

**PUBLIC NOTICE
INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
CITY OF SAN JOSÉ, CALIFORNIA**

File No. and Project Name/Description:

File No. PDC12-010. A Planned Development Rezoning to allow up to 20 detached townhome units on approximately 3.4 acres located at SE corner of Mabury Road and Educational Park Drive at 12710 Mabury Road (Council District 4).

The City has performed environmental review on the project. Environmental review examines the nature and extent of any adverse effects on the environment that could occur if a project is approved and implemented. Based on the review, the City has prepared a draft Mitigated Negative Declaration (MND) for this project. An MND is a statement by the City that the project will not have a significant effect on the environment if protective measures (mitigation measures) are included in the project.

The public is welcome to review and comment on the draft Mitigated Negative Declaration.

The public comment period for this draft Mitigated Negative Declaration begins on **October 31, 2012**, and ends on **November 30, 2012**.

The draft Mitigated Negative Declaration, initial study, and reference documents are available online at: <http://www.sanjoseca.gov/planning/eir/MND.asp>.

The documents are also available for review from 9:00 a.m. to 5:00 p.m. Monday through Friday at the City of San Jose Department of Planning, Building & Code Enforcement, located at City Hall, 200 East Santa Clara Street; and at the Dr. Martin Luther King, Jr. Main Library, located at 150 E. San Fernando Street.

For additional information, please contact John Davidson at (408) 535-7895, or by e-mail at john.davidson@sanjoseca.gov.

Joseph Horwedel, Director
Planning, Building and Code Enforcement



Deputy

Circulated on: October 31, 2012

MITIGATED NEGATIVE DECLARATION

The Director of Planning, Building and Code Enforcement has reviewed the proposed project described below to determine whether it could have a significant effect on the environment as a result of project completion. "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 significance.

NAME OF PROJECT: Sabatino Townhomes

PROJECT FILE NUMBER: PDC12-010

PROJECT DESCRIPTION: A Planned Development Rezoning, Planned Development Permit, Tentative Map and subsequent minor land use permits to allow up to 20 detached townhome units on approximately 3.4 acres.

PROJECT LOCATION & ASSESSORS PARCEL NO.: The project site is located at the southeast side of the intersection of Mabury Road and Educational Park Drive (12710 & 12750 Mabury Road). APN's 254-05-046, -048, and -049.

COUNCIL DISTRICT: 4

APPLICANT CONTACT INFORMATION: Murphy A. Sabatino, Jr., P.O. Box 90006, San Jose, CA 95190

FINDING: The Director of Planning, Building & Code Enforcement finds the project described above will not have a significant effect on the environment in that the attached initial study identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this draft Mitigated Negative Declaration, has made or agrees to make project revisions that clearly mitigate the effects to a less than significant level.

MITIGATION MEASURES INCLUDED IN THE PROJECT TO REDUCE POTENTIALLY SIGNIFICANT EFFECTS TO A LESS THAN SIGNIFICANT LEVEL

- I. AESTHETICS.** The project will not have a significant impact on aesthetics or visual resources, therefore no mitigation is required.
- II. AGRICULTURE AND FOREST RESOURCES.** The project will not have a significant impact on agriculture or forest resources, therefore no mitigation is required.
- III. AIR QUALITY.** The project will not have a significant air quality impact, therefore no mitigation is required.

IV. BIOLOGICAL RESOURCES.

Mitigation BIO-1: To offset the approximately 7,790 square feet of development within 100 feet of the riparian corridor, the applicant shall enhance the remaining portion of the riparian corridor by providing native plantings, maintenance and biological monitoring as described below (Mitigation Measures BIO-1.1, BIO-1.2, and BIO-1.3). Specific measures shall be included in a Habitat Mitigation and Monitoring Plan prepared by a qualified biologist and approved by the City of San Jose. In general, this plan would define the project site, the responsible parties, the methods and materials to be used in the enhancement, maintenance efforts to be used, and the goals and success criteria to be achieved by the end of a 5-year monitoring period.

Mitigation BIO-1.1 Enhancement of Riparian Area with Native Plantings Prior to Occupancy: To ensure that the setback area serves as habitat for species that utilize Upper Penitencia Creek, the riparian setback area shall be cleared of structures and debris to the extent practicable and native vegetation installed prior to the issuance of the first Certificate of Occupancy. Native plant species used should be sourced from within the greater Coyote Creek Watershed to the maximum extent practicable to ensure genetic similarity. Species to be used should be selected by a qualified biologist and should reflect species that are suited to the setback area's conditions. Species to be used are likely to include native trees such as California buckeye (*Aesculus californica*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue elderberry (*Sambucus laevigata*), and native shrub species such as California sagebrush (*Artemisia californica*), mugwort (*Artemisia douglasiana*), mule-fat (*Baccharis salicifolia*), toyon (*Heteromeles arbutifolia*), California rose (*Rosa californica*), and California snowberry (*Symphoricarpos albus*). Temporarily disturbed areas and areas where removal of extant debris has exposed bare soils should be treated with broadcasted seed of native grasses and forbs that are suited to the area.

At a minimum, the following number of plants shall be planted within the riparian enhancement area:

- Twenty-Seven (27) trees of 10 to 15-gallon size of species appropriate for a riparian area, such as red willow, toyon, valley oak, etc.
- Forty (40) shrubs of 1 to 5-gallon size. Small trees such as elderberry and toyon may be substituted for up to 10 shrubs as desired.

Plants should be installed at the appropriate times of the year (e.g. fall and early winter) and the planting effort (preparation and planting) should be facilitated by a qualified landscape professional to ensure they are installed correctly.

Mitigation BIO-1.2 Maintenance of the Riparian Area: Regular maintenance of the riparian enhancement area (Mitigation BIO-1.1) will be needed to ensure functional irrigation, to remove trash that may have accumulated within the riparian setback area, and to keep weeds from impacting native plantings. Maintenance should be conducted by a qualified firm with a background in native plant landscaping as species familiarity is important. At a minimum, maintenance should be conducted 3-4 times per year with attention focused during the spring and summer months. Irrigation may be used as needed during the initial phases of the installation; however, it should be designed to be consistent with the Riparian Corridor Policy Study and to develop self-sustaining vegetation (e.g. long slow watering periods spread out over time, supplemental watering during periods of drought, etc.). Irrigation should

not be used once plants are established. Weed-free, organic mulches may also be used around plantings.

Mitigation BIO-1.3 Monitoring of the Riparian Enhancement Area for 5 Years: Monitoring of the enhancement area shall be conducted by a qualified biologist for a minimum of 5 years to ensure that the goal of native habitat establishment is met. Monitoring should be conducted during the summer (June to August). Specific success criteria should be defined in the Habitat Mitigation and Monitoring Plan. At a minimum, the success criteria should include, but may not be limited to the following:

- **Survival:** Trees and shrubs should achieve survival at 70% by the end of the 5-year monitoring.
- **Health and Vigor:** Trees and shrubs should show a mean health and vigor of 60% (or 6 on a 10 point scale). This is to ensure that surviving trees are likely to persist upon completion of the monitoring period.
- **Litter removal:** Due to the location of the site within an urban area, litter may be a concern. All litter should be removed annually prior to annual monitoring.

A brief report, prepared by a qualified biologist, shall be submitted to the Environmental Senior Planner of the Department of Planning, Building, and Code Enforcement once a year for each of the five years after issuance of the first Certificate of Occupancy detailing the status of the new plantings and maintenance of the riparian enhancement area, as well as measures needed to improve success (if any). The monitoring status report shall be due one year after the issuance of the first Certificate of Occupancy, and each subsequent year on the same date for a period of five years.

- V. CULTURAL RESOURCES.** The project will not have a significant impact on cultural resources, therefore no mitigation is required.
- VI. GEOLOGY AND SOILS.** The project will not have a significant impact due to geology and soils, therefore no mitigation is required.
- VII. GREENHOUSE GAS EMISSIONS.** The project will not have a significant impact due to greenhouse gas emissions, therefore no mitigation is required.
- VIII. HAZARDS AND HAZARDOUS MATERIALS.** The project will not have a significant hazards and hazardous materials impact, therefore no mitigation is required.
- IX. HYDROLOGY AND WATER QUALITY.** The project will not have a significant hydrology and water quality impact, therefore no mitigation is required.
- X. LAND USE AND PLANNING.** The project will not have a significant land use impact, therefore no mitigation is required.
- XI. MINERAL RESOURCES.** The project will not have a significant impact on mineral resources, therefore no mitigation is required.

- XII. NOISE.** The project will not have a significant noise impact, therefore no mitigation is required.
- XIII. POPULATION AND HOUSING.** The project will not have a significant population and housing impact, therefore no mitigation is required.
- XIV. PUBLIC SERVICES.** The project will not have a significant impact on public services, therefore no mitigation is required.
- XV. RECREATION.** The project will not have a significant impact on recreation, therefore no mitigation is required.
- XVI. TRANSPORTATION / TRAFFIC.** The project will not have a significant traffic impact, therefore no mitigation is required.
- XVII. UTILITIES AND SERVICE SYSTEMS.** The project will not have a significant impact on utilities and service systems, therefore no mitigation is required.
- XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.** The project will not substantially reduce the habitat of a fish or wildlife species, be cumulatively considerable, or have a substantial adverse effect on human beings, therefore no mitigation is required.

PUBLIC REVIEW PERIOD

Before 5:00 p.m. on **November 30, 2012**, any person may:

1. Review the Draft Mitigated Negative Declaration (MND) as an informational document only;
or
2. Submit written comments regarding the information, analysis, and mitigation measures in the Draft MND. Before the MND is adopted, Planning staff will prepare written responses to any comments, and revise the Draft MND, if necessary, to reflect any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Joseph Horwedel, Director
Planning, Building and Code Enforcement

Circulation period, from October 31, 2012 to November 30, 2012


Deputy

INITIAL STUDY

PROJECT FILE NO.: PDC12-010

PROJECT DESCRIPTION: A Planned Development Rezoning and subsequent land use permits including a Planned Development Permit and Tentative Map to allow up to 20 detached townhome units on approximately 3.4 acres. Exhibits including a Vicinity Map, Aerial Photo, Site Photos, Assessor’s Parcel Map, Zoning Map, General Plan Map, and Proposed Site Plan are attached to this Initial Study.

PROJECT LOCATION AND ASSESSOR’S PARCEL NUMBER(s): The project site is located at the southeast corner of Mabury Road and Educational Park Drive (12710 & 12750 Mabury Road). APN 254-05-046, 048, 049

EXISTING GENERAL PLAN DESIGNATION: Mixed Use Neighborhood (Alum Rock Planning Area); Open Space, Parklands and Habitat

EXISTING ZONING: A Agriculture District

EXISTING LAND USE: Rural Residential – two single-family detached residences and associated accessory structures.

SURROUNDING LAND USES / GENERAL PLAN / ZONING:

North: Park chain / Open Space, Parklands and Habitat / R-1-5(PD) South: High school / Public/Quasi-Public, Residential Neighborhood / A East: High school / Public/Quasi-Public / A, R-M West: Single family residential / Residential Neighborhood / R-1-5(PD)

PROJECT APPLICANT’S NAME AND ADDRESS: Murphy Sabatino & Michael Moul, 12710 & 12750 Mabury Road, San Jose, CA 95133

LEAD AGENCY CONTACT INFORMATION: John Davidson, City of San Jose Dept. of Planning, Building & Code Enforcement, 200 W. Santa Clara Street, 3rd Flr. (408) 535-7895.

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED:

DETERMINATION

On the basis of this initial study:

<input type="checkbox"/>	I find the proposed project could not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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 the project proponent has agreed to revise the project to avoid any significant effect. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find the proposed project could have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT(EIR) is required.
<input type="checkbox"/>	I find the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated impact” on the environment, but at least one effect has been (1) adequately analyzed in a previous document pursuant to applicable legal standards, and (2) addressed by mitigation measures based

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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	on the previous analysis as described in the attached sheets/initial study. An EIR is required that analyzes only the effects that were not adequately addressed in a previous document.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, no further environmental analysis is required because all potentially significant effects have been (1) adequately analyzed in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are included in the project, and further analysis is not required.

10/30/12
Date


Signature

Name of Preparer: Mike Campbell, AICP

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I. AESTHETICS - Would the project:

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2
b) Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2
e) Increase the amount of shading on public open space (e.g. parks, plazas, and/or school yards) ?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2

FINDINGS:

The proposed project would alter the existing visual character of the site and its surroundings through various means including the demolition of the existing houses and structures on the site and the construction of new houses, driveways and parking areas. However, the proposed project would not significantly degrade the existing visual character of the site in that the project would be required to undergo architectural and site design review by Planning Staff to ensure compatibility with the surrounding neighborhood.

Exterior building and parking lot lighting associated with the new development would likely create a minor increase in the amount of nighttime lighting than the existing land use on the site, however it would not adversely affect views in the area. The project would be required to conform to the City’s *Residential Design Guidelines* and to the standards of the City’s Outdoor Lighting Policy. Therefore, less than significant impacts would occur as a result of the project.

STANDARD PROJECT CONDITIONS: The project shall implement the following standard conditions:

- Design of the project shall conform to the City’s *Residential Design Guidelines*;
- Lighting on the site shall conform to the City’s Outdoor Lighting Policy (4-3).

MITIGATION MEASURES: None required.

II. AGRICULTURE AND FOREST RESOURCES - Would the project:

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"/>	X	1,3,4
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,3,4
c) Conflict with existing zoning for, or cause rezoning of, forest land [as defined in PRC Section 12220(g)], timberland, (as defined by PRC Section 4526), or timberland zoned Timberland Production [as defined by GC Section 51104(g)]?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,3,4
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"/>	X	1,3,4
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"/>	X	1,3,4

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FINDINGS:

The project site is not located in an area identified as prime farmland, nor is the site being used for or zoned for agricultural use. Therefore, the proposed project will not result in a significant impact on the City’s or Region’s agricultural resources.

The City of San Jose does not contain any forest lands or timberlands suitable for timber production nor are there any areas of the zoned Timberland Production. The project site is outside of any timberland areas, and will therefore not result in a significant impact from the loss forest lands or timberlands.

MITIGATION MEASURES: None Required.

III. AIR QUALITY - Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,14
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,14
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,14
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,14
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,14

Regulatory Overview

The Bay Area Air Quality Management District (BAAQMD) is the local agency responsible for assuring that national and state air quality standards are attained and maintained in the Bay Area. BAAQMD has prepared the *California Environmental Quality Act Air Quality Guidelines* to assist lead agencies in evaluating air quality impacts of plans and individual development projects within the San Francisco Bay Area Air Basin (SFBAAB). The Guidelines provide BAAQMD-recommended procedures for evaluating potential air quality impacts during the environmental review process, consistent with CEQA requirements. The revised Guidelines were adopted in May 2011.

The SFBAAB is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards, due primarily to the region’s development history. Past, present and future development projects contribute to the region’s air quality impacts on a cumulative basis. A project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts, however, if a project’s contribution to the cumulative impact is considerable, then the project’s impact would be considered significant.

Toxic Air Contaminants and Fine Particulate Matter

The Guidelines establish thresholds of significance for local community risks and hazards associated with Toxic Air Contaminants (TACs) and fine particulate matter (PM_{2.5}). TACs are airborne pollutants that may pose a present or potential hazard to human health. They can be emitted directly from a wide range of sources, from industrial plants to motor vehicles, or can be formed in the atmosphere through reactions among different pollutants. The health effects associated with TACs are quite diverse and can include long-term or short-term acute effects. They are primarily

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regulated through state and local risk management programs designed to eliminate, avoid or minimize the risk of adverse health effects from exposures to TACs.

PM_{2.5} is a complex mixture of substances including elements, compounds, diesel exhaust and wood smoke. It is considered perhaps the most harmful air pollutant to human health, and can either be emitted directly, or can form in the atmosphere through reaction among different pollutants. Common stationary sources of TACs and PM_{2.5} emissions include gas stations, dry cleaners and diesel backup generators. Common mobile sources include on-road motor vehicles and off-road sources such as construction equipment, ships and trains. The City of San Jose is among several Bay Area cities identified in the Guidelines as having a relatively high exposure to TACs and PM_{2.5} compared to other Bay Area communities. BAAQMD strongly recommends that impacted communities such as San Jose develop and adopt a Community Risk Reduction Plan to provide comprehensive, community-wide strategies for reducing the overall exposure to TAC and PM_{2.5} emissions and concentrations from new and existing sources. Among the thresholds of significance listed for TACs and PM_{2.5} are compliance with a qualified Community Risk Reduction Plan. The City of San Jose is currently preparing a Community Risk Reduction Plan, which would require projects considered to be sensitive receptors located within 1,000 feet of sources of diesel PM (e.g. freeways, major roadways, rail lines and rail yards) to provide onsite mitigation measures to reduce the risk posed by TACs and PM_{2.5}.

Criteria Air Pollutants

The Guidelines establish thresholds of significance for operational-related criteria air pollutant and precursor emissions in maximum annual emissions (tons per year), and average daily emissions (lbs. per day). Criteria air pollutants and precursors consist of reactive organic gases (ROG), oxides of nitrogen (NO_x), and particulate matter (PM₁₀ and PM_{2.5}). The thresholds represent levels at which a project's individual emissions would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If daily average or annual emissions of operational-related criteria air pollutants or precursors would exceed the applicable thresholds, the project would result in a cumulatively significant impact. Typical sources of criteria air pollutants used to quantify emissions from land use projects include area sources (e.g. natural gas fuel combustion for space and water heating, wood stoves and fireplace combustion, landscape maintenance equipment, consumer products, and architectural coating), and operational-related emissions (mobile sources). URBEMIS, the modeling tool commonly used for calculation air quality emissions, is not equipped to calculate air quality impacts from stationary sources.

Carbon Monoxide

Emissions and ambient concentrations of carbon monoxide (CO) have decreased dramatically in the SFBAAB since 1975. Although the SFBAAB is currently an attainment area for CO, elevated localized concentrations still warrant consideration during the environmental review process. Occurrences of localized CO concentrations are typically associated with heavy traffic congestion, which most frequently occurs at signalized intersections of high-volume roadways. The Guidelines provide thresholds of significance for local CO emissions. These represent limits to which public health is protected. If a project would cause local CO emissions that exceed the limits, the project would result in a significant impact to air quality. The Guidelines state that a proposed project would result in less than significant impacts to localized carbon monoxide concentrations if the following screening criteria are met:

1. 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.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. 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, bridge underpass, natural or urban street canyon, below grade roadway).

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Construction

Temporary Air Quality impacts may result from demolition of the existing structure(s), excavation of soil, and other construction activities on the subject site. Implementation of the practices listed below will reduce the temporary construction impacts to a less than significant level.

STANDARD CONSTRUCTION PRACTICES: The following construction practices shall be implemented during all phases of construction for the proposed project to prevent visible dust emissions from leaving the site.

- Water all active construction areas at least twice daily and more often during windy periods to prevent visible dust from leaving the site; active areas adjacent to windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard;
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shuttling equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2845 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturers specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

FINDINGS:

The City of San Jose uses the thresholds of significance established by BAAQMD to assess air quality impacts. The screening criteria contained in BAAQMD’s recently adopted CEQA Guidelines provide a conservative indication of whether a project could result in potentially significant air quality impacts. If the screening criteria are met by a proposed project, then the project would not result in the generation of pollutants that exceed the thresholds of significance, and would not require a detailed air quality assessment of the project’s air pollutant emissions. For townhomes, the screening criteria for Criteria Air Pollutants and Precursors is 451 dwelling units, and for single family it is 325 dwelling units. The proposed 20-unit project falls well below these screening criteria, therefore the project will not result in a significant impact.

IV. BIOLOGICAL RESOURCES - Would the project:

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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	1,10,26, 27
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b) Have a substantial adverse effect on any aquatic, wetland, or riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,6,10,26 27
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act including, but not limited to, marsh, vernal pool, coastal, etc., through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,6,26,27
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,10,26, 27
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,11,26 27
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2,26,27

FINDINGS:

A biotics evaluation was prepared for the project site by Live Oak Associates, Inc. The report identified and analyzed sensitive and significant biotic resources and habitats, regional fish and wildlife movement corridors, and existing local, state and federal policies, ordinances and laws governing land use and natural resource protection. The following discussion is based on the findings and recommendations of the report, a copy of which is included in the Appendix.

Biotic Habitats

The site consists of upland ruderal or developed habitat with Upper Penitencia Creek running along its eastern and southern boundary. Within the ruderal habitat area, there are two existing residences on the site, with associated swimming pool, landscaping and gardens, and accessory structures (greenhouses). The vegetation consists of maintained gardening beds, orchard trees and various landscape plants and fruit trees, and scatted non-native herbaceous species. Animals expected to occur in this area include common species of reptiles, birds and mammals that are adapted to urban living. Among the species observed during Live Oak’s surveys were western fence lizard, European starling, Anna’s hummingbird, house finch, lesser goldfinch, California towhee, black phoebe, American crow, mourning dove, and red-shouldered hawk. In addition, burrows of the Botta’s pocket gopher were observed, and a common rat was heard. Other small mammals that could potentially occur were identified as opossum, striped skunk and raccoon.

The Upper Penitencia Creek habitat portion of the site is described as slightly degraded urban cottonwood-willow riparian woodland, having a mixed tree overstory common to the valley floor of Santa Clara County. The on-site reach of the creek is a manipulated channel with no deep pools, with a significant portion of the creek banks lined with cement. The tree species present include Fremont cottonwood, coast live oak, red willow, and several naturalized Northern California black walnut specimens (likely to be the progeny of escaped orchard trees that have historically occurred adjacent to the riparian corridor). The understory vegetation consists mainly of ruderal, non-native species of grasses, forbs and shrubs. Bird species observed during the surveys included mallard, bushtit, Anna’s hummingbird, northern mockingbird, western scrub jay, Bullock’s oriole, lesser goldfinch, belted kingfisher and red-shouldered hawk. Other species expected to occur within this riparian corridor habitat include fish such as steelhead trout, and several amphibian and reptile species such as arboreal salamander, California slender salamander, Pacific tree frog,

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ensatina, western fence lizard, southern alligator lizard, and western toad. Mammal species such as eastern fox squirrel, California vole, western harvest mouse, ornate shrew, California mouse, striped skunk, raccoon, and brush rabbit would also be expected to occur. Burrows of Botta’s pocket gopher and California ground squirrel were observed.

Although a number of reptile, bird and mammal species may use the site, and despite the fact that Upper Penitencia Creek is considered a movement corridor, the report states that the upland portion of the site lacks the intrinsic factors necessary or desirable for the regular and predictable movement of wildlife species through it in order to meet ecological requirements. Because the proposed development will occur outside of the actual riparian corridor, the report concluded that the project will have little effect on home range or dispersal movements of native wildlife moving through the site.

Special Status Species

The report provides a list of 20 special status animal and 12 special status plant species that occur in the vicinity of the site. Special status species are those that are either state and/or federally listed as rare, threatened or endangered, or candidate species for such designation, or considered “species of special concern” by the California Department of Fish & Game. Of the 20 animal species, a total of four are described in the report as species that may occur on the site regularly. Two of them, steelhead trout and western pond turtle, would be restricted to the Upper Penitencia Creek riparian corridor. Because development of the proposed project would not physically impact the creek corridor, it was determined that there would be no significant impacts to either of these species. The remaining two species, white-tailed kite and loggerhead shrike, may breed within the trees and larger shrubs of the site, particularly within the Upper Penitencia Creek corridor. Development of the project may result in mortality of individuals of these two species, which are protected by state and federal law, as well as more common migratory bird species likewise protected by the California Fish and Game Code. Although the loss of habitat for these two species would not be considered a significant impact, impacts to individuals would be considered significant. The trees of the site provide suitable nesting habitat for the white-tailed kite, loggerhead shrike, and common migratory bird species. Project construction occurring during nesting season (February 1 through August 31) could induce the adults to abandon the nests when juveniles are present, leading to their starvation. This would constitute a significant impact. The report therefore recommended the following mitigation measures, which, when fully implemented, would reduce potential impacts to a less than significant level:

- Should project construction be scheduled to commence between February 1 and August 31, a pre-construction survey will be conducted by a qualified biologist for nesting birds within the onsite trees as well as all trees within 250 feet of the site. The survey will occur within 30 days of the onset of construction.
- If pre-construction surveys undertaken during the nesting season locate active nests within or near construction zones, these nests, and an appropriate buffer around them (as determined by a qualified biologist), will remain off-limits to construction until the nesting season is over. Suitable setbacks from occupied nests will be established by a qualified biologist and maintained until the conclusion of the nesting season.

The report concluded that although the upland portion of the project site provides some habitat for regional wildlife populations, it is not of unique or significant value to those populations, and that development of the site will not result in fish or wildlife populations dropping below self-sustaining levels or threaten to eliminate an animal community. The project would therefore not constitute a significant adverse impact on wildlife resources.

Of the 12 special status plant species occurring in the vicinity, none were determined to occur on the site, due to the lack of suitable habitat.

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Riparian Corridor Policy

The City of San Jose’s Riparian Corridor Policy Study recommends that all buildings, other structures, impervious surfaces, outdoor activity areas and ornamental landscaped areas should be separated a minimum of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greater). There are exceptions allowed to the 100-foot minimum, however, based on such factors as proximity to the downtown area, infill projects, size of the project site, unusual geometric characteristics of the project site, and inclusion of other measures that could potentially provide better protection and enhancement of the riparian value, among others. Noting the Policy’s allowable exceptions to the 100-foot setback, the report identifies several exceptions that may be applicable to the project. These include the project’s location within approximately two miles of downtown San Jose, the highly irregular shape of the subject site and its disproportionately long riparian frontage, and the possibility that the project could include a restoration plan to improve and extend the riparian corridor by eradicating non-native understory species and planting local vegetation. The report says that a reduced setback would not significantly reduce or adversely impact the riparian corridor, that there is no evidence of streambank erosion or previous stabilization efforts that could be negatively affected by the proposed development, and that the granting of an exception would not be detrimental or injurious to adjacent and/or downstream properties. The report states that a reduced setback of 50 to 75 feet would not result in a detrimental biological impact to the creek, and that future site development could incrementally increase the value of this particular reach of riparian corridor over existing conditions by plantings of riparian trees and shrubs within the 50-75 foot setback area, by managing the riparian corridor by restricting human access, and by regular trash removal.

A subsequent letter was prepared by Live Oak Associates, Inc. following the development of a site plan for the project. A copy of the letter is included in the Appendix. The letter, dated October 11, 2012, concluded that the intrusions into the 100-foot and 75-foot setbacks proposed by the site plan are in accord with the findings and conclusions of their previous report, and with the Riparian Corridor Policy. The letter recommended the following enhancement of the riparian corridor setback area as mitigation for the modest impact to the corridor setback.

MITIGATION MEASURE: The following mitigation has been developed to offset the approximately 7,790 square feet of development within 100 feet of the riparian corridor. To comply with this mitigation, the applicant shall provide native plantings, maintenance and biological monitoring as generally described below. The details of the enhancement shall be included in a Habitat Mitigation and Monitoring Plan prepared by a qualified biologist and approved by the City of San Jose. In general, this plan would define the project site, the responsible parties, the methods and materials to be used in the enhancement, maintenance efforts to be used, and the goals and success criteria to be achieved by the end of a 5-year monitoring period.

Native Plantings.

To ensure that the setback area serves as habitat for species that utilize Upper Penitencia Creek, the riparian setback area should be cleared of structures and debris to the extent practicable and some native vegetation should be installed. Native plant species used should be sourced from within the greater Coyote Creek Watershed to the maximum extent practicable to ensure genetic similarity. Species to be used should be selected by a qualified biologist and should reflect species that are suited to the setback area’s conditions. Species to be used are likely to include native trees such as California buckeye (*Aesculus californica*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue elderberry (*Sambucus laevigata*), and native shrub species such as California sagebrush (*Artemisia californica*), mugwort (*Artemisia douglasiana*), mule-fat (*Baccharis salicifolia*), toyon (*Heteromeles arbutifolia*), California rose (*Rosa californica*), and California snowberry (*Symphoricarpos albus*). Temporarily disturbed areas and areas where removal of extant debris has exposed bare soils should be treated with broadcasted seed of native grasses and forbs that are suited to the area.

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At a minimum the following number of plants should be planted:

- 27 trees: 10 to 15-gallon size trees such as red willow, toyon, valley oak, etc.
- 40 shrubs: 1 to 5-gallon size shrubs should be planted. Small trees, such as elderberry and toyon, may be substituted for up to 10 shrubs as desired.

Plants should be installed at the appropriate times of the year (e.g. fall and early winter) and the planting effort (preparation and planting) should be facilitated by a qualified landscape professional to ensure they are installed correctly.

Maintenance.

Regular maintenance of the enhancement area will be needed to ensure that irrigation is functional, to remove trash that may have accumulated within the riparian setback area, and to keep weeds from impacting native plantings. Maintenance should be conducted by a qualified firm with a background in native plant landscaping as species familiarity is important. At a minimum, maintenance should be conducted 3-4 times per year with attention focused during the spring and summer months. Irrigation may be used as needed during the initial phases of the installation; however, it should be designed to be consistent with the Riparian Corridor Policy Study and to develop self-sustaining vegetation (e.g. long slow watering periods spread out over time, supplemental watering during periods of drought, etc.). Irrigation should not be used once plants are established. Weed-free, organic mulches may also be used around plantings.

Monitoring.

Monitoring of the enhancement area shall be conducted by a qualified biologist for a minimum of 5 years to ensure that the goal of native habitat establishment is met. Monitoring should be conducted during the summer (June to August). Specific success criteria should be defined in the Habitat Mitigation and Monitoring Plan. At a minimum, the success criteria should include, but may not be limited to the following:

- Survival: Trees and shrubs should achieve survival at 70% by the end of the 5-year monitoring.
- Health and Vigor: Trees and shrubs should show a mean health and vigor of 60% (or 6 on a 10 point scale). This is to ensure that surviving trees are likely to persist upon completion of the monitoring period.
- Litter removal: Due to the location of the site within an urban area, litter may be a concern. All litter should be removed annually prior to annual monitoring.

The above topics and details shall be defined in greater detail in a Habitat Mitigation and Monitoring Plan approved by the City of San Jose prior to the installation of the plantings.

Jurisdictional Waters

The California Regional Water Quality Control Board (RWQCB) has regulatory authority over wetlands and waterways under both the federal Clean Water Act (CWA) and the State of California’s Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the CWA, the Water Board has regulatory authority over actions in waters of the United States, through the issuance of water quality certifications (certifications). Under Section 401 of the CWA, which are issued in combination with permits issued by the Army Corps of Engineers (ACOE), under Section 404 of the CWA. When the Water Board issues Section 401 certifications, it simultaneously issues general Water Discharge Requirements for the project, under the Porter-Cologne Water Quality Control Act. Activities in areas that are outside of the jurisdiction of the ACOE (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high water mark) are regulated by the Water Board, under the authority of the Porter-Cologne Water Quality Control Act. Activities that lie outside of ACOE jurisdiction may require the issuance of either

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individual or general waste discharge requirements (WDRs) from the Water Board. Because the subject project will not disturb the Upper Penitencia Creek corridor, it will not adversely affect any federally-protected wetlands.

Tree Removal

The City of San José has established regulations for removal of landscape trees at least 56 inches in circumference measured two feet above grade. The proposed project will obtain a permit for the removal of ordinance-sized trees and provide for the replacement of removed trees in conformance with the City of San José Tree Ordinance. It should be noted that per City policy, plantings for impacts to riparian habitat do not count towards the mitigation for removal of trees outside of the riparian area.

A tree survey was conducted on the project site by Live Oak Associates, Inc. in April 2012. A total of 134 trees were surveyed, ranging from 6 inches to 664 inches in circumference (multi-trunk specimen). Of these, 53 are ordinance-sized. Construction of the proposed project would likely result in the removal of at least 80 trees from the site, which would include 27 ordinance sized trees. Approximately 13 of the trees to be removed are located within 100 feet of the riparian corridor.

The exact number of trees to be removed will be determined at the development permit stage. Removal of these trees would not be considered a significant impact. However, the project will be required to conform to the City’s tree preservation ordinance, and will provide replacement trees in conformance with City policy. Replacement trees will be over and above the regular landscaping to be provided on the site. A copy of the tree survey, including a map and table listing all of the trees surveyed is contained in the Live Oak Associates, Inc. biotic evaluation included in the Appendix. Trees to be replaced

STANDARD PERMIT CONDITIONS: All trees that are to be removed shall be replaced at the following ratios:

Diameter of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
18 inches or greater	5:1	4:1	3:1	24-inch box
12 - 18 inches	3:1	2:1	none	24-inch box
less than 12 inches	1:1	1:1	none	15-gallon container

x:x = tree replacement to tree loss ratio

Note: Trees greater than 18” diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.

The species and exact number of trees to be planted on the site will be determined at the development permit stage, in consultation with the City Arborist and the Department of Planning, Building, and Code Enforcement.

In the event the project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures will be implemented, to the satisfaction of the Director of Planning, Building and Code Enforcement, at the development permit stage:

- The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees.

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- An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of the Director of the Department of Planning, Building, and Code Enforcement. Contact Jaime Ruiz, PRNS Landscape Maintenance Manager, at 975-7214 or Jaime.Ruiz@sanjoseca.gov for specific park locations in need of trees.
- A donation of \$300 per mitigation tree to Our City Forest for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. Contact Rhonda Berry, Our City Forest, at (408) 998-7337 x106 to make a donation. A donation receipt for off-site tree planting shall be provided to the Planning Project Manager prior to issuance of a development permit.

Habitat Conservation Plan

To promote the recovery of endangered species while accommodating planned development, infrastructure and maintenance activities, the Local Partners, consisting of the City of San Jose, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, Santa Clara County and the cities of Gilroy and Morgan Hill, are preparing a joint Habitat Conservation Plan/Natural Community Conservation Plan (Habitat Plan). The Santa Clara Valley Habitat Plan (Plan) is being developed in association with the U.S. Fish & Wildlife Service (USFWS), California Department of Fish & Game (CDFG), and the National Marine Fisheries Service (NMFS) and in consultation with stakeholder groups and the general public to protect and enhance ecological diversity and function within more than 500,000 acres of southern Santa Clara County.

The Santa Clara Habitat Plan Planning Agreement outlines the Interim Project Process to ensure coordination of projects approved or initiated in the Planning Area before completion of the Habitat Plan to help achieve the preliminary conservation objectives of the plan, and not preclude important conservation planning options or connectivity between areas of high habitat values. The Interim Project Process requires the local participating agencies to notify the wildlife agencies (DFG and USFWS) of projects that have the potential to adversely impact Covered Species, natural communities, or conflict with the preliminary conservation objectives of the Habitat Plan. The Wildlife Agencies comments on Interim Projects should recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives of the Habitat Plan.

The project site is within the Habitat Plan study area and was referred to the California Department of Fish and Game and U.S. Fish and Wildlife Service for comments. Recommended mitigation has been included and the project will be consistent with the preliminary conservation objectives of the Habitat Conservation (HCP) Plan.

V. CULTURAL RESOURCES - Would the project:

a) Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,7, 25
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,8, 25
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,8, 25
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,8, 25

FINDINGS:

The following discussion is based upon a cultural resources report completed by Basin Research Associates on April 21, 2012. As the report may discuss that location of specific archaeological sites, it is considered administratively

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confidential and is not included in this Initial Study. Qualified personnel may request a copy from the City’s Planning Division located at 200 East Santa Clara Street, Floor 3, during normal business hours.

The report prepared by Basin Research Associates was based on the results of a California Historical Resources Information System regional information center records search for the subject site, as well as a limited literature review, archaeological field survey, architectural field review and evaluation, and consultation with the Native American Heritage Commission.

Archaeological Resources

The results of the record search indicated that no prehistoric, combined prehistoric/historic or built environment sites have been recorded in or adjacent to the project site. In addition, no local, state, or federal historically or architecturally significant structures, landmarks, or points of interest have been identified within or adjacent to the project site. For the field survey conducted on the site, transects were oriented in an east-to-west direction and spaced at approximately 3-meter intervals. Overall surface visibility was poor (less than 5%) due to dense vegetation, lawns and wood chips. Surface soils observed were brown clayey loam with subrounded to rounded sandstone cobbles. No evidence of prehistoric or historically significant archaeological resources was observed.

