



PLANNING DIVISION

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MITIGATED NEGATIVE DECLARATION

I. DESCRIPTION OF PROJECT:

Date: July 7, 2021

Application #s: SR2020-0023/SD2020-0008/EA2020-0016

APN: 779-04-075

Project Title: Royal Oak Village Project

Project Location: 15440 Monterey Road
Morgan Hill, CA 95037

Project Proponent: A0702 Morgan Hill L.P.
2000 E. Fourth Street, Ste 205
Santa Ana, CA 92705

Project Description: The Royal Oak Village Project (proposed project) would include demolition of the existing on-site structures and redevelopment of the site with 73 multi-family residential units distributed throughout three, three-story buildings (Building A, Building B, and Building B2). The proposed project would be an affordable housing project that would include six, one-bedroom units, 38, two-bedroom units, and 29, three-bedroom units for low-income families. With respect to amenities, the proposed project would include a clubhouse, green spaces, a dog park, and a tot-lot. The proposed project would also include widening of and other associated off-site improvements to both Watsonville Road and Monterey Road. The widening would include curb and gutter improvements, new storm drainage infrastructure, and new sidewalk. Additionally, the off-site improvements to Watsonville Road would include a bike lane, a meandering pathway, medians, and new signing and striping.

The proposed project would require the following City approvals:

- Parcel Map;
- Conditional Use Permit to reduce parking lot landscaping;
- Design Review Permit; and
- Demolition Permit.

II. DETERMINATION

In accordance with the City of Morgan Hill procedures for compliance with the California Environmental Quality Act (CEQA), the City has completed an Initial Study to determine whether the proposed project may

have a significant adverse effect on the environment. On the basis of that study, the City makes the following determination:

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

III. MITIGATION AND AVOIDANCE MEASURES

A. Biological Resources

- IV-1. To the maximum extent practicable, the removal of trees and shrubs and demolition of buildings shall occur during the non-breeding season (September 1 through January 31). If tree removal or building demolition cannot be avoided during the breeding season (February 1 through August 31), pre-construction surveys shall be conducted by a qualified biologist during the breeding season for tree-nesting raptors and other migratory birds less than 14 days prior to the onset of such construction-related disturbances. The pre-construction survey shall include all trees, large shrubs, buildings, or other areas of potential nesting habitat within the project footprint and, where possible, within 250 feet of the footprint. If active nests are deemed absent from the area, then further mitigation measures are not required, and ground disturbance or construction could occur within 14 days following the survey. Pre-construction surveys and results shall be submitted to the City of Morgan Hill Development Services Department for review and approval prior to issuance of grading permit or issuance of building permit.*
- IV-2. If nesting raptors or other migratory birds are detected on the site during the survey, a suitable disturbance-free buffer of up to 500 feet shall be established around all active nests. The precise dimension of the buffer would be determined at that time and may vary depending on factors such as location, species, topography, and line of sight to the construction area. The buffer area(s) shall be enclosed with temporary fencing, and equipment and workers shall not enter the enclosed buffer areas. Typical buffers range between 100 feet and 250 feet for migratory bird nests and between 250 feet and 500 feet for a raptor nest. If active nests are found within the project footprint, a qualified biologist shall monitor nests daily for a minimum of five days during construction to evaluate potential nesting disturbance by construction activities. If construction activities cause the nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then an exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. Buffers shall remain in place for the duration of ground disturbing activities, the breeding season, or until a qualified biologist has confirmed that all chicks have fledged and are independent of their parents, whichever occurs first.*
- IV-3. Pre-construction surveys are required to ascertain whether burrowing owls occupy burrows on or adjacent to the site. A minimum of two surveys are required, with the first survey to occur up to 14 days prior to initial construction activities (e.g., vegetation removal, grading, or excavation) and the second survey to occur within two days prior to initial construction activities. If burrowing owls or evidence of burrowing owls are not observed during pre-construction surveys, construction may proceed. If burrowing owls or their recent sign are observed during the surveys,*

occupied burrows shall be identified by the monitoring biologist and appropriate construction-free buffers, as described below, shall be established:

- *A 250-foot non-disturbance buffer shall be established around all active burrowing owl burrows or nest sites, as identified and defined by a qualified biologist. If the biologist determines that a nest is vacant, the non-disturbance buffer zone around that nest may be removed. The SCVHP specifies that a vacation from the site for a week or more by a burrowing owl, as determined by a qualified biologist, would constitute a voluntary relocation by the owl, and the qualified biologist could then take measures to collapse suitable burrows of the site to discourage reoccupation. The biologist shall supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (SCVHP, Chapter 6, Condition 15). For permission to encroach within 250 feet of such burrows during the nesting season (February 1 through August 31), an Avoidance, Minimization, and Monitoring Plan shall be prepared and approved by the City of Morgan Hill Development Services Department and Wildlife Agencies prior to such encroachment.*
- *Should a burrowing owl be overwintering or nesting on-site in the non-breeding season (September 1 through January 31), construction activities shall not be allowed within the 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:*
 - *A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction);*
 - *The same qualified biologist monitors the owl during construction and does not find a change in owl foraging behavior in response to construction activities;*
 - *If a change in owl nesting and foraging behavior occur because of construction activities, the construction activities shall cease within the 250-foot buffer; and*
 - *If the owls are gone for at least one week, the project proponent may request approval from the City of Morgan Hill Development Services Department that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone shall be removed, and construction may continue.*

IV-4. The SCVHP prohibits the passive relocation or exclusion of burrowing owls until a positive regional growth trend is achieved, as defined in Section 5.4.6 of the SCVHP; however, a project may qualify for an exception to this prohibition. Permission to engage in passive relocation during the non-breeding season shall be requested through the standard application process (Section 6.8 of the SCVHP). Application for an exception would require additional information, including a relocation plan and documentation by a qualified biologist that owls have occupied the site for the full year without vacating the site for 10 or more consecutive days. The application would need to be submitted to the City of Morgan Hill Development Services Department, and the Wildlife Agencies would then evaluate the application and decide if an exception should be granted. If passive relocation is approved, additional measures may be required by the City of Morgan Hill Development Services Department.

- IV-5. A habitat assessment shall be conducted prior to demolition by a qualified biologist to identify buildings on-site that could be suitable for roosting bats. If the habitat assessment does not find suitable roosting habitat, further mitigation is not required. If the habitat assessment finds that suitable roosting habitat is present, a bat survey shall be conducted by a qualified bat biologist within 30 days of building demolition to determine if bats are roosting or breeding in the buildings. Additionally, an emergency survey may be required for areas that cannot be surveyed directly. The surveys shall be conducted during times of the year when bats are active (March 1 through August 15). The habitat assessment, surveys, and results shall be submitted to the City of Morgan Hill Development Services Department for review and approval prior to issuance of a demolition permit.*
- IV-6. If a maternity colony is found on the site, then a construction-free buffer up to 100 feet shall be established around the colony by a qualified biologist. The size of the buffer shall be determined by the biologist depending on factors such as the type of construction-related activity to occur and its proximity to the maternity colony. The buffer shall remain in place until the biologist determines that the nursery is not active.*
- IV-7. If a bat colony is found on the site during the overwintering season (i.e., October 15 through March 1), demolition shall be delayed until after March 1 or until a qualified biologist determines that bats are absent.*
- IV-8. If a non-breeding bat colony is found in buildings to be demolished, the individuals shall be humanely evicted by way of a two-step, partial dismantlement of the buildings prior to demolition. The eviction shall be conducted under the direction and supervision of a qualified biologist to ensure that harm or take would not occur to any bats as a result of demolition activities.*
- IV-9. The removal of Ordinance Sized Trees shall be avoided and preserved to the maximum extent feasible, as determined by the City of Morgan Hill Development Services Director. If Ordinance Sized Trees cannot be avoided during construction, the project applicant shall mitigate for the removal of the Ordinance Sized Trees located within the project site, by providing an on-site replacement planting program at a minimum 1:1 ratio with 24-inch box sized trees. The City shall condition the project to replace the oaks at a 2:1 ratio. Replacement shall be overseen and verified by a qualified arborist and the City of Morgan Hill. The detailed replacement program shall be submitted to the City of Morgan Hill Development Services Director for approval prior to issuance of a grading permit.*
- IV-10. For the Ordinance Sized Trees to be preserved as part of the project, the project applicant shall include a Tree Preservation Plan, which shall be noted on Improvement Plans, subject to review and approval by the City of Morgan Hill Development Services Department prior to issuance of a grading permit. The measures identified within the Tree Preservation and Protection Plan shall remain in place for the duration of construction activities. Following Tree Preservation Measure may include:*
- 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 outside/on 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 six 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's condition, and treatment of damaging conditions (insects, diseases, nutrient deficiencies, etc.) as they occur, or as appropriate.*
- *Individual trees likely to suffer significant impacts may require specific, more extensive efforts and/or a more detailed specification than those contained within these general guidelines.*

B. Geology and Soils

VII-1. All grading and foundation plans for the development shall be designed by a civil and structural engineer and reviewed and approved by the City Engineer, Chief Building Official, and a qualified geotechnical engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report prepared for the proposed project by Geo-Logic Associates are properly incorporated and used in the project design.

C. Hazards and Hazardous Materials

IX-1. Prior to issuance of a demolition permit for any structure at the site, the project applicant shall provide the City of Morgan Hill Development Services Department a detailed assessment pertaining to the potential presence of lead-based paint-containing materials in existing all structures that may be scheduled for demolition. If structures do not contain lead-based paint, further mitigation is not required; however, if lead-based paint is found, Mitigation Measure IX-2 shall be implemented.

IX-2. Prior to issuance of a demolition permit by the City for the existing structures, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with federal, State, and local regulations. The demolition contractor shall be informed that all paint on the

buildings shall be considered as containing lead. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing lead paint in accordance with federal, State, and local regulations subject to approval by the City Building Official. Proof of removal shall be submitted to the City of Morgan Hill Development Services Department prior to issuance of a demolition permit.

- IX-3. Following demolition and prior to issuance of a grading permit, a sampling grid shall be superimposed and discrete shallow samples shall be collected at points currently under building foundations. The samples shall be tested for chlordane and/or DDT isomers to determine whether Regional Water Quality Control Board Environmental Screening Levels (ESLs) are exceeded in any samples. The applicant shall submit a report to the Development Services Department for review and approval that includes, but is not limited to, sampling activities performed, relevant ESLs for identified contaminants, summary of contaminated concentrations, and locations where ESLs are exceeded, if any. If ESLs are exceeded in on-site soils, the impacted areas shall be removed and properly disposed of under oversight by the Santa Clara County Department of Environmental Health (SCCDEH) prior to issuance of a grading permit; and proof of remediation under SCCDEH oversight shall be provided to the City of Morgan Hill Development Services Department prior to grading. For larger quantities of soils that are non-hazardous, subject to approval by the Morgan Hill Development Services Department, such soils may generally be placed under interior roads, parking areas, or buildings during normal grading operations, and verification of proper handling and disposal.*

D. Noise

- XIII-1. Noise-generating construction activities associated with the proposed project and intersection improvements shall not occur within the hours identified in Municipal Code Section 8.28.040(D). The above language shall be included on final project improvement plans prior to issuance of a grading permit by the City of Morgan Hill Development Services Department.*

- XIII-2. To the maximum extent practical, the following measures should be implemented during project construction:*

- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition;*
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project construction;*
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible;*
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors;*
- Project area and site access road speed limits shall be established and enforced during the construction period; and*
- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.*

The above requirements shall be included via notation on project grading plans, subject to review and approval by the Development Services Department prior to issuance of a grading permit.

E. Transportation

XVII-1. Prior to issuance of grading permit, the project applicant shall prepare a Construction Traffic Management Plan for review and approval by the City of Morgan Hill. The plan shall include the following:

- A project staging plan to maximize on-site storage of materials and equipment;*
- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hours; lane closure proceedings; signs, cones and other warning devices for drivers; and designation of construction access routes;*
- Provisions for maintaining adequate emergency access to the project site;*
- Permitted construction hours;*
- Designated locations for construction staging areas;*
- Identification of parking areas for construction employees, site visitors, and inspectors, including on-site locations; and*
- Provisions for street sweeping to remove construction-related debris on public streets.*

III. FINDING

The City of Morgan Hill hereby finds that the proposed project could have a significant effect on the environment; however, there would not be a significant effect in this case because mitigation measures summarized above and described in the initial study will reduce the impacts to a less-than-significant level.

Jennifer Carman, Development Services Director

Date

Development Services Department



Royal Oak Village Project
Initial Study/Mitigated Negative Declaration

July 2021

Prepared by



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APPENDICES

Appendix A:	CalEEMod Modeling Results
Appendix B:	Biological Evaluation
Appendix C:	Investigation of Potential Waters of the US
Appendix D:	Arborist Report
Appendix E:	Geotechnical Study
Appendix F:	Phase I Environmental Site Assessment
Appendix G:	Phase II Environmental Site Assessment
Appendix H:	Preliminary Stormwater Control Plan
Appendix I:	Flood Study
Appendix J:	Trip Generation and Operations Analysis
Appendix K:	Noise Assessment
Appendix L:	Vehicle Miles Traveled Assessment

INITIAL STUDY

JULY 2021

A. BACKGROUND

1. Project Title: Royal Oak Village Project
2. Lead Agency Name and Address: City of Morgan Hill
Development Services Department
17575 Peak Avenue
Morgan Hill, CA 95037
3. Contact Person and Phone Number: Gina Paolini
Principal Planner
17575 Peak Avenue
Morgan Hill, CA 95037
4. Project Location: 15440 Monterey Road
South of the intersection of Monterey Road and Watsonville Road
Morgan Hill, CA 95037
APN 779-04-075
5. Project Applicant: A0702 Morgan Hill L.P.
2000 E. Fourth Street, Ste 205
Santa Ana, CA 92705
6. General Plan Designation: Mixed Use-Flex
7. Zoning Designation: Mixed Use-Flex
Planned Development
8. Required Approvals from Other Public Agencies: U.S. Army Corps of Engineers
Section 408 Permit

9. Surrounding Land Uses and Setting:

The project site consists of approximately 3.7 acres of the overall 7.54-acre Royal Oak Mushroom Farm parcel. The project site contains existing structures associated with the Royal Oak Mushroom Farm, as well as ruderal vegetation and scattered trees along the project site's borders. Surrounding land uses include single-family residential development to the north and west, across Watsonville Road, vacant land immediately south, a private school further to the southeast, and a remaining portion of the former Royal Oak Mushroom Farm to the east, which is bound by Monterey Road.

10. Project Description Summary:

The Royal Oak Village Project (proposed project) would include demolition of the existing on-site structures and redevelopment of the site with 73 multi-family residential units

distributed throughout three, three-story buildings (Building A, Building B, and Building B2). The proposed project would be an affordable housing project that would include six, one-bedroom units, 38, two-bedroom units, and 29, three-bedroom units for low-income families. With respect to amenities, the proposed project would include a clubhouse, green spaces, a dog park, and a tot-lot. The proposed project would also include widening of and other associated off-site improvements to both Watsonville Road and Monterey Road. The widening would include curb and gutter improvements, new storm drainage infrastructure, and new sidewalk. Additionally, the off-site improvements to Watsonville Road would include a bike lane, a meandering pathway, medians, and new signing and striping.

B. SOURCES

The following documents and websites are referenced information sources used within this analysis:

1. Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.
2. Bay Area Air Quality Management District. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. May 2017.
3. CAL FIRE. *California Fire Hazard Severity Zone*. January 13, 2020. Available at: <https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed March 2021.
4. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.
5. California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 2021.
6. California Department of Conservation. *Landslides*. Available at: <https://www.conservation.ca.gov/cgs/landslides#landslidemaps>. Accessed March 2021.
7. California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005>. Accessed March 2021.
8. California Department of Transportation. *State Scenic Highway System Map*. Available at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>. Accessed March 2021.
9. California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.
10. California Historical Resources Information System. *Record search results for the proposed Royal Oak Village project, Morgan Hill, Santa Clara County, California*. April 16, 2021.
11. California State Geoportal. *California Fire Hazard Severity Zones (FHSZ)*. November 18, 2020. Available at: <https://gis.data.ca.gov/>. Accessed March 2021.
12. Center For Public Safety Management, LLC. *Police Operations and Data Analysis Report: Morgan Hill, California*. August 2016.
13. City of Morgan Hill. *2035 General Plan, City of Morgan Hill*. Adopted July 2016.
14. City of Morgan Hill. City Council Staff Report 2163, Accept Report Regarding Wastewater System Needs and Rate Study Schedule. February 6, 2019.
15. City of Morgan Hill. *City of Morgan Hill Urban Water Management Plan 2015*. August 2016.
16. City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.
17. City of Morgan Hill. *Morgan Hill 2035 Draft Environmental Impact Report*. January 2016.

18. Department of Toxic Substances Control. EnviroStor. Available at: <https://dtsc.ca.gov/dtscs-cortese-list/>. Accessed March 2021.
19. FEMA. FEMA Flood Map Service Center. Available at: <https://msc.fema.gov/portal/search?AddressQuery=15440%20Monterey%20Road%2C%20Morgan%20Hill%2C%20California#searchresultsanchor>. Accessed March 2021.
20. Flores, Areana, Bay Area Air Quality Management District. Personal communication [phone] with Jacob Byrne, Senior Associate/Air Quality Technician, Raney Planning & Management. September 17, 2019.
21. Geo-Logic Associates. *Geotechnical Study Proposed Royal Oak Village*. September 1, 2020.
22. Good, Dwight, Assistant Chief Cooperative Fire Protection of the City of Morgan Hill. Personal Communication [email] with Nick Pappani, Vice President of Raney Planning & Management, Inc. June 1, 2021.
23. Governor's Office of Planning and Research. *Technical Advisory on Evaluation Transportation Impacts in CEQA*. December 2018.
24. Hexagon Transportation Consultants, Inc. *Trip Generation and Operations Analysis for the Proposed Royal Oak Village Affordable Housing Development* in Morgan Hill, California. April 15, 2021.
25. Hexagon Transportation Consultants, Inc. *VMT Assessment for the Proposed Royal Oak Residential Development in Morgan Hill, California*. April 15, 2021.
26. Live Oak Associates, Inc. *UHC Morgan Hill Biological Evaluation City of Morgan Hill, California*. September 3, 2020.
27. Live Oak Associates, Inc. *UHC Morgan Hill Investigation of Potential Waters of the United States City of Morgan Hill, California*. October 22, 2020.
28. McClenahan Consulting, LLC. *Royal Oak Village*. August 20, 2020 (Revised April 1, 2021).
29. Mercury News. Anderson Dam: *Plans released to drain Santa Clara County's largest reservoir*. Available at: <https://www.mercurynews.com/2020/06/08/anderson-dam-draining-to-start-oct-1-could-take-six-months-to-empty/>. Accessed April 2021.
30. MH Engineering Co. *Preliminary Storm Water Control Plan: Royal Oak Village*. February 16, 2021.
31. Native American Heritage Commission. *Royal Oak Village Project, Santa Clara County*. April 15, 2021.
32. Rdn Consulting, Inc. *Royal Oak Village Residential Development Noise Assessment in the City of Morgan Hill, CA*. December 1, 2020.
33. Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.
34. Santa Clara Valley Transportation Authority. *2015 Congestion Management Plan*. October 2015.
35. Santa Clara Valley Water District. *2016 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2016.
36. Schaaf and Wheeler Consulting Civil Engineers. *Royal Oak Village Conceptual Design Impact Analysis to West Little Llagas*. December 4, 2020.
37. South Coast Air Quality Management District. 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. Available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf). Accessed October 2020.
38. Ta-Group DD, LLC. *Phase I Environmental Site Assessment Residential Development Property Royal Oak Village*. April 2, 2020.
39. Ta-Group DD, LLC. *Phase II Environmental Site Assessment, Shallow Soils Sampling Report*. November 2, 2020.

40. United States Army Corps of Engineers. *Engineer Circular No. 1165-2-220*. September 10, 2018.
41. Valley Water. *C1: Anderson Dam Seismic Retrofit**. Available at: <https://www.valleywater.org/anderson-dam-project>. Accessed March 2021.
42. Weather Spark. *Average Weather in Morgan Hill*. Available at: <https://weatherspark.com/y/1089/Average-Weather-in-Morgan-Hill-California-United-States-Year-Round#:~:text=The%20predominant%20average%20hourly%20wind,of%2095%25%20on%20August%201>. Accessed March 2021.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Less Than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

D. DETERMINATION

On the basis of this initial study:

- I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Gina Paolini, Principal Planner

Printed Name

Date

City of Morgan Hill

For

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) identifies and analyzes the potential environmental impacts of the Royal Oak Village Project. The information and analysis presented in this document is organized in accordance with the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines. Where the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures are prescribed. The mitigation measures prescribed for environmental effects described in this IS/MND will be implemented in conjunction with the project, as required by CEQA. The mitigation measures will be incorporated into the project through project conditions of approval. The City will adopt findings and a Mitigation Monitoring/Reporting Program for the project in conjunction with approval of the project.

In July 2016, the City of Morgan Hill adopted the 2035 General Plan,¹ as well as an associated Environmental Impact Report (EIR) for the updated General Plan.² The General Plan EIR is a program EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 *et seq.*). The General Plan EIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan to the maximum extent feasible.

The City of Morgan Hill 2035 General Plan designates the site as Mixed-Use Flex (MU-F) which permits a mix of residential, commercial, and office uses applied either vertically or horizontally. According to the City of Morgan Hill Zoning Map, updated February of 2019, the project site is designated as MU-F Planned Development Combining District (PD). The proposed project would entail a 73-unit multi-family affordable residential community built on 3.7 acres, for a proposed unit density of approximately 19 dwelling units per acre (du/ac). The proposed project would be consistent with the General Plan land use and zoning designations for the site.

As noted pursuant to Public Resources Code (PRC) 21083.3, the environmental review for a project that is consistent with the City's General Plan or zoning may limit the analysis to environmental effects that are peculiar to the subject parcel or to the project and which were not addressed as significant effects in the prior EIR. Because the proposed project would be consistent with the General Plan and zoning designations for the site, the analysis contained in this IS/MND is limited to the effects on the environment which are peculiar to the project site or proposed project.

F. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed components and discretionary actions required for the project.

Project Location and Setting

The project site consists of approximately 3.7 acres of the overall 7.54-acre parcel (identified as Assessor's Parcel Number [APN] 779-04-075) at 15440 Monterey Road, south of the intersection of Monterey Road and Watsonville Road in the City of Morgan Hill, California (see Figure 1). The City's General Plan land use designation for the site is Mixed Use-Flex (MU-F) and the site is zoned MU-F and Planned Development (PD). The 3.7-acre project site is currently developed with the former Royal Oak Mushroom Farm, consisting of six structures that were used for the drying out and warehousing of mushrooms.

¹ City of Morgan Hill. *2035 General Plan, City of Morgan Hill*. Adopted July 2016.

² City of Morgan Hill. *Morgan Hill 2035 Final Environmental Impact Report*. Adopted July 2016.

Surrounding Land Uses

Surrounding land uses include single-family residential development to the north and west, across Watsonville Road, vacant land to the immediate south, a private school further to the southeast, and a remaining portion of the former Royal Oak Mushroom farm to the east, which is bound by Monterey Road (see Figure 2). The project site is approximately 0.10 mile southwest of West Little Llagas Creek. West Little Llagas Creek flows under Monterey Road, south of the Monterey/Watsonville Road intersection, and then in a northerly direction under Watsonville Road.

The immediate existing surrounding land uses and developments are summarized as follows:

North - Watsonville Road, single-family residences, and vacant land;

West - Vacant land and single-family residences;

East - Remaining portion of APN 779-04-075, Monterey Road, and vacant land east of Monterey Road; and

South - Vacant land and a K-12 private school to the southeast.

Project Components

A description of the proposed project, including off-site improvements is provided below.

Proposed Project

The proposed project would consist of a 73-unit, multi-family affordable residential community. In order to accommodate the project, the six existing on-site structures, as well as two adjacent structures off-site, all of which are associated with the former Royal Oak Mushroom Farm, would be demolished. The 73 units would be distributed throughout three, three-story buildings (Building A, Building B, and Building B2) and would include six one-bedroom units, 38 two-bedroom units, and 29 three-bedroom units for low-income families earning between 30 percent and 60 percent of the Area Median Income (AMI). Out of the 73 units, 36 units would be dedicated to farmworker housing. In addition, one unit would be set aside for the on-site manager and would be located above the clubhouse. With respect to amenities, the proposed project would include a clubhouse, green spaces, a dog park, and a tot lot (see Figure 3). The clubhouse would be approximately 3,611 square feet and would include a lounge room, management office, computer room, central laundry room, and a patio overlooking a proposed play area.

The proposed multi-family development would require on-site employees in order to serve the future residents. Therefore, the proposed project would have one full-time, on-site property manager, and one full-time service provider to serve the residents of the proposed project. In addition, the proposed project anticipates an average of 10 to 25 visitors per day, which includes friends, family, food delivery, and service providers.

Parking, Access, and Circulation

The proposed project would include a total of 140 parking spaces, located in the southern and southwestern portions of the project site, as well as west of the clubhouse. Of the 140 surface parking spaces, 73 would be solar-covered carport parking spots and 65 would be standard parking spots. Eight spaces would be American Disability Act (ADA) compliant. In addition, the proposed project would include 15 parking spots for electric vehicles (EV) and three EV charging stations. Short- and long-term bike parking would be provided throughout the project site, with a total of six long-term and six short-term bike spaces per building.

Figure 1
Regional Project Location

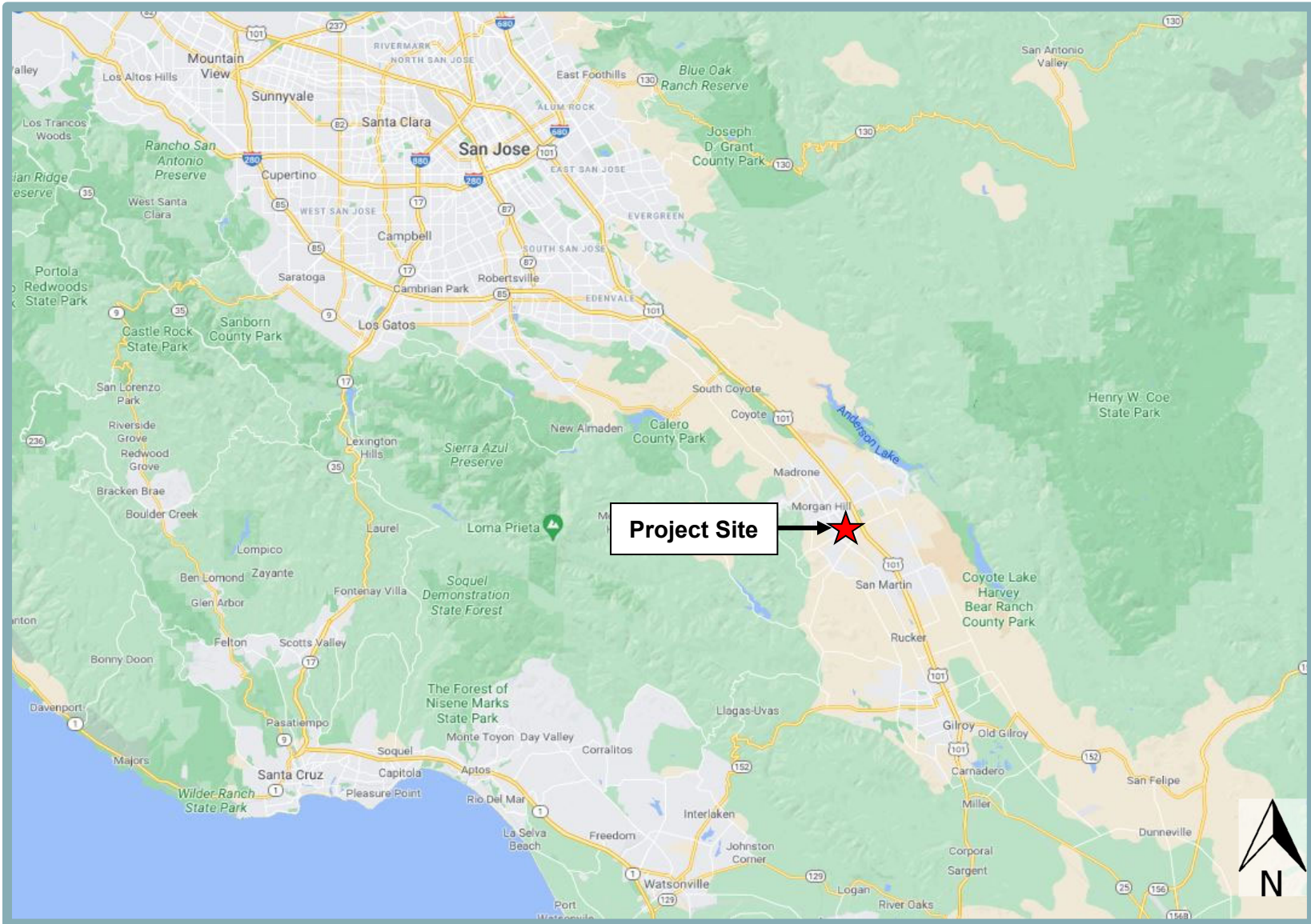
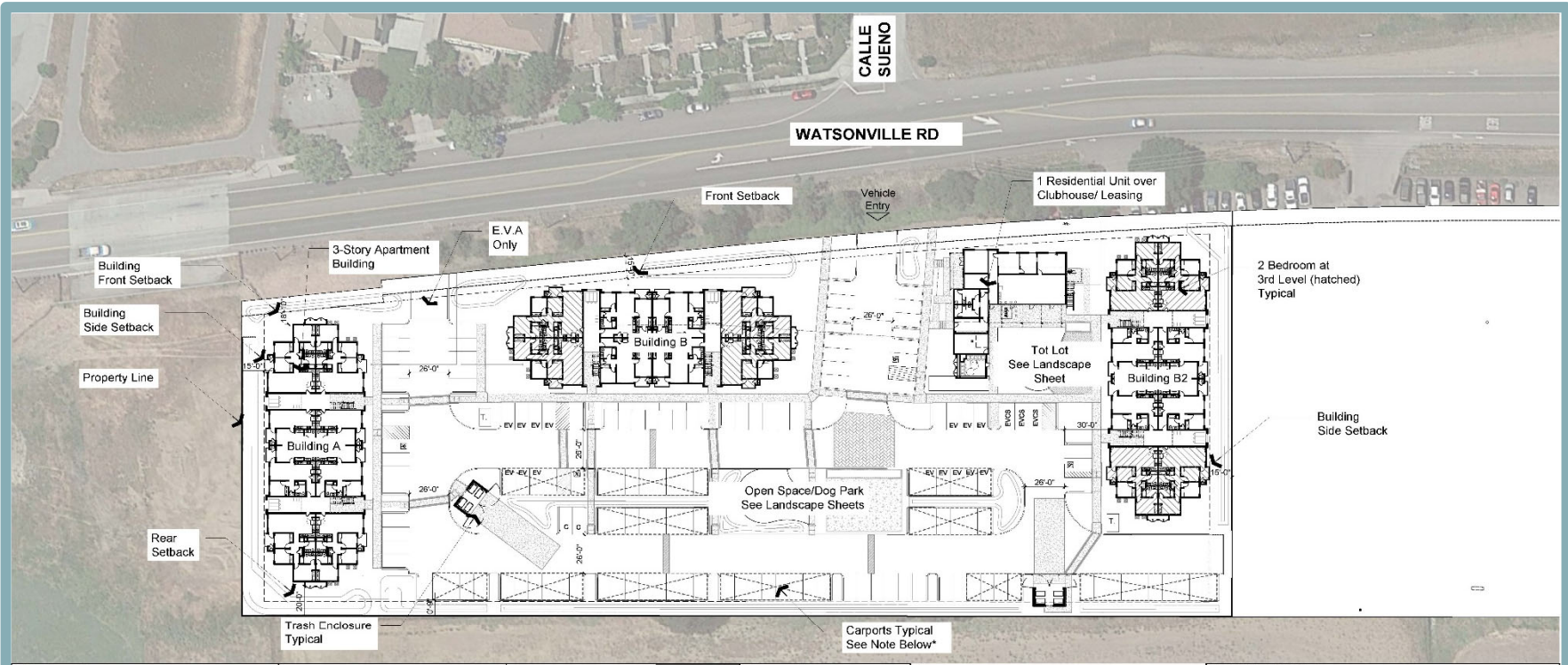


Figure 2
Project Vicinity Map



**Figure 3
Site Plan**



Project Data	Project Summary	Required	Amenity Summary	Legend	VICINITY MAP																																																								
Project Address Part of 15440 Monterey Road Morgan Hill, CA Site Area Information Gross Site Area 4.03 AC (±175,547 SF) Net Site Area 3.7 AC (±161,172 SF) Dwelling Units 73 DU Density (Net AC) 19.73 DU / AC FAR .68 Lot Coverage 30% Zone District/Gen. Plan Mixed Use Flex Building Area Information See A3.0 sheet series for building areas	Residential: Affordable Rental <table border="1"> <thead> <tr> <th>Unit Plan</th> <th>Unit Type</th> <th>Total</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Plan 1-1</td> <td>1bd/1b</td> <td>06</td> <td>8%</td> </tr> <tr> <td>Plan 2-1</td> <td>2bd/2ba</td> <td>38</td> <td>52%</td> </tr> <tr> <td>Plan 3-1</td> <td>3bd/2ba</td> <td>29</td> <td>40%</td> </tr> <tr> <td>Totals</td> <td></td> <td>73</td> <td>100%</td> </tr> </tbody> </table> Required (Per State Density Bonus) <table border="1"> <thead> <tr> <th>Unit Plan</th> <th>Parking</th> <th>Totals</th> </tr> </thead> <tbody> <tr> <td>Plan 1-1</td> <td>1 stall/unit</td> <td>6</td> </tr> <tr> <td>Plan 2-1</td> <td>2 stalls/unit</td> <td>76</td> </tr> <tr> <td>Plan 3-1</td> <td>2 stalls/unit</td> <td>58</td> </tr> <tr> <td>Total</td> <td></td> <td>140</td> </tr> </tbody> </table>	Unit Plan	Unit Type	Total	Percent	Plan 1-1	1bd/1b	06	8%	Plan 2-1	2bd/2ba	38	52%	Plan 3-1	3bd/2ba	29	40%	Totals		73	100%	Unit Plan	Parking	Totals	Plan 1-1	1 stall/unit	6	Plan 2-1	2 stalls/unit	76	Plan 3-1	2 stalls/unit	58	Total		140	Required Electric Vehicle Charging Station 3* <small>*Per section 18.72.04(C)</small> Provided <table border="1"> <thead> <tr> <th>Parking Type</th> <th>Accessible**</th> <th>Totals</th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>(5)</td> <td>58</td> </tr> <tr> <td>Electric Vehicle</td> <td>(1)</td> <td>7</td> </tr> <tr> <td>Carport</td> <td>(2)</td> <td>65</td> </tr> <tr> <td>Carport EV</td> <td></td> <td>8</td> </tr> <tr> <td>Compact Spaces</td> <td></td> <td>2</td> </tr> <tr> <td>Total</td> <td>(8)</td> <td>140</td> </tr> </tbody> </table> <small>**Inclusive to totals</small> Electric Vehicle Charging Station 3	Parking Type	Accessible**	Totals	Standard	(5)	58	Electric Vehicle	(1)	7	Carport	(2)	65	Carport EV		8	Compact Spaces		2	Total	(8)	140	Tier 1 (Required 2) Provided 3: Picnic/ Barbeque Area Park Benches Tot Lot Tier 2 (Required 2) Provided 2: Shade Trellis Dog Park Tier 2 (Required 1) Provided 2: Restroom Area Clubhouse w/ kitchen	T. : Transformer EV: Future Electric Vehicle Space EVCS: Electric Vehicle Charging Stations C: Compact Space AC Unit Condosor	
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Access to the project site would be provided by two driveways from Watsonville Road. The main, full access entry, would consist of the fourth leg of the Watsonville Road and Calle Sueno intersection, and be located between Building B and the clubhouse. The main access would be 26 feet wide. The additional driveway would provide access to the project site for Emergency Vehicle Access (EVA) vehicles only, and would be located at the southern portion of the project site, between Building A and Building B (see Figure 4). Additionally, the proposed project would include an eight-foot-wide proposed bike path along the project frontage of Watsonville Road.

Utilities

Water and sewer services for the proposed project would be provided by the City through connections to existing infrastructure. More specifically, the proposed project would include new water connections from the proposed buildings to the existing 10-inch waterline in Watsonville Road. Additionally, the proposed project would include new connections to the existing 15-inch sanitary sewer line in Watsonville Road (see Figure 5).

As shown in the Storm Water Management Plan, see Figure 6 and Figure 7, treated stormwater flows would release into the City's public storm drain under Watsonville Road, which discharges into West Little Llagas Creek. West Little Llagas Creek crosses under Watsonville Road at the intersection of Monterey Road and Watsonville Road through box culverts that are currently owned in fee by the City as a public right-of-way. According to the Preliminary Stormwater Control Plan (SWCP), the project site and off-site improvement areas have been divided into eight Drainage Management Areas (DMAs).³ Each DMA would include stormwater infrastructure, such as drainage pipes and bioretention basins, which would collect, treat, and detain stormwater runoff prior to discharge into the City's storm drain system (see Figure 6 and Figure 7). The proposed system would include sufficient volume to maintain the two-year through 100-year post-project storm events at pre-project levels.

Common Open Space and Landscaping Improvements

Consistent with Section 18.64.050 of the City's Municipal Code, landscaping would be provided throughout the site in accordance with the City's minimum landscape requirements for residential zones. All existing trees on the project frontage along Watsonville Road would be removed, as well as the existing trees within the project site. After tree removal, the proposed project would include the planting of trees, shrubs, grasses, and vines within the project site and the project frontage along Watsonville Road. The proposed landscaping improvements within the site include shrubs surrounding the bioretention basins, shrubs and trees along the perimeter of the proposed buildings, and trees along the perimeter of the parking lot within designated open spaces.

Additionally, the proposed project would include new trees, mulch, cobble with mortar, and shrubs on the median within Monterey Road. Further, trees would be planted along the project frontage on the southern side of the proposed eight-foot-wide bike path. The project would include a total of approximately 23,856 square feet of common open space, consisting of nine parkways, two play lawns, a dog park, and a tot-lot (see Figure 8). In addition, the proposed project would include benches, seat wall planters, and entry planters near the open space elements.

³ MH Engineering Co. *Preliminary Storm Water Control Plan: Royal Oak Village*. February 16, 2021.

**Figure 4
Fire and Circulation Exhibit**

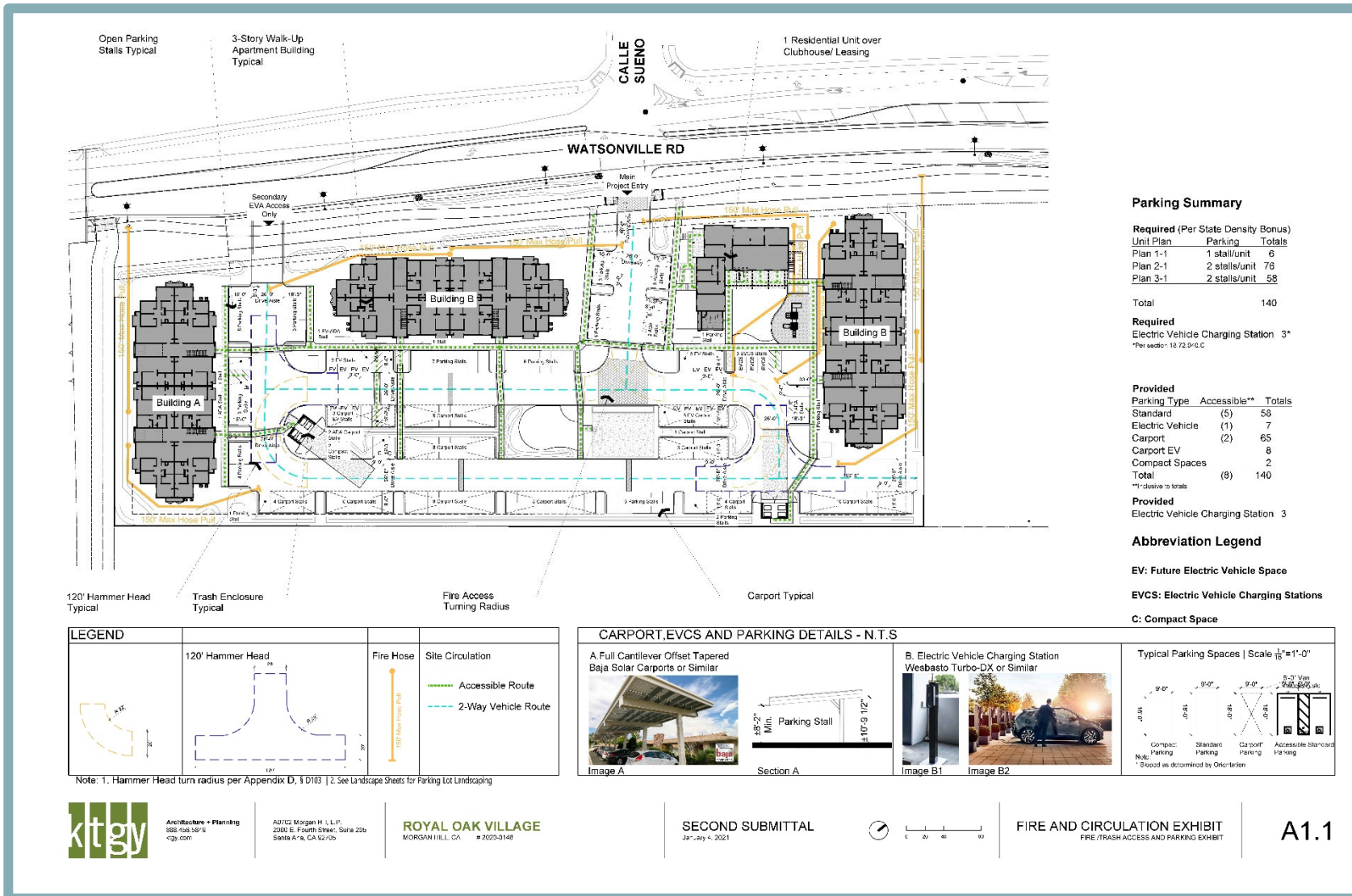


Figure 5
Site Utility Plan

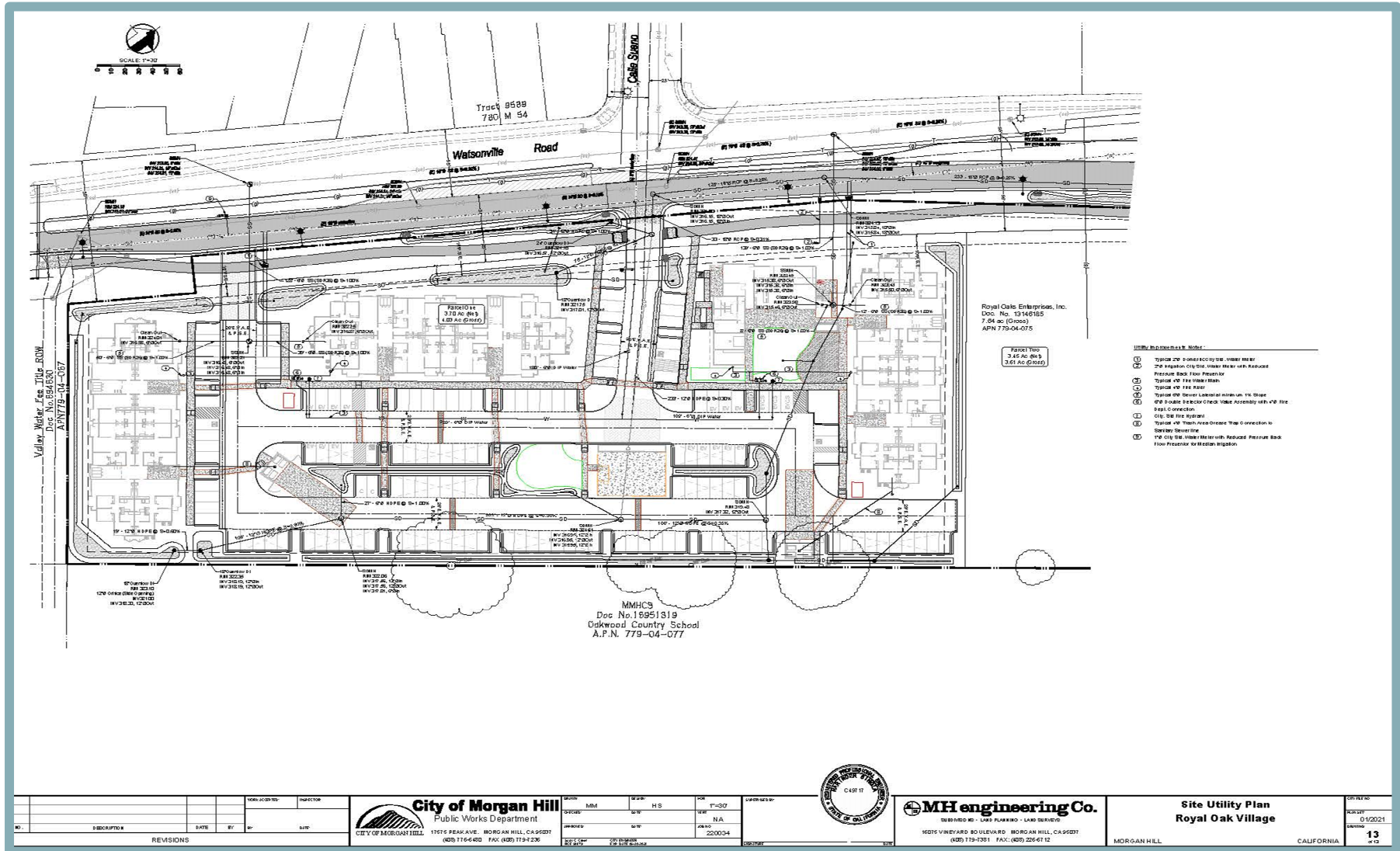


Figure 6
Storm Water Management Plan – On-site

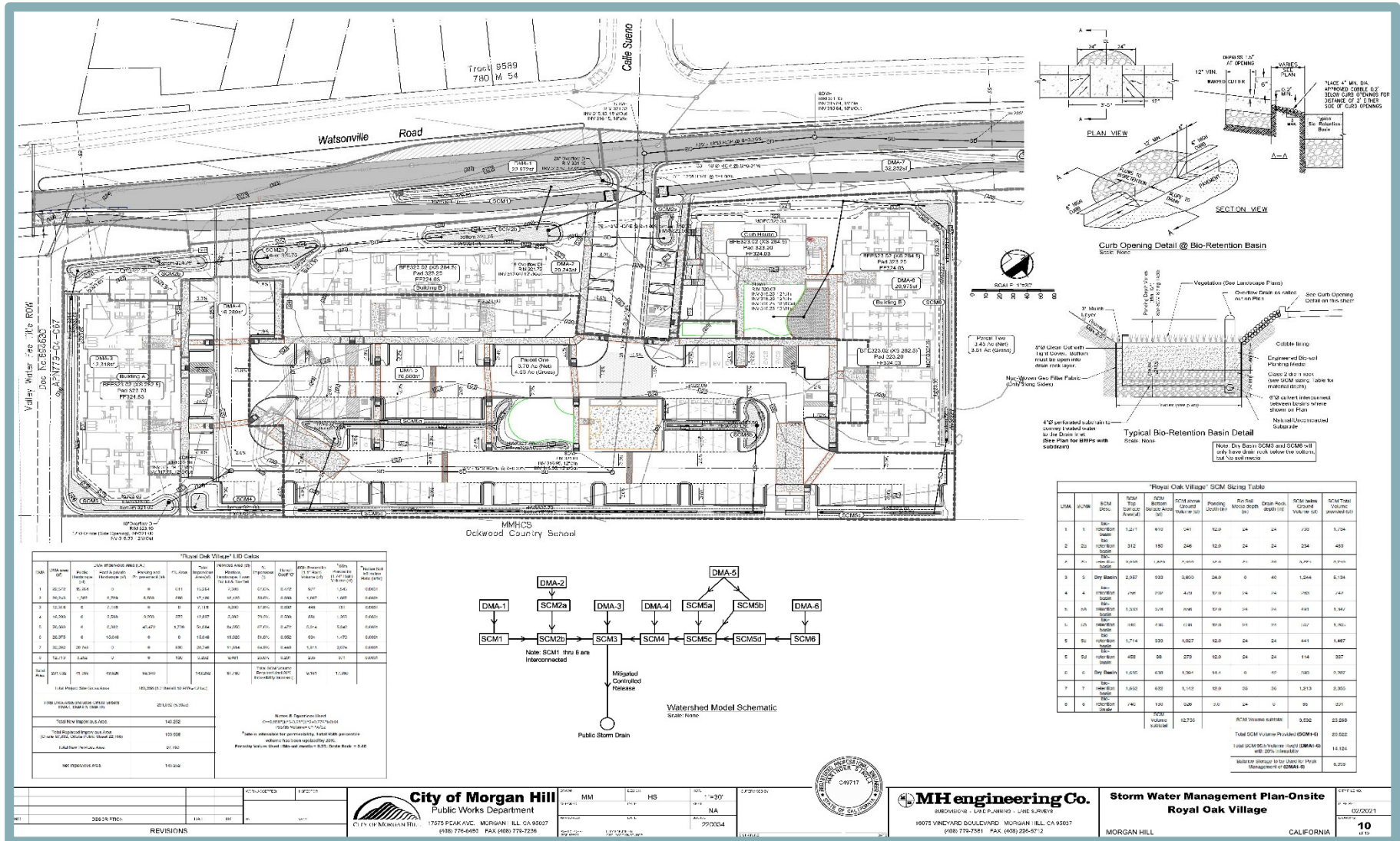
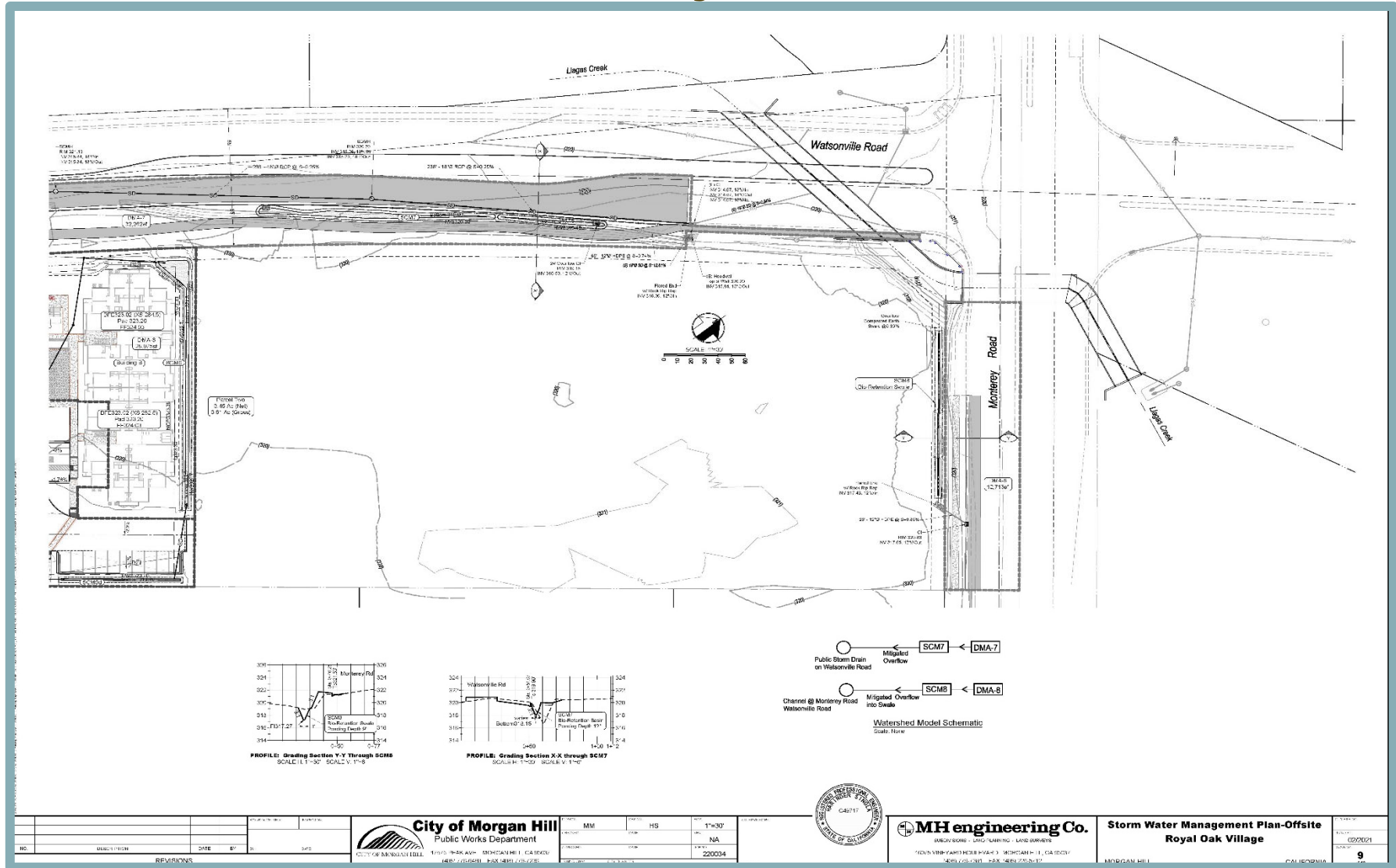


Figure 7
Storm Water Management Plan – Off-site



NO.	REVISIONS	DATE	BY	CHKD



PROJECT NO.	MM	HS	DATE	11/20/20
SCALE	1"=30'		PROJECT NO.	220034

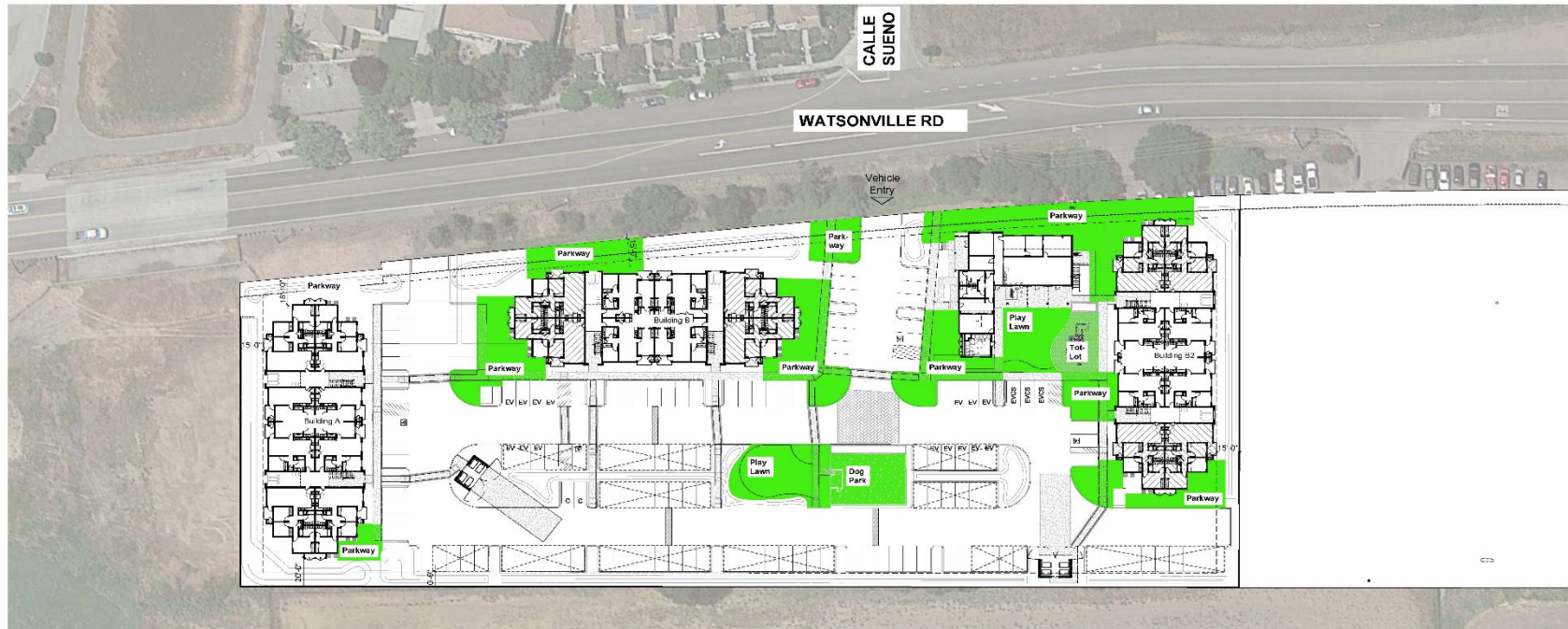


MH engineering Co.
1000 N. MAIN ST. SUITE 100
MORGAN HILL, CA 95037
TEL: 408.985.2100 FAX: 408.985.2102

Storm Water Management Plan-Offsite
Royal Oak Village
MORGAN HILL, CALIFORNIA

DATE	09/20/21
SHEET NO.	9

**Figure 8
Common Open Space Exhibit**



Common Open Space Summary		Legend
Required:	161,172 SF (3.7 Net AC) x15% = 24,176 SF	 Common Open Space*
		*15' Min. Clearance, 500 min sq. and Clear to Sky
Provided:	SF	
Parkways	±17,800	
Play Lawns	±3,230	
Tot-Lot	±1,060	
Dog Park	±1,769	
Total	±23,859 SF	



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ROYAL OAK VILLAGE
MORGAN HILL, CA # 2020-0146

SECOND SUBMITTAL
January 4, 2021



COMMON OPEN SPACE EXHIBIT
SITE PLAN

A1.5

Off-Site Improvements

The proposed project would include the widening of Watsonville and Monterey Roads. The proposed widening of the south side of Watsonville Road would begin just south of the project site's southern boundary and extend northerly for approximately 2,175 feet. The proposed widening and repaving along Watsonville Road would end approximately 245 feet from the intersection of Watsonville Road and Monterey Road. Widening would vary from 21 to 35 feet and include curb and gutter improvements.

The off-site improvements to Watsonville Road would also include installation of raised, tapered medians north and south of its intersection with Calle Sueno; dedicated northbound and southbound left-turn pockets at the intersection; and a dedicated southbound right-turn lane. In addition, an eight-foot wide buffered bike lane would be installed along the project's Watsonville Road frontage. The northbound approach to the Watsonville Road/Monterey Road intersection would be restriped to include a dedicated left-turn lane, one through lane, one through/right-turn lane, and an eight-foot-wide bike lane.

In addition to the widening, median, repaving, and striping improvements, the project would include installation of an eight-foot-wide meandering pathway along the project's Watsonville Road frontage that would connect to the existing sidewalk at Monterey Road (see Figure 9 and Figure 10). All existing trees within the Watsonville Road right-of-way would be removed as part of the road widening. In addition, the existing overhead utility transmission line, and associated utility poles, along the project's Watsonville Road frontage, would be undergrounded and removed, respectively.

As part of the Watsonville Road improvements, two new bioretention basins would be constructed between back of new curb and the new eight-foot-wide meandering path to generally capture and treat runoff from new roadway pavement surfaces, before discharge into the City's existing storm drain system.

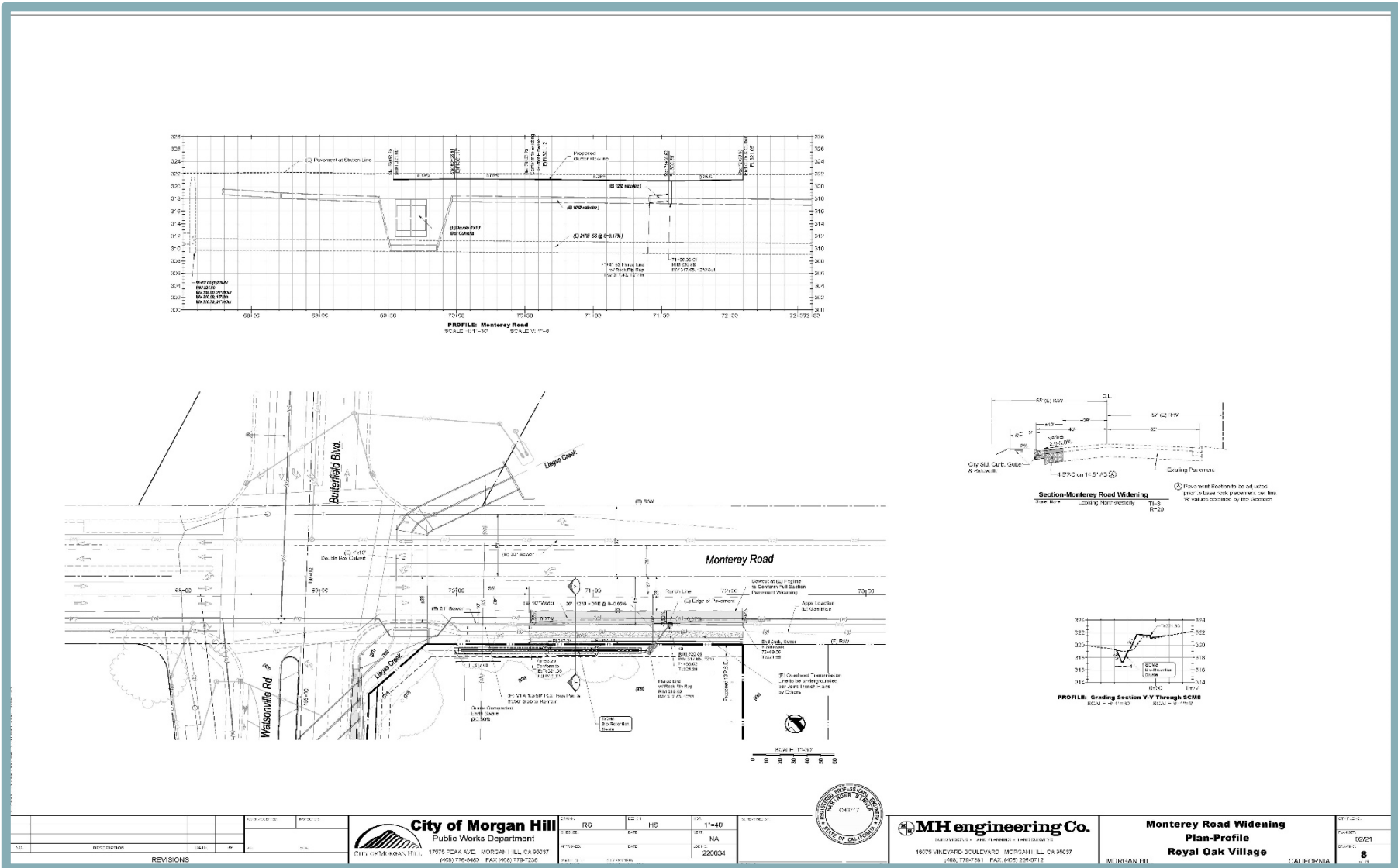
The off-site improvements to Monterey Road would include widening (± 12 feet) of the south side of the roadway along the project's frontage and installation of curb, gutter, and sidewalk. The new sidewalk improvements would serve to extend the existing sidewalk along the south side of Monterey Road such that sidewalk would exist along the project's complete Monterey Road frontage (see Figure 11).

Design Review and Waiver

Pursuant to Section 18.08.040 of the City's Municipal Code, the proposed project would be subject to a Design Review permit. The proposed project would be reviewed based on the standards set forth in Section 18.108.040. Specifically, the site plan would be analyzed based on elements of design, development location, arrangement of all structures, and design in harmony with surrounding facilities. The purpose of the Design Review is to allow the City to review all development, signs, buildings, structures, and other facilities in order to further enhance the City's appearance, and the livability and usefulness of properties.

In addition, the project includes a Design Waiver request to address the design standard related to orientation of the proposed buildings. The Morgan Hill General Plan, Policy CNF-11.18, states, "For residential buildings adjacent to a collector or arterial street, the primary entrance of homes (front door) is located along the street unless sound walls are installed (see "Sound Wall" section for requirements)." Building B would have four units that front Watsonville Road.

Figure 11
Monterey Road Widening Plan – Profile



Providing additional access to the units from Watsonville Road would require multiple staged paths and multiple ramps to account for the elevation increase between the building and the street. Additional access points would also reduce security on the unit entries and would eliminate bike storage areas. As a result, the applicant requests a Design Waiver to the aforementioned design standard. This Initial Study assumes that the Design Waiver would be approved by the Planning Commission pursuant to Density Bonus Law.

Concessions

Government Code Section 65915(d)(2)(D) requires the City to grant four incentives, or concessions, for projects that are 100 percent affordable for lower income households (excluding managers unit), except that up to 20 percent of the total units in the development may be for moderate-income households. Concessions are considered waivers or reductions in development standards, such as height limitation, setback requirements, a floor area ratio (FAR), on-site open space requirements, or a parking ratio. The following four concessions or incentives for the proposed project were approved by City Council on January 20, 2021:

- **Parking:** Parking is being requested at the State level of one space per one-bedroom unit, and two spaces per two- and three-bedroom units. In total, 140 residential parking spaces are provided with four additional spaces for guest parking.
- **Height:** The maximum height requirement for development in MU-F sites is 35 feet. The proposed project includes a maximum height of 45 feet. Therefore, the applicant requested a height exception to the City's building requirements.
- **Floor Area Ratio:** The maximum FAR for project sites zoned MU-F in the City is 0.5. The current FAR on the net acre site is calculated at 0.68. To achieve a FAR of 0.5, the project would need to combine a reduction of the number of units by 14 and reduce solar paneled carport spaces. Therefore, the applicant requested an exception to the FAR requirements defined by the City.
- **Common Open Space:** According to the City's Municipal Code, a project must attain a 15 percent common open space requirement. Accordingly, the minimum open space required for a 3.7 net acre site is 24,176 square feet. Open space proposed within the project site would be 23,840 square feet, which is below the required minimum of 24,176 square feet. Thus, the applicant requests an exception to the Common Open Space requirements defined by the City.

Conditional Use Permit

The proposed project would increase the site's landscaping footprint through the addition of on-site trees. However, the placement of trees may have a direct negative impact on solar generation due to shading on the 73 parking spaces covered by solar roof carports. Because the parking lot would incorporate solar panels and bioswales, the project is eligible for reduced parking lot landscaping requirements with the approval of a Conditional Use Permit (CUP). Therefore, the proposed project requests a CUP based on the "Green Parking Exemptions."

Requested/Required Entitlements

The proposed project would require the City's approval of the following:

- Parcel Map;
- Conditional Use Permit to reduce parking lot landscaping;
- Design Review Permit; and,
- Demolition Permit.

As previously discussed, the four concessions allowed in accordance with Government Code Section 65915(d)(2)(D) were approved by the City Council on January 20, 2021.

In addition, the project site is located in the MU-F Zoning District within Block 13 of the Monterey Road Corridor for which a Block Level Master Plan (BLMP) is generally required for all projects wanting to develop within the block. Furthermore, a CUP is required for a residential-only project within the MU-F zone. California Senate Bill 330 (SB 330) established the “Housing Crisis Act of 2019”, effective January 1, 2020, making changes to the local approval process until January 1, 2025. The project, as proposed, is consistent with the General Plan and meets the base zoning standards; therefore, although a BLMP, PD master plan and a CUP for the site are required by the Morgan Hill Zoning Code, SB 330 supersedes these requirements.

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. 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"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. The Morgan Hill General Plan does not designate official scenic view corridors or vistas. However, the General Plan recognizes the undeveloped hillsides visible from the valley floor are scenic characteristics of the City, and that views of prominent hillsides should be preserved. Throughout the low-lying areas of Morgan Hill, scenic views of the hillside are generally intermittent and obscured by existing development and trees.

The project site is located near existing development and is not on a hillside or in the vicinity of a hillside. Distant views of the hills to the east of the City are visible from motorists, bicyclists, and pedestrians travelling along Monterey Road. However, Monterey Road and the hills are east of the site; therefore, development of the proposed project would not affect the scenic views of the hillsides from the public roadway. Furthermore, such views are substantially obscured by existing trees and shrubs along the project frontages. The proposed off-site improvements to Watsonville Road and Monterey Road would not include any structures that could impair views of scenic vistas. As such, construction of the off-site improvements would not have a substantial adverse effect on a scenic vista.

The proposed project would be consistent with the site’s current land use and zoning designations. Therefore, development of the site and associated effects on scenic vistas have been anticipated by the City and analyzed in the General Plan EIR. The City’s General Plan EIR concluded that buildout of the General Plan, including the project site, would result in a less-than-significant impact related to scenic vistas. The proposed project would not result in additional effects beyond those previously evaluated in the City’s General Plan EIR. Thus, the proposed project would not have a substantial adverse effect on a scenic vista and a **less-than-significant** impact would occur.

- b. According to the California Department of Transportation (Caltrans) map of Santa Clara County prepared for the Scenic Highway Mapping System, officially designated State or

County scenic highways do not occur in the project vicinity.⁴ Because the project site is not located in the vicinity of any State scenic highways, the proposed project would not damage any scenic resources within a State scenic highway. Therefore, **no impact** related to damaging scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway would occur.

- c. The project site is in an urbanized area adjacent to other existing residential development. Currently, the project site is zoned MU-F and PD and designated MU-F by the General Plan. Given that the proposed project would be consistent with the site's current land use and zoning designations, the City has anticipated buildout of the project site and associated impacts related to aesthetic resources in the General Plan EIR. The City's General Plan EIR concluded that buildout of the General Plan, including the project site, would result in a less-than-significant impact related to visual character and quality.⁵ Because the project is in an urbanized area and is consistent with zoning for the site, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality in the City.

Furthermore, the Design Review permit, in accordance with Morgan Hill Municipal Code Section 18.108.040, requires the proposed project be consistent with the Design Review findings. In regard to the proposed off-site improvements to Watsonville Road and Monterey Road, the proposed improvements would expand the landscape easement along the project site frontages and allow for the construction of new sidewalks, thereby improving the visual character and quality of the streetscape.

Based on the above, the overall project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings nor conflict with applicable zoning and other regulations governing scenic quality. Therefore, a **less-than-significant** impact would occur.

- d. The project site does not contain any existing sources of light or glare because the existing facility, Royal Oak Mushroom Farm, is not in operation. As such, development of the proposed project would increase the amount of light, including, but not limited to, headlights from vehicles traveling on the project site, exterior light fixtures, and interior light spilling through windows. However, the project vicinity includes existing development that currently generates light and glare in the area. Streetlights are currently provided along the project frontages at Monterey Road and in the single-family development northwest of the project site. Thus, the project would not introduce new sources of light or glare to an area where none currently exist.

In addition, new sources of lighting would be required to comply with the standards set forth in Section G of the City's Architectural Review Handbook, Section 18.76.060 (Glare), and Section 15.40.310 (Open parking lots) of the Morgan Hill Municipal Code. Section 18.76.060 includes requirements that restrict uses from producing direct or sky-reflected glare that is visible at a distance of five hundred feet from the use or activity. In addition, Section 15.40.310 includes requirements such as directing light downward and minimum maintained lighting on parking surfaces. Compliance with such would help to ensure that

⁴ California Department of Transportation. *State Scenic Highway System Map*. Available at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>. Accessed March 2021.

⁵ City of Morgan Hill. *Morgan Hill 2035 Draft Environmental Impact Report* [pg. 4.1-15]. January 2016.

the light and glare created by the proposed project would be consistent with the levels of light and glare currently emitted in the surrounding area.

Therefore, the proposed project would not introduce new sources of substantial light or glare to the site which would adversely affect day or nighttime views in the area, and a **less-than-significant** impact would occur.

II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. 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"/>	✘
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
c. 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"/>	✘
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
e. 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"/>	✘

Discussion

- a,e. The Royal Oak Mushroom Farm was previously used for agricultural use, specifically for the drying out and warehousing of mushrooms; however, operations have ceased and the existing buildings are currently vacant. In addition, the overall project site, including the off-site improvement areas, are currently designated as “Urban and Built-Up Land” on the California Important Farmland Map.⁶ Furthermore, the project site is not located in an area currently zoned or designated for agricultural purposes. Given the designation of the site as Urban and Built-Up Land, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use. Therefore, **no impact** would occur as a result of the proposed project.

- b. The project site is currently zoned MU-F and PD and designated MU-F by the City’s General Plan. Neither the zoning nor land use designations are for agricultural uses, and the project site is not under a Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and **no impact** would occur.

- c,d. The project site is not considered forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). Therefore, the proposed project would have **no impact** with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

⁶ California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 2021.

III. AIR QUALITY.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a,b. The City of Morgan Hill is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM_{2.5}), and State respirable particulate matter 10 microns in diameter (PM₁₀) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM_{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM_{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation. The USEPA has not yet approved a request for redesignation of the SFBAAB; therefore, the SFBAAB remains in nonattainment for 24-hour PM_{2.5}.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the USEPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2017 Clean Air Plan, adopted on April 19, 2017. The 2017 Clean Air Plan was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM₁₀ standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2017 Clean Air Plan. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures to be implemented in the region to attain the State and federal AAQS within the SFBAAB. Adopted BAAQMD rules and regulations, as

well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. The BAAQMD’s established significance thresholds associated with development projects for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀ and PM_{2.5}, expressed in pounds per day (lbs/day) and tons per year (tons/yr), are listed in Table 1. By exceeding the BAAQMD’s mass emission thresholds for ROG, NO_x, PM₁₀, or PM_{2.5}, a project would be considered to conflict with or obstruct implementation of the BAAQMD’s air quality planning efforts.

Table 1 BAAQMD Thresholds of Significance			
Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10

Source: BAAQMD, CEQA Guidelines, May 2017.

Emissions of particulate matter can be split into two categories: fugitive emissions and exhaust emissions. The BAAQMD thresholds of significance for exhaust PM emissions are presented in Table 1. The BAAQMD does not maintain quantitative thresholds for fugitive emissions of PM₁₀ or PM_{2.5}; rather, BAAQMD requires all projects within the district’s jurisdiction to implement Basic Construction Mitigation Measures (BCMMS) related to dust suppression. The BCMMS include the following, which would be required for the project by the City as conditions of approval (COA):

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. 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.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. 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.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. 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.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. Where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumes the following project and/or site-specific information:

- Construction would commence in March of 2022 and occur over an approximately 1.5-year period;
- Approximately 52,250 square feet of building material would be removed during demolition, including the two adjacent structures to the east;
- Approximately 300 cubic yards of soils/materials would be exported during site preparation;
- Approximately 4,929 cubic yards of soils/materials would be imported during grading;
- The off-site improvements, including the widening of Watsonville Road and Monterey Road, would disturb up to 89,500 square feet;
- The trip generation rates were updated to be consistent with the project-specific Trip Generation and Operations Analysis;
- Hearths/fireplaces would not be included in the proposed homes;
- The project would comply with the Model Water Efficient Landscape Ordinance (MWELo) and the 2019 California Green Building Standards (CALGreen) Code; and
- The project would comply with all applicable provisions of the 2019 CBSC, including meeting 100 percent of electricity demand through on-site renewable energy generation.

The proposed project's estimated emissions associated with construction and operation are provided below. All CalEEMod results are included as Appendix A to this Initial Study.

Construction Emissions

According to the CalEEMod results, the proposed project, including off-site improvements, would result in maximum unmitigated construction-related criteria air pollutant emissions as shown in Table 2. As shown in the table, the construction of the proposed project would generate criteria pollutants emissions below all applicable thresholds of significance. In addition, the proposed project's required implementation of the BAAQMD's BCMMs listed above for the project's construction activities would help to minimize construction-related emissions.

Overall, because construction of the proposed project would not exceed any applicable thresholds of significance, project construction would not conflict with or obstruct implementation of the applicable air quality plan.

Table 2
Maximum Unmitigated Construction Emissions (lbs/day)

Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	6.63	54	NO
NO _x	33.25	54	NO
PM ₁₀ *	1.61	82	NO
PM _{2.5} *	1.48	54	NO

Note:
* Denotes emissions from exhaust only. BAAQMD does not have adopted thresholds for fugitive PM emissions.

Source: CalEEMod, April 2021 (see Appendix A).

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated operational criteria air pollutant emissions as shown in Table 3.

Table 3
Unmitigated Maximum Operational Emissions

Pollutant	Proposed Project Emissions		Threshold of Significance		Exceeds Threshold?
	lbs/day	tons/yr	lbs/day	tons/yr	
ROG	2.67	0.46	54	10	NO
NO _x	2.38	0.42	54	10	NO
PM ₁₀ *	0.06	0.01	82	15	NO
PM _{2.5} *	0.06	0.01	54	10	NO

Note:
* Denotes emissions from exhaust only. BAAQMD has not yet adopted thresholds for fugitive PM emissions.

Source: CalEEMod, April 2021 (see Appendix A).

As shown in the table, the proposed project's operational emissions would be below the applicable thresholds of significance. Because the proposed project's operational emissions would be below the applicable thresholds of significance, the proposed project would not be considered to conflict with or obstruct implementation of the applicable air quality plan during project operation.

Cumulative Emissions

Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 1 represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 1, the project's emissions would

be cumulatively considerable, resulting in a significant adverse cumulative air quality impact to the region's existing air quality conditions. Because the proposed project would not generate criteria pollutant emissions above the applicable thresholds of significance, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State AAQS.

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2017 Clean Air Plan. Because construction and operation of the proposed project would not result in emissions of criteria air pollutants in excess of BAAQMD's thresholds of significance, conflicts with or obstruction of the implementation of the applicable regional air quality plans would not occur. As a result, the project would not result in a cumulatively considerable net increase of a criteria pollutant for which the project region is nonattainment under an applicable federal or State AAQS. Thus, a **less-than-significant** impact would occur.

- c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors would be the single-family residences located approximately 100 feet northwest of the project site, across Watsonville Road.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions, TAC emissions, and criteria pollutants, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads

- or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
 - The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

Given that the proposed project is consistent with the site's current land use and zoning designations, the proposed project would not conflict with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP).⁷ The addition of project trips would not be sufficient to increase traffic volumes at any nearby intersection to more than 44,000 vehicles per hour. Intersections where air mixing is inhibited do not exist in proximity to the project site. As such, based on the BAAQMD screening criteria, the proposed project would result in a less-than-significant impact related to localized CO emissions concentrations and would not expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, gas dispensing facilities, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. As noted above, the nearest sensitive receptors to the project site are the single-family residences to the northwest of the project site.

The proposed project does not include any operations that would be considered a substantial source of TACs. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs. However, short-term, construction-related activities would result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project is estimated to be approximately 1.5 years.

All construction equipment and operation thereof would be regulated pursuant to the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. Furthermore,

⁷ Santa Clara Valley Transportation Authority. 2015 *Congestion Management Plan*. October 2015.

the project applicant would be required to prepare, and include on all site development and grading plans, a management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project. Pursuant to Section 18.76.040 (Air contaminants) of the City's Municipal Code, the management plan must include all applicable BAAQMD rules and regulations, as well as the City's standard conditions for construction activity, including the BCMMs listed above under questions 'a' and 'b'. The City of Morgan Hill Development Services Department would ensure that the conditions listed above would be noted on project construction drawings prior to issuance of a building permit or approval of improvement plans.

In addition, only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. Operation of construction equipment within portions of the development area would allow for the dispersal of emissions, and would ensure that construction-activity is not continuously occurring in the portions of the project site closest to existing receptors. Furthermore, the prevailing wind direction in Morgan Hill is from the west,⁸ which would help to move the emissions of DPM from the use of construction equipment towards the east, away from the nearest sensitive receptors.

Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the potential for any one sensitive receptor in the area to be exposed to concentrations of pollutants for a substantially extended period of time would be low.

Criteria Pollutants

The BAAQMD thresholds of significance were established with consideration given to the health-based air quality standards established by the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), and are designed to aid the district in achieving attainment of the NAAQS and CAAQS.⁹ Although the BAAQMD's thresholds of significance are intended to aid achievement of the NAAQS and CAAQS for which the SFBAAB is in nonattainment, the thresholds of significance do not represent a level above which individual project-level emissions would directly result in public health impacts. Nevertheless, a project's compliance with BAAQMD's thresholds of significance provides an indication that criteria pollutants released as a result of project implementation would not inhibit attainment of the health-based regional NAAQS and CAAQS. Because project-related emissions would not exceed the BAAQMD's thresholds, and, thus, would not inhibit attainment of regional NAAQS and CAAQS, the criteria pollutants emitted during project implementation would not be anticipated to result in measurable health impacts to sensitive receptors. Accordingly, the proposed project would not expose sensitive receptors to excess concentrations of criteria pollutants.

Conclusion

Based on the above discussion, the proposed project would not expose any sensitive receptors to excess concentrations of localized CO, TACs, or criteria pollutants.

⁸ Weather Spark. *Average Weather in Morgan Hill*. Available at: <https://weatherspark.com/y/1089/Average-Weather-in-Morgan-Hill-California-United-States-Year-Round#:~:text=The%20predominant%20average%20hourly%20wind,of%2095%25%20on%20August%201>. Accessed March 2021.

⁹ Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.

Consequently, the proposed project would result in a **less-than-significant** impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

- d. Emissions of concern include those leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in questions 'a' through 'c' above. Therefore, the following discussion focuses on emissions of odors and dust.

According to the BAAQMD CEQA Guidelines, odors are generally regarded as an annoyance rather than a health hazard.¹⁰ Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on a number of variables including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative analysis to determine the presence of a significant odor impact is difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses and is not located in the vicinity of any such existing or planned land uses.

Construction activities often include diesel-fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities would be temporary, and limited to the hours of operation set forth in Chapter 8.28 of the City's Municipal Code. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize emissions, including emissions leading to odors. Accordingly, substantial objectionable odors would not be expected to occur during construction activities.

With respect to dust, as noted previously, the proposed project would be required to implement BAAQMD's BCMMs during project construction. The BCMMs would act to reduce construction-related dust by requiring that haul trucks with loose material are covered, reducing vehicle dirt track-out, and limiting vehicle speeds within the project site, among other methods, which would ensure that construction of the proposed project does not result in substantial emissions of dust. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, and non-paved areas would be landscaped. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people, and a **less-than-significant** impact would result.

¹⁰ Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines*. May 2017.

IV. BIOLOGICAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. 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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. 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"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following is based primarily on a Biological Evaluation report prepared for the proposed project by Live Oak Associates, Inc. (LOA), included as Appendix B to this IS/MND.¹¹ As part of the Biological Evaluation, a review of databases maintained by the California Natural Diversity Database (CNDDDB), the California Native Plant Society (CNPS), and the Santa Clara Valley Habitat Plan (SCVHP) was conducted to evaluate the potential for special-status species to occur within the project area. In addition, a site reconnaissance survey was conducted by LOA on May 29, 2020.

Discussion

a. Currently, the project site is developed with the former Royal Oak Mushroom Farm. A small number of shrubs and trees are located along the borders of the project site. According to the Biological Evaluation prepared for the proposed project, the habitats within the project site consist of two biotic habitats: developed/landscaped and ruderal. Developed lands provide limited habitat for locally occurring wildlife species. Ruderal portions of the project site are dominated by non-native grasses and forbs as well as scattered trees and shrubs. Compared to more natural habitats, ruderal areas provide relatively low habitat value for wildlife due to the sparseness of understory vegetation. In addition, the project site contains a shallow retention basin (approximately four feet deep) and a manmade roadside ditch. The shallow retention basin is located within the ruderal field near the south end of the former buildings. The retention basin is regularly inundated by stormwater. The manmade roadside ditch collects stormwater runoff from upstream

¹¹ Live Oak Associates, Inc. *UHC Morgan Hill Biological Evaluation City of Morgan Hill, California*. September 3, 2020.

properties and from Watsonville Road and conveys stormwater approximately 300 feet northeast to a culvert.

Certain plant and animal species are considered to have special status if they are listed or proposed for listing under the federal or State Endangered Species Acts, meet the definition of Rare or Endangered under CEQA, are otherwise considered special-status by the California Department of Fish and Wildlife (CDFW) or CNPS, or considered rare locally. In addition, nesting birds and raptors are protected under the Federal Migratory Bird Treaty Act (MBTA), which prohibits killing, possessing, or trading of migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA covers take of whole birds, parts of birds, and bird nests and eggs.

The project site is located within the boundaries of the SCVHP, which provides take authorization for 18 listed and non-listed species (i.e., covered species). In addition, the SCVHP includes conservation measures to protect the species covered by the SCVHP, as well as a conservation strategy designed to mitigate impacts on covered species and contribute to the recovery of the species in the study area. Compliance with the SCVHP is discussed under question 'f' below.

Based on the Biological Evaluation, a total of seven special-status plants and 26 special-status wildlife species are known to occur in the project region. The project site is not located within designated Critical Habitat for any federally listed plant or animal species. The potential for any of the identified special-status species to occur on the project site is addressed below.

Special-Status Plant Species

According to the Biological Evaluation, seven special-status vascular plant species are known to occur in the project vicinity, including the following: Santa Cruz tarplant (*Holocarpha macradenia*); San Francisco popcorn flower (*Plagiobothrys diffusus*); Big-scale balsamroot (*Balsamorhiza macrolepis*); Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*); Dudley's lousewort (*Pedicularis dudleyi*); California alkali grass (*Puccinellia simplex*); and Saline Clover (*Trifolium hydrophilum*). However, according to the Biological Evaluation, project buildout would not have an effect on regional populations of the aforementioned species because the site does not provide habitat or provides poor habitat for the special-status plant species. Therefore, the proposed project would not adversely affect special-status plant species during construction or operations.

Special-Status Wildlife Species

According to the Biological Evaluation, of the 26 special-status wildlife species that occur, or once occurred, regionally, 22 species are considered absent or unlikely to occur on-site due to past and ongoing disturbance of the site and surrounding lands, absence of suitable habitat, and/or the site being situated outside of the species' known range. According to the Biological Evaluation, four special-status wildlife species have the potential to forage on the site and/or breed on-site or close enough to the site that the special-status species could be adversely impacted during construction of the proposed project. The four special-status wildlife species include the white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and pallid bat (*Antrozous pallidus*). Foraging individuals of the aforementioned species would not be vulnerable to construction-related injury or mortality because the species are highly mobile foragers. Thus, the species would be expected to avoid active construction zones. The

species could breed on-site due to the presence of suitable habitat such as trees and shrubs and, thus, could be vulnerable to construction-related disturbances.

In addition, although the project site is located outside of the SCVHP burrowing owl fee area and is not identified in the SCVHP as “Occupied Nesting Burrowing Owl Habitat”, “Potential Burrowing Owl Nesting/Overwintering Habitat Depending on Site Conditions”, or “Overwintering Only Habitat”, out of an abundance of caution, the project site should be considered potential nesting/overwintering habitat given that the burrowing owl could potentially overwinter or occupy the site in the future prior to grading.

Based on the above, the potential effects to the aforementioned special-status birds and bats, as well as to migratory birds and burrowing owl are discussed in further detail below.

Special-Status and Other Migratory Birds

Existing trees and shrubs on and near the project site provide potential nesting habitat for nesting migratory birds and raptors protected by the MBTA, including the white-tailed kite and loggerhead shrike, which are considered Fully Protected by the CDFW. Similarly, buildings on-site could provide nesting opportunities for swallows protected under the MBTA. Therefore, project construction activities, including demolition, initial site grading, soil import, and/or tree and vegetation removal occurring during the nesting period for migratory birds (typically between February 1 to August 31) could have the potential to result in nest abandonment or death of any live eggs or young, should protected birds or their nests be present within or near the project site. In such an event, the proposed project could result in a potentially significant impact. The off-site improvements are considered to have a potential to impact nesting birds given that the improvements are anticipated to involve the removal of the trees along Watsonville Road and Monterey Road frontages, which support various trees. Therefore, the overall project could have a substantial adverse effect on special-status birds and other migratory birds and raptors.

Burrowing Owl

As stated above, the project site is located outside of the SCVHP burrowing owl fee area, and is not identified in the SCVHP as “Occupied Nesting Burrowing Owl Habitat”, “Potential Burrowing Owl Nesting/Overwintering Habitat Depending on Site Conditions”, or “Overwintering Only Habitat”. Burrowing owls do not require a specific vegetation cover or soil type and typically use vacated burrows dug by small mammals as nesting habitat; however, burrowing owls are also known to use artificial burrows including pipes, culverts, and piles of concrete pieces in urban areas. Burrowing owls or vacated burrows were not found on-site. However, out of an abundance of caution, in the professional judgment of the project biological consultant, the project site should be considered potential nesting/overwintering habitat given that the burrowing owl could potentially overwinter or occupy the site in the future prior to grading. As such, should site grading occur during the nesting season for the species (February 1 through August 31), nests and nestlings potentially present on the site could be adversely affected by the proposed development, and a potentially significant impact could occur. Burrowing owls are protected under Condition One and Condition 15 of the SCVHP; therefore, compliance with the aforementioned conditions is recommended.

Special-Status Bats

Special-status bats, such as the pallid bat and townsend’s big-eared bat were not observed on the site during the site reconnaissance survey conducted by LOA. However,

some of the existing buildings on-site support potential roosting habitat for bats. As such, demolition or removal of existing buildings could result in the loss of a roosting or maternity colony of bats should any be present at the time of such activities. Therefore, a substantial adverse effect on special-status bats could occur during construction activities.

Conclusion

Based on the above, development of the proposed project would not result in any substantial adverse effects to special-status plants. However, the project site provides potential foraging habitat and breeding habitat for special-status bird and bat species, as well as other migratory bird species protected by the MBTA. If such species occur on the project site during construction activities, the project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as candidate, sensitive, or special status-species in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service (USFWS), and a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above identified potential impact to a *less-than-significant* level.

Loggerhead Shrike, White-tailed Kite, and other Migratory Birds and Raptors

IV-1.

To the maximum extent practicable, the removal of trees and shrubs and demolition of buildings shall occur during the non-breeding season (September 1 through January 31). If tree removal or building demolition cannot be avoided during the breeding season (February 1 through August 31), pre-construction surveys shall be conducted by a qualified biologist during the breeding season for tree-nesting raptors and other migratory birds less than 14 days prior to the onset of such construction-related disturbances. The pre-construction survey shall include all trees, large shrubs, buildings, or other areas of potential nesting habitat within the project footprint and, where possible, within 250 feet of the footprint. If active nests are deemed absent from the area, then further mitigation measures are not required, and ground disturbance or construction could occur within 14 days following the survey. Pre-construction surveys and results shall be submitted to the City of Morgan Hill Development Services Department for review and approval prior to issuance of grading permit or issuance of building permit.

IV-2.

If nesting raptors or other migratory birds are detected on the site during the survey, a suitable disturbance-free buffer of up to 500 feet shall be established around all active nests. The precise dimension of the buffer would be determined at that time and may vary depending on factors such as location, species, topography, and line of sight to the construction area. The buffer area(s) shall be enclosed with temporary fencing, and equipment and workers shall not enter the enclosed buffer areas. Typical buffers range between 100 feet and 250 feet for migratory bird nests and between 250 feet and 500 feet for a raptor nest. If active nests are found within the project footprint, a qualified biologist shall monitor nests daily for a minimum of five days during construction to evaluate potential nesting disturbance by construction activities. If construction activities cause the

nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then an exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. Buffers shall remain in place for the duration of ground disturbing activities, the breeding season, or until a qualified biologist has confirmed that all chicks have fledged and are independent of their parents, whichever occurs first.

Burrowing Owl

IV-3.

Pre-construction surveys are required to ascertain whether burrowing owls occupy burrows on or adjacent to the site. A minimum of two surveys are required, with the first survey to occur up to 14 days prior to initial construction activities (e.g., vegetation removal, grading, or excavation) and the second survey to occur within two days prior to initial construction activities. If burrowing owls or evidence of burrowing owls are not observed during pre-construction surveys, construction may proceed. If burrowing owls or their recent sign are observed during the surveys, occupied burrows shall be identified by the monitoring biologist and appropriate construction-free buffers, as described below, shall be established:

- *A 250-foot non-disturbance buffer shall be established around all active burrowing owl burrows or nest sites, as identified and defined by a qualified biologist. If the biologist determines that a nest is vacant, the non-disturbance buffer zone around that nest may be removed. The SCVHP specifies that a vacation from the site for a week or more by a burrowing owl, as determined by a qualified biologist, would constitute a voluntary relocation by the owl, and the qualified biologist could then take measures to collapse suitable burrows of the site to discourage reoccupation. The biologist shall supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (SCVHP, Chapter 6, Condition 15). For permission to encroach within 250 feet of such burrows during the nesting season (February 1 through August 31), an Avoidance, Minimization, and Monitoring Plan shall be prepared and approved by the City of Morgan Hill Development Services Department and Wildlife Agencies prior to such encroachment.*
- *Should a burrowing owl be overwintering or nesting on-site in the non-breeding season (September 1 through January 31), construction activities shall not be allowed within the 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:*
 - *A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction);*
 - *The same qualified biologist monitors the owl during construction and does not find a change in owl foraging behavior in response to construction activities;*

- *If a change in owl nesting and foraging behavior occur because of construction activities, the construction activities shall cease within the 250-foot buffer; and*
- *If the owls are gone for at least one week, the project proponent may request approval from the City of Morgan Hill Development Services Department that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone shall be removed, and construction may continue.*

IV-4. *The SCVHP prohibits the passive relocation or exclusion of burrowing owls until a positive regional growth trend is achieved, as defined in Section 5.4.6 of the SCVHP; however, a project may qualify for an exception to this prohibition. Permission to engage in passive relocation during the non-breeding season shall be requested through the standard application process (Section 6.8 of the SCVHP). Application for an exception would require additional information, including a relocation plan and documentation by a qualified biologist that owls have occupied the site for the full year without vacating the site for 10 or more consecutive days. The application would need to be submitted to the City of Morgan Hill Development Services Department, and the Wildlife Agencies would then evaluate the application and decide if an exception should be granted. If passive relocation is approved, additional measures may be required by the City of Morgan Hill Development Services Department.*

Special-Status Bats

IV-5. *A habitat assessment shall be conducted prior to demolition by a qualified biologist to identify buildings on-site that could be suitable for roosting bats. If the habitat assessment does not find suitable roosting habitat, further mitigation is not required. If the habitat assessment finds that suitable roosting habitat is present, a bat survey shall be conducted by a qualified bat biologist within 30 days of building demolition to determine if bats are roosting or breeding in the buildings. Additionally, an emergency survey may be required for areas that cannot be surveyed directly. The surveys shall be conducted during times of the year when bats are active (March 1 through August 15). The habitat assessment, surveys, and results shall be submitted to the City of Morgan Hill Development Services Department for review and approval prior to issuance of a demolition permit.*

IV-6. *If a maternity colony is found on the site, then a construction-free buffer up to 100 feet shall be established around the colony by a qualified biologist. The size of the buffer shall be determined by the biologist depending on factors such as the type of construction-related activity to occur and its proximity to the maternity colony. The buffer shall remain in place until the biologist determines that the nursery is not active.*

IV-7. *If a bat colony is found on the site during the overwintering season (i.e., October 15 through March 1), demolition shall be delayed until after March 1 or until a qualified biologist determines that bats are absent.*

IV-8. *If a non-breeding bat colony is found in buildings to be demolished, the individuals shall be humanely evicted by way of a two-step, partial dismantlement of the buildings prior to demolition. The eviction shall be conducted under the direction and supervision of a qualified biologist to ensure that harm or take would not occur to any bats as a result of demolition activities.*

- b,c. An investigation of potential waters of the U.S. was completed for the proposed project by LOA on October 22, 2020 (Appendix C)¹² and was submitted to the U.S. Army Corps of Engineers (USACE) for a formal determination. The potential hydrological features on the site are the retention basin and the roadside ditch. The retention basin holds stormwater during the wet season and supports hydrophytic vegetation, but not hydric soils, which is required to meet the USACE's three technical criteria for jurisdictional wetlands. Because the retention basin was constructed as part of the prior on-site mushroom operations in uplands (i.e., not replacing an existing aquatic feature), is regularly maintained, and failed to meet the USACE technical criteria for wetlands, the retention basin is presumed to be neither waters of the U.S. nor waters of the State. The roadside ditch is a man-made feature that collects stormwater runoff from upstream properties and Watsonville Road and conveys water approximately 300 feet northeast to a culvert. The culvert directs flow into a storm drain that outlets to West Little Llagas Creek, a known water of the U.S., underneath Watsonville Road. Because the roadside ditch was excavated in uplands and does not replace historical tributary water, the roadside ditch would not be considered waters of the U.S. or waters of the State and, therefore, would not be regulated by the USACE, CDFW, or Regional Water Quality Control Board (RWQCB). Therefore, jurisdictional wetlands or other waters of the U.S. or of the State, including streams or other small drainages, riparian habitats, or other aquatic features regulated by federal or State laws, are not present on the project site.

As noted in the Biological Evaluation, certain natural plant communities and wildlife habitats are considered to have special status due to their restricted occurrence in the State, their tendency to support rare plant or animal species, or because impacts are restricted or otherwise regulated under federal, State, or local laws or ordinances. However, sensitive habitats do not occur on-site. Accordingly, implementation of the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS or have a substantial adverse effect on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. Based on such, a ***less-than-significant*** impact would occur.

- d. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression and increasing the potential for recolonization of habitat patches. In California, movement corridors are typically associated with valleys, rivers, creeks, riparian vegetation, and ridgelines. Lands surrounding the project site have been moderately developed with neighborhoods, roads, and commercial, agricultural, and industrial land uses, which greatly constrain, but do not completely impede movement of wildlife between the site and open lands. West Little Llagas Creek, located southwest of the site, serves as a movement corridor for local wildlife species. The SCVHP identifies Llagas Creek as

¹² Live Oak Associates, Inc. *UHC Morgan Hill Investigation of Potential Waters of the United States City of Morgan Hill, California*. October 22, 2020.

a regional landscape linkage. Movements on and across the site could consist of typical movements associated with an individual animal's home range or territory, or animals dispersing from their natural range. The project site does not have unique features that would lend to facilitating wildlife movements in a disproportionate way as to function as a wildlife movement corridor. In fact, existing development on the site may deter through-movements, and wildlife moving onto the site may disperse back towards the direction from which they came. Therefore, development of the proposed project would not substantially interfere with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites, and a **less-than-significant** impact would occur.

- e. Section 12.32.030 (Permit-Required) of the City of Morgan Hill's Municipal Code requires the approval of a tree removal permit prior to the removal of any Ordinance Sized Trees, except that a permit shall not be required for developments which have been reviewed and approved by the Planning Commission or Development Services Director and the tree removal conforms with the landscape plans of those developments. An Ordinance Sized Tree is defined as a non-indigenous tree with a circumference greater than 40 inches (approximately 12.7-inch diameter) or any indigenous tree with circumference greater than 18 inches (approximately 5.7 inches in diameter). Indigenous tree means any tree native to the Morgan Hill region, such as oaks (all types), sycamore, California bay, madrone, or alder.

An Arborist Report was prepared for the proposed project by McClenahan Consulting, LLC (see Appendix D)¹³ to determine species, size, and condition of trees on-site and provide for general tree preservation guidelines, should any trees remain on-site. Based on the Arborist Report results, the project site contains 37 trees, all of which are proposed for removal. Of the 37 trees, 16 are indigenous trees and 21 are non-indigenous trees. Of the 21 non-indigenous trees, 12 are considered Ordinance Sized Trees. All of the 28 Ordinance Sized Trees are located on site. Most of the redwood trees, blue gum compactus, and black walnut trees on-site are severely drought stressed and should be removed due to poor conditions. The live oak trees, including few black walnut trees and blue gum compactus trees, are in fair condition. For all Ordinance Sized Trees to be removed, replacement plantings would be required in accordance with Municipal Code Section 12.32.080. If any Ordinance Sized Trees are able to be retained, preservation and/or protection measures would be required. Should additional Ordinance Sized Trees require trimming or removal, the project applicant would be required to comply with Section 12.32.030 of the City's Municipal Code related to replanting.

Although the live oak trees located on the project frontage of Watsonville Road may be suited for preservation, the trees may not have enough vertical clearance to achieve maturity. To preserve the live oak trees, grading and construction of the off-site improvements along Watsonville Road would need to avoid the Tree Protection Zone (TPZ) identified by the Arborist Report. However, according to the Arborist Report, the degree of grading needed to achieve finished grades and excavation/over excavation for sidewalk and curb and gutters along Watsonville Road would encroach into the TPZ and, thus, would impact a significant portion of the root systems of the trees. While crown raising would be capable of achieving the necessary vertical clearance, the trees would be expected to lose up to 30 percent of their root systems. As a result, removal of the trees may still be required.

¹³ McClenahan Consulting, LLC. *Royal Oak Village*. August 20, 2020. Revised April 1, 2021.

Based on the above, the proposed project could have a **potentially significant** impact related to conflicting with local policies or ordinances protecting biological resources if the appropriate protection measures are not implemented during construction for trees identified for preservation, and replacement trees are not provided in accordance with the City's Ordinance.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

- IV-9. *The removal of Ordinance Sized Trees shall be avoided and preserved to the maximum extent feasible, as determined by the City of Morgan Hill Development Services Director. If Ordinance Sized Trees cannot be avoided during construction, the project applicant shall mitigate for the removal of the Ordinance Sized Trees located within the project site, by providing an on-site replacement planting program at a minimum 1:1 ratio with 24-inch box sized trees. The City shall condition the project to replace the oaks at a 2:1 ratio. Replacement shall be overseen and verified by a qualified arborist and the City of Morgan Hill. The detailed replacement program shall be submitted to the City of Morgan Hill Development Services Director for approval prior to issuance of a grading permit.*
- IV-10. *For the Ordinance Sized Trees to be preserved as part of the project, the project applicant shall include a Tree Preservation Plan, which shall be noted on Improvement Plans, subject to review and approval by the City of Morgan Hill Development Services Department prior to issuance of a grading permit. The measures identified within the Tree Preservation and Protection Plan shall remain in place for the duration of construction activities. Following Tree Preservation Measure may include:*
- *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 outside/on 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 six 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's condition, and treatment of damaging conditions (insects, diseases, nutrient deficiencies, etc.) as they occur, or as appropriate.*
- *Individual trees likely to suffer significant impacts may require specific, more extensive efforts and/or a more detailed specification than those contained within these general guidelines.*

- f. As noted above, the project site is located within the boundaries of the SCVHP permit area. The SCVHP was developed through a partnership between Santa Clara County, the cities of San José, Morgan Hill, and Gilroy, the Santa Clara Valley Water District (SCVWD), the Santa Clara VTA, the USFWS, and the CDFW. The SCVHP 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 southern Santa Clara County. The SCVHP provides take authorization for 18 covered species and includes conservation measures to protect the species covered by the SCVHP, as well as a conservation strategy designed to mitigate impacts on covered species and contribute to the recovery of the species in the study area.

According to the Biological Evaluation, the project site is within the SCVHP coverage area and, therefore, is required to comply with the SCVHP. Specifically, the project site is designated as "Urban-Suburban" land cover type in the SCVHP. Chapter 9 of the SCVHP states that any area defined as "Urban-Suburban" is "exempt from development fees, with the exception of the nitrogen deposition fee and burrowing owl fee, if it is not located in or adjacent to a parcel that contains a stream, riparian woodland or forest, wetland, pond, or serpentine." The overall project site is not subject to the burrowing owl fee because the site is located outside of the SCVHP burrowing owl fee area. However, the proposed project would be subject to nitrogen deposition fees, which are related to the number of anticipated car trips resulting from the development. As of 2019, the nitrogen deposition fees are \$4.96 for each new vehicle trip. In addition to fees, the project would be required to comply with applicable conditions of the SCVHP. Condition one avoids direct impacts on special-status species, Condition three maintains hydrologic conditions and protects water quality, and Condition 15 protects the burrowing owl. Compliance with Conditions one and 15 are required through Mitigation Measures IV-1 through IV-8 and compliance with Condition three is discussed within Section X, Hydrology and Water Quality, of this IS/MND.

Compliance with Conditions one, three, and 15, as well as payment of the fees described above, would ensure that the proposed project would not conflict with the SCVHP, natural conservation community plan, or other approved local, regional, or state habitat conservation plan and would result in a **less-than-significant** impact.

V. CULTURAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a. A records search of the California Historic Resources Information Center (CHRIS) was performed by the Northwest Information Center (NWIC) for cultural resource site records and survey reports within the project area, including the off-site improvement areas. Based on the results of the CHRIS search, the State Office of Historic Preservation Built Environment Resource Directory (OHP BERD), which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places, does not list recorded buildings or structures within or adjacent to the project area.¹⁴ Typically, buildings 50 years of age or older have the potential to be considered historic if they meet additional criteria for historical significance such as being associated with significant historic events, persons, architectural design, or yield important information. The existing on-site structures associated with the Royal Oak Mushroom Farm were completed in 1974 and are, thus, 47 years old. As such, the structures would not meet the minimum age standard to be of historical value. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 resulting in a ***less-than-significant*** impact.

b-c. According to the CHRIS search, a moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. As noted in the General Plan EIR, archaeological surveys conducted in City of Morgan Hill have identified numerous prehistoric sites with shell midden components, including human burials. Currently, the project site is developed, which would have included disturbances of the underlying soil. As such, while unlikely, the possibility exists for previously unknown resources to be found on-site during grading and excavation of the site, as well as during construction activities associated with the off-site improvements on Watsonville Road and Monterey Road. In the event that such resources are unearthed, the following City standard COA related to the protection of archaeological resources would be implemented; consistent with Section 18.60.890 of the City’s Municipal Code:

1. An archaeologist shall be present on-site to monitor all ground-disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:
 - a. Work at the location of the find will halt immediately within thirty feet of the find. If an archaeologist is not present at the time of

¹⁴ California Historical Resources Information System. *Record search results for the proposed Royal Oak Village project, Morgan Hill, Santa Clara County, California.* April 16, 2021.

- the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;
- b. If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
 - c. If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and
 - d. If the resource cannot be avoided, the archaeologist shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2.
2. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans,
 - a. 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.
 - b. Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
 - c. Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
 3. 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, ground stone 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 exclusion zone as defined below.
 4. 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 twenty-five to fifty feet for single burial or archaeological find).
5. The exclusion zone shall be secured (e.g., twenty-four-hour surveillance) as directed by the city or county if considered prudent to avoid further disturbances.
 6. 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:
 - a. The City of Morgan Hill Development Services Director,
 - b. The contractor's point(s) of contact,
 - c. The coroner of the county of Santa Clara (if human remains found), and
 - d. The Native American Heritage Commission (NAHC) in Sacramento.
 7. 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 twenty-four hours to notify the NAHC.
 8. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.).
 9. Within twenty-four hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose,
 10. Within twenty-four hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out.
 11. 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.

Compliance with the above standard COA would ensure that construction of the proposed project, including off-site improvements, would have a **less-than-significant** impact related to historical or unique archeological resources, as well as the disturbance of human remains.

VI. ENERGY.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project’s potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC), which became effective with the rest of the CBSC on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of Electric Vehicle charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources’ MWEL0, or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills;
- Mandatory periodic inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies;
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board; and
- For some single-family and low-rise residential development developed after January 1, 2020, mandatory on-site solar energy systems capable of producing 100 percent of the electricity demand created by the residence(s). Certain residential developments, including those developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy-efficiency measures from the 2016 Building Energy Efficiency Standards. The 2019 Building Energy Efficiency Standards are in effect for building permit applications submitted after January 1, 2020.

The 2019 standards provide for additional efficiency improvements beyond the current 2016 standards. Non-residential buildings built in compliance with the 2019 standards are anticipated to use approximately 30 percent less energy compared to the 2016 standards, primarily due to lighting upgrades.¹⁵

For residential buildings, compliance with the 2019 standards will use approximately seven percent less energy due to energy efficiency measures compared to homes built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use approximately 53 percent less energy than those under the 2016 standards.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated by the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

The CARB's *2017 Climate Change Scoping Plan Update* (2017 Scoping Plan)¹⁶ builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's

¹⁵ California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.

¹⁶ California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.

climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The In-Use Off-Road Diesel Vehicle Regulation described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

In response to the growing climate crisis, the City has determined that natural gas use in local buildings, which accounts for approximately one-third of the community's carbon footprint, represents the City's greatest opportunity to reduce future greenhouse gas emissions. Requiring all new buildings to be constructed without natural gas will dramatically reduce future emission growth as electricity procured by Silicon Valley Clean Energy is 100 percent carbon free. The City Council adopted Ordinance No. 2306 on November 6, 2019, which prohibits natural gas infrastructure in new buildings.

Following implementation of the proposed project, PG&E would provide electricity to the project site. Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape and vehicle maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by residents' commutes.

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as door and window interlocks, direct digital controls for HVAC systems, and high efficiency outdoor lighting. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project by PG&E would comply with the State's Renewable Portfolio Standard (RPS), which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. Thus, a portion of the energy consumed during project operations would originate from renewable sources. With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy.

Conclusion

Based on the context above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a ***less-than-significant*** impact would occur.

VII. GEOLOGY AND SOILS.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area 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 checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. 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"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The following discussion is based primarily on a Geotechnical Study prepared for the proposed project by Geo-Logic Associates (Appendix E).¹⁷

ai, aii. The General Plan EIR notes that Morgan Hill is located between two major active fault lines, including the Sargent and San Andreas faults to the west in the Santa Cruz Mountains, and the Calaveras fault in the Diablo Range to the east. However, according to the Geotechnical Study, active faults do not cross the site, and the site is not located in an Alquist-Priolo Earthquake Fault Zone. Therefore, the proposed project would not be subject to risks related to rupture of a known earthquake fault. However, the project site is located in an area of high seismicity. According to the Geotechnical Study, the proposed structures could be subject to a severe earthquake (magnitude 7 to 8+) that could cause significant ground shaking at the project site. Additionally, the site would periodically experience small to moderate earthquakes.

However, the proposed project would be subject to all applicable regulations within the CBSC and Chapter 15.08 (Building Code) of the City’s Municipal Code, which provide standards to protect property and public safety by regulating the design and construction of foundations, building frames, and other building elements. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the

¹⁷ Geo-Logic Associates. *Geotechnical Study Proposed Royal Oak Village*. September 1, 2020.

event of a maximum magnitude earthquake, conformance with the CBCS can reasonably be assumed to ensure that the proposed structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake.

Therefore, a **less-than-significant** impact would occur related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure.

aiii,aiv,

- c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence/settlement are described in detail below.

Liquefaction

Liquefaction is a phenomenon in which granular material is transformed from a solid state to a liquefied state as a consequence of increased pore-water pressure and reduced effective stress. Increased pore-water pressure is induced by the tendency of granular materials to densify when subjected to cyclic shear stresses associated with earthquakes. According to the Geotechnical Study, a review of the Santa Clara County Liquefaction Hazard Zone map for the project site indicates the project site is not in a liquefaction zone. Additionally, according to the Geotechnical Report, the potential for liquefaction of the subsurface granular soils encountered on the site is low due to their dense to very dense relative density. Furthermore, the CBCS and Morgan Hill Building Code provide standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements, which would further reduce the potential for seismic-related ground failure, including liquefaction. As such, compliance with the aforementioned regulations would ensure that the potential for risks related to liquefaction would be less than significant.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. Based on the California Geologic Survey, the site is not located within a designated seismic hazard zone for landslides.¹⁸ Further, the General Plan EIR concludes that compliance with the policies within the Safety, Services, and Infrastructure Element of the General Plan, along with the CBCS and Morgan Hill Building Code, would reduce any potential impacts related to landslides to a less-than-significant level.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. The project site is relatively level. In addition, the site is not located near any open faces that would be considered susceptible to lateral spreading. Therefore, the potential for lateral spreading to pose a risk to the proposed development is relatively low. Further, the General Plan EIR concludes that impacts related to lateral spreading would be reduced to a less-than-significant level with compliance with the CBCS, the Santa Clara County General Plan, and the Morgan Hill Municipal Code.

¹⁸ California Department of Conservation. *Landslides*. Available at: <https://www.conservation.ca.gov/cgs/landslides#landslidemaps>. Accessed March 2021.

Subsidence/Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. Given that the proposed project would comply with the design standards of the CBSC, the potential for subsidence to pose a risk to the proposed development is relatively low. In addition, the General Plan EIR concludes that impacts related to subsidence/settlement would be reduced to a less-than-significant level with compliance with the CBSC and the Morgan Hill Municipal Code.

Conclusion

Compliance with standard construction regulations included in the CBSC and the Morgan Hill Municipal Code would ensure that the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, landslides, or unstable soils such as lateral spreading, subsidence, or collapse. Thus, a **less-than-significant** impact would occur.

- b. Development of the project site and off-site improvements would cause ground disturbance of mostly topsoil related to construction activity. The ground disturbance would be limited to the areas proposed for grading and excavation, including the building pads; curb, gutter, sidewalk improvement areas; drainage, sewer, water infrastructure alignments; and off-site improvement areas. After grading and excavation and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

New development within the City that disturbs one or more acres of land is required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs) to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The proposed project would disturb approximately 3.7 acres; as such, the proposed project would be subject to the aforementioned requirements. In addition, pursuant to Chapter 13.30 (Urban Storm Water Quality Management and Discharge Control) of the City's Municipal Code, the project applicant would be required to submit a sediment and erosion control plan to the City of Morgan Hill, Land Development Engineering Division, prior to the approval of improvement plans and issuance of building permits. The plan(s) shall be acceptable and conform to City standards to prevent significant sediment and soil erosion during construction and include the standards and guidelines found in the California Stormwater Quality Association, Stormwater Best Management Practice Handbook. Based on the above, the proposed project would not result in substantial soil erosion or the loss of topsoil. Thus, a **less-than-significant** impact would occur.

- d. As stated in the Geotechnical Study, an Atterberg limits test was performed on a soil sample of a near-surface clay. The test indicated that the clay has an intermediate to high plasticity, which generally corresponds to a high expansion potential. Further, a review of the regional soil information obtained from the United States Department of Agriculture (USDA) National Resources Conservation Service (NRCS) website indicates intermediate to high plasticity clays in the upper soil layers.

As noted in the General Plan EIR, the CBSC and Chapter 15.08 (Building Code) of the City's Municipal Code provide standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, and other building elements. The proposed project would be required to comply with all applicable CBSC standards to ensure the structural integrity of the proposed structures. Furthermore, to avoid damage due to soil expansion and shrinkage, Section 15.08.090 (Section 1907A.1 amended - Minimum slab provisions) of the City's Municipal Code includes requirements for minimum thickness of concrete floor slabs, as well as required reinforcement with wire mesh or an approved alternate, to help prevent damage due to shrinking and swelling. The Geotechnical Study includes recommendations for moderately low expansive soil conditions on the project site, consisting of moisture conditioning of the subgrade. As for the off-site improvement areas, the areas are already developed with existing roadways. Thus, improvements to Watsonville Road and Monterey Road would not further exacerbate risks related to expansive soils.

Based on the above, without incorporation of the Geotechnical Study recommendations into the project design, the proposed project could result in a **potentially significant** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* impact.

VII-1. All grading and foundation plans for the development shall be designed by a civil and structural engineer and reviewed and approved by the City Engineer, Chief Building Official, and a qualified geotechnical engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report prepared for the proposed project by Geo-Logic Associates are properly incorporated and used in the project design.

- e. The proposed project would connect to existing City-maintained sewer infrastructure and would not include the use of septic tanks. Therefore, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.
- f. Paleontological resources, or fossils, are the remains of prehistoric plant and animal life. As noted in the General Plan EIR, based on a review of the University of California's Museum of Paleontology's (UCMP) fossil locality database conducted for all of Santa Clara County, paleontological resources have not been explicitly identified as being found within Morgan Hill.¹⁹ Nonetheless, previously unknown paleontological resources could potentially exist within the project site, and any ground-disturbing activity associated with implementation of the proposed project could have the potential to disturb or destroy such resources. The project would be subject to the City's standard measures listed in Chapter V, Cultural Resources, of this IS/MND, which, as noted in the General Plan EIR, would ensure impacts to paleontological resources are less-than-significant.

The General Plan EIR concludes that impacts related to the destruction of unique geological and paleontological features would be considered less than significant upon buildout of the General Plan. Considering the proposed project would be consistent with

¹⁹ City of Morgan Hill. *Morgan Hill 2035 General Plan EIR* [pg. 4.5-17]. Adopted July 2016.

the General Plan land use designation, the resulting impact to paleontological and geological features would not be more severe than what has been previously anticipated in the General Plan EIR. In addition, the off-site improvement areas have been subject to prior disturbances. Therefore, based on the above, including compliance with the City's COAs, the proposed project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, and a ***less-than-significant*** impact would occur.

VIII. GREENHOUSE GAS EMISSIONS.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a,b. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project’s GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

The proposed project is located within the jurisdictional boundaries of BAAQMD. The BAAQMD developed a threshold of significance for project-level GHG emissions in 2009. The District’s approach to developing the threshold was to identify a threshold level of GHG emissions for which a project would not be expected to substantially conflict with existing California legislation. At the time that the thresholds were developed, the foremost legislation regarding GHG emissions was Assembly Bill (AB) 32, which established an emissions reduction goal of reducing statewide emissions to 1990 levels by 2020.²⁰ The GHG emissions threshold of significance recommended by BAAQMD to determine compliance with AB 32 is 1,100 MTCO₂e/yr or 4.6 MTCO₂e per service population per year (MTCO₂e/SP/yr.). If a project generates GHG emissions above the BAAQMD’s adopted threshold level, the project is considered to generate significant GHG emissions and conflict with AB 32.

The foregoing threshold is intended for use in assessing operational GHG emissions only. Construction of a proposed project would result in GHG emissions over a short-period of time in comparison to the operational lifetime of the project. To capture the construction-

²⁰ Bay Area Air Quality Management District. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. May 2017.

related GHG emissions due to buildout of the proposed project, such emissions are amortized over the anticipated project lifetime and added to the operational GHG emissions. Given that construction-related GHG emissions would not occur concurrently with operational emissions and would cease upon completion of construction activities, combining the two emissions sources represents a conservative estimate of total project GHG emissions.

Since the adoption of BAAQMD's GHG thresholds of significance, the State legislature has passed AB 197 and Senate Bill (SB) 32, which builds off of AB 32 and establishes a statewide GHG reduction target of 40 percent below 1990 levels by 2030. Considering the legislative progress that has occurred regarding statewide reduction goals since the adoption of BAAQMD's standards, the emissions thresholds presented above would determine whether a proposed project would be in compliance with the 2020 emissions reductions goals of AB 32, but would not necessarily demonstrate whether a project would be in compliance with SB 32. In accordance with the changing legislative environment, the BAAQMD has begun the process of updating the District's CEQA Guidelines; however, updated thresholds of significance have not yet been adopted. In the absence of BAAQMD-adopted thresholds to assess a project's compliance with SB 32, the City has chosen to consider additional GHG emissions thresholds.

SB 32 requires that by 2030 statewide emissions be reduced by 40 percent beyond the 2020 reduction target set by AB 32. In the absence of adopted thresholds from BAAQMD, the CARB, or the City of Morgan Hill, this analysis assumes that in order to meet the reduction targets of SB 32, a proposed project would be required to reduce emissions by an additional 40 percent beyond the emissions reductions currently required by BAAQMD for compliance with AB 32. Assuming a 40 percent reduction from current BAAQMD targets, a proposed project would be in compliance with SB 32 if the project's emissions did not exceed the following thresholds: 660 MTCO₂e/yr or 2.6 MTCO₂e/SP/yr. The BAAQMD has informally endorsed this approach to analysis in other recent projects throughout the Bay Area.

In addition to the quantitative thresholds described above, the City has also determined that a qualitative analysis assessing the project's compliance with the CARB's *California's 2017 Climate Change Scoping Plan* (2017 Scoping Plan) is warranted. The CARB's 2017 Scoping Plan establishes a strategy to meet California's 2030 GHG targets; accordingly, should the project be shown to comply with the 2017 Scoping Plan, the proposed project would be considered consistent with Statewide reduction targets for the year 2030. Based on recommendations from BAAQMD, a project's compliance with the local actions contained in Appendix B of the 2017 Scoping Plan may be used to assess a project's compliance with the 2017 Scoping Plan and, thus, consistency with SB 32.²¹ In addition, the project's consistency with the goals of the Plan Bay Area 2040 is discussed below.

By using the BAAQMD thresholds of significance for GHG, the updated SB 32 thresholds discussed above, and evaluating the project's consistency with applicable plans, the City would comply with Section 15064.4(b)(3) of the CEQA Guidelines, which suggests that lead agencies consider the extent that the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction of GHG emissions.

²¹ Flores, Areana, Bay Area Air Quality Management District. Personal communication [phone] with Jacob Byrne, Senior Associate/Air Quality Technician, Raney Planning & Management. September 17, 2019.

GHG Emissions

Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD has an adopted threshold of significance for construction-related GHG emissions and does not require quantification. Nonetheless, the proposed project's construction GHG emissions, as well as operational emissions, have been estimated using CalEEMod under the same assumptions discussed in Section III, Air Quality, of this IS/MND (see Appendix A).

The emissions estimates prepared for the proposed project determined that unmitigated construction of the project, including the proposed off-site improvements, would result in total GHG emissions of 723.16 MTCO_{2e} over the 1.5-year construction period. In the analysis below, the construction GHG emissions are amortized over the anticipated 30-year lifetime of the proposed project.²²

Compliance with AB 32 and SB 32

As shown in Table 4, the project's total unmitigated annual GHG emissions in the first year of project operation, 2023, including amortized construction-related emissions, were estimated to be approximately 411.22 MTCO_{2e}/yr, which would be below BAAQMD's adopted threshold of significance for AB 32 and the adjusted threshold of significance to represent compliance with SB 32. Accordingly, neither construction nor operations of the proposed project would be anticipated to result in significant emissions of GHGs.

Table 4	
Unmitigated Operational GHG Emissions	
Source	GHG Emissions (MTCO_{2e}/yr)
Operational GHG Emissions	387.11
Area	0.91
Energy	32.35
Mobile	328.52
Waste	16.89
Water	8.44
Amortized Construction GHG Emissions	24.11
Total Annual GHG Emissions	411.22
BAAQMD AB 32 Threshold	1,100
Adjusted SB 32 Threshold	660
Exceeds Threshold?	NO
<i>Source: CalEEMod, April 2021 (see Appendix A).</i>	

Consistency with 2017 Scoping Plan

Appendix B to the CARB's 2017 Scoping Plan provides examples of potentially feasible mitigation measures that could be considered to assess a project's compliance with the State's 2030 GHG emissions reductions goals. Thus, general compliance with the Local Actions within the 2017 Scoping Plan could be considered to demonstrate the project's compliance with SB 32. The project's consistency with the applicable Local Actions within the 2017 Scoping Plan is assessed in Table 5 below.

²² South Coast Air Quality Management District. 2008. *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. Available at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf). Accessed October 2020.

Table 5 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Construction	
Enforce idling time restrictions for construction vehicles.	CARB's In-Use Off-Road Vehicle Regulations include restrictions that limit idling time to five minutes under most situations. Construction fleets and all equipment operated as part of on-site and off-site construction activities would be subject to CARB's idling restrictions. As such, the proposed project would be required to comply with this measure.
Require construction vehicles to operate with the highest tier engines commercially available.	The project applicant has not committed to using construction equipment that complies with the highest tier engines commercially available. However, construction emissions would be below the BAAQMD's thresholds.
Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible.	The CALGreen Code requires the diversion of construction and demolition waste, and the proposed project would be required to comply with the most up-to-date CALGreen Code. The project applicant would pursue the feasibility of using locally-sourced building materials or materials with a high recycled content.
Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance.	As noted previously, 37 on-site trees are anticipated for removal as part of the proposed project. However, implementation of Mitigation Measures IV-9 and IV-10 would ensure that ordinance-sized trees are preserved to the maximum extent feasible and that any ordinance-sized trees that are removed, with the exception of oaks, shall be replaced at a minimum 1:1 ratio with 24-inch box sized trees. Pursuant to Mitigation Measure IV-9, oaks shall be replaced at a 2:1 ratio. As such, the project would mitigate for losses in carbon sequestration and would be considered to generally comply with the suggested measure.
Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators.	The contractor would use existing grid electricity to the extent feasible. However, the possibility exists that temporary generators would be used for electricity in instances where grid electricity is not accessible. Overall, the project would be considered to generally comply with the suggested measure.
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available.	The City does not require the use of alternatively-fueled construction equipment, unless warranted by mitigation, which is not the case for this project. Furthermore, the commercial availability of renewable diesel in the project area is currently unknown.
Require diesel equipment fleets to be lower emitting than any current emission standard.	The project applicant has not committed to reducing emissions from the construction fleet beyond any current emissions standards. However, construction emissions would be below the BAAQMD's thresholds.
Operations	
Comply with lead agency's standards for mitigating transportation impacts under SB 743.	As noted in Section XVII, Transportation, of this IS/MND, implementation of the project would result in a less-than-significant impact to Vehicle Miles Traveled (VMT). As such, the proposed project would comply with this measure.

Table 5 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals.	Pursuant to the 2019 CALGreen Code, residential projects are required to install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each unit, which would be suitable for EV charging. Compliance with the 2019 CALGreen Code would ensure that the proposed project provides sufficient EV charging infrastructure to comply with this suggested measure.
Dedicate on-site parking for shared vehicles.	The project applicant has not committed to providing shared vehicles and/or dedicated on-site parking for such shared vehicles. Consequently, compliance with this suggested measure is uncertain at this time.
Provide adequate, safe, convenient, and secure on-site bicycle parking and storage in multi-family residential projects and in non-residential projects.	The proposed project would include 15 short-term and 15 long-term bicycle parking areas. As such, the project would comply with this suggested measure.
Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan.	With implementation of the proposed project, continuous sidewalks along the Monterey Road frontage would be provided, as well as a new pathway and buffered bike lane along the Watsonville Road frontage. In addition, new walkways and pedestrian crossings would be provided throughout the project site to provide continuous pedestrian connectivity. Future residents of the proposed project would have convenient access to the existing bicycle facilities in the project area, including the bike lanes along Monterey Road, Watsonville Road, and Butterfield Boulevard. Considering the project would provide pedestrian and bicycle facility improvements and provide access to existing bicycle infrastructure, the proposed project would be generally consistent with the suggested measure.
Require on-site renewable energy generation.	The 2019 CBSC requires that residential structures that are three-stories or less in height be constructed with renewable energy systems sufficient to provide 100 percent of the electricity required for the residence. The proposed three-story, multi-family residential development would be subject to such requirements. Due to the CBSC's requirements regarding renewable energy systems for residential land uses, the proposed project would include on-site renewable energy generation and would comply with this measure.
Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size development.	The proposed project would not include wood-burning fireplaces. Thus, the proposed project would comply with the suggested measure.
Require cool roofs and "cool parking" that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing.	The 2019 CBSC contains requirements for the thermal emittance, three-year aged reflectance, and Solar Reflectance Index (SRI) of roofing materials used in new construction and re-roofing projects. Such standards, with which the project would be required to comply, would help to reduce heating and cooling costs associated with the

Table 5 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
	proposed project. In addition, approximately 73 parking spaces would be located within covered carports, which reduces the amount of exposed pavement surfaces. Accordingly, surface lot heat effects would be reduced compared to provision of all necessary parking spaces in uncovered surface lots. Therefore, the proposed project would generally comply with the suggested measure.
Require solar-ready roofs.	The 2019 CBSC requires that new residential structures under three stories generate 100 percent of electricity needs from on-site solar. Therefore, the proposed project would comply with this suggested measure.
Require organic collection in new developments.	California state legislature AB 1826 requires commercial and multi-family customers to subscribe to organics recycling. Therefore, the proposed multi-family residential buildings would be required to include organic collection. In addition, the City's garbage provider offers food scraps collection services for multi-family residential buildings. As such, future residents may have access to the organic collection service. Thus, the proposed project would include organic collection and the project would comply with the suggested measure.
Require low-water landscaping in new developments (see CALGreen Divisions 4.3 and 5.3 and the Model Water Efficient Landscape Ordinance [MWELo], which is referenced in CALGreen). Require water efficient landscape maintenance to conserve water and reduce landscape waste.	Landscaping within the project site would be required to comply with the CALGreen Code and all water efficiency measures therein, including the MWELo regulations adopted by the City of Morgan Hill. Accordingly, the proposed project is anticipated to comply with this measure.
Achieve Zero Net Energy performance building standards prior to dates required by the Energy Code.	The project applicant has not committed to achieving Zero Net Energy. It should be noted that neither the CBSC nor the City of Morgan Hill requires new multi-family residential developments to achieve Zero Net Energy at this time. Additionally, project GHG emissions do not exceed BAAQMD thresholds.
Encourage new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program, LEED rating system, or Living Building Challenge.	The project applicant has not committed to achieving third-party green building certification. Neither the CBSC nor the City of Morgan Hill requires new residential developments to achieve third-party green building certification.
Require the design of bike lanes to connect to the regional bicycle network.	Marked bike lanes exist in the project vicinity. Future residents of the proposed project would have convenient access to the existing bicycle facilities along Monterey Road, Watsonville Road, and Butterfield Boulevard. In addition, the proposed project includes a new buffered bike lane along Watsonville Road. As noted in the Section XVII, Transportation, in this ISMND, the demand generated by the proposed project could be accommodated by the existing bicycle facilities in the

Table 5 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
	vicinity of the project site and, therefore, the proposed project would not conflict with existing or planned bicycle facilities. Thus, the proposed project would comply with the general intent of the suggested measure. Additional discussion of existing and proposed bicycle facilities is provided in Section XVII, Transportation, of this IS/MND.
Expand urban forestry and green infrastructure in new land development.	Landscaping improvements would be included throughout the project site, including new trees, various shrubs and grasses. As such, the proposed development would expand upon urban forestry and green infrastructure, and would comply with the measure.
Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available.	The City of Morgan Hill requires all new buildings to be constructed without natural gas. Accordingly, the measure is not applicable to the project.
Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment.	Pursuant to the California Electrical Code, Article 210.52(E), the project would be required to include at least one electrical outlet to be located in the perimeter of a balcony, desk, or porch. The project applicant has not committed to providing additional exterior electrical outlets to promote the use of electric landscape maintenance equipment. Consequently, the project would generally comply with the suggested measure.
Require the design of the electric outlets and/or wiring in new residential unit garages to promote electric vehicle usage.	The proposed project does not include residential unit garages. Therefore, the measure is not applicable to the proposed project.
Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans.	The proposed project would be required to comply with the CBSC, which includes standards related to installation of energy-efficient appliances and building features such as water heaters and ventilation systems. Thus, the project would generally comply with the suggested measure.
Require each residential and commercial building equip buildings [sic] with energy efficient AC units and heating systems with programmable thermostats/timers.	The proposed project would be required to comply with the CBSC, which includes standards related to energy-efficient heating and cooling systems. Thus, the project would generally comply with the suggested measure.
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets (see CALGreen Divisions 4.3 and 5.3 as well as Appendices A4.3 and A5.3).	The proposed project would be required to comply with the residential water efficiency regulations within the CALGreen Code. Thus, the proposed project would comply with the suggested measure.
Require the use of energy-efficient lighting for all street, parking, and area lighting.	All proposed exterior lighting would be LED type, consistent with the 2019 Building Energy Efficiency Standards. Thus, the proposed project would comply with the suggested measure.
Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the	The suggested measures included in the 2017 Scoping Plan are not considered to be requirements for local projects under CEQA, but instead represent options for projects to demonstrate compliance with the 2017 Scoping

Table 5 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
<p>anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district. The project may alternatively purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry determined to be acceptable by the local air district.</p>	<p>Plan. The inclusion of GHG off-set mitigation projects or the purchase of carbon credits is typically dependent on a project's exceedance of the previously identified quantitative GHG thresholds. However, neither BAAQMD nor the City have identified quantitative thresholds that could be used to determine that the project's anticipated emissions would be such that an off-site mitigation project or purchase of GHG reduction credits would be required in order to comply with SB 32.</p> <p>Considering that the project has been shown to be generally consistent with the foregoing measures, the City, in its discretion as lead agency, has chosen not to require the project to implement an off-site mitigation project or purchase GHG reduction credits.</p>
<p>Source: California Air Resources Board. AB 32 Scoping Plan [Appendix B]. Accessible at: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed March 2021.</p>	

As shown in Table 5, the proposed project would generally comply with the suggested measures and, thus, the proposed project would be considered generally consistent with the 2017 Scoping Plan. Because the 2017 Scoping Plan is the CARB's strategy for meeting the State's 2030 emissions goals established by SB 32, the project would be considered to comply with the goals of SB 32.

Consistency with the Plan Bay Area 2040

The San Francisco Bay Area's Plan Bay Area 2040 has been prepared jointly by the San Francisco Bay Area MTC and the ABAG. Plan Bay Area 2040 is a regional plan intended to provide a strategy for the reduction of GHG emissions and air pollutants within the San Francisco Bay Area. The Plan Bay Area 2040 is a long-range plan that serves as a Regional Transportation Plan and Sustainable Communities Strategy (SCS). As an SCS, the Plan Bay Area 2040 is required to comply with regional targets for reducing GHG emissions through the integration of transportation and land use planning. ABAG has not provided a specified means of identifying an individual development project's compliance with the Plan Bay Area 2040. For the purposes of this analysis, the proposed project is compared to the overall goal of the Plan Bay Area 2040, which is to reduce regional GHG emissions through the reduction of transportation-related emissions.

In the vicinity of the project site, sidewalks exist along the westbound side of Watsonville Road and pedestrian crosswalk facilities at the Monterey Road/Watsonville Road intersection. The project would include installation of an eight-foot-wide meandering pathway and a new buffered bike lane along the project's Watsonville Road frontage. The sidewalk along Watsonville Road would connect to the existing sidewalk at Monterey Road. In addition, the proposed project would include sidewalk improvements to extend the existing sidewalk along the south side of Monterey Road, such that sidewalk would exist along the project's complete Monterey Road frontage. Bike lanes currently exist along Monterey Road, Watsonville Road, and Butterfield Boulevard, and a trailhead

providing access to the West Little Llagas Creek Trail is located within 400 feet of the project site. The proposed project would include a new buffered bike lane along the project frontage of Watsonville Road. The project site is served by VTA Route 68 that runs along Monterey Road. Frequent Route 68 serves northbound and southbound bus stops at the intersection of Monterey Road and Watsonville Road/Butterfield Boulevard, approximately 800 feet walking distance from the project site, and would provide access to several nearby grocery stores, restaurants, banks, and schools within close proximity to the project site. The proposed project's pedestrian and bicycle connectivity and proximity to public transit would help to reduce the need for single-passenger vehicle trips and associated transportation-related emissions.

Furthermore, as discussed in Section XVII, Transportation, the Office of Planning and Research (OPR) guidelines state that adding affordable housing to infill locations generally improves jobs-housing balance, in turn shortening commutes and reducing VMT. Because the project would include 100 percent affordable residential development, a less-than-significant impact related to VMT would occur and, consequently, GHG emissions associated with the proposed housing development would be low as compared to market-rate housing.

Because the proposed project would not significantly contribute to an increase in regional VMT and would support infrastructure that reduces transportation-related GHG emissions, the proposed project would be considered consistent with the Plan Bay Area 2040, and would not conflict with the regional GHG reduction targets therein.

Conclusion

Based on the above, project emissions would be below the BAAQMD's threshold of significance and would not be considered to conflict with the emissions reductions required by AB 32 or SB 32. In addition, the project would be generally consistent with the 2017 Scoping Plan and the Plan Bay Area 2040. As such, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and impacts would be considered ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The following is based primarily on the Phase I Environmental Site Assessment (ESA)²³ (Appendix F) and Phase II ESA²⁴ (Appendix G) prepared for the proposed project by Ta-Group DD, LLC., (TAGDD). TAGDD personnel conducted a site reconnaissance of the subject property for conditions indicating a potential environmental concern on March 27, 2020. The Phase I ESA included a review of historical records, vapor encroachment screening, review of database files concerning hazardous material storage, review of previous environmental reports concerning historic property conditions, and interviews with person(s) knowledgeable of the subject property. Based on the results of the Phase I ESA, a Phase II ESA was prepared to determine/analyze the potential presence of Volatile Organic Compounds (VOC) and organochloride pesticides.

- a. Project operations would likely involve use of common commercial cleaning products, fertilizers, herbicides, and fuels/lubricants on-site, any of which could contain potentially

²³ Ta-Group DD, LLC. *Phase I Environmental Site Assessment Residential Development Property Royal Oak Village*. April 2, 2020.

²⁴ Ta-Group DD, LLC. *Phase II Environmental Site Assessment, Shallow Soils Sampling Report*. November 2, 2020.

hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount that would potentially be used on the site, occasional use of such products would not represent a substantial risk to public health or the environment. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and a **less-than-significant** impact would occur.

- b. Construction activities associated with the proposed project would involve the use of various products such as concrete, paints, and adhesives. In addition, heavy-duty construction equipment would contain hydraulic fluid, diesel fuel, and other petroleum products. Small quantities of such potentially toxic substances would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials.

The proposed project would include the demolition of on-site facilities associated with the former Royal Oak Mushroom Farm. Therefore, the Phase I ESA discusses the potential hazard risks to the environment and/or public associated with demolition, particularly related to asbestos-containing materials (ACM), lead-based paints (LBP), and radon. In addition, according to the Phase I ESA, a known or suspected Recognized Environmental Concern (REC) was identified within the project site related to the previous use of the site. Further, the Phase I ESA notes an aboveground storage tank (AST) and underground storage tanks (UST) in the vicinity of the project site. Each of the aforementioned potential hazard risks are discussed in further detail below.

Asbestos

Asbestos is the name for a group of naturally occurring silicate minerals that are considered to be “fibrous” and through processing can be separated into smaller and smaller fibers. The fibers are strong, durable, chemical resistant, and resistant to heat and fire. The majority of the structures on the property are galvanized steel sheds and barns. According to the Phase I ESA, surfaces finished that would have potential ACM are not present. A maintenance building and the former office are the only buildings on site that contain wallboard and areas with interior finish that may contain ACM. However, the Phase I ESA concludes that while small amounts of ACM could be present (primarily in the office buildings), such materials were not observed during the site visit. The Phase I ESA did not analyze the potential for ACM to be present at the two off-site structures to be demolished as part of the proposed project. Therefore, risks related to exposure to ACM associated with demolition of the off-site structures could occur should ACM be present.

Lead-Based Paints

The U.S. Department of Housing and Urban Development (HUD) defines LBP hazard as “any condition that causes exposure to lead that would result in adverse human health effects” resulting from lead-contaminated dust, bare, lead-contaminated soil, and/or lead-contaminated paint (LCP) that is deteriorated or present on accessible, friction, or impact surfaces. LCP is defined as any paint with any detectable amount of lead present in the paint. LCP may create a lead hazard when being removed. Demolition of the on-site and off-site structures could result in the release of lead must be conducted according to Cal/OSHA standards. According to the Phase I ESA, the potential for lead-based paints on exterior

painted surfaces at the site is likely and testing should be conducted prior to future demolition activities.

Radon

Radon is a naturally-occurring, odorless, invisible gas. Radon is the leading cause of non-smoking-related lung cancer in the U.S. Natural radon levels vary and are closely related to geologic formations. Radon may enter buildings through basement sumps or other openings. The USEPA has prepared a map to assist federal, State, and local jurisdictions. The map divides the country into three radon zones, with Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the USEPA's action level for radon, four picocuries per liter (pCi/L). Dwellings above the action level are recommended to undergo renovations to abate the level of radon infiltrating the home. Based on such factors as indoor radon measurements, geology, aerial radioactivity, and soil permeability, the USEPA has identified the County of Santa Clara as Zone 2 (i.e., a predicted average indoor radon screening level between 2 and 4 pCi/L), which is below the USEPA's action level for radon. Thus, based on the Phase I ESA, radon is not considered a significant environmental concern for the project site.

Known or Suspected REC

Known or suspected RECs are defined by the American Society for Testing and Materials (ASTM) e1527-13 as the presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

A toxic insecticide, *Perm-Up 3.2.*, which is known to contain volatile organics, was formerly used at the prior Royal Oaks Mushroom Farm. During the operations of the Royal Oaks Mushroom Farm, wash and waste water at the facility was held in a sump and discharged through sprinklers and pumps onto the vacant land at the south end of the project site. As such, the potential for residual chemicals related to discharge of the insecticide is considered a REC. Therefore, a Phase II ESA was conducted, including limited soil sampling of the sprinkled area in order to assess the potential presence of VOC and organochloride pesticides associated with such. Three shallow soils samples were collected and analyzed. Based on the results of the samples, VOC related to the former application of *Perm-Up 3.2EC* was not found in samples collected by personnel.

Pesticides attributed to previous agricultural use on the property were found in one of the three samples, including Dichlorodiphenyltrichloroethane (DDT), Dichlorodiphenyldichloroethylene (DDE), and Chlordane and Chlordane isomers. However, according to the Phase II ESA, because the chemicals were absent in two of the three samples, the pesticides are likely to be present non-uniformly on the project site, and not representative of surficial soil conditions. However, due to the previous use of *Perm-Up 3.2*, DDT, DDE, and Chlordane on the project site, such chemicals could be found in soils beneath the on-site and off-site structures. The mere presence of contaminated soils at the site, should such exist, would be considered an existing environmental condition and, thus, would not be considered an impact under CEQA, as CEQA does not require analysis of the existing environment on the project. Rather, the proposed project could have the potential to result in an impact associated with underlying contaminated soils should the proposed project exacerbate the existing conditions (e.g., contaminated soils become airborne during ground-disturbing activities and expose construction workers or future residents of the proposed

project). The soils beneath the structures cannot be sampled until the buildings are demolished at a later date. Should contaminated soils under the existing building exist due to the previous use of pesticide application at the site, a significant impact could occur.

Nearby UST and AST

According to the Phase I ESA, former gasoline USTs were present roughly 100 feet northwest of the northern border of the subject site, within the overall Royal Oak Mushroom Farm. Additionally, a fuel AST is present 150 feet north of the subject property. Both the USTs and AST were investigated by TAGDD, including a screening for vapor encroachment onto the project site, to determine the presence of benzene and other fuel constituents. The presence of benzene and other remaining fuel constituents were determined by comparing the concentrations present at the site to the applicable USEPA residential ambient air Regional Screening Levels (RSLs). Based on the results of the vapor encroachment screening, only benzene levels exceeded the applicable USEPA screening value, while all other constituents were not found to be present or were present at concentrations below the applicable RSLs. Although benzene concentrations were identified above the applicable USEPA screening value, according to the Phase I ESA, source VOC is absent from the soils, which means that all available VOC has moved from the soil to interstitial pore space. Any vapors present in soil spaces will continue to degrade and be reduced over time if left undisturbed. It should be noted that the USTs and AST and associated conditions would be considered part of the existing environment and, thus, are outside of the purview of the CEQA analysis unless the proposed project would have the potential to exacerbate the existing conditions. The proposed project would not involve any improvements or operations that could exacerbate the existing conditions associated with the USTs and AST, including disturbance of soils substantial enough to cause a public health risk to future residences at the project site. Therefore, TAGDD determined that, based on the results of the vapor encroachment screening and the distance between the project site and the USTs and AST, the USTs and AST would not be considered RECs and would not be a significant environmental concern for the project site.

Conclusion

Based on the above, demolition of the existing on-site structures could result in the release of LBPs. In addition, the previous use of pesticides at the project site may have resulted in soil contamination beneath existing structures. As such, the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials in the environment. Therefore, development of the proposed project could result in a **potentially significant** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* impact.

- IX-1. *Prior to issuance of a demolition permit for any structure at the site, the project applicant shall provide the City of Morgan Hill Development Services Department a detailed assessment pertaining to the potential presence of lead-based paint-containing materials in existing all structures that may be scheduled for demolition. If structures do not contain lead-based paint, further mitigation is not required; however, if lead-based paint is found, Mitigation Measure IX-2 shall be implemented.*

- IX-2. *Prior to issuance of a demolition permit by the City for the existing structures, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with federal, State, and local regulations. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing lead paint in accordance with federal, State, and local regulations subject to approval by the City Building Official. Proof of removal shall be submitted to the City of Morgan Hill Development Services Department prior to issuance of a demolition permit.*
- IX-3. *Following demolition and prior to issuance of a grading permit, a sampling grid shall be superimposed and discrete shallow samples shall be collected at points currently under building foundations. The samples shall be tested for chlordane and/or DDT isomers to determine whether Regional Water Quality Control Board Environmental Screening Levels (ESLs) are exceeded in any samples. The applicant shall submit a report to the Development Services Department for review and approval that includes, but is not limited to, sampling activities performed, relevant ESLs for identified contaminants, summary of contaminated concentrations, and locations where ESLs are exceeded, if any. If ESLs are exceeded in on-site soils, the impacted areas shall be removed and properly disposed of under oversight by the Santa Clara County Department of Environmental Health (SCCDEH) prior to issuance of a grading permit; and proof of remediation under SCCDEH oversight shall be provided to the City of Morgan Hill Development Services Department prior to grading. For larger quantities of soils that are non-hazardous, subject to approval by the Morgan Hill Development Services Department, such soils may generally be placed under interior roads, parking areas, or buildings during normal grading operations, and verification of proper handling and disposal.*
- c. The nearest existing school relative to the project site is Oakwood Country School, located approximately 0.14-mile south of the site. As discussed above, development of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. However, a potential exists for contaminated soils to be present on the site. According to Mitigation Measure IX-3, impacted areas from contaminated soils would be removed and properly disposed of under oversight by the SCCDEH prior to on-site construction. While any soil samples collected at the site would be transported from the site for analysis, the size of the samples would be relatively small and would not have the potential to expose the surrounding community, including students at the nearby school, to a substantial concentration of any particular contaminant. If any contaminated soils are identified and require disposal off-site, the soil would be transported by a licensed transporter. Any trucks loaded with contaminated soils would be loaded at the site and appropriately covered (tarp) in accordance with Department of Transportation (DOT) regulations. The loaded trucks would use the most direct routes, which would provide the least risk of exposure to surrounding communities, and would avoid the major commute times and residential areas as much as possible. If remediation of soils is required, soil contaminants could be released into the environment as dust. Pursuant to BAAQMD rules and regulations, dust control methods such as watering exposed surfaces daily (e.g., parking areas, staging

- areas, soil piles, graded areas, and unpaved access roads) would reduce substantial emissions of dust. Therefore, with implementation of Mitigation Measures IX-1 through IX-3 and compliance with applicable regulations, a **less-than-significant** impact would result relating to the emission or handling of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d. According to the Department of Toxic Substances Control, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.²⁵ Therefore, **no impact** would result from implementation of the proposed project associated with hazardous materials sites.
- e. The public airport nearest to the project site is the San Martin Airport, which is located approximately 2.7 miles southeast of the project site at 13030 Murphy Avenue. The project site is located well outside of the Airport Influence Area (AIA) identified in the South County Airport Comprehensive Land Use Plan.²⁶ In addition, the project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not result in an airport-related safety hazard for people residing or working in the project area, and **no impact** would occur.
- f. The proposed project, including off-site improvements, would not involve any substantial modifications to the overall roadway network and would not restrict or impede access in the area. Construction of the proposed project could temporarily impede access during off-site improvements; however, implementation of Mitigation Measure XVII-1 in Section XVII, Transportation, of this IS/MND requires implementation of a Construction Traffic Management Plan, which would reduce construction related hazards. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project is consistent with the site's current General Plan land use and zoning designations; thus, development of the site and associated effects on emergency evacuation routes were considered as part of the General Plan and analyzed in the General Plan EIR. Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and a **less-than-significant** impact would occur.
- g. According to the California Department of Forestry and Fire Protection (CAL FIRE) California Fire Hazard Severity Zone Map,²⁷ the project site is not within a Fire Hazard Severity Zone (FHSZ). In addition, the City's Wildland Urban Interface Map²⁸ indicates that the project site is not located in a High or Very High FHSZ. Furthermore, the project site is located in a developed area of the City and the project would be consistent with what has been anticipated for the site in the City's General Plan. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and a **less-than-significant** impact would occur.

²⁵ Department of Toxic Substances Control. EnviroStor. Available at: <https://dtsc.ca.gov/dtscs-cortese-list/>. Accessed March 2021.

²⁶ Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.

²⁷ Cal Fire. *California Fire Hazard Severity Zone*. January 13, 2020. Available at: <https://qis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414>. Accessed March 2021.

²⁸ City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.

X. HYDROLOGY AND WATER QUALITY.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>

Discussion

- a. The proposed project’s potential to result in water quality impacts during construction and operations is discussed in further detail separately below.

Construction

Project construction activities such as grading, excavation, and trenching for the site would result in the disturbance of on-site soils, while construction of the intersection improvements would include the removal of concrete and repaving of the area. The exposed soils have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Impacts from construction-related activities would generally be short-term and of limited duration.

Water quality degradation is regulated by the federal NPDES Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the NPDES permitting program is administered by the State Water Resources Control Board (SWRCB) through nine RWQCBs. The project site is under the jurisdiction of the Central Coast RWQCB. As discussed in Section VII, Geology and Soils, of this IS/MND, new development within the City that disturbs one or more acres of land is required to comply with the NPDES General Construction Permit and prepare a SWPPP incorporating BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The proposed project would disturb approximately 3.7 acres, as well as the off-site improvement areas, and, thus, would be subject to the State NPDES General Permit conditions. Compliance with the SWRCB NPDES General Construction Permit through preparation of a SWPPP that specifies site management activities to be implemented during site development, such as construction stormwater BMPs, erosion and sedimentation controls, dewatering, runoff controls, and construction equipment maintenance, would ensure that construction of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

The proposed project would also be subject to all regional and local water quality regulations. In order to meet water quality objectives for the region, the City of Morgan Hill, City of Gilroy, and County of Santa Clara have prepared and are implementing a Revised Regional Storm Water Management Plan (SWMP). The SWMP incorporates the efforts of the City of Morgan Hill, the City of Gilroy, and the unincorporated portion of Santa Clara County, within the watershed of the Pajaro River and Monterey Bay, to meet the Phase II Storm Water Permit requirements for small municipal separate storm sewer systems (MS4s). The Upper Pajaro River Watershed is located within the jurisdiction of the Central Coast RWQCB. The City of Morgan Hill implements the SWMP through an extensive program that entails: 1) the establishment of SWMP goals for the City; 2) public education and outreach; 3) public involvement and participation; 4) illicit discharge control; 5) construction site storm water runoff control; 6) post-construction storm water management in development; and 7) pollution prevention. For construction activities, the SWMP presents BMPs that are required for the control of storm water runoff quality during construction.

Post-Construction

After project completion, an increase in impervious surfaces on the project site, as well as off-site improvement areas, could contribute incrementally to the degradation of downstream water quality during storm events. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported via stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban pollutants that would likely be associated with the proposed project include sediment, household pesticides, oil and grease, nutrients, metals, bacteria, and trash. In addition, stormwater runoff could cause soil erosion if not properly addressed and provide a more lucrative means of transport for pollutants to enter the waterways.

The proposed project would be managed in accordance with Resolution R3-2013-0032 issued by the Central Coast RWQCB. The resolution formally adopts post-construction stormwater management requirements for development projects in the Central Coast Region. The requirements identify 10 Watershed Management Zones (WMZs) in the covered area, and specify stormwater management requirements for each zone, depending

on the size of the development project. Because the project site is located in an area classified as WMZ-1, stormwater management at the project site must include site design and runoff features to limit the amount of runoff from the project site as well as on-site water quality treatment to reduce pollutant loads in the stormwater runoff using a Low Impact Development (LID) treatment system such as biofiltration. In WMZ-1, the treatment system must retain 95 percent of the runoff from the project site and also maintain peak runoff flows such that they do not exceed pre-project flows.

A preliminary SWCP has been prepared for the proposed project. On-site stormwater runoff from impervious surfaces would be collected and transported to bioretention basins that would treat and detain all on-site runoff prior to discharge to the City's public storm drain under Watsonville Road. In addition, as part of the Watsonville Road improvements, two new bioretention basins would be constructed between back of new curb and the new eight-foot-wide meandering path to generally capture and treat runoff from new roadway pavement surfaces, before discharge into the City's existing storm drain system. According to the preliminary SWCP, the bioretention basins on-site are designed to handle 20,522 cubic feet of stormwater, which exceeds the required volume necessary of 14,124 cubic feet. As a result, the bioretention basins on-site are designed to accommodate storage for runoff retention as required by the Central Coast RWQCB.

The design, construction, operation, and maintenance of the proposed drainage system would be addressed in a final SWCP to be submitted to the City of Morgan Hill in accordance with the stormwater management requirements adopted by Resolution R3-2013-0032. The final SWCP would demonstrate how the drainage system would meet the specified water quality, runoff retention, and peak flow management requirements. Prior to occupancy of the project, the stormwater controls would be field verified by the City of Morgan Hill to confirm design of the controls in accordance with the specified standards, and the controls would be subject to later operation and maintenance inspections by the City.

Pursuant to Chapter 18.140 (Post Construction Stormwater Pollution Prevention) of the City's Municipal Code, the proposed project would be subject to permanent storm water pollution prevention measures. As such, the proposed project would be required to comply with the design standards set forth in Section 18.140.040 (Design standards and selection of best management practices), and select and implement BMPs to the satisfaction of the City in accordance with the requirements contained in the most recent versions of the following documents:

1. City of Morgan Hill Stormwater Post Construction BMPs Development Standards for new development and redevelopment;
2. California Storm Water Quality Association Best Management Practice Handbooks;
3. City of Gilroy, City of Morgan Hill and County of Santa Clara Regional SWMP, as approved by the Central Coast Regional Water Quality Control Board; and
4. City of Morgan Hill Hydro-modification Management Plan, as approved by the Central Coast Regional Water Quality Control Board.

The final design of the proposed drainage system would be reviewed and approved by the City of Morgan Hill Engineering Land Development Division, which would ensure that the proposed drainage system complies with the City's Post Construction Stormwater Pollution Prevention Ordinance with respect to incorporating sufficient permanent stormwater treatment control BMPs. Therefore, water quality standards or waste discharge

requirements would not be violated, and water quality would not be degraded as a result of the proposed project operations.

Conclusion

Based on the above discussions, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations. Therefore, a **less-than-significant** impact would occur.

- b,e. The City's water supplies currently consist entirely of groundwater. Approximately 25 percent of the City's supply is extracted from the Coyote Valley subarea of the Santa Clara Subbasin, and approximately 75 percent is extracted from the Llagas Subbasin. The project site is located within the Llagas Subbasin. Neither of the subbasins are in a condition of overdraft, and groundwater levels are not expected to drop.²⁹ It should be noted that water supply is discussed in Section XIX, Utilities and Service Systems, of this IS/MND.

Groundwater within the Llagas Subbasin is managed by the SCVWD. The 2016 Groundwater Management Plan (GWMP), prepared pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA), describes the SCVWD's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County and identified by the Department of Water Resources (DWR) as Basins 2-9.02 and 3-3.01, respectively. Pursuant to the DWR, the Llagas Subbasin is designated as a high-priority basin.³⁰

Major recharge facilities within the Llagas Subbasin include the Uvas and Chesbro Reservoirs, in-stream recharge in Llagas and Uvas Creeks, the Madrone Channel, the San Pedro and Main Avenue groundwater recharge ponds, and the Uvas-Llagas pipeline, which is capable of diverting water from Uvas Reservoir to Llagas Creek. The project site is not located adjacent to any of the aforementioned waterways. The project site is currently developed with impervious surfaces. While the proposed project would include development of new impervious surfaces on the project site, stormwater from the site would be routed to stormwater detention basins, which would allow for captured runoff to infiltrate underlying soils in a manner that would allow groundwater recharge.

Given that groundwater levels within the subbasin underlying the project site are currently stable, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the Llagas Subbasin. In addition, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Furthermore, the proposed project is consistent with the General Plan land use and zoning designations and, thus, any water supply/recharge impacts associated with development of the site would have been addressed in the General Plan EIR. Thus, a **less-than-significant** impact would occur.

²⁹ City of Morgan Hill. *Morgan Hill 2035 Environmental Impact Report* [pg. 4.9-18]. Adopted July 2016.

³⁰ Santa Clara Valley Water District. *2016 Groundwater Management Plan, Santa Clara and Llagas Subbasins* [pg. ES-1]. November 2016.

- ci-iii. The proposed project site consists of vacant and developed land associated with the former Royal Oak Mushroom Farm. Development of the proposed project would include demolition of the existing facilities and redevelopment of the site with multi-family residential units. A net increase of approximately 143,252 square feet in impervious surfaces on the project site would result, which would alter the existing drainage pattern of the site. According to the preliminary SWCP prepared for the proposed project (Appendix H),³¹ stormwater runoff would be collected into eight DMAs that would drain into proposed bioretention basins for on-site retention and treatment prior to discharge to the City's stormwater system. In addition, as part of the Watsonville Road improvements, two new bioretention basins would be constructed between back of new curb and the new eight-foot-wide meandering path to generally capture and treat runoff from new roadway pavement surfaces, before discharge into the City's existing storm drain system. Mitigated flows from the proposed development would release into the City public storm drain under Watsonville Road, which discharges into West Little Llagas Creek. West Little Llagas Creek crosses under Watsonville Road at Monterey Road by way of box culverts, currently owned in fee by the City as public right-of-way. The proposed stormwater system would be required to maintain peak runoff flows such that they do not exceed pre-project flows in accordance with the stormwater management requirements adopted by Resolution R3-2013-0032.

Furthermore, the design, construction, operation, and maintenance of the proposed stormwater system would need to be addressed in a final stormwater runoff management plan to be submitted to the City of Morgan Hill in accordance with the stormwater management requirements set forth in Chapter 18.140 of the City's Municipal Code. The final stormwater runoff management plan would demonstrate how the stormwater system would meet the specified water quality, runoff retention, and peak flow management requirements. The final design of the proposed drainage system would be reviewed and approved by the City of Morgan Hill Engineering Land Development Division, which would ensure that the proposed drainage system complies with all applicable regional and local standards and requirements with respect to incorporating sufficient stormwater control BMPs. In addition, compliance with the SWRCB NPDES General Construction Permit would ensure that appropriate stormwater BMPs, erosion and sedimentation controls, and runoff controls are implemented during construction activities.

Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Thus, a **less-than-significant** impact would occur.

- civ. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) number 06085C0607H, the project site, including the off-site improvement area, is located within Zone AE, which is considered a Special Flood Hazard Zone (SFHA) attributed to the nearby West Little Llagas Creek.³² Areas within Zone AE are subject to inundation from the one-percent annual chance flood (i.e., within the 100-year floodplain). The proposed project would be designed to construct the first-floor elevation to be at least one foot higher than the water surface elevations (WSEL) of the 100-year floodplain, thus

³¹ MH Engineering Co. *Preliminary Storm Water Control Plan: Royal Oak Village*. February 16, 2021.

³² FEMA. FEMA Flood Map Service Center. Available at: <https://msc.fema.gov/portal/search?AddressQuery=15440%20Monterey%20Road%2C%20Morgan%20Hill%2C%20California#searchresultsanchor>. Accessed March 2021.

ensuring no harm to future on-site residents or structures. A Flood Study (Appendix I) was prepared for the proposed project by Schaaf and Wheeler to determine the WSEL impacts in the surrounding area due to the proposed project and increases to the FEMA mapped base flood elevations (BFEs).

According to the City of Morgan Hill Municipal Code, Chapter 15.80, Flood Damage Prevention, the City allows a cumulative increase of up to one-foot of WSEL for proposed and existing developments. Specifically, the City has stated that a cumulative increase to the FEMA mapped BFE of 0.65 feet would be allowable for development of the project site.³³ According to the Flood Study, the proposed project would result in an increase in the BFE of 0.61 feet, which is within the allowable 0.65-foot range allowed by the City. The increase would leave a setback from West Little Llagas Creek so as not to impede any overflow spills from the Creek.

The SCVWD is currently undertaking the Upper Llagas Creek Flood Protection Project (ULCFPP), which extends from Buena Vista Avenue to Wright Avenue, including West Little Llagas Creek in downtown Morgan Hill. The federally authorized project would involve slope modifications, deepening of stream channels, and a 30- to 80-foot widening of channel banks in order to protect the urban area of Morgan Hill from a one-percent (or 100-year) flood and reduce the frequency of flooding in surrounding areas. Because the ULCFPP would occur over the span of 11 years (2014 to 2025), portions of Llagas Creek would be modified at different times and are categorized by different reaches. Upon completion of the ULCFPP, the proposed project would no longer be located within an area subject to inundation by the one-percent-annual-chance flood event. The proposed widening improvements to Watsonville Road would involve limited work within the right-of-way (ROW) for the ULCFPP related to the construction of an eight-foot-wide meandering sidewalk along the south side of Watsonville Road. This work within the ULCFPP ROW, owned by Valley Water, would require a Section 408 permit from the USACE. The Section 408 permit would be required as a COA by the City.

Section 408 provides that USACE may grant permission for another party to alter a Civil Works project upon a determination that the alteration proposed will not be injurious to the public interest and will not impair the usefulness of the Civil Works project.³⁴ The surface level sidewalk improvements would not impair the usefulness of the ULCFPP due to the subsurface nature of the future flood-related improvements. For example, the planned improvements consist of exhuming the buried bridge crossing at Watsonville Road. The bridge is currently buried to the bottom of its superstructure. The new channel, which would be created by the ULCFPP, would be aligned through the bridge, which would be exhumed during construction. The bridge was constructed by the SCVWD and is sized to carry the 1-percent flood. Because these improvements would occur below Watsonville Road, the installation of an eight-foot sidewalk within a portion of Valley Water's ROW would not impair the usefulness of the ULCFPP.

Based on the above, development of the proposed project within the floodplain would result in relatively minor increases in WSEL. Given that the project would not substantially increase WSEL, a FEMA Conditional Letter of Map Revision (CLOMR) would not be required. For any improvements occurring within the 100-year floodplain, the project would implement all

³³ Schaaf and Wheeler. *Royal Oak Village Conceptual Design Impact Analysis to West Little Llagas*. December 4, 2021.

³⁴ United States Army Corps of Engineers. *Engineer Circular No. 1165-2-220*. September 10, 2018.

necessary policies and regulations set forth by the City regarding development in a flood zone, including Chapter 15.80 (Flood Damage Prevention) of the City's Municipal Code. Section 15.80.160 (Standards of construction) specifies standards related to anchoring, construction materials and methods, and elevation and floodproofing for all new development within SFHAs. Therefore, the proposed project would not impede or redirect flood flows, and **less-than-significant** impact would occur

- d. 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 land sliding into or beneath the water body. The project site is not located near a water body that is susceptible to seiche hazard. The nearest closed body of water is Anderson Lake, located approximately 4.43 miles northeast of the site. In addition, the distance to the nearest coastline does not subject the site to tsunami hazards.

The dams in Santa Clara County are managed by the SCVWD. The dams are inspected twice each year and are continuously monitored for seepage and settling and inspected immediately following significant earthquakes. The Anderson Dam is approximately four miles north of the project site. A seismic stability evaluation performed in 2011 for Anderson Dam indicated that the downstream and upstream embankments could become unstable during a very large magnitude earthquake and the rupture of faults underlying the dam may have adverse impacts on the outlet pipes and intake structure. The SCVWD has initiated a capital improvement project, the Anderson Dam Seismic Retrofit Project (ADSRP), to complete the planning, design, and construction of the seismic retrofit of the dam. Construction work for the ADSRP is planned to start in 2021.³⁵

Until recently, in order to protect the public from potential effects until the ADSRP is complete, a storage restriction of approximately 45 feet below the dam crest has been in place, with a reduced storage capacity of 61,810 acre-feet. The SCVWD and regulatory agencies (California Division of Safety of Dams and the Federal Energy Regulatory Commission) have approved the restriction and believe that the restriction would be sufficient to prevent the uncontrolled release of water in case of dam failure after a major earthquake. Most recently, federal dam regulators have ordered Anderson Reservoir, the largest reservoir in Santa Clara County, to be completely drained starting October 1, 2020.³⁶ As such, the reduced storage of the dam would ensure that the project site is not exposed to risks associated with dam failure.

Based on the above, the proposed project would not be exposed to substantial risks related to flooding as a result of the failure of a dam, tsunamis, or seiches. Therefore, a **less-than-significant** impact would occur.

³⁵ Valley Water. C1: *Anderson Dam Seismic Retrofit**. Available at: <https://www.valleywater.org/anderson-dam-project>. Accessed March 2021.

³⁶ Mercury News. *Anderson Dam: Plans released to drain Santa Clara County's largest reservoir*. Available at: <https://www.mercurynews.com/2020/06/08/anderson-dam-draining-to-start-oct-1-could-take-six-months-to-empty/>. Accessed April 2021.

XI. LAND USE AND PLANNING.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

- a. Currently, the project site is developed with former structures and facilities associated with the Royal Oak Mushroom Farm. The proposed residential development would be consistent with other nearby residential uses. Furthermore, the proposed project would be consistent with the City’s General Plan land use and zoning designations. Additionally, the widening and off-site improvements would improve pedestrian connectivity through the construction of sidewalks along Monterey Road and a meandering pathway along the project frontage of Watsonville Road. As such, the proposed project would promote connectivity in the vicinity and would not physically divide an established community. Thus, a **less-than-significant** impact would occur.