Historic Resources

An architectural field survey and preliminary evaluation of the two existing houses on the site were conducted by a consulting architectural historian, and included in the report. The report concluded that no California Register of Historical Places (CRHR) listed, determined, or potentially significant local, state or federal historic properties, landmarks, etc. have been identified on or adjacent to the subject site. It was determined that the two existing houses have not been designated or determined for any state, local or federal historic resource listing. Although they represent typical examples of the Ranch House Style from the 1960’s, there are many more distinguished examples still extant in San Jose. The houses do not appear to be eligible under the CRHR Criterion 3 because they are not exceptional examples of the Ranch House Style in San Jose. Further archival historical research about the Sabatino family’s importance to local, regional and state history would be required to conclusively determine CRHR status.

Conclusions and Recommendations

The report concluded that, based on a review of archaeological records, historic maps and other documents, and a field inventory, the proposed project can proceed as planned, in regard to prehistoric and historic archaeological resources. No subsurface testing for buried archaeological resources appears necessary at this time. It was recommended that if any unanticipated prehistoric or significant historic era cultural materials are exposed during construction grading or excavation, operations should stop within 25 feet of the find and a qualified professional archaeologist be contacted for evaluation and further recommendations.

MITIGATION MEASURES: None required.

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VI. GEOLOGY AND SOILS - Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,5,24
2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,5,24
3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,5,24
4) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,5,24
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,5,24
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"/>	X	<input type="checkbox"/>	1,5,24
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,5,24
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"/>	X	1,5,24

FINDINGS:

The site is not located within a Geologic Hazard Zone or Liquefaction Zone. However, the project site is located within the seismically active San Francisco region, which requires that the building be designed and built in conformance with the requirements of the 1997 Uniform Building Code for Seismic Zone 4. The potential for geologic and soils impacts resulting from conditions on the site can be mitigated by utilizing standard engineering and construction techniques. As the project includes these required measures, the potential for seismic impacts will be less than significant.

MITIGATION MEASURES: None required

VII. GREENHOUSE GAS EMISSIONS - Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,14
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,14
(Note: Greenhouse gas(es) include, but are not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride)					

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FINDINGS:

Various gases in the Earth’s atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth’s surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the Earth’s surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect.

The City of San Jose recently adopted the Envision San Jose 2040 General Plan (November 2011). As part of the General Plan update, the City adopted a Greenhouse Gas Reduction Strategy in accordance with the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5. The GHG strategy identifies policies and measures to reduce greenhouse gas generation within the City.

The Envision San Jose 2040 General Plan focuses on creating urban centers that provide mixed-use settings for new housing and job growth that are pedestrian, bicycle and transit-oriented. The mixed-use land use concept reduces GHG emissions by placing land uses closer together and, as a result, decreasing vehicle miles traveled. The City has also adopted a GHG Strategy that includes policies and measures to reduce GHG emissions. Adoption of a GHG Strategy provides environmental clearance for GHG impacts of proposed development as per the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5. The project is consistent with the 2040 General Plan and GHG Strategy: therefore, it would have a less-than-significant impact for GHG emissions.

The project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, since the proposed project is consistent with the City’s 2040 General Plan that includes implementation of a GHG Reduction Strategy.

VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:

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 type="checkbox"/>	X	1
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
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"/>	X	<input type="checkbox"/>	1

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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"/>	X	<input type="checkbox"/>	1,12.28, 29
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1

FINDINGS:

Phase I and II Environmental Site Assessments

A Phase I Environmental Assessment (ESA) was performed on the project site by Aquifer Sciences, Inc. in August 2012. The ESA included a reconnaissance of the site and vicinity; an evaluation of aerial photographs, maps and city directories; a review of public records on file at regulatory agencies; and an evaluation of contaminated sites in the area. The ESA identified five recognized environmental conditions at the site. The conditions were:

- Former agricultural usage and probable associated application of pesticides;
- An abandoned truck on the eastern portion of the site;
- An abandoned tractor on the southern corner of the site;
- Two corroded 50-gallon drums located on the eastern portion of the site;
- Two septic tanks and associated leach fields adjacent to the existing residences on the site.

In addition, the ESA identified five contaminated sites within one mile of the site from available information in regulatory databases. None of these were determined, however, to pose a concern to soil or groundwater quality at the project site. Based on its findings and conclusions, the Phase I ESA recommended that a Phase II ESA be performed at the site to collect and analyze soil and groundwater samples for the purpose of evaluating potential impacts, and determining the scope of any soil or groundwater remediation measures that may be warranted.

Aquifer Sciences, Inc. performed the Phase II environmental assessment in September 2012. The objectives of the assessment were to: 1) collect and analyze soil samples near each of the recognized environmental conditions identified during the Phase I assessment; 2) collect and analyze groundwater samples to evaluate potential impacts from the recognized environmental conditions; 3) evaluate and compare analytical data for soil and groundwater samples to regulatory limits; and 4) determine the scope of any soil or groundwater remediation that may be warranted.

Soil and groundwater sampling was conducted at nine locations across the site. Nineteen soil samples were collected from the nine borings. The soil samples were collected at depths of 1, 3, and 6 feet below ground surface. Of the 19 samples collected, 14 were designated for laboratory analysis. Groundwater samples were collected from 2 of the 9 boring locations, at depths of approximately 28 to 32 feet below ground surface.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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The laboratory analytical results were compared to regulatory standards to evaluate the environmental condition of the soil. The results of the soil sample analyses were compared to Cal/EPA’s California Human Health Screening Levels (CHHSLs) for residential properties, the Regional Water Quality Control Board’s (RWQCB) Environmental Screening Levels (ESLs) for residential properties, the State of California’s Total Threshold Limit Concentration (TTL) values for the classification of hazardous substances, and the State of California’s Soluble Threshold Limit Concentration (STLC) values. The results of the groundwater analyses were compared to the RWQCB’s Tier 1 ESLs for groundwater. The following conclusions were made, based on the assessment results.

- The pesticide concentrations detected in soil include a-chlordane, g-chlordane, DDD, DDE, and DDT. None of the pesticide concentrations exceeded the residential CHHSLs or ESLs.
- Low concentrations of petroleum hydrocarbons (TPH-diesel and TPH-motor oil) were detected in some of the soil samples. None of these detections exceeded the residential ESLs.
- Metals occur naturally in soil and rock and were detected in varying concentrations in all of the samples. Arsenic, chromium, and/or vanadium were detected in many samples at concentrations exceeding one and/or another of the applicable guidelines.
- Arsenic was detected in every soil sample. Soils of the San Jose area typically contain background concentrations of arsenic of up to approximately 20 mg/kg. None of the soil samples contained arsenic above the background concentration.
- Chromium was detected at low concentrations in the soil samples, but did not exceed the residential CHHSL or ESL. Chromium exceeded the rule-of-thumb comparison of ten times the STLC in two of the samples. The presence of chromium in soil is common in the San Jose area and is likely naturally-occurring at these concentrations.
- Vanadium was detected in two soil samples at concentrations exceeding the residential ESL, but not the residential CHHSL. The presence of vanadium in soil is common in the San Jose area and is likely naturally-occurring at these concentrations.
- The analytical data indicate that the soil quality is consistent with the site’s former agricultural usage. Shallow soil at the site contains residual concentrations of pesticides; however, none exceeded residential CHHSLs or ESLs.
- The groundwater samples were analyzed for petroleum hydrocarbons, Volatile Organic Compounds (VOCs) and/or metals. Petroleum hydrocarbons and VOCs were not detected in the groundwater samples.
- One of the groundwater samples contained traces of 10 metals (barium, chromium, cobalt, copper, mercury, molybdenum, nickel, selenium, vanadium, and zinc). None of the metals concentrations in the sample exceeded the ESLs.

The results of the Phase II assessment indicated that the environmental quality of the soil and groundwater is favorable for the proposed project. The analytical data showed that the concentrations of pesticides, petroleum hydrocarbons, and VOCs in soil and groundwater were either not detected or do not exceed the current regulatory screening limits given as residential CHHSLs and ESLs. Arsenic, chromium and vanadium were detected in soil at low concentrations exceeding at least one regulatory limit, but not exceeding naturally-occurring concentrations in the San Jose area. The Phase II assessment concluded that no environmental remediation was necessary.

State Lists

The project is not currently included on the State DTSC’s Hazardous Waste and Substances Site List (Cortese List), the project site is not listed on other federal, state or local databases. (See the following websites: DTSC: <http://www.envirostor.dtsc.ca.gov/public/SCCDEH>; <http://lustop.sccgov.org/RWQCB>; <http://www.geotracker.swrcb.ca.gov/>).

Demolition

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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Development of the proposed project will require the demolition of two houses on the site, which may contain asbestos building materials and/or lead-based paint. Demolition done in conformance with these Federal, State and Local laws and regulations, will avoid significant exposure of construction workers and/or the public to asbestos and lead-based paint.

STANDARD PROJECT CONDITIONS:

- In conformance with State and Local laws, a visual inspection/pre-demolition survey, and possible sampling, will be conducted prior to the demolition of the building to determine the presence of asbestos-containing materials and/or lead-based paint.

All potentially friable asbestos-containing materials shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. Materials containing more than one percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations.

During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1, including employees training, employee air monitoring and dust control. Any debris or soil containing lead-based paint or coatings will be disposed of at landfills that meet acceptance criteria for the waste being disposed.

IX. HYDROLOGY AND WATER QUALITY - Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,15
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,17
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,9
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,9

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1
j) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1

FINDINGS:

Flooding/Drainage

The subject site is located within the 100-year flood hazard area. It is located in Flood Zone A. The project would not expose people or structures to flooding because it must (1) elevate the lowest floor above the flood level, and (2) elevate the building support utility systems such as HVAC, electrical, plumbing, air conditioning equipment, including ductwork, and other service facilities must be elevated above the base flood elevation or otherwise protected from flood damage.

Water Quality - Construction Period

Any construction or demolition activity that results in land disturbance equal to or greater than one acre must comply with the Construction General Permit (CGP), administered by the State Water Resources Control Board (SWRCB). The CGP requires the installation and maintenance of Best Management Practices (BMPs) to protect water Quality until the site is stabilized.

The project is expected to require Construction General Permit coverage based on the area of land disturbed. Prior to commencement of construction or demolition, the project must file a Notice of Intent (NOI) with the SWRCB and develop, implement and maintain a Storm Water Pollution Prevention Plan (SWPPP) to control the discharge of stormwater pollutants associated with construction activities.

All development projects, whether subject to the CGP or not, shall comply with the City of San Jose’s Grading Ordinance, which requires the use of erosion and sediment controls to protect water quality while the site is under construction. Prior to the issuance of a permit for grading activity occurring during the rainy season (October 15 to April 15), the project will submit to the Director of Public Works an Erosion Control Plan detailing BMPs that will prevent the discharge of stormwater pollutants.

Water Quality - Post-Construction

The City of San Jose is required to operate under a Municipal Stormwater NPDES Permit to discharge stormwater from the City’s storm drain system to surface waters. On October 14, 2009, the San Francisco Bay Regional Water Quality Control Board adopted the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (MRP) for 76 Bay Area municipalities, including the City of San Jose.

The MRP (NPDES Permit No. CAS612008) mandates the City of San Jose use its planning and development review authority to require that stormwater management measures such as Site Design, Pollutant Source Control and Treatment measures are included in new and redevelopment projects to minimize and properly treat stormwater runoff. Provision C.3 of the MRP regulates the following types of development projects:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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- Projects that create or replace 10,000 square feet or more of impervious surface;
- Special Land Use Categories¹ that create or replace 5,000 feet or more of impervious surface

The MRP requires regulated projects to include Low Impact Development (LID) practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site’s natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

The project will create or replace approximately 36,500 square feet of impervious surface. Based on its size and land use, the project will be required to comply with the LID stormwater management requirements of Provision C.3 of the MRP.

The MRP also requires regulated projects to include measures to control hydromodification impacts where the project would otherwise cause increased erosion, silt pollutant generation, or other adverse impacts to local rivers and creeks. Development projects that create and/or replace 1 acre or more of impervious surface and are located in a subwatershed or catchment that is less than 65% impervious, must manage increases in runoff flow and volume so that post-project runoff shall not exceed estimated pre-project rates and durations.

Based on its size and land use, the project will not be required to comply with the hydromodification requirements of Provision C.3 of the MRP.

The City has developed policies that implement Provision C.3, consistent with the MRP. The City’s Post-Construction Urban Runoff Management Policy (6-29) establishes specific requirements to minimize and treat stormwater runoff from new and redevelopment projects. The City’s Post-Construction Hydromodification management Policy (8-14) establishes an implementation framework for incorporating measures to control hydromodification impacts from development projects.

Implementation of the following standard conditions, consistent with NPDES Permit and City Policy requirements, will reduce potential construction and post-construction impacts to surface water quality to less than significant levels:

Construction Measures

- Prior to commencement of any clearing, grading or excavation, the project shall comply with the SWRCB’s National Pollutant Discharge Elimination System (NPDES) Construction General Permit, as follows:
 1. The applicant shall file a Notice of Intent (NOI) with the SWRCB
 2. The applicant shall develop, implement and maintain a Storm Water Pollution Prevention Plan (SWPPP) to control the discharge of stormwater pollutants including sediments associated with construction activities, The SWPPP shall identify current construction-period Best Management Practices, as described in the CASQA Construction Handbook (August 2011).

¹ Special Land Use Categories are defined as uncovered parking areas (stand-alone or part of another use), restaurants, auto service facilities, and retail gasoline outlets.

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- The project shall comply with the City of San Jose Grading Ordinance, including implementing erosion and dust control during site preparation and with the City of San Jose Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction.
- Typical measures that will be implemented to prevent stormwater pollution and minimize potential sedimentation during construction include but are not limited to:
 1. Utilize on-site sediment control BMPs to retain sediment on the project site;
 2. Utilize stabilized construction entrances and/or wash racks;
 3. Implement damp street sweeping;
 4. Provide temporary cover of disturbed surfaces to help control erosion during construction;
 5. Provide permanent cover to stabilize the disturbed surfaces after construction has been completed.

X. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2

FINDINGS:

Projects that have the potential to physically divide an established community include new freeways and highways, major arterials streets, and railroad lines. The proposed townhouse project would provide infill housing within an existing residential neighborhood, and would therefore not physically divide an established community but rather provide a completion of that community. The proposed project will be subject to architectural and site design review by the City at the Planned Development Permit stage of the entitlement process. Such review will include conformance with the City’s adopted Residential Design Guidelines. The Guidelines are intended to ensure that new development is compatible with existing neighborhood character and does not adversely impact neighboring residential uses. Additionally, see the Riparian Corridor Policy discussion provided in Section IV. Biological Resources. A less than significant impact would occur as a result of the project.

Habitat Conservation Plan

See discussion provided in Section IV. BIOLOGICAL RESOURCES, above.

MITIGATION MEASURES: None Required.

XI. MINERAL RESOURCES - Would the project:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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"/>	X	1,2,23
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"/>	X	1,2,23

FINDINGS:

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation's mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated: the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue, as containing mineral deposits which are of regional significance as a source of construction aggregate materials.

Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San José as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited above, San José does not have mineral deposits subject to SMARA.

The project site is outside of the Communications Hill area, and will therefore not result in a significant impact from the loss of availability of a known mineral resource.

MITIGATION MEASURES: None Required.

XII. NOISE - Would the project result in:

a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2,13,18
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1
f) For a project within the vicinity of a private airstrip, 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"/>	X	1

FINDINGS:

Noise Impacts From the Project

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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Traffic generated by this project is not expected to substantially increase noise levels in the project area.

Noise from the construction of the proposed project could potentially pose a significant impact to the surrounding residential properties. To limit the construction noise impacts on nearby properties, various mitigation measures have been incorporated into the proposal.

STANDARD PROJECT CONDITIONS:

- Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for any on-site or off-site work within 500 feet of any residential unit. Construction outside of these hours may be approved through a development permit based on a site-specific construction noise mitigation plan and a finding by the Director of Planning, Building and Code Enforcement that the construction noise mitigation plan is adequate to prevent noise disturbance of affected residential uses.
- The contractor shall use “new technology” power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poor maintained engines or other components.
- Locate stationary noise generating equipment as far as possible from sensitive receptors. Staging areas shall be located a minimum of 200 feet from noise sensitive receptors, such as residential uses.

XIII. POPULATION AND HOUSING - Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1

FINDINGS:

The proposed project would not induce substantial population growth because it has a net density of 15 DU/AC which is consistent with the General Plan Land Use/Transportation Diagram designation of Mixed Use Neighborhood (up to 30 DU/AC).

MITIGATION MEASURES: None required.

XIV. PUBLIC SERVICES

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2

FINDINGS:

The project site is located in an urbanized area of San Jose, and well served by existing Fire, Police, School, Park and other Public Facilities. The site is served by one fire station within 4 minutes response time. No additional Fire or Police personnel or equipment are necessary to serve the proposed project.

As required by California Government Code Section 53080, the project will be required to pay a school impact fee for residential development to offset the increased demands on school facilities caused by the project. Therefore, the project will have a less than significant impact on school facilities.

There are three developed parks within walking distance (3/4 mile) of the project site. Penitencia Creek Park is located across Mabury Road from the site, and contains open space, walking trails and other passive recreational facilities. Overfelt Gardens Park is a community park located approximately 1/2-mile south of the site, and contains gardens, hiking trails, and a wildlife sanctuary. Vinci Park, located approximately 3/4-mile north of the site, is a small City park containing a playground and BBQ areas.

STANDARD PROJECT CONDITIONS:

- In accordance with California Government Code Section 65996, the developer shall pay a school impact fee, to the School District, to offset the increased demands on school facilities caused by the proposed project.
- The project shall conform to the City’s *Park Impact Ordinance (PIO)* and *Parkland Dedication Ordinance (PDO)* (Municipal Code Chapter 19.38).

MITIGATION MEASURES: None required.

XIV. RECREATION

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"/>	X	<input type="checkbox"/>	1,2
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2

FINDINGS:

There are three developed parks within walking distance (3/4 mile) of the project site. Penitencia Creek Park is located across Mabury Road from the site, and contains open space, walking trails and other passive recreational facilities. Overfelt Gardens Park is a community park located approximately 1/2-mile south of the site, and contains gardens,

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hiking trails, and a wildlife sanctuary. Vinci Park, located approximately ¾-mile north of the site, is a small City park containing a playground and BBQ areas.

The City of San José has adopted the Parkland Dedication Ordinance (PDO) (Chapter 19.38) and Park Impact Ordinance (PIO) requiring residential developers to dedicate public parkland or pay in-lieu fees, or both, to offset the demand for neighborhood parkland created by their housing developments. Each new residential project is required to conform to the PDO and PIO. The acreage of parkland required is based upon the Acreage Dedication Formula outlined in the Parkland Dedication Ordinance.

The proposed project would increase the number of residents on the site. Although the project includes recreational space for new residents, the project would add to the residential population using nearby recreational facilities. However, the project is not expected to increase the use of existing parks such that substantial deterioration would occur or be accelerated.

STANDARD PROJECT CONDITIONS:

- The project shall conform to the City’s *Park Impact Ordinance (PIO)* and *Parkland Dedication Ordinance (PDO)* (Municipal Code Chapter 19.38).

MITIGATION MEASURES: None required.

XV. TRANSPORTATION / TRAFFIC - Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2,19
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2,19
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,19
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,19
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,20
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,2,18

FINDINGS:

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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The City’s Department of Public Works has analyzed the proposed project and determined that it would be in conformance with the City’s Transportation Level of Service Policy (Council Policy 5-3) and would not create a significant traffic impact.

MITIGATION MEASURES: None required.

XVI. UTILITIES AND SERVICE SYSTEMS - Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,15
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,2,21
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	1,17
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,22
e) 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"/>	X	<input type="checkbox"/>	1,21
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,21
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	1,21

FINDINGS:

The proposed project would not require construction of new facilities for wastewater treatment, storm drainage, water, or waste disposal because the subject site is located within the City of San Jose Urban Service Area where such facilities exist, and have the capacity to serve the proposed project.

MITIGATION MEASURES: None required.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to (1) degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	1,10
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<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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"/>	X	<input type="checkbox"/>	1,16
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"/>	X	<input type="checkbox"/>	1

FINDINGS:

As discussed in the previous sections, the proposed project could potentially have significant environmental effects with respect to special status species, trees and flooding. With the above noted mitigation, however, the impacts of the proposed project would be reduced to a less than significant level.

MITIGATION MEASURES: See mitigation measures described above in Sections IV. BIOLOGICAL RESOURCES.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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CHECKLIST REFERENCES

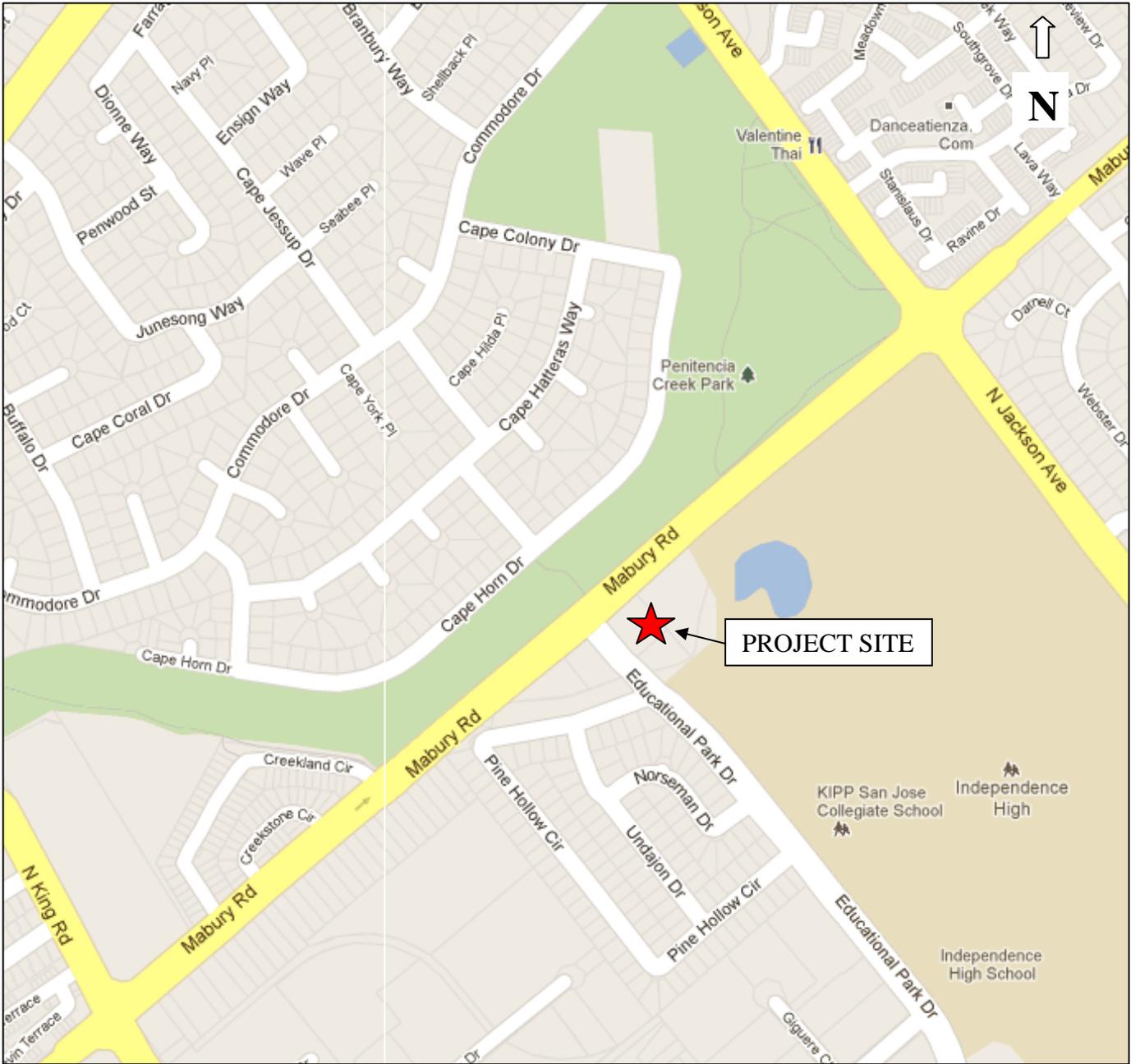
1. Environmental Clearance Application – File No. PDC12-010
2. San Jose 2020 General Plan
3. USDA, Soil Conservation Service, Soil Survey of SC County, August 1968
4. USDA, Soil Conservation Service, Important Farmlands of SC County map, June 1979
5. State of California’s Geo-Hazard maps / Alquist Priolo Fault maps
6. Riparian Corridor Policy Study 1994
7. San Jose Historic Resources Inventory
8. City of San Jose Archeological Sensitivity Maps
9. FEMA Flood Insurance Rate Map, Santa Clara County, 2009
10. California Department of Fish & Game, California Natural Diversity Database, 2001
11. City of San Jose Heritage Tree Survey Report
12. California Environmental Protection Agency Hazardous Waste and Substances Sites List, 1998
13. City of San Jose Noise Exposure Map for the 2020 General Plan
14. BAAQMD CEQA Guidelines, Bay Area Air Quality Management District. April 1996, revised 2010.
15. San Francisco Bay Regional Water Quality Control Board 1995 Basin Plan
16. Final Environmental Impact Report, City of San Jose, SJ 2020 General Plan
17. Santa Clara Valley Water District
18. City of San Jose Title 20 Zoning Ordinance
19. San Jose Department of Public Works
20. San Jose Fire Department
21. San Jose Environmental Services Department
22. San Jose Water Company, Great Oaks Water Company
23. California Division of Mines and Geology
24. Cooper Clark, San Jose Geotechnical Information Maps, July 1974
25. Basin Research, *Cultural Resources – Residential Project, 12710 and 12750 Mabury Road, San Jose*, April 21, 2012.
26. Live Oak Associates, Inc., *Biotic Evaluation, Mabury Property, City of San Jose, Santa Clara County, California*, May 9, 2012.
27. Live Oak Associates, Inc., Riparian Enhancement Mitigation Letter, October 11, 2012.
28. Aquifer Sciences, Inc., *Phase I Environmental Assessment, 12710 and 12750 Mabury Road, San Jose, California*, September 20, 2012.

<i>Issues</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant With Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>	<i>Information Sources</i>
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29. Aquifer Sciences, Inc., *Phase II Environmental Assessment, 12710 and 12750 Mabury Road, San Jose, California, October 5, 2012.*

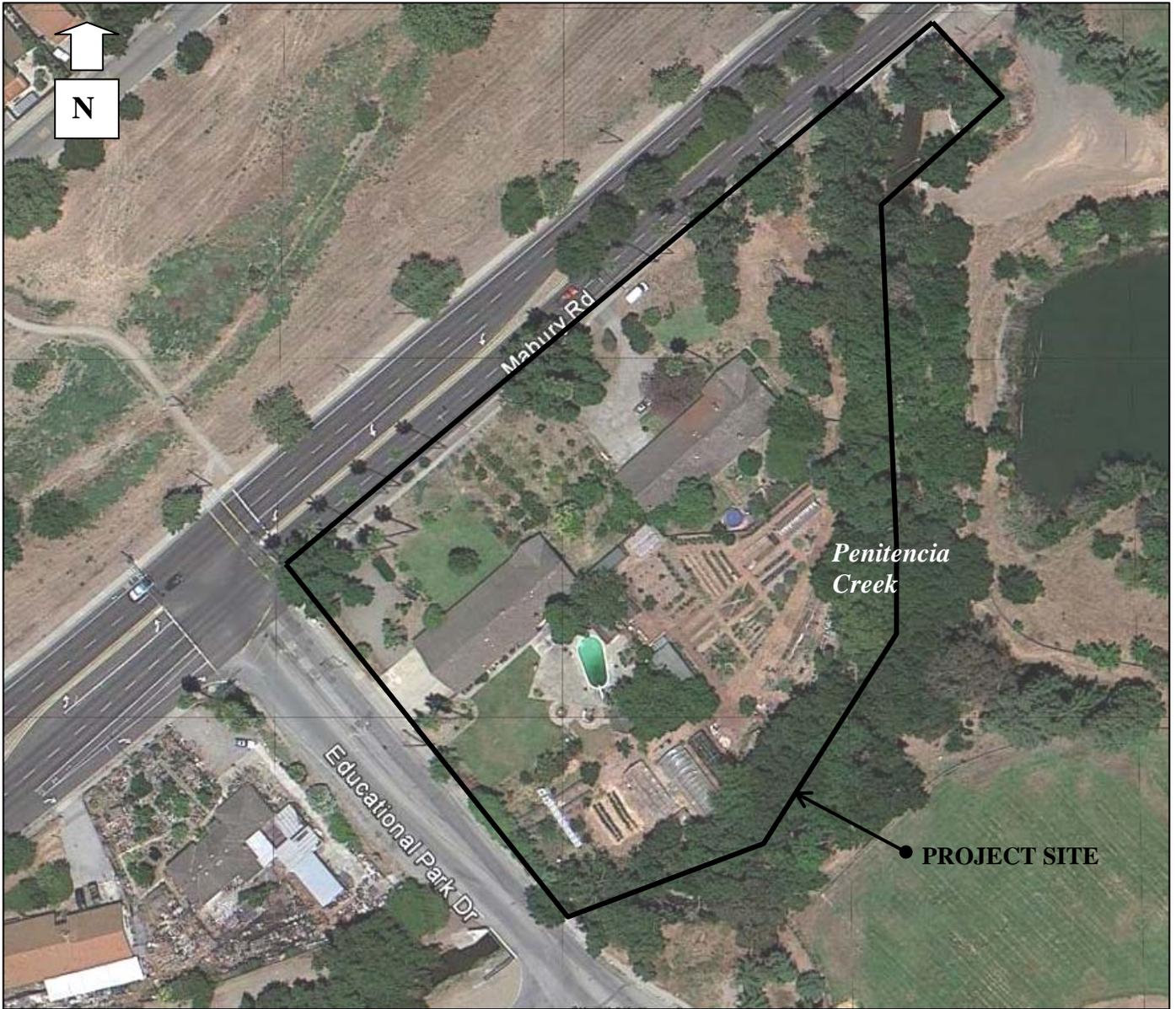
EXHIBITS

- **Vicinity Map**
- **Aerial Photo**
- **Site Photos**
- **Assessor's Parcel Map**
- **Zoning Map**
- **General Plan Map**
- **Site Plan**



SOURCE: GOOGLE MAPS

Vicinity Map



SOURCE: GOOGLE EARTH

Aerial Photo



Viewing southeast towards project frontage on Mabury Road.



Viewing south towards project frontage on Educational Park Drive.

Site Photos



Viewing east along project frontage on Mabury Road.



Existing residence on the westerly side of the site.

Site Photos

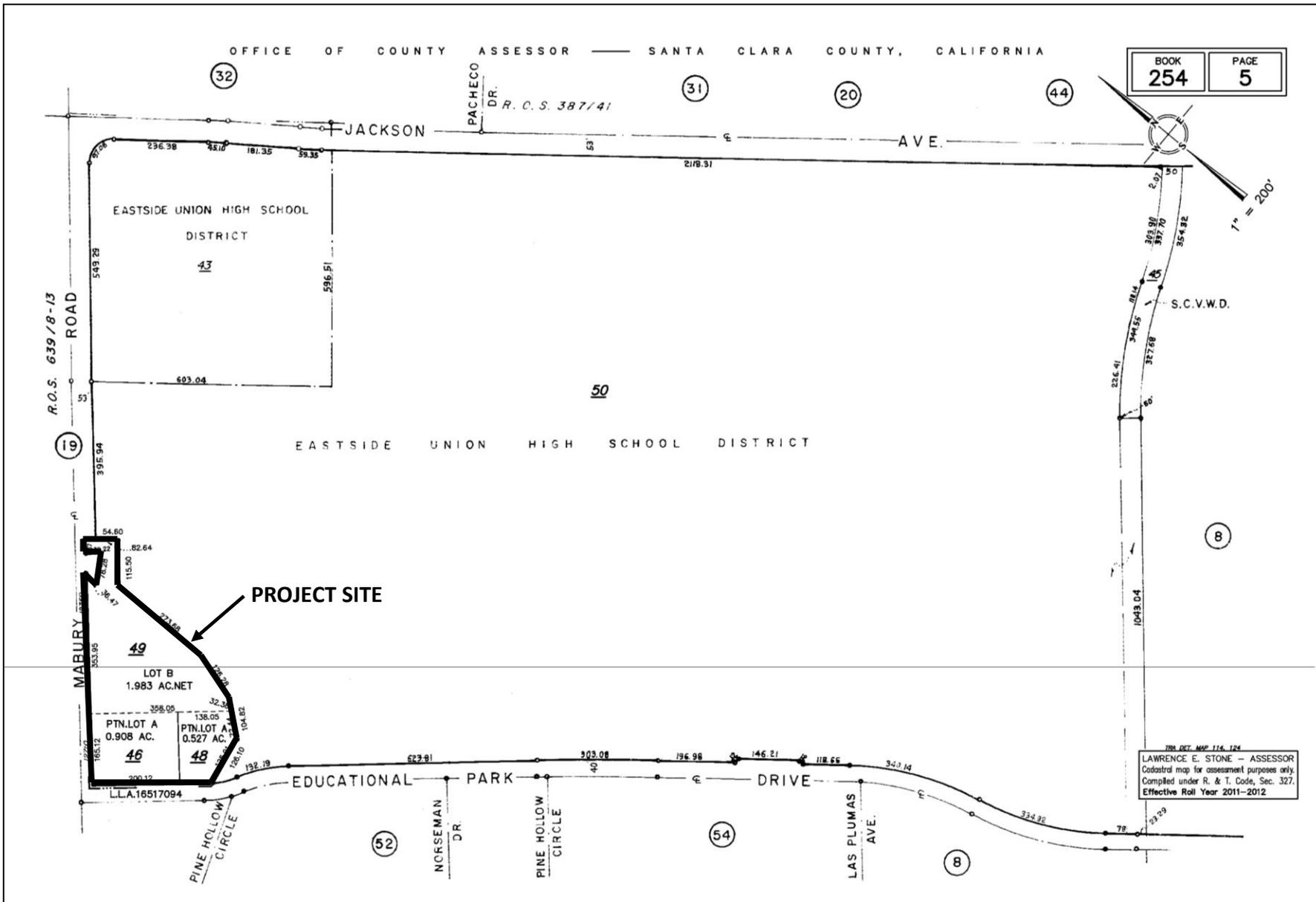


Penitencia Creek from the Mabury Road bridge at the northeast corner of the site.

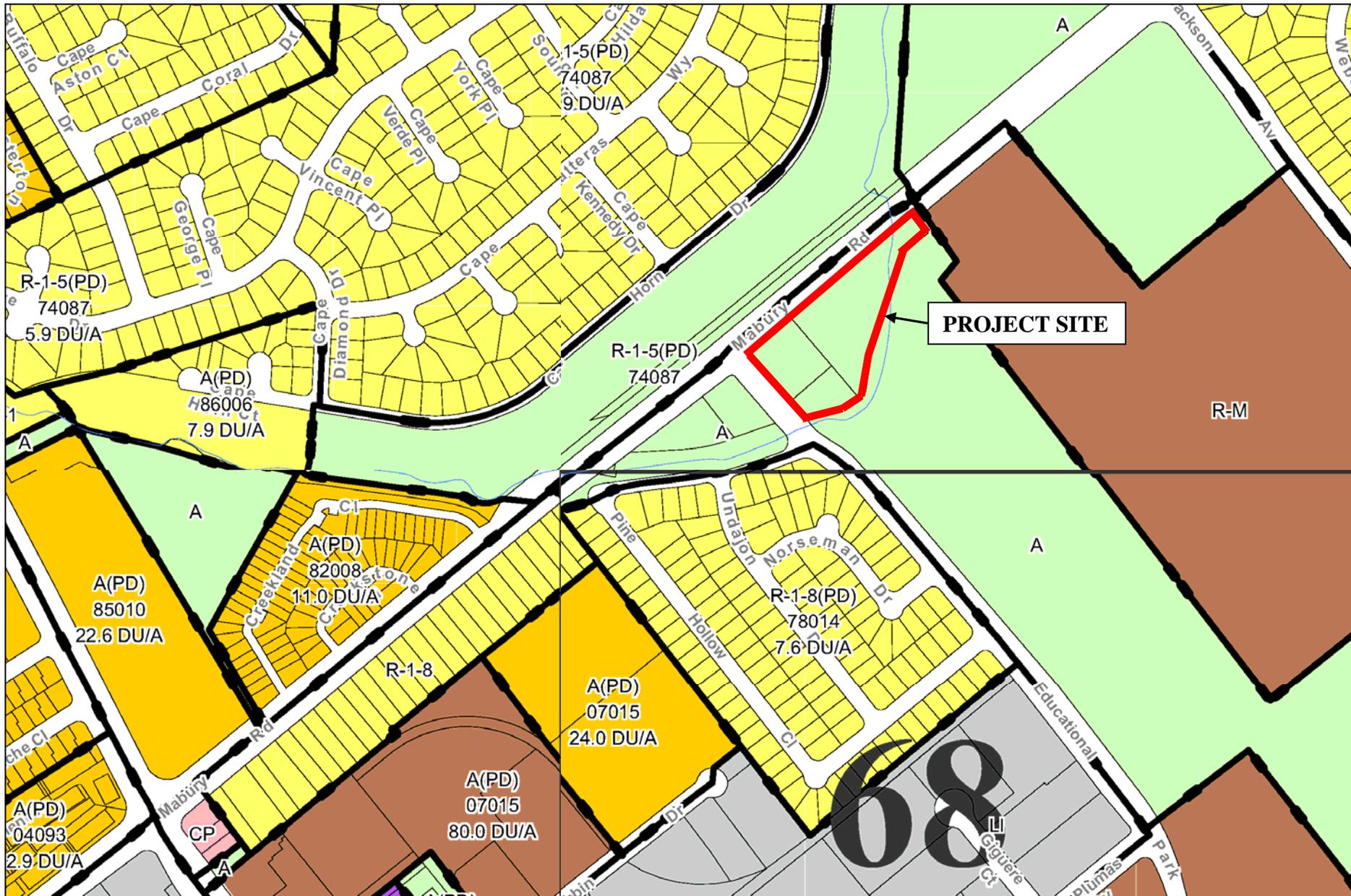


Viewing west along the Mabury Road frontage of the site.