- b. According to the City’s General Plan, the project site is designated MU-F and zoned MU-F and PD. The MU-F designation, which is primarily applied to properties along the Monterey Road corridor north and south of downtown, allows for a mix of residential, commercial, and office use applied either vertically or horizontally. The proposed project would adhere to the General Plan designation by expanding the range of residential development within the project area. As such, the type and intensity of growth that would be induced by the proposed project has been anticipated by the General Plan and associated environmental effects have been analyzed in the General Plan EIR. As discussed throughout this IS/MND, the proposed project would not result in any significant environmental effects that would not be mitigated to a less-than-significant level.

The proposed project would generally be consistent with General Plan policies, as well as other applicable policies and regulations adopted for the purpose of avoiding or mitigating environmental effects. For example, with implementation of Mitigation Measures IV-1 through IV-10, the project would not conflict with any applicable policies, regulations, or ordinances related to the protection of biological resources. Furthermore, the off-site improvements would promote pedestrian connectivity. Overall, the proposed project would be consistent with the General Plan and would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and a **less-than-significant** impact would occur.

XII. MINERAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
b. 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"/>	✘

Discussion

a,b. The City’s General Plan does not identify any regionally or locally important mineral resources within the City of Morgan Hill. The *Santa Clara County General Plan* does identify mineral resources of importance; however, the project site is not in proximity to the quarries currently in operation. Consequently, the proposed project would not result in the loss of a known mineral resource that would be of value to the region nor would the project result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, **no impact** to mineral resources would occur as a result of the proposed project.

XIII. NOISE.

Would the project result in:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion

- a. The following section includes a discussion of noise standards and criteria applicable to various land uses, as well as potential traffic noise and non-transportation noise sources associated with the proposed project.

City Noise Standards and Criteria

Chapter 9, Safety, Service, and Infrastructure, of the City’s General Plan contains the following policies pertaining to new residential developments such as the proposed project:

SSI-8.1 Exterior Noise Level Standards. Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (see Table SSI-1 [of the General Plan]), as follows:

- Apply a maximum exterior noise level of 60 dBA L_{dn} in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing an L_{dn} of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, an L_{dn} of 65 dBA may be permitted.
- Indoor noise levels should not exceed an L_{dn} of 45 dBA in new residential housing units.
- Noise levels in new residential development exposed to an exterior L_{dn} 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous noise levels in all other habitable rooms should not exceed 55 dBA. The maximum outdoor noise level for new residences near the railroad shall be 70 dBA L_{dn} , recognizing that train noise is characterized by relatively few loud events.

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

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

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

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

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

In addition to the policies listed above, Section 18.76.090 (Noise) of the City’s Municipal Code contains maximum noise levels for non-transportation noise sources. The City’s quantitative exterior noise standards are reproduced below in Table 6. Importantly, this section of the Code states that noise standards in the below table (i.e., Table 18.76-1 of the Code) do not apply to noise generated by vehicle traffic in the public right-of-way or from temporary construction, demolition, and vehicles that enter and leave the site of the noise-generating use (e.g., construction equipment, trains, trucks).

Table 6	
Noise Level Performance Standards	
Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi Public	60 dBA
Notes: <ul style="list-style-type: none"> The planning commission may allow an additional 5 dBA noise level at the lot line if the maximum noise level shown above cannot be achieved with reasonable and feasible mitigation. 	
Source: City of Morgan Hill Municipal Code.	

Furthermore, Section 8.28.040.D of the Morgan Hill Municipal Code, limits construction activity noise as follows:

"Construction activities" are defined as including but not limited to excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including

but not limited to landowners, construction company owners, contractors, subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership, control or direction to violate this provision.

Sensitive Receptors

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are considered to be sensitive to noise because intrusive noise can be disruptive to such activities. Within the project vicinity, the nearest sensitive receptors are the single-family residences located northwest of the project site, across Watsonville Road.

Project Construction Noise

Construction of the proposed project would involve the use of heavy-duty equipment for demolition, grading, excavation, paving, and building construction, which would result in temporarily increased noise levels. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point.

Table 7 shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels up to 85 dB at a distance of 50 feet. As distance increases between equipment, or increases separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source decrease at a rate of approximately 6 dB per every doubling of distance from the noise source.

Type of Equipment	Maximum Level, dB at 50 feet
Backhoe	78
Compactor	83
Compressor (air)	78
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Pneumatic Tools	85

Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.

The proposed improvements to Watsonville Road would occur approximately 70 feet from the centerline of the roadway to the nearest residential building façade. The distance from the proposed Watsonville roadway improvements to the nearest residential building façade would be considered a worst-case condition (i.e., the closest point of project improvements to the nearest receptor) as the on-site project improvements and Monterey Road improvements would be further from the sensitive receptors. Chapter 8.28 of the Morgan Hill Municipal Code prohibits construction activities between 8:00 PM and 7:00

AM, Monday through Friday, and between 6:00 PM and 9:00 AM on Saturdays. Construction activities may not occur on Sundays or federal holidays.

Given the restrictions on construction hours, and the City's standard COA requiring the use of best available technology by construction contractors to minimize excessive noise from construction equipment, the project would not result in substantial temporary increases in noise generation during construction activities. However, without compliance with the Morgan Hill Municipal Code, restricting hours of construction and requiring use of BMPs during project construction, the proposed project could result in a temporary short-term noise impact.

Project Operational Noise

Operation of the proposed project would generate noise associated with vehicle traffic on local roadways, on-site circulation of vehicles throughout the proposed drive aisles and parking area, HVAC, and landscaping maintenance.

According to the Trip Generation and Operations Analysis (Appendix J) prepared for the proposed project, traffic generated by the proposed project would be limited to 58 daily trips.³⁷ According to General Plan Policy SSI-8.5, noise level increases resulting from traffic associated with a new project would be considered significant if: a) the noise level increase is 5 dB L_{dn} or greater, with a future level of less than 60 dB L_{dn} ; or b) the noise level increase is 3 dB L_{dn} or greater, with a future noise level of 60 dB L_{dn} or greater. According to the General Plan EIR, along Watsonville Road, between Olive Avenue and Monterey Road, buildout of the General Plan is expected to increase ambient noise by 1.1 dBA. In addition, along Monterey Road, between Watsonville Road and John Wilson Way, buildout of the General Plan is expected to increase ambient noise levels by 1.1 dBA. Therefore, as noted in the General Plan EIR, with implementation of the noise policies and compliance with the relevant Municipal Code ordinances, buildout of the General Plan was determined to result in a less-than-significant impact related to traffic noise. Considering the anticipated increase in transportation noise on adjacent roadways would not exceed the City's standards set forth in Policy SSI-8.5, traffic noise increases attributable to the project would be less than significant.

In general, residential uses do not include substantial noise-generating operations. Assuming the project HVAC systems and maintenance equipment would be in normal working order, stationary noise sources associated with the proposed project would not substantially increase noise levels from what currently exists in the project area. In addition, stationary source operational noise levels associated with the proposed project would likely be negligible at the nearest single-family residences to the northwest. Therefore, the project would not result in significant operational noise level increases.

Based on the above, a less-than-significant impact would occur with regard to project operational noise.

Noise Levels at the Proposed Residences

CEQA does not require an analysis of the existing environment's impact on the project; however, noise-related effects on future residents of the proposed project is typically

³⁷ Hexagon Transportation Consultants Inc. *Trip Generation and Operations Analysis for the Proposed Royal Oak Village Affordable Housing Development in Morgan Hill, California*. April 15, 2021.

evaluated to determine consistency with the policies set forth in the lead agency's general plan. While not required under CEQA, the following section regarding off-site traffic noise effects on future project residents is provided for informational purposes. A Noise Assessment was conducted for the proposed project to determine the estimated exterior and interior noise levels within the future residential structures (Appendix K).³⁸

Exterior Noise

Primary sources of noise in the project vicinity would be vehicular traffic along Watsonville Road and Monterey Road. For noise sensitive multi-family residential development, the exterior noise level standard set forth by the City Noise Element of the General Plan is 65 dBA L_{dn} for outdoor usable areas. According to the General Plan, based on the future traffic projections at buildout of the General Plan, the noise level at 50 feet from the centerline of Watsonville Road and Monterey Road is anticipated to be 71.5 dBA L_{dn} and 75.1 dBA L_{dn} , respectively. The proposed building facades along Watsonville Road are located at least 75 feet from the centerline of the roadway. The increased distance would lower the noise levels to 69.6 dBA L_{dn} at such building facades, which would exceed the City's 65 dBA L_{dn} standard. The proposed building facades along Monterey Road are located over 620 feet from the centerline of the roadway, which would reduce the noise levels at such locations to below 65 dBA L_{dn} , which would be below the City's standard. Therefore, vehicular traffic along Watsonville Road could exceed the exterior noise level standard for noise-sensitive multi-family residential developments.

Interior Noise

Predicted exterior instantaneous noise levels along the building facades of the residential dwellings could reach nearly 85 dBA L_{max} along Watsonville Road and 80 dBA L_{max} along Monterey Road. A worst-case future projected building facade noise level of 70 dBA L_{dn} and the predicted max exterior instantaneous noise level of 85 dBA L_{max} was used for all floor areas for the analysis of units along Watsonville Road. The Noise Assessment shows that a windows-open condition would only reduce the interior noise levels 12 to 15 dBA L_{dn} and not provide adequate interior noise reduction. In order to meet the 45 dBA L_{dn} interior noise standard and the maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) standard in bedrooms of 50 dBA, and 55 dBA in all other habitable rooms, an interior noise level reduction of 25 to 35 dBA L_{dn} is needed for the proposed project. Therefore, a closed window and door condition is required to reduce interior noise levels sufficient to comply with CCR Title 24 and City of Morgan Hill requirements. The windows/doors closed condition does not require the windows or doors to be non-operable but does require that mechanical ventilation be installed in those units along the project frontage of Watsonville Road and Monterey Road to move air within the structure. To achieve the maximum instantaneous noise level in bedrooms standard of 50 dBA, and 55 dBA in all other habitable rooms, a minimum Sound Transmission Class (STC) rating of 35 is needed for the units adjacent to Watsonville Road. The units facing Monterey Road are predicted to have noise levels 5 dBA lower due to the distance separation and would need a minimum STC rating of 30. Use of higher STC-rated windows should be included where practical.

Conclusion

Based on the above, exterior and interior noise at the proposed residences along Watsonville Road and Monterey Road could exceed the City's applicable noise level

³⁸ Rdn Consulting, Inc. *Royal Oak Village Residential Development Noise Assessment in the City of Morgan Hill*, CA. December 1, 2020.

standards. Such an effect would not be considered an impact under CEQA; however, in order to address the concern, the City would require the following COA to ensure consistency with the City's General Plan noise levels standards:

- Prior to approval of project improvement plans, the plans shall show four-foot-high barriers at the patios and balconies/decks of the units along Watsonville Road. The barriers must be constructed of a non-gapping material (i.e., masonry, stucco, ¼-inch thick glass, or plexiglass, or a combination of materials). All glass assemblies (e.g., barriers, doors, and windows) should be dual-paned and have sealant applied around the exterior edges having a STC 35 rating along Watsonville Road and STC 30 rating for units facing Monterey Road. Additionally, mechanical ventilation should be installed in the units adjacent to Watsonville Road to move air within the structures.

Based on the above, operation of the proposed project would not result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the City's General Plan and the Municipal Code. However, without compliance with the measures outlined in Mitigation Measures XIII-1 and XIII-2, temporary construction noise levels could be considered **potentially significant**.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

XIII-1. Noise-generating construction activities associated with the proposed project and intersection improvements shall not occur within the hours identified in Municipal Code Section 8.28.040(D). The above language shall be included on final project improvement plans prior to issuance of a grading permit by the City of Morgan Hill Development Services Department.

XIII-2. To the maximum extent practical, the following measures should be implemented during project construction:

- *All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition;*
- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project construction;*
- *Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible;*
- *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors;*
- *Project area and site access road speed limits shall be established and enforced during the construction period; and*

- *Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.*

The above requirements shall be included via notation on project grading plans, subject to review and approval by the Development Services Department prior to issuance of a grading permit.

- b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception, as well as damage to structures have been developed for vibration levels defined in terms of PPV.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 8, which was developed by Caltrans, shows the vibration levels that would normally be required to result in damage to structures. As shown in the table, the threshold for architectural damage to structures is 0.20 in/sec PPV and continuous vibrations of 0.10 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

The proposed project would only cause elevated vibration levels during construction, as the proposed project would not involve any uses or operations that would generate substantial groundborne vibration. Although noise and vibration associated with construction of the project would add to the noise and vibration environment in the immediate project vicinity, construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Because the proposed project would not cause continuous, long-term vibrations, the project would not be expected to result in extended annoyance to the nearby sensitive receptors.

The primary vibration-generating activities associated with the proposed project would occur during grading, placement of utilities, and construction of foundations. Table 9 shows the typical vibration levels produced by construction equipment at various distances. The most substantial source of groundborne vibrations associated with project construction would be the use of vibratory compactors on-site and within the off-site improvement area.

Off-site improvements along Watsonville Road would occur at a distance of approximately 70 feet from the building facade of the nearest existing single-family residences northwest of the site. On-site improvements and off-site improvements to Monterey Road would occur at a further distance from the nearest sensitive receptors. Because vibratory compactors/rollers used for on-site and off-site improvements would operate at a distance greater than 50 feet from the nearest existing sensitive receptors, groundborne vibration would not exceed 0.2 in/sec PPV associated with project improvements. Furthermore, use

of vibratory compactors/rollers would occur intermittently at different portions of the site at different times and over a short period of time. Based on the above, the use of vibratory rollers during construction activities would not expose people to or generate excessive groundborne vibration or groundborne noise levels, and impacts would be **less-than-significant**.

Table 8			
Effects of Vibration on People and Buildings			
PPV		Human Reaction	Effect on Buildings
in/sec	mm/sec		
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage
Source: Caltrans. Transportation Related Earthborne Vibrations. TAV-02-01-R9601. February 20, 2002.			

Table 9		
Vibration Levels for Various Construction Equipment		
Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Large Bulldozer	0.089	0.029
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029
Jackhammer	0.035	0.011
Vibratory Hammer	0.070	0.023
Vibratory Compactor/roller	0.210	0.070
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.		

- c. The public airport closest to the project site is the San Martin Airport, which is located approximately 2.7 miles southeast of the project site at 13030 Murphy Avenue. The project site is located well outside of the AIA identified in the South County Airport Comprehensive

Land Use Plan.³⁹ In addition, the project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic, and ***no impact*** would occur.

³⁹ Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.

XIV. POPULATION AND HOUSING.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

- a. The proposed project would construct a multi-family residential development with associated facilities such as a clubhouse, green spaces, a dog park, and a tot lot. In addition, the proposed project includes off-site improvements to Watsonville Road and Monterey Road. Given that the project is consistent with the site’s current land use and zoning designations, potential growth associated with development of the site has been anticipated by the City and analyzed in the City of Morgan Hill General Plan EIR. Therefore, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and a **less-than-significant** impact would occur.

- b. The project site is currently developed with the remnants of the old Royal Oak Mushroom Farm. Thus, existing people or housing are not located on the project site. In addition, the proposed project would involve construction of affordable housing, thereby increasing the housing opportunities within the City. Therefore, the proposed project would not displace existing people or housing necessitating the construction of replacement housing elsewhere, and a **less-than-significant** impact would occur.

XV. PUBLIC SERVICES.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
e. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a-e. The City of Morgan Hill contracts with CAL FIRE for fire protection services. Three fire stations are located within the City boundaries: El Toro Station, located at 18300 Old Monterey Road; Dunne-Hill Station, located at 2100 Dunne Avenue; and the CAL FIRE station at 15670 Monterey Road. The nearest fire station (CAL FIRE station) is located approximately 0.27-mile to the northeast of the site. Although the City has not adopted response time standards or goals related to fire suppression, CAL FIRE is held to a seven minute, 59 second response time standard per the 911 Emergency Medical Services Provider Agreement between the City of Morgan Hill and the County of Santa Clara Emergency Medical Services Agency.⁴⁰

The project site has been previously anticipated by the General Plan for residential and/or commercial development. The increase in demand associated with the proposed project would not necessitate new or physically altered facilities and, due to its proximity to the nearest fire station, the EMS response time standard of seven minutes, 59 seconds could be maintained. In addition, the proposed structures would be equipped with fire sprinklers and fire alarm systems. Such features would help to address fire situations within the site, which would reduce the demand for fire protection services from the project site.

The Morgan Hill Police Department is located at 16200 Vineyard Boulevard, approximately 0.85-mile northeast of the site. Based on the 2016 Police Operations Report, the project site is located in an area with an extremely low rate of crime.⁴¹ The project site is also located within the Morgan Hill Police Department’s normal patrol route, and, thus, police response times would be comparable to nearby existing developments. Furthermore, given that the project is consistent with the site’s current General Plan land use and zoning designations, impacts related to provision of new or physically altered fire and police protection facilities have been previously analyzed in the General Plan EIR. The General Plan EIR concluded that buildout of the City would have a less-than-significant impact related to the provision of such public services.

The Morgan Hill Unified School District (MHUSD) operates public education facilities that serve the project site and surrounding area. The MHUSD has 10 elementary schools, two middle schools, and three high schools serving more than 8,000 students within and in

⁴⁰ Dwight Good, Assistant Chief Cooperative Fire Protection, Morgan Hill Fire Department. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning and Management, Inc. June 1, 2021.

⁴¹ Center For Public Safety Management, LLC. *Police Operations and Data Analysis Report: Morgan Hill, California*. August 2016.

the vicinity of Morgan Hill. Using the MHUSD student yield rate of 0.465 students per household, the total anticipated development potential for the project site (73 residential units) could add approximately 34 new students to MHUSD schools.

The City collects development impact fees to help pay for public services that include public schools. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “legislative or adjudicative act involving the planning, use, or development of real property.” (Government Code 65996(b).) Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be “full and complete mitigation.” Therefore, according to SB 50, the payment of the necessary school impact fees for the project would be full and satisfactory CEQA mitigation.

With regard to other public facilities, such as libraries, given the relatively small number of units included in the proposed project, the project would not be anticipated to result in a substantial increase in demand for library services, or other public facilities, such that expanded facilities would be required. Future residents of the proposed project would have access to the Morgan Hill Library, which is operated by the Santa Clara County Library District. In addition, the General Plan EIR concluded that buildout of the City, including the project site, would have a less-than-significant impact related to libraries.

Based on the above, the proposed project would have a **less-than-significant** impact with respect to creating adverse physical environmental impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, and other public facilities. Project impacts related to parks and recreational facilities are discussed in Section XVI, Recreation, of this IS/MND.

XVI. RECREATION.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. 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"/>

Discussion

a,b. The proposed project would introduce new residents to the community and, thus, would increase demand on existing parks and recreational facilities within the City. However, the proposed project would include green spaces, a dog park, and a tot lot for on-site recreation opportunities. The demand for recreation attributable to the proposed multi-family affordable residential project would not be substantial enough to necessitate the construction of new parks or alteration of existing parks, the construction of which could have environmental impacts.

Therefore, because the proposed project would include on-site recreation opportunities and would not substantially increase the demand for recreation facilities within the City, the proposed project would not increase use of neighborhood and regional recreational parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated. Thus, a **less-than-significant** impact would occur related to recreational resources.

XVII. TRANSPORTATION.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	✗	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	✗	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. The proposed project would include the demolition of the existing on-site structures and redevelopment of the site with 73 residential units distributed throughout three, three-story buildings. Additionally, the proposed project includes off-site improvements to Watsonville Road and Monterey Road. A Trip Generation and Operations Analysis (Appendix J) for the proposed project was prepared, which includes a discussion of the proposed project’s potential impacts on transit, bicycle, and pedestrian facilities, which are discussed in further detail below. While a level of service (LOS) evaluation was also included in the Trip Generation and Operations Analysis, LOS analysis is not required as part of CEQA review for the reason described below. However, the LOS will be reviewed by the City in order to determine if the project should be conditioned to implement any operation transportation enhancements.

The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Traditionally, lead agencies used LOS to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Mitigation measures typically took the form of capacity-increasing improvements, which often had their own environmental impacts (e.g., to biological resources). Depending on circumstances, and an agency’s tolerance for congestion (e.g., as reflected in its general plan), LOS D, E, or F often represented significant environmental effects. In 2013, however, the Legislature passed legislation with the intention of ultimately doing away with LOS in most instances as a basis for environmental analysis under CEQA. Enacted as part of Senate Bill 743 (2013), PRC Section 21099, subdivision (b)(1), directed the Governor’s OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing “criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section.”

Subdivision (b)(2) of Section 21099 further provides that “[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion *shall not be considered a significant impact on the environment*

pursuant to [CEQA], except in locations specifically identified in the guidelines, if any.” (Italics added.)

Pursuant to Senate Bill 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018. It became effective in early 2019. Subdivision (a) of that section provides that “[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, ‘vehicle miles traveled’ refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project’s effect on automobile delay shall not constitute a significant environmental impact.”⁴²

Please refer to Question ‘b’ for a discussion of VMT.

Transit, Bicycle, and Pedestrian Facilities

The project site is served by VTA Route 68 that runs along Monterey Road. Frequent Route 68 (Gilroy Transit Center to San Jose Diridon Transit Center) serves northbound and southbound bus stops at the intersection of Monterey Road and Watsonville Road/Butterfield Boulevard, approximately 800 feet walking distance from the project site. A typical mode split (i.e., percentage of travelers using a particular type of transportation or number of trips using said type) in Morgan Hill would be at a three percent transit share. Assuming a three percent transit mode share for the project equates up to one transit rider during each of the peak hours. Therefore, the transit ridership demands of the proposed project would be accommodated by the existing transit facilities.

Commercial uses adjacent to the project site, in the vicinity of Monterey Road and Tennant Avenue, as well as the bus stops discussed above generate pedestrian traffic. The proposed project would increase pedestrian traffic from residents traveling to and from the commercial uses and bus stops. Currently, the project site is adjacent to sidewalks along the westbound side of Watsonville Road and pedestrian crosswalk facilities at the Monterey Road/Watsonville Road intersection. The project proposes to construct a sidewalk along the Watsonville Road frontage, starting at the bridge crossing west of the project site and extending east to the existing sidewalk near Monterey Road. The proposed sidewalk would provide a continuous route between the project site and control pedestrian crossings at the Monterey Road/Watsonville Road intersection. The proposed eight-foot width of the sidewalk would exceed the minimum five-foot requirement of the City’ Municipal Code.

To the west of the project site, sidewalks do not exist along Watsonville Road between La Alameda Drive and the project site frontage. However, implementation of the missing sidewalk segment is beyond the means of the proposed project because the construction would require work within, and possibly acquisition of, right-of-way that is not controlled by the project applicant. Pedestrian access to areas located west along Watsonville Road would require users to utilize the crosswalk at the Monterey Road/Watsonville Road intersection and existing sidewalks along westbound Watsonville Road.

⁴² Subdivision (b)(2) of Section 15064.3 (“transportation projects”) provides that “[t]ransportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

In the project vicinity, bike lanes are located along Monterey Road, Watsonville Road, and Butterfield Boulevard. The existing bike lanes travel in both directions of Watsonville Road along the project frontage. The proposed project would include a new buffered bike lane along Watsonville Road. Additionally, a trailhead providing access to the West Little Llagas Creek Trail is located less than 400 feet west from the project site. The trail runs northward between Watsonville Road and Spring Avenue, roughly parallel with Monterey Road. According to the Trip Generation and Operations Analysis, the project is not expected to generate a significant amount of bicycle trips and the demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site.

Conclusion

Based on the above, a **less than significant** would occur related to conflicting with a program, plan, ordinance, or policy addressing the circulation system, including transit, bicycle, and pedestrian facilities.

- b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Determination of impacts based on VMT have been required by law Statewide since July 1, 2020.

Pursuant to Section 15064.3(b)(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. Hexagon Transportation Consultants, Inc., prepared a VMT assessment for the proposed project (Appendix L) to provide an assessment of the project's effect on VMT.⁴³ The City of Morgan Hill, at the time of the VMT report prepared for the proposed project, is undertaking a process of updating its General Plan policies to incorporate VMT methodologies and significance thresholds to be consistent with SB 743 but has not yet released draft thresholds. In the absence of an adopted or draft City policy with numeric thresholds, the VMT assessment relies on *The Technical Advisory on Evaluating Transportation Impacts in CEQA* published by the Governor's OPR.⁴⁴ The OPR recommendations include the screening thresholds criteria listed below:

- OPR recommends that office or residential projects not exceeding a level of 15 percent below existing VMT per capita may indicate a less-than-significant impact on VMT;
- OPR recommends that projects (including office, residential, retail, and mixed-use developments) proposed within half a mile of an existing major transit stop or within a quarter of an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact;
- OPR recommends that 100 percent of affordable residential development in infill locations be presumed to have a less-than-significant impact on VMT; and
- OPR recommends that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact.

⁴³ Hexagon Transportation Consultants, Inc. *VMT Assessment for the Proposed Royal Oak Residential Development in Morgan Hill, California*. April 15, 2021.

⁴⁴ Governor's Office of Planning and Research. *Technical Advisory on Evaluation Transportation Impacts in CEQA*. December 2018.

The proposed project would consist of 73 affordable housing apartment units. According to the OPR recommendations, because the proposed project would be a 100 percent affordable residential development, the proposed project would have a less-than-significant impact on VMT. The OPR guidelines state that adding affordable housing to infill locations generally improves jobs-housing balance, in turn shortening commutes and reducing VMT. In addition, the OPR guidelines state that in areas where existing jobs-housing balance is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing. Furthermore, the pedestrian generators near the project vicinity would help support the reduction in project VMT. Transit facilities in the project vicinity (within ¼- to one-mile radius) include transit bus stops along Monterey Road. The transit services would provide access to commercial uses (restaurant, retail, etc.) along Monterey Road and Downtown Morgan Hill, approximately 1.5 miles north of the project site. Several existing employment uses (light industrial and manufacturing) within walking distance of the site are located in the vicinity of Vineyard Boulevard and Tennant Avenue. As a result of the project proposing 100 percent affordable units and due to transit facilities located within less than a one-mile radius, the proposed project would have a **less-than-significant** impact related to a conflict or inconsistency with CEQA Guidelines Section 15064.3(b).

- c,d. Access to the project site would be provided by two driveways from Watsonville Road. The main, full access entry, would consist of the fourth leg of the Watsonville Road and Calle Sueno intersection, and be located between Building B and the clubhouse. The main access would be 26 feet wide. The additional driveway would provide access to the project site for EVA vehicles only, and would be located at the southern portion of the project site, between Building A and Building B. Additionally, 26-foot-wide internal driveways would be designed to allow for larger emergency vehicles to travel within the project site. Emergency vehicles would enter in the southern side of the project site, and would be able to maneuver throughout the site and exit throughout either entrance/exit. Thus, the driveway and drive aisle widths would be designed to ensure emergency vehicles could maneuver through the site without encountering obstructions. As such, adequate EVA would be provided at the project site.

Construction traffic associated with the proposed project and off-site improvements would include heavy-duty vehicles that would share the area roadways with normal vehicle traffic, creating potential conflicts with other roadway users, as well as transport of construction material, and daily construction employee trips to and from the site. Although the number of added daily trips generated by the project at completion would be minimal, the short-term increase in traffic that would occur during the construction phase of the proposed project could temporarily disrupt daily traffic flows on area roadways, including emergency response vehicles. Therefore, the proposed project could result in a temporary increase in hazards due to a geometric design feature or incompatible uses and inadequate emergency access, and a **potentially significant** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

- XVII-1. *Prior to issuance of grading permit, the project applicant shall prepare a Construction Traffic Management Plan for review and approval by the City of Morgan Hill. The plan shall include the following:*

- *A project staging plan to maximize on-site storage of materials and equipment;*
- *A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak hours; lane closure proceedings; signs, cones and other warning devices for drivers; and designation of construction access routes;*
- *Provisions for maintaining adequate emergency access to the project site;*
- *Permitted construction hours;*
- *Designated locations for construction staging areas;*
- *Identification of parking areas for construction employees, site visitors, and inspectors, including on-site locations; and*
- *Provisions for street sweeping to remove construction-related debris on public streets.*

XVIII. TRIBAL CULTURAL RESOURCES.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a,b. As discussed in Section V, Cultural Resources, of this IS/MND, the project site and the off-site improvement areas do not contain any known resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), and do not contain known resources that could be considered historic pursuant to the criteria set forth in subdivision (c) of PRC Section 5024.1. However, according to the CHRIS search, the site has a moderate potential for unrecorded Native American archaeological resources to exist. Additionally, according to a NAHC Sacred Lands File, the project site may contain known tribal cultural resources.⁴⁵ Thus, the possibility exists for unrecorded tribal cultural resources to be found during ground-disturbing activities associated with the proposed project. However, the project applicant would be required to comply with the City’s standard COA stated in Section V, Cultural Resources, of this IS/MND. Compliance with the City’s standard COA would ensure that impacts to tribal cultural resources would be **less than significant**.

⁴⁵ Native American Heritage Commission. *Royal Oak Village Project, Santa Clara County*. April 15, 2021.

XIX. UTILITIES AND SERVICE SYSTEMS.

Would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. 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"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a-c. Brief discussions of the water, wastewater, stormwater drainage, electrical, and telecommunications facilities that would serve the proposed project are included below.

Water

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's water system facilities include 17 wells, 10 booster stations, 12 storage tanks, 1,927 fire hydrants, and over 180 miles of water pipelines. 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.

The proposed project would include new connections from the proposed buildings to an existing 10-inch waterline in Watsonville Road. According to the City's Urban Water Management Plan, the City's projected water supply far exceeds the water demand for normal, single-dry, and multiple-dry years until at least 2040.⁴⁶ For example, during a normal year in 2025, the anticipated supply exceeds the anticipated demand by 58,645 acre-feet per year. Given that the proposed project is consistent with the site's current land use and zoning designations, the type and intensity of growth that would occur as a result of the proposed project was generally considered in the 2035 General Plan and associated water use has been analyzed in the General Plan EIR. Therefore, the proposed project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, and sufficient water supplies would be available to serve the project from existing entitlements and resources.

⁴⁶ City of Morgan Hill. *City of Morgan Hill Urban Water Management Plan 2015* [pg. 7-4 to 7-7]. 2016.

Wastewater

The City of Morgan Hill sewer collection system consists of approximately 160 miles of gravity sewers, over 3,000 manholes, nearly three miles of force mains, and 14 lift stations. The sewer lines range in size from four inches to 30 inches in diameter and the piping system includes 26 siphons. The City's collection system moves the City's wastewater south to the South County Regional Wastewater Authority (SCRWA) Wastewater Treatment Facility (WWTF) located in southern Gilroy. SCRWA is a joint powers authority formed by the cities of Morgan Hill and Gilroy to collectively treat the wastewater of both cities.⁴⁷ The City of Morgan Hill has an allocation of 3.56 million gallons per day (MGD) from the WWTF. The average dry weather flow from the City of Morgan Hill was approximately 2.7 MGD in 2015.⁴⁸

Based on the current and projected sewage flows associated with the WWTF, the incremental increase in wastewater generation associated with the development of the proposed project would not require the construction of new or expansion of existing wastewater treatment facilities, as adequate capacity is already sufficient to serve the proposed project. Furthermore, given that the project is consistent with the site's current General Plan land use and zoning designations, the type and intensity of growth that would occur as a result of the proposed project was generally considered in the 2035 General Plan and associated wastewater generation has been analyzed in the General Plan EIR.

Stormwater

Issues related to stormwater infrastructure are discussed in Section X, Hydrology and Water Quality, of this IS/MND. As noted therein, the proposed project would not significantly increase stormwater flows into the City's existing system. The final drainage system design for the project would be subject to review and approval by the City of Morgan Hill Land Development Engineering Division to confirm that the proposed drainage system for the project is consistent with the City's Storm Drainage Master Plan and standard stormwater-related conditions of approval. Therefore, the proposed project would not 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.

Electricity, Natural Gas, and Telecommunications

Electricity service for the proposed project would be provided by PG&E by way of existing electrical infrastructure in the project vicinity. It should be noted that the proposed project would not use natural gas, as natural gas is prohibited in all new construction effective March 1, 2020, pursuant to City Ordinance No. 2306. Along Watsonville Road, an existing transformer and utility poles are to be removed and/or relocated and the existing overhead transmission line is to be undergrounded. However, the undergrounding and relocating of existing utilities would occur in disturbed surfaces. Therefore, removing, relocation, and undergrounding the aforementioned utilities would not substantially impact the environment. Thus, impacts to electricity, natural gas, and telecommunications infrastructure would be less than significant.

⁴⁷ City of Morgan Hill. *City Council Staff Report 2163, Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. February 6, 2019.

⁴⁸ City of Morgan Hill. *2035 General Plan Draft EIR*. January 2016.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Thus, a **less-than-significant** impact would occur.

- d,e. 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 with the Salinas Valley Solid Waste Authority to dispose of municipal solid waste at Johnson Canyon Sanitary Landfill. According to the CalRecycle's Solid Waste Information System (SWIS) Facility Details, the Landfill has a maximum permitted tonnage limit of 1,574 tons per day, a design capacity of 13,834,328 cubic yards, and an estimated closure date of 2055.⁴⁹ The proposed project would not produce enough solid waste for the landfill to exceed capacity. Therefore, sufficient permitted capacity exists at the Johnson Canyon Sanitary Landfill to accommodate the proposed project's incremental increase in solid waste disposal needs.

The proposed residences would involve the generation of typical solid waste types and would not require specialized solid waste disposal needs. Furthermore, pursuant to CBSC Section 4.408, the proposed project would be required to submit a Waste Management Plan to the City detailing on-site sorting of construction debris. Implementation of the Waste Management Plan would ensure that the proposed project meets established diversion requirements for reused or recycled construction waste. As such, the proposed project would comply with applicable federal, State, and local statutes and regulations related to solid waste. Therefore, the proposed project would have a **less-than-significant** impact related to solid waste.

⁴⁹ California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005>. Accessed March 2020.

XX. WILDFIRE.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a-d. As discussed in Section IX, Hazards and Hazardous Materials, of this IS/MND, the City’s Wildland Urban Interface map indicates that the project site and the off-site improvements to Watsonville Road and Monterey Road are not located in a High or Very High FHSZ.⁵⁰ Furthermore, the California Fire Hazard Severity Zone Viewer indicates that the project site is not located in a High or Very High FHSZ.⁵¹ The nearest High or Very High FHSZ is located approximately 0.72-mile to the west. The proposed project would be required to comply with all applicable requirements of the California Fire Code, as adopted by Chapter 15.44 of the City’s Municipal Code, including installation of fire sprinkler systems.

As noted in Section IX, implementation of the proposed project would not interfere with potential evacuation or response routes used by emergency response teams. The project would not conflict with the City’s Emergency Operations Plan with implementation of Mitigation Measure XVII-1 in Section XVII, Transportation, of this IS/MND.⁵² In addition, the project is not located on a substantial slope, and the project area does not include any existing features that would substantially increase fire risk for residents. Given that the project site is located within a developed urban area and is situated adjacent to existing roads, water lines, and other utilities, the project would not result in substantial fire risks related to installation or maintenance of such infrastructure. Therefore, the proposed project would not be subject to substantial risks related to wildfires, and a **less-than-significant** impact would occur.

⁵⁰ City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.

⁵¹ California State Geportal. *California Fire Hazard Severity Zones (FHSZ)*. November 18, 2020. Available at: <https://gis.data.ca.gov/>. Accessed March 2021.

⁵² City of Morgan Hill. *Emergency Operations Plan*. January 11, 2018.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. As discussed in Section IV, Biological Resources, of this IS/MND, the proposed project would be required to implement mitigation measures to minimize potential impacts to special-status and migratory birds and raptors, and special-status bats. Although unlikely, the possibility exists that subsurface excavation of the site during grading and other construction activities could unearth deposits of cultural significance. However, this IS/MND explains how the City’s Municipal Code requires standard measures for development projects that would ensure any impacts to archaeological resources would be less than significant. Therefore, the proposed project’s impact related to degradation of the quality of the environment, substantial reduction of habitat or plant and wildlife species, and elimination of important examples of the major periods of California history or prehistory would be **less than significant**.
- b. As discussed throughout this IS/MND, the proposed project would be consistent with the site’s current General Plan land use and zoning designations. As such, the type and intensity of growth that would be induced by the proposed project has been generally anticipated pursuant to the General Plan and associated cumulative environmental effects have been analyzed in the General Plan EIR. Furthermore, as demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level with implementation of project-specific mitigation measures and compliance with applicable General Plan policies. When viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not contribute to cumulative impacts in the City of Morgan Hill, and the project’s cumulative impact would be **less than significant**.
- c. The project site would be developed in a generally urbanized and built-up area of the City of Morgan Hill. The potential for substantial environmental effects on human beings is addressed within this IS/MND and all impacts have been identified as less than significant or less than significant with the incorporation of mitigation measures. For example,

impacts to human beings associated with potential hazardous materials are addressed within the Hazards and Hazardous Materials section of this IS/MND and would be reduced to less-than-significant levels with implementation of Mitigation Measures IX-1 to IX-3. Overall, the proposed project would not result in substantial adverse impacts to human beings, either directly or indirectly, and a **less-than-significant** impact would result.

Appendix A

CalEEMod Modeling Results

Royal Oaks Village - Bay Area AQMD Air District, Annual

Royal Oaks Village
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	140.00	Space	1.34	56,000.00	0
Apartments Mid Rise	73.00	Dwelling Unit	2.87	73,000.00	209
Other Asphalt Surfaces	89.50	1000sqft	2.05	89,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	257.69	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Royal Oaks Village - Bay Area AQMD Air District, Annual

Project Characteristics - CO2 intensity factor updated per PG&E's RPS projections.

Land Use - Lot acreages updated per site plan.

Construction Phase - Construction phase timing based on AQ Questionnaire.

Trips and VMT - Site prep and grading phase haul trip lengths adjusted per AQ Questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation updated to be consistent with project-specific traffic report.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect to compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy per AQ Questionnaire and compliance with CalGreen Code

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	PhaseEndDate	5/22/2023	7/31/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	7/17/2023
tblConstructionPhase	PhaseEndDate	3/28/2022	3/14/2022
tblConstructionPhase	PhaseEndDate	5/9/2022	6/27/2022
tblConstructionPhase	PhaseEndDate	4/24/2023	7/18/2022
tblConstructionPhase	PhaseEndDate	4/11/2022	5/9/2022
tblConstructionPhase	PhaseStartDate	4/25/2023	8/2/2022
tblConstructionPhase	PhaseStartDate	5/10/2022	7/19/2022

Royal Oaks Village - Bay Area AQMD Air District, Annual

tblConstructionPhase	PhaseStartDate	4/12/2022	5/10/2022
tblConstructionPhase	PhaseStartDate	3/28/2023	6/28/2022
tblConstructionPhase	PhaseStartDate	3/29/2022	3/15/2022
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	4,929.00
tblLandUse	LotAcreage	1.26	1.34
tblLandUse	LotAcreage	1.92	2.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44

2.0 Emissions Summary

Royal Oaks Village - Bay Area AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2022	5-31-2022	1.1011	1.1011
2	6-1-2022	8-31-2022	0.7354	0.7354
3	9-1-2022	11-30-2022	0.8795	0.8795
4	12-1-2022	2-28-2023	0.8228	0.8228
5	3-1-2023	5-31-2023	0.8132	0.8132
6	6-1-2023	8-31-2023	0.4439	0.4439
		Highest	1.1011	1.1011

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5339	0.0101	0.7762	4.9000e-004		0.0362	0.0362		0.0362	0.0362	3.3281	2.2565	5.5845	6.2100e-003	2.2000e-004	5.8049
Energy	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	71.1724	71.1724	4.8700e-003	1.4900e-003	71.7383
Mobile	0.0903	0.4000	1.0260	3.8200e-003	0.3413	3.1300e-003	0.3445	0.0916	2.9200e-003	0.0945	0.0000	350.6061	350.6061	0.0122	0.0000	350.9105
Waste						0.0000	0.0000		0.0000	0.0000	6.8164	0.0000	6.8164	0.4028	0.0000	16.8874
Water						0.0000	0.0000		0.0000	0.0000	1.5089	4.2349	5.7438	0.1555	3.7600e-003	10.7502
Total	0.6276	0.4392	1.8146	4.5000e-003	0.3413	0.0417	0.3830	0.0916	0.0414	0.1331	11.6534	428.2699	439.9233	0.5816	5.4700e-003	456.0912

Royal Oaks Village - Bay Area AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3655	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
Energy	3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510
Mobile	0.0881	0.3865	0.9741	3.5700e-003	0.3178	2.9400e-003	0.3207	0.0853	2.7400e-003	0.0880	0.0000	328.2344	328.2344	0.0116	0.0000	328.5236
Waste						0.0000	0.0000		0.0000	0.0000	6.8164	0.0000	6.8164	0.4028	0.0000	16.8874
Water						0.0000	0.0000		0.0000	0.0000	1.2072	3.2284	4.4356	0.1244	3.0000e-003	8.4391
Total	0.4568	0.4206	1.5302	3.7800e-003	0.3178	8.2000e-003	0.3260	0.0853	8.0000e-003	0.0933	8.0236	364.5123	372.5359	0.5402	3.5900e-003	387.1122

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	27.21	4.24	15.67	16.00	6.90	80.31	14.88	6.90	80.69	29.88	31.15	14.89	15.32	7.10	34.37	15.12

3.0 Construction Detail

Construction Phase

Royal Oaks Village - Bay Area AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/14/2022	5	10	
2	Site Preparation	Site Preparation	3/15/2022	5/9/2022	5	40	
3	Grading	Grading	5/10/2022	6/27/2022	5	35	
4	Building Construction	Building Construction	7/19/2022	7/17/2023	5	260	
5	Paving	Paving	6/28/2022	7/18/2022	5	15	
6	Architectural Coating	Architectural Coating	8/2/2022	7/31/2023	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 3.39

Residential Indoor: 147,825; Residential Outdoor: 49,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,730 (Architectural Coating – sqft)

OffRoad Equipment

Royal Oaks Village - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Royal Oaks Village - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	238.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	38.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	616.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0257	0.0000	0.0257	3.8900e-003	0.0000	3.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1286	0.1030	1.9000e-004	6.2100e-003	6.2100e-003		5.7800e-003	5.7800e-003		0.0000	16.9951	16.9951	4.7700e-003	0.0000	17.1145
Total	0.0132	0.1286	0.1030	1.9000e-004	0.0257	6.2100e-003	0.0319	3.8900e-003	5.7800e-003	9.6700e-003	0.0000	16.9951	16.9951	4.7700e-003	0.0000	17.1145

Royal Oaks Village - Bay Area AQMD Air District, Annual

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.8000e-004	0.0295	6.7200e-003	9.0000e-005	2.0100e-003	9.0000e-005	2.1000e-003	5.5000e-004	8.0000e-005	6.3000e-004	0.0000	8.8803	8.8803	4.5000e-004	0.0000	8.8915
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.4000e-004	1.5500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4826	0.4826	1.0000e-005	0.0000	0.4829
Total	1.0900e-003	0.0297	8.2700e-003	1.0000e-004	2.6000e-003	9.0000e-005	2.7000e-003	7.1000e-004	8.0000e-005	7.9000e-004	0.0000	9.3629	9.3629	4.6000e-004	0.0000	9.3744

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0257	0.0000	0.0257	3.8900e-003	0.0000	3.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1286	0.1030	1.9000e-004		6.2100e-003	6.2100e-003		5.7800e-003	5.7800e-003	0.0000	16.9951	16.9951	4.7700e-003	0.0000	17.1144
Total	0.0132	0.1286	0.1030	1.9000e-004	0.0257	6.2100e-003	0.0319	3.8900e-003	5.7800e-003	9.6700e-003	0.0000	16.9951	16.9951	4.7700e-003	0.0000	17.1144

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3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.8000e-004	0.0295	6.7200e-003	9.0000e-005	2.0100e-003	9.0000e-005	2.1000e-003	5.5000e-004	8.0000e-005	6.3000e-004	0.0000	8.8803	8.8803	4.5000e-004	0.0000	8.8915
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.4000e-004	1.5500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4826	0.4826	1.0000e-005	0.0000	0.4829
Total	1.0900e-003	0.0297	8.2700e-003	1.0000e-004	2.6000e-003	9.0000e-005	2.7000e-003	7.1000e-004	8.0000e-005	7.9000e-004	0.0000	9.3629	9.3629	4.6000e-004	0.0000	9.3744

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0634	0.6617	0.3940	7.6000e-004		0.0323	0.0323		0.0297	0.0297	0.0000	66.8788	66.8788	0.0216	0.0000	67.4195
Total	0.0634	0.6617	0.3940	7.6000e-004	0.3613	0.0323	0.3936	0.1986	0.0297	0.2283	0.0000	66.8788	66.8788	0.0216	0.0000	67.4195

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3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.5900e-003	4.9000e-004	1.0000e-005	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.5507	0.5507	4.0000e-005	0.0000	0.5517
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	6.8000e-004	7.4200e-003	3.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.3166	2.3166	5.0000e-005	0.0000	2.3178
Total	1.0900e-003	3.2700e-003	7.9100e-003	4.0000e-005	2.9400e-003	2.0000e-005	2.9600e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.8673	2.8673	9.0000e-005	0.0000	2.8695

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0634	0.6617	0.3940	7.6000e-004		0.0323	0.0323		0.0297	0.0297	0.0000	66.8787	66.8787	0.0216	0.0000	67.4195
Total	0.0634	0.6617	0.3940	7.6000e-004	0.3613	0.0323	0.3936	0.1986	0.0297	0.2283	0.0000	66.8787	66.8787	0.0216	0.0000	67.4195

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3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	2.5900e-003	4.9000e-004	1.0000e-005	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.5507	0.5507	4.0000e-005	0.0000	0.5517
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	6.8000e-004	7.4200e-003	3.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.6000e-004	2.0000e-005	7.7000e-004	0.0000	2.3166	2.3166	5.0000e-005	0.0000	2.3178
Total	1.0900e-003	3.2700e-003	7.9100e-003	4.0000e-005	2.9400e-003	2.0000e-005	2.9600e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.8673	2.8673	9.0000e-005	0.0000	2.8695

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1149	0.0000	0.1149	0.0590	0.0000	0.0590	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0341	0.3650	0.2673	5.2000e-004		0.0165	0.0165		0.0152	0.0152	0.0000	45.5958	45.5958	0.0148	0.0000	45.9645
Total	0.0341	0.3650	0.2673	5.2000e-004	0.1149	0.0165	0.1314	0.0590	0.0152	0.0741	0.0000	45.5958	45.5958	0.0148	0.0000	45.9645

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0300e-003	0.0420	7.9200e-003	9.0000e-005	1.5700e-003	7.0000e-005	1.6400e-003	4.3000e-004	7.0000e-005	5.0000e-004	0.0000	8.9270	8.9270	6.3000e-004	0.0000	8.9428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.0000e-004	5.4100e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6892	1.6892	4.0000e-005	0.0000	1.6901
Total	1.7800e-003	0.0425	0.0133	1.1000e-004	3.6400e-003	8.0000e-005	3.7300e-003	9.8000e-004	8.0000e-005	1.0600e-003	0.0000	10.6161	10.6161	6.7000e-004	0.0000	10.6329

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1149	0.0000	0.1149	0.0590	0.0000	0.0590	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0341	0.3650	0.2673	5.2000e-004		0.0165	0.0165		0.0152	0.0152	0.0000	45.5958	45.5958	0.0148	0.0000	45.9645
Total	0.0341	0.3650	0.2673	5.2000e-004	0.1149	0.0165	0.1314	0.0590	0.0152	0.0741	0.0000	45.5958	45.5958	0.0148	0.0000	45.9645

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0300e-003	0.0420	7.9200e-003	9.0000e-005	1.5700e-003	7.0000e-005	1.6400e-003	4.3000e-004	7.0000e-005	5.0000e-004	0.0000	8.9270	8.9270	6.3000e-004	0.0000	8.9428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	5.0000e-004	5.4100e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0900e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.6892	1.6892	4.0000e-005	0.0000	1.6901
Total	1.7800e-003	0.0425	0.0133	1.1000e-004	3.6400e-003	8.0000e-005	3.7300e-003	9.8000e-004	8.0000e-005	1.0600e-003	0.0000	10.6161	10.6161	6.7000e-004	0.0000	10.6329

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1015	0.9291	0.9736	1.6000e-003		0.0481	0.0481		0.0453	0.0453	0.0000	137.8765	137.8765	0.0330	0.0000	138.7023
Total	0.1015	0.9291	0.9736	1.6000e-003		0.0481	0.0481		0.0453	0.0453	0.0000	137.8765	137.8765	0.0330	0.0000	138.7023

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6400e-003	0.1883	0.0467	5.1000e-004	0.0125	3.8000e-004	0.0129	3.6100e-003	3.6000e-004	3.9700e-003	0.0000	48.8949	48.8949	2.3200e-003	0.0000	48.9529
Worker	0.0194	0.0129	0.1398	4.8000e-004	0.0536	3.4000e-004	0.0539	0.0143	3.2000e-004	0.0146	0.0000	43.6486	43.6486	9.1000e-004	0.0000	43.6714
Total	0.0250	0.2012	0.1865	9.9000e-004	0.0661	7.2000e-004	0.0668	0.0179	6.8000e-004	0.0185	0.0000	92.5435	92.5435	3.2300e-003	0.0000	92.6243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1015	0.9291	0.9736	1.6000e-003		0.0481	0.0481		0.0453	0.0453	0.0000	137.8764	137.8764	0.0330	0.0000	138.7021
Total	0.1015	0.9291	0.9736	1.6000e-003		0.0481	0.0481		0.0453	0.0453	0.0000	137.8764	137.8764	0.0330	0.0000	138.7021

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6400e-003	0.1883	0.0467	5.1000e-004	0.0125	3.8000e-004	0.0129	3.6100e-003	3.6000e-004	3.9700e-003	0.0000	48.8949	48.8949	2.3200e-003	0.0000	48.9529
Worker	0.0194	0.0129	0.1398	4.8000e-004	0.0536	3.4000e-004	0.0539	0.0143	3.2000e-004	0.0146	0.0000	43.6486	43.6486	9.1000e-004	0.0000	43.6714
Total	0.0250	0.2012	0.1865	9.9000e-004	0.0661	7.2000e-004	0.0668	0.0179	6.8000e-004	0.0185	0.0000	92.5435	92.5435	3.2300e-003	0.0000	92.6243

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1109	1.0141	1.1452	1.9000e-003		0.0493	0.0493		0.0464	0.0464	0.0000	163.4224	163.4224	0.0389	0.0000	164.3942
Total	0.1109	1.0141	1.1452	1.9000e-003		0.0493	0.0493		0.0464	0.0464	0.0000	163.4224	163.4224	0.0389	0.0000	164.3942

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0100e-003	0.1721	0.0495	5.9000e-004	0.0148	2.0000e-004	0.0150	4.2800e-003	1.9000e-004	4.4700e-003	0.0000	56.3107	56.3107	2.3400e-003	0.0000	56.3692
Worker	0.0215	0.0137	0.1524	5.5000e-004	0.0635	4.0000e-004	0.0639	0.0169	3.7000e-004	0.0173	0.0000	49.7375	49.7375	9.7000e-004	0.0000	49.7617
Total	0.0265	0.1858	0.2019	1.1400e-003	0.0783	6.0000e-004	0.0789	0.0212	5.6000e-004	0.0217	0.0000	106.0481	106.0481	3.3100e-003	0.0000	106.1309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1109	1.0141	1.1452	1.9000e-003		0.0493	0.0493		0.0464	0.0464	0.0000	163.4222	163.4222	0.0389	0.0000	164.3940
Total	0.1109	1.0141	1.1452	1.9000e-003		0.0493	0.0493		0.0464	0.0464	0.0000	163.4222	163.4222	0.0389	0.0000	164.3940

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0100e-003	0.1721	0.0495	5.9000e-004	0.0148	2.0000e-004	0.0150	4.2800e-003	1.9000e-004	4.4700e-003	0.0000	56.3107	56.3107	2.3400e-003	0.0000	56.3692
Worker	0.0215	0.0137	0.1524	5.5000e-004	0.0635	4.0000e-004	0.0639	0.0169	3.7000e-004	0.0173	0.0000	49.7375	49.7375	9.7000e-004	0.0000	49.7617
Total	0.0265	0.1858	0.2019	1.1400e-003	0.0783	6.0000e-004	0.0789	0.0212	5.6000e-004	0.0217	0.0000	106.0481	106.0481	3.3100e-003	0.0000	106.1309

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2700e-003	0.0834	0.1094	1.7000e-004		4.2600e-003	4.2600e-003		3.9200e-003	3.9200e-003	0.0000	15.0207	15.0207	4.8600e-003	0.0000	15.1421
Paving	4.4400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0127	0.0834	0.1094	1.7000e-004		4.2600e-003	4.2600e-003		3.9200e-003	3.9200e-003	0.0000	15.0207	15.0207	4.8600e-003	0.0000	15.1421

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3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.1000e-004	2.3200e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7239	0.7239	2.0000e-005	0.0000	0.7243
Total	3.2000e-004	2.1000e-004	2.3200e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7239	0.7239	2.0000e-005	0.0000	0.7243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2700e-003	0.0834	0.1094	1.7000e-004		4.2600e-003	4.2600e-003		3.9200e-003	3.9200e-003	0.0000	15.0207	15.0207	4.8600e-003	0.0000	15.1421
Paving	4.4400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0127	0.0834	0.1094	1.7000e-004		4.2600e-003	4.2600e-003		3.9200e-003	3.9200e-003	0.0000	15.0207	15.0207	4.8600e-003	0.0000	15.1421

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3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.1000e-004	2.3200e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7239	0.7239	2.0000e-005	0.0000	0.7243
Total	3.2000e-004	2.1000e-004	2.3200e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7239	0.7239	2.0000e-005	0.0000	0.7243

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0768	0.0988	1.6000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	13.9152	13.9152	9.1000e-004	0.0000	13.9379
Total	0.2393	0.0768	0.0988	1.6000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	13.9152	13.9152	9.1000e-004	0.0000	13.9379

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3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5900e-003	2.3800e-003	0.0258	9.0000e-005	9.9000e-003	6.0000e-005	9.9700e-003	2.6400e-003	6.0000e-005	2.6900e-003	0.0000	8.0663	8.0663	1.7000e-004	0.0000	8.0705
Total	3.5900e-003	2.3800e-003	0.0258	9.0000e-005	9.9000e-003	6.0000e-005	9.9700e-003	2.6400e-003	6.0000e-005	2.6900e-003	0.0000	8.0663	8.0663	1.7000e-004	0.0000	8.0705

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2282					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0768	0.0988	1.6000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	13.9152	13.9152	9.1000e-004	0.0000	13.9379
Total	0.2393	0.0768	0.0988	1.6000e-004		4.4500e-003	4.4500e-003		4.4500e-003	4.4500e-003	0.0000	13.9152	13.9152	9.1000e-004	0.0000	13.9379

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3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5900e-003	2.3800e-003	0.0258	9.0000e-005	9.9000e-003	6.0000e-005	9.9700e-003	2.6400e-003	6.0000e-005	2.6900e-003	0.0000	8.0663	8.0663	1.7000e-004	0.0000	8.0705
Total	3.5900e-003	2.3800e-003	0.0258	9.0000e-005	9.9000e-003	6.0000e-005	9.9700e-003	2.6400e-003	6.0000e-005	2.6900e-003	0.0000	8.0663	8.0663	1.7000e-004	0.0000	8.0705

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.0984	0.1367	2.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	19.2771	19.2771	1.1500e-003	0.0000	19.3059
Total	0.3305	0.0984	0.1367	2.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	19.2771	19.2771	1.1500e-003	0.0000	19.3059

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3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6500e-003	2.9600e-003	0.0329	1.2000e-004	0.0137	9.0000e-005	0.0138	3.6500e-003	8.0000e-005	3.7300e-003	0.0000	10.7464	10.7464	2.1000e-004	0.0000	10.7517
Total	4.6500e-003	2.9600e-003	0.0329	1.2000e-004	0.0137	9.0000e-005	0.0138	3.6500e-003	8.0000e-005	3.7300e-003	0.0000	10.7464	10.7464	2.1000e-004	0.0000	10.7517

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3161					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.0984	0.1367	2.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	19.2770	19.2770	1.1500e-003	0.0000	19.3059
Total	0.3305	0.0984	0.1367	2.2000e-004		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	19.2770	19.2770	1.1500e-003	0.0000	19.3059

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3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6500e-003	2.9600e-003	0.0329	1.2000e-004	0.0137	9.0000e-005	0.0138	3.6500e-003	8.0000e-005	3.7300e-003	0.0000	10.7464	10.7464	2.1000e-004	0.0000	10.7517
Total	4.6500e-003	2.9600e-003	0.0329	1.2000e-004	0.0137	9.0000e-005	0.0138	3.6500e-003	8.0000e-005	3.7300e-003	0.0000	10.7464	10.7464	2.1000e-004	0.0000	10.7517

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0881	0.3865	0.9741	3.5700e-003	0.3178	2.9400e-003	0.3207	0.0853	2.7400e-003	0.0880	0.0000	328.2344	328.2344	0.0116	0.0000	328.5236
Unmitigated	0.0903	0.4000	1.0260	3.8200e-003	0.3413	3.1300e-003	0.3445	0.0916	2.9200e-003	0.0945	0.0000	350.6061	350.6061	0.0122	0.0000	350.9105

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	397.12	397.12	397.12	917,191	853,905
Parking Lot	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	397.12	397.12	397.12	917,191	853,905

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	37.5169	37.5169	4.2200e-003	8.7000e-004	37.8828
NaturalGas Mitigated	3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510
NaturalGas Unmitigated	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6555	33.6555	6.5000e-004	6.2000e-004	33.8555

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	630680	3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6555	33.6555	6.5000e-004	6.2000e-004	33.8555
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.4000e-003	0.0291	0.0124	1.9000e-004		2.3500e-003	2.3500e-003		2.3500e-003	2.3500e-003	0.0000	33.6555	33.6555	6.5000e-004	6.2000e-004	33.8555

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	602654	3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		3.2500e-003	0.0278	0.0118	1.8000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	32.1599	32.1599	6.2000e-004	5.9000e-004	32.3510

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	301370	35.2260	3.9600e-003	8.2000e-004	35.5695
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	19600	2.2910	2.6000e-004	5.0000e-005	2.3133
Total		37.5169	4.2200e-003	8.7000e-004	37.8828

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

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6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3655	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
Unmitigated	0.5339	0.0101	0.7762	4.9000e-004		0.0362	0.0362		0.0362	0.0362	3.3281	2.2565	5.5845	6.2100e-003	2.2000e-004	5.8049

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0544					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2945					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1684	3.8800e-003	0.2319	4.6000e-004		0.0332	0.0332		0.0332	0.0332	3.3281	1.3670	4.6950	5.3500e-003	2.2000e-004	4.8938
Landscaping	0.0165	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
Total	0.5339	0.0102	0.7762	4.9000e-004		0.0362	0.0362		0.0362	0.0362	3.3281	2.2565	5.5845	6.2100e-003	2.2000e-004	5.8049

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0544					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2945					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0165	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111
Total	0.3655	6.2700e-003	0.5443	3.0000e-005		3.0100e-003	3.0100e-003		3.0100e-003	3.0100e-003	0.0000	0.8895	0.8895	8.6000e-004	0.0000	0.9111

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Royal Oaks Village - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.4356	0.1244	3.0000e-003	8.4391
Unmitigated	5.7438	0.1555	3.7600e-003	10.7502

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	4.75624 / 2.9985	5.7438	0.1555	3.7600e-003	10.7502
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		5.7438	0.1555	3.7600e-003	10.7502

Royal Oaks Village - Bay Area AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.805 / 2.009	4.4356	0.1244	3.0000e-003	8.4391
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		4.4356	0.1244	3.0000e-003	8.4391

8.0 Waste Detail

8.1 Mitigation Measures Waste

Royal Oaks Village - Bay Area AQMD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.8164	0.4028	0.0000	16.8874
Unmitigated	6.8164	0.4028	0.0000	16.8874

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.58	6.8164	0.4028	0.0000	16.8874
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		6.8164	0.4028	0.0000	16.8874

Royal Oaks Village - Bay Area AQMD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	33.58	6.8164	0.4028	0.0000	16.8874
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		6.8164	0.4028	0.0000	16.8874

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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Royal Oaks Village - Bay Area AQMD Air District, Annual

11.0 Vegetation

Royal Oaks Village - Bay Area AQMD Air District, Summer

Royal Oaks Village
Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	140.00	Space	1.34	56,000.00	0
Apartments Mid Rise	73.00	Dwelling Unit	2.87	73,000.00	209
Other Asphalt Surfaces	89.50	1000sqft	2.05	89,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	257.69	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Royal Oaks Village - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 intensity factor updated per PG&E's RPS projections.

Land Use - Lot acreages updated per site plan.

Construction Phase - Construction phase timing based on AQ Questionnaire.

Trips and VMT - Site prep and grading phase haul trip lengths adjusted per AQ Questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation updated to be consistent with project-specific traffic report.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect to compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy per AQ Questionnaire and compliance with CalGreen Code

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	PhaseEndDate	5/22/2023	7/31/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	7/17/2023
tblConstructionPhase	PhaseEndDate	3/28/2022	3/14/2022
tblConstructionPhase	PhaseEndDate	5/9/2022	6/27/2022
tblConstructionPhase	PhaseEndDate	4/24/2023	7/18/2022
tblConstructionPhase	PhaseEndDate	4/11/2022	5/9/2022
tblConstructionPhase	PhaseStartDate	4/25/2023	8/2/2022
tblConstructionPhase	PhaseStartDate	5/10/2022	7/19/2022

Royal Oaks Village - Bay Area AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	4/12/2022	5/10/2022
tblConstructionPhase	PhaseStartDate	3/28/2023	6/28/2022
tblConstructionPhase	PhaseStartDate	3/29/2022	3/15/2022
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	4,929.00
tblLandUse	LotAcreage	1.26	1.34
tblLandUse	LotAcreage	1.92	2.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44

2.0 Emissions Summary

Royal Oaks Village - Bay Area AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365
Energy	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Mobile	0.5710	2.1307	5.8706	0.0222	1.9485	0.0172	1.9656	0.5213	0.0160	0.5373		2,246.0053	2,246.0053	0.0742		2,247.8603
Total	32.7072	3.0233	51.6507	0.1000	1.9485	5.6945	7.6429	0.5213	5.6933	6.2146	611.0718	2,730.7104	3,341.7822	0.9249	0.0469	3,378.8860

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Energy	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Mobile	0.5586	2.0615	5.5491	0.0208	1.8140	0.0161	1.8301	0.4853	0.0151	0.5003		2,102.4946	2,102.4946	0.0704		2,104.2533
Total	2.6720	2.2833	11.6612	0.0221	1.8140	0.0619	1.8759	0.4853	0.0608	0.5461	0.0000	2,307.6371	2,307.6371	0.0846	3.5600e-003	2,310.8141

Royal Oaks Village - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	91.83	24.48	77.42	77.93	6.90	98.91	75.46	6.90	98.93	91.21	100.00	15.49	30.95	90.85	92.41	31.61

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/14/2022	5	10	
2	Site Preparation	Site Preparation	3/15/2022	5/9/2022	5	40	
3	Grading	Grading	5/10/2022	6/27/2022	5	35	
4	Building Construction	Building Construction	7/19/2022	7/17/2023	5	260	
5	Paving	Paving	6/28/2022	7/18/2022	5	15	
6	Architectural Coating	Architectural Coating	8/2/2022	7/31/2023	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 3.39

Residential Indoor: 147,825; Residential Outdoor: 49,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,730 (Architectural Coating – sqft)

OffRoad Equipment

Royal Oaks Village - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Royal Oaks Village - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	238.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	38.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	616.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	5.1433	1.2427	6.3859	0.7787	1.1553	1.9340		3,746.7812	3,746.7812	1.0524		3,773.0920

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1748	5.7924	1.3046	0.0184	0.4158	0.0169	0.4327	0.1140	0.0162	0.1301		1,971.8975	1,971.8975	0.0970		1,974.3213
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.2197	5.8177	1.6441	0.0196	0.5391	0.0177	0.5567	0.1466	0.0169	0.1635		2,086.3318	2,086.3318	0.0993		2,088.8152

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	5.1433	1.2427	6.3859	0.7787	1.1553	1.9340	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1748	5.7924	1.3046	0.0184	0.4158	0.0169	0.4327	0.1140	0.0162	0.1301		1,971.8975	1,971.8975	0.0970		1,974.3213
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.2197	5.8177	1.6441	0.0196	0.5391	0.0177	0.5567	0.1466	0.0169	0.1635		2,086.3318	2,086.3318	0.0993		2,088.8152

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0671	1.6126	19.6797	9.9308	1.4836	11.4144		3,686.0619	3,686.0619	1.1922		3,715.8655

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0900e-003	0.1292	0.0226	2.9000e-004	4.9900e-003	2.3000e-004	5.2200e-003	1.3700e-003	2.2000e-004	1.5900e-003		30.9158	30.9158	2.0800e-003		30.9677
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
Total	0.0570	0.1595	0.4300	1.6700e-003	0.1529	1.1400e-003	0.1540	0.0406	1.0600e-003	0.0417		168.2370	168.2370	4.9400e-003		168.3604

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0671	1.6126	19.6797	9.9308	1.4836	11.4144	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0900e-003	0.1292	0.0226	2.9000e-004	4.9900e-003	2.3000e-004	5.2200e-003	1.3700e-003	2.2000e-004	1.5900e-003		30.9158	30.9158	2.0800e-003		30.9677
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0539	0.0303	0.4074	1.3800e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		137.3212	137.3212	2.8600e-003		137.3927
Total	0.0570	0.1595	0.4300	1.6700e-003	0.1529	1.1400e-003	0.1540	0.0406	1.0600e-003	0.0417		168.2370	168.2370	4.9400e-003		168.3604

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5683	0.9409	7.5091	3.3699	0.8656	4.2355		2,872.0464	2,872.0464	0.9289		2,895.2684

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0573	2.3926	0.4183	5.3500e-003	0.0925	4.1800e-003	0.0967	0.0254	4.0000e-003	0.0294		572.7558	572.7558	0.0385		573.7176
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.1021	2.4179	0.7578	6.5000e-003	0.2157	4.9400e-003	0.2207	0.0581	4.7000e-003	0.0628		687.1901	687.1901	0.0409		688.2115

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5683	0.9409	7.5091	3.3699	0.8656	4.2355	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0573	2.3926	0.4183	5.3500e-003	0.0925	4.1800e-003	0.0967	0.0254	4.0000e-003	0.0294		572.7558	572.7558	0.0385		573.7176
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.1021	2.4179	0.7578	6.5000e-003	0.2157	4.9400e-003	0.2207	0.0581	4.7000e-003	0.0628		687.1901	687.1901	0.0409		688.2115

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0926	3.1341	0.7334	8.6400e-003	0.2166	6.2100e-003	0.2228	0.0624	5.9400e-003	0.0683		915.6624	915.6624	0.0415		916.6998
Worker	0.3412	0.1921	2.5802	8.7200e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		869.7007	869.7007	0.0181		870.1538
Total	0.4337	3.3262	3.3136	0.0174	1.1531	0.0120	1.1651	0.3108	0.0112	0.3220		1,785.3631	1,785.3631	0.0596		1,786.8536

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0926	3.1341	0.7334	8.6400e-003	0.2166	6.2100e-003	0.2228	0.0624	5.9400e-003	0.0683		915.6624	915.6624	0.0415		916.6998
Worker	0.3412	0.1921	2.5802	8.7200e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		869.7007	869.7007	0.0181		870.1538
Total	0.4337	3.3262	3.3136	0.0174	1.1531	0.0120	1.1651	0.3108	0.0112	0.3220		1,785.3631	1,785.3631	0.0596		1,786.8536

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0694	2.4220	0.6602	8.3900e-003	0.2166	2.7600e-003	0.2194	0.0624	2.6300e-003	0.0650		889.9037	889.9037	0.0355		890.7904
Worker	0.3185	0.1728	2.3797	8.3900e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		836.3596	836.3596	0.0163		836.7664
Total	0.3879	2.5948	3.0399	0.0168	1.1531	8.4000e-003	1.1615	0.3108	7.8200e-003	0.3186		1,726.2633	1,726.2633	0.0517		1,727.5568

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0694	2.4220	0.6602	8.3900e-003	0.2166	2.7600e-003	0.2194	0.0624	2.6300e-003	0.0650		889.9037	889.9037	0.0355		890.7904
Worker	0.3185	0.1728	2.3797	8.3900e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		836.3596	836.3596	0.0163		836.7664
Total	0.3879	2.5948	3.0399	0.0168	1.1531	8.4000e-003	1.1615	0.3108	7.8200e-003	0.3186		1,726.2633	1,726.2633	0.0517		1,727.5568

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6949	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6949	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939
Total	0.0449	0.0253	0.3395	1.1500e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		114.4343	114.4343	2.3800e-003		114.4939

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	4.3909	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0388	0.5206	1.7600e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		175.4659	175.4659	3.6600e-003		175.5574
Total	0.0688	0.0388	0.5206	1.7600e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		175.4659	175.4659	3.6600e-003		175.5574

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	4.3909	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0688	0.0388	0.5206	1.7600e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		175.4659	175.4659	3.6600e-003		175.5574
Total	0.0688	0.0388	0.5206	1.7600e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		175.4659	175.4659	3.6600e-003		175.5574

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	4.3780	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
Total	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	4.3780	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Royal Oaks Village - Bay Area AQMD Air District, Summer

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213
Total	0.0643	0.0349	0.4801	1.6900e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		168.7392	168.7392	3.2800e-003		168.8213

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

Royal Oaks Village - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5586	2.0615	5.5491	0.0208	1.8140	0.0161	1.8301	0.4853	0.0151	0.5003		2,102.4946	2,102.4946	0.0704		2,104.2533
Unmitigated	0.5710	2.1307	5.8706	0.0222	1.9485	0.0172	1.9656	0.5213	0.0160	0.5373		2,246.0053	2,246.0053	0.0742		2,247.8603

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	397.12	397.12	397.12	917,191	853,905
Parking Lot	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	397.12	397.12	397.12	917,191	853,905

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Royal Oaks Village - Bay Area AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
NaturalGas Unmitigated	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892

Royal Oaks Village - Bay Area AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1727.89	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.65111	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023

6.0 Area Detail

Royal Oaks Village - Bay Area AQMD Air District, Summer

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Unmitigated	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365

Royal Oaks Village - Bay Area AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.0220	0.6637	39.6650	0.0764		5.6310	5.6310		5.6310	5.6310	611.0718	270.5294	881.6012	0.8362	0.0432	915.3780
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
Total	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365

Royal Oaks Village - Bay Area AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
Total	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Royal Oaks Village - Bay Area AQMD Air District, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Royal Oaks Village - Bay Area AQMD Air District, Winter

Royal Oaks Village
Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	140.00	Space	1.34	56,000.00	0
Apartments Mid Rise	73.00	Dwelling Unit	2.87	73,000.00	209
Other Asphalt Surfaces	89.50	1000sqft	2.05	89,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	257.69	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Royal Oaks Village - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 intensity factor updated per PG&E's RPS projections.

Land Use - Lot acreages updated per site plan.

Construction Phase - Construction phase timing based on AQ Questionnaire.

Trips and VMT - Site prep and grading phase haul trip lengths adjusted per AQ Questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation updated to be consistent with project-specific traffic report.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect to compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy per AQ Questionnaire and compliance with CalGreen Code

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	260.00
tblConstructionPhase	NumDays	230.00	260.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	35.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	10.00	40.00
tblConstructionPhase	PhaseEndDate	5/22/2023	7/31/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	7/17/2023
tblConstructionPhase	PhaseEndDate	3/28/2022	3/14/2022
tblConstructionPhase	PhaseEndDate	5/9/2022	6/27/2022
tblConstructionPhase	PhaseEndDate	4/24/2023	7/18/2022
tblConstructionPhase	PhaseEndDate	4/11/2022	5/9/2022
tblConstructionPhase	PhaseStartDate	4/25/2023	8/2/2022
tblConstructionPhase	PhaseStartDate	5/10/2022	7/19/2022

Royal Oaks Village - Bay Area AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	4/12/2022	5/10/2022
tblConstructionPhase	PhaseStartDate	3/28/2023	6/28/2022
tblConstructionPhase	PhaseStartDate	3/29/2022	3/15/2022
tblGrading	MaterialExported	0.00	300.00
tblGrading	MaterialImported	0.00	4,929.00
tblLandUse	LotAcreage	1.26	1.34
tblLandUse	LotAcreage	1.92	2.87
tblProjectCharacteristics	CO2IntensityFactor	641.35	257.69
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44

2.0 Emissions Summary

Royal Oaks Village - Bay Area AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365
Energy	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Mobile	0.4914	2.2400	5.8980	0.0208	1.9485	0.0172	1.9657	0.5213	0.0161	0.5374		2,103.4870	2,103.4870	0.0756		2,105.3761
Total	32.6276	3.1326	51.6781	0.0985	1.9485	5.6946	7.6430	0.5213	5.6934	6.2147	611.0718	2,588.1921	3,199.2639	0.9262	0.0469	3,236.4018

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Energy	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Mobile	0.4791	2.1629	5.6119	0.0194	1.8140	0.0162	1.8302	0.4853	0.0151	0.5004		1,968.7945	1,968.7945	0.0719		1,970.5915
Total	2.5925	2.3847	11.7240	0.0207	1.8140	0.0619	1.8759	0.4853	0.0609	0.5462	0.0000	2,173.9370	2,173.9370	0.0862	3.5600e-003	2,177.1523

Royal Oaks Village - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	92.05	23.87	77.31	78.96	6.90	98.91	75.46	6.90	98.93	91.21	100.00	16.01	32.05	90.70	92.41	32.73

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/14/2022	5	10	
2	Site Preparation	Site Preparation	3/15/2022	5/9/2022	5	40	
3	Grading	Grading	5/10/2022	6/27/2022	5	35	
4	Building Construction	Building Construction	7/19/2022	7/17/2023	5	260	
5	Paving	Paving	6/28/2022	7/18/2022	5	15	
6	Architectural Coating	Architectural Coating	8/2/2022	7/31/2023	5	260	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 17.5

Acres of Paving: 3.39

Residential Indoor: 147,825; Residential Outdoor: 49,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,730 (Architectural Coating – sqft)

OffRoad Equipment

Royal Oaks Village - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Royal Oaks Village - Bay Area AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	238.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	38.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	616.00	10.80	7.30	6.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	114.00	32.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	5.1433	1.2427	6.3859	0.7787	1.1553	1.9340		3,746.7812	3,746.7812	1.0524		3,773.0920

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1795	5.9203	1.3974	0.0181	0.4158	0.0172	0.4331	0.1140	0.0165	0.1304		1,938.2376	1,938.2376	0.1015		1,940.7752
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.2272	5.9515	1.7138	0.0192	0.5391	0.0180	0.5570	0.1466	0.0172	0.1638		2,043.6564	2,043.6564	0.1037		2,046.2494

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1433	0.0000	5.1433	0.7787	0.0000	0.7787			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	5.1433	1.2427	6.3859	0.7787	1.1553	1.9340	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1795	5.9203	1.3974	0.0181	0.4158	0.0172	0.4331	0.1140	0.0165	0.1304		1,938.2376	1,938.2376	0.1015		1,940.7752
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.2272	5.9515	1.7138	0.0192	0.5391	0.0180	0.5570	0.1466	0.0172	0.1638		2,043.6564	2,043.6564	0.1037		2,046.2494

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0671	1.6126	19.6797	9.9308	1.4836	11.4144		3,686.0619	3,686.0619	1.1922		3,715.8655

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.2900e-003	0.1285	0.0268	2.8000e-004	4.9900e-003	2.4000e-004	5.2300e-003	1.3700e-003	2.3000e-004	1.6000e-003		29.5722	29.5722	2.2600e-003		29.6288
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
Total	0.0605	0.1660	0.4064	1.5500e-003	0.1529	1.1500e-003	0.1540	0.0406	1.0700e-003	0.0417		156.0748	156.0748	4.9200e-003		156.1978

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0671	0.0000	18.0671	9.9308	0.0000	9.9308			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	18.0671	1.6126	19.6797	9.9308	1.4836	11.4144	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.2900e-003	0.1285	0.0268	2.8000e-004	4.9900e-003	2.4000e-004	5.2300e-003	1.3700e-003	2.3000e-004	1.6000e-003		29.5722	29.5722	2.2600e-003		29.6288
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0572	0.0375	0.3796	1.2700e-003	0.1479	9.1000e-004	0.1488	0.0392	8.4000e-004	0.0401		126.5026	126.5026	2.6600e-003		126.5691
Total	0.0605	0.1660	0.4064	1.5500e-003	0.1529	1.1500e-003	0.1540	0.0406	1.0700e-003	0.0417		156.0748	156.0748	4.9200e-003		156.1978

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5683	0.9409	7.5091	3.3699	0.8656	4.2355		2,872.0464	2,872.0464	0.9289		2,895.2684

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0609	2.3806	0.4957	5.1200e-003	0.0925	4.4200e-003	0.0969	0.0254	4.2300e-003	0.0296		547.8645	547.8645	0.0419		548.9116
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.1086	2.4118	0.8121	6.1800e-003	0.2157	5.1800e-003	0.2209	0.0581	4.9300e-003	0.0630		653.2833	653.2833	0.0441		654.3858

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5683	0.0000	6.5683	3.3699	0.0000	3.3699			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	6.5683	0.9409	7.5091	3.3699	0.8656	4.2355	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0609	2.3806	0.4957	5.1200e-003	0.0925	4.4200e-003	0.0969	0.0254	4.2300e-003	0.0296		547.8645	547.8645	0.0419		548.9116
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.1086	2.4118	0.8121	6.1800e-003	0.2157	5.1800e-003	0.2209	0.0581	4.9300e-003	0.0630		653.2833	653.2833	0.0441		654.3858

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0980	3.1577	0.8426	8.4200e-003	0.2166	6.4400e-003	0.2231	0.0624	6.1600e-003	0.0685		892.2845	892.2845	0.0449		893.4058
Worker	0.3624	0.2373	2.4041	8.0400e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		801.1829	801.1829	0.0169		801.6041
Total	0.4605	3.3950	3.2467	0.0165	1.1531	0.0122	1.1653	0.3108	0.0115	0.3222		1,693.4674	1,693.4674	0.0617		1,695.0099

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0980	3.1577	0.8426	8.4200e-003	0.2166	6.4400e-003	0.2231	0.0624	6.1600e-003	0.0685		892.2845	892.2845	0.0449		893.4058
Worker	0.3624	0.2373	2.4041	8.0400e-003	0.9365	5.7500e-003	0.9422	0.2484	5.3000e-003	0.2537		801.1829	801.1829	0.0169		801.6041
Total	0.4605	3.3950	3.2467	0.0165	1.1531	0.0122	1.1653	0.3108	0.0115	0.3222		1,693.4674	1,693.4674	0.0617		1,695.0099

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0737	2.4338	0.7482	8.1800e-003	0.2166	2.8800e-003	0.2195	0.0624	2.7500e-003	0.0651		867.4113	867.4113	0.0381		868.3632
Worker	0.3395	0.2133	2.2080	7.7300e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		770.5011	770.5011	0.0151		770.8780
Total	0.4132	2.6471	2.9562	0.0159	1.1531	8.5200e-003	1.1616	0.3108	7.9400e-003	0.3187		1,637.9124	1,637.9124	0.0532		1,639.2413

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0737	2.4338	0.7482	8.1800e-003	0.2166	2.8800e-003	0.2195	0.0624	2.7500e-003	0.0651		867.4113	867.4113	0.0381		868.3632
Worker	0.3395	0.2133	2.2080	7.7300e-003	0.9365	5.6400e-003	0.9421	0.2484	5.1900e-003	0.2536		770.5011	770.5011	0.0151		770.8780
Total	0.4132	2.6471	2.9562	0.0159	1.1531	8.5200e-003	1.1616	0.3108	7.9400e-003	0.3187		1,637.9124	1,637.9124	0.0532		1,639.2413

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6949	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.5921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6949	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742
Total	0.0477	0.0312	0.3163	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4188	105.4188	2.2200e-003		105.4742

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	4.3909	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0479	0.4850	1.6200e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		161.6422	161.6422	3.4000e-003		161.7272
Total	0.0731	0.0479	0.4850	1.6200e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		161.6422	161.6422	3.4000e-003		161.7272

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	4.3909	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0479	0.4850	1.6200e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		161.6422	161.6422	3.4000e-003		161.7272
Total	0.0731	0.0479	0.4850	1.6200e-003	0.1889	1.1600e-003	0.1901	0.0501	1.0700e-003	0.0512		161.6422	161.6422	3.4000e-003		161.7272

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	4.3780	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
Total	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.1863					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	4.3780	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Royal Oaks Village - Bay Area AQMD Air District, Winter

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280
Total	0.0685	0.0430	0.4455	1.5600e-003	0.1889	1.1400e-003	0.1901	0.0501	1.0500e-003	0.0512		155.4520	155.4520	3.0400e-003		155.5280

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

Royal Oaks Village - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4791	2.1629	5.6119	0.0194	1.8140	0.0162	1.8302	0.4853	0.0151	0.5004		1,968.7945	1,968.7945	0.0719		1,970.5915
Unmitigated	0.4914	2.2400	5.8980	0.0208	1.9485	0.0172	1.9657	0.5213	0.0161	0.5374		2,103.4870	2,103.4870	0.0756		2,105.3761

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	397.12	397.12	397.12	917,191	853,905
Parking Lot	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	397.12	397.12	397.12	917,191	853,905

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Royal Oaks Village - Bay Area AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Parking Lot	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Other Asphalt Surfaces	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
NaturalGas Unmitigated	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892

Royal Oaks Village - Bay Area AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1727.89	0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0186	0.1592	0.0678	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.2812	203.2812	3.9000e-003	3.7300e-003	204.4892

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.65111	0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0178	0.1522	0.0648	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.2480	194.2480	3.7200e-003	3.5600e-003	195.4023

6.0 Area Detail

Royal Oaks Village - Bay Area AQMD Air District, Winter

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585
Unmitigated	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365

Royal Oaks Village - Bay Area AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	30.0220	0.6637	39.6650	0.0764		5.6310	5.6310		5.6310	5.6310	611.0718	270.5294	881.6012	0.8362	0.0432	915.3780
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
Total	32.1176	0.7334	45.7123	0.0767		5.6645	5.6645		5.6645	5.6645	611.0718	281.4240	892.4957	0.8468	0.0432	926.5365

Royal Oaks Village - Bay Area AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2982					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6137					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1837	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334		10.8945	10.8945	0.0106		11.1585
Total	2.0956	0.0697	6.0474	3.2000e-004		0.0334	0.0334		0.0334	0.0334	0.0000	10.8945	10.8945	0.0106	0.0000	11.1585

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Royal Oaks Village - Bay Area AQMD Air District, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Royal Oaks Village Bay Area AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.56200E-002	1.75140E-001	2.35580E-001	3.90000E-004	9.80000E-003	9.80000E-003	0.00000E+000	3.31923E+001	3.31923E+001	2.06000E-003	0.00000E+000	3.32438E+001
Concrete/Industrial Saws	1.79000E-003	1.40100E-002	1.83200E-002	3.00000E-005	7.50000E-004	7.50000E-004	0.00000E+000	2.68828E+000	2.68828E+000	1.50000E-004	0.00000E+000	2.69195E+000
Cranes	4.11000E-002	4.53210E-001	2.11680E-001	6.60000E-004	1.88700E-002	1.73600E-002	0.00000E+000	5.76664E+001	5.76664E+001	1.86500E-002	0.00000E+000	5.81326E+001
Excavators	6.58000E-003	5.77500E-002	1.05790E-001	1.70000E-004	2.79000E-003	2.57000E-003	0.00000E+000	1.47422E+001	1.47422E+001	4.77000E-003	0.00000E+000	1.48614E+001
Forklifts	4.19600E-002	3.91270E-001	4.48070E-001	6.00000E-004	2.50200E-002	2.30100E-002	0.00000E+000	5.23736E+001	5.23736E+001	1.69400E-002	0.00000E+000	5.27971E+001
Generator Sets	4.12000E-002	3.65680E-001	4.77410E-001	8.60000E-004	1.77800E-002	1.77800E-002	0.00000E+000	7.34770E+001	7.34770E+001	3.35000E-003	0.00000E+000	7.35607E+001
Graders	7.26000E-003	9.20100E-002	3.01300E-002	1.20000E-004	2.93000E-003	2.69000E-003	0.00000E+000	1.01808E+001	1.01808E+001	3.29000E-003	0.00000E+000	1.02631E+001
Pavers	3.10000E-003	3.14800E-002	4.32600E-002	7.00000E-005	1.50000E-003	1.38000E-003	0.00000E+000	6.19505E+000	6.19505E+000	2.00000E-003	0.00000E+000	6.24514E+000
Paving Equipment	2.67000E-003	2.60600E-002	3.81900E-002	6.00000E-005	1.27000E-003	1.17000E-003	0.00000E+000	5.36784E+000	5.36784E+000	1.74000E-003	0.00000E+000	5.41124E+000
Rollers	2.49000E-003	2.58900E-002	2.79100E-002	4.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.45779E+000	3.45779E+000	1.12000E-003	0.00000E+000	3.48574E+000
Rubber Tired Dozers	7.32500E-002	7.69440E-001	3.13420E-001	7.50000E-004	3.65200E-002	3.36000E-002	0.00000E+000	6.56490E+001	6.56490E+001	2.12300E-002	0.00000E+000	6.61798E+001
Tractors/Loaders/Backhoes	7.55600E-002	7.67930E-001	1.05900E+000	1.47000E-003	4.00500E-002	3.68400E-002	0.00000E+000	1.29523E+002	1.29523E+002	4.18900E-002	0.00000E+000	1.30570E+002
Welders	3.44100E-002	1.87190E-001	2.19200E-001	3.30000E-004	7.69000E-003	7.69000E-003	0.00000E+000	2.44687E+001	2.44687E+001	2.79000E-003	0.00000E+000	2.45384E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.56200E-002	1.75140E-001	2.35580E-001	3.90000E-004	9.80000E-003	9.80000E-003	0.00000E+000	3.31923E+001	3.31923E+001	2.06000E-003	0.00000E+000	3.32437E+001
Concrete/Industrial Saws	1.79000E-003	1.40100E-002	1.83200E-002	3.00000E-005	7.50000E-004	7.50000E-004	0.00000E+000	2.68828E+000	2.68828E+000	1.50000E-004	0.00000E+000	2.69194E+000
Cranes	4.11000E-002	4.53210E-001	2.11680E-001	6.60000E-004	1.88700E-002	1.73600E-002	0.00000E+000	5.76663E+001	5.76663E+001	1.86500E-002	0.00000E+000	5.81325E+001
Excavators	6.58000E-003	5.77500E-002	1.05790E-001	1.70000E-004	2.79000E-003	2.57000E-003	0.00000E+000	1.47422E+001	1.47422E+001	4.77000E-003	0.00000E+000	1.48614E+001
Forklifts	4.19600E-002	3.91270E-001	4.48070E-001	6.00000E-004	2.50200E-002	2.30100E-002	0.00000E+000	5.23736E+001	5.23736E+001	1.69400E-002	0.00000E+000	5.27970E+001
Generator Sets	4.12000E-002	3.65680E-001	4.77410E-001	8.60000E-004	1.77800E-002	1.77800E-002	0.00000E+000	7.34769E+001	7.34769E+001	3.35000E-003	0.00000E+000	7.35607E+001
Graders	7.26000E-003	9.20100E-002	3.01300E-002	1.20000E-004	2.93000E-003	2.69000E-003	0.00000E+000	1.01808E+001	1.01808E+001	3.29000E-003	0.00000E+000	1.02631E+001
Pavers	3.10000E-003	3.14800E-002	4.32600E-002	7.00000E-005	1.50000E-003	1.38000E-003	0.00000E+000	6.19504E+000	6.19504E+000	2.00000E-003	0.00000E+000	6.24513E+000
Paving Equipment	2.67000E-003	2.60600E-002	3.81900E-002	6.00000E-005	1.27000E-003	1.17000E-003	0.00000E+000	5.36783E+000	5.36783E+000	1.74000E-003	0.00000E+000	5.41123E+000
Rollers	2.49000E-003	2.58900E-002	2.79100E-002	4.00000E-005	1.49000E-003	1.37000E-003	0.00000E+000	3.45778E+000	3.45778E+000	1.12000E-003	0.00000E+000	3.48574E+000
Rubber Tired Dozers	7.32500E-002	7.69440E-001	3.13420E-001	7.50000E-004	3.65200E-002	3.36000E-002	0.00000E+000	6.56489E+001	6.56489E+001	2.12300E-002	0.00000E+000	6.61797E+001
Tractors/Loaders/Balckhoes	7.55600E-002	7.67930E-001	1.05900E+000	1.47000E-003	4.00500E-002	3.68400E-002	0.00000E+000	1.29523E+002	1.29523E+002	4.18900E-002	0.00000E+000	1.30570E+002
Welders	3.44100E-002	1.87190E-001	2.19200E-001	3.30000E-004	7.69000E-003	7.69000E-003	0.00000E+000	2.44687E+001	2.44687E+001	2.79000E-003	0.00000E+000	2.45384E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20510E-006	1.20510E-006	0.00000E+000	0.00000E+000	1.20323E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.71478E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21388E-006	1.21388E-006	0.00000E+000	0.00000E+000	1.20414E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.35665E-006	1.35665E-006	0.00000E+000	0.00000E+000	1.34577E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14562E-006	1.14562E-006	0.00000E+000	0.00000E+000	1.13643E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22487E-006	1.22487E-006	0.00000E+000	0.00000E+000	1.22348E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.82244E-007	9.82244E-007	0.00000E+000	0.00000E+000	9.74365E-007
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.61419E-006	1.61419E-006	0.00000E+000	0.00000E+000	1.60125E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.86295E-006	1.86295E-006	0.00000E+000	0.00000E+000	1.84801E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.89202E-006	2.89202E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21860E-006	1.21860E-006	0.00000E+000	0.00000E+000	1.20883E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15810E-006	1.15810E-006	0.00000E+000	0.00000E+000	1.14881E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22606E-006	1.22606E-006	0.00000E+000	0.00000E+000	8.15050E-007

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.14	0.04	0.14	0.04	0.00	0.00
Demolition	Fugitive Dust	0.03	0.00	0.03	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.11	0.06	0.11	0.06	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.36	0.20	0.36	0.20	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.45	3.36	5.05	6.54	6.07	6.16	0.00	6.38	6.38	4.93	0.00	6.38
Natural Gas	4.41	4.44	4.45	5.26	4.26	4.26	0.00	4.44	4.44	4.62	4.84	4.44
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	23.77	22.78	20.01	20.21	21.50
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.15	0.30		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.05			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.07			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	3.00			
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00
No	Commute	Provide Ride Sharing Program	5.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting		
Yes	On-site Renewable		100.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	33.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
--	--

Appendix B

Biological Evaluation



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

UHC MORGAN HILL BIOLOGICAL EVALUATION CITY OF MORGAN HILL, CALIFORNIA

Prepared by

LIVE OAK ASSOCIATES, INC.

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September 3, 2020

PN 2478-01

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EXECUTIVE SUMMARY

Live Oak Associates, Inc. (LOA) examined the biological resources of the approximately 3.7-acre UHC Morgan Hill project site ("site") plus an additional 0.9 acres of off-site improvements. LOA evaluated possible impacts to these biological resources resulting from the development of affordable rental housing units ("project"). The site is located on Watsonville Road, approximately one mile west of Highway 101 in the City of Morgan Hill, Santa Clara County, California.

Habitat and land use types occurring in the site include developed areas, ruderal fields, and a retention basin that is a relict from a former mushroom production facility. Sensitive natural communities are absent from the site and subsequently no impacts to these communities are anticipated. The site does not serve as a wildlife movement corridor, although wildlife may use the site as part of their typical dispersal movements to higher-quality habitats in the region. Site development is not expected to have a significant effect on home range and dispersal movements of native wildlife that may occur in the region.

Special status species that may occur on the site include the white-tailed kite, loggerhead shrike, Townsend's big eared bat, and pallid bat. These species could occasionally forage and/or could breed on or near the site. While breeding individuals would be vulnerable to construction-related disturbance at their nest, foraging individuals would not be vulnerable because of their high mobility and ability to avoid active construction zones. Mitigation measures for breeding individuals of these species are provided in this document. Foraging habitat for these species would not be adversely affected by the project, particularly since this habitat is not uniquely important for sustaining viable populations. As a result, the loss of native habitat for these species would be considered less than significant. Similarly, impacts to habitat for special status plants would also be considered less than significant.

The timing of site development could result in harm or injury to tree-nesting raptors or migratory birds and roosting bats, should they occur onsite prior to development. Although nests were not observed during LOA's field survey, onsite trees and shrubs provide nesting habitat for migratory birds and raptors, including special status birds such as the white-tailed kite and loggerhead shrike. Buildings onsite also provide nesting habitat for swallows and roosting habitat for bats. Mitigation measures include timing both tree removal and building demolition to occur during the non-breeding season to avoid impacts to nesting or roosting habitat. If the latter could not be accomplished, preconstruction surveys would be required. Although unlikely, burrowing owls could occur onsite, and preconstruction surveys would be required. Mitigation measures in compliance with the Santa Clara Valley Habitat Plan (SCVHP) are included in this document.

Onsite hydrologic features include a roadside ditch and retention basin. Neither of these features are believed to be regulated waters (i.e., waters of the U.S. and waters of the State).

The project would be subject to the nitrogen deposition fee and Conditions 1, 3, and 15 of the SCVHP. These conditions avoid direct impacts on special status species (Condition 1), maintain

hydrologic conditions and protect water quality (Condition 3), and protect the Western Burrowing Owl (Condition 15). Compliance with Conditions 1 and 15 involves mitigation measures of preconstruction surveys, avoidance measures for owls and nests, and construction monitoring. Condition 3 requires all projects to minimize impacts to covered species and their aquatic habitat. Additionally, Condition 3 requires the local jurisdiction (i.e., the City of Morgan Hill) to verify the implementation of appropriate mitigation measures. These measures should be incorporated into project engineering and Stormwater Pollution Prevention Plans (SWPPP). If the retention basin is determined by the Habitat Agency to be a seasonal wetland, the payment of a wetland surcharge fee would be required. The project would also be subject to SCVHP's Condition 12, which avoids and mitigates impacts to wetlands and ponds. Impacts to degradation of water quality in seasonal creeks, reservoirs, and downstream waters would be considered less-than-significant.

The project is consistent with the Morgan Hill 2035 General Plan's biological and natural resource protection policies. The City's tree ordinance specifies mitigation measures regarding the removal of trees, and project buildout will result in the removal of some, if not all, trees onsite. Tree removal, along with construction activities that lead to the injury, decline, structural failure, or death of a tree proposed to be retained on the site, would constitute a significant impact. Mitigation measures reducing tree impacts to a less-than-significant level are provided in this document.

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1 INTRODUCTION

The technical report that follows is an evaluation of the biological resources of the approximately 3.7-acre UHC Morgan Hill project site (“site” or “study area”) in the City of Morgan Hill, Santa Clara County, California (Figure 1). The purpose of this report is to describe the biological resources of the site and evaluate possible impacts to these resources resulting from project implementation.

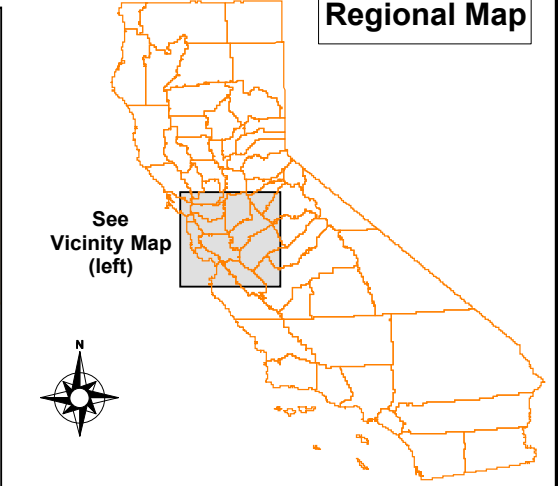
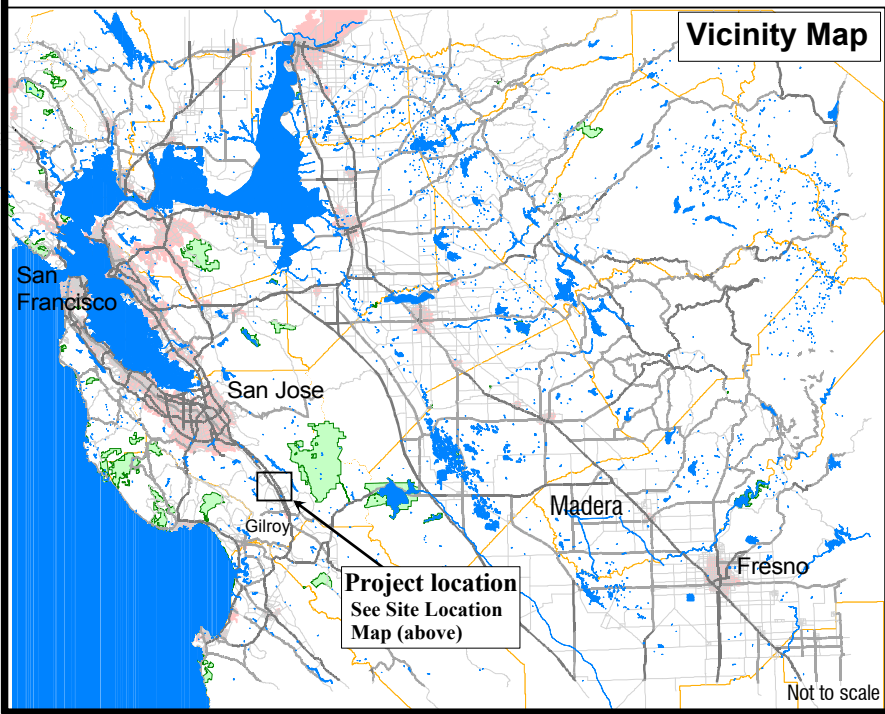
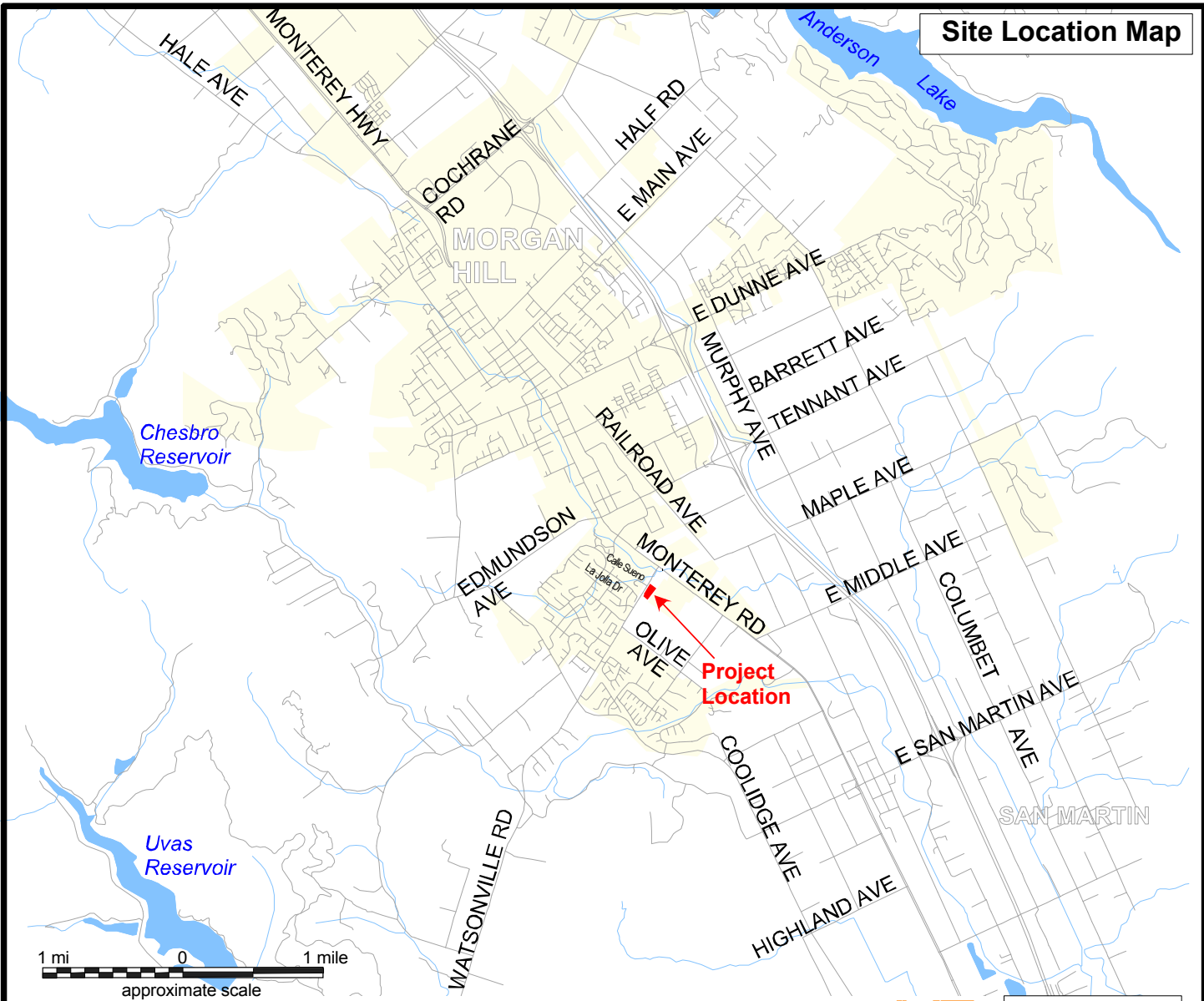
Development projects have the potential to damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, these activities may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA), and/or covered by policies and ordinances of the City of Morgan Hill. This report addresses issues related to 1) sensitive biotic resources occurring on the site; 2) the federal, state, and local laws regulating such resources, and 3) mitigation measures that may be required to reduce the magnitude of anticipated impacts. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources;
- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species’ known range;
- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development;
- Identify and discuss project impacts to biological resources likely to occur on the sites within the context of CEQA or any state or federal laws; and
- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and NEPA and that are generally consistent with recommendations of the resource agencies for affected biological resources.

1.1 PROJECT LOCATION

The project site is a 3.7-acre subset of a larger 6.5-acre parcel (APN 779-04-075) located at located at 15440 Monterey Road in the City of Morgan Hill (Figure 1). The site is bounded by Watsonville Road to the northwest, non-operational agricultural buildings to the northeast, an open field associated with Oakwood School to the southeast, and the West Little Llagas Creek diversion channel (currently under construction) to the southwest. The surrounding land use is primarily residential.

The site is located within the Mt. Madonna 7.5-minute U.S. Geological Survey (USGS) quadrangle in the southwest quarter of section 34, township 9 south, range 3 east, Mount Diablo Base and Meridian.



	Live Oak Associates, Inc.		
	UHC Morgan Hill Site / Vicinity Map		
Date	Project #	Figure #	
6/09/2020	2478-01	1	

1.2 PROJECT DESCRIPTION

The proposed project is the development of the 3.7-acre site with a 73-unit multi-family affordable community comprised of 72 one-, two-, and three-bedroom apartments for low-income families and a unit provided for an on-site Property Manager. The housing units will be accommodated in three sets of multi-story buildings. The development will include a community room, management office, computer room, central laundry room, an outdoor play area, and associated parking.

The project includes associated off-site improvements, including the widening of Watsonville Road, a sidewalk, and undergrounding of utilities in the right-of-way of Watsonville Road.

The combined area of project construction and off-site improvements totals 4.6 acres.

1.3 STUDY METHODOLOGY

The analysis of project impacts, as discussed in Section 4.0 of this report, is based on the known and potential biotic resources of the site, discussed in Section 2.0. Thus, the site's broader environmental setting is described to provide context for the discussion more specifically related to threatened and endangered species, wetlands, and other sensitive habitats. The biotic habitats observed on the study area, along with their constituent plants and animals, are also described. As such, the following were completed for this biological evaluation:

Background review. LOA reviewed resource agency data and literature, including, but not limited to, the following:

- The California Natural Diversity Database Rarefind 5 (CNDDDB; CDFW 2020);
- The California Native Plant Society's *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2020);
- *Monterey S. of Watsonville Biological Evaluation, Santa Clara County, California* (LOA 2011);
- Santa Clara Valley Habitat Plan (ICF International 2012);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service Custom Soil Resource Report for Eastern Santa Clara Area, California (NRCS 2019); and
- Manuals and references related to plants and animals of Santa Clara Valley.

Field survey. LOA ecologists Davinna Ohlson and Arren Allegretti conducted a field survey of the site on May 29, 2020. The field survey included the identification of onsite biotic habitats and land uses. All identifiable plants and animals observed on the site were recorded. Because a portion of the site is developed, buildings were visually inspected for potential habitation by wildlife.

Ms. Ohlson and Ms. Allegretti completed a formal wetland delineation of the site on August 6, 2020.

2 EXISTING CONDITIONS

2.1 REGIONAL SETTING

The site is located in south Morgan Hill, approximately one mile west of Highway 101 and two miles east of the foothills of the Santa Cruz Mountains. The site is bounded by Watsonville Road to the northwest, non-operational agricultural buildings to the northeast, an open field associated with Oakwood School to the southeast, and the West Little Llagas Creek diversion channel (currently under construction) to the southwest.

Lands immediately northwest of the site and between Watsonville Road and Santa Teresa Boulevard consist of residential subdivisions. West of Santa Teresa Boulevard and into the foothills, development is generally rural residential in character. Southwest of the site are agricultural and open fields, and the generally undeveloped or rural residential land uses extend south to San Martin. Between the site and Highway 101 are a mosaic of roads and undeveloped lands.

West Little Llagas Creek, a seasonal creek that is part of the Uvas/Llagas watershed, occurs across the street less than 200 ft from the site, where the channel elbow turns the alignment parallel to the north side of Watsonville Road. The creek passes under Watsonville Road immediately southwest of Monterey Road, then crosses under Monterey Road, where it continues through relatively undeveloped lands to eventually drain into Llagas Creek several miles southeast of the site. A diversion channel, currently under construction immediately southwest of the site, will eventually divert water from West Little Llagas Creek to Llagas Creek. The diversion channel is part of the Llagas Creek Flood protection project managed by the Santa Clara Valley Water District.

Like much of California, the project site experiences a Mediterranean climate with dry, hot summers and cool, wet winters. Annual precipitation in the general vicinity of the site is highly variable. Average annual rainfall is approximately 21 inches, most of which occurs from November to April (WRCC 2020).

Situated on the floor of Santa Clara Valley, the site's topographically is relatively flat, ranging in elevations from 320 ft (97.5 m) to 325 ft (99 m) National Geodetic Vertical Datum.

2.2 SOILS

Only one soil type—San Ysidro loam, 0 to 2% slopes—occurs on the site. The San Ysidro series consists of very deep, moderately well drained soils with very slow permeability that formed in alluvium from sedimentary rocks (NRCS 2020).

San Ysidro soils are considered hydric. Hydric soils are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. Under sufficiently wet conditions, hydric soils support the growth and regeneration of hydrophytic (i.e., "water-loving") vegetation.

The San Ysidro series is slightly acidic in the upper profile to moderately alkaline in the lower profile (NRCS 2020). Because it is not strongly alkaline in nature, it would preclude certain plant species adapted to alkaline soils from successfully maintaining populations on the site.

Serpentine soils are absent from the site, indicating that plants adapted to such soils are unlikely to have colonized the site in the past or under current conditions.

2.3 BIOTIC HABITATS AND LAND USES

The site is a former mushroom production facility with structures related to its former use still extant. For the purposes of this analysis, two biotic habitats and/or land uses were identified on the site; these are 1) developed/landscaped and 2) ruderal (Figure 2). These habitats and land uses and their constituent plant and animal species are described in more detail in the following subsections. A list of the vascular plant species observed on the project site is provided in Appendix A. Selected photographs of the project site are presented in Appendix B.

To be consistent with the Santa Clara Valley Habitat Plan (SCVHP), the habitats and land uses identified on the site have been keyed to their corresponding SCVHP land cover type (ICF International 2012; Table 1). The type and extent of actual SCVHP land covers will be verified at such time that an SCVHP application is prepared and submitted to the Santa Clara Valley Habitat Agency.

Table 1. Habitats/land uses and associated SCVHP land cover types for the UHC Morgan Hill site.

Habitat or land use	SCVHP land cover type*
Developed/landscaped	Agriculture developed
Ruderal	Grain, Row-crop, Hay and Pasture, Disked / Short-term Fallowed

* Anticipated SCVHP land cover type based on the SCVHP's land cover descriptions.

2.3.1 Developed/Landscaped

More than half the site is developed and landscaped. This part of the former mushroom production facility comprises several large mushroom production buildings, storage/warehouse buildings, and a gravel driveway and parking area. The facility discontinued its operations in the last ten years and has not been replaced with new, formal uses. Consequently, the buildings are in various stages of disrepair, and structures having corrugated metal roofs are dilapidated with some roof sections missing.

Annual grasses and forbs typical of ruderal, disturbed areas were present around the buildings and along the margins of the gravel driveway and parking area. Grasses observed were all non-native species and included wild oat (*Avena fatua*), Italian ryegrass (*Festuca perennis*), foxtail barley (*Hordeum murinum*), California brome (*Bromus carinatus*), and riggut (*Bromus diandrus*). Forbs observed were also mostly of European descent and included everlasting cudweed (*Pseudognaphalium luteo-album*), prickly lettuce (*Lactuca serriola*), common mallow (*Malva parviflora*), lambs quarters (*Chenopodium album*), summer mustard (*Hirschfeldia incana*), curly dock (*Rumex crispus*), English plantain (*Plantago lanceolata*), red-stem filaree (*Erodium cicutarium*), and field bindweed (*Convolvulus arvensis*).

LEGEND

Habitats / Land Uses

 Developed / Landscaped

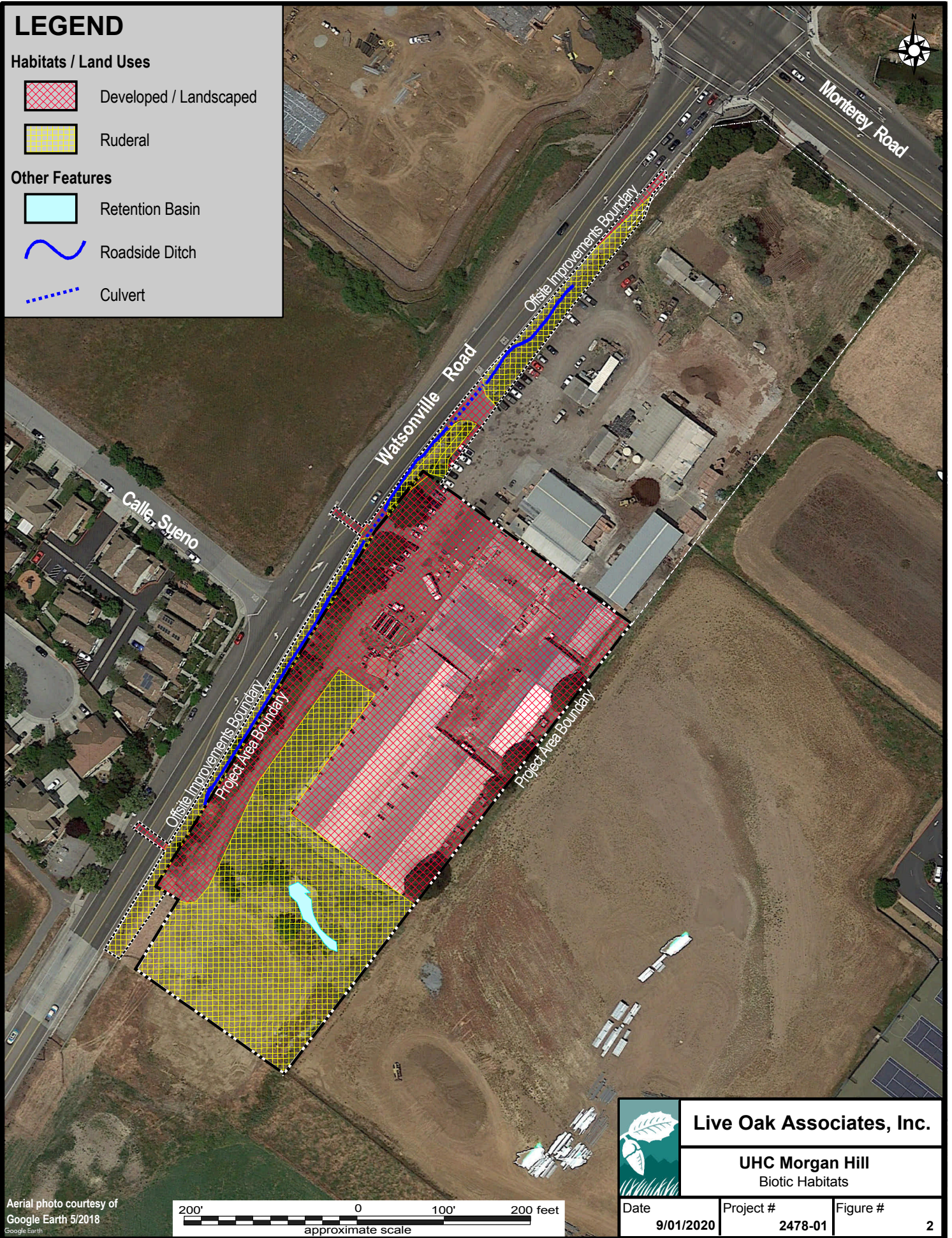
 Ruderal

Other Features

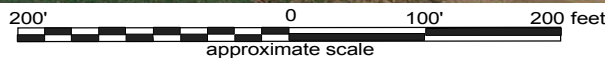
 Retention Basin

 Roadside Ditch

 Culvert



Aerial photo courtesy of Google Earth 5/2018



Live Oak Associates, Inc.

UHC Morgan Hill
Biotic Habitats

Date	Project #	Figure #
9/01/2020	2478-01	2

Landscape vegetation consists of trees and shrubs occurring along or outside the fence fronting Watsonville Road. These include common juniper (*Juniperus communis*), coast live oak (*Quercus agrifolia*), oleander (*Nerium oleander*), and bottlebrush (*Callistemon citrinus*). Several red iron bark trees (*Eucalyptus sideroxylon*) were present behind the production buildings along the southeast fence.

Developed lands provide limited habitat for locally occurring wildlife species. The predominance of hardscape and moderate urbanization surrounding the site preclude many terrestrial vertebrates from occurring on developed areas of the site. However, some species have adapted to urban landscapes, and wildlife species occurring in ruderal areas onsite or on more natural lands surrounding the site could incidentally move through developed portions of the site.

Reptiles such as the southern alligator lizard (*Elgaria multicarinata*) and western fence lizard (*Sceloporus occidentalis*) may occur in landscaped areas of the site, particularly where sufficient ground cover is available.

Most avian species occurring in developed areas likely are foragers in adjacent natural lands. While no stick nests were observed during the May 2020 survey, large trees on the site provide nesting habitat for birds such as red-tailed hawks (*Buteo jamaicensis*) and mourning doves (*Zenaidura macroura*), which were observed on the site. Other birds observed include the turkey vulture (*Cathartes aura*), rock pigeon (*Columba livia*), Brewer's blackbird (*Euphagus cyanocephalus*), and house finch (*Carpodacus mexicanus*). Barn swallows (*Hirundo rustica*) were flying over the site and could build nests in the building onsite.

Black-tailed jackrabbits (*Lepus californicus*) were seen behind the buildings along the southeastern fenceline and in the adjacent, offsite fields. Other mammals that may occur on or move through developed parts of the site include the Virginia opossum (*Didelphis virginiana*) and feral house cat (*Felis catus*). Those buildings on the site having corrugated metal roofs with sections missing do not provide suitable roosting habitat for bats because there is too much light and air exposure for bats to roost. The remaining buildings are more enclosed with limited light and airflow; these buildings may be potential roosting habitat for bats such as the Brazilian free-tailed bat (*Tadarida brasiliensis*), although no evidence of bats (e.g., guano) in or around these structures was present.

2.3.2 Ruderal

The remainder of the site consists of a ruderal field, part of which is underlain by gravel. A low concrete pile is located along the southeast fenceline in the site's southern corner. Ruderal portions of the study area are dominated by non-native grasses and forbs as well as scattered trees and shrubs. Similar to grasses found by the developed areas, grasses occurring in this habitat included slender wild oats, ripgut brome, Italian ryegrass, and foxtail barley. Dominant forbs observed include field mustard, wild radish (*Raphanus sativus*), prickly lettuce, purple salsify (*Tragopogon porrifolius*), common knotweed (*Polygonum aviculare*), curly dock, and fiddleneck (*Amsinckia* sp.).

A small, shallow retention basin (approximately 4 ft deep) is present within the ruderal field near the south end of the former production buildings (Figure 2). While the mushroom facility was operational, this basin retained pump-fed water from the production buildings. It now would only be inundated by stormwater. While the retention basin was not inundated during the May and August 2020 field surveys, it is dominated by hydrophytic vegetation, including rabbitsfoot grass (*Polypogon monspeliensis*), common spike rush (*Eleocharis macrostachya*), hyssop loosestrife (*Lythrum hyssopifolium*), and fringed willowherb (*Epilobium ciliatum*). Two black walnuts (*Juglans nigra*) occur next to the retention basin, and a row of three planted redwoods (*Sequoia sempervirens*) occur near the walnuts.

A narrow, shallow roadside ditch with modest herbaceous cover along the shoulder of Watsonville Road carries stormwater runoff from properties southwest of the site northeasterly to West Little Llagas Creek. Vegetation in the ditch was dominated by wild oats and Italian rye grass. Other herbaceous species in the ditch include rabbitsfoot grass, hyssop loosestrife, and summer mustard (*Hirschfeldia incana*).

Compared to more natural habitats, ruderal areas and fields provide relatively low habitat value for wildlife due to the sparseness of understory vegetation that would typically provide food and cover for many reptiles, small birds, and mammals native to the region. Nevertheless, some native wildlife have adapted to ruderal habitats and could occur on the site.

Western fence lizards were observed in the ruderal field, particularly near the concrete pile. Other reptiles that may occur in this habitat include the southern alligator lizard and gopher snake (*Pituophis catenifer*). Although it is low-quality habitat, amphibians such as the Pacific tree frog (*Pseudacris regilla*) and bull frog (*Lithobates catesbeianus*) may breed in the retention basin during the wet season depending upon annual conditions (e.g., level and duration of inundation).

Killdeer (*Charadrius vociferous*) and American crows (*Corvus brachyrhynchos*) were observed in the ruderal field. The walnut and redwood trees provide nesting opportunities for species such as the mourning dove and Anna's hummingbird (*Calypte anna*).

Mammals that may occur in developed parts of the site would also be expected to disperse through or occasionally forage in the site's ruderal areas. Small mammal burrows were generally absent except for a few scattered California vole (*Microtus californicus*) holes.

If standing water is present, the retention basin can serve as a source of drinking water for birds and mammals that might occur on the site.

2.4 SENSITIVE NATURAL COMMUNITIES

California contains a wide range of natural communities, or unique assemblages of plants and animals. These communities have largely been classified and mapped by CDFW as part of its natural heritage program. Natural communities are assigned state and global ranks according to their rarity and the magnitude and trend of the threats they face. Natural communities with a state rank of 1-3 (on a 1-5 scale) are considered sensitive and must be considered in CEQA review. Examples of sensitive natural communities include various types of wetlands and riparian habitat.

No sensitive natural communities occur on the site.

2.5 WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors are areas where regional wildlife populations regularly and predictably move during dispersal or migration. Landscape linkages refer to areas that allow for the movement of wildlife and plant species from a specific area of suitable habitat to another (Ament et al. 2014). A linkage can vary from a narrow strip of habitat that functions as a conduit for movement (i.e., a corridor) or a large area of intact habitat that can allow for daily travel by animals throughout their home ranges, accommodate migration to support life history needs (e.g., breeding, foraging), support genetic diversity, and provide ability for species to adapt to climate change (ICF International 2012; Nathan et al. 2008; Santa Clara Open Space Authority and Conservation Biology Institute 2017). Many landscape linkages are broad areas of regional movement corridors for wildlife that generally include a wide swath of land used for movement between two or more core areas for multiple regional species (Bastille-Rousseau and Wittemyer 2020).

Landscape linkages are vital to terrestrial animals for connectivity between core habitat areas (i.e., larger intact habitat areas where species carry out their life cycle). Connections between two or more core habitat areas help ensure that genetic diversity is maintained, thereby diminishing the probability of inbreeding depression and geographic extinctions. Linkages between core habitat areas allow wildlife to access key locations containing diverse biological resources essential for survival and maintenance of their life cycles.

In California, movement corridors are typically associated with valleys, rivers and creeks supporting riparian vegetation, and ridgelines. Corridors containing higher-quality habitat have minimal human footprints (e.g., roads and buildings) and are preferable to wildlife over corridors supporting little cover (i.e., sparse vegetation) and development (e.g., high-density roads).

The importance of an area as a movement corridor depends on the wildlife species being considered and their consistent use patterns. Animal movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

Lands surrounding the site have been moderately developed with neighborhoods, roads, and commercial, agricultural, and industrial land uses, which greatly constrain, but do not completely impede, the movement of wildlife between the site and more open lands. As noted in section 2.3, wildlife may use the site as part of their dispersal movements to higher-quality habitats in the region. The slightly degraded West Little Llagas Creek adjacent to the site serves as a movement corridor for local wildlife species that persist in nearby lands, and wildlife utilizing this corridor may move onto the site. A diversion channel, currently under construction immediately southwest of the site, will eventually divert water from West Little Llagas Creek to Llagas Creek

(Section 2.1). The SCVHP identifies Llagas Creek as a regional landscape linkage (ICF International 2012). Following its completion, the diversion channel may influence wildlife movements occurring in and along Llagas Creek and between Llagas Creek and West Little Llagas Creek.

Movements on and across the site consist of typical movements associated with an individual animal's home range or territory, or animals dispersing from their natal range. There are no unique features on the site itself, however, that would lend it to facilitating wildlife movements in a disproportionate way as to function as a wildlife movement corridor. In fact, existing development on the site may deter through-movements, and wildlife moving onto the site may disperse back towards the direction from which they came.

2.6 SPECIAL STATUS PLANTS AND ANIMALS

Many plant and animal species in California have naturally low populations, limited distributions, or both. Such species are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to urban, agricultural, and other human uses. Plant and wildlife species have also experienced an anthropogenic decline in population numbers due to habitat loss and degradation, climate change, the introduction of non-native competitors, hunting, and other factors.

Federal and state endangered species legislation provides a legal mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. As described more fully in Section 3.2, state and federal laws provide the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. Many native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as "species of special concern" by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2019). Collectively, these plants and animals are referred to as "special status species."

The California Natural Diversity Database (CDFW 2019) was queried for special status species occurrences in the nine USGS 7.5-minute quadrangles containing and immediately surrounding the project site (Mt. Madonna, Chittenden, Watsonville East, Loma Prieta, Santa Teresa Hills, Watsonville West, Gilroy, Mount Sizer, and Morgan Hill) using the California Natural Diversity Database (CNDDDB) Rarefind (CDFW 2020). These species and their potential to occur on the project site are summarized in Tables 2 and 3 below. Figures 3a and 3b show the CNDDDB occurrences of special status plant and animal species, respectively, within a three-mile radius of the site.

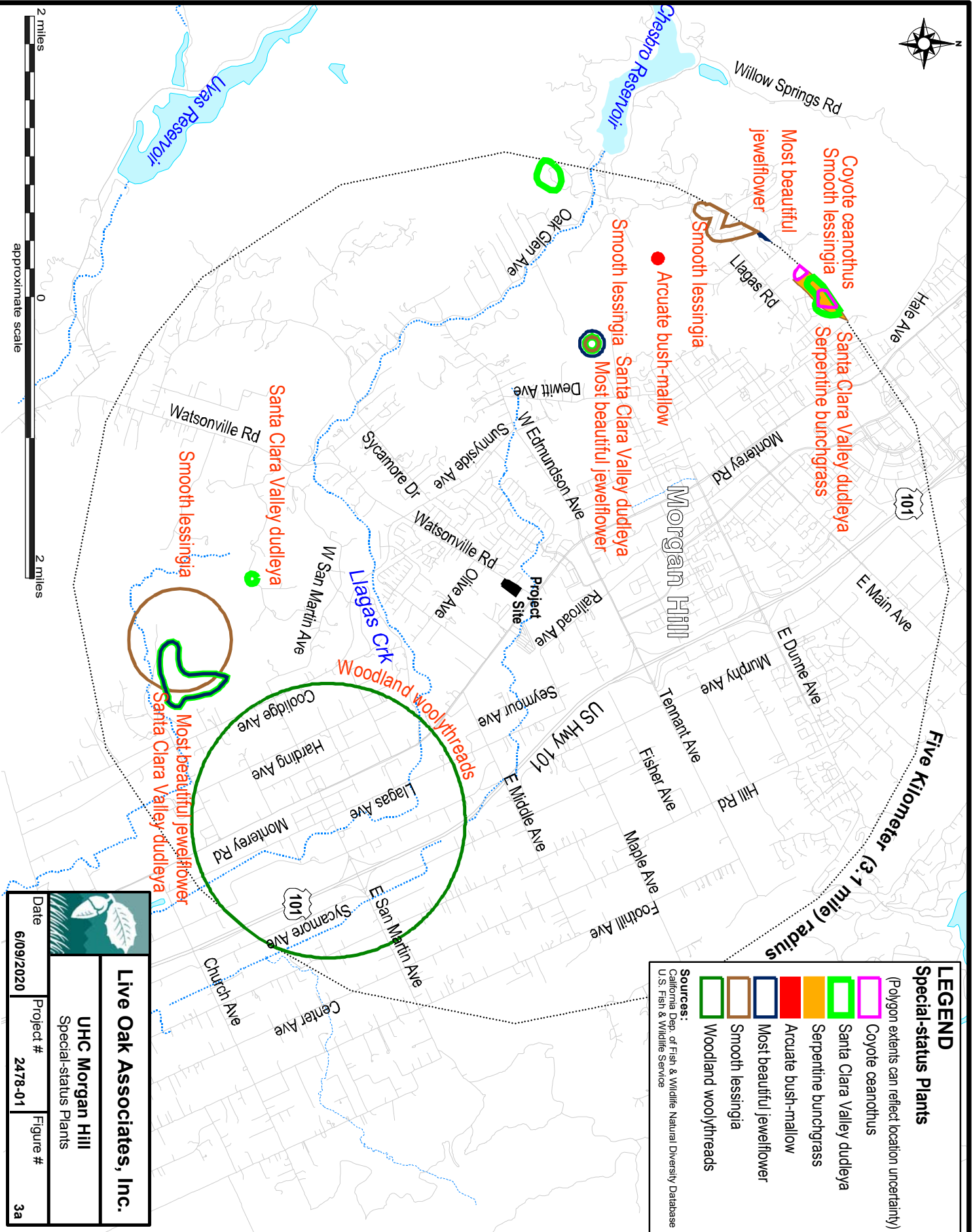
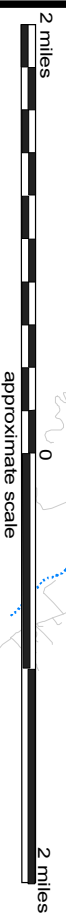
Because serpentine soils are absent from the site, those plant species that are uniquely adapted to serpentine conditions are considered absent from the site. These species include the Tiburon paintbrush (*Castilleja affinis* ssp. *neglecta*), pink creamsacs (*Castilleja rubicundula* ssp. *rubicundula*), coyote ceanothus (*Ceanothus ferrisiae*), dwarf soap root (*Chlorogalum*

pomeridianum var. *minus*), Mt. Hamilton thistle (*Cirsium fontinale* var. *campylon*), Brewer's clarkia (*Clarkia breweri*), San Francisco collinsia (*Collinsia multicolor*), Santa Clara Valley dudleya (*Dudleya abramsii* ssp. *setchellii*), fragrant fritillary (*Fritillaria liliacea*), phlox-leaf serpentine bedstraw (*Galium andrewsii* ssp. *gatense*), Loma Prieta (*Hoita strobilina*), smooth lessingia (*Lessingia micradenia* var. *glabrata*), woodland woollythreads (*Monolopia gracilens*), Metcalf Canyon jewel-flower (*Streptanthus albidus* ssp. *albidus*), and most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*).

Other plant species occur in habitats that are not present on the project site (e.g., brackish and freshwater marshes, coastal scrub, vernal pools, etc.) or are well outside the site's elevational range; these species are also considered absent from the site. These species include the Anderson's manzanita (*Arctostaphylos andersonii*), Hooker's manzanita (*Arctostaphylos hookeri* ssp. *hookeri*), Pajaro manzanita (*Arctostaphylos pajaroensis*), Santa Cruz Mountains pussypaws (*Calyptridium parryi* var. *hesseae*), Monterey spineflower (*Chorizanthe pungens* var. *pungens*), robust spineflower (*Chorizanthe robusta* var. *robusta*), Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*), Hoover's button-celery (*Eryngium aristulatum* var. *hooveri*), sand-loving wallflower (*Erysimum ammophilum*), Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*), Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*), Legenere (*Legenere limosa*), arcuate bush-mallow (*Malacothamnus arcuatus*), Hall's bush-mallow (*Malacothamnus hallii*), Santa Cruz Mountains beardtongue (*Penstemon rattanii* var. *kleei*), Yadon's rein orchid, (*Piperia yadonii*), Choris' popcorn-flower (*Plagiobothrys chorisianus* var. *chorisianus*), rock sanicle (*Sanicula saxatilis*), Mt. Hamilton jewel-flower (*Streptanthus callistus*), and Santa Cruz clover (*Trifolium buckwestiorum*).








Some wildlife species would not be expected to occur on the site because the habitats necessary to support them are absent (e.g., creeks or rivers, or mixed evergreen or riparian woodlands, and chaparral) or because the project site is located outside of their known range. These species include the Smith's blue butterfly (*Euphilotes enoptes smithi*), Bay checkerspot butterfly (*Euphydryas editha bayensis*), tidewater goby (*Eucyclogobius newberryi*), steelhead (*Oncorhynchus mykiss irideus*), Monterey roach (*Lavinia symmetricus subditus*), Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*), and western snowy plover (*Charadrius alexandrinus nivosus*). As such, they are considered absent from the site.

Plant and animal species that have some potential to occur on the project site or immediate vicinity because suitable habitats are present and the site is located in or near their known distributions are included in Tables 2 and 3 below.



LEGEND
Special-status Plants

(Polygon extents can reflect location uncertainty)

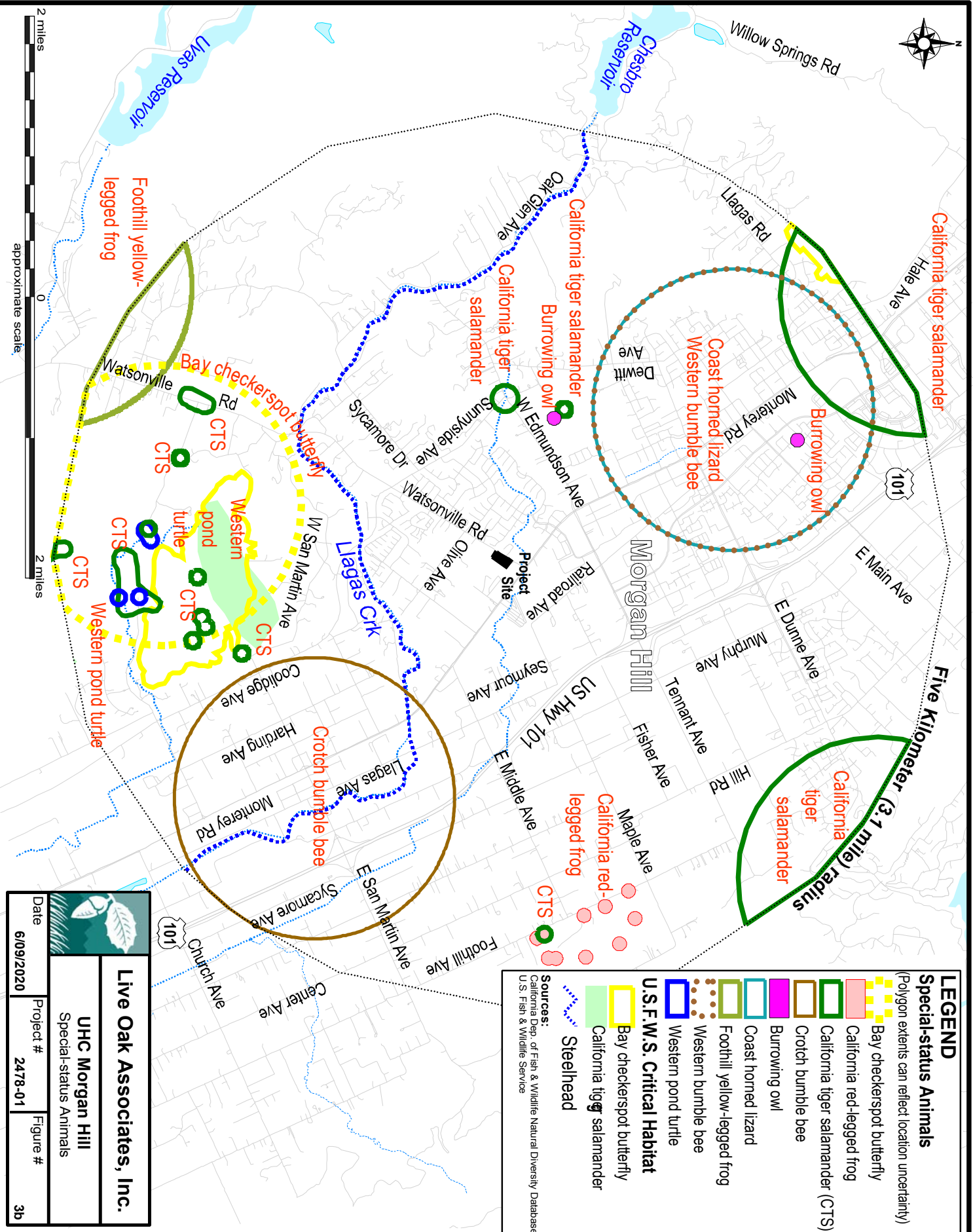
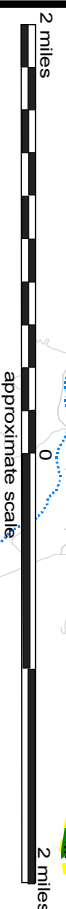
-  Coyote ceanothus
-  Santa Clara Valley dudleya
-  Serpentine bunchgrass
-  Arcuate bush-mallow
-  Most beautiful jewelflower
-  Smooth lessingia
-  Woodland woollythreads

Sources:
California Dep. of Fish & Wildlife Natural Diversity Database
U.S. Fish & Wildlife Service

Live Oak Associates, Inc.

UHC Morgan Hill
Special-status Plants

Date	6/09/2020	Project #	2478-01	Figure #	3a
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LEGEND

(Polygon extents can reflect location uncertainty)

Special-status Animals

- Bay checkerspot butterfly
- California red-legged frog
- California tiger salamander (CTS)
- Croch bumble bee
- Burrowing owl
- Coast horned lizard
- Foothill yellow-legged frog
- Western bumble bee
- Western pond turtle

U.S.F.W.S. Critical Habitat

- Bay checkerspot butterfly
- California tiger salamander
- Steelhead

Sources:
 California Dept. of Fish & Wildlife Natural Diversity Database
 U.S. Fish & Wildlife Service

Live Oak Associates, Inc.

UHC Morgan Hill
 Special-status Animals

Date	6/09/2020	Project #	2478-01	Figure #	3b
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Table 2a. Special status plant species that could occur in the project vicinity. (Sources: CDFW 2020 and CNPS 2020)

PLANTS			
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT, CE, CRPR 1B	<u>Habitat:</u> Coastal prairie, coastal scrub, and valley and foothill grasslands, often in clay or sandy soils. <u>Elevation:</u> 10-220 meters. <u>Blooms:</u> June-October. <u>Life form:</u> annual herb	Absent. Grassland habitat on the site is ruderal and highly disturbed. Furthermore, this species is not known to occur in Santa Clara County.
San Francisco popcornflower <i>Plagiobothrys diffusus</i>	CE, CRPR 1B	<u>Habitat:</u> Coastal prairie and valley and foothill grasslands. Historically found on grassy slopes with marine influence. <u>Elevation:</u> 60-360 meters. <u>Blooms:</u> March–June. <u>Life form:</u> Annual herb.	Absent. Grassland habitat on the site is ruderal and highly disturbed. This species was not observed on the site during the May 2020 field survey. The nearest known occurrence is more than 13 miles southwest of the site near the Watsonville Airport.

Table 2b. Special status plant species that could occur in the project vicinity. (Sources: CDFW 2020 and CNPS 2020)

PLANTS			
Other special status plants listed by the CDFW and CNPS			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	CRPR 1B	<u>Habitat:</u> Chaparral, cismontane woodland, and valley and foothill grassland. Can occur in serpentine soils. <u>Elevation:</u> 45-1555 meters. <u>Blooms:</u> March–June. <u>Life form:</u> Perennial herb.	Absent. Serpentine soils are absent from the site. Grassland habitat on the site is ruderal and highly disturbed from surrounding development. This species was not observed on the site during the May 2020 survey.
Congdon's tarplant <i>Centromadia parryi ssp. congonii</i>	CRPR 1B	<u>Habitat:</u> Valley and foothill grassland on alkaline soils, swales, terraces, floodplains, grasslands, disturbed sites <u>Elevation:</u> 0-300 meters. <u>Blooms:</u> May-November. <u>Life form:</u> Annual herb.	Absent. This species was not observed on the site during the May 2020 field survey, which occurred during this species' blooming period. The nearest documented occurrence is approximately 12 miles southwest of the site.

PLANTS Other special status plants listed by the CDFW and CNPS			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Dudley's lousewort <i>Pedicularis dudleyi</i>	CRPR 1B	<u>Habitat:</u> Chaparral (maritime), cismontane woodland, north coast coniferous forest, and valley and foothill grassland. <u>Elevation:</u> 60-330 meters. <u>Blooms:</u> April-June. <u>Life form:</u> Perennial herb.	Absent. Suitable habitat is absent from the site. This species was not observed on the site during the May 2020 field survey. This species is likely to have been locally extirpated as the nearest county record of this species is in Pescadero Creek from 1903.
California alkali grass <i>Puccinellia simplex</i>	CRPR 1B	<u>Habitat:</u> Chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools. <u>Elevation:</u> 2-930 meters <u>Blooms:</u> March- May. <u>Life form:</u> Annual herb.	Unlikely. The site's ruderal field and retention basin provide very marginal habitat for this species. The site also lacks alkaline soils known to support this species. The nearest known occurrence is approximately 14 miles south of the site by Soda Lake in Santa Cruz.
Saline clover <i>Trifolium hydrophilum</i>	CRPR 1B	<u>Habitat:</u> Marshes and swamps, valley and foothill grasslands on mesic or alkaline soils, and vernal pools. <u>Elevation:</u> 0-300 meters. <u>Blooms:</u> April-June.	Unlikely. The site's ruderal field and retention basin provides marginal habitat for this species. The site also lacks alkaline soils known to support this species. The nearest known occurrence is approximately 14 miles south of the site by Soda Lake in Santa Cruz.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the sites at time of field surveys or during recent past.
 Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
 Possible: Species not observed on the sites, but it could occur there from time to time.
 Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient.
 Absent: Species not observed on the sites and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CP	California Protected

CRPR California Rare Plant Rank
 1A Plants Presumed Extinct in California
 1B Plants Rare, Threatened, or Endangered in California and elsewhere
 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere
 3 Plants about which we need more information – a review list
 4 Plants of limited distribution – a watch list

Table 3a. Special status animal species that could occur in the project vicinity. (Source: CDFW 2020)

ANIMALS			
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Crotch bumble bee <i>Bombus crotchii</i>	CE (Candidate)	Open grassland and scrub habitats of the southern 2/3 of California. Flight period for queens is late February to late October peaking in April and July; flight period for males and workers is March through September peaking in early July. Constructs nests underground in animal burrows. Overwintering sites are likely in soft soils or in debris or leaf litter.	Unlikely. There is no suitable nesting habitat for this species onsite. However, the site supports a limited growth of flowering plants on which this species can forage. The nearest documented observation of this species is from 1959 approximately two miles southeast of the site in San Martin (CDFW 2020).
Western bumblebee <i>Bombus occidentalis</i>	FE, CE (Candidate)	Coastal and Sierra Nevada ranges within meadows and grasslands and some natural areas within urban environments. Populations may be restricted to high elevation and coastal areas. This species historically occurred from the Channel Islands to the northern California border. Flight period is February to late November, peaking in late June and late September. Typically nests in abandoned animal burrows on west and south-west facing slopes. Overwintering sites are likely in friable soils or in debris or leaf litter.	Unlikely. There is no suitable nesting habitat for this species onsite. However, the site supports a limited growth of flowering plants on which this species can forage. The adjacent grassland southwest of the site may provide more suitable habitat; therefore, this species cannot be completely discounted for this site. An occurrence of the western bumble bee was documented in 1940 and was generally mapped to Morgan Hill. The project site is located less than two miles southeast of the accuracy polygon associated with this occurrence (CDFW 2020).

ANIMALS			
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
California tiger salamander <i>Ambystoma californiense</i>	FT, CT, CSC	Breeds in vernal pools and stock ponds of central California. Adults typically aestivate in grassland habitats adjacent to the breeding sites but are capable of traveling up to 1.3 miles from their breeding sites to aestivate.	Unlikely. The only feature on the site that may provide suitable breeding habitat is the retention basin. However, this basin may not hold water for a duration long enough to support breeding CTS. Aestivation habitat in the form of small mammal burrows is marginal, at best. The nearest documented occurrences of this species are more than one mile from the site. Individuals would have to travel a significant distance through a mosaic of roadways and development—generally considered barriers to wildlife movements—to access the site’s marginal aestivation habitat. Individuals utilizing West Little Llagas Creek would be unlikely to successfully disperse to the study area due to the presence of predatory fish species in the creek channel. Critical Habitat for CTS is approximately 1.5 miles to the south of the site.
Foothill yellow-legged frog <i>Rana boylei</i>	CT (Candidate), CSC	Partly shaded, shallow, swiftly-flowing streams and riffles with rocky substrate in a variety of habitats.	Absent. There is no viable habitat for this species onsite.

ANIMALS			
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
California red-legged frog <i>Rana draytonii</i>	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	Absent. There is no viable habitat for this species onsite. The retention basin is not inundated for a duration or at a depth that would support breeding. The West Little Llagas Creek channel is within 200 ft of the site north of Watsonville Road, and an approximately 70-ft reach of the creek is on the same side of the road as the site near the intersection of Watsonville Road and Monterey Road. CRLF have not been documented in West Little Llagas Creek (CNDDDB 2020), but if CRLF were to occur in the creek, the site does not support features that would be considered an attractant to the species over that of the creek environment. The nearest documented occurrences of CRLF are more than two miles east of the site, on the east side of Highway 101.
Swainson's hawk (SWHA) <i>Buteo swainsonii</i>	CT	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	Unlikely. Suitable breeding habitat is absent from the site, and there was no evidence of Swainson's hawks nesting onsite during the May 2020 field survey. SWHA have been documented breeding near Coyote Creek approximately 8 miles north of the site near the Charter School of Morgan Hill. Ruderal parts of the site offer low-quality foraging habitat.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	FE, CE	Early successional riparian vegetation including dense brush, mesquite, or cottonwood-willow forests in riparian areas. Occurs in southern Santa Clara County during the breeding season March, migrates out of the state July through September.	Absent. Breeding and foraging habitat are absent from the site.

ANIMALS			
Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Bank swallow <i>Riparia riparia</i>	CT	Occurs in open areas near flowing water, nests in steep banks along inland water or coast.	Unlikely. No viable breeding habitat for this species exists onsite. Bank swallows have not been recorded within 3 miles of the site. Regardless, individuals may pass through the site when moving between suitable habitat areas.
Tricolored blackbird <i>Agelaius tricolor</i>	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in nearby grassland and cropland habitats.	Absent. Breeding and foraging habitat are absent from the site.

Table 3b. Special status animal species that could occur in the project vicinity. (Source: CDFW 2020)

ANIMALS			
California Species of Special Concern and Protected Species			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
California giant salamander <i>Dicamptodon ensatus</i>	CSC	Occurs in or adjacent to cold clear permanent to semi-permanent streams and seeps.	Absent. There is no suitable habitat for this species onsite.
Santa Cruz black salamander <i>Aneides flavipunctatus niger</i>	CSC	Deciduous woodland, coniferous forests, and coastal grasslands around the Santa Cruz Mountains and foothills. This species is occasionally found in the yards of older homes with mature live oaks and shrubs in the San Francisco Bay Area (Stebbins and McGinnis 2012). They can be found under rocks near streams, in talus, under damp logs, rotting wood, and other objects.	Absent. Habitats that this species is typically known to occur in are absent from the site. This species has not been documented within 3 miles of the site (CDFW 2020).

ANIMALS			
California Species of Special Concern and Protected Species			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Western pond turtle <i>Emys marmorata</i>	CSC	Intermittent and permanent waterways including streams, marshes, rivers, ponds and lakes. Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	Unlikely. The retention basin is not inundated for a duration or at a depth that would be considered suitable habitat for this species. Western pond turtles have not been documented along West Little Llagas Creek, the nearest intermittent waterway to the site. The nearest documented occurrences are more than two miles south of the site.
Coast horned lizard <i>Phrynosoma blainvillii</i>	CSC	Occur in grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	Unlikely. Onsite habitat is poor since the site lacks sandy soils that this species is known to occur in.
Northern California legless lizard <i>Anniella pulchra</i>	CSC	Occurs mostly underground in warm moist areas with loose soil and substrate. Occurs in habitats including sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	Absent. Suitable habitat is absent from the site. The site lacks the sandy or loose soils associated with sparse vegetation that this species is known to occur in.
White-tailed kite <i>Elanus leucurus</i>	CP	Open grasslands and agricultural areas throughout central California.	Possible. Large trees on the site provide suitable nesting habitat. Foraging habitat would be considered marginal.
Golden eagle <i>Aquila chrysaetos</i>	CP	Typically frequents rolling foothills, mountain areas, sage-juniper flats, and desert. Usually nests on cliffs.	Unlikely. Suitable nesting habitat is absent from the site. The ruderal fields would be considered poor foraging habitat for this species.
Northern harrier <i>Circus cyaneus</i>	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	Unlikely. The ruderal fields are sparsely vegetated and would be considered marginal breeding and foraging habitat.

ANIMALS			
California Species of Special Concern and Protected Species			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Burrowing owl (BUOW) <i>Athene cunicularia</i>	CSC	Open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. Often associated with California ground squirrels.	Unlikely. Ground squirrel burrows or other suitable nesting habitat are absent from the site. However, foraging habitat in most of the site is marginal. The BUOW is a volant species that may pass through the site from time to time and, although unlikely, could overwinter or breed on the site should suitable breeding habitat become available.
Black swift <i>Cypseloides niger</i>	CSC	Migrants and transients found throughout many habitats of state. Breeds on steep cliffs or ocean bluffs, or in cracks and crevasses of inland deep canyons.	Absent. The site does not provide suitable breeding or foraging habitat for this species.
Grasshopper sparrow <i>Ammodramus savannarum</i>	CSC	Occurs in California during spring and summer in open grasslands with scattered shrubs.	Unlikely. The site would be considered poor nesting and foraging habitat for this species.
Yellow-breasted chat (YBC) <i>Icteria virens</i>	CSC	Frequently breeds in dense riparian shrubs and blackberry thickets and uses areas of dense vegetation during migration.	Absent. Suitable nesting and foraging habitat is absent from the site.
Loggerhead Shrike <i>Lanius ludovicianus</i>	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Nests in tall shrubs and dense trees. Forages in grasslands, marshes, and ruderal habitats. Can often be found in cropland.	Possible. While the site has limited dense bushes used by loggerhead shrikes for breeding, the species may forage over the site from time to time.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Gruver and Keinath (2006) found that this species prefers roosts with low to moderate air flow for regulating air temperature. Forages in a wide variety of habitats, including riparian areas used for commuting and drinking.	Possible. The deteriorated state of the metal-roofed buildings would preclude them from serving as roosts. Other, more intact structures could serve as roosting habitat, although no evidence of use by bats (e.g., guano) was present during the May 2020 survey. Foraging habitat on the site is poor.

ANIMALS			
California Species of Special Concern and Protected Species			
Common and scientific names	Status	General habitat description	*Occurrence in the study area
Pallid Bat Antrozous pallidus	CSC	Grasslands, chaparral, woodlands, and forests; most common in dry rocky open areas providing roosting opportunities.	Possible. The deteriorated state of the metal-roofed buildings would preclude them from serving as roosts. Other, more intact structures could serve as roosting habitat, although no evidence of use by bats (e.g., guano) was present during the May 2020 survey. Foraging habitat on the site is poor.
San Francisco dusky-footed woodrat Neotoma fuscipes annectens	CSC	Hardwood forests, oak riparian and shrub habitats. This species is known to build terrestrial stick houses around logs or near trees in areas that are cool and shaded (USFWS 2020).	Absent. Suitable habitat for this species is absent from the site. No woodrat nests were observed during the May 2020 field survey.
American badger Taxidea taxus	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	Unlikely. Badgers may occupy open lands to the south and may incidentally move onto the site. However, the site itself would not be considered suitable habitat for this species. No badger burrows (or burrows that would be of suitable size for badgers) were present on the site during the May 2020 survey. This species has not been documented within three miles of the site.

***Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the site at time of field surveys or during recent past.

Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.

Possible: Species not observed on the site, but it could occur there from time to time.

Unlikely: Species not observed on the site and would not be expected to occur there except, perhaps, as a transient.

Absent: Species not observed on the site and precluded from occurring there because habitat requirements not met.

STATUS CODES

- | | | | |
|-----|---------------------------------------|----|-----------------------|
| FE | Federally Endangered | CE | California Endangered |
| FT | Federally Threatened | CT | California Threatened |
| FPE | Federally Endangered (Proposed) | CR | California Rare |
| FC | Federal Candidate | CP | California Protected |
| CSC | California Species of Special Concern | | |

2.7 DESIGNATED CRITICAL HABITAT

The USFWS often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

There is no designated critical habitat for any species on or adjacent to the project site.

2.8 JURISDICTIONAL WATERS

The U.S. Army Corps of Engineers (USACE) has regulatory authority over waters of the U.S., which includes certain rivers, creeks, lakes, ponds, reservoirs, wetlands, and, in some cases, irrigation canals (Section 3.6). The CDFW asserts jurisdiction over waters in California that have a defined bed and bank, including engineered channels that replace, and/or connect to, natural drainages. The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) assert jurisdiction over all surface water and groundwater in the State of California.

A formal wetland delineation of the site was completed by LOA on August 6, 2020 and will be submitted to the USACE for a formal determination.

The only potential hydrologic features on the site are the retention basin and the roadside ditch. The retention basin is a relict feature associated with the mushroom production plant and is regularly maintained by the property owner. It holds stormwater during the wet season and supports hydrophytic vegetation, but it did not support hydric soils, which is required to meet the USACE’s three technical criteria for jurisdictional wetlands. Because it was constructed by the mushroom operation in uplands (i.e., not replacing an existing aquatic feature), is regularly maintained, and failed to meet the USACE technical criteria for wetlands, it is presumed to be neither a water of the U.S. nor a water of the State.

The roadside ditch is a man-made feature that collects stormwater runoff from upstream properties and from Watsonville Road and conveys it approximately 300 ft northeast to a culvert. The culvert directs flow into a storm drain that outlets to West Little Llagas Creek, a known water of the U.S., underneath Watsonville Road. Because it was excavated in uplands and does not replace a historical tributary water, the roadside ditch would not be considered a water of the U.S. nor a water of the State and, therefore, would not be regulated by the USACE or RWQCB. The roadside ditch would also not be regulated by the CDFW.

3 REGULATORY FRAMEWORK

This section discusses the regulatory framework within which the project must be implemented. This includes a summary of the federal, state, and local laws regulating biological resources and any other environmental policies and plans relevant to this analysis.

3.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

In California, any project carried out or approved by a public agency that will result in a direct or reasonably foreseeable indirect physical change in the environment must comply with CEQA. The purpose of CEQA is to ensure that a project's potential impacts on the environment are evaluated, and methods for avoiding or reducing these impacts are considered, before the project is allowed to move forward. A secondary aim of CEQA is to provide justification to the public for the approval of any projects involving significant impacts on the environment.

According to *2019 CEQA Status and Guidelines* (2019), a significant effect on the environment means "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest." Although the lead agency may set its own CEQA significance thresholds, project impacts to biological resources are generally considered to be significant if they would meet any of the following criteria established in Appendix G of the CEQA Guidelines:

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

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a “mandatory findings of significance” if the project has the potential to:

- Substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.
- Achieve short-term environmental goals to the detriment of long-term environmental goals.
- Produce environmental effects that are individually limited but cumulatively considerable, meaning that the incremental effects of the project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects.
- Produce environmental effects that cause substantial adverse effects on human beings, either directly or indirectly.

3.2 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Federal projects or proponents on federal lands (e.g., general plans, area plans, and specific projects) are subject to the provisions of the National Environmental Policy Act (NEPA). NEPA declares a continuing Federal policy “to use all practical means and measures... to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations.” NEPA directs a systematic, interdisciplinary approach to planning and decision-making and requires environmental statements for “major Federal actions significantly affecting the quality of the human environment.” Implementing regulations by the Council on Environmental Quality (CEQ) (40 CFR Parts 1500-1508) requires Federal agencies to identify and assess reasonable alternatives to proposed actions that will restore and enhance the quality of the human environment and avoid or minimize adverse environmental impacts. According to CEQ, impacts to the environment are considered significant if a project will:

- Adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, as amended; or
- Violate federal, state, or local law or requirement imposed for the protection of the environment (40 CFR 1508.27).

Actions that adversely affect waters of the United States or that impede the migratory movements of fish and wildlife may also be considered significant. An action that substantially reduces the areal extent of fish and wildlife habitat may be considered significant, especially if habitat loss occurs in areas identified by state and federal governments as ecologically sensitive or of great scenic value.

As used in NEPA, a determination that certain effects on the human environment are significant requires considerations of both context and intensity. Context means that significance must be

analyzed in terms of the affected environment in which a proposed action would occur. For the purposes of assessing effects of an action on biological resources, the relevant context would often be local. The analysis would require a comparison of the action area's biological resources to the biological resources of the local area within which the action area is located. The analysis may, however, require a comparison of the action area's biological resources with the biological resources of an entire region.

Intensity refers to the severity of impact. In considering the intensity of impact to biological resources, it is necessary to address the unique qualities of wetlands and ecologically critical areas that may be affected by the action, the degree to which the action will be controversial, the degree to which the effects of the action will be uncertain, the degree to which the action will establish a precedent for future actions that may result in significant effects, and the potential for the action to result in cumulatively significant effects.

NEPA requires that significant impacts be mitigated, meaning that measures must be implemented that would reduce the magnitude of the impact, preferably to a less-than-significant level. Suitable measures include the following:

- Avoiding the effect altogether by not taking a certain action or parts of an action.
- Minimizing effects by limiting the degree or magnitude of the action and its implementation.
- Rectifying the effect by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the effect over time by preservation and maintenance operations during the life of the project.
- Compensating for the effect by replacing or providing substitute resources or environments.

3.3 THREATENED AND ENDANGERED SPECIES

State and federal "endangered species" legislation has provided the CDFW and USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal Endangered Species Acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the take of a listed species. To "take" a listed species, as defined by the state of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under CEQA. Both agencies review CEQA documents to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.4 MIGRATORY BIRDS

State and federal laws also protect most bird species. The State of California signed Assembly Bill 454 into law in 2019, which clarifies native bird protection and increases protections where California law previously deferred to Federal law. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.5 BIRDS OF PREY

Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFW.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., scc. 668-668c) prohibits anyone from taking bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. The act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

3.6 BATS

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit, as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.” For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.7 JURISDICTIONAL WATERS AND WETLANDS

Jurisdictional waters include waters of the United States subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE) and waters of the State of California subject to the regulatory authority of the California Department of Fish and Wildlife (CDFW) and the California Regional Water Quality Control Board (RWQCB).

3.7.1 Clean Water Act, Section 404

The USACE regulates the filling or grading of Waters of the U.S. under the authority of Section 404 of the Clean Water Act. Drainage channels and adjacent wetlands may be considered “waters of the United States” or “jurisdictional waters” subject to the jurisdiction of the USACE.

The extent of jurisdiction has been defined in the Code of Federal Regulations and clarified in federal courts.

The definition of waters of the U.S. have changed several times in recent years. In January 2020, the Environmental Protection Agency (EPA) and USACE jointly issued the Navigable Waters Protection Rule. The new rule was published in the Federal Register on April 21, 2020, and took effect on June 22, 2020.

The Navigable Waters Protection Rule (33 CFR §328.3(a)) defines waters of the U.S. as:

Territorial Seas and Traditional Navigable Waters (TNWs)

- The territorial seas and traditional navigable waters include large rivers and lakes and tidally-influenced waterbodies used in interstate or foreign commerce.

Tributaries

- Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.
- Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other “waters of the United States,” through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

Lakes, Ponds, and Impoundments of Jurisdictional Waters

- Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other waters of the United States, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a water of the United States in a typical year, such as certain oxbow lakes that lie along the Mississippi River.

Adjacent Wetlands

- Wetlands that physically touch other jurisdictional waters are “adjacent wetlands.”
- Wetlands separated from a water of the United States by only a natural berm, bank or dune are also “adjacent.”

- Wetlands inundated by flooding from a water of the United States in a typical year are “adjacent.”
- Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are “adjacent” so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The Navigable Waters Protection Rule also outlines what do not constitute waters of the United States. The following waters/features are not jurisdictional under the rule:

- Waterbodies that are not included in the four categories of waters of the United States listed above.
- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion, but is defined for the first time in the final rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters.

- Waste treatment systems have been excluded from the definition of waters of the United States since 1979 and will continue to be excluded under the final rule. Waste treatment systems include all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater or stormwater prior to discharge (or eliminating any such discharge).

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the permit requirements of the USACE under Section 404 of the Clean Water Act. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued without a CWA Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards (Section 3.6.2).

3.7.2 Porter-Cologne Water Quality Act/Clean Water Act, Section 401

There are nine Regional Water Quality Control Boards (RWQCB) statewide; collectively, they oversee regional and local water quality in California. The RWQCB administers Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders.

Pursuant to Section 401 of the Clean Water Act, the RWQCB regulates waters of the State that are also waters of the U.S. Discharges into such waters require a Section 401 Water Quality Certification from the RWQCB as a condition to obtaining certain federal permits, such as a Clean Water Act Section 404 permit (Section 3.6.1). Discharges into all Waters of the State, even those that are not also Waters of the U.S., require Waste Discharge Requirements (WDRs), or a waiver of WDRs, from the RWQCB.

The Porter-Cologne Water Quality Control Act, Water Code Section 13260, requires that “any person discharging waste, or proposing to discharge waste, within any region that could affect the ‘waters of the State’ to file a report of discharge” with the RWQCB. Waters of the State as defined in the Porter-Cologne Act (Water Code Section 13050[e]) are “any surface water or groundwater, including saline waters, within the boundaries of the state.” This gives the RWQCB authority to regulate a broader set of waters than the Clean Water Act alone; specifically, in addition to regulating waters of the U.S. through the Section 401 Water Quality Certification process, the RWQCB also claims jurisdiction and exercises discretionary authority over “isolated waters,” or waters that are not themselves waters of the U.S. and are not hydrologically connected to waters of the U.S.

The RWQCB also administers the Construction Stormwater Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Stormwater Program. A prerequisite for this permit is the development of a Stormwater Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, stormwater, or other pollutants into a Water of the U.S. may require a NPDES permit.

3.7.3 California Fish and Game Code, Section 1602

The CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a Notification of Lake or Streambed Alteration. If the CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the lake or drainage in question.

3.8 CITY OF MORGAN HILL TREE ORDINANCE

The City of Morgan Hill's tree ordinance (Chapter 12.32 of the City's municipal code) protects all trees having a single stem or trunk with a circumference of forty inches or greater for nonindigenous species (except those in residential zones) and eighteen inches or greater for indigenous species measured at four and one-half feet vertically above the ground or immediately below the lowest branch. Indigenous trees are defined by the City as any tree that is native to the Morgan Hill region, including oaks (all types), California bays, madrones, sycamore and alder. The ordinance states that "it is unlawful for any person to cut down, remove, poison, or otherwise kill or destroy, or cause to be removed, any ordinance sized tree, street tree, or a community of trees on any city or private property without first securing a permit as provided in this chapter; provided, however, that a permit shall not be required for developments which have been reviewed and approved by the planning commission or architectural and site review board and the tree removal conforms with the landscape plans of those developments."

3.9 MORGAN HILL 2035 GENERAL PLAN

The Natural Resources and Environment Element of the 2035 General Plan (General Plan) aims to "preserve open space, agricultural sites, hillsides, riparian areas, wildlife habitat, and other natural features". The General Plan includes several goals and policies relevant to biological protections including, but are not limited to the following:

GOAL NRE-1 Preservation of open space areas and natural features.

- A policy applicable to this project under this goal includes *Policy NRE-1.10 Wetland Delineation and Mitigation*. This policy requires a wetland delineation and mitigation for projects with features that exhibit hydric soils, hydrophytic vegetation, and wetland hydrology. The wetland delineation and mitigation will be part of the environmental review of future development.

GOAL NRE-2 Preservation of hillside areas as open space and scenic features.

GOAL NRE-5 Preservation and reclamation of streams and riparian areas as open space.

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

Additional policies which may apply include:

- Policy HC-3.11 Conservation Coordination. Coordinate location and development of parks with the Natural Resources and Environment Element of the General Plan to maximize opportunities for resource protection, greenbelt creation, environmental education, and passive recreational use of open space.
- Policy HC-3.14 Streamside Trails. Work in partnership with the Santa Clara Valley Water District to establish easements and develop trails and linear parks along creeks and drainage channels, connecting parks, regional trails, schools, library, and other community facilities and ensuring that natural resources are protected and restored.
- Policy HC-3.24 Parkland Acquisition. Actively pursue acquisition of appropriate parkland for recommended parks, trails and facilities, and to meet existing and future recreation needs.
- Action HC-3.G Parkland Dedication. Consider adoption of a Citywide Parkland Dedication Ordinance to achieve more development of public park space.
- Action HC-3.N El Toro Trails. Continue the development of hiking trails on the open space/greenbelt areas of El Toro.
- Policy TR-9.1: Private Development Connections. Ensure adequate pedestrian access in all developments, with special emphasis on pedestrian connections in the downtown area, in shopping areas, and major work centers, including sidewalks in industrial areas in accordance with the Trails and Natural Resources Master Plan.

Projects must be consistent will all measures (Goals and Policies) of the General Plan

3.10 SANTA CLARA VALLEY HABITAT PLAN

Six local partners (i.e., County of Santa Clara, Santa Clara Valley Transportation Authority; Santa Clara Valley Water District; and the Cities of San Jose, Gilroy, and Morgan Hill) and two wildlife agencies (i.e., the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service) prepared and adopted the SCVHP, which primarily covers southern Santa Clara County, including the City of San Jose with the exception of the bayland areas.

The SCVHP is a multi-species Habitat Conservation Plan (HCP) and a Natural Community Conservation Plan (NCCP). An HCP meets federal ESA requirements and enables local agencies to allow projects and activities to occur in endangered species' habitats. In exchange, those projects and activities must incorporate HCP-prescribed measures to avoid, minimize, or compensate for adverse effects on natural communities and endangered species. The SCVHP extends its federally granted endangered species permit—known as take authorization—to all projects and activities it covers. Loosely defined, take means to injure or kill a listed species or alter the habitat on which it depends. Although the ESA prohibits take of listed species, under some circumstances, take can be authorized by permit to agencies, developers, and other entities engaged in otherwise lawful activities (Section 3.2). The HCP process recognizes the impact of

land use activities and establishes a program to provide for a net benefit to specific species (i.e., covered species).

An NCCP is the State counterpart to the HCP. It provides a means of complying with the Natural Community Conservation Plan Act (NCCP Act) and securing take authorization at the State level. The NCCP Act is broader than federal ESA and the California Endangered Species Act. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land uses. The SCVHP, as an approved NCCP, provides for the conservation of species and protection and management of natural communities in perpetuity within the area covered by permits.

The SCVHP addresses listed species, species that are likely to become listed during the plan's 50-year permit term, and biologically sensitive habitats. The eighteen covered species include nine plants and nine animals. The animal species covered include, but are not limited to, the California tiger salamander, California red-legged frog, western pond turtle, and western burrowing owl. In general, the SCVHP is a fee-based program aimed at providing for the regional conservation of these species.

Fees. Funding sources for the SCVHP include development fees based on land cover types, fees charged based on the occurrence of certain species and sensitive habitat types such as serpentine habitats, and fees based on the number of vehicle trips the project is anticipated to add to the baseline conditions on an annual basis and/or the number of residential units included in the project. Chapter 9 of the SCVHP describes fees that may be required by each project.

SCVHP fees are generally calculated based on the size and planned usage of the property related to the proposed project. For projects occurring on parcels that are 10 or more acres in size, the fees are calculated based on the development area for the project plus a 50-foot buffer around permanent impacts and a 10-foot buffer around temporary impacts (e.g., underground utility construction that results in restoration of the surface to pre-project conditions). For permanent and temporary impacts, the acreage would be multiplied by the project's Land Cover Fee Zone classification as defined in the SCVHP. Development of smaller parcels are generally charged fees for the entire parcel. Properties that contain sensitive species habitats and/or sensitive habitat communities that are covered by the SCVHP and that would be impacted by a project are also subject to species and/or sensitive habitat fee surcharges based on the acreages of impact.

In addition to area-based fees, the SCVHP includes a nitrogen deposition fee for diffuse impacts to habitats from increased nitrogen levels resulting from particular projects. This fee is related to the number of vehicle trips or single-family units generated by a project.

Conditions on Covered Activities. Projects occurring within the SCVHP plan area are subject to the requirements and provisions of the SCVHP. The SCVHP specifies twenty conditions for covered activities. These conditions can be found in Chapter 6 of the SCVHP and are summarized below:

- **Condition 1 (page 6-7). Avoid Direct Impacts on Legally Protected Plant and Wildlife Species-** Condition 1 instructs developers to avoid direct impacts on legally protected plant and wildlife species, including federally endangered Contra Costa goldfields and fully protected wildlife species including the golden eagle, bald eagle, American peregrine falcon, southern bald eagle, white-tailed kite, California condor, and ring-tailed cat. Condition 1 also protects bird species and their nests that are protected under the Migratory Bird Treaty Act (MBTA). Additionally, golden eagles and bald eagles are protected under the Bald and Golden Eagle Protection Act.
- **Condition 2 (page 6-9). Incorporate Urban-Reserve System Interface Design Requirements-** Condition 2 provides design requirements for the urban-reserve system interface. Some of the design requirements included in Condition 2 are installing non-permeable fences between urban and reserve areas, fencing public roads that run adjacent to reserve areas, minimizing the length of shared boundaries between urban and reserve areas, outdoor lighting limitations, and landscaping requirements.
- **Condition 3 (page 6-12). Maintain Hydrologic Conditions and Protect Water Quality-** Condition 3 sets forth a consistent approach for applying water quality conditions of each Regional Board across the SCVHP area. This includes programmatic avoidance and minimization measures, performance standards, and control measures to minimize increases of peak discharge of stormwater and to reduce runoff of pollutants to protect water quality, including during project construction. Required measures related to Conditions 3, 4, and 5 can be located in Table 6-2 of the SCVHP. These measures relate to stormwater runoff, in-stream channel and floodplain impacts, vegetation control and/or maintenance, materials a project should and should not use, landscaping and revegetation, free-span bridges at stream crossings, culverts, trails, levees, erosion control, and construction requirements and timing.
- **Condition 4 (page 6-14). Avoidance and Minimization for In-Stream Projects-** Condition 4 minimizes impacts on riparian and aquatic habitat through appropriate design requirements and construction practices and provides avoidance and minimization measures for in-stream projects that may impact stream morphology, aquatic and riparian habitat, flow conditions, covered species, natural communities, and wildlife movement.
- **Condition 5 (page 6-18). Avoidance and Minimization Measures for In-Stream Operations and Maintenance-** Condition 5 provides avoidance and minimization measures for in-stream operations and maintenance activities, which includes, but are not limited to trail, bridge, road, and culvert maintenance, bank stabilization, removal of debris, and vegetation management.
- **Condition 6 (Page 6-21). Design and Construction Requirements for Covered Transportation Projects-** Condition 6 provides requirements for rural development design, construction, and post-construction. Types of projects affected by Condition 6 include highway projects, mass transit projects, roadway projects and interchange upgrades, road safety and operational improvements, and dirt road construction.

- **Condition 7 (page 6-28). Rural Development Design and Construction Requirements-** Condition 7 provides requirements for development design and construction of new development outside of the urban service area including requirements relating to site hydrology, vineyards, private rural roads, vegetation management, soils, and lighting.
- **Condition 8 (page 6-35). Implement Avoidance and Minimization Measures for Rural Road Maintenance-** Condition 8 provides requirements for rural roads, road median, and barrier maintenance including requirements regarding riparian setbacks, erosion measures, herbicide and pesticide use, seasonal restrictions, mower cleaning, revegetation, ground-disturbing road maintenance, and flow lines.
- **Condition 9 (page 6-37). Prepare and Implement a Recreation Plan-** Condition 9 requires providing public access to all reserve lands owned by a public entity. Each reserve land must provide a recreation plan.
- **Condition 10 (page 6-42). Fuel Buffer-** Condition 10 provides requirements for fuel buffers between 30 and 100 feet of structures. Requirements include measures relating to fuel buffers near structures and on reserve lands; the most notable measure is the requirement for nesting bird surveys prior to any fuel buffer maintenance during the nesting season.
- **Condition 11 (page 6-44). Stream and Riparian Setbacks-** Condition 11 provides requirements for stream and riparian setbacks. Development areas must observe development-free stream setbacks measured from the top of the stream bank of between 35 to 200 feet depending on the category rating of the stream and the slope class of the development and setback areas. Setbacks for Category 1 streams with 0-30% slopes should be at least 100 feet, and with >30% slopes should be at least 150 feet. Category 2 streams should have a setback of 35 feet. Chapter 6, Condition 11 of the SCVHP also defines the criteria used by the SCVHP to verify or identify a stream which includes evaluation of the features hydrologic connectivity, channel form, and topographic position.
- **Condition 12 (page 6-56). Wetland and Pond Avoidance and Minimization-** Condition 12 provides measures to protect wetlands and ponds, including planning actions, design, and construction actions. A surcharge fee applies for impacts to wetland habitats.
- **Condition 13 (page 6-58). Serpentine and Associated Covered Species Avoidance and Minimization-** Condition 13 requires surveys for special status plants and the Bay checkerspot butterfly as well as its larval host plant in appropriate areas that support serpentine bunchgrass grassland, serpentine rock outcrops, serpentine seeps, and serpentine chaparral. A surcharge fee applies for impacts to serpentine habitat.
- **Condition 14 (page 6-60). Valley Oak and Blue Oak Woodland Avoidance and Minimization-** Condition 14 provides requirements for project planning and project construction, including avoidance of large oaks, guidance on irrigation near oak trees, and a buffer around the root protection zone, roads and pathways within 25 feet of the dripline of an oak tree, trenching, and pruning activities. Fees apply for impacts to valley oak and blue oak woodlands.

- **Condition 15 (page 6-62). Western Burrowing Owl-** Condition 15 requires preconstruction surveys for burrowing owls in appropriate habitat prior to construction activities, provides avoidance measures for owls and nests in the breeding season and owls in the non-breeding season, and requirements for construction monitoring. A surcharge fee applies for development within mapped burrowing owl breeding habitat.
- **Condition 16 (page 6-68) Least Bell's** - Condition 16 requires preconstruction surveys in appropriate habitat for the least Bell's vireo prior to construction activities, and provides avoidance and construction monitoring measures.
- **Condition 17 (page 6-69) Tricolored Blackbird-** Condition 17 requires preconstruction surveys in appropriate habitat for the tricolored blackbird prior to construction activities, and provides avoidance and construction monitoring measures.
- **Condition 18 (page 6-71) San Joaquin Kit Fox-** Condition 18 requires preconstruction surveys in appropriate habitat for the San Joaquin kit fox prior to construction activities and provides avoidance and construction monitoring measures.
- **Condition 19 (page 6-74). Plant Salvage when Impacts are Unavoidable-** Condition 19 provides salvage guidance and requirements for covered plants.
- **Condition 20 (page 6-76). Avoid and Minimize Impacts to Covered Plant Occurrences-** Condition 20 provides requirements for preconstruction surveys for appropriate covered plants (per habitat).

4 ANALYSIS OF PROJECT IMPACTS AND MITIGATION MEASURES

The following analysis assumes that the entire project site will be built out as currently represented in the site plans provided by KTG Architecture + Planning (2020) and MH Engineering Co. (2019). Any appreciable difference in either scope or general location of the proposed project would require an additional impact assessment to determine if the scope and magnitude of impacts have changed.

4.1 IMPACTS TO SPECIAL STATUS PLANTS

Potential Impacts. Seven special status vascular plant species are known to occur in the general project vicinity (Tables 2a and 2b). Project buildout would have no effect on regional populations of these species since the site provides no habitat or poor habitat for special status plants. Therefore, the project would not adversely affect any of these species, and impacts would be less than significant as defined by CEQA and NEPA.

Mitigation. Mitigation measures are not warranted.

4.2 IMPACTS TO HABITAT FOR SPECIAL STATUS ANIMALS

Potential Impacts. Of the twenty-six special status animal species that occur, or once occurred, regionally, twenty-two species are considered absent or unlikely to occur on site due to past and ongoing disturbance of the site and surrounding lands, the absence of suitable habitat, and/or the site's being situated outside of the species' known range (Tables 3a and 3b). These include the Crotch bumble bee, western bumblebee, California tiger salamander, California giant salamander, Santa Cruz black salamander, foothill yellow-legged frog, California red-legged frog, western pond turtle, coast horned lizard, northern California legless lizard, golden eagle, Swainson's hawk, northern harrier, burrowing owl, black swift, Least Bell's vireo, bank swallow, yellow-breasted chat, grasshopper sparrow, tricolored blackbird, San Francisco dusky-footed woodrat, and American badger. Eventual project build-out would have a less than significant effect on habitat for these species because there is little or no likelihood that they are present.

Four special status species could forage on the site from time to time and/or could breed on-site or close enough to the site that they would be vulnerable to construction-related disturbance at their nest. These include the white-tailed kite, loggerhead shrike, Townsend's big-eared bat, and pallid bat (Table 3b). Foraging individuals of these species would not be vulnerable to construction-related injury or mortality because they are highly mobile foragers and would be expected to simply avoid active construction zones. These species also would not be adversely affected from project-related loss of habitat. Potential foraging habitat on the project site is not uniquely important for these species, and similar or higher quality foraging habitat is relatively abundant in the region. Therefore, the loss of habitat for these species would be considered less than significant.

While the loss of habitat for these four species is less than significant, they could breed on-site or close enough to the site that they would be vulnerable to construction-related disturbance at

their nest or roost. Impacts to individuals of these species are discussed further in Sections 4.3 and 4.5, respectively.

Mitigation. Mitigation measures are not warranted.

4.3 IMPACTS TO TREE-NESTING RAPTORS AND OTHER MIGRATORY BIRDS

Potential Impacts. No stick nests were observed in trees or shrubs on the site during the May 2020 field survey. However, trees and shrubs on the site provide potential nesting habitat for migratory birds and birds of prey, including special status birds such as the white-tailed kite and loggerhead shrike. Similarly, buildings on the site could provide nesting opportunities for swallows.

Project buildout will require the removal of some, if not all, trees and shrubs on the site and demolition of the onsite structures. If a migratory bird or other bird of prey were to nest on or adjacent to the site prior to or during proposed construction activities, such activities could result in the abandonment of active nests or direct mortality or other harm to these birds. Ground disturbance and construction activities that adversely affect the nesting success of migratory birds and other birds of prey or result in mortality, injury, or other harm of individual birds would be a significant adverse impact under CEQA and NEPA.

Mitigation. Implementation of the following measures would mitigate impacts to nesting raptors and other migratory birds, including special status birds that could nest on the site, to a less-than-significant level.

MM-4.3a. To the maximum extent practicable, the removal of trees and shrubs and demolition of buildings should occur during the non-breeding season (September 1 through January 31). If it is not possible to avoid tree removal or building demolition during the breeding season (February 1 through August 31), pre-construction surveys should be conducted by a qualified biologist during the breeding season for tree-nesting raptors and other migratory birds no more than 14 days prior to the onset of such construction-related disturbances. Pre-construction surveys during the non-breeding season are not necessary for tree-nesting raptors and migratory birds, as they are expected to abandon their roosts during ground disturbance or construction.

The pre-construction survey should include all trees, large shrubs, buildings, or other areas of potential nesting habitat within the project footprint and, where possible, within 250 ft of the footprint. If active nests are deemed absent from the area, then no further mitigation measures are required, and ground disturbance or construction could occur within 14 days following the survey.

MM-4.3b. If nesting raptors or other migratory birds are detected on the site during the survey, a suitable disturbance-free buffer of up to 250 ft should be established around all active nests. The precise dimension of the buffer would be determined at that time and may vary depending on factors such as location, species, topography, and line of sight to the construction area. The buffer area(s) should be enclosed with temporary fencing, and equipment and workers should not enter the enclosed buffer areas. Buffers should remain in place for the duration of creek

maintenance activities, the breeding season, or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents, whichever occurs first.

4.4 IMPACTS TO BURROWING OWLS

Potential Impacts. The site is outside of the burrowing owl fee area for the SCVHP. Ground squirrel burrows were absent from the site, and no evidence of burrowing owls was observed. Nonetheless, burrowing owls could potentially overwinter or otherwise occupy the site in the future prior to grading. Burrowing owls are protected under Condition 1 of the SCVHP. Therefore, compliance with measures of Condition 15 of the SCVHP is required, and the project shall conduct pre-construction surveys in accordance with the Condition 15 of the SCVHP. Measures to ensure compliance with this condition are included below as MM-4.1.2a and 4.1.2b.

If a burrowing owl were to nest or overwinter on the site prior to the start of construction, construction activities could result in the abandonment of active nests or direct mortality to these birds. Should site demolition or grading occur during the nesting season for this species (i.e., February 1 through August 31), nests and nestlings that may be present would likely be destroyed. Overwintering burrowing owls may also be buried in their roost burrows outside of the nesting season (September 1 through January 31). Construction activities that adversely affect the nesting success or result in mortality of individual owls would be considered a significant impact under CEQA and NEPA.

Mitigation. Implementation of the following measures will ensure that burrowing owls will not be harmed by construction activities and compliance with the SCVHP. More importantly, the measures below will reduce the potential impacts to burrowing owls to a less-than-significant level.

MM-4.4a. Pre-construction surveys are required to ascertain whether burrowing owls occupy burrows on or adjacent to the site. A minimum of two surveys are required, with the first survey to occur no more than 14 days prior to initial construction activities (e.g., vegetation removal, grading, or excavation) and the second survey to occur no more than 2 days prior to initial construction activities. If no burrowing owls or evidence of burrowing owls are observed during pre-construction surveys, construction may proceed. If burrowing owls or their recent sign are observed during these surveys, occupied burrows should be identified by the monitoring biologist and appropriate construction-free buffers, as described below, should be established.

- A 250-foot non-disturbance buffer should be established around all active burrowing owl burrows or nest sites as identified and defined by a qualified biologist. If the biologist determines that a nest is vacant, the non-disturbance buffer zone around that nest may be removed. The SCVHP specifies that a vacation from the site for a week or more by a burrowing owl, as determined by a qualified biologist, would constitute a voluntary relocation by the owl, and the qualified biologist could then take measures to collapse suitable burrows of the site to discourage reoccupation. The biologist should supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (SCVHP, Chapter 6, Condition 15).

For permission to encroach within 250 feet of such burrows during the nesting season (February 1 through August 31), an Avoidance, Minimization, and Monitoring Plan would need to be prepared and approved by the Implementing Entity and the Wildlife Agencies prior to such encroachment (review Chapter 6, pp. 6-64 & 6-65, of the SCVHP for further detail).

- Should a burrowing owl be overwintering or nesting on-site in the non-breeding season (September 1 through January 31), construction activities would not be allowed within the 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:
 - A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
 - The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
 - If there is any change in owl nesting and foraging behavior because of construction activities, these activities will cease within the 250-foot buffer.
 - If the owls are gone for at least one week, the project proponent may request approval from the Implementing Entity that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone will be removed, and construction may continue.

MM-4.4b. The SCVHP prohibits the passive relocation or exclusion of burrowing owls until a positive regional growth trend is achieved as defined in Section 5.4.6 of the SCVHP; however, a project may qualify for an exception to this prohibition. Permission to engage in passive relocation during the non-breeding season would need to be requested through the standard application process (Section 6.8 of the SCVHP). Application for an exception would require additional information, including a relocation plan and documentation by a qualified biologist that owls have occupied the site for the full year without vacating the site for 10 or more consecutive days. The application would need to be submitted to the Implementing Entity, and the Wildlife Agencies would then evaluate the application and decide if an exception should be granted. If passive relocation is approved, additional measures may be required by the Implementing Entity.

4.5 IMPACTS TO BATS

Potential Impacts. Some of the existing buildings on the site support potential roosting habitat for bats. Although no bats or evidence of bats were observed on the site during the May 2020 survey, bats may currently inhabit these structures or may do so in the future. Demolition or removal of existing buildings could result in the loss of a roosting or maternity colony of bats. The loss of a colony for any bat species, regardless of the species' listing status, would be considered a significant impact.

Mitigation. The project applicant should implement the following measures to ensure that bats will not be harmed by construction activities.

MM-4.5a: A habitat assessment should be conducted by a qualified biologist to identify trees and buildings on the site that could be suitable for roosting bats.

MM-4.5b: If the habitat assessment finds that suitable roosting habitat is present, then a bat survey should be conducted by a qualified bat biologist within 30 days of building demolition to determine if bats are roosting or breeding in the buildings prior to demolition. An emergence survey may be required for areas that cannot be surveyed directly. These surveys would be conducted during times of the year when bats are active (March 1 through October 15).

MM-4.5c: If a maternity colony is found on the site, then a construction-free buffer should be established around the colony by a qualified biologist. The size of the buffer should be determined by the biologist depending on factors such as the type of construction-related activity to occur and its proximity to the maternity colony. This buffer should remain in place until the biologist determines that the nursery is no longer active.

MM-4.5d: If a bat colony is found on the site during the overwintering season (i.e., October 15 through March 1), demolition must be delayed until after March 1 or until a qualified biologist determines that bats are absent.

MM-4.5e: If a non-breeding bat colony is found in the structures to be demolished, the individuals should be humanely evicted via a two-step, partial dismantlement of the buildings prior to demolition. This eviction should be conducted under the direction and supervision of a qualified biologist to ensure that no harm or take would occur to any bats as a result of demolition activities.

4.6 IMPACTS TO TREES

Potential Impacts. Project buildout will result in the removal of some, if not all, trees on the site. These include the eucalyptus on the southeastern property line and the redwood and walnut trees next to the retention basin. The removal of any trees protected by the City's tree ordinance would constitute a significant impact. Construction activities that lead to the injury, decline, structural failure, or death of a tree proposed to be retained on the site would also constitute a significant impact.

Mitigation. The following measures would reduce tree impacts to a less-than-significant level.

MM-4.6a: Prior to the removal of any trees, a tree removal permit would need to be obtained from the City of Morgan Hill. The removal of trees protected by the City's ordinance or damage to trees proposed to be retained would require appropriate tree replacement mitigation (i.e., tree replacement at a ratio depending on species and size of the removed or damaged tree) as determined by the City of Morgan Hill's planning department.

MM-4.6b: For trees to be retained, a tree preservation plan should be prepared for the project identifying all protection and mitigation measures to be taken. These measures should remain in place for the duration of construction activities at the project site.

4.7 IMPACTS TO JURISDICTIONAL WATERS

Potential Impacts. A formal jurisdictional waters analysis and wetland delineation was completed for the site but has not been submitted to the USACE for verification as of the writing of this report. Neither the roadside ditch nor the retention basin meet the definition of a water of the U.S., nor would they be considered waters of the State (Section 2.8). Therefore, impacts to these features would be considered less than significant under CEQA and NEPA.

Mitigation. Mitigation measures are not warranted.

4.8 IMPACTS TO HABITAT FOR NATIVE WILDLIFE

Potential Impacts. Most of the site is either developed or consists of ruderal habitat, which provides only low-quality habitat for most species. Project buildout would also result in the loss of a retention basin. The proposed project would not result in a wildlife population dropping below self-sustaining levels or threaten to eliminate an animal community. Due to the small amount of low-quality habitat that would be impacted by project development, the loss of habitat for native wildlife resulting from project buildout is considered less than significant.

Mitigation. Mitigation measures are not warranted.

4.9 IMPACTS TO MOVEMENT OF NATIVE WILDLIFE

Potential Impacts. Site development would not constrain current native wildlife movement since the site provides minimal dispersal habitat for native wildlife and does not function as a movement corridor for native wildlife. Any wildlife using West Little Llagas Creek as a local movement corridor would continue to use it in a similar manner after site development. Site development is not expected to have a significant effect on home range and dispersal movements of native wildlife that may occur in the region. Therefore, the project will result in a less-than-significant impact on the movements of native wildlife.

Mitigation. Mitigation measures are not warranted.

4.10 IMPACTS TO WATER QUALITY IN SEASONAL DRAINAGES AND DOWNSTREAM WATERS

Potential Impacts. Proposed construction activities, particularly site grading, can result in soils of the construction zone barren of vegetation and vulnerable to sheet, rill, or gully erosion. Eroded soil can be carried as sediment in seasonal creeks to be deposited in creek beds and adjacent wetlands. Furthermore, runoff could also be polluted with grease, oil, pesticide and herbicide residues, heavy metals, or other contaminants. However, the project site is nearly level. Therefore, the potential for erosion and the degradation of water quality in West Little Llagas Creek is small.

The applicant is expected to comply with the provisions of a grading permit, including standard erosion control measures that employ best management practices (BMPs). Projects involving the grading of large tracts of land must also be in compliance with provisions of a General Construction permit (a type of NPDES permit) available from the California Regional Water Quality Control Board. Compliance with the above permit(s) should result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the site and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

Mitigation. Mitigation measures are not warranted.

4.11 IMPACTS TO DESIGNATED CRITICAL HABITAT AND SENSITIVE NATURAL COMMUNITIES

Potential Impacts. Designated critical habitat and sensitive natural communities are absent from the project site and adjacent lands. The project will have no impact on such habitats.

Mitigation. Mitigation measures are not warranted.

4.12 POTENTIAL CONFLICTS WITH THE SANTA CLARA VALLEY HABITAT CONSERVATION PLAN

Potential Impacts. The project would be considered a covered project under the SCVHP. As such, the project would be subject to conditions and fees of the SCVHP.

For all covered projects, compliance with the SCVHP requires submittal of an application, payment of fees, and following all SCVHP conditions relevant to the project. SCVHP conditions could include prescribed surveys for covered species, riparian setbacks, water quality design measures, and other measures. SCVHP fees are assessed on projects based on the land cover fee zone designations of the property, which have been determined for all properties in the SCVHP permit area by the implementing agency subject to field verification of land cover type; the occurrence of specific sensitive habitats (e.g., serpentine habitats or aquatic habitats) and/or habitats of sensitive species (e.g., burrowing owls) on the property which render fee surcharges; and the anticipated increase in nitrogen deposition resulting from the proposed project, which is determined through the number of residential units and/or anticipated car trips resulting from the planned development.

The project occurs within the SCVHP coverage area and, therefore, is required to comply with the SCVHP. To fully comply with the SCVHP, the project sponsor will pay all applicable SCVHP fees and comply with all applicable SCVHP conditions.

Per the SCVHP, project buildout will require the following fees:

Fee Zones. The project would be assessed a fee based on the Land Cover Fee Zone(s) deemed most applicable to the property by the Santa Clara Valley Habitat Agency. The fee is calculated based on per acre of development area plus a 50-foot buffer around the project development footprint and is subject to an annual price adjustment. Temporary impacts are calculated as a fraction of the Zone fee, and a 10-foot buffer around temporary impact areas would also be included in the fee. Areas mapped as Urban Areas, which include existing development, and areas to be conserved as open space would not be assessed a fee.

Nitrogen Deposition Fee. All development projects are subject to a nitrogen deposition fee based on new daily vehicle trips generated as a result of the project (e.g., increased vehicle traffic). These trips result in increased nitrogen emissions impacting sensitive communities within the Santa Clara Habitat plan area. For residential projects, fees are calculated based on the number of residential units built and is subject to annual price adjustment.

Per the SCVHP, project buildout may also require the following fee:

Wetland Fee. Should the site support areas determined by the Santa Clara Valley Habitat Agency to be wetlands (Section 4.7), a wetland fee subject to annual price adjustment would be assessed. Wetland fees vary by wetland type to account for the different costs of restoration and the different mitigation ratios required.

In addition to fees, the project would be required to comply with applicable conditions of the SCVHP. Conditions 1, 3, and 15 of the SCVHP (Section 3.10) are applicable to the proposed project; Condition 12 of the SCVHP may also apply to the proposed project. If these conditions are modified prior to project implementation, the project may need to comply with the modified conditions.

Table 4. Applicable Santa Clara Valley Habitat Plan (SCVHP) conditions of the UHC Morgan Hill project.

Condition	Project Applicability	Comments/Requirements
Condition 1 (p. 6-7 of SCVHP). Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	Applies	This condition requires compliance with existing laws protecting plant and wildlife species, including species not covered under the SCVHP. This requires compliance with Migratory Bird Treaty Act (MBTA), which prohibits killing or possessing covered migratory birds, their young, nests, feathers, or eggs. Nesting birds that could use the project site are protected by the MBTA. Project mitigations for pre-construction surveys for migratory birds, including for burrowing owls, ensures compliance with this condition.
Condition 2 (p. 6-9 of SCVHP). Incorporate Urban-Reserve System Interface Design Requirements	N/A	The project is not interfacing with the reserve system.
Condition 3 (p. 6-12 of SCVHP). Maintain Hydrologic Conditions and Protect Water Quality	Applies	This condition requires all projects to incorporate measures detailed in the SCVHP's Table 6-2 to minimize indirect and direct effects to covered species and their aquatic habitat. This condition also requires the local jurisdiction (i.e., the City of Morgan Hill) to verify that all appropriate measures from Table 6-2 are implemented. Measures from Table 6-2 should be incorporated into project engineering and Stormwater Pollution Prevention Plans (SWPPP).
Condition 4 (p. 6-14 of SCVHP). Avoidance and Minimization for In-Stream Projects	N/A	The project is not impacting streams.

Condition	Project Applicability	Comments/Requirements
Condition 5 (p. 6-18 of SCVHP). Avoidance and Minimization Measures for In-Stream Operations and Maintenance	N/A	The project is not impacting streams.
Condition 6 (p. 6-21 of SCVHP). Design and Construction Requirements for Covered Transportation Projects	N/A	Project is not a transportation project.
Condition 7 (p. 6-28 of SCVHP). Rural Development Design and Construction Requirements	N/A	The project is within the urban service area and is not a rural development.
Condition 8 (p. 6-35 of SCVHP). Implement Avoidance and Minimization Measures for Rural Road Maintenance	N/A	No rural road maintenance.
Condition 9 (p. 6-37 of SCVHP). Prepare and Implement a Recreation Plan	N/A	Project is not part of the Reserve System.
Condition 10 (p. 6-42 of SCVHP). Fuel Buffer	N/A	A fuel buffer is not required for this project.
Condition 11 (p. 6-44 of SCVHP). Stream and Riparian Setbacks	N/A	The project is not impacting streams and will not encroach on the 35-foot setback from West Little Llagas Creek.
Condition 12 (p. 6-56 of SCVHP). Wetland and Pond Avoidance and Minimization	Potentially applies	Buildout of the project will result in the removal of the retention basin. If the retention basin is determined by the Habitat Agency to be a seasonal wetland, then compliance with this condition, including the payment of a wetland surcharge fee, will be required.
Condition 13 (p. 6-58 of SCVHP). Serpentine and Associated Covered Species Avoidance and Minimization	N/A	Serpentine habitat and species are absent.
Condition 14 (p. 6-60 of SCVHP). Valley Oak and Blue Oak Woodland Avoidance and Minimization	N/A	Valley and blue oak woodlands are absent.
Condition 15 (p. 6-62 of SCVHP). Western Burrowing Owl	Applies	Although the site is outside the burrowing owl fee zone, overwintering burrowing owls may occur onsite. To comply with Condition 1, this project must also comply with Condition 15, including preconstruction surveys and avoidance measures for owls and nests, and requirements for construction monitoring. Mitigation measures 4.1.2a and 4.1.2b, described above in Section 4.1.2, defines the required actions for compliance with this condition.

Condition	Project Applicability	Comments/Requirements
Condition 16 (p. 6-68 of SCVHP) Least Bell's Vireo	N/A	Although the project occurs within the Pajaro Watershed—the only watershed currently associated with this species in the SCVHP coverage area—this species is not known within the watershed from this far north. Furthermore, suitable habitat is absent from the site.
Condition 17 (p. 6-69 of SCVHP) Tricolored Blackbird	N/A	Suitable habitat for the tricolored blackbird is absent from the site. Additionally, the project does not occur within 250 feet of SCVHP-mapped tricolored blackbird habitat.
Condition 18 (p. 6-71 of SCVHP) San Joaquin Kit Fox	N/A	The project is outside of modeled habitat for the San Joaquin kit fox.
Condition 19 (p. 6-74 of SCVHP). Plant Salvage when Impacts are Unavoidable	N/A	Covered plants are absent.
Condition 20 (p. 6-76 of SCVHP). Avoid and Minimize Impacts to Covered Plant Occurrences	N/A	Covered plants are absent.

Compliance with Conditions 1, 3, 12, and 15, as well as the payment of development fees described above, would ensure that the project does not conflict with the SCVHP. It is recommended that the project proponent thoroughly review the relevant sections of the SCVHP identified in this report, including Table 6-2, to ensure full compliance.

Mitigation. Mitigation measures are not warranted.

4.13 POTENTIAL CONFLICTS WITH THE MORGAN HILL 2035 GENERAL PLAN

The Morgan Hill 2035 General Plan includes policies adopted by the City of Morgan Hill that aim to protect biological resources during implementation of new projects. The proposed project is consistent with the General Plan’s biological and natural resource protection policies.

Mitigation. Mitigation measures are not warranted.

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APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below were observed on the UHC Morgan Hill site during the field surveys conducted by Live Oak Associates on May 29 and August 6, 2020. The wetland indicator status of each plant as listed in the U.S. Army Corps of Engineers 2018 National Wetland Plant list is shown following its common name (USACE 2018).

OBL - Obligate
 FACW - Facultative Wetland
 FAC - Facultative
 FACU - Facultative Upland
 UPL - Upland

ASTERACEAE - Sunflower Family

<i>Baccharis pilularis</i>	Coyote brush	UPL
<i>Carduus pycnocephalus*</i>	Italian thistle	UPL
<i>Hemizonia congesta</i> ssp. <i>luzulifolia</i>	Hayfield tarweed	UPL
<i>Lactuca serriola*</i>	Prickly lettuce	FACU
<i>Pseudognaphalium luteoalbum*</i>	Everlasting cudweed	FAC
<i>Sonchus arvensis*</i>	Field sowthistle	FACU
<i>Sonchus asper*</i>	Prickly sowthistle	FAC
<i>Sonchus oleraceus*</i>	Common sowthistle	UPL

BORAGINACEAE – Borage Family

<i>Amsinckia intermedia</i>	Common fiddleneck	UPL
<i>Amsinckia menziesii</i>	Small-flowered fiddleneck	UPL

BRASSICACEAE – Mustard Family

<i>Brassica nigra*</i>	Black mustard	UPL
<i>Brassica rapa*</i>	Common mustard	FACU
<i>Hirschfeldia incana*</i>	Summer mustard	UPL
<i>Raphanus sativus*</i>	Wild radish	UPL

CHENOPODIACEAE – Goosefoot Family

<i>Chenopodium album*</i>	Lambs quarters	FACU
---------------------------	----------------	------

CONVOLVULACEAE – Morning-Glory Family

<i>Convolvulus arvensis*</i>	Field bindweed	UPL
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CUPRESSACEAE – Cypress Family

<i>Juniperus communis</i>	Common juniper	FACU
<i>Sequoia sempervirens</i>	Coast redwood	UPL

CYPERACEAE – Sedge Family

<i>Eleocharis macrostachya</i>	Common spikerush	OBL
--------------------------------	------------------	-----

FABACEAE – Legume Family

<i>Medicago polymorpha</i> *	Burclover	FACU
FAGACEAE – Oak Family		
<i>Quercus agrifolia</i>	Coast live oak	UPL
GERANIACEAE – Geranium Family		
<i>Erodium cicutarium</i> *	Redstem filaree	UPL
JUGLANDACEAE – Walnut Family		
<i>Juglans californica</i>	California black walnut	FACU
LYTHRACEAE – Loosestrife Family		
<i>Lagerstroemia indica</i>	Crape myrtle	UPL
<i>Lythrum hyssopifolium</i> *	Hyssop loosestrife	OBL
MALVACEAE – Mallow Family		
<i>Malva parviflora</i> *	Cheeseweed mallow	UPL
MYRTACEAE – Myrtle Family		
<i>Eucalyptus sideroxylon</i> *	Red iron bark	UPL
ONAGRACEAE – Evening Primrose Family		
<i>Epilobium ciliatum</i>	Fringed willowherb	FACW
PLANTAGINACEAE – Plantain Family		
<i>Kickxia elatine</i> *	Sharp-leaved fluellin	UPL
<i>Plantago erecta</i>	California plantain	UPL
<i>Plantago lanceolata</i> *	English plantain	FAC
POACEAE - Grass Family		
<i>Aira caryophyllea</i> *	Silver hairgrass	FACU
<i>Avena fatua</i> *	Wild oat	UPL
<i>Bromus carinatus</i>	California brome	UPL
<i>Bromus diandrus</i> *	Ripgut brome	UPL
<i>Bromus hordeaceus</i> *	Soft chess	FACU
<i>Festuca perennis</i> *	Italian ryegrass	FAC
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> *	Mediterranean barley	FAC
<i>Hordeum murinum</i> *	Foxtail barley	FACU
<i>Phalaris</i> sp.	Canary grass	-
<i>Polypogon monspeliensis</i> *	Rabbitsfoot grass	FACW
POLYGONACEAE – Buckwheat Family		
<i>Polygonum aviculare</i> *	Common knotweed	FAC
<i>Rumex crispus</i> *	Curly dock	FAC
VITACEAE – Grape Family		
<i>Vitis californica</i>	California wild grape	FACU

*Non-native species

APPENDIX B: SELECTED PHOTOGRAPHS OF THE STUDY AREA



Photo 1. Former mushroom production buildings (left), ruderal field (middle left), and landscape vegetation (right). Northwestern boundary facing southwest.



Photo 2. Existing buildings.



Photo 3. Southeastern boundary facing northeast.



Photo 4. Retention basin.

Appendix C
Investigation of Potential Waters of the US



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

UHC MORGAN HILL INVESTIGATION OF POTENTIAL WATERS OF THE UNITED STATES CITY OF MORGAN HILL, CALIFORNIA

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1 INTRODUCTION

Live Oak Associates, Inc. (LOA), surveyed an approximately 4.6-acre site, which comprises the 3.7-acre UHC Morgan Hill project site and an adjacent 1.6-acre area of planned off-site improvements (collectively referred to as the “site” or “study area”), for potential waters of the United States, including areas meeting the technical criteria of wetlands.

The site is located 15440 Watsonville Road (APN 779-04-075), approximately one mile west of Highway 101 in the City of Morgan Hill, Santa Clara County, California (Figure 1). The site is bounded by Watsonville Road to the northwest, non-operational agricultural buildings to the northeast, an open field associated with Oakwood School to the southeast, and the West Little Llagas Creek diversion channel (currently under construction) to the southwest. The site is within the Mt. Madonna 7.5-minute U.S. Geological Survey (USGS) quadrangle in the southwest quarter of section 34, township 9 south, range 3 east of the Mount Diablo Meridian (Figure 2).

The Department of the Army, acting through the U.S. Army Corps of Engineers (USACE), is authorized to issue permits for the discharge of dredged or fill material into waters of the United States under section 404 of the Clean Water Act (CWA). They may also regulate activities in or on navigable waters under the authority of sections 9 and 10 of the Rivers and Harbors Act.

1.1 REGULATORY DEFINITION OF WATERS OF THE U.S.

The USACE regulates the filling or grading of Waters of the U.S. under the authority of Section 404 of the Clean Water Act. Drainage channels and adjacent wetlands may be considered “waters of the United States” or “jurisdictional waters” subject to the jurisdiction of the USACE. The extent of jurisdiction has been defined in the Code of Federal Regulations and clarified in federal courts.

The definition of waters of the U.S. have changed several times in recent years. In January 2020, the Environmental Protection Agency (EPA) and USACE jointly issued the Navigable Waters Protection Rule. The new rule was published in the Federal Register on April 21, 2020, and took effect on June 22, 2020.

The Navigable Waters Protection Rule (33 CFR §328.3(a)) defines waters of the U.S. as:

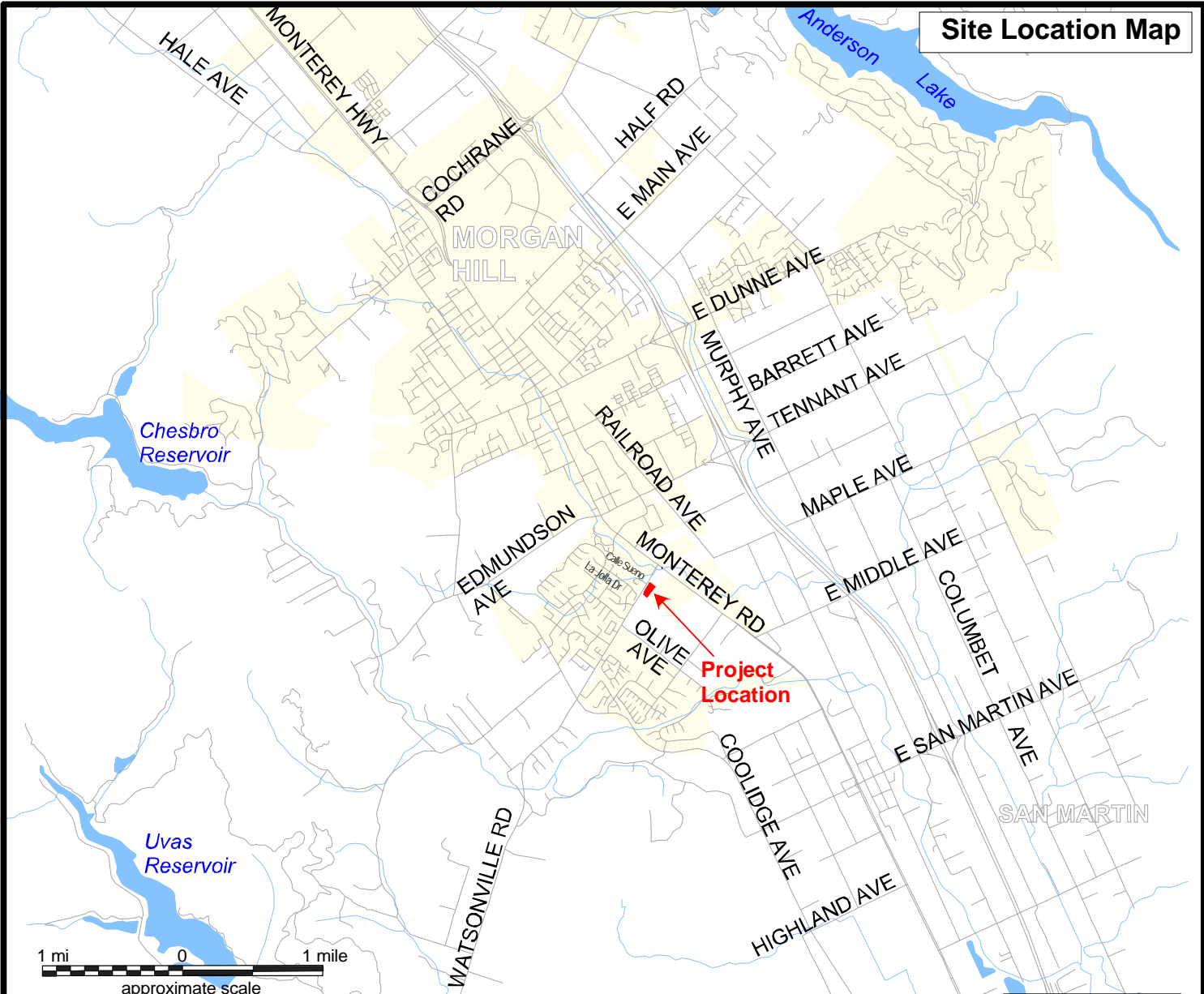
Territorial Seas and Traditional Navigable Waters (TNWs)

- The territorial seas and traditional navigable waters include large rivers and lakes and tidally influenced waterbodies used in interstate or foreign commerce.

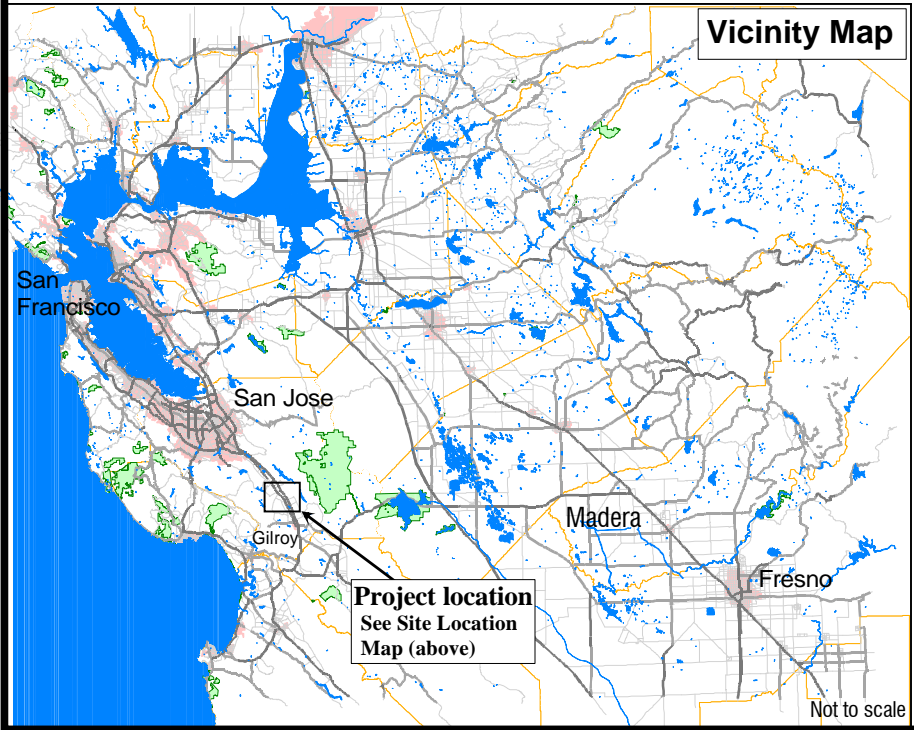
Tributaries

- Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.
- Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other “waters of the United States,” through channelized non-

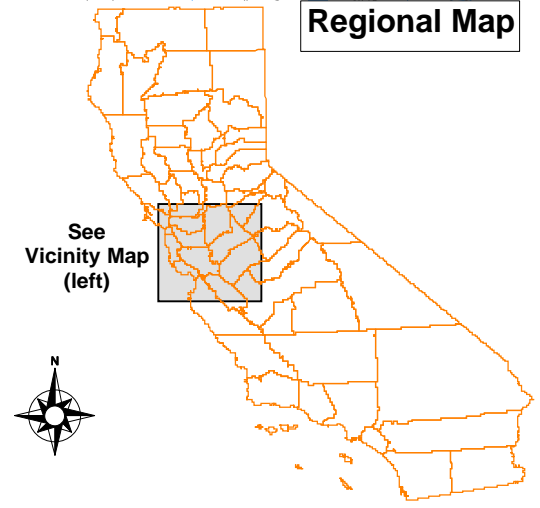
Site Location Map




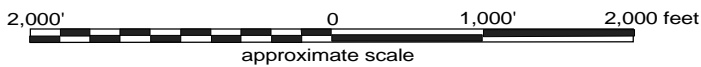
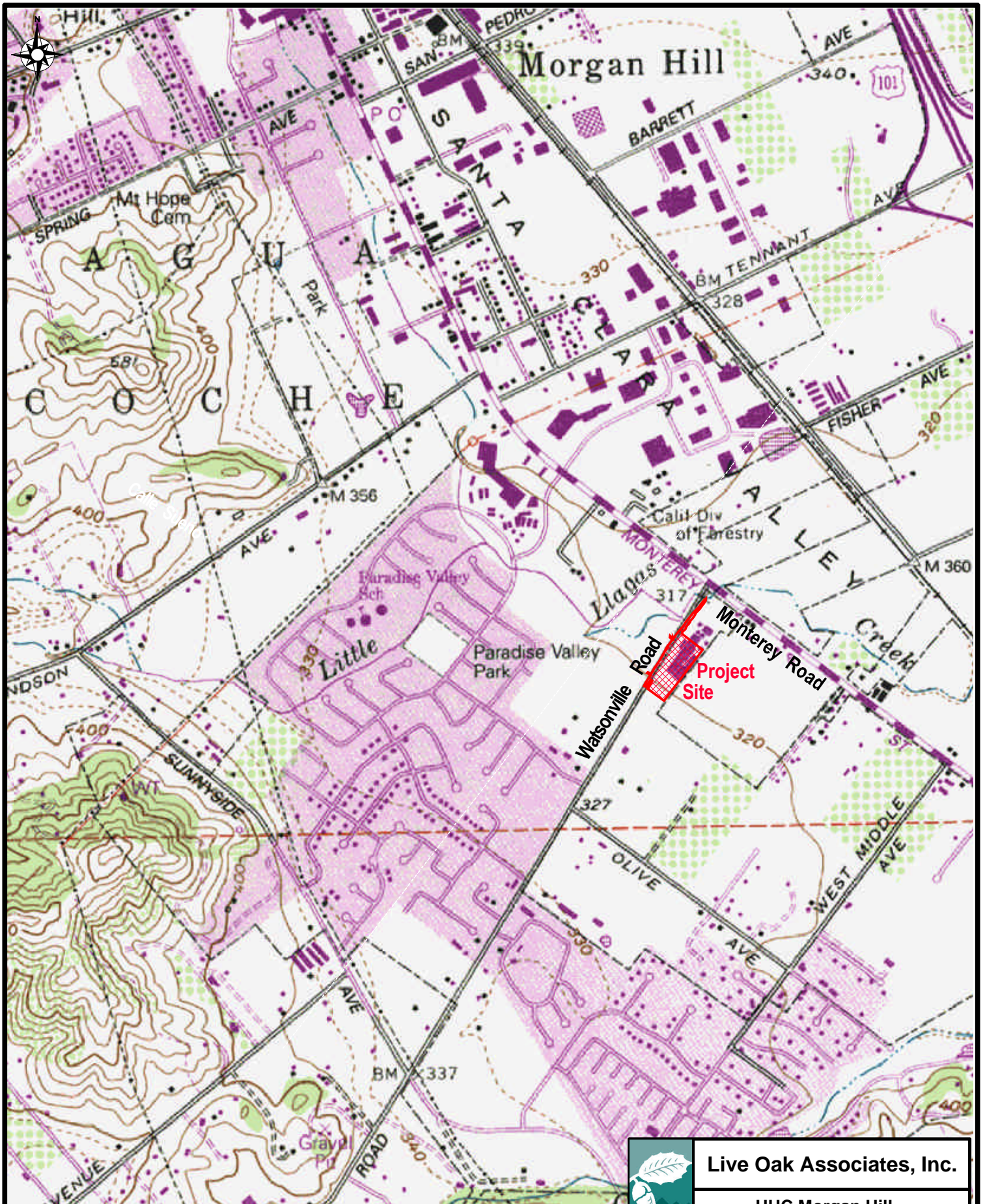
Vicinity Map




Regional Map



	Live Oak Associates, Inc.		
	UHC Morgan Hill Site / Vicinity Map		
Date	Project #	Figure #	
6/09/2020	2478-02	1	



Source:
U.S.G.S. Mount Madonna 7-1/2' Quadrangle 1994

 Live Oak Associates, Inc.		
UHC Morgan Hill U.S.G.S. Quadrangle		
Date	Project #	Figure #
9/09/2020	2478-02	2

jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).

- Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

Lakes, Ponds, and Impoundments of Jurisdictional Waters

- Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other waters of the United States, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a water of the United States in a typical year, such as certain oxbow lakes that lie along the Mississippi River.

Adjacent Wetlands

- Wetlands that physically touch other jurisdictional waters are “adjacent wetlands.”
- Wetlands separated from a water of the United States by only a natural berm, bank or dune are also “adjacent.”
- Wetlands inundated by flooding from a water of the United States in a typical year are “adjacent.”
- Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are “adjacent” so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, if the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The Navigable Waters Protection Rule also outlines what do not constitute waters of the United States. The following waters/features are not jurisdictional under the rule:

- Waterbodies that are not included in the four categories of waters of the United States listed above.
- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.

- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion. However, prior converted cropland is defined for the first time in the final rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters.
- Waste treatment systems have been excluded from the definition of waters of the United States since 1979 and will continue to be excluded under the final rule. Waste treatment systems include all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater or stormwater prior to discharge (or eliminating any such discharge).

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the permit requirements of the USACE under Section 404 of the Clean Water Act. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values.

1.2 SUPREME COURT DECISIONS AFFECTING THE DEFINITIONS OF WATERS OF THE UNITED STATES

The reach and extent of Clean Water Act jurisdiction over aquatic features has been the subject of several U.S. Supreme Court decisions, in *United States v. Riverside Bayview Homes* (Riverside), *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC) and *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the Rapanos decision). In general, these decisions address the jurisdictional status of aquatic features that are not hydrologically connected to navigable waters or their tributaries, or have such an insubstantial hydrologic connection that destruction or modification of the aquatic feature would have little effect on downstream waters of the United States.

1.2.1 United States v. Riverside Bayview Homes, Inc. (Riverside)

In Riverside (1985), the Supreme Court unanimously ruled that adjacent wetlands are “inseparably bound up” with the waters that they are adjacent to. Therefore, wetlands, including intrastate wetlands, adjacent to waters of the United States were, themselves, waters of the United States (80 Fed. Reg. 37076, 2015).

1.2.2 SWANCC Decision

In January of 2001, the U.S. Supreme Court ruled in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision) that “non-navigable, isolated, intrastate” waters could not be claimed as jurisdictional by the USACE on the basis of their use by migratory birds. Although the Court did not specifically address the meaning of the word “isolated,” it upheld the jurisdictional status of “adjacent” wetlands (and other waters), which are by definition wetlands that are “bordering, contiguous, or neighboring” other jurisdictional waters. Therefore, the term “isolated wetland” has implicitly been defined as ‘wetlands that are not bordering, contiguous, or neighboring’ other jurisdictional waters. This definition does not, however, address the degree of proximity necessary to establish that one wetland (or other water) is “adjacent” to a known jurisdictional water. As established by the Supreme Court in their Riverside (1985) decision, “wetlands separated from other waters by man-made dikes or barriers, natural river berms, beach dunes, and the like are ‘adjacent wetlands.’”

1.2.3 Consolidated Carabell/Rapanos Decision

In June of 2006, the U.S. Supreme Court ruled in the consolidated cases of *June Carabell v. U.S. Army Corps of Engineers* and *John Rapanos v. United States* that wetlands are waters of the United States “if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’” When, in contrast, wetland’s effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term ‘navigable waters.’

On June 5, 2007, the Environmental Protection Agency (EPA) and the USACE jointly issued guidance in interpreting the Carabell/Rapanos cases as they apply to the extent of federal jurisdiction covered by Section 404 of the Clean Water Act. The agencies revised this guidance memorandum on December 2, 2008. The key points of this guidance are that the EPA and the USACE: 1) will assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries of traditional navigable waters where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months), and wetlands that directly abut such tributaries; 2) will decide jurisdiction over relatively impermanent non-navigable tributaries of navigable waters, wetlands adjacent to such tributaries, and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary, based on a fact-specific analysis to determine whether they have a “significant nexus” with a traditional navigable water; and 3) generally will not assert jurisdiction over swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) or ditches excavated wholly in and draining

only uplands and that do not carry a relatively permanent flow of water. In applying the “significant nexus” standard, the EPA and USACE will “assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.” “Significant nexus” includes consideration of hydrologic and ecologic factors.

The court rulings and subsequent guidance provided by the EPA and USACE discussed above are germane to the delineation of jurisdictional waters summarized in this report. They are presently the basis for determining the jurisdictional status of drainage features and wetlands of the study area.

All activities that involve the discharge of dredge or fill material into Waters of the U.S. are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the RWQCB issues a Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards.

1.3 STATE OF CALIFORNIA JURISDICTION OVER AQUATIC FEATURES

The State of California also asserts jurisdiction over drainages, wetlands, and other aquatic features. The limits of State jurisdiction differ from those of the USACE. The California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB) are the two state regulatory agencies responsible for implementing state regulations that identify and protect waters of the state.

According to Section 1602 of the California Fish and Game Code, public and private entities may not substantially divert or obstruct the natural flow of any river, stream, or lake within the state. This section of Fish and Game Code establishes the State’s interest in regulating construction activities in the “bed, channel, or bank” of a natural drainage or stream. A “stream” subject to the jurisdiction of the CDFW has been defined as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life” (California Code of Regulations, Title 14).

Under the Porter-Cologne Water Quality Control Act of 1969, the State Water Resources Control Board (SWRCB) and nine local RWQCBs have regulatory authority over activities affecting water quality in all surface waters of the State, consisting of rivers, streams, lakes, and wetlands of the State.

Shortly after the U.S. Supreme Court rendered its SWANCC Decision, the SWRCB notified the Regional Boards that isolated waters, including wetlands, were subject to the jurisdiction of the State of California per provisions of the Porter-Cologne Water Quality Control Act. The Regional Boards, therefore, now assert jurisdiction over isolated wetlands disclaimed as jurisdictional by the USACE.

The RWQCB for a given region regulates discharges of fill or pollutants into Waters of the State through the issuance of various permits and orders. Discharges into Waters of the State that are

also Waters of the U.S. require a Section 401 Water Quality Certification from the RWQCB as a prerequisite to obtaining certain federal permits, such as a Section 404 Clean Water Act permit. Discharges into all Waters of the State, even those that are not also Waters of the U.S., require Waste Discharge Requirements (WDRs), or waivers of WDRs, from the RWQCB.

The RWQCB also administers the Construction Storm Water Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Storm Water Program. A prerequisite for this permit is the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, storm water, or other pollutants into a Water of the U.S. may require a NPDES permit.

2 METHODS

LOA plant and wetland ecologists Davinna Ohlson and Arren Allegretti surveyed the site for potential jurisdictional waters on August 6, 2020. The survey was conducted in a manner consistent with guidelines found in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008), and *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (USACE 2001). Color photographs of the site were taken from several locations (Appendix A).

2.1 AREAS MEETING THE TECHNICAL CRITERIA OF WETLANDS

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas” (Environmental Laboratory 1987). Wetlands are characterized by the presence of hydrophytic vegetation (i.e., an association of plants adapted to saturated soils), hydric soils (i.e., soils which have developed under the anaerobic conditions imposed by soil saturation), and wetland hydrology (i.e., surface inundation or saturated soils). Accordingly, LOA surveyed the site for wetland indicator plants, positive indicators of hydric soils, and wetland hydrology.

LOA established sample points to document current site conditions. The sample locations were assessed for the diagnostic environmental characteristics of wetlands, and the dominant vegetation species, soils, and hydrology conditions were recorded onto USACE-designated data sheets (Appendix B). Vegetation species were identified using the *Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) to the lowest taxonomic level necessary to obtain their wetland indicator status from the U.S. Army Corps of Engineers 2018 National Wetland Plant list (USACE 2018). A list of vascular plant species observed on the site is provided in Appendix C.

Wetland indicator species are designated according to their frequency of occurrence in wetlands:

OBLIGATE (OBL)	Probability to occur in wetland is >99%
FACULTATIVE WETLAND (FACW)	Probability to occur in wetland is >67 to 99%
FACULTATIVE (FAC)	Probability to occur in wetland is 33 to 67%
FACULTATIVE UPLAND (FACU)	Probability to occur in wetland is 1 to <33%.
UPLAND (UPL)	Probability to occur in wetland is <1%

Hydrophytic vegetation is considered present when “inundation or soil saturation is either permanent or of sufficient frequency and duration to exert a controlling influence on the plant species present” (USACE 2008). The presence of hydrophytic vegetation is typically determined using the dominance test. This occurs when a “prevalence” (i.e. more than 50%) of the dominant species across all vegetative strata (i.e., trees, shrubs, herbs, and woody vines) at a given location are composed of obligate (OBL), facultative wetland (FACW), and facultative (FAC) plant species. On sites where the vegetation initially fails the dominance test but indicators of hydric soil and

wetland hydrology are present, a plot-based prevalence index is calculated. The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot, and hydrophytic vegetation is considered present when the prevalence index is 3.0 or less.

LOA also examined each sample location for positive indicators of wetland hydrology and hydric soils. Evidence of wetland hydrology consists of primary indicators including, but not limited to, the presence of surface water, saturation, water marks in non-riverine systems, water-stained leaves, and a biotic crust. Secondary indicators of wetland hydrology include, but are not limited to, water marks in riverine systems, drainage patterns, and a dry season water table. Wetland hydrology is considered present when either one or more primary indicators is present, or two or more secondary indicators are present. LOA examined the soil profile at each sample point for indicators of hydric soils, including, but not limited to, low chromas, gleying, mottling, concretions, and sulfidic odors.

2.2 TRADITIONAL NAVIGABLE WATERS AND TRIBUTARY WATERS

Pursuant to USACE regulations (33 CFR §329), navigable waters are those waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. Such waters are referred to as “traditional navigable waters” in the USACE and EPA guidance regarding the *Rapanos* decision.

Tributary waters are waters that contribute flow to a navigable water, interstate water, or the territorial seas. Tributaries are generally characterized by the presence of the physical indicators of a bed and bank and an ordinary high water mark. Such features may carry a permanent or intermittent flow of water. Perennial streams are those with surface water flowing continuously year-round. Intermittent streams have surface water flowing continuously during certain times of the year and more than in direct response to precipitation (i.e., both precipitation and groundwater provide part of the stream's flow) (33 CFR §328.3).

In the absence of adjacent wetlands, the limit of CWA jurisdiction of traditional navigable waters, rivers, streams, and their tributaries extends to the “ordinary high water” (OHW) mark. The OHW mark refers to “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR §328.3).

The site does not contain any traditional navigable waters. A roadside ditch within the study area was inspected to determine if it met the definition of a tributary water. LOA mapped the location of this feature using the ArcGIS Collector application.

2.3 OTHER WATERS

For the purposes of this report, other waters refers to waters that are not waters of the U.S. as defined in 33 CFR §328.3(a). The study area was surveyed for the presence of other waters.

3 RESULTS

3.1 EXISTING CONDITIONS

The site is in south Morgan Hill, approximately one mile west of Highway 101 and two miles east of the foothills of the Santa Cruz Mountains. The site is bounded by Watsonville Road to the northwest, non-operational agricultural buildings to the northeast, an open field associated with Oakwood School to the southeast, and the West Little Llagas Creek diversion channel (currently under construction) to the southwest. The site itself consists of a former mushroom production facility with structures related to its former use still extant.

Situated on the floor of Santa Clara Valley, the site's topography is relatively flat, ranging in elevations from 320 ft (97.5 m) to 325 ft (99 m) National Geodetic Vertical Datum.

3.1.1 Soils

Two soil types—San Ysidro loam, 0 to 2% slopes, and Zamora clay loam, 0 to 2% slopes—occur in the study area (Figure 3). The San Ysidro series consists of very deep, moderately well drained soils with very slow permeability that formed in alluvium from sedimentary rocks. Zamora soils consist of very deep, well drained soils that formed in alluvium from mixed rocks (NRCS 2020a).

San Ysidro soils are considered hydric. Hydric soils are soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. Under sufficiently wet conditions, hydric soils support the growth and regeneration of hydrophytic vegetation. Zamora soils are not considered hydric, although hydric inclusions may occur (NRCS 2020b).

3.1.2 Climate

Santa Clara County experiences a Mediterranean climate with warm, dry summers and cool, wet winters. The average annual daytime temperature in the general vicinity of the site is 69° F. Annual precipitation in the general vicinity of the site is highly variable. Average annual rainfall is approximately 21 inches, most of which occurs from November to April (WRCC 2020).

3.2 POTENTIAL WATERS OF THE UNITED STATES

No areas meeting the definition of waters of the United States were present on the site.

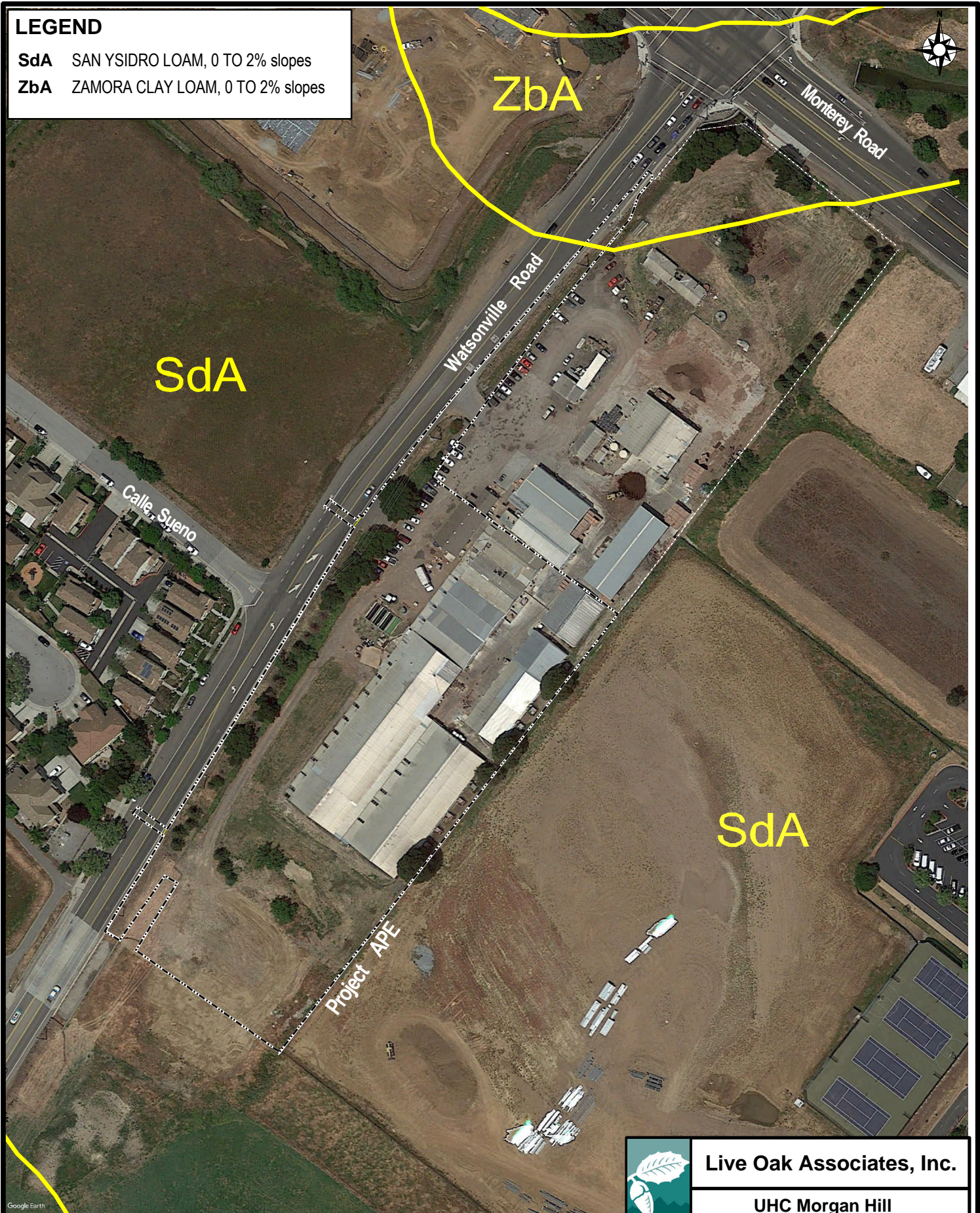
3.3 OTHER WATERS (NOT WATERS OF THE UNITED STATES)

Two hydrologic features were present on the site: a retention basin and a roadside ditch. Vegetation, soil, and hydrology data were collected for both features.

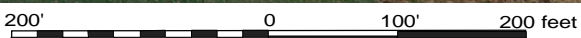
Retention basin. A small, shallow retention basin (approximately 4 ft deep) is present within the ruderal field near the south end of the site (Sample point 1; Figure 4). The retention basin was constructed as part of the mushroom facility whose operations were discontinued in 2018. The basin is regularly maintained by the property owner; maintenance activities include sediment removal and routine mowing. Additionally, the basin was constructed in uplands, does not

LEGEND

- SdA** SAN YSIDRO LOAM, 0 TO 2% slopes
- ZbA** ZAMORA CLAY LOAM, 0 TO 2% slopes



Google Earth

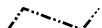




approximate scale
1" = 150'

Source:
Aerial Photo courtesy of Google Earth 5/2018
U.S.D.A. Soil Conservation Service

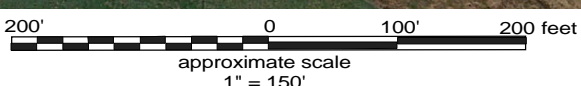
	Live Oak Associates, Inc.		
	UHC Morgan Hill Soils		
Date	Project #	Figure #	
9/09/2020	2478-02		3

LEGEND


-  - Project A.P.E. (Approx. 4.56 Ac.)
-  SP1 - Sample Points
-  - Culvert



Google Earth



Source:
 Aerial Photo courtesy of Google Earth 5/2018
 Universal Transverse Mercator Coordinate System Zone 10, NAD83 / NAVD 1988

	Live Oak Associates, Inc.		
	UHC Morgan Hill Aquatic Resources Delineation		
Date	Project #	Figure #	
9/09/2020	2478-02	4	

replace a water of the U.S., and is physically and hydrologically isolated from other waters of the U.S.

The basin met the USACE's technical wetland criteria for vegetation and hydrology, but it did not meet the technical criteria for soils. Dominant species, along with their wetland indicator status, included rabbitsfoot grass (*Polypogon monspeliensis*) (FACW) and canary grass (*Phalaris* sp.) (FAC). Wetland hydrology indicators included the presence of surface soil cracks and inundation visible on aerial imagery. The basin did not exhibit overall hydric soil conditions and had a moist Munsell soil color of 10 YR 4/3 in the first 12 inches of the soil profile. Therefore, this feature would not be considered a jurisdictional wetland.

Roadside ditch. A roadside ditch connected by several culverts occurs within the study area alongside Watsonville Road (Sample point 3; Figure 4). Overall, the ditch lacks a defined bed and bank and indicators of an ordinary high water mark. The ditch was excavated in uplands and does not replace a historical tributary water. This manmade feature collects stormwater run-off from Watsonville Road and upstream properties and conveys it approximately 300 ft northeast to a culvert. The culvert directs flow into a storm drain that outlets to West Little Llagas Creek, a known water of the U.S., underneath Watsonville Road.

This feature met the hydrophytic vegetation criteria but did not meet the criteria for hydric soils and wetland hydrology. Dominant species included Italian rye grass (*Festuca perennis*) (FAC) and rabbitsfoot grass. Non-dominant species included summer mustard (*Hirschfeldia incana*) (UPL), field bindweed (*Convolvulus arvensis*) (UPL), hyssop loosestrife (*Lythrum hyssopifolium*) (OBL), and sharp point fluellin (*Kickxia elatine*) (UPL). The soil profile exhibited a moist Munsell color notation of 10 YR 3/4 in the first ten inches with clay loam texture. The soils lacked redoximorphic features and did not exhibit any other indicators of hydric soils. Wetland hydrology indicators were also absent. Therefore, this feature would not be considered a jurisdictional wetland.

3.4 UPLAND AREAS

No other parts of the study area met any of the definitions of a water of the U.S. The remainder of the site was comprised of upland habitats, including development associated with the former mushroom facility and ruderal fields.

Ruderal areas of the study area were dominated by non-native grasses such as wild oat (*Avena fatua*) (UPL) in the understory, while black walnut (*Juglans nigra*) (UPL) dominated the overstory (Sample point 2; Figure 4). Other species such as field bindweed (*Convolvulus arvensis*) (UPL), English plantain (*Plantago lanceolata*) (FAC), and Mediterranean barley (*Hordeum marinum*) (FAC) were also present. Soils had a moist Munsell color notation of 10 YR 3/3 in the upper 12 inches with no presence of hydric soil indicators. The soil profile at this sample point were similar to the soils in the retention basin, where soils resembled fill dirt and were likely excavated from the retention basin. Indicators of wetland hydrology were also absent. Therefore, these areas failed to meet the technical criteria for jurisdictional wetlands.

4 DISCUSSION

The retention basin and roadside ditch are both manmade features that were created in uplands and do not replace historical waters of the U.S. The retention basin also undergoes routine maintenance (e.g., mowing) and has no hydrologic connection to a water of the U.S. Both features also failed to meet the USACE's three-parameter criteria for a wetland and do not meet the regulatory definition of waters of the United States. Therefore, it is our opinion that waters of the U.S. are absent from the site.

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APPENDIX A: SELECTED PHOTOGRAPHS OF THE STUDY AREA



Photo 1. Manmade retention basin that was part of the former mushroom production facility (Sample point 1).



Photo 2. Upland, ruderal field next to the retention basin (Sample point 2).



Photo 3. Roadside ditch along Watsonville Road looking southwest (Sample point 3).



Photo 4. Roadside ditch along Watsonville Road looking northeast.



Photo 5. Former mushroom production buildings (left), ruderal field (middle left), and landscape vegetation (right).

APPENDIX B: WETLAND DATA SHEETS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: UHC Morgan Hill City/County: Morgan Hill Sampling Date: 06-Aug-20
 Applicant/Owner: A0702 Morgan Hill L.P. State: CA Sampling Point: 1
 Investigator(s): Davinna Ohlson, Arren Allegratti Section, Township, Range: 534, T9S, R3E
 Landform (hillslope, terrace, etc.): Retention basin Local relief (concave, convex, none): Flat Slope (%): <1
 Subregion (LRR): C Lat: 37° 6.302' N Long: 121° 38.229' W Datum: NAD83
 Soil Map Unit Name: San Ysidro fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Sample point taken in a retention basin associated with a mushroom production facility that discontinued operations in 2018. Maintenance occurs periodically.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
Herb Stratum (Plot size: <u>60' x 15'</u>) 1. <u>Phalaris sp.</u> 40 Y FAC 2. <u>Polypogon monspeliensis</u> 20 Y FACW 3. <u>Festuca portensis</u> 10 N FAC 4. <u>Polygonum aviculare</u> 5 N FAC 5. <u>Lythrum hyssopifolium</u> 5 N OBL 6. <u>Epilobium citatum</u> 3 N FACW 7. <u>Eleocharis macrostachya</u> 2 N OBL 8. <u>Convolvulus arvensis</u> 2 N UPL _____ = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
% Bare Ground in Herb Stratum <u>13</u> % Cover of Biotic Crust <u>0</u>				

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0'
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks:
 Basin bottom is dominated by hydrophytes, Vegetation was recently mowed.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 4/3	99	10YR 5/8	1	C	M	Clay loam	Some gravel mixed in
2-4	10YR 4/3	100		<1	C		Clay loam	Faint redox visible
4-12	10YR 4/3	100					Clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks:

site appears to contain fill dirt. Some faint redoxomorphic features are present in the upper soil profile.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Surface soil cracks present throughout. Inundation visible on aerial imagery during wet season.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: UNCC Morgan Hill City/County: Morgan Hill Sampling Date: 06-Aug-20
 Applicant/Owner: A0702 Morgan Hill L.P. State: CA Sampling Point: 2
 Investigator(s): Davinna Ohlson, Arren Allegretti Section, Township, Range: S31, T9S, R3E
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Flat Slope (%): <1
 Subregion (LRR): C Lat: 37° 6.200' N Long: 121° 38.232' W Datum: NAD83
 Soil Map Unit Name: San Ysidro fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p style="margin-left: 20px;"><i>Sample point taken in ruderal uplands adjacent to retention basin.</i></p>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' x 30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Juglans nigra</u>	<u>5</u>			Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____				
<u>5</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size: <u>30' x 30'</u>)				Hydrophytic Vegetation Indicators:
1. <u>Avena fatua</u>	<u>60</u>	<u>Y</u>	<u>UPL</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Malva sp.</u>	<u><1</u>	<u>N</u>	<u>UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. <u>Plantago lanceolata</u>	<u><1</u>	<u>N</u>	<u>FAC</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. <u>Hordeum marinum</u>	<u><1</u>	<u>N</u>	<u>FAC</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Convolvulus arvensis</u>	<u><1</u>	<u>N</u>	<u>UPL</u>	
6. <u>Lactuca serriola</u>	<u><1</u>	<u>N</u>	<u>FACU</u>	
7. _____				
8. _____				
<u>65</u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present?
1. _____				Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u>		% Cover of Biotic Crust <u>0</u>		
Remarks: <p style="margin-left: 20px;"><i>Plot area consists of ruderal vegetation.</i></p>				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 3/3	100	-	-	-	-	Clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
--	--

Remarks:
Soil profile is similar to that of sample point 1. Area consists of some fill dirt and has been manipulated (excavated soils from retention basin).

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one required; check all that apply)</u>	<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No hydrology indicators present.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: UHC Morgan Hill City/County: Morgan Hill Sampling Date: 06-Aug-20
 Applicant/Owner: A0702 Morgan Hill L.P. State: CA Sampling Point: 3
 Investigator(s): Davinna Ohlson, Arren Allegretti Section, Township, Range: S 31, T 9 S, R 2 E
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): Flat Slope (%): 1
 Subregion (LRR): C Lat: 37° 6.372' N Long: 121° 38.201' W Datum: NAD 83
 Soil Map Unit Name: San Ysidro fine sandy loam NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <p style="margin-left: 40px;">Sample point taken in roadside ditch along Watsonville Rd.</p>	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
_____	_____	_____	_____		
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
_____ = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0' <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Herb Stratum (Plot size: <u>20' x 4'</u>)					
1. <u>Polypogon monspeliensis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>		
2. <u>Festuca perennis</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>		
3. <u>Hirschfeldia incana</u>	<u>10</u>	<u>N</u>	<u>UPL</u>		
4. <u>Convolvulus arvensis</u>	<u>5</u>	<u>N</u>	<u>UPL</u>		
5. <u>Lythrum hyssopifolium</u>	<u>10</u>	<u>N</u>	<u>OBL</u>		
6. <u>Kickxia elatine</u>	<u>3</u>	<u>N</u>	<u>UPL</u>		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
_____ = Total Cover					
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust <u>0</u>					
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks:
 This reach of ditch is dominated by facultative grasses.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10 YR 8/1	100	—	—	—	—	clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Vernal Pools (F9)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
--	---

Remarks:
 No hydric soil indicators observed.

HYDROLOGY

Wetland Hydrology Indicators:	Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 No hydrology indicators present.

APPENDIX C: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below were observed on the UHC Morgan Hill site during the field surveys conducted by Live Oak Associates on May 29 and August 6, 2020. The wetland indicator status of each plant as listed in the U.S. Army Corps of Engineers 2018 National Wetland Plant list is shown following its common name (USACE 2018).

OBL - Obligate
 FACW - Facultative Wetland
 FAC - Facultative
 FACU - Facultative Upland
 UPL – Upland

ASTERACEAE - Sunflower Family

<i>Baccharis pilularis</i>	Coyote brush	UPL
<i>Carduus pycnocephalus*</i>	Italian thistle	UPL
<i>Hemizonia congesta</i> ssp. <i>luzulifolia</i>	Hayfield tarweed	UPL
<i>Lactuca serriola*</i>	Prickly lettuce	FACU
<i>Pseudognaphalium luteoalbum*</i>	Everlasting cudweed	FAC
<i>Sonchus arvensis*</i>	Field sowthistle	FACU
<i>Sonchus asper*</i>	Prickly sowthistle	FAC
<i>Sonchus oleraceus*</i>	Common sowthistle	UPL

BORAGINACEAE – Borage Family

<i>Amsinckia intermedia</i>	Common fiddleneck	UPL
<i>Amsinckia menziesii</i>	Small-flowered fiddleneck	UPL

BRASSICACEAE – Mustard Family

<i>Brassica nigra*</i>	Black mustard	UPL
<i>Brassica rapa*</i>	Common mustard	FACU
<i>Hirschfeldia incana*</i>	Summer mustard	UPL
<i>Raphanus sativus*</i>	Wild radish	UPL

CHENOPODIACEAE – Goosefoot Family

<i>Chenopodium album*</i>	Lambs quarters	FACU
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CONVOLVULACEAE – Morning-Glory Family

<i>Convolvulus arvensis*</i>	Field bindweed	UPL
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CUPRESSACEAE – Cypress Family

<i>Juniperus communis</i>	Common juniper	FACU
<i>Sequoia sempervirens</i>	Coast redwood	UPL

CYPERACEAE – Sedge Family

<i>Eleocharis macrostachya</i>	Common spikerush	OBL
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FABACEAE – Legume Family		
<i>Medicago polymorpha*</i>	Burclover	FACU
FAGACEAE – Oak Family		
<i>Quercus agrifolia</i>	Coast live oak	UPL
GERANIACEAE – Geranium Family		
<i>Erodium cicutarium*</i>	Redstem filaree	UPL
JUGLANDACEAE – Walnut Family		
<i>Juglans californica</i>	California black walnut	FACU
LYTHRACEAE – Loosestrife Family		
<i>Lagerstroemia indica</i>	Crape myrtle	UPL
<i>Lythrum californicum</i>	California loosestrife	OBL
<i>Lythrum hyssopifolium*</i>	Hyssop loosestrife	OBL
MALVACEAE – Mallow Family		
<i>Malva parviflora*</i>	Cheeseweed mallow	UPL
MYRTACEAE – Myrtle Family		
<i>Eucalyptus sideroxylon*</i>	Red iron bark	UPL
ONAGRACEAE – Evening Primrose Family		
<i>Epilobium ciliatum</i>	Fringed willowherb	FACW
PLANTAGINACEAE – Plantain Family		
<i>Plantago erecta</i>	California plantain	UPL
<i>Plantago lanceolata*</i>	English plantain	FAC
POACEAE - Grass Family		
<i>Aira caryophylla*</i>	Silver hairgrass	FACU
<i>Avena fatua*</i>	Wild oat	UPL
<i>Bromus carinatus</i>	California brome	UPL
<i>Bromus diandrus*</i>	Ripgut brome	UPL
<i>Bromus hordeaceus*</i>	Soft chess	FACU
<i>Festuca perennis*</i>	Italian ryegrass	FAC
<i>Hordeum marinum ssp. gussoneanum*</i>	Mediterranean barley	FAC
<i>Hordeum murinum*</i>	Foxtail barley	FACU
<i>Polypogon monspeliensis*</i>	Rabbitsfoot grass	FACW
POLYGONACEAE – Buckwheat Family		
<i>Rumex crispus*</i>	Curly dock	FAC
VITACEAE – Grape Family		
<i>Vitis californica</i>	California wild grape	FACU

*Non-native species

Appendix D Arborist Report



McClenahan Consulting, LLC

Arboriculturists Since 1911

1 Arastradero Road, Portola Valley, CA 94028-8012

Telephone (650) 326-8781

Fax (650) 854-1267

www.spmcclenahan.com

August 20, 2020
April 1, 2021 Revised

A0702 Morgan Hill, L.P.
c/o Mr. Mark Irving
2000 East Fourth Street #205
Santa Ana, CA 92705

Re: Royal Oak Village
15440 Monterey Road
Morgan Hill, CA

Assignment

As requested, I performed a visual inspection of 37 trees to determine species, size and condition and provide for general tree preservation guidelines, should any trees remain on site.

Summary

This site is proposed for a new development that will likely require removal of most of the trees. There are four species of tree on site (*Eucalyptus globulus 'Compactus'*, *Juglans hindsii*, *Quercus agrifolia* and *Sequoia sempervirens*). Trees 10 through 37 are located at the frontage under the high voltage lines. Most of the redwoods are severely drought stressed and should be removed due to poor condition. Trees 14 through 16 are the best suited for preservation but may not have enough vertical clearance to achieve maturity, the current design will require removal to accommodate the new required streetscape (sidewalk and bioswale for drainage). An alternative design around trees 14-16 and impacts are described in the discussion section below. The conclusion of that review is that retention of the trees is still questionable due to the degree of anticipated loss of roots and above ground pruning of canopy. Arborist monitoring would be necessary to assess impacts and determine the risk associated with tree retention.

Methodology

No root crown exploration, climbing or plant tissue analysis was performed as part of this survey. For purposes of identification, trees have been marked with aluminum tags. Trees 1, 2 and 4 diameters were estimated using the tape along the side of the tree. Other multi trunk and low branching trees were measured below bifurcation or at standard height.

In determining Tree Condition several factors have been considered which include:

- Rate of growth over several seasons;
- Structural decays or weaknesses;
- Presence of disease or insects; and
- Life expectancy.

Tree Descriptions

1 Blue gum compactus (*Eucalyptus globulus* 'Compactus')

Diameter: Est 46" Multi trunk

Height: 55' **Spread:** 36'

Condition: Fair

Location: East fence

Observation:

Interior deadwood. Insect damage. Weak branch attachments.

2 Blue gum compactus

Diameter: Est 42" Multi trunk

Height: 50' **Spread:** 40'

Condition: Fair

Location: East fence

Observation:

Interior deadwood. Insect damage. Weak branch attachments.

3 Blue gum compactus

Diameter: 24.2,18.6 Multi trunk

Height: 35' **Spread:** 28'

Condition: Poor

Location: East fence

Observation:

Heavy accumulation of deadwood and some dieback. Poor structure.

4 Blue gum compactus

Diameter: Est 85" at base Multi trunk

Height: 65' **Spread:** 40'

Condition: Fair

Location: East fence

Observation:

Interior deadwood. Insect damage. Weak branch attachments.

5 Black walnut (*Juglans hindsii*)

Diameter: 9.9,9.3" Multi trunk

Height: 25' **Spread:** 30'

Condition: Fair

Location: South side of lot

Observation:

Scaffold limbs exhibit weak attachments.

6 Black walnut

Diameter: 21"at base Multi trunk

Height: 22' **Spread:** 25'

Condition: Poor to Fair

Location: South side of lot

Observation:

Scaffold limbs exhibit weak attachments. Below average vigor. Adjacent walnut has four stems less than 11-inches.

7 Coast redwood (*Sequoia sempervirens*)

Diameter: 8.3"
Height: 25' **Spread:** 12'
Condition: Poor to Fair
Location: South side of lot
Observation:
Significant drought stress.

8 Coast redwood

Diameter: 11.8"
Height: 28' **Spread:** 12'
Condition: Poor
Location: South side of lot
Observation:
Significant drought stress.

9 Coast redwood

Diameter: 11"
Height: 30' **Spread:** 12'
Condition: Poor
Location: South side of lot
Observation:
Significant drought stress.

10 Coast redwood

Diameter: 9.9"
Height: 15' **Spread:** 12'
Condition: Poor
Location: Frontage
Observation:
Significant drought stress.

11 Coast redwood

Diameter: 12.3"
Height: 20' **Spread:** 10'
Condition: Poor
Location: Frontage
Observation:
Significant drought stress.

12 Coast redwood

Diameter: 9.3"
Height: 20' **Spread:** 10'
Condition: Poor
Location: Frontage
Observation:
Significant drought stress.

13 Coast redwood

Diameter: 9.6"
Height: 18' **Spread:** 10'
Condition: Poor
Location: Frontage

Observation:
Significant drought stress.

14 Coast live oak (*Quercus agrifolia*)

Diameter: 11.9" Low branching
Height: 15' **Spread:** 14'
Condition: Fair
Location: Frontage

Observation:
Cluster of three trees creating one canopy.

15 Coast live oak

Diameter: 13.9, 16.4" Low branching
Height: 25' **Spread:** 30'
Condition: Fair
Location: Frontage

Observation:
Cluster of three trees creating one canopy.

16 Coast live oak

Diameter: 16.3" Low branching
Height: 22' **Spread:** 20'
Condition: Fair
Location: Frontage

Observation:
Cluster of three trees creating one canopy.

17 Coast live oak

Diameter: 17.3"
Height: 35' **Spread:** 30'
Condition: Fair
Location: Frontage

Observation:
Bifurcation at 10'

18 Coast redwood

Diameter: 7.3"
Height: 12' **Spread:** 9'
Condition: Dead
Location: Frontage

Observation:
Top half dead.

19 Coast redwood

Diameter: 13.1"
Height: 18' **Spread:** 9'
Condition: Very Poor
Location: Frontage
Observation:
Dead.

20 Black walnut

Diameter: 18.6"
Height: 20' **Spread:** 20'
Condition: Poor to Fair
Location: Frontage
Observation:
Dieback observed. 16-inch decaying stump sprout is 3-feet to the south.

21 Coast redwood

Diameter: 14.1"
Height: 23' **Spread:** 10'
Condition: Poor to Fair
Location: Frontage
Observation:
Crowded by other trees. Drought stressed.

22 Coast redwood

Diameter: 13.2"
Height: 20' **Spread:** 12'
Condition: Poor to Fair
Location: Frontage
Observation:
Drought stressed.

23 Coast redwood

Diameter: 9.3"
Height: 20' **Spread:** 9'
Condition: Very Poor
Location: Frontage
Observation:
Mostly dead.

24 Coast redwood

Diameter: 7.6"
Height: 12' **Spread:** 9'
Condition: Very Poor
Location: Frontage
Observation:
Mostly dead.

25 Coast live oak

Diameter: 7.4"
Height: 12' **Spread:** 15'
Condition: Fair
Location: Frontage

Observation:
Leans away from adjacent oak.

26 Coast live oak

Diameter: 12.8"
Height: 20' **Spread:** 20'
Condition: Fair
Location: Frontage

Observation:
Narrow scaffold limb attachments. Under power lines.

27 Coast live oak

Diameter: 15.9" Low branching
Height: 20' **Spread:** 25'
Condition: Fair
Location: Frontage

Observation:
East lean. Low scaffold limb covered with old vine.

28 Coast live oak

Diameter: 8.3"
Height: 15' **Spread:** 8'
Condition: Fair
Location: Frontage

Observation:
Leans away from larger oak.

29 Coast live oak

Diameter: 9.6"
Height: 20' **Spread:** 16'
Condition: Fair
Location: Frontage

Observation:
Leans away from larger oak.

30 Coast live oak

Diameter: 7.6"
Height: 20' **Spread:** 12'
Condition: Fair
Location: Frontage

Observation:
Leans away from larger oak.

31 Coast live oak

Diameter: 19.9"
Height: 24' **Spread:** 25'
Condition: Fair
Location: Frontage

Observation:
East lean. Lower third of crown covered with vine.

32 Coast live oak

Diameter: 9.7"
Height: 18' **Spread:** 16'
Condition: Fair
Location: Frontage

Observation:
Leans to east. Under power lines.

33 Coast live oak

Diameter: 15.1"
Height: 20' **Spread:** 20'
Condition: Fair
Location: Frontage

Observation:
East lean. Vines on low limbs.

34 Coast live oak

Diameter: 11.9, 16.6" Multi trunk
Height: 25' **Spread:** 30'
Condition: Fair
Location: Frontage

Observation:
Narrow scaffold limb attachments. Under power lines

35 Coast live oak

Diameter: 25.4"
Height: 20' **Spread:** 40'
Condition: Fair
Location: Frontage

Observation:
Topped for line clearance.

36 Coast redwood

Diameter: 8, 7, 6" Multi trunk
Height: 18' **Spread:** 16'
Condition: Fair
Location: Frontage

Observation:
Under power lines.

37 Coast live oak

Diameter: 6.8"
Height: 18' **Spread:** 18'
Condition: Fair
Location: Frontage at fence
Observation:
East lean. Minor twig blight.

Discussion

An alternative plan for the streetscape will still adversely impact tree health for live oak 14, 15 and 16. Tree Protection Zones for the trees: tree 14=6-feet, tree 15=13-feet and tree 16=9-feet. Shifting the sidewalk 7-feet to the south would put the sidewalk 7-feet from trees 15 and 16 and 5-feet from tree 14. The proposed curb and gutter will be approximately 10-feet from trees 15 and 16 and outside the TPZ of 14. The bioswale would be 2-feet from trees 15 and 16 and 8-feet from tree 14. The joint trench will likely encroach into the TPZ of these three trees as well.

In this alternative design, there will be significant impacts on two sides of the trees anticipated. The degree of grading needed to achieve finished grades and the excavation/over excavation needed for sidewalk and curb and gutter forms will impact a significant portion of the root systems. Should this design be approved, crown raising will be required to achieve required sidewalk vertical clearances. It may be feasible to retain the trees with crown raising and cleaning but there would also need to be anticipated loss of more than 30 percent of the root systems. Therefore, arborist monitoring during grading and excavation would be needed to determine appropriate mitigation to preserve trees or if removal is recommended due to the degree of root loss.

TREE PRESERVATION GUIDELINES

Tree Preservation and Protection Plan

In providing recommendations for tree preservation, we recognize that injury to trees as a result of construction include mechanical injuries to trunks, roots and branches, and injury as a result of changes that occur in the growing environment.

To minimize these injuries, we recommend grading operations encroach no closer than six times the trunk diameter, (i.e. 30" diameter tree x 6=180" distance). At this distance, buttress/anchoring roots would be preserved and minimal injury to the functional root area would be anticipated. Should encroachment within the area become necessary, hand digging is *mandatory*.

Barricades

Prior to initiation of construction activity, temporary barricades should be installed around all trees in the construction area. Six-foot high, chain link fences are to be mounted on steel posts, driven 2 feet into the ground, at no more than 10-foot spacing. The fences shall enclose the entire area under the drip line of the trees or as close to the drip line area as practical. These barricades will be placed around individual trees and/or groups of trees as the existing environment dictates. The temporary barricades will serve to protect trunks, roots and branches from mechanical injuries, will inhibit stockpiling of construction materials or debris within the sensitive 'drip line' areas and will prevent soil compaction from increased vehicular/pedestrian traffic. No storage of material, topsoil, vehicles or equipment shall be permitted within the tree enclosure area.

Root Pruning (if necessary)

During and upon completion of any trenching/grading operation within a Tree Protection Zone, clean pruning cuts of exposed, damaged or severed roots greater than one inch diameter should be accomplished under the supervision of a qualified Arborist to minimize root deterioration beyond the soil line ***within twenty-four (24) hours***.

Pruning

Pruning of the foliar canopies to include removal of deadwood is recommended and should be initiated prior to construction operations. Such pruning will provide any necessary construction clearance, will lessen the likelihood or potential for limb breakage, reduce 'windsail' effect and provide an environment suitable for healthy and vigorous growth.

Irrigation

A supplemental irrigation program is recommended for the trees and should be accomplished at regular three to four-week intervals during the period of May 1st through October 31st. Irrigation is to be applied at or about the 'drip line' in an amount sufficient to supply approximately ten (10) gallons of water for each inch in trunk diameter.

Irrigation can be provided by means of a soil needle, 'soaker' or permeable hose. When using 'soaker' or permeable hoses, water is to be run at low pressure, avoiding runoff/puddling, allowing the needed moisture to penetrate the soil to feeder root depths.

Fertilization

A program of fertilization by means of deep root soil injection is recommended with applications in spring and summer for those trees to be impacted by construction. Fertilizer should include organic blends and components such as mycorrhizae and bio stimulants.

Such fertilization will serve to stimulate feeder root development, offset shock/stress as related to construction and/or environmental factors, encourage vigor, alleviate soil compaction and compensate for any encroachment of natural feeding root areas.

Inception of this fertilizing program is recommended prior to the initiation of construction activity.

Mulch

Mulching with wood chips (maximum depth 3") within tree environments (outer foliar perimeter) will lessen moisture evaporation from soil, protect and encourage adventitious roots and minimize possible soil compaction.

Inspection

Periodic inspections by the ***Site Arborist*** are recommended during construction activities, particularly as trees are impacted by trenching/grading operations.

Inspections at approximate four (4) week intervals would be sufficient to assess and monitor the effectiveness of the Tree Preservation Plan and to provide recommendations for any additional care or treatment.

A0702 Morgan Hill, L. P.
Crossings on Watsonville Road
15440 Monterey Road, Morgan Hill, CA

All written material appearing herein constitutes original and unpublished work of the Arborist and may not be duplicated, used or disclosed without written consent of the Arborist.

We thank you for this opportunity to be of assistance in your tree preservation concerns.

Should you have any questions, or if we may be of further assistance in these concerns, kindly contact our office at any time.

McCLENAHAN CONSULTING, LLC

A handwritten signature in black ink, appearing to read "John H. McClenahan". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

By: **John H. McClenahan**
ISA Board Certified Master Arborist, WE-1476B
member, American Society of Consulting Arborists

JHMc: cm

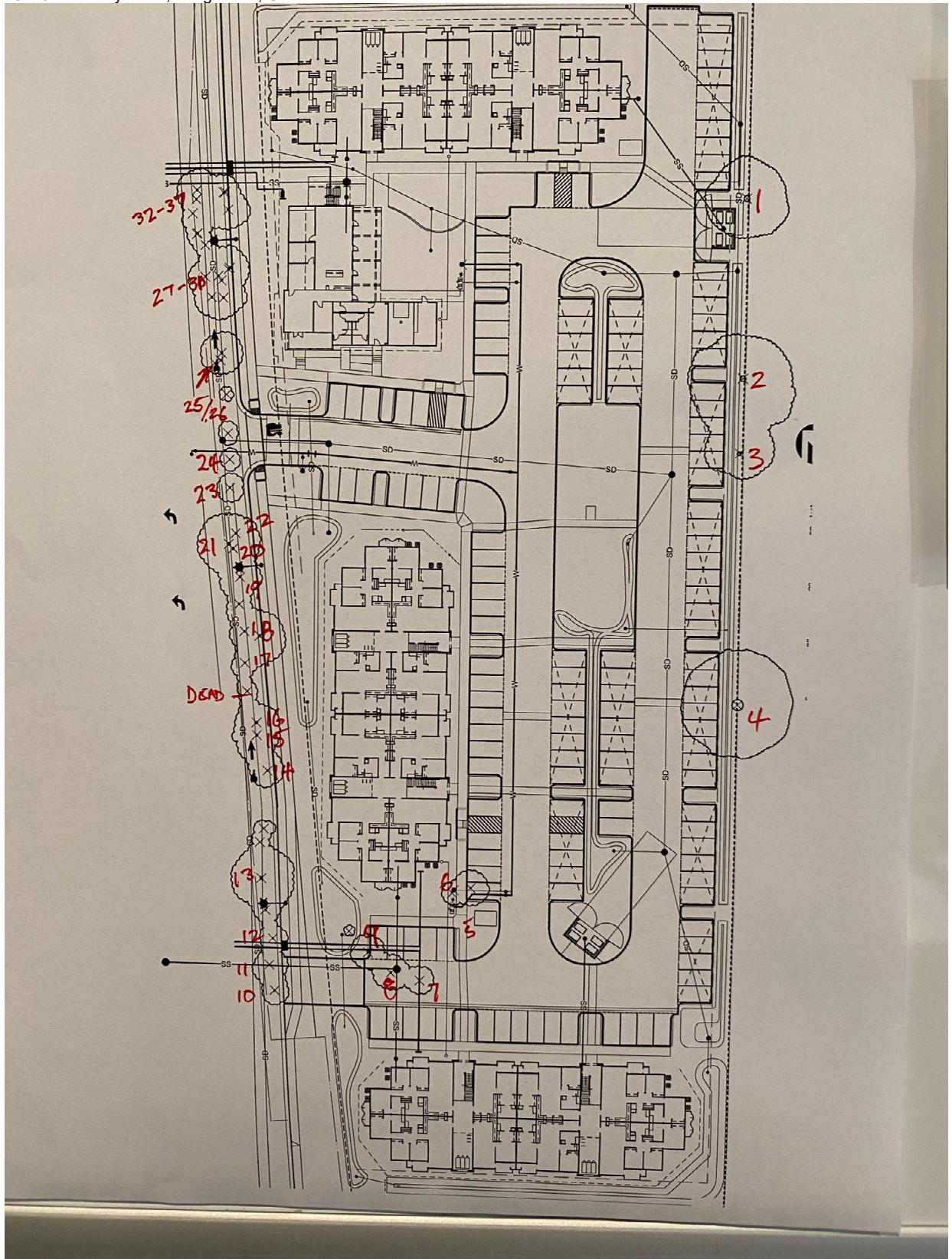


Figure 1: Proposed site plan

A0702 Morgan Hill, L. P.
Crossings on Watsonville Road
15440 Monterey Road, Morgan Hill, CA





A0702 Morgan Hill, L. P.
Crossings on Watsonville Road
15440 Monterey Road, Morgan Hill, CA









A0702 Morgan Hill, L. P.
Crossings on Watsonville Road
15440 Monterey Road, Morgan Hill, CA







A0702 Morgan Hill, L. P.
Crossings on Watsonville Road
15440 Monterey Road, Morgan Hill, CA



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ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like a medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risks is to eliminate all trees.

A handwritten signature in black ink, appearing to read "John H. McClenahan". The signature is fluid and cursive, written over a horizontal line.

Arborist: John H. McClenahan
Date: August 20, 2020
April 1, 2021 Revised

Appendix E

Geotechnical Study

**GEOTECHNICAL STUDY
PROPOSED ROYAL OAK VILLAGE**

MORGAN HILL, CALIFORNIA

**SEPTEMBER 1, 2020
PROJECT PA20.1020.00**

SUBMITTED TO:

**UHC H4, LLC
2000 E. Fourth Street, #205
Santa Ana, CA 92705**

PREPARED BY:

**Geo-Logic Associates
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Morgan Hill, California 95037
(408) 778-2818**



**GEOTECHNICAL STUDY
ROYAL OAK VILLAGE
15480 WATSONVILLE ROAD
MORGAN HILL, CALIFORNIA**

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Appendix A - Keys to Soil Classification and Drill Hole Logs

Keys to Soil Classification (Fine and Coarse Grained Soils)
Log of Exploratory Drill Holes (DH-1 through DH-8)

Appendix B – Laboratory Test Data

Figure B-1	Atterberg Limits Test Results
Figures B-2 to B-4	Particle Size Analysis Test Reports
Figure B-5	R-value Test Results
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1 INTRODUCTION

This report presents the results of our geotechnical study for an approximately 3.7-acre portion of a larger 7.5-acre property located at 15480 Watsonville Road in Morgan Hill, California. The Assessor Parcel Number of the 7.5-acre property is 779-04-075. The 3.7-acre portion is the western portion of the larger property and is referenced as the “site,” or “project site” in this report. The approximate location of the project site is shown on the Vicinity Map included on the Site Plan, Figure 1. Figure 1 also shows a layout of the proposed development and the approximate locations of our drill holes and bulk samples.

This report presents our findings, conclusions, and geotechnical recommendations for design and construction of the project. These findings, conclusions, and recommendations are based on information collected and reviewed during this study. The conclusions and recommendations in this report should not be extrapolated to other areas or used for other projects without our review.

1.1 Project Description

Based on information provided by our client and our review of the Conceptual Design drawing prepared by KTG Architecture + Planning, dated July 17, 2020, we understand the project will include three rectangular-shaped apartment buildings and one 3,000-square-foot clubhouse and leasing building. The apartment buildings will have three stories and will range between approximately 10,300 and 11,500 square feet in footprint area, with a total of 73 dwelling units. The leasing building will be a one-story building. All buildings will have wood-framed construction with post-tensioned slab foundations. The remaining areas of the site will be used for at-grade paved parking and open space/park area. Associated improvements will include underground utilities, exterior flatwork, and landscaping.

Site grading will involve cuts and fills across the site, with an estimated 4 feet of fill on the northeast portion. No retaining walls are currently planned.

The above project descriptions are based on information provided to us. If the actual project differs from those described above, Geo-Logic Associates (GLA) should be contacted to review our findings, conclusions, and recommendations, and to present any necessary modifications to address the different project development schemes.

1.2 Information Provided

For this study, we were provided with the following.

- Drawings titled “Conceptual Design” showing locations of the planned buildings, prepared by KTG Architecture + Planning, dated July 17, 2020.
- Proposed project information.

1.3 Purpose and Scope of Services

The purpose of this geotechnical study was to explore subsurface conditions at the project site and to provide geotechnical recommendations for design and construction of the proposed improvements. The following work was performed.

1. Performed a site reconnaissance to observe site surface conditions and to mark locations of our exploration.
2. Reviewed available geologic and geotechnical information pertinent to the site.
3. Notified Underground Service Alert (USA) for underground utility clearance and coordinated our drilling with you and the property owner representative.
4. Explored subsurface conditions by means of eight exploratory drill holes to depths between approximately 19.5 and 45 feet below ground surface.
5. Collected two bulk samples of the near-surface soils.
7. Performed laboratory tests on selected soil samples from the drill holes and on the bulk samples to measure pertinent engineering properties of the samples.
8. Performed engineering analysis on the field and laboratory data.
9. Prepared this geotechnical study report.

2 SITE INVESTIGATION

This study consists of a site reconnaissance and a subsurface exploration program. The site reconnaissance was to observe existing site surface conditions. The subsurface exploration program was to explore earth conditions at the project site. The observed surface and subsurface site conditions are discussed in Section 3 of this report.

2.1 Subsurface Exploration

Our subsurface exploration program involved drilling of eight exploratory drill holes (DH-1 through DH-8) on June 3, 2020. The exploratory drill holes were located in the field by referencing to existing site features and pacing; therefore, their locations are approximate. The approximate drill hole locations are shown on Figure 1.

The eight exploratory drill holes were advanced using a truck-mounted Mobile B53 drilling rig equipped with 8-inch diameter hollow-stem augers. The depth of exploration ranged between approximately 19.5 and 45 feet below ground surface (bgs). In the field, our personnel visually classified the materials encountered and maintained a log of each drill hole.

Soil samples were obtained using a 2-inch outside diameter (O.D.; 1.4-inch inside diameter, I.D.) split-barrel sampler (also called a Standard Penetration Test sampler) and a 3-inch O.D. (2½-inch I.D.) split-barrel sampler. Soil samples were obtained by driving the sampler up to 18 inches into the earth material using a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler was recorded for each 6-inch penetration interval. The number of blows required to drive the sampler the last 12 inches, or the penetration interval indicated on the log when harder material was encountered, is shown as blows per foot (blow count) on the drill hole logs.

In the field, our personnel visually classified the materials encountered and maintained a log of each drill hole. Visual classification of soils encountered in our drill holes was made in general accordance with the Unified Soil Classification System (ASTM D 2487 and D 2488). The results of our laboratory tests were used to refine our field classifications. Two Keys to Soil Classification, one for fine grained soils and one for coarse grained soils, are included in Appendix A, together with the logs of the drill holes.

2.2 Laboratory Testing

Geotechnical laboratory testing was conducted on selected soil samples collected from our drill holes. These tests included moisture content, dry density, Atterberg limits, sieve analysis, and percentage passing a No. 200 sieve. An R-value test was performed on one of the bulk samples and a laboratory compaction test was performed on the other bulk sample. The laboratory test results are presented on the drill hole logs at the corresponding sample depths. Graphic presentations of the results of the Atterberg limits, sieve analysis, R-value, and compaction tests are presented on separate sheets in Appendix B.

In addition to geotechnical testing, two selected soil samples were sent to CERCO Analytical for corrosivity analysis. A brief report from CERCO Analytical with the corrosivity test results is included in Appendix B.

3 FINDINGS

3.1 Surface Conditions

The approximately 3.7-acre project site is located on the southeast side of Watsonville Road, approximately 560 feet southwest of Monterey Road. Topography across the site is generally flat-lying, with a gentle down gradient from the southwest to the northeast.

The project site is currently occupied by several structures, mostly buildings associated with the former mushroom farm operation. The front (northwest) portion of the site was used for parking and much of the areas adjacent and between existing buildings are covered by asphalt and Portland cement concrete pavements. A vacant field occupies the western portion of the site, with a pond in the southwestern portion. Vegetation across the site consists of lawns, bushes, and isolated trees mostly along the perimeter of the site.

3.2 Subsurface Conditions

Subsurface soils at the site consist generally of alluvial fan and stream deposits composed of sandy clay, gravelly sand, and clayey sand, according to the Geologic Map of the Gilroy 7.5 Minute Quadrangle, California, prepared by United States Geological Survey, E. Helley and J.K. Nakata, 2007.

In drill hole DH-1, the subsurface soils consist of very stiff to hard clay with sand to a depth of about 12 feet below ground surface (bgs), dense clayey sand to hard sandy clay to a depth of about 16 feet bgs, and very dense clayey sand with gravel to clayey gravel with sand to the maximum explored depth of about 20 feet bgs.

In drill hole DH-2, the subsurface soils consist of hard clay with sand to a depth of about 7 feet bgs and dense clayey sand with gravel to the maximum explored depth of about 19.5 feet bgs.

In drill hole DH-3, the subsurface soils consist of hard clay with sand to a depth of about 7 feet bgs, very dense clayey sand to a depth of about 12 feet bgs, dense clayey gravel with sand to a depth of about 16 feet bgs, and very dense clayey sand with gravel to clayey gravel with sand to the maximum explored depth of about 20 feet bgs.

In drill hole DH-4, the subsurface soils consist of very stiff clay with sand to a depth of about 7 feet bgs, dense clayey sand with gravel to a depth of about 12 feet bgs, very stiff clay to a depth of about 16.5 feet bgs, and very dense clayey sand with gravel to the maximum explored depth of about 20 feet bgs.

In drill hole DH-5, the subsurface soils consist of very stiff to hard clay with sand to a depth of about 7 feet bgs, dense clayey sand to a depth of about 12 feet bgs, very stiff to hard clay to a depth of about 16 feet bgs, and very dense clayey sand to the maximum explored depth of about 19.5 feet bgs.

In drill hole DH-6, the subsurface soils consist of very stiff clay with sand to a depth of about 16 feet bgs and very stiff sandy clay to dense clayey sand to the maximum explored depth of about 20 feet bgs.

In drill hole DH-7, the subsurface soils consist of stiff to hard clay with sand to a depth of about 7 feet bgs, very dense clayey sand to a depth of about 12 feet bgs, hard clay with sand to a depth of about 16 feet bgs, very dense clayey sand with gravel and clayey gravel with sand to a depth of about 42 feet bgs, and hard clay to the maximum explored depth of about 45 feet bgs.

In drill hole DH-8, the subsurface soils consist of very stiff clay with sand to a depth of about 6 feet bgs, hard sandy lean clay to a depth of about 12 feet bgs, and very dense clayey sand with gravel and clayey gravel with sand to the maximum explored depth of about 20 feet bgs.

An Atterberg limits test performed on a sample of the surficial clay indicates the clay has an intermediate plasticity which generally corresponds to a high expansion potential.

3.3 Groundwater

Groundwater was encountered in DH-7 at a depth of approximately 24 feet bgs at the time of drilling. Groundwater was not encountered in the other borings because of their relatively shallower depth.

It should be noted that fluctuations in the groundwater level may occur due to seasonal variations in rainfall and temperature, pumping from wells, regional groundwater recharge program, irrigation, or other factors that were not evident at the time of our study.

3.4 Variations in Subsurface Conditions

Our interpretations of soil and groundwater conditions, as described in this report, are based on information obtained from drill holes and laboratory testing for this study. Our conclusions and recommendations are based on these interpretations. Please realize the site has undergone different phases of development and grading. Therefore, it is likely that undisclosed variations in subsurface conditions exist at the site, particularly old foundations, abandoned utilities and localized areas of deep and loose fill.

Careful observations should be made during construction to verify our interpretations. Should variations from our interpretations be found, we should be notified to evaluate whether any revisions should be made to our recommendations.

4 SEISMIC CONSIDERATIONS

4.1 Earthquake Faulting

The Greater San Francisco Bay area is seismically dominated by the active San Andreas Fault system, the tectonic boundary between the northward moving Pacific Plate (west of the fault) and the North American Plate (east of the fault). This movement is distributed across a complex system of generally strike-slip, right-lateral, and subparallel faults.

Potential sources of significant earthquake ground shaking at the site include several active and potentially active faults in the Greater San Francisco Bay area, as well as faults farther afield. The faults were first compiled on the State's Fault Activity Map (Jennings, 1974; Jennings and Bryant, 2010). This map has now been integrated into the US Geological Survey's Quaternary Fault and Fold Database and made available as a .kmz "drape" over Google Earth terrain files.

The distance to a seismic source (fault) is defined by the Next Generation Attenuation (NGA) relationships as the closest distance to the seismogenic zone, be it in the subsurface or at the surface; distances may therefore differ from distances measured on the ground surface. The distances shown on the table below are for reference only, as they are horizontal distances from the site to the surface trace of the seismic source, and not necessarily the closest distance to a (dipping) seismogenic zone. These distances were measured using the US Geological Survey's Quaternary Fault and Fold Database, with major faults listed in approximate order of distance from the site; not all sources are listed in the summary table below.

Fault Name	Approximate Distance	Orientation from Site
Calaveras	7 km	Northeast
Sargent	10 km	Southwest
San Andreas	15 km	Southwest
Zayante-Vergeles	20 km	Southwest
Hayward (southeast extension)	16 km	Northeast
San Gregorio	55 km	Southwest

4.2 Ground Accelerations

According to the 2019 California Building Code (CBC) and American Society of Civil Engineers (ASCE) Standard 7-10, the spectral response acceleration at any period can be taken as the lesser of the spectral response accelerations from the probabilistic and deterministic ground motion approaches. The U.S. Seismic Design Maps tool available at the Structural Engineers Association of California (SEAOC) website was used for this purpose to retrieve seismic design parameter values for design of buildings at the subject site. Two levels of ground motions are considered in the Application: Risk-targeted Maximum Considered Earthquake (MCE_R) and Design Earthquake (DE), with both probabilistic and deterministic values defined in terms of maximum-direction rather than geometric-mean, horizontal spectral acceleration (S_a). The

probabilistic MCE_R spectral response accelerations are represented by a 5 percent damped acceleration response spectrum having a 1 percent probability of collapse within a 50-year period and in the direction of the maximum horizontal response. The probabilistic Design Earthquake (DE) S_a value at any period can be taken as two-thirds of the MCE_R S_a value at the same period.

Using the Seismic Design Maps application at the SEAOC website, a site Class C, and the latitude and longitude of the site (latitude 37.10593496° N, longitude -121.63637386° W), the calculated geometric mean peak ground acceleration adjusted for site class effects (PGA_M) for the MCE_G (Geometric Mean Maximum Considered Earthquake) is 0.758g.

4.3 Seismicity

The Working Group on California Earthquake Probabilities' (WGCEP) estimates of the probabilities of major earthquakes are now in their sixth iteration, with the greatest changes in approach being the inclusion of multifold rupture scenarios, in the progressive consideration of more potential seismic sources, the possibility of earthquakes on unrecognized faults, and the inclusion of the notion of fault "readiness". Current estimates (WGCEP, 2014) for the San Francisco region indicate a 72% probability of a large (magnitude 6.7 or greater) earthquake in the San Francisco Bay area as a whole over the 30-year period beginning in 2014; this overall probability is greater than the previous (WGCEP, 2007) probability of 63%, due mainly to the inclusion of multi-fault rupture scenarios. The estimate for the Calaveras fault alone is 14.4% (revised up from the 7% presented by WGCEP, 2007); for the (northern) San Andreas fault alone, 27.4% (revised upward from the WGCEP (2007) value of 21%); and for the Hayward fault, 45.3% (revised upward from the WGCEP (2007) value of 31%).

4.4 Liquefaction

Soil liquefaction is a phenomenon in which saturated granular soils, and certain fine-grained soils, lose their strength due to the build-up of excess pore water pressure during cyclic loading, such as that induced by earthquakes. Soils most susceptible to liquefaction are saturated, clean, loose, fine-grained sands and non-plastic silts. Certain gravels, plastic silts, and clays are also susceptible to liquefaction. The primary factors affecting soil liquefaction include:

- 1) intensity and duration of seismic shaking;
- 2) soil type;
- 3) relative density of granular soils;
- 4) moisture content and plasticity of fine-grained soils;
- 5) overburden pressure; and
- 6) depth to ground water.

Our review of the Santa Clara County Liquefaction Hazard Zone map for the project site (County of Santa Clara, October 26, 2012) indicates the site is not in a liquefaction hazard zone. In our opinion, the potential for liquefaction of the subsurface granular soils encountered in our drill holes is low because of their dense to very dense relative density.

4.5 Seismic Design Parameters

The following site coefficients and seismic ground motion parameters are developed using the U.S. Seismic Design Maps Tool at the SEAOC website, the latitude and longitude of the site, and a Site Class C based on regional USGS information of the site location and subsurface materials encountered in our subsurface exploration.

Parameter	ASCE 7-16 Values
Site Class	C
Site Coefficient Fa	1.2
Site Coefficient Fv	1.4
S _s	1.512g
S ₁	0.6g
S _{MS}	1.815g
S _{M1}	0.84g
S _{DS}	1.21g
S _{D1}	0.56g

5 CONCLUSIONS AND DISCUSSION

Based on our geotechnical evaluation, it is our opinion the project site may be developed as discussed in this report, provided our geotechnical recommendations are incorporated in the design and construction of the project. Our opinions, conclusions, and recommendations are based on our understanding of the proposed development, data review, properties of soils encountered in subsurface exploration, laboratory test results, and engineering analyses. Geotechnical considerations for this project are discussed below.

5.1 Ground Rupture

The project site is not located in an Alquist-Priolo Earthquake Fault Zone. Because no active or potentially active faults are known to cross the site, the risk of fault rupture through the project site is low.

5.2 Seismic Shaking

The project site is located in an area of high seismicity. Based on general knowledge of the site seismicity, it should be anticipated that, during their useful life, the proposed structures will be subject to at least one severe earthquake (magnitude 7 to 8+) that could cause considerable ground shaking at the site. It is also anticipated that the site will periodically experience small to moderate magnitude earthquakes.

5.3 Expansion Potential of Surficial Soils

An Atterberg limits test performed on a sample of the near-surface clay indicates the clay has an intermediate to high plasticity which generally corresponds to a high expansion potential. Our review of the regional soil information at the United States Department of Agriculture National Resources Conservation Service website also indicates intermediate to high plasticity clays in the upper soil layers.

Expansive soils are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, perched groundwater, drought or other factors. Changes in soil moisture may result in unacceptable settlement or heave of structures, concrete slabs and pavements supported on these materials. Depending on the extent and location below finished subgrade, these soils could have a detrimental effect on the proposed construction.

To reduce its potential impact on the proposed structures, the upper 30 inches of soil below design grade in the proposed building and concrete slab-on-grade areas should be moisture conditioned with controlled compaction. The building foundations and concrete slabs-on-grade should be constructed on a layer of “non-expansive” fill as recommended in this report.

5.4 Existing Improvements

Existing improvements at the project site include miscellaneous structures, sheds, underground utilities, isolated trees, and possibly septic tanks, leach fields, and water wells. Prior to construction, the existing structures and improvements should be removed and the resulting excavations should be accurately documented and properly backfilled with engineered fill under the observation and testing of the project Geotechnical Engineer. Any existing water wells should be abandoned per the requirements of Santa Clara Valley Water District.

6 GEOTECHNICAL RECOMMENDATIONS

6.1 Earthwork

6.1.1 Site Preparation, Clearing and Stripping

Prior to grading, construction areas should be cleared of all structures and foundations, asphalt and concrete pavements, obstructions, deleterious materials, abandoned or designated utility lines, designated trees, and other below grade obstacles encountered during the clearing operation. Tree stumps should be grubbed. Roots with diameter of about 1 inch or larger or length of about 3 feet or longer should be removed. Any existing septic tanks and leach fields should be removed. Any existing wells should be destroyed per requirements of Santa Clara Valley Water District.

Depressions, excavations, and holes that extend below the planned finish grades should be cleaned and backfilled with engineered fill compacted to the requirements given under the section of "Engineered Fill Placement and Compaction." Demolition excavations should be accurately documented and the backfill operations should be performed under the observation of the project Geotechnical Engineer.

After clearing, the site should be stripped to sufficient depth to remove vegetation and organic-laden topsoil. Stripped material may be stockpiled for use in landscape areas if approved by the project landscape architect; otherwise, it should be removed from the site. For planning purposes, an estimated stripping depth of 3 to 6 inches may be assumed in vegetated areas. The actual stripping depth should be determined in the field by the Geotechnical Engineer at the time of construction.

6.1.2 Excavation, Temporary Construction Slopes, and Shoring

Excavations for this project are expected to include demolition excavations, over-excavation of loose and disturbed soils, cuts to achieve design grades, trenching to construct new underground utilities, and foundation excavations. Excavations and temporary construction slopes should be constructed in accordance with the current CAL-OSHA safety standards and local jurisdiction. The stability and safety of excavations, braced or unbraced, is the responsibility of the contractor. Care should be exercised when excavating in the proximity of existing structures and improvements.

Contractors are responsible for the design, installation, maintenance, and removal of temporary shoring and bracing systems. The presence of existing improvements must be incorporated in the design of the shoring and bracing systems.

Trench excavations adjacent to existing or proposed foundations should be above an imaginary plane having an inclination of 1½:1 (horizontal to vertical) extending down from the bottom edge of the foundations.

6.1.3 Backfilling of Existing Pond

The existing pond in the southwestern portion of the site should be backfilled with compacted engineered fill per recommendations in this report. Prior to backfilling, loose, wet, unsuitable soil in the pond bottom should be removed. The pond bottom should be scarified, water conditioned, and compacted as recommended in the "Subgrade Preparation" section below. Engineered fill should be placed and compacted per the "Engineered Fill Placement and Compaction" sections below.

6.1.4 Subgrade Preparation

After site clearing and stripping, the soil subgrades should be prepared as recommended below.

Building and concrete slab-on-grade areas: Soils in building and concrete slab-on-grade areas should be over-excavated to at least 22 inches below design pad grade, but not less than 12 inches below existing grade. The soil surfaces exposed by over-excavation should be scarified to a depth of 8 inches, moisture-conditioned, and compacted in accordance with the recommendations given in the "Engineered Fill Placement and Compaction" section below. In structure areas to receive foundations or concrete slabs-on-grade, subgrade preparation should extend a minimum of 5 feet horizontally beyond the limits of the proposed structures and any adjoining flatwork, unless it is restricted by existing improvements.

Pavement areas: Soils in pavement areas should be over-excavated to at least 12 inches below existing ground surface. In areas with 12 inches of cuts or deeper to achieve design subgrade level, this over-excavation may be waived. Soil surfaces exposed by over-excavation or cuts should be scarified to a depth of 8 inches, moisture-conditioned, and compacted in accordance with the recommendations given in the "Engineered Fill Placement and Compaction" section below. Subgrade preparation should extend a minimum of 3 feet beyond the back of the curbs or pavements.

Prepared soil subgrades should be non-yielding when proof-rolled by a fully loaded water truck or similar weight equipment. Moisture conditioning of subgrade soils should consist of adding water if the soils are too dry and allowing the soils to dry if the soils are too wet. After the subgrades are properly prepared, the areas may be raised to design grades by placement of engineered fill.

Wet soils should be anticipated during and after rainy months. Where encountered, unstable, wet or soft soil will require processing before compaction can be achieved. If construction schedule does not allow for air-drying, other means such as lime or cement treatment of the soil or excavation and replacement with suitable material may be considered. Geotextile fabrics may also be used to help stabilize the subgrade. The method to be used should be determined at the time of construction based on the actual site conditions. We recommend

obtaining unit prices for subgrade stabilization during the construction bid process.

6.1.5 "Non-expansive" Fill

The post-tensioned foundation slabs and exterior concrete slabs-on-grade should be constructed on a 12-inch minimum thick layer of "non-expansive" fill meeting the material requirements presented below under "Materials for Fill." The "non-expansive" fill should extend a minimum of 5 feet horizontally beyond the limits of the proposed structures and at least 3 feet beyond exterior flatwork.

6.1.6 Materials for Fill

In general, on-site soils with an organic content of less than 3 percent by weight, free of deleterious materials or hazardous substances, and meeting the gradation requirements below may be used as engineered fill except where special material (such as capillary break material) is recommended.

Engineered fill material should not contain rocks or lumps larger than 3 inches in greatest dimension, should not contain more than 15 percent of the material larger than 1½ inches, and should contain at least 20 percent passing the No. 200 sieve. In addition to these requirements, import fill including "non-expansive" fill should have a low expansion potential as indicated by Plasticity Index of 15 or less (per ASTM D4318), or Expansion Index of less than 20 (per ASTM D4829).

All fills should be approved by the project Geotechnical Engineer prior to delivery to the site. At least 5 working days prior to importing to the site, a representative sample of the proposed import fill should be delivered to our laboratory for evaluation. Import fills should be tested and approved for residential use per the California Department of Toxic Substances Control (DTSC) guidelines.

6.1.7 Engineered Fill Placement and Compaction

Engineered fill should be placed in horizontal lifts each not exceeding 8 inches in thickness, moisture conditioned to the required moisture content, and mechanically compacted to the recommendations below. Relative compaction or compaction is defined as the in-place dry density of the compacted soil divided by the laboratory maximum dry density as determined by ASTM Test Method D1557, latest edition, expressed as a percentage. Moisture conditioning of soils should consist of adding water to the soils if they are too dry and allowing the soils to dry if they are too wet.

Engineered fills consisting of expansive soils should be compacted to between 87 and 92 percent relative compaction at moisture content between 3 and 6 percent above the laboratory optimum value. Engineered fills consisting of soils of low expansion potential, including "non-expansive" fill, should be compacted to a minimum of 90 percent relative

compaction with moisture content between about 1 and 3 percent above the laboratory optimum value. In pavement areas, the upper 8 inches of subgrade soil should be compacted to between 90 and 95 percent relative compaction. Aggregate base in vehicle pavement areas should be compacted at slightly above the optimum moisture content to a minimum of 95 percent relative compaction.

6.1.8 Trench Backfill

Backfilling of utility trenches in public right-of-way areas should comply with the City of Morgan Hill standard specifications and details.

Backfilling of utility trenches in private areas may consist of bedding material extending from the bottom of the trench to about 1 foot above the top of pipe, and on-site or imported backfill material above the bedding to the proposed finish subgrade. Bedding may consist of free-draining sand (less than 5% passing a No. 200 sieve), lean concrete, or sand cement slurry. Sand, if used as bedding, should be compacted to at least 90 percent relative compaction. Backfill material may consist of on-site or imported soil, and should be compacted per recommendations in the “Engineered Fill Placement and Compaction” section above.

The backfill material should be placed in lifts each not exceeding 6 inches in uncompacted thickness. Thicker lifts may be used if the contractor can demonstrate that the recommended level of compaction can be achieved with the compaction equipment and procedures used. Compaction should be performed by mechanical means only. Water jetting or flooding to attain compaction of backfill should not be permitted.

6.1.9 Considerations for Soil Moisture and Seepage Control

Subgrade soil and engineered fill should be compacted at moisture content meeting our recommendations. Consideration should be given to reducing the potential for water infiltration from the exterior to under the buildings through utility lines crossing the building perimeter. In utility lines crossing beneath perimeter foundations, permeable backfill should be terminated at least 1 foot outside of the perimeter foundation. Impermeable material, such as concrete or clay soil, should be used for the entire trench depth to act as a seepage cutoff.

Where concrete slabs or pavements abut against landscaped areas, the base rock layer and subgrade soil should be protected against saturation. Water if allowed to seep into the subgrade soil or pavement section could reduce the service life of the improvements. Methods that may be considered to reduce infiltration of water include: 1) subdrains installed behind curbs and slabs in landscape areas; 2) vertical cut-offs, such as a deepened curb section, or equivalent, extending at least 2 inches into the subgrade soil; and 3) use of a drip or controlled irrigation system for landscape watering.

6.1.10 Wet Weather Construction

If site grading and construction is to be performed during the winter rainy months, the owner and contractors should be fully aware of the potential impact of wet weather. Rainstorms can cause delay to construction and damage to previously completed work by saturating compacted pads or subgrades, or flooding excavations.

Earthwork during rainy months will require extra effort and caution by the contractors. The contractors are responsible for protecting their work to avoid damage by rainwater. Standing pools of water should be pumped out immediately. Construction during wet weather conditions should be addressed in the project construction bid documents and/or specifications. We recommend the contractors submit a wet weather construction plan outlining procedures they will employ to protect their work and to minimize damage to their work by rainstorms.

6.2 Foundations

6.2.1 General

We understand the preferred foundation system for the proposed buildings is post-tensioned slab. In the following sections, we have provided geotechnical design parameters for post-tensioned slab foundations.

The Geotechnical Engineer should review the foundation plans and details before construction and observe the foundation excavations during construction to determine if the foundation excavations extend into suitable bearing material. Prior to placement of concrete, foundation excavations should be cleaned of loose soils. If unsuitable soils are encountered in the foundation excavations, the soils should be removed as recommended by our Geotechnical Engineer and replaced with approved material such as compacted engineered fill or lean concrete.

Foundation excavations should not be allowed to dry before placement of concrete. If visible cracks appear in the foundation excavations, the excavations should be thoroughly moisture conditioned beginning at least 2 days prior to placement of concrete to close all cracks. It is also important that the base of the foundation excavations not be allowed to become excessively wet, resulting in soft soils. Water should not be allowed to pond in the bottom of the excavations. Areas that become water damaged should be over-excavated to a firm base. The foundation excavations should be monitored by our representative for compliance with appropriate moisture control and to confirm the adequacy of the bearing materials.

To maintain the desired support, the bottom of foundations adjacent to utility trenches or buried structures should be below an imaginary plane having an inclination of 1.5 horizontal to 1 vertical, extending upward from the bottom edge of the adjacent utility trenches or structures. If the foundations are closer than the recommended distance, the project

Geotechnical Engineer should be consulted for recommendations.

6.2.2 Post-tensioned Slabs

The proposed residential structures may be constructed on post-tensioned (PT) slab foundations founded on a minimum 12-inch thick layer of “non-expansive” fill over properly moisture-conditioned and compacted on-site soil. Preparation of soil subgrade, moisture conditioning, and compaction of soil and engineered fill should be as recommended in the “Earthwork” section of this report.

The following parameters may be used with the 2004 PTI “Design of Post-Tensioned Slabs-on-Ground, Third Edition” manual for design of the PT slabs.

Parameters	PT Slabs Constructed on 12 Inches of “Non-expansive” Fill
e_m (center lift)	8 feet
e_m (edge lift)	4 feet
y_m (center lift)	1.2 inch
y_m (edge lift)	2.0 inch

Allowable soil bearing pressure = 2,000 psf for dead plus live loads, with a one-third increase when including transient loads, such as wind or seismic

A deepened edge, minimum 6 inches wide, should be constructed along the perimeter of the PT slabs. The deepened edge should extend to at least 18 inches below the bottom of the PT slabs. The deepened edge can help reduce moisture infiltration to under the PT slabs.

The PT slabs may be constructed on 1 to 2 inches of sand over a 15-mil visqueen vapor barrier over compacted subgrade soil. Sand has been used for protection of the vapor barrier during construction and to allow dissipation of concrete mix water during curing. The use of sand, or equivalent material, should be determined by the project structural engineer or architect. A lower water-cement ratio (0.45 to 0.50) will help reduce the permeability of the concrete and, hence, vapor transmission through the slabs.

Resistance to lateral loads may be developed from friction between the bottom of the PT slabs and the supporting subgrade, with an ultimate friction coefficient of 0.25 between the foundations and supporting subgrade.

Settlements are expected to be primarily elastic. Post construction total and differential settlements of the PT slabs are anticipated to be less than 1 and ½ inch, respectively.

6.3 Exterior Concrete Slabs-on-Grade

Exterior concrete slabs-on-grade for this project will be limited to exterior flatwork. The building ground floor will consist of the PT slab foundations.

The exterior concrete slabs-on-grade should be constructed on a minimum 12-inch thick layer of “non-expansive” fill over property moisture conditioned and compacted native soil, as recommended in the “Earthwork” section of this report. Soil subgrades MUST be maintained in a moist condition prior to placement of concrete for the concrete slabs. Design of reinforcement, joint spacing, etc. is the responsibility of the design engineer.

Exterior concrete slabs-on-grade should be cast free from adjacent foundations or other non-heaving edge restraints. This may be accomplished by using a strip of 1/2-inch asphalt-impregnated felt divider material between the slab edges and the adjacent structure. Frequent construction or control joints should be provided in all concrete slabs where cracking is objectionable. Continuous reinforcing or dowels at the construction and control joints will also aid in reducing uneven slab movements.

6.4 Vehicle Flexible Pavements

Vehicle flexible pavements for this project will include paved parking and driveway areas, subject mostly to automobiles and light trucks as well as occasional heavy trucks such as delivery and garbage trucks. An R-value of 21 was measured at an exudation pressure of 300 psi on a bulk sample of soil collected from the site. The design R-value for each traffic index was adjusted based on the laboratory measured expansion pressure. The calculated pavement sections using the Caltrans pavement design procedures are presented below.

DESIGN TRAFFIC INDEX	HOT MIX ASPHALT (inches)	CLASS 2 AGGREGATE BASE (inches)	TOTAL (inches)
5.0	3.0	8.0	11.0
5.5	3.0	10.0	13.0
6.0	3.5	10.5	14.0
6.5	4.0	11.0	15.0

The pavement sections for each area should be determined based on vehicle type, vehicle loads, and frequency. In general, a traffic index of 5.0 may be considered for automobile and light truck areas. Where heavier trucks are expected, a traffic index of 6.0 or higher should be considered.

Pavement sections should be constructed on soil subgrades that have been prepared as outlined in the “Earthwork” section of this report. The upper 8 inches of soil subgrade in pavement areas should be compacted to between 90 and 95 percent relative compaction. The

full section of aggregate base and aggregate subbase should be compacted to at least 95 percent relative compaction. Evaluation of relative compaction should be based on ASTM D1557, latest edition. The Class 2 Aggregate Base material should conform to Section 26 of the Caltrans Standard Specifications and the Class 2 Aggregate Subbase material should conform to Section 25 of the Caltrans Standard Specifications.

6.5 Surface Drainage

Engineering design of grading and drainage at the site is the responsibility of the project Civil Engineer. We suggest the following for consideration by the project Civil Engineer, as appropriate.

Sufficient surface drainage should be provided to direct water away from buildings, foundations, concrete slabs-on-grade and pavements, and towards suitable collection and discharge facilities. Ponding of surface water should be avoided by establishing positive drainage away from all improvements.

7 PLAN REVIEW, EARTHWORK AND FOUNDATION OBSERVATION

Post-report geotechnical services by Geo-Logic Associates (GLA), typically consisting of pre-construction design consultations and reviews and construction observation and testing services, are necessary for GLA to confirm the recommendations contained in this report. This report is based on limited sampling and investigation, and by those constraints may not have discovered local anomalies or other varying conditions that may exist on the project site. Therefore, this report is only preliminary until GLA can confirm that actual conditions in the ground conform to those anticipated in the report. Accordingly, as an integral part of this report, GLA recommends post-report, construction related geotechnical services to assist the project team during design and construction of the project. GLA requires that it perform these services if it is to remain as the project Geotechnical Engineer-of-record.

During design, GLA can provide consultation and supplemental recommendations to assist the project team in design and value engineering, especially if the project design has been modified after completion of our report. It is impossible for us to anticipate every design scenario and use of construction materials during preparation of our report. Therefore, retaining GLA to provide post-report consultation will help address design changes, answer questions and evaluate alternatives proposed by the project designers and contractors.

Prior to issuing project plans and specifications for construction bidding purposes, GLA should review the grading, drainage and foundation plans and the project specifications to determine if the intent of our recommendations has been incorporated in these documents. We have found that such a review process will help reduce the likelihood of misinterpretation of our recommendations which may cause construction delay and additional cost.

Construction phase services can include, among other things, the observation and testing during site clearing, stripping, excavation, mass grading, subgrade preparation, fill placement and compaction, backfill compaction, foundation construction and pavement construction activities.

Geo-Logic Associates would be pleased to provide cost proposals for follow-up geotechnical services. Post-report geotechnical services may include additional field and laboratory services.

8 LIMITATIONS

In preparing the findings and professional opinions presented in this report, Geo-Logic Associates (GLA) has endeavored to follow generally accepted principles and practices of the engineering geologic and geotechnical engineering professions in the area and at the time our services were performed. No warranty, express or implied, is provided.

The conclusions and recommendations contained in this report are based, in part, on information that has been provided to us. In the event that the general development concept or general location and type of structures are modified, our conclusions and recommendations shall not be considered valid unless we are retained to review such changes and to make any necessary additions or changes to our recommendations. To remain as the project Geotechnical Engineer-of-record, GLA must be retained to provide geotechnical services as discussed under the Post-report Geotechnical Services section of this report.

Subsurface exploration is necessarily confined to selected locations and conditions may, and often do, vary between these locations. Should conditions different from those described in this report be encountered during project development, GLA should be consulted to review the conditions and determine whether our recommendations are still valid. Additional exploration, testing, and analysis may be required for such evaluation.

Should persons concerned with this project observe geotechnical features or conditions at the site or surrounding areas which are different from those described in this report, those observations should be reported immediately to GLA for evaluation.

It is important that the information in this report be made known to the design professionals involved with the project, that our recommendations be incorporated into project drawings and documents, and that the recommendations be carried out during construction by the contractor and subcontractors. It is not the responsibility of GLA to notify the design professionals and the project contractors and subcontractors.

The findings, conclusions, and recommendations in this report are applicable only to the specific project development on this specific site. These data should not be used for other projects, sites, or purposes unless they are reviewed by GLA or a qualified geotechnical professional.

Report prepared by,

Geo-Logic Associates

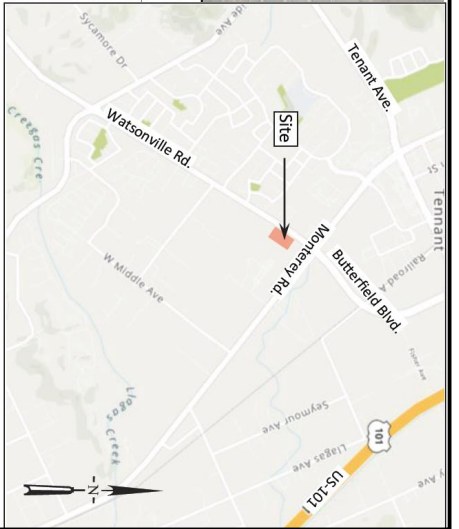
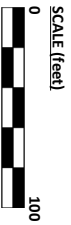
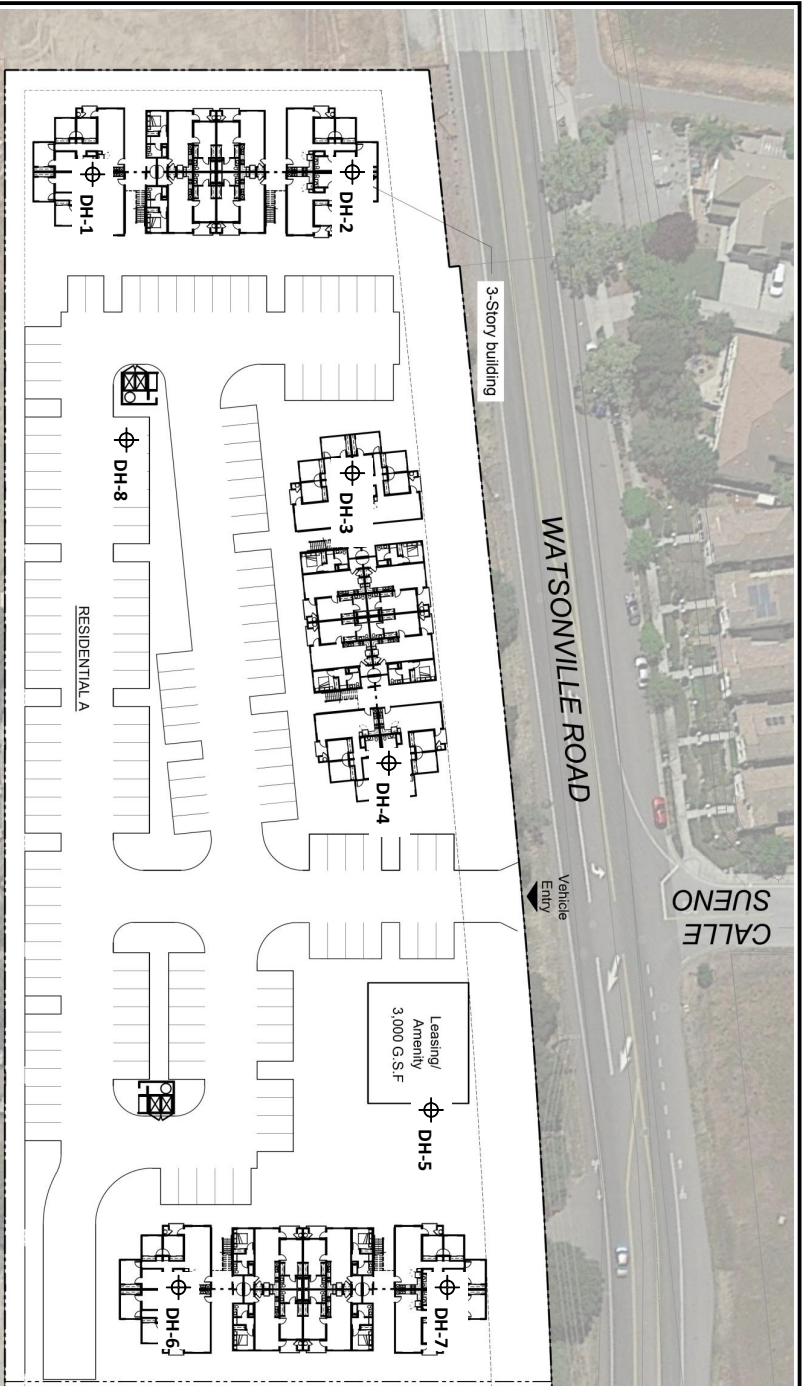


Chalerm (Beeson) Liang
GE 2031



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Copies: Mark Irving, UHC (3 hard copies & 1 electronic copy)



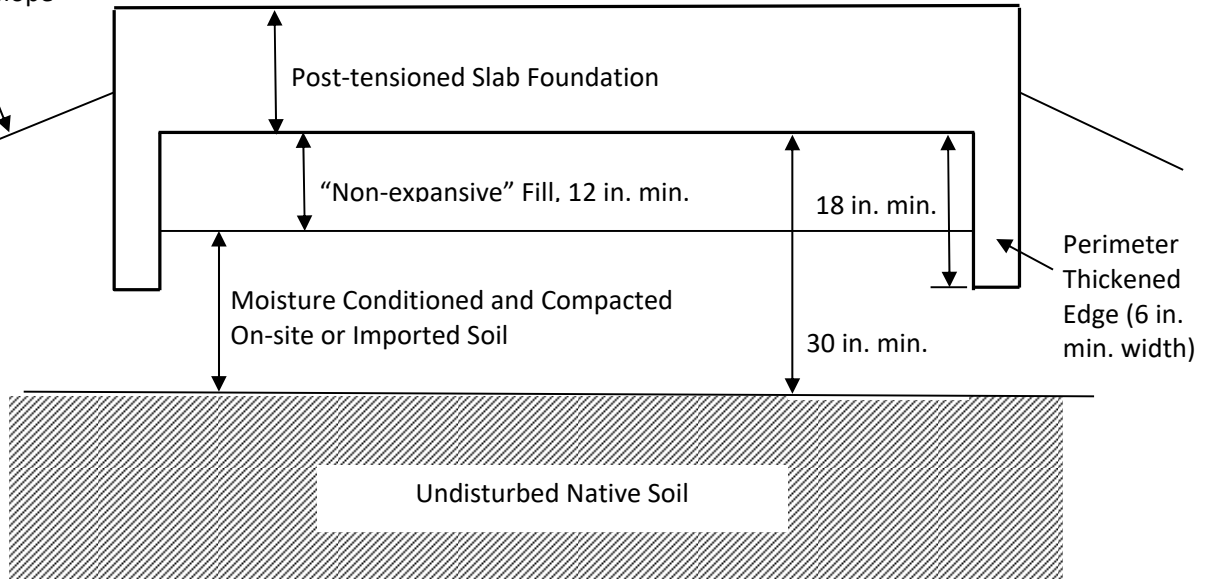
VICINITY MAP – no scale

Legend
 Ⓧ DH-8 Number & approximate location of exploratory drill hole

Base
 Conceptual Design, UHC Morgan Hill, CA, prepared by ktyg
 Architecture + Planning, dated March 18, 2020.

	16055 Caputo Drive, Suite D Morgan Hill, California 95037 Phone (408) 778-2818 Fax (408) 779-6879	Drafted By: Date: Checked By: Revision:	SITE PLAN UHC Watsonville Road Morgan Hill, California	FIGURE 1 PROJECT PA20.1020

Exterior Finish
Grade, Slope
to Drain



SUBGRADE PREPARATION AND THICKENED EDGE FOR POST-TENSIONED SLAB FOUNDATIONS

NOTE:

1. Refer to project geotechnical report for details recommendations.

SCHEMATIC ONLY – NOT TO SCALE

Geo-Logic
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**POST-TENSIONED SLAB
FOUNDATIONS
15480 WATSONVILLE ROAD
MORGAN HILL, CALIFORNIA**

FIGURE

2

**PROJECT
PA20.1020**

Drafted By:

Date: September 2020

Checked By:

Revision:

APPENDIX A

KEYS TO SOIL CLASSIFICATION

AND

DRILL HOLE LOGS

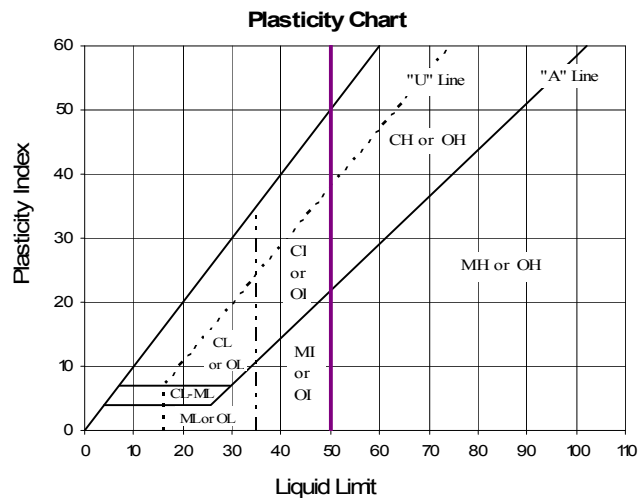
KEY TO SOIL CLASSIFICATION - FINE GRAINED SOILS
(50% OR MORE IS SMALLER THAN NO. 200 SIEVE SIZE)
(modified from ASTM D2487 to include fine grained soils with intermediate plasticity)

MAJOR DIVISIONS			GROUP SYMBOLS	GROUP NAMES
SILTS AND CLAYS (Liquid Limit less than 35) Low Plasticity	Inorganic	PI < 4 or plots below "A" line	ML	Silt, Silt with Sand or Gravel, Sandy or Gravelly Silt, Sandy or Gravelly Silt with Sand or Gravel
	Inorganic	PI > 7 or plots on or above "A" line	CL	Lean Clay, Lean Clay with Sand or Gravel, Sandy or Gravelly Lean Clay, Sandy or Gravelly Lean Clay with Sand or Gravel
	Inorganic	PI between 4 and 7	CL-ML	Silty Clay, Silty Clay with Sand or Gravel, Sandy or Gravelly Silty Clay, Sandy or Gravelly Silty Clay with Sand or Gravel
	Organic	See footnote 3	OL	Organic Silt (below "A" Line) or Organic Clay (on or above "A" Line) ^(1,2)
SILTS AND CLAYS (35 ≤ Liquid Limit < 50) Intermediate Plasticity	Inorganic	PI < 4 or plots below "A" line	MI	Silt, Silt with Sand or Gravel, Sandy or Gravelly Silt, Sandy or Gravelly Silt with Sand or Gravel
	Inorganic	PI > 7 or plots on or above "A" line	CI	Clay, Clay with Sand or Gravel, Sandy or Gravelly Clay, Sandy or Gravelly Clay with Sand or Gravel
	Organic	See footnote 3	OI	Organic Silt (below "A" Line) or Organic Clay (on or above "A" Line) ^(1,2)
SILTS AND CLAYS (Liquid Limit 50 or greater) High Plasticity	Inorganic	PI plots below "A" line	MH	Elastic Silt, Elastic Silt with Sand or Gravel, Sandy or Gravelly Elastic Silt, Sandy or Gravelly Elastic Silt with Sand or Gravel
	Inorganic	PI plots on or above "A" line	CH	Fat Clay, Fat Clay with Sand or Gravel, Sandy or Gravelly Fat Clay, Sandy or Gravelly Fat Clay with Sand or Gravel
	Organic	See note 3 below	OH	Organic Silt (below "A" Line) or Organic Clay (on or above "A" Line) ^(1,2)

1. If soil contains 15% to 29% plus No. 200 material, include "with sand" or "with gravel" to group name, whichever is predominant.
2. If soil contains ≥30% plus No. 200 material, include "sandy" or "gravelly" to group name, whichever is predominant. If soil contains ≥15% of sand or gravel sized material, add "with sand" or "with gravel" to group name.
3. Ratio of liquid limit of oven dried sample to liquid limit of not dried sample is less than 0.75.

CONSISTENCY	UNCONFINED SHEAR STRENGTH (KSF)	STANDARD PENETRATION (BLOWS/FOOT)
VERY SOFT	< 0.25	< 2
SOFT	0.25 – 0.5	2 – 4
FIRM	0.5 – 1.0	5 – 8
STIFF	1.0 – 2.0	9 – 15
VERY STIFF	2.0 – 4.0	16 – 30
HARD	> 4.0	> 30

MOISTURE	CRITERIA
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp, but no visible water
Wet	Visible free water, usually soil is below the water table



KEY TO SOIL CLASSIFICATION – COARSE GRAINED SOILS
(MORE THAN 50% IS LARGER THAN NO. 200 SIEVE SIZE)
(modified from ASTM D2487 to include fines with intermediate plasticity)

MAJOR DIVISIONS		GROUP SYMBOLS	GROUP NAMES ¹
GRAVELS (more than 50% of coarse fraction is larger than No. 4 sieve size)	Gravels with less than 5% fines	$Cu \geq 4$ and $1 \leq Cc \leq 3$	GW Well Graded Gravel, Well Graded Gravel with Sand
		$Cu < 4$ and/or $1 > Cc > 3$	GP Poorly Graded Gravel, Poorly Graded Gravel with Sand
	Gravels with 5% to 12% fines	ML, MI or MH fines	GW-GM Well Graded Gravel with Silt, Well Graded Gravel with Silt and Sand
			GP-GM Poorly Graded Gravel with Silt, Poorly Graded Gravel with Silt and Sand
		CL, CI or CH fines	GW-GC Well Graded Gravel with Clay, Well Graded Gravel with Clay and Sand
			GP-GC Poorly Graded Gravel with Clay, Poorly Graded Gravel with Clay and Sand
	Gravels with more than 12% fines	ML, MI or MH fines	GM Silty Gravel, Silty Gravel with Sand
		CL, CI or CH fines	GC Clayey Gravel, Clayey Gravel with Sand
		CL-ML fines	GC-GM Silty Clayey Gravel; Silty, Clayey Gravel with Sand
	SANDS (50% or more of coarse fraction is smaller than No. 4 sieve size)	Sands with less than 5% fines	$Cu \geq 6$ and $1 \leq Cc \leq 3$
$Cu < 6$ and/or $1 > Cc > 3$			SP Poorly Graded Sand, Poorly Graded Sand with Gravel
Sands with 5% to 12% fines		ML, MI or MH fines	SW-SM Well Graded Sand with Silt, Well Graded Sand with Silt and Gravel
			SP-SM Poorly Graded Sand with Silt, Poorly Graded Sand with Silt and Gravel
		CL, CI or CH fines	SW-SC Well Graded Sand with Clay, Well Graded Sand with Clay and Gravel
			SP-SC Poorly Graded Sand with Clay, Poorly Graded Sand with Clay and Gravel
Sands with more than 12% fines		ML, MI or MH fines	SM Silty Sand, Silty Sand with Gravel
		CL, CI or CH fines	SC Clayey Sand, Clayey Sand with Gravel
		CL-ML fines	SC-SM Silty, Clayey Sand; Silty, Clayey Sand with Gravel

US STANDARD SIEVES

3 Inch ¾ Inch No. 4 No. 10 No. 40 No. 200

	COARSE	FINE	COARSE	MEDIUM	FINE	
COBBLES & BOULDERS	GRAVELS		SANDS			SILTS AND CLAYS

RELATIVE DENSITY (SANDS AND GRAVELS)	STANDARD PENETRATION (BLOWS/FOOT)
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	50+

1. Add "with sand" to group name if material contains 15% or greater of sand-sized particle. Add "with gravel" to group name if material contains 15% or greater of gravel-sized particle.

MOISTURE	CRITERIA
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp, but no visible water
Wet	Visible free water, usually soil is below the water table

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 1						
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00												
DRILL RIG: Mobile B-53R		LOGGED BY: FS												
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---												
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---												
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff to hard		Cl	1	S										
			2	D	17	4.5			18		102			
			3											
			4	S										
			5	D	53	3.5				18		104		
			6											
			7											
			8											
			9	S										
			10	D	36	3.5								
			11											
CLAYEY SAND to SANDY CLAY: Dark yellowish brown (10YR 3/4), moist, dense to very dense sand to hard clay		SC/Cl	12											
			13											
			14	S										
	15	D	69											
CLAYEY SAND with GRAVEL to CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand, fine to coarse gravel		SC/GC	16											
			17											
			18											
BOTTOM OF HOLE = 20 Feet No groundwater encountered			19	S										
			20	D	79									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 2						
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00												
DRILL RIG: Mobile B-53R		LOGGED BY: FS												
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---												
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---												
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard		Cl	1	D	50/6"	3.5		49	20	32	99			
			2											
			3											
			4	S										
			5	D	65	4.5								
			6											
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse sand less gravel, very dense		SC	7											
			8											
			9	S										
			10	D	52					11		114		
			11											
			12											
			13											
			14	S										
			15	D	75									
			16											
			17											
			18											
BOTTOM OF HOLE = 19.5 Feet No groundwater encountered			19	S										
			20	D	50/6"									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 3						
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00												
DRILL RIG: Mobile B-53R		LOGGED BY: FS												
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---												
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---												
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard		Cl	1	S										
			2	D	40	4.5	83		18					
			3											
			4	S										
			5	D	76	4.25								
			6											
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very dense		SC	7											
			8											
			9	S										
			10	D	82									
CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse gravel, with fine to coarse sand		GC	11											
			12											
			13											
			14	S										
CLAYEY SAND with GRAVEL to CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand, fine to coarse gravel		SC/GC	15	D	54									
			16											
BOTTOM OF HOLE = 20 Feet No groundwater encountered			17											
			18											
			19	S										
			20	D	94									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 4				
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00										
DRILL RIG: Mobile B-53R		LOGGED BY: FS										
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---										
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---										
DESCRIPTION OF EARTH MATERIALS	SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard	CI	1	S									
		2	D	45	4.25							
		3										
		4	S									
		5	D	49				13		105		
		6										
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse sand; fine to coarse gravel	SC	7										
		8										
		9	S									
		10	D	53				11		111		
		11										
CLAY: Dark yellowish brown (10YR 3/4), moist, very stiff	CI	12										
		13										
		14	S									
		15	D	40								
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand; fine to coarse gravel	SC	16										
		17										
		18										
BOTTOM OF HOLE = 19.8 Feet No groundwater encountered		19	S	50/6"								
		20	D	50/3"								

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 5						
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00												
DRILL RIG: Mobile B-53R		LOGGED BY: FS												
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---												
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---												
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff		Cl	1	S										
			2	D	17	4.0			19		99			
			3											
			4	S										
			5	D	67	2.0				20		100		
			6											
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse sand		SC	7											
			8											
			9	S										
			10	D	64									
CLAY: Dark yellowish brown (10YR 3/4), moist, very stiff to hard		Cl	12											
			13											
			14	S										
			15	D	41									
			16											
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand		SC	17											
			18											
			19	S										
BOTTOM OF HOLE = 19.5 Feet No groundwater encountered			20	D	50/5"									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 6				
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00								
DRILL RIG: Mobile B-53R				LOGGED BY: FS								
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---								
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---										
DESCRIPTION OF EARTH MATERIALS	SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
Concrete section: approx. 5"												
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff	Cl	1	S									
		2	D	13	1.5			22		95		
		3										
		4	S									
		5	D	52	3							
		6										
		7										
		8										
		9	S									
		10	D	68				18		103		
		11										
		12										
		13										
		14	S									
		15	D	44	2.5							
SANDY CLAY to CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very stiff clay/dense sand; fine to coarse sand	Cl/SC	16										
		17										
		18										
BOTTOM OF HOLE = 20 Feet No groundwater encountered		19	S									
		20	D	54								

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 7					
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00											
DRILL RIG: Mobile B-53R		LOGGED BY: FS											
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---											
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: approx. 24 ft Final: ---											
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
Baseroack section: approx. 1"													
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, stiff very stiff to hard	Cl	1	S										
		2	D	17	3.0				17		96		
		3											
		4	S										
		5	D	85	3.25				18		104		
		6											
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand	SC	7											
		8											
		9	S										
		10	D	90					18		106		
		11											
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard; with fine to coarse sand	Cl	12											
		13											
		14	S										
		15	D	66		81			21		98		
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand; with fine to coarse gravel	SC	16											
		17											
		18											
		19	S										
		20	D	77									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 7				
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00										
DRILL RIG: Mobile B-56		LOGGED BY: FS										
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---										
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: approx. 24 ft Final: ---										
DESCRIPTION OF EARTH MATERIALS	SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAYEY SAND with GRAVEL (continued)	SC	21										
CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, dense to very dense; fine to coarse gravel; with fine to coarse sand	GC	22										
		23										
		24	S	53		14		13				
		25	I									
		26	I									
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, dense to very dense; fine to coarse sand; with fine to coarse gravel very dense	SC	27										
		28										
		29	S	53								
		30	I									
		31	I									
		32										
		33										
		34	S	63		15		14				
		35	I									
		36										
37												
38												
39	S		62									
40	I											

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE							DH- 7				
PROJECT NAME: UHC Watsonville Road, Morgan Hill					PROJECT NUMBER: PA20.1020.00								
DRILL RIG: Mobile B-56					LOGGED BY: FS								
HOLE DIAMETER: 8-inch hollow stem auger					HOLE ELEVATION: ---								
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample				GROUND WATER DEPTH: Initial: approx. 24 ft Final: ---									
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAYEY SAND with GRAVEL (continued)		SC	41										
-----			42										
CLAY: Dark yellowish brown (10YR 3/4), moist, hard		CL	43										
			44	S	61								
			45	I									
BOTTOM OF HOLE = 45 Feet			46										
			47										
			48										
			49										
			50										
			51										
			52										
			53										
			54										
			55										
			56										
			57										
			58										
			59										
			60										
GEO-LOGIC ASSOCIATES										PAGE: 3 of 3			

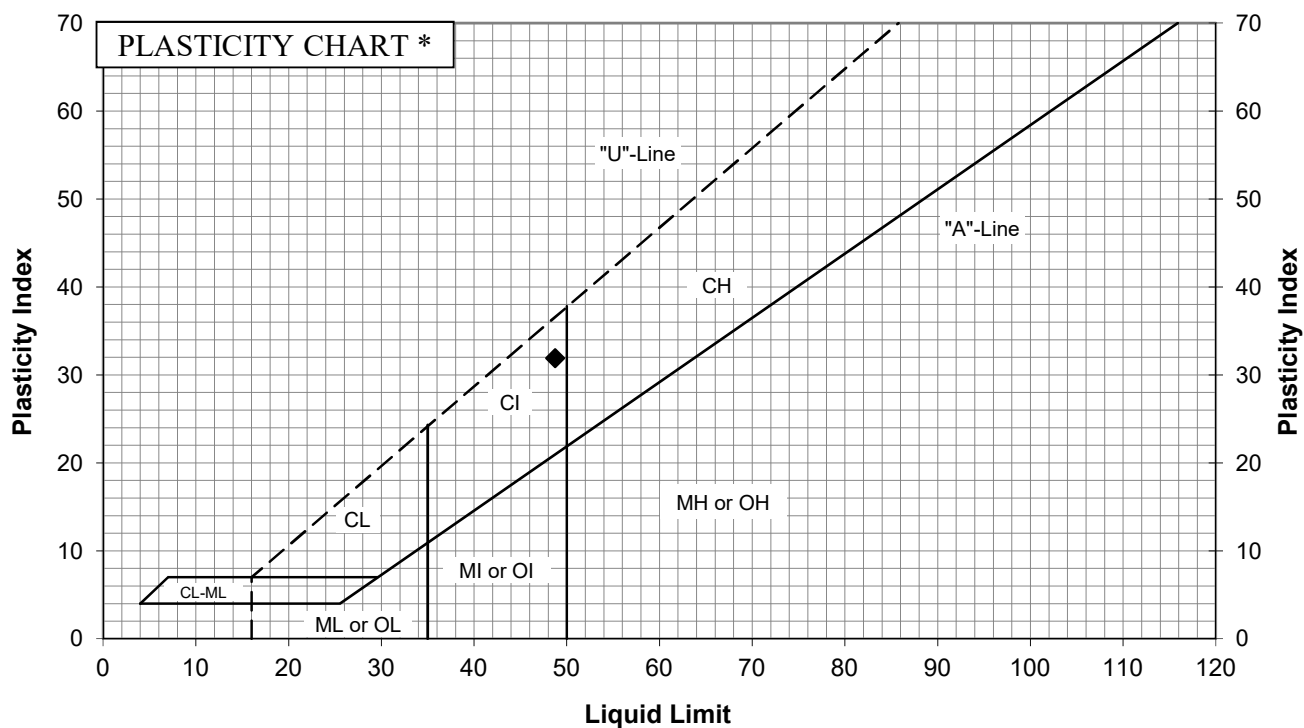
DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 8						
PROJECT NAME: UHC Watsonville Road, Morgan Hill		PROJECT NUMBER: PA20.1020.00												
DRILL RIG: Mobile B-53R		LOGGED BY: FS												
HOLE DIAMETER: 8-inch hollow stem auger		HOLE ELEVATION: ---												
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH: Initial: --- Final: ---												
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff		Cl	1	S										
			2	D	39	4.5			14		21			
			3											
			4	S										
			5	D	62	4.5								
SANDY CLAY: Dark yellowish brown (10YR 3/4), moist, hard		Cl	6											
			7											
			8											
			9	S										
			10	D	72					16		107		
CLAYEY SAND with GRAVEL to CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand, fine to coarse gravel		SC/GC	12											
			13											
			14	S										
			15	D	86									
			16											
CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse gravel, with fine to coarse sand		GC	17											
			18											
BOTTOM OF HOLE = 20 Feet No groundwater encountered			19	S										
			20	D	74									

APPENDIX B

LABORATORY TEST RESULTS

ATTERBERG LIMITS TEST RESULTS

PROJECT NAME	UHC Watsonville Road, Morgan Hill			PROJECT No.	PA20.1020.00
DATE OF TEST	6/9/2020				
KEY SYMBOL	◆				
DRILL HOLE No.	2				
DEPTH (ft)	1				
NATURAL WATER CONTENT (%)	20				
% Retained No. 40 SIEVE (Est.)	---	---			
% PASSING No. 200 SIEVE	---	---			
LIQUID LIMIT	49				
PLASTIC LIMIT	17				
PLASTICITY INDEX	32				
CLASSIFICATION SYMBOL	CI				



* Based on the Unified Soil Classification System modified to incorporate the "intermediate" classifications CI, MI, and OI for soils with liquid limits between 35 and 50. In the unmodified Unified Soil Classification System, such soils would be classified as CL, ML and OL, respectively.