Site Photos



Assessor's Parcel Map



SOURCE: San Jose Dept. of Planning, Building & Code Enforcement

Zoning Map



SOURCE: San Jose Department of Planning, Building & Code Enforcement

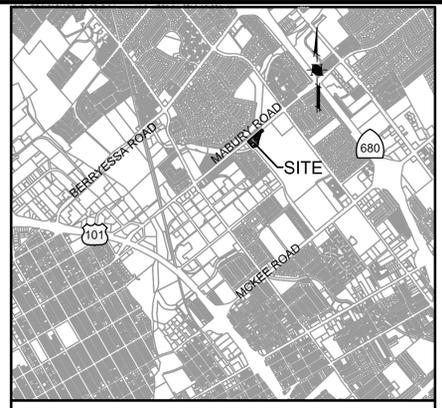
- | | |
|--|--|
| <ul style="list-style-type: none"> Downtown Commercial Downtown Urban Village Transit Employment Center Regional Commercial Mixed Use Commercial Neighborhood/Community Commercial Combined Industrial/Commercial Industrial Park Light Industrial Heavy Industrial Public/Quasi-Public Transportation and Utilities Transit Residential Urban Residential Mixed Use Neighborhood Residential Neighborhood Rural Residential Lower Hillside Agriculture Private Recreation and Open Space Open Space, Parklands and Habitat Open Hillside Residential Neighborhood Open Space, Parklands and Habitat | <ul style="list-style-type: none"> Sphere of Influence Urban Service Area Urban Growth Boundary Urban Reserve Specific Plan Area Boundary Urban Village Area Boundary Transit Employment Residential Preferred Hotel Site Overlay Floating Park Site Caltrain Station CalTrain Line Proposed BART Station BART Line Existing Light Rail Station Planned Light Rail Station Light Rail Line Freeway Interchange Grade Separation Golf Course Overlay Solid Waste Disposal Site Candidate Solid Waste Disposal Site Planning Area Boundary |
|--|--|

General Plan Map



Land Use Entitlements
 Land Planning
 Landscape Architecture
 Civil Engineering
 Utility Design
 Land Surveying
 Stormwater Compliance

1570 Oakland Road (408) 487-2200
 San Jose, CA 95131 HMHca.com



VICINITY MAP
 NOT TO SCALE

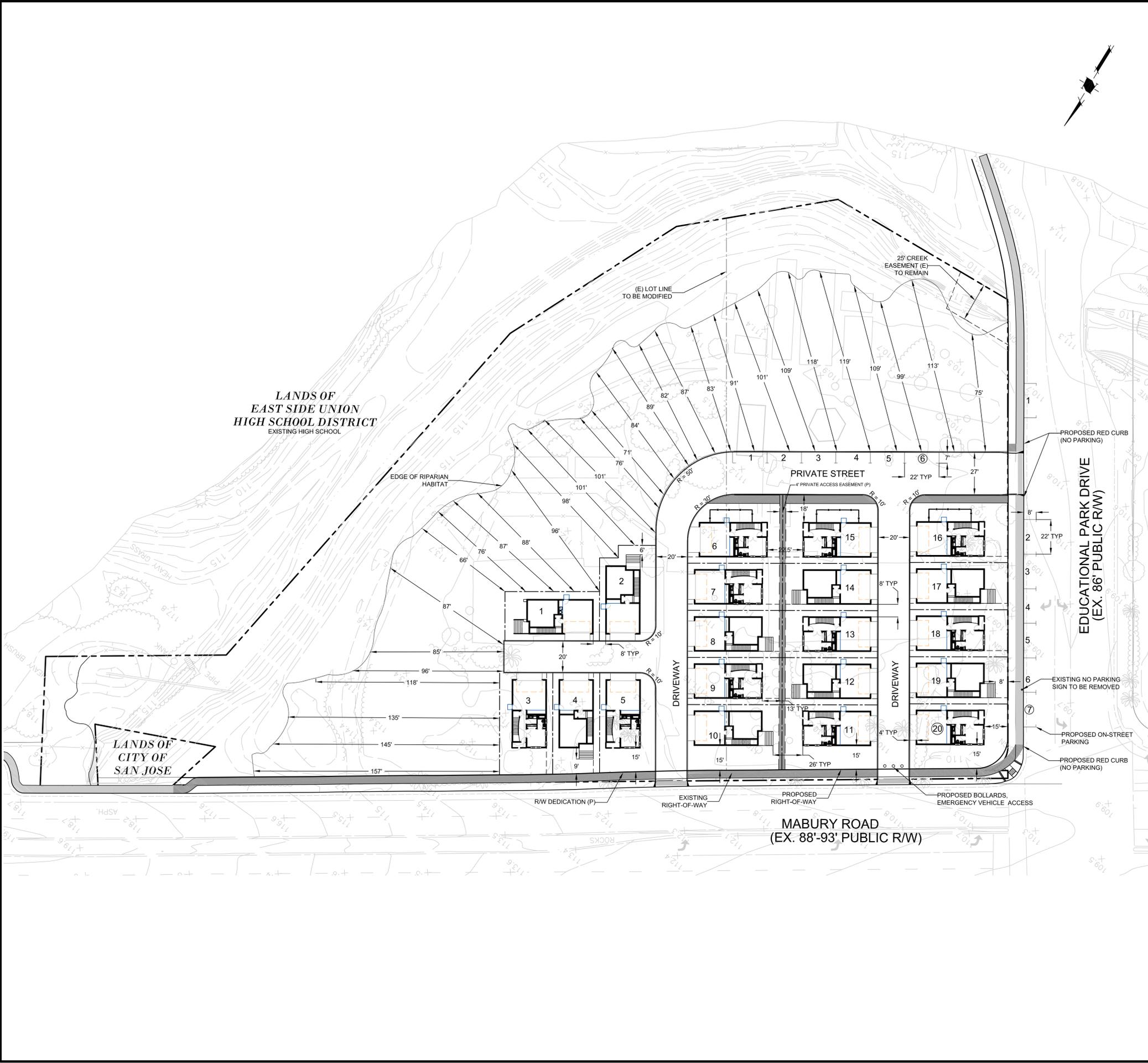
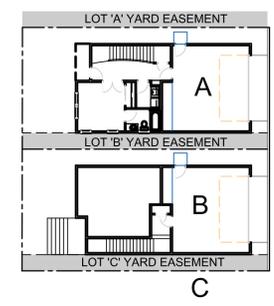
LEGEND

PROJECT BOUNDARY	---
PROPERTY LINE	---
PROPERTY LINE (EXISTING)	---
PROPOSED RIGHT-OF-WAY	---
EXISTING RIGHT-OF-WAY	---
EASEMENT	---
SIDEWALK	---
FACE OF CURB	---
BACK OF CURB	---

NOTES

- EXISTING LOT LINES TO BE REMOVED AS PART OF THIS APPLICATION

EASEMENT DETAIL



(A) PD ZONING
PDC 12-010
12710 & 12750 MABURY ROAD
SABATINO PROPERTY

NO	DATE	DESCRIPTION
9/20/2012		REVISED PER CITY COMMENTS
PROJECT NO:	4205-00	
CAD DWG FILE:	420500SP.DWG	
DESIGNED BY:	DY	
DRAWN BY:	DY	
CHECKED BY:	TA	
DATE:	MAY 10, 2012	
SCALE:	1" = 30'	
© HMH		

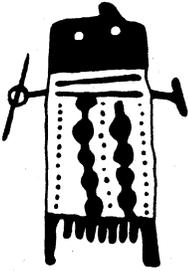
CONCEPTUAL SITE PLAN

S:\PROJECTS\120500\DELZONING\420500SP.DWG

PLOTED: 02/12/2012 10:47 AM

APPENDIX

- **Cultural Resources Report, 4/21/12 – Basin Research**
- **Biotic Evaluation, 5/4/12 – Live Oak Associates, Inc.**
- **Riparian Enhancement Mitigation Memo, 10/12/12 – Live Oak Associates, Inc.**
- **Phase I Environmental Site Assessment, 9/20/12 – Aquifer Sciences, Inc.**
- **Phase II Environmental Site Assessment, 10/5/12 – Aquifer Sciences, Inc.**



April 21, 2012

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RESEARCH
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Mr. Mike Campbell
Stormwater Compliance Manager
HMH
1570 Oakland Road
San Jose, CA 95131

RE: Cultural Services – Residential Project, 12710 and 12750 Mabury Road, San Jose

Dear Mr. Campbell,

Please let this letter serve as the *Initial Study/Feasibility Cultural Resources Review* for the above project in accordance with the City of San Jose Planning mandates and the California Environmental Quality Act (CEQA).

This document provides the results of a California Historical Resources Information System regional information center records search, a limited literature review, an archaeological field survey, an architectural field review and evaluation, consultation with the Native American Heritage Commission (NAHC), and management recommendations.

PROJECT LOCATION AND DESCRIPTION

The proposed residential in-fill project plans to 24 townhomes on approximately 3.4 acres adjacent on the south side of Mabury Road at Educational Park Drive adjacent to the north side of Upper Penitencia Creek, City of San Jose, Santa Clara County. The three parcels are currently occupied by two single family residences located at 12710 Mabury Road (APN 254-05-046) and 12750 Mabury Road (APN 254-05-049). The third parcel (APN 254-05-048) is adjacent to both parcels as well as Educational Park Drive and the creek (USGS San Jose East, Calif. 1980; Township 6 South Range 1 East [T6S R1E], Unsectioned) [Figs. 1-3].

RESEARCH SOURCES CONSULTED

A prehistoric and historic site record and literature search was conducted by the California Historical Resources Information System, Northwest Information Center, Sonoma State University (CHRIS/NWIC File No. 11-1059 dated March 28, 2012 by Hagel).

The literature review by Basin Research Associates included a review of lists of various city, state and/or federal historically or architecturally significant structures, landmarks, or points of interest in and adjacent to the parcels (see References Cited and Consulted).

INDIVIDUALS, AGENCIES AND GROUPS

The Native American Heritage Commission (NAHC) was contacted for a review of the *Sacred Lands Inventory* (Busby 2012).

Mr. Ward Hill, consulting architectural historian interviewed one of the current owners, Murphy Sabatino, on April 5, 2012. The property is owned by the Sabatino Family Trust. According to Mr. Sabatino, his great grandfather, Angelo Sabatino, and his wife Angela, worked as farmers on the property (much of original parcel has been sold off). They originally had a cherry orchard. The Sabatino family built the two houses extant today at 12710 and 12750 Mabury Road in 1964.

No other agencies, departments or local historical societies were contacted for this letter report.

RESEARCH FINDINGS

This report was prepared to identify potentially significant cultural resources listed or eligible for the California Register of Historical Resources (CRHR) within to the proposed project.

RECORDS SEARCH RESULTS

No prehistoric, combined prehistoric/historic, historic, or built environment sites have been recorded or reported in or adjacent to the proposed project (CHRIS/NWIC File No. 11-1059).

Seven (7) cultural resources compliance reports - excluding overviews - on file at the CHRIS/NWIC include the project and/or adjacent areas (Cartier 1977/S-4429; Flynn 1978/S-4459; Winter 1975/S-4730; Garaventa and Anastasio 1984/S-6617; Anastasio and Guedon 1985/S-7712; Anastasio 1985/S-7844; Roop 1979/S-8519).¹ The 165 acre "Berryessa South" project report by Winter (1975/S-4730) includes the entire project area. This study included an archaeological surface survey conducted in 20 foot transects with approximately 100% surface visibility, 63 auger units, and 5 test units. Results were negative.

In addition there are 19 general overviews and/or "other reports" without specific geographic boundaries on file at the CHRIS/NWIC that marginally encompass the project area. These reports include mapping of sites throughout Santa Clara County for the San Jose 2020 General Plan, transportation projects, listing of resources within the county, and selected topics (e.g., ecology, ethnography, geoarchaeology, etc.).

One known compliance report not on file at the CHRIS/NWIC is limited to *DRAFT Cultural Resources - Existing Setting. Envision San José 2040 General Plan, Santa Clara County, California* (Basin Research Associates 2009).

LISTED HISTORIC PROPERTIES

No local, state or federal historically or architecturally significant structures, landmarks, or

1. Two reports mapped in/adjacent by the CHRIS/NWIC were produced for projects on the north side of Mabury opposite the project area (Whatford 1994/S-15850; Cartier 2000/S-24128).

points of interest have been identified within or adjacent to the project alignment.

ARCHAEOLOGICAL SENSITIVITY

Two reports place the three parcels within an “Archaeologically Sensitive” area due to their location near Penetencia Creek (see *Cultural Resources Review for the City of San Jose 2020 General Plan Update* (Garaventa and Guedon 1993/S-15228) and the *DRAFT Cultural Resources - Existing Setting. Envision San José 2040 General Plan* (Basin Research Associates 2009:Fig. 12A)).

NATIVE AMERICAN RESOURCES - Prehistoric

The CHRIS/NWIC records search was negative for the project and area adjacent to the project (CHRIS/NWIC File No. 11-1059).

NATIVE AMERICAN RESOURCES - Ethnographic

The aboriginal inhabitants of the project vicinity belonged to a group known as the Costanoans. The project area is within the former territory of the *Tamyen (Tamien)* subgroup of the Costanoan Indians or *Ohlone* Indians.² The project was probably situated within the territory of the *San Francisco* tribelet (or *Our Patron San Francisco*) which was centered on the confluence of the Guadalupe River and Los Gatos Creek. Alternatively, the project may have been within the territory of the *Santa Ysabel* and/or *Werwerse-n* located east of the *Tamyen* (Kroeber 1925:465, Fig. 42; C. King 1978:437-438, Fig. 54; Levy 1978:485, Fig. 1; Hylkema 1995:35, #2, 36, Map 6; King 1994:205, Fig. 7.1; Milliken 1995:229, Map 5).

No known Native American villages, trails, traditional use areas or contemporary use areas have been identified in, adjacent or near the project (e.g., op cit.; Elsasser 1986:48, Table 4, Fig. 10; CAL/OHP 1988).

The NAHC search of the *Sacred Lands Inventory* ". . . failed to indicate the presence of Native American cultural resources in the immediate project area" (Pilas-Treadway 2012).

HISTORIC PERIOD RESOURCES

The Spanish philosophy of government in northwestern New Spain was directed at the founding of presidios, missions, and secular towns with the land held by the Crown (1769-1821). The later Mexican (1822-1848) policy stressed individual ownership of the land (Hart 1987).

Hispanic Era Resources

Early Spanish expeditions, Fages 1770, Fages 1772, and Anza 1775/1776 likely followed aboriginal trails. None of these trails/routes were located in or adjacent to the proposed project alignment (Milliken 1995:33, Map 3; USNPS 1995). During the Hispanic Period (ca. 1804-

2. People of Costanoan descent presently residing in the greater San Francisco Bay Area generally prefer to use the term *Ohlone* to Costanoan (see Galvan 1967/1968; Margolin 1978; Bean 1994).

1848), the proposed project was located Pueblo Tract No. 1, part of four square leagues of land given to *Pueblo San Jose de Guadalupe*. None of the known Hispanic Period roads, adobe dwellings, or other structures, features, etc. have been identified in or adjacent to the proposed project. This portion of Pueblo Tract No. 1 was most likely used as a *dehesa*, that is public pasture land for grazing cattle (e.g., Thompson and West 1876:37, 60; Thompson and Herrmann 1866/1879; Hendry and Bowman 1940:816-820, 984; Findlay 1985:8).

Project Development Site Historic Map Review

The 1958 USDA *Santa Clara Area, California Soil Survey* shows no kitchen middens (Ka) indicating prehistoric Native American occupation in or adjacent to the project.

The *Creek & Watershed Map of Central San Jose & Vicinity San Jose* shows the alignment of Upper Penitencia Creek adjacent to the project and in the study area vicinity as unmodified (Thompson and Sowers 2005). Initially the creek was known as the *Arroyo Aguaje* (e.g., Thompson and Herrman 1866/1879) and later as the *Arroyo de la Penitencia* or *Aguaje* (Whitney 1873).

Healey's 1866 *Official Map of the County of Santa Clara* shows no features in or near the project. This map labels Penitencia Creek. Berryessa Road north of the project and Santa Clara/Alum Rock Avenue (south of the project) are also shown, but not Mabury.

Thompson's 1866 Plat of the *Pueblo Lands of San Jose* and similar Thompson and Herrmann's 1866/1879 *Plat of the Pueblo Lands of San Jose* indicate the project was within the northern part of Pueblo Tract No. 1. No features including roads or structures are shown near the project other than the *Arroyo Aguaje* (Penitencia Creek).

Thompson and West's 1876 *Historical Atlas of Santa Clara County* shows no structures or roads/streets (Thompson and West 1876:25, 37). At the time the project was situated in a 171.88-acre parcel owned by D. Hobson while Frank Howard Mabury, namesake of Mabury Road, occupied a 63.32-acre parcel adjacent to the south side of "Penitencia Creek" opposite the project. Mabury is known to have ". . . tapped the Penitencia Creek to irrigate his fields" (Loomis 1982:54). No features including Mabury Road or structures are shown near the project.

The 1899 USGS San Jose topographic map (surveyed in 1895) shows Mabury Road through the study area. The three project parcels were agricultural from the 1940s through at least 1961 (US War Dept 1943 [photography 1939]; USGS 1961). Based on USGS quadrangle maps, the two residences present in the project - 12710 Mabury Road at the corner Mabury Road and Educational Park Drive (APN 254-05-046) and 12750 Mabury Road (APN 254-05-049) - were built between 1961 and 1968/1973 (USGS 1973, 1980).

FIELD REVIEW - ARCHAEOLOGY

An archaeological field inventory of the project was completed on March 30, 2012 by Mr. Christopher Canzonieri (M.A.), an archaeologist meeting the Standards of the Secretary of the Interior. Mr. Canzonieri met with Mr. Murphy Sabatino, representative of the family who have owned the property since 1939 prior to conducting his survey.

The project area consists of two single family ca. 1960s ranch style homes located on three parcels. 12710 Mabury Road (APN 254-05-046) on the corner of Mabury Road and Educational Park Drive [Fig. 4]; APN 254-05-048 [Fig. 9] is located at the rear of 12710 and is adjacent Educational Park Drive, Upper Penitencia Creek; and, 12750 Mabury Road (APN 254-05-49) [Figs. 5-8]. The property frontage along Mabury Road is well maintained with landscaping and manicured lawns [see Figs. 4-5] while numerous ancillary buildings (greenhouses, sheds, gazebos, etc.) piles of wood, concrete and brick and compost piles are present at property rear, parallel to Penitencia Creek. Field transects were oriented east to west and spaced at approximately three meter intervals. Overall surface visibility was poor with less than 5% due to dense vegetation, lawns and wood chips. Sediments are brown clayey loam with subrounded to rounded sandstone cobbles. No evidence of prehistoric or historically significant archaeological resources was observed during the inventory.

FIELD REVIEW - BUILT ENVIRONMENT (see Attachments)

Mr. Ward Hill (M.A.), consulting architectural historian, conducted an architectural field survey and preliminary evaluation of the two residential properties in the project on April 5, 2012. During this survey, he photographed the houses, inspected the interiors and exteriors, noting later alterations and obvious evidence of deterioration. He also surveyed the landscaping adjacent to the houses which includes numerous trees, a swimming pool and various plantings.

The property is owned by the Sabatino Family Trust. According to Mr. Murphy Sabatino, his great grandfather, Angelo Sabatino, and his wife Angela, worked as farmers on the property. They originally had a cherry orchard. Born in 1889, Angelo Sabatino died in 1963. According to Mr. Sabatino, the family built the two houses extant today at 12710 and 12750 Mabury Road in 1964. The houses appear to be builder-designed and were likely constructed by the same building contractor. Mr. Sabatino's grandfather Murphy Sabatino (who worked in real estate) and his wife Josephine occupied 12710 Mabury Road until 2001.

Description [Figs 4-5]

The two Ranch House Style houses at 12710 and 12750 Mabury Road at the southeast corner of Mabury Road and Educational Park Drive. The two adjacent wood-frame single-family houses - sited on an east/west axis - have long, rectangular, linear plans. The houses are set back about 100 feet from Mabury Road. The landscaping on the three parcels includes several tall, thin palm trees, a small orchard near Mabury Road between the two houses and additional medium and smaller size trees. The houses have front and rear yards with lawns and trimmed hedges. A low white picket fence encloses the rear lawn at 12750 Mabury Road. The backyard at 12710 Mabury includes a large concrete paved patio area and a swimming pool. The modern greenhouses and brick barbeque in the backyard of this house have been added since 2003.

12710 Mabury Road [see Fig. 4]

The house at 12710 Mabury Road has cross-gable roof covered with wood shingles. The roof has wide eaves. At the east end of the house, the front gable (with a decorative fascia under the eaves) faces Mabury Road to the north and a long front porch is recessed below the roof west of the front gable. Seven columns set on the concrete walkway support the porch roof. A three car garage (the garage doors face west) is at the west end the house. The front (north) and west

facades are covered with board and batten siding. Stone facing also covers part of the north façade in the vicinity of the main entrance and gabled bay on the east has wooden clapboard covering the base. Two brick chimneys project above the roof. The entrance area also has stone paving. The east and rear (south) facades are covered with smooth stucco. The house has aluminum sliders for windows and double, paneled entrance doors. The rear façade has two sliding glass doors opening to the back yard. Inside the two houses have similar floor plans. The linear spatial arrangement at 12710 Mabury Road includes a kitchen, den, utility room and bathroom on the south and the dining room, living room and the entrance foyer on the north. The three bedrooms and two additional bathrooms are located at the eastern end of the house. The den had an exposed natural wood beam ceiling and a brick fireplace. The interior walls are gypsum wallboard.

12750 Mabury Road [see Fig. 5]

The house at 12750 Mabury Road also has cross-gable roof covered with wood shingles. The roof has wide eaves. At the east end of the house, the front gable (with an exposed roof rafter at the roof peak) faces Mabury Road to the north and a long front porch is recessed below the roof west of the front gable. A series of square posts with diagonal braces set on the concrete walkway support the porch roof. The three car garage on the west opens to a large paved area at the north side of the house. The front (north) façade is covered with board and batten siding and brick facing while the other three facades are covered with smooth stucco. The house has aluminum sliders for windows and double entrance doors each with a single window. The entrance porch is recessed below the right side of the front gable supported by a large beam on square posts. The rear façade has two doors opening to the back yard. Inside the two houses have similar floor plans. The linear spatial arrangement at 12750 Mabury Road includes a contiguous kitchen, dining room and den on the south and a utility room, living room and the entrance foyer on the north. The den and dining room area has natural wood, exposed rafter ceiling like the house at 12710 Mabury Road. Three bedrooms and two bathrooms are located at the eastern end of the house. The interior walls are gypsum wallboard.

Preliminary Evaluation

The houses at 12710 and 12750 Mabury Road, San Jose have not been designated or determined for any state, local or federal historic resource listing. The houses appear to retain a high level of historic integrity. Although the houses retain historic integrity, based on the survey conducted for this report, the houses do not appear to be eligible under California Register of Historical Places (CRHR) Criterion 3 because they are not exceptional examples of the Ranch House Style in San Jose.

. . . resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.

The houses are typical examples of the Ranch House Style from the 1960s and many more distinguished examples of this domestic style are still extant in San Jose. Additional detailed archival historical research/oral history is necessary in order to evaluate the building under Criteria 1 and 2.

SUMMARY

- No archaeological resources have been identified in or adjacent to the proposed project based on the records search and field inventory conducted for the proposed project.
- No known ethnographic, traditional or contemporary Native American resources have been identified in or adjacent to the project.
- The limited historic map review indicates that no late 19th through mid-20th structures were located in the project or adjacent.
- The houses do not appear to be eligible under California Register of Historical Places (CRHR) Criterion 3 because they are not exceptional examples of the Ranch House Style in San Jose. The houses are typical examples of the Ranch House Style from the 1960s and many more distinguished examples of this domestic style are still extant in San Jose. Further archival historical research/oral history about the Sabatino family is required in order to evaluate the houses under CRHR) Criteria 1 and 2
- No CRHR listed, determined or potentially significant local, state or federal historic properties, landmarks, etc. have been identified in or adjacent to the proposed project.

CONCLUSIONS AND MANAGEMENT RECOMMENDATIONS

It is the considered opinion of Basin Research Associates, based on a review of archaeological records, historic maps and other documents, and a field inventory that the proposed project can proceed as planned in regard to prehistoric and historic archaeological resources. No subsurface testing for buried archaeological resources appears necessary at this time.

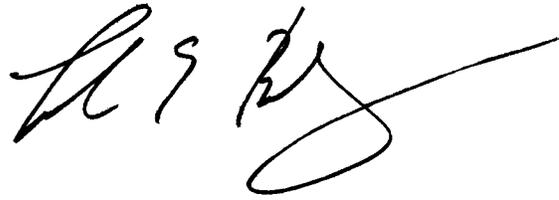
The initial architectural review of the two buildings present on the property suggests that they are not eligible for inclusion on the CRHR. However, additional historical research regarding the Sabatino Family's importance to local, regional and state history is required to conclusively determine CRHR status.

Basin Research Associates recommends that if any unanticipated prehistoric or significant historic era cultural materials are exposed during construction grading and/or excavation, operations should stop within 25 feet of the find and a qualified professional archaeologist contacted for evaluation and further recommendations. Potential recommendations could include evaluation, collection, recordation, analysis, etc. of any significant cultural materials followed by a professional report.³

-
3. Significant prehistoric cultural resources are defined as human burials, features or other clusterings of finds made, modified or used by Native American peoples in the past. The prehistoric and protohistoric indicators of prior cultural occupation by Native Americans include artifacts and human bone, as well as soil discoloration, shell, animal bone, sandstone cobbles, ashy areas, and baked or vitrified clays. Prehistoric materials may include:
 - a. Human bone - either isolated or intact burials.
 - b. Habitation (occupation or ceremonial structures as interpreted from rock rings/features,

If I can provide any additional information or be of further service please don't hesitate to contact me.

BASIN RESEARCH ASSOCIATES, INC.



Colin I. Busby, Ph.D., RPA
Principal

CIB/dg
Enclosures

-
- c. distinct ground depressions, differences in compaction (e.g., house floors).
Artifacts including chipped stone objects such as projectile points and bifaces; groundstone artifacts such as manos, metates, mortars, pestles, grinding stones, pitted hammerstones; and, shell and bone artifacts including ornaments and beads.
 - d. Various features and samples including hearths (fire-cracked rock; baked and vitrified clay), artifact caches, faunal and shellfish remains (which permit dietary reconstruction), distinctive changes in soil stratigraphy indicative of prehistoric activities.
 - e. Isolated artifacts

Historic cultural materials may include finds from the late 19th through early 20th centuries. Objects and features associated with the Historic Period can include.

- a. Structural remains or portions of foundations (bricks, cobbles/boulders, stacked field stone, postholes, etc.).
- b. Trash pits, privies, wells and associated artifacts.
- c. Isolated artifacts or isolated clusters of manufactured artifacts (e.g., glass bottles, metal cans, manufactured wood items, etc.).
- d. Human remains.

In addition, cultural materials including both artifacts and structures that can be attributed to Hispanic, Asian and other ethnic or racial groups are potentially significant. Such features or clusters of artifacts and samples include remains of structures, trash pits, and privies.

REFERENCES CITED AND CONSULTED

American Society of Civil Engineers

- 2012 List of Historic Civil Engineering Landmarks [254 listings; last modified March 30, 2011.] <http://en.wikipedia.org/wiki/List_of_Historic_Engineering_Lan...> accessed 4/27/2012.

American Society of Civil Engineers, San Francisco (ASCE)

- 1977 Historic Civil Engineering Landmarks of San Francisco and Northern California. The History and Heritage Committee, San Francisco Section, American Society of Civil Engineers. Pacific Gas and Electric Company, n.p.

Anastasio, Rebecca Loveland (Basin Research Associates)

- 1985 A Cultural Resources Assessment of the Alum Rock Sanitary Sewer Supplement, City of San Jose, Santa Clara County, California. MS on file, S-7844, CHRIS/NWIC, Sonoma State University, Rohnert Park.

Anastasio, Rebecca L. and Stuart A. Guedon (Basin Research Associates)

- 1985 A Cultural Resources Assessment of the Proposed City of San Jose Enterprise Zone, Santa Clara County, California. MS on file, S-7712, CHRIS/NWIC, Sonoma State University, Rohnert Park.

Basin Research Associates, Inc.

- 1994 Recorded Archaeological Resources in Santa Clara County, California (plotted on the BARCLAY 1993 LoCaide Atlas). MS on file, S-16394, CHRIS/NWIC, Sonoma State University Rohnert Park.
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Abbreviations

- n.d. no date
 v.d. various dates
 N.P. no publisher noted
 n.p. no place of publisher noted

Note: The abbreviated phrase "CHRIS/NWIC, Sonoma State University, Rohnert Park" is used for material on file at the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park.

ATTACHMENTS

FIGURES

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- FIGURE 2 Project Location (USGS San Jose East, Calif. 1980)
- FIGURE 3 Aerial View of Project Area (Google Earth)
- FIGURE 4 View southeast towards 12710 Mabury Road (APN 254-05-046)
- FIGURE 5 View south towards 12750 Mabury Road (APN 254-05-049)
- FIGURE 6 View to south of the west of APN 354-05-049
- FIGURE 7 View west towards 12750 Mabury Road
- FIGURE 8 View southwest of the rear of APN 254-05-049
- FIGURE 9 View northeast of APN 254-05-048

CORRESPONDENCE

- LETTER REQUEST TO NATIVE AMERICAN HERITAGE
COMMISSION
- LETTER NATIVE AMERICAN HERITAGE COMMISSION
RESPONSE

REPORT

- REPORT Letter Report to Basin Research Associates
12710 & 12750 Mabury Road, San Jose
Ward Hill (M.A.), Architectural Historian
April 16, 2012



Figure 1: General Project Location

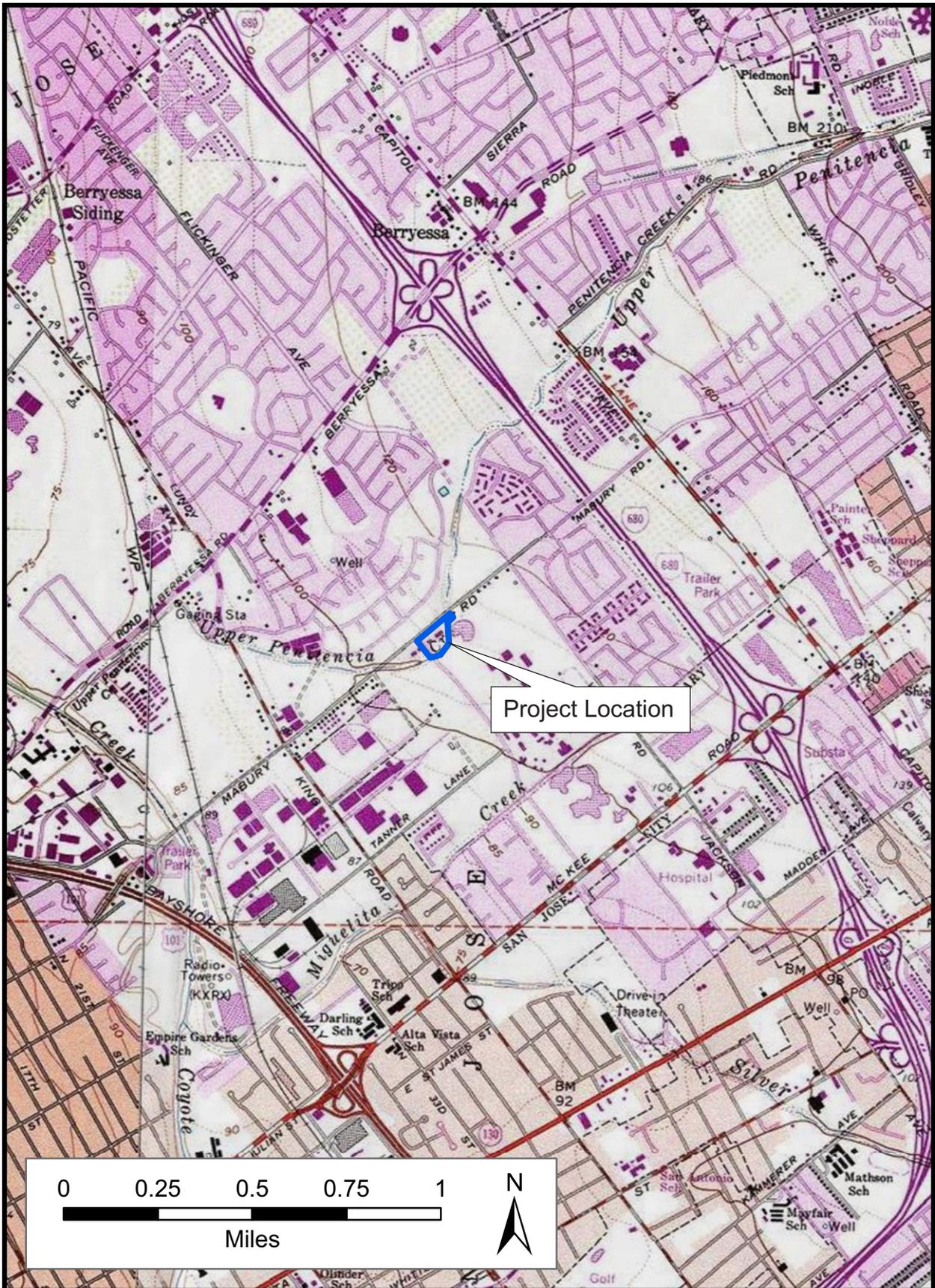


Figure 2: Project Location (USGS San Jose East, Calif. 1980)

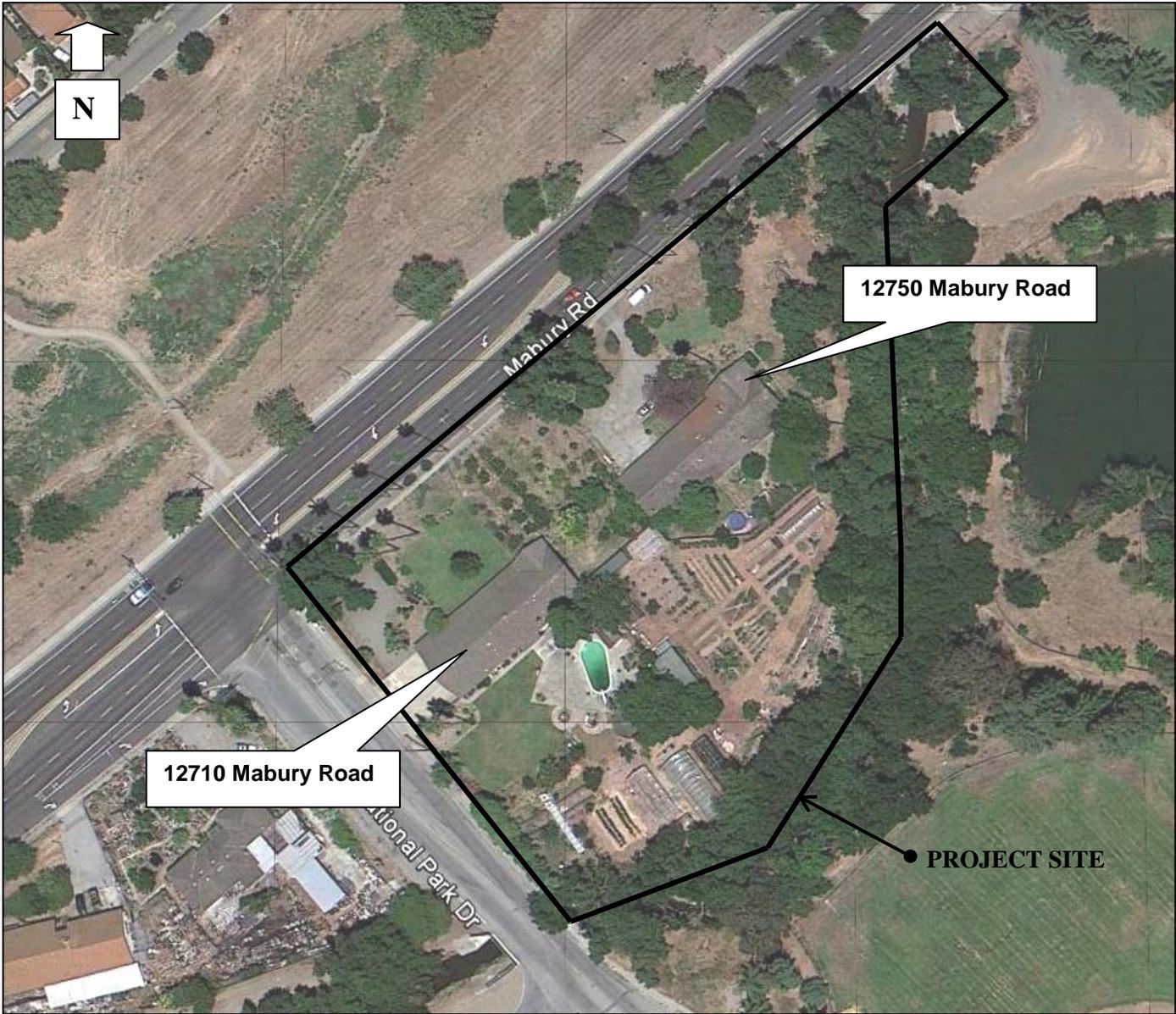


Figure 3: Aerial View of Project Area (SOURCE: GOOGLE EARTH)



Figure 4: View southeast towards 12710 Mabury Road (APN 254-05-046)



Figure 5: View south towards 12750 Mabury Road (APN 254-05-049)



Figure 6: View to south of the west side of APN 254-05-049



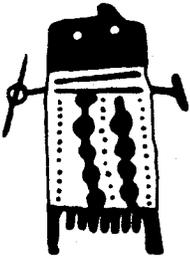
Figure 7: View west towards 12750 Mabury Road



Figure 8: View southwest of the rear of APN 254-05-049



Figure 9: View northeast of APN 254-05-048



March 26, 2012

BASIN
RESEARCH
ASSOCIATES

1933 DAVIS STREET
SUITE 210
SAN LEANDRO, CA 94577
VOICE (510) 430-8441
FAX (510) 430-8443

Mr. Larry Meyers
Executive Secretary
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

RE: Request for Review of Sacred Lands Inventory –
Residential Project, Mabury Road, City of San Jose, Santa Clara County

Dear Mr. Meyers,

Please let this letter stand as our request for the Native American Heritage Commission (NAHC) to conduct a review of the NAHC *Sacred Lands Inventory* to determine if any listed properties are present within or adjacent to the above proposed project area (see enclosed USGS map).