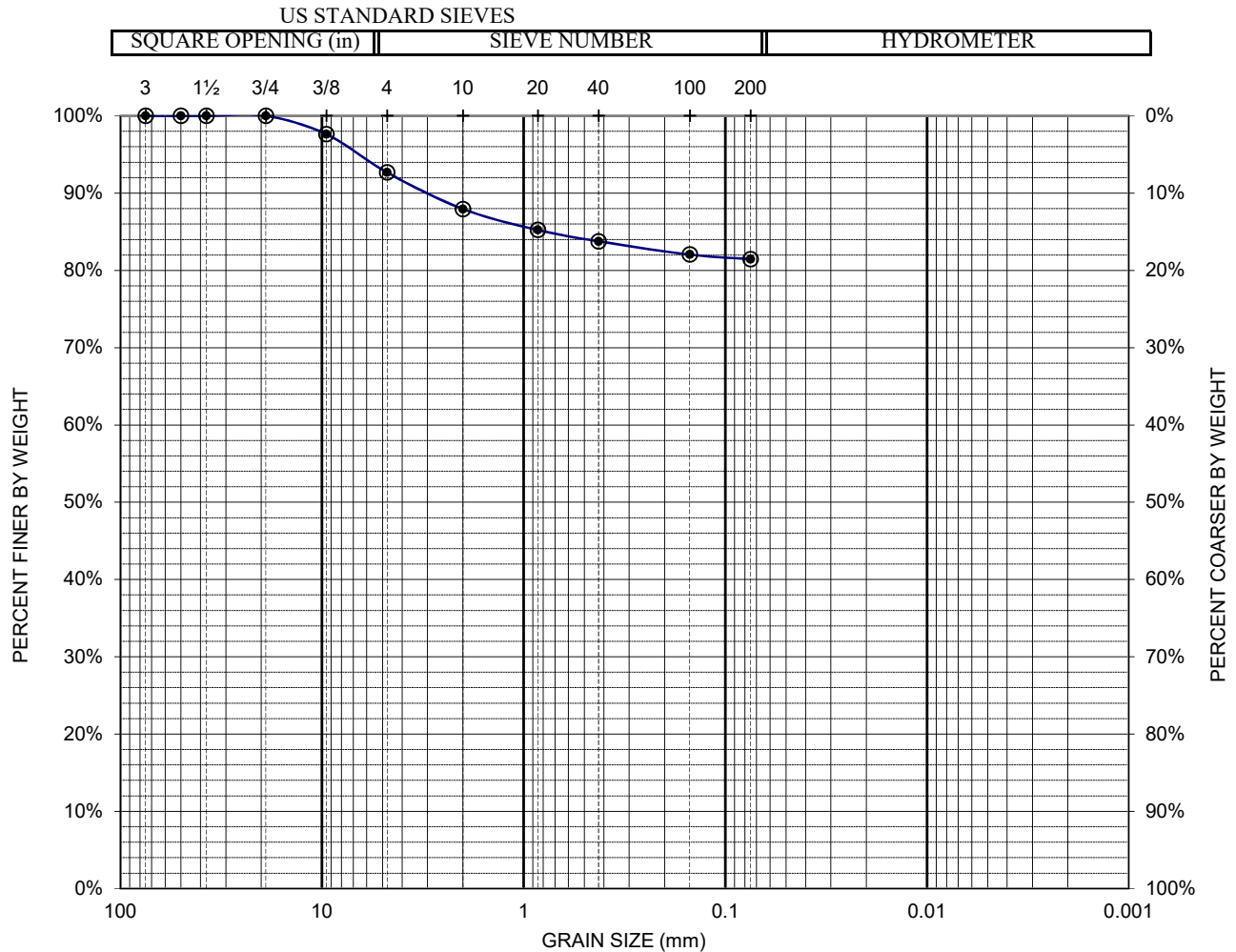
GEO-LOGIC ASSOCIATES

Figure

B-1

GRAIN SIZE TEST RESULTS

PROJECT NAME UHC Watsonville Road, Morgan Hill				PROJECT No.	PA20.1020.00
DRILL HOLE No.	7	DEPTH (ft)	14.5	SAMPLE	0
DATE OF TEST				6/10/2020	
SOURCE/QUARRY: ---					
DESCRIPTION OF SOIL: Clay with Sand					

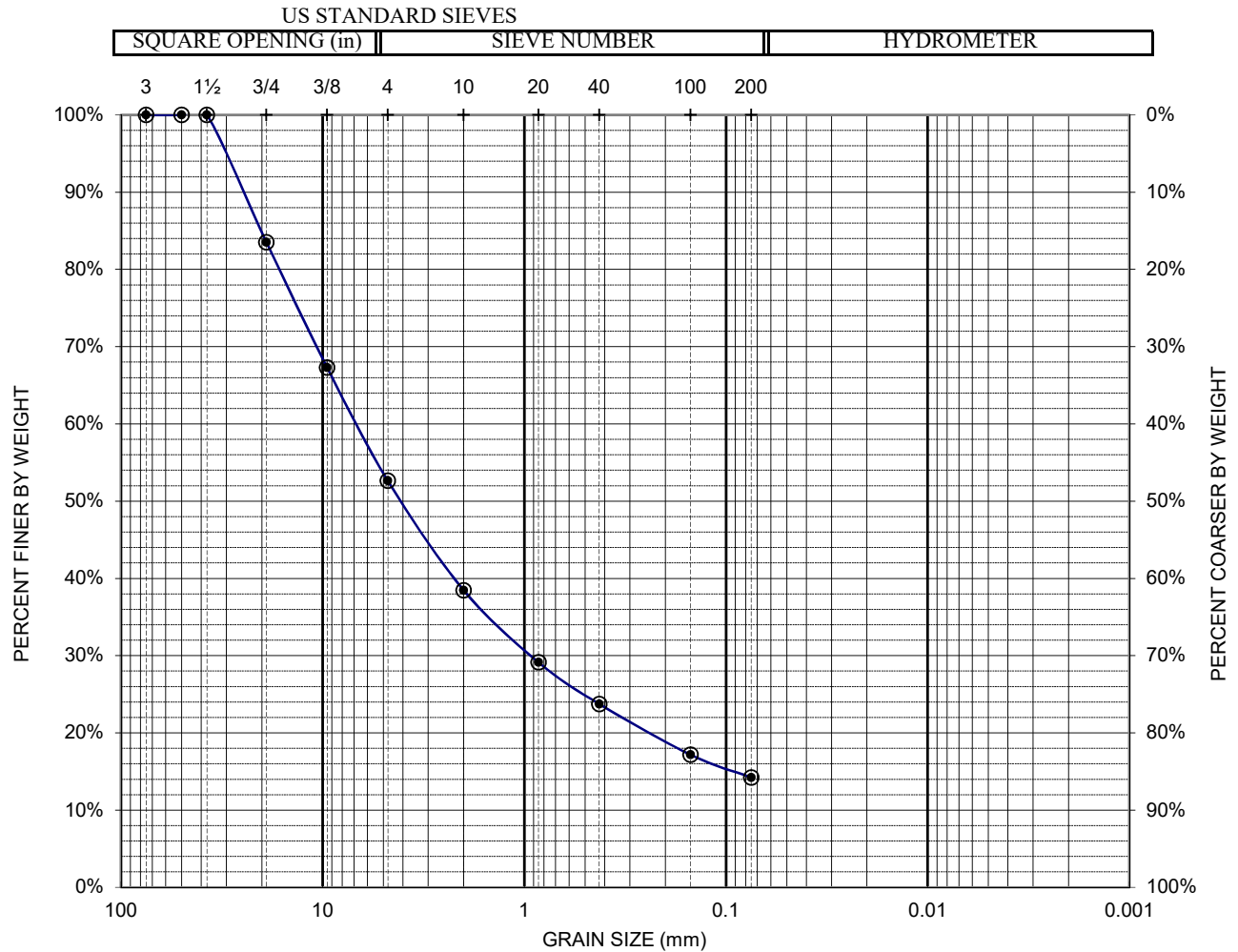


	COARSE	FINE	COARSE	MEDIUM	FINE	
COBBLES	GRAVEL		SAND			SILT & CLAY
	7.3%		11.2%			81.5%

REMARKS:

GRAIN SIZE TEST RESULTS

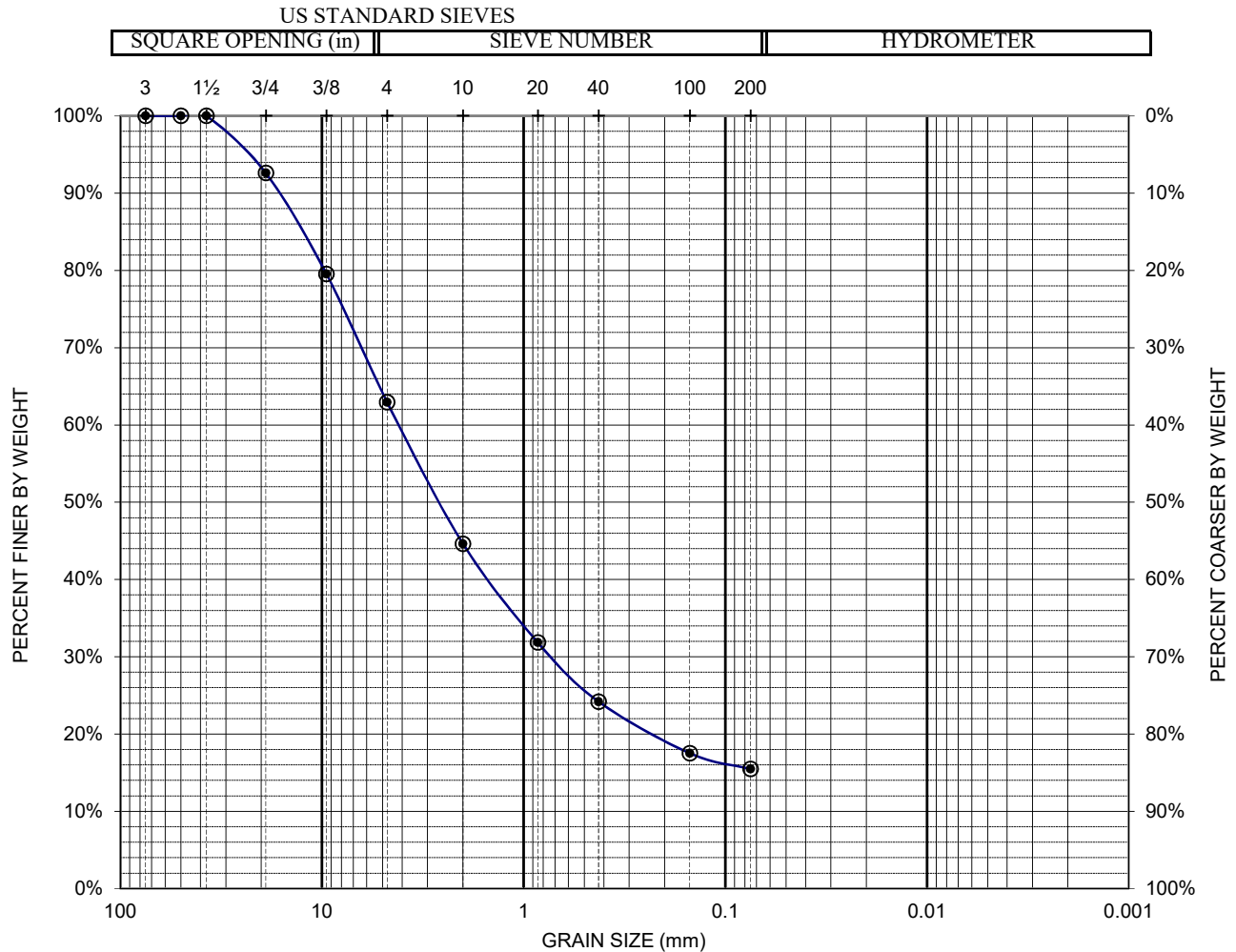
PROJECT NAME UHC Watsonville Road, Morgan Hill				PROJECT No.	PA20.1020.00
DRILL HOLE No.	7	DEPTH (ft)	24-25	SAMPLE	0
				DATE OF TEST	6/10/2020
SOURCE/QUARRY: ---					
DESCRIPTION OF SOIL: Clayey Gravel with Sand					



REMARKS:

GRAIN SIZE TEST RESULTS

PROJECT NAME UHC Watsonville Road, Morgan Hill				PROJECT No.	PA20.1020.00
DRILL HOLE No.	7	DEPTH (ft)	34-35	SAMPLE	0
DATE OF TEST				6/10/2020	
SOURCE/QUARRY: ---					
DESCRIPTION OF SOIL: Clayey Sand with Gravel					



REMARKS:

COMPACTION TEST REPORT

Project: UHC
Sample: Bulk
Description: Brown, Sandy Clay w. trace F. Gravel

Job No. PA20.1020
Date: 6/18/2020
By: LD

ASTM D1557	Method B	Volume (cf): 0.03333		# Blows: 25	# Layers: 5
Specimen		A	B	C	D
Wet Weight (grs)		1902	1951	1916	1808
Wet Density (pcf)		125.8	129.0	126.7	119.6
Moisture Content (%)		14.4	16.5	18.6	11.8
Dry Density (pcf)		110.0	110.8	106.8	107.0

Max. Dry Density : 111.0 pcf
Opt. Water Content: 16.0 %

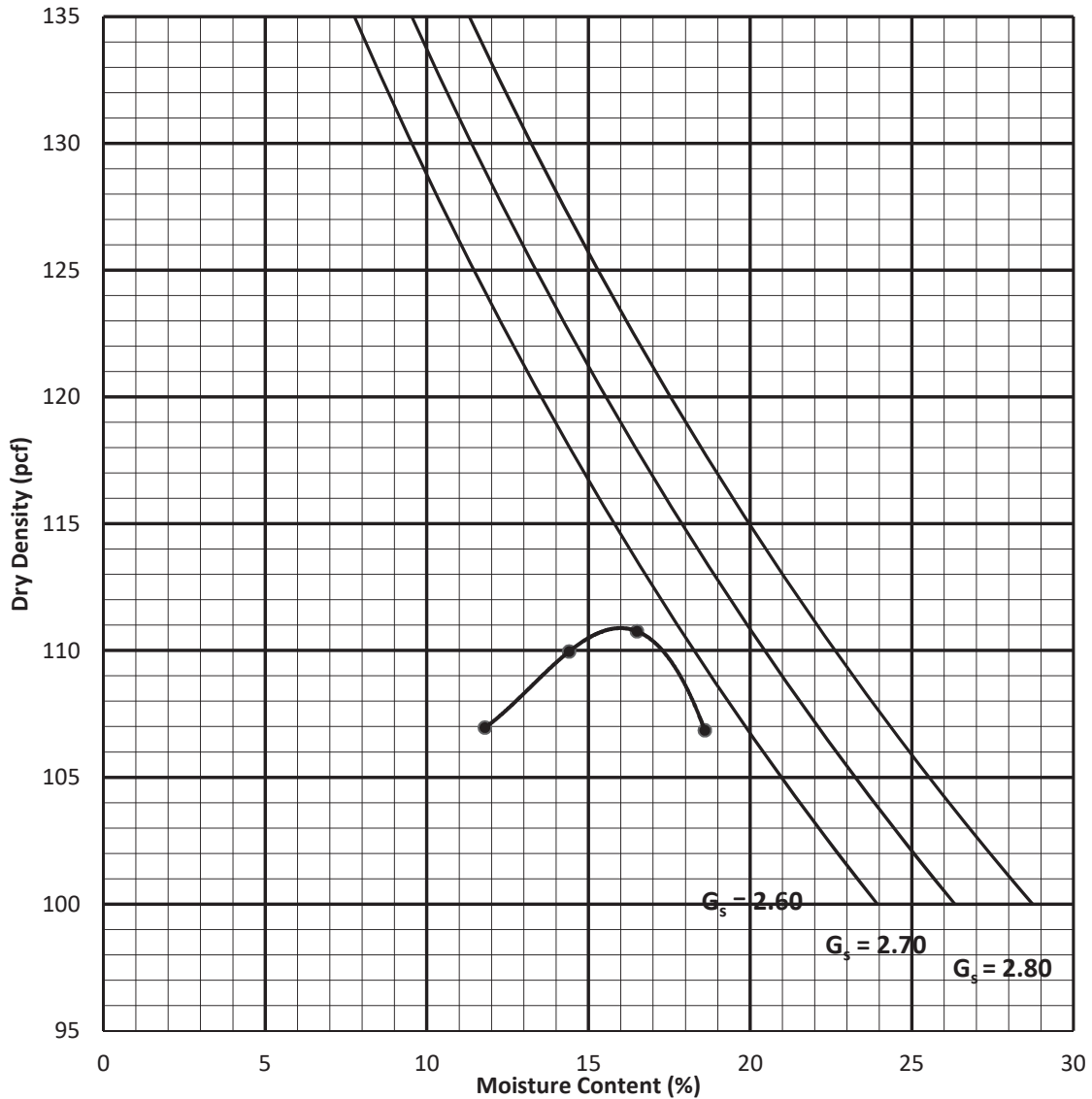


Figure B-5

'R' VALUE CA 301

Project UHC

Date: 6/18/20

By: LD

Job #: PA20-1020

Sample : Bulk

Soil Type: Brown, Silty Clay w. trace Gravel

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	150	70	100	
Initial Moisture Content	%	12.1	12.1	12.1	
Water Added	ml	60	80	70	
Moisture at Compaction	%	17.7	19.6	18.6	
Sample & Mold Weight	gms	3193	3176	3180	
Mold Weight	gms	2102	2106	2103	
Net Sample Weight	gms	1091	1070	1077	
Sample Height	in.	2.461	2.53	2.482	
Dry Density	pcf	114.1	107.2	110.8	
Pressure	lbs	7145	3710	5120	
Exudation Pressure	psi	569	295	408	
Expansion Dial	x 0.0001	101	45	76	
Expansion Pressure	psf	437	195	329	
Ph at 1000lbs	psi	32	47	38	
Ph at 2000lbs	psi	80	110	93	
Displacement	turns	3.61	4.47	3.98	
R' Value		41	20	31	
Corrected 'R' Value		41	20	31	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	21
By Expansion Pressure :	15
TI =	5

Figure B-6



1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

1 July, 2020

Job No. 2006083
Cust. No. 10854

Ms. Francesca Senes
Geo-Logic Associates
16055-D Caputo Drive
Morgan Hill, CA 95037

Subject: Project No.: PA20.1020.00
Project Name: 15480 Watsonville Road, Morgan Hill, CA
Corrosivity Analysis – ASTM Test Methods

Dear Ms. Senes:

Pursuant to your request, CERCO Analytical has analyzed the soil samples submitted on June 15, 2020. Based on the analytical results, this brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurements, both samples are classified as “moderately corrosive”. All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentrations are both none detected with a detection limit of 15 mg/kg.

The sulfate ion concentrations range from 18 to 43 mg/kg and are determined to be insufficient to damage reinforced concrete structures and cement mortar-coated steel at these locations.

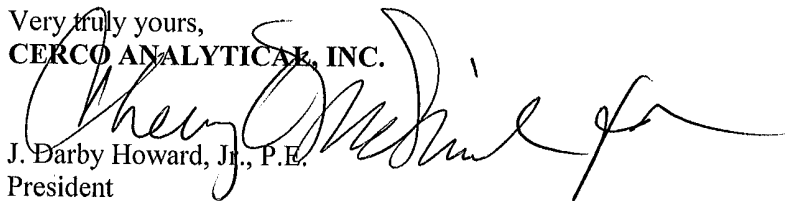
The pH of the soils range from 7.72 to 7.79, which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potentials are both 300-mV which is indicative of potentially “slightly corrosive” soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc.* at (925) 927-6630.

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,
CERCO ANALYTICAL, INC.


J. Darby Howard, Jr., P.E.
President

JDH/jdl
Enclosure

Appendix F
Phase I Environmental Site Assessment



PHASE I ENVIRONMENTAL SITE ASSESSMENT

RESIDENTIAL REDEVELOPMENT PROPERTY
Royal Oak Village

APN 779-04-075 (South 3.7 Acres)

City of Morgan Hill
Santa Clara County, California

Prepared For:

A0702 Morgan Hill, L.P.
2000 E. Fourth St. Suite 205
Santa Ana, CA 92705

April 2, 2020

Project 1219003a

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Prepared for:

A0702 Morgan Hill, L.P.
2000 E. Fourth St. Suite 205
Santa Ana, CA 92705

Subject Property:

APN 779-04-075 (South 3.7 acres)
15480 Watsonville Road
Santa Clara County, California

Prepared and Edited by:

Timothy Lester
Managing Principal

TA-Group DD, LLC

4136 Tiger Run Court, Suite 118
Carlsbad, California 92008-72
(760) 431-3747

Project 1219003a

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Figure 1 – Site Location / Aerial Map

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APPENDICES

Appendix A – Résumé of Environmental Professional

Appendix B – Preliminary Title Report and FEMA Map

Appendix C – Aerials Topographic Map and Directory

Appendix D – Environmental Records Search

Appendix E – Property Owner/User Provided Questionnaires

Appendix F – Photographic Log

Appendix G – TAGDD Phase II Letter Report excerpt, January 2020

GENERAL SUBJECT PROPERTY INFORMATION

Project Information: Royal Mushroom Farm (South 3.7-Acres)

Project 1219003a

Subject Property:

APN 779-04-075 (South 3.7-acres)
15480 Watsonville Road
Santa Clara County, California

Client Information:

A0702 Morgan Hill, L.P.
2000 E. Fourth St. Suite 205
Santa Ana, CA 92705

Consultant Information:

TA-Group DD, LLC
3146 Tiger Run Court, Suite 118, Carlsbad, California 92008
Phone: (760) 473-0645
E-mail Address of Environmental Professional: timothy.lester@TA-GroupDD.com

Site Access Contact: John Telfer john@scountyrealty.com

Inspection Date: March 27, 2020 / **Report Date:** April 2, 2020

Site Assessor: Timothy Lester – Principal

Environmental Professional (EP) Certification: I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312.10



Timothy Lester
Managing Principal

AAI Certification: We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Timothy Lester
Managing Principal

EXECUTIVE SUMMARY

At the request and authorization of the Client (A0702 Morgan Hill, L.P.), TA-Group DD, LLC (TAGDD) conducted a Phase I Environmental Site Assessment (ESA) for the southern 3.7-acres of the overall Royal Mushroom property located at 15480 Watsonville Road, in the City of Morgan Hill, Santa Clara County, California. The subject property is encompassed by a portion of Assessor's Parcel Number (APN) 779-04-075.

The purpose of this Phase I ESA was to assess the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment (i.e., *recognized environmental condition* as delineated in ASTM International *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, Designation E1527-13 [ASTM E1527-13]). The following bulleted items summarize the information obtained during the preparation of this ESA:

- The subject property encompasses approximately the southern 3.7-acres of an 8-acre property on a single parcel identified as Assessor's Parcel Number (APN) 779-04-075. An address of 15440 Monterey Road is identified on a referenced Title Report, while other sources reference an address of 15480 Monterey Road, City of Morgan Hill, Santa Clara County, California.
- The property is a level developed parcel developed with a commercial mushroom growing facility and associated buildings. Elevations range from roughly 324 feet AMSL on the south to 321 feet AMSL on the north.
- Based on historical records such as aerial photographs and topographic maps, the subject property was developed from at least 1938 as orchards. Between 1939-1953 the subject property was cleared of orchards, and several commercial agricultural buildings were constructed on the adjacent (overall Royal Mushroom) property to the north. Between 1953-1963 those buildings were demolished and the main drying building on the north was constructed. Between 1968-1974 the majority of the drying buildings were completed. The residence to the north was demolished; and the subject site features, in general, were as they appear today.
- On March 27, 2020, TAGDD personnel conducted a reconnaissance of the subject property to physically observe the property and adjoining properties for conditions indicating a potential environmental concern. Concerns would include any evidence of contamination, distressed vegetation, petroleum-hydrocarbon staining, waste drums, illegal dumping, or improper waste storage and/or handling. With the exception of possible pesticide use/application, no evidence of environmental concerns above the *DeMinimus* threshold was noted on the subject property during our site reconnaissance.
- TAGDD performed a Vapor Encroachment Screen (VES) for the subject property, in accordance with ASTM E2600-15. The purpose was to evaluate whether sites (e.g., gas stations, dry cleaners, or other listings of environmental concern) that store or dispose of potential chemicals of concern or have documented releases, may migrate as vapors onto the property, because of contaminated soil documented near the property (i.e., a Vapor Encroachment Condition or VEC). Based on the results of a Tier 1 VES as outlined in the ASTM E2600-15 practice, TAGDD concluded that a pVEC could be ruled out.

Findings and Opinions

Based on the information obtained in this ESA, TAGDD has the following findings and opinions:

- *Known or suspected RECs* – are defined by the ASTM E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

This assessment has revealed the following *known or suspected RECs* in connection with the subject property:

- A toxic insecticide, *Perm-Up 3.2EC*, which is known to contain volatile organics, was formerly utilized at the facility. Wash and waste water on the facility was held in a sump and discharged via sprinklers and pumps onto the open area at the south end of the subject site. The potential for residual chemicals related to discharge of this insecticide is considered a REC.
- *Controlled RECs (CRECs)* – are defined by the ASTM E1527-13 as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls)

This assessment has revealed no evidence of *CRECs* in connection with the subject property.

- *Historical RECs (HRECs)* – are defined by the ASTM E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls). This assessment has revealed the following evidence of *HRECs* in connection with the subject property.
- *De Minimis* Conditions – include environmental concerns identified which may warrant discussion but do not qualify as RECs, as defined by the ASTM E1527-13.

No *de minimis* conditions were revealed in connection with the subject property.

Conclusions and Recommendations

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E1527-13 of APN 779-04-075, with an address of 15440 Monterey Road, the *subject property*. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report.

This assessment has revealed evidence of a *recognized environmental condition* related to insecticide use/application in connection with the *subject property*. *Further investigation, consisting of soil sampling in the open area at the southern end of the site, is warranted.*

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) was to assess the possible presence of *recognized environmental conditions* for the southern half (3.7-acres) of the overall property located at 15480 Watsonville Road, in the City of Morgan Hill, Santa Clara County, California (**Figure 1**). *Recognized environmental conditions (RECs)* include property uses that may indicate the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term *REC* is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment, and that would not be subject to enforcement action by a regulatory agency.

This ESA was performed in general conformance with the ASTM International *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, Designation E1527-13 (ASTM E1527-13).

1.2 Scope of Services

The following scope of services was conducted by TA-GROUP DD:

- A review of readily available documents which included topographic, geologic, and hydrogeologic conditions associated with the subject property.
- A review of readily available maps, aerial photographs, and other documents relative to historical subject property usage and development.
- A review of previous environmental reports and regulatory file information pertaining to both existing and historic property conditions.
- A review of readily available federal, state, county, and city documents and database files concerning hazardous material storage, generation and disposal, active and inactive landfills, existing environmental concerns, and associated permits related to the subject property and/or immediately adjacent sites.
- A site reconnaissance to ascertain current conditions on the subject property.
- Interviews with person(s) knowledgeable of the subject property.
- The preparation of this report which presents our findings, conclusions, and recommendations.

1.3 Reliance

This ESA has been prepared for the use of Client, and may also be relied upon by UHC H4 LLC, and Ikaika Ohana Inc. This assessment should not be relied upon by other parties without the express written consent of TAGDD and Client. Any use or reliance upon this assessment by a party other than the Client; therefore, shall be solely at the risk of such third party and without legal recourse against TAGDD, its employees, officers, or director regardless of whether the action in which recovery of damages is brought or based upon contract, tort, statute or otherwise.

This assessment should not be interpreted as a statistical evaluation of the subject property, but rather is intended to provide a preliminary indication of onsite impacts from previous property usage and/or the release of hazardous materials. If significant indicators of the presence of hazardous materials and/or petroleum contamination are not encountered during our research, such substances may still be present. The findings in this report are based upon published geologic and hydrogeologic information, information (both documentary and oral) provided by the Client, various local, state and federal agencies, Environmental Data Resource® (i.e., agency database search), and TAGDD's field observations. Some of these data are subject to change over time. Some of these data are based on information not currently observable or measurable but recorded by documents or orally reported by individuals.

2.0 PHYSIOGRAPHIC SETTING

2.1 Subject Property Description

The subject property lies in the Southern end of the City of Morgan Hill, County of Santa Clara, California (**Figure 2**). The property includes the southern 3.7-acres of Assessor's Parcel Numbers (APN) 779-04-075 (**Appendix B**). The subject property is primarily developed for agricultural uses with a series of galvanized, concrete block, and wood-framed barns/buildings and related outbuildings and is known as the Royal Mushroom Farm. According to the City of Morgan Hill Zoning Map (<https://www.morgan-hill.ca.gov/DocumentCenter/View/328/Zoning-Map?bidId=>), the subject property is zoned "PD", or "Planned Development Combining District".

2.2 Topography

The subject property is located on the United States Geological Survey (USGS) 7.5 Minute Mount Madonna Quadrangle map (USGS, 2012). The elevation of the subject property ranges from approximately 324 feet above mean sea level (amsl) at the south end to roughly 321 feet amsl pm the northern end of the property. Based on overall topography, the subject property is generally level, with a slight surface drainage trend towards the lower elevations on the north.

2.3 Regional and Local Geology

The subject property and vicinity are situated in the Santa Clara Valley, a northwest-southeast trending valley located east of the Santa Cruz Mountains and west of the Diablo Range. The site is underlain by alluvium comprised of gravel, sand and clay, of the Holocene epoch and Quaternary Period (USDIGS, 1973).

The subject property is located within the Coast Ranges Geomorphic Province, northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet amsl, and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The norther and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake Volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Pt. Arena to the Gulf of California. Structural deformation in the vicinity of the subject

property is related to the San Andreas Fault zone, a major northwest-southeast trending strike-slip fault zone that runs northeast of the property. Motion along the San Andreas Fault zone is primarily right-lateral. The slip rate is 24 millimeters per year and the maximum earthquake magnitude estimated is 7.4M. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands (CGS, 2002).

Soil in the vicinity of the subject property has been identified by the United States Department of Agriculture - Natural Resource Conservation Service ([https:// websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx](https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx)), online Web Soil Survey database as mainly the San Ysidro Loam (SdA). The loam consists of moderately well drained soils and is classified with low runoff. Soils formed in alluvium derived from sedimentary rock. San Ysidro soils occur on alluvial fans, terraces and valley floors at slopes between 0 and 2 percent. These soils rarely flood and have a moderately low to moderately high capacity to transmit water.

2.4 Regional and Local Hydrogeology

According to the Central Coast Regional Water Quality Control (CCRWQCB, 2016) the subject property is located within the South Santa Clara Valley Hydrologic Area (305.30), within the Pajaro River Hydrologic Unit (305.00). In general, ground water in this area is considered beneficial for agricultural water supply (AGR), municipal and domestic water supply (MUN), industrial process water supply (PROC), and industrial service water supply (IND).

The California Department of Water Resources Water Data Library (WDL) website was reviewed for wells on the subject site or within the immediate vicinity http://wdl.water.ca.gov/water_datalibrary/water_quality/station_county/select_station.cfm?URLStation=09S03E34E002M&source=map. Groundwater depth data for this well was not available for review. However, due to the presence of a creek immediately adjacent to the northwest corner of the subject property, groundwater is expected to be shallow.

2.5 Hydrologic Flood Plain Information

TAGDD reviewed the Federal Emergency Management Agency (FEMA) Flood Hazard Map website (<https://msc.fema.gov/portal/search#searchresultsanchor>) to determine if the subject property was located within an area designated as a Flood Hazard Zone. According to the information reviewed on the Flood Insurance Rate Map (FIRM), Map No. 06085C0607H, the subject property is located within Zone AE, an area susceptible to flood hazard. A copy of the FIRMETTE map is included in **Appendix B**.

3.0 SUBJECT PROPERTY BACKGROUND

3.1 Subject Property Ownership

Information regarding the ownership of the subject property was obtained from a Preliminary Title Report (PTR), prepared by Chicago Title Company, dated July 19, 2018. According to the PTR, the current owner of the subject property is listed as the Royal Oaks Corporation, Inc. A copy of the PTR with detailed parcel and legal descriptions is included in **Appendix B**.

3.2 Subject Property History

TAGDD reviewed readily available information sources to evaluate historic land use in and around the subject site. These information sources include aerial photographs, United States Geological Survey (USGS) maps, and city and/or county records. The information sources are reviewed in the following sections.

3.2.1 Historical Aerial Photograph and Topographic Map Review

Historical aerial photographs and topographic maps were reviewed to identify historical land development and any surface conditions which may have impacted the subject property. Photographs and historical topographic maps dating between 1938 and 2018 were obtained and reviewed from ERIS®. An aerial photograph was also obtained from Google Earth® and used to prepare **Figure 1** (Aerial Site Map).

Table 1 summarizes the results of the aerial photograph review. Reviews were made at approximate 5-year jumps on recent maps to lessen repetitive data. Copies of all aerial photographs and historical topographic maps provided by ERIS® are included in **Appendix C**.

TABLE 1 Summary of Historical Aerial Photograph and Topographic Map Review		
Year	Source and Scale	Comments
1939	Fairchild / 1" = 500'	Subject is orchards. Residence and orchards on balance of overall Mushroom property to north. Surrounding area undeveloped rural and orchards.
1953	USGS / "	Subject cleared of orchard and appears to be in cultivation for hay (hay stacks present). Adjacent to north has residence north end, 3 long E-W galvanized buildings south of residence, followed by orchard & another (barn?) midway to south. Service station at corner of Watsonville and Monterey. Overall area still dominated by orchards but becoming more developed. Residences on site to E. Monterey Rd now a larger split highway.
1963	ASCS / "	Long building occupies center, northernmost 2/3 of subject site. Smaller long building center of south end. 2 buildings in center of adjacent property to north. Gas station at Monterey/Watsonville gone.
1968	USGS / "	As above but clearer; main drying buildings on north side all present plus small building (?) that appears to be a portion of current office. South side has 2 drying buildings plus much smaller building at northeast side. Adjacent to north has current drying, shop buildings and large pole barn, plus residence and shed at north end. Surrounding area still primarily orchards and rural.
1974	USGS / "	Subject now close to current configuration; drying building on southeast corner added. Residence and barn/outbuilding at North end gone. Features on lot to NW indistinct.
1981	USGS / "	Subject as above. Single family residential development filling in to southwest. Commercial development to the north.
1993	USGS / "	Subject as above. Single family residential to West/SW expanding. Commercial expanding to North. Local orchards disappearing.

TABLE 1 Summary of Historical Aerial Photograph and Topographic Map Review		
Year	Source and Scale	Comments
2005	NAIP / “	Subject as above.
2009	NAIP / “	Subject as above.
2014	NAIP / “	Subject as above. Watsonville Rd has been extended to North and is now a large divided highway.
2018	NAIP / “	Subject as above. Property to W and NW now under development.

NAIP is the National Agriculture Inspection Program. USGS is the U.S. Geological Survey. NHAP is National High-Altitude Photography. No additional pertinent information was noted.

3.2.2 City/County Directories

Directory listings associated Monterey Road and Watsonville Road in the immediate vicinity were obtained from ERIS®, an environmental information/database retrieval service. Directories dating to 1962 were researched. The listings included two Leaking UST sites on or immediately adjacent to the property, both of which are discussed in **Section 5.4**. The full Directory research results are included in **Appendix C**.

3.2.3 Fire Insurance Maps

TAGDD researched available Fire Insurance Maps of the subject property. Such maps provide detailed information on site structures, uses, and occupancies and were typically utilized by insurance companies to evaluate potential fire risk. No coverage was available for the subject property. A copy of the Insurance Map report is included in **Appendix C**.

3.2.4 Summary of Property History

Based on historical records such as aerial photographs and topographic maps, the subject property was developed from at least 1938 as orchards. Between 1939-1953 the subject property was cleared of orchards, and several commercial agricultural buildings were constructed on the adjacent (overall Royal Mushroom property to the north. Between 1953-1963 those buildings were demolished and the main drying building on the north was constructed. Between 1968-1974 the majority of the drying buildings were completed. The residence to the north was demolished; and the subject site features, in general, were as they appear today.

3.3 ERIS Database Review

TAGDD subcontracted an electronic database report from ERIS®, an environmental information/database retrieval service. Facilities were identified by county, state, or federal agencies that generate, store, or dispose of hazardous materials or which have or have had releases from underground storage tanks, industrial uses, or related sites. A copy of the full ERIS® report is provided in **Appendix D**, along with a description of the individual databases.

In our opinion most of the larger environmental releases have been documented since Federal Environmental regulations were implemented a half a century ago. Since that time substantial scrutiny has been levied at industrial, fuel, solvent and hazardous materials users/generators. There are other important factors; but in our opinion these are the most important. In general, this means that the threat to a particular subject property is either from documented / regulated larger release sites (such as CERCLA/RCRA), or alternatively from private sites where use predated regulatory scrutiny.

With this in mind, TAGDD generally evaluates environmental hazard threat based upon 5 main criteria (not necessarily in this order): proximity to the subject site, size of release/potential release, age of potential release, direction of groundwater gradient, and depth to groundwater. Proximity is generally the most important of these factors, as a small release of hazardous substances can have a substantial effect on environmental liability. **Table 2** identifies sites found based on proximity, including database source:

3.3.1 Subject Property

Because we searched based on the Title Report address of 15440 Monterey Road, there are no listings for the subject property. However, the 15480 Watsonville Road address is included in the search category below.

3.3.2 Adjacent Properties (within 1/8th Mile Radius Distance (660 feet))

There are 13 notations in this search radius. 11 of the notations for Map Key 1, at the 15480 address, which is the Subject property (Royal Mushroom Farm). Four of the notations (Delisted LST, Santa Clara LO, WDR, and LUST) relate to the former USTs north of the Subject Site, on the northern portion of the overall Royal Mushroom site, discussed more fully in **Section 5.4**.

Of the remaining 7 notations, 2 are CUPA permit listings (waste storage/waste generator); 3 are HAZNET permit related listings; 1 is a FIND/FRS permit listing for the water system; and 1 is a RCRA Non-generator permit listing.

The remaining 2 notations (Listings 2 and 3) are for the White Service Station release at the northern end of the Royal Mushroom overall property, which is also discussed more fully in **Section 5.4**.

3.3.3 Surrounding Area; 1/8 to 1/4 Miles Radius Distance (660-1,320 feet)

There are 22 notations involving listings 4-8 in this search radius. Listing No. 4 (2 notations) is a former tank site, some 677 feet downgradient and/or side gradient. Based on distance and side/downgradient location, it's not considered an environmental concern.

Listing 9 (2 notations) is 1,288 feet side or downgradient and is a school site with a delisted HAZ notation and a CUPA (local permits) notation as a small quantity generator. Due to distance, gradient, and lack of release listings, the site is not considered an environmental concern.

Listings 5 (9 notations); 6 (1 notation) and 8 (1 notation) are all the same site; a CalFire/CDF headquarters location 895 feet to the northwest, on Monterey Road. Listing 8 involves a LUST release from UST's removed from the site in 1998.

An investigation including soil remediation, groundwater sampling/monitoring, and vapor sampling was conducted and the site was closed in 2019. A vapor plume is defined and confined. Due to distance and defined plume, the LUST release is not considered an environmental concern.

The remaining 10 notations for Listings 5 and 6 for the site involve permits for Bay Area AQMD Emissions permits, ASTs on the site, and similar permits. None relate to releases and none are considered environmental concerns.

Listing 7 (6 notations) is for a Tire shop located 1,209 feet to the West/Northwest along Monterey Road. The listings are mostly for permits and include a Delisted HAZ notation and a Historical Tank notation. However, there are no releases/LUST records associated with the site. Based on distance and lack of release notations, the site is not considered an environmental concern.

Listing 10 is located downgradient at a distance of 1,273 feet. The listing is for a permit only and is not considered an environmental concern.

3.3.4 Surrounding Area; 1/4 to 1/2 Miles Radius Distance (1,320-2,640 feet)

There are 3 listings (No. 11, 12, 13) with 4 notations in this search radius. All are upgradient.

Listing 11 is a small quantity generator which uses a wide variety of solvent wastes, located 1,684 feet distant. Based on distance and lack of release, the site is not considered an environmental concern.

Listing 12 is a former Dry Cleaner located 2,145 feet distant that has undergone a soil vapor extraction remediation under a voluntary remediation program. Remediation goals were achieved and certified in 2016. Based on distance and completion of remediation, the site is not considered an environmental concern.

Listing 13 is a LUST cleanup site located 2,470 feet distant. The site was a gasoline release to soil closed in 1987. Based on distance, soil-only nature and closure status, the site is not considered an environmental concern.

3.3.5 Surrounding Area; 1/2 to 1.0 Miles Radius Distance (2,640-5,280 feet)

There are 7 listings (No. 15-20) in this search radius. All of these listings are over 3,000 feet distant. Listings 14, 15, and 16 all have certified closures. Based on distance and closure status, they are considered environmental concerns.

Listing 17 is 3,689 feet distant and was suspected on contributing to solvent contamination at a neighboring site in 1994. There is no investigation data and further assessment is not documented, based primarily on distance, it is not considered an environmental concern.

Listing 18 is a Tiered Permit site 4,375 feet distant. Listing 19 is a similar Tiered Permit site located 5,082 feet distant. Listing 20 is an historical site located 5,135 feet distant referred to the water board in 1994. None of these sites have documented releases. Based on lack of data and very substantial distance from the subject site, none are considered environmental concerns.

3.3.6 Orphan / Unplottable Sites

There are 12 unplottable listings in the report. One was a report of mobile drug lab materials in a vehicle. Two listings are reports of pedestrian fatalities. Two listings are FINDS watermaster listings. Three are either Geotracker irrigated lands or other Geotracker listings in San Martin (not Morgan Hill). The remaining 4 are HHSS, HIST Manifest, or Haznet listings, none of which include any release notations or information. Based on lack of release information, none are considered environmental concerns.

TABLE 2 Database Search ID with Results	No. of Reported Facilities	Search Radius (Miles)
ONE HALF to ONE MILE (.05-1.0) RADIUS	8	0.5-1.0
Envirostor	7	
State Response	1	
ONE QUARTER to ONE HALF MILE (0.25-0.5) RADIUS	4	0.25-0.5
Envirostor	1	
State LUST	1	
State VCP	1	
Fed RCRA TSD	1	
ONE EIGHTH TO ONE QUARTER MILE (0.125-0.25) RADIUS	22	0.125-0.25
State LUST	1	
State UST Closure	2	
State Delisted HAZ	2	
State Emissions	3	
State HHSS	1	
State Delisted Tank	1	
State Historical Tank	3	
Santa Clara Co LO	1	
Santa Clara Co CUPA	5	
FED RCRA Non Generator	3	
SUBJECT TO ONE EIGHTH MILE (0.125) Radius	13	0-0.125
State Discharge	1	
State CHMIRS	3	
Santa Clara Co CUPA	2	
Santa Clara Co LO	2	
Federal FINDS	1	
Federal RCRA Non Generator	1	
State LUST	2	
State Delisted LST	1	
SUBJECT SITE	0	SUBJECT

3.4 Regulatory Agency Review and Interviews

3.4.1 City of Morgan Hill, City Clerk's Office

EEl contacted the City of Morgan Hill City Clerk's Office for information pertaining to hazardous waste releases, spills, incident reports, and/or inspection reports for the subject property (request TA-G 1219003). According to Ms. Angie Gonzalez in the Office of the City Clerk (January 24), the City does not have records related to our request.

3.4.2 County of Santa Clara Consumer and Environmental Protection Agency

EEl contacted the County of Santa Clara Consumer and Environmental Protection Agency (CSCCEPA) Hazardous Materials Compliance Division concerning any permit, inspection, UST, or cleanup information available for the subject property, identified as APNs 779-04-075, and 15440 Monterey Road. An email received on January 24 (our request No. 20-138) indicated that no records were available.

3.4.3 County of Santa Clara Department of Environmental Health

TAGDD contacted the County of Santa Clara Department of Environmental Health (CSDDEH) concerning any permit, inspection, UST, or cleanup information available for the subject property APNs. No response had been received as of the date of this report. If information is received that affects the conclusions of this report, TAGDD will advise Client. We do not anticipate such information, based on the data reviewed elsewhere in this report.

3.4.4 California Regional Water Quality Control Board / Geotracker

TA Group DD reviewed the state Geotracker database for information regarding releases, environmental permits, spills, cleanup cases, and related data (<https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=palomar+mountain>). No information on cases or permits were found within the local area which are not discussed elsewhere in this report.

3.4.5 Bay Area Air Quality Management District (BAAQMD)

EEl contacted the Bay Area Air Quality Management District (BAAQMD) regarding any records for the subject property APNs. Permits could not be accessed on the Online Portal. An official response was not received as of the publication date of this report. We note that Emissions reporting is included in the database report reviewed elsewhere in this report. If additional information is reported which affects the conclusions of our report, TAGDD will notify client. Based on research conducted we do not expect to receive additional data.

3.4.6 California Department of Toxic Substances Control

TAGDD reviewed the online database Envirostor ([https://www.envirostor .dtsc.ca.gov /public/](https://www.envirostor.dtsc.ca.gov/public/)), which provides records on Federal Superfund sites (National Priority List); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and school site. The database is maintained by the California Department of Toxic Substances Control. Based on our review, no listings are present within the immediate area that are not discussed and identified in **Section 3.3.**

3.4.7 Review of CALGEM (former Division of Oil, Gas and Geothermal Resources) Files

Oil and gas wells were not observed at the subject property during our site reconnaissance. A review of the Geologic Energy Management Division (CALGEM; formerly the California Division of Oil, Gas, and Geothermal Resources Website <https://secure.conservation.ca.gov/WellSearch/>) fields in California and Alaska did not indicate the presence of oil and gas wells on or within 5 miles of the subject property.

3.4.8 National Pipeline Mapping System

TAGDD reviewed the National Pipeline Mapping System (<https://pvnpm.phmsa.dot.gov/PublicViewer/>) public viewer website for gas transmission pipelines and hazardous liquid trunk lines on or close to the subject property. According to the website, no pipelines are present in the immediate area. The closest petroleum pipeline is present >1,700 feet to the north and is not considered a concern.

3.5 Previous Site Assessment Files

The property owner provided TAGDD with files related to the adjacent White Service Station site investigation and closure, as well as files related to former UST on the project site. These files are discussed below; Selected file excerpts are included in **Appendix G**.

3.5.1 Gasoline USTs on Adjacent Royal Mushroom Property

The property owner provided information regarding the Closure of three (3) former USTs on the subject site (Santa Clara Water District Case No. 14-139) dated March 26, 1996. According to the Case Closure Summary, one 150-gallon UST and two 550-gallon USTs with associated piping were removed on January 21, 1994. An excavation 20-feet deep was made at the site by Light Air & Space Construction (LA&S). Water was encountered in the excavation and a groundwater grab sample was collected and found to be unimpacted. Information regarding the disposal of excavated soil was not present. The closure stated, "District Staff does not make specific determination concerning public health risk". Vapor and soil sampling were subsequently conducted at the property by TAGDD (TAGDD, 2020). Vapor results were low. Based on the distance to the subject property, and the results of TAGDD sampling, the site is not considered a REC.

3.5.2 White Service Station

TAGDD was provided County of Santa Clara documentation regarding the Closure evaluation and approval for the White Service Station site, which was formerly closed on February 14, 2011. The site was formerly present at the intersection of Monterey Road and Watsonville Road. The road configuration has been changed since the report was prepared. While the precise location of the former tanks and sampling is not clear, it appears that the former Creek Channel referenced on drawings are immediately adjacent to the northern portion of the Royal Mushroom property; roughly 450-feet north of the Subject Property.

The former Service station previously held five underground storage tanks, ranging in size from 20-gallons to 1,350-gallons. Those USTs were removed on March 6, 2010; a 12-foot deep excavation occurred which extended 40-feet south, and 36-feet East of the former centerlines of

Monterey Road and Watsonville Road. The excavation, based on these measurements, would be expected to be adjacent and offsite (to the Northwest) of the Subject Site. However; a note in the case file said “there is one active water supply well located onsite within approximately 40-feet of the excavation between the excavation and the creek”. Based on our site reconnaissance, an active supply well on the northwestern corner of the site is roughly 75 feet from the current channelized creek. If the aforementioned statement is referencing the same well, the excavation appears to be ONSITE. Post-excavation sampling documented fuel hydrocarbons remaining in soil at part-per-million levels. Benzene was not present in remnant soil samples.

Records indicate that 1,100-cubic yards of soil was “aerated and reused onsite” according to documents reviewed. Relatively low concentrations of fuel constituents were allowed to remain in soil. Subsequently, additional sampling was requested by the County. In September 2010 a soil sample was collected (SS-27) that revealed low levels of diesel contamination. A groundwater grab sample was also collected and found to be unimpacted.

Vapor and soil sampling were subsequently conducted at the property by TAGDD (TAGDD, 2020). Vapor results were low. Based on the distance to the subject property, and the results of TAGDD sampling, the site is not considered a REC.

3.6 Interview with Current Property Owner

TAGDD was given access to the site by the property manager, Mr. Van Tassel, who also provided information about site operations and history. Mr. Donald Hordness, the property owner, completed an Owner questionnaire on February 2, 2020. The information provided is documented below. A copy of the property owner questionnaire is included in **Appendix E**.

3.6.1 Past or Present Uses Indicating Environmental Concern

Mr. Hordness stated that the subject property was developed as a mushroom farm.

3.6.2 Presence of Hazardous Substances or Environmental Violations

Mr. Hordness stated that he was aware of former tanks pulled under jurisdiction of the County.

3.6.3 Deed Restrictions or Other Activity or Land Use Restrictions

Mr. Hordness stated that he was not aware of any deed restrictions or other activity or land use restrictions placed on the subject property.

3.6.4 Environmental Liens or Governmental Notification

Mr. Hordness stated that he was not aware of any environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the subject property.

3.6.5 Previous Assessments

Mr. Hordness stated that he was aware of a previous Phase I ESA prepared for the property and stated elsewhere his knowledge of previous “tank pull”.

3.6.6 Legal Proceedings

Mr. Hordness stated that he was not aware of any environmental liens, unresolved notices of violation, or litigation related to a contamination issue at the subject property.

3.7 User Provided Information

Pursuant to ASTM E1527-13, TAGDD provided a Phase I ESA User Specific Questionnaire to the “user” (the person on whose behalf the Phase I ESA is being conducted), Mr. Mark Irving, representing the Buyer/User. The User Specific Information provided is documented in the following sections. A list of the user specific questions (per ASTM E1527-13) with associated responses is included in **Appendix E**.

3.7.1 Environmental Liens or Activity and Use Limitations

Mr. Irving did not have knowledge of environmental liens or activity and use limitations (AULs) in association with the subject property. No separate Environmental Lien Search was provided as part of this work product.

3.7.2 Specialized Knowledge

Mr. Irving stated that he has no specialized knowledge or experience related to the subject property or nearby properties (i.e., knowledge of the chemicals or processes used by a type of business).

3.7.3 Valuation Reduction for Environmental Issues

Mr. Irving stated that the purchase price reflected market value.

3.7.4 Presence or Likely Presence of Contamination

Mr. Irving stated that he was aware of a former tank spill and cleanup on the subject property.

3.7.5 Other

Mr. Irving stated that the Phase I ESA was being prepared for a property transaction (purchase and lending).

3.8 Other Environmental Issues

3.8.1 Asbestos-Containing Materials

Asbestos, a natural fiber used in the manufacturing of several different building materials, has been identified as a human carcinogen. Most friable (i.e., easily broken or crushed) Asbestos-Containing Material (ACM) was banned in building materials by 1978. By 1989, most major manufacturers had voluntarily removed non-friable ACM (i.e., flooring, roofing, and mastics/sealants) from the market. These materials, however, were not banned completely.

In October 1995, the Federal Occupational Safety and Health Administration (OSHA) redefined how building materials are classified in regard to asbestos and the also the way these materials are to be handled. Under this ruling, “thermal system insulation and sprayed-on or troweled on

or otherwise applied surfacing materials” applied before 1980 are considered presumed Asbestos-Containing Materials (PACM). Other building materials such as “floor or ceiling tiles, siding, roofing, transite panels” (i.e., non-friable) are also considered PACM unless tested.

The majority of structures on the property are galvanized steel sheds and barns. In general surface finished that would have potential Asbestos Containing Materials (ACM) are not present. A maintenance building and the former office are the only buildings that contain wallboard and areas with interior finishes. No suspect tiles are present. While small amounts of ACM could be present (primarily in the office building), such materials were not observed. In our opinion, the potential presence of ACM is likely, but in small quantities.

3.8.2 Lead-Based Paint

Lead-Based Paint (LBP) is identified by OSHA, the Environmental Protection Agency (EPA) and the Department Housing and Urban Development Department (HUD) as being a potential health risk to humans, particularly children, based upon its effects to the central nervous system, kidneys, and bloodstream. The risk of Lead-Based Paint has been classified by HUD based upon the age and condition of the painted surface. This classification includes the following:

- maximum risk is from paint applied before 1950;
- a severe risk is present from paint applied before 1960;
- a moderate risk is present from paint applied before 1970;
- a slight risk is present from paint applied before 1977; and
- paint applied after 1977 is not expected to contain lead.

The age or paint noted on structures likely includes periods of high risk for lead. In our opinion, the potential for LBP on exterior painted surfaces for maintenance, operations buildings is likely and testing should be conducted prior to future demolition activities.

3.8.3 Radon

Radon is a radioactive gas which has been identified as a human carcinogen. Radon gas is typically associated with fine-grained rock and soil, and results from the radioactive decay of radium. The U.S. EPA recommends that homeowners in areas with radon screening levels greater than 4 Picocuries per liter (pCi/L) conduct mitigation of radon gas to reduce exposure. Sections 307 and 309 of the Indoor Radon Abatement Act of 1988 (IRAA) directed the U.S. EPA to list and identify areas of the U.S. with the potential for elevated indoor radon levels. U.S. EPA’s Map of Radon Zones (EPA-402-R-93-071) assigns each of the 3,141 counties in the US to one of three zones based on radon potential:

- Zone 1 counties have a predicted average indoor radon screening level greater than 4 pCi/L.
- Zone 2 counties have a predicted average indoor radon screening level between 2 and 4 pCi/L.
- Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L.

Based on such factors as indoor radon measurements; geology; aerial radioactivity; and soil permeability, the U.S. EPA has identified the County of Santa Clara as Zone 2 (i.e., a predicted average indoor radon screening level between 2 and 4 pCi/L). TAGDD does not consider radon as a significant environmental concern at this time.

4.0 SITE RECONNAISSANCE

4.1 Purpose

The purpose of our site reconnaissance was to visually and physically observe the subject property, any onsite structures, and adjoining properties for conditions indicating an existing release, past release, or threatened release of any hazardous materials/substances or petroleum products into structures on the subject property, or into soil and/or groundwater beneath the property. This would include any evidence of contamination, distressed vegetation, petroleum-hydrocarbon surface staining, waste drums, ASTs/USTs, illegal dumping, or improper waste storage/handling. Detailed information is provided in the following text.

4.2 Subject Property

On March 27, 2020 TA Group DD personnel conducted a site reconnaissance to visually observe the subject property and adjoining properties for conditions indicating a potential environmental concern. Environmental concerns would include any evidence of contamination, distressed vegetation, petroleum-hydrocarbon staining, waste drums, illegal dumping, or improper waste storage and/or handling. Visual conditions present during the site reconnaissance are documented in the Photographic Log (**Appendix F**) and summarized in **Table 2**.

The subject property is located east of the intersection of Watsonville Road and Calle Sueno, in Morgan Hill, California. The site address is 15480 Watsonville Road (**Figure 2**). The subject occupies the southern half of the former Royal Mushrooms site. The roughly rectangular subject property occupies 3.7-acres, and is bound on the north by the balance of the Royal Mushroom property and Monterey Road; on the west by Watsonville Road and residential development; on the south by an extension of a large drainage canal and undeveloped property, and on the east by an undeveloped/vacant property. The overall Mushroom Farm site is fenced with a combination of chain link and barbed wire. Access is from Watsonville Road. Pertinent features discussed below are noted on **Figure 3**. *The Northern half is expressly "Not A Part" of this assessment.*

Mr. Robert Van Tassel, who managed the facility for over 30 years, met us to provide access; all structures were open and accessible. TAGDD surveyed the property starting at the former office area at the northwest corner, and continuing counter clockwise around the exterior, followed by north-south transects of the structures and walkways. The subject site includes most of the office building. Floors are concrete. There are two bathrooms, each with ceramic tile floors. Some drywall is present in this building. There are two walk-in freezers, as well as a French drain running along the main floor. According to Mr. Tassel, the building's main room was used as a finishing/packing area and was washed down daily during operations. No staining was noted. Drains run to the outside, and then South to a sump. Discussions with Mr. Van Tassel indicate that the sump is used to contain wash and rainwater that is diverted via drains to the sump. The sump contains the water, which is then pumped out to risers and sprinklers on the southern, undeveloped portion of the site. A PG&E pad mounted transformer is also present immediately south of the office building. The transformer is in excellent shape and no leakage is noted. A large electrical panel is also present south of the transformer at the northern side of the drying buildings.

We continued south along the western edge of the property. A roughly 60-foot open area is present on the western side of the lot which provides access to the southern, undeveloped portion of the property. An excavated pond is present south of the buildings that (according to Mr. Van Tassel) contains excess

rainwater. The pond was mostly dry except for the western end. Roughly 225-feet of the southern end is open and undeveloped. The area is covered with low grasses. At the open areas southeastern corner, dumped stockpiles of broken concrete are present. No trash or hazardous materials were noted in the area.

Continuing around the property, a much narrower open area, roughly 15-feet wide, is present on the eastern border. Altogether, a total of 8 buildings are present on the property, including the aforementioned office building. The remaining buildings are concrete and/or wood framed, concrete floored drying buildings. We reconnoitered all interior buildings and the open area between the buildings, which is also concrete covered. We opened access doors on a large number of the drying rooms in all of the remaining buildings. All floors were concrete. Walls are either concrete block or wood; many of the rooms are in disrepair and roofs are compromised. Fiberglass insulation is sandwiched in plywood ceiling panels in many of the buildings. The exterior roofs are galvanized steel. One wood cabinet contained several empty 1-gallon jugs of a “restricted use” insecticide: *Perm-Up 3.2EC*. The MSDS for this chemical indicates it is flammable as a vapor or liquid and has both dermal and oral acute (Category 4) toxicity. Additional MSDS descriptions indicate the material contains aromatic hydrocarbons. However, specific information regarding chemical components were not referenced on the researched MSDS. Mr. Van Tassel indicated the chemical was formerly used during steam treatment of the drying rooms. The only other environmental-related issue noted was a small stockpile of used rat poison containers, stacked on concrete in the center walkway area.

TAGDD also surveyed an access corridor on the north west side of the buildings. A large number of Gas fired heaters/AC units are present in this area. They service the eastern drying rooms. No chemicals are associated with this equipment. With the exception of the features noted above, no evidence of contamination, distressed vegetation, petroleum-hydrocarbon surface staining, waste drums, USTs, ASTs, illegal dumping, or improper waste storage/handling was noted during our site reconnaissance.

TABLE 3 - Summary of Site Reconnaissance		
Item	Concerns	Comments
General Housekeeping	No	No concerns observed.
Surface Spills	No	No concerns observed.
Stained Surfaces	No	No concerns observed.
Fill Materials	No	No concerns observed
Pits/Ponds/Lagoons	No	A rainwater storage pond is present south of the buildings.
Surface Impoundments	No	No concerns observed.
ASTs/USTs	No	No concerns observed.
Distressed Vegetation	No	No concerns observed.
Wetlands	No	No concerns observed.
Electrical Substations	No	A pad mounted transformer is present south of the office building
Areas of Dumping	No	No concerns observed.
Transformers	No	No concerns observed.
Waste/Scrap Storage	No	No concerns observed.
Chemical Use/Storage	No	A small number of empty <i>Perm-Up 3.2EC</i> containers noted.

4.3 Adjacent Properties

TAGDD conducted a visual and auto reconnaissance of the adjoining commercial development and drove the immediate area to observe the potential for offsite impacts that may affect the subject property. These would include evidence of chemical storage or usage, surface staining or leakage, distressed vegetation, or evidence of illegal dumping.

The adjacent surrounding property is either undeveloped, newly developed residential (West), natural land or ranch/rural developments. TAGDD did not observe environmental concerns in the vicinity of the subject property.

5.0 VAPOR ENCROACHMENT SCREEN

ASTM Standard E2600-15 Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions was used as guidance for conducting a VES for the subject property. The purpose of the screening is to determine whether a Vapor Encroachment Condition (VEC) exists from chemicals of concern (COC) that may migrate as vapors onto a property because of contaminated soil and groundwater on or near the subject property. The screening involves a two-tiered approach to assessing VEC risk as described herein. The VES process includes a review of site conditions (e.g., aerial photographs, city directories, and environmental database information), which is information typically collected during a Phase I ESA, user provided information, and in some instances the use of a third-party vapor encroachment application. The following sections describe the VES performed on the property.

5.1 Site Conditions

The subject site is a level alluvial valley located between two north-south trending coastal ranges. Google Earth indicates the elevation of the subject property descends from approximately 324 feet amsl) on the south to 321 feet amsl at its north end; therefore, surface drainage is assumed to be northward. A drainage channel is present south of the property. Groundwater is assumed to be shallow.

5.2 User Provided Information

To assist TAGDD in the completion of the VES, Mr. Irving, the Owner's representative, completed a Vapor Encroachment Screen - User Questionnaire (**Appendix E**). The questionnaire provided basic information regarding the use, condition, and proposed development of the subject property.

According to Mr. Irving, the subject property will be developed as a Senior Housing complex. Future plans will include slab-on-grade multistory residential, but details have not been finalized. According to Mr. Irving, a former tank leak is known to have occurred on the property. Mr. Irvine did not report knowledge of any other reported gas stations, cleaners, fuel storage tanks, odors, chemicals, or health concerns are known to be present on the property.

5.3 Tier 1 Screening – Search Distance Test/Chemicals of Concern

A Tier 1 Screening includes the search distance test that involves a review of the regulatory database report and available historical records obtained during the Phase I ESA process to decide if any known or suspect potentially contaminated properties exist within the Area of Concern (AOC). High risk sites are

typically current and former gas stations, former and current dry cleaners, manufactured gas plants, and industrial sites (Brownfields). The AOC is defined as any up-gradient sites within the ASTM E1527-13 standard search distances and any cross or down gradient sites within 1/3 mile (1745-feet) *for solvents and petroleum products. If the contamination at the known or potentially contaminated sites within the AOC consists of Chemicals of Concern (COCs), then a potential Vapor Encroachment Condition (pVEC) exists, and a Tier 2 Screening evaluation is recommended. If no known or potentially contaminated sites with COCs exist within the AOC, no further inquiry is necessary.

5.4 Findings

Former gasoline USTs were present roughly 100-feet northwest of the northern border of the subject site, within the overall Royal Mushroom site. Soil vapor sampling performed by EEI (EEI, 2019) indicated the presence of low levels of fuel constituents in vapors. The closest sampling point to the property, roughly 80-feet to the north (location SV-6), contained 24 ug/m³ benzene.

A fuel AST is also present roughly 150-feet north of the subject property, which was also investigated. Vapor sample location SV-2 collected at the AST contained 20 ug/m³ benzene.

Based on a review of the data, TAGDD considers it unlikely that benzene or other remaining fuel constituents are present at concentrations that would cause impact health risk at the subject property. A vapor pVEC can be ruled out.

6.0 DATA GAPS AND DEVIATIONS FROM ASTM PRACTICES

Section 3.2.21 (ASTM E1527-13) defines a data gap as “a lack or inability to obtain information required by the practice despite good faith effort of the environmental professional to gather such information.”

6.1 Historical Data Gaps

No historical data gaps were identified during our research efforts.

6.2 Regulatory Data Gaps

No regulatory data gaps were identified during our research efforts.

6.3 Onsite Data Gaps

No onsite data gaps were identified during our research efforts.

6.4 Deviations from ASTM Practices

Section 12.10 (ASTM E1527-13), states that all deletions and deviations from this practice shall be listed individually and in detail, including client-imposed constraints, and all additions should be listed. TAGDD believes that there are no exceptions to, or deletions and deviations from, the ASTM E1527-13 Guidelines.

7.0 CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E1527-13 of APN 419-140-057, the *subject property*. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report.

This assessment has revealed the following evidence of *recognized environmental conditions* in connection with the *subject property*.

- *Known or suspected RECs* – are defined by the ASTM E1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

This assessment has revealed the following *known or suspected RECs* in connection with the subject property:

- A toxic insecticide, *Perm-Up 3.2EC*, which is known to contain volatile organics, was formerly utilized at the facility. Wash and waste water on the facility was held in a sump and discharged via sprinklers and pumps onto the open area at the south end of the subject site. The potential for residual chemicals related to discharge of this insecticide is considered a REC.

- *Controlled RECs (CRECs)* – are defined by the ASTM E1527-13 as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls)

This assessment has revealed no evidence of *CRECs* in connection with the subject property.

- *Historical RECs (HRECs)* – are defined by the ASTM E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls). This assessment has revealed no evidence of *HRECs* in connection with the subject property.
- *De Minimis Conditions* – include environmental concerns identified which may warrant discussion but do not qualify as RECs, as defined by the ASTM E1527-13.

No *de minimis* conditions were revealed in connection with the subject property.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E1527-13 of APN 779-04-075, with an address of 15480 Watsonville Road / 15440 Monterey Road, the *subject property*. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report.

This assessment has revealed evidence of a *recognized environmental condition* related to insecticide use/application in connection with the *subject property*. *Further investigation, consisting of soil sampling in the open area at the southern end of the site, is warranted.*

SELECTED REFERENCES

California Department of Toxic Substances (DTSC), Website (<http://www.envirostor.dtsc.ca.gov/public/>), EnviroStor database.

California Department of Water Resources, Water Data Library (WDL), Website (<http://www.water.ca.gov/waterdatalibrary>).

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County of Santa Clara, Department of Environmental Health, Local Oversight Program, Public Record Document Search website, www.lustop.sccgove.org.

County of Santa Clara, Department of Environmental Health: Fuel Leak Case Closure Former White Gasoline, Monterey Road and Watsonville Road, Morgan Hill, CA, Case No. 14-806, SCVWDID No. 09SE3E34M010, dated Feb 14, 2011.

County of Santa Clara, Department of Environmental Health: Various County communications regarding the White Service Station investigation and closure.

Federal Emergency Management Agency (FEMA) website, (www.fema.gov).

Light Air and Space Construction (Excerpts), Sampling Report, "SW Corner Monterey Road and Watsonville Road, Morgan Hill, CA", dated March 24, 2010.

National Pipeline Mapping System (NPMS), Public Map Viewer Website, (<https://www.npms.phmsa.dot.gov/PublicViewer/>).

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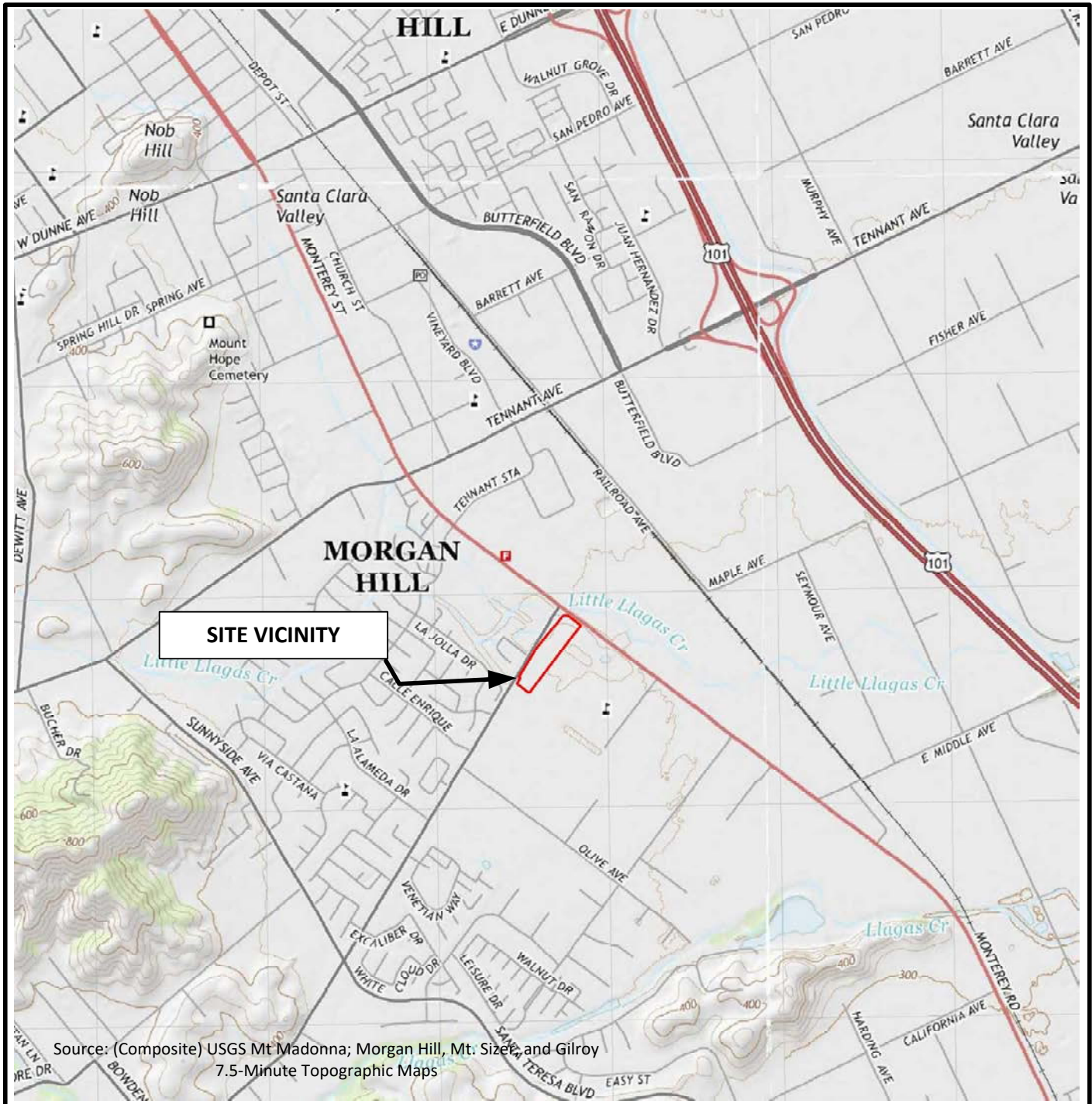
State Water Resources Control Board, Website, GeoTracker database, (<http://www.geotracker.swrcb.ca.gov/>).

TA-Group DD, LLC: *"Soil and Soil Vapor Sampling Report, 15480 Watsonville Road / 15440 Monterey Road Assessor's Parcel Number 779-04-075, Morgan Hill, Santa Clara County, California 95038 Project No. 119003"* dated January 5, 2020.

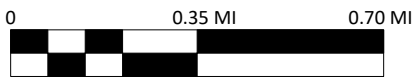
United States Department of Agriculture (USDA), Natural Resources Conservation Center, Website, Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>).

United States Geological Survey (USGS), 2012, 7.5' Topographic Map, Mount Madonna, California Quadrangle.

FIGURES



LEGEND



Approximate Scale

VICINITY MAP

Crossings on Watsonville Road
 15480 Watsonville / 15440 Monterey Road
 Morgan Hill, California
 Project 1219003a



FIGURE 1



Scale is Approximate

SITE AERIAL
 Crossings on *Watsonville Road*
 15440/15480 Monterey Road
 Morgan Hill, California Project
 1219003

FIGURE 2

TA-GROUP DD, LLC
 Diligent Diligence

Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX A
RESUME OF ENVIRONMENTAL PROFESSIONAL



CURRICULUM VITAE

TIMOTHY A. LESTER, C.E.M.

Summary: As a founder and managing partner providing Environmental Consulting and related services since 1996, Mr. Lester has provided consulting and technical services as a Principal Scientist, Project Manager, expert witness for Due Diligence, Site Investigation, and Remediation at sites impacted by heavy metals, petroleum hydrocarbons, solvents, pesticides, PNA and PCB, and radionuclides (NORM). As a remediation specialist, he has hands on experience designing, installing, and managing large scale metals fixation, bioventing, soil vapor extraction, sparging, and free phase hydrocarbon recovery projects. His career in environmental investigation and remediation began in 1987, enhanced by four years of related experience in the geotechnical and petroleum exploration businesses. Mr. Lester has been an active participant on all phases of due diligence, site investigation, and remediation planning, cleanup strategy, feasibility evaluation, remedial implementation, and litigation support for a variety of industrial and commercial projects.

Employment History

- 1996 TO PRESENT** **FOUNDER/ EEI & TA-Group DD, LLC**
Mr. Lester has been the project manager and technical resource for major real estate investment trusts (REIT) and commercial developments, and has managed all environmental due diligence, investigation, and cleanup for an aggregate of over \$400 million dollars in commercial properties. Additionally, Mr. Lester has managed all investigation, regulatory strategy, and cleanup at a number of fuel and solvent release sites in California, Oregon, Arizona, Nevada, New Mexico, and Washington related to former retail fuel release sites, and has managed and implemented soil and groundwater investigations at fuel and chlorinated solvent sites for other clients. Mr. Lester also was the primary environmental expert for a landfill chlorinated solvent case in Southern California, and has provided similar expert testimony on a number of environmental release cases.
- 1989 TO 1997** **SR. PROJECT MANAGER, SR. GEOLOGIST, MARKETING MANAGER CLAYTON (FORMERLY MITTELHAUSER CORPORATION)**
Actively managed southwest region Phase II investigations, remediation, and specialized regulatory projects. Evaluated investigation information and remedial alternatives while preparing Remedial Action Plans (RAP) for multi-contaminant impacted landfill site, numerous fuel impacted sites, a RCRA regulated utility remediation project, refinery bioventing projects, a California superfund townegas project, a bulk storage facility impoundment cleanup, and numerous other large remediation project sites. All RAPs were approved.

Promotions included Project to Senior Geologist, to Geoservices and Technology Division Manager. Technical services included managing remediation projects, designing and coordinating investigation projects, and developing regulatory and technical strategy for Southwest Region. Provided expert witness services to remediation projects involving soil and groundwater contamination. Conceptualized, designed, and implemented a variety of large scale industrial bioventing (refinery, Utility RCRA, Townegas, bulk storage) and soil vapor extraction projects.
- 1987 TO 1989** **PROJECT MANAGER**
NACHANT ENVIRONMENTAL, INC. Promoted from staff to Project Geologist and Project Manager. Responsible for all phases of investigation and cleanup of sites primarily contaminated with fuel hydrocarbons, chlorinated hydrocarbons, and waste oils. Part of project team which developed, built, and implemented largest soil vapor extraction (1,000 cfm) project in state at that time.
- 1986 TO 1987** **Geotechnical Technician and Geologist in Training** **Geosoils, Inc.**
- 1983 TO 1986** **Exploration Technician** **ARCO Oil & Gas & ARCO Exploration**

C.V., TIMOTHY A. LESTER, R.E.A. II, C.E.M.

Representative Projects

PG&E Bioventing Project, Morro Bay, CA. Prepared proposal, conceptual design, and all preliminary costing for \$1.0M impoundment remediation project. Prepared Remedial Action Plan and met with regulators for this RCRA facility.

Mine Project, Mountain Pass, CA. Prepared proposal and all preliminary costing for \$5.6M mine remediation project. Project included regulatory, design engineering, construction, and field remediation of RCRA hazardous and NORM waste. Largest single (annual) project ever performed by company.

School Phase I ESA, Orange County, CA: Provided oversight activities for a Phase I ESA under DTSC guidance for the Running Springs school site in Orange County, California. Avoided a PEA and attained a DTSC No Further Action letter for the School District. Currently providing Preliminary Endangerment Assessment services to the Val Verde School District, Riverside, California on a Middle School project.

Bioventing Project, So. California Refinery: Provided all conceptual design for push-pull bioventing system in a site characterized by complex fine grained sediments. Contaminants included VOC, fuels, PNA, and heavy oil. Wrote approved Remedial Action Plan (LARWQCB). Managed field installation of innovative high vacuum (clay target) system. Project value \$400k.

Landfill Project, Palos Verdes, CA. Project Manager for all phases of regulatory strategy, Phase II investigations, remedial planning and design for site impacted by heavy metals, PCB, PNA, hydrocarbons, pesticides. Wrote approved RAP which utilized USEPA protocol risk assessment to reduce remediation to capping option; savings to \$3.0M. Total project value \$2.0M+

Scrap Metal Terminal, POLA, CA. For the largest scrap metal terminal in the western U.S., managed and implemented a Phase II investigation project for free phase hydrocarbons. Delineated occurrence and managed installation of borings, piezometers, and groundwater monitoring wells. Evaluated sites remedial options and prepared Remedial Action Plan (approved).

SVE Remediation Project, Santa Fe Springs, CA. Prepared proposal, prepared conceptual design, selected technology and equipment, managed field installation, and managed project for soil and groundwater investigation and cleanup project utilizing Soil Vapor Extraction in TCE, fuel, and PNA impacted soils. Dual nested system designed to remediate dual target fine grained and coarse grained target sediments. Closed site.

Bioventing Project, So. California State Superfund Site: Provided all conceptual design for appurtenants and push-pull biovent system, utilizing anhydrous ammonia nutrient feed. Wrote approved RAP (regional water quality control board and Cal-EPA) and coordinated final engineering. Managed installation of large, 20+ nested well (clay and sand) system. Project value \$700k.

LITIGATION SUPPORT

As an Expert Witness, reviewed applicable soil contamination reports for a solvent release site at a former battery manufacturing site in the Los Angeles basin. Evaluated remedial alternatives, prepared conceptual remediation program, provided remedial cost estimates, and was deposed in Superior Court for the defendant. Testified in trial at Superior Court for the defendant. "Seventh Avenue Investment vs. Exide Corporation".

As an Expert Witness in a Southern California TCE/PCE solvent case: Provided soil contamination evaluation, conceptual design and costing for Soil Vapor Extraction remediation of PCE and TCE impacted site in the Los Angeles Basin. Testified as expert witness for defense.

As an Expert Witness, evaluated historical landfill soil, data, and SWAT data for chlorinated solvent release at site and neighboring facilities. Determined range of costs for appropriate remedial options and evaluated remedial actions and costs prepared by others. Testified in Trial at Superior Court in the County of San Diego, for the plaintiffs in "Bay National Properties, et al. vs. County of San Diego, et al. for Daley and Heft.

As technical support for the development of remediation alternative costs and feasibility, representing the defendants (joint defense team), in "Cedar-Sinai Medical Center vs. Atlantic Richfield Co., et al., in a soil and groundwater solvent contamination case related to a suspected dry cleaner release. Evaluated historical release data to soil and groundwater, evaluated remediation and disposal practices, cost control, and regulatory options.

C.V., TIMOTHY A. LESTER, R.E.A. II, C.E.M.

Reviewed prior consultant soil and groundwater investigation and feasibility reports for solvents, metals, fuels, and other contaminants for a large industrial property with documented soil and groundwater contamination. Worked as technical support for the evaluation of remedial feasibility, options, and implementation costs. Representing the defendant, California Steel Industries, in the Kaiser Steel Industries bankruptcy proceedings, for Morgan, Lewis, and Bockius.

Named as Expert Witness for a chlorinated solvent and RCRA release site in the City of Industry superfund site. Inspected property, conducted soil investigation, and evaluated historical data at the site. Wrote an approved Remedial Action Plan for the facility and prepared soil vapor extraction remediation cost and implementation guidelines. Case was settled prior to trial. Work conducted for McDermott, Will and Emory.

Education

Bachelor of Science, Geology, California State University Bakersfield
Various Graduate Courses in Geochemistry, Fate and Transport

Publications/Presentations

With C.E. Dial and D.J. Leu, "A Case Study of a refinery Bioventing Project", September, 1993, presented to the American Petroleum Institute, Baltimore, Maryland

"Vacuum Extraction, New Technologies and Wider Applications", May, 1989, presented at HAZMAT 1989, Anaheim, California

Lectures to Environmental Engineering classes at CSU Irvine, Winter, 1995: "Air Sparging", and "Free Phase Recovery"

Certifications

Registered Environmental Assessor II No. 20047, State of California (FORMER/CA no longer uses this registration)
Certified Environmental Manager No. EM-1754, State of Nevada
HAZWOPER 40-hour OSHA Training
HAZWOPER Site Supervisor 8-hour Training

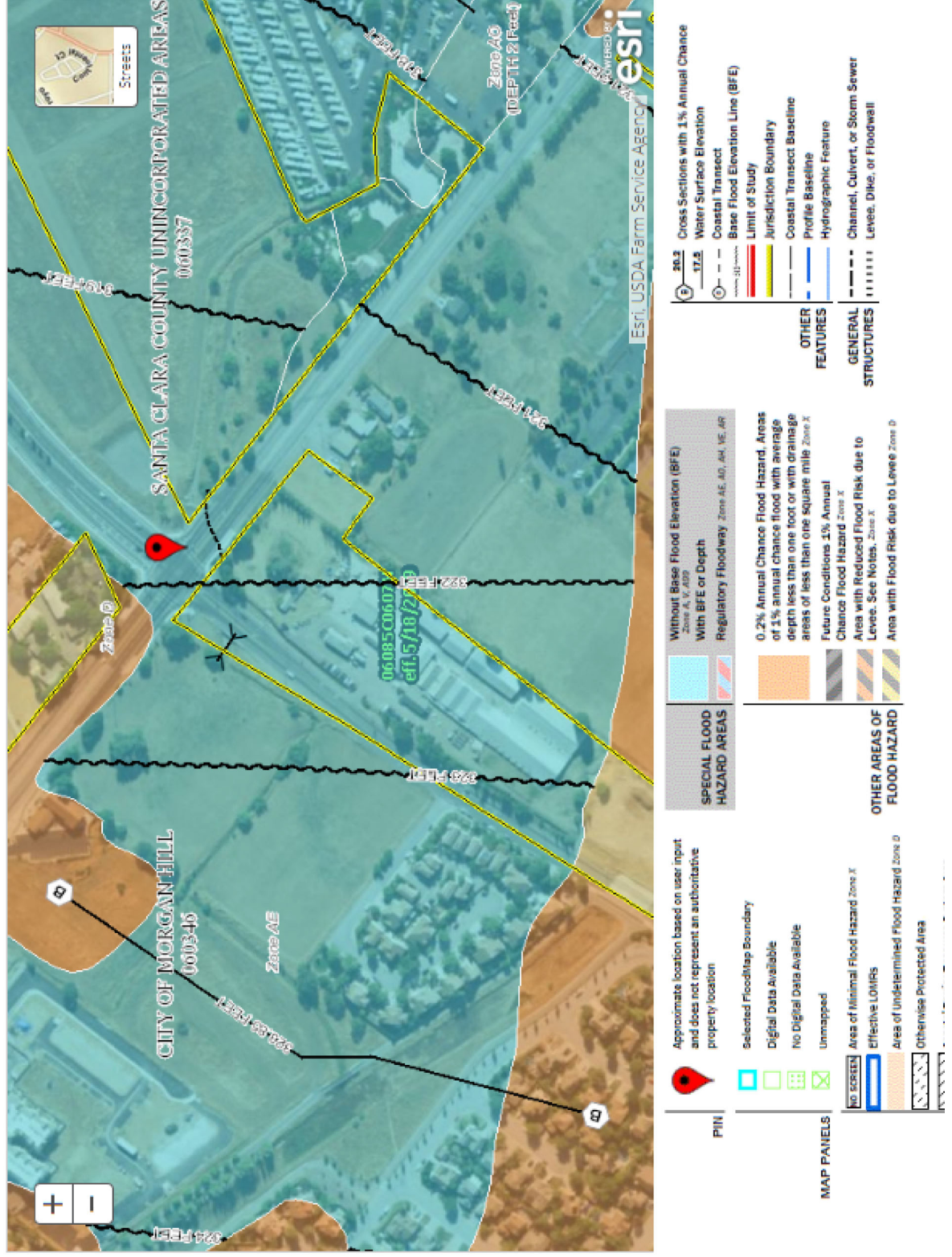
Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX B
SUBJECT PROPERTY SUPPORTING DOCUMENTATION
Preliminary Title Report w/APN Map
FEMA Map

You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMapette. If you are a person with a disability, are blind, or have low vision, and need assistance, please contact a map specialist.

[Go To NFHL Viewer »](#)





Issuing Policies of Chicago Title Insurance Company

Order No.: 98201654-982-CF-KC

Title Officer: Kenneth Connaker

TO:

Escrow Officer: Corinne Fimbrez

South County Realty
17045 Monterey Road, Ste A
Morgan Hill, CA 95037

675 N. First St, Suite 300
San Jose, CA 95112
(408) 292-4212
(408) 282-1404

ATTN: **.Matt Telfer**
YOUR REFERENCE:

PROPERTY ADDRESS: 15440 Monterey Road, Morgan Hill, CA

PRELIMINARY REPORT

*In response to the application for a policy of title insurance referenced herein, **Chicago Title Company** hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a policy or policies of title insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an exception herein or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations or Conditions of said policy forms.*

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Attachment One. The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Attachment One. Copies of the policy forms should be read. They are available from the office which issued this report.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

The policy(s) of title insurance to be issued hereunder will be policy(s) of Chicago Title Insurance Company, a Florida corporation.

Please read the exceptions shown or referred to herein and the exceptions and exclusions set forth in Attachment One of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects and encumbrances affecting title to the land.

Chicago Title Company

By: *Jeff Davidson*
Authorized Signature



By: *Randy Quirk*
Randy Quirk, President

Attest: *Michael Gravelle*
Michael Gravelle, Secretary



PRELIMINARY REPORT

EFFECTIVE DATE: July 19, 2018 at 7:30 a.m.

ORDER NO.: 98201654-982-CF-KC

The form of policy or policies of title insurance contemplated by this report is:

ALTA Extended Owners Policy (6-17-06)
ALTA Extended Loan Policy (6-17-06)

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:

A Fee

2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

Royal Oaks Enterprises, Inc., a California corporation

3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

See Exhibit A attached hereto and made a part hereof.

EXHIBIT A
LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

PORTION OF LOT 1, AS SHOWN UPON THAT CERTAIN MAP ENTITLED, "MAP OF THE LAS LLAGAS SUBDIVISION", WHICH MAP WAS FILED FOR RECORD IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, ON NOVEMBER 5, 1910 IN **BOOK N OF MAPS, AT PAGE 12**, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE POINT OF INTERSECTION OF THE SOUTHWESTERLY LINE OF MONTEREY ROAD (CALIFORNIA STATE HIGHWAY) AS SAID LINE WAS ESTABLISHED IN THE DEED FROM PIETRO SUGLIO, ET UX, TO STATE OF CALIFORNIA, DATED JUNE 29, 1939 IN **BOOK 917 OFFICIAL RECORDS, PAGE 90**, SANTA CLARA COUNTY RECORDS, WITH THE DIVIDING LINE BETWEEN LOTS 1 AND 2, AS SAID LOTS ARE SHOWN UPON THE MAP REFERENCED ABOVE; RUNNING THENCE FROM SAID POINT OF BEGINNING NORTH 51° 40' WEST ALONG THE SAID SOUTHWESTERLY LINE OF MONTEREY ROAD FOR A DISTANCE OF 253.34 FEET TO AN IRON PIPE; THENCE LEAVING THE SAID SOUTHWESTERLY LINE OF MONTEREY ROAD AND RUNNING SOUTH 70° 41' 40" WEST 68.95 FEET TO AN IRON PIPE AND SOUTH 84° 21' 30" WEST 122.75 FEET TO A NAIL SET IN THE CENTERLINE OF WATSONVILLE ROAD, AS SAID ROAD IS SHOWN UPON THE MAP ABOVE REFERENCED; RUNNING THENCE SOUTH 32° 35' WEST ALONG THE SAID CENTER LINE OF WATSONVILLE ROAD FOR A DISTANCE OF 1142.18 FEET TO THE NORTHWESTERLY COMMON CORNER FOR LOTS 1 AND 29, AS SAID LOTS ARE SHOWN UPON THE MAP ABOVE REFERENCED; THENCE LEAVING THE SAID CENTER LINE OF WATSONVILLE ROAD AND RUNNING SOUTH 51° 40' EAST ALONG THE DIVIDING LINE BETWEEN SAID LOTS 1 AND 29 FOR A DISTANCE OF 264.16 FEET TO THE COMMON CORNER FOR SAID LOTS 1 AND 2 IN THE NORTHEASTERLY LINE OF SAID LOT 29; RUNNING THENCE NORTH 38° 20' EAST ALONG THE DIVIDING LINE BETWEEN SAID LOTS 1 AND 2 FOR A DISTANCE OF 1279.91 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION CONVEYED TO SANTA CLARA VALLEY WATER DISTRICT, A PUBLIC CORPORATION, BY DEED RECORDED FEBRUARY 1, 1991, **BOOK 1607 PAGE 1020** DESCRIBED AS FOLLOWS:

BEING A PORTION OF THE LANDS DESCRIBED AS PARCEL ONE IN THE DEED RECORDED IN BOOK **3228 OF OFFICIAL RECORDS AT PAGE 139**, IN THE OFFICE OF THE RECORDER COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, TO WIT:

BEGINNING AT THE MOST WESTERLY CORNER OF SAID PARCEL 1 AS DESCRIBED IN SAID DEED, SAID POINT ALSO BEING IN THE CENTERLINE OF WATSONVILLE ROAD (60 FEET WIDE); THENCE ALONG SAID CENTERLINE N. 32° 35' 00" E. 162.36 FEET; THENCE LEAVING SAID CENTERLINE S. 57° 25' 00" E. 60.00 FEET; THENCE S. 32° 35' 00" W. 93.02 FEET; THENCE S. 51° 40' 00" E. 211.41 FEET TO THE SOUTHEASTERLY LINE OF SAID PARCEL 1; THENCE ALONG SAID SOUTHEASTERLY LINE, S. 38° 20' 00" W. 75.00 FEET TO THE SOUTHWESTERLY LINE OF SAID PARCEL 1; THENCE ALONG SAID SOUTHWESTERLY LINE, N. 51° 40' 00" W. 264.16 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM THAT PORTION THEREOF CONDEMNED IN FEE, AS DESCRIBED IN FINAL ORDER OF CONDEMNATION IN FAVOR OF THE CITY OF MORGAN HILL, A MUNICIPAL CORPORATION, RECORDED FEBRUARY 14, 2013, AS INSTRUMENT NO. **22094204** OF OFFICIAL RECORDS.

PARCEL TWO:

PORTION OF LOT 1, AS SHOWN UPON THAT CERTAIN MAP ENTITLED, "MAP OF THE LAS LLAGAS SUBDIVISION", WHICH MAP WAS FILED FOR RECORD IN THE OFFICE OF THE RECORDER OF THE

**EXHIBIT A
(Continued)**

COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, ON NOVEMBER 5, 1910 IN BOOK N OF MAPS, AT PAGE 12, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON PIPE SET IN THE SOUTHWESTERLY LINE OF MONTEREY ROAD (CALIFORNIA STATE HIGHWAY) AS SAID LINE WAS ESTABLISHED IN THE DEED FROM PIETRO SUGLIO. ET UX, TO STATE OF CALIFORNIA, DATED JUNE 29, 1938, RECORDED JANUARY 25, 1939 IN **BOOK 917 OF OFFICIAL RECORDS**, PAGE 90, SANTA CLARA COUNTY RECORDS, DISTANT THEREON N. 51° 40' WEST 253.34 FEET FROM THE POINT OF INTERSECTION THEREOF WITH THE DIVIDING LINE BETWEEN LOTS 1 AND 2, AS SAID LOTS ARE SHOWN UPON THE MAP ABOVE REFERENCED; RUNNING THENCE FROM SAID POINT OF BEGINNING SOUTH 70° 41' 40" WEST 68.95 FEET TO AN IRON PIPE AND SOUTH 84° 21' 30" WEST 122.75 FEET TO A NAIL SET IN THE CENTER LINE OF WATSONVILLE ROAD, AS SAID ROAD IS SHOWN UPON THE MAP ABOVE REFERENCED; RUNNING THENCE NORTH 32° 35' EAST ALONG THE SAID CENTER LINE OF WATSONVILLE ROAD TO A POINT ON THE SOUTHWESTERLY LINE OF MONTEREY ROAD, AS SAID ROAD WAS ESTABLISHED BY THE CERTAIN DEED TO THE STATE OF CALIFORNIA MENTIONED ABOVE, THENCE SOUTH 51° 40' EAST ALONG SAID SOUTHWESTERLY LINE OF MONTEREY ROAD TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM ALL THAT PORTION THEREOF AS CONVEYED TO THE STATE OF CALIFORNIA BY DEED DATED JUNE 29, 1938, RECORDED JANUARY 25, 1939 IN **BOOK 917 OF OFFICIAL RECORDS** PAGE 90, SANTA CLARA COUNTY RECORDS, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST EASTERLY CORNER OF SAID LOT 1, BEING A POINT IN THE CENTER LINE OF THE MONTEREY ROAD, DISTANT SOUTH 37° 53' 30" WEST 15.00 FEET FROM ENGINEER'S STATION 48.47 OF THE DEPARTMENT OF PUBLIC WORKS SURVEY BETWEEN MORGAN HILL AND LLAGAS CREEK, ROAD IV-S. C1-2-C; THENCE ALONG THE CENTER LINE OF MONTEREY ROAD NORTH 52° 06' 30" WEST 395.46 FEET TO THE NORTHERLY CORNER OF SAID LOT 1, BEING THE POINT OF INTERSECTION OF SAID CENTER LINE WITH THE CENTER LINE OF WATSONVILLE ROAD; THENCE ALONG THE CENTER LINE OF WATSONVILLE ROAD, SOUTH 31° 41' 30" WEST 57.03 FEET THENCE LEAVING LAST SAID CENTER LINE SOUTH 62° 51' EAST 30.09 FEET; THENCE FROM A TANGENT WHICH BEARS NORTH 31° 41' 50" EAST ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 10 FEET, THROUGH AN ANGLE OF 96° 12' A DISTANCE OF 16.79 FEET TO A POINT IN A LINE PARALLEL TO AND DISTANT 55 FEET SOUTHWESTERLY MEASURED AT RIGHT ANGLES FROM THE CENTER LINE OF SAID SURVEY; THENCE ALONG SAID PARALLEL LINE SOUTH 52° 06' 30" EAST 350.79 FEET TO THE SOUTHEASTERLY LINE OF SAID LOT 1, THENCE ALONG SAID SOUTHEASTERLY LOT LINE NORTH 37° 53' 30" EAST 40 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM THAT PORTION THEREOF CONDEMNED IN FEE, AS DESCRIBED IN FINAL ORDER OF CONDEMNATION IN FAVOR OF THE CITY OF MORGAN HILL, A MUNICIPAL CORPORATION, RECORDED FEBRUARY 14, 2013, AS INSTRUMENT NO. **22094204** OF OFFICIAL RECORDS.

APN: **779-04-075**

EXCEPTIONS

AT THE DATE HEREOF, ITEMS TO BE CONSIDERED AND EXCEPTIONS TO COVERAGE IN ADDITION TO THE PRINTED EXCEPTIONS AND EXCLUSIONS IN SAID POLICY FORM WOULD BE AS FOLLOWS:

1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2018-2019.
2. Prior to close of escrow, please contact the Tax Collector's Office to confirm all amounts owing, including current fiscal year taxes, supplemental taxes, escaped assessments and any delinquencies.
3. The lien of supplemental or escaped assessments of property taxes, if any, made pursuant to the provisions of Chapter 3.5 (commencing with Section 75) or Part 2, Chapter 3, Articles 3 and 4, respectively, of the Revenue and Taxation Code of the State of California as a result of the transfer of title to the vestee named in Schedule A or as a result of changes in ownership or new construction occurring prior to Date of Policy.
4. The herein described property lies within the boundaries of a Mello-Roos Community Facilities District (CFD) as follows:

CFD No: 2013-1
 For: Library Services
 Disclosed by: Notice of Special Tax Lien
 Recording Date: January 22, 2014
 Recording No.: 22502535, Official Records

This property, along with all other parcels in the CFD, is liable for an annual special tax. This special tax is included with and payable with the general property taxes of the City Morgan Hill, County of Santa Clara. The tax may not be prepaid.

Further information may be obtained by contacting:

Fiscal Agent of the Santa Clara County Library District Joint Powers
 14600 Winchester Blvd
 Los Gatos, CA 95032
 (408) 293-2326 Ext. 3004

5. Any liens or other assessments, bonds, or special district liens including without limitation, Community Facility Districts, that arise by reason of any local, City, Municipal or County Project or Special District.
6. Water rights, claims or title to water, whether or not disclosed by the public records.
7. Rights of the public to any portion of the Land lying within the area commonly known as Watsonville Road and Monterey Road.
8. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Coast Counties Gas and Electric Company, a corporation
 Purpose: Electrical facilities
 Recording Date: October 7, 1926
 Recording No: 23521, Book 269, Page 401 Official Records
 Affects: The exact location and extent of said easement is not disclosed of record

EXCEPTIONS (Continued)

10. Waiver of any claims for damages to said Land by reason of the location, construction, landscaping or maintenance of the street or highway adjoining said Land, as contained in the deed to

County/City/State: State of California
 Name of Street or Highway: Monterey Road
 Recording Date: January 25, 1939
 Recording No.: 151186, **Book 917, Page 90**, Official Records

11. A deed of trust to secure an indebtedness in the amount shown below,

Amount: \$1,000,000.00
 Dated: May 7, 2010
 Trustor/Grantor: Royal Oak Enterprises, Inc., California corporation
 Trustee: Vib Corp
 Beneficiary: Rabobank, N.A.
 Loan No.: None shown
 Recording Date: June 11, 2010
 Recording No.: **20738320**, Official Records

A substitution of trustee under said deed of trust which names, as the substituted trustee, the following

Trustee: Rabobank, N.A.
 Recording Date: November 5, 2015
 Recording No.: **23135957**, Official Records

An agreement to modify the terms and provisions of said deed of trust as therein provided

Entitled: Modification and Supplement to Deed of Trust and Partial Reconveyance
 Executed by: Royal Oaks Enterprises, Inc. and Rabobank, N.A.
 Recording Date: November 5, 2015
 Recording No.: **23135958**, Official Records

12. Easement(s) for the purpose(s) shown below and rights incidental thereto as condemned by an instrument,

Entitled: Final Order of Condemnation
 Court: Superior
 Case No.: 111cv-202713
 In favor of: City of Morgan Hill
 Purpose: Storm drainage and public utilities
 Recording Date: February 14, 2013
 Recording No.: **22094204**, Official Records
 Affects: As described in said document herein referred to

13. The herein described Land is located in an area frequently subject to Land Conservation Contracts executed pursuant to the Williamson Act (Cal. Govt. Code §§ 51200 et seq.). Land Conservation Contracts restrict the land use to agricultural, recreational, open-space and other compatible uses. If the herein described Land is subject to a Land Conservation Contract, please notify the Title Department.

The Company reserves the right to add additional items and/or make further requirements.

EXCEPTIONS (Continued)

14. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
15. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
16. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
17. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the land and not shown by the Public Records.
18. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
19. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
20. Any lien or right to a lien for services, labor or material not shown by the Public Records.
21. Any rights of the parties in possession of a portion of, or all of, said Land, which rights are not disclosed by the public records.

The Company will require, for review, a full and complete copy of any unrecorded agreement, contract, license and/or lease, together with all supplements, assignments and amendments thereto, before issuing any policy of title insurance without excepting this item from coverage.

The Company reserves the right to except additional items and/or make additional requirements after reviewing said documents.

22. Matters which may be disclosed by an inspection and/or by a correct ALTA/NSPS Land Title Survey of said Land that is satisfactory to the Company, and/or by inquiry of the parties in possession thereof.
23. The Company will require an ALTA/NSPS LAND TITLE SURVEY. If the owner of the Land the subject of this transaction is in possession of a current ALTA/NSPS LAND TITLE SURVEY, the Company will require that said survey be submitted for review and approval; otherwise, a new survey, satisfactory to the Company, must be prepared by a licensed land surveyor and supplied to the Company prior to the close of escrow.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

EXCEPTIONS (Continued)

24. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance by the corporation named below:

Name of Corporation: Royal Oaks Enterprises, Inc., a California corporation

- a) A Copy of the corporation By-laws and Articles of Incorporation
- b) An original or certified copy of a resolution authorizing the transaction contemplated herein
- c) If the Articles and/or By-laws require approval by a 'parent' organization, a copy of the Articles and By-laws of the parent
- d) A current dated certificate of good standing from the proper governmental authority of the state in which the entity was created

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

25. The Company will require that an Owner's Affidavit be completed by the party(s) named below before the issuance of any policy of title insurance.

Party(s): Royal Oaks Enterprises, Inc., a California corporation

The Company reserves the right to add additional items or make further requirements after review of the requested Affidavit.

26. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below:

Limited Liability Company: Urban Housing Communities LLC

- a) A copy of its operating agreement, if any, and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member.
- b) If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendments thereto with the appropriate filing stamps.
- c) If the Limited Liability Company is member-managed, a full and complete current list of members certified by the appropriate manager or member.
- d) A current dated certificate of good standing from the proper governmental authority of the state in which the entity is currently domiciled.
- e) If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.
- f) If Limited Liability Company is a Single Member Entity, a Statement of Information for the Single Member will be required.
- g) Each member and manager of the LLC without an Operating Agreement must execute in the presence of a notary public the Certificate of California LLC (Without an Operating Agreement) Status and Authority form.

**EXCEPTIONS
(Continued)**

27. The transaction contemplated in connection with this Report is subject to the review and approval of the Company's Corporate Underwriting Department. The Company reserves the right to add additional items or make further requirements after such review.

PLEASE REFER TO THE "INFORMATIONAL NOTES" AND "REQUIREMENTS" SECTIONS WHICH FOLLOW FOR INFORMATION NECESSARY TO COMPLETE THIS TRANSACTION.

END OF EXCEPTIONS

INFORMATIONAL NOTES SECTION

1. None of the items shown in this report will cause the Company to decline to attach CLTA Endorsement Form 100 to an Extended Coverage Loan Policy, when issued.
2. The Company is not aware of any matters which would cause it to decline to attach CLTA Endorsement Form 116 indicating that there is located on said Land Agricultural Land, known as **15440 Monterey Road**, located within the City of Morgan Hill, California, to an Extended Coverage Loan Policy.
3. Note: The name(s) of the proposed insured(s) furnished with this application for title insurance is/are:

Name(s) furnished: Urban Housing Communities LLC

If these name(s) are incorrect, incomplete or misspelled, please notify the Company.
4. Note: There are NO conveyances affecting said Land recorded within 24 months of the date of this report.
5. Note: The charge for a policy of title insurance, when issued through this title order, will be based on the Basic Title Insurance Rate.
6. Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts were:

Tax Identification No.: 779-04-075
Fiscal Year: 2017-2018
1st Installment: \$11,474.42
2nd Installment: \$8,191.92
Exemption: \$0.00
Land: \$816,474.00
Improvements: \$518,963.00
Personal Property: \$232,776.00
Code Area: 004-004
Bill No.: 779-04-075-00
7. Pursuant to Government Code Section 27388.1, as amended and effective as of 1-1-2018, a Documentary Transfer Tax (DTT) Affidavit may be required to be completed and submitted with each document when DTT is being paid or when an exemption is being claimed from paying the tax. If a governmental agency is a party to the document, the form will not be required. DTT Affidavits may be available at a Tax Assessor-County Clerk-Recorder.
8. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
9. Your application for title insurance was placed by reference to only a street address or tax identification number. Based on our records, we believe that the legal description in this report covers the parcel(s) of Land that you requested. If the legal description is incorrect, the seller/borrower must notify the Company and/or the settlement company in order to prevent errors and to be certain that the correct parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.

**INFORMATIONAL NOTES
(Continued)**

10. Note: If a county recorder, title insurance company, escrow company, real estate broker, real estate agent or association provides a copy of a declaration, governing document or deed to any person, California law requires that the document provided shall include a statement regarding any unlawful restrictions. Said statement is to be in at least 14-point bold face type and may be stamped on the first page of any document provided or included as a cover page attached to the requested document. Should a party to this transaction request a copy of any document reported herein that fits this category, the statement is to be included in the manner described.
11. Note: Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of an agent, an authorized employee of the insured lender, or by using Bancserv or other approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.
12. Note: The policy of title insurance will include an arbitration provision. The Company or the insured may demand arbitration. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Please ask your escrow or title officer for a sample copy of the policy to be issued if you wish to review the arbitration provisions and any other provisions pertaining to your Title Insurance coverage.
13. Due to the special requirements of SB 50 (California Public Resources Code Section 8560 et seq.), any transaction that includes the conveyance of title by an agency of the United States must be approved in advance by the Company's State Counsel, Regional Counsel, or one of their designees.

END OF INFORMATIONAL NOTES

Kenneth Connaker/lct

Wire Fraud Alert

This Notice is not intended to provide legal or professional advice. If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. **DO NOT** use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the phone number of relevant parties to the transaction as soon as an escrow account is opened.** **DO NOT** send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do **NOT** reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
<http://www.fbi.gov>

Internet Crime Complaint Center:
<http://www.ic3.gov>

FIDELITY NATIONAL FINANCIAL, INC. PRIVACY NOTICE

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, “FNF,” “our,” or “we”) respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

Types of Information Collected

We may collect two types of information from you: Personal Information and Browsing Information.

Personal Information. FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g., Social Security Number, driver’s license, passport, or other government ID number);
- financial account information (e.g., loan or bank account information); and
- other personal information necessary to provide products or services to you.

Browsing Information. FNF may automatically collect the following types of Browsing Information when you access an FNF website, online service, or application (each an “FNF Website”) from your Internet browser, computer, and/or mobile device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website

How Personal Information is Collected

We may collect Personal Information about you from:

- information we receive from you on applications or other forms;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

How Browsing Information is Collected

If you visit or use an FNF Website, Browsing Information may be collected during your visit. Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a “cookie” may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer’s hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to “Do Not Track” features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to other websites. FNF is not responsible for the privacy practices or the content of any of those other websites. We advise you to read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates’, and third parties’ products and services, jointly or independently.

When Information Is Disclosed

We may make disclosures of your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to nonaffiliated third party service providers with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or

- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Please see “**Choices With Your Information**” to learn the disclosures you can restrict.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to guard your Personal Information. We limit access to nonpublic personal information about you to employees who need to know that information to do their job. When we provide Personal Information to others as discussed in this Privacy Notice, we expect that they process such information in compliance with our Privacy Notice and in compliance with applicable privacy laws.

Choices With Your Information

If you do not want FNF to share your information with our affiliates to directly market to you, you may send an “opt out” request by email, phone, or physical mail as directed at the end of this Privacy Notice. We do not share your Personal Information with nonaffiliates for their use to direct market to you.

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information and Browsing Information with nonaffiliated third parties, except as permitted by California law.

For Nevada Residents: You may be placed on our internal Do Not Call List by calling (888) 934-3354 or by contacting us via the information set forth at the end of this Privacy Notice. Nevada law requires that we also provide you with the following contact information: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: BCPINFO@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information and Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not share information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

Information From Children

The FNF Websites are meant for adults and are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF’s headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence for any of the purposes described in this Privacy Notice. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the “Service Websites”). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender’s privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender’s privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except (1) as required or authorized by contract with the mortgage loan servicer or lender, or (2) as required by law or in the good-faith belief that such disclosure is necessary to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The revised Privacy Notice, showing the new revision date, will be posted on the FNF Website. Each time you provide information to us following any amendment of this Privacy Notice, your provision of information to us will signify your assent to and acceptance of the terms of the revised Privacy Notice for all previously collected information and information collected from you in the future. We may use comments, information or feedback that you submit to us in any manner that we may choose without notice or compensation to you.

Accessing and Correcting Information; Contact Us

If you have questions, would like to access or correct your Personal Information, or want to opt-out of information sharing for affiliate marketing, send your requests via email to privacy@fnf.com, by phone to (888) 934-3354, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue
Jacksonville, Florida 32204
Attn: Chief Privacy Officer

Notice of Available Discounts

Pursuant to Section 2355.3 in Title 10 of the California Code of Regulations Fidelity National Financial, Inc. and its subsidiaries ("FNF") must deliver a notice of each discount available under our current rate filing along with the delivery of escrow instructions, a preliminary report or commitment. Please be aware that the provision of this notice does not constitute a waiver of the consumer's right to be charged the field rate. As such, your transaction may not qualify for the below discounts.

You are encouraged to discuss the applicability of one or more of the below discounts with a Company representative. These discounts are generally described below; consult the rate manual for a full description of the terms, conditions and requirements for each discount. These discounts only apply to transaction involving services rendered by the FNF Family of Companies. This notice only applies to transactions involving property improved with a one-to-four family residential dwelling.

FNF Underwritten Title Company

FNTC - Chicago Title Company
FNTCCA –Fidelity National Title Company of California

FNF Underwriter

CTIC - Chicago Title Insurance Company

Available Discounts

CREDIT FOR PRELIMINARY REPORTS AND/OR COMMITMENTS ON SUBSEQUENT POLICIES (CTIC)

Where no major change in the title has occurred since the issuance of the original report or commitment, the order may be reopened within 12 or 36 months and all or a portion of the charge previously paid for the report or commitment may be credited on a subsequent policy charge.

DISASTER LOANS (CTIC)

The charge for a lender's Policy (Standard or Extended coverage) covering the financing or refinancing by an owner of record, within 24 months of the date of a declaration of a disaster area by the government of the United States or the State of California on any land located in said area, which was partially or totally destroyed in the disaster, will be 50% of the appropriate title insurance rate.

CHURCHES OR CHARITABLE NON-PROFIT ORGANIZATIONS (CTIC)

On properties used as a church or for charitable purposes within the scope of the normal activities of such entities, provided said charge is normally the church's obligation the charge for an owner's policy shall be 50% to 70% of the appropriate title insurance rate, depending on the type of coverage selected. The charge for a lender's policy shall be 40% to 50% of the appropriate title insurance rate, depending on the type of coverage selected.

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ATTACHMENT ONE
CALIFORNIA LAND TITLE ASSOCIATION
STANDARD COVERAGE POLICY – 1990
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
(b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material not shown by the public records.

CLTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE

EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
 - a. building;
 - b. zoning;
 - c. land use;
 - d. improvements on the Land;
 - e. land division; and

- f. environmental protection.
This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
 3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
 4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
 - b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
 5. Failure to pay value for Your Title.
 6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the Land.
 This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
 7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
 8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
 9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:

- For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.

The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

		Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1.00%	% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 10,000.00
Covered Risk 18:	1.00%	% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 19:		1.00% of Policy Amount Shown in Schedule A or \$5,000.00 (whichever is less)	\$ 25,000.00
Covered Risk 21:		1.00% of Policy Amount Shown in Schedule A or \$2,500.00 (whichever is less)	\$ 5,000.00

2006 ALTA LOAN POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13 or 14); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.

6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

(Except as provided in Schedule B - Part II, (t(or T)his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

(PART I

(The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:)

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;
 or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 and 10); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

(The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

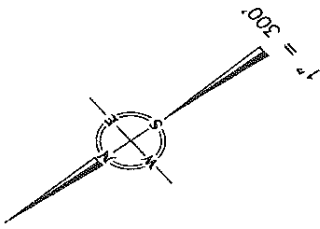
1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown in the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and that are not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material not shown by the Public Records.
7. (Variable exceptions such as taxes, easements, CC&R's, etc. shown here.)

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (12-02-13)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to
 - (i) the occupancy, use, or enjoyment of the Land;
 - (ii) the character, dimensions, or location of any improvement erected on the Land;
 - (iii) the subdivision of land; or
 - (iv) environmental protection;or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
- (b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
 - (a) created, suffered, assumed, or agreed to by the Insured Claimant;
 - (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
 - (c) resulting in no loss or damage to the Insured Claimant;
 - (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
 - (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury, or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
 - (a) a fraudulent conveyance or fraudulent transfer, or
 - (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.



"Important: This plat is not a survey. It is furnished as a Convenience to locate the land in relation to adjoining streets and other lands and NOT to guarantee any dimensions, distances, bearings, or acreage."

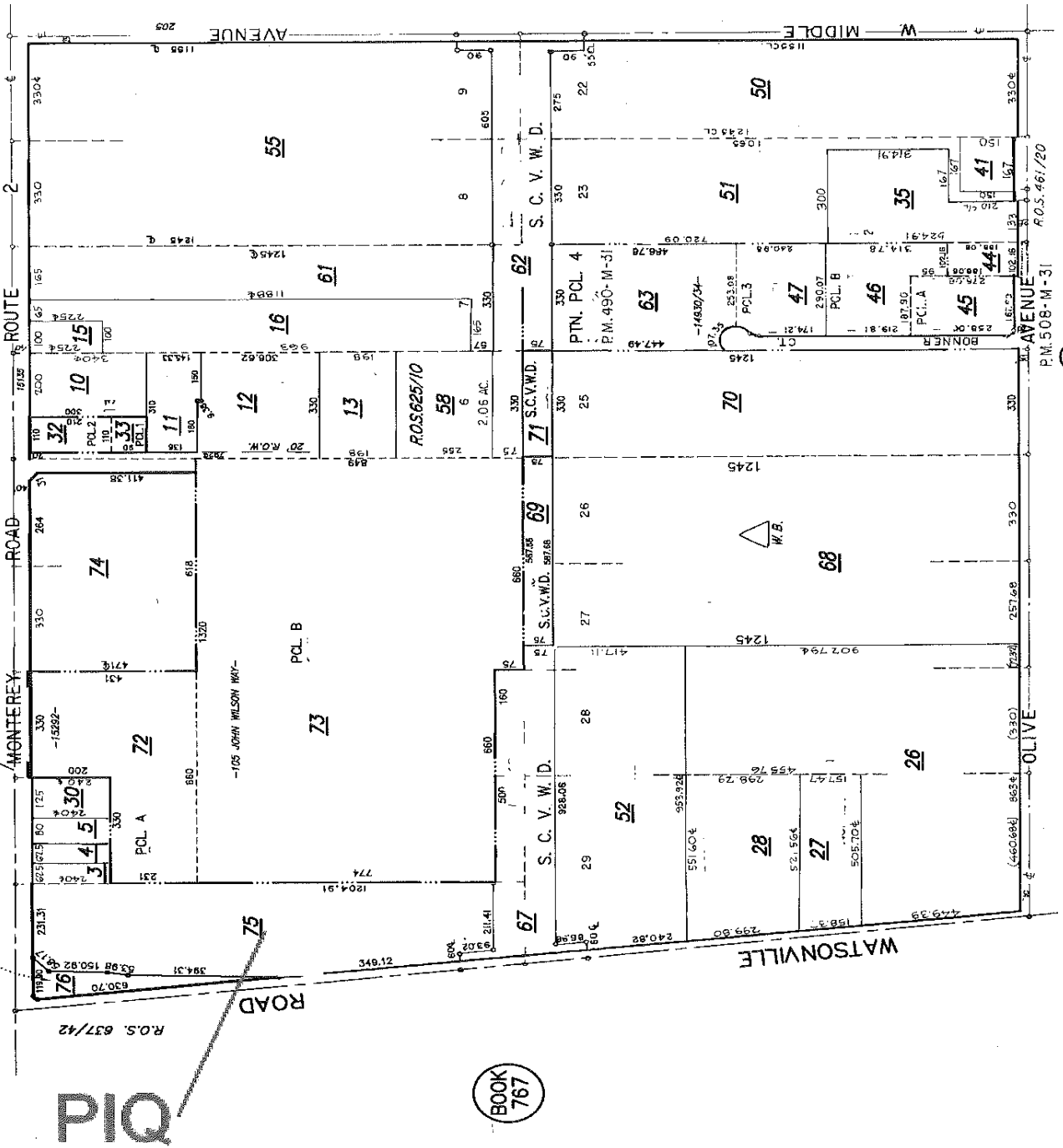
TRN DET. MAP 201.204
LAWRENCE E. STONE — ASSESSOR
Cadastral map for assessment purposes only.
Compiled under R. & T. Code, Sec. 321.
Effective Roll Year 2014-2015

P.M. 372-M-3
LLA. 19413929
DOC. 20146332

BOOK 825

LLA. 18388208

DOC. 22094204
CITY OF MORGAN HILL
0.654 AC.



BOOK 767

LAS LLAGAS SUBDIVISION 3

P.M. 508-M-31

R.O.S. 461/20

This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX C
HISTORICAL MAPS DATA SEARCH RESULTS
Aerial Photographs
FIRM Map
Directory Searches

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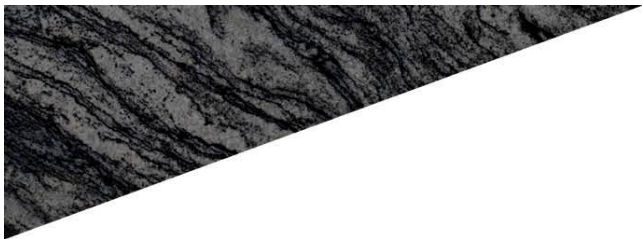
**HISTORICAL
AERIALS**

Project Property: URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd
Morgan Hill CA 95037

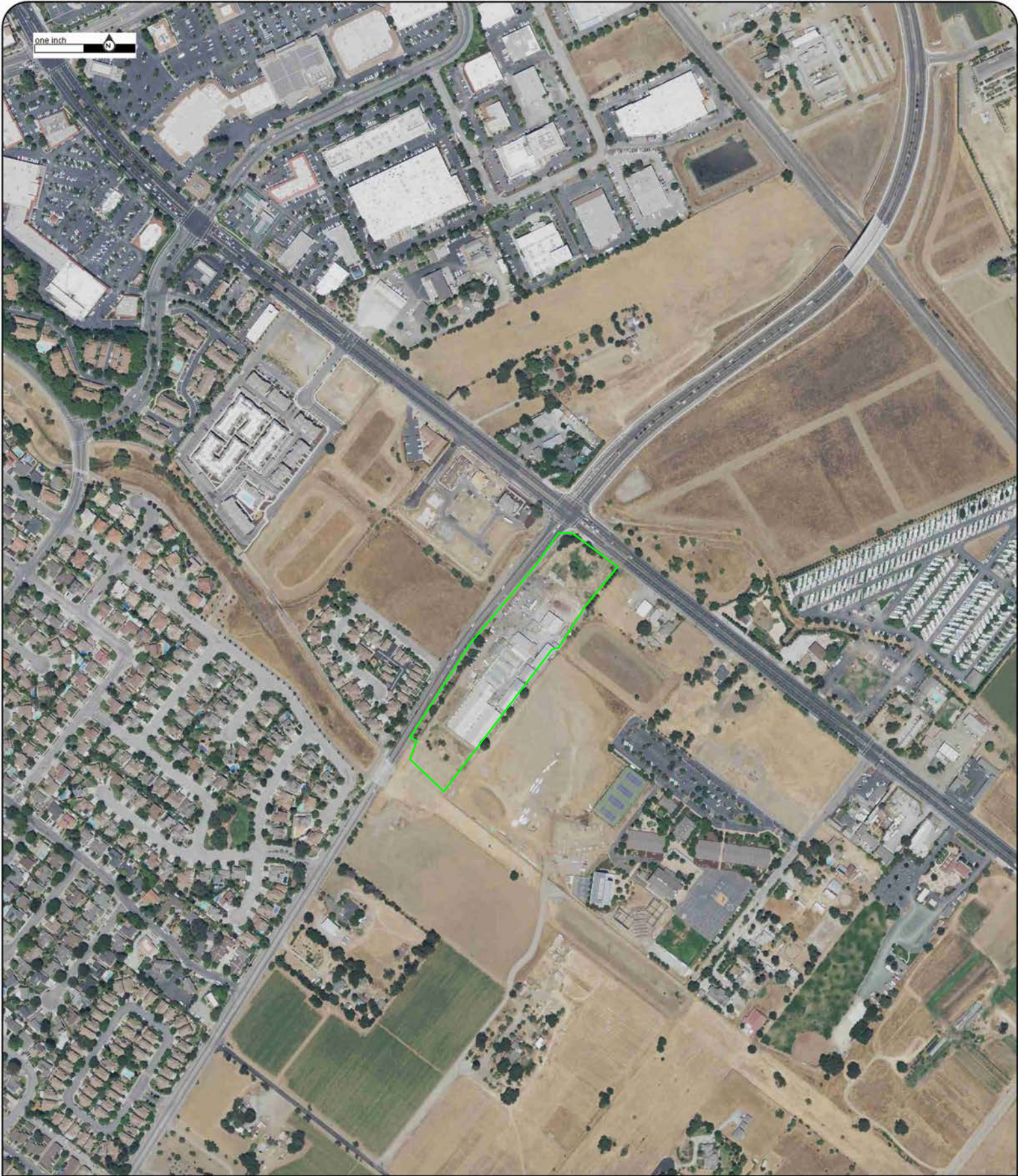
Requested By: TA-Group DD, LLC

Order No: 20200123214

Data Completed: January 24,2020



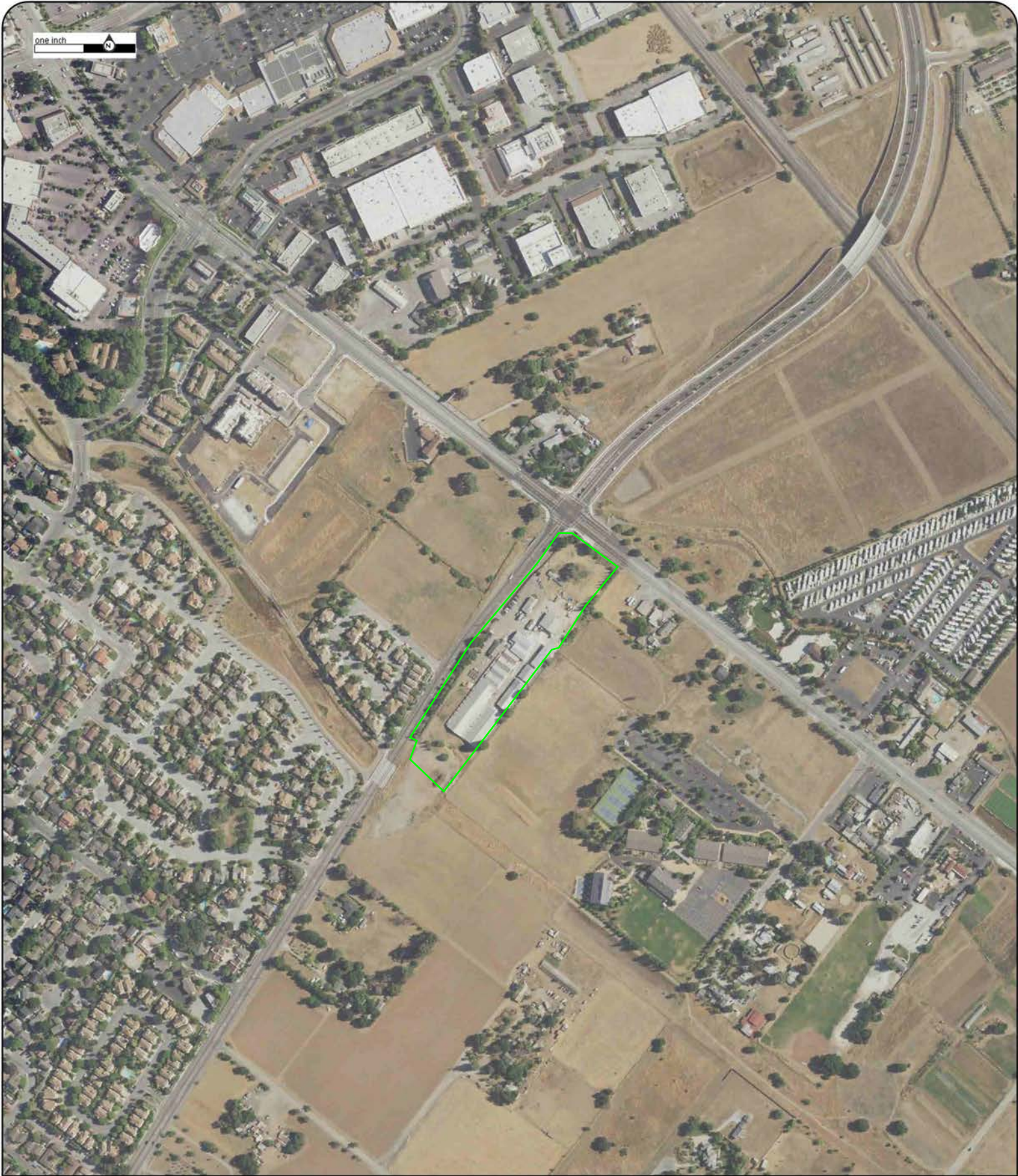
Date	Source	Source Scale	Comments
2018	National Agriculture Information Program	1" to 500'	
2016	National Agriculture Information Program	1" to 500'	
2014	National Agriculture Information Program	1" to 500'	
2012	National Agriculture Information Program	1" to 500'	
2010	National Agriculture Information Program	1" to 500'	
2009	National Agriculture Information Program	1" to 500'	
2006	National Agriculture Information Program	1" to 500'	
2005	National Agriculture Information Program	1" to 500'	
1993	US Geological Survey	1" to 500'	
1981	US Geological Survey	1" to 500'	
1974	US Geological Survey	1" to 500'	
1968	US Geological Survey	1" to 500'	
1963	Agriculture and Soil Conservation Service	1" to 500'	
1953	US Geological Survey	1" to 500'	
1939	Private Company	1" to 500'	



Year:2018
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394

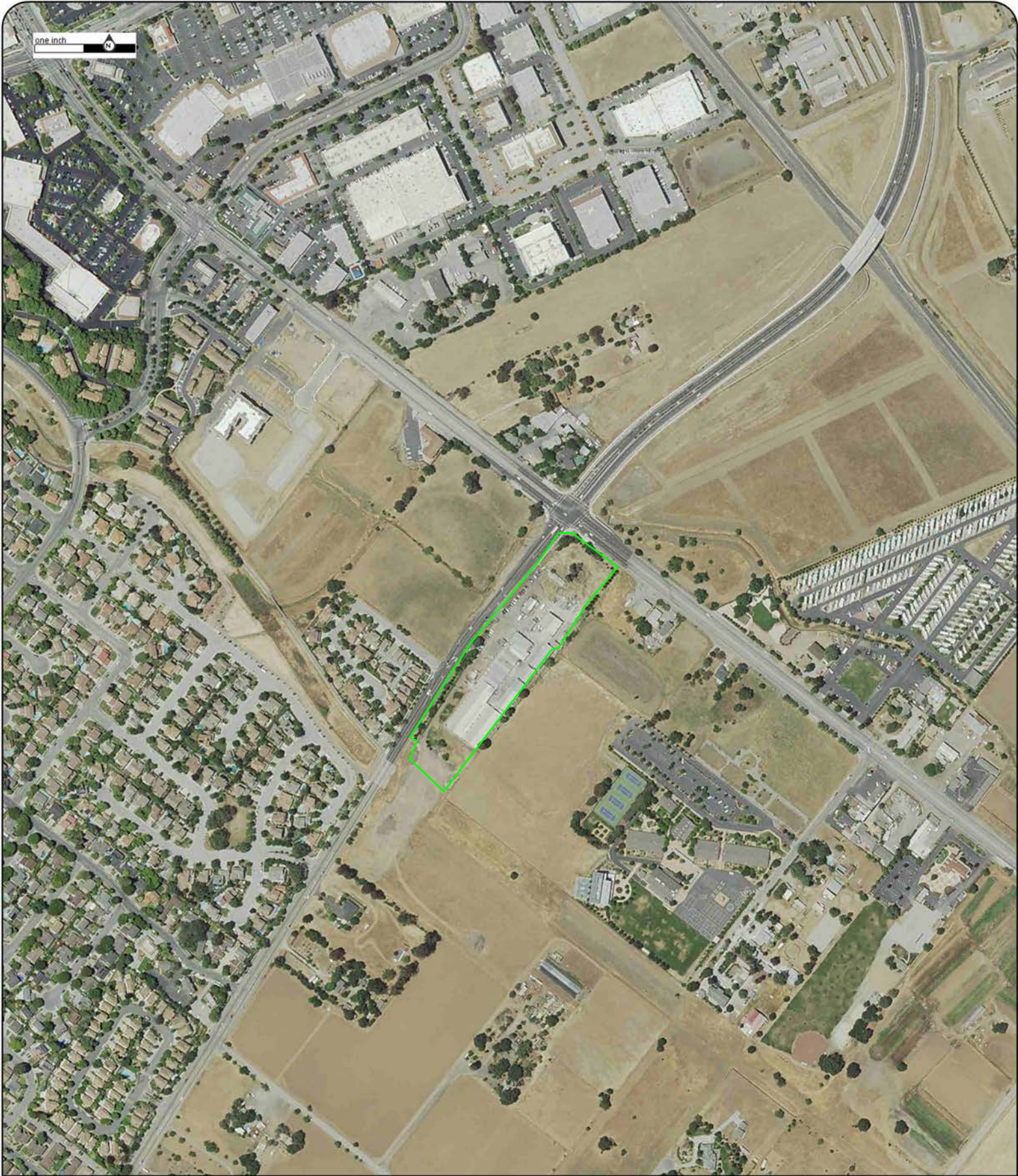




Year:2016
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394





Year:2014
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394

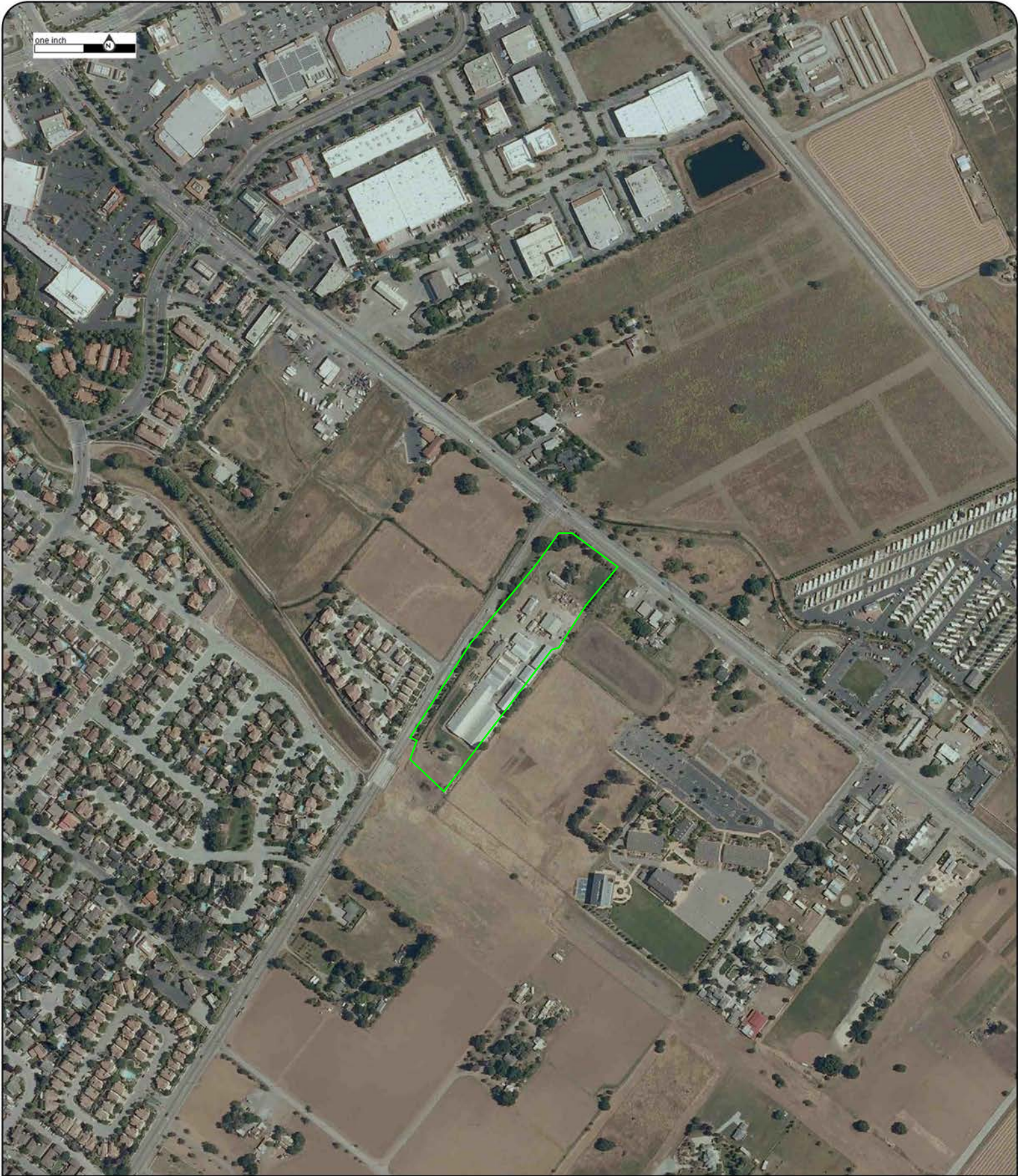




Year:2012
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394





Year:2010
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394





Year:2009
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA Parcel No:20200123214
Approx Center:37.10603507/-121.6362394





one inch

Year:2006
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394

Order No:20200123214





Year:2005
Source:NAIP
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394





one inch

Year:1993
Source:USGS
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394





Year:1981
Source:USGS
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Parcel No:20200123214
Approx Center:37.10603507/-121.6362394





Year:1974
Source:USGS
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394





one inch

Year:1968
Source:USGS
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394

Order No:20200123214



one inch



Year:1963
Source:ASCS
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA Parcel No:20200123214
Approx Center:37.10603507/-121.6362394





Year:1953
Source:USGS
Scale:1" to 500'
Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA
Approx Center:37.10603507/-121.6362394



one inch



Year:1939

Source:FAIRCHILD

Scale:1" to 500'

Comment:

Address:SEC Watsonville Rd @ Monterey Rd,Morgan Hill,CA Parcel No:20200123214

Approx Center:37.10603507/-121.6362394

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TOPOGRAPHIC MAPS

Project Property: URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd
Morgan Hill CA 95037

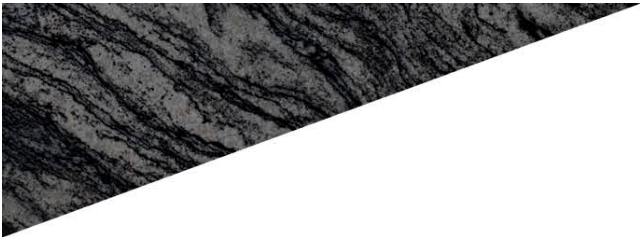
Project No: 1219003

Requested By: TA-Group DD, LLC

Order No: 20200123214

Date Completed: January 24, 2020

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We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
2015	7.5
1996	7.5
1994	7.5
1980	7.5
1979	7.5
1968	7.5
1955	7.5
1939	15
1917	15

Topographic Maps included in this report are produced by the USGS and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property.

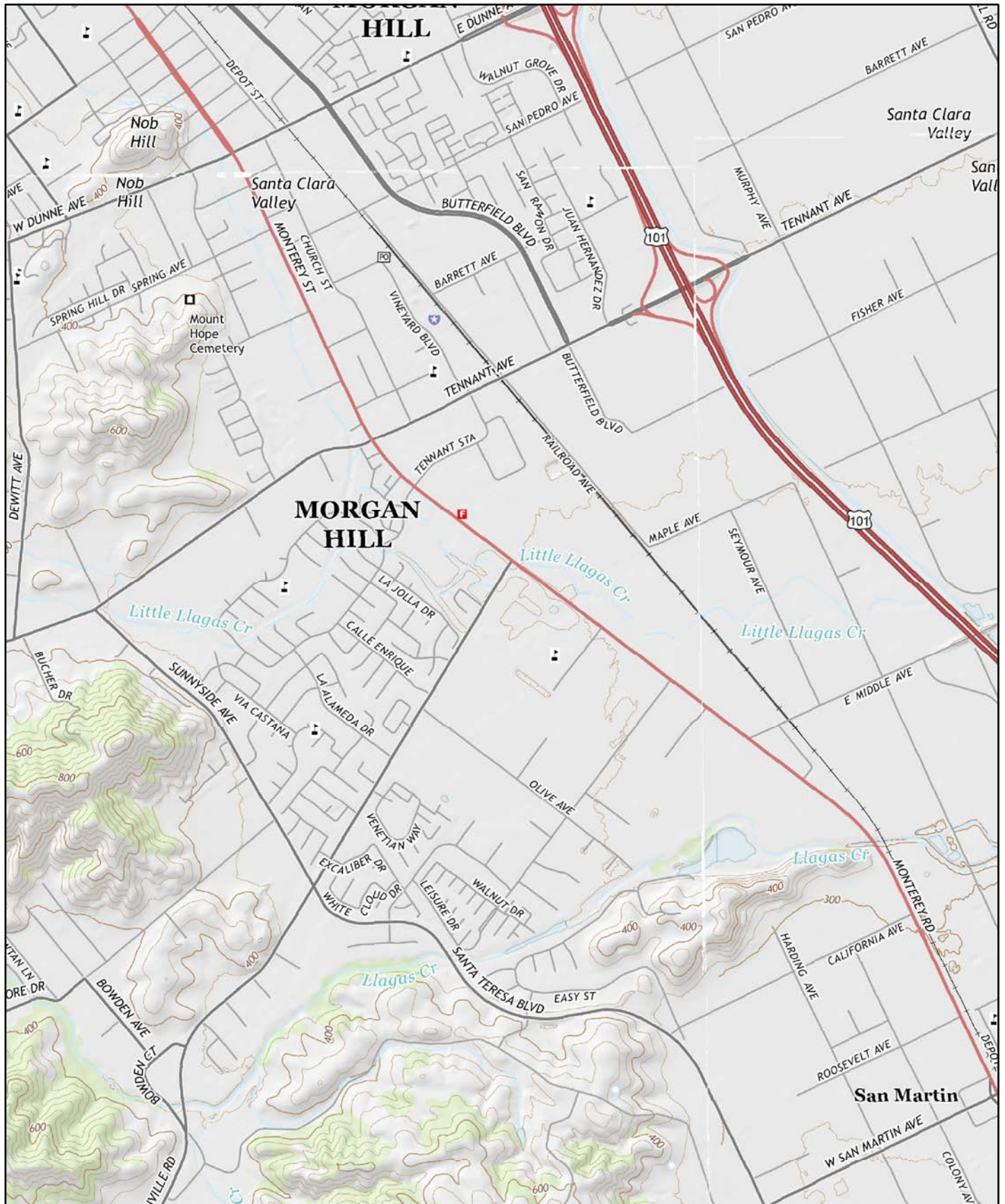
No warranty of Accuracy or Liability for ERIS: The information contained in this report has been produced by ERIS Information Inc.(in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS', using Topographic Maps produced by the USGS. This maps contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present you with information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Environmental Risk Information Services

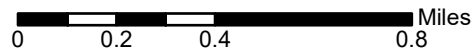
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2015

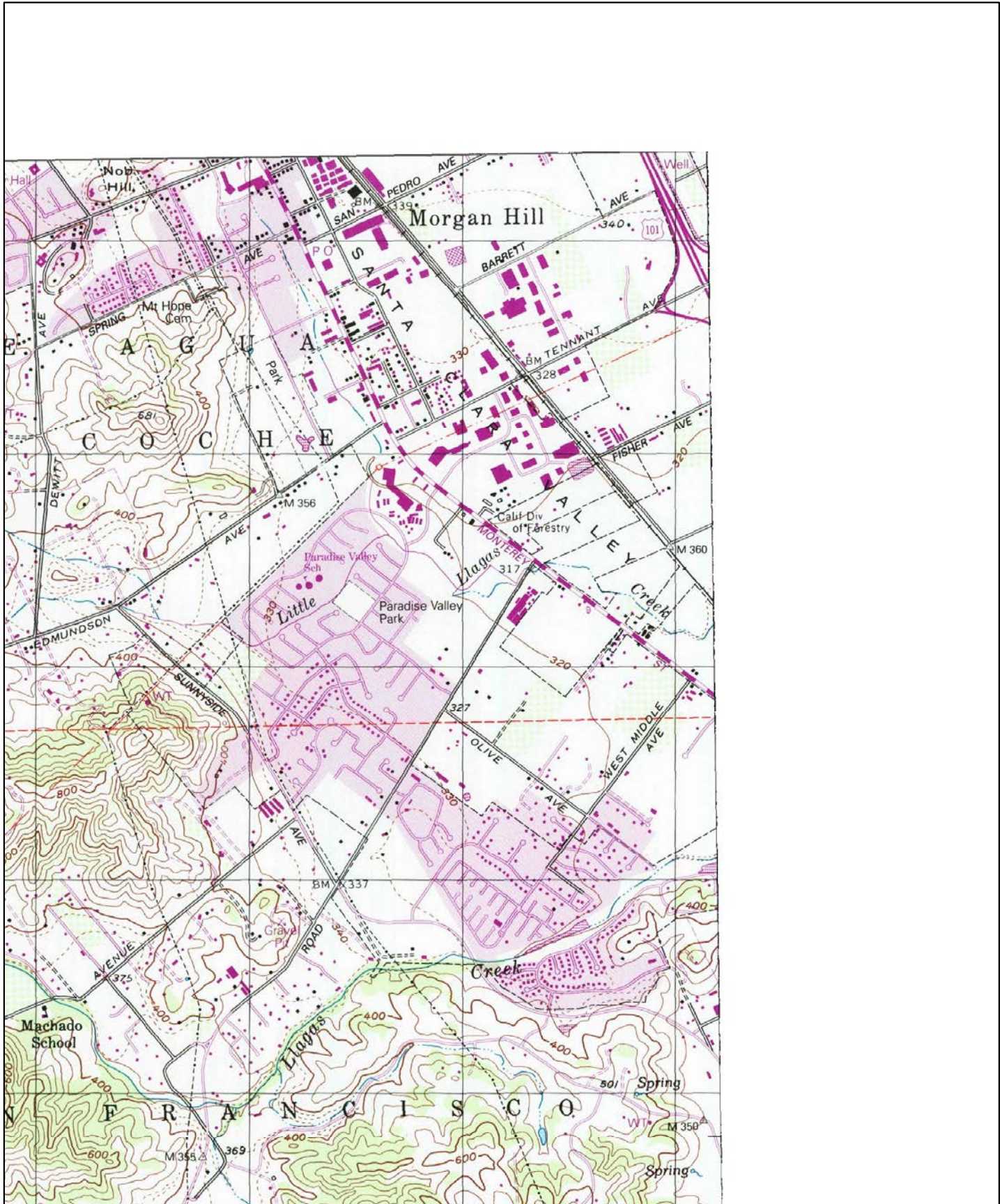


Order No. 20200123214

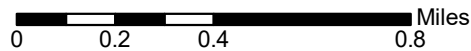
Quadrangle(s): Mount Madonna, CA

Source: USGS 7.5 Minute Topographic Map





1996

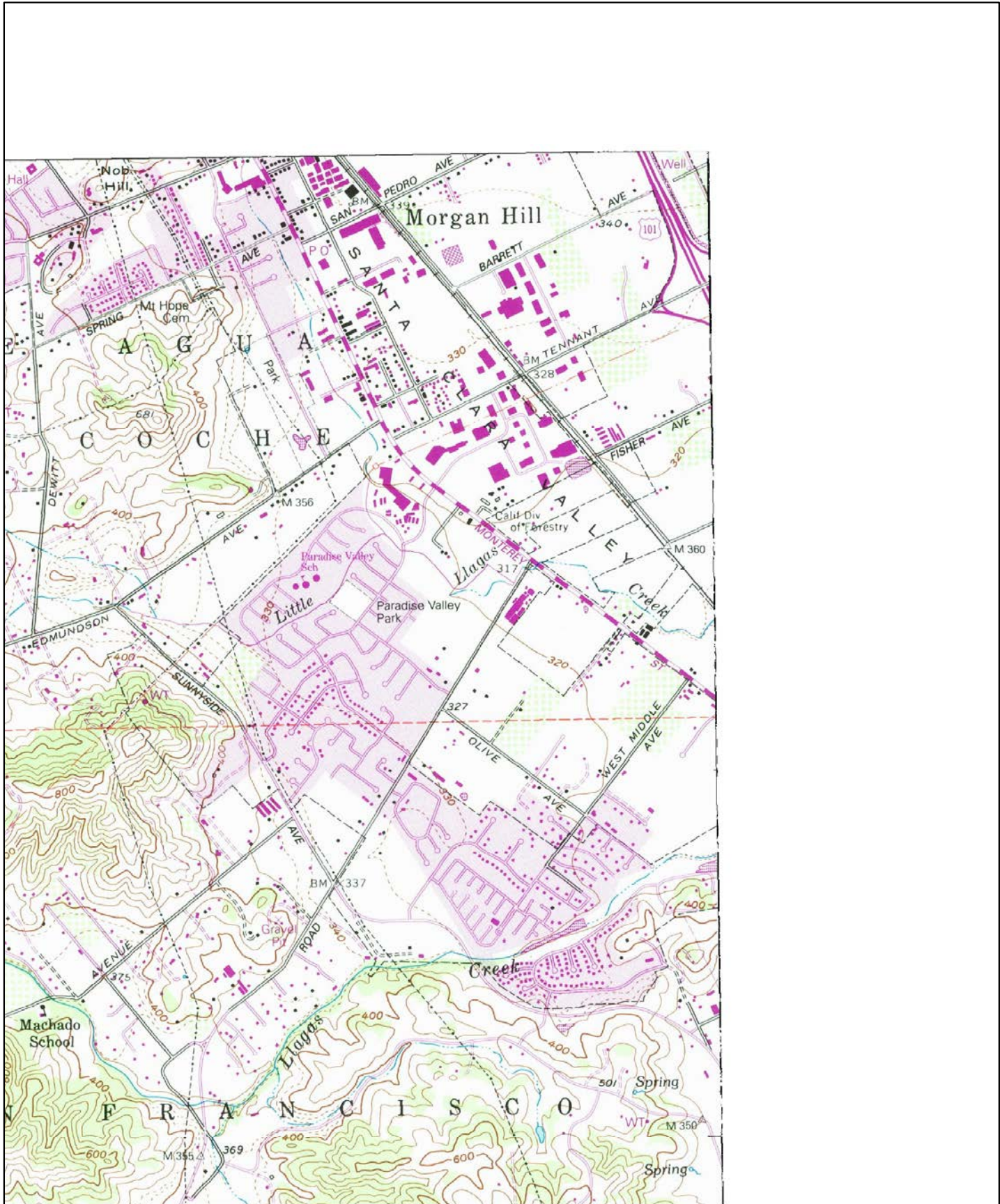


Order No. 20200123214

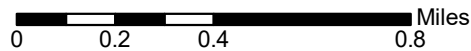
Quadrangle(s): Mount Madonna, CA

Source: USGS 7.5 Minute Topographic Map





1994

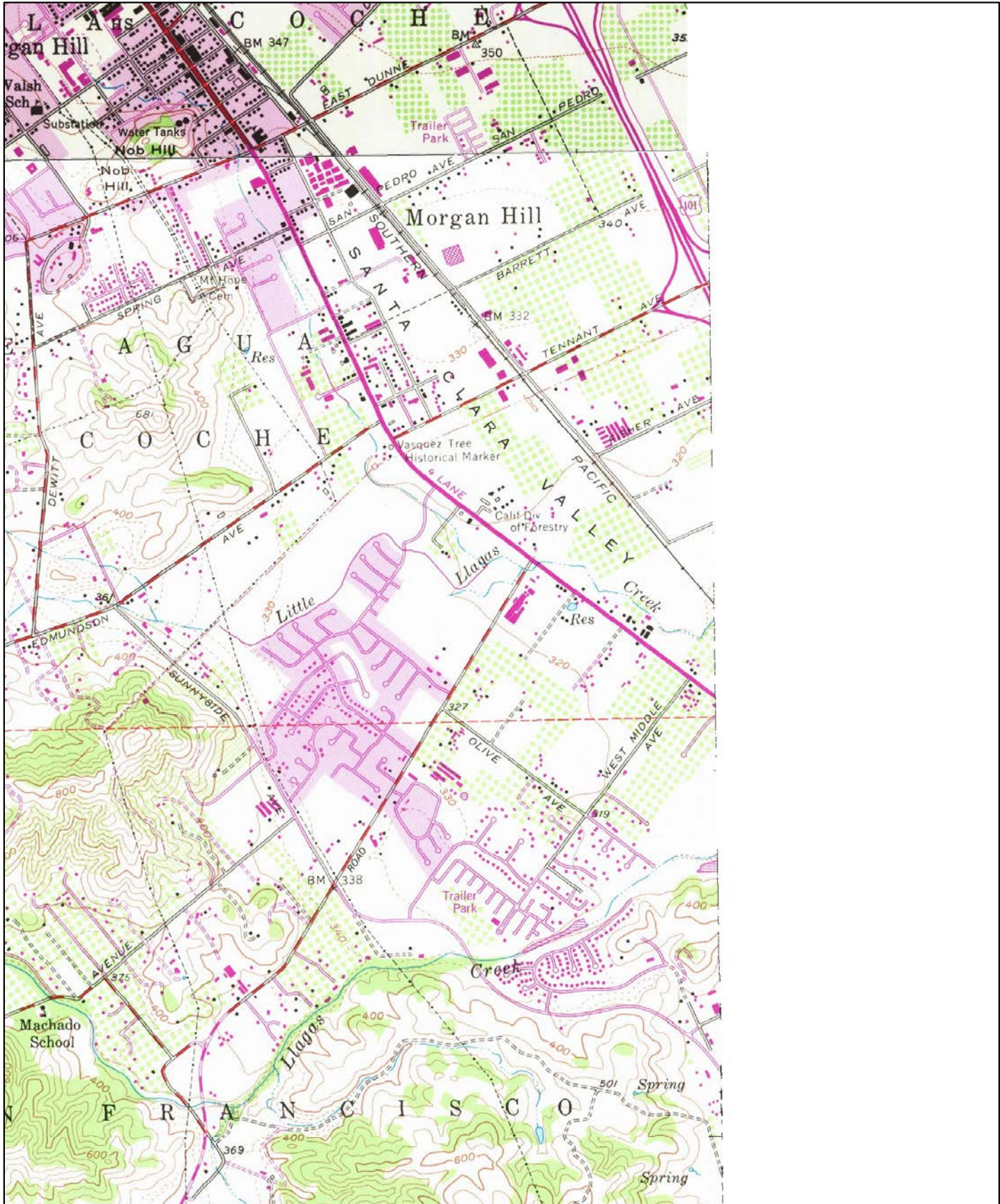


Order No. 20200123214

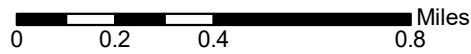
Quadrangle(s): Mt Madonna, CA

Source: USGS 7.5 Minute Topographic Map





1980

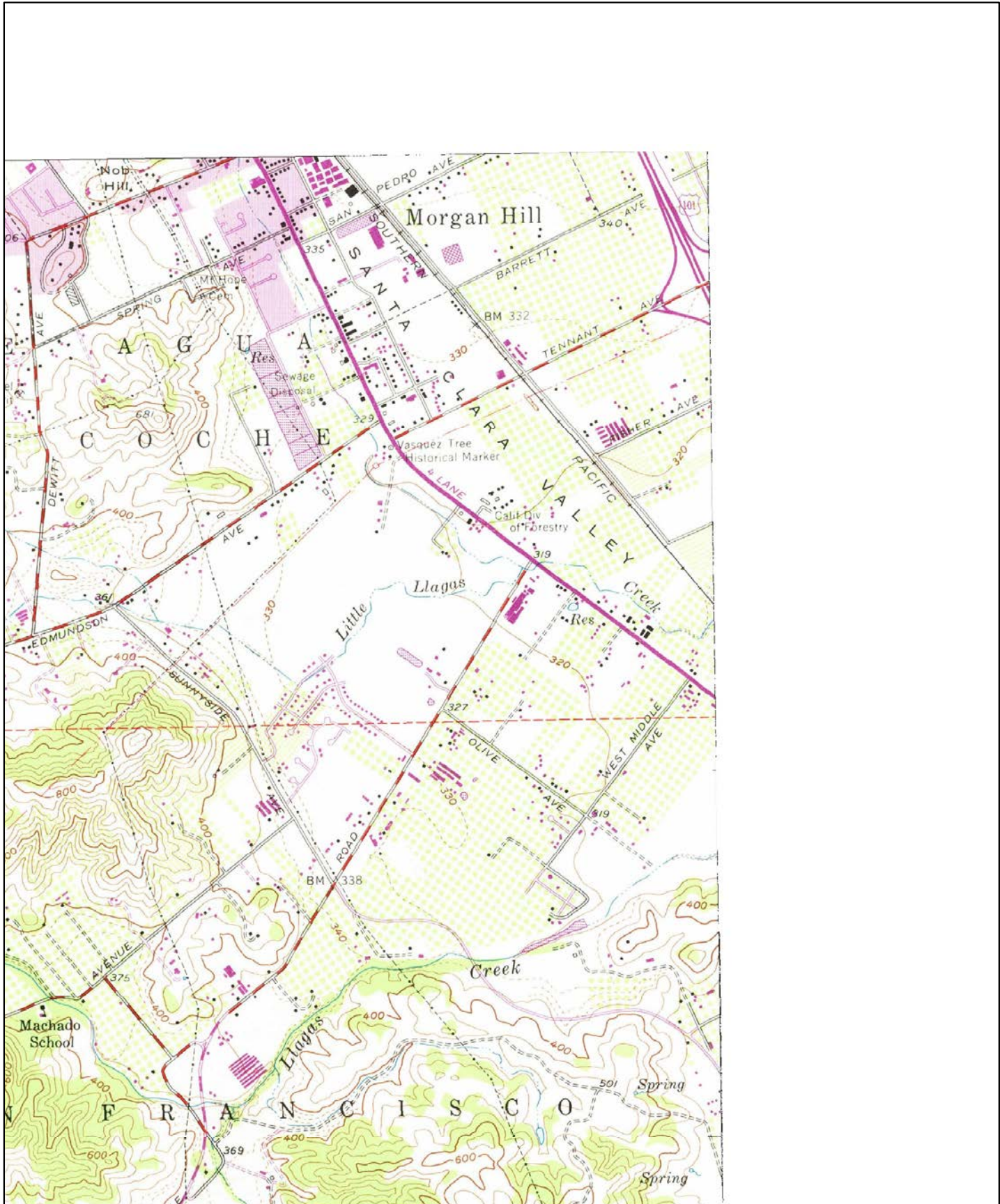


Order No. 20200123214

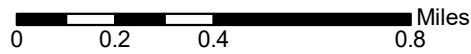
Quadrangle(s): Mt Madonna, CA

Source: USGS 7.5 Minute Topographic Map





1979

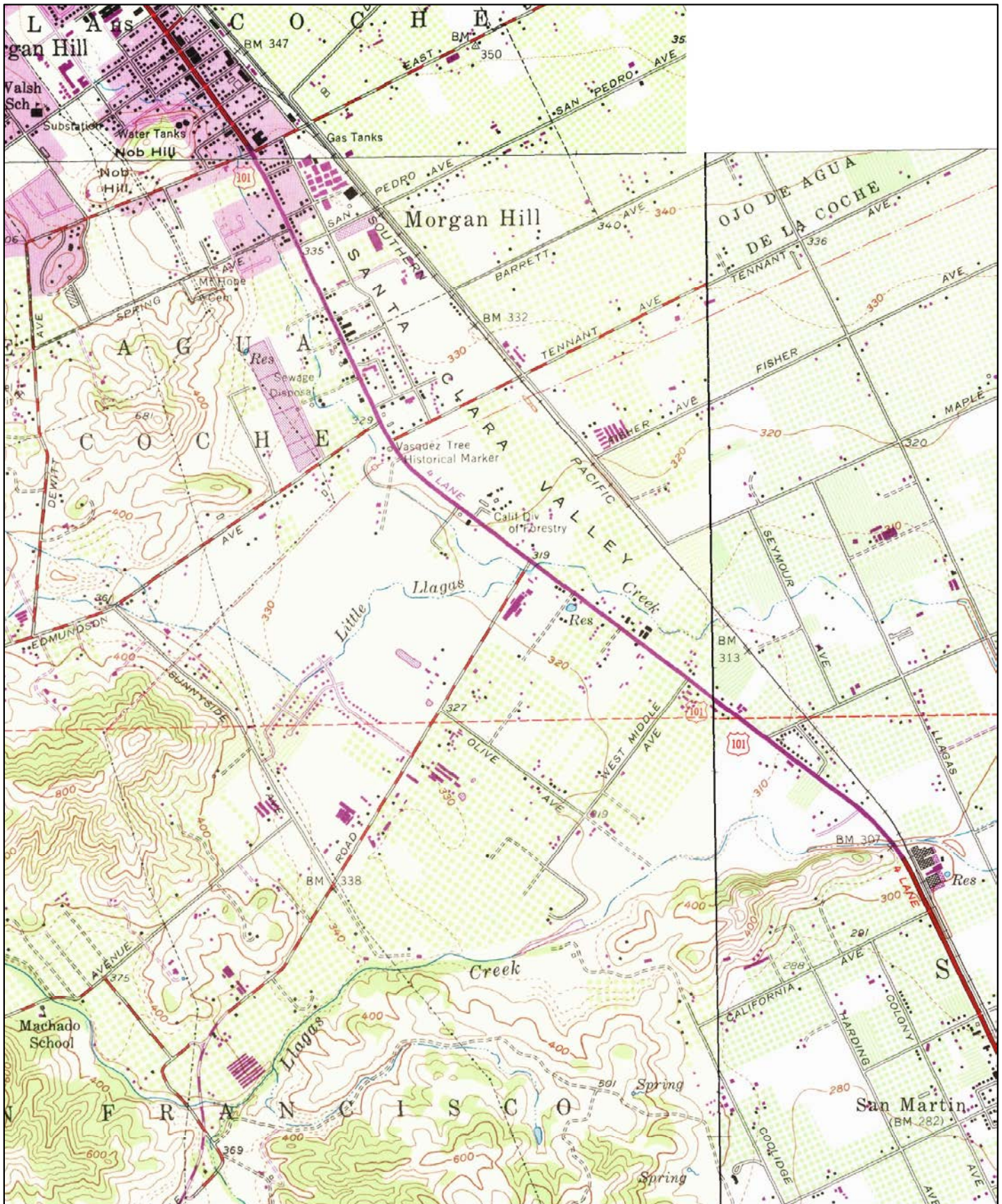


Order No. 20200123214

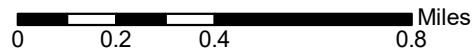
Quadrangle(s): Mt Madonna, CA

Source: USGS 7.5 Minute Topographic Map





1968

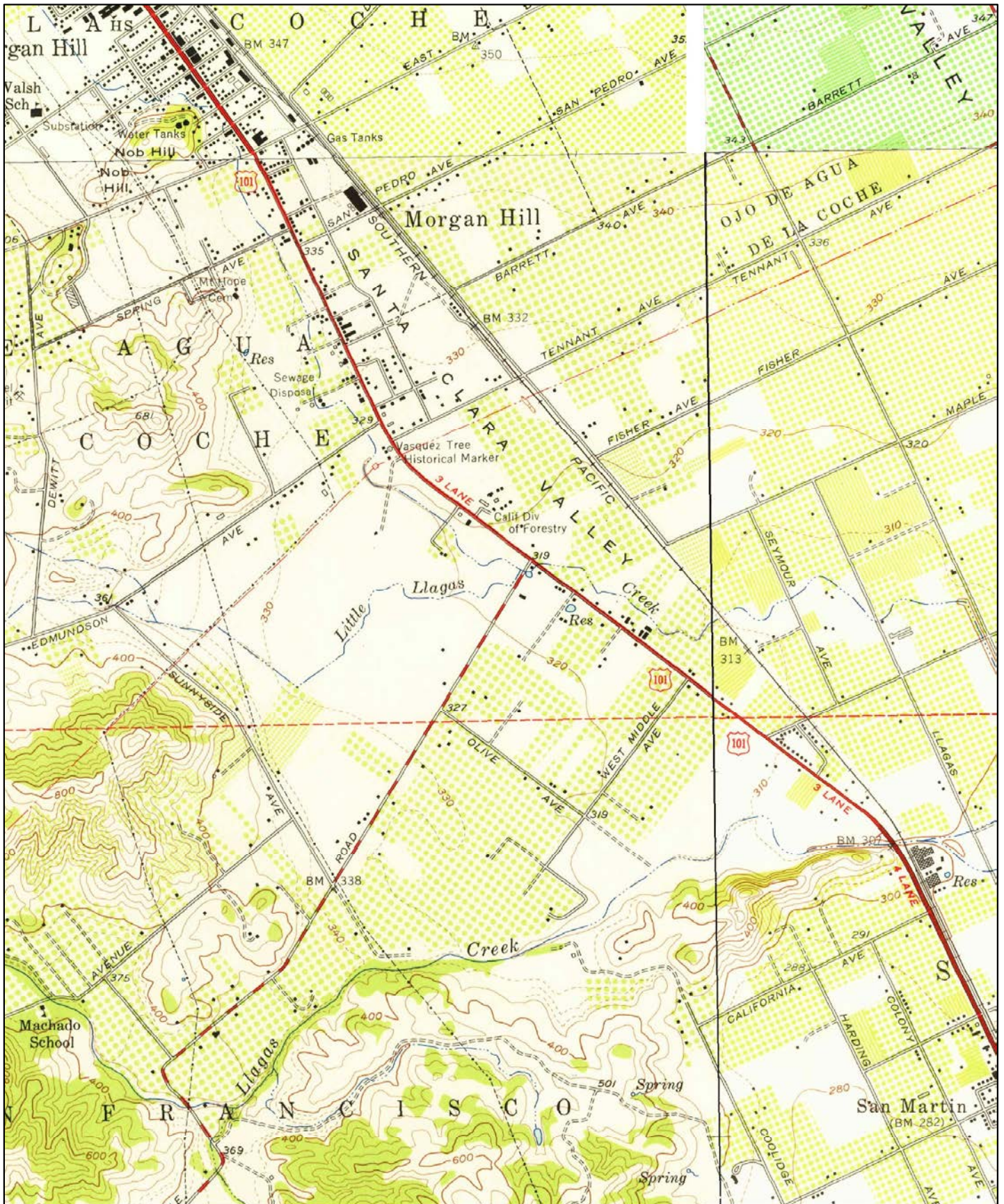


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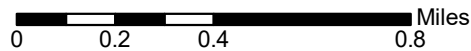
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Source: USGS 7.5 Minute Topographic Map





1955

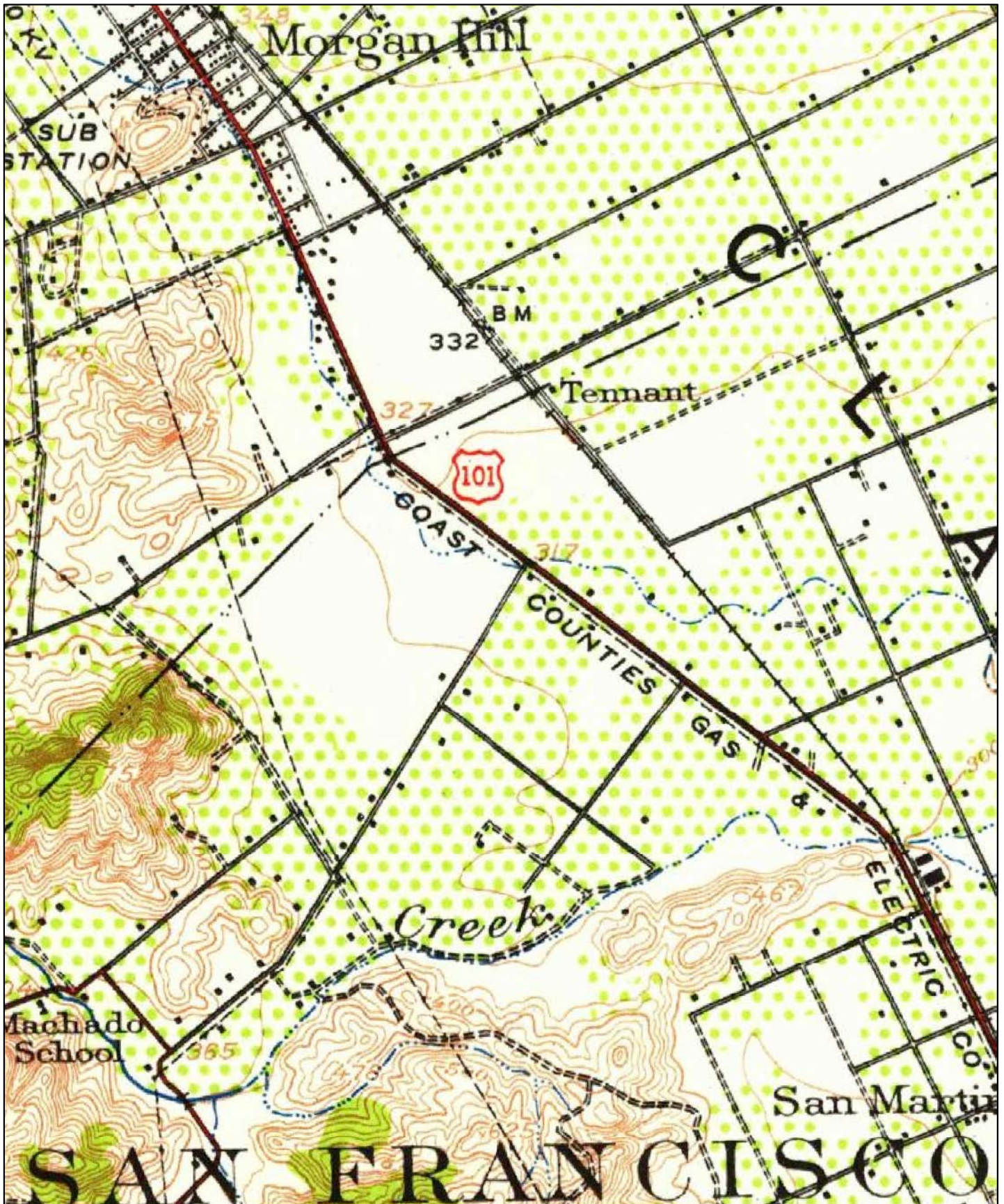


Order No. 20200123214

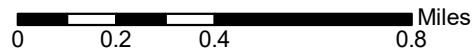
Quadrangle(s): Mt Madonna, CA

Source: USGS 7.5 Minute Topographic Map





1939

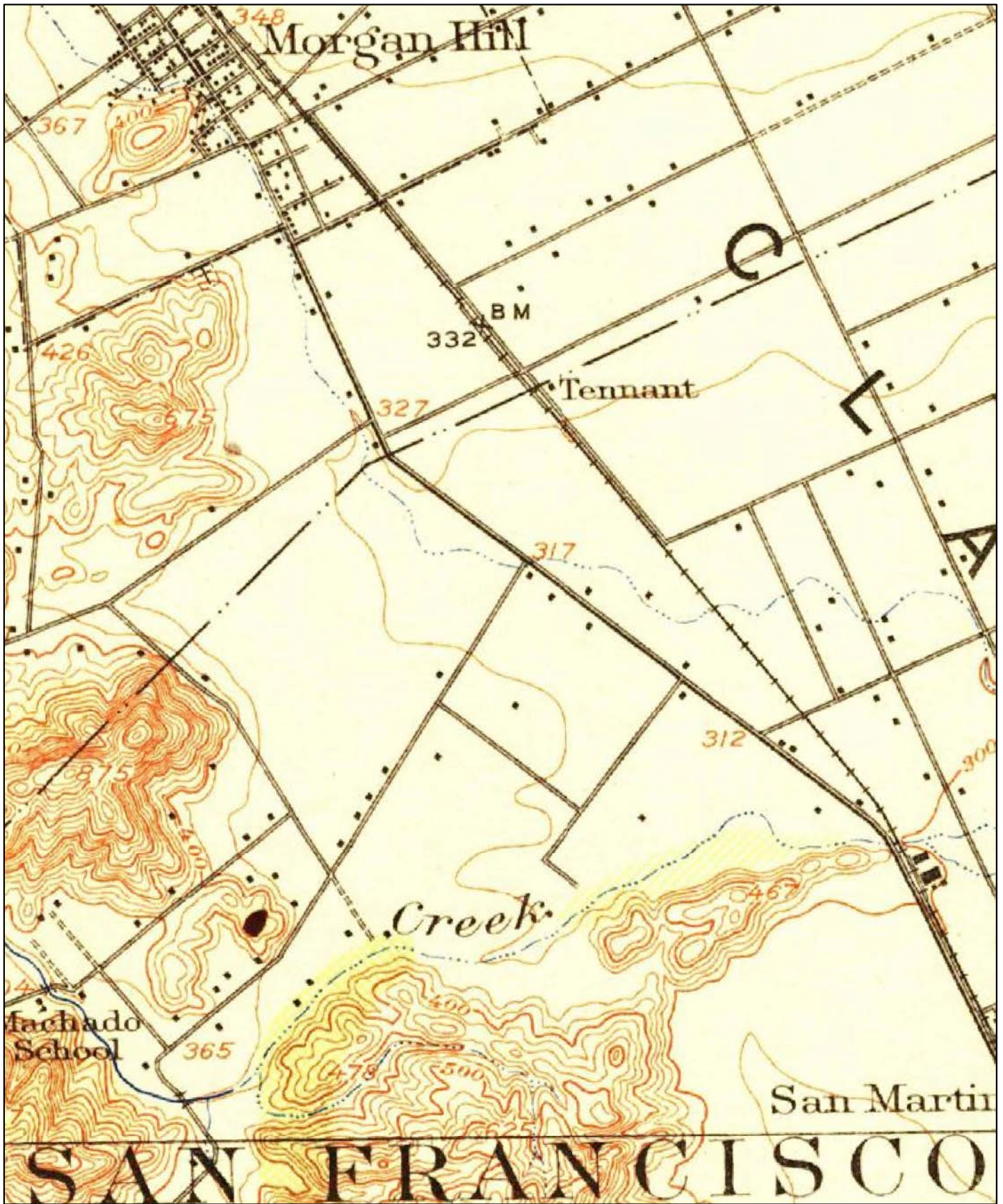


Order No. 20200123214

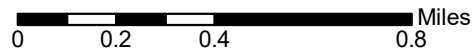
Quadrangle(s): Morgan Hill, CA

Source: USGS 15 Minute Topographic Map





1917



Order No. 20200123214

Quadrangle(s): Morgan Hill, CA

Source: USGS 15 Minute Topographic Map



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ENVIRONMENTAL RISK INFORMATION SERVICES



CITY
DIRECTORY

Project Property: *URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd
Morgan Hill, CA 95037*


Project No: *1219003*

Requested By: *TA-Group DD, LLC*

Order No: *20200123214*

Date Completed: *January 28, 2020*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com



January 28, 2020
RE: CITY DIRECTORY RESEARCH
URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd Morgan Hill, CA

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:

15200-15700 of Monterey Road
15200-15480 of Watsonville Road

Search Results Summary

Date	Source	Comment
2018	DIGITAL BUSINESS DIRECTORY	
2014	DIGITAL BUSINESS DIRECTORY	
2009	DIGITAL BUSINESS DIRECTORY	
2005	DIGITAL BUSINESS DIRECTORY	
2001	DIGITAL BUSINESS DIRECTORY	
1995-96	HAINES	
1990-91	HAINES	
1987	HAINES	
1981	HAINES	
1976	HAINES	
1971	HAINES	
1965	POLKS	
1962	POLKS	

NO LISTING FOUND FOR THIS YEAR...