The proposed project consists of a residential in-fill project on approximately 3.4 acres located on the south side Mabury Road at Educational Park Drive adjacent to the north side of Penitencia Creek in the City of San Jose. Two single family residences currently occupy the proposed project site.

Information from the NAHC *Sacred Lands Inventory* will be used in an “initial study/feasibility” level letter report to be submitted to the City of San Jose.

If I can provide any further information, please don't hesitate to contact me (510 430-8441 or Basinres1@gmail.com). Thank you for your timely review of our request.

BASIN RESEARCH ASSOCIATES, INC.

Colin I. Busby, Ph.D., RPA
Principal

CIB/dg

BASIN RESEARCH ASSOCIATES

STATE OF CALIFORNIAEdmund G. Brown, Jr., Governor**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390



April 5, 2012

Colin I. Busby
BASIN Research Associates
1933 Davis Street, Suite 210
San Leandro, CA 94577

Sent by Fax: 510-430-8443
Number of Pages: 2

Re: Residential Project, Mabury Road, City of San Jose, Santa Clara County.

Dear Mr. Busby:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

A handwritten signature in black ink, appearing to read "Debbie Pilas-Treadway".

Debbie Pilas-Treadway
Environmental Specialist III

**Native American Contacts
Santa Clara County
April 4, 2012**

Jakki Kehi
720 North 2nd Street
Patterson , CA 95363
jakki@bigvalley.net
(209) 892-1060

Ohlone/Costanoan

Amah/Mutsun Tribal Band
Jean-Marie Feyling
19350 Hunter Court
Redding , CA 96003
jmfgmc@sbcglobal.net
530-243-1633

Ohlone/Costanoan

Katherine Erolinda Perez
PO Box 717
Linden , CA 95236
canutes@verizon.net
(209) 887-3415

Ohlone/Costanoan
Northern Valley Yokuts
Bay Miwok

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister , CA 95024
ams@indiancanyon.org
831-637-4238

Ohlone/Costanoan

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
PO Box 5272
Galt , CA 95632
vlopez@amahmutsun.org
916-743-5833

Ohlone/Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
2574 Seaboard Avenue
San Jose , CA 95131
muvekma@muvekma.org
408-205-9714
510-581-5194

Ohlone / Costanoan

Amah Mutsun Tribal Band
Edward Ketchum
35867 Yosemite Ave
Davis , CA 95616
aerieways@aol.com

Ohlone/Costanoan
Northern Valley Yokuts

The Ohlone Indian Tribe
Andrew Galvan
PO Box 3152
Fremont , CA 94539
chochenyo@AOL.com
(510) 882-0527 - Cell
(510) 687-9393 - Fax

Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

Amah/Mutsun Tribal Band
Irene Zwierlein, Chairperson
789 Canada Road
Woodside , CA 94062
amah_mutsun@yahoo.com
(650) 851-7747 - Home
650-400-4806 cell preferred
(650) 851-7489 - Fax

Ohlone/Costanoan

Trina Marine Ruano Family
Ramona Garibay, Representative
30940 Watkins Street
Union City , CA 94587
soaprootmo@msn.com
510-972-0645-home
209-688-4753-cell

Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Residential Project, Mabury Road, City of San Jose, Santa Clara County

WARD HILL

Architectural History. Historic Preservation

April 16, 2012

Dr. Colin Busby
Basin Research Associates
1933 Davis Street, Suite 210
San Leandro, CA 94577

RE: 12710 & 12750 Mabury Road
San Jose, California

Dear Dr. Busby:

The purpose of this letter is to provide a preliminary historic resource evaluation of the two single-family houses at 12710 and 12750 Mabury Road, San Jose, California. The houses are located on three parcels that include 3.418 acres (APN 254-05-046, 048 & 049). I conducted a field survey of the property on April 5, 2012. During this survey, I photographed the houses, inspected the interiors and exteriors, noting later alterations and obvious evidence of deterioration. I also surveyed the landscaping adjacent to the houses which includes numerous trees, a swimming pool and various plantings.

I have not conducted historic research on the property. However, I interviewed one of the current owners, Murphy Sabatino, on April 5, 2012. The property is owned by the Sabatino Family Trust. According to Murphy Sabatino, his great grandfather, Angelo Sabatino, and his wife Angela, worked as farmers on the property (much of original parcel has been sold off). They originally had a cherry orchard. Born in 1889, Angelo Sabatino died in 1963. According to Mr. Sabatino, the Sabatino family built the two houses extant today at 12710 and 12750 Mabury Road in 1964. The houses appear to be builder-designed and were likely constructed by the same building contractor. Mr. Sabatino's grandfather Murphy Sabatino (who worked in real estate) and his wife Josephine occupied 12710 Mabury Road until 2001.

Description

The two Ranch House Style houses at 12710 and 12750 Mabury Road at the southeast corner of Mabury Road and Educational Park Drive. The two adjacent wood-frame single-family houses - sited on an east/west axis - have long, rectangular, linear plans. The houses are set back about 100 feet from Mabury Road. The landscaping on the three parcels includes several tall, thin palm

trees, a small orchard near Mabury Road between the two houses and additional medium and smaller size trees. The houses have front and rear yards with lawns and trimmed hedges. A low white picket fence encloses the rear lawn at 12750 Mabury Road. The backyard at 12710 Mabury includes a large concrete paved patio area and a swimming pool. The modern greenhouses and brick barbeque in the backyard of this house have been added since 2003.

12710 Mabury Road [Figs. 4-10]

The house at 12710 Mabury Road has cross-gable roof covered with wood shingles. The roof has wide eaves. At the east end of the house, the front gable (with a decorative fascia under the eaves) faces Mabury Road to the north and a long front porch is recessed below the roof west of the front gable. Seven columns set on the concrete walkway support the porch roof. A three car garage (the garage doors face west) is at the west end the house. The front (north) and west facades are covered with board and batten siding. Stone facing also covers part of the north façade in the vicinity of the main entrance and gabled bay on the east has wooden clapboard covering the base. Two brick chimneys project above the roof. The entrance area also has stone paving. The east and rear (south) facades are covered with smooth stucco. The house has aluminum sliders for windows and double, paneled entrance doors. The rear façade has two sliding glass doors opening to the back yard. Inside the two houses have similar floor plans. The linear spatial arrangement at 12710 Mabury Road includes a kitchen, den, utility room and bathroom on the south and the dining room, living room and the entrance foyer on the north. The three bedrooms and two additional bathrooms are located at the eastern end of the house. The den had an exposed natural wood beam ceiling and a brick fireplace. The interior walls are gypsum wallboard.

12750 Mabury Road [Figs. 11-17]

The house at 12750 Mabury Road also has cross-gable roof covered with wood shingles. The roof has wide eaves. At the east end of the house, the front gable (with an exposed roof rafter at the roof peak) faces Mabury Road to the north and a long front porch is recessed below the roof west of the front gable. A series of square posts with diagonal braces set on the concrete walkway support the porch roof. The three car garage on the west opens to a large paved area at the north side of the house. The front (north) façade is covered with board and batten siding and brick facing while the other three facades are covered with smooth stucco. The house has aluminum sliders for windows and double entrance doors each with a single window. The entrance porch is recessed below the right side of the front gable supported by a large beam on square posts. The rear façade has two doors opening to the back yard. Inside the two houses have similar floor plans. The linear spatial arrangement at 12750 Mabury Road includes a contiguous kitchen, dining room and den on the south and a utility room, living room and the entrance foyer on the north. The den and dining room area has natural wood, exposed rafter ceiling like the house at 12710 Mabury Road. Three bedrooms and two bathrooms are located at the eastern end of the house. The interior walls are gypsum wallboard.

California Register of Historical Resources (CRHR)

In 1992, Assembly Bill 2881 added Section 21084.1 to the Public Resources Code (i.e. the CEQA statute), which providing more specific guidelines for identifying historic resources during the CEQA process:

A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. For purposes of this section, an historical resource is a resource listed in, or determined eligible for listing in, the California Register of Historical Resources.

Consequently, under Section 21084.1, an historic resource eligible for the California Register would by definition be an historic resource for purposes of CEQA compliance. The Final Regulations for nominating resources to the California Register were published in January, 1998. Under the regulations, a number of historic resources are automatically eligible for the California Register if they have been listed in and determined eligible for the National Register of Historic Places or the California Historic Landmarks program (landmarks 770 or higher). Historic resources included in local inventories or designated under local ordinances can also be presumed eligible if they meet certain criteria.

In order for a resource to be eligible for the California Register, it must satisfy all of the following three criteria:

- 1) meet one or more of the four criteria of significance:
 - a. the resource is associated with events or patterns of events that have made a significant contribution to the broad patterns of local and regional history.
 - b. the resource is associated with the lives of persons important to the nation or to California's past.
 - c. the resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
 - d. the resource has the potential to yield information important to the prehistory or history of the state or the nation (this criteria applies primarily to archaeological sites).
- 2) the resource retains historic integrity (defined below); and,
- 3) it is fifty years old or older (except for rare cases of structures of a higher or "exceptional level of significance").

The California Register regulations define "integrity" as "the authenticity of a property's physical

identity, evidenced by the survival of characteristics that existed during the property's period of significance." That is, it must retain enough of its historic character or appearance to be recognizable as an historical resource. California Register regulations specify that integrity is a quality that applies to historic resources in seven ways: location, design, setting, materials, workmanship, feeling and association. A property must retain most of these qualities to possess integrity.

Evaluation

The houses at 12710 and 12750 Mabury Road, San Jose, have not been designated or determined for any state, local or federal historic resource listing. The houses appear to retain a high level of historic integrity. Although the houses retain historic integrity, based on the survey conducted for this letter report, the houses at 12710 and 12750 Mabury Road, San Jose do not appear to be eligible under California Register Criterion 3 because they are not exceptional examples of the Ranch House Style in San Jose. The houses are typical examples of the Ranch House Style from the 1960s and many more distinguished examples of this domestic style are still extant in San Jose. I would need to conduct further archival historical research/oral history about the Sabatino family in order to evaluate the houses under Criteria 1 and 2.

Please let me know if you have any questions regarding this letter.

Sincerely,

Via email

Ward Hill, M.A.
Architectural Historian

ATTACHMENTS

FIGURES

- | | |
|-----------|--|
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| Figure 12 | 12750 Mabury Road, view from northeast |
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| Figure 14 | 12750 Mabury Road, entrance door and porch, view from northwest |
| Figure 15 | 12750 Mabury Road, view from southwest |
| Figure 16 | 12750 Mabury Road, interior view - den and kitchen |
| Figure 17 | 12750 Mabury Road, interior view, living room and entrance foyer |



Figure 1: General Project Location

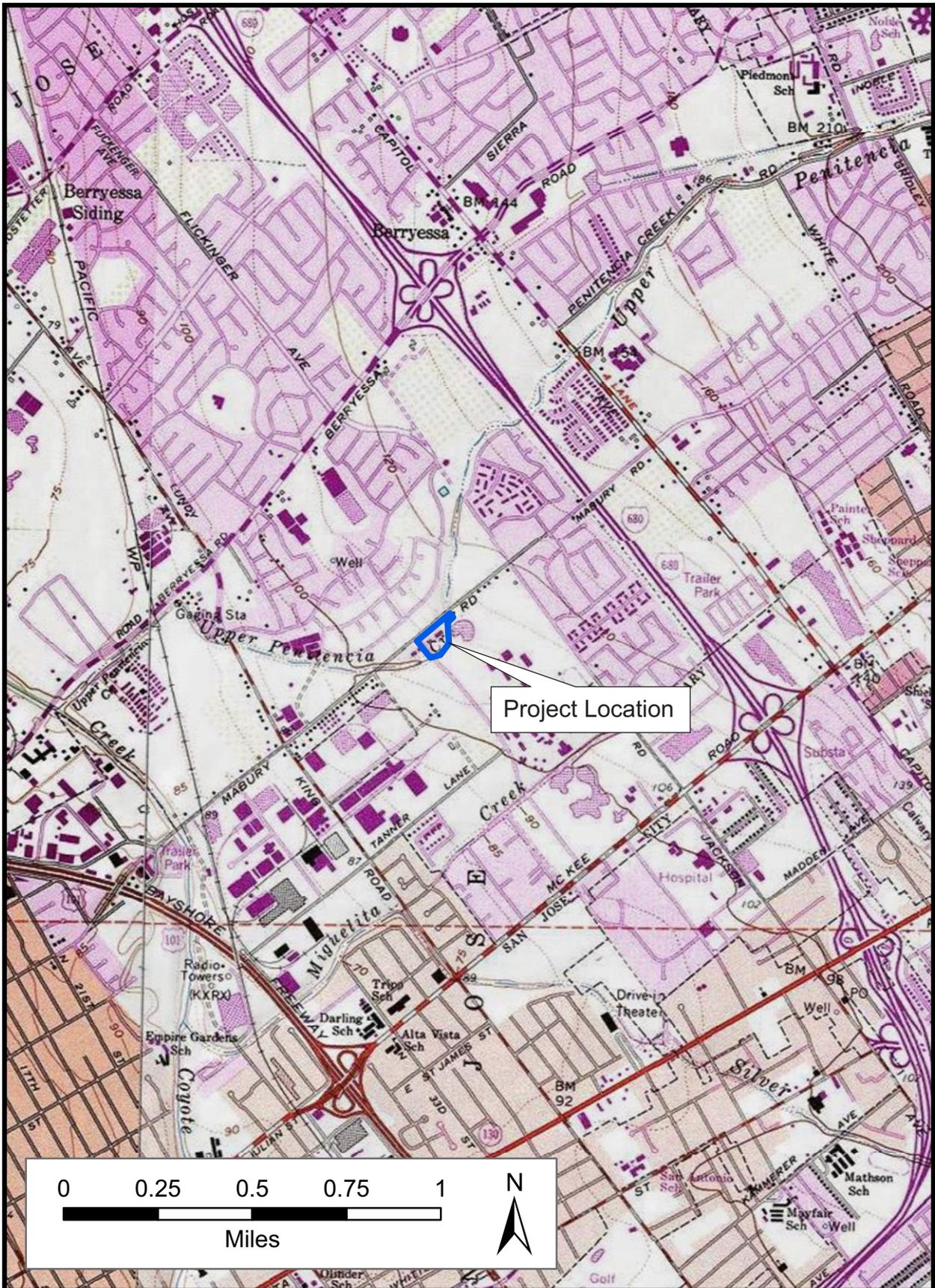


Figure 2: Project Location (USGS San Jose East, Calif. 1980)

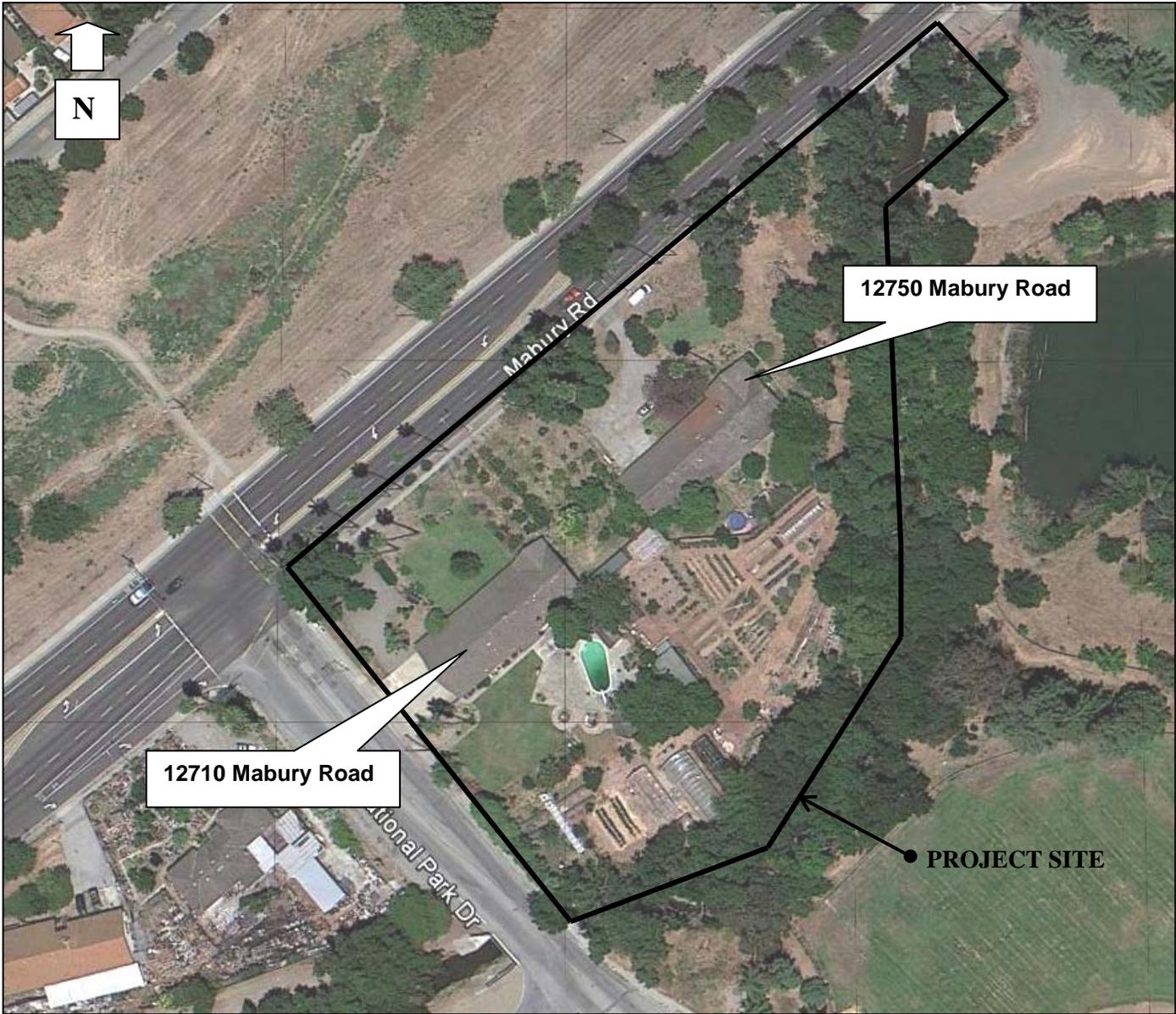


Figure 3: Aerial View of Project Area (SOURCE: GOOGLE EARTH)



Figure 4: 12710 Mabury Road, view from northeast



Figure 5: 12710 Mabury Road, view from northwest



Figure 6: 12710 Mabury Road, entrance porch, view from northwest



Figure 7: 12710 Mabury Road, entrance doors and porch, view from northwest



Figure 8: 12710 Mabury Road, view from southeast



Figure 9: 12710 Mabury Road, interior view den and kitchen



Figure 10: 12710 Mabury Road, interior view, living room and dining room



Figure 11: 12750 Mabury Road, view from northwest



Figure 12: 12750 Mabury Road, view from northeast



Figure 13: 12750 Mabury Road, entrance porch, view from north



Figure 14: 12750 Mabury Road, entrance door and porch, view from northwest



Figure 15: 12750 Mabury Road, view from southwest



Figure 16: 12750 Mabury Road, interior view – den and kitchen



Figure 17: 12750 Mabury Road, interior view – living room and entrance foyer



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

BIOTIC EVALUATION MABURY PROPERTY

CITY OF SAN JOSE, SANTA CLARA COUNTY, CALIFORNIA

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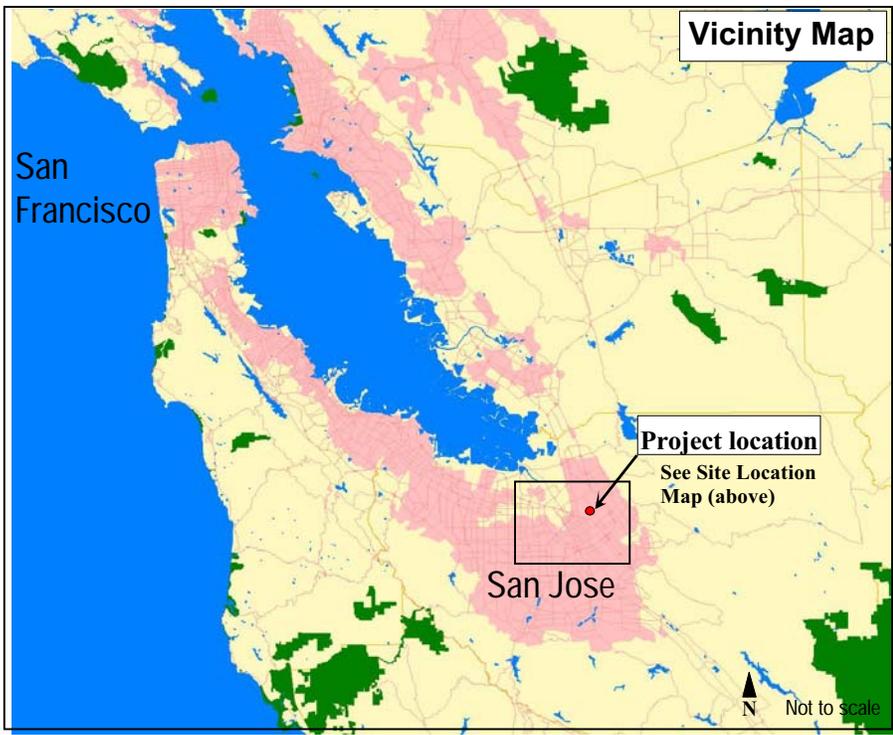
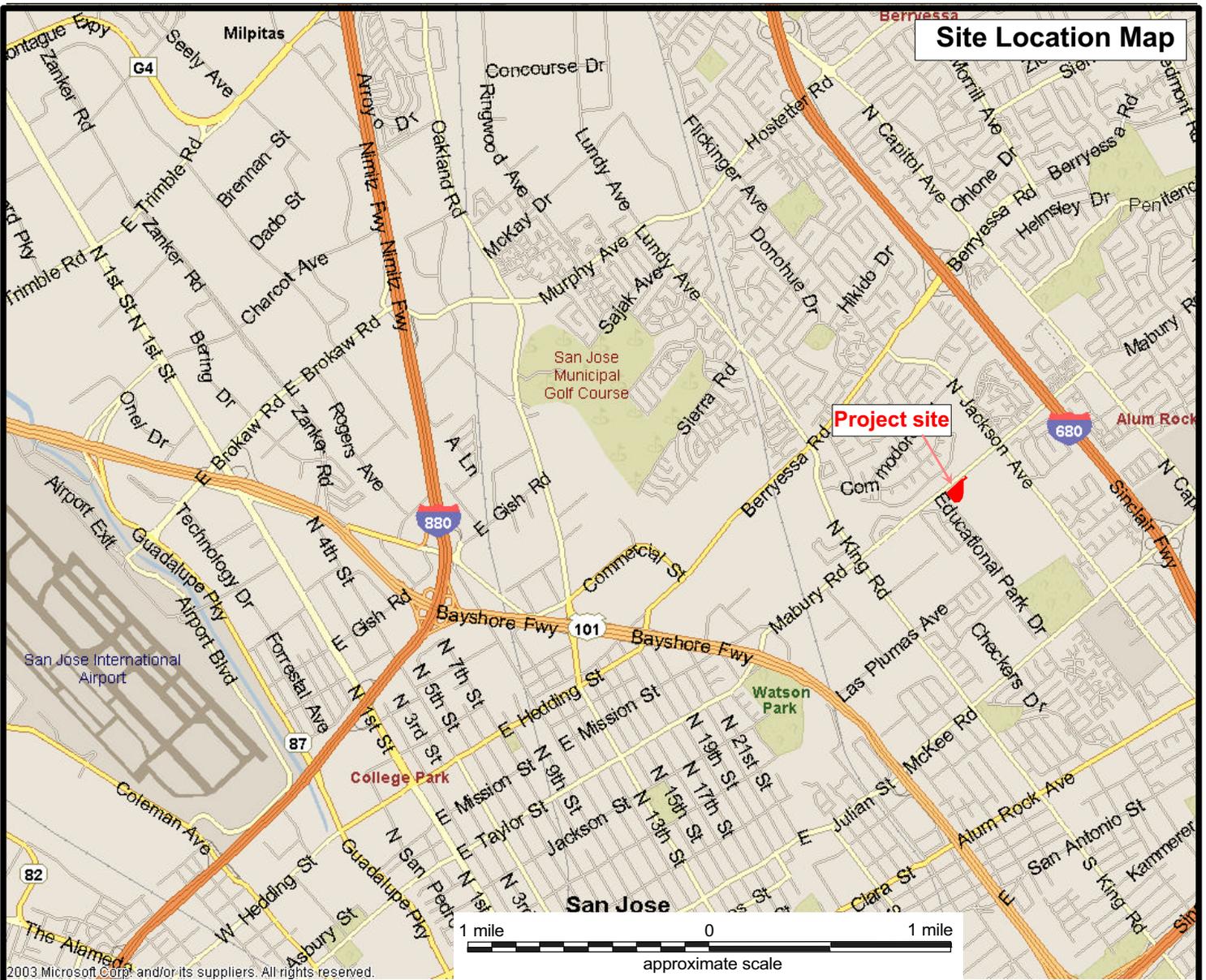
1.0 INTRODUCTION

This report describes the biotic resources of the approximately 3.42-acre Mabury Property (hereafter referred to as the “study area” or “site”) and evaluates possible impacts to these resources resulting from future redevelopment. The site is located on the eastern corner of Mabury Road and Educational Park Drive along Upper Penitencia Creek (APNs 254-05-46 and 254-05-47) (Figure 1). The site can be found on the San Jose East, California U.S.G.S quadrangle, in portions of Section 33, Township 6 South, Range 1 East. The site currently consists of developed or ruderal upland areas with Upper Penitencia Creek running along the site’s eastern and southern boundary.

In this report, Live Oak Associates, Inc. (LOA) identifies sensitive biotic resources, significant biotic habitats, regional fish and wildlife movement corridors, and existing local, state and federal natural resource protection policies, ordinances, and laws regulating land use. Provisions of the California Environmental Quality Act (CEQA), the federal Clean Water Act (CWA), the state and federal endangered species acts (FESA and CESA respectively), California Fish and Game Code, and California Water Code could greatly affect project costs, depending on the natural resources present on the site. The primary objectives of this report are as follows:

- To summarize all site-specific information related to existing biological resources;
- To 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 natural resource issues specific to the site that could affect future development;
- Identify avoidance and mitigation measures that could significantly reduce the magnitude of likely biological resource issues associated with site development.

Natural resource issues related to these state and federal laws have been identified in past planning studies conducted in the general project area, and it is reasonable to presume that such issues could be relevant to the subject parcels examined in this report. A number of state and federally listed animals, as well as other special status animal species (i.e., candidate species for listing and California species of special concern), have been documented within 20 miles of the



Live Oak Associates, Inc.

Mabury Property
Site / Vicinity Map

Date	Project #	Figure #
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project site. These species include state and/or federally listed species such as the California red-legged frog as well as California species of special concern including the western pond turtle and burrowing owl. This report evaluates the site's suitability for these and other species.

CEQA is also concerned with project impact on riparian habitat, wildlife movement corridors, fish and wildlife habitat, and jurisdictional wetlands, as well as project compliance with special ordinances and state laws protecting regionally sensitive biotic resources, and approved habitat conservation plans. Therefore, this report addresses the relevance of each of these issues to eventual site development.

Sources of information used in the preparation of this analysis included: (1) the California Natural Diversity Data Base (CDFG 2012); (2) the Inventory of Rare and Endangered Vascular Plants of California (CNPS 2012); (3) State and Federally Listed Endangered and Threatened Animals of California (CDFG 2012); (4) numerous planning documents and biological studies for projects in the area, many of which have been prepared by LOA; and (5) manuals and references related to plants and animals of the San Francisco Bay Area. Additional information was gathered during field surveys conducted by LOA ecologists Melissa Denena on April 19, 2010, Nathan Hale on May 21, 2010, and Nathan Hale and Neal Kramer on April 20 and 23, 2012.

2.0 EXISTING CONDITIONS

The site is located in the northern portion of the City of San Jose, Santa Clara County, California. Currently, the site consists of upland ruderal or developed habitat with Upper Penitencia Creek running along the site's eastern and southern boundary. The site is located on relatively flat ground with an elevation of approximately 110 feet (35 meters) (National Geodetic Vertical Datum (NGVD)).

One soil type was identified on the project site, Elder fine sandy loam, 0 to 2 percent slopes, rarely flooded (NRCS Web Soil Survey 2012). Elder soils are well drained soils formed in alluvial material derived from mixed rock sources with moderately rapid permeability. Only two percent of this soil type is considered hydric in stream landforms.

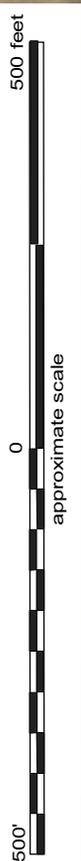
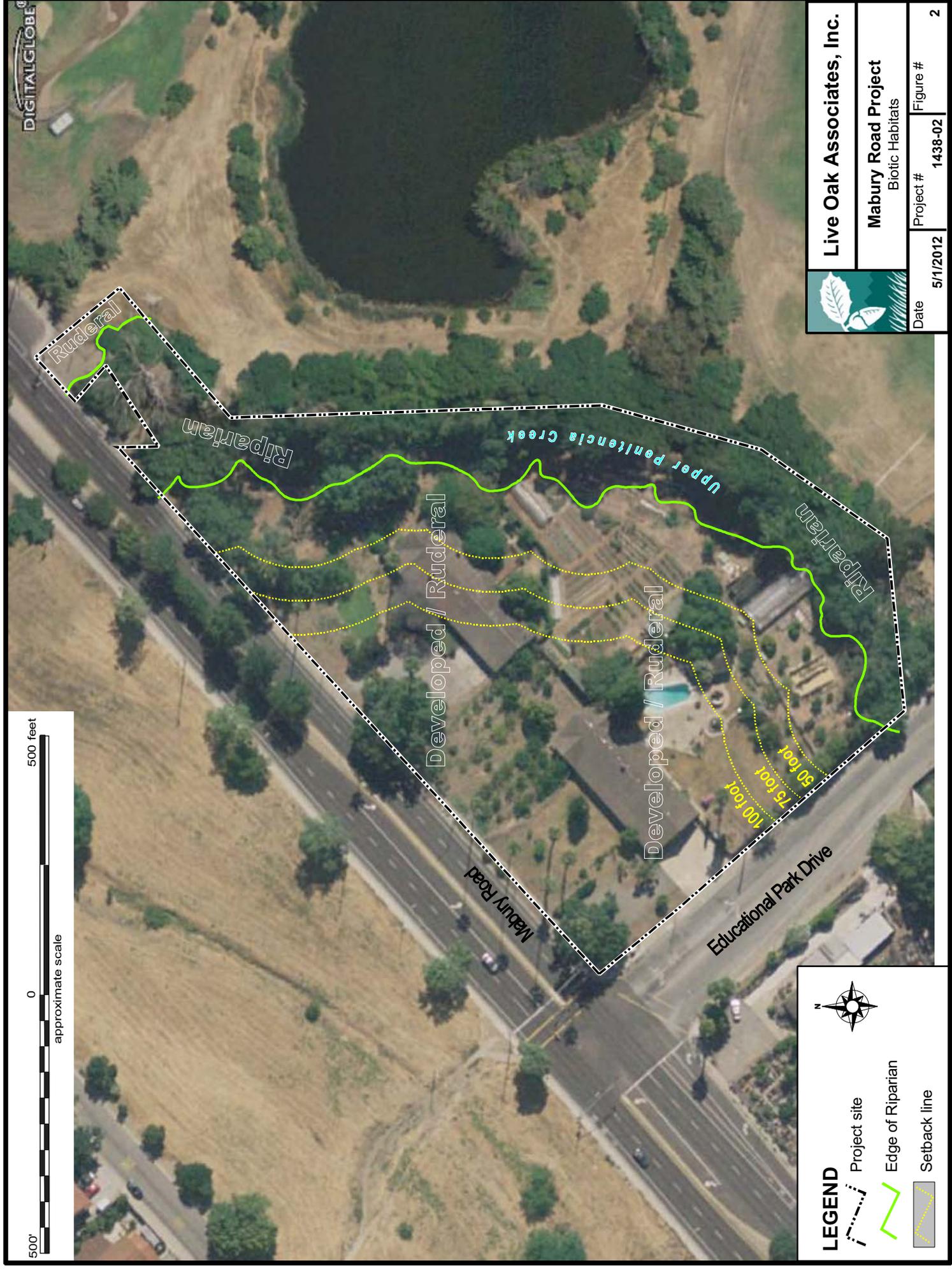
Annual precipitation in the general vicinity of the study area is 15 inches, almost 85% of which falls between the months of October and March. Virtually all precipitation falls in the form of rain. Storm waters generally infiltrate into the soils of the site. Once field capacity has been reached, however, runoff will sheet flow into Upper Penitencia Creek along the site's eastern and southern boundary.