- 15220 WESTERN WAY LANDSCAPES...*Lawn & Ground*
- 15220 WESTERN WAY LANDSCAPES...*Landscape Con*
- 15305 GOALPULSE LIFE COACHING...*Unclassified*
- 15305 HOCK & CO...*Accountants*
- 15305 HOCK & CO...*Tax Return Preparation & F*
- 15480 ROYAL OAKS MUSHROOMS...*Mushrooms*

NO LISTING FOUND FOR THIS YEAR...

- 15220 HYDRO TECH IRRIGATION EQPT...*Farm & Ga*
- 15220 WESTERN WAY LANDSCAPES...*Landscaping S*
- 15305 HOCK CO...*Offices Of Certified Public*
- 15480 ROYAL OAKS MUSHROOMS...*Mushroom Produc*

15200 ACE ASPHALT PAVING...*Surfacing And Pav*
15200 GOLDEN STATE EQUIPMENT...*Sv Estab Eqp*
15365 ALICE CORTEZ BAIL BONDS...*Bail Bonds*
15585 BLDG...*Legal Services*
15665 VIKING DEVMNT...*Comm/off Bldg New Con<*
15685 EXIT REALTY KEYSTONE...*Real Estate*
15685 GATEWAY REALTY...*Real Estate*
15685 MORGAN HILL SPORTS CARDS...*Misc Retail*
15700 BLDG...*Bathroom Fixtures & Accessories*

15220 SEALTECH...*Trade Contractor*
15220 WESTERN WAY LANDSCAPES...*Landscape Con*
15220 WESTERN WAY LANDSCAPES...*Landscape Con*
15305 ELDER & HOCK...*Accountants*
15305 HOCK & CO...*Acctg,audit,bkkeep*
15305 KEN FELS INSURANCE...*Insur Agts,brks,s*
15480 ROYAL OAKS MUSHROOMS...*Undercover Fd C*

NO LISTING FOUND FOR THIS YEAR...

- 15220 WESTERN WAY LANDSCAPES...
- 15305 CHRISTIANS IN COMMERCE...
- 15305 ELDER & HOCK...*Auditing Services*
- 15480 ROYAL OAKS MUSHROOMS...*Vegetable Crops*

NO LISTING FOUND FOR THIS YEAR...

NO LISTING FOUND FOR THIS YEAR...

1995-96

SOURCE: HAINES

MONTEREY ROAD

15200 MAPLE LEAF PK BNQTS
15200 MAPLE LEAF REC PARK
15220 TEVES GUS
15250 XXXX
15355 MULTI TENANT RESIDENTIAL
15365 MARTINEZ MANA C
15540 BRANON REALTY
15570 XXXX
15585 BAANON DAND A
15585 HARMER STEEL PROD
15585 LINSKO PRIVTE LOGR
15585 LOU MAR CONCRETE
15585 MARTINEZ CONCRETE
15585 MCKENNY WILT
15585 OLSON LEE A
15665 MORGN HL MOTOR CO
15665 NICKS USED CARS
15665 SUPERIOR MOTOR CO
15670 CA ST FORESTRY HDQ
15670 CA ST FORESTRY STA
15670 SOUTH SCLAR CO FIRE
15670 SOUTH SCLAR CO FIRE
15685 OAK & BRASS CO
15685 ROMAN EMPRESS
15700 B J VIDEO
15700 B- I NATURAL COSMETICS
15700 OAK CORNER THE

1995-96

SOURCE: HAINES

WATSONVILLE ROAD

15200 A- NEWTON DIANE
15200 A- NEWTON GARY
15205 XXXX
15220 CERAOLO RICHARD
15220 SEALTECH
15255 XXXX
15330 LINDNEA JOHN G
15330 MASCIARELLI VICTOR
15330 TAX PEOPLE THE
15335 XXXX
15350 STEIDLEY HAROLD
15360 XXXX
15480 ROYAL OAKS MUSHROOM
NO LISTINGS IN RANGE

1990-91

SOURCE: HAINES

MONTEREY ROAD

15160 VIZCARRA ARAULLO
15220 XXXX
15355 MULTI TENANT RESIDENTIAL
15365 EL CHIQUIS
15540 BRANON DAVID A
15540 BRANON REALTY
15540 LOU MAR CONSTRUCTIN
15570 WIENS THOMAS A
15585 BUILDING
15585 C- MORGN HLINS SY
15585 FIDELITY UNION INS
15585 GAVILAN MANAGEMENT
15585 KAZESKI PROPERTIES
15585 LAZZARINI E J CPA
15585 LAZZCO INC
15585 MASON ANITA KELL
15585 MASON ANITA REALTOR
15585 MCKENNEY ASSOCUTES
15585 MCKENNY MILT
15585 OLSON LEE A
15585 OLSON LEE A
15585 TAYLOR BOB HOMES
15665 SUPERIOR MOTOR CO
15670 CA ST FORESTRY HDQ
15670 CA ST FORESTRY STA
15670 SOUTH SCLAR CO FIRE
15670 WEAVER M PATRICIA
15670 WEAVER WM
15685 COUCH WAYNE CO
15685 OAK & BRASS CO
15715 KNIGHT & DAY CMPTR SV

1990-91

SOURCE: HAINES

WATSONVILLE ROAD

15200 MULTI TENANT RESIDENTIAL
15206 XXXX
15220 XXXX
15255 XXXX
15330 XXXX
15480 ROYAL OAKS MUSHROOM

1987

SOURCE: HAINES

MONTEREY ROAD

WEAVER WM
15160 MULTI TENANT RESIDENTIAL
15220 XXXX
15295 B J LANDSCAPING
15355 MULTI TENANT RESIDENTIAL
15365 OUTER LIMITS
15540 BRANON DAVID A
15540 BRANON REALTY
15540 LOU MAR CONSTRUCTIN
15570 WIENS THOMAS A
15585 ADAIR WISELASSOCTE
15585 BIRA WILSON & CO INC
15585 BUILDING
15585 C- MORGH HL INS SV
15585 FIDELITY UNION INS
15585 LAZZARINI E J CPA
15585 LAZZCO INC
15585 MASON ANITA KELL
15585 MASON ANITA REALTOR
15585 MASON ANITA REALTOR
15585 MCKENNY MILT
15585 OLSON LEE A
15585 OLSON LEE A
15585 PAC STATES DEVL P
15585 QUINTREX
15665 SUPERIOR MOTOR CO
15670 CA ST FORESTRY HDQ
15670 SOUTH SCLAR CO FIRE
15670 WEAVER M PATRICIA
15685 COUCH WAYNE CO
15685 HOFF REAL ESTATE
15685 OAK & BRASS CO
15685 VIA SATELLITE
15715 KNIGHT & DAY CMPTR SV

1987

SOURCE: HAINES

WATSONVILLE ROAD

15200 WHALEN MIKE
15205 XXXX
15220 XXXX
15330 XXXX
15350 STEIDLEY HAROLD
15360 XXXX
15480 ROYAL OAKS MUSHROOM

1981

SOURCE: HAINES

MONTEREY ROAD

15190 XXXX
15205 XXXX
15220 SPEEGLE W
15250 A & B CAMPER SHELLS
15280 XXXX
15295 B J LANDSCAPING
15325 XXXX
15345 XXXX
15355 SPECHT REUEL
15365 COUNTRY TIME TAVERN
15440 XXXX
15540 BRANON REALTY
15540 BRANON REALTY
15540 D & L CONCRETE
15540 LAWSON RANDY
15558 LAZZCO INVESTMENTS
15570 MULTI TENANT RESIDENTIAL
15585 BARRETT HARVEY B
15585 BUILDING
15585 C- MORGN HL INS SERV
15585 C- PATCHEN JOHN
15585 DAY GEOXASC REALTY
15585 LAZZARINI E J CONST
15585 LAZZARINI E J CPA
15585 LAZZARINI E J CPA
15585 LAZZCO LNC
15585 LAZZCO LNVESTMENTS
15585 NEW YORK LIFE INS
15585 OLSON LEE A
15585 SHARPATATRO GEN CNT
15655 XXXX
15665 SPLISH SPLASH POOL
15665 SUPERIOR MOTOR SV
15665 TIM GLASS LANDSCPNG
15670 CA ST FORESTRY DIV
15670 CA ST GEN SV CMNCTN
15670 SOUTH CNTY FIRE DIS
15685 AFFILATED BROKERS
15685 BAIN REALTY
15685 FIELDS DICK
15685 HENKE EVERETT
15685 M H ENGINEERING
15685 M H ENGINEERING CO
15685 MCCLINTOCK WILLIAM
15685 READ SUSAN
15685 SILACCI GARY
15686 XXXX
15715 VISTA DEL MNTE RLTY
15715 VISTA DELMONTE RLTY
155585GEORGE DAY REALTY

1981

SOURCE: HAINES

WATSONVILLE ROAD

15200 MULTI TENANT RESIDENTIAL
15350 STEIDLEY HAROLD
15360 VALENZUELA JERRY
15480 ALPINE MUSHRM CLTR

1976

SOURCE: HAINES

MONTEREY ROAD

15190 NEWTON E
15205 XXXX
15220 SPEEGLE BILL
15280 SPEEGLE W
15280 VALLEY PUMP & MACH SH
15345 XXXX
15355 MULTI TENANT RESIDENTIAL
15365 OUR PLACE
15540 XXXX
15570 MULTI TENANT RESIDENTIAL
15655 XXXX
15665 LOGOS MOBILE HM SRV
15665 SOUTH CO MBL HM SLS
15670 CALIF ST FRSTRY DIV
15670 CALIF ST GENL SERV
15670 CASTLEMAN DAN
15670 MAISON WILLIAM J
15685 FALCOCCHIA & DININO
15685 HENKE EVERETT
15685 M H ENGINEERING CO
15685 MCCLINTOCK WILLIAM
15686 XXXX
15715 XXXX

1976

SOURCE: HAINES

WATSONVILLE ROAD

15200 MULTI TENANT RESIDENTIAL
15205 XXXX
15220 MATLOCK DIANE
15255 XXXX
15330 SIMS WENDEL
15335 XXXX
15350 STEIDLEY HAROLD
15360 BISHOP HUGH S
15480 ALPINE MUSHRM CLTR

1971

SOURCE: HAINES

MONTEREY ROAD

15155 B- BAUGHMAN RICHARD
15155 C- GALLEGOS J A
15155 E- MC JUNK IN THOS A
15155 NASH WM C
15205 WILSONS FLORISTS
15220 MULTI TENANT RESIDENTIAL
15280 SPEEGLE W
15355 SPECHT REUEL B
15540 SANTA CLR FRUIT MKT
15570 MULTI TENANT RESIDENTIAL
15665 SUPERIOR MOTORS
15670 A- MALM RICHARD
15670 C- LUNDGREN ALBIN
15670 CALIF STE FRSTRY DV
15670 DIVISON OF FORESTRY
15685 MORGAN MANOR
15715 8 & B TEXACO

1971

SOURCE: HAINES

WATSONVILLE ROAD

15200 SOUSA TONY
15205 VANATTA LEE
15220 INPYN JOHN
15255 MASUOKA FRED S
15330 WINDERS LOUIS M
15335 MULTI TENANT RESIDENTIAL
15350 STEIDLEY HAROLD
15360 COUGHLAN MARILYN A
15480 ALPINE MUSHRM CLTR

NO LISTINGS IN RANGE

STREET NOT LISTED

NO LISTINGS IN RANGE

STREET NOT LISTED

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



FIRE
INSURANCE
MAPS

Project Property: URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd
Morgan Hill CA 95037

Project No: 1219003

Requested By: TA-Group DD, LLC

Order No: 20200123214

Date Completed: January 24, 2020

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX D
ENVIRONMENTAL RECORDS SEARCH

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



DATABASE REPORT

Project Property: *URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd
Morgan Hill CA 95037*

Project No: *1219003*

Report Type: *Database Report*

Order No: *20200123214*

Requested by: *TA-Group DD, LLC*

Date Completed: *January 24, 2020*

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Reliance on information in Report: This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as database review of environmental records.

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Executive Summary

Property Information:

Project Property: *URB Morgan Hill
SEC Watsonville Rd @ Monterey Rd Morgan Hill CA 95037*

Project No: *1219003*

Coordinates:

Latitude: *37.10603507*
Longitude: *-121.6362394*
UTM Northing: *4,107,505.41*
UTM Easting: *621,176.49*
UTM Zone: *10S*

Elevation: *320 FT*

Order Information:

Order No: *20200123214*
Date Requested: *January 23, 2020*
Requested by: *TA-Group DD, LLC*
Report Type: *Database Report*

Historicals/Products:

Aerial Photographs *Historical Aerials (Boundaries)*
City Directory Search *CD - 2 Street Search*
ERIS Xplorer [*ERIS Xplorer*](#)
Excel Add-On *Excel Add-On*
Fire Insurance Maps *US Fire Insurance Maps*
Topographic Map *Topographic Maps*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	1	-	1
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA CESQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	1	3	-	-	4
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
State								
RESPONSE	Y	1	0	0	0	0	1	1
ENVIROSTOR	Y	1	0	0	0	1	7	8
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	2	1	1	-	4
DELISTED LST	Y	0.5	0	1	0	0	-	1
SWRCB SWF	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
UST CLOSURE	Y	0.5	0	0	0	0	-	0
HHSS	Y	0.25	0	0	2	-	-	2
AST	Y	0.25	0	0	1	-	-	1
DELISTED TNK	Y	0.25	0	0	0	-	-	0
CERS TANK	Y	0.25	0	0	1	-	-	1
LUR	Y	0.5	0	0	0	0	-	0
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	1	-	1
CLEANUP SITES	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	0	-	-	0
DELISTED CTNK	Y	0.25	0	0	0	-	-	0
HIST TANK	Y	0.25	0	0	3	-	-	3
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County								
SANTA CLARA HSOL	Y	0.5	0	0	0	0	-	0
SANTA CLARA LO	Y	0.5	0	2	1	0	-	3
UST SANTA CLARA	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
SANTA CLARA CUPA	Y	0.25	0	2	5	-	-	7
SANJOSE HM	Y	0.25	0	0	0	-	-	0
GILROY CUPA	Y	0.25	0	0	0	-	-	0
SUNNYVALE CUPA	Y	0.25	0	0	0	-	-	0

Additional Environmental Records

Federal

PFAS NPL	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	1	-	-	-	1
TRIS	Y	PO	0	-	-	-	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER CONTAM	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCB	Y	0.5	0	0	0	0	-	0

State

DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DRYC GRANT	Y	0.25	0	0	0	-	-	0
PFAS	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS GW	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	0	0
SCH	Y	1	0	0	0	0	0	0
CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	0	3	-	-	-	3
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	0	-	-	-	0
DELISTED HAZ	Y	0.5	0	0	2	0	-	2
GEOTRACKER	Y	0.125	0	0	-	-	-	0
WASTE DISCHG	Y	0.25	0	1	0	-	-	1
EMISSIONS	Y	0.25	0	0	3	-	-	3
CDL	Y	0.125	0	0	-	-	-	0

Tribal **No Tribal additional environmental record sources available for this State.**

County **No County additional environmental databases were selected to be included in the search.**

Total: 0 13 22 4 8 47

* PO – Property Only

* 'Property and adjoining properties' database search radii are set at 0.25 miles.

Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev Diff (ft)</i>	<i>Page Number</i>
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No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	SANTA CLARA LO	Royal Oak Mushroom	15480 Watsonville Rd Morgan Hill CA <i>SCVWD ID Closure Date:</i> 09S3E34N01f 3/28/1996	NW	0.00 / 17.41	0	25
1	DELISTED LST	Royal Oak Mushroom	15480 Watsonville Rd Morgan Hill CA 95037	NW	0.00 / 17.41	0	25
1	LUST	ROYAL OAK MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037 <i>Global ID Status Status Date:</i> T0608500024 COMPLETED - CASE CLOSED 1996-03-28 00:00:00	NW	0.00 / 17.41	0	25
1	SANTA CLARA CUPA	ROYAL OAKS MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	0	29
1	HAZNET	PACIFIC GAS & ELECTRIC COMPANY	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	0	29
1	HAZNET	ROYAL OAKS MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	0	30
1	HAZNET	ROYAL OAK MUSHROOMS	15480 WATSONVILLE ROAD GILROY CA 950200000	NW	0.00 / 17.41	0	30
1	FINDS/FRS	ROYAL OAK MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	0	30
1	SANTA CLARA CUPA	ROYAL OAKS MUSHROOMS	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	0	31
1	WASTE DISCHG	ROYAL OAKS ENTERPRISES, INC.	15480 WATSONVILLE ROAD MORGAN HILL CA 95037	NW	0.00 / 17.41	0	31
1	RCRA NON GEN	ROYAL OAKS MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037 <i>EPA Handler ID:</i> CAL000263424	NW	0.00 / 17.41	0	32
2	LUST	FORMER WHITE GASOLINE	MONTEREY ROAD AND WATSONVILLE ROAD MORGAN HILL CA 95037 <i>Global ID Status Status Date:</i> T10000001954 COMPLETED - CASE CLOSED 2011-02-14 00:00:00	NNE	0.01 / 32.62	1	33

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
3	SANTA CLARA LO	Former White Gasoline	Monterey Rd & Watsonville Rd Morgan Hill CA <i>SCVWD ID Closure Date:</i> 09S3E34M01f 02/14/2011	NNE	0.02 / 119.27	2	41
4	HHSS	BILL SPEEGLE	15220 MONTEREY MORGAN HILL CA 95037	E	0.13 / 677.27	0	41
4	HIST TANK	BILL SPEEGLE	15220 MONTEREY MORGAN HILL CA	E	0.13 / 677.27	0	42
5	SANTA CLARA LO	Morgan Hill CDF	15670 Monterey Rd Morgan Hill CA <i>SCVWD ID Closure Date:</i> 09S3E34E01f	NNW	0.17 / 895.73	3	42
5	AST	CAL FIRE	15670 MONTEREY RD. MORGAN HILL CA 95037	NNW	0.17 / 895.73	3	42
5	SANTA CLARA CUPA	CAL FIRE-MORGAN HILL FFS	15670 MONTEREY ST MORGAN HILL CA 95037	NNW	0.17 / 895.73	3	42
5	CERS TANK	CAL FIRE-MORGAN HILL FFS	15670 MONTEREY ST MORGAN HILL CA 95037 <i>Site ID:</i> 388687	NNW	0.17 / 895.73	3	42
5	EMISSIONS	CAL FIRE MORGAN HILL HEADQUART	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.17 / 895.73	3	52
5	EMISSIONS	CAL FIRE MORGAN HILL HEADQUARTERS	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.17 / 895.73	3	52
5	HIST TANK	SANTA CLARA RANGER UNIT HEADQU	15670 MONTEREY ROAD MORGAN HILL CA	NNW	0.17 / 895.73	3	54
5	RCRA NON GEN	CAL FIRE STANT CLARA UNIT	15670 MONTEREY ST MORGAN HILL CA 95037- 5431 <i>EPA Handler ID:</i> CAL000037856	NNW	0.17 / 895.73	3	54
5	EMISSIONS	CA DEPT FORESTRY & FIRE STATION	15670 MONTEREY ST MORGAN HILL CA 95037	NNW	0.17 / 895.73	3	55
6	HHSS	SANTA CLARA RANGER UNIT HEADQU	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.19 / 1,005.09	4	56

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
7	DELISTED HAZ	MORGAN HILL TIRE & SERVICES	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	4	56
7	SANTA CLARA CUPA	BIG O TIRES	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	4	56
7	HIST TANK	GERARD TIRE	15745 MONTEREY ROAD MORGAN HILL CA	NNW	0.23 / 1,209.48	4	56
7	SANTA CLARA CUPA	MORGAN HILL TIRE & AUTO	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	4	56
7	SANTA CLARA CUPA	MORGAN HILL TIRE & AUTO	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	4	56
7	RCRA NON GEN	RWC TIRE & SERVICE CENTRAL INC DBA BIG O TIRES	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	4	57
			<i>EPA Handler ID:</i> CAL000423822				
8	LUST	MORGAN HILL CDF	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.22 / 1,169.95	4	58
			<i>Global ID Status Status Date:</i> T0608502353 COMPLETED - CASE CLOSED 2019-01-10 00:00:00				
9	DELISTED HAZ	OAKWOOD COUNTRY SCHOOL	105 JOHN WILSON WY MORGAN HILL CA 95037	ESE	0.24 / 1,288.41	0	88
9	SANTA CLARA CUPA	OAKWOOD COUNTRY SCHOOL	105 JOHN WILSON WY MORGAN HILL CA 95037	ESE	0.24 / 1,288.41	0	88
10	RCRA NON GEN	HOCK & COMPANY	15305 WATSONVILLE RD MORGAN HILL CA 95037-5928	SW	0.24 / 1,273.89	10	88
			<i>EPA Handler ID:</i> CAC003040855				
11	RCRA TSD	MISSION BELL MANUFACTURING, INC.	15740 CONCORD CL. MORGAN HILL CA 95139	NNE	0.32 / 1,684.16	3	89
			<i>EPA Handler ID:</i> CAL000191441				
12	VCP	A FRENCH CLEANER	602 TENNANT STATION WAY MORGAN HILL CA 95037	NNW	0.41 / 2,145.28	7	90
			<i>Estor/EPA ID Cleanup Status:</i> 60000130 CERTIFIED AS OF 11/28/2016				
12	ENVIROSTOR	A FRENCH CLEANER	602 TENNANT STATION WAY MORGAN HILL CA 95037	NNW	0.41 / 2,145.28	7	98
			<i>Estor/EPA ID Cleanup Status:</i> 60000130 CERTIFIED AS OF 11/28/2016				

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
<u>13</u>	LUST	U-SAVE ROCKERY	15760 RAILROAD AVE MORGAN HILL CA 95037	NNE	0.47 / 2,470.61	6	<u>106</u>
<i>Global ID Status Status Date:</i> T0608502174 COMPLETED - CASE CLOSED 1987-08-13 00:00:00							
<u>14</u>	ENVIROSTOR	JACKSON FAMILY TRUST	235 TENNANT AVENUE MORGAN HILL CA 95037	NNW	0.57 / 3,004.26	12	<u>108</u>
<i>Estor/EPA ID Cleanup Status:</i> 71002096 CERTIFIED AS OF 5/13/2014							
<u>15</u>	RESPONSE	WINSTON CHAN PROPERTY	14735 MONTEREY HWY SAN MARTIN CA 95046	ESE	0.66 / 3,470.92	-5	<u>110</u>
<i>Estor/EPA ID Cleanup Status:</i> 43490061 CERTIFIED AS OF 5/30/1987							
<u>15</u>	ENVIROSTOR	WINSTON CHAN PROPERTY	14735 MONTEREY HWY SAN MARTIN CA 95046	ESE	0.66 / 3,470.92	-5	<u>111</u>
<i>Estor/EPA ID Cleanup Status:</i> 43490061 CERTIFIED AS OF 5/30/1987							
<u>16</u>	ENVIROSTOR	UNAXIS MATERIALS, INC./CONTRAVES, INC.	16035 VINEYARD BOULEVARD MORGAN HILL CA 95037	NNW	0.61 / 3,224.80	12	<u>113</u>
<i>Estor/EPA ID Cleanup Status:</i> 71002906 NO FURTHER ACTION AS OF 6/27/2014							
<u>17</u>	ENVIROSTOR	ASCO AIR CONDITIONING	16250 RAILROAD AVE. MORGAN HILL CA 95037	N	0.73 / 3,869.82	16	<u>115</u>
<i>Estor/EPA ID Cleanup Status:</i> 43340081 REFER: OTHER AGENCY AS OF 7/29/1994							
<u>18</u>	ENVIROSTOR	BAS PRECISION SHEET METAL, INC.	16170 JAQUELINE CT MORGAN HILL CA 95037	N	0.83 / 4,375.83	17	<u>116</u>
<i>Estor/EPA ID Cleanup Status:</i> 71003139 INACTIVE - NEEDS EVALUATION AS OF							
<u>19</u>	ENVIROSTOR	ITALIX COMPANY, INC.	120 MAST STREET MORGAN HILL CA 95037	NNW	0.96 / 5,082.15	18	<u>116</u>
<i>Estor/EPA ID Cleanup Status:</i> 60002858 ACTIVE AS OF 7/29/2019							
<u>20</u>	ENVIROSTOR	CASTLE A.L. INC	190 MAST MORGAN HILL CA 95037	NNW	0.97 / 5,135.21	18	<u>117</u>
<i>Estor/EPA ID Cleanup Status:</i> 43510004 REFER: RWQCB AS OF 6/13/1994							

Executive Summary: Summary by Data Source

Standard

Federal

RCRA TSD - RCRA non-CORRACTS TSD Facilities

A search of the RCRA TSD database, dated Nov 18, 2019 has found that there are 1 RCRA TSD site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
MISSION BELL MANUFACTURING, INC.	15740 CONCORD CL. MORGAN HILL CA 95139	NNE	0.32 / 1,684.16	11
<i>EPA Handler ID: CAL000191441</i>				

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Nov 18, 2019 has found that there are 4 RCRA NON GEN site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ROYAL OAKS MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1
<i>EPA Handler ID: CAL000263424</i>				
CAL FIRE STANT CLARA UNIT	15670 MONTEREY ST MORGAN HILL CA 95037-5431	NNW	0.17 / 895.73	5
<i>EPA Handler ID: CAL000037856</i>				
RWC TIRE & SERVICE CENTRAL INC DBA BIG O TIRES	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	7
<i>EPA Handler ID: CAL000423822</i>				
HOCK & COMPANY	15305 WATSONVILLE RD MORGAN HILL CA 95037-5928	SW	0.24 / 1,273.89	10
<i>EPA Handler ID: CAC003040855</i>				

State

RESPONSE - State Response Sites

A search of the RESPONSE database, dated Oct 1, 2019 has found that there are 1 RESPONSE site(s) within approximately 1.00 miles of the project property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
WINSTON CHAN PROPERTY	14735 MONTEREY HWY SAN MARTIN CA 95046	ESE	0.66 / 3,470.92	15
<i>Estor/EPA ID Cleanup Status: 43490061 CERTIFIED AS OF 5/30/1987</i>				

ENVIROSTOR - EnviroStor Database

A search of the ENVIROSTOR database, dated Oct 1, 2019 has found that there are 8 ENVIROSTOR site(s) within approximately 1.00 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
A FRENCH CLEANER	602 TENNANT STATION WAY MORGAN HILL CA 95037	NNW	0.41 / 2,145.28	12
<i>Estor/EPA ID Cleanup Status: 60000130 CERTIFIED AS OF 11/28/2016</i>				
JACKSON FAMILY TRUST	235 TENNANT AVENUE MORGAN HILL CA 95037	NNW	0.57 / 3,004.26	14
<i>Estor/EPA ID Cleanup Status: 71002096 CERTIFIED AS OF 5/13/2014</i>				
UNAXIS MATERIALS, INC. /CONTRAVES, INC.	16035 VINEYARD BOULEVARD MORGAN HILL CA 95037	NNW	0.61 / 3,224.80	16
<i>Estor/EPA ID Cleanup Status: 71002906 NO FURTHER ACTION AS OF 6/27/2014</i>				
ASCO AIR CONDITIONING	16250 RAILROAD AVE. MORGAN HILL CA 95037	N	0.73 / 3,869.82	17
<i>Estor/EPA ID Cleanup Status: 43340081 REFER: OTHER AGENCY AS OF 7/29/1994</i>				
BAS PRECISION SHEET METAL, INC.	16170 JAQUELINE CT MORGAN HILL CA 95037	N	0.83 / 4,375.83	18
<i>Estor/EPA ID Cleanup Status: 71003139 INACTIVE - NEEDS EVALUATION AS OF</i>				
ITALIX COMPANY, INC.	120 MAST STREET MORGAN HILL CA 95037	NNW	0.96 / 5,082.15	19
<i>Estor/EPA ID Cleanup Status: 60002858 ACTIVE AS OF 7/29/2019</i>				
CASTLE A.L. INC	190 MAST MORGAN HILL CA 95037	NNW	0.97 / 5,135.21	20
<i>Estor/EPA ID Cleanup Status: 43510004 REFER: RWQCB AS OF 6/13/1994</i>				
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
WINSTON CHAN PROPERTY	14735 MONTEREY HWY SAN MARTIN CA 95046	ESE	0.66 / 3,470.92	15
<i>Estor/EPA ID Cleanup Status: 43490061 CERTIFIED AS OF 5/30/1987</i>				

LUST - Leaking Underground Fuel Tank Reports

A search of the LUST database, dated Nov 14, 2019 has found that there are 4 LUST site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ROYAL OAK MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1
<i>Global ID Status Status Date: T0608500024 COMPLETED - CASE CLOSED 1996-03-28 00:00:00</i>				
FORMER WHITE GASOLINE	MONTEREY ROAD AND WATSONVILLE ROAD MORGAN HILL CA 95037	NNE	0.01 / 32.62	2
<i>Global ID Status Status Date: T10000001954 COMPLETED - CASE CLOSED 2011-02-14 00:00:00</i>				

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
MORGAN HILL CDF	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.22 / 1,169.95	8
<i>Global ID Status Status Date: T0608502353 COMPLETED - CASE CLOSED 2019-01-10 00:00:00</i>				
U-SAVE ROCKERY	15760 RAILROAD AVE MORGAN HILL CA 95037	NNE	0.47 / 2,470.61	13
<i>Global ID Status Status Date: T0608502174 COMPLETED - CASE CLOSED 1987-08-13 00:00:00</i>				

DELISTED LST - Delisted Leaking Storage Tanks

A search of the DELISTED LST database, dated Nov 14, 2019 has found that there are 1 DELISTED LST site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
Royal Oak Mushroom	15480 Watsonville Rd Morgan Hill CA 95037	NW	0.00 / 17.41	1

HHSS - Historical Hazardous Substance Storage Information Database

A search of the HHSS database, dated Aug 27, 2015 has found that there are 2 HHSS site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
BILL SPEEGLE	15220 MONTEREY MORGAN HILL CA 95037	E	0.13 / 677.27	4
SANTA CLARA RANGER UNIT HEADQU	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.19 / 1,005.09	6

AST - Aboveground Storage Tanks

A search of the AST database, dated Aug 31, 2009 has found that there are 1 AST site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
CAL FIRE	15670 MONTEREY RD. MORGAN HILL CA 95037	NNW	0.17 / 895.73	5

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated Nov 18, 2019 has found that there are 1 CERS TANK site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
CAL FIRE-MORGAN HILL FFS	15670 MONTEREY ST MORGAN HILL CA 95037	NNW	0.17 / 895.73	5

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
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Site ID: 388687

VCP - Voluntary Cleanup Program

A search of the VCP database, dated Oct 1, 2019 has found that there are 1 VCP site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
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A FRENCH CLEANER	602 TENNANT STATION WAY MORGAN HILL CA 95037	NNW	0.41 / 2,145.28	12
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Estor/EPA ID | Cleanup Status: 60000130 | CERTIFIED AS OF 11/28/2016

HIST TANK - Historical Hazardous Substance Storage Container Information - Facility Summary

A search of the HIST TANK database, dated May 27, 1988 has found that there are 3 HIST TANK site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
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BILL SPEEGLE	15220 MONTEREY MORGAN HILL CA	E	0.13 / 677.27	4
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SANTA CLARA RANGER UNIT HEADQU	15670 MONTEREY ROAD MORGAN HILL CA	NNW	0.17 / 895.73	5
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GERARD TIRE	15745 MONTEREY ROAD MORGAN HILL CA	NNW	0.23 / 1,209.48	7
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County

SANTA CLARA LO - Santa Clara County - Local Oversight Program Listing

A search of the SANTA CLARA LO database, dated Jun 14, 2017 has found that there are 3 SANTA CLARA LO site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
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Royal Oak Mushroom	15480 Watsonville Rd Morgan Hill CA	NW	0.00 / 17.41	1
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SCVWD ID | Closure Date: 09S3E34N01f | 3/28/1996

Former White Gasoline	Monterey Rd & Watsonville Rd Morgan Hill CA	NNE	0.02 / 119.27	3
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SCVWD ID | Closure Date: 09S3E34M01f | 02/14/2011

Morgan Hill CDF	15670 Monterey Rd Morgan Hill CA	NNW	0.17 / 895.73	5
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SCVWD ID | Closure Date: 09S3E34E01f |

SANTA CLARA CUPA - Santa Clara County - CUPA Facilities List

A search of the SANTA CLARA CUPA database, dated Oct 31, 2019 has found that there are 7 SANTA CLARA CUPA site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ROYAL OAKS MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1
ROYAL OAKS MUSHROOMS	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1
CAL FIRE-MORGAN HILL FFS	15670 MONTEREY ST MORGAN HILL CA 95037	NNW	0.17 / 895.73	5
MORGAN HILL TIRE & AUTO	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	7
MORGAN HILL TIRE & AUTO	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	7
BIG O TIRES	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	7

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
OAKWOOD COUNTRY SCHOOL	105 JOHN WILSON WY MORGAN HILL CA 95037	ESE	0.24 / 1,288.41	9

Non Standard

Federal

FINDS/FRS - Facility Registry Service/Facility Index

A search of the FINDS/FRS database, dated Nov 6, 2019 has found that there are 1 FINDS/FRS site(s) within approximately 0.02 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ROYAL OAK MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1

State

HAZNET - Hazardous Waste Manifest Data

A search of the HAZNET database, dated Oct 24, 2016 has found that there are 3 HAZNET site(s) within approximately 0.02 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ROYAL OAK MUSHROOMS	15480 WATSONVILLE ROAD GILROY CA 95020000	NW	0.00 / 17.41	1
ROYAL OAKS MUSHROOM	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1
PACIFIC GAS & ELECTRIC COMPANY	15480 WATSONVILLE RD MORGAN HILL CA 95037	NW	0.00 / 17.41	1

DELISTED HAZ - Delisted Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the DELISTED HAZ database, dated Nov 29, 2018 has found that there are 2 DELISTED HAZ site(s) within approximately 0.50 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
MORGAN HILL TIRE & SERVICES	15745 MONTEREY RD MORGAN HILL CA 95037	NNW	0.23 / 1,209.48	7

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
OAKWOOD COUNTRY SCHOOL	105 JOHN WILSON WY MORGAN HILL CA 95037	ESE	0.24 / 1,288.41	9

WASTE DISCHG - Waste Discharge Requirements

A search of the WASTE DISCHG database, dated Nov 14, 2019 has found that there are 1 WASTE DISCHG site(s) within approximately 0.25 miles of the project property.

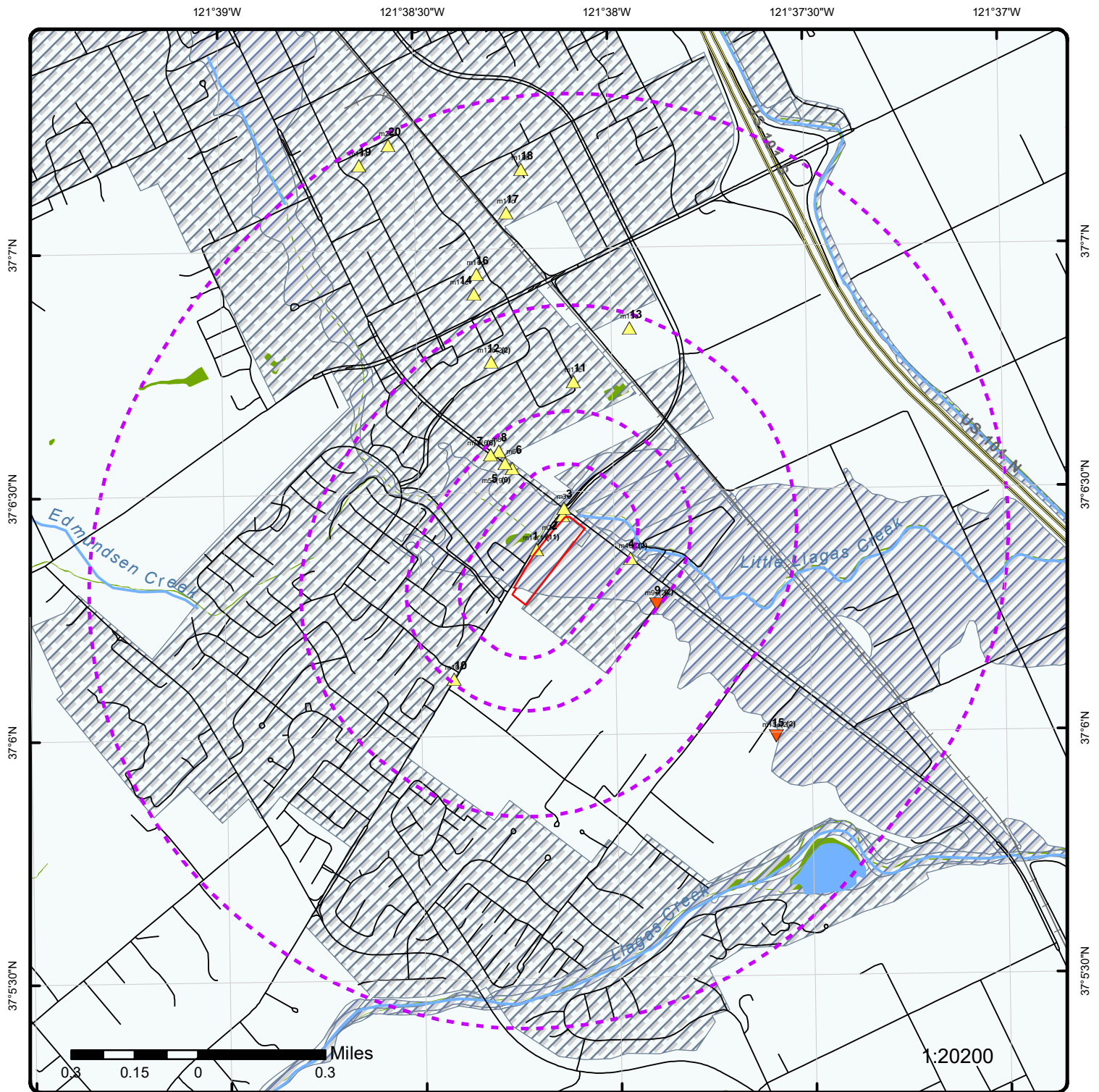
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
ROYAL OAKS ENTERPRISES, INC.	15480 WATSONVILLE ROAD MORGAN HILL CA 95037	NW	0.00 / 17.41	1

EMISSIONS - Toxic Pollutant Emissions Facilities

A search of the EMISSIONS database, dated Dec 31, 2017 has found that there are 3 EMISSIONS site(s) within approximately 0.25 miles of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
CA DEPT FORESTRY & FIRE STATION	15670 MONTEREY ST MORGAN HILL CA 95037	NNW	0.17 / 895.73	5

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (mi/ft)</u>	<u>Map Key</u>
CAL FIRE MORGAN HILL HEADQUARTERS	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.17 / 895.73	5
CAL FIRE MORGAN HILL HEADQUART	15670 MONTEREY ROAD MORGAN HILL CA 95037	NNW	0.17 / 895.73	5



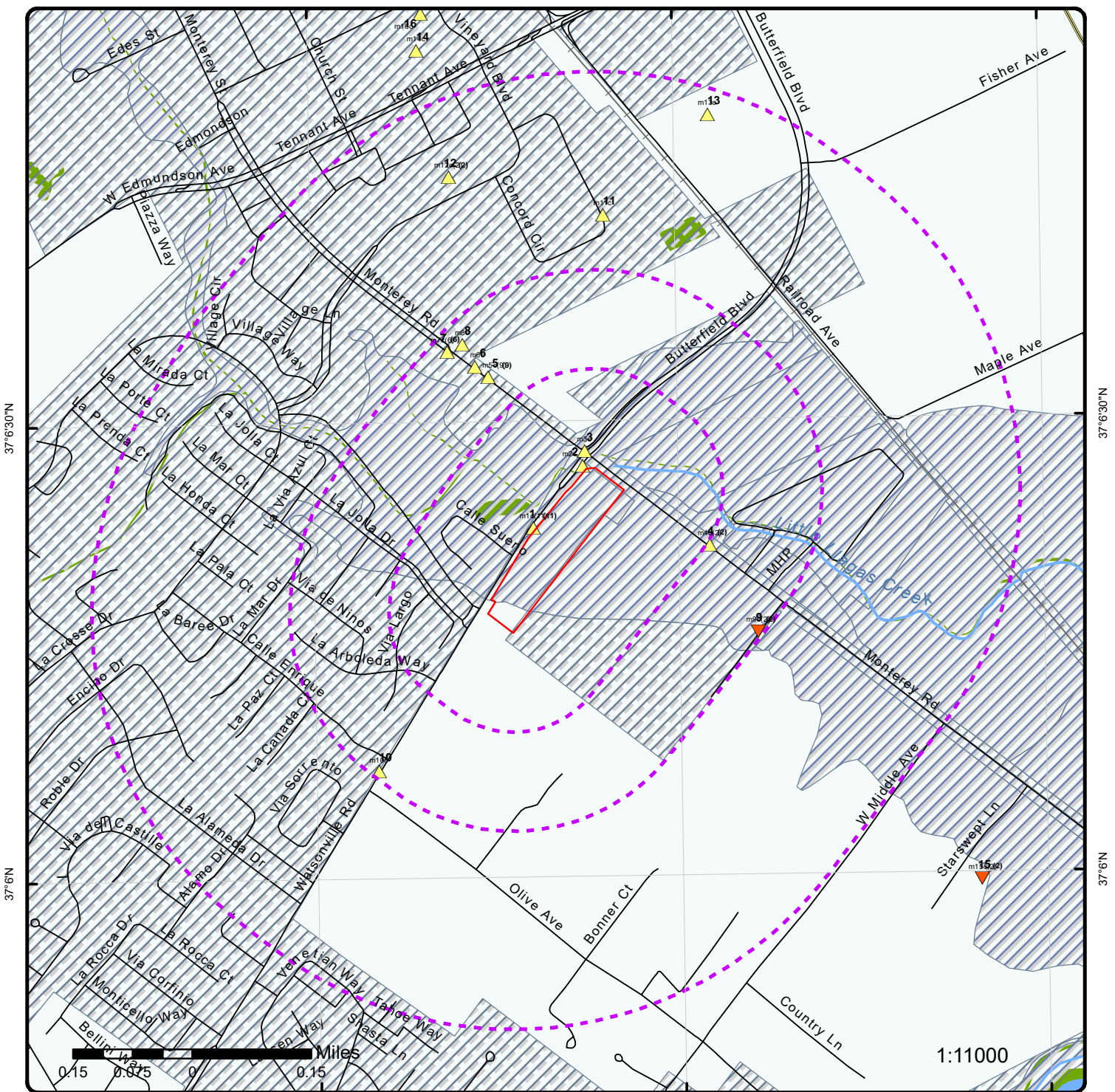
Map : 1.0 Mile Radius

Order Number: 20200123214

Address: SEC Watsonville Rd @ Monterey Rd, Morgan Hill, CA



Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		



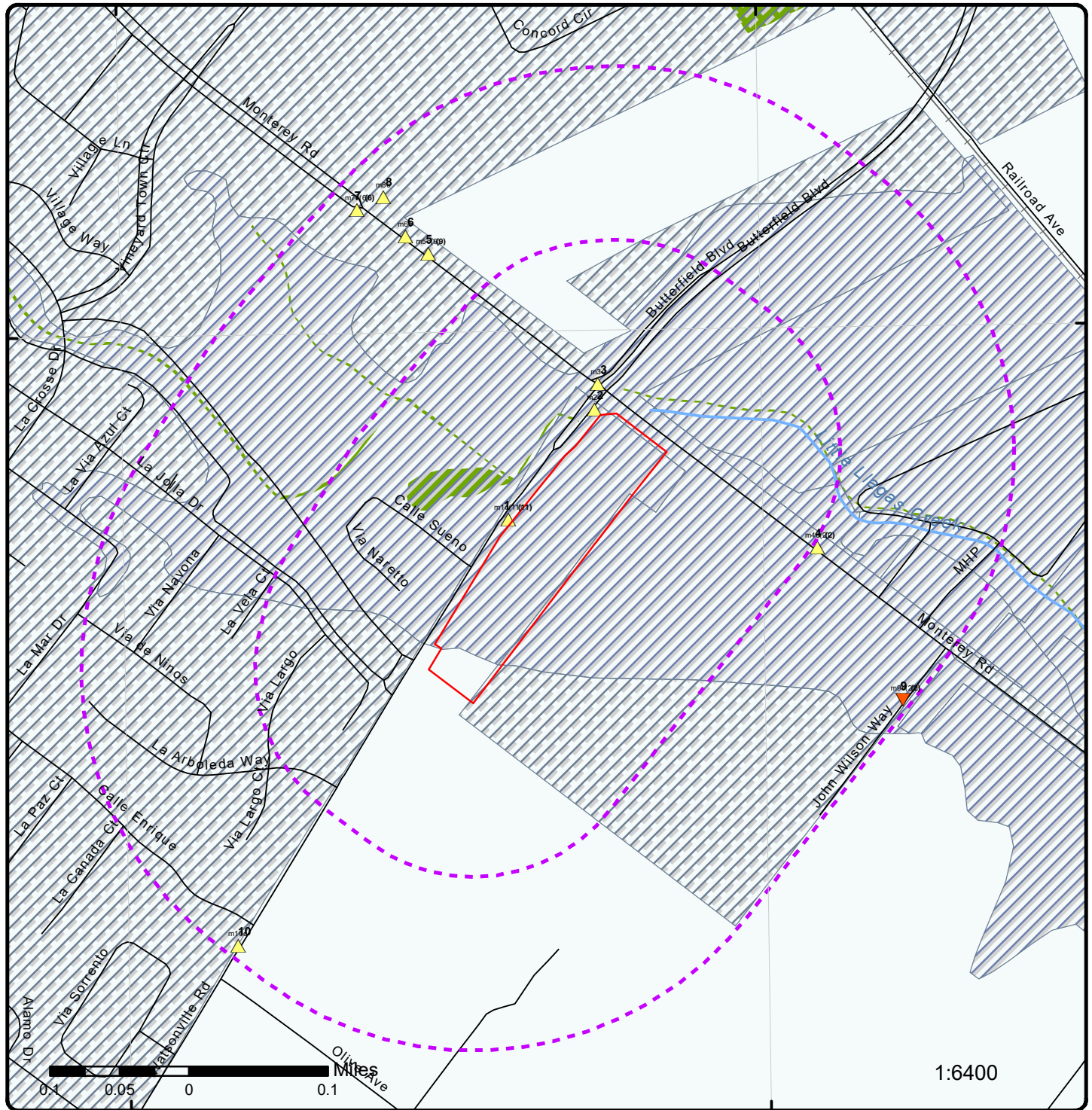
Map : 0.5 Mile Radius

Order Number: 20200123214

Address: SEC Watsonville Rd @ Monterey Rd, Morgan Hill, CA



Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		



Map : 0.25 Mile Radius

Order Number: 20200123214

Address: SEC Watsonville Rd @ Monterey Rd, Morgan Hill, CA



Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		

121°38'30"W

121°38"W

121°37'30"W

37°7'N

37°6'30"N

37°6'N

37°6'30"N

37°6'N



0.1 0.05 0 0.1 Miles

1:10000

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Aerial Year: 2018

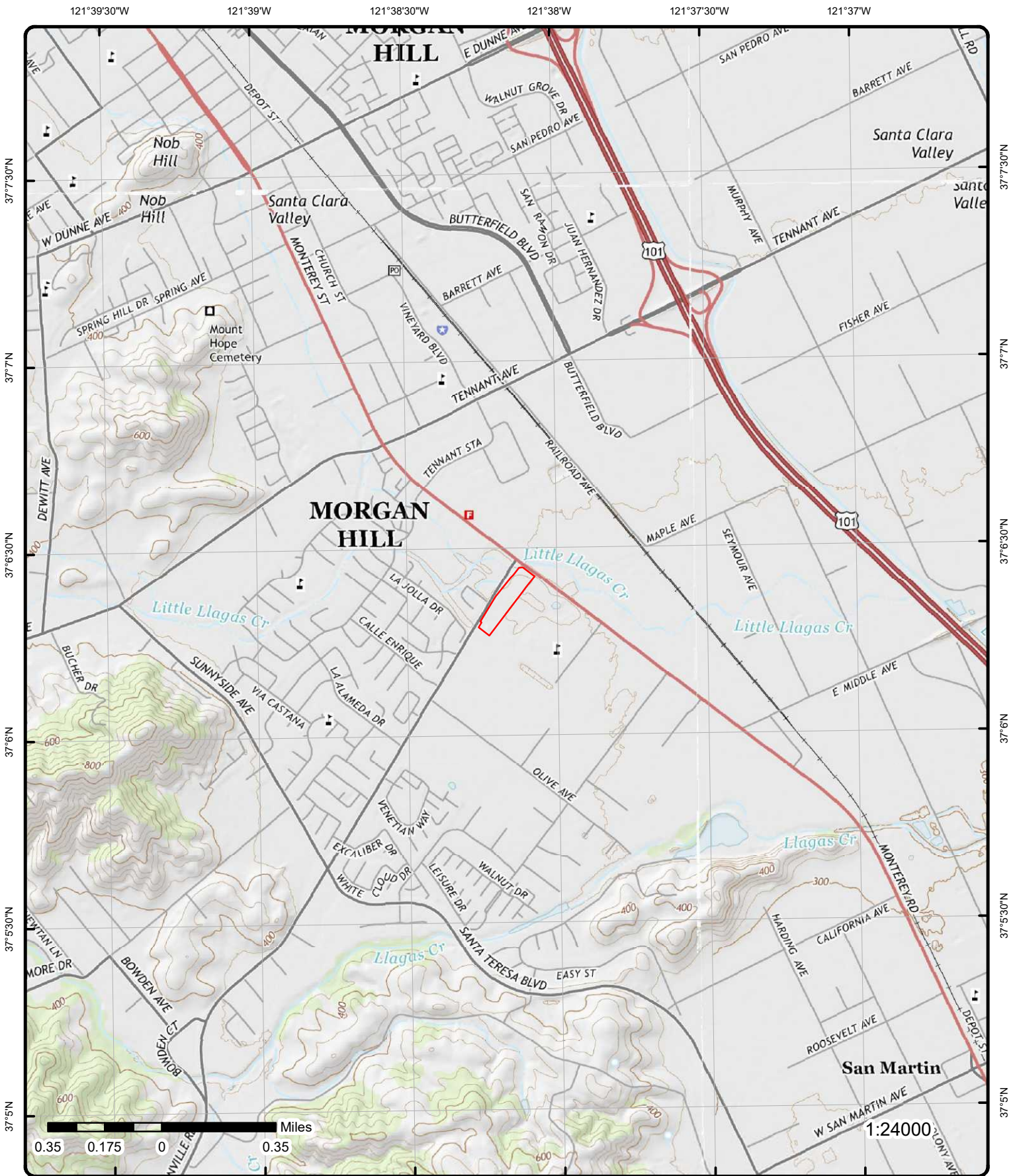
Address: SEC Watsonville Rd @ Monterey Rd, Morgan Hill, CA

Source: ESRI World Imagery

Order Number: 20200123214



© ERIS Information Inc.



Topographic Map Year: 2015

Address: SEC Watsonville Rd @ Monterey Rd, CA

Quadrangle(s): Mount Madonna,CA; Morgan Hill,CA; Mount Sizer,CA; Gilroy,CA

Source: USGS Topographic Map

Order Number: 20200123214



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Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 11	NW	0.00 / 17.41	320.92 / 0	Royal Oak Mushroom 15480 Watsonville Rd Morgan Hill CA	SANTA CLARA LO

SCVWD ID: 09S3E34N01f
Closure Date: 3/28/1996
Link: <http://lustop.sccgov.org/files/09S3E34N01f/>

1	2 of 11	NW	0.00 / 17.41	320.92 / 0	Royal Oak Mushroom 15480 Watsonville Rd Morgan Hill CA 95037	DELISTED LST
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Delisted Leaking Storage Tanks

Global ID: T0608507117 Case Type: LUST Cleanup Site Status: Completed - Case Closed Status Date: 28/03/1996 0:00 RB Case No: Loc Case No: Case Worker: Local Agency: Claim Case No: Site Name: Lead Agency: SANTA CLARA COUNTY LOP File Location: Cal Water Watershed Name: DWR Groundwater Sub Basin: Proposed UST Closure: Orig Address: Original Source: LUST Record Date: 05-SEP-2014 Contam of Concern:	Comments Deadline: CUF Case: NO Begin Date: How Discovered: Stop Method: County: Santa Clara Latitude: 37.103254 Longitude: -121.637029
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Gasoline

Potential Media Affected:

How Discover Desc:

Stop Description:

1	3 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAK MUSHROOM 15480 WATSONVILLE RD MORGAN HILL CA 95037	LUST
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Global ID: T0608500024 Status: COMPLETED - CASE CLOSED Status Date: 1996-03-28 00:00:00 Case Type: LUST CLEANUP SITE Date Source: LUST Cleanup Sites from GeoTracker Search; LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download	County: SANTA CLARA Latitude: 37.1036797 Longitude: -121.6373596
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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download - Facilities Detail

RB Case No:	2424	Potential COC:	Gasoline
Local Case No:		How Discovered:	
Begin Date:	1993-01-01 00:00:00	Stop Method:	
Lead Agency:	SANTA CLARA COUNTY LOP	Stop Description:	
Local Agency:	SANTA CLARA COUNTY LOP	Case Worker:	UST
CUF Case:	NO	File Location:	All Files are on GeoTracker or in the Local Agency Database

Potential Media of Concern: Soil

How Discovered Description:

Calwater Watershed Name: Pajaro River - South Santa Clara Valley (305.30)

DWR GW Subbasin Name: Gilroy-Hollister Valley - Llagas Area (3-003.01)

Disadvantaged Community:

Site History:

Regulatory Activity

Action Type:	RESPONSE
Date :	1996-04-01 00:00:00
Action:	Soil and Water Investigation Report
Action Type:	RESPONSE
Date :	1996-03-28 00:00:00
Action:	Other Report / Document
Action Type:	ENFORCEMENT
Date :	1996-03-28 00:00:00
Action:	Closure/No Further Action Letter
Action Type:	ENFORCEMENT
Date :	1996-02-12 00:00:00
Action:	Notice of Responsibility - #39229
Action Type:	ENFORCEMENT
Date :	1996-01-02 00:00:00
Action:	Staff Letter - #18602
Action Type:	REMEDIATION
Date :	1994-01-21 00:00:00
Action:	Excavation
Action Type:	Other
Date :	1993-01-01 00:00:00
Action:	Leak Reported

Regulatory Contacts

Contact Type:	Local Agency Caseworker	Address:	1555 Berger Drive, Suite 300
Contact Name:	UST CASE WORKER	Email:	
City:	SAN JOSE	Phone No:	4089183400
Organization Name:	SANTA CLARA COUNTY LOP		
Contact Type:	Regional Board Caseworker	Address:	895 AEROVISTA PL, SUITE 101
Contact Name:	RB3 STAFF	Email:	centralcoast@waterboards.ca.gov
City:	SAN LUIS OBISPO	Phone No:	8055493147
Organization Name:	CENTRAL COAST RWQCB (REGION 3)		

Status History

Status:	Completed - Case Closed
Status Date:	1996-03-28 00:00:00
Status:	Open - Site Assessment

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Status Date:		1994-01-21 00:00:00				
Status:		Open - Case Begin Date				
Status Date:		1993-01-01 00:00:00				
<u>LUST Sites from GeoTracker Search - Regulatory Profile(as of Oct 31, 2019)</u>						
Site Facility Name:	ROYAL OAK MUSHROOM	Potential COC:	GASOLINE			
Site Facility Type:	LUST CLEANUP SITE	Facility Type:				
Cleanup Status:	COMPLETED - CASE CLOSED	Composting Method:				
Project Status:		Address:	15480 WATSONVILLE RD			
WDR Place Type:		City:	MORGAN HILL			
WDR File:		Zip:	95037			
WDR Order:		County:	SANTA CLARA			
CUF Priority Assig:		CUF Claim:				
CUF Amount Paid:						
File Location:	ALL FILES ARE ON GEOTRACKER OR IN THE LOCAL AGENCY DATABASE					
Designated Beneficial Use:	MUN, AGR, IND, PROC					
Project Oversight Agencies:						
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0608500024					
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 3/28/1996					
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0608500024&tabname=regulatoryhistory					
Potential Media of Concern:	SOIL					
User Defined Beneficial Use:						
DWR GW Sub Basin:	Gilroy-Hollister Valley - Llagas Area (3-003.01)					
Calwater Watershed Name:	Pajaro River - South Santa Clara Valley (305.30)					
Post Closure Site Management:						
Future Land Use:						
Cleanup Oversight Agencies:	SANTA CLARA COUNTY LOP (LEAD) CASEWORKER: UST CASE WORKER CENTRAL COAST RWQCB (REGION 3) - CASE #: 2424 CASEWORKER: RB3 STAFF SANTA CLARA VALLEY WATER DISTRICT - CASE #: 09S3E34N01f					
Gndwater Monitoring Freque:						
Site History:	No site history available					
<u>LUST Sites from GeoTracker Search - Cleanup Status History(as of Oct 31, 2019)</u>						
Status:	Completed - Case Closed					
Date :	3/28/1996					
Status:	Open - Site Assessment					
Date :	1/21/1994					
Status:	Open - Case Begin Date					
Date :	1/1/1993					
<u>LUST Sites from GeoTracker Search - Cleanup Action Report (as of Oct 31, 2019)</u>						
Action Type:	EXCAVATION	Begin Date:	1/21/1994			
Phase:		End Date:	3/16/1994			
Contaminant Mass Removed:						
Description:						
<u>LUST Sites from GeoTracker Search - Regulatory Activities(as of Oct 31, 2019)</u>						
Action Type:	Response Requested - Other					
Action Date:	3/28/1996					
Received Issue Date:	3/28/1996					
Action:	Other Report / Document					
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608500024&doc_id=5825650					
Title Description Comments:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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SCVWD Electronic Files

Action Type: Other Regulatory Actions
Action Date: 3/28/1996
Received Issue Date: 3/28/1996
Action: Closure/No Further Action Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608500024&enforcement_id=6232737&temptable=ENFORCEMENT

Title Description Comments:

Action Type: Notices
Action Date: 2/12/1996
Received Issue Date: 2/12/1996
Action: Notice of Responsibility - #39229
Doc Link:

Title Description Comments:

Action Type: Other Regulatory Actions
Action Date: 1/2/1996
Received Issue Date: 1/2/1996
Action: Staff Letter - #18602
Doc Link:

Title Description Comments:

Action Type: Response Requested - Reports
Action Date: 4/1/1996
Received Issue Date:
Action: Soil and Water Investigation Report
Doc Link:

Title Description Comments:

Soil and Water Investigation Report

Action Type: Cleanup Action
Action Date: 1/21/1994
Received Issue Date:
Action: Excavation
Doc Link:

Title Description Comments:

Action Type: Leak Action
Action Date: 1/1/1993
Received Issue Date:
Action: Leak Reported
Doc Link:

Title Description Comments:

LUST Sites from GeoTracker Search - Documents(as of Oct 31, 2019)

Document Type: Site Documents
Document Date: 3/28/1996
Size :
Submitted By: COUNTY OF SANTA CLARA STUDENT INTERN (REGULATOR)

Type: OTHER REPORT / DOCUMENT
Title: SCVWD ELECTRONIC FILES - REGULATOR RESPONSE
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608500024&document_id=5825650

Document Type: Site Documents
Document Date: 3/28/1996
Size :
Submitted By: COUNTY OF SANTA CLARA STUDENT INTERN (REGULATOR)

Type: CLOSURE/NO FURTHER ACTION LETTER
Title: UNKNOWN
Submitted:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608500024&enforcement_id=6232737

LUST Sites from GeoTracker Search - Related Cases(as of Oct 31, 2019)

Identifier:	WDR100036000	Address:	15480 Watsonville Road
Project Name:	Royal Oaks Enterprises, Inc.	City:	MORGAN HILL
Status:	HISTORICAL - WDR	Association:	Related Global ID
Description:	Auto-Entered via Standardized Address Match		
Project Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=WDR100036000		

1	4 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAKS MUSHROOM 15480 WATSONVILLE RD MORGAN HILL CA 95037	SANTA CLARA CUPA
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Facility ID:	FA0203046
GIS Latitude:	37.106407
GIS Longitude:	-121.636561
PE:	BP11
Description:	HAZMAT STORAGE & HMBP FACILITY, 1-3 CHEMICALS
Record ID:	PR0388255

1	5 of 11	NW	0.00 / 17.41	320.92 / 0	PACIFIC GAS & ELECTRIC COMPANY 15480 WATSONVILLE RD MORGAN HILL CA 95037	HAZNET
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SIC Code:		Mailing City:	SAN JOSE
NAICS Code:		Mailing State:	CA
EPA ID:	CAC002582028	Mailing Zip:	95119
Create Date:	9/16/2004	Region Code:	2
Fac Act Ind:	No	Owner Name:	P G & E
Inact Date:	4/25/2005	Owner Addr 1:	6402 SANTA TERESA BLVD
County Code:	43	Owner Addr 2:	
County Name:	Santa Clara	Owner City:	SAN JOSE
Mail Name:	ENV AFFAIRS	Owner State:	CA
Mailing Addr 1:	6402 SANTA TERESA BLVD	Owner Zip:	95119
Mailing Addr 2:		Owner Phone:	0000000000
Owner Fax:			

Contact Information

Contact Name:	MIKE MCBRIDE
Street Address 1:	6402 SANTA TERESA BLVD
Street Address 2:	
City:	SAN JOSE
State:	CA
Zip:	95119
Phone:	4082024213

Tanner Information

Generator EPA ID:	CAC002582028
Generator County Code:	43
Generator County:	Santa Clara
TSD EPA ID:	CAD028409019
TSD County Code:	19
TSD County:	Los Angeles
State Waste Code:	223
State Waste Code Desc.:	Unspecified oil-containing waste
Method Code:	H01
Method Description:	Transfer station
Tons:	1.8
Year:	2002

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
<u>1</u>	6 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAKS MUSHROOM 15480 WATSONVILLE RD MORGAN HILL CA 95037	HAZNET
SIC Code: 0119 NAICS Code: 111199 EPA ID: CAL000263424 Create Date: 12/10/2002 Fac Act Ind: Yes Inact Date: County Code: 43 County Name: Santa Clara Mail Name: Mailing Addr 1: PO BOX 447 Mailing Addr 2: Owner Fax: 0000000000		Mailing City: MORGAN HILL Mailing State: CA Mailing Zip: 950370000 Region Code: 2 Owner Name: DON HORDNESS Owner Addr 1: PO BOX 447 Owner Addr 2: Owner City: MORGAN HILL Owner State: CA Owner Zip: 950370000 Owner Phone: 4087792362				
Contact Information						
--						
Contact Name:		DON HORDNESS				
Street Address 1:		PO BOX 447				
Street Address 2:						
City:		MORGAN HILL				
State:		CA				
Zip:		95037				
Phone:		4087792362				
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<u>1</u>	7 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAK MUSHROOMS 15480 WATSONVILLE ROAD GILROY CA 950200000	HAZNET
SIC Code: NAICS Code: EPA ID: CAC001001768 Create Date: 1/6/1994 Fac Act Ind: No Inact Date: 10/25/2000 County Code: 43 County Name: Santa Clara Mail Name: Mailing Addr 1: 15480 WATSONVILLE ROAD Mailing Addr 2: Owner Fax:		Mailing City: GILROY Mailing State: CA Mailing Zip: 950200000 Region Code: 2 Owner Name: ROYAL OAK MUSHROOM Owner Addr 1: 15480 WATSONVILLE ROAD Owner Addr 2: Owner City: GILROY Owner State: CA Owner Zip: 950200000 Owner Phone: 0000000000				
Contact Information						
--						
Contact Name:		DAVE GUTHRIDGE				
Street Address 1:		4985 AVERY COURT				
Street Address 2:						
City:		SAN JOSE				
State:		CA				
Zip:		951360000				
Phone:		4084630171				
--						
<u>1</u>	8 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAK MUSHROOM 15480 WATSONVILLE RD MORGAN HILL CA 95037	FINDS/FRS
Registry ID: 110065225900 FIPS Code: HUC Code: 18060002 Site Type Name: STATIONARY Location Description:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Supplemental Location:

Create Date: 10-OCT-2015 10:05:33
Update Date: 21-FEB-2016 20:44:30
Interest Types: NON-TRANSIENT NON-COMMUNITY WATER SYSTEM, STATE MASTER, TRANSPORTER, WATER TREATMENT PLANT
SIC Codes: 0182
SIC Code Descriptions: FOOD CROPS GROWN UNDER COVER
NAICS Codes: 111199
NAICS Code Descriptions: ALL OTHER GRAIN FARMING.
Conveyor: FRS-GEOCODE
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 11
Census Block Code: 060855123073001
EPA Region Code: 09
County Name: SANTA CLARA
US/Mexico Border Ind:
Latitude: 37.106375
Longitude: -121.636767
Reference Point: ENTRANCE POINT OF A FACILITY OR STATION
Coord Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Accuracy Value: 50
Datum: NAD83
Source:
Facility Detail Rprt URL: http://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110065225900
Program Acronyms:

CA-ENVIROVIEW:149297, CA-ENVIROVIEW:253690, CA-ENVIROVIEW:63210, RCRAINFO:CAL000263424, SFDW:CA4300945, SFDW:CA4300945 55127

<u>1</u>	9 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAKS MUSHROOMS 15480 WATSONVILLE RD MORGAN HILL CA 95037	SANTA CLARA CUPA
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Facility ID: FA0203045
GIS Latitude: 37.106407
GIS Longitude: -121.636561
PE: 2202
Description: GENERATES < 100 KG/YR
Record ID: PR0315493

<u>1</u>	10 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAKS ENTERPRISES, INC. 15480 WATSONVILLE ROAD MORGAN HILL CA 95037	WASTE DISCHG
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County: SANTA CLARA
Site Facility Type: * WDR SITE
Status: HISTORICAL - WDR
Note: Information related to facilities can be searched on Geo Tracker Website: <https://geotracker.waterboards.ca.gov/search>
Global ID: WDR100036000
Facility ID:
Site Code:

WDR Sites from GeoTracker Search - Facilities(as of Oct 31, 2019)

Site Facility Name:	ROYAL OAKS ENTERPRISES, INC.	WDR Place Type:	Food Processor
Site Facility Type:	* WDR SITE	WDR File No:	
Cleanup Status:	HISTORICAL - WDR	WDR Order No:	95-003
Cleanup Stat Detail:		File Location:	
Potential COC:		Address/Partial Add:	15480 WATSONVILLE ROAD
Site History:	No site history available	City:	MORGAN HILL
CUF Claimno No:		Zip:	95037
CUF Amount Paid:		County:	SANTA CLARA

Groundwater Monitoring

Frequ:
Composting Method:
Facility Type:
Potential Media of Concern:
User Defined Beneficial Use:
Designated Beneficial Use: MUN, AGR, IND, PROC
Post Closure Site Management:
Future Land Use Reported:
CUF Priority Assigned:
Project Status: HISTORICAL - WDR AS OF 2/10/1995
DWR GW Sub Basin: Gilroy-Hollister Valley - Llagas Area (3-003.01)
Calwater Watershed:
Cleanup Oversight Agencies:
Project Oversight Agencies: CENTRAL COAST RWQCB (REGION 3) (LEAD)
CASEWORKER: CECILE BLANCARTE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=WDR100036000
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=WDR100036000&tabname=regulatoryhistory

WDR Sites from GeoTracker Search - Project Status History(as of Oct 31, 2019)

Status: Historical - WDR
Date : 2/10/1995

Status: Open - Case Begin Date
Date : 2/10/1995

Status: Active - WDR
Date : 2/10/1995

WDR Sites from GeoTracker Search - Related Cases(as of Oct 31, 2019)

Identifier: T0608500024
Status: COMPLETED - CASE CLOSED
Project Name: Royal Oak Mushroom
Association: Related Global ID
Description: Auto-Entered via Standardized Address Match
Address: 15480 Watsonville Rd
City: MORGAN HILL
Project Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0608500024

Identifier: T0608500024
Status: COMPLETED - CASE CLOSED
Project Name: Royal Oak Mushroom
Association: Related Global ID
Description:
Address: 15480 Watsonville Rd
City: MORGAN HILL
Project Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0608500024

<u>1</u>	11 of 11	NW	0.00 / 17.41	320.92 / 0	ROYAL OAKS MUSHROOM 15480 WATSONVILLE RD MORGAN HILL CA 95037	RCRA NON GEN
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EPA Handler ID: CAL000263424
Gen Status Universe: No Report
Contact Name: DON HORDNESS
Contact Address: PO BOX 447 , , MORGAN HILL , CA, 95037 ,
Contact Phone No and Ext: 408-779-2362
Contact Email: DHORDNESS@DELFRESH.COM
Contact Country:
County Name: SANTA CLARA
EPA Region: 09
Land Type:
Receive Date: 20021210

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violation/Evaluation Summary

Note: NO RECORDS: As of November 2019, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: Yes
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20021210
Handler Name: ROYAL OAKS MUSHROOM
Generator Status Universe: No Report
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Operator	Street No:
Type: Other	Street 1: PO BOX 447
Name: DON HORDNESS	Street 2:
Date Became Current:	City: MORGAN HILL
Date Ended Current:	State: CA
Phone: 408-779-2362	Country:
Source Type: Implementer	Zip Code: 95037

Owner/Operator Ind: Current Owner	Street No:
Type: Other	Street 1: PO BOX 447
Name: DON HORDNESS	Street 2:
Date Became Current:	City: MORGAN HILL
Date Ended Current:	State: CA
Phone: 408-779-2362	Country:
Source Type: Implementer	Zip Code: 95037-0000

<u>2</u>	1 of 1	NNE	0.01 / 32.62	321.53 / 1	FORMER WHITE GASOLINE MONTEREY ROAD AND WATSONVILLE ROAD MORGAN HILL CA 95037	LUST
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Global ID: T10000001954
Status: COMPLETED - CASE CLOSED
Status Date: 2011-02-14 00:00:00
Case Type: LUST CLEANUP SITE
Date Source: LUST Cleanup Sites from GeoTracker Search; LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download
County: SANTA CLARA
Latitude: 37.1075083826486
Longitude: -121.635539531708

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download - Facilities Detail

RB Case No:	14-806	Potential COC:	Gasoline
Local Case No:	09S3E34M01f	How Discovered:	Tank Closure
Begin Date:	2010-03-24 00:00:00	Stop Method:	Close and Remove Tank
Lead Agency:	SANTA CLARA COUNTY LOP	Stop Description:	removed USTs that had been closed in-place
Local Agency:		Case Worker:	
CUF Case:	NO	File Location:	All Files are on GeoTracker or in the Local Agency Database

Potential Media of Concern: Soil

How Discovered Description:

Calwater Watershed Name: Pajaro River - South Santa Clara Valley (305.30)

DWR GW Subbasin Name: Gilroy-Hollister Valley - Llagas Area (3-003.01)

Disadvantaged Community:

Site History:

In 2010, 5 USTs that had been previously closed in place were removed from the vacant lot. It is believed that the property has been vacant for at least 50 years. Overexcavation of visibly stained soil was conducted following UST removal. Based on the confirmation soil samples, petroleum hydrocarbons were still present along the excavation closest to the creek. Groundwater had been noted to be present in the excavation, but not sufficient enough to sample. Additional investigation is planned to define the extent of contamination remaining in soil and whether groundwater has been impacted.

Regulatory Activity

Action Type:	RESPONSE
Date :	2013-06-03 00:00:00
Action:	Other Report / Document
Action Type:	ENFORCEMENT
Date :	2011-02-14 00:00:00
Action:	Closure/No Further Action Letter
Action Type:	RESPONSE
Date :	2011-02-08 00:00:00
Action:	Correspondence
Action Type:	ENFORCEMENT
Date :	2011-01-19 00:00:00
Action:	LOP Case Closure Summary to RB
Action Type:	RESPONSE
Date :	2010-12-22 00:00:00
Action:	Soil and Water Investigation Report
Action Type:	RESPONSE
Date :	2010-11-30 00:00:00
Action:	Other Report / Document
Action Type:	RESPONSE
Date :	2010-11-05 00:00:00
Action:	Correspondence
Action Type:	RESPONSE
Date :	2010-10-29 00:00:00
Action:	Preliminary Site Assessment Report
Action Type:	ENFORCEMENT
Date :	2010-10-25 00:00:00
Action:	Staff Letter
Action Type:	ENFORCEMENT
Date :	2010-07-28 00:00:00
Action:	Staff Letter
Action Type:	RESPONSE
Date :	2010-07-27 00:00:00
Action:	Other Workplan

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:		RESPONSE				
Date :		2010-06-28 00:00:00				
Action:		Preliminary Site Assessment Workplan				
Action Type:		RESPONSE				
Date :		2010-04-28 00:00:00				
Action:		Correspondence				
Action Type:		ENFORCEMENT				
Date :		2010-04-26 00:00:00				
Action:		Staff Letter				
Action Type:		ENFORCEMENT				
Date :		2010-04-23 00:00:00				
Action:		Notice of Responsibility				
Action Type:		RESPONSE				
Date :		2010-04-22 00:00:00				
Action:		Unauthorized Release Form				
Action Type:		Other				
Date :		2010-04-12 00:00:00				
Action:		Leak Reported				
Action Type:		RESPONSE				
Date :		2010-04-09 00:00:00				
Action:		Other Report / Document				
Action Type:		RESPONSE				
Date :		2010-04-09 00:00:00				
Action:		Remedial Progress Report				
Action Type:		Other				
Date :		2010-03-26 00:00:00				
Action:		Leak Stopped				
Action Type:		REMEDICATION				
Date :		2010-03-24 00:00:00				
Action:		Excavation				
Action Type:		Other				
Date :		2010-03-24 00:00:00				
Action:		Leak Discovery				

Regulatory Contacts

Contact Type:	Regional Board Caseworker	Address:	895 AEROVISTA PLACE, SUITE 101
Contact Name:	WEI LIU	Email:	wei.liu@waterboards.ca.gov
City:	SAN LUIS OBISPO	Phone No:	8055493147
Organization Name:	CENTRAL COAST RWQCB (REGION 3)		

Status History

Status:	Completed - Case Closed
Status Date:	2011-02-14 00:00:00
Status:	Open - Site Assessment
Status Date:	2010-04-22 00:00:00
Status:	Open - Case Begin Date
Status Date:	2010-03-24 00:00:00

LUST Sites from GeoTracker Search - Regulatory Profile(as of Oct 31, 2019)

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Site Facility Name:	FORMER WHITE GASOLINE				Potential COC: GASOLINE	
Site Facility Type:	LUST CLEANUP SITE				Facility Type:	
Cleanup Status:	COMPLETED - CASE CLOSED				Composting Method:	
Project Status:					Address: MONTERY ROAD AND WATSONVILLE ROAD	
WDR Place Type:					City: MORGAN HILL	
WDR File:					Zip: 95037	
WDR Order:					County: SANTA CLARA	
CUF Priority Assig:					CUF Claim:	
CUF Amount Paid:						
File Location:	ALL FILES ARE ON GEOTRACKER OR IN THE LOCAL AGENCY DATABASE					
Designated Beneficial Use:	MUN, AGR, IND, PROC					
Project Oversight Agencies:						
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000001954					
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 2/14/2011					
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T10000001954&tabname=regulatoryhistory					
Potential Media of Concern:	SOIL					
User Defined Beneficial Use:						
DWR GW Sub Basin:	Gilroy-Hollister Valley - Llagas Area (3-003.01)					
Calwater Watershed Name:	Pajaro River - South Santa Clara Valley (305.30)					
Post Closure Site Management:						
Future Land Use:	COMMERCIAL					
Cleanup Oversight Agencies:	SANTA CLARA COUNTY LOP (LEAD) - CASE #: 09S3E34M01f CENTRAL COAST RWQCB (REGION 3) - CASE #: 14-806 CASEWORKER: WEI LIU					
Gndwater Monitoring Freque:						
Site History:						

In 2010, 5 USTs that had been previously closed in place were removed from the vacant lot. It is believed that the property has been vacant for at least 50 years. Overexcavation of visibly stained soil was conducted following UST removal. Based on the confirmation soil samples, petroleum hydrocarbons were still present along the excavation closest to the creek. Groundwater had been noted to be present in the excavation, but not sufficient enough to sample. Additional investigation is planned to define the extent of contamination remaining in soil and whether groundwater has been impacted.

LUST Sites from GeoTracker Search - Cleanup Status History(as of Oct 31, 2019)

Status:	Completed - Case Closed
Date :	2/14/2011
Status:	Open - Site Assessment
Date :	4/22/2010
Status:	Open - Case Begin Date
Date :	3/24/2010

LUST Sites from GeoTracker Search - Cleanup Action Report (as of Oct 31, 2019)

Action Type:	EXCAVATION	Begin Date:	3/24/2010
Phase:	Soil	End Date:	3/29/2010
Contaminant Mass Removed:			
Description:	aeration		

LUST Sites from GeoTracker Search - Regulatory Activities(as of Oct 31, 2019)

Action Type:	Response Requested - Other
Action Date:	6/3/2013
Received Issue Date:	6/3/2013
Action:	Other Report / Document
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5774479
Title Description Comments:	

Impacted Soil Documentation

Action Type:	Response Requested - Other
Action Date:	6/3/2013

Received Issue Date: 6/3/2013
Action: Other Report / Document
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860651
Title Description Comments:

MISCELLANEOUS REPORT FROM LUSTOP

Action Type: Other Regulatory Actions
Action Date: 2/14/2011
Received Issue Date: 2/14/2011
Action: Closure/No Further Action Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6077692&temptable=ENFORCEMENT

Title Description Comments:

Action Type: Response Requested - Other
Action Date: 2/8/2011
Received Issue Date: 2/8/2011
Action: Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860653

Title Description Comments:

CORRESPONDENCE FILE FROM LUSTOP 4/22/2010-2/8/2011

Action Type: Response Requested - Other
Action Date: 2/8/2011
Received Issue Date: 2/8/2011
Action: Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860652

Title Description Comments:

CORRESPONDENCE FILE FROM LUSTOP 4/22/2010-2/8/2011

Action Type: Other Regulatory Actions
Action Date: 1/19/2011
Received Issue Date: 1/19/2011
Action: LOP Case Closure Summary to RB
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6074849&temptable=ENFORCEMENT

Title Description Comments:

Action Type: Response Requested - Reports
Action Date: 12/22/2010
Received Issue Date: 12/22/2010
Action: Soil and Water Investigation Report
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860645

Title Description Comments:

GROUNDWATER ASSESSMENT REPORT

Action Type: Response Requested - Other
Action Date: 11/30/2010
Received Issue Date: 12/22/2010
Action: Other Report / Document
Doc Link:

Title Description Comments:

Additional information and site plan drawn to scale

Action Type: Response Requested - Other
Action Date: 11/5/2010
Received Issue Date: 12/22/2010
Action: Correspondence

Doc Link:

Title Description Comments:

req perjury statement for previously submitted rpt

Action Type: Response Requested - Reports
Action Date: 10/29/2010
Received Issue Date: 10/21/2010
Action: Preliminary Site Assessment Report
Doc Link:
Title Description Comments:

Action Type: Other Regulatory Actions
Action Date: 10/25/2010
Received Issue Date: 10/25/2010
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6067324&temptable=ENFORCEMENT
Title Description Comments:

req for additional information and reminder of ESI compliance

Action Type: Other Regulatory Actions
Action Date: 7/28/2010
Received Issue Date: 7/28/2010
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6059122&temptable=ENFORCEMENT
Title Description Comments:

app wp

Action Type: Response Requested - Workplans
Action Date: 7/27/2010
Received Issue Date: 7/27/2010
Action: Other Workplan
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860648
Title Description Comments:

WORKPLAN

Action Type: Response Requested - Workplans
Action Date: 6/28/2010
Received Issue Date: 7/27/2010
Action: Preliminary Site Assessment Workplan
Doc Link:
Title Description Comments:

Action Type: Response Requested - Other
Action Date: 4/28/2010
Received Issue Date: 4/28/2010
Action: Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860644
Title Description Comments:

STATE RELATED CORESPONDENCE FROM LUSTOP 4/28/2010

Action Type: Other Regulatory Actions
Action Date: 4/26/2010
Received Issue Date: 4/26/2010
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6049412&temptable=ENFORCEMENT
Title Description Comments:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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req wp for additional inv.

Action Type: Notices
Action Date: 4/23/2010
Received Issue Date: 4/23/2010
Action: Notice of Responsibility
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6048997&temptable=ENFORCEMENT
Title Description Comments:

Action Type: Response Requested - Other
Action Date: 4/22/2010
Received Issue Date: 4/22/2010
Action: Unauthorized Release Form
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860646
Title Description Comments:

URF

Action Type: Response Requested - Reports
Action Date: 4/9/2010
Received Issue Date: 4/9/2010
Action: Remedial Progress Report
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860649
Title Description Comments:

REMEDIAL REPORT

Action Type: Response Requested - Other
Action Date: 4/9/2010
Received Issue Date: 4/9/2010
Action: Other Report / Document
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T10000001954&doc_id=5860650
Title Description Comments:

MAPS METROSCAN FROM LUSTOP

Action Type: Leak Action
Action Date: 4/12/2010
Received Issue Date:
Action: Leak Reported
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action Date: 3/26/2010
Received Issue Date:
Action: Leak Stopped
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action Date: 3/24/2010
Received Issue Date:
Action: Leak Discovery
Doc Link:
Title Description Comments:

Action Type: Cleanup Action
Action Date: 3/24/2010
Received Issue Date:
Action: Excavation

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Doc Link:
Title Description Comments:

aeration

LUST Sites from GeoTracker Search - Documents(as of Oct 31, 2019)

Document Type:	Site Documents	Size :	
Document Date:	6/3/2013	Submitted By:	CHRIS WIDMANN (REGULATOR)
Type:	OTHER REPORT / DOCUMENT	Submitted:	
Title:	IMPACTED SOIL DOCUMENTATION		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5774479		
Document Type:	Site Documents	Size :	
Document Date:	6/3/2013	Submitted By:	MICHAEL SCHUSTER (REGULATOR)
Type:	OTHER REPORT / DOCUMENT	Submitted:	
Title:	MISCELLANEOUS REPORT FROM LUSTOP		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860651		
Document Type:	Site Documents	Size :	
Document Date:	6/3/2013	Submitted By:	CANDACE GARCIA (REGULATOR)
Type:	OTHER REPORT / DOCUMENT	Submitted:	
Title:	MISCELLANEOUS REPORT FROM LUSTOP		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860651		
Document Type:	Site Documents	Size :	
Document Date:	2/14/2011	Submitted By:	(REGULATOR)
Type:	CLOSURE/NO FURTHER ACTION LETTER	Submitted:	
Title:	UNKNOWN		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6077692		
Document Type:	Site Documents	Size :	
Document Date:	2/8/2011	Submitted By:	CANDACE GARCIA (REGULATOR)
Type:	CORRESPONDENCE	Submitted:	
Title:	CORRESPONDENCE FILE FROM LUSTOP 4/22/2010-2/8/2011		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860652		
Document Type:	Site Documents	Size :	
Document Date:	2/8/2011	Submitted By:	CANDACE GARCIA (REGULATOR)
Type:	CORRESPONDENCE	Submitted:	
Title:	CORRESPONDENCE FILE FROM LUSTOP 4/22/2010-2/8/2011		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860653		
Document Type:	Site Documents	Size :	
Document Date:	1/19/2011	Submitted By:	(REGULATOR)
Type:	LOP CASE CLOSURE SUMMARY TO RB	Submitted:	
Title:	UNKNOWN		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6074849		
Document Type:	Site Documents	Size :	
Document Date:	12/22/2010	Submitted By:	CANDACE GARCIA (REGULATOR)
Type:	SOIL AND WATER INVESTIGATION REPORT	Submitted:	
Title:	GROUNDWATER ASSESSMENT REPORT		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860645		
Document Type:	Site Documents	Size :	788 KB
Document Date:	11/11/2010	Submitted By:	DAVID GUTHRIDGE (AUTH_RP)
Type:	OTHER REPORT / DOCUMENT	Submitted:	
Title:	SOIL AERATION		
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1513621032/T10000001954.PDF		
Document Type:	Site Documents	Size :	
Document Date:	10/25/2010	Submitted By:	(REGULATOR)
Type:	STAFF LETTER	Submitted:	
Title:	REQ FOR ADDITIONAL INFORMATION AND REMINDER OF ESI COMPLIANCE		
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6067324		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Document Type:	Site Documents			Size :	1,648 KB	
Document Date:	10/14/2010			Submitted By:	DAVID GUTHRIDGE (AUTH_RP)	
Type:	PRELIMINARY SITE ASSESSMENT REPORT			Submitted:		
Title:	PRELIMINARY SITE ASSESSMENT					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9853043913/T10000001954.PDF					
Document Type:	Site Documents			Size :		
Document Date:	7/28/2010			Submitted By:	(REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	APP WP					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6059122					
Document Type:	Site Documents			Size :		
Document Date:	7/27/2010			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	OTHER WORKPLAN			Submitted:		
Title:	WORKPLAN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860648					
Document Type:	Site Documents			Size :		
Document Date:	4/28/2010			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	CORRESPONDENCE			Submitted:		
Title:	STATE RELATED CORESPONDENCE FROM LUSTOP 4/28/2010					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860644					
Document Type:	Site Documents			Size :		
Document Date:	4/26/2010			Submitted By:	KRISTI CONG (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	REQ WP FOR ADDITIONAL INV.					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6049412					
Document Type:	Site Documents			Size :		
Document Date:	4/23/2010			Submitted By:	KRISTI CONG (REGULATOR)	
Type:	NOTICE OF RESPONSIBILITY			Submitted:		
Title:	UNKNOWN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&enforcement_id=6048997					
Document Type:	Site Documents			Size :		
Document Date:	4/22/2010			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	UNAUTHORIZED RELEASE FORM			Submitted:		
Title:	URF					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860646					
Document Type:	Site Documents			Size :		
Document Date:	4/9/2010			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	OTHER REPORT / DOCUMENT			Submitted:		
Title:	MAPS METROSCAN FROM LUSTOP					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860650					
Document Type:	Site Documents			Size :		
Document Date:	4/9/2010			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	REMEDIAL PROGRESS REPORT			Submitted:		
Title:	REMEDIAL REPORT					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000001954&document_id=5860649					
3	1 of 1	NNE	0.02 / 119.27	322.28 / 2	Former White Gasoline Monterey Rd & Watsonville Rd Morgan Hill CA	SANTA CLARA LO
SCVWD ID:	09S3E34M01f					
Closure Date:	02/14/2011					
Link:	http://lustop.sccgov.org/files/09S3E34M01f/					
4	1 of 2	E	0.13 / 677.27	320.60 / 0	BILL SPEEGLE 15220 MONTEREY	HHSS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
MORGAN HILL CA 95037						
County:		Santa Clara				
Pdf File Url:		http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002cec5.pdf				
4	2 of 2	E	0.13 / 677.27	320.60 / 0	BILL SPEEGLE 15220 MONTEREY MORGAN HILL CA	HIST TANK
Owner Name:		BILL SPEEGLE		No of Containers: 1		
Owner Street:		15220 MONTEREY		County: SANTA CLARA		
Owner City:		MORGAN HILL		Facility State: CA		
Owner State:		CA		Facility Zip: 95037		
Owner Zip:		95037				
5	1 of 9	NNW	0.17 / 895.73	323.84 / 3	Morgan Hill CDF 15670 Monterey Rd Morgan Hill CA	SANTA CLARA LO
SCVWD ID:		09S3E34E01f				
Closure Date:						
Link:		http://lustop.sccgov.org/files/09S3E34E01f/				
5	2 of 9	NNW	0.17 / 895.73	323.84 / 3	CAL FIRE 15670 MONTEREY RD. MORGAN HILL CA 95037	AST
Total Capacity(Gal):		2,300		Owner Name: CAL FIRE		
CUPA:		Santa Clara County		County: Santa Clara		
5	3 of 9	NNW	0.17 / 895.73	323.84 / 3	CAL FIRE-MORGAN HILL FFS 15670 MONTEREY ST MORGAN HILL CA 95037	SANTA CLARA CUPA
Facility ID:		FA0250649				
GIS Latitude:		37.109249				
GIS Longitude:		-121.637611				
PE:		2205				
Description:		GENERATES 100 KG YR TO <5 TONS/YR				
Record ID:		PR0377874				
PE:		2011				
Description:		APSA FACILITY-SPCC TEMPLATE (<10,000 GAL CAP)				
Record ID:		PR0399682				
PE:		BP03				
Description:		HMBP FACILITY, 7-9 CHEMICALS				
Record ID:		PR0376780				
5	4 of 9	NNW	0.17 / 895.73	323.84 / 3	CAL FIRE-MORGAN HILL FFS 15670 MONTEREY ST MORGAN HILL CA 95037	CERS TANK
Site ID:		388687				
Latitude:		37.109553				
Longitude:		-121.638286				
County:		Santa Clara County				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Regulated Programs

EI ID: 10346416
EI Description: Aboveground Petroleum Storage

EI ID: 10346416
EI Description: Chemical Storage Facilities

EI ID: 10346416
EI Description: Hazardous Waste Generator

Violations

Violation Date: 05/04/2015
Violation Program: HW
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Notes:

Violation Source: CERS
Violation Division: Santa Clara County Environmental Health

Observed 1 x 55 gallon empty ATF drum along the outside wall of the well house that did not have an empty date marked on the drum.

Violation Description:

Haz Waste Generator Program - Operations/Maintenance - General

Violations

Violation Date: 06/13/2019
Violation Program: HW
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Notes:

Violation Source: CERS
Violation Division: Santa Clara County Environmental Health

Facility failed to submit a written response to 05/04/2015 inspection report.

Violation Description:

Hazardous Waste Generator Program - Administration/Documentation - General

Violations

Violation Date: 06/13/2019
Violation Program: HW
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.11
Violation Notes:

Violation Source: CERS
Violation Division: Santa Clara County Environmental Health

A hazardous waste determination must be made for the following containers: - 55 gallon steel drum, located outside training materials storage area, holding unknown liquid. - 55 gallon steel drum, located behind gas house, holding unknown liquid.

Violation Description:

Failure to determine if wastes generated are hazardous waste by using generator knowledge or applying testing method.

Violations

Violation Date: 05/04/2015
Violation Program: HW
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Violation Source: CERS
Violation Division: Santa Clara County Environmental Health

The following vessels were not properly labeled: 1 x 300 gallon waste coolant tank and 1 x 300 gallon waste oil tank did not have the accumulation start date marked on the tanks; 2 x 5-gallon containers of waste coolant & 1 x 5-gallon container of waste oil on the shop floor were unlabeled; 1 x 30 gallon waste oil cart has a faded label that is not readable.

Violation Description:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 06/13/2019 **Violation Source:** CERS
Violation Program: HW **Violation Division:** Santa Clara County Environmental Health
Citation: HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Notes:

Review of consolidated manifests and discussion with staff indicates that used antifreeze and undrained oil filters are stored on site for greater than 180 days. Disposal receipts dates within the last 3 years are listed below: Used Antifreeze: 07/11/18 (346 gal) Undrained used oil filters: 05/16/18 (2 drums), 03/19/17 (2 drums) **Note: Many records provided by the department have a truncated [Violation Notes] field.

Violation Description:

Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met:

- (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms.
- (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f).
- (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.

Violations

Violation Date: 05/04/2015 **Violation Source:** CERS
Violation Program: HW **Violation Division:** Santa Clara County Environmental Health
Citation: 22 CCR 23 66273.34 - California Code of Regulations, Title 22, Chapter 23, Section(s) 66273.34
Violation Notes:

Observed 3 drums of universal waste batteries which did not have the accumulation start date marked on the labels. Use the labels provided to you to properly label your universal waste drums.

Violation Description:

- Failure to properly label the following categories of universal waste as:
- 1) Each batteries or the container in which the batteries are contained as "Universal Waste-Battery(ies)".
 - 2) Each mercury-containing equipment or the container in which the mercury-containing equipment is contained as "Universal Waste -Mercury-Containing Equipment".
 - 3) Each Florescent lamp or the container or package in which the lamps are contained as "Universal Waste-Lamp(s)".
 - 4) Each electronic devices or the container or pallet in or on which the electronic devices are contained as "Universal Waste-Electronic Device(s)".
 - 5) Each CRTs or the container or pallet in or on which the CRTs are contained as "Universal Waste-CRT(s)".
 - 6) A container of CRT glass shall be labeled or marked clearly with the following phrase: "Universal Waste-CRT glass".
 - 7) In lieu of labeling individual electronic devices, CRTs, and/or containers of CRT glass pursuant to subsections d) through f) of this section, a universal waste handler may combine, package, and accumulate those universal wastes in appropriate containers or within a designated area demarcated by boundaries that are clearly labeled with the applicable portion(s) of the following phrase: "Universal Waste-Electronic Device(s)/Universal Waste - CRT (s)/Universal Waste-CRT Glass".

Violations

Violation Date: 05/04/2015 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Santa Clara County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

The 408-299-6930 emergency contact number for "Local hazardous materials program" is out of date. Replace it with 408-918-3400.

Violation Description:

Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violations

Violation Date: 05/04/2015
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Configuration of aboveground storage of fuels and petroleum wastes has changed greater than 5 years ago but plan was never amended to reflect changes.

Violation Description:

Failure to make SPCC plan amendment(s) when the facility has had a change in: design, construction, operation, or maintenance which affects the facility's discharge potential.

Violations

Violation Date: 06/13/2019
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Documentation was not available to ensure that liquid level sensing devices are being calibrated/maintained for the following containers: - 1000 gallon diesel convault tank Kruegar level gauge - 1000 gallon gasoline convault tank Kruegar level gauge - 300 gallon used oil tank electronic level sensor
**Note: Many records provided by the department have a truncated [Violation Notes] field.

Violation Description:

Failure to regularly test liquid level sensing devices to ensure proper operation.

Violations

Violation Date: 06/13/2019
Violation Program: HW
Citation: 40 CFR 1 265.201(c)(5) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.201(c)(5)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Per staff, used oil and antifreeze tanks are inspected monthly leaks and deterioration.

Violation Description:

Failure to inspect hazardous waste tanks for the following, when present:
4) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams.
5) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

Violations

Violation Date: 05/04/2015
Violation Program: HW
Citation: 22 CCR 12 66262.40(c) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(c)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

In the Bone Yard, the following items were observed: 1 X 5-gallon waste container with a one gallon paint can submerged in a unidentifiable brown grease-like sludge; 5 x30 gallon grey drums marked "incendiary oil" 5 x 55-gallon drums behind the trailer, 1 x 55 gallon drum of unknown substance, 1 x 5 gallon propane container, and 4 x 10 gallon propane containers that operator stated were previously used for forklifts. Provide a written response as to how these items were handled. Please note that empty hazardous materials or waste containers 5 gallons or less can be safely thrown in the trash.

Violation Description:

Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violations

Violation Date: 05/04/2015
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Operator stated that facility changes occurred greater than 5 years ago and original plan was never dated and no subsequent reviews were never made or documented since then. Your facility is qualified to use the Tier 1 template. Use the template to document your aboveground storage plan.

Violation Description:

Failure to perform a five-year review of the SPCC plan.

Violations

Violation Date: 05/04/2015
Violation Program: HW
Citation: 22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Provide an accumulation start date on your 55 gallon used filter drum.

Violation Description:

Failure to properly handle, manage, label, and recycle used oil and fuel filters.

Violations

Violation Date: 06/13/2019
Violation Program: HMRRP
Citation: HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter 6.95, Section(s) 25508.1(a)-(f)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Observed the following hazardous materials which have not been previously disclosed in HMBP: - Antifreeze (110 gallons) - Acetylene (250 cuft) - Firefighting Foam (200 gallons) Additionally, a 100% or more quantity increase was observed for the following materials: - Propane (1008 gallons) - Oxygen (500 cuft) **Note: Many records provided by the department have a truncated [Violation Notes] field.

Violation Description:

Failure to electronically update business plan within 30 days of any one of the following events:
A 100 percent or more increase in the quantity of a previously disclosed material.
Any handling of a previously undisclosed hazardous materials at or above reportable quantities.
A change of business address, business ownership, or business name.
A substantial change in the handler's operations that requires modification to any portion of the business plan.

Violations

Violation Date: 05/04/2015
Violation Program: HW
Citation: 40 CFR 1 262.34(d)(5)(ii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(ii)
Violation Source: CERS
Violation Division: Santa Clara County Environmental Health
Violation Notes:

Steve Birdsall no longer works for the organization. Remove/replace his name as an emergency coordinator from your posted Emergency Procedures.

Violation Description:

Failure to post, next to the telephone, Emergency Information (SQG) containing the location of emergency equipment, contact names and numbers.

Violations

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violation Date: 06/13/2019 **Violation Source:** CERS
Violation Program: APSA **Violation Division:** Santa Clara County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Facility is not performing monthly/annual inspections in conformance with STI SP001 industry standards as described in SPCC template. A copy of the STI SP001 checklist will be provided along with this report.

Violation Description:

"Failure to test or inspect each aboveground container for integrity based on industry standards as discussed in the SPCC Plan:

1. On a regular schedule.
2. After making material repairs.
3. Use non-destructive testing.
4. Inspect each container's supports, foundations, and outside for signs of deterioration, discharges, or accumulation of oil inside diked areas."

Violations

Violation Date: 06/13/2019 **Violation Source:** CERS
Violation Program: APSA **Violation Division:** Santa Clara County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Facility does not currently have a system or procedure to prevent overfills during filling of 1000 gallon diesel and gasoline tanks. The tanks are equipped with guillotine fill limiters, however, the limiters are not installed on the fill drop tubes used to fill the tank. Additionally, all tank re-fueling operations are unmonitored/unsupervised by facility staff. Ensure that each container is provided with a system or documented procedure to prevent overfills of the container, describe the system or procedure in the SPCC Plan and regularly test to ensure proper operation or efficacy. Additionally, SPCC template does not include electronic monitoring system used to prevent overfills for 300 gallon used oil tank.

Violation Description:

Failure to adequately describe in the SPCC Plan, overflow prevention methods, including a description of the systems or procedures used to prevent overfills for each container.

Violations

Violation Date: 05/04/2015 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Santa Clara County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

The following corrections are necessary on your CERS inventory submittal: Storage pressure for propane should be "> ambient"; storage temperature should be "< ambient"; Type for antifreeze should be changed from "pure" to "waste", add the waste code for waste coolant as 134; for used lubricating oils, indicate the type as "waste" and provide the waste code as 221; For motor oil (new), remove the 300 gallons from the annual waste amount, and remove the 221 waste code. Your facility has a total of 8 reportable chemicals. Ensure that all of these chemicals that are identified in the comments section of this report are electronically reported on CERS.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 05/04/2015 **Violation Source:** CERS
Violation Program: APSA **Violation Division:** Santa Clara County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

SPCC documentation was reviewed and document was not approved by management.

Violation Description:

Failure to obtain facility management approval to fully implement the SPCC Plan.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Violations

Violation Date: 05/04/2015
Violation Program: HMRRP
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Your site map is incomplete. Add the following items to your site map: storm & sewer drains, evacuation staging areas, and emergency response equipment. Upload your revised map to CERS. Change the volume on the map for the waste oil tank and waste coolant tank from 500 gallons to 300 gallons each.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date: 06/13/2019
Violation Program: HMRRP
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Notes:

Training documentation related to HMBP emergency response and safety was not available for review at time of inspection.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 06/13/2019
Violation Program: APSA
Citation: HSC 6.67 25270.4.5 (a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5 (a)
Violation Notes:

Training documentation demonstrating staff has been trained in SPCC plan and oil-handling procedures was not available for review at time of inspection.

Violation Description:

Failure to include in the SPCC plan an adequate description of employee training. Training shall address, at a minimum: operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; content of the facility SPCC plan; and annual discharge prevention briefings for oil-handling personnel to assure adequate understanding of the SPCC plan.

Violations

Violation Date: 06/13/2019
Violation Program: APSA
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Used oil tank dike storage area does not have a functional valve to restrict discharge of liquids. Valve is currently broken and cannot retain rainwater to inspect for oil contamination prior to discharge.

Violation Description:

Failure to ensure drainage from diked storage areas is restrained by valves, except where facility systems are designed to control such discharge, or failure to ensure manually activated pumps or ejectors are used and the condition of the accumulation is inspected prior to draining dike.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Enforcements

Enf Action Date: 05/04/2015 **Enf Action Program:** HW
Enf Action Type: Notice of Violation (Unified Program) **Enf Action Source:** CERS
Enf Action Division: Santa Clara County Environmental Health
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Enf Action Date: 05/04/2015 **Enf Action Program:** APSA
Enf Action Type: Notice of Violation (Unified Program) **Enf Action Source:** CERS
Enf Action Division: Santa Clara County Environmental Health
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Enf Action Date: 05/04/2015 **Enf Action Program:** HMRRP
Enf Action Type: Notice of Violation (Unified Program) **Enf Action Source:** CERS
Enf Action Division: Santa Clara County Environmental Health
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Evaluations

Eval Date: 06/13/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Santa Clara County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site with Sr. Hazardous Materials Specialist, Ruben Williams, of HMCD. Facility is a fire station storing the following hazardous materials above HMBP reportable quantities: - Diesel (1000 gallons) - Gasoline (1000 gallons) - Propane (1008 gallons) - Aluminum Sulfate (55 gallons) - Used oil (350 gallons) - Used antifreeze (350 gallons) - Lubricating oils (330 gallons) - Antifreeze (110 gallons) - Oxygen (500 cuft) - Acetylene (250 cuft) - Firefighting Foam (200 gallons) HMBP submitted via CERS 06/06/19 (Accepted) Property owned by the State of California CERS ID 10346416; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/04/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Santa Clara County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

A physical walk-through and paperwork review was started on 5/1/2015 and concluded today. Facility has an active EPA ID # CAL000037856. CERS account ID # 10346416 indicates that a submittal occurred on 4/30/2015 and was administratively approved on 4/30/2015. Business Activities page shows the hazardous waste box checked as "yes" and the EPA ID# has been properly entered. Manifest records for the last three years were reviewed and were proper. Hazardous waste training is performed annually and documented on the IIPP-7 New Employee Safety Orientation Training and is digitally stored on the web-based Target Solutions software. Contaminated rags are recycled through Aramark. Lead-acid automotive batteries are recycled through Interstate Batteries. Fire extinguishers are all properly charged. Universal waste batteries are recycled under a bill of lading. Eyewash, first aid kit, safety glasses, ear plugs, spill control equipment were available for [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/04/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Santa Clara County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Facility has the following chemicals subject to the APSA program: Gasoline - 1000 gallon aboveground tank UL listed double-walled split tank with 5 gallon overspill box and Guillotine Fill limiter Diesel - 1000 gallon aboveground tank UL listed double-walled split tank with 5 gallon overspill box and Guillotine Fill limiter Used Oil - 300 gallon aboveground tank UL 2085 listed double-walled tank with 5 gallon spill bucket and a BJ Enterprises 007 Tank Monitor for overfill protection Motor Oil - 2 x 55 gallon drums ATF - 2 x 55 gallon drums ; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/13/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Santa Clara County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Facility is a fire station with the following bulk storage containers: - 1000 gallon diesel convault split tank (double-walled) - 1000 gallon gasoline convault split tank (double-walled) - 300 gallon used oil tank (double walled) - 2 x 55-gallon drums 15-40 motor oil - 55 gallon drum ATF Notes: - SPCC Tier I template was available for review. - SPCC plan 5-year review performed 05/29/19. - Per SPCC template, facility is performing visual inspections in conformance with STI SP001 industry standards. - 300 gallon used oil tank is remotely fed through a suction system located inside maintenance shop. Tank is equipped with liquid level sensor and activates an audible/visual alarm when 75% capacity is reached. - Used oil tank is mounted on tertiary containment basin and stored inside diked enclosure. - 1000 gallon convault tanks are equipped with Kruegar float gauges and is dip-sticked weekly for inventory control. - Observed 55 gallons of full synthetic [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/04/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Santa Clara County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An inspection was started on 5/1/2015 and concluded today to field verify the hazardous materials business plan (HMBP) that was submitted and administratively approved on 4/30/2015. Facility has the following 9 reportable chemicals: Gasoline - 1000 gallon tank Diesel - 1000 gallon tank Used oil- 300 gallon tank; 1 x 30 gallon mobile cart Used coolant - 300 gallon tank; 1 x 30 gallon mobile cart Motor Oil 15-40W -2 x 55 gallon drums Propane - 2 x 500 gallon tanks used for emergency backup power generator; 2 x 10 gallon containers used for forklifts Oxygen - 2 x 250 cu ft cylinders in the Dozer Bay; 3 x 250 cu ft cylinders in the Well House. Aluminum Sulfate - 2 x 55 gallon drums at the the water recycling unit. Universal Waste Batteries - 2 x 300 pound drums Your HMBP permit will be adjusted to reflect this larger amount of reportable chemicals. Emergency Response training was reviewed and is current. Recommend providing chains to secure your [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/13/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Santa Clara County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site with Sr. Hazardous Materials Specialist, Ruben Williams, of HMCD. Facility is a fire station and equipment maintenance shop routinely generating the following hazardous waste: - Used oil - Used antifreeze - Undrained used oil filters (metal) Notes: - State ID CAL000037856 (Active) - Consolidated manifests (2016-2019) reviewed at time of inspection. - Emergency information posted as required. - Fire extinguishers and eye wash stations were observed as maintained. - Spill kits readily available throughout facility. - Hazardous waste training performed annually and documented through web-based portal. The following violations were corrected at time of inspection: [G020] MARKING OF HAZARDOUS WASTE: Observed the following unmarked/insufficiently marked containers at time of inspection: - 2 x ~20 gallon portable containers holding used oil missing all required markings - 2 x ~20 gallon portable containers holding used antifreeze missing all [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Environmental Contact
Entity Name: ANTHONY ANDERSON
Entity Title:
Address: 15670 MONTEREY RD

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
City:		MORGAN HILL				
State:		CA				
Country:						
Zip Code:		95037				
Phone:						
Affil Type Desc:		Parent Corporation				
Entity Name:		CAL Fire / Santa Clara Unit				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Document Preparer				
Entity Name:		SAM GONZALES				
Entity Title:						
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Property Owner				
Entity Name:		State Of California DGS				
Entity Title:						
Address:		707 THIRD STREET				
City:		WEST SACRAMENTO				
State:		CA				
Country:		United States				
Zip Code:		95605				
Phone:		(916) 376-5000				
Affil Type Desc:		Legal Owner				
Entity Name:		Cal Fire				
Entity Title:						
Address:		PO BOX 944246				
City:		SACRAMENTO				
State:		CA				
Country:		United States				
Zip Code:		95037				
Phone:		(916) 376-5000				
Affil Type Desc:		CUPA District				
Entity Name:		Santa Clara County Environmental Health				
Entity Title:						
Address:		1555 Berger Drive, Suite 300				
City:		San Jose				
State:		CA				
Country:						
Zip Code:		95112-2716				
Phone:		(408) 918-3400				
Affil Type Desc:		Identification Signer				
Entity Name:		Sam Gonzales				
Entity Title:		FIRE CAPTAIN				
Address:						
City:						
State:						
Country:						
Zip Code:						
Phone:						
Affil Type Desc:		Operator				
Entity Name:		CAL FIRE-MORGAN HILL FFS				
Entity Title:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Address:
City:
State:
Country:
Zip Code:
Phone: (408) 779-2121
Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 15670 MONTEREY RD
City: MORGAN HILL
State: CA
Country:
Zip Code: 95037
Phone:

Coordinates

Env Int Type Code: APSA	Longitude: -121.638290
Program ID: 10346416	Coord Name:
Latitude: 37.109550	Ref Point Type Desc: Center of a facility or station.

5	5 of 9	NNW	0.17 / 895.73	323.84 / 3	CAL FIRE MORGAN HILL HEADQUART 15670 MONTEREY ROAD MORGAN HILL CA 95037	EMISSIONS
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2013 Criteria Data

Facility ID: 21283	CERR Code:
Facility SIC Code: 9229	TOGT: .001
CO: 43	ROGT: .0000914
Air Basin: SF	COT: .002
District: BA	NOXT: .001
COID: SCL	SOXT: 0
DISN: BAY AREA AQMD	PMT: 0
CHAPIS:	PM10T: 0

2013 Toxic Data

Facility ID: 21283	COID: SCL
Facility SIC Code: 9229	DISN: BAY AREA AQMD
CO: 43	CHAPIS:
Air Basin: SF	CERR Code:
District: BA	
TS:	
Health Risk Asmt:	
Non-Cancer Chronic Haz Ind:	
Non-Cancer Acute Haz Ind:	

5	6 of 9	NNW	0.17 / 895.73	323.84 / 3	CAL FIRE MORGAN HILL HEADQUARTERS 15670 MONTEREY ROAD MORGAN HILL CA 95037	EMISSIONS
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2014 Criteria Data

Facility ID: 21283	CERR Code:
Facility SIC Code: 9229	TOGT: .0008463
CO: 43	ROGT:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Air Basin:	SF			COT:	.0024986	
District:	BA			NOXT:	.00064398	
COID:	SCL			SOXT:	.000174	
DISN:	BAY AREA AQMD			PMT:	.000170734	
CHAPIS:				PM10T:	.000170734	

2014 Toxic Data

Facility ID:	21283			COID:	SCL	
Facility SIC Code:	9229			DISN:	BAY AREA AQMD	
CO:	43			CHAPIS:		
Air Basin:	SF			CERR Code:		
District:	BA					
TS:						
Health Risk Asmt:						
Non-Cancer Chronic Haz Ind:						
Non-Cancer Acute Haz Ind:						

2015 Criteria Data

Facility ID:	21283			CERR Code:		
Facility SIC Code:	9229			TOGT:	.0008463	
CO:	43			ROGT:	.00074956	
Air Basin:	SF			COT:	.0024986	
District:	BA			NOXT:	.00064398	
COID:	SCL			SOXT:	.000174	
DISN:	BAY AREA AQMD			PMT:	.000170734	
CHAPIS:				PM10T:	.000170734	

2015 Toxic Data

Facility ID:	21283			COID:	SCL	
Facility SIC Code:	9229			DISN:	BAY AREA AQMD	
CO:	43			CHAPIS:		
Air Basin:	SF			CERR Code:		
District:	BA					
TS:						
Health Risk Asmt:						
Non-Cancer Chronic Haz Ind:						
Non-Cancer Acute Haz Ind:						

2016 Criteria Data

Facility ID:	21283			CERR CODE:		
Facility SIC Code:	9229			TOGT:	.0008463	
CO:	43			ROGT:	.00007879053	
Air Basin:	SF			COT:	.0024986	
District:	BA			NOXT:	.00064398	
COID:	SCL			SOXT:	.000174	
DISN:	BAY AREA AQMD			PMT:	.000170734	
CHAPIS:				PM10T:	.000170734	

2016 Toxic Data

Facility ID:	21283			TS:		
Facility SIC Code:	9229			HRA:		
CERR CODE:				CH Index:		
COID:	SCL			AH Index:		
CO:	43			Air Basin:	SF	
DISN:	BAY AREA AQMD			District:	BA	
CHAPIS:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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2017 Criteria Data

Facility ID:	21283	CERR Code:	
Facility SIC Code:	9229	TOGT:	.0008463
CO:	43	ROGT:	.00007879053
Air Basin:	SF	COT:	.0024986
District:	BA	NOXT:	.00064398
COID:	SCL	SOXT:	.0000435
DISN:	BAY AREA AQMD	PMT:	.000170734
CHAPIS:		PM10T:	.000170734

2017 Toxic Data

Facility ID:	21283	COID:	SCL
Facility SIC Code:	9229	DISN:	BAY AREA AQMD
CO:	43	CHAPIS:	
Air Basin:	SF	CERR Code:	
District:	BA		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

<u>5</u>	7 of 9	NNW	0.17 / 895.73	323.84 / 3	SANTA CLARA RANGER UNIT HEADQU 15670 MONTEREY ROAD MORGAN HILL CA	HIST TANK
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Owner Name:	CALIFORNIA DEPT. OF FORESTRY	No of Containers:	6
Owner Street:	1416-9TH STREET	County:	SANTA CLARA
Owner City:	SACRAMENTO	Facility State:	CA
Owner State:	CA	Facility Zip:	95037
Owner Zip:	95814		

<u>5</u>	8 of 9	NNW	0.17 / 895.73	323.84 / 3	CAL FIRE STANT CLARA UNIT 15670 MONTEREY ST MORGAN HILL CA 95037-5431	RCRA NON GEN
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EPA Handler ID:	CAL000037856
Gen Status Universe:	No Report
Contact Name:	LALA RUKH
Contact Address:	P.O. BOX 944246 , , SACRAMENTO , CA, 94244-2460 ,
Contact Phone No and Ext:	916-445-0418
Contact Email:	LALA.RUKH@FIRE.CA.GOV
Contact Country:	
County Name:	SANTA CLARA
EPA Region:	09
Land Type:	
Receive Date:	19900917

Violation/Evaluation Summary

Note: NO RECORDS: As of November 2019, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	Yes
Transfer Facility:	No
Onsite Burner Exemption:	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Furnace Exemption:		No				
Underground Injection Activity:		No				
Commercial TSD:		No				
Used Oil Transporter:		No				
Used Oil Transfer Facility:		No				
Used Oil Processor:		No				
Used Oil Refiner:		No				
Used Oil Burner:		No				
Used Oil Market Burner:		No				
Used Oil Spec Marketer:		No				

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19900917
Handler Name: CAL FIRE STANT CLARA UNIT
Generator Status Universe: No Report
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind: Current Owner	Street No:	
Type: Other	Street 1:	210 W SAN JACINTO AVE
Name: CALIF DEPT OF FORESTRY & FIRE PROTC	Street 2:	
Date Became Current:	City:	PERRIS
Date Ended Current:	State:	CA
Phone: 951-940-6900	Country:	
Source Type: Implementer	Zip Code:	92570-0000

Owner/Operator Ind: Current Operator	Street No:	
Type: Other	Street 1:	P.O. BOX 944246
Name: LALA RUKH	Street 2:	
Date Became Current:	City:	SACRAMENTO
Date Ended Current:	State:	CA
Phone: 916-445-0418	Country:	
Source Type: Implementer	Zip Code:	94244-2460

<u>5</u>	9 of 9	NNW	0.17 / 895.73	323.84 / 3	CA DEPT FORESTRY & FIRE STATION 15670 MONTEREY ST MORGAN HILL CA 95037	EMISSIONS
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2017 Criteria Data

Facility ID: 100439	CERR Code:	
Facility SIC Code: 5411	TOGT:	.00309492
CO: 43	ROGT:	.00309492
Air Basin: SF	COT:	
District: BA	NOXT:	
COID: SCL	SOXT:	
DISN: BAY AREA AQMD	PMT:	
CHAPIS:	PM10T:	

2017 Toxic Data

Facility ID: 100439	COID:	SCL
Facility SIC Code: 5411	DISN:	BAY AREA AQMD
CO: 43	CHAPIS:	
Air Basin: SF	CERR Code:	
District: BA		
TS:		
Health Risk Asmt:		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Non-Cancer Chronic Haz Ind:						
Non-Cancer Acute Haz Ind:						
6	1 of 1	NNW	0.19 / 1,005.09	324.41 / 4	SANTA CLARA RANGER UNIT HEADQU 15670 MONTEREY ROAD MORGAN HILL CA 95037	HHSS
County:		Santa Clara				
Pdf File Url:		http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002cf57.pdf				
7	1 of 6	NNW	0.23 / 1,209.48	324.74 / 4	MORGAN HILL TIRE & SERVICES 15745 MONTEREY RD MORGAN HILL CA 95037	DELISTED HAZ
Siteid:		381992				
Latitude:		37.109901				
Longitude:		-121.639862				
Original Source:		CHAZ				
Record Date:		30-MAY-2017				
7	2 of 6	NNW	0.23 / 1,209.48	324.74 / 4	BIG O TIRES 15745 MONTEREY RD MORGAN HILL CA 95037	SANTA CLARA CUPA
Facility ID:		FA0261703				
GIS Latitude:		37.110084				
GIS Longitude:		-121.639503				
PE:		BP02				
Description:		HMBP FACILITY, 4-6 CHEMICALS				
Record ID:		PR0383801				
PE:		2205				
Description:		GENERATES 100 KG YR TO <5 TONS/YR				
Record ID:		PR0383800				
7	3 of 6	NNW	0.23 / 1,209.48	324.74 / 4	GERARD TIRE 15745 MONTEREY ROAD MORGAN HILL CA	HIST TANK
Owner Name:		D.C.H., INC.		No of Containers:		2
Owner Street:		1000 NORTH KRAEMER PLACE		County:		SANTA CLARA
Owner City:		ANAHEIM		Facility State:		CA
Owner State:		CA		Facility Zip:		95037
Owner Zip:		92806				
7	4 of 6	NNW	0.23 / 1,209.48	324.74 / 4	MORGAN HILL TIRE & AUTO 15745 MONTEREY RD MORGAN HILL CA 95037	SANTA CLARA CUPA
Facility ID:		FA0230838				
GIS Latitude:		37.110084				
GIS Longitude:		-121.639503				
PE:		2205				
Description:		GENERATES 100 KG YR TO <5 TONS/YR				
Record ID:		PR0330929				
7	5 of 6	NNW	0.23 / 1,209.48	324.74 / 4	MORGAN HILL TIRE & AUTO 15745 MONTEREY RD	SANTA CLARA CUPA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
MORGAN HILL CA 95037						
Facility ID:		FA0203053				
GIS Latitude:		37.110084				
GIS Longitude:		-121.639503				
PE:		2205				
Description:		GENERATES 100 KG YR TO <5 TONS/YR				
Record ID:		PR0317552				

<u>7</u>	6 of 6	NNW	0.23 / 1,209.48	324.74 / 4	RWC TIRE & SERVICE CENTRAL INC DBA BIG O TIRES 15745 MONTEREY RD MORGAN HILL CA 95037	RCRA NON GEN
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EPA Handler ID: CAL000423822
Gen Status Universe: No Report
Contact Name: SAVENDRA DUTT
Contact Address: 415 MILITARY E , , BENICIA , CA, 94510 ,
Contact Phone No and Ext: 707-750-5070
Contact Email:
Contact Country:
County Name: SANTA CLARA
EPA Region: 09
Land Type:
Receive Date: 20170103

Violation/Evaluation Summary

Note: NO RECORDS: As of November 2019, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: Yes
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20170103
Handler Name: RWC TIRE & SERVICE CENTRAL INC DBA BIG O TIRES
Generator Status Universe: No Report
Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	Street No:	
Type:	Other	Street 1:	415 MILITARY E
Name:	SAVENDRA DUTT	Street 2:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Date Became Current:				City:	BENICIA	
Date Ended Current:				State:	CA	
Phone:	707-750-5070			Country:		
Source Type:	Implementer			Zip Code:	94510	
Owner/Operator Ind:				Street No:		
Type:	Current Owner			Street 1:	415 MILITARY E	
Name:	Other			Street 2:		
Date Became Current:	SAVENDRA DUTT			City:	BENICIA	
Date Ended Current:				State:	CA	
Phone:	707-750-5070			Country:		
Source Type:	Implementer			Zip Code:	94510	

8	1 of 1	NNW	0.22 / 1,169.95	324.53 / 4	MORGAN HILL CDF 15670 MONTEREY ROAD MORGAN HILL CA 95037	LUST
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Global ID:	T0608502353	County:	SANTA CLARA
Status:	COMPLETED - CASE CLOSED	Latitude:	37.109757889
Status Date:	2019-01-10 00:00:00	Longitude:	-121.638246885
Case Type:	LUST CLEANUP SITE		
Date Source:	LUST Cleanup Sites from GeoTracker Search; LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download		

LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download - Facilities Detail

RB Case No:	3394	Potential COC:	Gasoline
Local Case No:	09S3E34E01f	How Discovered:	Tank Closure
Begin Date:	1998-03-17 00:00:00	Stop Method:	Close and Remove Tank
Lead Agency:	SANTA CLARA COUNTY LOP	Stop Description:	
Local Agency:	SANTA CLARA COUNTY LOP	Case Worker:	UST
CUF Case:	NO	File Location:	All Files are on GeoTracker or in the Local Agency Database

Potential Media of Concern: Aquifer used for drinking water supply

How Discovered Description:

Calwater Watershed Name: Pajaro River - South Santa Clara Valley (305.30)

DWR GW Subbasin Name: Gilroy-Hollister Valley - Llagas Area (3-003.01)

Disadvantaged Community:

Site History:

The site is currently occupied by CalFire Santa Clara Headquarters Station #11 and South Santa Clara County Fire District Headquarters Station #1. A total of five USTs were located in two areas at the Site. Four USTs were located in the western area of the site at the former fuel pump house, and one UST was located near the water supply well pump house. In March 1998, all five tanks in both areas were permanently removed. Seven groundwater monitoring wells and thirteen soil vapor probes have been installed at the site to evaluate the extent of contamination. Historical soil excavations removed approximately 695 tons of petroleum-impacted soil. Site Management Requirements: Residual contamination in soil, groundwater, and soil vapor remains at the site that could pose an unacceptable risk under certain site development activities such as, but not limited to, site grading, excavation, or the installation of water wells. Therefore, the impact of the disturbance of any residual contamination or the installation of water well(s) in the vicinity of the residual contamination shall be assessed and appropriate action taken so that there is no significant impact to human health, safety, or the environment. This could necessitate additional sampling, health risk assessment, and mitigation measures. DEH and the appropriate planning and building department shall be notified prior to any changes in land use, grading activities, excavation, and installation of water wells. This notification shall include a statement that residual contamination exists on the property and list all mitigation actions, if any, necessary to ensure compliance with this site management requirement. The levels of residual contamination and any associated site risk are expected to reduce with time. At the time of closure, there is an inactive water supply well on site approximately 350 feet east from the edge of the plume. The water supply well has not been sampled since 2007. There have been historical detections of TPH (diesel) in groundwater samples collected from the water supply well. The TPH (diesel) concentrations detected in water samples collected from the water supply well have been attributed to the agricultural "oil dipper" type pump; although, DEH has not conclusively identified the source of TPH (diesel) in the water supply well. Site facilities were connected to the City of Morgan Hill's domestic water system in December 2006. The water supply well should not be reactivated for use and should be properly destroyed or maintained to comply with Santa Clara Valley Water District well ordinances. The soil vapor sample collected from SV2A on May 18, 2016, contained TPH (gas) at a concentration exceeding the residential human health risk environmental screening level; however, based upon the defined extent of the soil vapor plume and because no structures overly this location, the potential vapor intrusion risk is considered to be low. This should be reevaluated in the event that any structures are proposed to be constructed in this area.

Regulatory Activity

Action Type:	RESPONSE
Date :	2019-01-11 00:00:00

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action:					Well Destruction Report	
Action Type:					ENFORCEMENT	
Date :					2019-01-10 00:00:00	
Action:					Closure/No Further Action Letter	
Action Type:					ENFORCEMENT	
Date :					2018-10-02 00:00:00	
Action:					Staff Letter	
Action Type:					RESPONSE	
Date :					2018-07-30 00:00:00	
Action:					Monitoring Report - Semi-Annually - Regulator Responded	
Action Type:					ENFORCEMENT	
Date :					2018-07-27 00:00:00	
Action:					Notification - Public Notice of Case Closure	
Action Type:					ENFORCEMENT	
Date :					2018-06-18 00:00:00	
Action:					Staff Letter	
Action Type:					RESPONSE	
Date :					2018-01-30 00:00:00	
Action:					Monitoring Report - Semi-Annually	
Action Type:					ENFORCEMENT	
Date :					2017-11-15 00:00:00	
Action:					Staff Letter	
Action Type:					ENFORCEMENT	
Date :					2017-09-04 00:00:00	
Action:					Email Correspondence	
Action Type:					RESPONSE	
Date :					2017-05-31 00:00:00	
Action:					Soil Vapor Intrusion Investigation Report - Regulator Responded	
Action Type:					ENFORCEMENT	
Date :					2017-04-14 00:00:00	
Action:					Email Correspondence	
Action Type:					RESPONSE	
Date :					2017-03-30 00:00:00	
Action:					Proposed Plan	
Action Type:					ENFORCEMENT	
Date :					2017-02-22 00:00:00	
Action:					Staff Letter	
Action Type:					ENFORCEMENT	
Date :					2017-01-26 00:00:00	
Action:					Staff Letter	
Action Type:					RESPONSE	
Date :					2017-01-15 00:00:00	
Action:					Soil Vapor Intrusion Investigation Workplan - Regulator Responded	
Action Type:					ENFORCEMENT	
Date :					2016-11-04 00:00:00	
Action:					Staff Letter	
Action Type:					RESPONSE	
Date :					2016-07-05 00:00:00	
Action:					Site Assessment Report	
Action Type:					ENFORCEMENT	
Date :					2016-04-18 00:00:00	
Action:					Email Correspondence	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:		ENFORCEMENT				
Date :		2016-02-02 00:00:00				
Action:		Staff Letter				
Action Type:		RESPONSE				
Date :		2015-02-14 00:00:00				
Action:		Soil Vapor Intrusion Investigation Workplan - Regulator Responded				
Action Type:		RESPONSE				
Date :		2015-01-22 00:00:00				
Action:		Correspondence				
Action Type:		ENFORCEMENT				
Date :		2014-10-02 00:00:00				
Action:		Staff Letter				
Action Type:		ENFORCEMENT				
Date :		2014-09-16 00:00:00				
Action:		Staff Letter				
Action Type:		ENFORCEMENT				
Date :		2014-08-13 00:00:00				
Action:		Staff Letter				
Action Type:		RESPONSE				
Date :		2014-06-27 00:00:00				
Action:		Site Assessment Report				
Action Type:		ENFORCEMENT				
Date :		2014-02-10 00:00:00				
Action:		Staff Letter				
Action Type:		RESPONSE				
Date :		2014-01-30 00:00:00				
Action:		Other Report / Document - Regulator Responded				
Action Type:		ENFORCEMENT				
Date :		2013-11-21 00:00:00				
Action:		Notice of Violation				
Action Type:		RESPONSE				
Date :		2013-10-30 00:00:00				
Action:		Monitoring Report - Semi-Annually				
Action Type:		RESPONSE				
Date :		2013-04-30 00:00:00				
Action:		Monitoring Report - Semi-Annually				
Action Type:		RESPONSE				
Date :		2013-01-30 00:00:00				
Action:		Monitoring Report - Quarterly				
Action Type:		ENFORCEMENT				
Date :		2012-12-12 00:00:00				
Action:		Staff Letter				
Action Type:		RESPONSE				
Date :		2012-11-16 00:00:00				
Action:		Correspondence				
Action Type:		ENFORCEMENT				
Date :		2012-11-02 00:00:00				
Action:		Staff Letter				
Action Type:		RESPONSE				
Date :		2012-10-30 00:00:00				
Action:		Monitoring Report - Quarterly				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:						
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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action:					Monitoring Report - Quarterly	
Action Type:					RESPONSE	
Date :					2007-04-30 00:00:00	
Action:					Monitoring Report - Quarterly	
Action Type:					ENFORCEMENT	
Date :					2007-02-13 00:00:00	
Action:					Warning Letter - #70312	
Action Type:					RESPONSE	
Date :					2006-05-15 00:00:00	
Action:					Monitoring Report - Quarterly	
Action Type:					ENFORCEMENT	
Date :					2005-12-16 00:00:00	
Action:					Staff Letter - #506121	
Action Type:					RESPONSE	
Date :					2005-10-21 00:00:00	
Action:					Soil and Water Investigation Report	
Action Type:					ENFORCEMENT	
Date :					2005-08-30 00:00:00	
Action:					Staff Letter	
Action Type:					ENFORCEMENT	
Date :					2005-06-03 00:00:00	
Action:					Other Report	
Action Type:					RESPONSE	
Date :					2005-06-03 00:00:00	
Action:					Other Report / Document	
Action Type:					RESPONSE	
Date :					2004-10-15 00:00:00	
Action:					Soil and Water Investigation Report	
Action Type:					RESPONSE	
Date :					2004-09-17 00:00:00	
Action:					Monitoring Report - Quarterly	
Action Type:					ENFORCEMENT	
Date :					2004-05-27 00:00:00	
Action:					Staff Letter - #44034	
Action Type:					RESPONSE	
Date :					2004-05-27 00:00:00	
Action:					Monitoring Report - Quarterly	
Action Type:					RESPONSE	
Date :					2004-01-23 00:00:00	
Action:					Soil and Water Investigation Report	
Action Type:					RESPONSE	
Date :					2003-12-12 00:00:00	
Action:					Monitoring Report - Quarterly	
Action Type:					RESPONSE	
Date :					2003-11-04 00:00:00	
Action:					Soil and Water Investigation Workplan	
Action Type:					ENFORCEMENT	
Date :					2003-10-28 00:00:00	
Action:					Staff Letter - #42507	
Action Type:					ENFORCEMENT	
Date :					2003-09-25 00:00:00	
Action:					Staff Letter - #42232	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:					RESPONSE	
Date :					2003-09-04 00:00:00	
Action:					Soil and Water Investigation Report	
Action Type:					RESPONSE	
Date :					2003-02-20 00:00:00	
Action:					Well Installation Report	
Action Type:					RESPONSE	
Date :					2002-11-27 00:00:00	
Action:					Request for Closure	
Action Type:					RESPONSE	
Date :					2002-09-30 00:00:00	
Action:					Preliminary Site Assessment Report	
Action Type:					ENFORCEMENT	
Date :					2002-06-24 00:00:00	
Action:					Staff Letter - #38101	
Action Type:					RESPONSE	
Date :					2002-06-18 00:00:00	
Action:					Other Workplan	
Action Type:					RESPONSE	
Date :					1999-02-15 00:00:00	
Action:					Soil and Water Investigation Workplan	
Action Type:					ENFORCEMENT	
Date :					1999-01-07 00:00:00	
Action:					Staff Letter - #18600	
Action Type:					RESPONSE	
Date :					1999-01-01 00:00:00	
Action:					Correspondence	
Action Type:					Other	
Date :					1998-05-21 00:00:00	
Action:					Leak Reported	
Action Type:					RESPONSE	
Date :					1998-05-18 00:00:00	
Action:					Unauthorized Release Form	
Action Type:					Other	
Date :					1998-03-17 00:00:00	
Action:					Leak Stopped	
Action Type:					RESPONSE	
Date :					1998-03-17 00:00:00	
Action:					Other Report / Document	
Action Type:					Other	
Date :					1998-03-17 00:00:00	
Action:					Leak Discovery	
Action Type:					RESPONSE	
Date :					1998-03-13 00:00:00	
Action:					Tank Removal Report / UST Sampling Report	
<u>Status History</u>						
Status:					Completed - Case Closed	
Status Date:					2019-01-10 00:00:00	
Status:					Open - Eligible for Closure	
Status Date:					2018-07-27 00:00:00	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Status:					Open - Verification Monitoring	
Status Date:					2018-01-31 00:00:00	
Status:					Open - Site Assessment	
Status Date:					2009-11-30 00:00:00	
Status:					Open - Verification Monitoring	
Status Date:					2005-12-16 00:00:00	
Status:					Open - Site Assessment	
Status Date:					2003-09-04 00:00:00	
Status:					Open - Case Begin Date	
Status Date:					1998-03-17 00:00:00	
Status:					Open - Site Assessment	
Status Date:					1998-03-17 00:00:00	

LUST Sites from GeoTracker Search - Regulatory Profile(as of Oct 31, 2019)

Site Facility Name:	MORGAN HILL CDF	Potential COC:	GASOLINE
Site Facility Type:	LUST CLEANUP SITE	Facility Type:	
Cleanup Status:	COMPLETED - CASE CLOSED	Composting Method:	
Project Status:		Address:	15670 MONTEREY ROAD
WDR Place Type:		City:	MORGAN HILL
WDR File:		Zip:	95037
WDR Order:		County:	SANTA CLARA
CUF Priority Assig:		CUF Claim:	
CUF Amount Paid:			
File Location:	ALL FILES ARE ON GEOTRACKER OR IN THE LOCAL AGENCY DATABASE		
Designated Beneficial Use:	MUN, AGR, IND, PROC		
Project Oversight Agencies:			
Report Link:	https://geotracker.waterboards.ca.gov/profile_report?global_id=T0608502353		
Cleanup Status Detail:	COMPLETED - CASE CLOSED AS OF 1/10/2019		
Cleanup History Link:	https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0608502353&tabname=regulatoryhistory		
Potential Media of Concern:	AQUIFER USED FOR DRINKING WATER SUPPLY		
User Defined Beneficial Use:			
DWR GW Sub Basin:	Gilroy-Hollister Valley - Llagas Area (3-003.01)		
Calwater Watershed Name:	Pajaro River - South Santa Clara Valley (305.30)		
Post Closure Site Management:	NO EXCAVATION OF CONTAMINATED SOILS WITHOUT AGENCY REVIEW AND APPROVAL NO GROUNDWATER EXTRACTION AT ANY DEPTH WITHOUT APPROVAL NOTIFY PRIOR TO CHANGE IN LAND USE NOTIFY PRIOR TO DEVELOPMENT PERFORM H&S PLAN PRIOR TO SUBSURFACE WORK		
Future Land Use:	COMMERCIAL INDUSTRIAL		
Cleanup Oversight Agencies:	SANTA CLARA COUNTY LOP (LEAD) - CASE #: 09S3E34E01f CASEWORKER: UST CASE WORKER CENTRAL COAST RWQCB (REGION 3) - CASE #: 3394		
Gndwater Monitoring Freque:	# OF WELLS MONITORED - QUARTERLY : 4		
	REASONS FOR QUARTERLY OR MONTHLY OR OTHER GROUNDWATER MONITORING: Other - wells have been dry; if groundwater present, they are to sample wells; requested deeper investigation at the site.		

Site History:

The site is currently occupied by CalFire Santa Clara Headquarters Station #11 and South Santa Clara County Fire District Headquarters Station #1. A total of five USTs were located in two areas at the Site. Four USTs were located in the western area of the site at the former fuel pump house, and one UST was located near the water supply well pump house. In March 1998, all five tanks in both areas were permanently removed. Seven groundwater monitoring wells and thirteen soil vapor probes have been installed at the site to evaluate the extent of contamination. Historical soil excavations removed approximately 695 tons of petroleum-impacted soil.

Site Management Requirements:

Residual contamination in soil, groundwater, and soil vapor remains at the site that could pose an unacceptable risk under certain site development activities such as, but not limited to, site grading, excavation, or the installation of water wells. Therefore, the impact of the disturbance of any residual contamination or the installation of water well(s) in the vicinity of the residual contamination shall be assessed and appropriate action taken so that there is no significant impact to human health, safety, or the environment. This could necessitate additional sampling, health risk assessment, and mitigation measures. DEH and the appropriate planning and building department shall be notified prior to any changes in land use, grading activities, excavation,

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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and installation of water wells. This notification shall include a statement that residual contamination exists on the property and list all mitigation actions, if any, necessary to ensure compliance with this site management requirement. The levels of residual contamination and any associated site risk are expected to reduce with time.

At the time of closure, there is an inactive water supply well on site approximately 350 feet east from the edge of the plume. The water supply well has not been sampled since 2007. There have been historical detections of TPH (diesel) in groundwater samples collected from the water supply well. The TPH (diesel) concentrations detected in water samples collected from the water supply well have been attributed to the agricultural "oil dipper" type pump; although, DEH has not conclusively identified the source of TPH (diesel) in the water supply well. Site facilities were connected to the City of Morgan Hill's domestic water system in December 2006. The water supply well should not be reactivated for use and should be properly destroyed or maintained to comply with Santa Clara Valley Water District well ordinances.

The soil vapor sample collected from SV2A on May 18, 2016, contained TPH (gas) at a concentration exceeding the residential human health risk environmental screening level; however, based upon the defined extent of the soil vapor plume and because no structures overly this location, the potential vapor intrusion risk is considered to be low. This should be reevaluated in the event that any structures are proposed to be constructed in this area.

LUST Sites from GeoTracker Search - Cleanup Status History(as of Oct 31, 2019)

Status:	Completed - Case Closed
Date :	1/10/2019
Status:	Open - Eligible for Closure
Date :	7/27/2018
Status:	Open - Verification Monitoring
Date :	1/31/2018
Status:	Open - Site Assessment
Date :	11/30/2009
Status:	Open - Verification Monitoring
Date :	12/16/2005
Status:	Open - Site Assessment
Date :	9/4/2003
Status:	Open - Site Assessment
Date :	3/17/1998
Status:	Open - Case Begin Date
Date :	3/17/1998

LUST Sites from GeoTracker Search - Cleanup Action Report (as of Oct 31, 2019)

Action Type:	EXCAVATION	Begin Date:	2/11/2012
Phase:	Soil	End Date:	3/10/2012
Contaminant Mass Removed:	0		
Description:	degraded product and vent lines were encountered during excavation. Removed approximately 300 tons of soil to Kirby Caqnyon Landfill, Morgan Hill, CA		

LUST Sites from GeoTracker Search - Regulatory Activities(as of Oct 31, 2019)

Action Type:	Response Requested - Reports
Action Date:	1/11/2019
Received Issue Date:	12/27/2018
Action:	Well Destruction Report
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5976150
Title Description Comments:	
Action Type:	Other Regulatory Actions
Action Date:	1/10/2019
Received Issue Date:	1/10/2019
Action:	Closure/No Further Action Letter
Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					global_id=T0608502353&enforcement_id=6381554&temptable=ENFORCEMENT	
		Title Description Comments:				
		Action Type:	Other Regulatory Actions			
		Action Date:	10/2/2018			
		Received Issue Date:	10/2/2018			
		Action:	Staff Letter			
		Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6371223&temptable=ENFORCEMENT			
		Title Description Comments:				
		DEH approves well destructions				
		Action Type:	Response Requested - Reports			
		Action Date:	7/30/2018			
		Received Issue Date:	6/15/2018			
		Action:	Monitoring Report - Semi-Annually - Regulator Responded			
		Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=6159869			
		Title Description Comments:				
		2Q18 Semi-Annual Monitoring Report				
		Action Type:	Notices			
		Action Date:	7/27/2018			
		Received Issue Date:	7/27/2018			
		Action:	Notification - Public Notice of Case Closure			
		Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6365150&temptable=ENFORCEMENT			
		Title Description Comments:				
		Notice of Public Comment Period for Low-Threat Case Closure. No comments received.				
		Action Type:	Other Regulatory Actions			
		Action Date:	6/18/2018			
		Received Issue Date:	6/18/2018			
		Action:	Staff Letter			
		Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6361453&temptable=ENFORCEMENT			
		Title Description Comments:				
		No Further Action, pending LTC review				
		Action Type:	Response Requested - Reports			
		Action Date:	1/30/2018			
		Received Issue Date:	1/29/2018			
		Action:	Monitoring Report - Semi-Annually			
		Doc Link:	https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=6159868			
		Title Description Comments:				
		4Q17 Semi-Annual Monitoring Report. Should include naphthalene soil gas data.				
		Action Type:	Other Regulatory Actions			
		Action Date:	11/15/2017			
		Received Issue Date:	11/15/2017			
		Action:	Staff Letter			
		Doc Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6341330&temptable=ENFORCEMENT			
		Title Description Comments:				
		Response to report. Continue semi-annual groundwater sampling and collect naphthalene soil gas data.				
		Action Type:	Other Regulatory Actions			
		Action Date:	9/4/2017			
		Received Issue Date:	9/4/2017			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Action: Email Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6335544&temptable=ENFORCEMENT

Title Description Comments:

Courtesy email for 3Q17 QMR and SV sampling

Action Type: Response Requested - Reports
Action Date: 5/31/2017
Received Issue Date: 6/8/2017
Action: Soil Vapor Intrusion Investigation Report - Regulator Responded
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5911209

Title Description Comments:

Assessment report for additional groundwater and soil vapor investigation

Action Type: Other Regulatory Actions
Action Date: 4/14/2017
Received Issue Date: 4/14/2017
Action: Email Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6317543&temptable=ENFORCEMENT

Title Description Comments:

Email response in request to change SV sampling work scope

Action Type: Response Requested - Workplans
Action Date: 3/30/2017
Received Issue Date: 3/28/2017
Action: Proposed Plan
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5913641

Title Description Comments:

Timeline of Site Actions to reach compliance

Action Type: Other Regulatory Actions
Action Date: 2/22/2017
Received Issue Date: 2/22/2017
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6312525&temptable=ENFORCEMENT

Title Description Comments:

Submittals out of compliance

Action Type: Other Regulatory Actions
Action Date: 1/26/2017
Received Issue Date: 1/26/2017
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6309855&temptable=ENFORCEMENT

Title Description Comments:

Letter approval for additional groundwater and soil vapor investigation

Action Type: Response Requested - Workplans
Action Date: 1/15/2017
Received Issue Date: 1/16/2017
Action: Soil Vapor Intrusion Investigation Workplan - Regulator Responded
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5911206

Title Description Comments:

Work plan for groundwater and soil vapor sampling

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:		Other Regulatory Actions				
Action Date:		11/4/2016				
Received Issue Date:		11/4/2016				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6303063&temptable=ENFORCEMENT				
Title Description Comments:						
extension approval						
Action Type:		Response Requested - Reports				
Action Date:		*7/5/2016				
Received Issue Date:		6/30/2016				
Action:		Site Assessment Report				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5876977				
Title Description Comments:						
Action Type:		Other Regulatory Actions				
Action Date:		4/18/2016				
Received Issue Date:		4/18/2016				
Action:		Email Correspondence				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6282432&temptable=ENFORCEMENT				
Title Description Comments:						
extension approval						
Action Type:		Other Regulatory Actions				
Action Date:		2/2/2016				
Received Issue Date:		2/2/2016				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6274365&temptable=ENFORCEMENT				
Title Description Comments:						
extension approval						
Action Type:		Response Requested - Workplans				
Action Date:		*2/14/2015				
Received Issue Date:		1/27/2016				
Action:		Soil Vapor Intrusion Investigation Workplan - Regulator Responded				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5816408				
Title Description Comments:						
- See 2/2/16 directive letter						
Action Type:		Response Requested - Other				
Action Date:		1/22/2015				
Received Issue Date:		1/22/2015				
Action:		Correspondence				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5827365				
Title Description Comments:						
Temporary Delay in Response Activities						
Action Type:		Other Regulatory Actions				
Action Date:		10/2/2014				
Received Issue Date:		10/2/2014				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6222988&temptable=ENFORCEMENT				
Title Description Comments:						
WP Extension Approval						
Action Type:		Other Regulatory Actions				
Action Date:		9/16/2014				
Received Issue Date:		9/16/2014				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6220829&temptable=ENFORCEMENT				
Title Description Comments:						
Action Type:		Other Regulatory Actions				
Action Date:		8/13/2014				
Received Issue Date:		8/13/2014				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6216758&temptable=ENFORCEMENT				
Title Description Comments:						
		Out of Compliance				
Action Type:		Response Requested - Reports				
Action Date:		6/27/2014				
Received Issue Date:		9/9/2014				
Action:		Site Assessment Report				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5797015				
Title Description Comments:						
		- See 9/16/2014 directive letter.				
Action Type:		Other Regulatory Actions				
Action Date:		2/10/2014				
Received Issue Date:		2/10/2014				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6191684&temptable=ENFORCEMENT				
Title Description Comments:						
Action Type:		Response Requested - Other				
Action Date:		1/30/2014				
Received Issue Date:		1/28/2014				
Action:		Other Report / Document - Regulator Responded				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5790276				
Title Description Comments:						
		Path to Closure Work Plan - See 2/10/2014 directive letter.				
Action Type:		Enforcement/Orders				
Action Date:		11/21/2013				
Received Issue Date:		11/21/2013				
Action:		Notice of Violation				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6183204&temptable=ENFORCEMENT				
Title Description Comments:						
Action Type:		Other Regulatory Actions				
Action Date:		12/12/2012				
Received Issue Date:		12/12/2012				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6144844&temptable=ENFORCEMENT				
Title Description Comments:						
		Request for SA GWM				
Action Type:		Other Regulatory Actions				
Action Date:		11/2/2012				
Received Issue Date:		11/2/2012				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					global_id=T0608502353&enforcement_id=6141652&temptable=ENFORCEMENT	
Title Description Comments:						
Out of compliance letter						
Action Type: Other Regulatory Actions						
Action Date: 4/30/2012						
Received Issue Date: 4/30/2012						
Action: Staff Letter						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6120222&temptable=ENFORCEMENT						
Title Description Comments:						
reminder of requirement for quarterly groundwater monitoring due to signification fluctuation in groundwater elevation.						
Action Type: Response Requested - Reports						
Action Date: 4/30/2012						
Received Issue Date: 4/20/2012						
Action: Monitoring Report - Quarterly						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=6074321						
Title Description Comments:						
Action Type: Response Requested - Reports						
Action Date: *4/30/2012						
Received Issue Date: 4/20/2012						
Action: Final Remedial Action Report / Corrective Action Report						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5715383						
Title Description Comments:						
Action Type: Other Regulatory Actions						
Action Date: 1/24/2012						
Received Issue Date: 1/24/2012						
Action: Staff Letter						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6109484&temptable=ENFORCEMENT						
Title Description Comments:						
grant request for extension						
Action Type: Other Regulatory Actions						
Action Date: 6/20/2011						
Received Issue Date: 6/20/2011						
Action: Staff Letter						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6089793&temptable=ENFORCEMENT						
Title Description Comments:						
app remedial action plan						
Action Type: Response Requested - Workplans						
Action Date: *6/7/2011						
Received Issue Date: 6/15/2011						
Action: Interim Remedial Action Plan - Regulator Responded						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5694856						
Title Description Comments:						
remedial action work plan due 6/7/10						
Action Type: Other Regulatory Actions						
Action Date: 2/10/2011						
Received Issue Date: 2/10/2011						
Action: Staff Letter						
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6077345&temptable=ENFORCEMENT						

Title Description Comments:

response to request for extension remedial action work plan

Action Type: Response Requested - Other
Action Date: 2/4/2011
Received Issue Date: 2/8/2011
Action: Correspondence
Doc Link:
Title Description Comments:

Action Type: Response Requested - Reports
Action Date: 10/30/2010
Received Issue Date: 10/4/2010
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

all overdue gwm reports and timeline to recommence required monitoring - Letter response submitted - see Site Documents page.

Action Type: Other Regulatory Actions
Action Date: 10/7/2010
Received Issue Date: 10/7/2010
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6065864&temptable=ENFORCEMENT
Title Description Comments:

request notification letter of contract award

Action Type: Response Requested - Other
Action Date: 10/4/2010
Received Issue Date: 10/4/2010
Action: Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5696194
Title Description Comments:

Letter response

Action Type: Other Regulatory Actions
Action Date: 9/10/2010
Received Issue Date: 9/10/2010
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6063475&temptable=ENFORCEMENT
Title Description Comments:

out of compliance; overdue work plan and gwm reports

Action Type: Other Regulatory Actions
Action Date: 4/21/2010
Received Issue Date: 4/21/2010
Action: Staff Letter
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6048857&temptable=ENFORCEMENT
Title Description Comments:

request remedial action wp; continue quarterly groundwater monitoring until groundwater returns

Action Type: Response Requested - Reports
Action Date: 4/2/2010
Received Issue Date: 4/20/2010
Action: Soil and Water Investigation Report
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5656320

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Title Description Comments:						
Action Type:		Response Requested - Reports				
Action Date:		1/30/2010				
Received Issue Date:		4/20/2010				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
- sampling not conducted - wells dry						
Action Type:		Other Regulatory Actions				
Action Date:		11/30/2009				
Received Issue Date:		11/30/2009				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6036700&temptable=ENFORCEMENT				
Title Description Comments:						
app wp.						
Action Type:		Response Requested - Workplans				
Action Date:		*10/30/2009				
Received Issue Date:		11/4/2009				
Action:		Soil and Water Investigation Workplan				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5644916				
Title Description Comments:						
Action Type:		Response Requested - Reports				
Action Date:		10/30/2009				
Received Issue Date:		10/22/2009				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
Action Type:		Response Requested - Reports				
Action Date:		7/30/2009				
Received Issue Date:		10/22/2009				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
- sampling not conducted in second quarter						
Action Type:		Other Regulatory Actions				
Action Date:		7/16/2009				
Received Issue Date:		7/16/2009				
Action:		Staff Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6021411&temptable=ENFORCEMENT				
Title Description Comments:						
req wp for deeper investigation - dry wells						
Action Type:		Response Requested - Other				
Action Date:		4/6/2009				
Received Issue Date:		4/6/2009				
Action:		Other Report / Document				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927940				
Title Description Comments:						
Phone Log 04/06/2009						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:		Enforcement/Orders				
Action Date:		2/24/2009				
Received Issue Date:		2/24/2009				
Action:		Warning Letter				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6004073&temptable=ENFORCEMENT				
Title Description Comments:						
late gwm reports; edf noncompliance						
Action Type:		Response Requested - Reports				
Action Date:		1/30/2008				
Received Issue Date:		2/4/2008				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
Monitoring Report - Quarterly						
Action Type:		Response Requested - Reports				
Action Date:		10/30/2007				
Received Issue Date:		12/21/2007				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
Monitoring Report - Quarterly						
Action Type:		Response Requested - Reports				
Action Date:		7/30/2007				
Received Issue Date:		8/13/2007				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
Monitoring Report - Quarterly						
Action Type:		Response Requested - Reports				
Action Date:		4/30/2007				
Received Issue Date:		5/17/2007				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:						
Monitoring Report - Quarterly - 1st qtr 2007 gwm						
Action Type:		Enforcement/Orders				
Action Date:		2/13/2007				
Received Issue Date:		2/13/2007				
Action:		Warning Letter - #70312				
Doc Link:						
Title Description Comments:						
out of compliance - no gwm						
Action Type:		Other Regulatory Actions				
Action Date:		12/16/2005				
Received Issue Date:		12/16/2005				
Action:		Staff Letter - #506121				
Doc Link:						
Title Description Comments:						
TPHd in water supply well; gwm start, include water supply well						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Action Type:		Response Requested - Reports				
Action Date:		10/21/2005				
Received Issue Date:		12/8/2005				
Action:		Soil and Water Investigation Report				
Doc Link:						
Title Description Comments:		Soil and Water Investigation Report				
Action Type:		Other Regulatory Actions				
Action Date:		8/30/2005				
Received Issue Date:		8/30/2005				
Action:		Staff Letter				
Doc Link:						
Title Description Comments:		SWI late, GWM late, response to consultant letter, drilling scheduled for 8/7/05				
Action Type:		Reports				
Action Date:		6/3/2005				
Received Issue Date:		6/3/2005				
Action:		Other Report				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6324523&temptable=ENFORCEMENT				
Title Description Comments:		Map & Metroscan Information 06/03/2005				
Action Type:		Response Requested - Other				
Action Date:		6/3/2005				
Received Issue Date:		6/3/2005				
Action:		Other Report / Document				
Doc Link:		https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927942				
Title Description Comments:		State Information 06/03/2005				
Action Type:		Response Requested - Reports				
Action Date:		10/15/2004				
Received Issue Date:		12/8/2005				
Action:		Soil and Water Investigation Report				
Doc Link:						
Title Description Comments:		Soil and Water Investigation Report				
Action Type:		Response Requested - Reports				
Action Date:		9/17/2004				
Received Issue Date:		10/28/2004				
Action:		Monitoring Report - Quarterly				
Doc Link:						
Title Description Comments:		Monitoring Report - Quarterly				
Action Type:		Other Regulatory Actions				
Action Date:		5/27/2004				
Received Issue Date:		5/27/2004				
Action:		Staff Letter - #44034				
Doc Link:						
Title Description Comments:						
Action Type:		Response Requested - Reports				

Action Date: 5/27/2004
Received Issue Date: 5/27/2004
Action: Monitoring Report - Quarterly
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927938
Title Description Comments:

GW Monitoring Report 05/27/2004 - 04/18/2012

Action Type: Response Requested - Reports
Action Date: 1/23/2004
Received Issue Date: 12/8/2005
Action: Soil and Water Investigation Report
Doc Link:
Title Description Comments:

Soil and Water Investigation Report

Action Type: Response Requested - Reports
Action Date: 12/12/2003
Received Issue Date: 5/27/2004
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

Monitoring Report - Quarterly

Action Type: Response Requested - Workplans
Action Date: 11/4/2003
Received Issue Date: 10/10/2003
Action: Soil and Water Investigation Workplan
Doc Link:
Title Description Comments:

Soil and Water Investigation Workplan

Action Type: Other Regulatory Actions
Action Date: 10/28/2003
Received Issue Date: 10/28/2003
Action: Staff Letter - #42507
Doc Link:
Title Description Comments:

Action Type: Other Regulatory Actions
Action Date: 9/25/2003
Received Issue Date: 9/25/2003
Action: Staff Letter - #42232
Doc Link:
Title Description Comments:

Action Type: Response Requested - Reports
Action Date: 9/4/2003
Received Issue Date: 9/4/2003
Action: Soil and Water Investigation Report
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927943
Title Description Comments:

Soil & Water Investigation Report 09/04/2003 - 04/13/2010

Action Type: Response Requested - Reports
Action Date: 2/20/2003
Received Issue Date: 2/20/2003
Action: Well Installation Report
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927946

Title Description Comments:

Well Construction Application 02/20/2003

Action Type: Response Requested - Other
Action Date: 11/27/2002
Received Issue Date: 11/27/2002
Action: Request for Closure
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927941
Title Description Comments:

Request For Closure 11/27/2002

Action Type: Response Requested - Reports
Action Date: 9/30/2002
Received Issue Date: 12/2/2002
Action: Preliminary Site Assessment Report
Doc Link:
Title Description Comments:

Preliminary Site Assessment Report

Action Type: Other Regulatory Actions
Action Date: 6/24/2002
Received Issue Date: 6/24/2002
Action: Staff Letter - #38101
Doc Link:
Title Description Comments:

Action Type: Response Requested - Workplans
Action Date: 6/18/2002
Received Issue Date: 6/18/2002
Action: Other Workplan
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927947
Title Description Comments:

Work Plan 06/18/2002 - 01/28/2014

Action Type: Response Requested - Workplans
Action Date: 2/15/1999
Received Issue Date: 6/24/2002
Action: Soil and Water Investigation Workplan
Doc Link:
Title Description Comments:

Soil and Water Investigation Workplan

Action Type: Other Regulatory Actions
Action Date: 1/7/1999
Received Issue Date: 1/7/1999
Action: Staff Letter - #18600
Doc Link:
Title Description Comments:

Action Type: Response Requested - Other
Action Date: 1/1/1999
Received Issue Date: 1/1/1999
Action: Correspondence
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927937
Title Description Comments:

Correspondence 1999 - 2010

Action Type: Response Requested - Other
Action Date: 5/18/1998
Received Issue Date: 5/18/1998
Action: Unauthorized Release Form
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927945
Title Description Comments:

Unauthorized Release Form 05/18/1998

Action Type: Response Requested - Other
Action Date: 3/17/1998
Received Issue Date: 3/17/1998
Action: Other Report / Document
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927939
Title Description Comments:

Miscellaneous Sample Results 03/17/1998 - 07/15/1999

Action Type: Response Requested - Reports
Action Date: 3/13/1998
Received Issue Date: 3/13/1998
Action: Tank Removal Report / UST Sampling Report
Doc Link: https://geotracker.waterboards.ca.gov/view_documents_all?global_id=T0608502353&doc_id=5927944
Title Description Comments:

Tank Removal Report 03/13/1998 - 03/24/1998

Action Type: Response Requested - Reports
Action Date: *5/15/2006
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

Monitoring Report - Quarterly - sampling not done.

Action Type: Leak Action
Action Date: 5/21/1998
Received Issue Date:
Action: Leak Reported
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action Date: 3/17/1998
Received Issue Date:
Action: Leak Discovery
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action Date: 3/17/1998
Received Issue Date:
Action: Leak Stopped
Doc Link:
Title Description Comments:

Action Type: Cleanup Action
Action Date: 2/11/2012
Received Issue Date:
Action: Excavation
Doc Link:
Title Description Comments:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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degraded product and vent lines were encountered during excavation. Removed approximately 300 tons of soil to Kirby Caqnyon Landfill, Morgan Hill, CA

Action Type: Response Requested - Reports
Action Date: 4/30/2011
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

- sampling not conducted - will be done after completion of the excavation work.