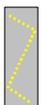
2.1 BIOTIC HABITATS/LAND USES

The site has been classified as developed/ruderal and Upper Penitencia Creek/riparian (Figure 2). The term "ruderal" refers to habitats that have been heavily disturbed by human factors and that support vegetation that is adapted to such disturbed conditions.

2.1.1 Developed/Ruderal

The majority of the site consists of existing development or ruderal areas. The upland portion of the site supports two single family homes, a large swimming pool area, some unkempt ruderal grassy areas, landscaping including an extensive gardening area in the area adjacent to and even within the riparian corridor. The gardening area was observed as supporting several large garden beds, some orchard trees, approximately a half dozen large greenhouses and lath houses, which are actively used by members of the local organization, the Santa Clara County Master Gardeners. Currently, there is no significant barrier or buffer between the existing riparian corridor and the existing gardening operation (i.e., landscaping and greenhouse structures).



- LEGEND**
-  Project site
 -  Edge of Riparian
 -  Setback line

The majority of the site is highly maintained and supports planted landscaped or horticulture vegetation with non-native herbaceous species scattered throughout. A few of the plants being grown in the gardens were fava beans (*Vicia faba*) as a cover crop, broccoli (*Brassica oleracea*), and tomatoes (*Solanum lycopersicum*) and peppers (*Capsicum annuum*) inside the shaded areas or greenhouses. In the ruderal areas, the understory herbaceous vegetation observed includes Bermuda grass (*Cynodon dactylon*), riggut brome (*Bromus diandrus*), wild oats (*Avena* sp.), foxtail barley (*Hordeum murinum*), mallow (*Malva* sp.), filaree (*Erodium* spp.), petty spurge (*Euphorbia peplus*), bird's eye speedwell (*Veronica persica*), dwarf nettle (*Urtica urens*), bristly oxtongue (*Picris echioides*), scarlet pimpernel (*Anagallis arvensis*), calla lily (*Zantedeschia aethiopica*), hedge parsley (*Torilis arvensis*), bur clover (*Medicago polymorpha*), sourgrass (*Oxalis pes-caprae*), yellow sorrel (*Oxalis corniculata*), and common bedstraw (*Galium aparine*). In addition to an area planted as a manicured lawn, landscaped shrubs and trees observed include, but are not limited to, bird of paradise (*Strelitzia reginae*), bearded iris (*Iris germanica*), geranium (*Pelargonium* sp.), violet (*Viola* sp.), agave (*Agave* sp.), rose (*Rosa* sp.), camellia (*Camellia* sp.), oleander (*Nerium oleander*), lemon bottlebrush (*Callistemon citrinus*), crape myrtle (*Lagerstroemia indica*), redwood (*Sequoia sempervirens*), peach (*Prunus perisca*), plum (*Prunus domestica*), apple (*Malus pumila*), pear (*Pyrus communis*), Mexican fan palm (*Washingtonia robusta*), black walnut (*Juglans hindsii*), and giant yucca (*Yucca elephantipes*).

Amphibians would be limited within this portion of the site due to the lack of consistent moisture. However, this habitat could be used regularly by reptile species including the western fence lizard (*Sceloporus occidentalis*) which was observed during the April 2012 surveys, as well as the southern alligator lizard (*Elgaria multicarinatus*) and gopher snake (*Pituophis melanoleucus*).

Avian species observed onsite during the April 2012 surveys included the European starling (*Sturnus vulgaris*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), lesser goldfinch (*Carduelis psaltria*), California towhee (*Pipilo crissalis*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zeniada macroura*), and red-shouldered hawk (*Buteo lineatus*). Of these species observed, an active black phoebe nest was observed under a shed eave, an inactive hummingbird nest was observed in a tree, and a few other inactive nests were noted.

The only mammalian species or burrows were observed in this portion of the site during the April 2012 site visits were those of Botta's pocket gophers (*Thomomys bottae*). Vocalization of a common rat (*Rattus norvegicus*) was also heard coming from under one of the residential houses. There are a few other small mammals that could periodically occur within this portion of the site, including common species adapted to urban living such as the opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), domestic dog (*Canis familiaris*), and house cat (*Felis catus*).

2.1.2 Upper Penitencia Creek/Riparian

Upper Penitencia Creek and its slightly degraded urban cottonwood-willow riparian woodland occur along the site's eastern and southern boundaries. The onsite reach of creek is a manipulated channel with no deep pools. A significant portion of the creek banks are lined with cement, particularly near Educational Park Road.

This habitat is characterized as having a mixed tree overstory common to the valley floor of Santa Clara County. These include Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*), red willow (*Salix laevigata*), and several naturalized individuals of Northern California walnut (*Juglans hindsii*). It is important to note that the property was reported as being historically used as a walnut orchard, so it is likely the case that the walnut trees observed within the riparian canopy are, like many walnut trees within riparian corridors throughout California, the progeny of escaped orchard walnut trees in which the rootstock of Northern California walnut trees successfully grow shoots that dominate the grafted fruiting portion from English or Armenian varieties. Understory vegetation included mostly ruderal, non-native species of grasses, forbs, and shrubs including bentgrass (*Agrostis* sp.), ripgut brome, smilo grass (*Piptatherum miliaceum*), milk thistle (*Silybum marianum*), sourgrass, stinging nettle (*Urtica dioica*), bedstraw, poison hemlock (*Conium maculatum*), common mallow (*Malva neglecta*), common horehound (*Marrubium vulgare*), common cattail (*Typha latifolia*), periwinkle (*Vinca major*), and Himalayan blackberry (*Rubus armeniacus*).

Several avian species were observed utilizing the riparian habitat. These included the mallard (*Mallard platyrhynchos*), bushtit (*Psaltriparus minimus*), Anna's hummingbird, northern

mockingbird (*Mimus polyglottos*), western scrub jay (*Aphelocoma californica*), Bullock's oriole (*Icterus bullockii*), lesser goldfinch, belted kingfisher (*Megaceryle alcyon*), red-shouldered hawk. An active red-shouldered hawk nest was observed offsite along the creek on the northern side of Mabury Road.

In addition, the riparian corridor would be expected to be utilized by several additional species of animals. In spite of being considered a warm water creek, Upper Penitencia Creek is known to provide habitat for several species of fishes including the steelhead (*Oncorhynchus mykiss*). Several amphibians and reptiles common to the riparian habitats of the region could be expected to utilize the leaf litter of the riparian vegetation, including the arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenuatus*), Pacific treefrog (*Hyla regilla*), ensatina (*Ensatina eschscholtzi*), western fence lizard, southern alligator lizard, and western toad (*Bufo boreas*).

Mammalian species are also expected to utilize the riparian corridor of Upper Penitencia Creek as foraging, denning, and migration habitat. The only mammal evidence observed were burrows of the Botta's pocket gopher and California ground squirrel (*Otospermophilus beecheyi*). However, other species could be expected to use the onsite riparian corridor habitat including the eastern fox squirrel (*Sciurus niger*), California vole (*Microtus californicus*), western harvest mouse (*Reithrodontomys megalotis*), ornate shrew (*Sorex ornatus*), California mouse (*Peromyscus californicus*), striped skunks, common raccoon, and brush rabbit (*Sylvilagus bachmani*).

2.2 MOVEMENT CORRIDORS

Wildlife movement corridors are areas where regional wildlife populations regularly and predictably move during dispersal or migration. Movement corridors in California are typically associated with valleys, rivers and creeks supporting riparian vegetation, and ridgelines. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles.

The importance of an area as a “movement corridor” depends on the species in question and its 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.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species potentially occurring onsite permits sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

As noted in Section 2.1, a number of reptiles, birds, and mammals may use the site as part of their home range and dispersal movements. In fact, Upper Penitencia Creek is considered a movement corridor, but the upland portion of site lacks intrinsic features necessary or desirable for the regular and predictable movement of wildlife species through it in order to meet ecological requirements.

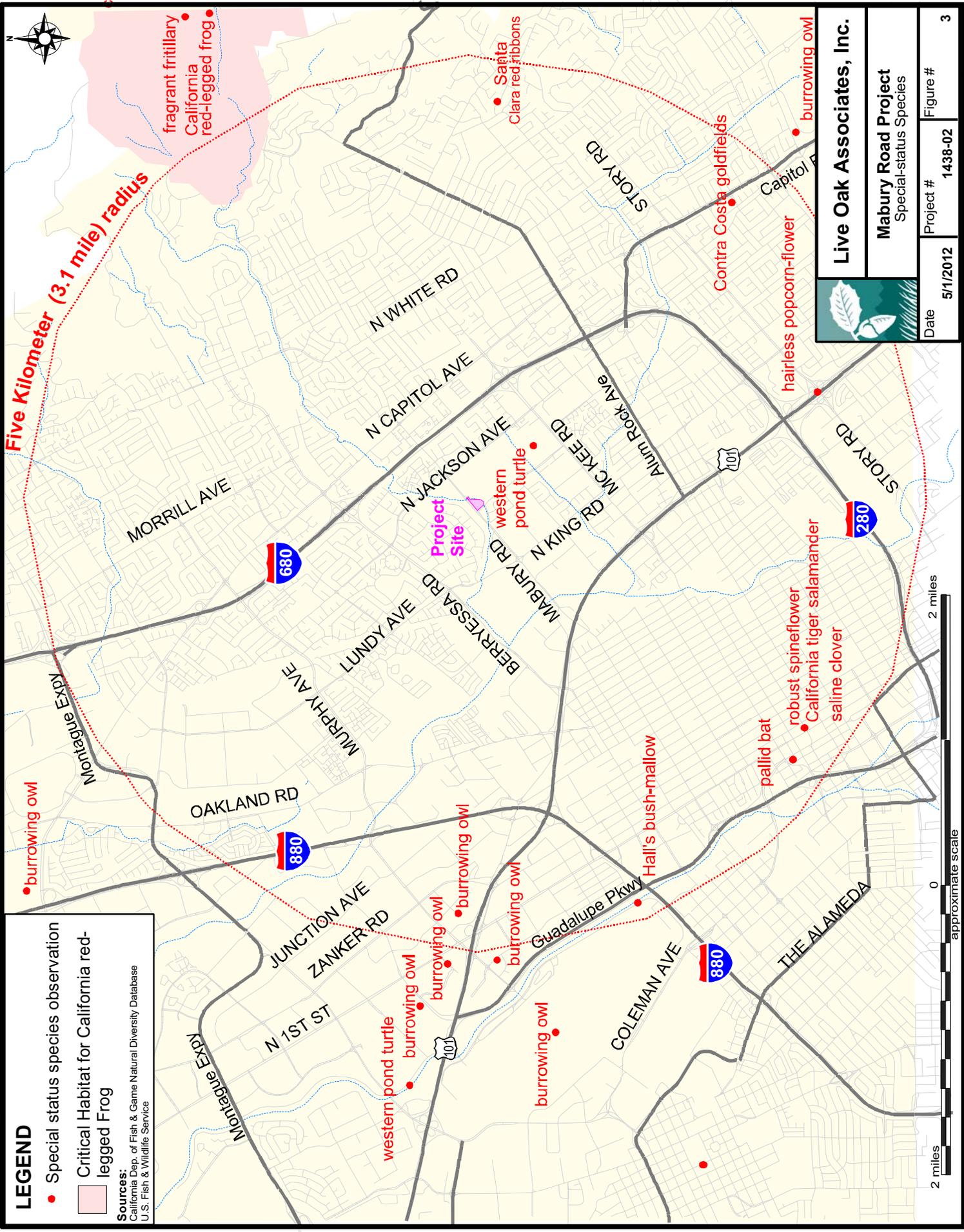
2.3 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered “rare” and are vulnerable to extirpation as the state’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) 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. A sizable number of 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 CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2012). Collectively, these plants and animals are referred to as “special status species.”

A number of special status plants and animals occur in the vicinity of the site (Figure 3). These species and their potential to occur in the study area are listed in Table 1 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988), *California Natural Diversity Data Base* (CDFG 2012), *Endangered and Threatened Wildlife and Plants* (USFWS 2012), *State and Federally Listed Endangered and Threatened Animals of California* (CDFG 2012), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2012). This information was used to evaluate the potential for special status plant and animal species that occur onsite. Figure 3 depicts the location of special status species found by the California Natural Diversity Data Base (CNDDDB). It is important to note that the CNDDDB is a volunteer database; therefore, it may not contain all known or gray literature records.

A search of published accounts for all of the relevant special status plant and animal species was conducted for the San Jose East USGS 7.5-minute quadrangle in which the project site occurs, and for the eight bordering quadrangles (San Jose West, Milpitas, Calaveras Reservoir, Mt. Day, Lick Observatory, Morgan Hill, Santa Teresa Hills, and Los Gatos) using the California Natural Diversity Data Base Rarefind 2012. All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, or 4 were also reviewed.

Species more likely to occur on the project site itself or in the surrounding vicinity are discussed further below.



LEGEND

- Special status species observation
- Critical Habitat for California red-legged Frog

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

Live Oak Associates, Inc.

Mabury Road Project
 Special-status Species

Date: 5/1/2012
 Project #: 1438-02
 Figure #: 3



TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CDFG 2012 and CNPS 2012)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Robust Spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	FE, CNPS 1B	Maritime chaparral, openings within cismontane woodlands, coastal dunes, and coastal scrub, at elevations between 3 and 300 meters. Blooms April-September.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.
Santa Clara Valley Dudleya (<i>Dudleya setchellii</i>)	FE, CNPS 1B	Serpentine outcrops in valley and foothill grasslands, at elevations between 60 and 365 meters. Blooms April-June.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary. The site also falls below of the typical elevation range for this species.
Contra Costa Goldfields (<i>Lasthenia conjugens</i>)	FE, CNPS 1B	Vernal pools and mesic areas of valley and foothill grasslands, typically alkaline, at elevations between 0 and 470 meters. Blooms March-June.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.
Metcalf Canyon Jewel Flower (<i>Streptanthus albidus</i> ssp. <i>albidus</i>)	FE, CNPS 1B	Valley and foothill grasslands on serpentine, at elevations between 45 and 800 meters. Blooms April-July.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary. The site also falls below of the typical elevation range for this species.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Big-scale Balsamroot (<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>)	CNPS 1B	Chaparral, cismontane woodland, valley and foothill grassland, sometimes on serpentine, at elevations between 90 and 1400 meters. Blooms March-June.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary. The site also falls below of the typical elevation range for this species.
Round-leaved Filaree (<i>California macrophylla</i>)	CNPS 1B	Cismontane woodlands and clay valley and foothill grasslands, at elevations between 15 and 1,200 meters. Blooms March-May.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.
Congdon's Tarplant (<i>Centromadia parryi</i> ssp. <i>congdonii</i>)	CNPS 1B	Alkaline soils of valley and foothill grasslands, at elevations between 0 and 425 meters. Blooms May-October.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS – cont’d.

Other special status plants listed by CNPS

Species	Status	Habitat	*Occurrence in the Study Area
Mt. Hamilton Thistle (<i>Cirsium fontinale</i> var. <i>campylon</i>)	CNPS 1B	Seasonal and perennial drainages on serpentine soils, at elevations between 95 and 890 meters. Blooms April-October.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary. The site also falls below of the typical elevation range for this species.
San Francisco Collinsia (<i>Collinsia multicolor</i>)	CNPS 1B	Closed-cone coniferous forests and serpentine coastal scrub, at elevations between 30 and 250 meters. Blooms March-May.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.
Fragrant Fritillary (<i>Fritillaria liliacea</i>)	CNPS 1B	Coastal prairie, coastal scrub, and valley and foothill grasslands, often on serpentine soils, at elevations between 3 and 410 meters. Blooms February – April.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.
Hall’s Bush Mallow (<i>Malacothamnus hallii</i>)	CNPS 1B	Chaparral and coastal scrub, at elevations between 10 and 760 meters. Blooms May to September.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.
Hairless Popcorn-flower (<i>Plagiobothrys glaber</i>)	CNPS 1A	Alkaline meadows and seeps and coastal salt marshes and swamps, at elevations between 15 and 180 meters. Blooms March-May.	Absent. Suitable habitat is absent from the site. The site consists of manipulated upland habitat with a disturbed reach of Upper Penitencia Creek flowing along the boundary.

ANIMALS (adapted from CDFG 2012 and USFWS 2012)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Bay Checkerspot Butterfly (<i>Euphydryas editha bayensis</i>)	FT	Associated with native grasslands on serpentine soils between 100 to 300 meters. Host plant is <i>Plantago erecta</i> .	Absent. The site completely lacks suitable habitat and the host plant for this species.
Steelhead (<i>Oncorhynchus mykiss</i>)	FT	Breeds in low elevation streams in Central CA lacking significant barriers for travel to and from the ocean. Such stream habitats are usually <70°F, with good water quality, and abundant riparian vegetation.	Possible. It is possible that this species could be present in the onsite reach of Upper Penitencia Creek. The site suitable rearing and movement corridor habitats for the species, but lacks gravelly rearing habitat.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – Cont'd.

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
California Tiger Salamander (<i>Ambystoma californiense</i>)	FT, CT	Breeds in seasonal vernal pools and stock ponds of central California; adults estivate in grassland habitats adjacent to the breeding sites.	Absent. Suitable breeding and estivation habitat for this species is absent from the site and its surrounding vicinity. The detention basin to the east is not considered a suitable breeding pond as it does not replace a historic seasonal wetland, is artificial, isolate, and perennial, and no special status species have ever been documented in the immediate vicinity of the pond.
California Red-legged Frog (<i>Rana aurora draytonii</i>)	FT, CSC	Rivers, creeks and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	Unlikely. Upper Penitencia Creek provides marginally suitable habitat for this species. There are no breeding pools within the onsite reach, but there is a slight potential individuals could rarely move through the creek. Additionally, the onsite reach is isolated from more suitable habitat due to the level of local urbanization.

Federal Protected Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Chinook Salmon (Central Valley Fall-Run) (<i>Oncorhynchus tshawytscha</i>)	CSC	Adults migrate up fresh water rivers or streams in the spring and spend the remainder of the time in the ocean.	Absent. The onsite reach of creek is unsuitable for chinook salmon spawning and rearing. There are no records for chinook salmon in Upper Penitencia Creek (either now or historically)
Foothill Yellow-legged Frog (<i>Rana boylei</i>)	CSC	Found primarily in swiftly flowing creeks.	Absent. Upper Penitencia Creek does not provides suitable habitat for this species.
Coast Horned Lizard (<i>Phrynosoma blainvillii</i>)	CSC	Grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	Absent. The site does not support suitable habitat for this species.
Western Pond Turtle (<i>Emys marmorata</i>)	CSC	Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	Possible. Suitable habitat is present onsite within Upper Penitencia Creek. This species was documented in 1998 in percolation ponds at Overfelt Gardens. However, it is unlikely pond turtles would occur within the upland habitat.
White-tailed Kite (<i>Elanus caeruleus</i>)	CP	Open grasslands and agricultural areas throughout central California.	Possible. Suitable foraging and breeding habitat exists onsite for this species.
Northern Harrier (<i>Circus cyaneus</i>)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	Unlikely. The site does not support suitable breeding habitat and provides only marginal foraging habitat for this species.
Golden Eagle (<i>Aquila chrysaetos</i>)	CP	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	Unlikely. The site does not support suitable breeding habitat and provides only marginal foraging habitat for this species.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – Cont’d.

Federal Protected Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Burrowing Owl (<i>Athene cunicularia</i>)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	Unlikely. Suitable habitat for this species is marginal at best on the site. There are very few burrows present onsite and the few open areas of the property are either actively manipulated for gardening purposes or are overgrown, making them unsuitable.
Tricolored blackbird (<i>Agelaius tricolor</i>)	CSC	Breeds near freshwater, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	Unlikely. The site does not support suitable breeding habitat and provides only marginal foraging habitat for this species.
Black Swift (<i>Cypseloides niger</i>)	CSC	Migrants and transients found throughout many habitats of California. Breeds on cliffs in restricted areas of the state.	Unlikely. Wintering or migrating black swifts may rarely forage over the site.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	Possible. Suitable foraging and breeding habitat exists onsite for this species.
Townsend’s Big-eared Bat (<i>Plecotus townsendii townsendii</i>)	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats of the state.	Unlikely. Marginally suitable roosting habitat is present in the onsite buildings, palm trees, and tree hollows, but it is unlikely individuals are present due to the existing conditions of the site and marginality of the habitat. It is possible transients may forage over the site rarely.
Pallid Bat (<i>Antrozous pallidus</i>)	CSC	Roosts in rocky outcrops, cliffs, and crevices with access to open habitats for foraging. May also roost in caves, mines, hollow trees and buildings.	Unlikely. Marginally suitable roosting habitat is present in the onsite buildings, palm trees, and tree hollows, but it is unlikely individuals are present due to the existing conditions of the site and marginality of the habitat. It is possible transients may forage over the site rarely.
San Francisco Dusky-footed Woodrat (<i>Neotoma fuscipes annectens</i>)	CSC	Found in hardwood forests, oak riparian and shrub habitats.	Absent. The site does not support suitable habitat for this species. The riparian habitat of the site is narrow and the level of site disturbance into the riparian habitat would preclude individuals from moving onsite. The site is also isolated from more typical habitat used by this species.
Ringtail (<i>Bassariscus astutus</i>)	CP	Occurs in riparian and heavily wooded habitats near water.	Unlikely. The site supports marginally suitable habitat for this species in the riparian trees. However, the riparian habitat of the site is narrow and the level of site disturbance into the riparian habitat would deter individuals from moving onsite. The site is also isolated from more typical habitat used by this species.

TABLE 1. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

ANIMALS – Cont’d.

Federal Protected Species and State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
American Badger (<i>Taxidea taxus</i>)	CSC	Occurs in grasslands, and open areas of scrubland and forests with friable soils that are uncultivated.	Absent. The site does not support suitable habitat for this species.

***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
		CSC	California Species of Special Concern
CNPS	California Native Plant Society Listing		
1A	Plants Presumed Extinct in California	3	Plants about which we need more information – a review list
1B	Plants Rare, Threatened, or Endangered in California and elsewhere	4	Plants of limited distribution – a watch list
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere		

2.4 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Regional Water Quality Control Board (RWQCB). Aquatic features are typically only considered to be jurisdictional if they connect to other Waters of the U.S. per the U.S. Supreme Court decision *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC Decision) and *Rapanos v. United States* and *Carabell v. Army Corps of Engineers* (referred together as the Rapanos decision). See Section 3.2.4 of this report for additional information.

Upper Penitencia Creek is assumed to be a Water of the U.S. and State falling under the jurisdiction of the USACE, CDFG, and RWQCB. The remainder of the site consists of upland habitat.

3.0 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all of its existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc. could potentially replace those species formerly occurring on a site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant or not. According to *Guide to the California Environmental Quality Act*, “Significant effect on the environment” is interpreted as 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. Specific project impacts to biological resources may be considered “significant” if they will:

- have a substantial adverse effect, the directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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 site;
- reduce substantially the habitat of a fish or wildlife species, including causing a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate an animal community;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

- conflict with the provisions of an adopted Habitat Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Furthermore, CEQA Guidelines Section 15065 states that a project may trigger the requirement to make a “mandatory findings of significance” if “the project has the potential to subsequently 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, reduce the number or restrict the range on an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.”

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal “endangered species” legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (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 CDFG and USFWS if activities associated with a proposed project will result in the “take” of a listed species. “Take” is defined by the state of California as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., sec. 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.

3.2.3 Birds of Prey

Birds of prey are also 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 CDFG.

3.2.4 The Bald and Golden Eagle Protection Act

The Bald Eagle Protection Act of 1940 (16 U.S.C. 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this Act. Take of bald and golden eagles is defined as follows: “disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (72 FR 31132; 50 CFR 22.3).

3.2.5 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”.

3.2.6 Wetlands and Other Jurisdictional Waters

Natural drainage channels and adjacent wetlands may be considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which 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;
- All interstate waters including interstate wetlands:
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). 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 Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

3.2.7 City of San Jose Riparian Corridor Policy and 2040 General Plan

The *City of San Jose's Riparian Corridor Policy Study* (1999) addresses several issues that relate to the identification, management, and protection of riparian resources within the City's Urban Service Area (USA). The City has assumed that riparian corridors outside the USA are substantially protected by the General Plan Policies that govern these areas. Riparian corridors are defined as:

Any defined stream channels including the area up to the bank full-flow line, as well as all riparian (streamside) vegetation in contiguous adjacent uplands. Characteristic wood riparian vegetation species could include (but are not limited to): willow, *Salix* sp.; alder, *Alnus* sp.; box elder, *Acer negundo*; Fremont cottonwood, *Populus fremontii*; bigleaf maple, *Acer macrophyllum*; western sycamore, *Platanus racemosa*; and oaks, *Quercus* sp. Stream channels include all perennial and intermittent streams shown as a solid or dashed blue line on USGS topographic maps, and ephemeral streams or "arroyos" with well-defined channels and some evidence of scour or deposition (City of San Jose, 1999, 3).

The City's Riparian Corridor Policy recommends the following riparian setback dimensions:

All buildings, other structures (with the exception of bridges and minor interpretative node structures), impervious surfaces, outdoor activity areas (except for passive or intermittent activities) and ornamental landscaped areas should be separated a minimum of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greater) (City of San Jose, 1999, 31).

While the Policy does recommend a 100-foot setback along riparian systems within the USA, it also provides for exceptions to the 100-foot setback guideline. Exceptions include:

- Locations in or near downtown San Jose;
- Urban infill locations where most properties are already developed and parcels are generally small (one acre or less);
- Sites adjacent to small lower order tributaries whose riparian influence does not extend 100 feet;
- Sites with unusual geometric characteristics and/or disproportionately long riparian frontages;
- Instances where implementation of the project includes measures which can protect and enhance the riparian value of the corridor more than could a 100-foot setback;
- Recreation facilities deemed to be a critical need and for which alternative site locations are limited; and
- Utility or equipment installations or replacements of existing ones, which involve no significant disturbance to the riparian corridor during construction and operation, and generate only incidental human activity.

The Policy states that if one or more of the above circumstances [exceptions] are present, a reduced setback may be considered if:

- There is no reasonable alternative which avoids or reduces the encroachment into the setback area.
- The reduced setback will not significantly reduce or adversely impact the riparian corridor.
- There is no evidence of stream bank erosion or previous attempts to stabilize the stream banks which could be negatively affected by the proposed development.
- The granting of the exception will not be detrimental or injurious to adjacent and/or downstream properties.

The Policy also states that projects with setbacks less than 100 feet should be conditioned to any measures necessary to ensure compliance with the purpose of these guidelines, including but not limited to:

- Minimum reduced setbacks should be no less than 50 feet or, in urban infill areas, no less than 30 feet or no less than the average of existing setbacks on adjacent properties, whichever is greater.
- Minimum reduced setbacks for those limited redevelopment sites...should represent some significant setback conditions and should never be less than 30 feet.
- Seeding or planting of bare soil.

- Any other measures reasonably necessary to achieve riparian protection.

The newly adopted San Jose 2040 General Plan further adopts the provisions of the riparian policy as goals of the City. Specific language regarding buffering extant riparian habitat from new development includes goal ER-2.2 which aims to “Ensure that a 100-foot setback from riparian habitat is the standard to be achieved in all but a limited number of instances, only where no significant environmental impacts would occur.” In spite of an apparently strict setback goal, this language is consistent with the riparian policy.

3.2.8 City of San Jose Tree Ordinance

The City of San Jose has Tree Removal Controls (Chapter 13.32 of the San Jose Municipal Code), which regulate the removal of trees. The City’s controls seek to:

Promote the health, safety, and welfare of the city by controlling the removal of trees in the city, as trees enhance the scenic beauty of the city, significantly reduce the erosion of topsoil, contribute to increased storm water quality, reduce flood hazards and risks of landslides, increase property values, reduce the cost of construction and maintenance of draining systems through the reduction of flow and the need to divert surface waters, contribute to energy efficiency and the reduction of urban temperatures, serve as windbreaks and are prime oxygen producers and air purification systems.

An “ordinance-size tree” is defined as any native or non-native tree with a circumference of 56 inches (diameter of 17.8 inches) at 24 inches above the natural grade of slope. For multi-trunk trees, the circumference is measured as the sum of the circumferences of all trunks at 24 inches above the natural grade of slope. A tree removal permit is required from the City prior to the removal of any trees covered under the ordinance. Prior to the issuance of a removal permit, the City requires that a formal tree survey be conducted which indicates the number, species, trunk circumference, diameter and location of all trees which would be removed or impacted by the project. A formal tree survey was conducted by LOA during the April 2012 survey.

3.2.9 Habitat Conservation Plans

Currently there is no adopted Habitat Conservation Plan that covers the study area. Six local partners (the 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 (the California Department of Fish and Game and the U.S. Fish and Wildlife Service)

are in the process of designing a multi-species habitat conservation plan. The study area of the Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP) primarily covers southern Santa Clara County, which includes the City of San Jose with the exception of the bayland areas. The HCP/NCCP will address listed species and species that are likely to become listed during the plan's 50-year permit term. The covered species include, but are not limited to, western burrowing owl, California tiger salamander, and California red-legged frog. The (HCP/NCCP) Planning Agreement requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. The Draft HCP proposes a 100 foot riparian corridor setback.

3.3 ENVIRONMENTAL IMPACT/MITIGATION

As described in *Section 1.0*, the proposed project is the redevelopment of the site. It is assumed for the purposes of this report that there would be no impacts to Upper Penitencia Creek. The potential impacts and mitigations resulting from future development of the property are discussed further below and have been divided into “potentially significant impact” and “less than significant impacts” to clearly divide the biological issues present onsite.

Potentially Significant Impacts

3.3.1 Potential Impacts to Special Status Animal Species

Impact. Of the 20 special status animal species potentially occurring in the region, a total of four may occur onsite regularly. The remaining species would not occur or would be unlikely to occur on the site due to the absence of suitable habitat. Most of these species are absent from the site due to the project location (i.e. outside of common range for species, location near existing development) or lack of suitable habitat (i.e. vernal pools or serpentine habitat).

Two of the species that may potentially occur onsite would be restricted to the Upper Penitencia Creek riparian corridor. These include the steelhead and western pond turtle. It has been assumed that site development will avoid impacts to Upper Penitencia Creek and its riparian habitat; therefore, the proposed project will have a less than significant impact on the steelhead and western pond turtle.

The remaining two species, the white-tailed kite and loggerhead shrike, may breed within the trees and larger shrubs of the site, particularly those along Upper Penitencia Creek. Site development may result in mortality of individuals of these two species which are protected by state and federal law, as well as more common migratory bird species likewise protected by the California Fish and Game Code. Although the loss of habitat for white-tailed kite and loggerhead shrike would not be considered significant, impacts to individuals would be considered significant. The trees of the site provide suitable nesting habitat for the white-tailed kite, loggerhead shrike, and common migratory bird species. Project construction at the time of nesting (February 1 through August 31) could induce the adults to abandon the nest when juveniles are present, thus leading to their starvation. The mortality of juveniles would constitute a significant adverse impact of the project.

Mitigation. Site development during the white-tailed kite, loggerhead shrike, and non-listed migratory bird nesting season (February 1 through August 31) could result in the abandonment of an active nest. The mortality of individuals that may result would constitute a significant adverse impact of the project; the loss of habitat would not constitute a significant adverse impact. The following mitigation measures are warranted:

- ***Mitigation Measure 3.3.1a:*** Should project construction be scheduled to commence between February 1 and August 31, a pre-construction survey will be conducted by a qualified biologist for nesting birds within the onsite trees as well as all trees within 250 feet of the site. This survey will occur within 30 days of the on-set of construction.
- ***Mitigation Measure 3.3.1b:*** If pre-construction surveys undertaken during the nesting season locate active nests within or near construction zones, these nests, and an appropriate buffer around them (as determined by a qualified biologist) will remain off-limits to construction until the nesting season is over. Suitable setbacks from occupied nests will be established by a qualified biologist and maintained until the conclusion of the nesting season.

Full implementation of the measures identified above would mitigate impacts to special status animal species potentially occurring on the site.

Less than Significant Impacts

3.3.2 Potential Impact to Special Status Plant Species

Impact. Of the 12 special status plant species potentially occurring in the region, none would occur or would be likely to occur on the site due to the absence of suitable habitat. Possible

impacts to regional populations of these species from eventual site development would not be significant as none of these special status plants would be impacted.

Mitigation. None warranted.

3.3.3 Potential Impacts to Riparian Habitat and Other Sensitive Natural Communities, Including Federally Protected Wetlands

Impact. The only sensitive natural community present onsite is Upper Penitencia Creek and its riparian habitat. It is assumed that the project will have no direct impact on this habitat. The City will require a setback from the top of bank or edge of riparian, whichever is greater, to ensure the project does not indirectly impact the site's sensitive natural communities (see Section 3.3.6 below). Due to the lack of any impacts to Upper Penitencia Creek and its riparian habitat and the establishment a setback, there will be a less than significant impact to sensitive natural communities of the site.

Mitigation. None warranted.

3.3.4 Impact to Movement or Nursery Sites of Fish or Wildlife Species

Impact. The developed/ruderal areas of the site where the proposed project will occur do not constitute a movement corridor for native wildlife. It is assumed that Upper Penitencia Creek and its riparian habitat, which are considered a movement corridor, will be avoided as a part of this project. Site development will have little effect on home range and dispersal movements of native wildlife moving through the site. Therefore, this project will result in a less than significant effect on regional wildlife movements.

Mitigation. None warranted.

3.3.5 Impact to Habitat for Fish and Wildlife Species

Impact. Development of the project site will convert disturbed upland areas used by very few native wildlife species into an active residential community. While the upland portion of the site provides some habitat for regional wildlife populations, it is not of unique or significant value to such populations. The project will not result in a fish or wildlife population dropping below self-sustaining levels, or threaten to eliminate an animal community. Therefore, development of the site will not constitute a significant adverse environmental impact on wildlife resources.

Mitigation. None warranted.

3.3.6 Conflict with Local Policies or Ordinances

Impact. There are two local policies or ordinances that the project will need to abide by are the City of San Jose's regulation for riparian corridors and trees. The applicant will be responsible for conforming to these two policy/ordinance requirements and applying for any necessary permits. From a CEQA standpoint, due to the urban nature of the site and the assumption that the riparian corridor will be avoided, a redevelopment project on the site would result in a less than significant impact as it relates to local policies and ordinances.

Regardless of CEQA, the City will likely enforce strict requirements as the project relates to the riparian corridor and trees. A further discussion on these two policies or ordinances follows.

City of San Jose Riparian Corridor Policy and 2040 General Plan. Established setbacks or buffers are designed to reduce anthropogenic effects on riparian systems. Usually, the resource agencies have asserted that buffers of 100 feet or more are necessary to reduce adverse affects on riparian systems. While reasonable evidence exists to support the notion that larger buffers provide significant additional benefit to riparian systems, there is a paucity of empirical data that allows for the establishment of a precise estimate. Therefore, the 100-foot riparian buffer that is often adopted is a historically-accepted value rather than an empirically derived one. While not empirically driven, however, a buffer of 100 feet provides a useful starting point to evaluate the potential effects from a proposed project.

Existing development of the site, including one of the existing homes, small out structures such as the aforementioned green- and lath houses, fencing, and landscaping, including the large garden operation described above, fall well within a 100-foot buffer of the existing riparian corridor and up-to the edge of the existing riparian habitat throughout much of the site (Figure 2). Also, evidence of human foot traffic and litter was observed within the banks of the creek, likely that of local high school students and residents. Surrounding land uses include a manmade detention pond, a local high school, a neighborhood park, and residential roadways and development.

Upper Penitencia Creek (the creek), a tributary to Coyote Creek, is characteristically an urban creek that flows through areas of dense development. The headwaters to the east are likely to be

the more ecologically intact than the rest of the corridor. While the biotic habitat of the creek may vary between areas that are somewhat ecologically intact to areas that are fairly impacted by human disturbances, the composition of faunal species that are known to occur within and along the creek within the vicinity of the site are comprised of species that are fairly well adapted to survival in urban environments. The biotic values for the immediate reach are fairly low to moderate, as indicated by the non-native understory, the fact that a portion of the reach that is adjacent to the study site has been channelized (associated with Educational Park Drive), and the presence of shoreline litter and evidence of foot traffic.

As indicated in the City of San Jose's *Riparian Corridor Policy Study*, the City of San Jose may permit projects to develop within the recommended setback of 100-feet given certain project specific circumstances. Future redevelopment of the site may qualify for several of the stated exceptions. These include:

- Locations in or near Downtown San Jose: The property is located approximately two miles from San Jose City Hall, which is arguably within the heart of the downtown area. As previously noted, the site is an urban infill site.
- Sites with unusual geometric characteristics and/or disproportionately long riparian frontages: The riparian corridor, as delineated on Figure 2, occurs along approximately half of the project boundary due to this fact, the site shape is also highly irregular. In addition, there exists a spur of property within the parcels to the north of the property that falls entirely within the riparian corridor. The unusual dominance of the riparian corridor on the property is also evident in the fact that 66% of the property falls within both the riparian corridor itself and a 100 foot setback boundary.
- Instances where implementation of the project includes measures which can protect and enhance the riparian value of the corridor more than could a 100-foot setback: A specific project is not proposed for the property at this time. However, future redevelopment of the site could include a restoration plan to improve and extend the riparian corridor by eradication of non-native understory species and planting local vegetation (as described within the *Riparian Corridor Policy Study*). While the City of San Jose's *Riparian Corridor Policy Study* states "Riparian setback areas should be planted with native trees, shrubs and groundcover and/or plants compatible with the particular adjacent riparian corridor classification," removal of the existing land-uses within a riparian buffer and removal of non-native species would be added benefits to the habitat value of the riparian corridor.

In addition, the following conditions also appear to be true with regard to this project:

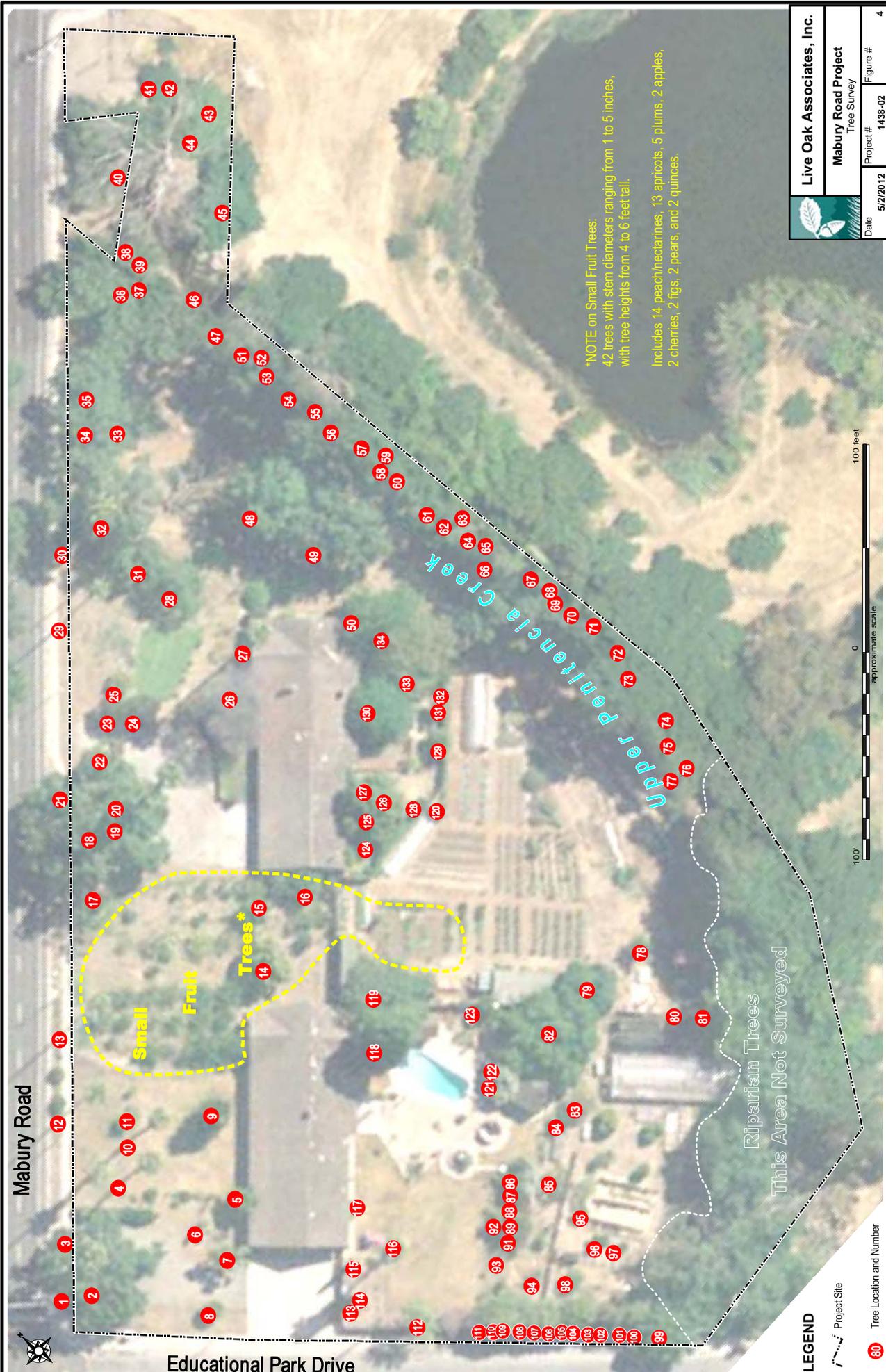
- The reduced setback will not significantly reduce or adversely impact the riparian corridor.

- There is no evidence of stream bank erosion or previous attempts to stabilize the stream banks which could be negatively affected by the proposed development.
- The granting of the exception will not be detrimental or injurious to adjacent and/or downstream properties.

As discussed above, the purpose of the City of San Jose's suggested setback is to reduce cumulative and direct development related impacts to sensitive riparian habitats. Based on the existing development footprint within the project site and land use of the site, the location of the site within dense urban development, the evidence of habitat degradation along this reach of Upper Penitencia Creek, and the possibility of future site development to include plans to rehabilitate the riparian corridor boundary (including actively replacing non-native understory vegetation with native species adapted to this reach of the creek), it is our opinion that a setback of 50 to 75 feet, with a possible minor exceptions in areas to allow for renovation of the existing building that encroaches on the setback, would not result in a detrimental biological impact to the creek. Future site development could incrementally increase the value of this reach of riparian corridor over existing condition by enhancement planting of riparian trees and shrubs within the 50- to 75-foot setback area, managing the riparian corridor by restricting human access and by regular trash removal.

City of San Jose Tree Ordinance. A formal tree survey was conducted on the site in April 2012 by certified arborist Neal Kramer. A total of 134 trees were surveyed (Figure 4; Appendices A and B). A portion of the riparian corridor close to Education Park Drive was not surveyed as it is assumed there will be no impacts in that area. Diameter at 24 inches above grade, circumference, height, spread, and general condition were recorded for all trees surveyed. It was also noted how many of these trees meet the criteria for being considered an ordinance tree. The results of the tree survey are depicted in Figure 4 with the tree table and ordinance tree photos included in Appendices A and B. Prior to the removal of any ordinance trees, the applicant will be required to obtain appropriate permits and implement the standard mitigation required by the City.

Mitigation. None warranted.



***NOTE on Small Fruit Trees:**
 42 trees with stem diameters ranging from 1 to 5 inches,
 with tree heights from 4 to 6 feet tall.

Includes 14 peachneclarnes, 13 apricots, 5 plums, 2 apples,
 2 cherries, 2 figs, 2 pears, and 2 quinces.

 Live Oak Associates, Inc.	
Mabury Road Project Tree Survey	
Date	5/2/2012
Project #	1438-02
Figure #	4

LEGEND

-  Project Site
-  Tree Location and Number

Riparian Trees
 This Area Not Surveyed

3.3.7 Conflict with an Adopted Habitat Conservation Plan

Impact. There are no adopted Habitat Conservation Plans for the project area at this time. However, the Santa Clara Valley Habitat Plan, if and when approved, would cover the Mabury Property. The Planning Agreement requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. Since the project lies within the interim referral area, a referral may be required. The project would be consistent with the Plan through the referral process.

Mitigation. None warranted.

3.3.8 Degradation of Water Quality in Seasonal Creeks, Reservoirs and Downstream Waters

Impact. The proposed project will require grading, excavation, and vegetation removal, thereby resulting in the project site becoming vulnerable to sheet, rill or gully erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek/river beds, canals, and adjacent wetlands.

To avoid or minimize sedimentation to offsite waters, the applicant will be required to develop an erosion control plan. The applicant must also comply with standard erosion control measures that employ best management practices (BMPs) and develop a SWPPP per State Water Quality Control Board Stormwater Permit. If the applicant abides by the above requirements, impacts to downstream waters from erosion and polluted stormwater runoff will be reduced to a less than significant level.

Mitigation. None warranted.

4.0 LITERATURE CITED

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APPENDIX A: Tree Survey Results (April 20 and 23, 2012)

Tree #	Common Name	Scientific Name	Diameter (inches) at 24" above grade	Circum. (inches)	Height (approx. ft.)	Spread (approx. ft.)	Ordinance Tree*	General Condition**
1	Mexican fan palm	<i>Washingtonia robusta</i>	21	66	90	8	Yes	Good
2	N. Cal. Black Walnut	<i>Juglans hindsii</i>	48	151	50	55	Yes	Good
3	Mexican fan palm	<i>Washingtonia robusta</i>	22	69	90	8	Yes	Good
4	Mexican fan palm	<i>Washingtonia robusta</i>	20.5	64	60	8	Yes	Good
5	Magnolia	<i>Magnolia sp.</i>	5	16	14	14	-	Fair
6	Giant yucca	<i>Yucca elephantipes</i>	14+3.5+13+6.5+6= 42	132	12	10	Yes	Fair
7	Giant yucca	<i>Yucca elephantipes</i>	6+11+14.5+9+8+8= 56.5	177	19	15	Yes	Fair
8	Mexican fan palm	<i>Washingtonia robusta</i>	21	66	16	9	Yes	Good
9	Fir	<i>Abies sp.</i>	17	53	15	18	-	Fair
10	Mexican fan palm	<i>Washingtonia robusta</i>	23	72	70	8	Yes	Good
11	Lemon	<i>Citrus limon</i>	5	16	9	9	-	Fair
12	Mexican fan palm	<i>Washingtonia robusta</i>	22	69	90	8	Yes	Good
13	Mexican fan palm	<i>Washingtonia robusta</i>	20	63	90	8	Yes	Good
14	Magnolia	<i>Magnolia sp.</i>	15	47	20	20	-	Good
15	Plum	<i>Prunus domestica</i>	10.5	33	18	15	-	Good
16	Plum	<i>Prunus domestica</i>	11.5	36	17	18	-	Fair
17	English walnut	<i>Juglans regia</i>	13	41	20	20	-	Poor
18	N. Cal. Black Walnut	<i>Juglans hindsii</i>	58	182	50	65	Yes	Fair
19	Mexican fan palm	<i>Washingtonia robusta</i>	21	66	65	9	Yes	Good
20	Mexican fan palm	<i>Washingtonia robusta</i>	26	82	70	10	Yes	Good
21	Mexican fan palm	<i>Washingtonia robusta</i>	20.5	64	90	8	Yes	Good
22	Lemon bottlebrush	<i>Callistemon citrinus</i>	2+6= 8	25	14	12	-	Fair
23	Crape myrtle	<i>Lagerstroemia indica</i>	6	19	14	10	-	Fair
24	Crape myrtle	<i>Lagerstroemia indica</i>	6.5	20	18	14	-	Fair

* In addition to being indicated in the Ordinance Tree Column, ordinance tree numbers and names are shown in bold lettering.

** Health: **Good** = 80-100% healthy foliage and no significant defects; **Fair** = 50-79% healthy foliage and/or minor defects; **Poor** = 5-49% healthy foliage and/or other significant defects; **Dead** = less than 5% healthy foliage

Tree #	Common Name	Scientific Name	Diameter (inches) at 24" above grade	Circum. (inches)	Height (approximate ft.)	Spread (approximate ft.)	Ordinance Tree*	General Condition**
25	Japanese maple	<i>Acer palmatum</i>	3+3+6.5= 12.5	39	8	10	-	Fair
26	Jacaranda	<i>Jacaranda mimosifolia</i>	23.5	74	50	45	Yes	Fair
27	Mexican fan palm	<i>Washingtonia robusta</i>	27.5	86	70	8	Yes	Good
28	English walnut	<i>Juglans regia</i>	11.5	36	20	24	-	Poor
29	Mexican fan palm	<i>Washingtonia robusta</i>	19	60	85	8	Yes	Good
30	Mexican fan palm	<i>Washingtonia robusta</i>	21.5	68	70	10	Yes	Good
31	N. Cal. Black Walnut	<i>Juglans hindsii</i>	22.5	71	20	28	Yes	Fair
32	N. Cal. Black Walnut	<i>Juglans hindsii</i>	35	109	48	52	Yes	Fair
33	N. Cal. Black Walnut	<i>Juglans hindsii</i>	6	19	16	10	-	Fair
34	N. Cal. Black Walnut	<i>Juglans hindsii</i>	25	79	30	28	Yes	Poor
35	N. Cal. Black Walnut	<i>Juglans hindsii</i>	17	53	28	22	-	Poor
36	N. Cal. Black Walnut	<i>Juglans hindsii</i>	4.5+4= 9.5	30	12	18	-	Poor
37	Fremont cottonwood	<i>Populus fremontia</i>	9.5+50+21.5+6+40+7+5.5+23+20+29= 211.5	664	70	60	Yes	Fair
38	Coast live oak	<i>Quercus agrifolia</i>	4+7= 11	35	15	15	-	Fair
39	N. Cal. Black Walnut	<i>Juglans hindsii</i>	8	25	18	16	-	Poor
40	Fremont cottonwood	<i>Populus fremontia</i>	68	214	55	55	Yes	Fair
41	Blue elderberry	<i>Sambucus nigra ssp. cae.</i>	8+4.5+7+6= 25.5	80	18	20	Yes	Fair
42	Coast live oak	<i>Quercus agrifolia</i>	4.5+2.5+1= 8	25	17	10	-	Fair
43	Blue elderberry	<i>Sambucus nigra ssp. cae.</i>	16.5+6+2+3= 27.5	86	25	32	Yes	Fair
44	Blue elderberry	<i>Sambucus nigra ssp. cae.</i>	2+3= 5	16	17	16	-	Fair
45	English walnut	<i>Juglans regia</i>	24.5+5= 29.5	93	40	40	Yes	Fair
46	N. Cal. Black Walnut	<i>Juglans hindsii</i>	5+4+3= 12	38	12	14	-	Poor
47	Fremont cottonwood	<i>Populus fremontia</i>	48+14= 62	195	70	40	Yes	Fair
48	N. Cal. Black Walnut	<i>Juglans hindsii</i>	26	82	40	36	Yes	Fair
49	N. Cal. Black Walnut	<i>Juglans hindsii</i>	29	91	40	45	Yes	Poor
50	Giant yucca	<i>Yucca elephantipes</i>	17+12+6+3+19+5+17= 79	248	18	15	Yes	Good
51	Coast live oak	<i>Quercus agrifolia</i>	20.5	64	60	30	Yes	Good

* In addition to being indicated in the Ordinance Tree Column, ordinance tree numbers and names are shown in bold lettering.

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Tree #	Common Name	Scientific Name	Diameter (inches) at 24" above grade	Circum. (inches)	Height (approximate ft.)	Spread (approximate ft.)	Ordinance Tree*	General Condition**
52	N. Cal. Black Walnut	<i>Juglans hindsii</i>	25	79	50	30	Yes	Fair
53	Coast live oak	<i>Quercus agrifolia</i>	11	35	30	18	-	Fair
54	N. Cal. Black Walnut	<i>Juglans hindsii</i>	15	47	15	20	-	Poor
55	Coast live oak	<i>Quercus agrifolia</i>	34	107	65	60	Yes	Good
56	N. Cal. Black Walnut	<i>Juglans hindsii</i>	14	44	40	20	-	Poor
57	N. Cal. Black Walnut	<i>Juglans hindsii</i>	19	60	40	35	Yes	Poor
58	N. Cal. Black Walnut	<i>Juglans hindsii</i>	36	113	40	54	Yes	Good
59	Red willow	<i>Salix laevigata</i>	12+4+7= 23	72	35	30	Yes	Fair
60	N. Cal. Black Walnut	<i>Juglans hindsii</i>	24+7= 31	97	35	20	Yes	Poor
61	N. Cal. Black Walnut	<i>Juglans hindsii</i>	7+6+3+6+3= 22	69	25	20	Yes	Poor
62	Coast live oak	<i>Quercus agrifolia</i>	13	41	25	30	-	Fair
63	Red willow	<i>Salix laevigata</i>	14+7= 21	66	36	50	Yes	Fair
64	Coast live oak	<i>Quercus agrifolia</i>	12+4= 16	50	26	20	-	Fair
65	Coast live oak	<i>Quercus agrifolia</i>	6.5+8= 14.5	46	15	15	-	Fair
66	N. Cal. Black Walnut	<i>Juglans hindsii</i>	39+27= 66	207	40	54	Yes	Fair
67	Coast live oak	<i>Quercus agrifolia</i>	10	31	25	15	-	Fair
68	Coast live oak	<i>Quercus agrifolia</i>	23	72	48	28	Yes	Fair
69	English walnut	<i>Juglans regia</i>	13	41	24	12	-	Poor
70	Coast live oak	<i>Quercus agrifolia</i>	5	16	15	10	-	Fair
71	N. Cal. Black Walnut	<i>Juglans hindsii</i>	17	53	45	25	-	Fair
72	Coast live oak	<i>Quercus agrifolia</i>	8	25	28	30	-	Fair
73	Coast live oak	<i>Quercus agrifolia</i>	20	63	40	32	Yes	Fair
74	N. Cal. Black Walnut	<i>Juglans hindsii</i>	16	50	20	20	-	Poor
75	N. Cal. Black Walnut	<i>Juglans hindsii</i>	14	44	20	15	-	Poor
76	Coast live oak	<i>Quercus agrifolia</i>	48+40= 88	276	65	75	Yes	Fair
77	N. Cal. Black Walnut	<i>Juglans hindsii</i>	21.5	68	25	24	Yes	Poor
78	Mulberry	<i>Morus alba</i>	5	16	17	14	-	Good
79	Loquat	<i>Eriobotrya japonica</i>	9+9+5.5= 23.5	74	25	28	Yes	Good

* In addition to being indicated in the Ordinance Tree Column, ordinance tree numbers and names are shown in bold lettering.

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Tree #	Common Name	Scientific Name	Diameter (inches) at 24" above grade	Circum. (inches)	Height (approximate ft.)	Spread (approximate ft.)	Ordinance Tree*	General Condition**
80	Unknown ornamental		3.5	11	12	10	-	Fair
81	Chinese elm	<i>Ulmus parviflora</i>	15.5	49	45	36	-	Good
82	English walnut	<i>Juglans regia</i>	23	72	30	46	Yes	Fair
83	Plum	<i>Prunus domestica</i>	10.5	33	12	8	-	Fair
84	Apple	<i>Malus pumila</i>	7	22	10	12	-	Fair
85	Apricot	<i>Prunus armeniaca</i>	12	38	11	15	-	Poor
86	Crape myrtle	<i>Lagerstroemia indica</i>	3.5	11	14	6	-	Fair
87	Crape myrtle	<i>Lagerstroemia indica</i>	3.5	11	13	6	-	Fair
88	Crape myrtle	<i>Lagerstroemia indica</i>	3.5	11	12	7	-	Fair
89	Crape myrtle	<i>Lagerstroemia indica</i>	2.5+2.5=5	16	12	8	-	Fair
90	Crape myrtle	<i>Lagerstroemia indica</i>	3	10	13	8	-	Fair
91	Crape myrtle	<i>Lagerstroemia indica</i>	4	13	14	10	-	Good
92	Blue elderberry	<i>Sambucus nigra ssp. caer</i>	6.5	20	18	15	-	Fair
93	N. Cal. Black Walnut	<i>Juglans hindsii</i>	3.5	11	17	10	-	Fair
94	Plum	<i>Prunus domestica</i>	7	22	12	8	-	Poor
95	Pear	<i>Pyrus communis</i>	6	19	11	9	-	Fair
96	Apple	<i>Malus pumila</i>	6	19	12	10	-	Fair
97	Apple	<i>Malus pumila</i>	4.5	14	10	9	-	Fair
98	Plum	<i>Prunus domestica</i>	5.5+4.5=10	31	12	12	-	Good
99	English walnut	<i>Juglans regia</i>	25.5	80	24	25	Yes	Fair
100	Redwood	<i>Sequoia sempervirens</i>	10	31	22	12	-	Fair
101	Redwood	<i>Sequoia sempervirens</i>	10	31	20	10	-	Fair
102	Redwood	<i>Sequoia sempervirens</i>	8.5	27	19	9	-	Fair
103	Redwood	<i>Sequoia sempervirens</i>	10	31	22	10	-	Fair
104	Redwood	<i>Sequoia sempervirens</i>	6	19	19	5	-	Poor
105	Redwood	<i>Sequoia sempervirens</i>	13.5	42	20	10	-	Fair
106	Redwood	<i>Sequoia sempervirens</i>	14	44	21	12	-	Fair
107	Redwood	<i>Sequoia sempervirens</i>	12.5	39	21	12	-	Fair

* In addition to being indicated in the Ordinance Tree Column, ordinance tree numbers and names are shown in bold lettering.

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Tree #	Common Name	Scientific Name	Diameter (inches) at 24" above grade	Circum. (inches)	Height (approximate ft.)	Ordinance Tree*	General Condition**
108	Redwood	<i>Sequoia sempervirens</i>	15.5	49	22	14	Fair
109	Redwood	<i>Sequoia sempervirens</i>	15.5	49	22	14	Fair
110	Redwood	<i>Sequoia sempervirens</i>	18.5	58	24	20	Fair
111	Redwood	<i>Sequoia sempervirens</i>	14	44	24	16	Fair
112	Liquidambar	<i>Liquidambar styraciflua</i>	8.5	27	26	15	Fair
113	Italian cypress	<i>Cupressus sempervirens</i>	8	25	35	5	Good
114	Nectarine	<i>Prunus persica</i> var. <i>necta</i>	2	6	9	7	Fair
115	Italian cypress	<i>Cupressus sempervirens</i>	6	19	28	4	Good
116	Mexican fan palm	<i>Washingtonia robusta</i>	19.5	61	60	5	Good
117	Lemon	<i>Citrus limon</i>	4	13	12	11	Fair
118	Avocado	<i>Persea americana</i>	25	79	55	28	Good
119	English walnut	<i>Juglans regia</i>	24	75	28	30	Fair
120	Grapefruit	<i>Citris paradisi</i>	4	13	12	12	Fair
121	Oleander	<i>Nerium oleander</i>	8	25	14	9	Fair
122	Oleander	<i>Nerium oleander</i>	9.5	30	14	9	Fair
123	Privet	<i>Ligustrum lucidum</i>	6.5+2=8.5	27	14	9	Fair
124	English laurel	<i>Prunus laurocerasus</i>	3+3+4+4+4+5+5=28	88	14	12	Fair
125	Tangerine	<i>Citrus reticulata</i>	5+3+5=13	41	17	14	Poor
126	Victorian box	<i>Pittosporum undulatum</i>	17	53	30	27	Fair
127	Lemon	<i>Citris limon</i>	3+1.5=4.5	14	11	10	Fair
128	Unknown ornamental		3+1=4	13	15	12	Fair
129	Blue elderberry	<i>Sambucus nigra</i> ssp. <i>caea</i>	13.5+5+2.5=21	66	20	18	Fair
130	Mulberry	<i>Morus alba</i>	16	50	22	22	Fair
131	Pomegranate	<i>Punica granatum</i>	5.5	17	15	14	Poor
132	Peach	<i>Prunus persica</i>	3.5	11	11	9	Poor
133	Silk tree	<i>Albizia julibrissin</i>	15	47	28	36	Fair
134	Mulberry	<i>Morus alba</i>	15.5	49	30	40	Poor

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APPENDIX B
Ordinance Tree Photos
Mabury Property April 20 and 23, 2012



TREES 1, 2, 3, 4, 10, 12



TREES 3, 4, 10, 12, 13, 21



TREE 6



TREE 7



TREES 8, 116



TREES 17, 18



TREES 18, 19, 20, 21, 29, 30



TREES 26, 27



TREES 29, 30, 31, 32



TREES 30, 31, 32



TREE 34



TREE 37



TREE 40



TREE 43



TREE 45



TREES 47, 51, 52, 55



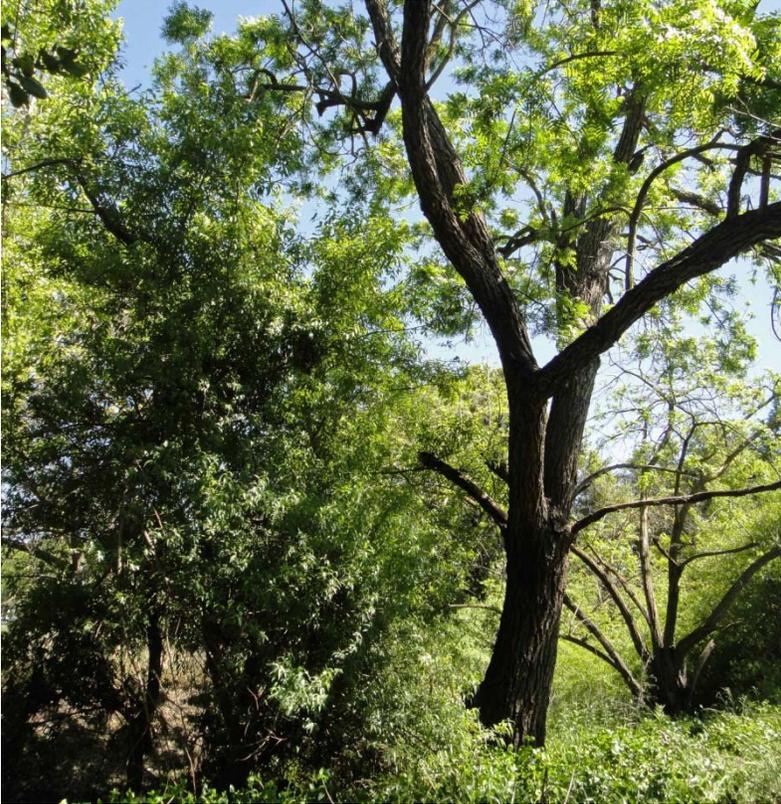
TREE 48, 49



TREE 50



TREE 57



TREES 58, 59, 60



TREES 60, 61, 63



TREES 66, 68



TREES 68, 71, 73



TREE 76



TREES 76, 77



TREES 79, 82



TREE 99



TREE 110



TREE 116



TREE 118



TREE 119



TREE 124



TREE 129



LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

October 11, 2012

Mike Campbell
HMH
1570 Oakland Road
San Jose, CA 95131

Subject: Riparian enhancement mitigation for the proposed development of the Mabury Road Property Located in San Jose, Santa Clara County, California (PN 1438-01)

Dear Mike:

As you are aware, Live Oak Associates, Inc. (LOA) conducted a riparian corridor delineation and assessment on May 21, 2010, of the approximately 3.42-acre Mabury Road Property (APNs 254-05-46 and 254-05-47) located on the eastern corner of Mabury Road and Educational Park Drive along Upper Penitencia Creek. Since that time a proposed project has been designed for the subject property. In accordance with our analysis and the City of San Jose's *Riparian Corridor Policy Study* ("riparian policy"; 1999), the proposed project is maintaining a significant development-free riparian setback. Much of proposed project interface falls outside of a 100-foot setback (including setbacks of more than 150 feet). However, some inclusions into the 100-foot and 75-foot setback area are planned. At the minimum, a section of the project comes to within 66-feet of the riparian corridor. Approximately 7,790 sq. ft. of development is proposed to fall within the 100-foot setback area and approximately 55,090 sq. ft. of the 100-foot setback area (approximately 88%) will remain undeveloped. This level of inclusion is in accord with our analysis and the riparian policy. The following mitigation is proposed to offset this modest impact to the riparian setback:

Enhancement mitigation.

The following mitigation has been developed to offset the approximately 7,790 sq.ft. of development within 100-feet of the riparian corridor. To comply with this mitigation, the applicant should provide native plantings, maintenance, and biological monitoring as generally described below. The details of the enhancement should be included in a Habitat Mitigation and Monitoring Plan prepared by a qualified biologist and approved by the City of San Jose. In general, this plan would define the project site, the responsible parties, the methods and materials to be used in the enhancement, maintenance efforts to be used, and the goals and success criteria to be achieved by the end of a 5-year monitoring period.

Native plantings.

To ensure that the setback area serves as habitat for species that utilize Upper Penitencia Creek the riparian setback area should be cleared of structures and debris to the extent practicable and some native vegetation should be installed. Native plant species used should be sourced from within the greater Coyote Creek Watershed to the maximum extent practicable to ensure genetic similarity. Species to be used should be selected by a qualified biologist and should reflect species that are suited to the setback area's conditions. Species to be used are likely to include native trees such as California buckeye (*Aesculus californica*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), blue elderberry (*Sambucus mexicana*), and red willow (*Salix laevigata*), and native shrub species such as California sagebrush (*Artemisia californica*), mugwort (*Artemisia douglasiana*), mule-fat (*Baccharis salicifolia*), toyon (*Heteromeles arbutifolia*), California rose (*Rosa californica*), and California snowberry (*Symphoricarpos albus*). Temporarily disturbed areas and areas where removal of extant debris has exposed bare soils should be treated with broadcasted seed of native grasses and forbs that are suited to the area.

At a minimum, the following number of plants should be planted:

- 15 Trees: 10 to 15-gallon size trees such as red willow, toyon, valley oak, etc.
- 40 Shrubs: 1 to 5-gallon size shrubs should be planted. Small trees, such as elderberry and toyon, may be substituted for up to 10 shrubs as desired.

Plants should be installed at the appropriate times of the year (e.g. fall and early winter), and the planting effort (preparation and planting) should be facilitated by a qualified landscape professional to ensure they are installed correctly.

Maintenance.

Regular maintenance of the enhancement area will be needed to ensure that irrigation is functional, to remove trash that may have accumulated within the riparian setback area, and to keep weeds from impacting native plantings. Maintenance should be conducted by a qualified firm with a background in native plant landscaping as species familiarity is important. At a minimum maintenance should be conducted 3-4 times per year with attention focused during the spring and summer months. Irrigation may be used as needed during the initial phases of the installation; however, it should be designed to be consistent with the riparian policy and to develop self-sustaining vegetation (e.g. long slow watering periods spread out over time, supplemental watering during periods of drought, etc.). Irrigation should not be used once plants are established. Weed-free, organic mulches may also be used around plantings.

Monitoring.

Monitoring of the enhancement area shall be conducted by a qualified biologist for a minimum of 5-years to ensure that the goal of native habitat establishment is met. Monitoring should be conducted during the summer (June to August). Specific success criteria should be defined in the Habitat Mitigation and Monitoring Plan. At a minimum the success criteria should include, but may not be limited to the following:

- Survival: Trees and shrubs should achieve survival at 70% by the end of the 5-year monitoring.

- Health and Vigor: Trees and shrubs should show a mean health and vigor of 60% (or 6 on a 10 point scale). This is to ensure that surviving trees are likely to persist upon completion of the monitoring period.
- Litter removal: Due to the location of the site within an urban area, litter may be a concern. All litter should be removed annually prior to annual monitoring.

As previously mentioned, these topics would be defined in greater detail in a Habitat Mitigation and Monitoring Plan approved by the City prior to installation of the plantings. The above topics and details should serve as a basis for the Plan.

If you have any additional questions or concerns regarding this mitigation please contact Dr. Rick Hopkins at (408) 281-5885 or me at (408) 281-5888.

Sincerely,



Nathan Hale, M.S. (Candidate)
Project Manager
Staff Ecologist

PHASE I ENVIRONMENTAL ASSESSMENT
12710 AND 12750 MABURY ROAD
SAN JOSE, CALIFORNIA

Prepared for

Mr. Murphy Sabatino
12710 and 12750 Mabury Road
San Jose, California 95133

by

Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd.
Lafayette, California 94549

September 20, 2012

September 20, 2012
212563

Murphy Sabatino
12710 and 12750 Mabury Road
San Jose, CA 95133

Subject: Phase I Environmental Assessment
12710 and 12750 Mabury Road, Redwood City, California

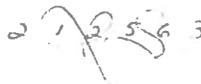
Dear Mr. Hardy:

Aquifer Sciences is pleased to present this report containing the results of the Phase I environmental assessment conducted for the 12710 and 12750 Mabury Road site in San Jose, California. We appreciate the opportunity to be of service. If you have any questions regarding this report, please call us.

Respectfully yours,

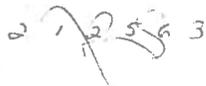


Justin Evans
Hydrogeologist



Rebecca A. Sterbentz, PG, CHG
President

I declare that, to the best of my professional knowledge and belief, I meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. I have specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all-appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Rebecca A. Sterbentz, PG, CHG
President

Enclosure

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PHASE I ENVIRONMENTAL ASSESSMENT
12710 and 12750 Mabury Road, San Jose, California
September 2012

PROJECT SUMMARY

This report presents the results of the Phase I environmental assessment conducted for the property (the "Site") located at 12710 and 12750 Mabury Road, San Jose, California (Figures 1 and 2). The objective of this assessment was to evaluate the current environmental condition of the Site for a planned development of single-family homes. The assessment included site reconnaissance, review of aerial photographs and maps, evaluation of city directories, review of public records on file at regulatory agencies, and evaluation of contamination issues at nearby sites. This Phase I environmental assessment was performed in accordance with American Society for Testing and Materials (ASTM) E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process."

The Site consists of approximately 3.4 acres of land and is located at 12710 and 12750 Mabury Road, San Jose, California. The Site is approximately 110 feet above mean sea level and is located approximately 9 miles southeast of San Francisco Bay and 2.5 miles west of the Diablo Range foothills. The land surface is relatively flat, sloping gently downward to the southwest. The Site is bounded by Mabury Road on the north, Penitencia Creek on the east, Educational Park Drive on the south, and the intersection of Mabury Road and Educational Park Drive on the west.

Two single-family homes are currently located on the Site. The area surrounding the homes includes patios, a pool, concrete-paved driveways, greenhouses, sheds, outdoor restrooms, planting areas, and landscaping. The single-family homes were constructed in the mid-1960s. The current owners of the Site are Sabatino Survivor's Trust, Moul Trust, and the Frank Maxwell Separate Property Trust. The eastern portion of the Site is made available to the Master Gardeners of Santa Clara County for organic gardening, cultivation trials and experimentation, and growing produce for charitable contribution.

Based on the results of the Phase I assessment, five recognized environmental conditions were identified at the Site. These are the former agricultural usage and probable associated application of pesticides, an abandoned truck on the eastern portion of the Site, an abandoned tractor on the southern corner of the Site, two corroded 50-gallon drums located on the eastern portion of the Site, and two septic tanks and associated leach fields adjacent to the residences.

Several known contaminated sites are located within one mile of the Site. From available information in regulatory databases, we identified five sites in the vicinity that had recognized environmental conditions. None of these sites pose a concern to soil or groundwater quality at the Site.

1.0 INTRODUCTION

1.1 SCOPE OF SERVICES AND OBJECTIVE

This report presents the results of the Phase I environmental assessment conducted for the property (the "Site") located at 12710 and 12750 Mabury Road, San Jose, California (Figures 1 and 2). The objective of this assessment was to evaluate the current environmental condition of the Site for a planned development of single-family homes. The assessment included site reconnaissance, review of aerial photographs and maps, evaluation of city directories, review of public records on file at regulatory agencies, and evaluation of contamination issues at nearby sites. This Phase I environmental assessment was performed in accordance with ASTM E1527-05 "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process."