Action Type: Response Requested - Reports
Action Date: 1/30/2011
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

- sampling not completed - no contractor

Action Type: Response Requested - Reports
Action Date: 10/30/2010
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

- sampling not conducted

Action Type: Response Requested - Reports
Action Date: 7/30/2010
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

- sampling not conducted

Action Type: Response Requested - Reports
Action Date: 6/7/2010
Received Issue Date:
Action: Interim Remedial Action Report
Doc Link:
Title Description Comments:

Action Type: Response Requested - Reports
Action Date: 4/30/2010
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

- sampling not conducted

Action Type: Response Requested - Reports
Action Date: 4/30/2009
Received Issue Date:
Action: Monitoring Report - Quarterly
Doc Link:
Title Description Comments:

1st atr 2009

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Received Issue Date:
 Action: Monitoring Report - Quarterly
 Doc Link:
 Title Description Comments:

LUST Sites from GeoTracker Search - Site Maps(as of Oct 31, 2019)

Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/6345254719/T0608502353.PDF
Size : 67 KB
Submitted By: JAMES BRAKE (AUTH_RP)
Submitted: 6/5/2017

Title: SOIL VAPOR INVESTIGATION, GROUNDWATER MONITORING WELL INSTALLATION, AND MONITORING REPORT (MW-6)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5590517044/T0608502353.PDF
Size : 93 KB
Submitted By: JAMES BRAKE (AUTH_RP)
Submitted: 6/5/2017

Title: SOIL VAPOR INVESTIGATION, GROUNDWATER MONITORING WELL INSTALLATION, AND MONITORING REPORT (MW-7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/5048857271/T0608502353.PDF
Size : 92 KB
Submitted By: JAMES BRAKE (AUTH_RP)
Submitted: 6/5/2017

Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/9735933303/T0608502353.PDF
Size : 68 KB
Submitted By: JAMES BRAKE (AUTH_RP)
Submitted: 6/29/2016*

Title: SOIL VAPOR INVESTIGATION AND GROUNDWATER MONITORING WELL INSTALLATION (MW-5)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/6772760748/T0608502353.PDF
Size : 98 KB
Submitted By: JAMES BRAKE (AUTH_RP)
Submitted: 6/29/2016*

LUST Sites from GeoTracker Search - Documents(as of Oct 31, 2019)

Document Type: Site Documents
Document Date: 1/10/2019
Type: CLOSURE/NO FURTHER ACTION LETTER
Title: UNKNOWN
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6381554
Size :
Submitted By: TRAVIS FLORA (REGULATOR)
Submitted:

Document Type: Site Documents
Document Date: 12/18/2018
Type: WELL DESTRUCTION REPORT
Title: GROUNDWATER AND SOIL VAPOR MONITORING WELL DESTRUCTION
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6554818928/T0608502353.PDF
Size : 16,603 KB
Submitted By: JAMES BRAKE (AUTH_RP)
Submitted:

Document Type: Site Documents
Document Date: 10/2/2018
Type: STAFF LETTER
Title: DEH APPROVES WELL DESTRUCTIONS
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6371223
Size :
Submitted By: TRAVIS FLORA (REGULATOR)
Submitted:

Document Type: Site Documents
Document Date: 7/27/2018
Type: NOTIFICATION - PUBLIC NOTICE OF CASE CLOSURE
Title: NOTICE OF PUBLIC COMMENT PERIOD FOR LOW-THREAT CASE CLOSURE.
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6365150
Size :
Submitted By: TRAVIS FLORA (REGULATOR)
Submitted:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Document Type:	Site Documents			Size :		
Document Date:	6/18/2018			Submitted By:	TRAVIS FLORA (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	NO FURTHER ACTION, PENDING LTC REVIEW					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6361453					
Document Type:	Monitoring Reports			Size :	1,928 KB	
Document Date:	6/14/2018			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	MONITORING REPORT - SEMI-ANNUALLY			Submitted:		
Title:	FIRST SEMI-ANNUAL GROUNDWATER MONITORING REPORT - 2018					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2054083466/T0608502353.PDF					
Document Type:	Monitoring Reports			Size :	2,940 KB	
Document Date:	1/26/2018			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	MONITORING REPORT - SEMI-ANNUALLY			Submitted:		
Title:	SUB-SLAB VAPOR INVESTIGATION AND GROUNDWATER MONITORING REPORT					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8655051887/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	11/15/2017			Submitted By:	TRAVIS FLORA (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	RESPONSE TO REPORT. CONTINUE SEMI-ANNUAL GROUNDWATER SAMPLING AND COLLECT NAPHTHALENE SOIL GAS DATA.					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6341330					
Document Type:	Site Documents			Size :		
Document Date:	9/4/2017			Submitted By:	CALVIN HEE (REGULATOR)	
Type:	EMAIL CORRESPONDENCE			Submitted:		
Title:	COURTESY EMAIL FOR 3Q17 QMR AND SV SAMPLING					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6335544					
Document Type:	Site Documents			Size :	8,160 KB	
Document Date:	6/6/2017			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	WELL INSTALLATION REPORT			Submitted:		
Title:	SOIL VAPOR INVESTIGATION, GROUNDWATER MONITORING WELL INSTALLATION, AND MONITORING REPORT					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1665030121/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	4/14/2017			Submitted By:	CALVIN HEE (REGULATOR)	
Type:	EMAIL CORRESPONDENCE			Submitted:		
Title:	EMAIL RESPONSE IN REQUEST TO CHANGE SV SAMPLING WORK SCOPE					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6317543					
Document Type:	Site Documents			Size :	67 KB	
Document Date:	3/24/2017			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	CORRESPONDENCE			Submitted:		
Title:	OUT OF COMPLIANCE LETTER CASE NO. 14-114, SCVWD ID NO. 09S3E34E01F					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5230064094/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	2/22/2017			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	SUBMITTALS OUT OF COMPLIANCE					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6312525					
Document Type:	Site Documents			Size :		
Document Date:	1/26/2017			Submitted By:	CANDACE GARCIA (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	LETTER APPROVAL FOR ADDITIONAL GROUNDWATER AND SOIL VAPOR INVESTIGATION					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6309855					
Document Type:	Site Documents			Size :	901 KB	
Document Date:	1/12/2017			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	WELL INSTALLATION WORKPLAN			Submitted:		
Title:	GROUNDWATER MONITORING WELL INSTALLATION AND SOIL VAPOR SAMPLING WORKPLAN					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9966956794/T0608502353.PDF					
Document Type:	Site Documents			Size :		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Document Date:	11/4/2016				Submitted By:	CANDACE GARCIA (REGULATOR)
Type:	STAFF LETTER				Submitted:	
Title:	UNKNOWN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6303063					
Document Type:	Site Documents			Size :		7,637 KB
Document Date:	6/30/2016*			Submitted By:		JAMES BRAKE (AUTH_RP)
Type:	SITE INVESTIGATION			Submitted:		
Title:	SOIL VAPOR INVESTIGATION AND GROUNDWATER MONITORING WELL INSTALLATION					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3889273941/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	4/18/2016			Submitted By:		AARON COSTA (REGULATOR)
Type:	EMAIL CORRESPONDENCE			Submitted:		
Title:	EXTENSION APPROVAL					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6282432					
Document Type:	Site Documents			Size :		
Document Date:	2/2/2016			Submitted By:		CANDACE GARCIA (REGULATOR)
Type:	STAFF LETTER			Submitted:		
Title:	UNKNOWN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6274365					
Document Type:	Site Documents			Size :		849 KB
Document Date:	1/27/2016			Submitted By:		JAMES BRAKE (AUTH_RP)
Type:	SITE INVESTIGATION WORKPLAN			Submitted:		
Title:	GROUNDWATER BORING AND SOIL VAPOR SAMPLING WORKPLAN					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8090696871/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	1/22/2015			Submitted By:		AARON COSTA (REGULATOR)
Type:	CORRESPONDENCE			Submitted:		
Title:	TEMPORARY DELAY IN RESPONSE ACTIVITIES					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5827365					
Document Type:	Site Documents			Size :		
Document Date:	10/2/2014			Submitted By:		AARON COSTA (REGULATOR)
Type:	STAFF LETTER			Submitted:		
Title:	WP EXTENSION APPROVAL					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6222988					
Document Type:	Site Documents			Size :		
Document Date:	9/16/2014			Submitted By:		RINA BANKS (REGULATOR)
Type:	STAFF LETTER			Submitted:		
Title:	UNKNOWN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6220829					
Document Type:	Site Documents			Size :		7,285 KB
Document Date:	9/5/2014			Submitted By:		JAMES BRAKE (AUTH_RP)
Type:	SITE INVESTIGATION			Submitted:		
Title:	ADDITIONAL SITE INVESTIGATION REPORT					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5842302441/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	8/13/2014			Submitted By:		CHRIS WIDMANN (REGULATOR)
Type:	STAFF LETTER			Submitted:		
Title:	OUT OF COMPLIANCE					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6216758					
Document Type:	Site Documents			Size :		
Document Date:	2/10/2014			Submitted By:		CHRIS WIDMANN (REGULATOR)
Type:	STAFF LETTER			Submitted:		
Title:	UNKNOWN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6191684					
Document Type:	Site Documents			Size :		1,485 KB
Document Date:	1/28/2014			Submitted By:		JAMES BRAKE (AUTH_RP)
Type:	OTHER WORKPLAN			Submitted:		
Title:	PATHWAY TO CLOSURE WORKPLAN					

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Title Link:		https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3636628627/T0608502353.PDF				
Document Type:	Site Documents			Size :		
Document Date:	11/21/2013			Submitted By:	CHRIS WIDMANN (REGULATOR)	
Type:	NOTICE OF VIOLATION			Submitted:		
Title:	UNKNOWN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6183204					
Document Type:	Site Documents			Size :		
Document Date:	12/12/2012			Submitted By:	CHRIS WIDMANN (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	REQUEST FOR SA GWM					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6144844					
Document Type:	Site Documents			Size :		
Document Date:	11/2/2012			Submitted By:	CHRIS WIDMANN (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	OUT OF COMPLIANCE LETTER					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6141652					
Document Type:	Site Documents			Size :		
Document Date:	4/30/2012			Submitted By:	CHRIS WIDMANN (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	REMINDER OF REQUIREMENT FOR QUARTERLY GROUNDWATER MONITORING DUE TO SIGNIFICATION FLUCTUATION IN GROUNDWATER ELEVATION.					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6120222					
Document Type:	Monitoring Reports			Size :	9,920 KB	
Document Date:	4/18/2012			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	REMOVAL ACTION AND FIRST QUARTER 2012 - GW MONITORING REPORT					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9936338305/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	1/24/2012			Submitted By:	CHRIS WIDMANN (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	GRANT REQUEST FOR EXTENSION					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6109484					
Document Type:	Site Documents			Size :		
Document Date:	6/20/2011			Submitted By:	(REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	APP REMEDIAL ACTION PLAN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6089793					
Document Type:	Site Documents			Size :	883 KB	
Document Date:	6/10/2011			Submitted By:	JAMES BRAKE (AUTH_RP)	
Type:	REMOVAL ACTION WORK PLAN			Submitted:		
Title:	REMOVAL ACTION WORKPLAN					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7990472376/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	2/10/2011			Submitted By:	(REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	RESPONSE TO REQUEST FOR EXTENSION REMEDIAL ACTION WORK PLAN					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6077345					
Document Type:	Site Documents			Size :		
Document Date:	10/7/2010			Submitted By:	(REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	REQUEST NOTIFICATION LETTER OF CONTRACT AWARD					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6065864					
Document Type:	Site Documents			Size :		
Document Date:	10/4/2010			Submitted By:	LANI LEE (REGULATOR)	
Type:	CORRESPONDENCE			Submitted:		
Title:	LETTER RESPONSE					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5696194					

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Document Type:	Site Documents			Size :		
Document Date:	9/10/2010			Submitted By:	(REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	OUT OF COMPLIANCE; OVERDUE WORK PLAN AND GWM REPORTS					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6063475					
Document Type:	Site Documents			Size :		
Document Date:	4/21/2010			Submitted By:	KRISTI CONG (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	REQUEST REMEDIAL ACTION WP; CONTINUE QUARTERLY GROUNDWATER MONITORING UNTIL GROUNDWATER RETURNS					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6048857					
Document Type:	Site Documents			Size :	2,273 KB	
Document Date:	4/19/2010			Submitted By:	LARRY KLEINECKE (AUTH_RP)	
Type:	SITE INVESTIGATION			Submitted:		
Title:	CDF MORGAN HILL 2010 ADDITIONAL INVESTIGATION					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/4200899422/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	11/30/2009			Submitted By:	KRISTI CONG (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	APP WP.					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6036700					
Document Type:	Site Documents			Size :	979 KB	
Document Date:	10/30/2009			Submitted By:	LARRY KLEINECKE (AUTH_RP)	
Type:	SITE INVESTIGATION WORKPLAN			Submitted:		
Title:	ADDITIONAL INVESTIGATION WORK PLAN					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1186662971/T0608502353.PDF					
Document Type:	Monitoring Reports			Size :	2,166 KB	
Document Date:	10/20/2009			Submitted By:	LARRY KLEINECKE (AUTH_RP)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	SEPTEMBER 2009 QMR MORGAN HILL					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1043016731/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	7/16/2009			Submitted By:	KRISTI CONG (REGULATOR)	
Type:	STAFF LETTER			Submitted:		
Title:	REQ WP FOR DEEPER INVESTIGATION - DRY WELLS					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6021411					
Document Type:	Site Documents			Size :		
Document Date:	4/6/2009			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	OTHER REPORT / DOCUMENT			Submitted:		
Title:	PHONE LOG 04/06/2009					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927940					
Document Type:	Site Documents			Size :		
Document Date:	2/24/2009			Submitted By:	KRISTI CONG (REGULATOR)	
Type:	WARNING LETTER			Submitted:		
Title:	LATE GWM REPORTS; EDF NONCOMPLIANCE					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6004073					
Document Type:	Monitoring Reports			Size :	255 KB	
Document Date:	1/25/2008			Submitted By:	MICHAEL DUGGAN (RP)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	CALFIRE SANTA CLARA UNIT HQ 4TH QTR QMR 2007					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/2414004266/T0608502353.PDF					
Document Type:	Monitoring Reports			Size :	238 KB	
Document Date:	11/27/2007			Submitted By:	MICHAEL DUGGAN (RP)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	3RD QMR 2007 CALFIRE SANTA CLARA UNIT HEADQUARTERS					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3252812027/T0608502353.PDF					
Document Type:	Monitoring Reports			Size :	2,047 KB	
Document Date:	8/9/2007			Submitted By:	MICHAEL DUGGAN (RP)	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Type:		MONITORING REPORT - QUARTERLY		Submitted:		
Title:		2ND QUARTER 2007 QMR				
Title Link:		https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7847549259/T0608502353.PDF				
Document Type:	Monitoring Reports			Size :	6,485 KB	
Document Date:	5/17/2007			Submitted By:	MICHAEL DUGGAN (RP)	
Type:	MONITORING REPORT - ANNUAL			Submitted:		
Title:	COMBINATION QMR REPORT 2005-2007					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1548048257/T0608502353.PDF					
Document Type:	Site Documents			Size :	2,917 KB	
Document Date:	12/15/2005*			Submitted By:	LARRY KLEINECKE (AUTH_RP)	
Type:	SOIL AND WATER INVESTIGATION REPORT			Submitted:		
Title:	REPORT OF SOIL AND GROUNDWATER INVESTIGATION					
Title Link:	https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7776569962/T0608502353.PDF					
Document Type:	Site Documents			Size :		
Document Date:	6/3/2005			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	OTHER REPORT / DOCUMENT			Submitted:		
Title:	STATE INFORMATION 06/03/2005					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927942					
Document Type:	Site Documents			Size :		
Document Date:	6/3/2005			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	OTHER REPORT			Submitted:		
Title:	MAP & METROSCAN INFORMATION 06/03/2005					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&enforcement_id=6324523					
Document Type:	Monitoring Reports			Size :	132 KB	
Document Date:	5/27/2004			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2004%2D05%2D27%2Epdf					
Document Type:	Monitoring Reports			Size :	1,176 KB	
Document Date:	5/27/2004			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2007%2D08%2D02%2Epdf					
Document Type:	Monitoring Reports			Size :	1,167 KB	
Document Date:	5/27/2004			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2009%2D10%2D20%2Epdf					
Document Type:	Monitoring Reports			Size :	334 KB	
Document Date:	5/27/2004			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2008%2D01%2D25%2Epdf					
Document Type:	Monitoring Reports			Size :	22,664 KB	
Document Date:	5/27/2004			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2012%2D04%2D18%2Epdf					
Document Type:	Monitoring Reports			Size :	487 KB	
Document Date:	5/27/2004			Submitted By:	MICHAEL SCHUSTER (REGULATOR)	
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2004%2D05%2D27%2Epdf					

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
						2D10%2D21%2Epdf
Document Type:	Monitoring Reports			Size :		1,176 KB
Document Date:	5/27/2004			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR1%5F2007%2D08%2D02%2Epdf					
Document Type:	Monitoring Reports			Size :		202 KB
Document Date:	5/27/2004			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2007%2D11%2D14%2Epdf					
Document Type:	Monitoring Reports			Size :		5,970 KB
Document Date:	5/27/2004			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	MONITORING REPORT - QUARTERLY			Submitted:		
Title:	GW MONITORING REPORT 05/27/2004 - 04/18/2012 -					
Title Link:	https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6287810385/GWM%5FR%5F2007%2D05%2D10%2Epdf					
Document Type:	Site Documents			Size :		
Document Date:	9/4/2003			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	SOIL AND WATER INVESTIGATION REPORT			Submitted:		
Title:	SOIL & WATER INVESTIGATION REPORT 09/04/2003 - 04/13/2010					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927943					
Document Type:	Site Documents			Size :		
Document Date:	2/20/2003			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	WELL INSTALLATION REPORT			Submitted:		
Title:	WELL CONSTRUCTION APPLICATION 02/20/2003					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927946					
Document Type:	Site Documents			Size :		
Document Date:	11/27/2002			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	REQUEST FOR CLOSURE			Submitted:		
Title:	REQUEST FOR CLOSURE 11/27/2002					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927941					
Document Type:	Site Documents			Size :		
Document Date:	6/18/2002			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	OTHER WORKPLAN			Submitted:		
Title:	WORK PLAN 06/18/2002 - 01/28/2014					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927947					
Document Type:	Site Documents			Size :		
Document Date:	1/1/1999			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	CORRESPONDENCE			Submitted:		
Title:	CORRESPONDENCE 1999 - 2010					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927937					
Document Type:	Site Documents			Size :		
Document Date:	5/18/1998			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	UNAUTHORIZED RELEASE FORM			Submitted:		
Title:	UNAUTHORIZED RELEASE FORM 05/18/1998					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927945					
Document Type:	Site Documents			Size :		
Document Date:	3/17/1998			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	OTHER REPORT / DOCUMENT			Submitted:		
Title:	MISCELLANEOUS SAMPLE RESULTS 03/17/1998 - 07/15/1999					
Title Link:	https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927939					
Document Type:	Site Documents			Size :		
Document Date:	3/13/1998			Submitted By:		MICHAEL SCHUSTER (REGULATOR)
Type:	TANK REMOVAL REPORT / UST SAMPLING			Submitted:		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
REPORT						
Title:		TANK REMOVAL REPORT 03/13/1998 - 03/24/1998				
Title Link:		https://geotracker.waterboards.ca.gov/view_documents?global_id=T0608502353&document_id=5927944				
9	1 of 2	ESE	0.24 / 1,288.41	320.38 / 0	OAKWOOD COUNTRY SCHOOL 105 JOHN WILSON WY MORGAN HILL CA 95037	DELISTED HAZ
Siteid:		382178				
Latitude:		37.104080				
Longitude:		-121.634660				
Original Source:		CHAZ				
Record Date:		30-MAY-2017				
9	2 of 2	ESE	0.24 / 1,288.41	320.38 / 0	OAKWOOD COUNTRY SCHOOL 105 JOHN WILSON WY MORGAN HILL CA 95037	SANTA CLARA CUPA
Facility ID:		FA0254633				
GIS Latitude:		37.104656				
GIS Longitude:		-121.631438				
PE:		2202				
Description:		GENERATES < 100 KG/YR				
Record ID:		PR0381686				
10	1 of 1	SW	0.24 / 1,273.89	330.34 / 10	HOCK & COMPANY 15305 WATSONVILLE RD MORGAN HILL CA 95037-5928	RCRA NON GEN
EPA Handler ID:		CAC003040855				
Gen Status Universe:		No Report				
Contact Name:		CARLY SPAIN				
Contact Address:		15305 WATSONVILLE RD , , MORGAN HILL , CA, 95037-5928 ,				
Contact Phone No and Ext:		408-779-4422				
Contact Email:		NICOLE@ENV-REM.COM				
Contact Country:						
County Name:		SANTA CLARA				
EPA Region:		09				
Land Type:						
Receive Date:		20191029				
<u>Violation/Evaluation Summary</u>						
Note:		NO RECORDS: As of November 2019, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).				
<u>Handler Summary</u>						
Importer Activity:		No				
Mixed Waste Generator:		No				
Transporter Activity:		No				
Transfer Facility:		No				
Onsite Burner Exemption:		No				
Furnace Exemption:		No				
Underground Injection Activity:		No				
Commercial TSD:		No				
Used Oil Transporter:		No				
Used Oil Transfer Facility:		No				
Used Oil Processor:		No				
Used Oil Refiner:		No				
Used Oil Burner:		No				
Used Oil Market Burner:		No				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
 Receive Date: 20191029
 Handler Name: HOCK & COMPANY
 Generator Status Universe: No Report
 Source Type: Implementer

Owner/Operator Details

Owner/Operator Ind:	Current Operator	Street No:	
Type:	Other	Street 1:	15305 WATSONVILLE RD
Name:	CARLY SPAIN	Street 2:	
Date Became Current:		City:	MORGAN HILL
Date Ended Current:		State:	CA
Phone:	408-779-4422	Country:	
Source Type:	Implementer	Zip Code:	95037-5928

Owner/Operator Ind:	Current Owner	Street No:	
Type:	Other	Street 1:	15305 WATSONVILLE RD
Name:	HOCK & COMPANY	Street 2:	
Date Became Current:		City:	MORGAN HILL
Date Ended Current:		State:	CA
Phone:	408-779-4422	Country:	
Source Type:	Implementer	Zip Code:	95037-5928

<u>11</u>	1 of 1	NNE	0.32 / 1,684.16	323.45 / 3	MISSION BELL MANUFACTURING, INC. 15740 CONCORD CL. MORGAN HILL CA 95139	RCRA TSD
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EPA Handler ID: CAL000191441
 Gen Status Universe: Small Quantity Generator
 Contact Name: MIKE W FISHER
 Contact Address: US
 Contact Phone No and Ext: 408-465-8341
 Contact Email: MIKEF@MISSIONBELL.COM
 Contact Country: US
 Land Type: Private
 County Name: SANTA CLARA
 EPA Region: 09
 Receive Date: 20060228

Violation/Evaluation Summary

Note: NO RECORDS: As of November 2019, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
 Mixed Waste Generator: No
 Transporter Activity: No
 Transfer Facility: No
 Onsite Burner Exemption: No
 Smelting, Melting and Refining: No
 Underground Injection Control: No
 Commercial TSD: No
 Used Oil Transporter: No
 Used Oil Transfer Facility: No
 Used Oil Processor: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Used Oil Refiner:		No				
Used Oil Burner:		No				
Used Oil Market Burner:		No				
Used Oil Spec Marketer:		No				
<u>Hazardous Waste Handler Details</u>						
Sequence No:		1				
Receive Date:		20060228				
Handler Name:		MISSION BELL MANUFACTURING, INC.				
Generator Status Universe:		Small Quantity Generator				
Source Type:		Annual/Biennial Report update with Notification				
<u>Waste Code Details</u>						
Hazardous Waste Code:		212				
Waste Code Description:		Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)				
Hazardous Waste Code:		343				
Waste Code Description:		Unspecified organic liquid mixture				
Hazardous Waste Code:		D001				
Waste Code Description:		IGNITABLE WASTE				
Hazardous Waste Code:		F003				
Waste Code Description:		THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.				
Hazardous Waste Code:		F005				
Waste Code Description:		THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.				
<u>Owner/Operator Details</u>						
Owner/Operator Ind:		Current Owner			Street No:	
Type:		Private			Street 1: 15130 CONCORD CL.	
Name:		MIKE SINYARD			Street 2:	
Date Became Current:		19810101			City: MORGAN HILL	
Date Ended Current:					State: CA	
Phone:					Country: US	
Source Type:		Annual/Biennial Report update with Notification			Zip Code: 95037	
Owner/Operator Ind:		Current Operator			Street No:	
Type:		Private			Street 1:	
Name:		MISSION BELL MANUFACTURING			Street 2:	
Date Became Current:		20000101			City:	
Date Ended Current:					State:	
Phone:					Country: US	
Source Type:		Annual/Biennial Report update with Notification			Zip Code:	
12	1 of 2	NNW	0.41 / 2,145.28	327.42 / 7	A FRENCH CLEANER 602 TENNANT STATION WAY MORGAN HILL CA 95037	VCP
Estor/EPA ID:		60000130			Permit Renewal Lead:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Site Code:	201604	Project Manager:	HENRY CHUI
Nat Priority List:	NO	Supervisor:	MARK PIROS
Acres:	0.05 ACRES	Public Partici Spclst:	
Special Program:	VOLUNTARY CLEANUP PROGRAM	Census Tract:	6085512307
Funding:	SITE PROPONENT	County:	SANTA CLARA
Assembly District:	30	Latitude:	37.112812
Senate District:	17	Longitude:	-121.638503

School District:

APN: 817-06-055, 81706057

Cleanup Status: CERTIFIED AS OF 11/28/2016

Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY

Site Type: VOLUNTARY CLEANUP

Office: CLEANUP BERKELEY

Past Use that Caused Contam: DRY CLEANING

Potential Media Affected: SOIL, SOIL VAPOR

Potential Contamin of Concern:

TETRACHLOROETHYLENE (PCE)

Site History:

The site is located in a retail strip mall on Tennant Station Way between Vineyard Boulevard and Church Street. The Site is 2,000 square feet and is a part of a multi-tenant single story building. Several dry cleaning businesses operated at the site including, Holiday Cleaners from 1986 to 1990, Sa Donna's Holiday Cleaners from 1990 to 1999, and A French Cleaners from 1999 to 2004. A soil vapor extraction system had operated from September 2012 to March 2015. Post remediation sub-slab and soil vapor samples reported in the January 2016 report verified that the cleanup goals have been achieved. The site is currently being used as a bowling center, arcade, and offices.

Status: CERTIFIED

Program Type: VOLUNTARY CLEANUP

CalEnviroScreen Score: 26-30%

Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60000130

Completed Activities

Title: A-French Cleaners NOE Documents

Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60252542

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: CEQA - Notice of Exemption

Date Completed: 11/5/2010

Comments:

Title: A French Cleaners SVE Pilot Test Work Notice

Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60310433

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: Work Notice

Date Completed: 7/27/2012

Comments: DTSC distributed this notice to inform the community about the upcoming pilot test of a soil vapor extraction system to determine if soil vapor extraction is an effective cleanup method for the Site.

Title: Community Profile

Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6019605

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: Community Profile

Date Completed: 11/24/2008

Comments: The Community Profile summarized responses to a public survey that DTSC conducted to gauge community interest in the project.

Title: Soil Gas Sampling (Assessment Rpt. Addendum #2)

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fieldwork				
Date Completed:		10/31/2007				
Comments:		Field work was completed.				
Title:		Report for Soil Gas Sampling (Assessment Rpt. Addendum #2)				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6017185				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Report				
Date Completed:		2/7/2008				
Comments:						
Title:		VCA Amendment				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6009989				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Amendment - Order/Agreement				
Date Completed:		11/21/2006				
Comments:						
Title:		2013 1st Qtr SVE Status Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60325218				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Monitoring Report				
Date Completed:		12/13/2013				
Comments:						
Title:		Indoor Air Sampling (Assessment Rpt. Addendum #1)				
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fieldwork				
Date Completed:		5/16/2007				
Comments:		Field work completed.				
Title:		Amendment to Voluntary Cleanup Agreement				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6012168				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Amendment - Order/Agreement				
Date Completed:		5/12/2008				
Comments:						
Title:		Sub-Slab Ventilation System Pilot Study Workplan				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60272758				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Pilot Study/Treatability Workplan				
Date Completed:		12/14/2011				
Comments:		Sub-Slab Ventilation System Pilot Test Work Plan approved for implementation. The results of the pilot test will help determine if the ventilation system be either continued or extended to facilitate sub-surface soil gas				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					remediation at the Site.	
					Title: Preliminary Endangerment Assessment Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6008568 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Preliminary Endangerment Assessment Report Date Completed: 8/10/2006 Comments: PEA approved which recommends additional soil gas and groundwater sampling.	
					Title: Well Decommissioning Report Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60416912 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Well Decommissioning Report Date Completed: 11/22/2016 Comments: The report documents the decommissioning of the four soil vapor monitoring wells and five soil vapor extraction system wells that were on the site, which was performed in accordance with the DTSC-approved work plan.	
					Title: 2013 3rd Quarter SVE System Status Report Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60338823 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Monitoring Report Date Completed: 12/13/2013 Comments:	
					Title: Voluntary Cleanup Agreement Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6008134 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Voluntary Cleanup Agreement Date Completed: 1/26/2006 Comments:	
					Title: Sub Slab Ventilation System Install and Startup Report Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60310749 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Pilot/Treatability Study Report Date Completed: 1/24/2013 Comments: Pilot study indicates that soil vapor extraction is an appropriate remediation technology for the Site. DTSC will modify the selected Site remedy to soil vapor extraction.	
					Title: Report for Soil Gas and Soil Sampling (Assessment Rpt. Addendum #3) Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6018175 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Site Characterization Report Date Completed: 3/17/2008 Comments:	
					Title: French Cleaners Sub-Slab and Soil Vapor Report Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60397837 Area Name: Area Link: Sub Area:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Sub Area Link:						
Document Type:		Technical Report				
Date Completed:		8/8/2016				
Comments:		The Report details the results of the sub-slab and soil gas confirmation sampling that was performed to confirm that the PCE soil vapor concentrations at the Site are below the removal goals established in the Final Removal Action Workplan. PCE was not detected in the confirmation sub-slab and soil gas samples. Additionally, a significant reduction in the PCE concentrations in soil vapor extraction system influent has been observed since startup, and the mass removal by the system has become negligible. DTSC has determined that no further action is required at the Site. A certification will be issued once confirmation is received that the soil vapor extraction and monitoring wells have been properly decommissioned.				
Title:		A French Cleaner Removal Action Workplan				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6018941				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Removal Action Workplan				
Date Completed:		11/9/2010				
Comments:						
Title:		A French Cleaners 2015 1st Quarter SVE Status Report_April 2015				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60380700				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Technical Report				
Date Completed:		10/23/2015				
Comments:		DTSC had provided comments on the 1st Quarter SVE Status Report and expressed a number of concerns regarding sampling methods and continued leak detections in the sample results. DTSC comments and concerns will be addressed in the revised Sampling Workplan and in future Quarterly SVE Reports.				
Title:		Well Decommissioning Workplan				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60413178				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Well Decommissioning Workplan				
Date Completed:		10/17/2016				
Comments:		The Work Plan describes the procedures to properly abandon the monitoring and soil vapor extraction wells and to remove the soil vapor extraction system.				
Title:		2014/2015 DTSC Oversight Cost Estimate				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60380681				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Annual Oversight Cost Estimate				
Date Completed:		9/24/2014				
Comments:		A French Cleaner REW and schedule for FY14/15. Scheduled activities included are SVE quarterly reports and Closure Workplan.				
Title:		2015 Annual Oversight Cost Estimate				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60396926				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Annual Oversight Cost Estimate				
Date Completed:		9/22/2015				
Comments:						
Title:		A French Cleaners 2014 2nd Quarter SVE Status Report_July 2014				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60367653				
Area Name:						
Area Link:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Sub Area:						
Sub Area Link:						
Document Type:		Technical Report				
Date Completed:		8/1/2014				
Comments:						
Title:		A French Cleaners Annual DTSC Oversight Cost Estimate				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60285118				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Annual Oversight Cost Estimate				
Date Completed:		11/22/2011				
Comments:		Annual Oversight Cost Estimate completed.				
Title:		2013 4th and 2014 1st Quarter SVE System Status Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60338825				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Operations and Maintenance Report				
Date Completed:		6/19/2014				
Comments:		The Report summarizes the operation of the soil vapor extraction (SVE) system from October 1, 2013 to March 31, 2014. Rebound testing was conducted between January 28 and March 20, 2014 and verification sample results showed that the SVE inlet PCE concentrations exceeded the SVE system restart parameter of 200 micrograms per cubic meter. The SVE system was restarted on March 21, 2014.				
Title:		A French Cleaners Site SVE Pilot Test Implementation Request				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60275000				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		*Correspondence - Received				
Date Completed:		8/26/2011				
Comments:						
Title:		2013 2nd Quarter SVE Status Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60338806				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Monitoring Report				
Date Completed:		12/13/2013				
Comments:						
Title:		French Cleaners SVE 2nd Quarter 2015 Status Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60395746				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Technical Report				
Date Completed:		10/22/2015				
Comments:		The Second Quarter, 2015 - SVE System Status Report summarizes remedial activities conducted at the site from April 1 to June 30, 2015. DTSC provided comments on the Report and conveyed concerns regarding the sampling methods and continued leak detections in the sample results. DTSC comments and concerns are to be addressed in the revised Sampling Workplan and in future quarterly SVE reports.				
Title:		VCA Amendment for PDF File				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6010563				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Amendment - Order/Agreement				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Date Completed:		3/28/2007				
Comments:		Amendment requires PDF submission of documents in addition to paper copy.				
Title:		A French Cleaners SVE Confirmation Sampling and Closure Work Plan				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60367651				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Design/Implementation Workplan				
Date Completed:		9/2/2015				
Comments:						
Title:		2013/14 DTSC Oversight Cost Estimate				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60336762				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Annual Oversight Cost Estimate				
Date Completed:		10/3/2013				
Comments:		The estimated annual oversight cost for the 2013/14 fiscal year is \$27,986.				
Title:		A French Cleaners RAW Public Notice				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60254326				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Public Notice				
Date Completed:		10/17/2010				
Comments:		Public Notice announcing Draft RAW public comment period completed. Public Notice ran in the Morgan Hill Dispatch on October 20, 2010.				
Title:		Workplan (Addendum)				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6017845				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Workplan				
Date Completed:		1/15/2008				
Comments:		The approval letter references a workplan dated 1-11-08 however the approval letter should have referred to a later version dated 1-14-08 (a correction to the letter was made and initialed. The confusion occurred because the consultant provided two drafts dated 1-11-08 and later corrected the date on the latter version to 1-14-08.				
Title:		Soil Vapor Extraction System Operation Workplan				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60272759				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Design/Implementation Workplan				
Date Completed:		12/11/2013				
Comments:						
Title:		Groundwater and Indoor Air Assessment Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6013289				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Report				
Date Completed:		3/9/2007				
Comments:		PCE concentration in indoor air is above acceptable limit for commercial use.				
Title:		Investigation Fieldwork				
Title Link:						
Area Name:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fieldwork				
Date Completed:		11/14/2006				
Comments:		Fieldwork has been completed. A report will be submitted in the 2nd week of December.				
Title:		Report for Indoor Air Testing (Assessment Rpt. Addendum #1)				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6017843				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Report				
Date Completed:		2/7/2008				
Comments:						
Title:		A French Cleaners ESD Fact Sheet				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60272888				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fact Sheets				
Date Completed:		10/21/2013				
Comments:		Remedy changed from soil excavation with soil vapor extraction as a contingency remedy to soil vapor extraction as the selected remedy.				
Title:		Site Certification				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6012305				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Certification				
Date Completed:		11/28/2016				
Comments:		DTSC certified the completion of the removal actions at the site. A soil vapor extraction system was constructed and operated until the tetrachloroethene concentrations in soil vapor were reduced to non-detectable levels in the vapor monitoring wells.				
Title:		Workplan - Environmental Investigation				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6013287				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Workplan				
Date Completed:		11/17/2006				
Comments:		Workplan approved requiring groundwater and indoor air asesments.				
Title:		Soil Vapor Extration rebound Testing Request				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60351475				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Technical Workplan				
Date Completed:		2/12/2014				
Comments:						
Title:		Soil and Soil Gas Sampling (Assessment Rpt. Addendum #3)				
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fieldwork				
Date Completed:		1/18/2008				
Comments:		Field work was completed.				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Title: A French Cleaners RAW ESD
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6018976
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Removal Action Workplan w/ESD
Date Completed: 10/2/2013
Comments: A French Cleaner has requested to modify the selected remedy for the A French Cleaner Site (Site) located at 650 Tennant Station, Morgan Hill, California. The modified remedy will not require the excavation of impacted soil from beneath the suite where the former dry cleaner operated as originally proposed in the RAW. Soil vapor extraction will be implemented at the Site as the primary cleanup action, rather than as a contingency cleanup action as outlined in the RAW. DTSC has determined that this is a significant, but not fundamental, change to the remedy as described in the RAW and has prepared and approved this Explanation of Significant Differences.

Title: Annual Oversight Cost Estimate
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60413275
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Annual Oversight Cost Estimate
Date Completed: 9/22/2016
Comments: The DTSC oversight cost estimate for all the project activities for fiscal year 2016/2017. The project activities include review of the Sub-slab and Soil Vapor Sampling Report, Well Decommissioning Workplan and Report, and preparation of the Site Certification.

Title: A French Cleaners RAW Fact Sheet
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6028407
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Fact Sheets
Date Completed: 9/15/2010
Comments: Draft RAW public comment period schedule the run from October 20, 2010 thru November 20, 2010.

Title: Annual Oversight Cost Estimate
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60310435
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Annual Oversight Cost Estimate
Date Completed: 10/9/2012
Comments: Annual DTSC oversight cost estimate for fiscal year 2012/2013 is \$23,484.

Title: CEQA (NOE)
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60309471
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: CEQA - Notice of Exemption
Date Completed: 9/30/2013
Comments: DTSC determined that the post-RAW remedy changes, from soil excavation with a soil vapor extraction contingency remedy to soil vapor extraction with no soil excavation is exempt from CEQA review.

12	2 of 2	NNW	0.41 / 2,145.28	327.42 / 7	A FRENCH CLEANER 602 TENNANT STATION WAY MORGAN HILL CA 95037	ENVIROSTOR
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Estor/EPA ID:	60000130	Permit Renewal Lead:	
Site Code:	201604	Project Manager:	HENRY CHUI
Nat Priority List:	NO	Supervisor:	MARK PIROS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Acres: 0.05 ACRES
Special Program: VOLUNTARY CLEANUP PROGRAM
Funding: SITE PROPONENT
Assembly District: 30
Senate District: 17
School District:
APN: 817-06-055, 81706057
Cleanup Status: CERTIFIED AS OF 11/28/2016
Cleanup Oversight Agencies: DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY
Site Type: VOLUNTARY CLEANUP
Office: CLEANUP BERKELEY
Past Use that Caused Contam: DRY CLEANING
Potential Media Affected: SOIL, SOIL VAPOR
Potential Contaminant of Concern:

TETRACHLOROETHYLENE (PCE)

Site History:

The site is located in a retail strip mall on Tennant Station Way between Vineyard Boulevard and Church Street. The Site is 2,000 square feet and is a part of a multi-tenant single story building. Several dry cleaning businesses operated at the site including, Holiday Cleaners from 1986 to 1990, Sa Donna's Holiday Cleaners from 1990 to 1999, and A French Cleaners from 1999 to 2004. A soil vapor extraction system had operated from September 2012 to March 2015. Post remediation sub-slab and soil vapor samples reported in the January 2016 report verified that the cleanup goals have been achieved. The site is currently being used as a bowling center, arcade, and offices.

Status: CERTIFIED
Program Type: VOLUNTARY CLEANUP
CalEnviroScreen Score: 26-30%
Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60000130

Completed Activities

Title: Annual Oversight Cost Estimate
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60413275
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Annual Oversight Cost Estimate
Date Completed: 9/22/2016
Comments: The DTSC oversight cost estimate for all the project activities for fiscal year 2016/2017. The project activities include review of the Sub-slab and Soil Vapor Sampling Report, Well Decommissioning Workplan and Report, and preparation of the Site Certification.

Title: A French Cleaners 2015 1st Quarter SVE Status Report_April 2015
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60380700
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Technical Report
Date Completed: 10/23/2015
Comments: DTSC had provided comments on the 1st Quarter SVE Status Report and expressed a number of concerns regarding sampling methods and continued leak detections in the sample results. DTSC comments and concerns will be addressed in the revised Sampling Workplan and in future Quarterly SVE Reports.

Title: 2013 2nd Quarter SVE Status Report
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60338806
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Monitoring Report
Date Completed: 12/13/2013
Comments:

Title: 2013 1st Qtr SVE Status Report
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60325218

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
<p>Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Monitoring Report Date Completed: 12/13/2013 Comments:</p>						
<p>Title: A French Cleaners ESD Fact Sheet Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60272888 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Fact Sheets Date Completed: 10/21/2013 Comments: Remedy changed from soil excavation with soil vapor extraction as a contingency remedy to soil vapor extraction as the selected remedy.</p>						
<p>Title: Voluntary Cleanup Agreement Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6008134 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Voluntary Cleanup Agreement Date Completed: 1/26/2006 Comments:</p>						
<p>Title: Sub Slab Ventilation System Install and Startup Report Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60310749 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Pilot/Treatability Study Report Date Completed: 1/24/2013 Comments: Pilot study indicates that soil vapor extraction is an appropriate remediation technology for the Site. DTSC will modify the selected Site remedy to soil vapor extraction.</p>						
<p>Title: Sub-Slab Ventilation System Pilot Study Workplan Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60272758 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Pilot Study/Treatability Workplan Date Completed: 12/14/2011 Comments: Sub-Slab Ventilation System Pilot Test Work Plan approved for implementation. The results of the pilot test will help determine if the ventilation system be either continued or extended to facilitate sub-surface soil gas remediation at the Site.</p>						
<p>Title: A French Cleaners RAW Fact Sheet Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6028407 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Fact Sheets Date Completed: 9/15/2010 Comments: Draft RAW public comment period schedule the run from October 20, 2010 thru November 20, 2010.</p>						
<p>Title: Report for Soil Gas and Soil Sampling (Assessment Rpt. Addendum #3) Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6018175 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Site Characterization Report</p>						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Date Completed:		3/17/2008				
Comments:						
Title:		Soil and Soil Gas Sampling (Assessment Rpt. Addendum #3)				
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fieldwork				
Date Completed:		1/18/2008				
Comments:		Field work was completed.				
Title:		Groundwater and Indoor Air Assessment Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6013289				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Report				
Date Completed:		3/9/2007				
Comments:		PCE concentration in indoor air is above acceptable limit for commercial use.				
Title:		Workplan - Environmental Investigation				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6013287				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Workplan				
Date Completed:		11/17/2006				
Comments:		Workplan approved requiring groundwater and indoor air asesments.				
Title:		Preliminary Endangerment Assessment				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6008568				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Preliminary Endangerment Assessment Report				
Date Completed:		8/10/2006				
Comments:		PEA approved which recommends additional soil gas and groundwater sampling.				
Title:		2013/14 DTSC Oversight Cost Estimate				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60336762				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Annual Oversight Cost Estimate				
Date Completed:		10/3/2013				
Comments:		The estimated annual oversight cost for the 2013/14 fiscal year is \$27,986.				
Title:		A French Cleaners SVE Pilot Test Work Notice				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60310433				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Work Notice				
Date Completed:		7/27/2012				
Comments:		DTSC distributed this notice to inform the community about the upcoming pilot test of a soil vapor extraction system to determine if soil vapor extraction is an effective cleanup method for the Site.				
Title:		A French Cleaners Site SVE Pilot Test Implementation Request				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60275000				
Area Name:						
Area Link:						
Sub Area:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Sub Area Link:						
Document Type:					*Correspondence - Received	
Date Completed:					8/26/2011	
Comments:						
Title:					Workplan (Addendum)	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6017845	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Site Characterization Workplan	
Date Completed:					1/15/2008	
Comments:					The approval letter references a workplan dated 1-11-08 however the approval letter should have referred to a later version dated 1-14-08 (a correction to the letter was made and initialed. The confusion occurred because the consultant provided two drafts dated 1-11-08 and later corrected the date on the latter version to 1-14-08.	
Title:					Indoor Air Sampling (Assessment Rpt. Addendum #1)	
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Fieldwork	
Date Completed:					5/16/2007	
Comments:					Field work completed.	
Title:					Well Decommissioning Report	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60416912	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Well Decommissioning Report	
Date Completed:					11/22/2016	
Comments:					The report documents the decommissioning of the four soil vapor monitoring wells and five soil vapor extraction system wells that were on the site, which was performed in accordance with the DTSC-approved work plan.	
Title:					French Cleaners Sub-Slab and Soil Vapor Report	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60397837	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Technical Report	
Date Completed:					8/8/2016	
Comments:					The Report details the results of the sub-slab and soil gas confirmation sampling that was performed to confirm that the PCE soil vapor concentrations at the Site are below the removal goals established in the Final Removal Action Workplan. PCE was not detected in the confirmation sub-slab and soil gas samples. Additionally, a significant reduction in the PCE concentrations in soil vapor extraction system influent has been observed since startup, and the mass removal by the system has become negligible. DTSC has determined that no further action is required at the Site. A certification will be issued once confirmation is received that the soil vapor extraction and monitoring wells have been properly decommissioned.	
Title:					French Cleaners SVE 2nd Quarter 2015 Status Report	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60395746	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Technical Report	
Date Completed:					10/22/2015	
Comments:					The Second Quarter, 2015 - SVE System Status Report summarizes remedial activities conducted at the site from April 1 to June 30, 2015. DTSC provided comments on the Report and conveyed concerns regarding the sampling methods and continued leak detections in the sample results. DTSC comments and concerns are to be addressed in the revised Sampling Workplan and in future quarterly SVE reports.	
Title:					A French Cleaners RAW ESD	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6018976	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:			Removal Action Workplan w/ESD			
Date Completed:			10/2/2013			
Comments:			A French Cleaner has requested to modify the selected remedy for the A French Cleaner Site (Site) located at 650 Tennant Station, Morgan Hill, California. The modified remedy will not require the excavation of impacted soil from beneath the suite where the former dry cleaner operated as originally proposed in the RAW. Soil vapor extraction will be implemented at the Site as the primary cleanup action, rather than as a contingency clean-up action as outlined in the RAW. DTSC has determined that this is a significant, but not fundamental, change to the remedy as described in the RAW and has prepared and approved this Explanation of Significant Differences.			
Title:			Soil Gas Sampling (Assessment Rpt. Addendum #2)			
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:			Fieldwork			
Date Completed:			10/31/2007			
Comments:			Field work was completed.			
Title:			2013 4th and 2014 1st Quarter SVE System Status Report			
Title Link:			http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60338825			
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:			Operations and Maintenance Report			
Date Completed:			6/19/2014			
Comments:			The Report summarizes the operation of the soil vapor extraction (SVE) system from October 1, 2013 to March 31, 2014. Rebound testing was conducted between January 28 and March 20, 2014 and verification sample results showed that the SVE inlet PCE concentrations exceeded the SVE system restart parameter of 200 micrograms per cubic meter. The SVE system was restarted on March 21, 2014.			
Title:			2013 3rd Quarter SVE System Status Report			
Title Link:			http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60338823			
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:			Monitoring Report			
Date Completed:			12/13/2013			
Comments:						
Title:			VCA Amendment for PDF File			
Title Link:			http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6010563			
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:			Amendment - Order/Agreement			
Date Completed:			3/28/2007			
Comments:			Amendment requires PDF submission of documents in addition to paper copy.			
Title:			Investigation Fieldwork			
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:			Fieldwork			
Date Completed:			11/14/2006			
Comments:			Fieldwork has been completed. A report will be submitted in the 2nd week of December.			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Title:					Well Decommissioning Workplan	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60413178	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Well Decommissioning Workplan	
Date Completed:					10/17/2016	
Comments:					The Work Plan describes the procedures to properly abandon the monitoring and soil vapor extraction wells and to remove the soil vapor extraction system.	
Title:					2015 Annual Oversight Cost Estimate	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60396926	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Annual Oversight Cost Estimate	
Date Completed:					9/22/2015	
Comments:						
Title:					2014/2015 DTSC Oversight Cost Estimate	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60380681	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Annual Oversight Cost Estimate	
Date Completed:					9/24/2014	
Comments:					A French Cleaner REW and schedule for FY14/15. Scheduled activities included are SVE quarterly reports and Closure Workplan.	
Title:					Soil Vapor Extraction System Operation Workplan	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60272759	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Design/Implementation Workplan	
Date Completed:					12/11/2013	
Comments:						
Title:					CEQA (NOE)	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60309471	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					CEQA - Notice of Exemption	
Date Completed:					9/30/2013	
Comments:					DTSC determined that the post-RAW remedy changes, from soil excavation with a soil vapor extraction contingency remedy to soil vapor extraction with no soil excavation is exempt from CEQA review.	
Title:					A French Cleaner Removal Action Workplan	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6018941	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:					Removal Action Workplan	
Date Completed:					11/9/2010	
Comments:						
Title:					A-French Cleaners NOE Documents	
Title Link:					http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60252542	
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Document Type:		CEQA - Notice of Exemption				
Date Completed:		11/5/2010				
Comments:						
Title:		Soil Vapor Extration rebound Testing Request				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60351475				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Technical Workplan				
Date Completed:		2/12/2014				
Comments:						
Title:		Annual Oversight Cost Estimate				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60310435				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Annual Oversight Cost Estimate				
Date Completed:		10/9/2012				
Comments:		Annual DTSC oversight cost estimate for fiscal year 2012/2013 is \$23,484.				
Title:		Community Profile				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6019605				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Community Profile				
Date Completed:		11/24/2008				
Comments:		The Community Profile summarized responses to a public survey that DTSC conducted to gauge community interest in the project.				
Title:		Report for Soil Gas Sampling (Assessment Rpt. Addendum #2)				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6017185				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Site Characterization Report				
Date Completed:		2/7/2008				
Comments:						
Title:		VCA Amendment				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6009989				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Amendment - Order/Agreement				
Date Completed:		11/21/2006				
Comments:						
Title:		Site Certification				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6012305				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Certification				
Date Completed:		11/28/2016				
Comments:		DTSC certified the completion of the removal actions at the site. A soil vapor extraction system was constructed and operated until the tetrachloroethene concentrations in soil vapor were reduced to non-detectable levels in the vapor monitoring wells.				
Title:		A French Cleaners SVE Confirmation Sampling and Closure Work Plan				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60367651				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
<p>Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Design/Implementation Workplan Date Completed: 9/2/2015 Comments:</p> <p>Title: A French Cleaners 2014 2nd Quarter SVE Status Report_July 2014 Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60367653 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Technical Report Date Completed: 8/1/2014 Comments:</p> <p>Title: A French Cleaners Annual DTSC Oversight Cost Estimate Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=60285118 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Annual Oversight Cost Estimate Date Completed: 11/22/2011 Comments: Annual Oversight Cost Estimate completed.</p> <p>Title: A French Cleaners RAW Public Notice Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=60254326 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Public Notice Date Completed: 10/17/2010 Comments: Public Notice announcing Draft RAW public comment period completed. Public Notice ran in the Morgan Hill Dispatch on October 20, 2010.</p> <p>Title: Amendment to Voluntary Cleanup Agreement Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&enforcement_id=6012168 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Amendment - Order/Agreement Date Completed: 5/12/2008 Comments:</p> <p>Title: Report for Indoor Air Testing (Assessment Rpt. Addendum #1) Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60000130&doc_id=6017843 Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Site Characterization Report Date Completed: 2/7/2008 Comments:</p>						
13	1 of 1	NNE	0.47 / 2,470.61	326.38 / 6	U-SAVE ROCKERY 15760 RAILROAD AVE MORGAN HILL CA 95037	LUST
Global ID:	T0608502174		County:		SANTA CLARA	
Status:	COMPLETED - CASE CLOSED		Latitude:		37.113902	
Status Date:	1987-08-13 00:00:00		Longitude:		-121.632577	
Case Type:	LUST CLEANUP SITE					
Date Source:	LUST Cleanup Sites from GeoTracker Search; LUST Cleanup Sites from GeoTracker Cleanup Sites Data					

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Download

LUST Cleanup Sites from GeoTracker Cleanup Sites Data Download - Facilities Detail

RB Case No:	463	Potential COC:	Gasoline
Local Case No:		How Discovered:	Tank Closure
Begin Date:	1987-02-20 00:00:00	Stop Method:	
Lead Agency:	CENTRAL COAST RWQCB (REGION 3)	Stop Description:	
Local Agency:	SANTA CLARA COUNTY LOP	Case Worker:	RB
CUF Case:	NO	File Location:	
Potential Media of Concern:	Soil		
How Discovered Description:			
Calwater Watershed Name:	Pajaro River - South Santa Clara Valley (305.30)		
DWR GW Subbasin Name:	Gilroy-Hollister Valley - Llagas Area (3-003.01)		
Disadvantaged Community:			
Site History:			

Regulatory Activity

Action Type:	Other
Date :	1987-03-05 00:00:00
Action:	Leak Reported
Action Type:	Other
Date :	1987-02-20 00:00:00
Action:	Leak Stopped
Action Type:	Other
Date :	1987-02-20 00:00:00
Action:	Leak Discovery

Regulatory Contacts

Contact Type:	Local Agency Caseworker	Address:	1555 Berger Drive, Suite 300
Contact Name:	UST CASE WORKER	Email:	
City:	SAN JOSE	Phone No:	4089183400
Organization Name:	SANTA CLARA COUNTY LOP		
Contact Type:	Regional Board Caseworker	Address:	895 AEROVISTA PL, SUITE 101
Contact Name:	RB3 STAFF	Email:	centralcoast@waterboards.ca.gov
City:	SAN LUIS OBISPO	Phone No:	8055493147
Organization Name:	CENTRAL COAST RWQCB (REGION 3)		

Status History

Status:	Completed - Case Closed
Status Date:	1987-08-13 00:00:00
Status:	Open - Case Begin Date
Status Date:	1987-02-20 00:00:00

LUST Sites from GeoTracker Search - Regulatory Profile(as of Oct 31, 2019)

Site Facility Name:	U-SAVE ROCKERY	Potential COC:	GASOLINE
Site Facility Type:	LUST CLEANUP SITE	Facility Type:	
Cleanup Status:	COMPLETED - CASE CLOSED	Composting Method:	
Project Status:		Address:	15760 RAILROAD AVE
WDR Place Type:		City:	MORGAN HILL
WDR File:		Zip:	95037
WDR Order:		County:	SANTA CLARA
CUF Priority Assig:		CUF Claim:	
CUF Amount Paid:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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File Location:
Designated Beneficial Use: MUN, AGR, IND, PROC
Project Oversight Agencies:
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T0608502174
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 8/13/1987
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T0608502174&tabname=regulatoryhistory
Potential Media of Concern: SOIL
User Defined Beneficial Use:
DWR GW Sub Basin: Gilroy-Hollister Valley - Llagas Area (3-003.01)
Calwater Watershed Name: Pajaro River - South Santa Clara Valley (305.30)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: CENTRAL COAST RWQCB (REGION 3) (LEAD) - CASE #: 463
CASEWORKER: RB3 STAFF
SANTA CLARA COUNTY LOP
CASEWORKER: UST CASE WORKER
SANTA CLARA VALLEY WATER DISTRICT

Gndwater Monitoring Freque:
Site History:

No site history available

LUST Sites from GeoTracker Search - Cleanup Status History(as of Oct 31, 2019)

Status: Completed - Case Closed
Date : 8/13/1987

Status: Open - Case Begin Date
Date : 2/20/1987

LUST Sites from GeoTracker Search - Regulatory Activities(as of Oct 31, 2019)

Action Type: Leak Action
Action Date: 3/5/1987
Received Issue Date:
Action: Leak Reported
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action Date: 2/20/1987
Received Issue Date:
Action: Leak Discovery
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action Date: 2/20/1987
Received Issue Date:
Action: Leak Stopped
Doc Link:
Title Description Comments:

14	1 of 1	NNW	0.57 / 3,004.26	332.35 / 12	JACKSON FAMILY TRUST 235 TENNANT AVENUE MORGAN HILL CA 95037	ENVIROSTOR
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Etor/EPA ID:	71002096	Permit Renewal Lead:	
Site Code:	550495	Project Manager:	ROBERT SENG
Nat Priority List:	NO	Supervisor:	ROBERT SENG
Acres:	1.14 ACRES	Public Partici Spclst:	
Special Program:	VOLUNTARY CLEANUP PROGRAM	Census Tract:	6085512310
Funding:	RESPONSIBLE PARTY	County:	SANTA CLARA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Assembly District:	30			Latitude:	37.115135	
Senate District:	17			Longitude:	-121.639205	
School District:						
APN:		817-04-030				
Cleanup Status:		CERTIFIED AS OF 5/13/2014				
Cleanup Oversight Agencies:		DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY				
Site Type:		TIERED PERMIT				
Office:		CLEANUP CYPRESS				
Past Use that Caused Contam:		NONE				
Potential Media Affected:		SOIL				
Potential Contaminant of Concern:						

TPH-JET FUEL, TPH-MOTOR OIL, TPH-DIESEL, TPH-GAS

Site History:

The facility was used for the manufacturing of sputtering from 1976 until 2002. The manufacturing of sputtering materials at the site was started by Haselden Corporation in 1976. Haselden Corporation was purchased by DeGussa, then by Leybold Materials, Inc. which later changed its name to Unaxis Materials in 2000. In early 2002, Unaxis sold the equipment and business to Hereaus which moved the business to Arizona. Unaxis retained the business name until September 2002, and continues to own the facility to date.

The sputtering manufacturing operations included weighing and blending of raw materials such as metals and metal oxide powders, producing billets by melting and sintering, machining billets, heat treating billets and parts, and bonding using Indium metal as the bonding agent. Raw materials processed included: aluminum oxide, cadmium sulfide, chromium metal, cobalt oxide, copper metal, hafnium metal and oxide, indium oxide, nickel metal, silicon carbide, silver, titanium metal and zinc oxide.

The former facility owner/operator was authorized by the Department on August 25, 1993 to treat certain hazardous waste onsite under Permit By Rule. Under this authorization, the Property was and is subject to the requirements of the Hazardous Waste Control Law at Health and Safety Code Sections 25100 et seq. The Property has also been the subject of a Corrective Action Consent Agreement dated September 13, 2004 between the Department and the former facility owner/operator. The former owner investigated 12 areas of concern ("AOCs") at the Property under the oversight of the Department.

The property was formerly a portion of a larger property of approximately 2.5 acres with address of 16035 Vineyard Boulevard. In 2005, the original property was split into two parcels now 235 Tennant Avenue (now the Jackson Family Trust property), and 16035 Vineyard Boulevard.

After the investigation, only one of those 12 AOCs, AOC 8, is the only affected portion of the property where elevated levels of petroleum hydrocarbons which are not suitable for unrestricted use will remain in place. AOC 8 is capped by a concrete slab floor over the area.

Status: CERTIFIED
Program Type: TIERED PERMIT
CalEnviroScreen Score: 76-80%
Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=71002096

Completed Activities

Title: Workplan for Soil Investigation/Request for Removal of Deed Restriction
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&doc_id=60330218
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Supplemental Site Investigation Workplan
Date Completed: 9/23/2013
Comments:

Title: Covenant to Restrict Use of Property
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&enforcement_id=60347206
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Land Use Restriction
Date Completed: 2/27/2008
Comments:

Title: Refund Advance
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&enforcement_id=60367746
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Correspondence

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Date Completed:		8/4/2014				
Comments:						
Title:		Termination of Covenant to Restrict Use of Property				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&enforcement_id=60341986				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Land Use Restriction - Release/Rescission				
Date Completed:		3/12/2014				
Comments:						
Title:		Standard Agreement				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&enforcement_id=60328176				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Consent Agreement				
Date Completed:		6/28/2013				
Comments:						
Title:		Supplemental Investigation Report				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&doc_id=60334740				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Supplemental Site Investigation Report				
Date Completed:		11/6/2013				
Comments:						
Title:		Certification Letter				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002096&enforcement_id=60360144				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Certification				
Date Completed:		5/13/2014				
Comments:						
Title:		Field Oversight				
Title Link:						
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Oversight				
Date Completed:		10/7/2013				
Comments:						

[15](#)

1 of 2

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0.66 /
3,470.92

315.16 /
-5

WINSTON CHAN PROPERTY
14735 MONTEREY HWY
SAN MARTIN CA 95046

RESPONSE

Estor/EPA ID: 43490061
Site Code: 200111
Nat Priority List: NO
Acres: 1 ACRES
Special Program:
Funding: RESPONSIBLE PARTY
Assembly District: 30
Senate District: 17
School District:
APN: 779-05-040
Cleanup Status: CERTIFIED AS OF 5/30/1987

Permit Renewal Lead:
Project Manager:
Supervisor: DENISE TSUJI
Public Partici Spclst:
Census Tract: 6085512307
County: SANTA CLARA
Latitude: 37.099859581856
Longitude: -121.626543329438

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Cleanup Oversight Agencies: Site Type: Office: Past Use that Caused Contam: Potential Media Affected: Potential Contamin of Concern:		DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY STATE RESPONSE OR NPL CLEANUP BERKELEY RECYCLING - OTHER, RECYCLING - SCRAP METAL SOIL				
DDD, DDE, DDT						
Site History: From 1980 to 1984, a junk dealer and collector operated a business on the site accepting a wide range of goods, including auto parts, books, old chemicals, paints, solvents and pesticides.						
Status: Program Type: CalEnviroScreen Score: Summary Link:		CERTIFIED STATE RESPONSE 26-30% http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43490061				
Completed Activities						
Title: Title Link: Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Date Completed: Comments:		Order http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43490061&enforcement_id=5002327 Fence & Post Order 7/1/1985 Issued F&P Order.				
Title: Title Link: Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Date Completed: Comments:		Removal Action Completion Report http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43490061&doc_id=5002326 Removal Action Completion Report 1/31/1986 Completed RA. All drums and containers were removed from the site, and three monitoring wells were installed. 38 cubic yards of soil and debris were removed along with an underground tank. Soil and groundwater samples were taken. The only chemicals of concern detected were DDT, DDE, and DDD in soil samples at low levels (none exceeding 180 parts per billion).				
Title: Title Link: Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Date Completed: Comments:		Site Discovery * Discovery 11/1/1984 In November of 1984 inspections revealed poor housekeeping at the site, along with numerous containers, drums, and sacks of hazardous wastes.				
Title: Title Link: Area Name: Area Link: Sub Area: Sub Area Link: Document Type: Date Completed: Comments:		Certification http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43490061&enforcement_id=5002328 Certification 5/30/1987 Certified Site.				

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
			3,470.92	-5	14735 MONTEREY HWY SAN MARTIN CA 95046	

Estor/EPA ID:	43490061	Permit Renewal Lead:	
Site Code:	200111	Project Manager:	
Nat Priority List:	NO	Supervisor:	DENISE TSUJI
Acres:	1 ACRES	Public Partici Spclst:	
Special Program:		Census Tract:	6085512307
Funding:	RESPONSIBLE PARTY	County:	SANTA CLARA
Assembly District:	30	Latitude:	37.099859581856
Senate District:	17	Longitude:	-121.626543329438
School District:			
APN:	779-05-040		
Cleanup Status:	CERTIFIED AS OF 5/30/1987		
Cleanup Oversight Agencies:	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY		
Site Type:	STATE RESPONSE OR NPL		
Office:	CLEANUP BERKELEY		
Past Use that Caused Contam:	RECYCLING - OTHER, RECYCLING - SCRAP METAL		
Potential Media Affected:	SOIL		
Potential Contamin of Concern:			

DDD, DDE, DDT

Site History:

From 1980 to 1984, a junk dealer and collector operated a business on the site accepting a wide range of goods, including auto parts, books, old chemicals, paints, solvents and pesticides.

Status:	CERTIFIED
Program Type:	STATE RESPONSE
CalEnviroScreen Score:	26-30%
Summary Link:	http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43490061

Completed Activities

Title:	Removal Action Completion Report
Title Link:	http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43490061&doc_id=5002326
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	Removal Action Completion Report
Date Completed:	1/31/1986
Comments:	Completed RA. All drums and containers were removed from the site, and three monitoring wells were installed. 38 cubic yards of soil and debris were removed along with an underground tank. Soil and groundwater samples were taken. The only chemicals of concern detected were DDT, DDE, and DDD in soil samples at low levels (none exceeding 180 parts per billion).

Title:	Site Discovery
Title Link:	
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	* Discovery
Date Completed:	11/1/1984
Comments:	In November of 1984 inspections revealed poor housekeeping at the site, along with numerous containers, drums, and sacks of hazardous wastes.

Title:	Certification
Title Link:	http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43490061&enforcement_id=5002328
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	Certification
Date Completed:	5/30/1987
Comments:	Certified Site.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Title:		Order				
Title Link:		http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43490061&enforcement_id=5002327				
Area Name:						
Area Link:						
Sub Area:						
Sub Area Link:						
Document Type:		Fence & Post Order				
Date Completed:		7/1/1985				
Comments:		Issued F&P Order.				

16	1 of 1	NNW	0.61 / 3,224.80	332.76 / 12	UNAXIS MATERIALS, INC. /CONTRAVES, INC. 16035 VINEYARD BOULEVARD MORGAN HILL CA 95037	ENVIROSTOR
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Estor/EPA ID:	71002906	Permit Renewal Lead:	
Site Code:	550004	Project Manager:	
Nat Priority List:	NO	Supervisor:	MARK PIROS
Acres:	0.5 ACRES	Public Partici Spclst:	
Special Program:		Census Tract:	6085512310
Funding:		County:	SANTA CLARA
Assembly District:	30	Latitude:	37.115813
Senate District:	17	Longitude:	-121.6390958
School District:			
APN:	NONE SPECIFIED		
Cleanup Status:	NO FURTHER ACTION AS OF 6/27/2014		
Cleanup Oversight Agencies:	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY		
Site Type:	TIERED PERMIT		
Office:	CLEANUP BERKELEY		
Past Use that Caused Contam:	MANUFACTURING - METAL		
Potential Media Affected:	SOIL		
Potential Contamin of Concern:			

TPH-MOTOR OIL

Site History:

Site History: Unaxis Materials, Inc. (Unaxis) manufactured sputtering materials at the facility from 1976 until 2002. The manufacturing of sputtering materials at the site was started by Haselden Corporation in 1976. Haselden Corporation was purchased by DeGussa, then by Leybold Materials, Inc. which later changed its name to Unaxis in 2000. In early 2002, Unaxis sold the equipment and business to Hereaus which moved the business to Arizona. Unaxis retained the business name until September 2002, and continues to own the facility to date.

The sputtering manufacturing operations included weighing and blending of raw materials such as metals and metal oxide powders, producing billets by melting and sintering, machining billets, heat treating billets and parts, and bonding using Indium metal as the bonding agent. Raw materials processed included: aluminum oxide, cadmium sulfide, chromium metal, cobalt oxide, copper metal, hafnium metal and oxide, indium oxide, nickel metal, silicon carbide, silver, titanium metal and zinc oxide.

On August 25, 1993, DTSC authorized the treatment of hazardous wastes onsite under PBR. On September 12, 2003, the County of Santa Clara Department of Environmental Health Certified Unified Program Agency referred to DTSC the corrective action required at the site due to elevated levels of chromium, cobalt, lead, thallium, indium and total petroleum hydrocarbons found at the site during the closure of the facility.

On September 12, 2003, the County of Santa Clara Certified Unified Program Agency referred to DTSC the corrective action oversight required at the site due to elevated levels of chromium, cobalt, thallium, indium and total petroleum hydrocarbons found at the site during closure of the facility.

On November 25, 2003, DTSC conducted an inspection at the site and observed areas outside the building where soil excavations were conducted and replaced with new soil at the Facility. Based on the site inspection and information available to DTSC, DTSC identified thirteen solid waste management units (SWMUs) and/or areas of concern (AOCs) that either have released or may release hazardous waste or hazardous waste constituents at the site.

On March 18, 2004, DTSC mailed to the Facility a draft Corrective Action Consent Agreement. Currently, the Facility legal representative has been communicating with the DTSC OLC representative regarding proposed changes in the language of the Consent Agreement. The Consent Agreement was signed on September 13, 2004.

Additional activities at the site are listed below:

Groundwater Contamination: Unknown

Project Description: PEA Investigation

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Status: NO FURTHER ACTION
Program Type: TIERED PERMIT
CalEnviroScreen Score: 76-80%
Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=71002906

Completed Activities

Title: Acknowledgement of Termination and Agreement to Record Preservation and Reservation of Rights
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002906&enforcement_id=60364271

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: Acknowledgement of Satisfaction

Date Completed: 5/14/2008

Comments:

Title: Corrective Action Consent Agreement

Title Link:

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: Consent Agreement

Date Completed: 9/13/2004

Comments:

Title: LUC Inspection Complete

Title Link:

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: * LUC Inspection Complete

Date Completed: 1/30/2009

Comments:

Title: RS Public Notice

Title Link:

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: * CEQA

Date Completed: 10/14/2007

Comments:

Title: PEA Completed

Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=71002906&doc_id=60253518

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: Preliminary Endangerment Assessment Report

Date Completed: 10/27/2005

Comments:

Title: PEA workplan approved

Title Link:

Area Name:

Area Link:

Sub Area:

Sub Area Link:

Document Type: Preliminary Endangerment Assessment Workplan

Date Completed: 1/25/2006

Comments:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Title: Inspection - Phase I Verification
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Phase I Verification
Date Completed: 1/14/2004
Comments: Inspection report sent on 1/14/2004

Title: Remedy Selection Completed
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Remedy Selection and Statement of Basis
Date Completed: 12/30/2007
Comments:

Title: Consent Agreement Executed
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Consent Agreement
Date Completed: 9/13/2004
Comments:

Title: Phase I Verification Inspection
Title Link:
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Phase 1
Date Completed: 1/14/2004
Comments:

17	1 of 1	N	0.73 / 3,869.82	336.58 / 16	ASCO AIR CONDITIONING 16250 RAILROAD AVE. MORGAN HILL CA 95037	ENVIROSTOR
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Estor/EPA ID:	43340081	Permit Renewal Lead:	
Site Code:		Project Manager:	
Nat Priority List:	NO	Supervisor:	
Acres:	NONE SPECIFIED	Public Partici Spclst:	
Special Program:		Census Tract:	6085512310
Funding:		County:	SANTA CLARA
Assembly District:	30	Latitude:	37.1179144441477
Senate District:	17	Longitude:	-121.637775277685
School District:			
APN:	817-32-043		
Cleanup Status:	REFER: OTHER AGENCY AS OF 7/29/1994		
Cleanup Oversight Agencies:	NONE SPECIFIED		
Site Type:	* HISTORICAL		
Office:	CLEANUP BERKELEY		
Past Use that Caused Contam:	NONE SPECIFIED		
Potential Media Affected:	NONE SPECIFIED		
Potential Contamin of Concern:			

ACID SOLUTION 2>PH WITH METALS, HALOGENATED SOLVENTS, LEAD

Site History:

Status: REFER: OTHER AGENCY

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Program Type: HISTORICAL
CalEnviroScreen Score: 76-80%
Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43340081

Completed Activities

Title: Site Screening
Title Link: http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=43340081&doc_id=5003249
Area Name:
Area Link:
Sub Area:
Sub Area Link:
Document Type: Site Screening
Date Completed: 7/1/1991
Comments: Though the operation process and waste handling practices at this site do not appear to be hazardous to human health and/or the environment, no verification has been conducted. The EPA's FIT program did not conduct a site reconnaissance visit to verify the facts. This fenced facility comprised of a single 20,000 sq ft warehouse building and asphalt pavement around it, was started in 1978 by James Price. Asco operates a business for sheet metal fabrication and servicing & installation of residential air conditioning units. Asco's operations involve a small quantity of hydrochloric acid (HCL), R-22 freon and generates sheet lead scraps. The site was suspected to be a potential source of high levels of methylene chloride in site soils of Olin Corp., an adjacent site. Both a history of chemical usage and waste disposal practices at Asco have proved Asco to be harmless in the matter. Asco's location, process or waste management practices also do not appear to have potential for propagating contamination through groundwater, surface water, air or contact routes. The site is currently under the oversight of the city of Morgan Hill Fire Department with no involvement of the Regional Water Quality Control Board (RWQCB) or the Department.

18	1 of 1	N	0.83 / 4,375.83	337.23 / 17	BAS PRECISION SHEET METAL, INC. 16170 JAQUELINE CT MORGAN HILL CA 95037	ENVIROSTOR
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Estor/EPA ID:	71003139	Permit Renewal Lead:	
Site Code:		Project Manager:	
Nat Priority List:	NO	Supervisor:	
Acres:	NONE SPECIFIED	Public Particip Spclst:	
Special Program:		Census Tract:	6085512310
Funding:		County:	SANTA CLARA
Assembly District:	30	Latitude:	37.119681
Senate District:	17	Longitude:	-121.636687
School District:			
APN:	NONE SPECIFIED		
Cleanup Status:	INACTIVE - NEEDS EVALUATION AS OF		
Cleanup Oversight Agencies:	NONE SPECIFIED		
Site Type:	TIERED PERMIT		
Office:	CLEANUP BERKELEY		
Past Use that Caused Contam:	NONE SPECIFIED		
Potential Media Affected:	NONE SPECIFIED		
Potential Contaminant of Concern:			

NONE SPECIFIED

Site History:

Facility Comments: PBR AMENDED ON 7/8/01, SEE SANTA CLARA COUNTY AUTHORIZATION LETTER DATED JULY 18, 2001.

Status: INACTIVE - NEEDS EVALUATION
Program Type: TIERED PERMIT
CalEnviroScreen Score: 76-80%
Summary Link: http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=71003139

19	1 of 1	NNW	0.96 / 5,082.15	338.23 / 18	ITALIX COMPANY, INC. 120 MAST STREET MORGAN HILL CA 95037	ENVIROSTOR
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Estor/EPA ID: 60002858 **Permit Renewal Lead:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
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Site Code:					Project Manager:	VIOLETA MISLANG
Nat Priority List:	NO				Supervisor:	ROBERT SENGA
Acres:	1 ACRES				Public Partici Spclst:	
Special Program:					Census Tract:	
Funding:	RESPONSIBLE PARTY				County:	SANTA CLARA
Assembly District:					Latitude:	0
Senate District:					Longitude:	0
School District:						
APN:	NONE SPECIFIED					
Cleanup Status:	ACTIVE AS OF 7/29/2019					
Cleanup Oversight Agencies:	DTSC - SITE CLEANUP PROGRAM - LEAD AGENCY					
Site Type:	TIERED PERMIT					
Office:	CLEANUP CYPRESS					
Past Use that Caused Contam:	NONE SPECIFIED					
Potential Media Affected:	NONE SPECIFIED					
Potential Contamin of Concern:						

NONE SPECIFIED

Site History:

Status:	ACTIVE
Program Type:	TIERED PERMIT
CalEnviroScreen Score:	
Summary Link:	http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=60002858

Completed Activities

Title:	Tiered Permitting Phase I Environmental Assessment Checklist
Title Link:	http://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60002858&doc_id=60463076
Area Name:	
Area Link:	
Sub Area:	
Sub Area Link:	
Document Type:	Phase 1
Date Completed:	8/9/2019
Comments:	

20	1 of 1	NNW	0.97 / 5,135.21	338.67 / 18	CASTLE A.L. INC 190 MAST MORGAN HILL CA 95037	ENVIROSTOR
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Estor/EPA ID:	43510004				Permit Renewal Lead:	
Site Code:					Project Manager:	
Nat Priority List:	NO				Supervisor:	
Acres:	NONE SPECIFIED				Public Partici Spclst:	
Special Program:					Census Tract:	6085512310
Funding:					County:	SANTA CLARA
Assembly District:	30				Latitude:	37.120278
Senate District:	17				Longitude:	-121.642778
School District:						
APN:	NONE SPECIFIED					
Cleanup Status:	REFER: RWQCB AS OF 6/13/1994					
Cleanup Oversight Agencies:	NONE SPECIFIED					
Site Type:	* HISTORICAL					
Office:	CLEANUP BERKELEY					
Past Use that Caused Contam:	NONE SPECIFIED					
Potential Media Affected:	NONE SPECIFIED					
Potential Contamin of Concern:						

NONE SPECIFIED

Site History:

Status:	REFER: RWQCB
Program Type:	HISTORICAL

<i>Map Key</i>	<i>Number of Records</i>	<i>Direction</i>	<i>Distance (mi/ft)</i>	<i>Elev/Diff (ft)</i>	<i>Site</i>	<i>DB</i>
CalEnviroScreen Score:		76-80%				
Summary Link:		http://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43510004				

Unplottable Summary

Total: 12 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
CDL		VEHICLE STOP AT VINEYARD & MONTEREY	MORGAN HILL CA	95037	820115825
CHMIRS	UPRR	MM 66.5, Coast Subdivision, near the Monterey Hwy. underpass	Morgan Hill CA		821765912
CHMIRS	UPRR	MPM 59.5 on the Coast Subdivision, nearest cross street is the Monterey Highway and Blanchard Rd., in the community of Cayote	Unincorporated county area Santa Clara CA		825417522
FINDS/FRS	DIAMOND CREEK DEVELOPMENT PROJECT	SW SIDE OF MONTEREY ST BETWEEN VINEYARD BLVD AND B	MORGAN HILL CA	95037	840123926
FINDS/FRS	EL CAMINO PACKING	MONTEREY RD	MORGAN HILL CA	95037	840224842
GEOTRACKER	LJB FARMS - MARN'S RANCH (AW1340)	MONTEREY ROAD	SAN MARTIN CA		875378194
GEOTRACKER	LJB FARMS - MARTIN RANCH (AW1340)	MONTEREY HIGHWAY	SAN MARTIN CA		875378195
GEOTRACKER	LJB FARMS - LAU RANCH (AW1340)	MONTEREY RD	SAN MARTIN CA		875373092
HAZNET	1X GENERAL TELEPHONE CO OF CALIF	MONTEREY HWY	MORGAN HILL CA	917080000	826798971
HHSS	PUPOO FARMS	RT 2 BOX 559 MONTEREY HWY.	MORGAN HILL CA	95037	822985717

HHSS	PUPPO FARMS	RT 2 BOX 559 MONTEREY HIWAY	MORGAN HILL CA	95037	822953832
HIST MANIFEST		MONTEREY HWY	MORGAN HILL CA	917080000	827558462

Unplottable Report

Site: VEHICLE STOP AT VINEYARD & MONTEREY MORGAN HILL CA 95037

CDL

Clue: 2000-09-101
Date: 9/20/2000
County: SANTA CLARA
Lab Type: M
Lab Type Description: Mobile Lab - location where illegal drug lab equipment and materials were found in a vehicle or other mode of transport.

Site: UPRR
MM 66.5, Coast Subdivision, near the Monterey Hwy. underpass Morgan Hill CA

CHMIRS

Clean Control No:
Notified Date Time: 8/7/200306:41:00 PM
County: Santa Clara County
URL:
Notified Date: 2003
Year:

California Hazardous Material Incident Report System (as of 1997 to 2005)

Contained:	Yes	Bbls:	0
Substance:	Train V Trespasser	Cups:	0
Incident Date:	8/7/200312:00:00 AM	Cuft:	0
No of Injuries:	1	Gals:	0.000000
No of Fatafs:	1	Grams:	0
No of Evacs:	0	Lbs:	0
Cleanup:	Unknown	Liters:	0
Water:	No	Oz:	0
Water Way:		Pts:	0
City:	Morgan Hill	Qts:	0
County:	Santa Clara County	Sheen:	0
Zip:		Tons:	0
Site:	Rail Road	Unknown:	0
Admin Agency:	Santa Clara County Health Department		
Location:	MM 66.5, Coast Subdivision, near the Monterey Hwy. underpass		
Description:	Train struck two trespassers, one is a confirmed fatality.		

Site: UPRR
MPM 59.5 on the Coast Subdivision, nearest cross street is the Monterey Highway and Blanchard Rd., in the community of Cayote Unincorporated county area Santa Clara CA

CHMIRS

Clean Control No: 15-1209
Notified Date Time:
County: Santa Clara County
URL: <https://w3.calema.ca.gov/operational/mal haz.nsf/f1841a103c102734882563e200760c4a/2f398735f852059588257dfd0009a0c4?OpenDocument>
Notified Date: 2015
Year:

California Hazardous Material Incident Report System (as of 2006 to 2015)

Contained:	Yes	3 Ves >= 300 Tons:	No
1 Substance:	Train V Trespasser	Incident Date:	3/2/2015
1 Measure:	N/A	Incident Time:	1733
1 Other:		Spill Site:	Rail Road
1 Quantity:	1	Injuries?:	No
1 Type:	RAILROAD	No of Injuries:	
1 Pipeline:	No	Fatafs?:	Yes
1 Vessel >= 300 Tons:	No	No of Fatafs:	1

2 Substance:		Evacs?:	No
2 Quantity:		No of Evacs:	
2 Measure:		Cleanup:	Unknown
2 Type:		Site:	
2 Other:		Cause:	Human Error
2 Pipeline:	No	Cause Other:	
2 Vessel >= 300 Tons:	No	Dog No:	
3 Substance:		Water:	No
3 Quantity:		Water Way:	
3 Measure:		City:	Unincorporated county area Santa Clara
3 Type:		County:	Santa Clara County
3 Other:		Zip:	
3 Pipeline:	No		
Admin Agency:	AA/CUPA,DFG-OSPR,DTSC,RWQCB,US EPA,USFWS,PUC,SFM		
Notification Area:	MPM 59.5 on the Coast Subdivision, nearest cross street is the Monterey Highway and Blanchard Rd., in the community of Cayote		
Location:	Train #CT156 of the 2nd with lead locomotive JPBX917 struck a suicidal trespasser which resulted in a fatality		
Description:			

Spill Report View

Amount 1:		Creation Date:	03/02/2015 06:16 PM
Amount 2:		Received By:	
Amount 3:		Admin Agency:	
Type:	RAILROAD	Admin Agency 2:	
Water:		Additional County:	
On Scene:		Phone No:	
Other on Scene:		Ext:	
Other Notified:		Pag Cell:	
Document Title:	Cal OES-Update		
Spill Site:			
Cause Desc for Other:			
Person Notifying Cal OES:			

OES Hazardous Materials Spill Update

Notify Date:	03/02/2015
Notify Time:	1745
Occurrence Date:	03/02/2015
Occurrence Time:	1733
Upd Known Impact:	
Update Cause:	
Pers Notifying Upd Place:	
Pers Notifying Upd Nme:	
Phone No:	
Ext:	
Pag Cell:	
Fax Notifi List:	AA/CUPA, DFG-OSPR, DTSC, RWQCB, US EPA, USFWS, PUC, SFM
Person Notifying Cal OES	UPRR
Agenc:	
Person Reporting Spill Agency:	
Op Area:	Santa Clara County
Unknown Header:	BAY AREA AQMD
Substance 1:	Train V Trespasser
Qty Amount 1:	1
Measure 1:	N/A
Type 1:	RAILROAD
Other 1:	
Pipeline 1:	No
Vessel >= 300 Tons 1:	No
Substance 2:	
Qty Amount 2:	
Measure 2:	
Type 2:	
Other 2:	
Pipeline 2:	No
Vessel >= 300 Tons 2:	No
Substance 3:	
Qty Amount 3:	

Measure 3:
Type 3:
Other 3:
Pipeline 3: No
Vessel >= 300 Tons 3: No
Administering Agency:
Secondary Agency:
Additional Counties:
Additional Admin Agency:
Other Notified: Caltrans
RWQCB Unit: 2
Confirmation Request:
Fax Notification List 2:
Administering Agency 2:
Additional Admin Agency 2:
Secondary Agency 2:
Additional Counties 2:
DOG Unit:
RWQCB Unit 2:
Doc URL: <https://w3.calema.ca.gov/operational/mal haz. nsf/f1841a103c102734882563e200760c4a/333a414c30068faa88257dfd000c78e2?OpenDocument>
NRC: 1109468
Update Description:

03/02/2015 06:16:13 PM - NRC report #1109468 received with no new or conflicting information.

Situation Update:

NRC report #1109468 received with no new or conflicting information.

Original Description:

Train #CT156 of the 2nd with lead locomotive JPBX917 struck a suicidal trespasser which resulted in a fatality

OES Hazardous Materials Update Quantities

Amount:
Measure: N/A

Spill Report View

Amount 1:		Creation Date:	03/02/2015 05:45 PM
Amount 2:		Received By:	
Amount 3:		Admin Agency:	
Type:	RAILROAD	Admin Agency 2:	
Water:		Additional County:	
On Scene:		Phone No:	
Other on Scene:		Ext:	
Other Notified:		Pag Cell:	
Document Title:	SPILL Report		
Spill Site:	Rail Road		
Cause Desc for Other:			
Person Notifying Cal OES:			

Hazardous Materials Spill Report

Control Cal OES:	15-1209	Type 3:	
Control NRC:		Other 3:	
Date :	03/02/2015	Pipeline 3:	No
Incident Date:	03/02/2015	Ves >= 300 Tons 3:	No
Time:	1745	Name:	
Incident Time:	1733	Phone:	
Water Involved:	No	Ext:	
Drink Wtr Impact:		Pag Cell:	
Qty 1:	=	PRS Name:	
Measure 1:	N/A	PRS Phone:	
Type 1:	RAILROAD	PRS Ext:	
Pipeline 1:	No	PRS Pag Cell:	

Ves >= 300 Tons 1: No
Qty 2: =
Amount 2:
Measure 2:
Type 2:
Other 2:
Pipeline 2: No
Vessel >= 300 Tns 2: No
Qty 3: =
Amount 3:
Measure 3:

Received By:
Header Unknown: BAY AREA AQMD
Incident Desc:
R R Crssing < 50 Ft:
Upr Rim :
Notification Info:
Notification List:
DOG Unit:
RWQCB Unit: 2
Injuries: No
Fatality: Yes
 Fatals #: 1

Incident Location: MPM 59.5 on the Coast Subdivision, nearest cross street is the Monterey Highway and Blanchard Rd., in the community of Cayote
Reported Cause: Human Error
Amount 1: 1
Substance 1: Train V Trespasser
Substance 2:
Substance 3:
Waterway:
Contained: Yes
Known Impact:
Other 1:
Detail for Other:
Site: Rail Road
On Scene: Fire Dept., Police Dept.
Other on Scene:
Other Notified: Caltrans
Evacuation: No
Cleanup By: Unknown
Agency: UPRR
PRS Agency:
Admin Agency:
Sec Agency:
Additional County:
Admin Agency 2:
Description: Train #CT156 of the 2nd with lead locomotive JPBX917 struck a suicidal trespasser which resulted in a fatality

Site: **DIAMOND CREEK DEVELOPMENT PROJECT**
SW SIDE OF MONTEREY ST BETWEEN VINEYARD BLVD AND B MORGAN HILL CA 95037

[FINDS/FRS](#)

Registry ID: 110065230191
FIPS Code:
HUC Code: 18060002
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 10-OCT-2015 10:07:07
Update Date:
Interest Types: STATE MASTER
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor: CALEPA
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No: 11
Census Block Code: 060855123072001
EPA Region Code: 09
County Name: SANTA CLARA
US/Mexico Border Ind:
Latitude: 37.108667
Longitude: -121.639736
Reference Point:
Coord Collection Method: UNKNOWN
Accuracy Value:
Datum: NAD83

Source:
Facility Detail Rprt URL: http://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110065230191
Program Acronyms:
 CA-ENVIROVIEW:263767

Site: **EL CAMINO PACKING** [FINDS/FRS](#)
MONTEREY RD MORGAN HILL CA 95037

Registry ID: 110066031653
FIPS Code:
HUC Code:
Site Type Name: STATIONARY
Location Description:
Supplemental Location:
Create Date: 14-OCT-2015 09:33:58
Update Date:
Interest Types: STATE MASTER
SIC Codes:
SIC Code Descriptions:
NAICS Codes:
NAICS Code Descriptions:
Conveyor:
Federal Facility Code:
Federal Agency Name:
Tribal Land Code:
Tribal Land Name:
Congressional Dist No:
Census Block Code:
EPA Region Code: 09
County Name: SANTA CLARA COUNTY
US/Mexico Border Ind:
Latitude:
Longitude:
Reference Point:
Coord Collection Method:
Accuracy Value:
Datum: NAD83
Source:
Facility Detail Rprt URL: http://ofmpub.epa.gov/frs_public2/fii_query_detail.disp_program_facility?p_registry_id=110066031653
Program Acronyms:

CA-ENVIROVIEW:113913

Site: **LJB FARMS - MARNS RANCH (AW1340)** [GEOTRACKER](#)
MONTEREY ROAD SAN MARTIN CA

Global ID: AGL020007722 **Latitude:**
Status: TERMINATED **Longitude:**
Status Date: **County:** SANTA CLARA
Site Facility Type: IRRIGATED LANDS REGULATORY PROGRAM

Site: **LJB FARMS - MARTIN RANCH (AW1340)** [GEOTRACKER](#)
MONTEREY HIGHWAY SAN MARTIN CA

Global ID: AGL020007724 **Latitude:**
Status: ENROLLED **Longitude:**
Status Date: **County:** SANTA CLARA
Site Facility Type: IRRIGATED LANDS REGULATORY PROGRAM

Site: **LJB FARMS - LAU RANCH (AW1340)** [GEOTRACKER](#)
MONTEREY RD SAN MARTIN CA

Global ID: AGL020007730 **Latitude:**

Status: ENROLLED Longitude: SANTA CLARA
Status Date: County:
Site Facility Type: IRRIGATED LANDS REGULATORY PROGRAM

Site: 1X GENERAL TELEPHONE CO OF CALIF
MONTEREY HWY MORGAN HILL CA 917080000

HAZNET

SIC Code: Mailing City: CHINO
NAICS Code: Mailing State: CA
EPA ID: CAX000033860 Mailing Zip: 917080000
Create Date: 8/9/1983 Region Code: 2
Fac Act Ind: No Owner Name: --
Inact Date: 4/30/1986 Owner Addr 1: --
County Code: 43 Owner Addr 2: --
County Name: Santa Clara Owner City: --
Mail Name: Owner State: 99
Mailing Addr 1: JACKIE MCCORMICK Owner Zip: --
Mailing Addr 2: Owner Phone: 0000000000
Owner Fax:

Contact Information

Contact Name: BILL SHADY
Street Address 1:
Street Address 2:
City:
State: 99
Zip:
Phone: 4083996249

Site: PUPOO FARMS
RT 2 BOX 559 MONTEREY HWY. MORGAN HILL CA 95037

HHSS

County: Santa Clara
Pdf File Url: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020731.pdf>

Site: PUPPO FARMS
RT 2 BOX 559 MONTEREY HIWAY MORGAN HILL CA 95037

HHSS

County: Santa Clara
Pdf File Url: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002072f.pdf>

Site: MONTEREY HWY MORGAN HILL CA 917080000

HIST MANIFEST

Gen EPA ID: CAX000033860
Create Date: 08/09/1983 0:00
Inact Date: 4/30/1986 0:00:00
Facility Mail Street: JACKIE MCCORMICK
Facility Mail City: CHINO
Facility Mail State: CA
Facility Mail Zip: 917080000
Contact Phone(s): 4083996249
File Year(s): 1983
Contact Name(s): BILL SHADY

Tanner Information

Method Description:
Tons: 1.66
Year: 1983
Generator County Code: 43
Generator County: Santa Clara
Method Code: D80

Tsd County Code: 19
Tsd County: Los Angeles
State Waste Code: 451
State Waste Code Desc: Degreasing sludge
Tsd Epa ID: CAD067786749

Tanner Information

Method Description:
Tons: 0
Year: 1983
Generator County Code: 43
Generator County: Santa Clara
Method Code:
Tsd County Code: 19
Tsd County: Los Angeles
State Waste Code:
State Waste Code Desc:
Tsd Epa ID: CAD067786749

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List:

NPL

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Government Publication Date: Nov 25, 2019

National Priority List - Proposed:

PROPOSED NPL

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

Government Publication Date: Nov 25, 2019

Deleted NPL:

DELETED NPL

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Government Publication Date: Nov 25, 2019

SEMS List 8R Active Site Inventory:

SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Nov 25, 2019

SEMS List 8R Archive Sites:

SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Nov 25, 2019

Inventory of Open Dumps, June 1985:

ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

EPA Report on the Status of Open Dumps on Indian Lands:

[IODI](#)

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Comprehensive Environmental Response, Compensation and Liability Information System -

[CERCLIS](#)

CERCLIS:

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned:

[CERCLIS NFRAP](#)

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens:

[CERCLIS LIENS](#)

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action:

[RCRA CORRACTS](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Nov 18, 2019

RCRA non-CORRACTS TSD Facilities:

[RCRA TSD](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Nov 18, 2019

RCRA Generator List:

[RCRA LQG](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Nov 18, 2019

RCRA Small Quantity Generators List:

[RCRA SQG](#)

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Nov 18, 2019

RCRA Conditionally Exempt and Very Small Quantity Generators List:

[RCRA CESQG](#)

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Conditionally Exempt and Very Small Quantity Generators (VSQG and CESQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG and CESQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Nov 18, 2019

RCRA Non-Generators:

[RCRA NON GEN](#)

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Nov 18, 2019

Federal Engineering Controls-ECs:

[FED ENG](#)

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jun 11, 2019

Federal Institutional Controls- ICs:

[FED INST](#)

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Jun 11, 2019

Emergency Response Notification System:

[ERNS 1982 TO 1986](#)

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System:

[ERNS 1987 TO 1989](#)

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System:

[ERNS](#)

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Nov 25, 2019

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database:

[FED BROWNFIELDS](#)

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Sep 3, 2019

FEMA Underground Storage Tank Listing:

[FEMA UST](#)

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Petroleum Refineries:

REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Oct 8, 2019

Petroleum Product and Crude Oil Rail Terminals:

BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Jan 18, 2019

LIEN on Property:

SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Nov 25, 2019

Superfund Decision Documents:

SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: Oct 25, 2019

State

State Response Sites:

RESPONSE

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database is state equivalent NPL.

Government Publication Date: Oct 1, 2019

EnviroStor Database:

ENVIROSTOR

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database is state equivalent CERCLIS.

Government Publication Date: Oct 1, 2019

Delisted State Response Sites:

DELISTED ENVIS

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: Oct 1, 2019

Solid Waste Information System (SWIS):

SWF/LF

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: Nov 13, 2019

EnviroStor Hazardous Waste Facilities:

HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: Oct 1, 2019

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report:

SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Land Disposal Sites:

LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Nov 14, 2019

Leaking Underground Fuel Tank Reports:

LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Nov 14, 2019

Delisted Leaking Storage Tanks:

DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: Nov 14, 2019

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels:

SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Permitted Underground Storage Tank (UST) in GeoTracker:

UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: Nov 14, 2019

Proposed Closure of Underground Storage Tank Cases:

UST CLOSURE

List of UST cases that are being considered for closure by either the California Environmental Protection Agency, State Water Resources Control Board or the Executive Director that have been posted for a 60-day public comment period.

Government Publication Date: Oct 8, 2019

Historical Hazardous Substance Storage Information Database:

HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Aboveground Storage Tanks:

AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

Delisted Storage Tanks:

DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Jan 7, 2020

California Environmental Reporting System (CERS) Tanks:

[CERS TANK](#)

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Nov 18, 2019

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions:

[LUR](#)

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: Oct 1, 2019

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions:

[HLUR](#)

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Jan 13, 2020

Deed Restrictions and Land Use Restrictions:

[DEED](#)

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: Nov 14, 2019

Voluntary Cleanup Program:

[VCP](#)

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: Oct 1, 2019

GeoTracker Cleanup Program Sites:

[CLEANUP SITES](#)

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Nov 14, 2019

Delisted County Records:

[DELISTED COUNTY](#)

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Jan 14, 2020

Delisted California Environmental Reporting System (CERS) Tanks:

[DELISTED CTNK](#)

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: Nov 18, 2019

Historical Hazardous Substance Storage Container Information - Facility Summary:

[HIST TANK](#)

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in the 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Tribal

Leaking Underground Storage Tanks (LUSTs) on Indian Lands:

INDIAN LUST

LUSTs on Tribal/Indian Lands in Region 9, which includes California.

Government Publication Date: Apr 8, 2019

Underground Storage Tanks (USTs) on Indian Lands:

INDIAN UST

USTs on Tribal/Indian Lands in Region 9, which includes California.

Government Publication Date: Apr 8, 2019

Delisted Tribal Leaking Storage Tanks:

DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: May 2, 2019

Delisted Tribal Underground Storage Tanks:

DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: May 2, 2019

County

Santa Clara County - Historic Solvent Case Listing:

SANTA CLARA HSOL

The Santa Clara Valley Water District was responsible for the oversight of solvent and toxic release cases and maintained a list of historic solvent cases in Santa Clara County.

Government Publication Date: Aug 22, 2016

Santa Clara County - Local Oversight Program Listing:

SANTA CLARA LO

A list of Leaking Underground Storage Tanks (LUST) facilities in Santa Clara County Provided by Santa Clara Department of Environmental Health (DEH). Since July 1, 2004 the DEH has served as the oversight agency for investigations and clean-up of petroleum releases from underground storage tanks through implementation of the Local Oversight Program (LOP) contract with the State Water Resources Control Board.

Government Publication Date: Jun 14, 2017

Santa Clara County - Underground Storage Tanks:

UST SANTA CLARA

List of underground storage tanks made available by the County of Santa Clara's Hazardous Materials Compliance Division.

Government Publication Date: Nov 15, 2019

Santa Clara County - CUPA Facilities List:

SANTA CLARA CUPA

A list of facilities associated with various Certified Unified Program Agency (CUPA) programs in Santa Clara County. This list is made available by Santa Clara County Department of Environmental health (DEH). DEH's Hazardous Materials Compliance Division (HMCD) is CUPA for the county with jurisdiction within the Cities of Los Altos Hills, Monte Sereno, and Saratoga; and in all unincorporated areas of Santa Clara County, including Moffett Field, San Martin, and Stanford.

Government Publication Date: Oct 31, 2019

Santa Clara County - City of San Jose Hazardous Material Facilities:

SANJOSE HM

A list of facilities with hazardous materials, including underground and aboveground tanks. This list is maintained by the City of San Jose Fire Department.

Government Publication Date: Jan 6, 2020

Santa Clara County - Gilroy City CUPA Facilities List:

GILROY CUPA

The Gilroy City Fire Marshal's office maintains a list of CUPA Facilities located in Gilroy City.

Government Publication Date: Nov 26, 2019

Santa Clara County - Sunnyvale City CUPA List:

SUNNYVALE CUPA

A list of facilities associated with various Certified Unified Program Agency (CUPA) programs in Sunnyvale City, Santa Clara County. This list is made available by the Fire Prevention & Hazardous Materials division of the Sunnyvale Department of Public Safety.

Government Publication Date: Jul 16, 2019

Additional Environmental Record Sources

Federal

PFOA/PFOS Contaminated Sites:

[PFAS NPL](#)

List of sites where PFOA or PFOS contaminants have been found in drinking water or soil. Made available by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Nov 15, 2019

Facility Registry Service/Facility Index:

[FINDS/FRS](#)

The US Environmental Protection Agency (EPA)'s Facility Registry System (FRS) is a centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, data collected from EPA's Central Data Exchange registrations and data management personnel.

Government Publication Date: Nov 6, 2019

Toxics Release Inventory (TRI) Program:

[TRIS](#)

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Dec 31, 2017

Perfluorinated Alkyl Substances (PFAS) Releases:

[PFAS TRI](#)

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Dec 31, 2017

Perfluorinated Alkyl Substances (PFAS) Water Contamination:

[PFAS WATER CONTAM](#)

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Dec 20, 2019

Hazardous Materials Information Reporting System:

[HMIRS](#)

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Jan 8, 2019

National Clandestine Drug Labs:

[NCDL](#)

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Sep 26, 2019

Toxic Substances Control Act:

[TSCA](#)

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Jun 30, 2017

Hist TSCA:

[HIST TSCA](#)

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing:

[FTTS ADMIN](#)

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing:

[FTTS INSP](#)

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List:

[PRP](#)

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

Government Publication Date: Oct 25, 2019

State Coalition for Remediation of Drycleaners Listing:

[SCRD DRYCLEANER](#)

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS):

[ICIS](#)

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Nov 18, 2016

Drycleaner Facilities:

[FED DRYCLEANERS](#)

A list of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: May 29, 2018

Delisted Drycleaner Facilities:

[DELISTED FED DRY](#)

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: May 29, 2018

Formerly Used Defense Sites:

[FUDS](#)

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: Oct 23, 2018

Material Licensing Tracking System (MLTS):

[MLTS](#)

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: Nov 1, 2018

Historic Material Licensing Tracking System (MLTS) sites:

[HIST MLTS](#)

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File:

[MINES](#)

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: May 3, 2019

Alternative Fueling Stations:

[ALT FUELS](#)

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: Jan 8, 2020

Registered Pesticide Establishments:

[SSTS](#)

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: May 31, 2019

Polychlorinated Biphenyl (PCB) Notifiers:

[PCB](#)

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Oct 9, 2019

State

Dry Cleaning Facilities:

[DRYCLEANERS](#)

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Oct 25, 2019

Delisted Drycleaners:

[DELISTED DRYCLEANERS](#)

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Oct 25, 2019

Non-Toxic Dry Cleaning Incentive Program:

[DRYC GRANT](#)

A list of grant recipients of the Non-Toxic Dry Cleaning Incentive Program made available by the California Air Resources Board (CARB). The program provides grants to eligible dry cleaning businesses to assist them in transitioning away from PERC machines to alternative non-toxic and non-smog forming technologies.

Government Publication Date: Feb 28, 2018

Per- and Polyfluoroalkyl Substances (PFAS):

[PFAS](#)

List of sites from the State Water Resources Control Board (SWRCB)'s GeoTracker at which one or more of the potential contaminants of concern are in the PFAS Master List of PFAS Substances made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Nov 14, 2019

PFOA/PFOS Groundwater:

PFAS GW

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.Y

Government Publication Date: Jan 15, 2020

Hazardous Waste and Substances Site List - Site Cleanup:

HWSS CLEANUP

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: Nov 26, 2019

List of Hazardous Waste Facilities Subject to Corrective Action:

DTSC HWF

This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.

Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement:

INSP COMP ENF

A list of permitted facilities with inspections and enforcements tracked in the Department of Toxic Substance Control (DTSC) EnviroStor.

Government Publication Date: Jul 16, 2019

School Property Evaluation Program Sites:

SCH

A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.

Government Publication Date: Oct 1, 2019

California Hazardous Material Incident Report System (CHMIRS):

CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Oct 23, 2019

Hazardous Waste Manifest Data:

HAZNET

A list of hazardous waste manifests received each year by Department of Toxic Substances Control (DTSC). The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Oct 24, 2016

Historical California Hazardous Material Incident Report System (CHMIRS):

HIST CHMIRS

A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).

Government Publication Date: Jan 1, 1993

Historical Hazardous Waste Manifest Data:

HIST MANIFEST

A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.

Government Publication Date: Dec 31, 1992

Historical Cortese List:

HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders:

CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Feb 16, 2012

California Environmental Reporting System (CERS) Hazardous Waste Sites:

CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Nov 18, 2019

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites:

DELISTED HAZ

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker:

GEOTRACKER

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Nov 14, 2019

Waste Discharge Requirements:

WASTE DISCHG

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Nov 14, 2019

Toxic Pollutant Emissions Facilities:

EMISSIONS

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program. This program requires emission inventory updates every four years.

Government Publication Date: Dec 31, 2017

Clandestine Drug Lab Sites:

CDL

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/ clandestine drug laboratories.

Government Publication Date: Jun 30, 2018

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental databases were selected to be included in the search.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX E
ASTM QUESTIONNAIRES



ASTM E1527-13
OWNER/LANDLORD/OCCUPANT INTERVIEW QUESTIONS

Project Number / Name: 1219003 / A0702 Morgan Hill, L.P.
Assessor Parcel Number (APN): 779-04-075
Project Address: 15440 Monterey Road
City of Morgan Hill, Santa Clara County, California

1. What is/are the Current Use(s) of the Property, to the best of your knowledge?

Mushroom Farm.

2. What was/were the Past Use(s) of the Property, to the best of your knowledge?

Mushroom Farm

3. Are there now or were there ever present any aboveground storage tanks, underground storage tanks or vent pipes, fill pipes or accessways indicating underground storage tanks?

Pulled and Remediated Soil. per certificates.

4. Are there any areas of the site with strong, pungent, or noxious odors? NO

5. Are there any areas of standing surface water, including Pools or sumps? Septic Tanks

6. Are there any Hazardous Substances and/or Petroleum Product Containers currently stored on site? NO

7. Are there any unlabelled Drums or any Unidentified Substance Containers stored on the property? NO

8. Is there any Electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs? *NO*

9. Do you know of any spills or other chemical releases that have taken place at the property? *NO*

10. Do you know of any environmental cleanups that have taken place at the property?

Pulled Gas Tanks

11. Are you aware of any deed restrictions or other activity or land use restrictions that have been placed on the property as a result of an environmental issue? *NO*

12. Are you aware of any environmental liens, unresolved notices of violation, or litigation related to a contamination issue at the property? *NO*

13. Are you aware of any previous assessments conducted at the subject property? *yes*

Phase I report

Preparer:

Name: Don Hurdness
Address: P.O. Box 447 Morgan Hill Ca 95038.
Signature: *Don Hurdness*
Date: 2-5-20



ASTM E1527-13
USER SPECIFIC QUESTIONNAIRE

Project Number / Name: 1219003 / A0702 Morgan Hill, L.P.
Assessor Parcel Number (APN): 779-04-075
Project Address: 15440 Monterey Road
City of Morgan Hill, Santa Clara County, California

In order to comply with the ASTM E1527-13 Standard and qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The *user* should provide the following information to the *environmental professional*. Failure to conduct these inquiries could result in a determination that "*all appropriate inquiries*" is not complete. Please provide the following information (if available). Your answers will be incorporated into the final Phase I ESA under the section "User-supplied Information."

(1.) Environmental cleanup liens that are filed or recorded against the property (40 CFR 312.25).

Did a search of *recorded land title records* (or judicial records where appropriate, see NOTE below) identify any environmental liens filed or recorded against the *property* under federal, tribal, state or local law? (NOTE - In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that environmental liens and AULs be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens and AULs.

Title Report provided to TA-Group DD, User did not see any environmental liens

(2.) Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).

Did a search of *recorded land title records* (or judicial records where appropriate, see NOTE above) identify any AULs, such as *engineering controls*, land use restrictions, or *institutional controls* that are in place at the *property* and/or have been filed or recorded against the *property* under federal, tribal, state or local law?

Unknown

(3.) Specialized knowledge or experience of the person seeking to qualify for the Landowner Liability Protections (LLP - 40 CFR 312.28).

As the *user* of this *ESA* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business? (self-explanatory)

No

(4.) Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

Fair Value

(5.) Commonly known or *reasonably ascertainable* information about the *property* (40 CFR 312.30).

Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,

(a.) Do you know the past uses of the *property*?

Mushroom Farm

(b.) Do you know of specific chemicals that are present or once were present at the *property*?

No

(c.) Do you know of spills or other chemical releases that have taken place at the *property*?

Per previous Phase I reports provided to TA- Group, there was a tank spill and clean-up

(d.) Do you know of any environmental cleanups that have taken place at the *property*?

Yes

(6.) The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the *user* of this *ESA*, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

Unknown

In addition, certain information should be collected, if available, and provided to the *environmental professional* selected to conduct the Phase I. This information is intended to assist the *environmental professional* but is not necessarily required to qualify for one of the *LLPs*. The information includes:

(a) the reason why the Phase I is required,

Purchase and lending

(b) the type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.,

Existing use, agriculture, User will purchase

(c) the complete and correct address for the *property* (a map or other documentation showing *property* location and boundaries is helpful),

15440 Monterey Road, Morgan Hill, CA 95037

(d) the scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services on whether any considerations beyond the requirements of Practice E 1527 are to be considered),

Phase 1 and II

(e) identification of all parties who will rely on the Phase I *report*,

A0702 Morgan Hill, LP, UHC H4 LLC, City of
Morgan Hill, County of Santa Clara

(f) identification of the site contact and how the contact can be reached,

John Telfet (agent of seller)
408-779-3146

(g) any special terms and conditions which must be agreed upon by the *environmental professional*, and

Don't cut the lock and leave the key!

(h) any other knowledge or experience with the *property* that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition).

Phase 1 & 2 reports and County No Further Actions provided to TA-Group DD

Preparer:

Name: Mark Irving, A0702 Morgan Hill, LP
Address: 2000 E Fourth Street, #205, Santa Ana, CA 92705
Signature: Mark Irving
Date: 1/27/20



ASTM E2600-15
VAPOR ENCROACHMENT SCREENING – USER QUESTIONNAIRE

Project Number / Name: 1219003 / A0702 Morgan Hill, L.P.
Assessor Parcel Number (APN): 779-04-075
Project Address: 15440 Monterey Road
City of Morgan Hill, Santa Clara County, California

1. Property type: Commercial Industrial Multi-Tenant Vacant Land Agriculture
2. Are there any buildings/ structures on the property? Yes No Unknown
If yes, type construction metal warehouse used for mushroom farming
3. Will buildings/structures be constructed on the property in the future? Yes No Unknown
If yes, type construction Apartments
4. If buildings exist or are proposed, do/will they have elevators? Yes No
5. Type of level below grade (existing or proposed)? Full Basement Crawl Space Slab on grade
 Parking Garage Multi-level Existing- unknown Proposed-no
6. Ventilation in level below grade? Yes No Unknown
7. Sump pumps, floor drains, or trenches (existing or proposed)? Yes No Unknown
8. Radon or methane mitigation system installed? Yes No Unknown
9. Heating system type (existing or proposed)? (CHECK ALL THAT APPLY)
 Existing-unknown, proposed, heat pump
 Hot Air Circulation Electric Baseboard Hot Air Radiation Heat Pump Hot Water Radiation
 Wood Stove Kerosene Heater Steam Radiation Fireplace Coal Furnace Radiant Floor Heat
 Hot Water Circulation Fuel Oil Furnace Gas Furnace Other
10. Type of fuel energy (existing or proposed)? (CHECK ALL THAT APPLY)
 Existing unknown, proposed electric, solar
 Natural Gas Electric Propane Fuel Oil Kerosene Wood Coal Solar Other
11. Have there ever been any environmental problems at the property? Yes No Unknown
If yes, describe) tank leak

12. Does/will a gas station or dry cleaner operate anywhere on the property? Yes No Unknown

13. Do any tenants use hazardous chemicals in relatively large quantities on the property? Yes No

Unknown

If yes, describe _____

14. Have any tenants ever complained about odors in the building or experienced health-related problems that may have been associated with the building? Yes No Unknown

15. Are the operations (or proposed operations to be performed) on the property OSHA regulated?

Yes No Unknown

16. Are there any existing or proposed underground storage tanks (USTs) or above ground storage tanks (ASTs)? Yes. No Unknown Existing- tank removed, None Proposed

17. Are there any sensitive receptors (for example, children, elderly, people in poor health, and so forth) that occupy or will occupy the property? Yes No Unknown

Preparer:

Name: Mark Irving A0702 Morgan Hill, LP

Address: 2000 E Fourth Street, #205, Santa Ana, CA 92705

Signature: Mark Irving

Date: 1/27/20

Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX F
PHOTOGRAPHIC LOG



Photo 1: View south along Watsonville



Photo 2: View to North along Watsonville



Photo 5: View offsite north



Photo 4: NW corner of subject site



Photo 5: View south through west end of property



Photo 6: View east at north (offsite) end of office building



Photo 7: View east through north end of site



Photo 8: Transformer south of office building



Photo 9: Rainwater sump south of office building



Photo 10: Heater units north end west drying buildings



Photo 11: View south along north side walkway



Photo 12: View northeast through property from SW



Photo 13: View east along south property line



Photo 15: Pond / Impoundment on south end



Photo 14: View north from SE corner



Photo 16: View to south



Photo 17: View north along eastern property line



Photo 18: View west at south end buildings



Photo 19: View to north southeast covered walkway



Photo 20: Galvanized roofing covered walkway



Photo 21: North end drying buildings



Photo 22: Northeast end drying buildings



Photo 23: Northeast drying building interior



Photo 24: Northern drying building ceiling insulation



Photo 25: Typical drying room



Photo 27: Typical drying room



Photo 26: East side office building



Photo 28: Western building electric panels

Phase I ESA/ AO702 Morgan Hill, L.P.
15440 Monterey Rd/15480 Watsonville Rd, Morgan Hill, California

April 2, 2020
Project 1219003a

APPENDIX G
TAGDD Sampling Report Excerpts

February 5, 2020

Mark Irving

A0702 Morgan Hill, L.P.
2000 E. Fourth St. Suite 205
Santa Ana, CA 92705



Via email: mirving@uhcllc.net

**Subject: Soil and Soil Vapor Sampling Report
15480 Watsonville Road / 15440 Monterey Road
Assessor's Parcel Number 779-04-075
Morgan Hill, Santa Clara County, California 95038
Project No. 119003**

Dear Sir:

The following letter report documents limited Phase II ESA soil and soil gas sampling conducted at the referenced site location on January 29, 2020 in accordance with our approved proposal dated January 2, 2020.

BACKGROUND

TA-Group DD, LLC (TAGDD) conducted a Phase I Environmental Site Assessment (ESA) for the northern half of a roughly 8-acre property located at the southeast corner of Monterey Road and Watsonville Road, at an address (Title Report) of 15440 and 15480 (other reports) Watsonville Road, in the City of Morgan Hill, Santa Clara County, California. The subject property is encompassed by Assessor's Parcel Number (APN) 779-04-075.

The Phase I concluded that a *Recognized Environmental Condition* (REC) was present at the site, based on the historic presence two former gasoline leaking underground storage (LUST) tank releases and the presence of an Above Ground Storage (AST)

Both of the former LUST cases were closed with fuel constituents left in place, and vapor sampling had not been conducted at either release site. Additionally, contaminated soil related to one of the releases was apparently reused as fill. Since the site will be developed for residential uses, and vapor risk is a major concern of recent regulatory guidance, TAGDD recommended that limited soil and soil vapor sampling be conducted.

PREPARATION ACTIVITIES

Prior to conducting field activities, TAGDD staff coordinated site access with the property owner, marked the site for utility clearance, and called in a DigAlert ticket (Ticket No. X002600208-00x). A Geoprobe direct-push driller was subcontracted to install probes and collect soil samples. A State Certified mobile laboratory capable of analyzing samples for EPA Method 8260 for Volatile Organic Compounds (VOC) was also subcontracted. Environmental Support Technologies (EST) of Irvine California (ELAP Certification 2773).

SAMPLING RATIONALE & ANALYTICAL PROGRAM

Historical information indicated that residual hydrocarbons were present in or near two areas of the site (the former LUFT location), and an AST was in use historically. Since residential development is planned and vapor risk has not been evaluated, volatile organic compounds (VOC) concentrations present in vapor was the primary driver of the investigation.

Previous investigations indicated groundwater was present at depths of 12-feet or less in the past. Historical information also indicated the depth of residual fuel contamination. Based on these factors, and to allow a vapor profile to be developed, vapor sample probes were initially planned for depths of 4 and 8 feet below grade, with soil samples to be collected at 8-feet bg.

SAMPLING PROCEDURES

After advancing the boring to the respective sample depths, soil samples were collected in a 36-inch acetate liner; a sample cut to 6-inches, capped with a Teflon liner, and sealed with a plastic end cap. Samples were immediately handed over to the mobile laboratory for storage/processing.

Soil vapor samples were collected with a ¼ inch diameter Nylaflo™ tubing fitted with a porous sampling tip (to assist in recovering a representative soil gas sample) was placed into each boring. A one-foot thick sand pack, consisting of #3 Monterey™ sand was placed into the borehole covering the sampling tip which in turn was followed by the placement of hydrated bentonite chips to the surface (or for a nested probe, to the next probe depth). Probe surface completion consisted of a two-way gas tight samplevalve.

Soil gas probes were allowed to equilibrate for a minimum of 120 minutes. Soil vapor sample collection and analysis was conducted using an on-site mobile laboratory provided by EST. A purge volume test was conducted at the first probe location (SG-1) to determine the appropriate sample volume. Soil vapor samples were then collected by extracting sample material from the tip of the vapor probe utilizing a dedicated sampling syringe. Once the soil vapor sample was collected, the syringe was transported to the on-site mobile laboratory for immediate laboratory analysis. Upon completion of testing and analysis, the vapor probes were removed, and the boring locations backfilled with hydrated bentonite chips capped with surface materials matching the surrounding area.

Note: soil gas probe installation generally followed the Department of Toxic Substances Control (DTSC)/California Regional Water Quality Control Board - Los Angeles Region "Advisory - Active Soil Gas Investigations" guidance, dated July 2015.

SOIL AND VAPOR SAMPLING

TAGDD supervised the collection of soil gas and soil samples on January 28, 2020. **Figure 1** shows sample locations.

Initial vapor probes and soil samples were collected near the Watsonville Road entrance (B-1/SG-1) in the former UST tank pit, and at the northwest corner of the property, in the vicinity of the former White Gasoline Service Station location. A soil sample was collected at location B-1 at a depth of 8-feet bg. Following soil sample collection, two vapor probes were installed; one at 8-feet bg and one at 4-foot bg.

The second sampling location was B-2/SG-2, just south (and down slope) of a diesel AST location. The probe was initially driven to a depth of 8 feet and a soil sample collected. The sampler noted water smeared on the lower portion of the acetate liner, although the soil sample was not wet. While the soil sample was prepared, we observed groundwater in the boring. Groundwater stabilized at approximately 3-feet bg, preventing the installation of a deep soil gas probe. Based on the 3-foot stabilized water depth, a probe was installed at a depth of 2.5 feet bg.

The third sampling location (B-3/SG-3) was at the former White Gasoline service station. The exact location of the former excavation and tanks for the former White Gasoline release were not known, as reported excavation and sample had been measured from the former Monterey Street center-line. The road and intersection have been modified since excavation and sampling occurred.

The fence-line at the northwest corner of the property is displaced due to the offsite improvements (channelized creek and road improvements). The displaced section is coincident with the creek edge and tree-line that appears on current and historical aerial photographs. Based on historical information, B-3/SG-3 was installed approximately 20-feet off the center of the displaced centerline.

Vapor sample results from B-1 and B-3 indicated the presence of Benzene and other VOC constituents. Preliminary data indicated that the benzene levels were above current residential guidance criteria. In an effort to define the soil gas, step out borings were installed. Three step outs were installed North, South, and East of the interior LUST location B-1. Due to time limitations (new locations required a 2-hour purge cycle) a single probe at a depth of 4-feet bgs was installed at locations SG-4 (North); SG-5 (East); and SG-6. Lastly, a step out location (SG-7) was installed 50-feet inland from B-3 (White Gasoline).

SAMPLE RESULTS

Only fuel-related VOC were found during out sampling effort: Benzene, Toluene, Ethylbenzene, Xylene, and 1,2,4-Trimethylbenzene were the only constituents present. The most elevated concentrations in soil gas were:

- Benzene (170 ug/m³)
- Ethylbenzene (23 ug/m³)
- Toluene (270 ug/m³)
- Xylenes mp/o (66 ug/m³ / 14 ug/m³)
- 1,2,4-Trimethylbenzene / 1,3,5 Trimethylbenzene (12 ug/m³ / 2.4 ug/m³)
- Chlorobenzene (14 ug/m³)

Laboratory results are attached.

Table 1 Soil Vapor Results in ug/m ³ EPA Method 8260B					
Sample ID	Benzene	Toluene	Ethylbenzene ug/m ³	m,p-Xylenes/o-Xylenes	1,2,4- TMB / 1,3,5-TMB
SV1-4	170	270	23	66 / 10	12 / ND
SV1-8	22	22	ND	6.2 / ND	3 / ND
SV2-2.5	20	96	10	ND / 14	7.2 / 2.4
SV3-4	24	95	8.6	ND / 11	5.4 / ND
SV3-8	27	110	12	41 / 13	5.8 / ND
SV4-4	ND	3.0	ND	2.4 / ND	2.4 / ND
SV5-4	21*	57	ND	ND / 3.6	2.2 / ND
SV6-4	24	56	ND	12 / ND	3.8 / ND
SV7-4	12	40	ND	16 / ND	3.4 / ND
Reporting Limits	5.0	5.0	5.0	5.0	5.0
2019 USEPA RSL / Ambient Air	0.36	5200	1.1	100 / 100	63 / NVL
HERO Note 3 Derived Screening Value	12	NA	36.7	NA	NA
NOTE: m,p,o-Xylenes = meta, para, and ortho. TMB= Trimethylbenzene *Chlorobenzene also present at 14 ug/m ³ / The referenced RSL for Chlorobenzene is 520 ug/m ³ therefore there is no vapor risk NL = No Value Listed on USEPA April 2019 Ambient RSLs NA = not applicable, as the values are below USEPA direct residential ambient air RSL					

VAPOR RISK EVALUATION METHODOLOGY

Newly published and controversial guidance published by the USEPA at HERO Note 3 (April 2019) suggest that an Attenuation Factor (AF) of 0.03 be applied to for vapor sample screening. The AF is applied to USEPA Regional Screening Levels (RSL) for Resident Ambient Air, published in April, 2019 (<https://www.epa.gov/risk/forms/contact-us-about-regional-screening-levels-rsls>).

Of the four volatile chemicals found in vapor samples, only Benzene and Ethylbenzene are risk discussion factors, as all other soil gas constituents are below the direct RSL values.

To determine the new screening value proposed in USEPA HERO Note 3 guidance, the RSL is divided by the AF of 0.03. For Ethylbenzene the derived screening value is **36.7 ug/m³** (1.1 / 0.03). For Benzene the derived screening value is **12 ug/m³** (0.36 / 0.03).

None of the Ethylbenzene values exceed the extremely conservative new HERO Note 3 derived screening value. For Benzene, 8 of the 9 vapor results fail the new screening criteria. Based on these results Benzene is present at values above the new HERO Note 3 guidance.

SOIL SAMPLE RESULTS

No fuel VOC was found in any of the three soils samples, B1-8, B2-8, or B3-8. Laboratory results are attached.

CONCLUSIONS

TAGDD performed limited vapor and soil sampling at the subject property, which consisted of collecting vapor at suspect locations, augmented with soil samples. All samples were analyzed by EPA Method 8260.

Vapor results were compared to new USEPA guidance that compares USEPA Residential Ambient Air RSLs by applying the new HERO Note 3 AF of 0.03. Of the fuel constituents present in soil gas, only Benzene failed the new USEPA guidance screening value; however, all but one of the vapor samples failed this criteria.

The extent of benzene levels in soil gas has not been defined at any of the three suspect sampling areas. For the interior UST area near the Watsonville entrance, the northern border is defined, while the east and western sample location are roughly twice the default benzene screening value. At the northwest corner near the former White Gasoline LUST release, the step out boring (SG-7) is at the default 12 ug/m³ value. At the AST location (SG-2), the single vapor sample is at roughly twice the screening value.

The absence of benzene or other fuel VOC in soil argue that, at least at sample locations, there is no source VOC within soil matrix; that is, all available VOC has moved from soil to interstitial pore space. If true, this means that there is no "source" material, and that vapors present in soil pore spaces will continue to degrade and be reduced over time if left undisturbed.

RECOMMENDATIONS

TAGDD recommends that additional soil vapor sampling be conducted in the future to define the borders of soil gas remaining at the site. This sampling could occur prior to, or after mitigation efforts.

Mitigation efforts could consist entirely of exposing soil (during grading or otherwise) within the impacted areas, and allowing these very low concentrations of benzene vapors to naturally vent to the atmosphere under controlled conditions, under the direction of OSHA trained personnel or a qualified environmental consultant. Monitoring should be conducted and documented. Additional vapor sampling could be conducted after such grading to verify the absence of benzene vapor above the guidance levels discussed here.

Alternatively, vapor barriers could be installed within the areas impacted by benzene vapors; or the design could incorporate benzene impacted areas as roadways, parking lots, or other areas where vapors are not released into confined spaces.

Another alternative would be to conduct a more comprehensive, site specific risk assessment, including site specific parameters such as soil permeability and porosity that would replace generic values contained in the default risk assessment guidance.

LIMITATIONS

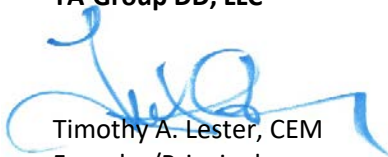
Findings provided herein have been derived in accordance with current standards of practice, and no warranty is expressed or implied. Standards of practice are subject to change with time. This report has been prepared for the sole use of the Client. Site conditions, land use (both onsite and offsite), or other factors may change as a result of manmade influences, and additional work may be required with the passage of time.

This report should not be relied upon by other parties without the express written consent of TAGDD or our Client, subject to our contract limitations. Any use or reliance upon this environmental evaluation by a party other than the Client, shall be solely at the risk of such third party and without legal recourse against TA-Group DD, its employees, officers, or directors, regardless of whether the action in which recovery of damages is brought or based upon contract, tort, statute, or otherwise. The Client has the responsibility to see that all parties to the project, including the designer, contractor, subcontractor, and building official, etc. are aware of this report in its complete form.

This report contains information which may be used in the preparation of contract specifications; however, the report is not designed as a specification document, and may not contain sufficient information for use without additional assessment. TAGDD assumes no responsibility or liability for work or testing performed by others. In addition, this report may be subject to review by the controlling authorities.

Thank you for contacting TAGDD regarding this important project. If you have questions, please contact the undersigned at (760) 473-0645.

Sincerely,
TA-Group DD, LLC



Timothy A. Lester, CEM
Founder/Principal

Attachments: Final Laboratory Reports Soil / Soil Vapor Samples, EST, Inc. dated Feb 3, 202 / EST Project Number EST3249
Figure 1: Sampling Locations

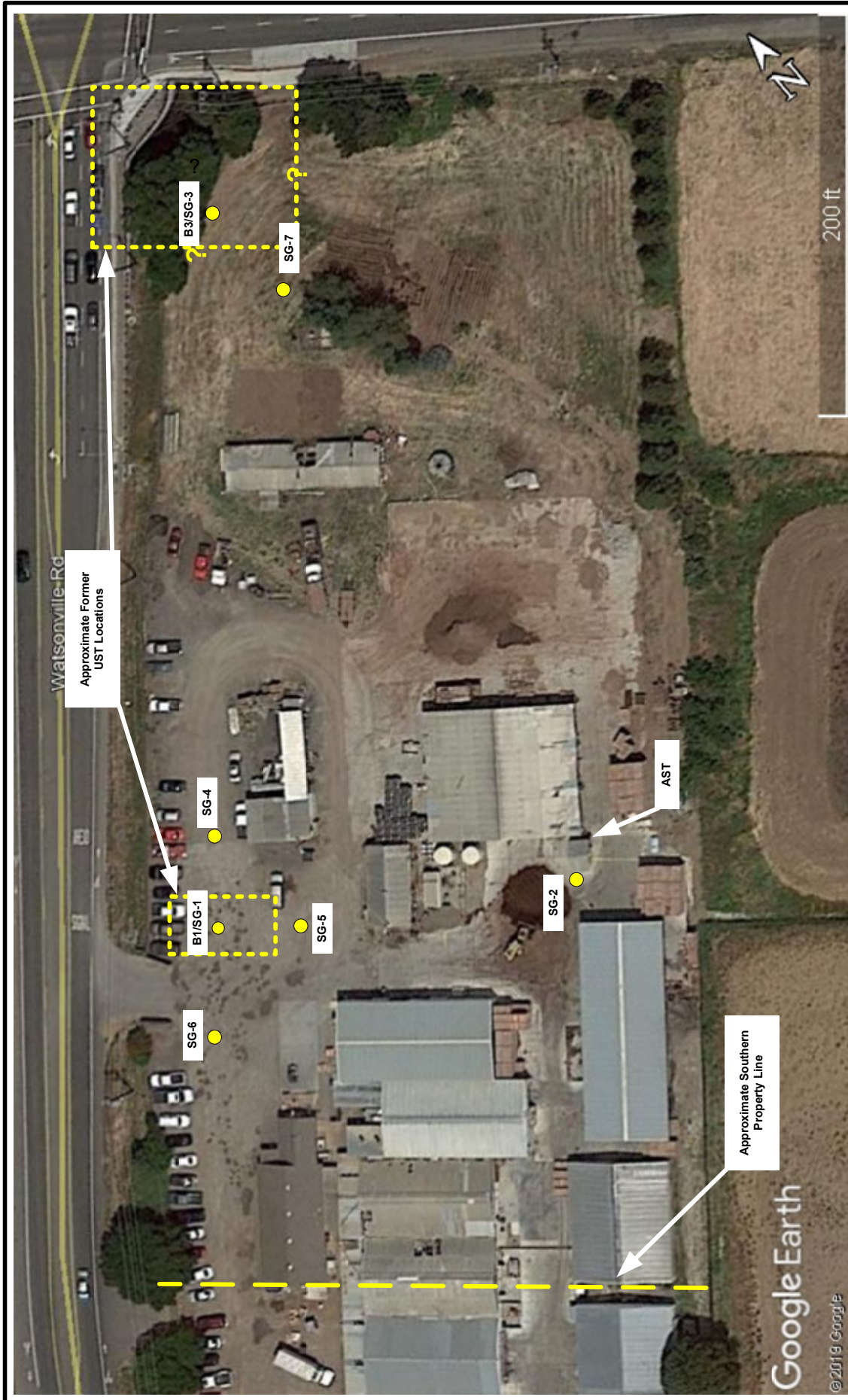
Selected References:

HERO, Note 3, Revision 2; <https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/04/HHRA-Note-3-2019-04.pdf>

USEPA: Regional Screening Levels (RSL) for Resident Ambient Air, published in April, 2019 (<https://www.epa.gov/risk/forms/contact-us-about-regional-screening-levels-rsls>).

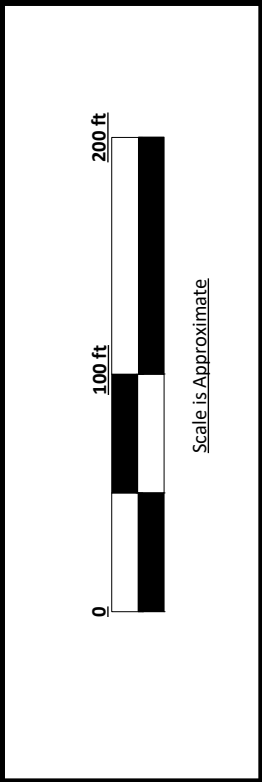
TA-Group DD; "Phase I Environmental Site Assessment, Potential Residential Development Property, APN 779-04-075, 15440 Monterey Road, 15480 Watsonville Road, Santa Clara County, California", dated February 5, 2020.

USEPA. <https://www.epa.gov/vaporintrusion/epa-spreadsheet-modeling-subsurface-vapor-intrusion>



SAMPLE LOCATIONS
 15440/15480 Monterey Road
 Morgan Hill, California
 Project 1219003

FIGURE 1



Appendix G
Phase II Environmental Site Assessment

June 13, 2020 (Revised November 2, 2020)

Mark Irving

A0702 Morgan Hill, L.P.
2000 E. Fourth St. Suite 205
Santa Ana, CA 92705



Via email: mirving@uhcllc.net

**Subject: Shallow Soil Sampling Report
 15480 Watsonville Road
 Assessor's Parcel Number 779-04-075 (South 3.7-acres)
 Morgan Hill, Santa Clara County, California 95038
 Project No. 1219003**

Reference: *"Phase I Environmental Site Assessment, Residential Redevelopment Property, APN 779-04-075 (South 3.7 Acres); 15480 Watsonville Road, Santa Clara County, California"* dated April 2, 2020, Project 1219003a, TAGDD

Dear Sir:

The following letter report documents limited soil sampling conducted at the referenced site location on June 3, 2020 in accordance with our approved Change Order No. 2 dated April 5, 2020.

BACKGROUND

TA-Group DD, LLC (TAGDD) conducted a Phase I Environmental Site Assessment (ESA) in April 2020 (referenced above) for the southern half of a 3.7-acre property located at the southeast corner of Monterey Road and Watsonville Road, at an address of 15480 Watsonville Road, in the City of Morgan Hill, Santa Clara County, California.

The Phase I concluded that a *Recognized Environmental Condition* (REC) was present at the site, based on the historic presence of a toxic insecticide (*Perm-Up 3.2EC*) used at the facility, which contained volatile organic compounds (VOC). Interviews with the operators indicated that surface water collected at the facility, which would presumably contain the insecticide, was gathered in a sump on the west side of the facility and subsequently discharged via a sprinkler system located at the southern end of the facility.

Based on the TAGDD recommended that limited soil sampling be conducted within the sprinklered area to assess the potential presence of VOC (and organochloride pesticides). Three shallow soil samples were collected and analyzed for this purpose.

PREPARATION ACTIVITIES

Prior to conducting field activities, TAGDD staff coordinated site access with Client. Utility clearance had formerly been conducted (DigAlert ticket (Ticket No. X002600208-00x).

SAMPLING RATIONALE & ANALYTICAL PROGRAM

Historical information indicated that water potentially containing *Perm-Up 3.2EC-related* VOC, was collected and disbursed in a sprinkler system at the southern end of the facility. If present, contaminants would be expected to be greatest near surface. Three shallow soil samples were collected in the sprinkler disbursement area and analyzed for VOC by EPA Method 8260b and Organochloride Pesticides by EPA Method 8181. **Figure 1** shows sample locations.

SAMPLING PROCEDURES

Excavation tools were cleaned prior and between holes to prevent cross contamination. Soil samples were collected by excavating to a depth of 6-10 inches below grade with a shovel, to moist relatively undisturbed soil. The holes were cleared 4-ounce glass sample jars used to collect samples. Jars were forced into the loosened subgrade soil, the soil leveled, and the sample lid screwed tightly down to prevent headspace. The sampler changed latex gloves between sample locations. Jars were immediately labeled and placed into a dry-ice chilled cooler prior to immediate transport to the laboratory; Torrent Laboratories, in Milpitas, California.

SOIL SAMPLE RESULTS

EPA 8260b VOCs were not detected in any samples. Laboratory results are attached. The pesticides Chlordane and DDT/DDE were found in one sample. **Table 1** includes sample results and referenced guidance.

Table 1 Results in ug/Kg EPA Method 8260B					
Sample ID	VOC EPA 8026	4.4'-DDT	4.4'-DDE	Chlordane	Gamma-Chlordane/ Alpha-Chlordane
1219003-HA-1	ND	7.20	7.34	477	30.5 / 49.4
1219003-HA-2	ND	ND	ND	ND	ND
1219003-HA-3	ND	ND	ND	ND	ND
Reporting Limits	5.0	3.9	2.6	42	3.3/3.5
2019 SFRWQCB Tier 1 ESL*	N/A	1.1**	330**	8.5	(not listed; use 8.5)

**San Francisco RWQCB Tier 1 Environmental Screening Levels 2019, Revision 2; Based on a generic site conceptual model designed for use at most sites*
*** ESL refers only to "DDE" and "DDE"*

DISCUSSION/CONCLUSIONS

No VOC related to the former application of *Perm-Up 3.2EC* insecticide was found in samples collected by TAGDD. Pesticides attributed to previous agricultural use on the property including DDT, DDE, and Chlordane and Chlordane isomers were found in only one of three samples. Based on experience at similar sites and the absence of these compounds in two or three samples, it is likely that these pesticides are present non-uniformly, and not representative of surficial soil conditions.

RECOMMENDATIONS

Post demolition, TAGDD recommends that a sampling grid be superimposed and discrete shallow samples collected at points currently under building foundations to identify any potential areas impacted by Chlordane and/or DDT isomers. In our experience, hot spots of pesticide-impacted soils are typically of limited volume and are typically excavated and disposed of without substantial grading. For larger quantities of soils that are non-hazardous, subject to regulatory approval, such soils may generally be placed under interior roads, parking areas, or buildings during normal grading operations to prevent future residential exposure.

LIMITATIONS

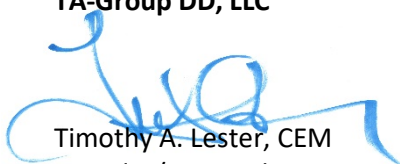
Findings provided herein have been derived in accordance with current standards of practice, and no warranty is expressed or implied. Standards of practice are subject to change with time. This report has been prepared for the sole use of the Client. Site conditions, land use (both onsite and offsite), or other factors may change as a result of manmade influences, and additional work may be required with the passage of time.

This report should not be relied upon by other parties without the express written consent of TAGDD or our Client, subject to our contract limitations. Any use or reliance upon this environmental evaluation by a party other than the Client, shall be solely at the risk of such third party and without legal recourse against TA-Group DD, its employees, officers, or directors, regardless of whether the action in which recovery of damages is brought or based upon contract, tort, statute, or otherwise. The Client has the responsibility to see that all parties to the project, including the designer, contractor, subcontractor, and building official, etc. are aware of this report in its complete form.

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Thank you for contacting TAGDD regarding this important project. If you have questions, please contact the undersigned at (760) 473-0645.

Sincerely,
TA-Group DD, LLC



Timothy A. Lester, CEM
Founder/Principal

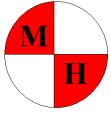
Attachments: Figure 1: Sampling Locations
Torrent Laboratory Report

Selected References:

TA-Group DD; *"Phase I Environmental Site Assessment, Residential Development Property, APN 779-04-075 (South 3.7-acres), 15480 Watsonville Road, Santa Clara County, California"*, dated April 2, 2020.

"Environmental Screening Levels", San Francisco Regional Water Quality Control Board, 2019, Revision 2:

Appendix H
Preliminary Stormwater Control Plan



MH engineering Co.

16075 Vineyard Blvd.
Morgan Hill, CA 95037
(408) 779-7381
(408) 226-5712 Fax

Preliminary Storm Water Control Plan Royal Oak Village

Watsonville Road & Monterey Road
(APN 779-04-075)
MHE 220034
February 16, 2021

Attachments:

LID Analysis
LID Calcs and SCM sizing table (11x17 spreadsheets)
Geotech Study (Full Report)
Storm water management plan-Offsite & Onsite (24x36)
Grading & Drainage Plan (24x36)
Site Grading Sections (24x36)
Hydrology Study (Peak Management)





Project Description:

This 7.64 acre parcel located at the Southwesterly corner of Watsonville Road and Monterey Road is a formerly mushroom farming facility. Business had been closed for last couple of years and land annexed into the City, currently zoned as MU-F (mixed use flex). Property has been used for a business with many buildings and other related infrastructure to grow mushrooms and process mushroom compost.

Property will be split into two parcels. All existing infrastructure on 'Parcel One' (3.70 ac) will be demolished and site cleared. Currently the entire site sits in 1% flood plain. A flood study has been prepared to raise 'Parcel One' above base flood elevations and remove proposed buildings comprised of total 72 apartments out of the flood plain.

This site does not have a much defined lay of land. Generally 'Parcel One' slopes in the south and easterly directions with less than 1% gradient. Watsonville Road frontage will be improved to its ultimate width with development of Parcel One.

Property lies within Monterey Bay region. Mitigated flows from the proposed development shall release into City public storm drain under Watsonville Road, which discharges into W. Little Llagas Creek, which crosses under Watsonville at Monterey Road corner via box culverts through the former corner of this property, currently owned in fee by the City as public right of way.

LID Analysis:

Section-2 Storm Water Management (LID)

Project lies within the California Regional Water Quality Control Board Central Coast. Project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 for the Resources Control Board Post Construction Requirements (PCRs):

- a) Project shall provide Stormwater Control Plan Checklist and applicable calculations per the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements.
- b) Project shall meet the applicable requirements of the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements:
 - i) Performance Requirement 1: Site Design and Runoff Reduction
 - ii) Performance Requirement 2: Water Quality Treatment
 - iii) Performance Requirement 3: Prevent offsite discharge from events up to the 95th percentile rainfall using SCMs.
 - iv) Performance Requirement 4: Control post-project peak flows to not exceed pre-project peak flows for the 2 through 10 year storm events.

Compliance:

2.1 Low Impact Development Design Strategies

2.1.a (PR-1) direct roof runoff onto vegetated areas

2.1.b (PR-1) direct runoff from sidewalks, walkways and other private hardscape onto vegetated areas



2.1.c (PR-2) Water Quality Treatment:

2.1.c.1 (PR-2) Runoff from impervious areas have been computed at 85th percentile rate and post construction treatment controls (SCM#1thru 8) have been sized to capture, store and treat first flush volumes.

2.1.c.2 (PR-2) storm water control measures (SCMs):

This site has documented infiltration infeasibility as indicated by the non-existent infiltration rates (**as low as 0.0031 in/hour**) provided by the Soils Engineer. Therefore, 85th and 95th percentile volumes have been increased by 20% and based on the EISA (equivalent impervious surface area) 10% of the site has been allocated to retention based SCMs. We have met both 10% area and 20% volume escalation requirements to comply with water board's Resolution No. R3-2013-0032 for infiltration infeasibility.

2.1.d (PR-3) runoff retention:

This development is tributary to East Little Llagas Creek in the Monterey Bay, Region 3. Site falls in zone WMZ-1. SCMs are sized to treat and store 95th percentile volumes with no release.

2.1.d.1 (PR-3) Lid site design measures:

Following design measures are incorporated into the site layout:

- a) created open spaces where native vegetation and significant trees are clustered
- b) limit impervious areas with the approved zoning
- c) minimized hardscape within the scope of project
- d) conformed site layout along natural landforms
- e) minimized native vegetation and optimized grading

2.1.e (PR-4) Peak Management Performance Requirement (Hydromodification):

As demonstrated in the routing analysis of various storm events in the hydrology study and summary presented on page 4, this project will meet the peak management requirements to mitigate post-project peak flows reduced to pre-project rates for discharge into the public storm drain with an orifice control.

2.1.f Performance Requirement Certifications

See attached Certifications.

2.2 Storm Water Control Measures (SCMs) for 85th & 95th percentile storm water management

Roof and perimeter areas surrounding all four buildings will generally filter through landscaping to receive pre-treatment before flowing into the SCMs. Runoff from the Access Drives and parking lots will directly sheet flow into the SCMs. No catch basins are proposed in the Access Drives and parking areas. LID Calcs and SCM sizing spreadsheets are included on the Storm Water Management Plan and also enclosed as stand-alone in this study. SCM sizing table provides quantitative break down of storage volume in each SCM above and below the bottom surface.



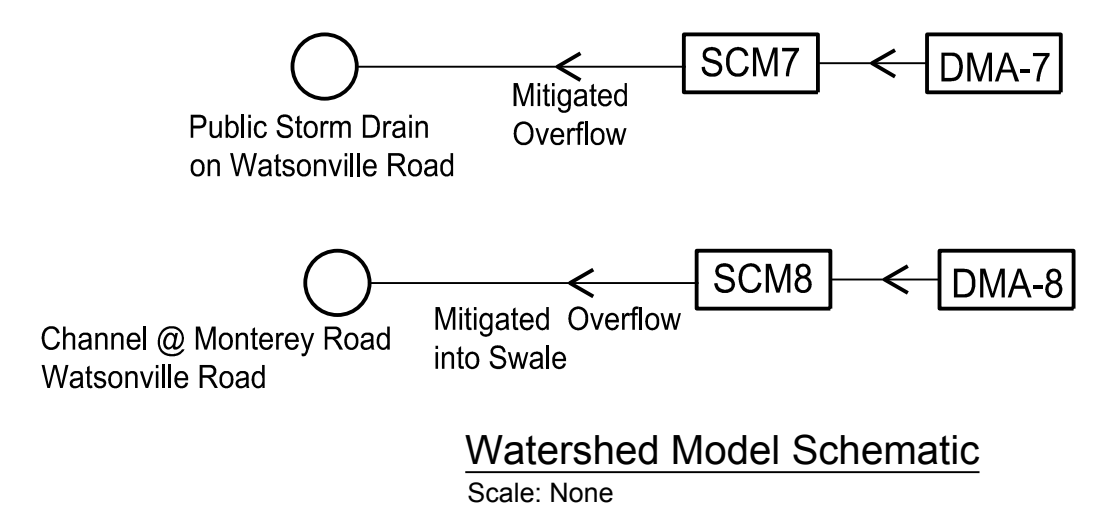
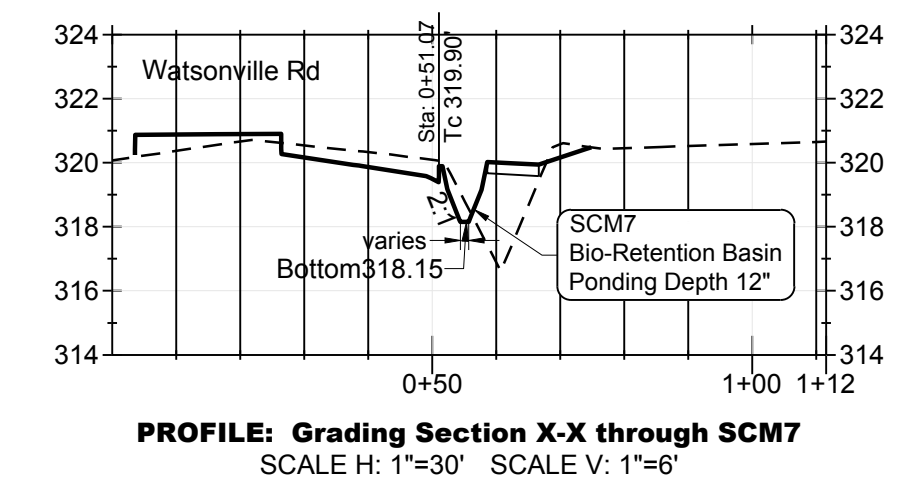
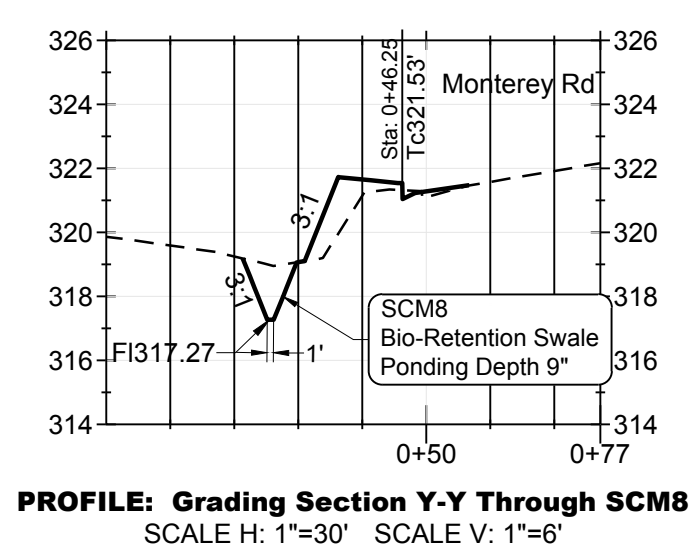
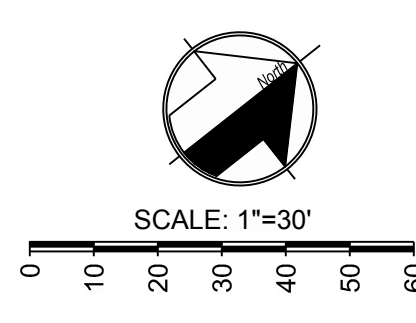
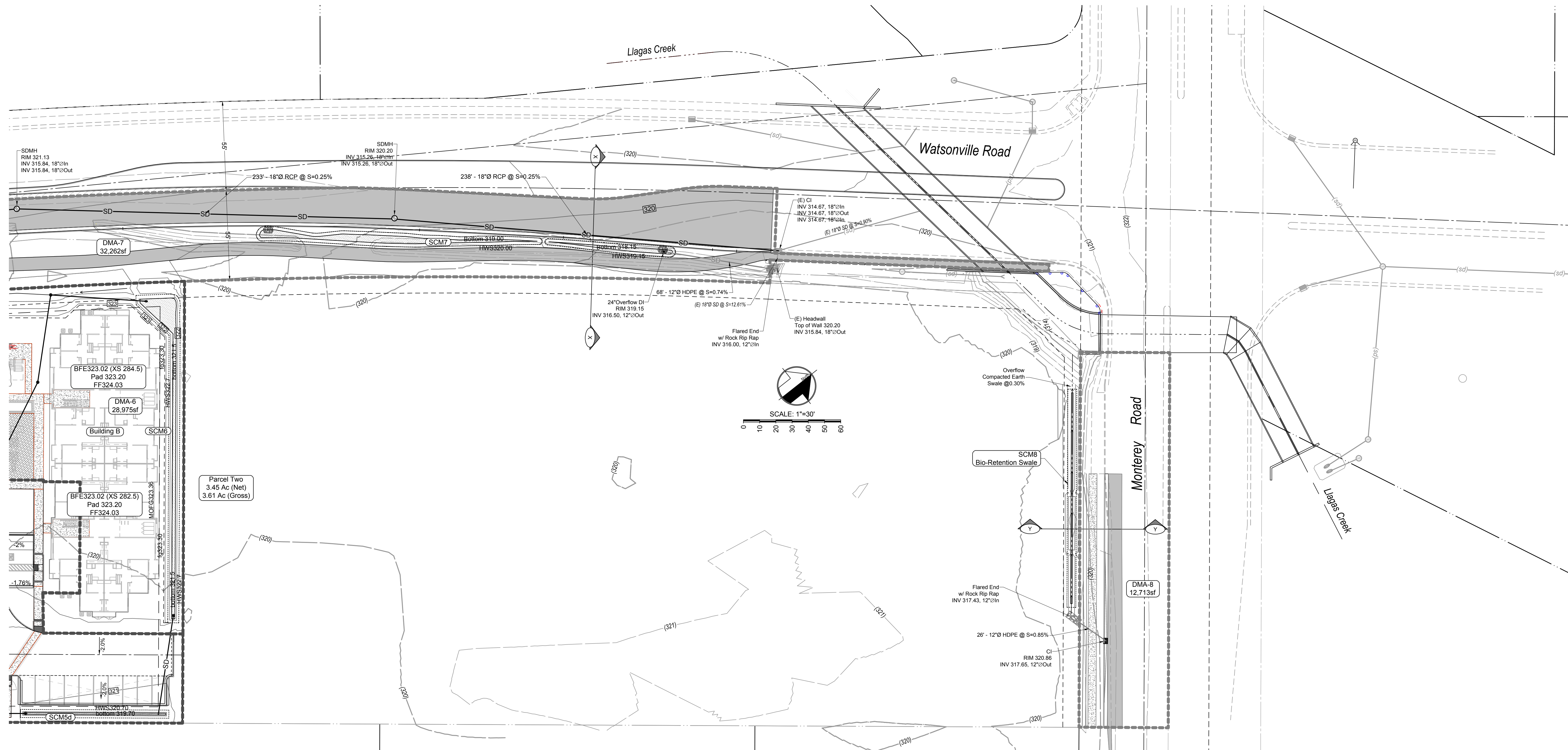
Hydrology (Peak Management):

Sufficient volume has been provided in the SCMs to mitigate 2 year through 100 year post-project storm events to pre-project level. Metered flows shall release at pre-project level from SCM3 (largest SCM) via 12"Ø orifice into the proposed public storm.

A full hydrology analysis is included in this study.