1.2 SIGNIFICANT ASSUMPTIONS

This Phase I assessment was conducted in order to identify and evaluate environmental conditions that constitute existing, past, or potential environmental risks associated with the Site. Performing the Phase I assessment in accordance with ASTM is intended to reduce, but not necessarily eliminate, uncertainty with respect to the potential for recognized environmental conditions associated with the Site.

1.3 LIMITATIONS AND EXCEPTIONS

All of the investigative requirements as stated in ASTM E1527-05 have been satisfied by this assessment, except:

- A chain-of-title search for the Site was not included in the scope of work.
- Regulatory personnel were not interviewed because there are no violations reported for the Site in the environmental databases.

1.4 DEVIATIONS

No material deviations from the standard were made during the preparation of this report.

1.5 ASSESSMENT RELIANCE

This environmental assessment was performed in accordance with the practices and procedures generally accepted in the consulting engineering field. Information presented in this report does not confirm whether soil or groundwater at the Site has been impacted. The scope of work did not include a vapor intrusion assessment. This assessment did not include an evaluation of naturally-occurring chemical hazards (such as asbestos, methane gas, or radon) or

potential physical hazards (such as liquefaction, damage from earthquakes, or flooding). An evaluation of wildlife habitats and endangered species also was not performed. Our professional judgment regarding the potential for contamination at the Site is based on limited data; no other warranty is given or implied by this report. This document was prepared exclusively for Mr. Murphy Sabatino, and is intended for use only by Mr. Sabatino, his agents, and assignees. No other person or entity may rely on the report without the expressed written consent of Aquifer Sciences, Inc.

2.0 SITE DESCRIPTION

2.1 LOCATION

The Site consists of approximately 3.4 acres of land and is located at 12710 and 12750 Mabury Road, San Jose, California (Figures 1 and 2).

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The Site is located in a residential area consisting primarily of single-family homes. Mabury Road, Educational Park Drive, Penitencia Creek, and lands of the Eastside Union High School District are within the Site vicinity.

2.3 DESCRIPTIONS OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS

Two single-family homes are currently located on the Site. The area surrounding the homes includes patios, a pool, concrete-paved driveways, greenhouses, sheds, outdoor restrooms, planting areas, and landscaping. Entry to the Site is from two driveways adjacent to Mabury Road and Educational Park Drive.

2.4 CURRENT USE OF THE SITE

The current use of the Site is residential and horticultural.

2.5 CURRENT USE OF ADJOINING PROPERTIES

The Site is bounded by Mabury Road on the north, Penitencia Creek on the east, Educational Park Drive on the south, and the intersection of Mabury Road and Educational Park Drive on the west.

To the north of the Site, across Mabury Road, is Penitencia Creek County Park. Penitencia Creek is located adjacent to and east of the Site. Further east are the Eastside Union High School District's recreational fields and a pond. A neighborhood of single-family homes, are located to the west and south across Educational Park Drive.

A summary of current use of the adjoining properties is presented in the following table.

Direction	Development Type	Site Use
North	infrastructure and recreational	Mabury Road, Penitencia Creek County Park
East	recreational	Penitencia Creek, recreational fields, a small pond
South	infrastructure and residential	Educational Park Drive, single-family residential homes
West	infrastructure and residential	Educational Park Drive, single-family residential homes

3.0 INFORMATION PROVIDED BY THE OWNER

3.1 TITLE RECORDS

A review of chain-of-title information was not included in the scope of work for this project. Therefore, environmental concerns associated with historical ownership of the Site were not evaluated through title records.

3.2 ENVIRONMENTAL LIENS AND LAND USE LIMITATIONS

No environmental liens or land use limitations were reported by the current owners or by the environmental records searched.

3.3 SPECIALIZED KNOWLEDGE

HMH Engineers, hired by the current owners, provided electronic copies of a biotic evaluation prepared by Live Oak Associates, Inc. in May 2012 and a cultural resources review prepared by Basin Research Associates in April 2012.

3.4 COMMONLY-KNOWN OR REASONABLY-ATTAINABLE INFORMATION

Aquifer Sciences was not provided with any commonly-known or reasonably-attainable information about the Site that would be material to identifying environmental conditions.

3.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The current legal owners of the Site are Sabatino Survivor's Trust, Moul Trust, and the Frank Maxwell Separate Property Trust. Currently the residence at 12750 Mabury Road is leased to a tenant.

3.6 REASON FOR PERFORMING THE PHASE I ASSESSMENT

The objective of this Phase I assessment was to evaluate the current environmental condition of the Site for a planned development of single-family homes.

3.7 ENVIRONMENTAL INVESTIGATIONS OF THE SITE

In May 2012, Live Oak Associates, Inc. performed a biotic evaluation of the Site. No other environmental investigations of the Site have been performed.

4.0 RECORDS REVIEW

4.1 STANDARD ENVIRONMENTAL RECORDS REVIEW

Aquifer Sciences requested that an environmental disclosure report be compiled for the Site and its vicinity by a computer-aided search service, Environmental Data Resources Inc. (EDR), in August 2012. The search service reviews the most recent versions of federal, state, and local regulatory agency lists to identify sites with known or potential soil or groundwater contamination, hazardous waste generators, wastewater dischargers, and dischargers of chemicals to air and water within a specified radius of the Site. EDR's full report is included in Appendix A. The EDR report lists all databases searched and their descriptions. When discrepancies were identified, the findings of Aquifer Sciences' site reconnaissance and other records verification were given precedence over information provided by EDR. It should be noted that this information is reported as Aquifer Sciences received it from EDR, which in turn reports information as it is provided by various government databases. It is not possible for either Aquifer Sciences or EDR to verify the accuracy or completeness of information contained in these databases; however, the use of and reliance on this information is generally accepted practice in the conduct of environmental due diligence.

The Site was not listed in any of the environmental databases.

4.1.1 Federal and State Listing Summary

A summary of nearby sites listed in federal and state environmental databases is presented in the following table.

Database	Minimum Search Distance	Number of sites	The Site Listed?	Concern to the Site?
FEDERAL DATABASES				
NPL	1.000	0	no	no
Proposed NPL	1.000	0	no	no
NPL LIENS	Site	0	no	no
Delisted NPL	1.000	0	no	no
CERCLIS	0.500	0	no	no
Federal Facility	1.000	0	no	no
CERCLIS-NFRAP	0.500	1	no	no
CORRACTS	1.000	0	no	no
RCRA TSDF	0.500	0	no	no
RCRA LQG	0.250	1	no	no
RCRA SQG	0.250	1	no	no
RCRA CESQG	0.250	0	no	no
US ENG CONTROLS	0.500	0	no	no
US INST CONTROL	0.500	0	no	no
ERNS	Site	0	no	no

AQUIFER SCIENCES, INC.

Database	Minimum Search Distance	Number of sites	The Site Listed?	Concern to the Site?
FEDERAL DATABASES (continued)				
FINDS	Site	0	no	no
HAZNET	Site	0	no	no
FUDS	1.000	0	no	no
ROD	1.000	0	no	no
STATE AND LOCAL RECORDS				
RESPONSE	1.000	0	no	no
ENVIROSTOR	1.000	5	no	no
SWF/LF	0.500	0	no	no
LUST	0.500	4	no	no
SLIC	0.500	1	no	no
HIST LUST	0.500	4	no	no
INDIAN LUST	0.500	0	no	no
UST	0.250	0	no	no
AST	0.250	0	no	no
INDIAN UST	0.250	0	no	no
FEMA UST	0.250	0	no	no
VCP	0.500	0	no	no
INDIAN VCP	0.500	0	no	no
US Brownfields	0.500	0	no	no
SWRCY	0.500	0	no	no
Historical Cal-Sites	1.000	0	no	no
Toxic Pits	1.000	0	no	no
CA FID UST	0.250	0	no	no
Historical UST	0.250	0	no	no
SWEEPS UST	0.250	1	no	no
DEED	0.500	0	no	no
CHMIRS	Site	0	no	no
RCRA-NonGen	0.250	0	no	no
CA Bond Exp. Plan	1.000	0	no	no
Cortese	0.500	0	no	no
Historical Cortese	0.500	3	no	no
San Mateo Co. BI	0.250	0	no	no
Notify 65	1.000	0	no	no
EMI	Site	0	no	no
ENF	Site	0	no	no
HWP	1.000	0	no	no
NPDES	Site	0	no	no
FTTS	Site	0	no	no
Historical FTTS	Site	0	no	no
San Jose HAZMAT	0.250	1	no	no
Manufactured Gas Plants	1.000	0	no	no

4.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

All sites listed in EDR's database report, including the "orphan" sites, were searched and reviewed. Included in the search were the RWQCB and the Environmental Protection Agency

(EPA) websites, as well as the Department of Toxic Substances Control (DTSC) files listed on the ENVIROSTOR website. In addition to the EDR database review, the GeoTracker website and several other government resources were researched for information on the sites identified as having potential environmental concerns. GeoTracker is a geographic information system and data warehouse operated by the State of California to provide online public access to environmental data.

4.3 NEARBY SITES OF CONCERN

According to the available information in regulatory databases and GeoTracker, there are several contaminated sites in the vicinity of the Site. The potential for environmental threat was evaluated based on information in databases regarding the type of release, current case status, and distance and direction from the Site. These sites and pertinent information about their environmental status are listed in the following table. The locations of these sites are shown on Figure 1. From the sites listed in this table, none represent recognized environmental conditions that could affect soil or groundwater at the Site.

Site Name	Site Address	Primary Database	Case Status	Media Affected	Distance and Direction	Concern to the Site?
San Jose Crane & Rigging	660 Giguere Court	LUST	open-site assessment 5/18/1992	groundwater	1,050 feet Southeast Downgradient	no
Matos Auto Center	670 North King Road	LUST	completed-case closed 1/3/1997	groundwater	1,900 feet Southwest Downgradient	no
Taniguchi Estate	12280 Mabury Road	LUST	completed-case closed 3/26/2004	soil and groundwater	2,000 feet Southwest Downgradient	no
San Jose Transit Village	686 North King Road	SLIC	certified 4/5/2011	soil and groundwater	2,100 feet Southwest Downgradient	no
De Jesus Store	796 North King Road	LUST	completed-case closed 5/9/2002	soil and groundwater	2,200 feet Southwest Downgradient	no

4.4 GEOLOGY AND HYDROGEOLOGY

The Site is situated on Holocene alluvial fan deposits of Santa Clara Valley. These deposits are described as “brown or tan, medium dense to dense gravelly sand or sandy gravel that grades upward to sandy or silty clay” (Helley, E.J., et al., 1994). Soils at the Site were deposited by streams flowing from the Diablo Range to the east. Deposition in this environment has resulted in a sequence characterized by irregular interfingering of coarse materials (sands and gravels in stream channels) into finer soils (silts and clays in overbank, estuarine, and bay deposits). Individual deposits are highly variable and discontinuous. The coarser-grained deposits make

up the major water-bearing zones, while silt and clay soils form aquitards that generally restrict the flow of groundwater.

Groundwater reportedly occurs in the vicinity at depths of approximately 20 feet below ground surface and flows to the northwest (WellTest, Inc., 2012).

4.5 TOPOGRAPHY AND DRAINAGE

The Site is approximately 110 feet above mean sea level and is located approximately 9 miles southeast of San Francisco Bay and 2.5 miles west of the Diablo Range foothills. The land surface is relatively flat, sloping gently downward to the southwest. One storm drain inlet is located in a gravel parking area on the western section of the Site. The majority of meteoric water is absorbed into the landscaping, recharging the water table. The nearest body of water is Upper Penitencia Creek, located adjacent to and east of the Site. The Site lies within the Upper Penitencia drainage area, which covers a 24-square-mile area. The Site is situated within the Coyote Creek watershed, which drains an area of approximately 320 square miles. Coyote Creek is located west of the Site and flows to the northwest into San Francisco Bay.

4.6 HISTORICAL USE INFORMATION FOR THE SITE

Historical use information for the Site and vicinity was gathered from aerial photographs, topographic maps, city directories, and environmental records. The following subsections present a summary of the historical evaluation.

Prior to 1965, the Site was used as agricultural land. Orchards were present on the Site from 1939 to 1965. In the mid-1960s, the two single-family homes were constructed on the Site. In the 1982 aerial photograph, the Site is shown to have its modern-day appearance.

4.6.1 Aerial Photographs

Aerial photographs were obtained from EDR, and copies are included in Appendix B. Aerial photographs obtained from Google Earth were also analyzed. Aerial photographs were inspected for evidence of development of the Site, storage of chemicals or other materials, and staining or distressed vegetation. Aerial photographs taken in 1939, 1948, 1956, 1965, 1982, 1993, 1998, and 2006 were included in the evaluation. Sections 4.6.6 and 4.7 present a summary of notable changes or observations concerning the Site and vicinity, as seen in the aerial photographs.

4.6.2 Historical Topographic Maps

USGS topographic maps for the Site and vicinity were evaluated. These maps included the San Jose 15-minute quadrangle dated 1899, 1953, and 1961, the San Jose East 7.5-minute

quadrangle dated 1953, 1961, 1968, 1973, and 1980, and the Calaveras Reservoir 7.5-minute quadrangle dated 1953, 1961, 1968, 1973, and 1980. Historical topographic maps provide information concerning development of the Site and vicinity, past uses of the Site, and other features (such as original topography and evidence of wells). Sections 4.6.6 and 4.7 present a summary of notable changes or observations concerning the Site and vicinity, as seen on the topographic maps. Copies of the topographic maps are included in Appendix C.

4.6.3 Sanborn Fire Insurance Maps

Since the 1860s, fire insurance maps have been created periodically for industrial and commercial facilities located in urban and suburban areas. Fire insurance maps typically illustrate features such as the facility name, buildings, aboveground and underground tanks, utilities, and chemical storage and disposal areas. Although fire insurance maps were created for areas of San Jose, none of the maps included the Site. Therefore, no information was available concerning the Site from this resource. A copy of the EDR declaration regarding fire insurance maps is included in Appendix D.

4.6.4 City Directories

A search of city directories was performed by EDR to identify businesses or other occupants of the Site in the past. The directories searched included Haines Company, Pacific Bell, and Pacific Telephone dating from 1975 through 2006. A copy of the city directory abstract is included in Appendix E. A summary of the city directories information is presented below.

Information in the city directories indicates that the Site vicinity is primarily residential; however, several small-businesses are listed. According to the city directories, the Sabatino Family has occupied the Site since the mid-1970s. Information in the city directories was consistent with what was apparent in the aerial photographs.

A search of city directories is required by the ASTM guideline. There are often apparent errors and obvious gaps in the information provided by the city directories. Aquifer Sciences reports the information as found, but does not guarantee its accuracy.

TARGET PROPERTY INFORMATION		
Date(s)	Address	Name
1975	12710 Mabury Road	Sabatino Murphy / Sabatino Joanne
2000	12750 Mabury Road	Sabatino Murphy
2000	12750 Mabury Road	Sabatino Mary
2006	12750 Mabury Road	Sabatino Murphy
2006	12750 Mabury Road	Sabatino Maiy [sic]

ADJOINING PROPERTY INFORMATION		
Date(s)	Address	Name
1996	1933 Cape Horn Drive	Proscript
2000	1933 Cape Horn Drive	Tsayyuo / Nguyen, Uoocy A
2006	1933 Cape Horn Drive	Tsay, Yuh Gang
1985	1907 Cape Horn Place	Quality Circuit Design
1980 - 1991	802 Cape Kennedy Drive	Ponderosa Express
1985 and 1991	802 Cape Kennedy Drive	Van Den Broeke Leonard E
2006	802 Cape Kennedy Drive	Tran, Tmh
2000	1858 Mabury Road	Trading Co / Hytec Precision / Intlhetwork
2000	1882 Pine Hollow Circle	SN 9 Uyen Thien
2006	1882 Pine Hollow Circle	Pro Video Service / Nguyen Thien

4.6.5 Environmental Lien and Other Relevant Searches

EDR performed a search of available current land title records for environmental cleanup liens and other use limitations. There were no environmental liens, or other use limitations reported. Copies of these reports are included in Appendix E.

A search of available property tax maps was performed by EDR. The property tax maps assist in evaluating potential environmental conditions of a property by understanding property boundaries and other characteristics. The Site consists of three parcels with APNs 254-05-046, 254-05-048, and 254-05-049. The eastern boundary of the Site is shared with the Eastside Union High School District. The property tax map did not reveal any other relevant information about the Site. A copy of the Property Tax Map Report is included in Appendix E.

The ASTM E 1527-05 lists building department records as a “standard historical source.” EDR did not report any permits issued by the City of San Jose for the Site. Permits for surrounding properties consist of residential additions, alterations, and repairs. A copy of the Building Permit Report is included in Appendix E.

4.6.6 Summary of Historical Use of the Site

Historical Use of the Site		
Year(s)	Site Use	Reference Sources
1899 - 1939	The Site appears as agricultural land with scattered rural homes in the 1899 topographic map. The 1939 aerial photo shows orchards on the Site.	topographic maps, aerial photographs, Google Earth
1939 - 1956	Aerial photos show orchards on the Site.	topographic maps, aerial photographs

Historical Use of the Site		
Year(s)	Site Use	Reference Sources
1965 - 1968	The 1965 aerial photograph shows orchards and the northeastern home constructed at 12750 Mabury Road. By 1968, both homes are shown as constructed.	aerial photographs, topographic maps
1982 - 2002	The Site appears to be used for residential purposes and there are no visible improvements.	topographic maps, aerial photographs
2006	Greenhouses and small-scale cultivation are visible on the eastern portion of the Site.	aerial photographs
Summary 1899 - 2006	In summary, the photographs and maps showed that land usage was primarily agricultural until approximately 1965. There was no evidence of distressed vegetation at the Site in any of the reference sources.	

4.7 HISTORICAL USE INFORMATION ON ADJOINING SITES

The following table summarizes historical land uses for adjoining sites.

Historical Use of Adjoining Sites		
Year(s)	Site Use	Reference Sources
1899 - 1965	The parcels adjacent to the Site appear to be used as agricultural land. The 1939 aerial photograph shows primarily orchards and other crops, as well as scattered rural homes.	topographic maps, aerial photographs
1973 - 1982	In the 1982 aerial photograph, the Site vicinity is developed into primarily single-family residential homes. The pond across Penitencia Creek, east of the Site, is visible.	topographic maps, aerial photographs
1982 - 2006	No visible changes since 1982 are apparent within the Site vicinity.	aerial photographs, Google Earth
Summary 1899 - 2005	In summary, the photographs and maps showed that land usage was primarily agricultural until approximately 1973. Most of the land appears developed for residential use by 1982.	

5.0 SITE RECONNAISSANCE

5.1 METHODOLOGY AND LIMITING CONDITIONS

On August 28, 2012, Rebecca Sterbentz and Justin Evans, Aquifer Sciences representatives, performed an inspection of the Site. Murphy Sabatino provided access to the Site and provided information about the property. Also present during the Site reconnaissance was Mike Kent of the Master Gardeners of Santa Clara County. The observations noted in this section apply to the Site as it appeared on that day. An interior walk-through inspection was performed at the residence at 12710 Mabury Road, but not at 12750 Mabury Road. The interiors of greenhouses and outbuildings were also inspected. The exteriors of adjoining sites were visually evaluated as part of the Site reconnaissance. Photographs taken during the inspection are included in Appendix F.

5.2 FACILITY OPERATIONS AND UTILITIES

Two one-story, single-family homes are currently located on the Site. The residences are rectangular in shape and oriented northwest-southeast. Both residences have attached garages. The residence at 12710 Mabury Road has a sub-grade basement. Each home has concrete and gravel parking areas. Located behind the residences, in the eastern portion of the Site, is a small-scale organic farming operation organized by Master Gardeners of Santa Clara County since 2003.

Other observed features include a pipeline that crosses Penitencia Creek in the northeastern portion of the Site. There are outdoor restrooms located behind 12710 Mabury Road. Also located behind 12710 Mabury Road is a pool surrounded by a concrete-paved patio and outdoor grill area.

5.2.1 Solid Waste Disposal

Solid waste is deposited in garbage bins located adjacent to each residence.

5.2.2 Sewage Discharge

Sanitary sewage disposal is provided by two septic tank systems. Both septic tanks are located on the northeast side of the residences.

5.2.3 Process Wastewater

There is no process wastewater created at the Site.

5.2.4 Surface Water Drainage

Meteoric water primarily drains into the landscaping; however, one storm drain inlet was observed in a gravel parking lot on the western portion of the Site.

5.2.5 Utilities

A list of the utilities serving the Site is presented in the following table.

Utility	Present Provider
Electricity	PG&E
Gas	PG&E
Water	City of San Jose
Sewage	Septic

5.3 EXTERIOR OBSERVATIONS

Exterior items and/or features that were observed at the Site are marked in the table and described in the paragraphs that follow.

Category	Item or Feature	Item or Feature Observed
<i>Operations, Processes, and Equipment</i>	Exhaust fans, vents, stacks, air compressors, emergency generators, and/or hydraulic equipment	
	Evidence of aboveground storage tanks	
<i>Aboveground Chemical or Waste Storage, Hazardous Materials, and Petroleum Product</i>	Drums, barrels and/or containers ≥ 5 gallons	X
	Hazardous materials	
	Petroleum products	
<i>Underground Chemical or Waste Storage, Drainage, or Collection Systems</i>	Evidence of underground storage tanks or ancillary equipment	
	Sumps, cisterns, catch basins, and /or dry wells	
	Septic tanks and/or leach fields	X
	Pipeline markers	
<i>Electrical Transformers/PCBs</i>	Pad- or pole-mounted transformers and/or capacitors	
	Generators	

Category	Item or Feature	Item or Feature Observed
<i>Evidence of Releases or Potential Releases</i>	Stressed vegetation	
	Stained soil	
	Stained pavement	
	Leachate or waste seeps	
	Trash, debris, and/or other waste material	
	Dumping or disposal areas	X
	Construction/demolition debris and/or dumped fill dirt	
	Surface water discoloration, odor, sheen, and/or free floating product	
	Strong, pungent or noxious odors	
	Exterior pipe discharges and/or other effluent discharges	
	Discharge from roof drains	
	Discharge other than roof drains	
	Boiler blowdown	
<i>Other Notable Site Features</i>	Surface water bodies	
	Drainage, storm drains, and sewer lines	X
	Wells	
	Additional observations	X

Aboveground Chemical or Waste Storage, Hazardous Materials, and Petroleum Product

Three 50-gallon drums were observed on the Site. Two were located in the eastern portion of the Site on both sides of an abandoned truck. Both were empty and were corroded with visible holes on the bottoms. One was labeled Southwestern Petroleum Co, Fort Worth, Texas. There were no unusual odors or obvious soil contamination around the drums. The third 50-gallon drum was located near a storage shed in the eastern side of 12710 Mabury Road. The drum was intact and labeled low ammonia grade Dynatex.

Underground Chemical or Waste Storage, Drainage, or Collection Systems

The residences at the Site are both on septic tank systems. Two septic tanks were identified on the northeastern side of each residence.

Evidence of Releases or Potential Releases

Several compost piles were staged in the southern and eastern portions of the Site adjacent to gardening areas. The compost consisted of discarded trimmings, leaves, grasses, and weeds. According to Mr. Kent, the composite is used in the organic garden.

Other Notable Site Features

An abandoned truck was observed in the eastern portion of the Site. The truck appeared to have been parked for an extended period of time. There were no unusual odors or obvious signs of contamination around the truck. An abandoned tractor was observed in the southern corner of the Site. The tractor appeared to be mid-20th century age and parked for an extended

period of time. There were no unusual odors or obvious signs of contamination around the tractor.

Several greenhouses were present in the southern portion of the Site. Many greenhouses were empty and unused. Some contained seedlings in pots, and others contained trial plants for growing experimentation by the Master Gardeners. According to Mr. Kent, no pesticides are used on the Site.

5.4 INTERIOR OBSERVATIONS

No interior items and/or features that might present an environmental concern were observed at the Site.

Category	Item or Feature	Item or Feature Observed
<i>Operations, Processes, and Equipment</i>	Elevators	
	Air compressors	
	Hydraulic equipment	
	Film/X-ray developing equipment	
<i>Aboveground Chemical or Waste Storage, Hazardous Materials, and Petroleum Products</i>	Evidence of aboveground storage tanks	
	Drums, barrels and/or containers \geq 5 gallons	
	Cleaning and/or similar supplies	
	Material Safety Data Sheets	
	Hazardous materials	
	Petroleum products	
<i>Evidence of Releases or Potential Releases</i>	Stained pavement or similar surface	
	Laboratory hoods and/or incinerators	
	Waste treatment systems and/or water treatment systems	
<i>Underground Chemical or Waste Storage, Drainage or Collection Systems</i>	Evidence of underground storage tanks or ancillary equipment	
	Grease traps	
	Oil/water separators	
	Interior floor drains	
<i>Other Notable Site Features</i>	Additional observations	

6.0 INTERVIEWS

During inspections and reconnaissance of the Site, we interviewed two individuals, Murphy Sabatino, who currently is the property owner, and Mike Kent of Master Gardeners of Santa Clara County. The interviews were conducted to assist in identifying any recognized environmental conditions at the Site. Specific information obtained from Mr. Sabatino and Mr. Kent has been incorporated in the appropriate sections of this report. No information was available about the septic tanks, leach fields, possible water wells, or details of prior agricultural usage.

7.0 FINDINGS AND OPINIONS

The following findings and opinions were derived from Aquifer Sciences' assessment of the Site.

On August 28, 2012, we inspected the Site. We identified five recognized environmental conditions on the Site.

The recognized environmental conditions are:

- Former agricultural usage and probable associated application of pesticides.
- An abandoned truck in the eastern portion of the Site.
- An abandoned tractor in the southern corner of the Site.
- Two corroded 50-gallon drums located in the eastern portion of the Site.
- Two septic tanks and associated leach fields adjacent to the residences.

Based on our review of historical maps, city directories, and regulatory environmental databases, no other recognized environmental conditions were identified at the Site. Several sites were identified in the vicinity, none of which represents recognized environmental conditions that could affect soil or groundwater quality at the Site. These sites are listed in Section 4.3.

8.0 CONCLUSIONS

Aquifer Sciences conducted a Phase I environmental assessment in August 2012 for the Site located at 12710 and 12750 Mabury Road in San Jose, California. The Phase I assessment included reconnaissance of the Site and vicinity; evaluation of aerial photographs, maps, and city directories; review of public records on file at regulatory agencies; and evaluation of contaminated sites in the area. The Site is located in a residential area, occupied primarily by single-family homes.

We performed this Phase I environmental assessment in conformance with the scope and limitations of ASTM E1527-05. Any exceptions to, or deletions from, this standard are described in Section 1.3 of this report.

Two one-story homes are currently located at 12710 and 12750 Mabury Road. The Site consists of approximately 3.4 acres of land. The Site is currently owned by Sabatino Survivor's Trust, Moul Trust, and the Frank Maxwell Separate Property Trust. The eastern portion of the Site is made available to the Master Gardeners of Santa Clara County for organic gardening, cultivation trials and experimentation, and growing produce for charitable contribution.

Based on the results of the Phase I assessment, five identified environmental conditions were identified at the Site.

The recognized environmental conditions are:

- Former agricultural usage and probable associated application of pesticides.
- An abandoned truck on the eastern portion of the Site.
- An abandoned tractor on the southern corner of the Site.
- Two corroded 50-gallon drums located on the eastern portion of the Site.
- Two septic tanks and associated leach fields adjacent to the residences.

Several known contaminated sites are located within one mile of the Site. From available information in regulatory databases, we identified five sites in the vicinity that had recognized environmental conditions. These sites are listed in the table in Section 4.3 and are shown on Figure 1. None of these sites poses a concern to soil or groundwater quality at the Site.

9.0 RECOMMENDATIONS

Based on the findings and conclusions of this Phase I environmental assessment, we offer the following recommendation:

1. Perform a Phase II environmental assessment at the Site.
 - Collect and analyze soil samples near each of the recognized environmental conditions listed in Section 7.0.
 - Collect and analyze groundwater samples to evaluate potential impacts from the recognized environmental conditions.
2. Determine the scope of any soil or groundwater remediation that may be warranted.

10.0 REFERENCES

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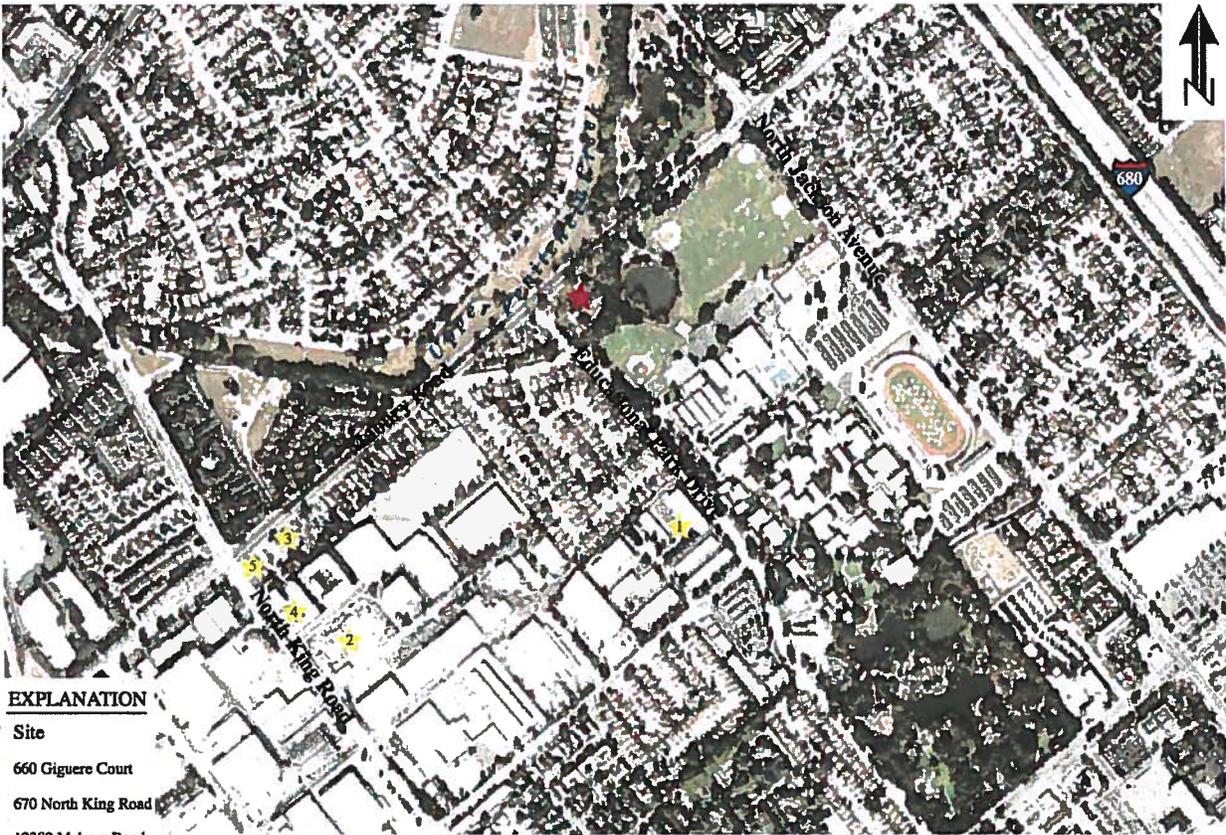
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EXPLANATION

- ★ Site
- 1 660 Giguere Court
- 2 670 North King Road
- 3 12280 Mabury Road
- 4 686 North King Road
- 5 796 North King Road

Figure 1. NEARBY SITES OF CONCERN
12710 and 12750 Mabury Road, San Jose, California

0 1000 feet
scale



EXPLANATION

-  septic tank
-  corroded 55-gallon drum
-  abandoned truck
-  abandoned tractor

0 150 feet
scale

Figure 2. SITE MAP
12710 and 12750 Mabury Road, San Jose, California

APPENDIX A

EDR ENVIRONMENTAL DISCLOSURE REPORT

APPENDIX B

AERIAL PHOTOGRAPHS

APPENDIX C

HISTORICAL TOPOGRAPHIC MAPS

APPENDIX D

SANBORN FIRE INSURANCE MAPS

APPENDIX E

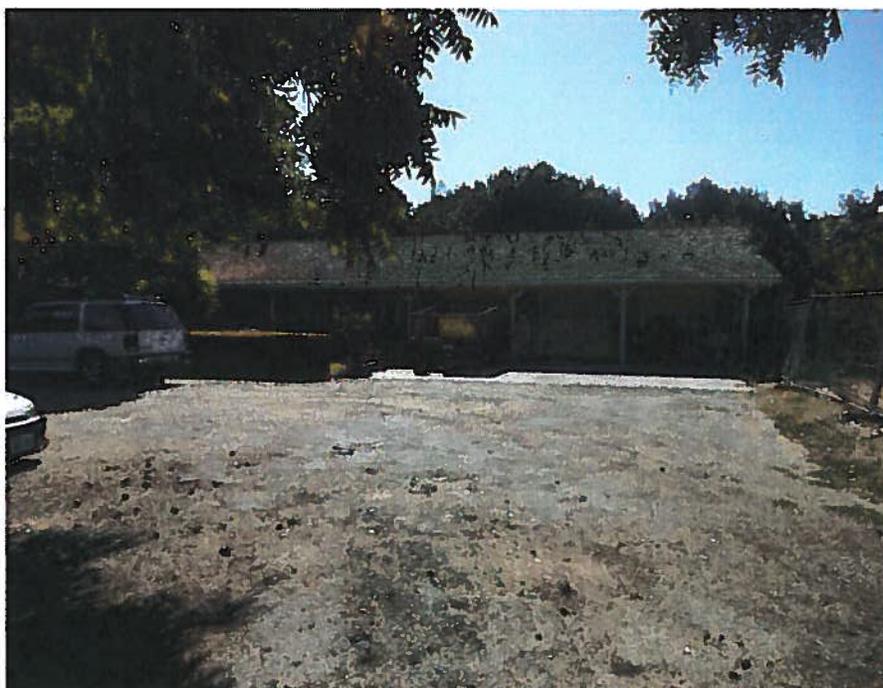
CITY DIRECTORIES,
ENVIRONMENTAL LIENS, AND
OTHER RELEVANT SEARCHES

APPENDIX F

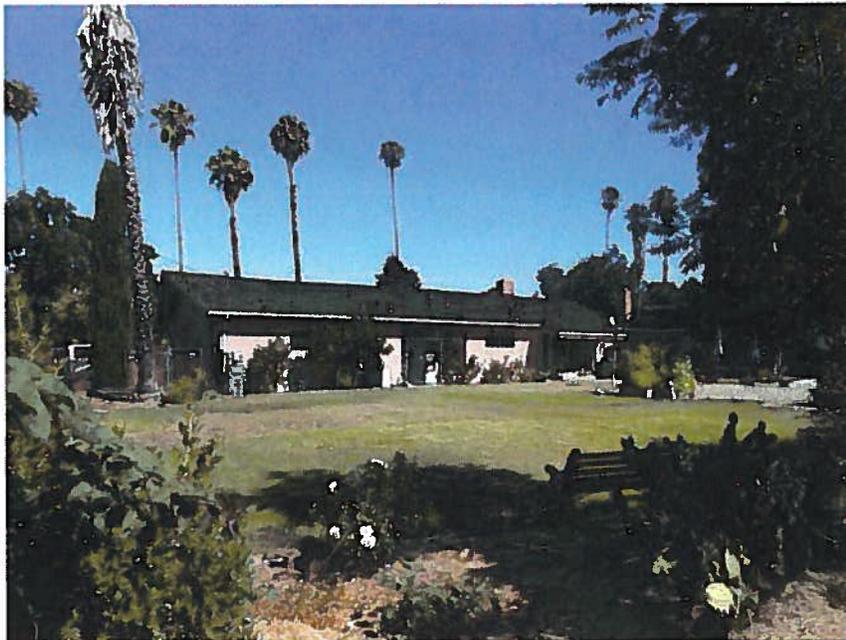
PHOTOGRAPHS OF THE SITE



Looking east at 12710 Mabury Road, San Jose, California.



Looking southeast at 12750 Mabury Road, San Jose, California.



Looking north at 12710 Mabury Road, San Jose, California.



Looking southwest at the organic garden, 12710 and 12750 Mabury Road, San Jose, California.



Looking southeast at the abandoned truck, 12710 and 12750 Mabury Road, San Jose, California.