Routing Summary Results:

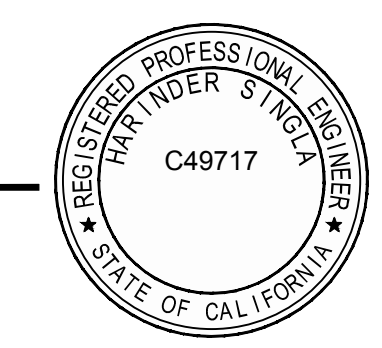
Event	Pre Project Q /Post Project Net Release at SCM3 via 12"Ø orifice, inv 321.00/Water Surface Elev.	
2yr	1.76/1.45/321.64	ok
10yr	2.83/2.56/321.95	ok
25yr	3.40/3.00/322.13	ok
100yr	3.95/3.49/322.35	ok



NO.	DESCRIPTION	DATE	BY	DATE
REVISIONS				

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL 17575 PEAK AVE. MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

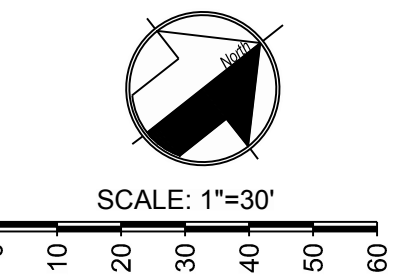
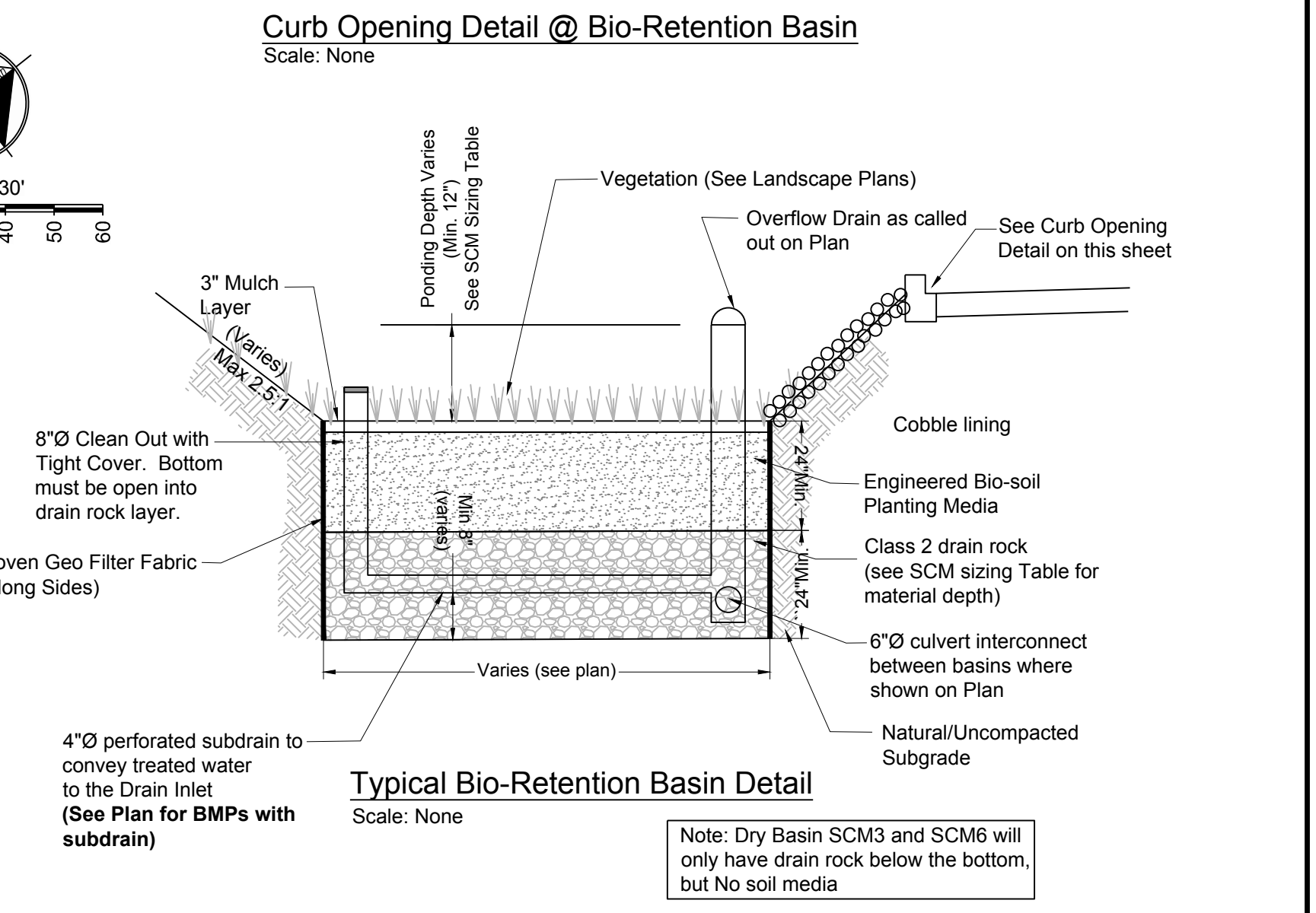
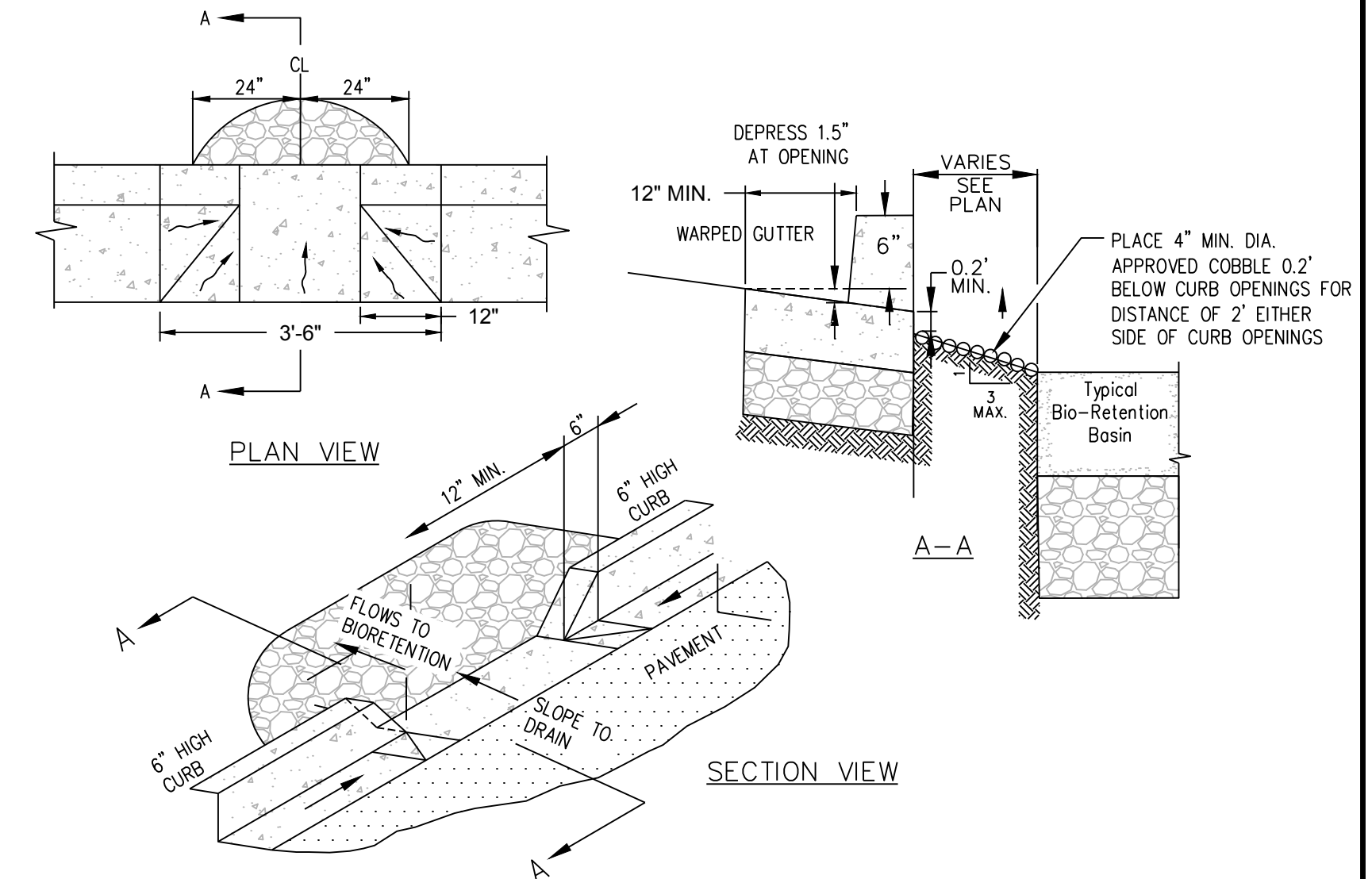
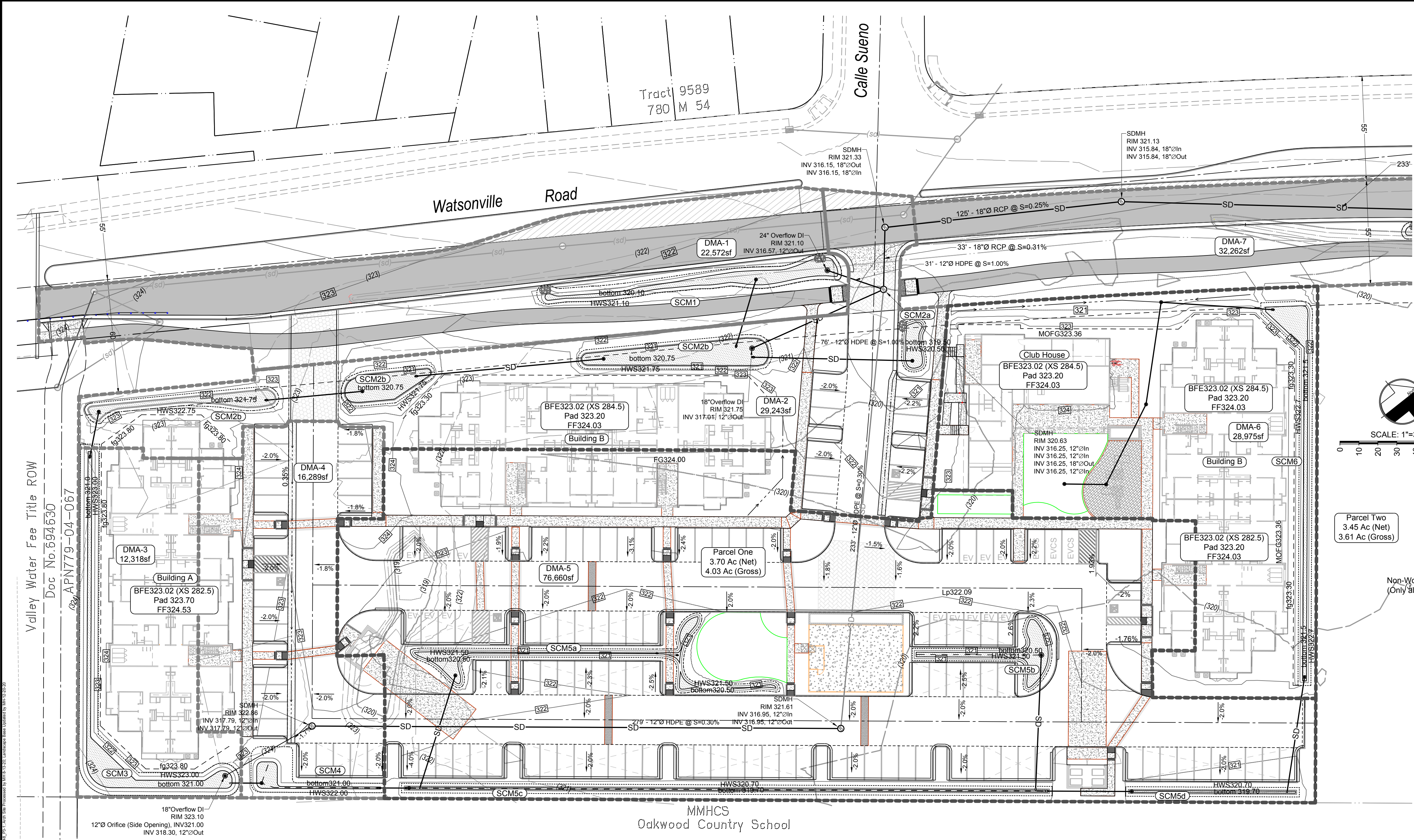
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MH engineering Co.
SUBDIVISIONS - LAND PLANNING - LAND SURVEYS
16075 VINEYARD BOULEVARD MORGAN HILL, CA 95037
(408) 779-7381 FAX: (408) 226-5712

Storm Water Management Plan-Offsite
Royal Oak Village
MORGAN HILL CALIFORNIA

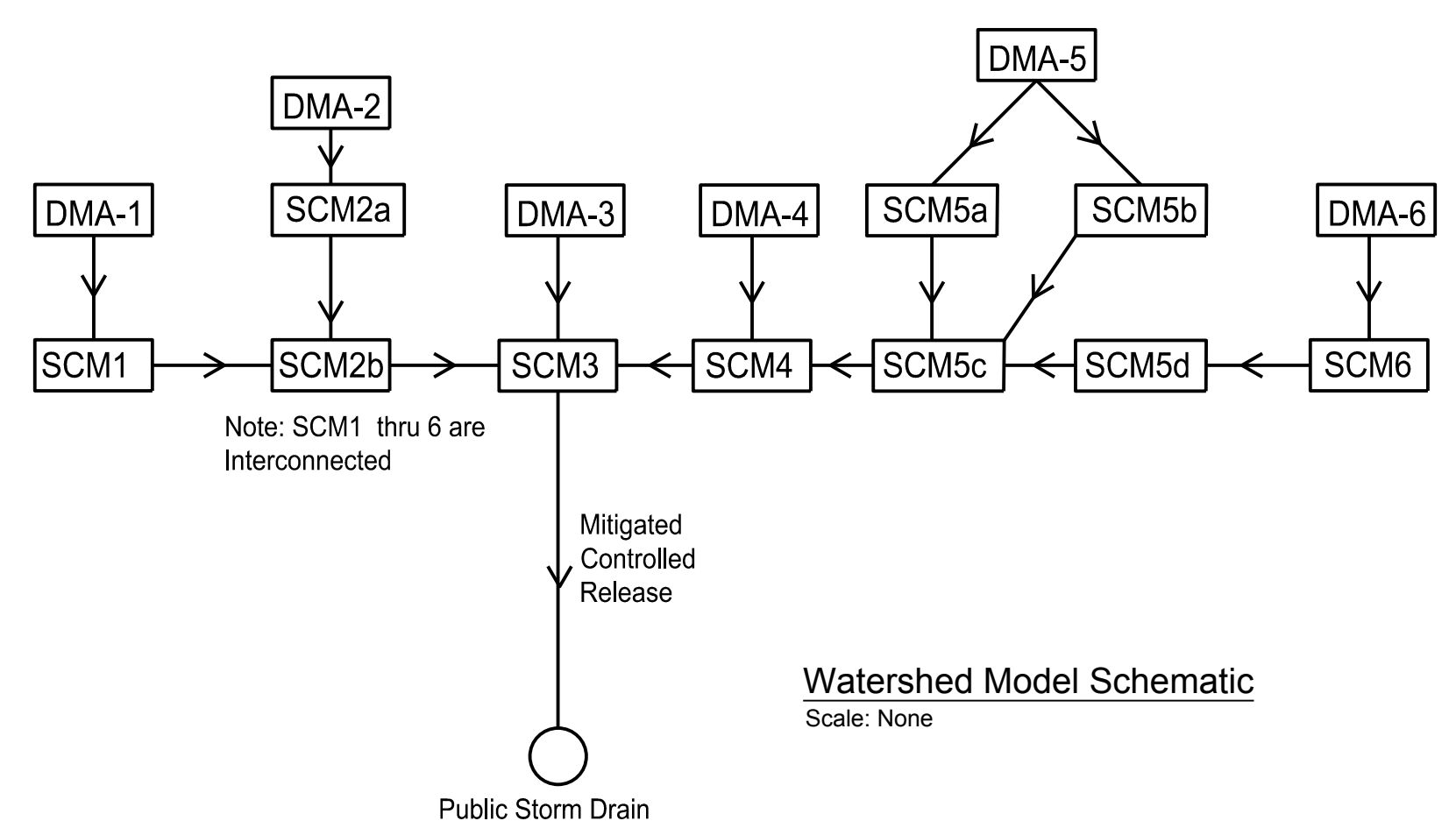
CITY FILE NO:	
PLAN SET:	02/2021
DRAWING:	9 of 13



"Royal Oak Village" LID Calcs

DMA	DMA Area (sf)	DMA Impervious Area (i.A.)	Public Handicap (sf)	Roof & private Handicap (sf)	Parking and Pr. pavement (sf)	4% Area	Total Impervious Area (sf)	PerVIOUS Area (sf)	% Impervious	Runoff Coeff. C	85th Percentile (1.1" Rain) Volume (cf)	95th Percentile (1.37" Rain) Volume (cf)	Native Soil Infiltration Rate (in/hr)
1	22,572	15,964	0	0	611	15,264	7,308	67.6%	0.472	977	1,545	0.0031	
2	29,243	1,822	9,729	5,569	296	17,120	12,123	58.5%	0.398	1,067	1,687	0.0031	
3	12,318	0	7,118	0	0	7,118	5,200	57.8%	0.392	443	701	0.0031	
4	16,289	0	3,598	9,200	372	12,897	3,392	79.2%	0.590	881	1,303	0.0031	
5	76,660	0	8,332	43,472	1,739	51,804	24,856	67.6%	0.472	3,314	5,242	0.0031	
6	28,975	0	15,049	0	0	15,049	13,026	51.9%	0.352	934	1,478	0.0031	
7	32,262	20,748	0	0	830	20,748	11,514	64.3%	0.443	1,311	2,074	0.0031	
8	12,713	3,252	0	0	130	3,252	9,461	25.6%	0.291	235	371	0.0031	
Total Area	231,032	41,086	43,826	58,340		143,252	67,780	Total SCM Volume Required (incl 20% infeasibility increase)		9,161	17,390		
Total Project Site Gross Area	183,388 (3.71 Net @ 0.50 RW = 4.21 ac)												
Total DMA Area (Includes Offsite Streets DMA1, DMA3 & DMA10)	231,032 (5.30 ac)												
Total New Impervious Area	143,252												
Total Replaced Impervious Area (Onsite 67,832; Offsite Public Street 22,106)	109,939												
Total New PerVIOUS Area	67,780												
Net Impervious Area	143,252												

Notes & Equations Used
 $C = 0.858^{(I)} + 1.078^{(I^2)} + 0.774^{(I^3)} + 0.04$
 1995/85 Volume = $C^{(I^2)}/12$
 *Site is infeasible for permeability. Total 95th percentile volume has been updated by 20%.
 Porosity Values Used: Bio-soil media = 0.25; Drain Rock = 0.40



"Royal Oak Village" SCM Sizing Table

DMA	SCM#	SCM Desc.	SCM Top Surface Area (sf)	SCM Bottom Surface Area (sf)	SCM above Ground Volume (cf)	Ponding Depth (in)	Bio Soil Media depth (in)	Drain Rock depth (in)	SCM below Ground Volume (cf)	SCM Total Volume provided (cf)
1	1	bio-retention basin	1,271	610	941	12.0	24	24	793	1,734
2	2a	bio-retention basin	312	180	246	12.0	24	24	234	480
2	2b	bio-retention basin	3,005	1,826	2,466	12.0	24	36	3,274	5,740
3	3	Dry Basin	2,957	933	3,890	24.0	0	40	1,244	5,134
4	4	bio-retention basin	756	202	479	12.0	24	24	263	742
5	5a	bio-retention basin	1,333	378	856	12.0	24	24	491	1,347
5	5b	bio-retention basin	840	436	638	12.0	24	24	567	1,205
5	5c	bio-retention basin	1,714	339	1,027	12.0	24	24	441	1,467
5	5d	bio-retention basin	458	88	273	12.0	24	24	114	387
6	6	Dry Basin	1,665	638	1,394	14.4	0	42	893	2,287
7	7	bio-retention basin	1,682	822	1,142	12.0	36	36	1,213	2,355
8	8	bio-retention Swale	740	130	326	9.0	24	0	65	391
		SCM Volume subtotal			12,736				9,592	23,268
		Total SCM Volume Provided (SCM1-6)								20,522
		Total SCM 95th Volume Req'd (DMA1-6) with 20% infeasibility								14,124
		Balance Storage to be Used for Peak Management of (DMA1-6)								6,398

NO.	DESCRIPTION	DATE	BY	DATE
REVISIONS				

City of Morgan Hill
 Public Works Department
 17575 PEAK AVE. MORGAN HILL, CA 95037
 (408) 776-6480 FAX (408) 779-7236

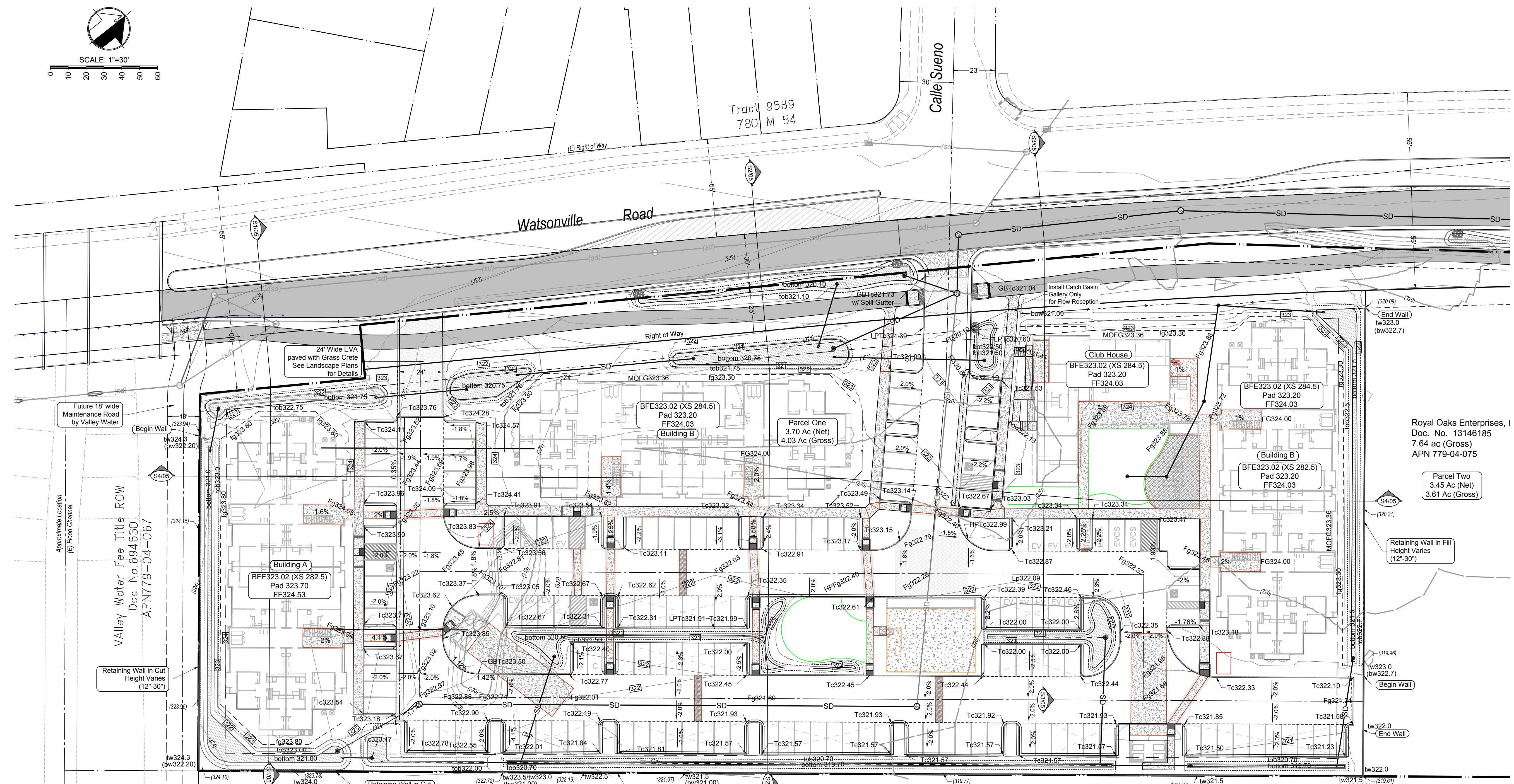
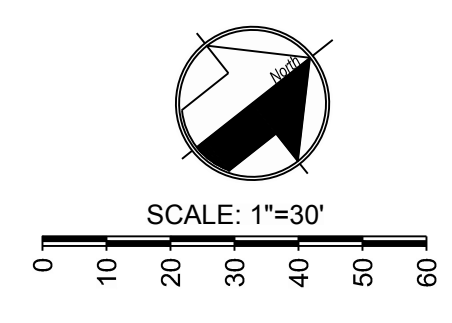
WORK ACCEPTED: _____ INSPECTOR: _____
 DRAWN: MM DESIGN: HS HOR: 1"=30'
 CHECKED: _____ DATE: _____ VERT: NA
 APPROVED: _____ DATE: _____ JOB NO: 220034
 Scott C. Creer CITY ENGINEER EXP. DATE 06-30-2023



MH engineering Co.
 SUBDIVISIONS - LAND PLANNING - LAND SURVEYS
 16075 VINEYARD BOULEVARD MORGAN HILL, CA 95037
 (408) 779-7381 FAX: (408) 226-5712

Storm Water Management Plan-Onsite
Royal Oak Village
 MORGAN HILL CALIFORNIA

CITY FILE NO:
 PLAN SET: 02/2021
 DRAWING: 10 of 13



Royal Oaks Enterprises, I
 Doc. No. 13146185
 7.64 ac (Gross)
 APN 779-04-075

Parcel One
 3.70 Ac (Net)
 4.03 Ac (Gross)

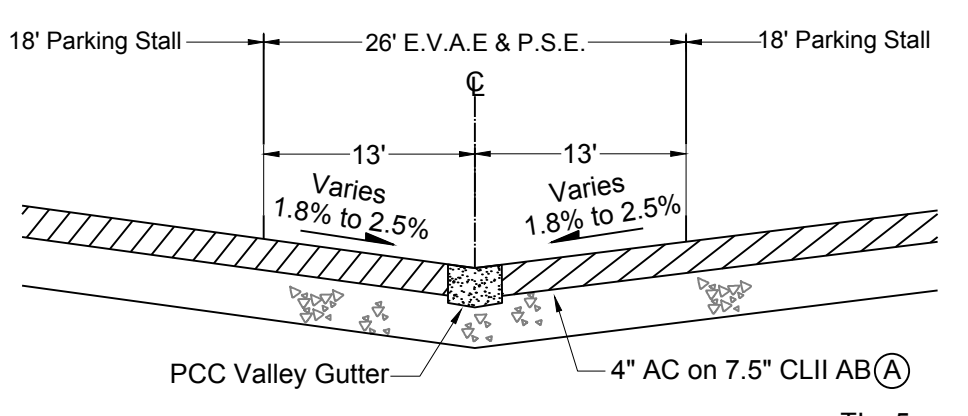
Parcel Two
 3.45 Ac (Net)
 3.61 Ac (Gross)

Valley Water Fee Title ROW
 Doc No. 694630
 APN 779-04-067

MMHCS
 Doc No. 16951319
 Oakwood Country School
 A.P.N. 779-04-077

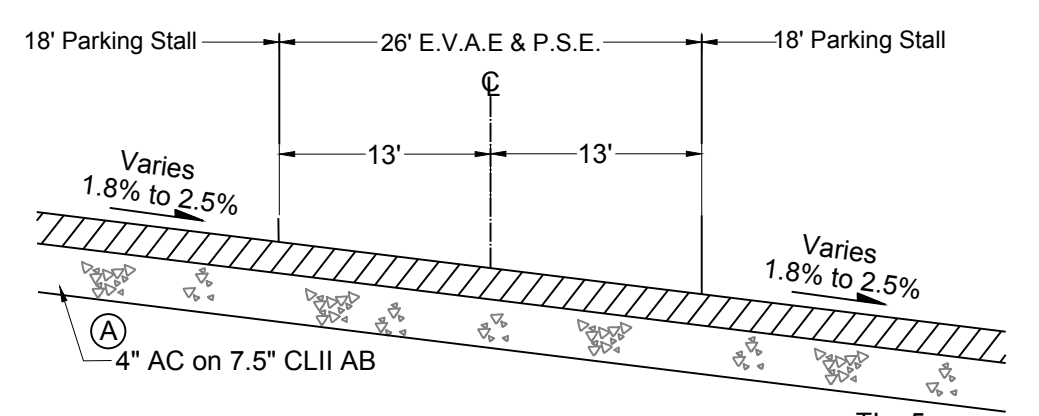
Preliminary Earthwork Summary ONSITE:

Description	Cut (yd)	fill (yd)
Strippings Loss (1" depth)	Typically Absorbed Onsite	
Access Drive, Parking & Site Grading incl. bio-retention basin excavation (w/ 10% compaction)	1,827	9,367
Bio-retention basin excavation for backfill with soil media and drain rock	311	
Trench spoils (wet & dry)	2,000	
Finish grading	300	
Net volume	4,438	9,367
	Import of Material	4,929

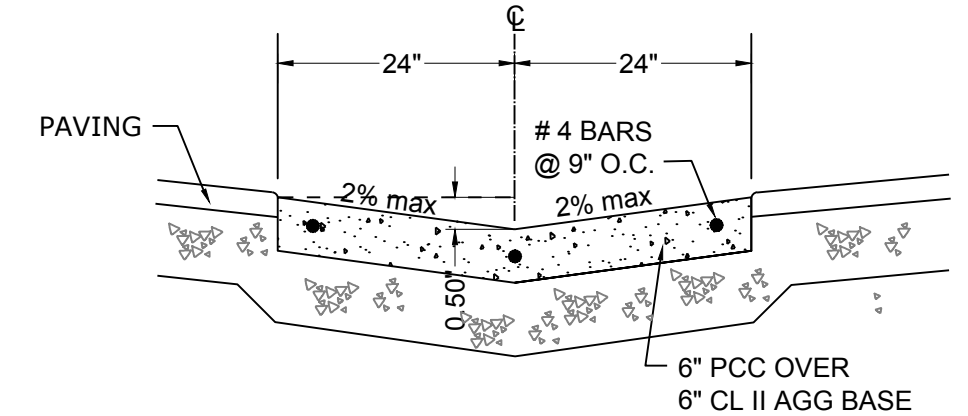


Detail - Private Access off Watsonville Road
 Scale none

(A) Pavement Section to be adjusted prior to base rock placement per final 'R' values obtained by the Geotech



Detail-Typical Private Access All other locations
 Scale none

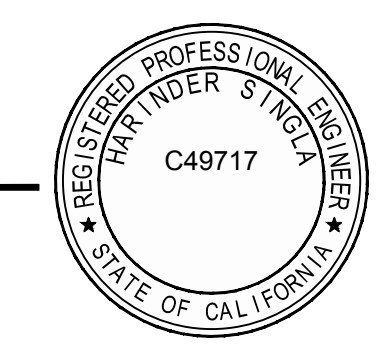


Detail-Typical PCC Valley Gutter
 Scale none

NO.	DESCRIPTION	DATE	BY	BY	DATE
REVISIONS					

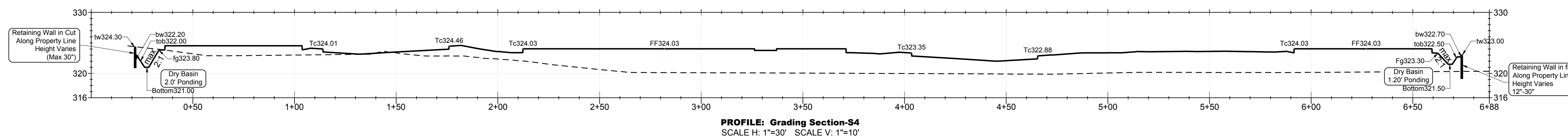
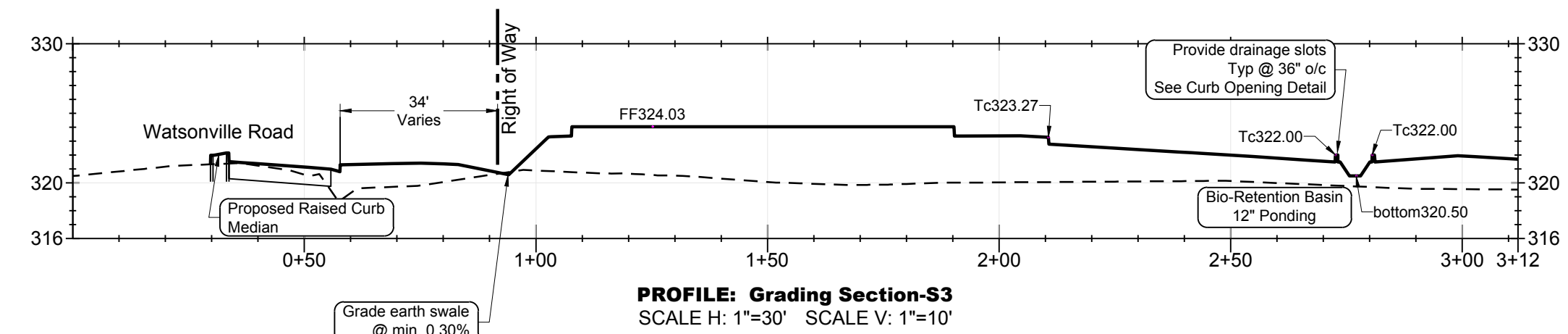
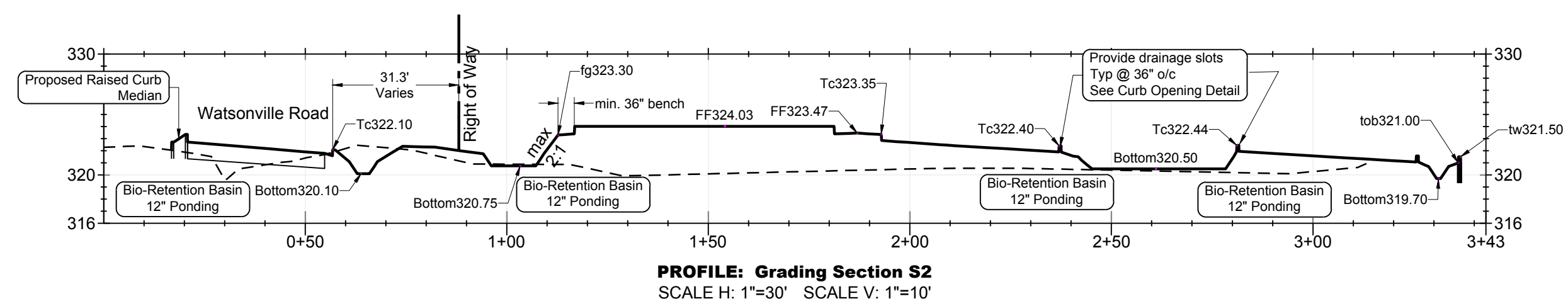
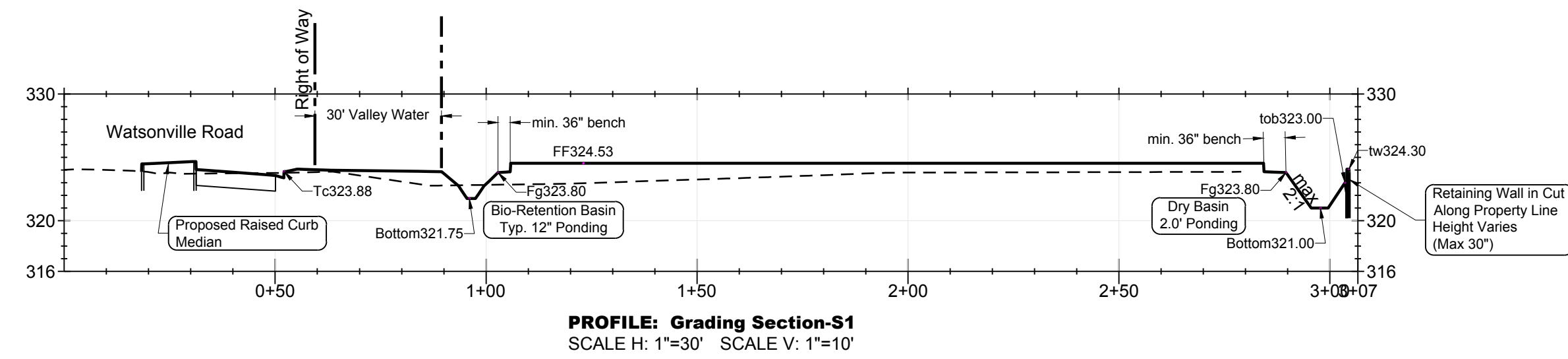
City of Morgan Hill
 Public Works Department
 CITY OF MORGAN HILL 17575 PEAK AVE. MORGAN HILL, CA 95037
 (408) 776-6480 FAX (408) 779-7236

DRAWN: MM	DESIGN: HS	HOR: 1"=30'	SUPERVISED BY:
CHECKED:	DATE:	VERT: NA	
APPROVED:	DATE:	JOB NO: 220034	
Scott C. Creer CITY ENGINEER EXP. DATE 06-30-2023			SIGNATURE DATE



MH engineering Co.
 SUBDIVISIONS - LAND PLANNING - LAND SURVEYS
 16075 VINEYARD BOULEVARD MORGAN HILL, CA 95037
 (408) 779-7381 FAX: (408) 226-5712

Grading and Drainage Plan
Royal Oak Village
 MORGAN HILL CALIFORNIA



DATE: 02/2021

NO.	DESCRIPTION	DATE	BY	BY	DATE
REVISIONS					

City of Morgan Hill
Public Works Department
CITY OF MORGAN HILL 17575 PEAK AVE MORGAN HILL, CA 95037
(408) 776-6480 FAX (408) 779-7236

DRAWN: MM	DESIGN: HS	HOR: 1"=30'	SUPERVISED BY:
CHECKED:	DATE:	VERT: 1"=10'	
APPROVED:	DATE:	JOB NO: 220034	
SCALE: CHM RCE 58879	CITY ENGINEER EXP. DATE 06-30-2023		

SIGNATURE _____ DATE _____



MH engineering Co.
SUBDIVISIONS - LAND PLANNING - LAND SURVEYS
16075 VINEYARD BOULEVARD MORGAN HILL, CA 95037
(408) 779-7381 FAX: (408) 226-5712

Site Grading Sections
Royal Oak Village
MORGAN HILL CALIFORNIA

CITY FILE NO.
PLAN SET: 02/2021
DRAWING: 12 of 13

"Royal Oak Village" LID Calcs												
DMA	DMA area (sf)	DMA Impervious Area (I.A.)			4% Area	Total Impervious Area(sf)	Pervious Area (sf)	% Impervious (i)	Runoff Coeff 'C'	85th Percentile (1.1" Rain) Volume (cf)	*95th Percentile (1.74" Rain) Volume (cf)	*Native Soil Infiltration Rate (in/hr)
		Public Hardscape (sf)	Roof & private Hardscape (sf)	Parking and Pr. pavement (sf)			Planters, Landscape, Lawn Tot lot & Bio-Ret					
1	22,572	15,264	0	0	611	15,264	7,308	67.6%	0.472	977	1,545	0.0031
2	29,243	1,822	9,729	5,569	296	17,120	12,123	58.5%	0.398	1,067	1,687	0.0031
3	12,318	0	7,118	0	0	7,118	5,200	57.8%	0.392	443	701	0.0031
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7	32,262	20,748	0	0	830	20,748	11,514	64.3%	0.443	1,311	2,074	0.0031
8	12,713	3,252	0	0	130	3,252	9,461	25.6%	0.201	235	371	0.0031
Total Area	231,032	41,086	43,826	58,340		143,252	87,780	Total SCM Volume Required (incl 20% infeasibility increase)		9,161	17,390	
Total Project Site Gross Area				183,388 (3.71Net+0.50 R/W=4.21ac)			<p align="center">Notes & Equations Used</p> $C = 0.858 * (i)^3 - 0.78 * (i)^2 + 0.774 * i + 0.04$ $P_{95/85} \text{ Volume} = C * I * A / 12$ <p>*Site is infeasible for permeability. Total 95th percentile volume has been upsized by 20%.</p> <p>Porosity Values Used : Bio-soil media = 0.25; Drain Rock = 0.40</p>					
Total DMA Area (Includes Offsite Streets DMA1, DMA9 & DMA10)				231,032 (5.30ac)								
Total New Impervious Area				143,252								
Total Replaced Impervious Area (Onsite 87,832; Offsite Public Street 22,106)				109,938								
Total New Pervious Area				87,780								
Net Impervious Area				143,252								

"Royal Oak Village" SCM Sizing Table											
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2	2a	bio-retention basin	312	180	246	12.0	24	24	234	480	
2	2b	bio-retention basin	3,005	1,926	2,466	12.0	24	36	3,274	5,740	
3	3	Dry Basin	2,957	933	3,890	24.0	0	40	1,244	5,134	
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5	5a	bio-retention basin	1,333	378	856	12.0	24	24	491	1,347	
5	5b	bio-retention basin	840	436	638	12.0	24	24	567	1,205	
5	5c	bio-retention basin	1,714	339	1,027	12.0	24	24	441	1,467	
5	5d	bio-retention basin	458	88	273	12.0	24	24	114	387	
6	6	Dry Basin	1,685	638	1,394	14.4	0	42	893	2,287	
7	7	bio-retention basin	1,662	622	1,142	12.0	36	36	1,213	2,355	
8	8	bio-retention Swale	740	130	326	9.0	24	0	65	391	
				SCM Volume subtotal	12,736			SCM Volume subtotal	9,592	23,268	
										Total SCM Volume Provided (SCM1-6)	20,522
										Total SCM 95th Volume Req'd (DMA1-6) with 20% Infeasibility	14,124
										Balance Storage to be Used for Peak Management of (DMA1-6)	6,398



September 15, 2020
Project PA20.1020.00

Mark Irving
UHC H4, LLC
2000 E. Fourth Street, #205
Santa Ana, California 92705

Subject: Percolation Testing, Crossing on Watsonville Road, Morgan Hill, California

Dear Mr. Irving,

This letter presents the results of our percolation testing for the proposed Crossing on Watsonville Road project to be located at 15480 Watsonville Road in Morgan Hill, California. Our firm has prepared a geotechnical study report for the project site dated September 1, 2020.

PROPOSED CONSTRUCTION

The project will include three rectangular-shaped apartment buildings and one clubhouse and leasing building. As a part of site development, underground storm water management systems are proposed. We understand the invert of the systems will be about 7 feet below ground surface.

SCOPE OF SERVICES

The scope of services we performed for the percolation testing task is discussed below.

1. Performed a site reconnaissance to observe site surface conditions and to mark locations of our exploration.
2. Notified Underground Service Alert (USA) for underground utility clearance and coordinated our drilling with you and the property owner representative.
3. Drilled and performed Round 1 percolation testing in four test holes to a depth of about 7 feet below ground surface (bgs).
4. Drilled and performed Round 2 percolation testing in four additional test holes to a depth of about 25 feet bgs.
5. Performed engineering analysis on the collected data.
6. Prepared this letter.

FIELD TESTING

Two rounds of percolation testing were performed. The percolation test holes for both rounds were drilled using a truck-mounted Mobile B53 drill rig equipped with 8-inch diameter hollow-stem augers. The approximate locations of the test holes are shown on the attached Figure 1.

Round 1: Round 1 consisted of four percolation test holes (P-1 through P-4) drilled on June 3, 2020, to a depth of about 7 feet bgs. After drilling, a solid, 4-inch diameter, Schedule 40 PVC casing was installed in each hole. The annular space of each hole was filled with bentonite pellets in the bottom approximately 3 feet, with soil above the bentonite. The test holes were filled with water for presoaking.

Round 1 percolation testing was performed on June 15 and 16, 2020, following the procedures of ASTM Test D6391, Method B, Field Measurement of Hydraulic Conductivity Using Borehole Infiltration. First, water was added to the top of the PVC casing and a standpipe apparatus was attached onto the top of the PVC casing. Water was then added through the standpipe of the test apparatus. The drop of water level in the standpipe was recorded with time. When the water level in the standpipe became low, water was added. The new initial water level was recorded, and subsequent water level readings in the standpipe were taken with time. At least three sets of readings were taken in each test hole. The results of our Round 1 testing are tabulated below.

Test Hole	Depth of Hole Below Ground Surface (feet)	Field Measured Infiltration Rate (in/hr)
P-1	7	0.018
P-2	7	0.0027
P-3	7	0.0039
P-4	7	0.0034

After reviewing these results with our client and the project civil engineer, our client authorized us to perform additional percolation testing to assess infiltration of water in the deeper granular sand and gravel material. The concept is to convey water in the underground storm water systems through percolation wells to the potentially more permeable sand and gravel material.

Round 2: Round 2 consisted of four additional percolation test holes (P-1A through P-4A) in the general area of the four Round 1 test holes. The Round 2 test holes were drilled on August 14, 2020 to a depth of about 25 feet bgs. In each test hole, a 4-inch diameter casing was installed, with the bottom 5 feet consisting of slotted pipe and the top 20 feet consisting of solid pipes. The bottom 5 feet of the annular space was backfilled with gravel, followed by 3 feet of bentonite chips and then soil above. This test hole arrangement was to simulate water infiltration in a percolation well extended from the bottom of the underground storm water

management systems to the sand and gravel layer between depths of approximately 20 and 25 feet bgs.

Round 2 percolation testing was performed on August 31, 2020. Water was first filled to the top of the casing and the drop in water level inside the casing was measured with time, without the standpipe apparatus described in Round 1 above. The results of our Round 2 testing are tabulated below.

Test Hole	Depth of Hole Below Ground Surface (feet)	Field Measured Infiltration Rate (in/hr)
P-1A	25	2.5
P-2A	25	0.02
P-3A	25	6.6
P-4A	25	3.4

Please note that hydraulic conductivity of soils will vary with gradation, fines content, and density. The hydraulic conductivity values presented should be considered to an order of magnitude.

LIMITATIONS

In preparing the findings and professional opinions presented herein, Geo-Logic Associates (GLA) has endeavored to follow generally accepted principles and practices of the engineering geologic and geotechnical engineering professions in the area and at the time our services were performed. No warranty, express or implied, is provided.

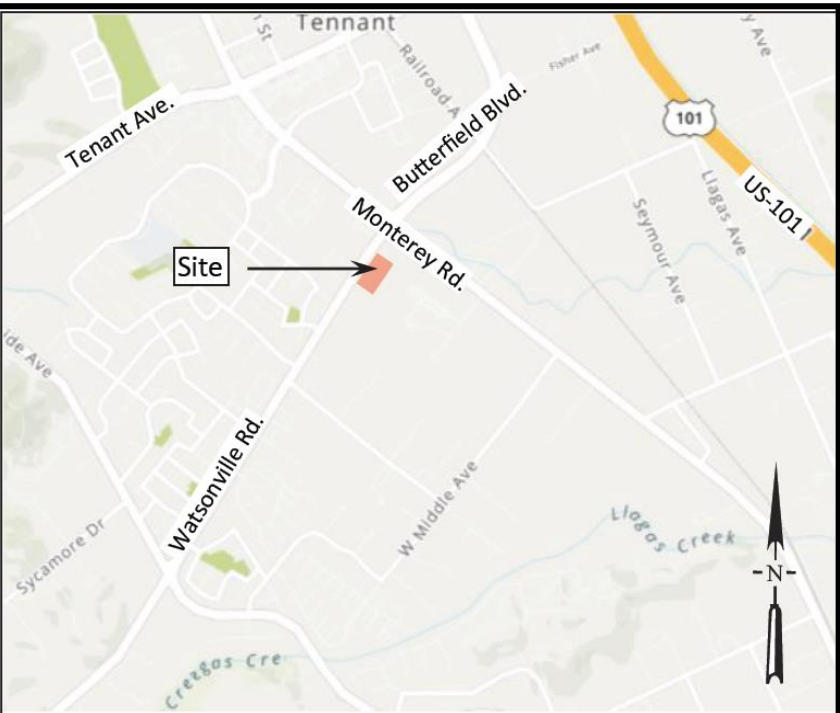
Sincerely,

Geo-Logic Associates dba Pacific Geotechnical Engineering


Chalerm (Beeson) Liang
GE 2031




Attachment – Figure 1, Site Plan



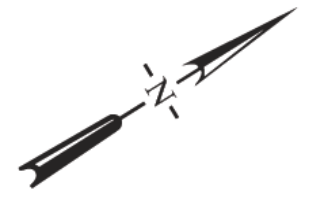
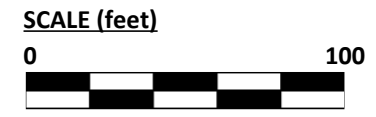
VICINITY MAP – no scale

Legend

 P-4A Number & approximate location of percolation test hole

Base

Conceptual Design, UHC Morgan Hill, CA, prepared by ktgy Architecture + Planning, dated March 18, 2020.



16055 Caputo Drive, Suite D
Morgan Hill, California 95037
Phone (408) 778-2818
Fax (408) 779-6879

Drafted By:	
Date:	
Checked By:	
Revision:	

SITE PLAN
UHC Watsonville Road
Morgan Hill, California

FIGURE
1
PROJECT
PA20.1020

**GEOTECHNICAL STUDY
PROPOSED CROSSING ON WATSONVILLE ROAD**

MORGAN HILL, CALIFORNIA

**SEPTEMBER 1, 2020
PROJECT PA20.1020.00**

SUBMITTED TO:

**UHC H4, LLC
2000 E. Fourth Street, #205
Santa Ana, CA 92705**

PREPARED BY:

**Geo-Logic Associates
16055 Caputo Drive, Suite D
Morgan Hill, California 95037
(408) 778-2818**



**GEOTECHNICAL INVESTIGATION
CROSSING ON WATSONVILLE ROAD
15480 WATSONVILLE ROAD
MORGAN HILL, CALIFORNIA**

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Figure 1	Site Plan
Figure 2	Post-tensioned Slab Foundations

Appendix A - Keys to Soil Classification and Drill Hole Logs

Keys to Soil Classification (Fine and Coarse Grained Soils)
Log of Exploratory Drill Holes (DH-1 through DH-8)

Appendix B – Laboratory Test Data

Figure B-1	Atterberg Limits Test Results
Figures B-2 to B-4	Particle Size Analysis Test Reports
Figure B-5	R-value Test Results
Figure B-6	Laboratory Compaction Test Results

1 INTRODUCTION

This report presents the results of our geotechnical investigation for an approximately 3.7-acre portion of a larger 7.5-acre property located at 15480 Watsonville Road in Morgan Hill, California. The Assessor Parcel Number of the 7.5-acre property is 779-04-075. The 3.7-acre portion is the western portion of the larger property and is referenced as the “site,” or “project site” in this report. The approximate location of the project site is shown on the Vicinity Map included on the Site Plan, Figure 1. Figure 1 also shows a layout of the proposed development and the approximate locations of our drill holes and bulk samples.

This report presents our findings, conclusions, and geotechnical recommendations for design and construction of the project. These findings, conclusions, and recommendations are based on information collected and reviewed during this investigation. The conclusions and recommendations in this report should not be extrapolated to other areas or used for other projects without our review.

1.1 Project Description

Based on information provided by our client and our review of the Conceptual Design drawing prepared by KTG Architecture + Planning, dated July 17, 2020, we understand the project will include three rectangular-shaped apartment buildings and one 3,000-square-foot clubhouse and leasing building. The apartment buildings will have three stories and will range between approximately 10,300 and 11,500 square feet in footprint area, with a total of 73 dwelling units. The leasing building will be a one-story building. All buildings will have wood-framed construction with post-tensioned slab foundations. The remaining areas of the site will be used for at-grade paved parking and open space/park area. Associated improvements will include underground utilities, exterior flatwork, and landscaping.

Site grading will involve cuts and fills across the site, with an estimated 4 feet of fill on the northeast portion. No retaining walls are currently planned.

The above project descriptions are based on information provided to us. If the actual project differs from those described above, Geo-Logic Associates (GLA) should be contacted to review our findings, conclusions, and recommendations, and to present any necessary modifications to address the different project development schemes.

1.2 Information Provided

For this investigation, we were provided with the following.

- Drawings titled “Conceptual Design” showing locations of the planned buildings, prepared by KTG Architecture + Planning, dated July 17, 2020.
- Proposed project information.

1.3 Purpose and Scope of Services

The purpose of this geotechnical investigation was to explore subsurface conditions at the project site and to provide geotechnical recommendations for design and construction of the proposed improvements. The following work was performed.

1. Performed a site reconnaissance to observe site surface conditions and to mark locations of our exploration.
2. Reviewed available geologic and geotechnical information pertinent to the site.
3. Notified Underground Service Alert (USA) for underground utility clearance and coordinated our drilling with you and the property owner representative.
4. Explored subsurface conditions by means of eight exploratory drill holes to depths between approximately 19.5 and 45 feet below ground surface.
5. Collected two bulk samples of the near-surface soils.
7. Performed laboratory tests on selected soil samples from the drill holes and on the bulk samples to measure pertinent engineering properties of the samples.
8. Performed engineering analysis on the field and laboratory data.
9. Prepared this geotechnical investigation report.

2 SITE INVESTIGATION

This investigation consists of a site reconnaissance and a subsurface exploration program. The site reconnaissance was to observe existing site surface conditions. The subsurface exploration program was to explore earth conditions at the project site. The observed surface and subsurface site conditions are discussed in Section 3 of this report.

2.1 Subsurface Exploration

Our subsurface exploration program involved drilling of eight exploratory drill holes (DH-1 through DH-8) on June 3, 2020. The exploratory drill holes were located in the field by referencing to existing site features and pacing; therefore, their locations are approximate. The approximate drill hole locations are shown on Figure 1.

The eight exploratory drill holes were advanced using a truck-mounted Mobile B53 drilling rig equipped with 8-inch diameter hollow-stem augers. The depth of exploration ranged between approximately 19.5 and 45 feet below ground surface (bgs). In the field, our personnel visually classified the materials encountered and maintained a log of each drill hole.

Soil samples were obtained using a 2-inch outside diameter (O.D.; 1.4-inch inside diameter, I.D.) split-barrel sampler (also called a Standard Penetration Test sampler) and a 3-inch O.D. (2½-inch I.D.) split-barrel sampler. Soil samples were obtained by driving the sampler up to 18 inches into the earth material using a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler was recorded for each 6-inch penetration interval. The number of blows required to drive the sampler the last 12 inches, or the penetration interval indicated on the log when harder material was encountered, is shown as blows per foot (blow count) on the drill hole logs.

In the field, our personnel visually classified the materials encountered and maintained a log of each drill hole. Visual classification of soils encountered in our drill holes was made in general accordance with the Unified Soil Classification System (ASTM D 2487 and D 2488). The results of our laboratory tests were used to refine our field classifications. Two Keys to Soil Classification, one for fine grained soils and one for coarse grained soils, are included in Appendix A, together with the logs of the drill holes.

2.2 Laboratory Testing

Geotechnical laboratory testing was conducted on selected soil samples collected from our drill holes. These tests included moisture content, dry density, Atterberg limits, sieve analysis, and percentage passing a No. 200 sieve. An R-value test was performed on one of the bulk samples and a laboratory compaction test was performed on the other bulk sample. The laboratory test results are presented on the drill hole logs at the corresponding sample depths. Graphic presentations of the results of the Atterberg limits, sieve analysis, R-value, and compaction tests are presented on separate sheets in Appendix B.

In addition to geotechnical testing, two selected soil samples were sent to CERCO Analytical for corrosivity analysis. A brief report from CERCO Analytical with the corrosivity test results is included in Appendix B.

3 FINDINGS

3.1 Surface Conditions

The approximately 3.7-acre project site is located on the southeast side of Watsonville Road, approximately 560 feet southwest of Monterey Road. Topography across the site is generally flat-lying, with a gentle down gradient from the southwest to the northeast.

The project site is currently occupied by several structures, mostly buildings associated with the former mushroom farm operation. The front (northwest) portion of the site was used for parking and much of the areas adjacent and between existing buildings are covered by asphalt and Portland cement concrete pavements. A vacant field occupies the western portion of the site, with a pond in the southwestern portion. Vegetation across the site consists of lawns, bushes, and isolated trees mostly along the perimeter of the site.

3.2 Subsurface Conditions

Subsurface soils at the site consist generally of alluvial fan and stream deposits composed of sandy clay, gravelly sand, and clayey sand, according to the Geologic Map of the Gilroy 7.5 Minute Quadrangle, California, prepared by United States Geological Survey, E. Helley and J.K. Nakata, 2007.

In drill hole DH-1, the subsurface soils consist of very stiff to hard clay with sand to a depth of about 12 feet below ground surface (bgs), dense clayey sand to hard sandy clay to a depth of about 16 feet bgs, and very dense clayey sand with gravel to clayey gravel with sand to the maximum explored depth of about 20 feet bgs.

In drill hole DH-2, the subsurface soils consist of hard clay with sand to a depth of about 7 feet bgs and dense clayey sand with gravel to the maximum explored depth of about 19.5 feet bgs.

In drill hole DH-3, the subsurface soils consist of hard clay with sand to a depth of about 7 feet bgs, very dense clayey sand to a depth of about 12 feet bgs, dense clayey gravel with sand to a depth of about 16 feet bgs, and very dense clayey sand with gravel to clayey gravel with sand to the maximum explored depth of about 20 feet bgs.

In drill hole DH-4, the subsurface soils consist of very stiff clay with sand to a depth of about 7 feet bgs, dense clayey sand with gravel to a depth of about 12 feet bgs, very stiff clay to a depth of about 16.5 feet bgs, and very dense clayey sand with gravel to the maximum explored depth of about 20 feet bgs.

In drill hole DH-5, the subsurface soils consist of very stiff to hard clay with sand to a depth of about 7 feet bgs, dense clayey sand to a depth of about 12 feet bgs, very stiff to hard clay to a depth of about 16 feet bgs, and very dense clayey sand to the maximum explored depth of about 19.5 feet bgs.

In drill hole DH-6, the subsurface soils consist of very stiff clay with sand to a depth of about 16 feet bgs and very stiff sandy clay to dense clayey sand to the maximum explored depth of about 20 feet bgs.

In drill hole DH-7, the subsurface soils consist of stiff to hard clay with sand to a depth of about 7 feet bgs, very dense clayey sand to a depth of about 12 feet bgs, hard clay with sand to a depth of about 16 feet bgs, very dense clayey sand with gravel and clayey gravel with sand to a depth of about 42 feet bgs, and hard clay to the maximum explored depth of about 45 feet bgs.

In drill hole DH-8, the subsurface soils consist of very stiff clay with sand to a depth of about 6 feet bgs, hard sandy lean clay to a depth of about 12 feet bgs, and very dense clayey sand with gravel and clayey gravel with sand to the maximum explored depth of about 20 feet bgs.

An Atterberg limits test performed on a sample of the surficial clay indicates the clay has an intermediate plasticity which generally corresponds to a high expansion potential.

3.3 Groundwater

Groundwater was encountered in DH-7 at a depth of approximately 24 feet bgs at the time of drilling. Groundwater was not encountered in the other borings because of their relatively shallower depth.

It should be noted that fluctuations in the groundwater level may occur due to seasonal variations in rainfall and temperature, pumping from wells, regional groundwater recharge program, irrigation, or other factors that were not evident at the time of our investigation.

3.4 Variations in Subsurface Conditions

Our interpretations of soil and groundwater conditions, as described in this report, are based on information obtained from drill holes and laboratory testing for this study. Our conclusions and recommendations are based on these interpretations. Please realize the site has undergone different phases of development and grading. Therefore, it is likely that undisclosed variations in subsurface conditions exist at the site, particularly old foundations, abandoned utilities and localized areas of deep and loose fill.

Careful observations should be made during construction to verify our interpretations. Should variations from our interpretations be found, we should be notified to evaluate whether any revisions should be made to our recommendations.

4 SEISMIC CONSIDERATIONS

4.1 Earthquake Faulting

The Greater San Francisco Bay area is seismically dominated by the active San Andreas Fault system, the tectonic boundary between the northward moving Pacific Plate (west of the fault) and the North American Plate (east of the fault). This movement is distributed across a complex system of generally strike-slip, right-lateral, and subparallel faults.

Potential sources of significant earthquake ground shaking at the site include several active and potentially active faults in the Greater San Francisco Bay area, as well as faults farther afield. The faults were first compiled on the State's Fault Activity Map (Jennings, 1974; Jennings and Bryant, 2010). This map has now been integrated into the US Geological Survey's Quaternary Fault and Fold Database and made available as a .kmz "drape" over Google Earth terrain files.

The distance to a seismic source (fault) is defined by the Next Generation Attenuation (NGA) relationships as the closest distance to the seismogenic zone, be it in the subsurface or at the surface; distances may therefore differ from distances measured on the ground surface. The distances shown on the table below are for reference only, as they are horizontal distances from the site to the surface trace of the seismic source, and not necessarily the closest distance to a (dipping) seismogenic zone. These distances were measured using the US Geological Survey's Quaternary Fault and Fold Database, with major faults listed in approximate order of distance from the site; not all sources are listed in the summary table below.

Fault Name	Approximate Distance	Orientation from Site
Calaveras	7 km	Northeast
Sargent	10 km	Southwest
San Andreas	15 km	Southwest
Zayante-Vergeles	20 km	Southwest
Hayward (southeast extension)	16 km	Northeast
San Gregorio	55 km	Southwest

4.2 Ground Accelerations

According to the 2019 California Building Code (CBC) and American Society of Civil Engineers (ASCE) Standard 7-10, the spectral response acceleration at any period can be taken as the lesser of the spectral response accelerations from the probabilistic and deterministic ground motion approaches. The U.S. Seismic Design Maps tool available at the Structural Engineers Association of California (SEAOC) website was used for this purpose to retrieve seismic design parameter values for design of buildings at the subject site. Two levels of ground motions are considered in the Application: Risk-targeted Maximum Considered Earthquake (MCE_R) and Design Earthquake (DE), with both probabilistic and deterministic values defined in terms of maximum-direction rather than geometric-mean, horizontal spectral acceleration (S_a). The

probabilistic MCE_R spectral response accelerations are represented by a 5 percent damped acceleration response spectrum having a 1 percent probability of collapse within a 50-year period and in the direction of the maximum horizontal response. The probabilistic Design Earthquake (DE) S_a value at any period can be taken as two-thirds of the MCE_R S_a value at the same period.

Using the Seismic Design Maps application at the SEAOC website, a site Class C, and the latitude and longitude of the site (latitude 37.10593496° N, longitude -121.63637386° W), the calculated geometric mean peak ground acceleration adjusted for site class effects (PGA_M) for the MCE_G (Geometric Mean Maximum Considered Earthquake) is 0.758g.

4.3 Seismicity

The Working Group on California Earthquake Probabilities' (WGCEP) estimates of the probabilities of major earthquakes are now in their sixth iteration, with the greatest changes in approach being the inclusion of multifold rupture scenarios, in the progressive consideration of more potential seismic sources, the possibility of earthquakes on unrecognized faults, and the inclusion of the notion of fault "readiness". Current estimates (WGCEP, 2014) for the San Francisco region indicate a 72% probability of a large (magnitude 6.7 or greater) earthquake in the San Francisco Bay area as a whole over the 30-year period beginning in 2014; this overall probability is greater than the previous (WGCEP, 2007) probability of 63%, due mainly to the inclusion of multi-fault rupture scenarios. The estimate for the Calaveras fault alone is 14.4% (revised up from the 7% presented by WGCEP, 2007); for the (northern) San Andreas fault alone, 27.4% (revised upward from the WGCEP (2007) value of 21%); and for the Hayward fault, 45.3% (revised upward from the WGCEP (2007) value of 31%).

4.4 Liquefaction

Soil liquefaction is a phenomenon in which saturated granular soils, and certain fine-grained soils, lose their strength due to the build-up of excess pore water pressure during cyclic loading, such as that induced by earthquakes. Soils most susceptible to liquefaction are saturated, clean, loose, fine-grained sands and non-plastic silts. Certain gravels, plastic silts, and clays are also susceptible to liquefaction. The primary factors affecting soil liquefaction include: 1) intensity and duration of seismic shaking; 2) soil type; 3) relative density of granular soils; 4) moisture content and plasticity of fine-grained soils; 5) overburden pressure; and 6) depth to ground water.

Our review of the Santa Clara County Liquefaction Hazard Zone map for the project site (County of Santa Clara, October 26, 2012) indicates the site is not in a liquefaction hazard zone. In our opinion, the potential for liquefaction of the subsurface granular soils encountered in our drill holes is low because of their dense to very dense relative density.

4.5 Seismic Design Parameters

The following site coefficients and seismic ground motion parameters are developed using the U.S. Seismic Design Maps Tool at the SEAOC website, the latitude and longitude of the site, and a Site Class C based on regional USGS information of the site location and subsurface materials encountered in our subsurface exploration.

Parameter	ASCE 7-16 Values
Site Class	C
Site Coefficient Fa	1.2
Site Coefficient Fv	1.4
S _s	1.512g
S ₁	0.6g
S _{MS}	1.815g
S _{M1}	0.84g
S _{DS}	1.21g
S _{D1}	0.56g

5 CONCLUSIONS AND DISCUSSION

Based on our geotechnical evaluation, it is our opinion the project site may be developed as discussed in this report, provided our geotechnical recommendations are incorporated in the design and construction of the project. Our opinions, conclusions, and recommendations are based on our understanding of the proposed development, data review, properties of soils encountered in subsurface exploration, laboratory test results, and engineering analyses. Geotechnical considerations for this project are discussed below.

5.1 Ground Rupture

The project site is not located in an Alquist-Priolo Earthquake Fault Zone. Because no active or potentially active faults are known to cross the site, the risk of fault rupture through the project site is low.

5.2 Seismic Shaking

The project site is located in an area of high seismicity. Based on general knowledge of the site seismicity, it should be anticipated that, during their useful life, the proposed structures will be subject to at least one severe earthquake (magnitude 7 to 8+) that could cause considerable ground shaking at the site. It is also anticipated that the site will periodically experience small to moderate magnitude earthquakes.

5.3 Expansion Potential of Surficial Soils

An Atterberg limits test performed on a sample of the near-surface clay indicates the clay has an intermediate to high plasticity which generally corresponds to a high expansion potential. Our review of the regional soil information at the United States Department of Agriculture National Resources Conservation Service website also indicates intermediate to high plasticity clays in the upper soil layers.

Expansive soils are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, perched groundwater, drought or other factors. Changes in soil moisture may result in unacceptable settlement or heave of structures, concrete slabs and pavements supported on these materials. Depending on the extent and location below finished subgrade, these soils could have a detrimental effect on the proposed construction.

To reduce its potential impact on the proposed structures, the upper 30 inches of soil below design grade in the proposed building and concrete slab-on-grade areas should be moisture conditioned with controlled compaction. The building foundations and concrete slabs-on-grade should be constructed on a layer of “non-expansive” fill as recommended in this report.

5.4 Existing Improvements

Existing improvements at the project site include miscellaneous structures, sheds, underground utilities, isolated trees, and possibly septic tanks, leach fields, and water wells. Prior to construction, the existing structures and improvements should be removed and the resulting excavations should be accurately documented and properly backfilled with engineered fill under the observation and testing of the project Geotechnical Engineer. Any existing water wells should be abandoned per the requirements of Santa Clara Valley Water District.

6 GEOTECHNICAL RECOMMENDATIONS

6.1 Earthwork

6.1.1 Site Preparation, Clearing and Stripping

Prior to grading, construction areas should be cleared of all structures and foundations, asphalt and concrete pavements, obstructions, deleterious materials, abandoned or designated utility lines, designated trees, and other below grade obstacles encountered during the clearing operation. Tree stumps should be grubbed. Roots with diameter of about 1 inch or larger or length of about 3 feet or longer should be removed. Any existing septic tanks and leach fields should be removed. Any existing wells should be destroyed per requirements of Santa Clara Valley Water District.

Depressions, excavations, and holes that extend below the planned finish grades should be cleaned and backfilled with engineered fill compacted to the requirements given under the section of "Engineered Fill Placement and Compaction." Demolition excavations should be accurately documented and the backfill operations should be performed under the observation of the project Geotechnical Engineer.

After clearing, the site should be stripped to sufficient depth to remove vegetation and organic-laden topsoil. Stripped material may be stockpiled for use in landscape areas if approved by the project landscape architect; otherwise, it should be removed from the site. For planning purposes, an estimated stripping depth of 3 to 6 inches may be assumed in vegetated areas. The actual stripping depth should be determined in the field by the Geotechnical Engineer at the time of construction.

6.1.2 Excavation, Temporary Construction Slopes, and Shoring

Excavations for this project are expected to include demolition excavations, over-excavation of loose and disturbed soils, cuts to achieve design grades, trenching to construct new underground utilities, and foundation excavations. Excavations and temporary construction slopes should be constructed in accordance with the current CAL-OSHA safety standards and local jurisdiction. The stability and safety of excavations, braced or unbraced, is the responsibility of the contractor. Care should be exercised when excavating in the proximity of existing structures and improvements.

Contractors are responsible for the design, installation, maintenance, and removal of temporary shoring and bracing systems. The presence of existing improvements must be incorporated in the design of the shoring and bracing systems.

Trench excavations adjacent to existing or proposed foundations should be above an imaginary plane having an inclination of 1½:1 (horizontal to vertical) extending down from the bottom edge of the foundations.

6.1.3 Backfilling of Existing Pond

The existing pond in the southwestern portion of the site should be backfilled with compacted engineered fill per recommendations in this report. Prior to backfilling, loose, wet, unsuitable soil in the pond bottom should be removed. The pond bottom should be scarified, water conditioned, and compacted as recommended in the "Subgrade Preparation" section below. Engineered fill should be placed and compacted per the "Engineered Fill Placement and Compaction" sections below.

6.1.4 Subgrade Preparation

After site clearing and stripping, the soil subgrades should be prepared as recommended below.

Building and concrete slab-on-grade areas: Soils in building and concrete slab-on-grade areas should be over-excavated to at least 22 inches below design pad grade, but not less than 12 inches below existing grade. The soil surfaces exposed by over-excavation should be scarified to a depth of 8 inches, moisture-conditioned, and compacted in accordance with the recommendations given in the "Engineered Fill Placement and Compaction" section below. In structure areas to receive foundations or concrete slabs-on-grade, subgrade preparation should extend a minimum of 5 feet horizontally beyond the limits of the proposed structures and any adjoining flatwork, unless it is restricted by existing improvements.

Pavement areas: Soils in pavement areas should be over-excavated to at least 12 inches below existing ground surface. In areas with 12 inches of cuts or deeper to achieve design subgrade level, this over-excavation may be waived. Soil surfaces exposed by over-excavation or cuts should be scarified to a depth of 8 inches, moisture-conditioned, and compacted in accordance with the recommendations given in the "Engineered Fill Placement and Compaction" section below. Subgrade preparation should extend a minimum of 3 feet beyond the back of the curbs or pavements.

Prepared soil subgrades should be non-yielding when proof-rolled by a fully loaded water truck or similar weight equipment. Moisture conditioning of subgrade soils should consist of adding water if the soils are too dry and allowing the soils to dry if the soils are too wet. After the subgrades are properly prepared, the areas may be raised to design grades by placement of engineered fill.

Wet soils should be anticipated during and after rainy months. Where encountered, unstable, wet or soft soil will require processing before compaction can be achieved. If construction schedule does not allow for air-drying, other means such as lime or cement treatment of the soil or excavation and replacement with suitable material may be considered. Geotextile fabrics may also be used to help stabilize the subgrade. The method to be used should be determined at the time of construction based on the actual site conditions. We recommend

obtaining unit prices for subgrade stabilization during the construction bid process.

6.1.5 "Non-expansive" Fill

The post-tensioned foundation slabs and exterior concrete slabs-on-grade should be constructed on a 12-inch minimum thick layer of "non-expansive" fill meeting the material requirements presented below under "Materials for Fill." The "non-expansive" fill should extend a minimum of 5 feet horizontally beyond the limits of the proposed structures and at least 3 feet beyond exterior flatwork.

6.1.6 Materials for Fill

In general, on-site soils with an organic content of less than 3 percent by weight, free of deleterious materials or hazardous substances, and meeting the gradation requirements below may be used as engineered fill except where special material (such as capillary break material) is recommended.

Engineered fill material should not contain rocks or lumps larger than 3 inches in greatest dimension, should not contain more than 15 percent of the material larger than 1½ inches, and should contain at least 20 percent passing the No. 200 sieve. In addition to these requirements, import fill including "non-expansive" fill should have a low expansion potential as indicated by Plasticity Index of 15 or less (per ASTM D4318), or Expansion Index of less than 20 (per ASTM D4829).

All fills should be approved by the project Geotechnical Engineer prior to delivery to the site. At least 5 working days prior to importing to the site, a representative sample of the proposed import fill should be delivered to our laboratory for evaluation. Import fills should be tested and approved for residential use per the California Department of Toxic Substances Control (DTSC) guidelines.

6.1.7 Engineered Fill Placement and Compaction

Engineered fill should be placed in horizontal lifts each not exceeding 8 inches in thickness, moisture conditioned to the required moisture content, and mechanically compacted to the recommendations below. Relative compaction or compaction is defined as the in-place dry density of the compacted soil divided by the laboratory maximum dry density as determined by ASTM Test Method D1557, latest edition, expressed as a percentage. Moisture conditioning of soils should consist of adding water to the soils if they are too dry and allowing the soils to dry if they are too wet.

Engineered fills consisting of expansive soils should be compacted to between 87 and 92 percent relative compaction at moisture content between 3 and 6 percent above the laboratory optimum value. Engineered fills consisting of soils of low expansion potential, including "non-expansive" fill, should be compacted to a minimum of 90 percent relative

compaction with moisture content between about 1 and 3 percent above the laboratory optimum value. In pavement areas, the upper 8 inches of subgrade soil should be compacted to between 90 and 95 percent relative compaction. Aggregate base in vehicle pavement areas should be compacted at slightly above the optimum moisture content to a minimum of 95 percent relative compaction.

6.1.8 Trench Backfill

Backfilling of utility trenches in public right-of-way areas should comply with the City of Morgan Hill standard specifications and details.

Backfilling of utility trenches in private areas may consist of bedding material extending from the bottom of the trench to about 1 foot above the top of pipe, and on-site or imported backfill material above the bedding to the proposed finish subgrade. Bedding may consist of free-draining sand (less than 5% passing a No. 200 sieve), lean concrete, or sand cement slurry. Sand, if used as bedding, should be compacted to at least 90 percent relative compaction. Backfill material may consist of on-site or imported soil, and should be compacted per recommendations in the “Engineered Fill Placement and Compaction” section above.

The backfill material should be placed in lifts each not exceeding 6 inches in uncompacted thickness. Thicker lifts may be used if the contractor can demonstrate that the recommended level of compaction can be achieved with the compaction equipment and procedures used. Compaction should be performed by mechanical means only. Water jetting or flooding to attain compaction of backfill should not be permitted.

6.1.9 Considerations for Soil Moisture and Seepage Control

Subgrade soil and engineered fill should be compacted at moisture content meeting our recommendations. Consideration should be given to reducing the potential for water infiltration from the exterior to under the buildings through utility lines crossing the building perimeter. In utility lines crossing beneath perimeter foundations, permeable backfill should be terminated at least 1 foot outside of the perimeter foundation. Impermeable material, such as concrete or clay soil, should be used for the entire trench depth to act as a seepage cutoff.

Where concrete slabs or pavements abut against landscaped areas, the base rock layer and subgrade soil should be protected against saturation. Water if allowed to seep into the subgrade soil or pavement section could reduce the service life of the improvements. Methods that may be considered to reduce infiltration of water include: 1) subdrains installed behind curbs and slabs in landscape areas; 2) vertical cut-offs, such as a deepened curb section, or equivalent, extending at least 2 inches into the subgrade soil; and 3) use of a drip or controlled irrigation system for landscape watering.

6.1.10 Wet Weather Construction

If site grading and construction is to be performed during the winter rainy months, the owner and contractors should be fully aware of the potential impact of wet weather. Rainstorms can cause delay to construction and damage to previously completed work by saturating compacted pads or subgrades, or flooding excavations.

Earthwork during rainy months will require extra effort and caution by the contractors. The contractors are responsible for protecting their work to avoid damage by rainwater. Standing pools of water should be pumped out immediately. Construction during wet weather conditions should be addressed in the project construction bid documents and/or specifications. We recommend the contractors submit a wet weather construction plan outlining procedures they will employ to protect their work and to minimize damage to their work by rainstorms.

6.2 Foundations

6.2.1 General

We understand the preferred foundation system for the proposed buildings is post-tensioned slab. In the following sections, we have provided geotechnical design parameters for post-tensioned slab foundations.

The Geotechnical Engineer should review the foundation plans and details before construction and observe the foundation excavations during construction to determine if the foundation excavations extend into suitable bearing material. Prior to placement of concrete, foundation excavations should be cleaned of loose soils. If unsuitable soils are encountered in the foundation excavations, the soils should be removed as recommended by our Geotechnical Engineer and replaced with approved material such as compacted engineered fill or lean concrete.

Foundation excavations should not be allowed to dry before placement of concrete. If visible cracks appear in the foundation excavations, the excavations should be thoroughly moisture conditioned beginning at least 2 days prior to placement of concrete to close all cracks. It is also important that the base of the foundation excavations not be allowed to become excessively wet, resulting in soft soils. Water should not be allowed to pond in the bottom of the excavations. Areas that become water damaged should be over-excavated to a firm base. The foundation excavations should be monitored by our representative for compliance with appropriate moisture control and to confirm the adequacy of the bearing materials.

To maintain the desired support, the bottom of foundations adjacent to utility trenches or buried structures should be below an imaginary plane having an inclination of 1.5 horizontal to 1 vertical, extending upward from the bottom edge of the adjacent utility trenches or structures. If the foundations are closer than the recommended distance, the project

Geotechnical Engineer should be consulted for recommendations.

6.2.2 Post-tensioned Slabs

The proposed residential structures may be constructed on post-tensioned (PT) slab foundations founded on a minimum 12-inch thick layer of “non-expansive” fill over properly moisture-conditioned and compacted on-site soil. Preparation of soil subgrade, moisture conditioning, and compaction of soil and engineered fill should be as recommended in the “Earthwork” section of this report.

The following parameters may be used with the 2004 PTI “Design of Post-Tensioned Slabs-on-Ground, Third Edition” manual for design of the PT slabs.

Parameters	PT Slabs Constructed on 12 Inches of “Non-expansive” Fill
e_m (center lift)	8 feet
e_m (edge lift)	4 feet
y_m (center lift)	1.2 inch
y_m (edge lift)	2.0 inch

Allowable soil bearing pressure = 2,000 psf for dead plus live loads, with a one-third increase when including transient loads, such as wind or seismic

A deepened edge, minimum 6 inches wide, should be constructed along the perimeter of the PT slabs. The deepened edge should extend to at least 18 inches below the bottom of the PT slabs. The deepened edge can help reduce moisture infiltration to under the PT slabs.

The PT slabs may be constructed on 1 to 2 inches of sand over a 15-mil visqueen vapor barrier over compacted subgrade soil. Sand has been used for protection of the vapor barrier during construction and to allow dissipation of concrete mix water during curing. The use of sand, or equivalent material, should be determined by the project structural engineer or architect. A lower water-cement ratio (0.45 to 0.50) will help reduce the permeability of the concrete and, hence, vapor transmission through the slabs.

Resistance to lateral loads may be developed from friction between the bottom of the PT slabs and the supporting subgrade, with an ultimate friction coefficient of 0.25 between the foundations and supporting subgrade.

Settlements are expected to be primarily elastic. Post construction total and differential settlements of the PT slabs are anticipated to be less than 1 and ½ inch, respectively.

6.3 Exterior Concrete Slabs-on-Grade

Exterior concrete slabs-on-grade for this project will be limited to exterior flatwork. The building ground floor will consist of the PT slab foundations.

The exterior concrete slabs-on-grade should be constructed on a minimum 12-inch thick layer of “non-expansive” fill over property moisture conditioned and compacted native soil, as recommended in the “Earthwork” section of this report. Soil subgrades MUST be maintained in a moist condition prior to placement of concrete for the concrete slabs. Design of reinforcement, joint spacing, etc. is the responsibility of the design engineer.

Exterior concrete slabs-on-grade should be cast free from adjacent foundations or other non-heaving edge restraints. This may be accomplished by using a strip of 1/2-inch asphalt-impregnated felt divider material between the slab edges and the adjacent structure. Frequent construction or control joints should be provided in all concrete slabs where cracking is objectionable. Continuous reinforcing or dowels at the construction and control joints will also aid in reducing uneven slab movements.

6.4 Vehicle Flexible Pavements

Vehicle flexible pavements for this project will include paved parking and driveway areas, subject mostly to automobiles and light trucks as well as occasional heavy trucks such as delivery and garbage trucks. An R-value of 21 was measured at an exudation pressure of 300 psi on a bulk sample of soil collected from the site. The design R-value for each traffic index was adjusted based on the laboratory measured expansion pressure. The calculated pavement sections using the Caltrans pavement design procedures are presented below.

DESIGN TRAFFIC INDEX	HOT MIX ASPHALT (inches)	CLASS 2 AGGREGATE BASE (inches)	TOTAL (inches)
5.0	3.0	8.0	11.0
5.5	3.0	10.0	13.0
6.0	3.5	10.5	14.0
6.5	4.0	11.0	15.0

The pavement sections for each area should be determined based on vehicle type, vehicle loads, and frequency. In general, a traffic index of 5.0 may be considered for automobile and light truck areas. Where heavier trucks are expected, a traffic index of 6.0 or higher should be considered.

Pavement sections should be constructed on soil subgrades that have been prepared as outlined in the “Earthwork” section of this report. The upper 8 inches of soil subgrade in pavement areas should be compacted to between 90 and 95 percent relative compaction. The

full section of aggregate base and aggregate subbase should be compacted to at least 95 percent relative compaction. Evaluation of relative compaction should be based on ASTM D1557, latest edition. The Class 2 Aggregate Base material should conform to Section 26 of the Caltrans Standard Specifications and the Class 2 Aggregate Subbase material should conform to Section 25 of the Caltrans Standard Specifications.

6.5 Surface Drainage

Engineering design of grading and drainage at the site is the responsibility of the project Civil Engineer. We suggest the following for consideration by the project Civil Engineer, as appropriate.

Sufficient surface drainage should be provided to direct water away from buildings, foundations, concrete slabs-on-grade and pavements, and towards suitable collection and discharge facilities. Ponding of surface water should be avoided by establishing positive drainage away from all improvements.

7 PLAN REVIEW, EARTHWORK AND FOUNDATION OBSERVATION

Post-report geotechnical services by Geo-Logic Associates (GLA), typically consisting of pre-construction design consultations and reviews and construction observation and testing services, are necessary for GLA to confirm the recommendations contained in this report. This report is based on limited sampling and investigation, and by those constraints may not have discovered local anomalies or other varying conditions that may exist on the project site. Therefore, this report is only preliminary until GLA can confirm that actual conditions in the ground conform to those anticipated in the report. Accordingly, as an integral part of this report, GLA recommends post-report, construction related geotechnical services to assist the project team during design and construction of the project. GLA requires that it perform these services if it is to remain as the project Geotechnical Engineer-of-record.

During design, GLA can provide consultation and supplemental recommendations to assist the project team in design and value engineering, especially if the project design has been modified after completion of our report. It is impossible for us to anticipate every design scenario and use of construction materials during preparation of our report. Therefore, retaining GLA to provide post-report consultation will help address design changes, answer questions and evaluate alternatives proposed by the project designers and contractors.

Prior to issuing project plans and specifications for construction bidding purposes, GLA should review the grading, drainage and foundation plans and the project specifications to determine if the intent of our recommendations has been incorporated in these documents. We have found that such a review process will help reduce the likelihood of misinterpretation of our recommendations which may cause construction delay and additional cost.

Construction phase services can include, among other things, the observation and testing during site clearing, stripping, excavation, mass grading, subgrade preparation, fill placement and compaction, backfill compaction, foundation construction and pavement construction activities.

Geo-Logic Associates would be pleased to provide cost proposals for follow-up geotechnical services. Post-report geotechnical services may include additional field and laboratory services.

8 LIMITATIONS

In preparing the findings and professional opinions presented in this report, Geo-Logic Associates (GLA) has endeavored to follow generally accepted principles and practices of the engineering geologic and geotechnical engineering professions in the area and at the time our services were performed. No warranty, express or implied, is provided.

The conclusions and recommendations contained in this report are based, in part, on information that has been provided to us. In the event that the general development concept or general location and type of structures are modified, our conclusions and recommendations shall not be considered valid unless we are retained to review such changes and to make any necessary additions or changes to our recommendations. To remain as the project Geotechnical Engineer-of-record, GLA must be retained to provide geotechnical services as discussed under the Post-report Geotechnical Services section of this report.

Subsurface exploration is necessarily confined to selected locations and conditions may, and often do, vary between these locations. Should conditions different from those described in this report be encountered during project development, GLA should be consulted to review the conditions and determine whether our recommendations are still valid. Additional exploration, testing, and analysis may be required for such evaluation.

Should persons concerned with this project observe geotechnical features or conditions at the site or surrounding areas which are different from those described in this report, those observations should be reported immediately to GLA for evaluation.

It is important that the information in this report be made known to the design professionals involved with the project, that our recommendations be incorporated into project drawings and documents, and that the recommendations be carried out during construction by the contractor and subcontractors. It is not the responsibility of GLA to notify the design professionals and the project contractors and subcontractors.

The findings, conclusions, and recommendations in this report are applicable only to the specific project development on this specific site. These data should not be used for other projects, sites, or purposes unless they are reviewed by GLA or a qualified geotechnical professional.

Report prepared by,

Geo-Logic Associates

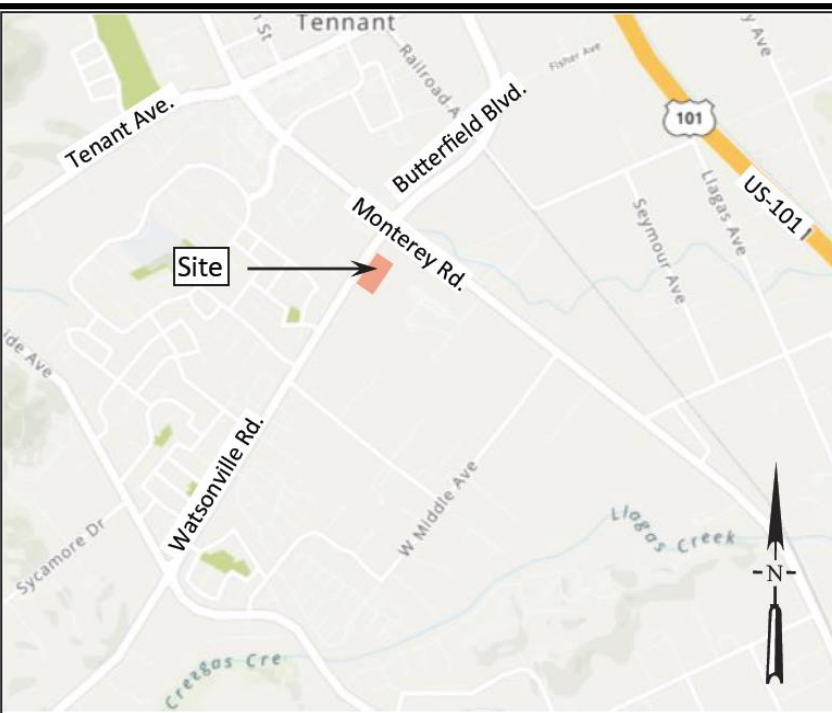


Chalerm (Beeson) Liang
GE 2031



Fs/csl

Copies: Mark Irving, UHC (3 hard copies & 1 electronic copy)



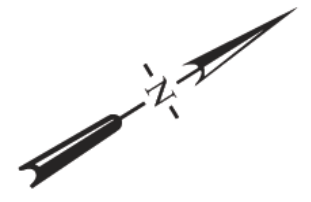
VICINITY MAP – no scale

Legend

⊕ DH-8 Number & approximate location of exploratory drill hole

Base

Conceptual Design, UHC Morgan Hill, CA, prepared by ktgy Architecture + Planning, dated March 18, 2020.



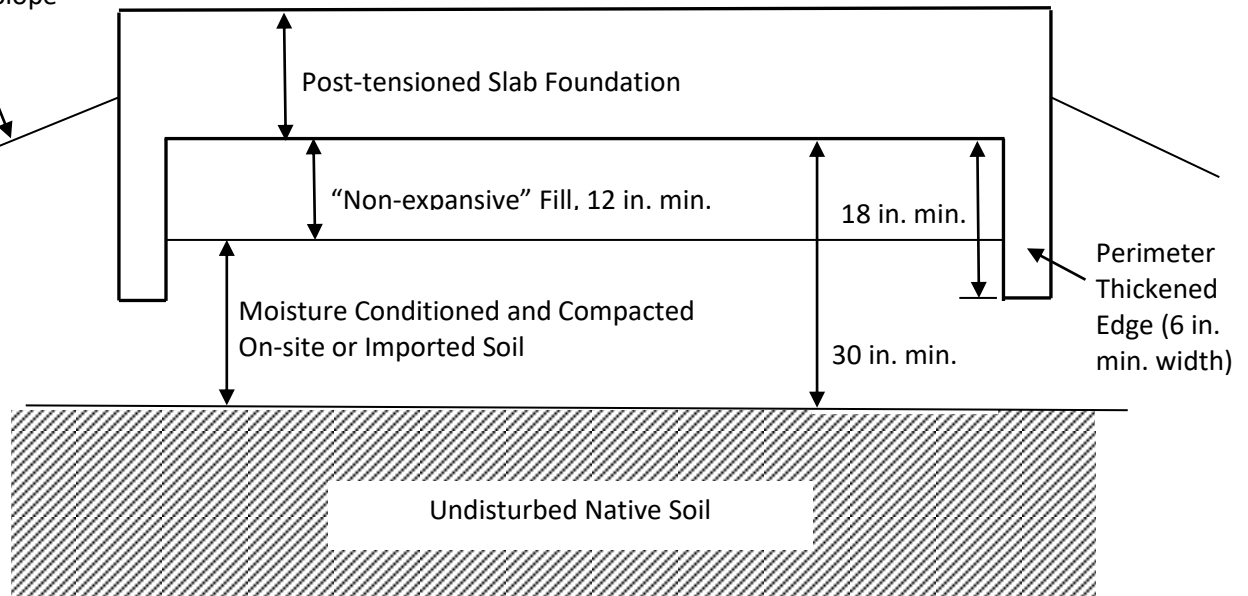
16055 Caputo Drive, Suite D
Morgan Hill, California 95037
Phone (408) 778-2818
Fax (408) 779-6879

Drafted By:
Date:
Checked By:
Revision:

SITE PLAN
UHC Watsonville Road
Morgan Hill, California

FIGURE
1
PROJECT
PA20.1020

Exterior Finish
Grade, Slope
to Drain




SUBGRADE PREPARATION AND THICKENED EDGE FOR POST-TENSIONED SLAB FOUNDATIONS

NOTE:

1. Refer to project geotechnical report for details recommendations.

SCHMATIC ONLY – NOT TO SCALE

	16055 Caputo Drive, Suite D Morgan Hill, California 95037 Phone (408) 778-2818 Fax (408) 779-6879		POST-TENSIONED SLAB FOUNDATIONS CROSSING AT WATSONVILLE ROAD MORGAN HILL, CALIFORNIA	FIGURE 2 PROJECT PA20.1020
	Drafted By:	Date: September 2020		

APPENDIX A

KEYS TO SOIL CLASSIFICATION

AND

DRILL HOLE LOGS

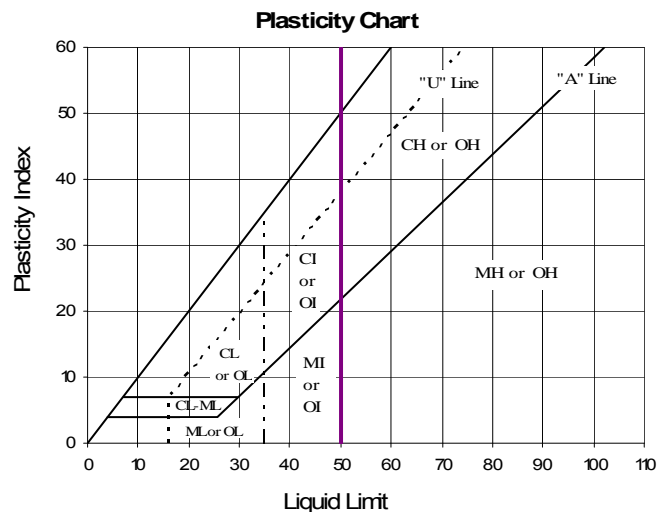
KEY TO SOIL CLASSIFICATION - FINE GRAINED SOILS
(50% OR MORE IS SMALLER THAN NO. 200 SIEVE SIZE)
(modified from ASTM D2487 to include fine grained soils with intermediate plasticity)

MAJOR DIVISIONS			GROUP SYMBOLS	GROUP NAMES
SILTS AND CLAYS (Liquid Limit less than 35) Low Plasticity	Inorganic	PI < 4 or plots below "A" line	ML	Silt, Silt with Sand or Gravel, Sandy or Gravelly Silt, Sandy or Gravelly Silt with Sand or Gravel
	Inorganic	PI > 7 or plots on or above "A" line	CL	Lean Clay, Lean Clay with Sand or Gravel, Sandy or Gravelly Lean Clay, Sandy or Gravelly Lean Clay with Sand or Gravel
	Inorganic	PI between 4 and 7	CL-ML	Silty Clay, Silty Clay with Sand or Gravel, Sandy or Gravelly Silty Clay, Sandy or Gravelly Silty Clay with Sand or Gravel
	Organic	See footnote 3	OL	Organic Silt (below "A" Line) or Organic Clay (on or above "A" Line) ^(1,2)
SILTS AND CLAYS (35 ≤ Liquid Limit < 50) Intermediate Plasticity	Inorganic	PI < 4 or plots below "A" line	MI	Silt, Silt with Sand or Gravel, Sandy or Gravelly Silt, Sandy or Gravelly Silt with Sand or Gravel
	Inorganic	PI > 7 or plots on or above "A" line	CI	Clay, Clay with Sand or Gravel, Sandy or Gravelly Clay, Sandy or Gravelly Clay with Sand or Gravel
	Organic	See footnote 3	OI	Organic Silt (below "A" Line) or Organic Clay (on or above "A" Line) ^(1,2)
SILTS AND CLAYS (Liquid Limit 50 or greater) High Plasticity	Inorganic	PI plots below "A" line	MH	Elastic Silt, Elastic Silt with Sand or Gravel, Sandy or Gravelly Elastic Silt, Sandy or Gravelly Elastic Silt with Sand or Gravel
	Inorganic	PI plots on or above "A" line	CH	Fat Clay, Fat Clay with Sand or Gravel, Sandy or Gravelly Fat Clay, Sandy or Gravelly Fat Clay with Sand or Gravel
	Organic	See note 3 below	OH	Organic Silt (below "A" Line) or Organic Clay (on or above "A" Line) ^(1,2)

1. If soil contains 15% to 29% plus No. 200 material, include "with sand" or "with gravel" to group name, whichever is predominant.
2. If soil contains ≥30% plus No. 200 material, include "sandy" or "gravelly" to group name, whichever is predominant. If soil contains ≥15% of sand or gravel sized material, add "with sand" or "with gravel" to group name.
3. Ratio of liquid limit of oven dried sample to liquid limit of not dried sample is less than 0.75.

CONSISTENCY	UNCONFINED SHEAR STRENGTH (KSF)	STANDARD PENETRATION (BLOWS/FOOT)
VERY SOFT	< 0.25	< 2
SOFT	0.25 – 0.5	2 – 4
FIRM	0.5 – 1.0	5 – 8
STIFF	1.0 – 2.0	9 – 15
VERY STIFF	2.0 – 4.0	16 – 30
HARD	> 4.0	> 30

MOISTURE	CRITERIA
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp, but no visible water
Wet	Visible free water, usually soil is below the water table



KEY TO SOIL CLASSIFICATION – COARSE GRAINED SOILS
(MORE THAN 50% IS LARGER THAN NO. 200 SIEVE SIZE)
(modified from ASTM D2487 to include fines with intermediate plasticity)

MAJOR DIVISIONS			GROUP SYMBOLS	GROUP NAMES ¹
GRAVELS (more than 50% of coarse fraction is larger than No. 4 sieve size)	Gravels with less than 5% fines	$Cu \geq 4$ and $1 \leq Cc \leq 3$	GW	Well Graded Gravel, Well Graded Gravel with Sand
		$Cu < 4$ and/or $1 > Cc > 3$	GP	Poorly Graded Gravel, Poorly Graded Gravel with Sand
	Gravels with 5% to 12% fines	ML, MI or MH fines	GW-GM	Well Graded Gravel with Silt, Well Graded Gravel with Silt and Sand
			GP-GM	Poorly Graded Gravel with Silt, Poorly Graded Gravel with Silt and Sand
		CL, CI or CH fines	GW-GC	Well Graded Gravel with Clay, Well Graded Gravel with Clay and Sand
			GP-GC	Poorly Graded Gravel with Clay, Poorly Graded Gravel with Clay and Sand
	Gravels with more than 12% fines	ML, MI or MH fines	GM	Silty Gravel, Silty Gravel with Sand
		CL, CI or CH fines	GC	Clayey Gravel, Clayey Gravel with Sand
		CL-ML fines	GC-GM	Silty Clayey Gravel; Silty, Clayey Gravel with Sand
	SANDS (50% or more of coarse fraction is smaller than No. 4 sieve size)	Sands with less than 5% fines	$Cu \geq 6$ and $1 \leq Cc \leq 3$	SW
$Cu < 6$ and/or $1 > Cc > 3$			SP	Poorly Graded Sand, Poorly Graded Sand with Gravel
Sands with 5% to 12% fines		ML, MI or MH fines	SW-SM	Well Graded Sand with Silt, Well Graded Sand with Silt and Gravel
			SP-SM	Poorly Graded Sand with Silt, Poorly Graded Sand with Silt and Gravel
		CL, CI or CH fines	SW-SC	Well Graded Sand with Clay, Well Graded Sand with Clay and Gravel
			SP-SC	Poorly Graded Sand with Clay, Poorly Graded Sand with Clay and Gravel
Sands with more than 12% fines		ML, MI or MH fines	SM	Silty Sand, Silty Sand with Gravel
		CL, CI or CH fines	SC	Clayey Sand, Clayey Sand with Gravel
		CL-ML fines	SC-SM	Silty, Clayey Sand; Silty, Clayey Sand with Gravel

US STANDARD SIEVES

3 Inch ¾ Inch No. 4 No. 10 No. 40 No. 200

	COARSE	FINE	COARSE	MEDIUM	FINE	
COBBLES & BOULDERS	GRAVELS		SANDS			SILTS AND CLAYS

RELATIVE DENSITY (SANDS AND GRAVELS)	STANDARD PENETRATION (BLOWS/FOOT)
Very Loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	50+

1. Add "with sand" to group name if material contains 15% or greater of sand-sized particle. Add "with gravel" to group name if material contains 15% or greater of gravel-sized particle.

MOISTURE	CRITERIA
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp, but no visible water
Wet	Visible free water, usually soil is below the water table

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 1					
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00									
DRILL RIG: Mobile B-53R				LOGGED BY: FS									
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---									
SAMPLER:		D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample		GROUND WATER DEPTH:		Initial: --- Final: ---							
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff to hard		Cl	1	S D D	17	4.5			18		102		
			2										
			3										
			4										
			5										
			6										
			7										
			8										
			9										
			10										
			11										
			CLAYEY SAND to SANDY CLAY: Dark yellowish brown (10YR 3/4), moist, dense to very dense sand to hard clay										
13													
14													
CLAYEY SAND with GRAVEL to CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand, fine to coarse gravel		SC/ GC	15	S D D	69								
			16										
			17										
BOTTOM OF HOLE = 20 Feet No groundwater encountered			18	S D D	79								
			19										
			20										
GEO-LOGIC ASSOCIATES										PAGE: 1 of 1			

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE								DH- 2				
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00										
DRILL RIG: Mobile B-53R				LOGGED BY: FS										
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---										
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample				GROUND WATER DEPTH: Initial: --- Final: ---										
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard		CI	1		50/6"	3.5		49	20	32	99			
			2											
			3											
			4	S										
			5	D	65		4.5							
			6	D										
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse sand less gravel, very dense		SC	7											
			8											
			9	S										
			10	D	52					11		114		
			11											
			12											
			13											
			14	S										
			15	D	75									
			16											
BOTTOM OF HOLE = 19.5 Feet No groundwater encountered			17											
			18											
			19	S										
			20	D	50/6"									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 3					
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00									
DRILL RIG: Mobile B-53R				LOGGED BY: FS									
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---									
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample				GROUND WATER DEPTH: Initial: --- Final: ---									
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard		CI	1	S D D	40	4.5	83		18				
			2										
			3										
			4										
			5										
			6										
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very dense		SC	7	S D D	82								
			8										
			9										
			10										
CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse gravel, with fine to coarse sand		GC	11	S D D	54								
			12										
			13										
			14										
CLAYEY SAND with GRAVEL to CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand, fine to coarse gravel		SC/ GC	15	S D D									
			16										
			17										
BOTTOM OF HOLE = 20 Feet No groundwater encountered			18	S D D	94								
			19										
			20										

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE							DH- 4					
PROJECT NAME: UHC Watsonville Road, Morgan Hill					PROJECT NUMBER: PA20.1020.00									
DRILL RIG: Mobile B-53R					LOGGED BY: FS									
HOLE DIAMETER: 8-inch hollow stem auger					HOLE ELEVATION: ---									
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample				GROUND WATER DEPTH:				Initial: --- Final: ---						
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard		CI	1	S										
			2	D	45	4.25								
			3											
			4	S										
			5	D	49					13		105		
			6											
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse sand; fine to coarse gravel		SC	7											
			8											
			9	S										
			10	D	53					11		111		
	11													
CLAY: Dark yellowish brown (10YR 3/4), moist, very stiff		CI	12											
			13											
			14	S										
			15	D	40									
	16													
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand; fine to coarse gravel		SC	17											
			18											
BOTTOM OF HOLE = 19.8 Feet No groundwater encountered			19	S										
			20	D	50/6" 50/3"									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE							DH- 5					
PROJECT NAME: UHC Watsonville Road, Morgan Hill					PROJECT NUMBER: PA20.1020.00									
DRILL RIG: Mobile B-53R					LOGGED BY: FS									
HOLE DIAMETER: 8-inch hollow stem auger					HOLE ELEVATION: ---									
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample					GROUND WATER DEPTH: Initial: --- Final: ---									
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff		CI	1	S	17	4.0			19		99			
			2	D										
			3											
			4	S	67	2.0				20		100		
			5	D										
			6											
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, dense; fine to coarse sand		SC	7		64									
			8											
			9	S										
			10	D										
	11													
CLAY: Dark yellowish brown (10YR 3/4), moist, very stiff to hard		CI	12		41									
			13											
			14	S										
	15	D												
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand		SC	16											
			17											
			18											
BOTTOM OF HOLE = 19.5 Feet No groundwater encountered			19	S	50/5"									
			20	D										

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 6						
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00										
DRILL RIG: Mobile B-53R				LOGGED BY: FS										
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---										
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample				GROUND WATER DEPTH: Initial: --- Final: ---										
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
Concrete section: approx. 5"														
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff		Cl	1	S										
			2	D	13	1.5			22		95			
			3											
			4	S										
			5	D	52	3								
			6											
			7											
			8											
			9	S										
			10	D	68					18		103		
			11											
			12											
			13											
			14	S										
			15	D	44	2.5								
SANDY CLAY to CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very stiff clay/dense sand; fine to coarse sand		Cl/SC	16											
			17											
			18											
BOTTOM OF HOLE = 20 Feet No groundwater encountered			19	S										
			20	D	54									

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 7					
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00									
DRILL RIG: Mobile B-53R				LOGGED BY: FS									
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---									
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample			GROUND WATER DEPTH:			Initial: approx. 24 ft Final: ---							
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
Baserock section: approx. 1"													
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, stiff		Cl	1	S									
			2	D	17	3.0			17		96		
			3	D		1.5							
very stiff to hard			4	S									
			5	D	85	3.25			18		104		
			6	D		3.0							
CLAYEY SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand		SC	7										
			8										
			9	S									
			10	D	90				18		106		
			11	D									
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, hard; with fine to coarse sand		Cl	12										
			13										
			14	S									
			15	D	66		81		21		98		
			16	D									
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand; with fine to coarse gravel		SC	17										
			18										
			19	S									
			20	D	77								

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE							DH- 7					
PROJECT NAME: UHC Watsonville Road, Morgan Hill					PROJECT NUMBER: PA20.1020.00									
DRILL RIG: Mobile B-56					LOGGED BY: FS									
HOLE DIAMETER: 8-inch hollow stem auger					HOLE ELEVATION: ---									
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample				GROUND WATER DEPTH: Initial: approx. 24 ft Final: ---										
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)	
CLAYEY SAND with GRAVEL (continued)		SC	21											
CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, dense to very dense; fine to coarse gravel; with fine to coarse sand		GC	22											
			23											
			24	S	53		14		13					
			25	I										
			26											
CLAYEY SAND with GRAVEL: Dark yellowish brown (10YR 3/4), moist, dense to very dense; fine to coarse sand; with fine to coarse gravel		SC	27											
			28											
			29	S	53									
			30	I										
			31											
very dense			32											
			33											
			34	S	63		15		14					
			35	I										
			36											
			37											
			38											
			39	S	62									
			40	I										

DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE						DH- 7				
PROJECT NAME: UHC Watsonville Road, Morgan Hill				PROJECT NUMBER: PA20.1020.00								
DRILL RIG: Mobile B-56				LOGGED BY: FS								
HOLE DIAMETER: 8-inch hollow stem auger				HOLE ELEVATION: ---								
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample			GROUND WATER DEPTH:			Initial: approx. 24 ft Final: --						
DESCRIPTION OF EARTH MATERIALS	SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAYEY SAND with GRAVEL (continued)	SC	41										
CLAY: Dark yellowish brown (10YR 3/4), moist, hard	CL	42										
		43										
BOTTOM OF HOLE = 45 Feet		44	S	61								
		45	I									
		46										
		47										
		48										
		49										
		50										
		51										
		52										
		53										
		54										
		55										
	56											
	57											
	58											
	59											
	60											
GEO-LOGIC ASSOCIATES									PAGE: 3 of 3			

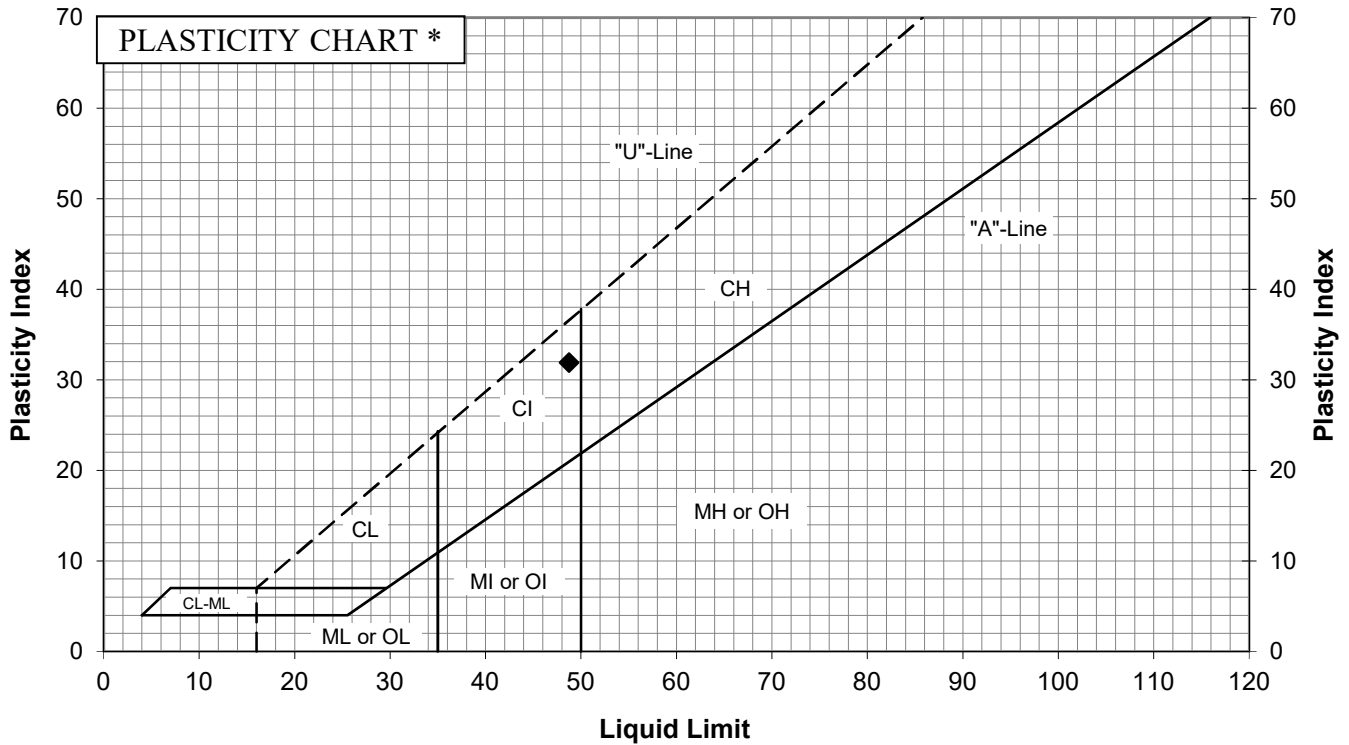
DATE: 6/3/2020		LOG OF EXPLORATORY DRILL HOLE							DH- 8				
PROJECT NAME: UHC Watsonville Road, Morgan Hill					PROJECT NUMBER: PA20.1020.00								
DRILL RIG: Mobile B-53R					LOGGED BY: FS								
HOLE DIAMETER: 8-inch hollow stem auger					HOLE ELEVATION: ---								
SAMPLER: D = 3" OD, 2½" ID Split-spoon X = 2½" OD, 2" ID Split-spoon I = Standard Penetrometer (2" OD SPT) S = Slough in sample					GROUND WATER DEPTH: Initial: --- Final: ---								
DESCRIPTION OF EARTH MATERIALS		SOIL TYPE	DEPTH (ft)	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	% PASSING #200 SIEVE	LIQUID LIMIT	WATER CONTENT	PLASTICITY INDEX	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
CLAY with SAND: Dark yellowish brown (10YR 3/4), moist, very stiff		Cl	1	S D D	39	4.5			14		21		
			2										
			3										
			4										
			5										
SANDY CLAY: Dark yellowish brown (10YR 3/4), moist, hard		Cl	6	S D D	72				16		107		
			7										
			8										
			9										
			10										
CLAYEY SAND with GRAVEL to CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse sand, fine to coarse gravel		SC/ GC	12	S D D	86								
			13										
			14										
			15										
			16										
CLAYEY GRAVEL with SAND: Dark yellowish brown (10YR 3/4), moist, very dense; fine to coarse gravel, with fine to coarse sand		GC	17	S D D	74								
			18										
BOTTOM OF HOLE = 20 Feet No groundwater encountered			19										
			20										

APPENDIX B

LABORATORY TEST RESULTS

ATTERBERG LIMITS TEST RESULTS

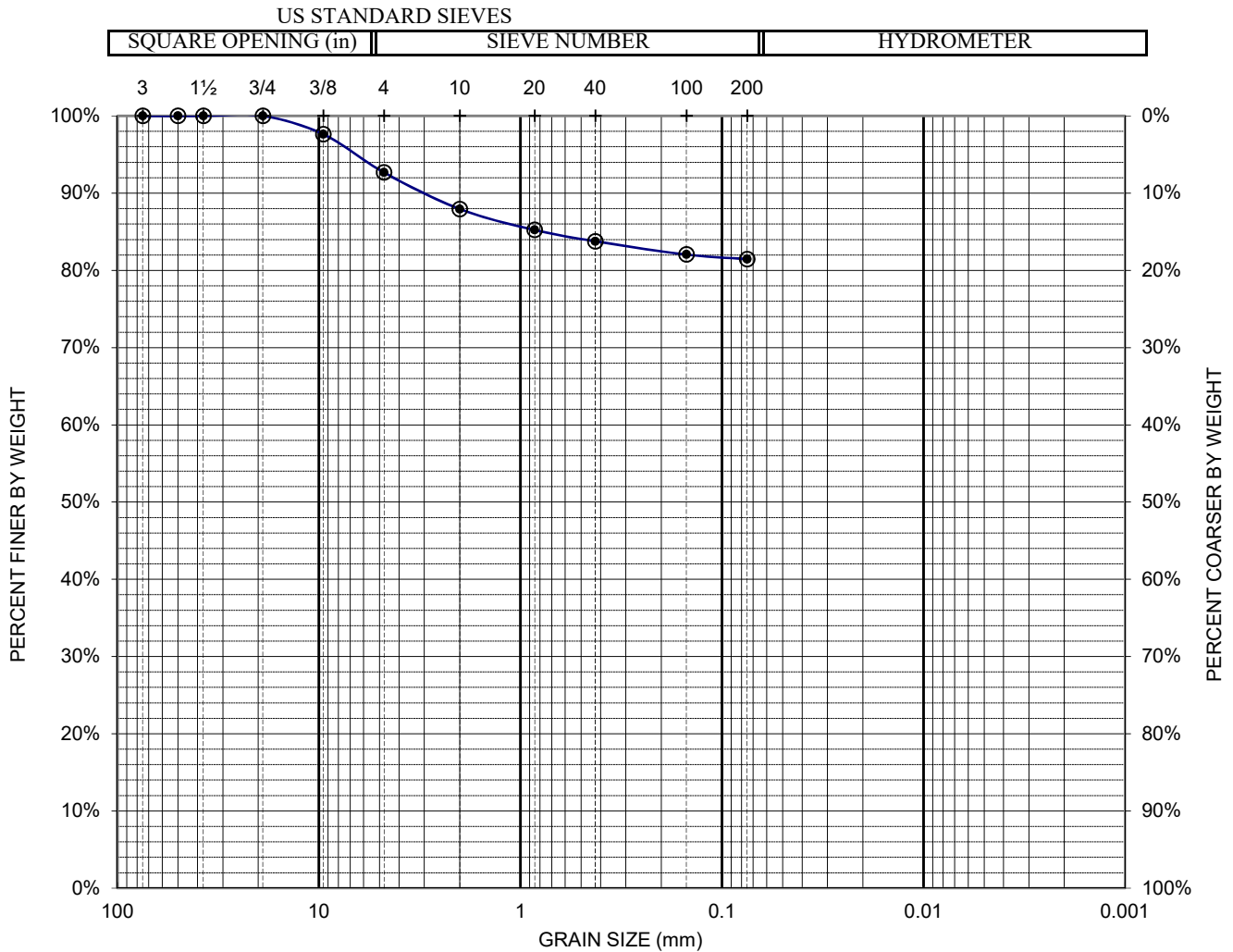
PROJECT NAME	UHC Watsonville Road, Morgan Hill	PROJECT No.	PA20.1020.00
DATE OF TEST	6/9/2020		
KEY SYMBOL	◆		
DRILL HOLE No.	2		
DEPTH (ft)	1		
NATURAL WATER CONTENT (%)	20		
% Retained No. 40 SIEVE (Est.)	---	---	
% PASSING No. 200 SIEVE	---	---	
LIQUID LIMIT	49		
PLASTIC LIMIT	17		
PLASTICITY INDEX	32		
CLASSIFICATION SYMBOL	CI		



* Based on the Unified Soil Classification System modified to incorporate the "intermediate" classifications CI, MI, and OI for soils with liquid limits between 35 and 50. In the unmodified Unified Soil Classification System, such soils would be classified as CL, ML and OL, respectively.

GRAIN SIZE TEST RESULTS

PROJECT NAME UHC Watsonville Road, Morgan Hill				PROJECT No.	PA20.1020.00
DRILL HOLE No. 7	DEPTH (ft) 14.5	SAMPLE 0	DATE OF TEST	6/10/2020	
SOURCE/QUARRY: ---					
DESCRIPTION OF SOIL: Clay with Sand					

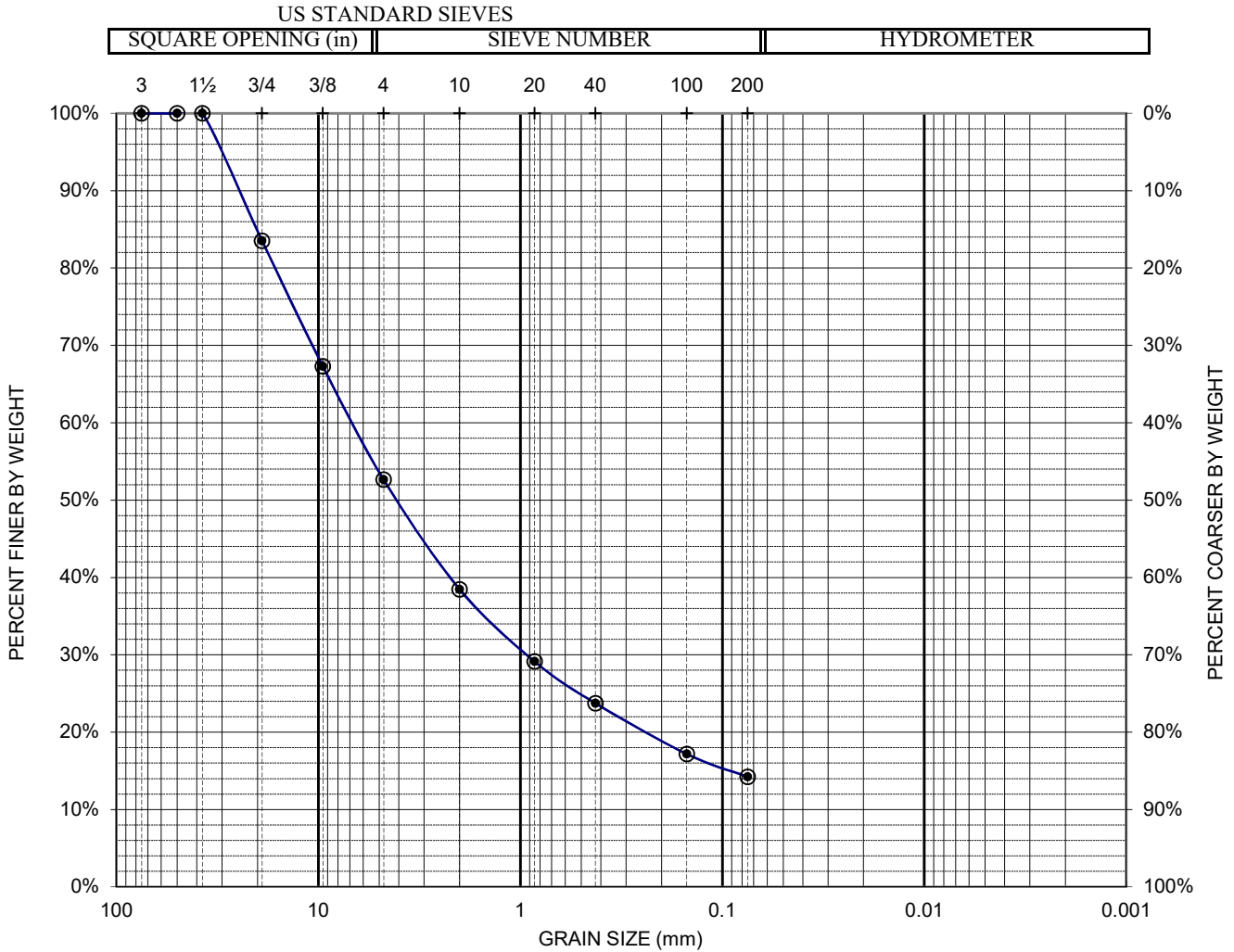


	COARSE	FINE	COARSE	MEDIUM	FINE	
COBBLES	GRAVEL		SAND			SILT & CLAY
	7.3%		11.2%			81.5%

REMARKS:

GRAIN SIZE TEST RESULTS

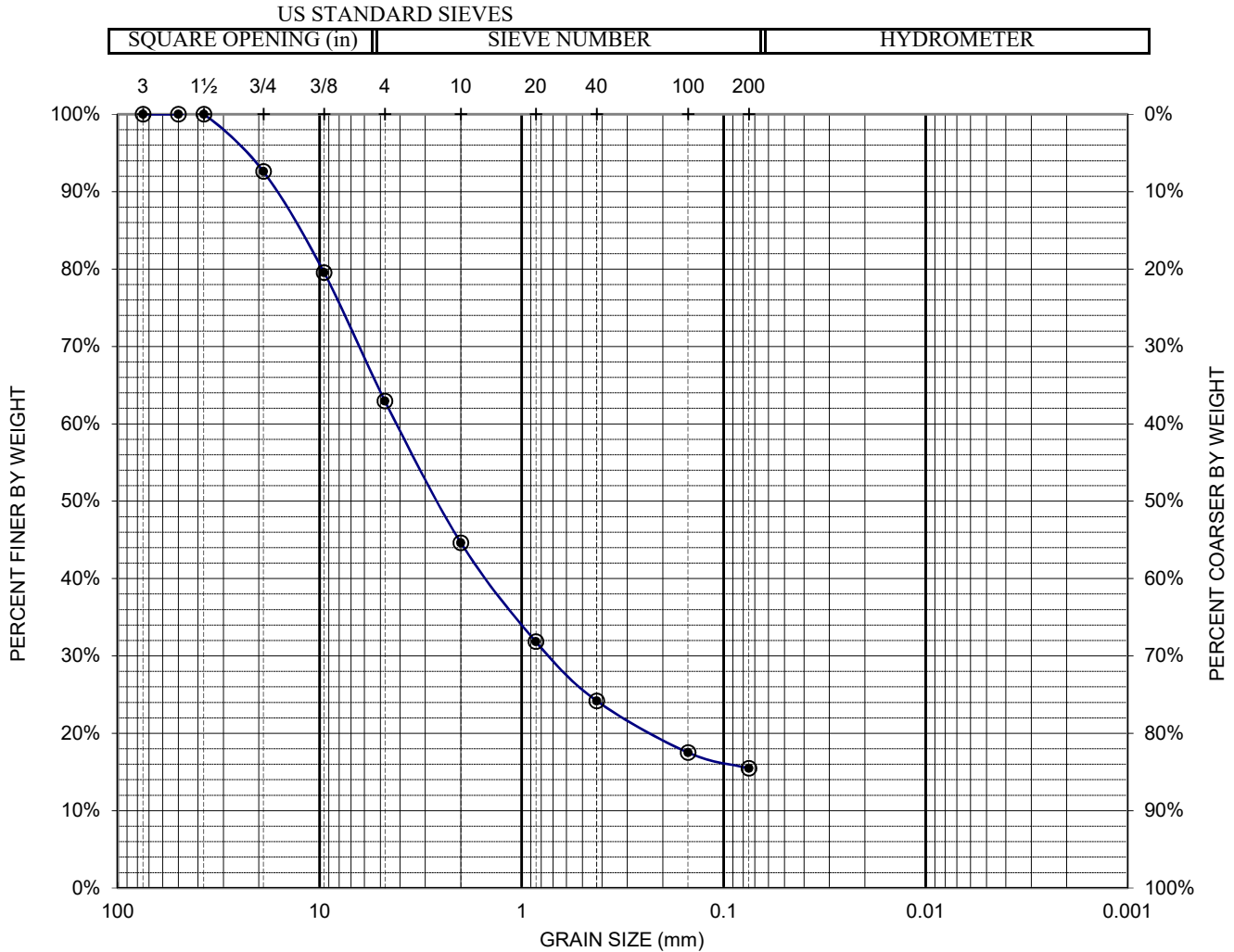
PROJECT NAME UHC Watsonville Road, Morgan Hill				PROJECT No.	PA20.1020.00
DRILL HOLE No. 7	DEPTH (ft) 24-25	SAMPLE 0	DATE OF TEST	6/10/2020	
SOURCE/QUARRY: ---					
DESCRIPTION OF SOIL: Clayey Gravel with Sand					



REMARKS:

GRAIN SIZE TEST RESULTS

PROJECT NAME UHC Watsonville Road, Morgan Hill				PROJECT No.	PA20.1020.00
DRILL HOLE No.	7	DEPTH (ft)	34-35	SAMPLE	0
SOURCE/QUARRY: ---				DATE OF TEST	6/10/2020
DESCRIPTION OF SOIL: Clayey Sand with Gravel					



REMARKS:

COMPACTION TEST REPORT

Project: UHC
Sample: Bulk
Description: Brown, Sandy Clay w. trace F. Gravel

Job No. PA20.1020
Date: 6/18/2020
By: LD

ASTM D1557	Method B	Volume (cf): 0.03333			# Blows: 25	# Layers: 5
Specimen	A	B	C	D		
Wet Weight (grs)	1902	1951	1916	1808		
Wet Density (pcf)	125.8	129.0	126.7	119.6		
Moisture Content (%)	14.4	16.5	18.6	11.8		
Dry Density (pcf)	110.0	110.8	106.8	107.0		

Max. Dry Density : 111.0 pcf
Opt. Water Content: 16.0 %

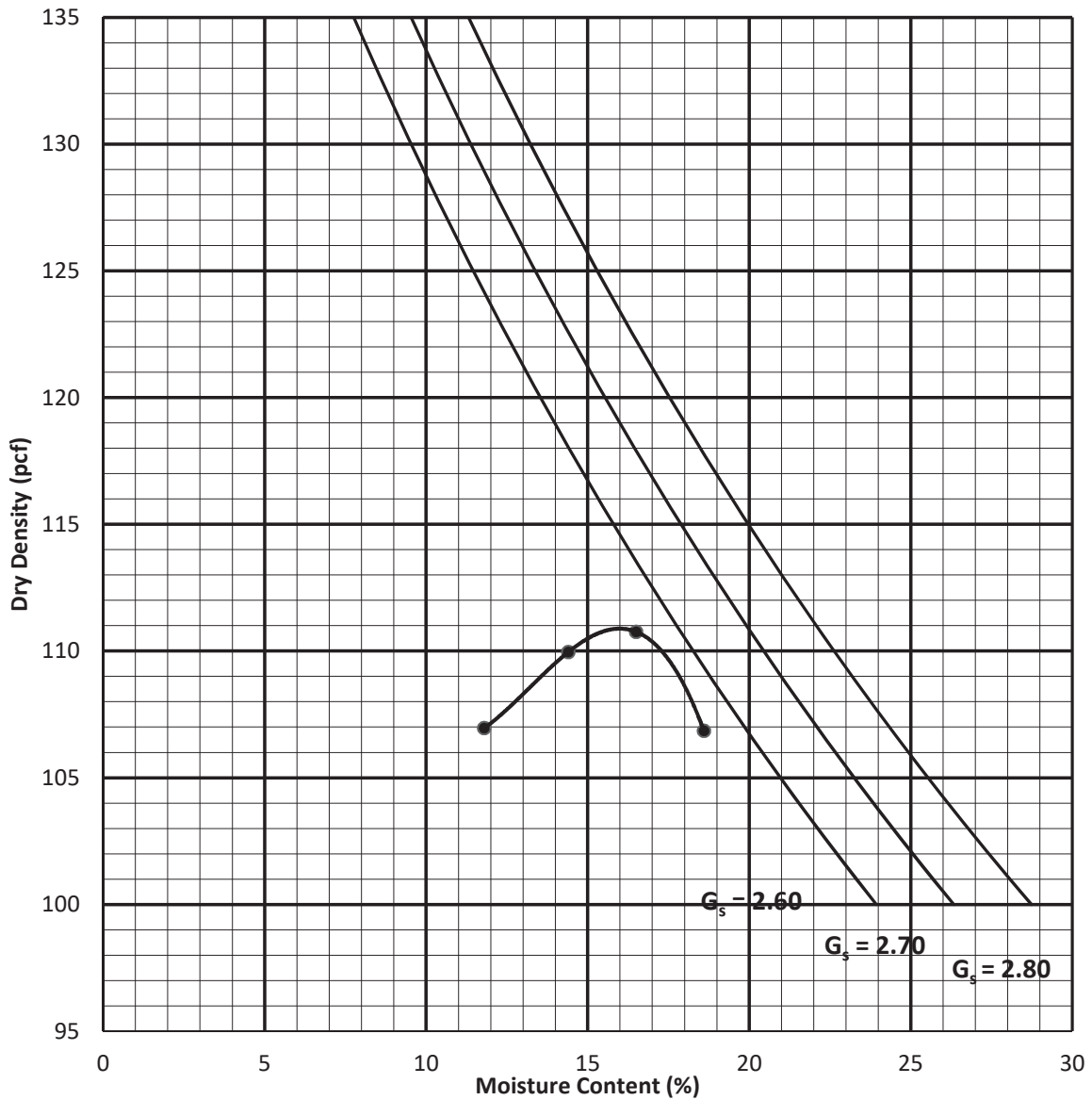


Figure B-5

'R' VALUE CA 301

Project UHC

Date: 6/18/20

By: LD

Job #: PA20-1020

Sample : Bulk

Soil Type: Brown, Silty Clay w. trace Gravel

TEST SPECIMEN		A	B	C	D
Compactor Air Pressure	psi	150	70	100	
Initial Moisture Content	%	12.1	12.1	12.1	
Water Added	ml	60	80	70	
Moisture at Compaction	%	17.7	19.6	18.6	
Sample & Mold Weight	gms	3193	3176	3180	
Mold Weight	gms	2102	2106	2103	
Net Sample Weight	gms	1091	1070	1077	
Sample Height	in.	2.461	2.53	2.482	
Dry Density	pcf	114.1	107.2	110.8	
Pressure	lbs	7145	3710	5120	
Exudation Pressure	psi	569	295	408	
Expansion Dial	x 0.0001	101	45	76	
Expansion Pressure	psf	437	195	329	
Ph at 1000lbs	psi	32	47	38	
Ph at 2000lbs	psi	80	110	93	
Displacement	turns	3.61	4.47	3.98	
R' Value		41	20	31	
Corrected 'R' Value		41	20	31	

FINAL 'R' VALUE	
By Exudation Pressure (@ 300 psi):	21
By Expansion Pressure :	15
TI =	5

Figure B-6



1100 Willow Pass Court, Suite A

Concord, CA 94520-1006

925 462 2771 Fax. 925 462 2775

www.cercoanalytical.com

1 July, 2020

Job No. 2006083

Cust. No. 10854

Ms. Francesca Senes
Geo-Logic Associates
16055-D Caputo Drive
Morgan Hill, CA 95037

Subject: Project No.: PA20.1020.00
Project Name: 15480 Watsonville Road, Morgan Hill, CA
Corrosivity Analysis – ASTM Test Methods

Dear Ms. Senes:

Pursuant to your request, CERCO Analytical has analyzed the soil samples submitted on June 15, 2020. Based on the analytical results, this brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurements, both samples are classified as “moderately corrosive”. All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentrations are both none detected with a detection limit of 15 mg/kg.

The sulfate ion concentrations range from 18 to 43 mg/kg and are determined to be insufficient to damage reinforced concrete structures and cement mortar-coated steel at these locations.

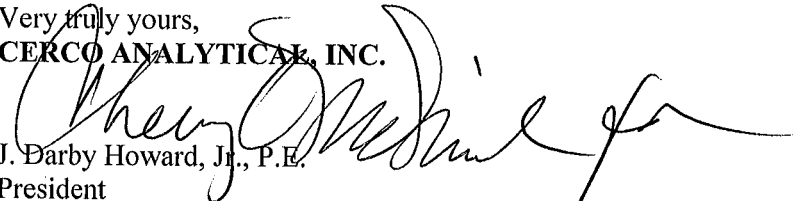
The pH of the soils range from 7.72 to 7.79, which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potentials are both 300-mV which is indicative of potentially “slightly corrosive” soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc. at (925) 927-6630.*

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,
CERCO ANALYTICAL, INC.


J. Darby Howard, Jr., P.E.
President

JDH/jdl
Enclosure

Client: Geo-Logic Associates
 Client's Project No.: PA20.1020.00
 Client's Project Name: 15480 Watsonville Road, Morgan Hill
 Date Sampled: 3-Jun-20
 Date Received: 15-Jun-20
 Matrix: Soil
 Authorization: Signed Chain of Custody

Date of Report: 1-Jul-2020

Job/Sample No.	Sample I.D.	Redox (mV)	pH	Conductivity (umhos/cm)*	Resistivity			Sulfide (mg/kg)*	Chloride (mg/kg)*	Sulfate (mg/kg)*
					(100% Saturation)	(ohms-cm)	(mg/kg)*			
2006083-001	DH-4 @ 1.5'	300	7.72	-	3,900	-	-	N.D.	18	
2006083-002	DH-4 @ 4'	300	7.79	-	2,000	-	-	N.D.	43	

Method:	ASTM D1498	ASTM D4972	ASTM D1125M	ASTM G57	ASTM D4658M	ASTM D4327
Reporting Limit:	-	-	10	-	50	15
Date Analyzed:	30-Jun-2020	26-Jun-2020	-	1-Jul-2020	-	29-Jun-2020



Cheryl McMillen
Laboratory Director

* Results Reported on "As Received" Basis
 N.D. - None Detected
 (1) Detection limit is elevated to 75 mg/kg due to dilution



MH engineering Co.

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Morgan Hill, CA 95037
(408) 779-7381
(408) 226-5712 Fax

Royal Oak Village
PR Certifications

**PERFORMANCE REQUIREMENT NO. 1
SITE DESIGN AND RUNOFF REDUCTION**

CERTIFICATION

DESIGN STRATEGY	INCORPORATED?
1. Limit disturbance of creeks and natural drainage features.	N/A
2. Minimize compaction of highly permeable soils.	N/A
3. Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection.	N/A
4. Minimize impervious surfaces by concentrating improvements on the least sensitive areas of the site, while leaving the remaining land in a natural undisturbed state.	✓
5. Minimize stormwater runoff by implementing one or more of the following design measures:	
a) Direct roof runoff into cisterns or rain barrels for reuse.	
b) Direct roof runoff onto vegetated areas safely away from building foundations and footings.	✓
c) Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas safely away from building foundations and footings.	✓
d) Direct runoff from driveways and/or uncovered parking lots onto vegetated areas safely away from building foundations and footings.	✓
e) Construct bike lanes, driveways, uncovered parking lots, sidewalks, walkways, and patios with permeable surfaces.	N/A

I, Harry Singla, acting as the Project Engineer for Crossings project, located at Watsonville Road, hereby state that the Site Design and Runoff Reduction design strategies indicated above have been incorporated into the design of the project.

Signature 

Date 8-27-20

SOURCE CONTROL CHECKLIST	
ON-SITE SOURCE CONTROL MEASURES	INCORPORATED?
Wash area/racks, drain to sanitary sewer ¹	<input type="checkbox"/>
Covered dumpster area, drain to sanitary sewer ¹	<input checked="" type="checkbox"/>
Sanitary sewer connection or accessible cleanout for swimming pool/spa/fountain ¹	<input type="checkbox"/>
Parking garage floor drains plumbed to sanitary sewer ¹	<input type="checkbox"/>
Fire sprinkler test water/condensate drain lines drain to landscape/sanitary sewer ¹	<input checked="" type="checkbox"/>
Interior floor drains/boiler drain lines plumbed to sanitary sewer	<input checked="" type="checkbox"/>
Beneficial landscaping/IPM (minimize irrigation, runoff, pesticides and fertilizers; promotes treatment)	<input checked="" type="checkbox"/>
Outdoor material storage protection	<input checked="" type="checkbox"/>
Covers, drains for loading docks, maintenance bays, fueling areas	<input type="checkbox"/>
Maintenance (pavement sweeping, catch basin cleaning, good housekeeping)	<input checked="" type="checkbox"/>
Storm drain labeling	<input checked="" type="checkbox"/>
Other ² _____	<input type="checkbox"/>

Notes:

¹ Subject to sanitary sewer authority requirements.

² See CASQA Stormwater BMP Handbook for New Development and Redevelopment for additional BMPs for vehicle service repair facilities, fuel dispensing areas, industrial processes, rooftop equipment and other pollutant generating activities and sources:

<https://www.casqa.org/resources/bmp-handbooks/new-development-redevelopment-bmp-handbook>

**PERFORMANCE REQUIREMENT NO. 2:
WATER QUALITY TREATMENT**

CERTIFICATION

	ON-SITE WATER QUALITY TREATMENT MEASURES (IN ORDER OF PRIORITY)	INCORPORATED?
1.	<p>Low Impact Development (LID) Treatment Systems designed to retain stormwater runoff generated by the 85th percentile 24-hour storm. Stormwater Control Measures implemented (circle all that apply, design documentation is required):</p> <ul style="list-style-type: none"> • Harvesting and Use, • Infiltration, • Evapotranspiration 	✓
2.	<p>Biofiltration Treatment Systems – with the following design parameters:</p> <ol style="list-style-type: none"> a) Maximum surface loading rate appropriate to prevent erosion, scour and channeling within the biofiltration treatment system itself and equal to 5 inches per hour, based on the flow of runoff produced from a rain event equal to or at least: <ol style="list-style-type: none"> i. 0.2 inches per hour intensity; or ii. Two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depth b) Minimum surface reservoir volume equal to the biofiltration treatment system surface area times a depth of 6 inches c) Minimum planting medium depth of 24 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of sand (60%-70%) meeting the specifications of American Society for Testing and Materials (ASTM) C33 and compost (30%-40%) may be used. A Regulated Project may utilize an alternative planting medium if it demonstrates its planting medium is equal to or more effective at attenuating pollutants than the specified planting medium mixture. d) Proper plant selection¹³ e) Subsurface drainage/storage (gravel) layer with an area equal to the biofiltration treatment system surface area and having a minimum depth of 12 inches f) Underdrain with discharge elevation at top of gravel layer g) No compaction of soils beneath the biofiltration facility (ripping/loosening of soils required if compacted) h) No liners or other barriers interfering with infiltration, except for situations where lateral infiltration is not technically feasible 	✓

¹³ Technical guidance for designing bioretention facilities is available from the Central Coast LID Initiative. The guidance includes design specifications and plant lists appropriate for the Central Coast climate:

http://www.centralcoastlidi.org/Central_Coast_LIDI/LID_Structural_BMPs.html

3.	Non-Retention Based Treatment Systems – designed to meet at least one of the following hydraulic sizing criteria:	
✓	(a) Volume Hydraulic Design Basis – Treatment systems whose primary mode of action depends on volume capacity shall be designed to treat stormwater runoff equal to the volume of runoff generated by the 85th percentile 24-hour storm event, based on local rainfall data.	
	(b) Flow Hydraulic Design Basis – Treatment systems whose primary mode of action depends on flow capacity shall be sized to treat: <ul style="list-style-type: none"> (i) The flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or (ii) The flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity. 	

I, Harry Singh, acting as the Project Engineer for Crossing project, located at Watsonville Road, hereby state that the On-Site Water Quality Treatment Measures indicated above have been incorporated into the design of the project.

Signature

Harry Singh

Date

8-27-20

**PERFORMANCE REQUIREMENT NO. 3:
RUNOFF RETENTION**

Design Rainfall Events & Treatment Requirements for WMZs

WMZ ¹	Treatment Options & Design Rainfall	Check Applicable WMZs
WMZ 1	Via optimized infiltration ² , prevent offsite discharge from events up to the 95 th percentile 24-hour rainfall event as determined from local rainfall data.	✓
WMZ 2	Via storage, rainwater harvesting, infiltration, and/or evapotranspiration, prevent offsite discharge from events up to the 95 th percentile 24-hour rainfall event as determined from local rainfall data.	
WM 4 *	Via optimized infiltration ² , prevent offsite discharge from events up to the 95 th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 5	Via optimized infiltration ² prevent offsite discharge from events up to the 85 th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 6	Via storage, rainwater harvesting, infiltration, and/or evapotranspiration, prevent offsite discharge from events up to the 85 th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 9	Via storage, rainwater harvesting, infiltration, and/or evapotranspiration, prevent offsite discharge from events up to the 85 th percentile 24-hour rainfall event as determined from local rainfall data.	
WMZ 10 *	Via optimized infiltration ² , prevent offsite discharge from events up to the 95 th percentile 24-hour rainfall event as determined from local rainfall data	

Notes:

* Applicable only to those areas that overlay designated Groundwater Basins

1. Includes only those WMZs contained in Santa Clara County.

2. Storage, rainwater harvesting, and/or evapotranspiration may be used when infiltration is optimized.

**PERFORMANCE REQUIREMENT NO. 3:
RUNOFF RETENTION**

LID Site Assessment Checklist

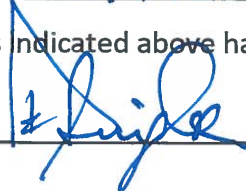
ITEMS TO DOCUMENT:	INCLUDED?
1. Site topography	<input checked="" type="checkbox"/>
2. Hydrologic features including contiguous natural areas, wetlands, watercourses, seeps, or springs	<input type="checkbox"/>
3. Depth to seasonal high groundwater	<input checked="" type="checkbox"/>
4. Locations of groundwater wells used for drinking water	<input type="checkbox"/>
5. Depth to an impervious layer such as bedrock	<input checked="" type="checkbox"/>
6. Presence of unique geology (e.g., karst)	<input type="checkbox"/>
7. Geotechnical hazards	<input type="checkbox"/>
8. Documented soil and/or groundwater contamination	<input type="checkbox"/>
9. Soil types and hydrologic soil groups	<input checked="" type="checkbox"/>
10. Vegetative cover/trees	<input checked="" type="checkbox"/>
11. Run-on characteristics (source and estimated runoff from offsite which discharges to the project area)	<input type="checkbox"/>
12. Existing drainage infrastructure for the site and nearby areas including the location of municipal storm drains	<input checked="" type="checkbox"/>
13. Structures including retaining walls	<input checked="" type="checkbox"/>
14. Utilities	<input checked="" type="checkbox"/>
15. Easements	<input checked="" type="checkbox"/>
16. Covenants	<input checked="" type="checkbox"/>
17. Zoning/Land Use	<input checked="" type="checkbox"/>
18. Setbacks	<input checked="" type="checkbox"/>
19. Open space requirements	<input checked="" type="checkbox"/>
20. Other pertinent overlay(s)	<input checked="" type="checkbox"/>

**PERFORMANCE REQUIREMENT NO. 3:
RUNOFF RETENTION**

LID Site Design Measures

	DESIGN MEASURE	INCORPORATED?
1.	Defining the development envelope, identifying the protected areas, and identifying areas that are most suitable for development and areas to be left undisturbed	N/A
2.	Identifying conserved natural areas, including existing trees, other vegetation, and soils (shown on the plans)	N/A
3.	Limit the overall impervious footprint of the project	✓
4.	Design of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety or mobility uses are not compromised	✓
5.	Set back development from creeks, wetlands, and riparian habitats	N/A
6.	Design conforms the site layout along natural landforms	
7.	Design avoids excessive grading and disturbance of vegetation and soils	✓

I, Harry Singh, acting as the Project Engineer for Crossings project, located at Watsonville Road, hereby state that LID Site Design Measures indicated above have been incorporated into the design of the project.

Signature 

Date 8-27-20

**PERFORMANCE REQUIREMENT NO. 3:
RUNOFF RETENTION**

Technical Infeasibility Checklist

	Site Conditions	Check If Applicable
1.	Depth to seasonal high groundwater limits infiltration and/or prevents construction of subgrade stormwater control measures ¹⁴	<input type="checkbox"/>
2.	Depth to an impervious layer such as bedrock limits infiltration	<input checked="" type="checkbox"/>
3.	Sites where soil types significantly limit infiltration	<input checked="" type="checkbox"/>
4.	Sites where pollutant mobilization in the soil or groundwater is a documented concern	<input type="checkbox"/>
5.	Space constraints (e.g., infill projects, some redevelopment projects, high density development)	<input type="checkbox"/>
6.	Geotechnical hazards	<input type="checkbox"/>
7.	Stormwater Control Measures located within 100 feet of a groundwater well used for drinking water	<input type="checkbox"/>
8.	Incompatibility with surrounding drainage system (e.g., project drains to an existing stormwater collection system whose elevation or location precludes connection to a properly functioning treatment or flow control facility)	<input type="checkbox"/>

¹⁴ See Santa Clara Valley Water District guidelines for minimum groundwater separation from stormwater infiltration devices (Section 7, Table 6, of this Manual).

APPENDIX B

Stormwater Control Plan Checklist

Stormwater Control Plan Required Contents	PR Level	Done?
1. Project Information	All	
• Project name		/
• Application number		
• Address and assessor's parcel number		/
• Name of Applicant		
• Project Phase number (if project is being constructed in phases)		
• Project Type (e.g., commercial, industrial, <u>multi-unit residential</u> , mixed-use, public), and description		/
2. Project Areas	All	
• Total project site area		/
• Total new impervious surface area		/
• Total replaced impervious surface area		/
• Total new pervious area		/
• Calculation of Net Impervious Area		/
3. Statement of Performance Requirements that apply to the project:	All	
• Performance Requirement No.1 – Site Design and Runoff Reduction		/
• Performance Requirement No.2 – Water Quality Treatment		/
• Performance Requirement No. 3 – Runoff Retention		/
• Performance Requirement No. 4 – Peak Management		/
4. Delineation of Drainage Management Areas (DMAs)	All	/
5. Summary of Site Design and Runoff Reduction Performance Requirement measures selected for the project (see PR-1 checklist)	PR-1	/
6. Description of Runoff Reduction Measures and Structural Stormwater Control Measures, by Drainage Management Area and for entire site	PR-2, 3, and 4	/
7. Water quality treatment calculations used to comply with the Water Quality Treatment Performance Requirement and any analysis to support infeasibility determination	PR-2	/
8. Documentation certifying that the selection, sizing, and design of the Stormwater Control Measures meet the full or partial Water Quality Treatment Performance Requirements (see PR-2 checklist)	PR-2	/

Stormwater Control Plan Required Contents	PR Level	Done?
9. Statement that Water Quality Treatment Performance Requirement has been met on-site, or, if not achievable: <ul style="list-style-type: none"> • Documentation of the volume of runoff for which compliance cannot be achieved on-site and the associated off-site compliance requirements • Statement of intent to comply with Water Quality Treatment Performance Requirement through Alternative Compliance 	PR-2	✓
10. LID Site Assessment Summary (see PR-3 checklist)	PR-3	✓
11. LID Site Design Measures Used (see PR-3 checklist)	PR-3	✓
12. Supporting calculations used to comply with the applicable Runoff Retention Performance Requirements	PR-3	✓
13. Documentation demonstrating infeasibility where Site Design and Runoff Reduction measures and retention-based Stormwater Control Measures cannot retain required runoff volume	PR-3	✓
14. Documentation demonstrating percentage of the project's Equivalent Impervious Surface Area dedicated to retention-based Stormwater Control Measures	PR-3	✓
15. Statement that Runoff Reduction Performance Requirement has been met on-site, or, if not achievable: <ul style="list-style-type: none"> • Documentation of the volume of runoff for which compliance cannot be achieved on-site and the associated off-site compliance requirements • Statement of intent to comply with Runoff Retention Performance Requirements through an Alternative Compliance agreement 	PR-3	✓
16. Supporting calculations used to comply with the applicable Peak Management Performance Requirements	PR-4	✓
17. Documentation demonstrating infeasibility where on-site compliance with Peak Management Performance Requirements cannot be achieved	PR-4	
18. Statement that Peak Management Performance Requirement has been met on-site, or, if not achievable: <ul style="list-style-type: none"> • Documentation of the volume of runoff for which compliance cannot be achieved on-site and the associated off-site compliance requirements • Statement of intent to comply with Peak Management Requirements through an Alternative Compliance agreement 		✓
19. O&M Plan for all structural SCMs to ensure long-term performance	PR-2, 3, and 4	
20. Owner of facilities and responsible party for conducting O&M	PR-2, 3, and 4	



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Royal Oak Village
Hydrology Study
(Peak Management)

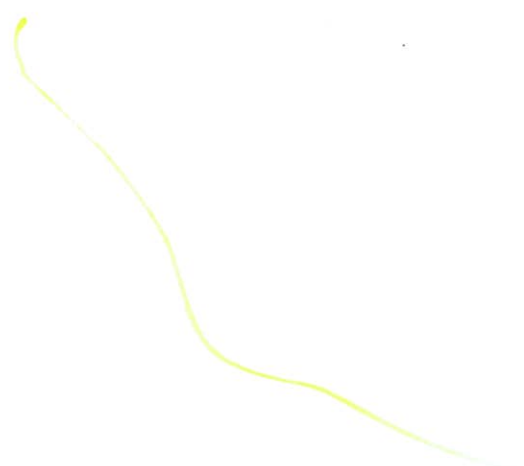
Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

1
Pre-Project
4.23ac.

2
Post-Project
4.23ac

3
SCM. Routing



2

Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Tuesday, Aug 25, 2020

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	-----
2	3.2899	0.1000	0.4504	-----
3	0.0000	0.0000	0.0000	-----
5	4.8340	0.1000	0.4718	-----
10	6.8656	0.1000	0.5248	-----
25	14.3801	3.0000	0.6662	-----
50	11.8133	1.1000	0.6004	-----
100	8.1332	0.1000	0.4776	-----

File name: SCC-25in.IDF

$$\text{Intensity} = B / (Tc + D)^E$$

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1.58	1.16	0.97	0.85	0.77	0.71	0.66	0.62	0.59	0.56	0.54	0.52
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	2.24	1.62	1.34	1.17	1.06	0.97	0.90	0.85	0.80	0.76	0.73	0.70
10	2.92	2.04	1.65	1.42	1.27	1.15	1.06	0.99	0.93	0.88	0.84	0.80
25	3.60	2.60	2.10	1.78	1.56	1.40	1.27	1.17	1.09	1.02	0.96	0.91
50	3.99	2.78	2.23	1.89	1.67	1.50	1.37	1.27	1.18	1.11	1.05	1.00
100	3.74	2.70	2.22	1.94	1.75	1.60	1.49	1.40	1.32	1.25	1.20	1.15

Tc = time in minutes. Values may exceed 60.

Precip. file name: MORGAN HILL SCS.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	2.20	2.65	0.00	3.62	4.17	4.79	5.20	5.59
SCS 6-Hr	0.00	1.44	0.00	0.00	2.30	2.65	2.88	3.09
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	2.20	2.65	0.00	3.62	4.17	4.79	5.20	5.59

3

Hydrograph Parameters Used:

$$T_{c \text{ pre}} = 10 \text{ min} + \text{overland sheet flow} \\ + \text{Watsonville Road side ditch} \\ = 10 + 8 \text{ min} = 17 \text{ min}$$

$$\text{Pre-Project Runoff Coeff.} = \frac{(2.07)(0.90) + 2.16(0.35)}{4.23}$$

Gross Area Parcel one

$$= 3.71 + 0.52 = 4.23 \text{ ac}$$

↑ Watsonville Rd (incl. existing pavement) $C_{\text{pre}} = 0.62$

$$\text{Post Project Runoff Coeff.} = \frac{(2.67)(0.90) + 1.56(0.35)}{4.23}$$

$$\left[\begin{array}{l} \text{Private hardscape} + \text{public hardscape} \\ 99,067 + 17,086 \text{ (DMA 1 \& 2)} \end{array} \right]$$

↑ Excludes DMA 9 \& 10 (offsite streets) $C_{\text{post}} = 0.70$

$$T_{c \text{ post}} = 10 \text{ min (roof to gutter)} + \text{Pipe flow to storage manifold} \\ = 10 + 9 = 19 \text{ min}$$

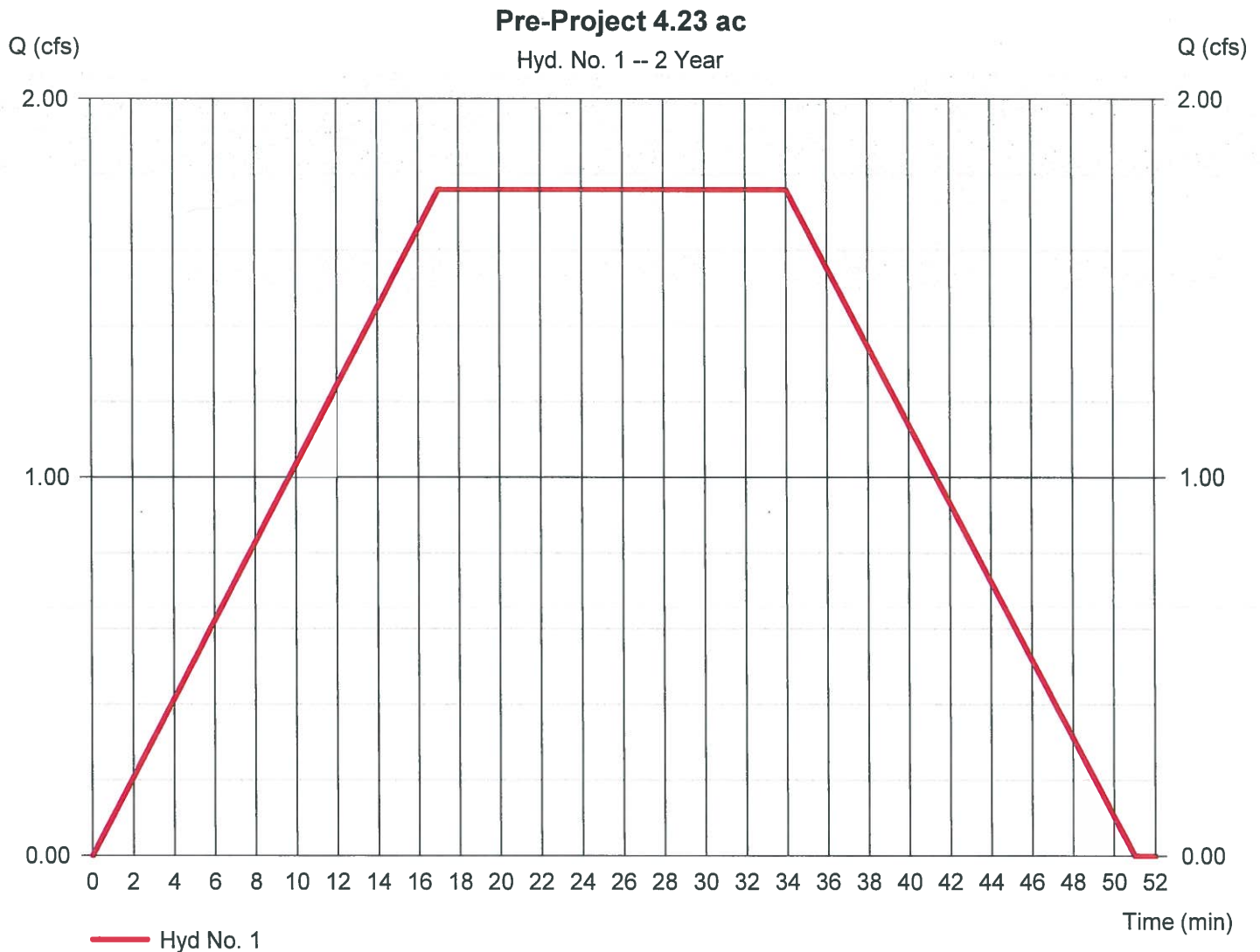
+

Hydrograph Report

Hyd. No. 1

Pre-Project 4.23 ac

Hydrograph type	= Mod. Rational	Peak discharge	= 1.760 cfs
Storm frequency	= 2 yrs	Time to peak	= 17 min
Time interval	= 1 min	Hyd. volume	= 3,591 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.62
Intensity	= 0.671 in/hr	Tc by User	= 17.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

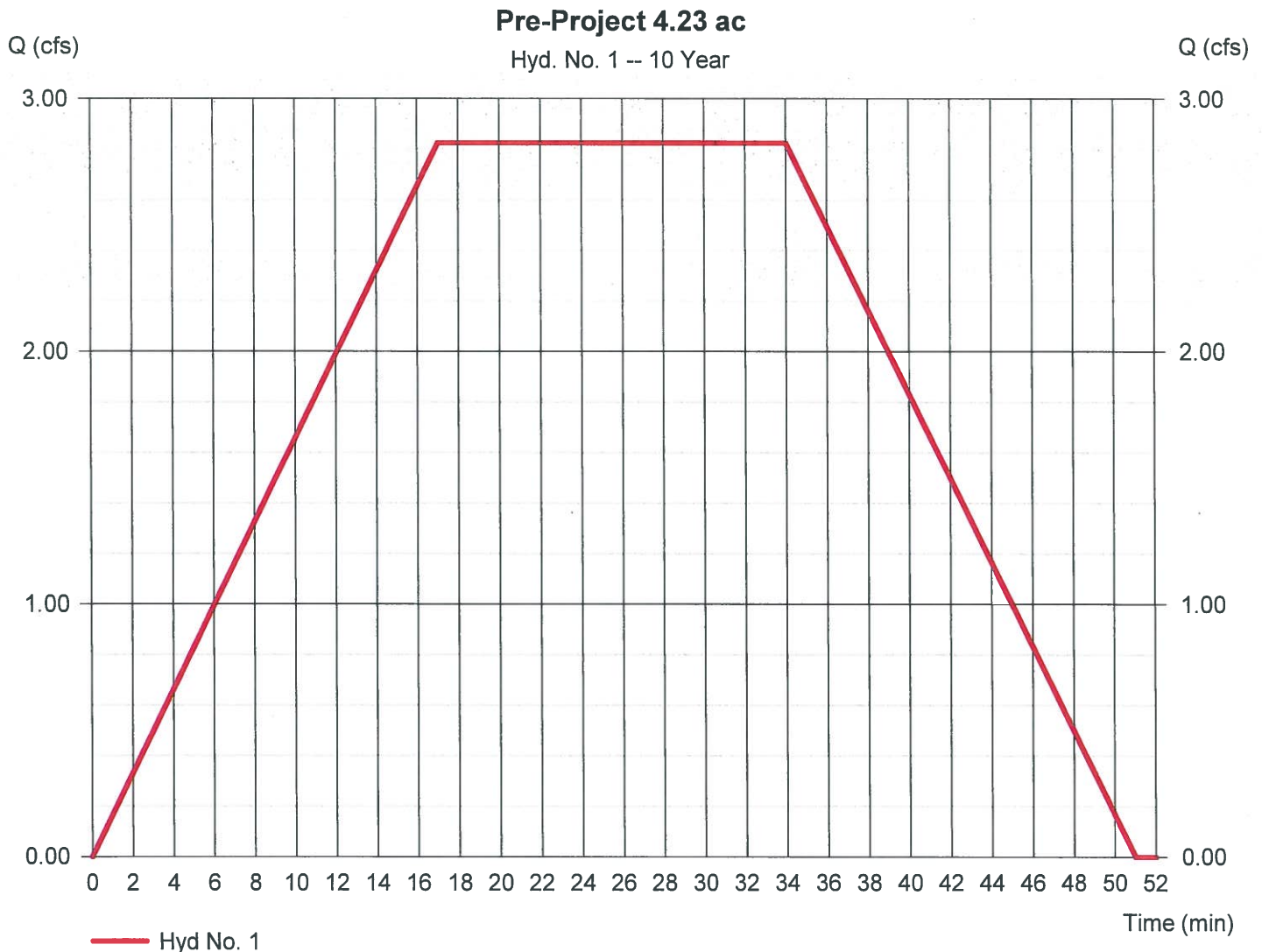


Hydrograph Report

Hyd. No. 1

Pre-Project 4.23 ac

Hydrograph type	= Mod. Rational	Peak discharge	= 2.825 cfs
Storm frequency	= 10 yrs	Time to peak	= 17 min
Time interval	= 1 min	Hyd. volume	= 5,763 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.62
Intensity	= 1.077 in/hr	Tc by User	= 17.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a



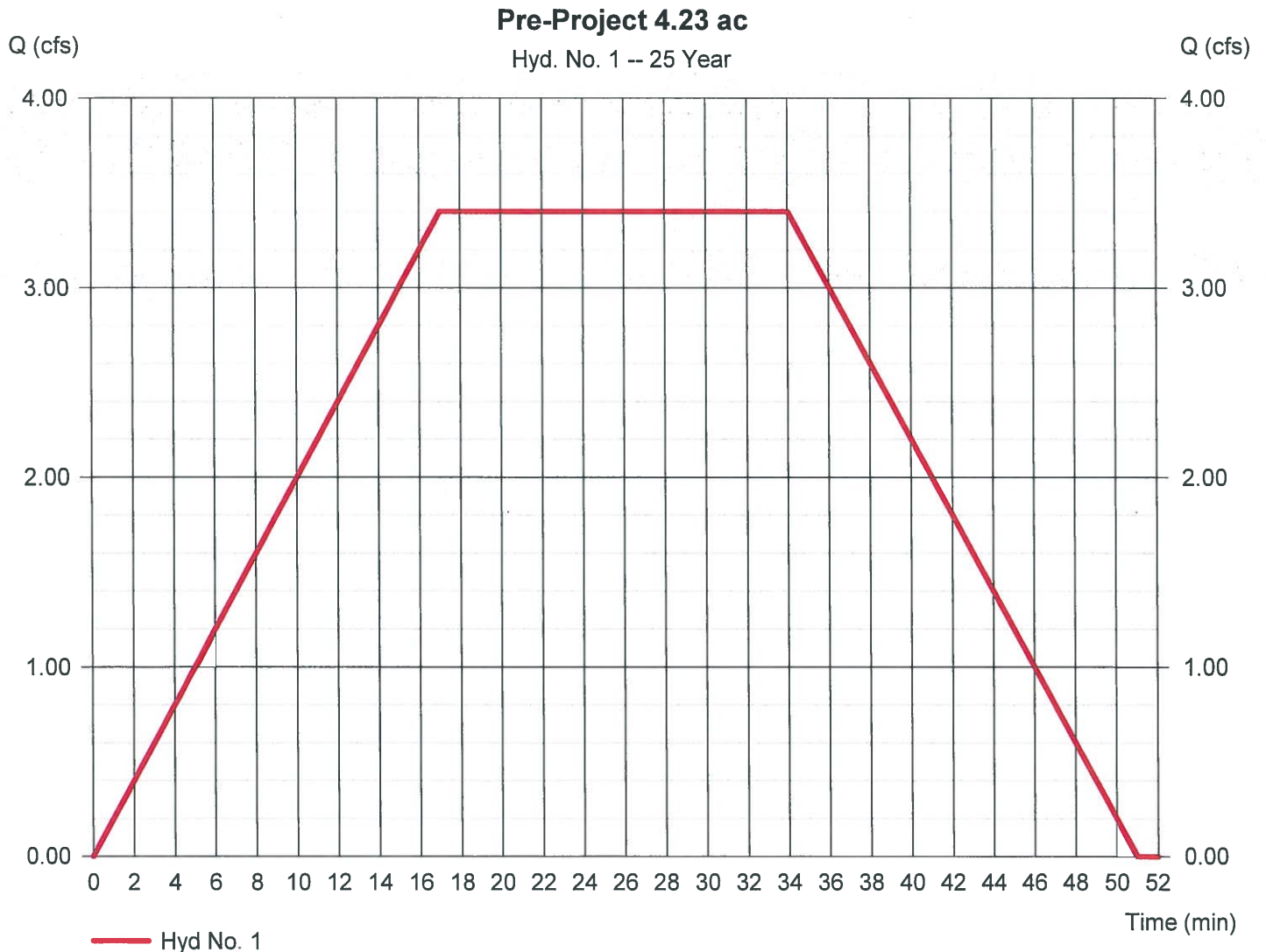
Hydrograph Report

Hyd. No. 1

Pre-Project 4.23 ac

Hydrograph type = Mod. Rational
Storm frequency = 25 yrs
Time interval = 1 min
Drainage area = 4.230 ac
Intensity = 1.297 in/hr
IDF Curve = SCC-25in.IDF
Target Q = n/a

Peak discharge = 3.402 cfs
Time to peak = 17 min
Hyd. volume = 6,940 cuft
Runoff coeff. = 0.62
Tc by User = 17.00 min
Storm duration = 2.0 x Tc
Est. Req'd Storage = n/a

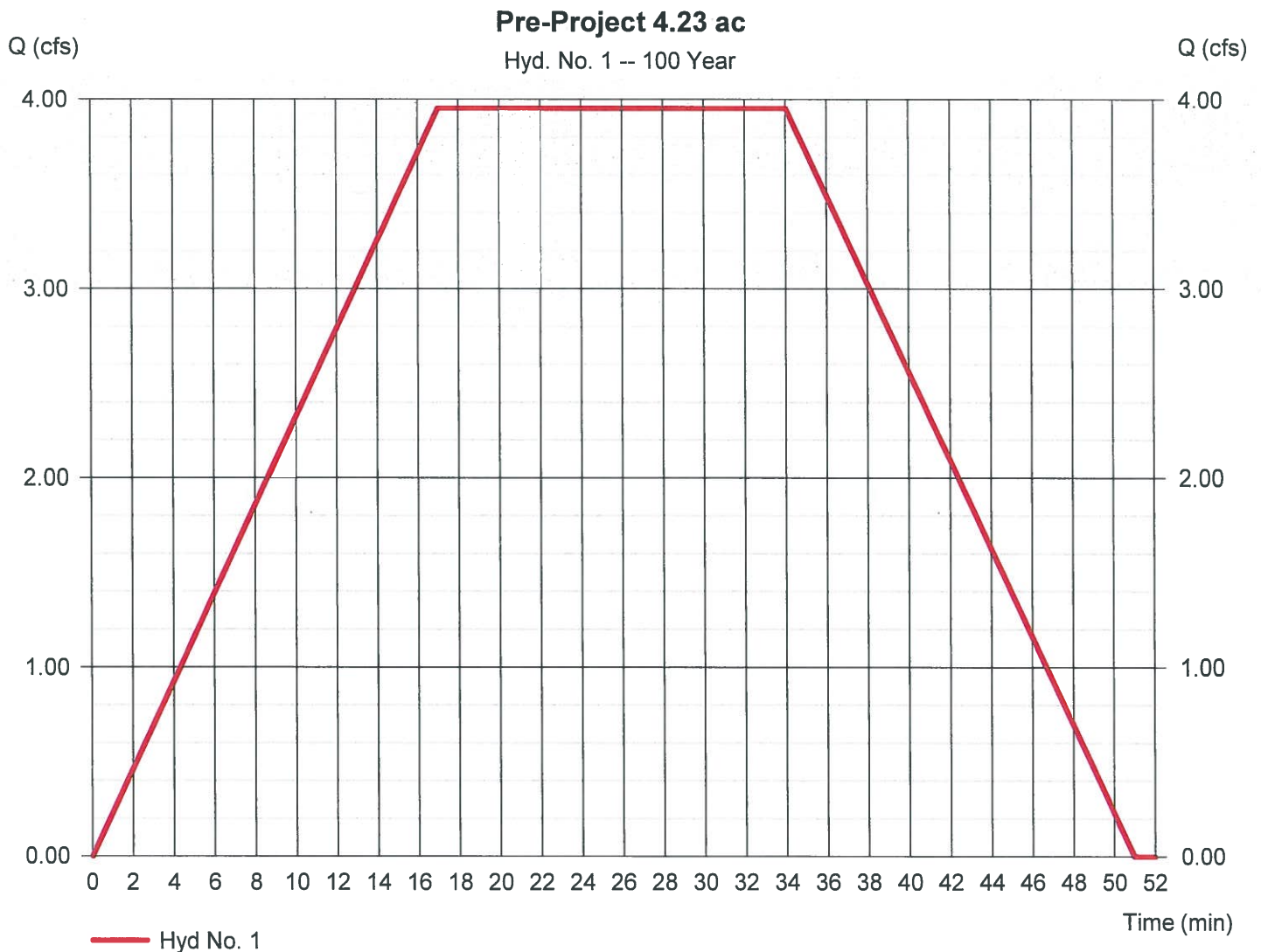


Hydrograph Report

Hyd. No. 1

Pre-Project 4.23 ac

Hydrograph type	= Mod. Rational	Peak discharge	= 3.953 cfs
Storm frequency	= 100 yrs	Time to peak	= 17 min
Time interval	= 1 min	Hyd. volume	= 8,065 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.62
Intensity	= 1.507 in/hr	Tc by User	= 17.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	= n/a	Est. Req'd Storage	= n/a

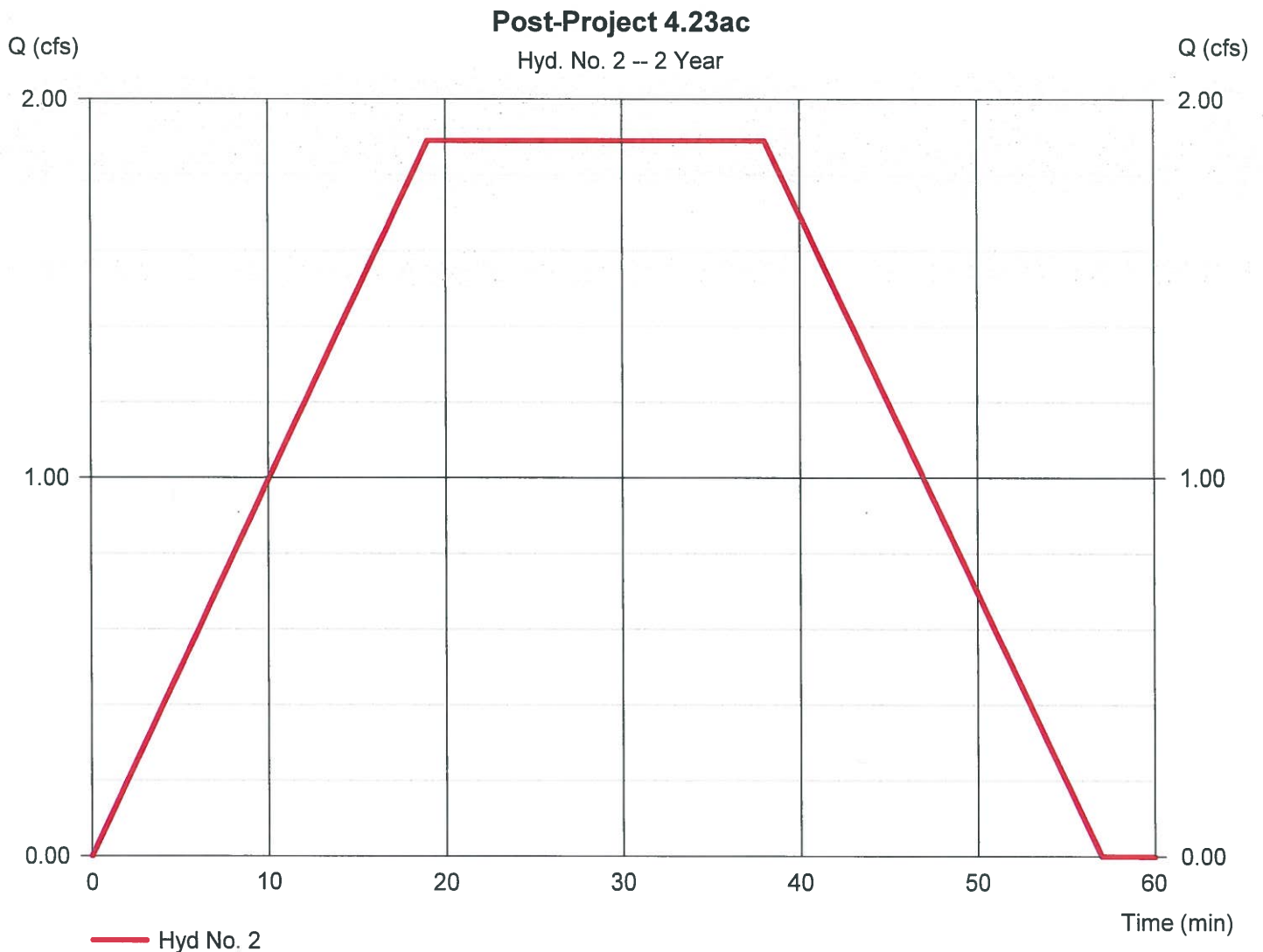


Hydrograph Report

Hyd. No. 2

Post-Project 4.23ac

Hydrograph type	= Mod. Rational	Peak discharge	= 1.891 cfs
Storm frequency	= 2 yrs	Time to peak	= 19 min
Time interval	= 1 min	Hyd. volume	= 4,311 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.7
Intensity	= 0.638 in/hr	Tc by User	= 19.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

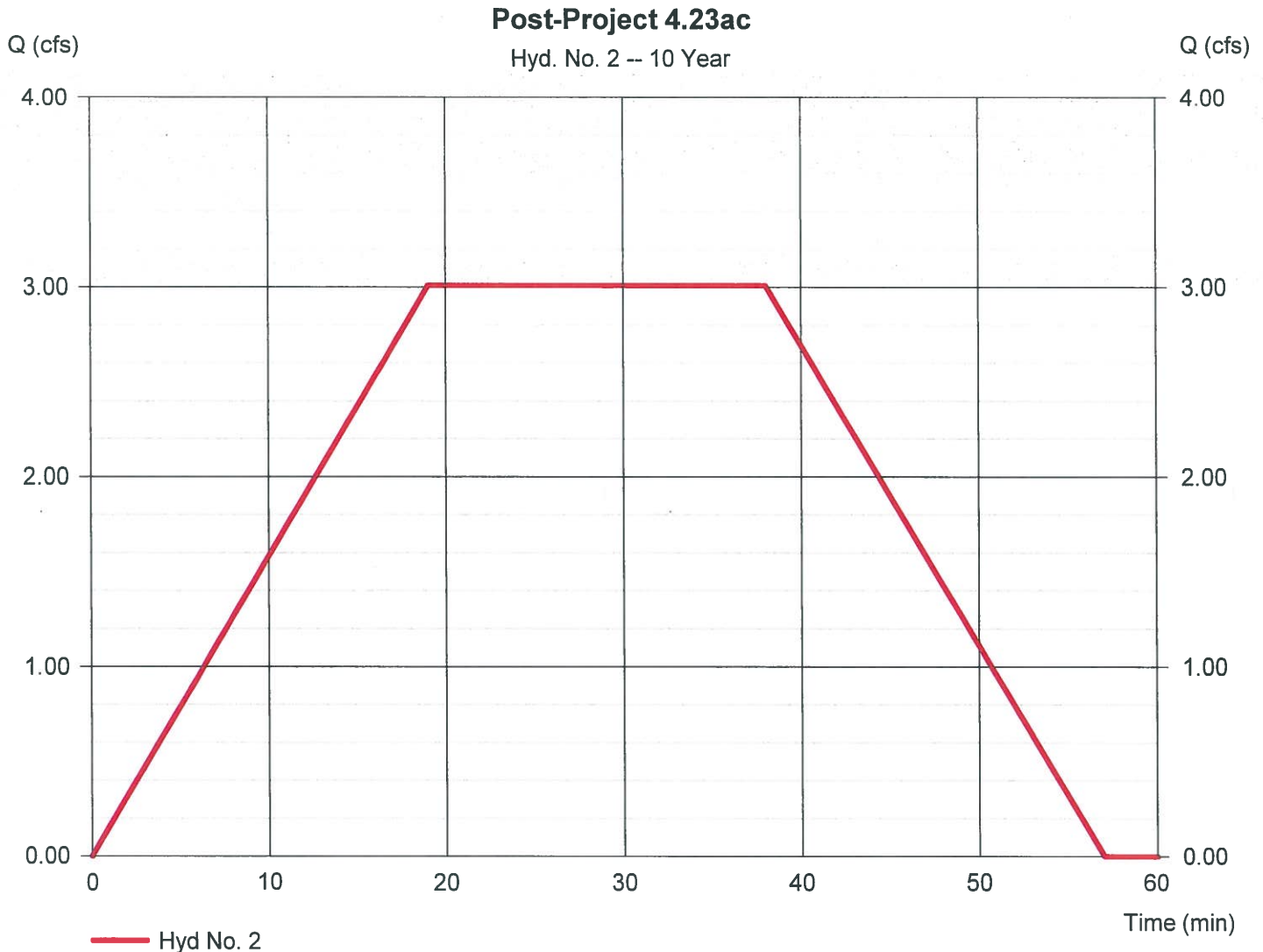


Hydrograph Report

Hyd. No. 2

Post-Project 4.23ac

Hydrograph type	= Mod. Rational	Peak discharge	= 3.009 cfs
Storm frequency	= 10 yrs	Time to peak	= 19 min
Time interval	= 1 min	Hyd. volume	= 6,860 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.7
Intensity	= 1.016 in/hr	Tc by User	= 19.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	=n/a	Est. Req'd Storage	=n/a

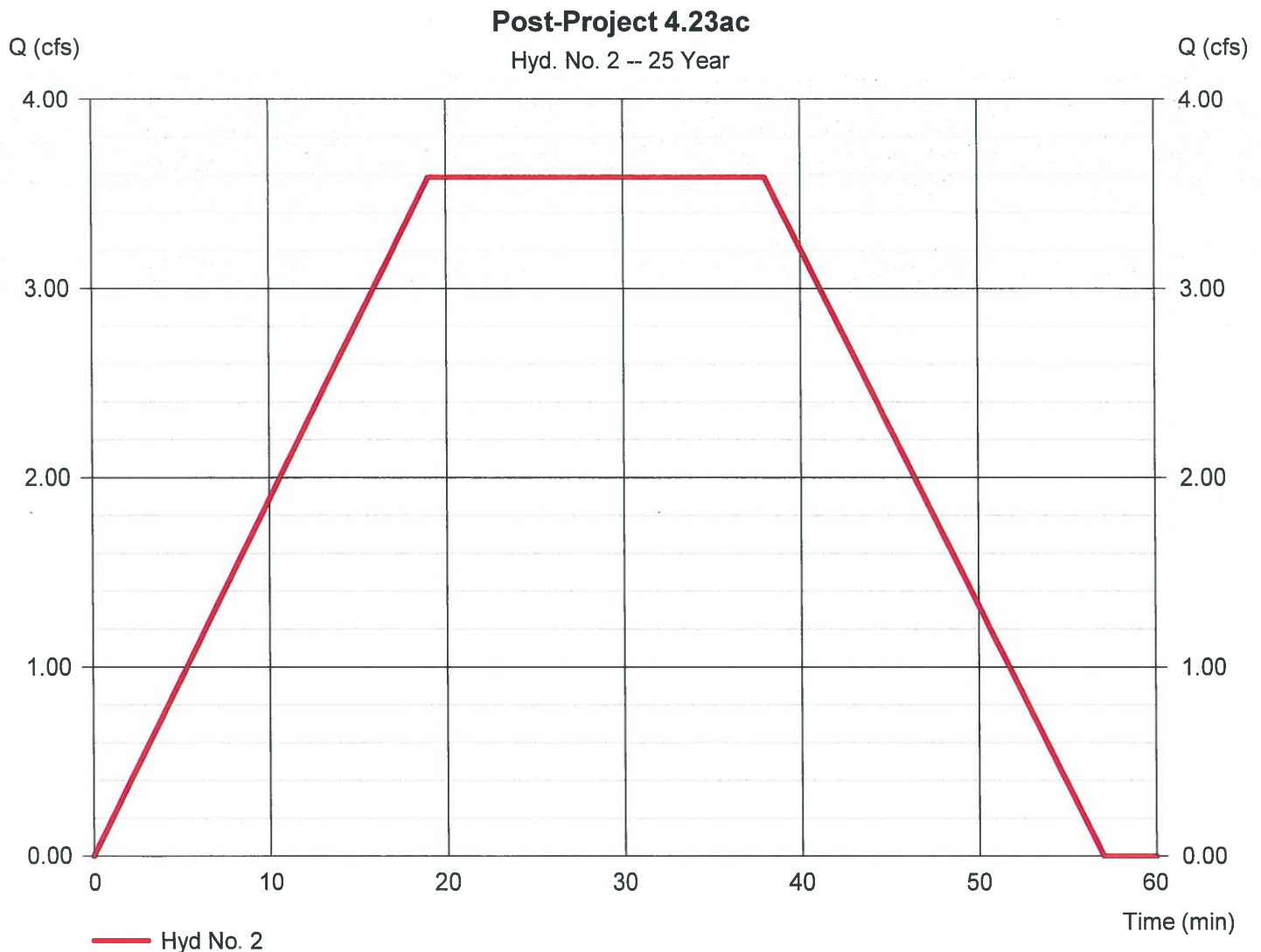


Hydrograph Report

Hyd. No. 2

Post-Project 4.23ac

Hydrograph type	= Mod. Rational	Peak discharge	= 3.587 cfs
Storm frequency	= 25 yrs	Time to peak	= 19 min
Time interval	= 1 min	Hyd. volume	= 8,179 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.7
Intensity	= 1.212 in/hr	Tc by User	= 19.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	= n/a	Est. Req'd Storage	= n/a

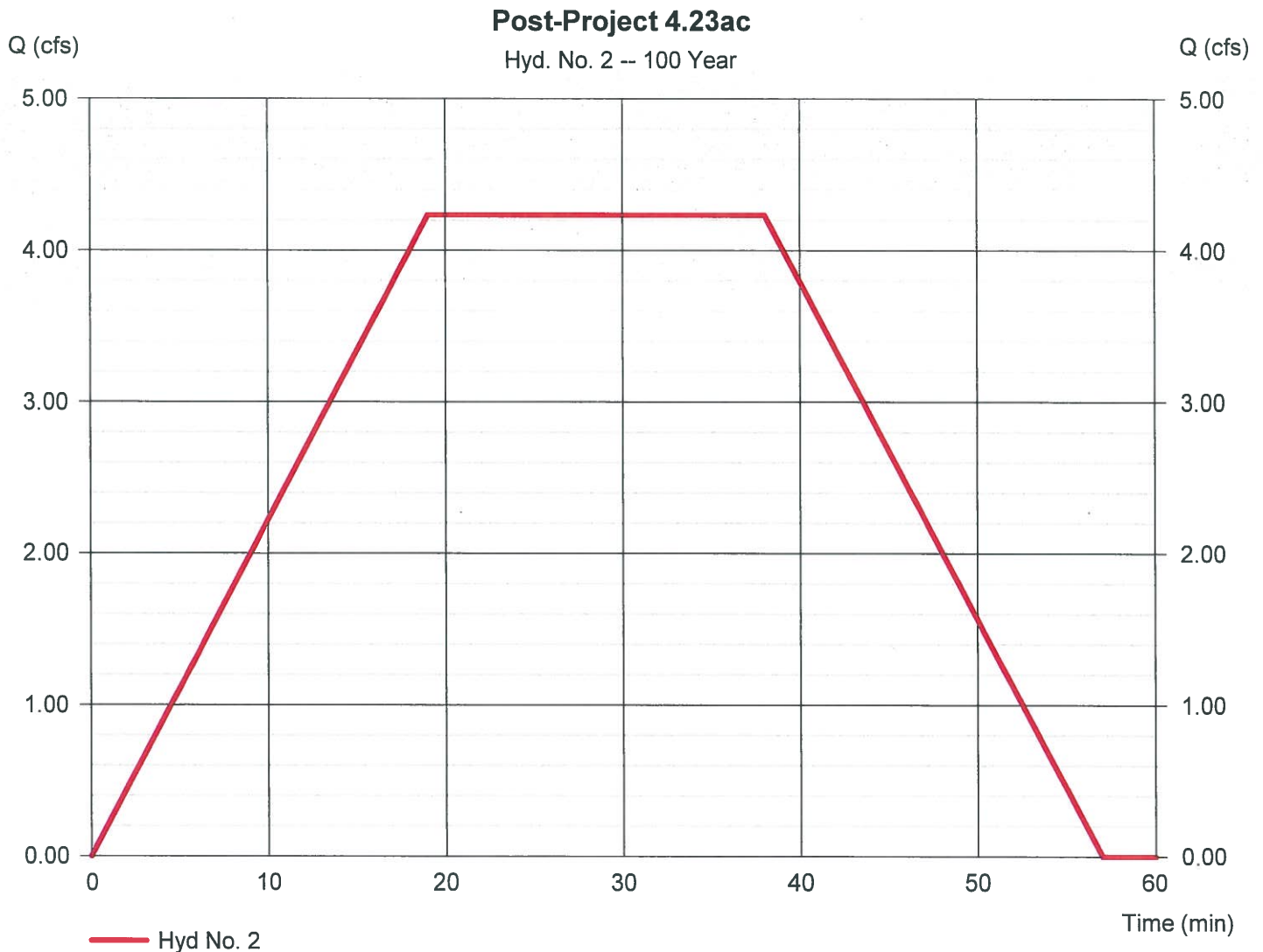


Hydrograph Report

Hyd. No. 2

Post-Project 4.23ac

Hydrograph type	= Mod. Rational	Peak discharge	= 4.233 cfs
Storm frequency	= 100 yrs	Time to peak	= 19 min
Time interval	= 1 min	Hyd. volume	= 9,652 cuft
Drainage area	= 4.230 ac	Runoff coeff.	= 0.7
Intensity	= 1.430 in/hr	Tc by User	= 19.00 min
IDF Curve	= SCC-25in.IDF	Storm duration	= 2.0 x Tc
Target Q	= n/a	Est. Req'd Storage	= n/a



Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Wednesday, 01 / 6 / 2021

Pond No. 1 - SCM-Combined Storage

Pond Data

Pond storage is based on user-defined values.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	320.75	n/a	0	0
0.25	321.00	n/a	820	820
0.75	321.50	n/a	1,466	2,286
1.25	322.00	n/a	1,143	3,429
1.75	322.50	n/a	1,143	4,572
2.25	323.00	n/a	1,185	5,757

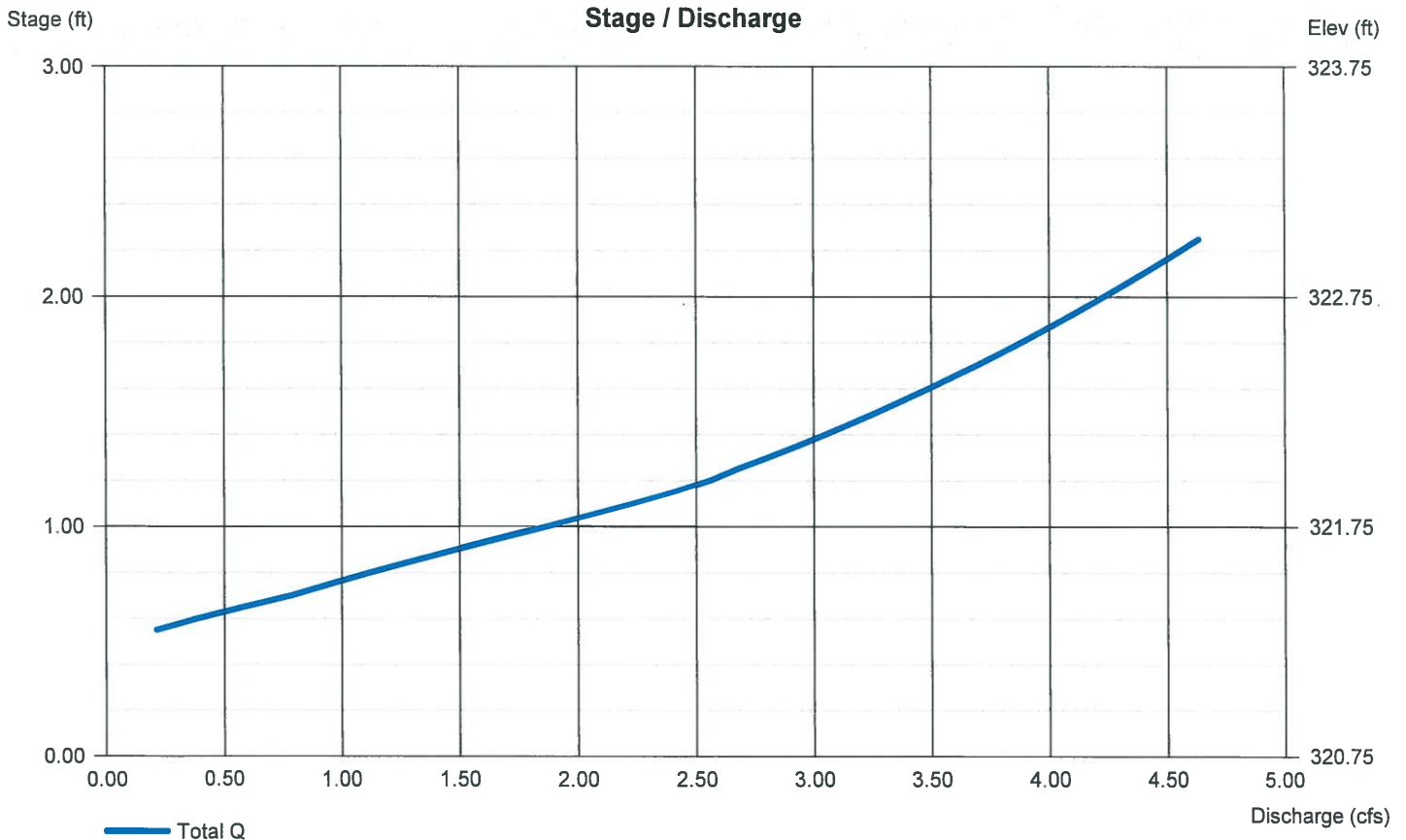
Culvert / Orifice Structures

Weir Structures

12" outlet

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 12.00	0.00	0.00	0.00	Crest Len (ft)	= 0.00	0.00	0.00	0.00
Span (in)	= 12.00	0.00	0.00	0.00	Crest El. (ft)	= 0.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 321.00	0.00	0.00	0.00	Weir Type	= ---	---	---	---
Length (ft)	= 19.00	0.00	0.00	0.00	Multi-Stage	= No	No	No	No
Slope (%)	= 3.95	0.00	0.00	n/a					
N-Value	= .015	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by Wet area)			
Multi-Stage	= n/a	No	No	No	TW Elev. (ft)	= 321.25			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

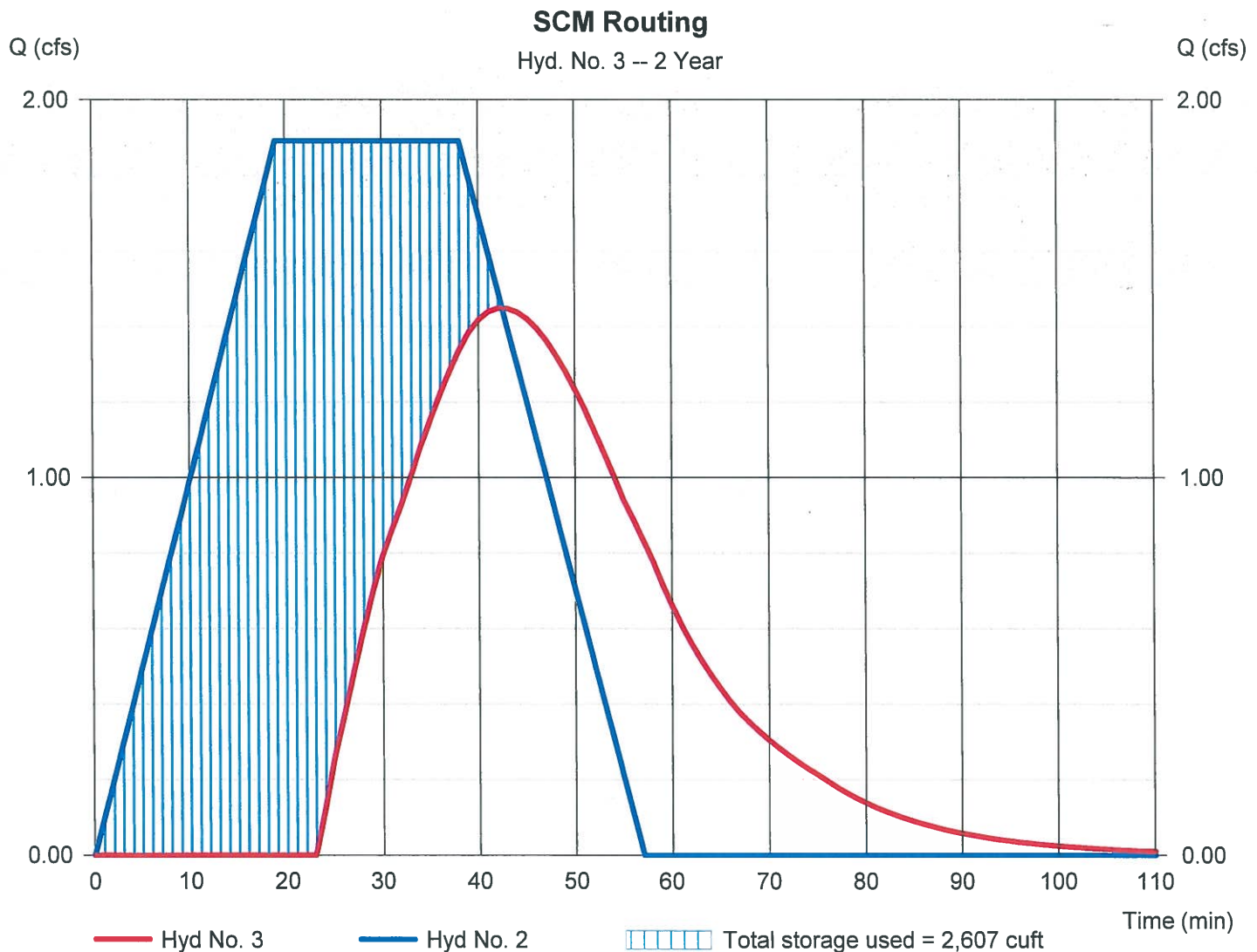
Wednesday, 01 / 6 / 2021

Hyd. No. 3

SCM Routing

Hydrograph type	= Reservoir	Peak discharge	= 1.448 cfs
Storm frequency	= 2 yrs	Time to peak	= 42 min
Time interval	= 1 min	Hyd. volume	= 2,757 cuft
Inflow hyd. No.	= 2 - Post-Project 4.23ac	Max. Elevation	= 321.64 ft
Reservoir name	= SCM-Combined Storage	Max. Storage	= 2,607 cuft

Storage Indication method used.



14

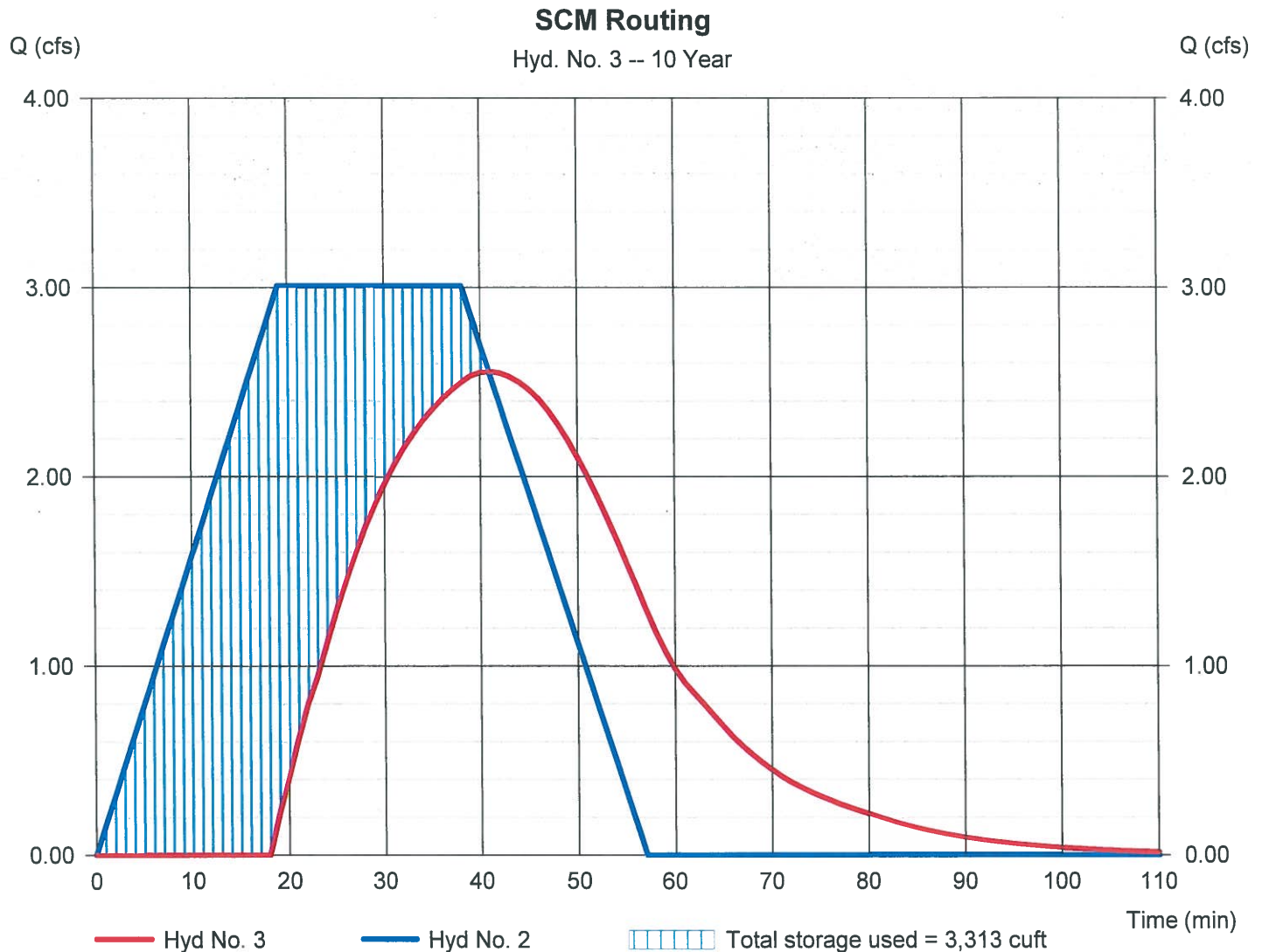
Hydrograph Report

Hyd. No. 3

SCM Routing

Hydrograph type	= Reservoir	Peak discharge	= 2,556 cfs
Storm frequency	= 10 yrs	Time to peak	= 41 min
Time interval	= 1 min	Hyd. volume	= 5,307 cuft
Inflow hyd. No.	= 2 - Post-Project 4.23ac	Max. Elevation	= 321.95 ft
Reservoir name	= SCM-Combined Storage	Max. Storage	= 3,313 cuft

Storage Indication method used.



15

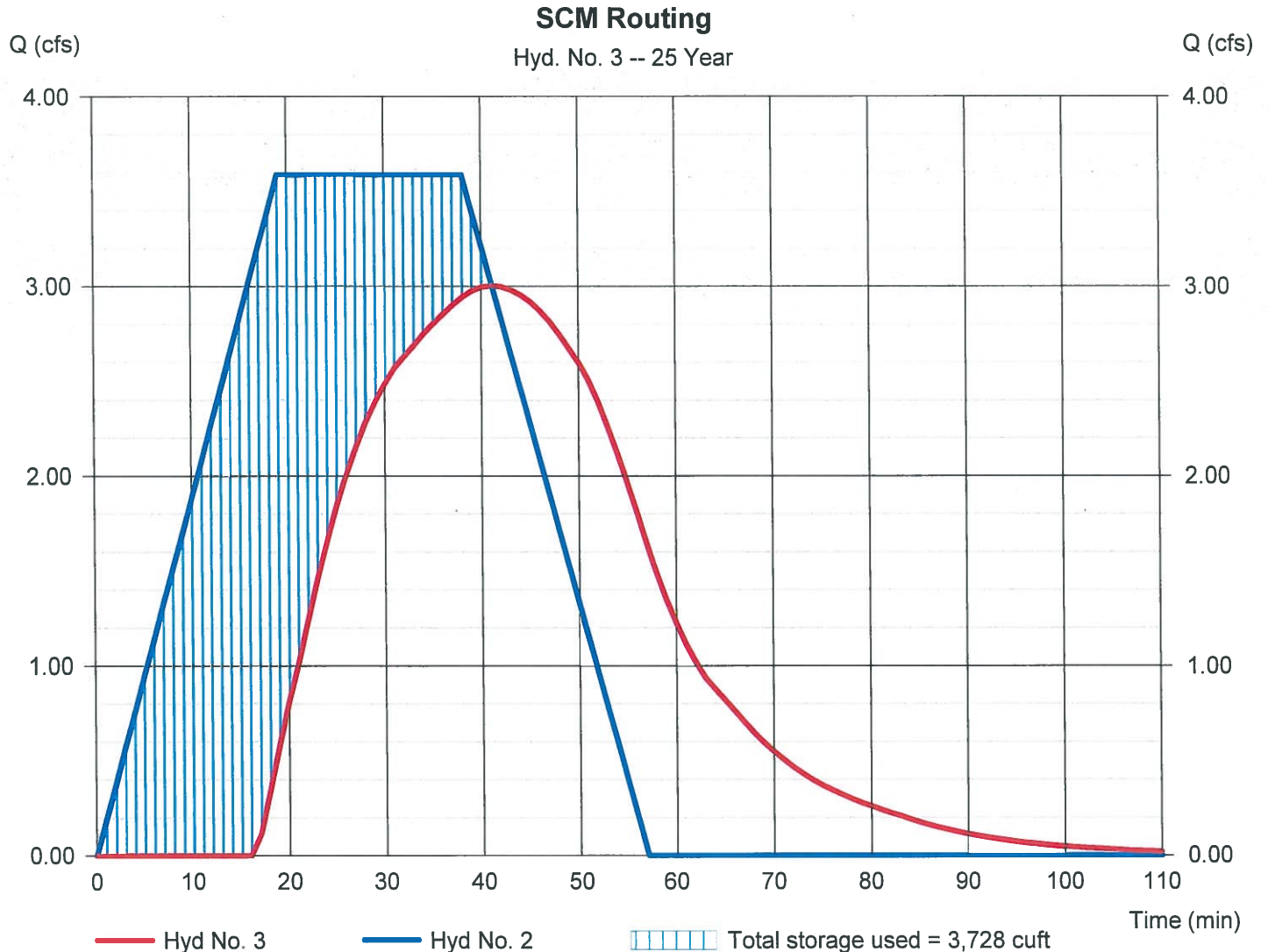
Hydrograph Report

Hyd. No. 3

SCM Routing

Hydrograph type	= Reservoir	Peak discharge	= 3.002 cfs
Storm frequency	= 25 yrs	Time to peak	= 41 min
Time interval	= 1 min	Hyd. volume	= 6,625 cuft
Inflow hyd. No.	= 2 - Post-Project 4.23ac	Max. Elevation	= 322.13 ft
Reservoir name	= SCM-Combined Storage	Max. Storage	= 3,728 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

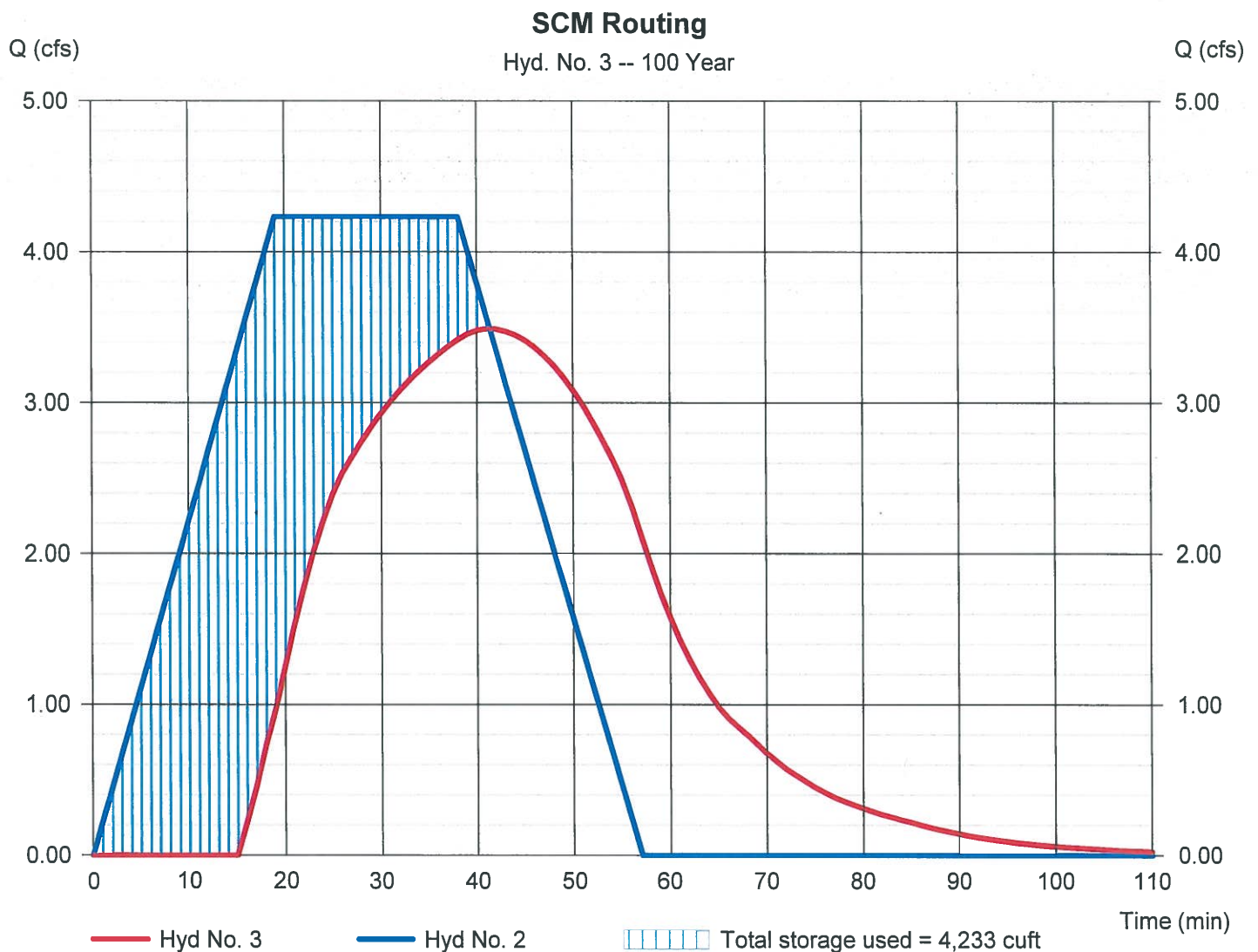
Wednesday, 01 / 6 / 2021

Hyd. No. 3

SCM Routing

Hydrograph type	= Reservoir	Peak discharge	= 3.489 cfs
Storm frequency	= 100 yrs	Time to peak	= 41 min
Time interval	= 1 min	Hyd. volume	= 8,098 cuft
Inflow hyd. No.	= 2 - Post-Project 4.23ac	Max. Elevation	= 322.35 ft
Reservoir name	= SCM-Combined Storage	Max. Storage	= 4,233 cuft

Storage Indication method used.



Appendix I Flood Study

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

870 Market Street, Suite 1278
San Francisco, CA 94102-2906
415-433-4848
FAX 415-433-1029

December 4, 2020

Charlie Ha
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

Subject: Royal Oak Village Conceptual Design Impact Analysis to West Little Llagas

Dear Mr. Ha:

This letter is in response to the City's request for an impact analysis of the subject development located at the intersection of Watsonville Road and Monterey Road. Schaaf & Wheeler previously modeled this development and the two developments upstream, Diamonds and Gables, to show water surface impacts in the surrounding area and increases to the FEMA mapped base flood elevations (BFEs).

The area of the proposed development is within a hydraulically complex system of culverts, bends, and overflows from an undersized creek channel that makes modeling in one-dimension (1D) very challenging. Schaaf & Wheeler developed what is in our opinion the best model of this area using the tools available and tying into the FEMA effective models of this area. This model was also developed for the two recently constructed developments upstream – The Diamond and The Gables. Since there is an ongoing flood control project that will ultimately remove this area from the floodplain, it did not make sense to develop a more sophisticated model of the area, as that will be completed once the construction of the flood control channel is constructed. Further information about the model can be found in Attachment 1 of this letter.

In an email dated 10/11/2019, the City stated that they would allow a cumulative increase to the FEMA mapped BFEs of 0.65-ft for the development of the subject property, formally referred to as the "Hordness Site" (Attachment 2). Schaaf & Wheeler determined that approximately 50% of the site could be developed, or 3.7 acres. This is approximately 650-ft from the Western property line. With this amount developed, the City can expect to see a 0.61-ft increase in the BFEs. This would leave a set back from West Little Llagas so not to impede the overflow spills from the Creek. Schaaf & Wheeler summarized these results in an email to the City on 1/24/2020 (Attachment 3).

Schaaf & Wheeler has reviewed the proposed development dated July 2002 that is Attachment 4 to this letter. The footprint of the proposed development is within the area that Schaaf & Wheeler designated that could be developed. In addition, the model fully blocked the cross-sections within the developable area. The proposed development has unblocked areas between the structures that will allow flow through and decrease the cumulative increase in water surface elevation.

Based on the previous modeling effort and the conceptual plans in Attachment 4 for the Royal Oak Village, the proposed development should not increase the BFEs more than 0.61-ft, which falls within the 0.65-ft as stated by the City.

If you have any questions, please don't hesitate to email or call- rlee@swsv.com, 415-271-3117.

Sincerely,
Schaaf & Wheeler

A handwritten signature in black ink that reads "Robin J. Lee". The signature is written in a cursive style with a large, stylized initial "R".

Robin J. Lee, PE
Senior Project Manager

ATTACHMENT 1

Model Overview

Model Configuration

Duplicate Effective Model

The existing *Effective Model* (5012013) was used to develop the *Duplicate Effective Model* in HEC-RAS 4.1.0. The U.S. Army Corps of Engineers (USACE) Hydrologic Engineering Center's River Analysis System (HEC-RAS) computer program supersedes its HEC-2. The HEC-2 effective model file was obtained from the Santa Clara Valley Water District's website:

http://www.valleywater.org/Services/Hec_data_library_download.aspx

The *Duplicate Effective Model* was recreated in HEC-RAS. This includes recreating the flow splits at XS 282 and the ineffective flow areas at the applicable cross sections. The model ties in at the downstream end upstream of the Union Railroad (XS 264) at 318.5 ft (NAVD) and at the upstream end at Edes Court (XS 342) at 332.3 ft (NAVD) per the effective FIS, see profile panels 160P – 161P (Feb. 19, 2014). As necessary the following conversion was used to convert the vertical datum from NGVD to NAVD:

$$NAVD = NGVD + 2.85 \text{ feet}$$

There is approximately a 0.3 foot difference in WSELs between the effective and duplicate effective model through the project area as shown in Table 1, as well as slight flow differences downstream of the lateral weirs (see Table 7). These small differences are due to the fact that HEC-RAS applies improved and more modern computational procedures that were not available when HEC-2 was developed. These changes between HEC-2 and HEC-RAS include computational differences in conveyance, bridge and culvert hydraulics, critical depth, and calculation tolerance. These computational differences will create small differences in the model results.

Table 1 - 100-yr WSEL *Effective Model* compared to *Duplicate Effective Model*

River Station XS	Effective WSEL (ft., NAVD)	Duplicate Effective WSEL (ft., NAVD)	Difference (ft)
316	325.29	325.27	-0.02
314	324.23	323.98	-0.25
312	324.23	324.01	-0.22
310	324.18	323.96	-0.22
304	324.1	323.91	-0.19
302	324.12	323.92	-0.2
300	323.88	323.64	-0.24
298	323.84	323.58	-0.26
296	323.75	323.47	-0.28
294	323.66	323.33	-0.33
292	323.64	323.3	-0.34
290	323.47	323.22	-0.25
284	323.38	323.04	-0.34
282	322.6	322.41	-0.19

Existing Model

The *Duplicate Effective Model* isn't detailed enough to accurately assess impacts. It contains lateral structures between Monterey Road and Watsonville Road that are modeled as rating curves. Lateral structure 281.8 removes approximately 95 cfs from the model which is then applied to a separate West Little Llagas Creek Overflow model which models spill from West Little Llagas Creek that travels on the south side of Monterey Road and does not rejoin the creek. Lateral structure 281.9 removes approximately 1050 cfs from that location and applies it downstream at XS 270. This approximates spill that travels on the south side of Monterey Road and eventually weirs over the road to rejoin the creek. HEC2 is not sophisticated enough to appropriately model these spills, but current versions of HEC-RAS (5.0.6) are capable of evaluating the complex hydraulics that occur in this area. The *Duplicate Effective Model* has been revised in the project area in order to accurately model the development impacts.

The majority of flow, 1111.76 cfs, travels on the south side of Monterey Road immediately downstream of Watsonville Road so this route is modeled as the main reach, with 771.87 cfs traveling on the north side of Monterey Road. Monterey Road is modeled as a lateral weir from Watsonville Road to approximately 3,000 feet downstream in order to allow flow to continuously weir over the road and reenter the creek as it travels downstream. County LiDAR topography is used to recut cross sections between XS 302 and XS 266 along West Little Llagas Creek and to add cross sections along the overflow route on the south side of Monterey Road. All recut and new cross sections have unique names from the *Duplicate Effective Model*. Furthermore, the new Watsonville Road alignment and culvert replacement (the culvert was enlarged and lengthened) along with the Monterey Road culvert lengthening and realignment were added to the model. The channel has also been improved between the Watsonville Road culvert and Monterey Road culvert which has also been added to the model. Developments in the model area constructed since the *Duplicate Effective Model* was created were added to the model as obstructions (see Figure 2). This model is considered the *Existing Model*, which the *Project Model* and *Cumulative Developments Model* will be compared against. See Figure 3 for the layout of the *Existing Model*.

In comparison to the *Duplicate Effective Model* results, there is an increase in water surface elevation upstream of the development site and a decrease in water surface elevation immediately upstream of the Watsonville Road culvert in comparison to the *Existing Model* results. The increase is likely due to the developments constructed post *Duplicate Effective Model* and the decrease is due to the new culvert location and geometry.

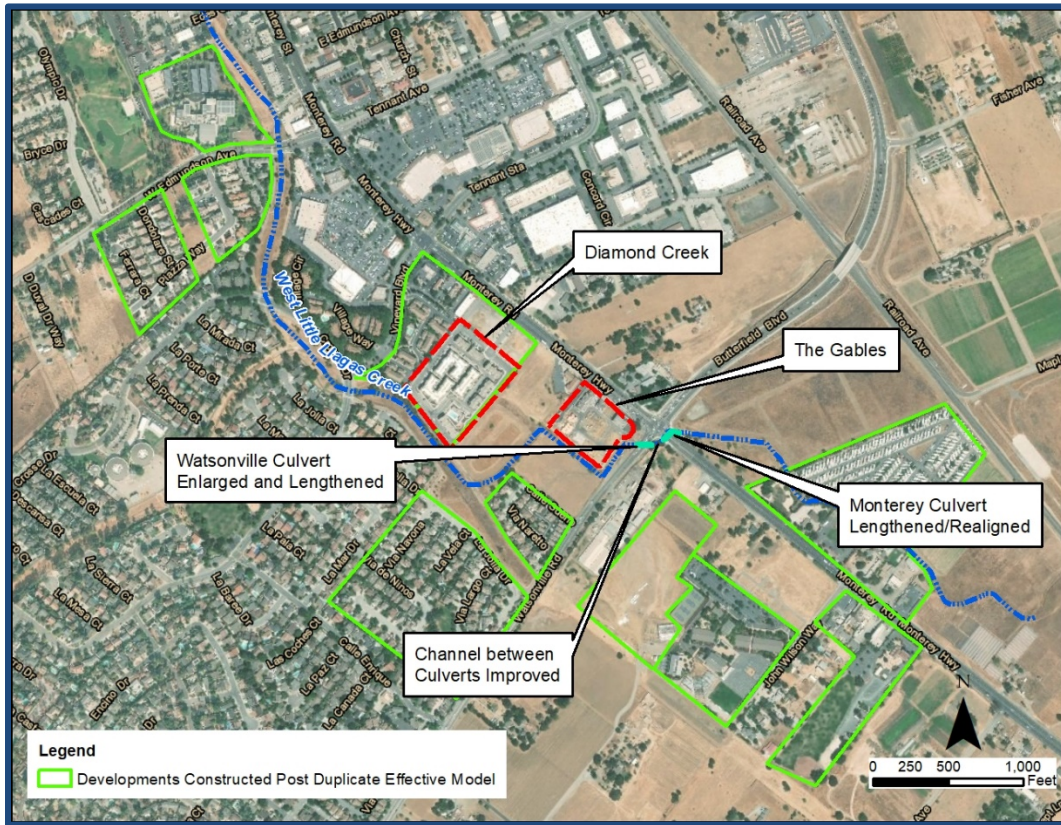


Figure 2 - Developments and Improvements added to the *Existing Model*

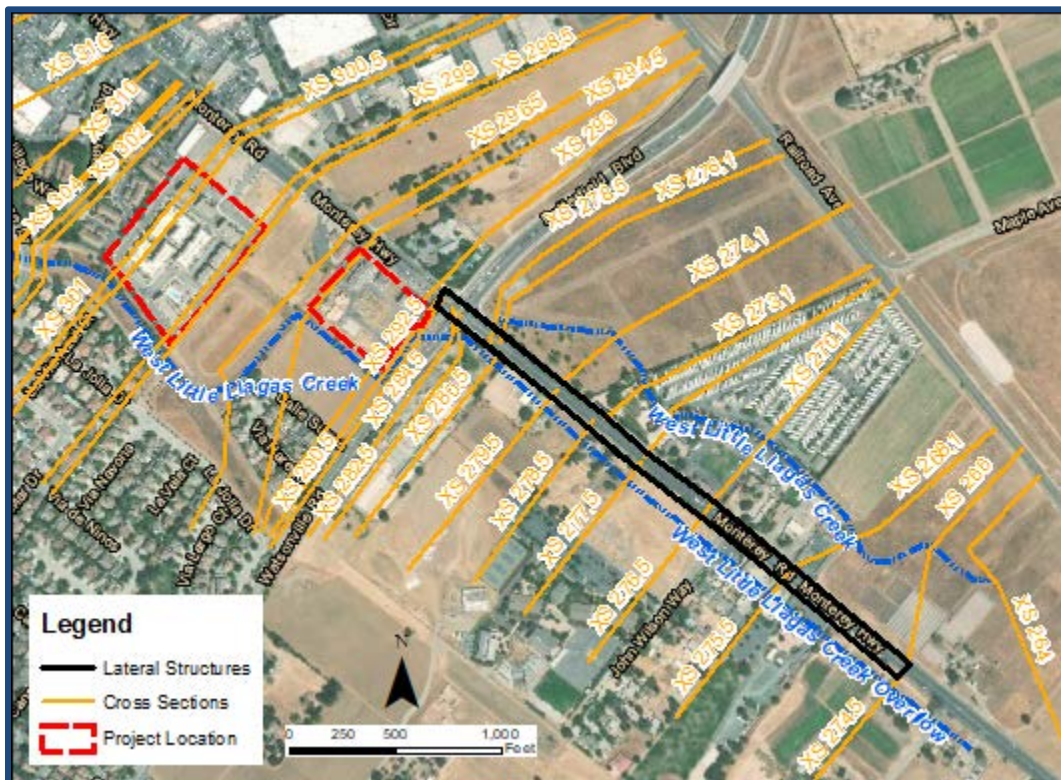


Figure 3 - *Existing Model* Layout

Project Model

The *Existing Model* of West Little Llagas Creek was utilized to determine the hydraulic impacts of the developments. The model was modified using as-built grading and building plans prepared by MH Engineering. Grades were modified and buildings were modeled as blocked obstruction areas at XS 301, XS 300.5, and XS 299 for the Diamond Creek development and at XS 294.5 and XS 293 for The Gables Development. This model is considered the *Project Model*. See Figure 4 for the layout of the *Project Model*.

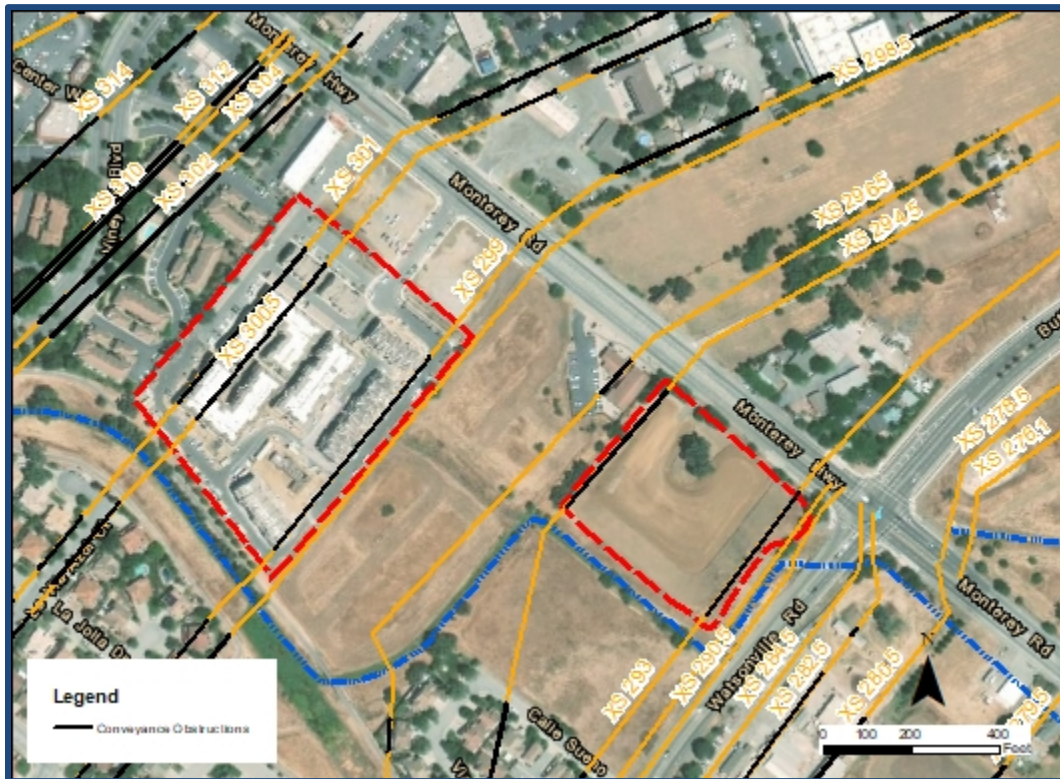


Figure 4 - Project Model Layout

Cumulative Developments Model

The cumulative impacts of planned developments in the surrounding area were also investigated. This analysis included adding in the planned development across Wastonville Road from The Gables. The Hordness project will consist of replacing the existing mushroom farm with a residential and commercial development. The model was modified using preliminary grading and building plans prepared by MH Engineering. The grades were modified and buildings were modeled as blocked obstruction areas at XS 282 and XS 280. This model is considered the *Cumulative Developments Model* and the layout is shown in Figure 5.

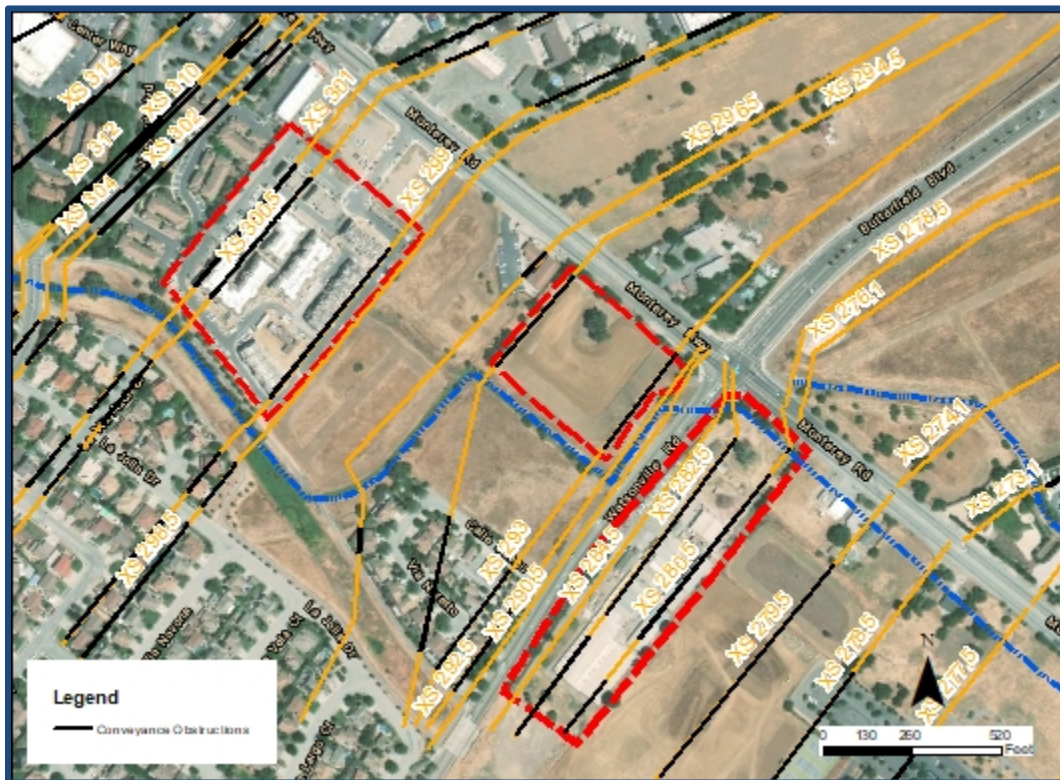


Figure 5 - Cumulative Developments Model Layout

Results

Existing Model

Comparison of the *Duplicate Effective Model* and *Existing Model* results show generally higher water surface elevation at the upstream end of the project area and lower water surface elevations through and below the project areas. The increased water surface elevation is likely due to developments that have been built in the area since the *Duplicate Effective Model* was built. The decreased water surface elevations are due to the new Watsonville Road alignment and culvert replacement. For FEMA purposes, the models will tie in at XS 316 at the upstream end and XS 282.5 at the downstream end which is in the same location as XS 282 in the *Duplicate Effective Model*. Results are summarized in Tables 1 and 2 below which lists *Duplicate Effective Model* cross section and the corresponding *Existing Model* cross section located in the same or comparable location.

Table 2 - 100-yr WSEL Duplicate Effective Model Compared to Existing Model

Duplicate Effective River Station XS	Existing Model River Station XS	Duplicate Effective WSEL (ft., NAVD)	Existing WSEL (ft., NAVD)	Difference (ft)
316	316	325.27	325.68	0.41
314	314	323.98	325.12	1.14
312	312	324.01	325.14	1.13
310	310	323.96	325.02	1.06
304	304	323.91	324.96	1.05
302	302	323.92	324.96	1.04
NA	301	NA	324.75	NA
300	300.5	323.64	324.65	1.01
NA	299	NA	323.78	NA
298	298.5	323.58	323.83	0.25
296 ¹	296.5	323.47	323.29	-0.18
294	294.5	323.33	323.16	-0.17
NA	293	NA	323.05	NA
292	292.5	323.3	323.06	-0.24
290 ²	290.5	323.22	323.05	-0.17
284 ²	284.5	323.04	322.99	-0.05
282	282.5	322.41	322.88	0.47

1. Duplicate Effective Model XS 296 located approximately 100 feet upstream of Existing Model XS 296.5.
2. Duplicate Effective cross sections upstream and downstream of the Watsonville Culvert are located in slightly different locations than the Existing Model cross sections due to culvert improvements.

Table 3 - 100-yr Flow Duplicate Effective Model Compared to Existing Model

Duplicate Effective River Station XS	Existing Model River Station XS	Duplicate Effective Flow (cfs)	Existing Fow (cfs)	Difference (cfs)
316	316	1444	1444	0
314	314	1936	1936	0
312	312	1936	1936	0
310	310	1936	1936	0
304	304	1936	1936	0
302	302	1936	1936	0
NA	301	NA	1936	NA
300	300.5	1936	1936	0
NA	299	NA	1936	NA
298	298.5	1936	1936	0
296 ¹	296.5	1936	1936	0
294	294.5	1936	1936	0
NA	293	NA	1936	NA
292	292.5	1936	1936	0
290 ²	290.5	1936	1924.81	-11.19
284 ²	284.5	1936	1924.81	-11.19
282	282.5	1936	1904.87	-31.13

1. Duplicate Effective Model XS 296 located approximately 100 feet upstream of Existing Model XS 296.5.
2. Duplicate Effective cross sections upstream and downstream of the Watsonville Culvert are located in slightly different locations than the Existing Model cross sections due to culvert improvements.

Project Model

Comparison of the *Existing Model* and *Project Model* results show a maximum 0.07 foot impact to the upstream West Llagas Creek water surface elevations due to the Diamond and Gables Developments. Results are summarized in Tables 4 and 5 below. Flows at various points through and downstream of the project area are shown in Figure 6 and a comparison of flows from all models is shown in Tables 6 and 7. Figures 7 and 8 plot the cross sections through the Diamond Creek site and Figures 9 and 10 plot the cross sections through The Gables site. The figures show the blocked obstructions to model the proposed developments.

Table 4 - 100-yr WSEL Existing Model Compared to Project Model Results

River Station XS	Existing WSEL (ft., NAVD)	Project WSEL (ft., NAVD)	Difference (ft)
316	325.68	325.67	-0.01
314	325.12	325.09	-0.03
312	325.14	325.11	-0.03
310	325.02	324.99	-0.03
304	324.96	324.93	-0.03
302	324.96	324.94	-0.02
301	324.75	324.7	-0.05
300.5	324.65	324.61	-0.04
299	323.78	323.58	-0.2
298.5	323.83	323.62	-0.21
296.5	323.29	323.36	0.07
294.5	323.16	323.17	0.01
293	323.05	323.05	0
292.5	323.06	323.06	0
290.5	323.05	323.05	0
284.5	322.99	323.03	0.04
282.5	322.88	322.89	0.01

Table 5 - 100-yr Flow Existing Model Compared to Project Model Results

River Station XS	Existing Flow (cfs)	Project Flow (cfs)	Difference (cfs)
316	1444	1444	0
314	1936	1936	0
312	1936	1936	0
310	1936	1936	0
304	1936	1936	0
302	1936	1936	0
301	1936	1936	0
300.5	1936	1936	0
299	1936	1936	0
298.5	1936	1936	0
296.5	1936	1936	0
294.5	1936	1936	0
293	1936	1936	0
292.5	1936	1936	0
290.5	1924.81	1923.93	-0.88
284.5	1924.81	1923.93	-0.88
282.5	1904.87	1905.26	0.39

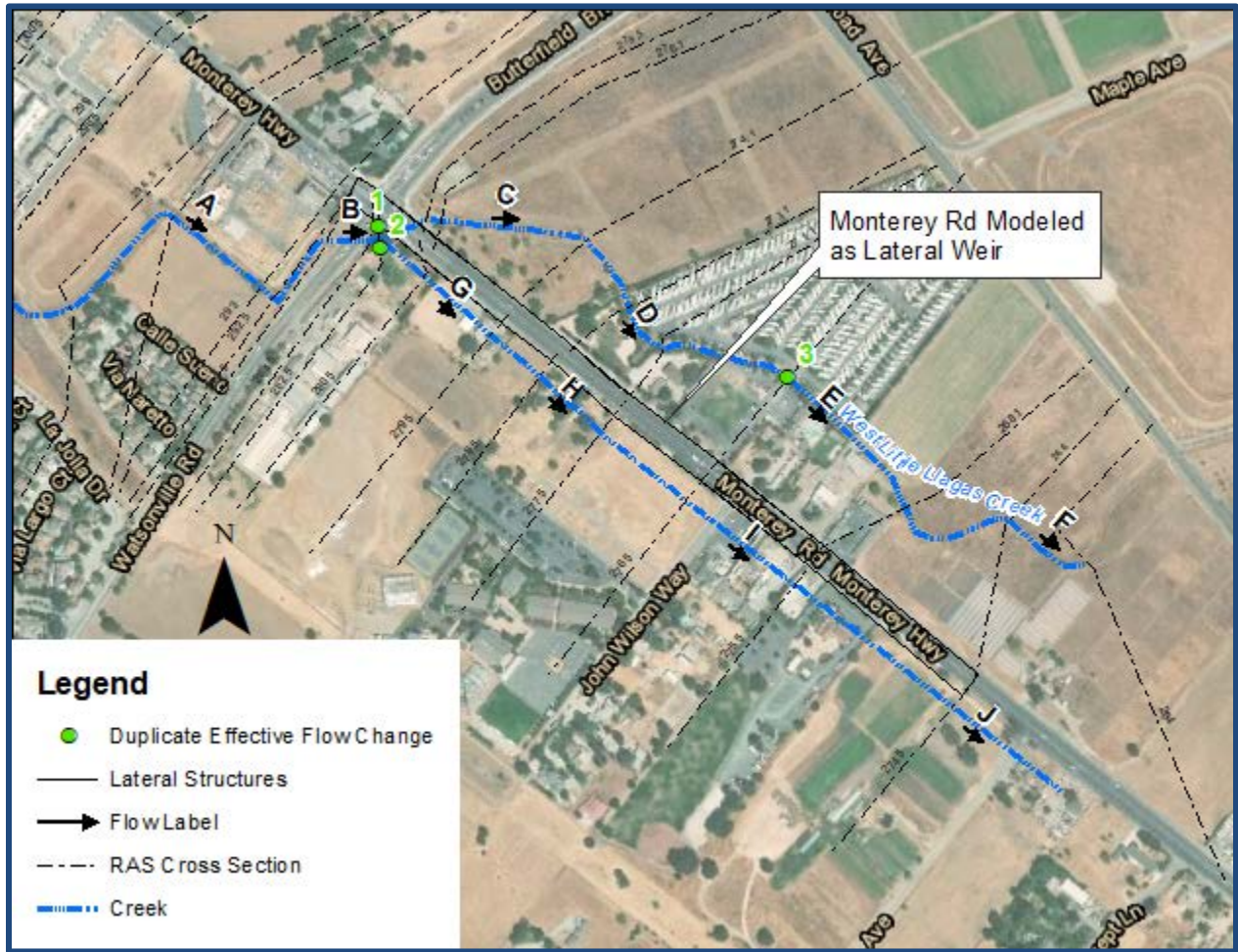


Figure 6 - Flow Results Comparison Figure

Table 6 - 100-yr Flow Splits from *Effective Model* and *Duplicate Effective Model*

Flow Location	Effective Flow (cfs)	Duplicate Effective Flow (cfs)
1	1053.94	1054.99
2	68.93	93.11
3	1053.94	1054.99

Table 7 - 100-yr Flow Results Comparison

Flow Location	Effective Flow (cfs)	Duplicate Effective Flow (cfs)	Existing Flow (cfs)	Project Flow (cfs)
A	1936.00	1936.00	1936.00	1936.00
B	1936.00	1936.00	1924.81	1923.93
C	813.13	803.06	771.87	797.26
D	813.13	803.06	999.73	1032.04
E	1867.07	1842.36	1898.76	1884.12
F	1867.07	1842.36	1907.45	1905.85
G	97.00	97.00	1111.76	1138.55
H	97.00	97.00	869.01	903.37
I	97.00	97.00	38.13	51.75
J	97.00	97.00	28.65	30.25

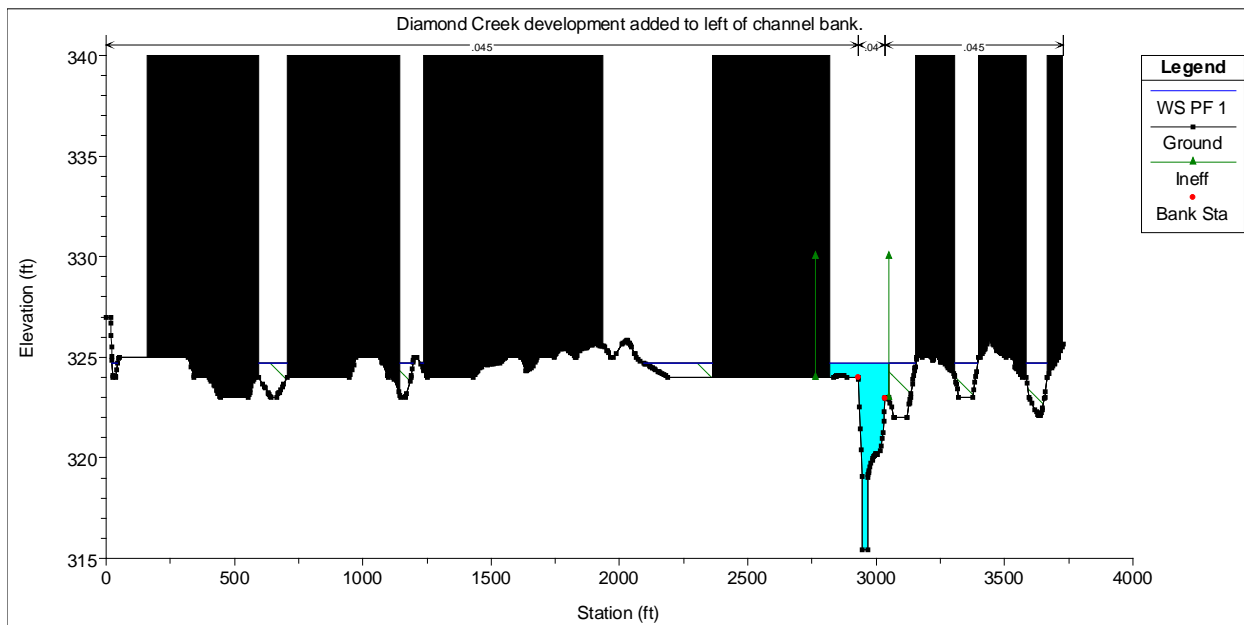


Figure 7 - Diamond Creek Development at XS 301

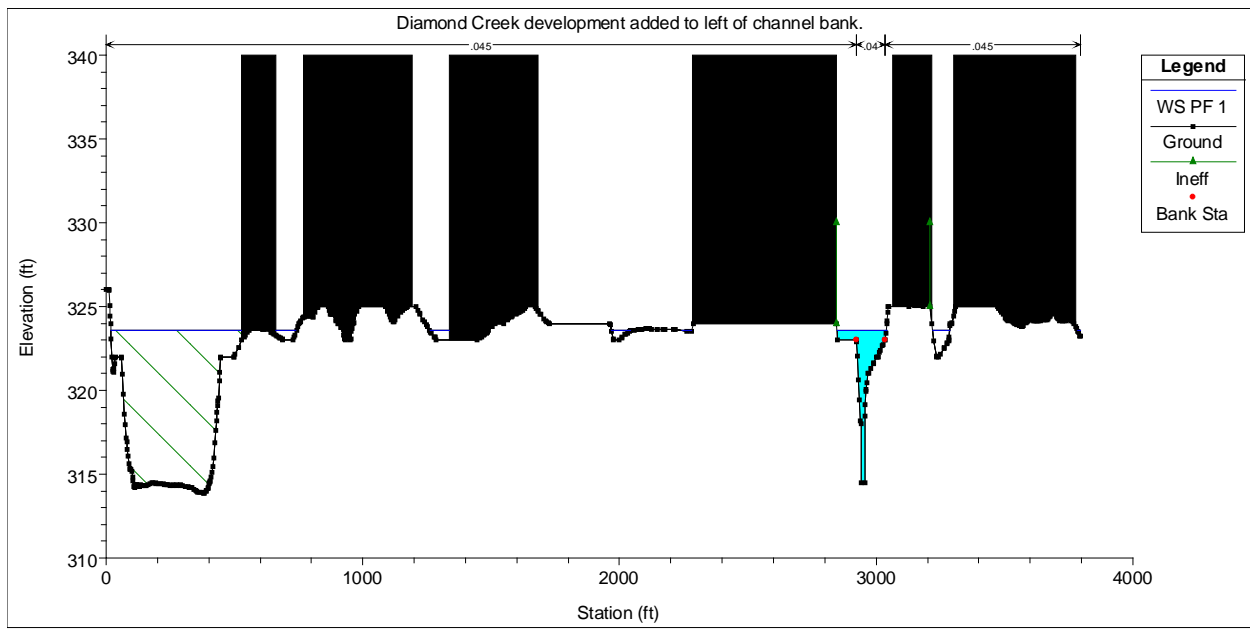


Figure 8 - Diamond Creek Development at XS 299

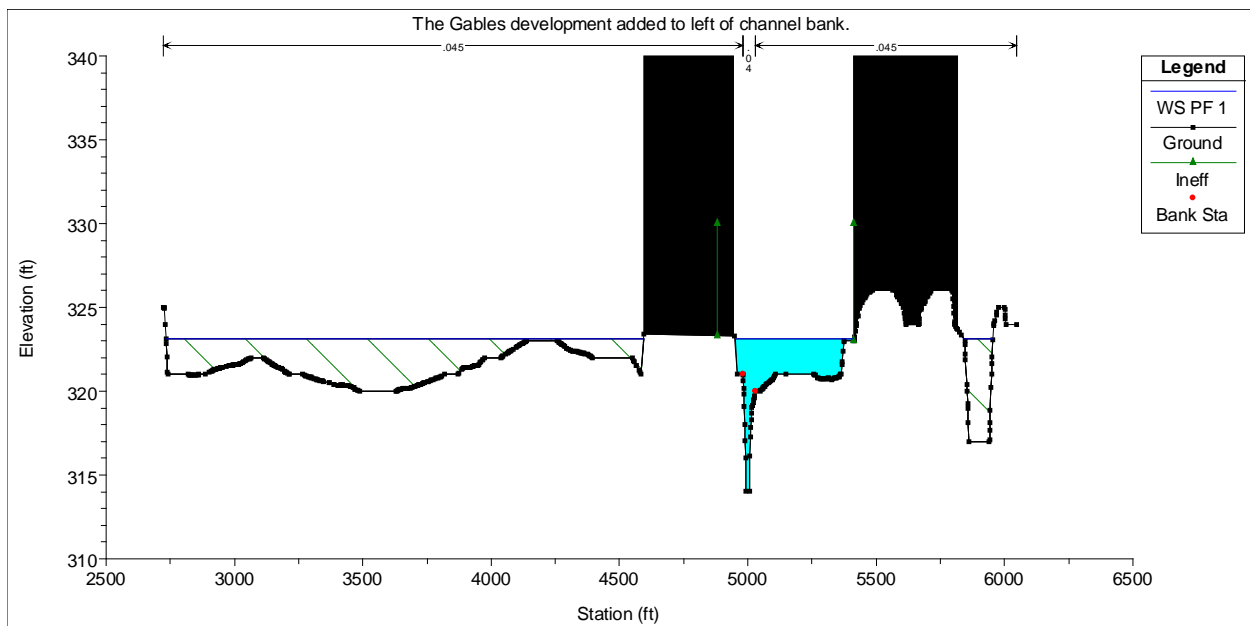


Figure 9 - The Gables Development at XS 294

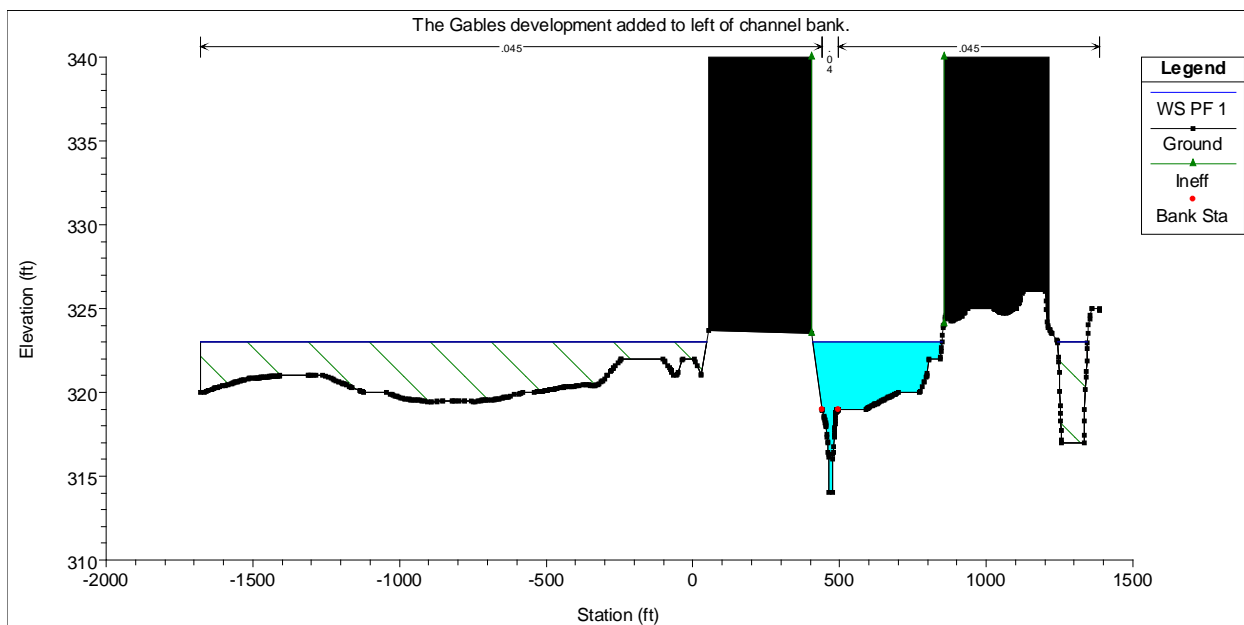


Figure 10 - The Gables Development at XS 293

Cumulative Development Model

The cumulative impacts from the project condition with the addition of the Hordness Development created a maximum increase in water surface elevation of approximately 0.52 feet as shown in Table 8. Therefore, the cumulative effect of the existing and proposed developments in the project area will not increase the water surface elevation above existing condition more than one foot at any location.

Table 8 - 100-yr WSEL Existing Model Compared to Cumulative Development Model Results

River Station XS	Existing WSEL (ft., NAVD)	Cumulative Development WSEL (ft., NAVD)	Difference (ft)
316	325.68	325.7	0.02
314	325.12	325.15	0.03
312	325.14	325.17	0.03
310	325.02	325.05	0.03
304	324.96	324.99	0.03
302	324.96	325	0.04
301	324.75	324.77	0.02
300.5	324.65	324.69	0.04
299	323.78	323.88	0.1
298.5	323.83	323.9	0.07
296.5	323.29	323.75	0.46
294.5	323.16	323.64	0.48
293	323.05	323.56	0.51
292.5	323.06	323.57	0.51
290.5	323.05	323.57	0.52
284.5	322.99	323.42	0.43
282.5	322.88	323.4	0.52

Table 9 - 100-yr Flow Existing Model Compared to Cumulative Development Model Results

River Station XS	Existing Flow (cfs)	Cumulative Development Flow (cfs)	Difference (cfs)
316	1444	1444	0
314	1936	1936	0
312	1936	1936	0
310	1936	1936	0
304	1936	1936	0
302	1936	1936	0
301	1936	1936	0
300.5	1936	1936	0
299	1936	1936	0
298.5	1936	1936	0
296.5	1936	1936	0
294.5	1936	1936	0
293	1936	1936	0
292.5	1936	1936	0
290.5	1924.81	1904.07	-20.74
284.5	1924.81	1904.07	-20.74
282.5	1904.87	1852.57	-52.3

Changes to FEMA Special Flood Hazard Areas

Changes are proposed to FEMA Special Flood Hazard Areas based on two scenarios: existing condition and project condition. The changes based on existing condition are due to the increase in water surface elevation upstream of the project site due to increased development since the *Duplicate Effective Model* was created and decrease in water surface elevation through and downstream the project site due to the new culvert under Watsonville Road and also more accurate topography. The increase in water surface elevation upstream of the project site in the existing condition is contained within the channel and not great enough to warrant a change in flood zone. The majority of the proposed change is from Zone AE to Zone X, although there is a roadway that is proposed to change from a Zone X to Zone AE. The flood boundaries were delineated by finding the intersection of the ground surface defined by Santa Clara County LiDAR topography and the water surface elevation determined at cross sections. Water surface elevations were interpolated between cross sections. Approximately 144 parcels will experience a change in SFHA zoning; the parcels are listed in Appendix H. The Zone AE Base Flood Elevations are proposed to be changed between XS 316 and XS 282.

The proposed change in Special Flood Hazard Area due to the project condition is to remove the portion of the development sites that are above the BFE from Zone AE. These areas, and lower elevation interior areas that are now protected from flooding by the development sites, are proposed to change to Zone X. These changes are shown in Figure 11.

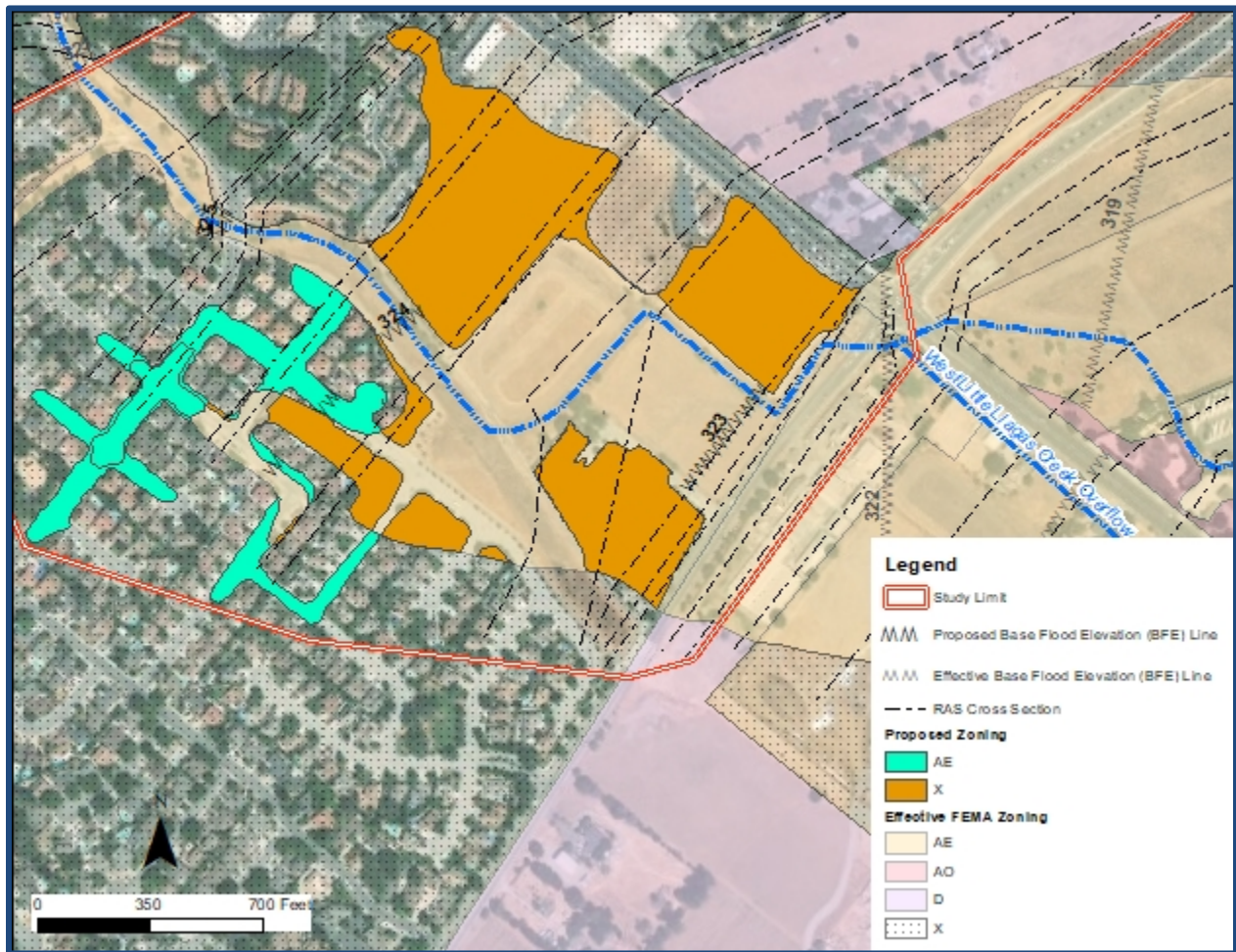


Figure 11 - Proposed change in FEMA SFHA

Attachments

- Appendix A – MT-2 Forms
- Appendix B – HEC-RAs Model
- Appendix C – Workmap
- Appendix D – GIS Data
- Appendix E – Annotated FIRM
- Appendix F – Revised Flood Profile
- Appendix G – As-built Plans
- Appendix H – Parcels effected by Proposed SFHA Change

ATTACHMENT 2

City Email 10/11/2019

From: [Charlie Ha](#)
To: [Robin J Lee](#); [Caitlin Gilmore](#); [Maria Angeles](#); [Leslie Little](#)
Cc: [Emily Straley](#); [Caitlin Gilmore](#); [Yvonne Arroyo](#); [Don at Del Fresh Produce](#); [John Bigley](#); [John Telfer](#); [Bill McClintock](#)
Subject: RE: Diamond Gables LOMR Submittal
Date: Friday, October 11, 2019 3:17:07 PM
Attachments: [image001.png](#)

Hello Robin and Caitlin,

The City will allow a **cumulative increase of 0.65 feet** in the base flood elevation (BFE) for the development of the Hordness site.

Therefore, the site footprint of the Hordeness development will need to be reduced so that the cumulative increase in the BFE shall not exceeded 0.65 feet.

Thanks.

Charlie Ha
Supervising Civil Engineer

City of Morgan Hill
Land Development Engineering Division
Development Services Department
17575 Peak Avenue, Morgan Hill, CA 95037

P: 408.778.6480 **Fax:** 408.779.7236
<mailto:charlie.ha@morganhill.ca.gov>
morgan-hill.ca.gov | [facebook](#) | [twitter](#)

From: Robin J Lee <rlee@swsv.com>
Sent: Tuesday, October 08, 2019 12:25 PM
To: Maria Angeles <Maria.Angeles@morganhill.ca.gov>; Charlie Ha <Charlie.Ha@morganhill.ca.gov>; Leslie Little <Leslie.Little@morganhill.ca.gov>
Cc: Emily Straley <estraley@swsv.com>; Caitlin Gilmore <CGilmore@swsv.com>; Yvonne Arroyo <yarroyo@valleywater.org>; Don at Del Fresh Produce <dthordness@delfresh.com>; John Bigley <jbigley@uhcllc.net>; John Telfer <john@scountyrealty.com>; Bill McClintock <billm@mhengineering.com>
Subject: RE: Diamond Gables LOMR Submittal

Hello Maria, Charlie and Leslie.

As we discussed over our conference call back on 9/19 and summarized in the attached email, Schaaf & Wheeler has updated the models for the Diamond and Gables LOMR submittal and responded to comments from Valley Water, Task #1. This email is to provide information in Task #4.

The LOMR application (narrative attached) also includes modeling for the cumulative impact which is inclusive of the Hordness Site Development. Valley Water is in the process of reviewing the models to ensure that they are hydraulically sound. In the meantime, I would like to provide the City with an overview map of how the cumulative impacts compare the FEMA FIRM map.

As the floodplain administrator, the City is to decide what constitutes the 1-ft of cumulative impact. If the cumulative is compared to the Duplicate Effective model from the 1970s, then the 1-ft threshold has been met in some locations. However, if we compare the cumulative model water surface elevations of each cross section on the FEMA FIRM map (link below) we see similar water surface elevations. The purple lines represent the cross sections in our model and the corresponding water surface elevations.

In addition, if we take the increases at cross section 282.5 over the Hordness Site in Tables 2 and 8 (attached Narrative) and add those values together (0.47ft + 0.52ft) we get an increase of 0.99ft. While this may seem like a coincident, our modeler was unaware of this effort and the result is what it is.

Annotated FIRM with Cumulative Model Cross Section water surface elevations here:

<https://schaafandwheeler.sharefile.com/d-se811d540dd0457da>

I understand that Valley Water still needs more time to review the revised models and responses to comments, but I don't anticipate the model results changing drastically from the models that we have now and I understand that this is a pressing issue.

Please let me know if there are any questions.

Robin J. Lee, PE | Senior Engineer

Schaaf and Wheeler Consulting Civil Engineers
870 Market Street, Ste. 1278, San Francisco, CA 94102
P: 415.433.4848 x 306; rlee@swsv.com
Santa Clara • San Francisco • Santa Rosa • Salinas

From: Emily Straley

Sent: Friday, October 4, 2019 5:35 PM

To: Yvonne Arroyo <yarroyo@valleywater.org>; Caitlin Gilmore <CGilmore@swsv.com>; 'Charlie Ha' <Charlie.Ha@morganhill.ca.gov>

Cc: 'Maria Angeles' <Maria.Angeles@morganhill.ca.gov>; Robin J Lee <rlee@swsv.com>

Subject: RE: Diamond Gables LOMR Submittal

Hi Yvonne,

ATTACHMENT 3

Schaaf & Wheeler Email 1/24/2020

From: [Robin Lee](#)
To: "Charlie Ha"; "Maria Angeles"
Cc: [Caitlin Gilmore](#)
Subject: West Little Llagas Modeling Impacts Summary
Date: Friday, January 24, 2020 3:19:00 PM
Attachments: [Hordness_approx_50_percent.pdf](#)
[SitePlan_Developable_3.7acres.pdf](#)
[Cumm_compared_DupEff_WSE.pdf](#)
[DiamondGables_LOMR_NarativeREV2.pdf](#)

Hi Charlie.

Thank you for the phone call the other day. I wanted to summarize what we discussed and provide the City with the model and the narratives for all three developments – Diamond, Gables, and Hordness.

The model really should be used as the best available data for this area, with the understanding that it was developed specifically to identify impacts of the above three mentioned projects.

The attached narrative for Diamond and Gables will discuss the development of the model and the impacts from those two projects. In addition, I have attached the comparison and information on the Hordness site development of 50% of the site to reduce overall cumulative impacts to below 0.6-ft.

The model that we have submitted includes both the cumulative for 100% Hordness development and 50% development.

Model files here, not zipped because that sometimes seems to cause issues.

https://schaafandwheeler-my.sharepoint.com/:f/g/personal/rlee_swsv_com/ElqilazF3alNqhB4VklzaUkBCJBBtcCOYvUluwh9KHjD6g?e=YqMh4e

Please let us know if you have any questions.

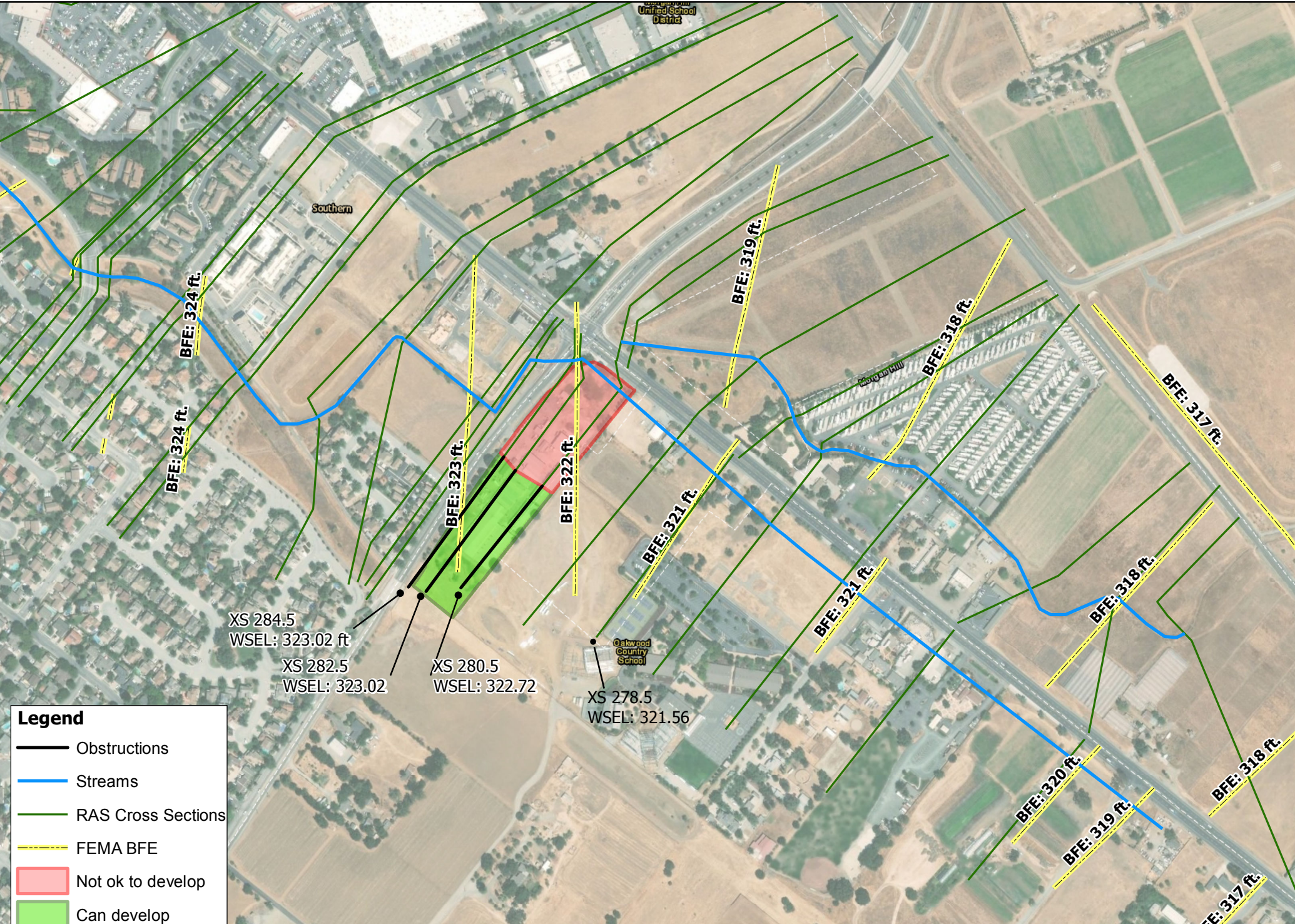
Robin J. Lee, PE | Senior Project Manager

Schaaf and Wheeler Consulting Civil Engineers
870 Market Street, Ste. 1278, San Francisco, CA 94102
P: 415.433.4848 x 306; rlee@swsv.com
Santa Clara • San Francisco • Santa Rosa • Salinas

Cumulative Impact Compared to Duplicate Effective Model

Duplicate Effective XS	Cumulative XS	Duplicate Effective WSE, ft	100% Site Developed		50% Site Developed	
			Cumulative WSE, ft	Difference, ft	Cumulative WSE, ft	Difference, ft
296	296.5	323.47	323.75	0.28	323.37	-0.1
294	294.5	323.33	323.64	0.31	323.18	-0.15
292	292.5	323.3	323.56	0.26	323.06	-0.24
290	290.5	323.22	323.56	0.34	323.06	-0.16
284	284.5	323.04	323.43	0.39	323.02	-0.02
282	282.5	322.41	323.4	0.99	323.02	0.61
280	280.5	322.53	323.05	0.52	322.72	0.19
*	278.5	321	321.6	0.6	321.56	0.56

* Interpoletd value from effective FIRM map as cross section not in duplicate effective



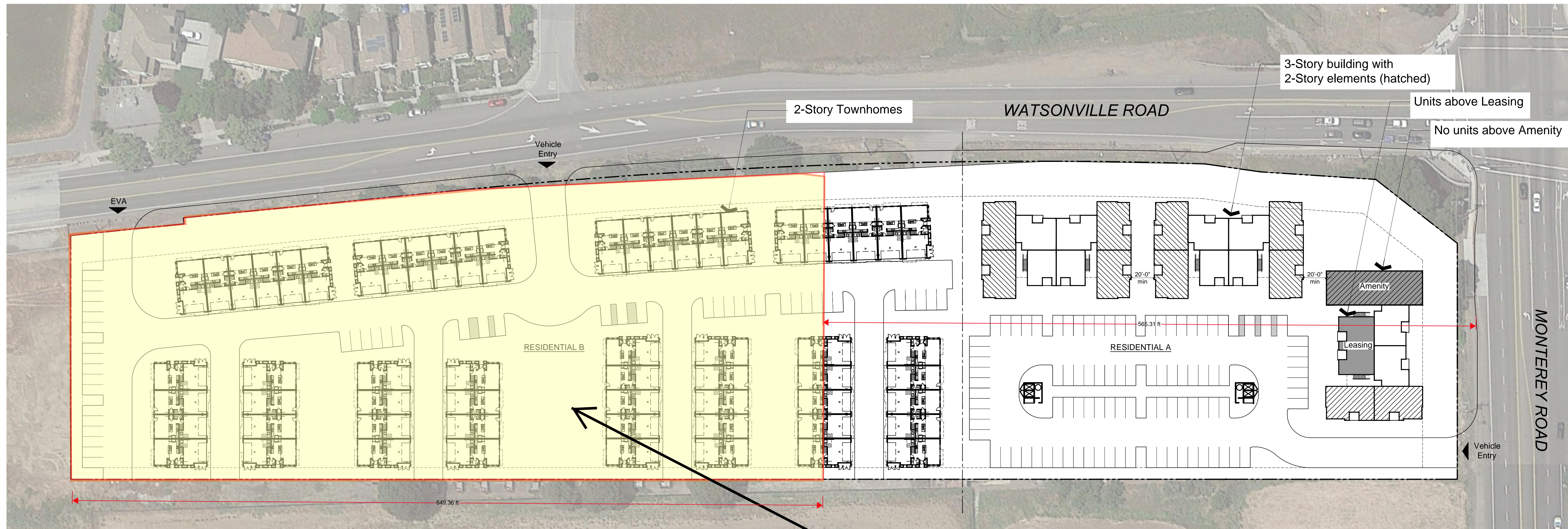
Legend

- Obstructions
- Streams
- RAS Cross Sections
- FEMA BFE
- Not ok to develop
- Can develop

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

N
0 500
Feet

Hordness Site Developable Area
Cummulative Impact = 0.61ft



This area can be developed to reduce impact to 0.61-ft

Project Data

Project Address
 Monterey St. & Watsonville Rd.
 Morgan Hill, CA

Site Area Information

Gross Site Area 7.043 AC
 Dwelling Units 120 DU
 Density 17 DU / AC

Unit SF Summary

Residential A: Affordable Rental

(Gross Site Area 2.596 AC)

Unit Plan	Unit Type	Total	Percent
Plan 1-1	1bd/1ba	16	30%
Plan 2-1	2bd/2ba	23	42%
Plan 3-1	3bd/2ba	15	28%
Totals		54	100%

Provided Parking A

Unit Plan	Parking	Total
Plan 1-1	1 stall/unit	16
Plan 2-1	2 stalls/unit	46
Plan 3-1	2 stalls/unit	30
Lot Parking		3
Totals		95

Residential B: BMR for Sale

(Gross Site Area 4.447 AC)

Unit Plan	Total	Percent
Plan 1	60	100%

Provided Parking B

Unit Plan	Parking	Total
Garage Parking	2 stalls/unit	120
Lot Parking	0.5 stalls/unit (min)	46
Totals		166

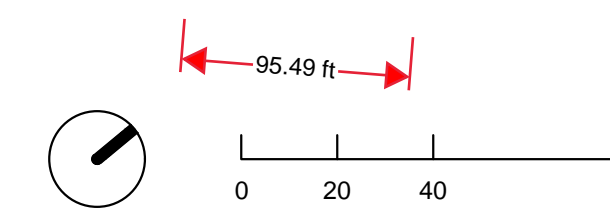


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 ktgy.com

Urban Housing Communities
 2000 E. Fourth Street, Suite 205
 Santa Ana, CA 92705

UHC Morgan Hill
 MORGAN HILL, CA # 2018-0870

CONCEPTUAL DESIGN
 SEPTEMBER 20, 2018



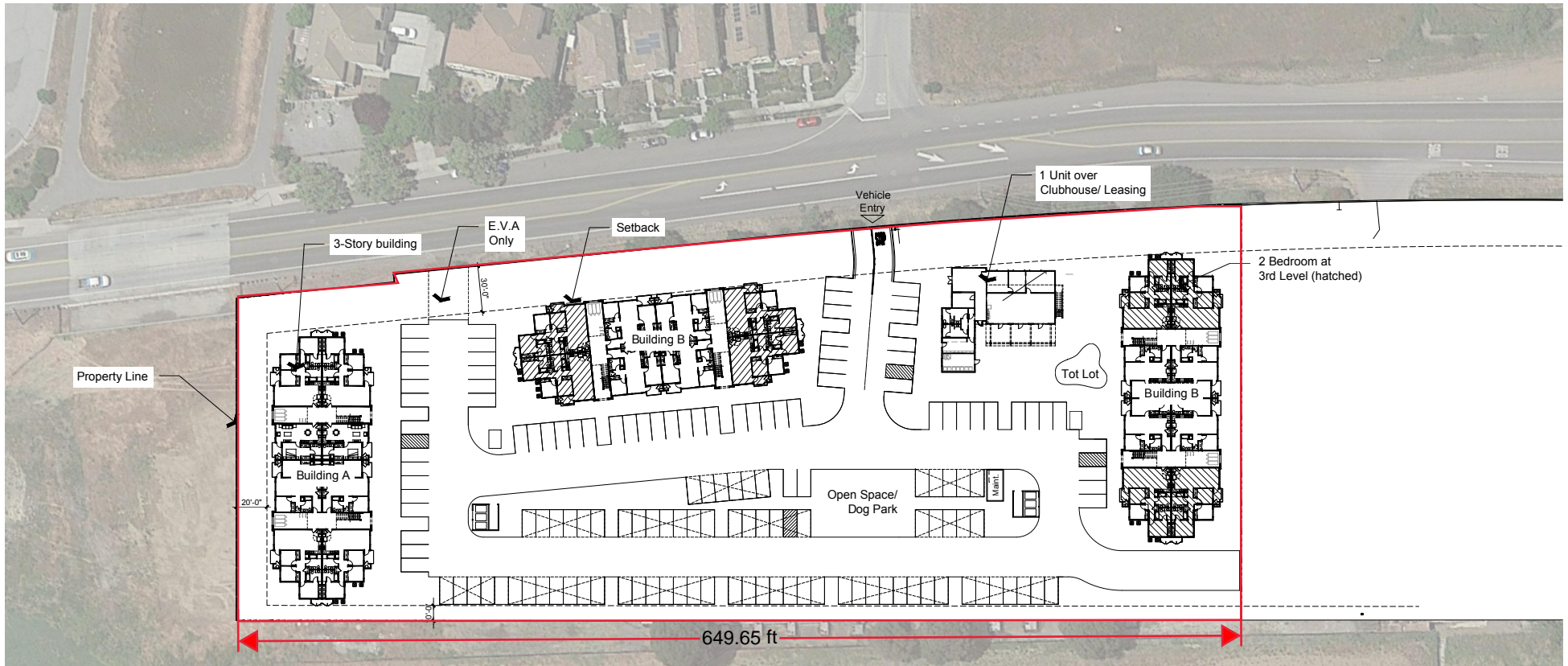
SITE PLAN

A1.0

ATTACHMENT 4

Crossing at Watsonville Road Conceptual Plans

July 2020



Project Data	Unit SF Summary	Amenity Summary																																			
Project Address Monterey St. & Watsonville Rd. Morgan Hill, CA	Residential: Affordable Rental <table border="1"> <thead> <tr> <th>Unit Plan</th> <th>Unit Type</th> <th>Total</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>Plan 1-1</td> <td>1bd/1ba</td> <td>06</td> <td>8%</td> </tr> <tr> <td>Plan 2-1</td> <td>2bd/2ba</td> <td>38</td> <td>52%</td> </tr> <tr> <td>Plan 3-1</td> <td>3bd/2ba</td> <td>29</td> <td>40%</td> </tr> <tr> <td>Totals</td> <td></td> <td>73</td> <td>100%</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Unit Plan</th> <th>Parking</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Plan 1-1</td> <td>1 stall/unit</td> <td>6</td> </tr> <tr> <td>Plan 2-1</td> <td>2 stalls/unit</td> <td>76</td> </tr> <tr> <td>Plan 3-1</td> <td>2 stalls/unit</td> <td>58</td> </tr> <tr> <td>Totals</td> <td></td> <td>140</td> </tr> </tbody> </table> Provided Required: 140 Stalls	Unit Plan	Unit Type	Total	Percent	Plan 1-1	1bd/1ba	06	8%	Plan 2-1	2bd/2ba	38	52%	Plan 3-1	3bd/2ba	29	40%	Totals		73	100%	Unit Plan	Parking	Total	Plan 1-1	1 stall/unit	6	Plan 2-1	2 stalls/unit	76	Plan 3-1	2 stalls/unit	58	Totals		140	Tier 1 (Required 2) Provided 3: Picnic/ Barbeque Area Park Benches Tot Lot Tier 2 (Required 2) Provided 2: Shade Trellis Dog Park Tier 2 (Required 1) Provided 2: Restroom Area Clubhouse w/ kitchen
Unit Plan	Unit Type	Total	Percent																																		
Plan 1-1	1bd/1ba	06	8%																																		
Plan 2-1	2bd/2ba	38	52%																																		
Plan 3-1	3bd/2ba	29	40%																																		
Totals		73	100%																																		
Unit Plan	Parking	Total																																			
Plan 1-1	1 stall/unit	6																																			
Plan 2-1	2 stalls/unit	76																																			
Plan 3-1	2 stalls/unit	58																																			
Totals		140																																			

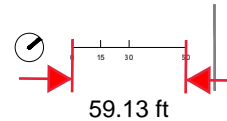


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Santa Ana, CA 92705

CROSSING ON WATSONVILLE ROAD
MORGAN HILL, CA # 2020-0148

CONCEPTUAL DESIGN
JULY 17, 2020



SITE PLAN

A1.0



Existing Structure Summary

Areas

Structure 1	±17,000 SF
Structure 2	±11,800 SF
Structure 3	± 6,800 SF
Structure 4	± 3,000 SF
Structure 5	± 11,000 SF
Structure 6	± 2,650 SF

Open Space
(Planned Residential)

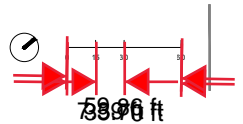


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CROSSING ON WATSONVILLE ROAD
MORGAN HILL, CA # 2020-0148

CONCEPTUAL DESIGN
JULY 17, 2020



SITE CONTEXT
EXISTING STRUCTURE AREAS

Appendix J

Trip Generation and Operations Analysis



Memorandum

Date: April 15, 2021

To: Nick Pappani, Raney Planning & Management, Inc.

From: Robert Del Rio, T.E., Luis Descanzo

Subject: Trip Generation and Operations Analysis for the Proposed Royal Oak Village Affordable Housing Development in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a trip generation and operations analysis for the proposed affordable housing apartment development project located at 15440 Monterey Road in Morgan Hill, California (APN: 779-04-075) (see Figure 1). The project as proposed consists of the construction of 73 apartment units on the site that is currently occupied by vacated warehouse buildings and storage yard (see Figure 2 for site plan). Access to the project site would be provided via one full-access driveway at the Calle Sueno/Watsonville Road intersection. Approximately 140 parking spaces would be provided on-site. The methodology, results, and recommendations of the analysis are discussed below.

Scope of Study

The current General Plan, *Morgan Hill 2035 General Plan*, adopted in July 2016 uses Level of Service (LOS) as its primary metric for the evaluation of the projected operation of the City's roadway system. Therefore, this traffic operations analysis based upon peak hour intersection level of service analysis is included for consistency with the General Plan goals and policies. The traffic operations analysis supplements the CEQA required VMT analysis provided in a separate memorandum. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

The purposes of the trip generation and operations analysis are to evaluate the magnitude of traffic that would be added to the roadway system due to the proposed project and to determine whether a comprehensive traffic study is required for the proposed project. The analysis consists of an evaluation of trip generation and peak-hour intersection level of service analysis at intersections in the immediate vicinity of the project site. Traffic conditions were evaluated for the scenarios listed below.

Existing Conditions. Existing conditions represent the existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes were represented by traffic counts collected in March 2019 for the intersection of Monterey Road/Watsonville Road. New traffic counts conducted in March 2021 at the same intersection showed a 30% reduction in AM peak-hour traffic volumes and a small increase of less than 3% in PM peak-hour traffic volumes. Therefore, new AM peak-hour traffic counts conducted at the intersection of Calle Sueno/Watsonville Road were factored by 30% to represent non-pandemic conditions.

Existing Plus Project Conditions. Existing plus project peak-hour traffic volumes were estimated by adding to the existing traffic volumes the additional traffic that would be generated by the proposed project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects of the proposed project on existing traffic conditions.



Figure 1
Site Location and Study Intersection

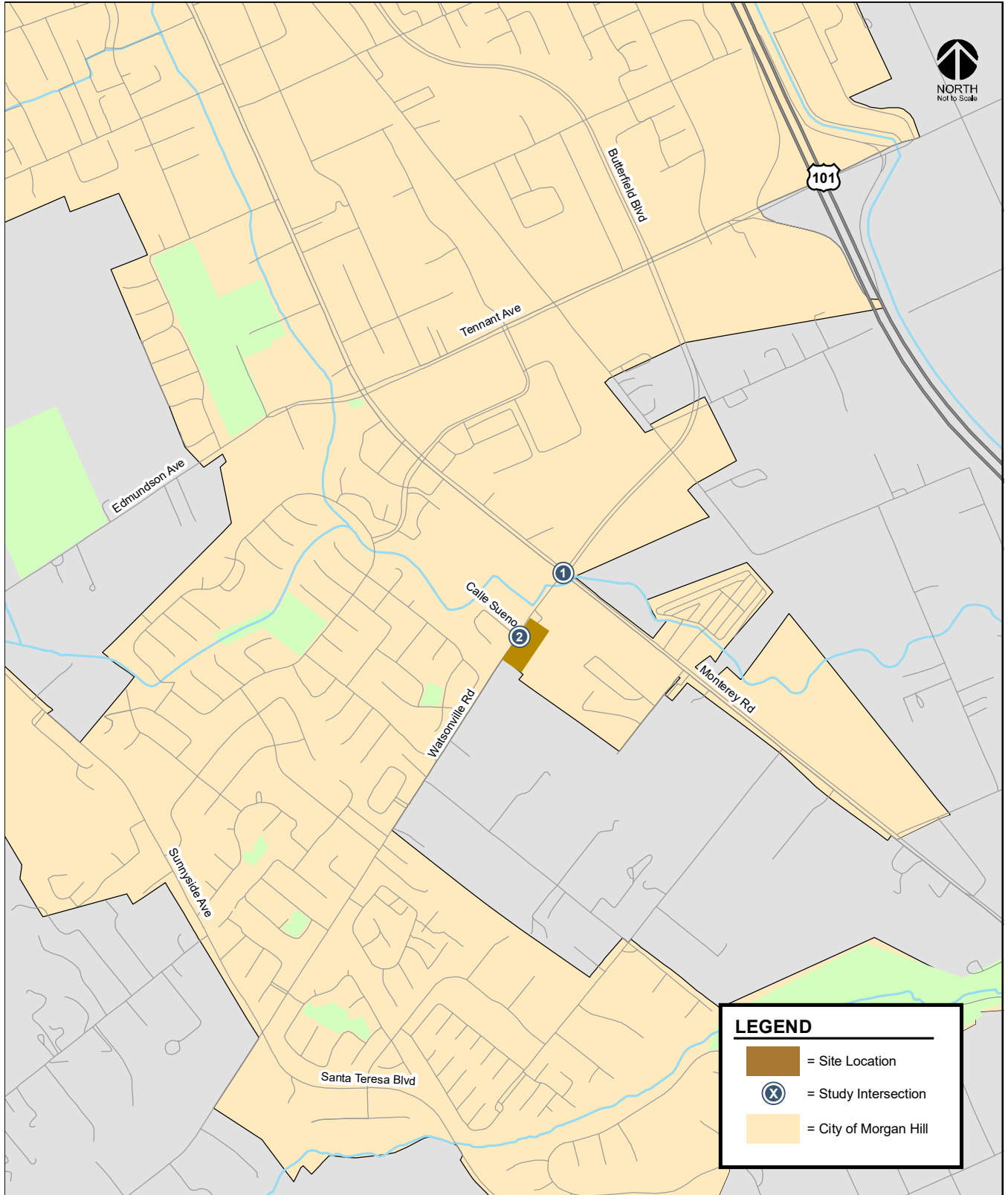
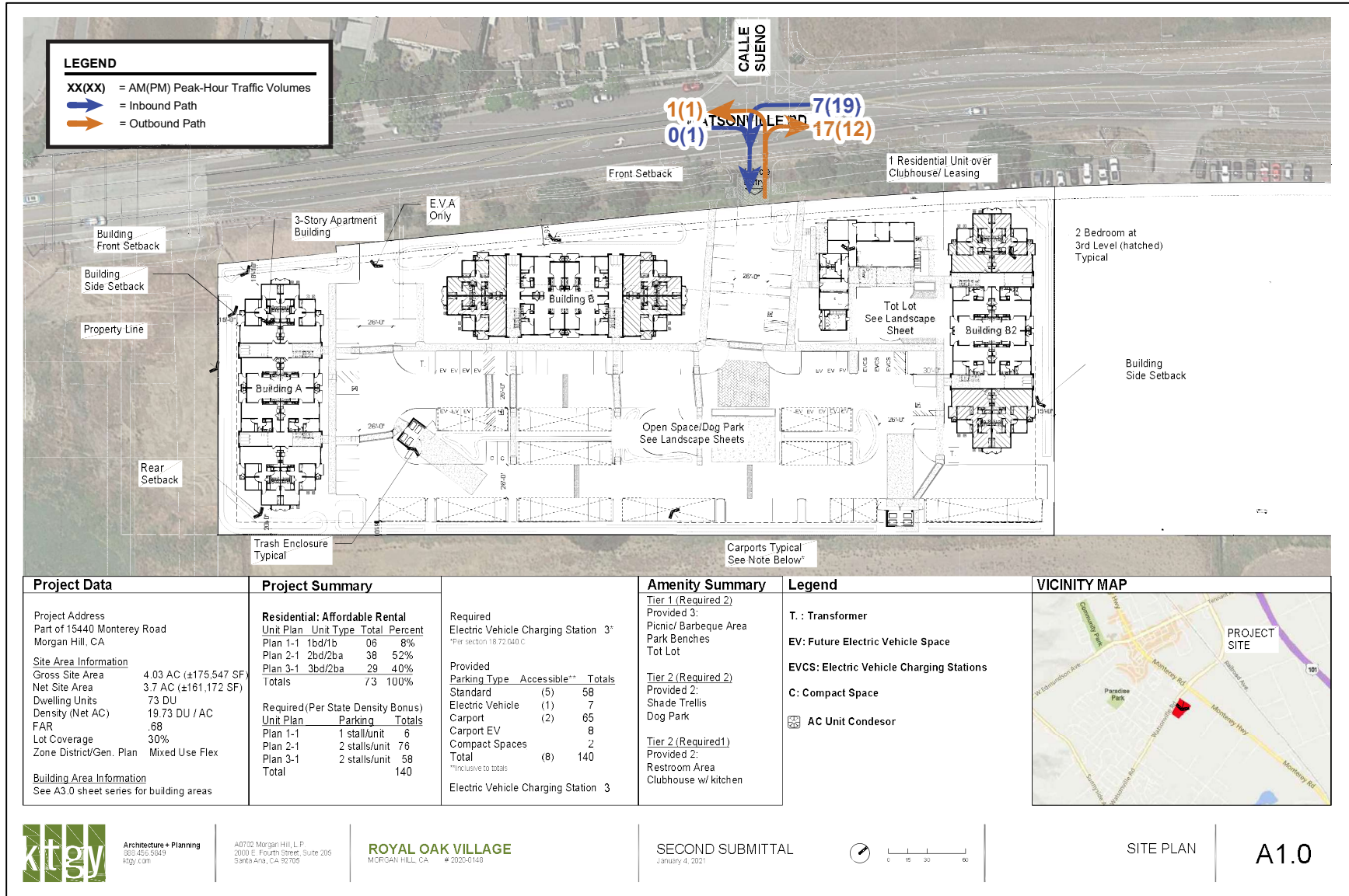


Figure 2
Site Plan and Project Trips at Driveway



Year 2025 Cumulative Conditions. Year 2025 Cumulative conditions represent future traffic volumes on the future transportation network. Year 2025 Cumulative conditions include traffic growth projected to occur in the Year 2025 without the proposed project.

Year 2025 Cumulative with Project Conditions. Year 2025 Cumulative with project consists of Year 2025 Cumulative traffic conditions with the addition of project traffic.

Project Trip Generation Estimates and Assignment

In determining the project trip generation, the magnitude of traffic entering and existing the site is estimated for the AM and PM peak hours. Through empirical research, data have been collected that quantify the amount of traffic produced by many types of land uses. The research is compiled in the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual, 10th Edition (2017)*. The standard trip generation rates can be applied to help predict the future traffic increases that would result from a new development. The rates published for “Multifamily Housing (Mid-Rise)” (ITE Land Use 221) were used to estimate the trips generated by the proposed project. ITE land use #221 includes apartment, townhouse, and condominium developments that have between three and ten levels. As proposed, the site would consist of three-story apartment buildings.

After applying the ITE trip rates, it is estimated that the project would generate 25 vehicle trips (7 inbound and 18 outbound) during the AM peak hour and 33 vehicle trips (20 inbound and 13 outbound) during the PM peak hour (see Table 1).

**Table 1
Trip Generation Summary**

Land Use	ITE Land Use Code ¹	Size	AM Peak Hour			PM Peak Hour				
			Pk-Hr Rate	Trip		Pk-Hr Rate	Trip			
				In	Out	Total		In	Out	Total
Proposed Land Use										
Multifamily Housing (Mid-Rise)	221	73 Dwelling Units	0.344	7	18	25	0.45	20	13	33
Notes:										
¹ Source: ITE <i>Trip Generation Manual</i> , 10th Edition 2017.										

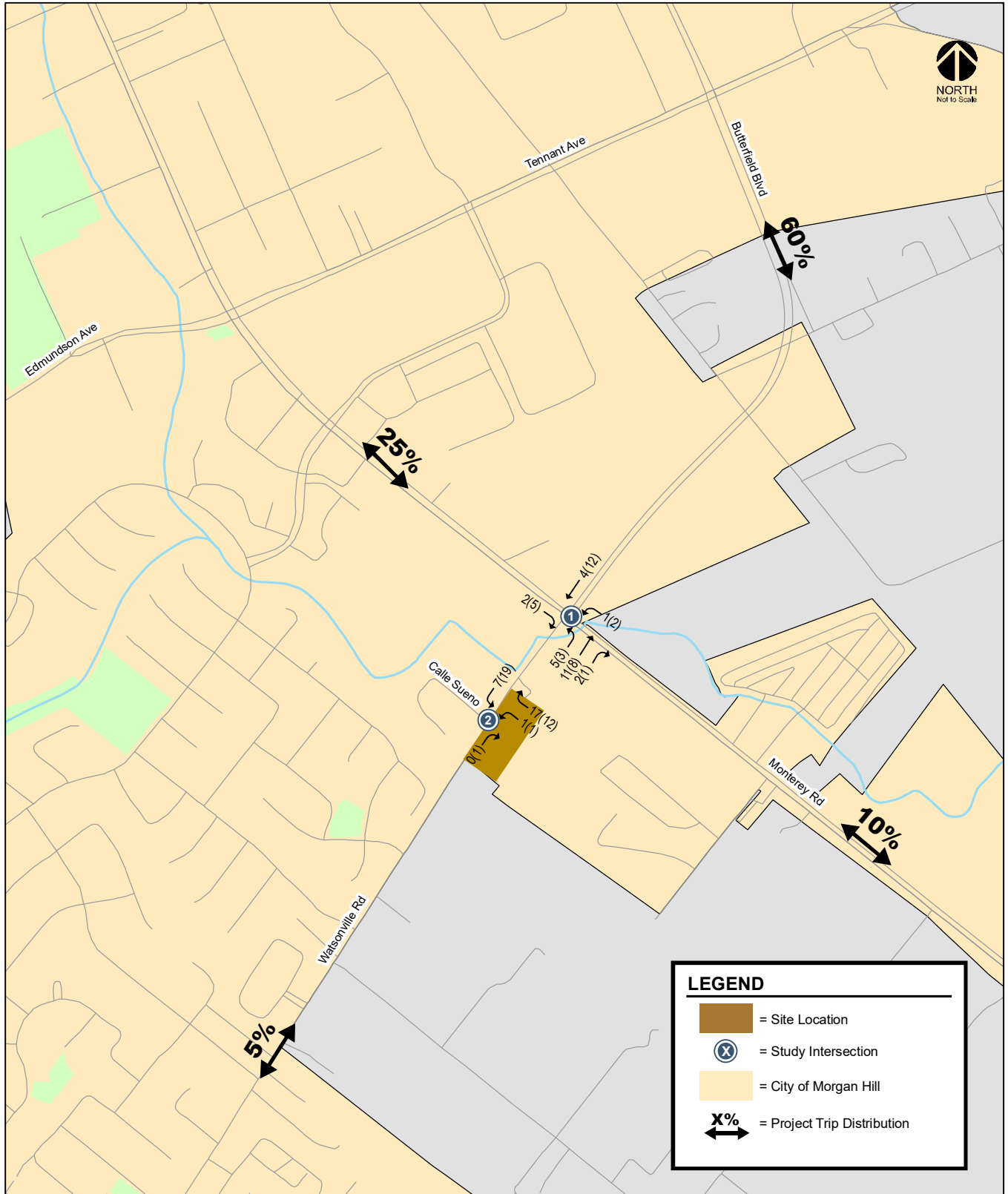
The directional distribution of site-generated traffic to and from the project site was estimated based on the existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM peak commute patterns, the location of the project driveways, freeway access points, and the locations of complimentary land uses. The peak-hour project trips associated with the proposed project were added to the transportation network in accordance with the distribution pattern. The project trip distribution pattern and assignment of project trips at the study intersections are shown on Figure 3.

Year 2025 Project Trip Generation Estimates

Year 2025 Cumulative traffic volumes were developed based on traffic forecasts produced for the City of Morgan Hill 2035 General Plan using the City’s Traffic Demand Forecasting (TDF) model. The Year 2035 General Plan traffic forecasts include land use growth and transportation improvements associated with buildout of the City’s General Plan.

The 2035 General Plan forecasts also include trips associated with the adopted General Plan land uses for the project site. Therefore, the trips associated with the adopted General Plan land uses for the project site were removed to develop Year 2025 Cumulative no project traffic volumes. Hexagon prepared trip estimates for the project site GP land uses which were estimated to consist of

Figure 3
Project Trip Distribution and Trip Assignment



approximately 92 multi-family dwelling units, 7,000 s.f. of retail and service use, and 5,000 s.f. of office use and the proposed development plan. The trip estimates indicate that the proposed development plan is of less intensity than that assumed in the General Plan traffic model for the project site. The proposed development plan would result in 20 fewer AM peak-hour trips and 42 fewer PM peak-hour trips at the project site when compared with the land uses included in the City’s current General Plan traffic model. The comparison of trip generation per the General Plan traffic model and proposed project are presented in Table 2.

**Table 2
General Plan Project Trip Generation Estimates Comparison**

Land Use	ITE Land Use Code ¹	Size	AM Peak Hour			PM Peak Hour				
			Pk-Hr Rate	Trip		Pk-Hr Rate	Trip			
				In	Out		Total	In	Out	Total
Proposed Land Use										
Multifamily Housing (Mid-Rise)	221	73 Dwelling Units	0.344	7	18	25	0.45	20	13	33
Approved Land Uses²										
Multifamily Housing (Mid-Rise)	221	92 Dwelling Units	0.344	8	24	32	0.45	26	16	42
Shopping Center	820	7,000 Square Feet	0.940	4	3	7	3.81	13	14	27
General Office Building	710	5,000 Square Feet	1.160	5	1	6	1.15	1	5	6
Net Project Trips				-10	-10	-20		-20	-22	-42
Notes:										
¹ Source: ITE <i>Trip Generation Manual</i> , 10th Edition 2017.										
² Approved land uses for the project site were obtained from the 2035 General Plan Traffic Demand Forecasting (TDF) model.										

The Year 2025 Cumulative no project traffic volumes were then estimated using a growth method that involved adding a proportion (10 Years or 50%) of the 2035 projected growth, with removal of the trips associated with the adopted General Plan land uses for the project, to existing traffic counts at each of the study intersections.

Additionally, it should be noted that the Mixed-Use Flex (7-24 du/ac) land use designation is currently assigned to the 3.7-acre project site per the City’s General Plan Land Use Map. Per the land use designation and maximum allowable development standards, the project site may support up to 89 dwelling units per the General Plan.

Intersection Level of Service Analysis Methodologies

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of traffic. The weekday AM peak hour of traffic generally falls within the 7:00 AM to 9:00 AM period and the weekday PM peak hour is typically in the 4:00 PM to 6:00 PM period. It is during these times that the most congested traffic conditions occur on a typical weekday.

Signalized Intersections

Signalized intersections are subject to the City of Morgan Hill's level of service standards. The City of Morgan Hill's level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow

rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of the following:

- **LOS F** for Downtown intersections and segments including at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Street;
- **LOS E** for the following intersections and freeway zones:
 - Main Avenue and Del Monte Avenue
 - Main Avenue and Depot Street
 - Dunne Avenue and Del Monte Avenue
 - Dunne Avenue and Monterey Avenue
 - Dunne Avenue and Church Street
 - Dunne Avenue and Depot Street
 - Cochrane Road and Monterey Road
 - Tennant Avenue and Monterey Road
 - Tennant Avenue and Butterfield Boulevard
 - Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane Road/DePaul Drive
 - Dunne Avenue Freeway Zone: from Walnut Grove Drive/East Dunne Avenue to Condit Road/East Dunne Avenue
 - Tennant Avenue Freeway Zone: from Butterfield Boulevard/Tennant Avenue to Condit Road/Tennant Avenue

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

1. The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under no project conditions to an unacceptable level (LOS E or F) under project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under no project conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by 0.01.

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

Unsignalized Intersections

The methodology used to determine the level of service for unsignalized intersections is also TRAFFIX and the 2000 HCM methodology for unsignalized intersection analysis. This method is applicable for both two-way and all-way stop-controlled intersections. For the analysis of stop-controlled intersections, the 2000 HCM methodology evaluates intersection operations on the basis of average control delay time for all vehicles on the stop-controlled approaches. For the purpose of reporting level of service for one- and two-way stop-controlled intersections, the delay and corresponding level of service for the stop-controlled minor street approach with the highest delay is reported. For all-way stop-controlled intersections, the reported average delay and corresponding level of service is the average for all approaches at the intersection. The City uses a minimum acceptable level of service standard of LOS D for unsignalized intersections, in accordance with its adopted threshold of significance in its Guidelines for Preparation of Transportation Impact Reports.

Signal Warrants

The level of service analysis at unsignalized intersections is supplemented with an assessment of the need for signalization of the intersection. The need for signalization of unsignalized intersections is assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the *California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD)*, Part 4, Highway Traffic Signals, 2014. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. The decision to install a traffic signal should not be based purely on the warrants alone. Instead, the installation of a signal should be considered and further analysis performed when one or more of the warrants are met. Additionally, engineering judgment is exercised on a case-by-case basis to evaluate the effect a traffic signal will have on certain types of accidents and traffic conditions at the subject intersection as well as at adjacent intersections. Intersections that meet the peak hour warrant are subject to further analysis before determining that a traffic signal is necessary. Other options such as traffic control devices, signage, or geometric changes may be preferable based on existing field conditions.

Level of Service Results

The results of the intersection level of service analysis show that both study intersections currently operate and are projected to continue to operate at an acceptable LOS D or better conditions under Year 2025 Cumulative conditions, and the addition of project traffic would not result in the degradation of the study intersection's levels of service during the AM and PM peak hours.

Based on the results of the intersection level of service analysis, the project would not have an adverse effect on operations at either of the study intersections. The results of level of service analysis are summarized in Table 3.

Site Access

The evaluation of site access is based on the site plan prepared by KTG Architecture+Planning dated January 4, 2021. Site access was evaluated to determine the adequacy of the site's access points with regard to the following: traffic volume, geometric design, and sight distance. Site access was evaluated in accordance with generally accepted traffic engineering standards and transportation planning principles.

The project site would be served by a full-access driveway at a new south leg of the intersection of Calle Sueno and Watsonville Road, as shown on Figure 2. An emergency vehicle access driveway also would be located approximately 300 feet west of the Calle Sueno/Watsonville Road driveway.

Sight Distance

The project driveway should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Watsonville Road. Landscaping and signage should be located in such a way to ensure an unobstructed view for drivers existing the site. Sight distance generally should be provided in accordance with Caltrans standards. The minimum acceptable sight distance is most often the stopping sight distance.

Watsonville Road has a posted speed limit of 45 mph. For a design speed of 45 mph, the recommended Caltrans' stopping sight distance is 360 feet. Based on the project site plan and observations in the field, vehicles exiting the project site driveway would have adequate sight distance in both directions on Watsonville Road.

**Table 3
Intersection Level of Service Summary**

Int. #	Intersection	Int. Control ¹	LOS Std	Peak Hour	Count Date	Existing			Existing Plus Project				Year 2025 Cumulative without Project			Year 2025 Cumulative with Project					
						Warrant Met?	Delay ²	LOS	Warrant Met?	Delay ²	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Warrant Met?	Delay ²	LOS	Warrant Met?	Delay ²	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Monterey Road and Watsonville Road/Butterfield Boulevard	Signal	D	AM	03/14/19	--	25.9	C	--	26.0	C	0.2	0.004	--	28.5	C	--	28.7	C	0.3	0.004
				PM	03/14/19	--	39.5	D	--	39.7	D	0.3	0.004	--	43.2	D	--	43.5	D	0.4	0.004
2	Calle Sueno and Watsonville Road	OWSC	D	AM	04/01/21	No	20.1	C	No	25.4	D	N/A	N/A	No	24.5	C	No	32.4	D	N/A	N/A
				PM	04/01/21	No	19.9	C	No	25.6	D	N/A	N/A	No	24.8	C	No	33.9	D	N/A	N/A

Notes:
¹OWSC = One-Way Stop-Controlled
²The reported delay and corresponding level of service for signalized intersections represent the average delay for all approaches at the intersection.
 The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.
 Bold indicates unacceptable level of service or signal warrant met.
 Bold and boxed indicate significant impact.

Signal Warrant Analysis

A signal warrant analysis was conducted for the one-way stop-controlled intersection of Calle Sueno and Watsonville Road, based on the Peak-Hour Volume Signal Warrant, (Warrant #3 – Part B) described in the *California Manual on Uniform Traffic Control Devices (CA MUTCD)*, 2014 Edition. The analysis indicates that intersection would not have traffic volumes that would meet the volume thresholds that would warrant installation of a traffic signal during either the AM or PM peak-hours under existing plus project and Year 2025 Cumulative plus project conditions.

Driveway Design and Operations

The City of Morgan Hill Design Standards specify a minimum driveway width of 16 feet and a maximum width of 24 feet. The site plan indicates a proposed driveway width of 26 feet. The driveway should be designed per City of Morgan Hill Design Standards.

Based on the project trip generation and trip assignment, it is estimated that a maximum of 20 inbound trips and 18 outbound trips would enter and exit the site during the peak hours. The estimated project trips at the project driveways are shown on Figure 2.

During the AM and PM peak-hours, it is estimated that 7 trips and 19 trips, respectively, would make inbound left-turns into the project driveway along Watsonville Road. As discussed above, traffic volumes at the intersection of Calle Sueno and Watsonville Road would not meet peak-hour signal warrant thresholds. However, stop-control at the project driveway approach to Watsonville Road and a dedicated westbound left-turn lane from Watsonville Road to the project entrance will be required. The 100-foot westbound left-turn lane indicated on the project site plan will be adequate to serve the project traffic. The proposed lane configurations along Watsonville Road are shown on Figure 4.

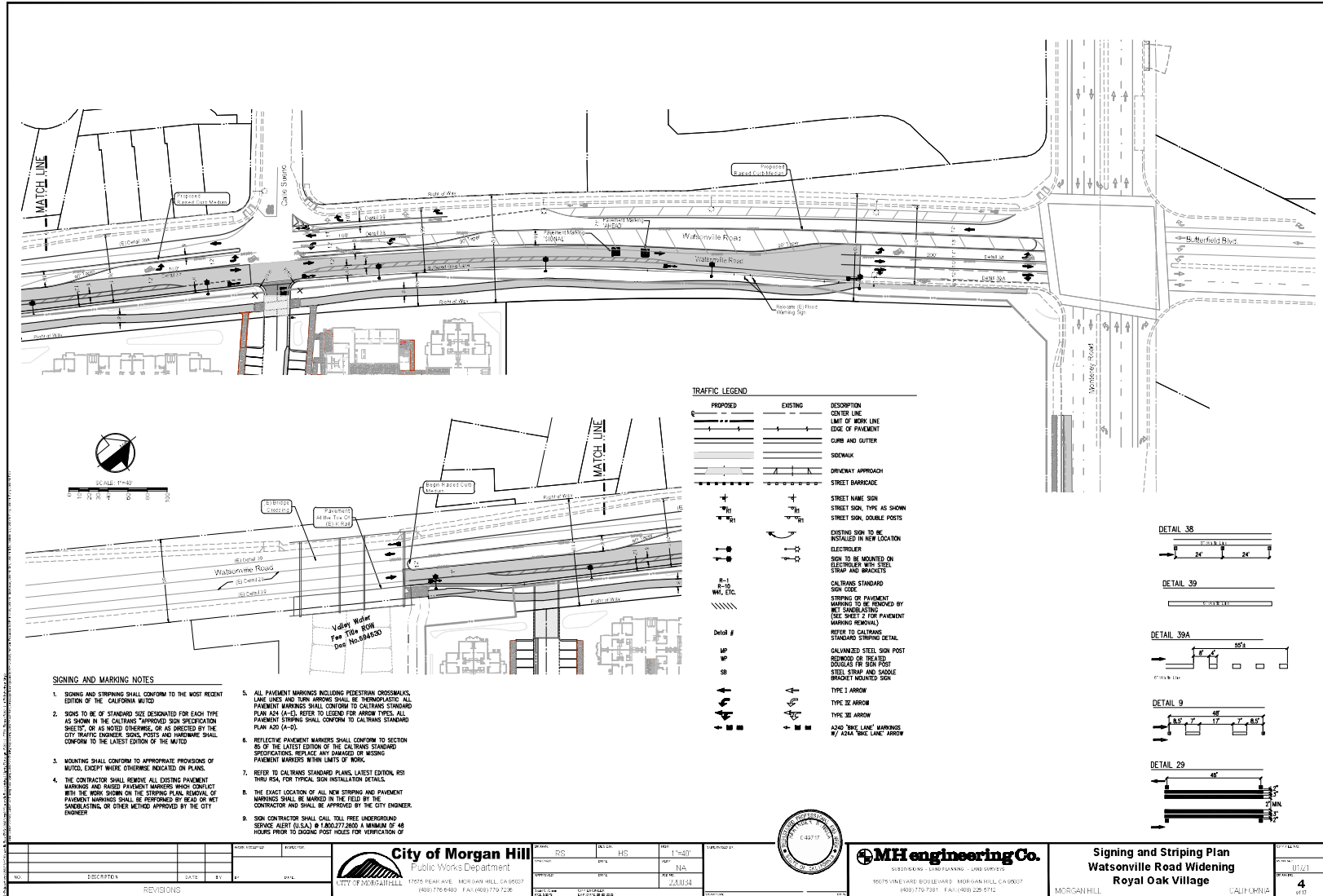
Transit, Pedestrian, and Bicycle Facility Evaluation

The project site is served by VTA Route 68 that runs along Monterey Road. Frequent Route 68 (Gilroy Transit Center to San Jose Diridon Transit Center) serves northbound and southbound bus stops at the intersection of Monterey Road and Watsonville Road/Butterfield Boulevard, approximately 800 feet walking distance from the project site. A typical mode split in Morgan Hill would be a three percent transit share. Assuming up to three percent transit mode share for the project equates to no more than one transit rider during each of the peak hours. The transit ridership demands of the proposed project can be accommodated by the existing transit facilities.

Pedestrian generators in the project vicinity include commercial uses in the vicinity of Monterey Road/Tennant Avenue and bus stops discussed above. In the vicinity of the project site, there are sidewalks along the westbound side of Watsonville Road and pedestrian crosswalk facilities at the Monterey Road/Watsonville Road intersection. There are no sidewalks along the eastbound side of Watsonville Road nor crosswalks at the Calle Sueno/Watsonville Road intersection. The project proposes to construct a sidewalk along its Watsonville Road frontage, starting at the bridge crossing west of the project site and extending east to the existing sidewalk near Monterey Road. The proposed sidewalk would provide a continuous route between the project site and controlled pedestrian crossings at the Monterey Road/Watsonville Road intersection. The proposed 8-foot width of the sidewalk will exceed the minimum of 5 feet required by the City code.

To the west of the project site, there would be no sidewalks along eastbound Watsonville Road between La Alameda Drive and the project site frontage. However, the implementation of the missing sidewalk segment is beyond the means of the proposed project since its construction would require work within, and possibly acquisition of, right-of-way that is not controlled by the project applicant.

Figure 4
Proposed Improvements along Watsonville Road



Pedestrian access to areas located west along Watsonville Road will require users to utilize the crosswalk at the Monterey Road/Watsonville Road intersection and existing sidewalks along westbound Watsonville Road.

In the project vicinity, there are bike lanes located along Monterey Road, Watsonville Road, and Butterfield Boulevard. There are existing bike lanes in both directions of Watsonville Road along the project frontage. As shown on Figure 4, the project proposes to upgrade the existing eastbound bike lane along the project frontage by providing a 4-foot painted buffer between the bike lane and eastbound travel lane. A trailhead providing access to the West Little Llagas Creek Trail is located less than 400 feet west from the project site. The trail runs northward between Watsonville Road and Spring Avenue, roughly parallel with Monterey Road. The project is not expected to generate a significant amount of bicycle trips. The demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site.

Traffic Study Requirements

The need for the preparation of a comprehensive traffic impact analysis for a particular development is based on its estimated trip generation and its effect on surrounding transportation facilities. The City of Morgan Hill requires the completion of a full traffic impact analysis if one of the following criteria are met:

1. Generates 100 or more net new peak hour trips; except that projects located in the 14-block Downtown Core area are exempt from this requirement. Net new peak hour trips are defined as the number of trips generated by the proposed development minus trips generated by existing development on the project site. (This threshold is consistent with the Valley Transportation Authority (VTA) policy.)
2. Adds 50 to 99 net new peak hour trips to the roadway system where nearby intersections are currently operating at or below the City's LOS standard, or projected to operate at or below the City's LOS standard with traffic added by approved developments; except that projects located in the 14-block Downtown Core area are exempt from this requirement. Adjacent or nearby intersections are defined as intersections to which the proposed development or proposed land use change adds 10 or more vehicle peak hour trips per lane.
3. Creates a transportation issue that City staff requests to have analyzed.

The proposed project will result in the addition of 25 AM peak-hour trips and 33 PM peak-hour trips to the roadway system under existing plus project conditions.

A review of intersection levels of service at the selected study intersections indicates that each study intersection is projected to operate at acceptable conditions during each of the peak hours. The addition of project traffic at each of the study intersections would not result in an adverse effect on operations based on the City's intersection operations standards.

Therefore, the evaluation of trip generation and intersection operations concludes that the proposed project will not result in an adverse effect on operations to intersections in the project area and is consistent with the *Morgan Hill 2035 General Plan* goals and policies. However, City staff ultimately determines the need for traffic studies for new developments.

Appendix K

Noise Assessment

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December 1, 2020

A0702 Morgan Hill L.P.
Attn: Mark Irving
Urban Housing Communities
2000 E. Fourth Street #205
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SUBJECT: Royal Oak Village Residential Development Noise Assessment in the City of Morgan Hill CA

Ldn Consulting is pleased to submit the following noise impact analysis for the proposed Royal Oak Village Residential Development in Morgan Hill CA. The purpose of the survey is to determine the estimated exterior and interior noise levels within the residential structures of proposed buildings and residential units of the proposed residential project in Morgan Hill, CA. This analysis will recommend mitigation measures for compliance with the California Code of Regulations Title 24 and the City of Morgan Hill guidelines and requirements for interior noise.

PROJECT LOCATION/DESCRIPTION

The proposed project is located within the City of Morgan Hill, CA. More specifically, the project is located along Watsonville Road, southwest of Highway 101 and Monterey Road. Access to the project site is from Watsonville Road.

The proposed project consists of a new three-story residential building comprised of 140 attached multi-family condominium homes across 9 condominium buildings. The project vicinity can be seen in Figure 1 and the project site configuration is provided in Figure 2.

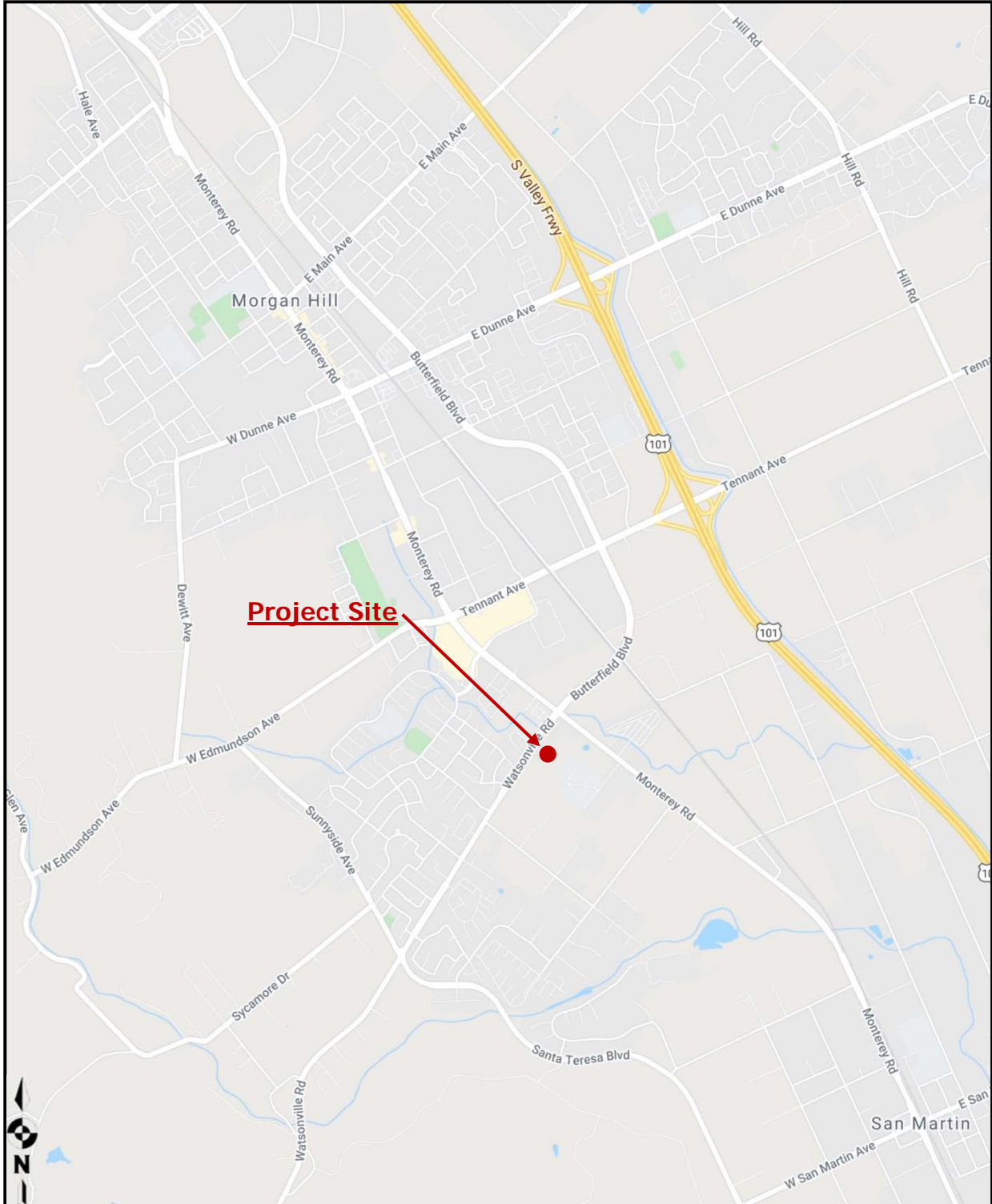
ACOUSTICAL FUNDAMENTALS

Noise is defined as unwanted or annoying sound which interferes with or disrupts normal activities. Exposure to high noise levels has been demonstrated to cause hearing loss. The individual human response to environmental noise is based on the sensitivity of that individual, the type of noise that occurs and when the noise occurs.

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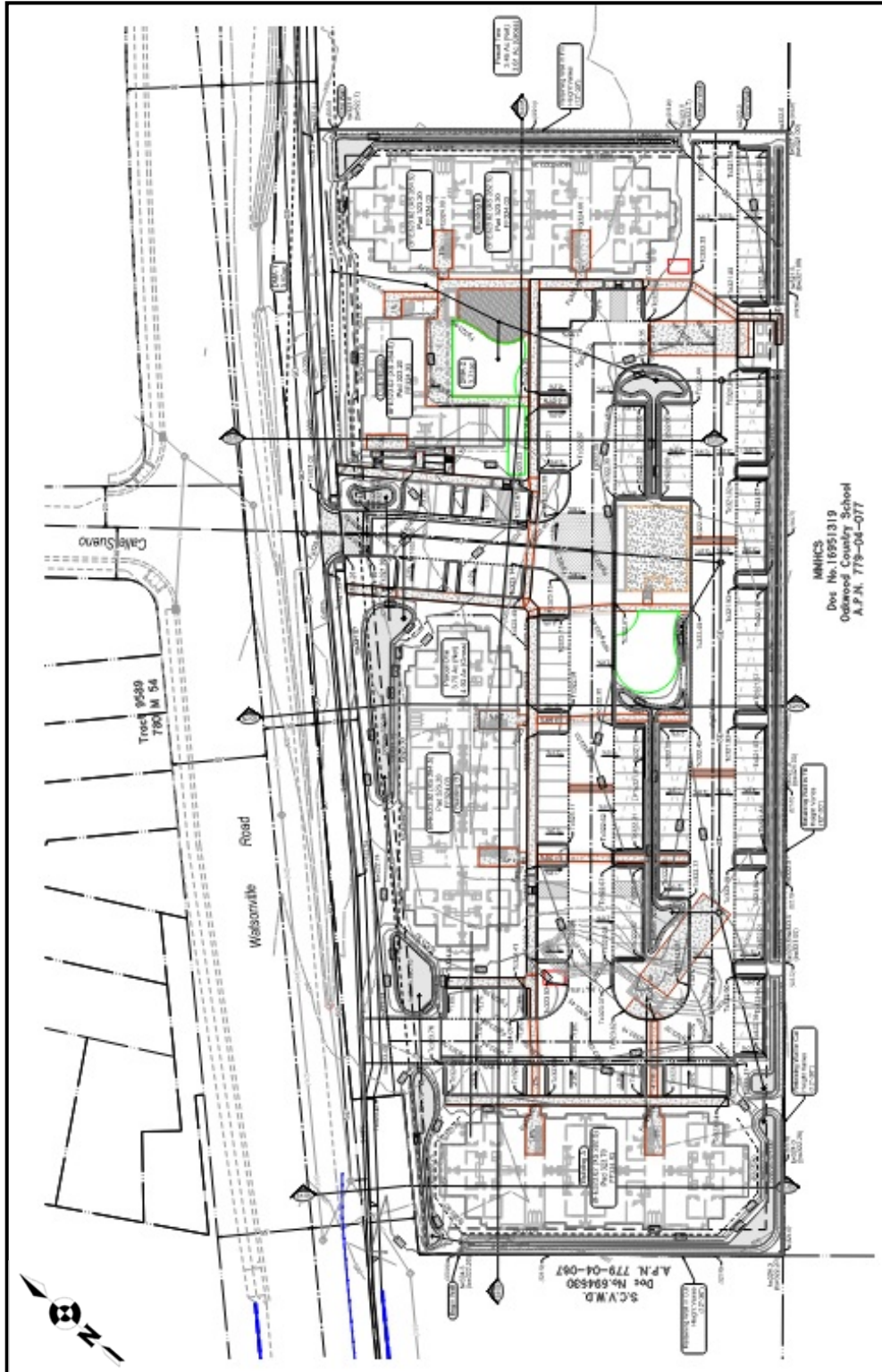
Figure 1: Project Vicinity Map



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Figure 2: Project Site Plan



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Sound is measured on a logarithmic scale consisting of sound pressure levels known as a decibel (dB). The sounds heard by humans typically do not consist of a single frequency but of a broadband of frequencies having different sound pressure levels. The method for evaluating all the frequencies of the sound is to apply an A-weighting to reflect how the human ear responds to the different sound levels at different frequencies. The A-weighted sound level adequately describes the instantaneous noise whereas the equivalent sound level depicted as L_{eq} represents a steady sound level containing the same total acoustical energy as the actual fluctuating sound level over a given time interval.

Mobile noise levels radiate in an almost oblique fashion from the source and drop off at a rate of 3 dBA for each doubling of distance under hard site conditions and at a rate of 4.5 dBA for soft site conditions. Hard site conditions consist of concrete, asphalt and hard pack dirt while soft site conditions exist in areas having slight grade changes, landscaped areas and vegetation.

The Day-Night Noise Level (Ldn) is the 24-hour A-weighted average for sound, with corrections for nighttime hours. The corrections require an addition of 10 decibels to sound levels at nighttime hours between 10 p.m. and 7 a.m. These additions are made to account for the increased sensitivity during the evening and nighttime hours when sound appears louder. Ldn values do not represent the actual sound level heard at any particular time, but rather represents the total sound exposure.

Additionally, Sound Transmission Class (or STC) is an integer rating of how well airborne sound is attenuated by a building partition. STC is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations (see ASTM International Classification E413 and E90). The STC number is derived from tested sound attenuation values found at the 1/3 octave band frequencies. These transmission-loss (TL) values are then plotted and compared to a standard reference contour. Acoustical engineers fit these values to the appropriate TL Curve to determine a single STC value found at 500 Hertz. STC is roughly the decibel reduction in noise a partition can provide, abbreviated 'dB'. If an 85 dB sound on one side of a wall is reduced to 50 dB on the other side, that partition is said to have an STC of 35. This number does not apply across the range of frequencies because the STC value is derived from a curve-fit from the tested 1/3 octave band frequencies. Any partition will have less TL at lower frequencies. For example, a wall with an STC of 35 may provide over 40 dB of attenuation at 3000 Hz but only 20 dB of attenuation at 125 Hz.

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NOISE STANDARDS

City of Morgan Hill Noise Standards

The City of Morgan Hill has established guidelines for acceptable community noise levels in the Noise Element of the General Plan. For noise sensitive multi-family developments, the City Noise Element requires an exterior noise level of less than 65 dBA LDN for outdoor usable areas. The City of Morgan Hill has adopted interior noise standards as part of the General Plan Noise Element for assessing the compatibility of land uses with transportation related noise impacts. The City General Plan requires that interior noise levels within new residential units not exceed 45 dBA Ldn. Interior noise levels in new residential development exposed to an exterior Ldn 60 dBA or greater should also be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA, and 55 dBA in all other habitable rooms.

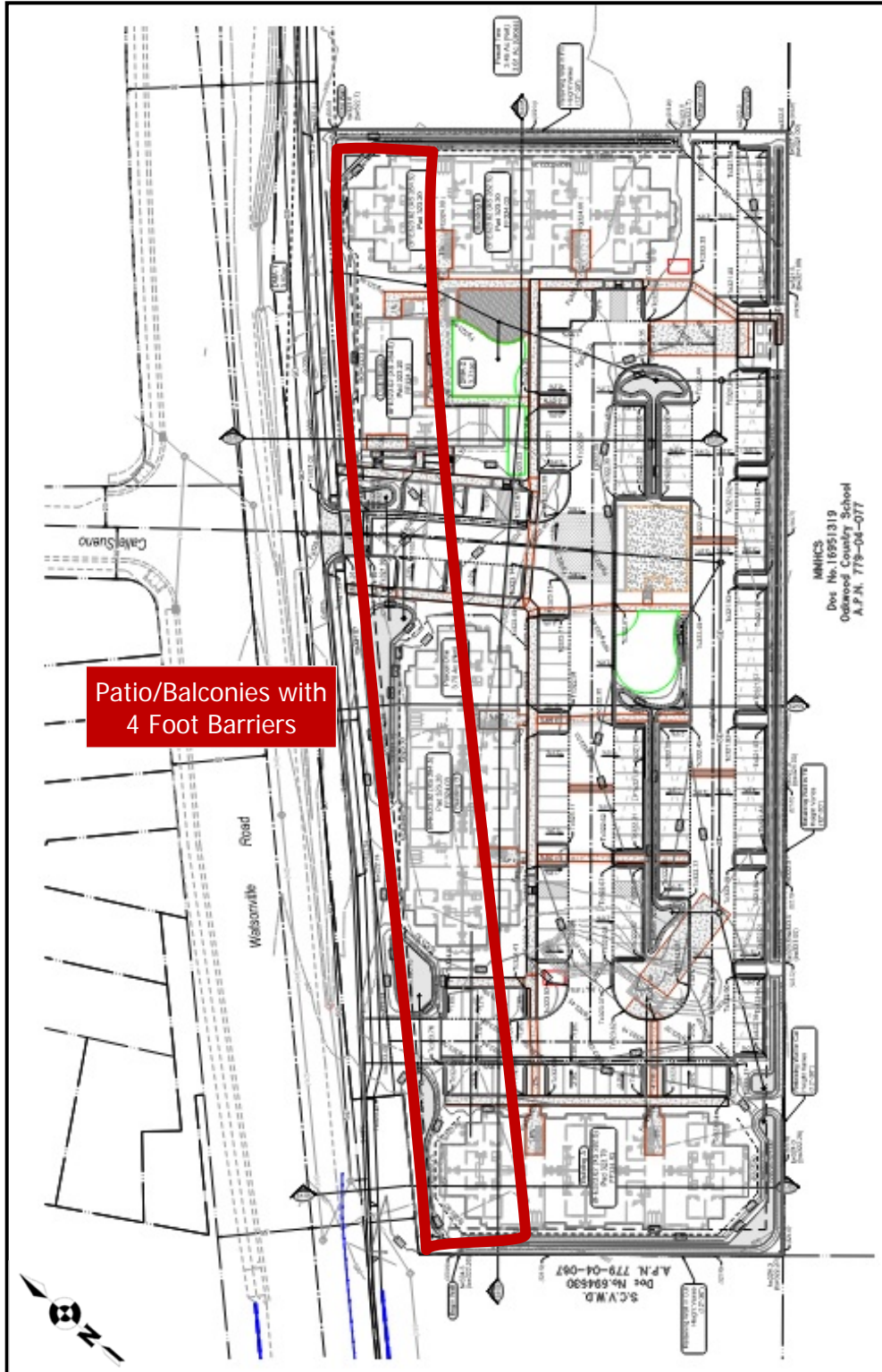
ANALYSIS PROCEDURES

Exterior Noise Levels

The primary sources of noise to the project site will be vehicular noise from adjacent Watsonville Road and nearby Monterey Street that could impact the site. Based on the future traffic projections along the roadways, a future 2035 noise level of 71.5 dBA Ldn at 50 feet from the centerline is anticipated along Watsonville Road and 75.1 dBA Ldn at 50 feet from the centerline is anticipated along Monterey Street (*Source: City of Morgan Hill General Plan 2035 Update Noise Section, 2017*). The proposed building facades are located at least 75 feet from the centerline of Watsonville Road and the increased distance would lower the noise levels approximately 2 decibels to 69.6 dBA Ldn at the building facades. The proposed buildings are located over 620 feet from the centerline of Monterey Street and the increased distance lowers the noise levels below 65 dBA Ldn from Monterey Street. Predicted exterior instantaneous noise levels along the building facades of the residential dwellings could reach levels of almost 85 dBA Lmax adjacent to Watsonville Road and could be almost 80 dBA Lmax for the units facing Monterey Street.

As a design feature, noise barriers in the form of 4-foot barriers at the patios and balconies/decks of the units along Watsonville Road were found to comply with the City of Morgan Hill Noise standards of 65 dBA CNEL at the multi-family residences. The barriers must be constructed of a non-gapping material (i.e., masonry, stucco, ¼ inch thick glass or Plexiglas). The general locations of proposed noise barriers of the ground floor patios and balconies/decks are provided in Figure 3.

Figure 3: Proposed Noise Barriers



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Interior Noise Levels

The methodology used to determine the resultant interior noise levels is based upon the exterior noise level minus the sound transmission loss as identified in the American Society of Testing and Materials (ASTM) guidelines: E413 & E90. Standard building construction will provide a noise reduction of approximately 12-15 dBA with a windows open conditions and minimum 20 dBA noise reduction with the windows closed. The exterior noise levels at the proposed structures calculated in terms of dBA are converted to the six-octave band sound pressure levels between: 125 Hertz - 4000 Hertz.

Acoustical modeling of the proposed project dwelling units was performed in accordance with the above guidelines and included combining the transmission loss for each of the building components that will reduce the interior noise levels. Building components typically include the windows, exterior doors, and exterior walls. The total noise reduction is dependent upon the transmission loss of each building component, their subsequent surface area, quality of the building/construction materials, a building façade and angle correction.

The interior noise level is also dependent on the acoustical energy absorbed within the room based upon the Noise Reduction Coefficients (NRC). NRC is a scalar representation of the amount of sound energy absorbed upon striking a particular surface and the arithmetic value average of sound absorption coefficients indicating a material's ability to absorb sound. The absorption coefficients for individual surface areas such as carpet, drywall and furnishings are used to calculate the interior room effects. The calculated building noise reduction includes both the room absorption characteristics and the transmission loss from the exterior assembly.

The interior noise reduction calculations were performed using Ldn Consulting's interior noise model. The model converts the exterior sound level to octave band frequencies and accounts for the transmission loss, correction factors and room absorption. The floor plans used for this analysis were provided by KTG, 2020. The following construction details were utilized for each of the building assemblies to determine the noise reduction characteristics:

Exterior walls and roof assemblies typically have a Sound Transmission Class (STC) rating of 46 or better. Exterior walls with this rating consist of 2"x 4" studs or larger, spaced 16" o.c. with minimum R-13 insulation and an exterior surface of hardiplank or stucco. Interior wall and ceiling surfaces shall be at least 1/2" thick gypsum or plaster. Roof assemblies should have a minimum of 1/2" sheathing, R-19 insulation and sealed to prevent noise leaks. Exterior entry doors should be of solid core construction. Glass assemblies should be dual-paned and have sealant applied around the exterior edges. The window assemblies are generally the weakest

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noise reducing component but are the most convenient and cost-effective elements to change if additional attenuation is needed. The STC ratings for the glass assemblies was calculated in the interior noise model and provided in the findings below.

A worst-case future projected building façade noise level of 70 dBA Ldn and the predicted exterior instantaneous noise levels of the residential dwellings could reach levels of 85 dBA Lmax was utilized for all floor areas for the unit along Watsonville Road.

Basic calculations show that a windows open condition will only reduce the interior noise levels 12-15 dBA Ldn and not provide adequate interior noise mitigation. To meet the 45 dBA Ldn interior noise standard and the maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA, and 55 dBA in all other habitable rooms, an interior noise level reduction of 25-35 dBA Ldn is needed for the proposed project. Therefore, a closed window and door condition is required to reduce interior noise levels to comply with CCR Title 24 and City of Morgan Hill requirements. The windows/doors closed condition does not require the windows or doors to be non-operable but does requires that mechanical ventilation be installed in those units identified in Figure 3 above to move air within the structure.

Modeling was conducted for each unit type and floor plan based upon the worst-case exterior noise levels, as identified above, to determine the required STC rating for the windows. The required noise reductions needed for all units having line of sight to the roadways in each building and the windows minimum STC Rating to meet the City's standards. The interior modeled results are provided as an attachment to this report.

To achieve the maximum instantaneous noise level in bedrooms of 50 dBA, and 55 dBA in all other habitable rooms, a minimum STC rating of 35 is needed for the units and assemblies adjacent to Watsonville Road as can be seen in Table 1. The units facing towards Monterey Road are predicted to have noise levels five decibels lower due to the distance separation and would need a minimum STC rating of 30. Use of higher STC-rated windows should be included where practical.

The necessary Sound Transmission Class (STC) ratings and transmission losses for the assemblies are also provided in Table 1, as a footnote, to reduce the interior noise levels at or below the 45 dBA Ldn standard. The minimum STC rating of 35 is needed for the glass assemblies for all units adjacent to Watsonville Road to achieve the 45 dBA Ldn and an STC of 30 is need for the units facing towards Monterey Road.

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Table 1: Sound Transmission Class Ratings

Units	Room	Threshold		STC Rating ¹	Interior Noise Level	
		Ldn	Lmax		Ldn	Lmax
Adjacent to Watsonville Road	Living	45	55	35	38	53
	Bedroom	45	50	35	35	50
Facing Monterey Road	Living	45	55	30	38	53
	Bedroom	45	50	30	35	50

¹ STC 35 needed to achieve the Lmax interior noise level threshold along Watsonville Road and an STC of 30 units facing towards Monterey Road. Higher STC ratings shown are to reduce Lmax noise levels to 50 dBA and 55 dBA in the bedrooms and living rooms, respectively and the use of higher STC-rated windows should be included where practical.

FINDINGS

As a design feature, noise barriers in the form of 4-foot high barriers at the patios and balconies/decks of the units along Watsonville Road were found to comply with the City of Morgan Hill Noise standards of 65 dBA CNEL at the multi-family residences. The barriers must be constructed of a non-gapping material (i.e., masonry, stucco, ¼ inch thick glass or Plexiglas) or a combination of these materials.

All glass assemblies should be dual-paned and have sealant applied around the exterior edges having an STC 35 rating along Watsonville Road and STC 30 for units facing Monterey Road to reduce the maximum noise levels. No impacts are anticipated with the incorporation of the reduction measures. If you have any questions, please do not hesitate to contact me directly at (760) 473-1253 or at jlouden@ldnconsulting.net.

Sincerely,

Ldn Consulting, Inc.

Jeremy Loudon, Principal

Attachments: Interior Noise Model Calculations

INTERIOR NOISE CALCULATIONS

Project Name:	Crossings at Watsonville	Ldn Consulting, Inc.
Building	All	
Floor Level	All	Date: 10/21/20
Arch Plan or Unit(s):	1	
Room Type:	Living/Dining	Project # 20-71

Exterior Noise Levels

	dBA Ldn	Frequency (Hz.)					
		125	250	500	1000	2000	4000
		Exterior Noise Level (Traffic Spectrum)	70.0	56.0	60.7	63.5	65.8
Correction for Angle and Façade	3	59.0	63.7	66.5	68.8	65.7	60.0
Adjusted Building Façade Levels	73.0	62.0	66.7	69.5	71.8	68.7	63.0

Transmission Loss (TL)

Exterior Assembly	Source	Area	STC	Transmission Loss (dB)					
				Frequency (Hz.)					
				125	250	500	1000	2000	4000
Siding	Hardiplank	153	46	27	42	44	46	49	54
Windows	Starline	25	35	25	23	32	39	39	37
Glass Doors	Starline	24	35	24	23	34	37	40	39

Room Absorption (RA)

Interior Characteristics	Source	NRC	Absorption Coefficients					
			Frequency (Hz.)					
			125	250	500	1000	2000	4000
Carpet	Army TM 5-805-4	0.28	0.15	0.17	0.12	0.32	0.52	0.30
Furnishings	Army TM 5-805-4	0.45	0.32	0.29	0.42	0.58	0.60	0.48
Drywall	Netwell	0.07	0.09	0.08	0.05	0.03	0.06	0.09
Overall Absorption Factor (Furnished Room)		0.8	0.56	0.54	0.59	0.93	1.18	0.87

Noise Reduction

	125	250	500	1000	2000	4000	
Noise Reduction from Absorption based upon Floor Area	-23.8	-23.8	-23.8	-23.8	-23.8	-23.8	
Noise Level Increase for Defects and Exposed Surface Area	17.0	17.0	17.0	17.0	17.0	17.0	
Overall Reduction from Transmission Loss + Room Absorption - Surface Exposure							32.1
Building Façade Noise Level (dBA Ldn)							70.0
Resultant Interior Noise Level (dBA Ldn)							38
Resultant Interior Noise Level (dBA Lmax)							53

INTERIOR NOISE CALCULATIONS

Project Name:	Crossings at Watsonville	Ldn Consulting, Inc.
Building	All	
Floor Level	All	Date: 10/21/20
Arch Plan or Unit(s):	1	
Room Type:	Bedroom	Project # 20-71

Exterior Noise Levels

	dBA Ldn	Frequency (Hz.)					
		125	250	500	1000	2000	4000
Exterior Noise Level (Traffic Spectrum)	70.0	56.0	60.7	63.5	65.8	62.7	57.0
Correction for Angle and Façade	3.0	59.0	63.7	66.5	68.8	65.7	60.0
Adjusted Building Façade Levels	73.0	59.0	63.7	66.5	68.8	65.7	60.0

Transmission Loss (TL)

Exterior Assembly	Source	Area	STC	Transmission Loss (dB)					
				Frequency (Hz.)					
				125	250	500	1000	2000	4000
Siding	Hardiplank	72	46	27	42	44	46	49	54
Windows	Starline	25	35	25	23	32	39	39	37
Glass Doors	Starline	0	35	24	23	34	37	40	39

Room Absorption (RA)

Interior Characteristics	Source	NRC	Absorption Coefficients					
			Frequency (Hz.)					
			125	250	500	1000	2000	4000
Carpet	Army TM 5-805-4	0.28	0.15	0.17	0.12	0.32	0.52	0.30
Furnishings	Army TM 5-805-4	0.45	0.32	0.29	0.42	0.58	0.60	0.48
Drywall	Netwell	0.07	0.09	0.08	0.05	0.03	0.06	0.09
Overall Absorption Factor (Furnished Room)		0.8	0.56	0.54	0.59	0.93	1.18	0.87

Noise Reduction

	125	250	500	1000	2000	4000	
Noise Reduction from Absorption based upon Floor Area	-21.0	-21.0	-21.0	-21.0	-21.0	-21.0	
Noise Level Increase for Defects and Exposed Surface Area	15.1	15.1	15.1	15.1	15.1	15.1	
Overall Reduction from Transmission Loss + Room Absorption - Surface Exposure							35.1
Building Façade Noise Level (dBA Ldn)							70.0

Resultant Interior Noise Level (dBA Ldn)	35
Resultant Interior Noise Level (dBA Lmax)	50

INTERIOR NOISE CALCULATIONS

Project Name:	Crossings at Watsonville	Ldn Consulting, Inc.
Building	All	
Floor Level	All	Date: 10/21/20
Arch Plan or Unit(s):	2	
Room Type:	Living/Dining	Project # 20-71

Exterior Noise Levels

	dBA Ldn	Frequency (Hz.)					
		125	250	500	1000	2000	4000
Exterior Noise Level (Traffic Spectrum)	70.0	56.0	60.7	63.5	65.8	62.7	57.0
Correction for Angle and Façade	3.0	59.0	63.7	66.5	68.8	65.7	60.0
Adjusted Building Façade Levels	73.0	62.0	66.7	69.5	71.8	68.7	63.0

Transmission Loss (TL)

Exterior Assembly	Source	Area	STC	Transmission Loss (dB)					
				Frequency (Hz.)					
				125	250	500	1000	2000	4000
Siding	Hardiplank	153	46	27	42	44	46	49	54
Windows	Starline	25	35	25	23	32	39	39	37
Glass Doors	Starline	24	35	24	23	34	37	40	39

Room Absorption (RA)

Interior Characteristics	Source	NRC	Absorption Coefficients					
			Frequency (Hz.)					
			125	250	500	1000	2000	4000
Carpet	Army TM 5-805-4	0.28	0.15	0.17	0.12	0.32	0.52	0.30
Furnishings	Army TM 5-805-4	0.45	0.32	0.29	0.42	0.58	0.60	0.48
Drywall	Netwell	0.07	0.09	0.08	0.05	0.03	0.06	0.09
Overall Absorption Factor (Furnished Room)		0.8	0.56	0.54	0.59	0.93	1.18	0.87

Noise Reduction

	125	250	500	1000	2000	4000	
Noise Reduction from Absorption based upon Floor Area	-23.9	-23.9	-23.9	-23.9	-23.9	-23.9	
Noise Level Increase for Defects and Exposed Surface Area	17.0	17.0	17.0	17.0	17.0	17.0	
Overall Reduction from Transmission Loss + Room Absorption - Surface Exposure							32.1
Building Façade Noise Level (dBA Ldn)							70.0

Resultant Interior Noise Level (dBA Ldn)	38
Resultant Interior Noise Level (dBA Lmax)	53

INTERIOR NOISE CALCULATIONS

Project Name:	Crossings at Watsonville	Ldn Consulting, Inc.
Building	All	
Floor Level	All	Date: 10/21/20
Arch Plan or Unit(s):	2	
Room Type:	Bedroom	Project # 20-71

Exterior Noise Levels

	dBA Ldn	Frequency (Hz.)					
		125	250	500	1000	2000	4000
Exterior Noise Level (Traffic Spectrum)	70.0	56.0	60.7	63.5	65.8	62.7	57.0
Correction for Angle and Façade	3.0	59.0	63.7	66.5	68.8	65.7	60.0
Adjusted Building Façade Levels	73.0	59.0	63.7	66.5	68.8	65.7	60.0

Transmission Loss (TL)

Exterior Assembly	Source	Area	STC	Transmission Loss (dB)					
				Frequency (Hz.)					
				125	250	500	1000	2000	4000
Siding	Hardiplank	72	46	27	42	44	46	49	54
Windows	Starline	25	35	25	23	32	39	39	37
Glass Doors	Starline	0	35	24	23	34	37	40	39

Room Absorption (RA)

Interior Characteristics	Source	NRC	Absorption Coefficients					
			Frequency (Hz.)					
			125	250	500	1000	2000	4000
Carpet	Army TM 5-805-4	0.28	0.15	0.17	0.12	0.32	0.52	0.30
Furnishings	Army TM 5-805-4	0.45	0.32	0.29	0.42	0.58	0.60	0.48
Drywall	Netwell	0.07	0.09	0.08	0.05	0.03	0.06	0.09
Overall Absorption Factor (Furnished Room)		0.8	0.56	0.54	0.59	0.93	1.18	0.87

Noise Reduction

	125	250	500	1000	2000	4000	
Noise Reduction from Absorption based upon Floor Area	-21.0	-21.0	-21.0	-21.0	-21.0	-21.0	
Noise Level Increase for Defects and Exposed Surface Area	15.1	15.1	15.1	15.1	15.1	15.1	
Overall Reduction from Transmission Loss + Room Absorption - Surface Exposure							35.1
Building Façade Noise Level (dBA Ldn)							70.0

Resultant Interior Noise Level (dBA Ldn)	35
Resultant Interior Noise Level (dBA Lmax)	50

INTERIOR NOISE CALCULATIONS

Project Name:	Crossings at Watsonville	Ldn Consulting, Inc.
Building	All	
Floor Level	All	Date: 10/21/20
Arch Plan or Unit(s):	3	
Room Type:	Living/Dining	Project # 20-71

Exterior Noise Levels

	dBA Ldn	Frequency (Hz.)					
		125	250	500	1000	2000	4000
Exterior Noise Level (Traffic Spectrum)	70.0	56.0	60.7	63.5	65.8	62.7	57.0
Correction for Angle and Façade	3.0	59.0	63.7	66.5	68.8	65.7	60.0
Adjusted Building Façade Levels	73.0	62.0	66.7	69.5	71.8	68.7	63.0

Transmission Loss (TL)

Exterior Assembly	Source	Area	STC	Transmission Loss (dB)					
				Frequency (Hz.)					
				125	250	500	1000	2000	4000
Siding	Hardiplank	153	46	27	42	44	46	49	54
Windows	Starline	25	35	25	23	32	39	39	37
Glass Doors	Starline	24	35	24	23	34	37	40	39

Room Absorption (RA)

Interior Characteristics	Source	NRC	Absorption Coefficients					
			Frequency (Hz.)					
			125	250	500	1000	2000	4000
Carpet	Army TM 5-805-4	0.28	0.15	0.17	0.12	0.32	0.52	0.30
Furnishings	Army TM 5-805-4	0.45	0.32	0.29	0.42	0.58	0.60	0.48
Drywall	Netwell	0.07	0.09	0.08	0.05	0.03	0.06	0.09
Overall Absorption Factor (Furnished Room)		0.8	0.56	0.54	0.59	0.93	1.18	0.87

Noise Reduction

	125	250	500	1000	2000	4000	
Noise Reduction from Absorption based upon Floor Area	-24.8	-24.8	-24.8	-24.8	-24.8	-24.8	
Noise Level Increase for Defects and Exposed Surface Area	17.0	17.0	17.0	17.0	17.0	17.0	
Overall Reduction from Transmission Loss + Room Absorption - Surface Exposure							33.0
Building Façade Noise Level (dBA Ldn)							70.0

Resultant Interior Noise Level (dBA Ldn)	37
Resultant Interior Noise Level (dBA Lmax)	52

INTERIOR NOISE CALCULATIONS

Project Name:	Crossings at Watsonville	Ldn Consulting, Inc.
Building	All	
Floor Level	All	Date: 10/21/20
Arch Plan or Unit(s):	3	
Room Type:	Bedroom	Project # 20-71

Exterior Noise Levels

	dBA Ldn	Frequency (Hz.)					
		125	250	500	1000	2000	4000
Exterior Noise Level (Traffic Spectrum)	70.0	56.0	60.7	63.5	65.8	62.7	57.0
Correction for Angle and Façade	3.0	59.0	63.7	66.5	68.8	65.7	60.0
Adjusted Building Façade Levels	73.0	59.0	63.7	66.5	68.8	65.7	60.0

Transmission Loss (TL)

Exterior Assembly	Source	Area	STC	Transmission Loss (dB)					
				Frequency (Hz.)					
				125	250	500	1000	2000	4000
Siding	Hardiplank	180	46	27	42	44	46	49	54
Windows	Starline	25	35	25	23	32	39	39	37
Glass Doors	Starline	0	35	24	23	34	37	40	39

Room Absorption (RA)

Interior Characteristics	Source	NRC	Absorption Coefficients					
			Frequency (Hz.)					
			125	250	500	1000	2000	4000
Carpet	Army TM 5-805-4	0.28	0.15	0.17	0.12	0.32	0.52	0.30
Furnishings	Army TM 5-805-4	0.45	0.32	0.29	0.42	0.58	0.60	0.48
Drywall	Netwell	0.07	0.09	0.08	0.05	0.03	0.06	0.09
Overall Absorption Factor (Furnished Room)		0.8	0.56	0.54	0.59	0.93	1.18	0.87

Noise Reduction

	125	250	500	1000	2000	4000	
Noise Reduction from Absorption based upon Floor Area	-20.3	-20.3	-20.3	-20.3	-20.3	-20.3	
Noise Level Increase for Defects and Exposed Surface Area	15.6	15.6	15.6	15.6	15.6	15.6	
Overall Reduction from Transmission Loss + Room Absorption - Surface Exposure							33.1
Building Façade Noise Level (dBA Ldn)							70.0

Resultant Interior Noise Level (dBA Ldn)	37
Resultant Interior Noise Level (dBA Lmax)	52

Appendix L
Vehicle Miles Traveled Assessment



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: April 15, 2021
To: Nick Pappani, Raney Planning & Management, Inc.
From: Robert Del Rio, T.E., Luis Descanzo
Subject: VMT Assessment for the Proposed Royal Oak Village Residential Development in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a vehicle-miles traveled (VMT) assessment for the proposed affordable housing apartment development project located at 15440 Monterey Road in Morgan Hill, California (APN: 779-04-075) (see Figure 1). The project as proposed consists of the construction of 73 apartment units on the site that is currently occupied by vacated warehouse buildings and storage yard (see Figure 2 for site plan). Access to the project site would be provided via one full-access driveway at the Calle Sueno/Watsonville Road intersection. The purpose of this memorandum is to provide an assessment of the project's effect on VMT. The VMT assessment methodology and results are discussed below.

VMT Evaluation and Methodology

Pursuant to Senate Bill (SB) 743, the California Environmental Quality Act (CEQA) 2019 Update Guidelines Section 15064.3, subdivision (b) states that VMT will be the metric in analyzing transportation impacts for land use projects for CEQA purposes. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips with one end within the project. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit serve in the project vicinity.

The *Technical Advisory on Evaluating Transportation Impacts in CEQA* published by the Governor's Office of Planning and Research (OPR) in December 2018 provides recommendations regarding VMT evaluation methodology, significance thresholds, and screening thresholds for land use projects. The OPR screening thresholds recommendations are intended to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed VMT evaluation. The OPR screening thresholds recommendations are based on project size, maps, transit availability, and provision of affordable housing. The OPR recommendations include the screening thresholds criteria listed below.

- OPR recommends that office or residential projects not exceeding a level of 15 percent below existing VMT per capita may indicate a less-than-significant impact on VMT.
- OPR recommends that projects (including office, residential, retail, and mixed-use developments) proposed within ½ mile of an existing major transit stop or within ¼ mile of an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact on VMT.
- OPR recommends that 100 percent affordable residential development in infill locations be presumed to have a less-than-significant impact on VMT.
- OPR recommends that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact on VMT.

The City of Morgan Hill, at the time of this report, is undertaking a process of updating its General Plan policies to incorporate VMT methodologies and significance thresholds to be consistent with SB 743 but has not released draft thresholds. In the absence of an adopted, or even draft, City policy with numeric thresholds, this assessment relies on OPR guidelines in analyzing the project's effects on VMT.

The proposed project would consist of 73 affordable housing apartment units. According to the OPR recommendations, since the proposed project would be a 100 percent affordable residential development it may be presumed to have a less-than-significant impact on VMT. The OPR guidelines state that adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. In addition, the OPR guidelines state that in areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market-rate housing.

Furthermore, the pedestrian generators near the project vicinity would help support a reduced project VMT. Pedestrian generators in the project vicinity (within ¼ to 1-mile radius) include transit bus stops along Monterey Road. These transit services would provide access to commercial uses (restaurant, retail, etc.) along Monterey Road and Downtown Morgan Hill, approximately 1.5 miles north of the project site. There are also several existing employment uses (light industrial and manufacturing) within walking distance of the site in the vicinity of Vineyard Boulevard and Tennant Avenue. As a result of the project proposing 100 percent affordable units and due to pedestrian generators located less than a 1-mile radius, it can be presumed that the project would have a less-than-significant impact on VMT.

Figure 1
Site Location

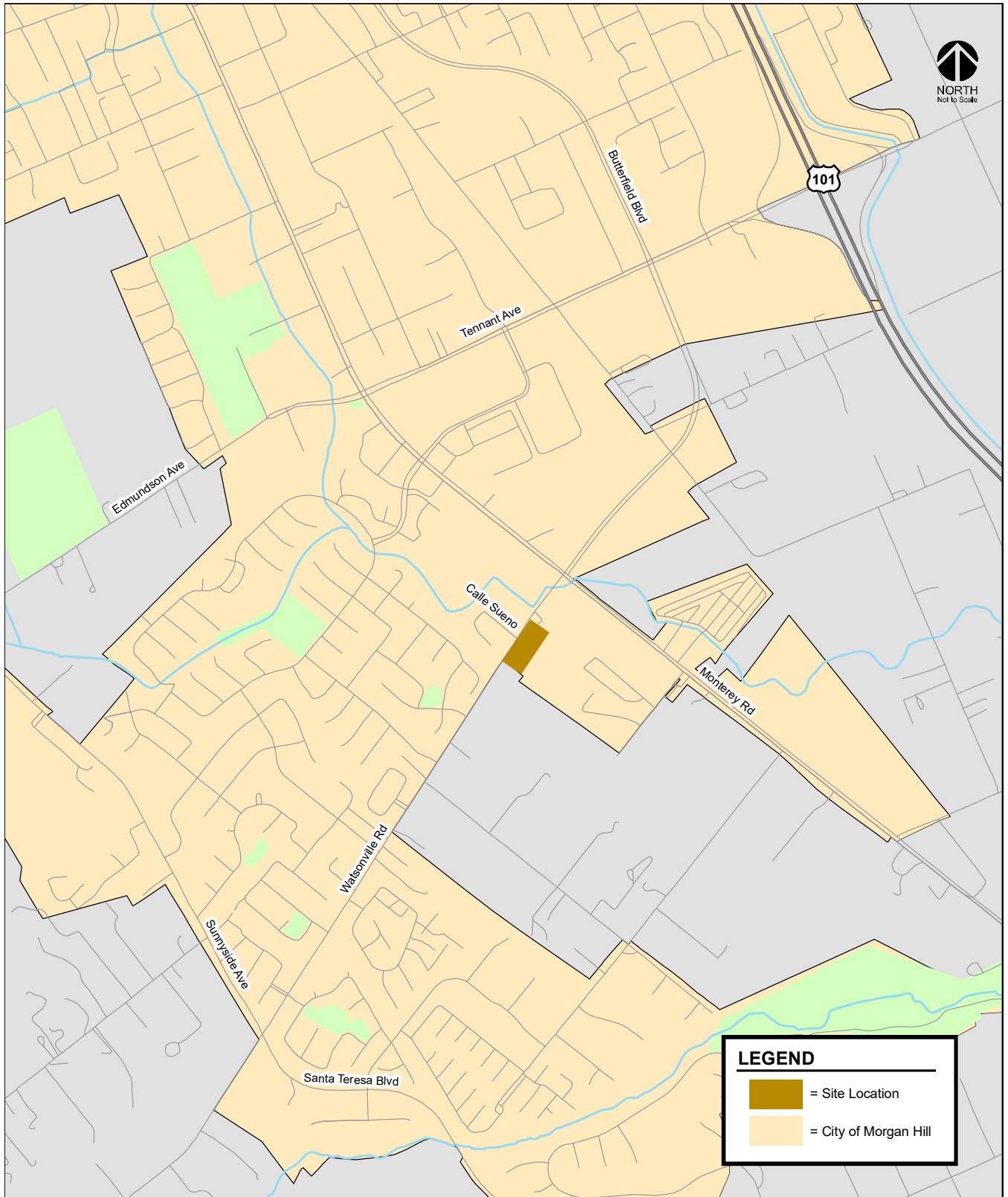


Figure 2
Site Plan