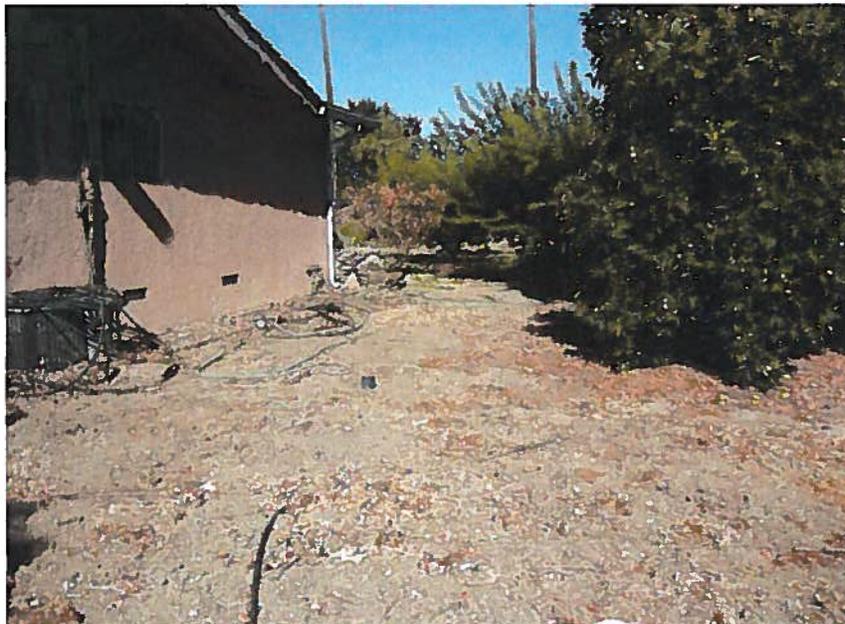
Looking east at the abandoned tractor, 12710 and 12750 Mabury Road, San Jose, California



View of corroded 55-gallon drum, 12710 and 12750 Mabury Road, San Jose, California.



View of 2nd corroded 55-gallon drum, 12710 and 12750 Mabury Road, San Jose, California.



Looking northwest at septic tank location, 12710 Mabury Road, San Jose, California.



View inside one of the greenhouses, 12710 and 12750 Mabury Road, San Jose, California

PHASE II ENVIRONMENTAL ASSESSMENT
12710 AND 12750 MABURY ROAD
SAN JOSE, CALIFORNIA

Prepared for

Mr. Murphy Sabatino
12710 and 12750 Mabury Road
San Jose, California 95133

by

Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd.
Lafayette, California 94549

October 5, 2012

October 5, 2012
212563

Murphy Sabatino
12710 and 12750 Mabury Road
San Jose, CA 95133

Subject: Phase II Environmental Assessment
12710 and 12750 Mabury Road, Redwood City, California

Dear Mr. Sabatino:

Aquifer Sciences is pleased to present this report containing the results of the Phase II environmental assessment conducted for the properties at 12710 and 12750 Mabury Road in San Jose, California. We appreciate the opportunity to be of service. If you have any questions regarding this report, please call us.

Respectfully yours,


Justin Evans
Staff Hydrogeologist


Rebecca A. Sterbentz, PG, CHG
President



Enclosure

cc: Mike Campbell, HMH

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Figure 1. Vicinity Map

Figure 2. Map Showing Sampling Locations

TABLES

Table 1. Analytical Data for Soil – Pesticides

Table 2. Analytical Data for Soil – Petroleum Hydrocarbons and VOCs

Table 3. Analytical Data for Soil – Metals

Table 4. Analytical Data for Groundwater – Petroleum Hydrocarbons and VOCs

Table 5. Analytical Data for Groundwater – Metals

APPENDICES

Appendix A. Drilling Logs

Appendix B. Laboratory Reports and Chain-of-Custody Documentation

PHASE II ENVIRONMENTAL ASSESSMENT
12710 and 12750 Mabury Road, San Jose, California
September 2012

1.0 INTRODUCTION

This report presents the results of the Phase II environmental assessment conducted for the properties (the "Site") located at 12710 and 12750 Mabury Road in San Jose, California (Figure 1). The objectives of this assessment were to: 1) collect and analyze soil samples near each of the recognized environmental conditions identified during the Phase I assessment, 2) collect and analyze groundwater samples to evaluate potential impacts from the recognized environmental conditions, 3) evaluate and compare analytical data for soil and groundwater samples to regulatory limits, and 4) determine the scope of any soil or groundwater remediation that may be warranted. Soil and groundwater sampling and analysis were performed in accordance with our work plan dated August 31, 2012.

2.0 SITE DESCRIPTION

The Site consists of approximately 3.4 acres of land and is located at 12710 and 12750 Mabury Road, San Jose, California (Figures 1 and 2). Prior to 1965, the Site was used as agricultural land. As shown in aerial photographs, orchards were present on the Site from 1939 to 1965. Two single-family homes are currently located on the Site. The area surrounding the homes includes patios, a pool, concrete-paved driveways, greenhouses, sheds, outdoor restrooms, planting areas, and landscaping.

The single-family homes were constructed in the mid-1960s. The eastern portion of the Site is made available to the Master Gardeners of Santa Clara County for organic gardening, cultivation trials and experimentation, and growing produce for charitable contribution.

3.0 SOIL AND GROUNDWATER SAMPLING AND ANALYSIS

On September 6, 2012, soil and groundwater sampling was conducted at nine locations across the Site. The sampling locations, B1 through B9, are illustrated on Figure 2.

Prior to drilling, each proposed boring location was marked and Underground Service Alert was notified to check for the presence of underground utilities. In addition, a private utility-line locator (C. Cruz Sub-Surface Locators) was retained to check the vicinity of each proposed boring.

The soil and groundwater sampling program was conducted by Aquifer Sciences field staff working under the direction of a California Professional Geologist. Environmental Control

AQUIFER SCIENCES, INC.

Associates, a C-57 certified environmental drilling company, performed the subsurface work using a Geoprobe 5410 truck-mounted rig equipped with a 2-inch diameter sampler and drive rods. Soil samples and cuttings were examined for lithologic identification and visible signs of contamination. Copies of the drilling logs are included in Appendix A.

All drilling equipment and tools were washed with an Alconox solution, rinsed with tap water, and rinsed with distilled water before the field program began and after each use. Sampling equipment was also washed with an Alconox solution, rinsed with tap water, and rinsed with distilled water prior to each use.

Soil samples were collected from borings B1, B2, B3, B4, and B8 at depths of 1, 3, and 6 feet below ground surface. Soil samples were collected from borings B5, B6, B7, and B9 at a depth of 1 foot below ground surface. The soil samples were collected in clean liners. The liners were sealed, labeled, stored on ice in a cooler at 4° Celsius, and transported under chain-of-custody protocol within 24 hours of collection to McCampbell Analytical, a state-certified analytical laboratory, located in Pittsburg, California.

In total, 19 soil samples were collected from the nine borings. Of these, 14 samples from the 1- and 3-foot depths within each boring were designated for laboratory analysis. The remaining five samples from the 6-foot depths were placed on hold at the laboratory for possible future analysis. The 1-foot deep samples from borings B1, B2, B5, B6, B7, and B8 were analyzed for total petroleum hydrocarbons identified as gasoline (TPH-gasoline), TPH-diesel and TPH-motor oil by EPA Method 8015B with silica gel cleanup. The 1-foot deep samples from borings B1 and B2 were analyzed for volatile organic compounds (VOCs) and fuel oxygenates by EPA Method 8260B. The 1-foot deep samples from borings B2 and B3 were also analyzed for the CAM 17 metals by EPA Method 6020. The 1- and 3-foot deep samples from borings B1, B2, B3, B4, B5, B8, and B9 were analyzed for organochlorine pesticides by EPA Method 8081A, and arsenic and lead by EPA Method 6020.

Grab groundwater samples were collected from two of the nine boring locations (B2 and B8). Groundwater samples were collected from the borings at depths of approximately 28 to 32 feet below ground surface. Each groundwater sample was collected using new tubing and a peristaltic pump. Reusable sampling equipment was washed with an Alconox solution, rinsed with tap water, and rinsed with distilled water prior to each use.

Samples were collected in clean bottles supplied by the analytical laboratory. The bottles were sealed, labeled, stored on ice in a cooler at 4° Celsius, and transported under chain-of-custody protocol within 24 hours of collection to McCampbell Analytical. After sampling was completed, each boring was filled and sealed with Portland cement.

Both groundwater samples were analyzed for TPH-gasoline, TPH-diesel, and TPH-motor oil by EPA Method 8015B with silica gel cleanup and VOCs and fuel oxygenates by EPA Method 8260B. Boring B2 was also analyzed for CAM 17 metals by EPA Method 200.8.

4.0 ANALYTICAL DATA EVALUATION

The results of laboratory analysis performed on the soil and groundwater samples collected on September 6, 2012, are presented in Tables 1 through 5. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix B.

4.1 ANALYTICAL DATA EVALUATION FOR SOIL

The analytical results were compared to regulatory standards to evaluate the environmental condition of the soil. One of the currently applicable regulatory guidelines is given by the California Environmental Protection Agency (Cal/EPA), which consists of California human health screening levels (CHHSLs) for residential properties. Another set of currently applicable regulatory guidelines is given by the Regional Water Quality Control Board (RWQCB), which consists of environmental screening levels (ESLs) for residential properties. The presence of a chemical at concentrations in excess of a CHHSL or ESL does not indicate that adverse impacts to human health are occurring, but suggests that further evaluation of potential human health concerns may be warranted. The analytical data were also compared to the Total Threshold Limit Concentration (TTLC) values established by the State of California to provide concentration limits for the classification of hazardous substances. In addition, the State of California has established Soluble Threshold Limit Concentration (STLC) values to provide soluble concentration limits for the classification of hazardous substances. As a rule-of-thumb, samples that contain an analyte at concentrations exceeding the numerical value of 10 times the STLC should be analyzed for soluble concentrations.

Table 1 summarizes the analytical data for organochlorine pesticides in soil. Low concentrations of *a*-chlordane, *g*-chlordane, *p,p*-dichlorodiphenyldichloroethane (DDD), *p,p*-dichlorodiphenyldichloroethene (DDE), and *p,p*-dichlorodiphenyltrichloroethane (DDT) were detected in one or another soil sample from borings B2, B3, B4, B5, and B9 from the 1- and 3-foot depths. None of the pesticide concentrations detected in the samples exceeded the CHHSLs, ESLs, TTLCs, or STLCs. No other pesticides were detected in the samples. These low pesticide concentrations in soil are consistent with the former agricultural usage of the Site.

Table 2 summarizes the analytical data for petroleum hydrocarbons and VOCs detected in the soil samples. TPH-gasoline was not detected in any of the soil samples. Low concentrations of TPH-diesel, up to 6.2 milligrams per kilogram (mg/kg), were detected in six samples. None of these TPH-diesel concentrations exceeded the residential ESL of 83 mg/kg. Low concentrations of TPH-motor oil (up to 49 mg/kg) were detected in four samples. None of

these TPH-motor oil concentrations exceeded the residential ESL of 370 mg/kg. VOCs and fuel oxygenates were not detected in any of the soil samples.

Table 3 summarizes the analytical data for metals detected in the soil samples. Low concentrations of metals were detected in all of the soil samples. Metals occur naturally in soil and rock, and are typically present at varying concentrations. None of the metals concentrations exceeded the CHHSLs or ESLs, except for arsenic and vanadium. Arsenic was detected in every sample at concentrations between 6.3 and 10 mg/kg. The CHHSL for arsenic is 0.07 mg/kg, and the ESL is 0.39 mg/kg. Arsenic concentrations up to approximately 20 mg/kg are within background levels for soil in the San Jose area. Vanadium was detected in two samples (B2-1 and B3-1) at concentrations of 55 and 44 mg/kg, respectively. The CHHSL for vanadium is 530 mg/kg, and the ESL is 16 mg/kg. The presence of vanadium in soil is common in the San Jose area and is likely naturally-occurring at these concentrations.

None of the metals concentrations, except chromium, exceeded the rule-of-thumb comparison of ten times the STLC. Chromium was detected in samples B2-1 and B3-1 at concentrations of 65 and 56 mg/kg, respectively. Ten times the STLC value is 50 mg/L. Chromium occurs naturally at these concentrations in soil in the San Jose area.

4.2 ANALYTICAL DATA EVALUATION FOR GROUNDWATER

The analytical data were compared to regulatory standards to evaluate the groundwater quality. The currently applicable regulatory guidelines are given by the RWQCB and consist of the Tier 1 ESLs for groundwater (Table A).

Table 4 summarizes the analytical data for petroleum hydrocarbons and VOCs detected in the groundwater samples from borings B2 and B8. TPH-gasoline, TPH-diesel, and TPH-motor oil were not detected in any of the groundwater samples. VOCs and fuel oxygenates were not detected in any of the groundwater samples.

Table 5 summarizes the analytical data for the CAM 17 metals detected in the groundwater sample from boring B2. Ten of the CAM 17 metals (barium, chromium, cobalt, copper, mercury, molybdenum, nickel, selenium, vanadium, and zinc) were detected in sample B2. Metals occur naturally in soil and groundwater, and the concentrations of metals detected in the groundwater samples at the Site appear to be representative of background conditions for the San Jose area. None of the metals concentrations in the samples exceeded the ESLs. The laboratory reported the presence of sodium, calcium, and magnesium salts, which is likely a byproduct of the septic tank and leach field.

5.0 SUMMARY AND CONCLUSIONS

In September 2012, Aquifer Sciences performed a Phase II environmental assessment for the Site located at 12710 and 12750 Mabury Road in San Jose, California. The main objectives of the Phase II assessment were to: 1) collect and analyze soil samples near each of the recognized environmental conditions identified during the Phase I assessment, 2) collect and analyze groundwater samples to evaluate potential impacts from the recognized environmental conditions, 3) evaluate and compare analytical data for soil and groundwater samples to regulatory limits, and 4) determine the scope of any soil or groundwater remediation that may be warranted.

Soil and groundwater samples were collected from nine borings across the Site. The sampling locations were selected based on the findings and conclusions of the Phase I environmental assessment. Soil sampling depths were selected mainly to evaluate the presence and distribution of agriculturally-related chemicals and the recognized environmental conditions identified in the Phase I environmental assessment. Grab groundwater samples were collected from two of the nine borings. Based on the assessment results, the following conclusions can be made:

- Soil encountered in the borings primarily consisted of clay, silt, sand and gravel. No evidence of staining or odor was apparent during sampling.
- The pesticide concentrations detected in soil include *a*-chlordane, *g*-chlordane, DDD, DDE, and DDT. None of the pesticide concentrations exceeded the residential CHHSLs or ESLs.
- Low concentrations of petroleum hydrocarbons (TPH-diesel and TPH-motor oil) were detected in some of the soil samples. None of these detections exceeded the residential ESLs.
- Metals occur naturally in soil and rock and were detected in varying concentrations in all of the samples. Arsenic, chromium, and/or vanadium were detected in many samples at concentrations exceeding one and/or another of the applicable regulatory guidelines.
- Arsenic was detected in every soil sample. Soils of the San Jose area typically contain background concentrations of arsenic up to approximately 20 mg/kg. None of the soil samples contained arsenic above the background concentration.
- Chromium was detected at low concentrations in the soil samples, but did not exceed the residential CHHSL or ESL. Chromium exceeded the rule-of-thumb comparison of ten times the STLC in two of the samples. The presence of chromium in soil is common in the San Jose area and is likely naturally-occurring at these concentrations.

- Vanadium was detected in two soil samples at concentrations exceeding the residential ESL, but not the residential CHHSL. The presence of vanadium in soil is common in the San Jose area and is likely naturally-occurring at these concentrations.
- The analytical data indicate that the soil quality is consistent with the Site's former agricultural usage. Shallow soil at the Site contains residual concentrations of pesticides; however, none exceeded residential CHHSLs or ESLs.
- The groundwater samples were analyzed for petroleum hydrocarbons, VOCs, and/or metals. Petroleum hydrocarbons and VOCs were not detected in the groundwater samples.
- Ten of the CAM 17 metals (barium, chromium, cobalt, copper, mercury, molybdenum, nickel, selenium, vanadium, and zinc) were detected in groundwater sample B2. None of the metals concentrations in the groundwater sample exceeded the ESLs.

6.0 RECOMMENDATIONS

The results of the Phase II assessment indicate that the environmental quality of soil and groundwater is favorable. The analytical data show that the concentrations of pesticides, petroleum hydrocarbons, and VOCs in soil and groundwater were either not detected or do not exceed the current regulatory screening limits given as residential CHHSLs and ESLs. Arsenic, chromium, and vanadium were detected in soil at low concentrations exceeding at least one regulatory limit, but not exceeding naturally-occurring concentrations in the San Jose area.

It is our understanding that the Site will be redeveloped for multi-family residential housing. Although there is no need to perform any environmental remediation based on the results of the Phase II assessment and current Site usage, the City of San Jose may have specific objectives regarding soil quality for certain residential development scenarios.

7.0 LIMITATIONS

This environmental assessment was performed in accordance with the practices and procedures generally accepted in the consulting engineering field. Our professional judgment regarding the potential for contamination at the Site is based on limited data; no other warranty is given or implied by this report. This document was prepared exclusively for Murphy Sabatino. It is intended for use only by Mr. Sabatino, his agents, and assignees. No other person or entity may rely upon the report without the expressed written consent of Aquifer Sciences, Inc.



Figure 1. VICINITY MAP
12710 and 12750 Mabury Road, San Jose, California

0 1000 feet
scale



EXPLANATION

-  septic tank
-  corroded 55-gallon drum
-  abandoned truck
-  abandoned tractor
-  soil sample location
-  soil and groundwater sample location
-  property boundary

0 150 feet
scale

**Figure 2. MAP SHOWING SAMPLING LOCATIONS
12710 and 12750 Mabury Road, San Jose, California**

AQUIFER SCIENCES, INC.

Table 1. ANALYTICAL DATA FOR SOIL – Pesticides
12710 and 12750 Mabury Road, San Jose, California

Sampling Location	Sampling Date	Sample Depth (feet)	a-Chlordane (mg/kg)	g-Chlordane (mg/kg)	DDD (mg/kg)	DDE (mg/kg)	DDT (mg/kg)	Dieldrin (mg/kg)	Other Pesticides (mg/kg)
B1-1	9/6/12	1	ND	ND	ND	ND	ND	ND	ND
B1-3	9/6/12	3	ND	ND	ND	ND	ND	ND	ND
B2-1	9/6/12	1	ND	ND	ND	0.0039	0.0070	ND	ND
B2-3	9/6/12	3	ND	ND	ND	ND	ND	ND	ND
B3-1	9/6/12	1	ND	ND	ND	0.0044	ND	ND	ND
B3-3	9/6/12	3	ND	ND	ND	ND	0.0067	ND	ND
B4-1	9/6/12	1	ND	0.0014	0.0017	0.23	0.036	ND	ND
B4-3	9/6/12	3	ND	ND	ND	0.0010	ND	ND	ND
B5-1	9/6/12	1	0.0032	0.0015	ND	0.047	0.036	ND	ND
B6-1	9/6/12	1	NA	NA	NA	NA	NA	NA	NA
B7-1	9/6/12	1	NA	NA	NA	NA	NA	NA	NA
B8-1	9/6/12	1	ND	ND	ND	ND	ND	ND	ND
B8-3	9/6/12	3	ND	ND	ND	ND	ND	ND	ND
B9-1	9/6/12	1	ND	ND	ND	0.0060	0.0072	ND	ND
Reporting Limit		----	0.001	0.001	0.001	0.001	0.001	0.001	varies
Residential CHHSL		----	0.43	0.43	2.3	1.6	1.6	0.035	varies
Residential ESL		----	0.44	0.44	2.4	1.7	1.7	0.0023	varies
TTLC		----	2.5	2.5	1	1	1	8	varies
STLC (mg/L)		----	0.25	0.25	0.1	0.1	0.1	0.8	varies

mg/kg = milligrams per kilogram (parts per million or ppm)

NA = not analyzed

ND = not detected above the reporting limit

DDD = p,p-dichlorodiphenyldichloroethane

DDE = p,p-dichlorodiphenyldichloroethene

DDT = p,p-dichlorodiphenyltrichloroethane

CHHSL = California human health screening level, California Environmental Protection Agency

ESL = Tier 1 environmental screening level, Table A, San Francisco Regional Water Quality Control Board, May 2008

TTLC = Total Threshold Limit Concentration

STLC = Soluble Threshold Limit Concentration (units are mg/L)

AQUIFER SCIENCES, INC.

Table 2. ANALYTICAL DATA FOR SOIL – Petroleum Hydrocarbons and VOCs
12710 and 12750 Mabury Road, San Jose, California

Sampling Location	Sampling Date	Sample Depth (feet)	TPH-gasoline (mg/kg)	TPH-diesel (mg/kg)	TPH-motor oil (mg/kg)	VOCs (mg/kg)
B1-1	9/6/12	1	ND	2.4	ND	ND
B1-3	9/6/12	3	NA	NA	NA	NA
B2-1	9/6/12	1	ND	3.6	7.9	ND
B2-3	9/6/12	3	NA	NA	NA	NA
B3-1	9/6/12	1	NA	NA	NA	NA
B3-3	9/6/12	3	NA	NA	NA	NA
B4-1	9/6/12	1	NA	NA	NA	NA
B4-3	9/6/12	3	NA	NA	NA	NA
B5-1	9/6/12	1	ND	4.1	26	NA
B6-1	9/6/12	1	ND	5.0	28	NA
B7-1	9/6/12	1	ND	6.2	49	NA
B8-1	9/6/12	1	ND	2.7	ND	NA
B8-3	9/6/12	3	NA	NA	NA	NA
B9-1	9/6/12	1	NA	NA	NA	NA
Reporting Limit		---	1.0	1.0	5.0	0.004 - 0.1
Residential CHHSL		---	NE	NE	NE	varies
Residential ESL		---	83	83	370	varies

mg/kg = milligrams per kilogram (parts per million or ppm)

NA = not analyzed

ND = not detected above the reporting limit

NE = none established

TPH = total petroleum hydrocarbons

VOCs = volatile organic compounds

CHHSL = California human health screening level, California Environmental Protection Agency

ESL = Tier 1 environmental screening level, Table A, San Francisco Regional Water Quality Control Board, May 2008

AQUIFER SCIENCES, INC.

Table 3. ANALYTICAL DATA FOR SOIL – Metals
12710 and 12750 Mabury Road, San Jose, California

Sampling Location	Sampling Date	Sample Depth (feet)	Antimony (mg/kg)	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
B1-1	9/6/12	1	NA	6.3	NA	NA	NA	NA	NA	NA	7.6	NA	NA	NA	NA	NA	NA	NA	NA
B1-3	9/6/12	3	NA	9.5	NA	NA	NA	NA	NA	NA	8.4	NA	NA	NA	NA	NA	NA	NA	NA
B2-1	9/6/12	1	1.6	10	490	0.55	0.48	65	14	59	25	0.087	0.93	86	ND	ND	ND	52	230
B2-3	9/6/12	3	NA	7.5	NA	NA	NA	NA	NA	NA	15	NA	NA	NA	NA	NA	NA	NA	NA
B3-1	9/6/12	1	0.54	10	240	ND	0.26	56	12	53	23	0.066	0.83	71	ND	ND	ND	44	61
B3-3	9/6/12	3	NA	9.1	NA	NA	NA	NA	NA	NA	8.7	NA	NA	NA	NA	NA	NA	NA	NA
B4-1	9/6/12	1	NA	8.6	NA	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA	NA	NA	NA
B4-3	9/6/12	3	NA	7.9	NA	NA	NA	NA	NA	NA	7.5	NA	NA	NA	NA	NA	NA	NA	NA
B5-1	9/6/12	1	NA	6.3	NA	NA	NA	NA	NA	NA	17	NA	NA	NA	NA	NA	NA	NA	NA
B6-1	9/6/12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B7-1	9/6/12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B8-1	9/6/12	1	NA	8.5	NA	NA	NA	NA	NA	NA	48	NA	NA	NA	NA	NA	NA	NA	NA
B8-3	9/6/12	3	NA	6.3	NA	NA	NA	NA	NA	NA	6.3	NA	NA	NA	NA	NA	NA	NA	NA
B9-1	9/6/12	1	NA	8.3	NA	NA	NA	NA	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA
Reporting Limit		-----	0.5	0.5	5.0	0.5	0.25	0.5	0.5	0.5	0.5	0.05	0.5	0.5	0.5	0.5	0.5	0.5	5.0
Residential CHHSL		-----	30	0.07	5,200	150	1.7	100,000	660	3,000	80	18	380	1,600	380	380	5.0	530	23,000
Residential ESL		-----	6.3	0.39	750	4.0	1.7	750	40	230	200	1.3	40	150	10	20	1.3	16	600
STLC (mg/L)		-----	15	5.0	100	0.75	1.0	5.0	8.0	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250

mg/kg = milligrams per kilogram (parts per million or ppm)

NA = not analyzed

ND = not detected

CHHSL = California human health screening level, California Environmental Protection Agency

ESL = Tier 1 environmental screening level, Table A, San Francisco Regional Water Quality Control Board, May 2008

STLC = Soluble Threshold Limit Concentration (units are mg/L)

6.3 = Bold font indicates that the concentration exceeds the ESL and/or the CHHSL.

65 = Shaded value indicates that the concentration exceeds ten times the STLC for the compound.

Table 4. ANALYTICAL DATA FOR GROUNDWATER – Petroleum Hydrocarbons and VOCs
12710 and 12750 Mabury Road, San Jose, California

Sampling Location	Sampling Date	TPH-gasoline ($\mu\text{g/L}$)	TPH-diesel ($\mu\text{g/L}$)	TPH-motor oil ($\mu\text{g/L}$)	VOCs ($\mu\text{g/L}$)
B2	9/6/12	ND	ND	ND	ND
B8	9/6/12	ND	ND	ND	ND
Reporting Limit		50	50	250	0.2 - 10
ESL		100	100	100	varies

$\mu\text{g/L}$ = micrograms per liter (parts per billion or ppb)

ND = not detected

TPH-gasoline = total petroleum hydrocarbons, quantified as gasoline

TPH-diesel = total petroleum hydrocarbons, quantified as diesel

TPH-motor oil = total petroleum hydrocarbons, quantified as motor oil

VOCs = volatile organic compounds

ESL = Tier 1 environmental screening level, Table A, San Francisco Regional Water Quality Control Board, May 2008

AQUIFER SCIENCES, INC.

Table 5. ANALYTICAL DATA FOR GROUNDWATER – Metals
12710 and 12750 Mabury Road, San Jose, California

Sampling Location	Sampling Date	Antimony ($\mu\text{g/L}$)	Arsenic ($\mu\text{g/L}$)	Barium ($\mu\text{g/L}$)	Beryllium ($\mu\text{g/L}$)	Cadmium ($\mu\text{g/L}$)	Chromium ($\mu\text{g/L}$)	Cobalt ($\mu\text{g/L}$)	Copper ($\mu\text{g/L}$)	Lead ($\mu\text{g/L}$)	Mercury ($\mu\text{g/L}$)	Molybdenum ($\mu\text{g/L}$)	Nickel ($\mu\text{g/L}$)	Selenium ($\mu\text{g/L}$)	Silver ($\mu\text{g/L}$)	Thallium ($\mu\text{g/L}$)	Vanadium ($\mu\text{g/L}$)	Zinc ($\mu\text{g/L}$)
B2	9/6/12	ND < 2.6	ND < 1.8	36	ND < 0.70	ND < 0.40	3.3	2.5	4	ND < 1.0	0.21	8.0	8.7	22	ND < 1.2	ND < 0.40	1.5	41
B8	9/6/12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reporting Limit	---	0.5	0.5	5.0	0.5	0.25	0.5	0.5	0.5	0.5	0.025	0.5	0.5	0.5	0.19	0.5	0.5	5.0
ESL	-----	6.0	50	1,000	4.0	5.0	21	140	1,000	15	2.0	35	100	50	35	2.0	15	5,000

$\mu\text{g/L}$ = micrograms per liter (parts per billion or ppb)

ND = not detected

ESL = Tier 1 environmental screening level, Table A, San Francisco Regional Water Quality Control Board, May 2008

Note: Reporting limit raised due to high non-reported metals content (salts of sodium, calcium, and magnesium, possibly associated with leach field).

APPENDIX A

DRILLING LOGS

AQUIFER SCIENCES, INC.

PROJECT NAME 212503 NO. B1

DRILLING LOCATION <u>127th & 127th Miles R1 San Jose, CA</u>		ELEVATION AND DATUM (FT)	
DRILLING AGENCY <u>EVA</u>	DRILLER <u>Scott</u>	DATE STARTED <u>9/6/0</u>	DATE FINISHED <u>9/6/0</u>
DRILLING METHOD <u>Direct Push</u>	DRILL BIT	BORING DEPTH (FT) <u>6</u>	WELL DEPTH (FT)
DRILLING EQUIPMENT <u>sample 540 unmounted</u>	SAMPLER	NO. OF SAMPLES	SOIL <u>3</u>
SIZE AND TYPE OF CASING		DEPTH TO WATER (FT.)	FIRST
TYPE OF PERFORATION	FROM	TO	FT
SIZE AND TYPE OF FILTER PACK	FROM	TO	FT
TYPE OF SEAL	FROM	TO	FT
TYPE OF SEAL	FROM	TO	FT
		LOGGED BY <u>JE</u>	
		CHECKED BY <u>[Signature]</u>	

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG		Water Level	SAMPLES				REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		Lithology	Well Construction Diagram		Sampling Interval	Recovery (%)	Flow Counts (per 6 in.)	QVM (ppmv)	
1	<u>gravel - fill</u> <u>silty sand w/ gravel</u> <u>sub rounded cherts</u>	<u>GMA</u>							<u>drill log @ 0930</u> <u>sample B1-1 @ 0930</u>
2									
3									<u>sample B1-3 @ 0941</u>
4									
5									
6	<u>Silty sand w/ gravel</u> <u>Bottom of boring @ 6'</u>	<u>SM</u>							<u>sample B1-6 @ 0943</u>

AQUIFER SCIENCES, INC.

PROJECT NAME 212563 NO B2

DRILLING LOCATION <u>12710 # 12750 Mabury Rd, San Jose</u>		ELEVATION AND DATUM (FT)	
DRILLING AGENCY <u>ECA</u>	DRILLER <u>Brent</u>	DATE STARTED <u>9/1/12</u>	DATE FINISHED <u>9/6/12</u>
DRILLING METHOD <u>Direct Push</u>	DRILL BIT	BORING DEPTH (FT) <u>28</u>	WELL DEPTH (FT)
DRILLING EQUIPMENT <u>Copier to 5-40 unbranded</u>	SAMPLER	NO OF SAMPLES	SOIL <u>3</u> GW <u>1</u> OTHER
SIZE AND TYPE OF CASING		DEPTH TO WATER (FT)	FIRST <u>25.5'</u> COMPLETION OTHER
TYPE OF PERFORATION	FROM TO FT.	LOGGED BY: <u>[Signature]</u>	
SIZE AND TYPE OF FILTER PACK	FROM TO FT.	CHECKED BY: <u>[Signature]</u>	
TYPE OF SEAL	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG		SAMPLES				REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		Lithology	Well Construction Diagram	Water Level	Sampling Interval	Recovery (%)	Flow Counts (per min)	
1	silty sand w/ gravel 1/2 in Ø brown	GM	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	start time @ 0950
2								sample B2-1 @ 0955
3								sample B2-3 @ 1000
4	silty sand 1-brown	SM	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	
5								sample B2-6 @ 1004
7	clay w/ silt & brown med. plasticity, moist	CL	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	
8								
9	silty sand w/ gravel sub rounded 1/4	GM	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	
10								
11	impaired clay w/ gravel	GC	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	
12								
13	clay silty 1-brown w/ gravel	GC	[Diagram]	[Diagram]	[Diagram]	[Diagram]	[Diagram]	

AQUIFER SCIENCES, INC.

PROJECT NAME 202563 NO B2

DRILLING LOCATION <u>12710 & 12750 Mabury Rd, San Jose, CA</u>		ELEVATION AND DATUM (FT)	
DRILLING AGENCY <u>ECA</u>	DRILLER <u>Brent</u>	DATE STARTED <u>9/6/2</u>	DATE FINISHED <u>9/14/2</u>
DRILLING METHOD <u>Conc. Push</u>	DRILL BIT	BORING DEPTH (FT) <u>28</u>	WELL DEPTH (FT)
DRILLING EQUIPMENT <u>Probe 5410 truck-mounted</u>	SAMPLER	NO OF SAMPLES	SOIL <u>3</u> GW <u>1</u> OTHER
SIZE AND TYPE OF CASING		DEPTH TO WATER (FT)	FIRST <u>25.5'</u> COMPLETION OTHER
TYPE OF PERFORATION	FROM TO FT.	LOGGED BY 	
SIZE AND TYPE OF FILTER PACK	FROM TO FT.	CHECKED BY 	
TYPE OF SEAL	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG			SAMPLES			REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		Lithology	Well Construction Diagram	Water Level	Sampling Interval	Recovery (%)	Blow Counts (per 6 in.)	
15	clay w/ silt no gravel	ML						
16								
17								
18								
19	moist sand & silt mixed	SM						
20								
21								
22								
23								
24								
25	silty clay w/ organics	ML						GW sample @ 1300 B2 FIRST water @ 25.5'
26	sand & silt	SM						
27								

AQUIFER SCIENCES, INC.

PROJECT NAME 212563

NO. B3

DRILLING LOCATION <u>12710 # 12750 Mahanoy Rd, Sun Jose CA</u>		ELEVATION AND DATUM (FT)	
DRILLING AGENCY <u>ECA</u>	DRILLER <u>Brent</u>	DATE STARTED <u>9/6/12</u>	DATE FINISHED <u>9/6/12</u>
DRILLING METHOD <u>Direct Push</u>	DRILL BIT	BORING DEPTH (FT)	WELL DEPTH (FT)
DRILLING EQUIPMENT <u>2000 lb 5410 truck</u>	SAMPLER	NO OF SAMPLES	SOIL <u>S</u> GW OTHER
SIZE AND TYPE OF CASING		DEPTH TO WATER (FT.)	FIRST COMPLETION OTHER
TYPE OF PERFORATION	FROM TO FT		
SIZE AND TYPE OF FILTER PACK	FROM TO FT	LOGGED BY: <u>JTB</u>	CHECKED BY: <u>[Signature]</u>
TYPE OF SEAL	FROM TO FT		
TYPE OF SEAL	FROM TO FT		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG		Water Level	SAMPLES			REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		Lithology	Well Construction Diagram		Sampling Interval	Recovery (%)	Blow Counts (per 6 in.)	
1	<p>silt soil 1.6 brown</p>  <p>silt 1 brown w/ gravel</p> <p>Bottom of Boring = 6'</p>	ML					<p>split line @ 1055</p> <p>sample B3-1 @ 1100</p> <p>sample B3-3 @ 1105</p> <p>sample B3-6 @ 1106</p>	
2								
3								
4								
5								
6								

AQUIFER SCIENCES, INC.

PROJECT NAME 212563

NO. B4

DRILLING LOCATION <u>12710 & 12750 Mabury Rd, San Jose, CA</u>		ELEVATION AND DATUM (FT)	
DRILLING AGENCY <u>ECA</u>	DRILLER <u>Brent</u>	DATE STARTED <u>9/6/12</u>	DATE FINISHED <u>9/6/12</u>
DRILLING METHOD <u>Geoprobe Direct Push</u>	DRILL BIT	BORING DEPTH (FT) <u>6</u>	WELL DEPTH (FT)
DRILLING EQUIPMENT <u>Geoprobe 5410 terminated</u>	SAMPLER	NO. OF SAMPLES	SOIL <u>3</u> GW OTHER
SIZE AND TYPE OF CASING		DEPTH TO WATER (FT)	FIRST COMPLETION OTHER
TYPE OF PERFORATION	FROM TO FT.		
SIZE AND TYPE OF FILTER PACK	FROM TO FT.	LOGGED BY: <u>JE</u>	CHECKED BY: <u>[Signature]</u>
TYPE OF SEAL	FROM TO FT.		
TYPE OF SEAL	FROM TO FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG		Water Level	SAMPLES			REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		Lithology	Well Construction Diagram		Recovery (%)	Flow Counts (per 6 in)	QVM (ppmv)	
1	fine-grained brown silty clay	ML			X			Start time @ 1115
2								B4-1 @ 1117
3								sample B4-3 @ 1121
4	Sand-silt brown w/ gravel 1/2 in	GM						
5								sample B4-6 @ 1123
6	Bottom of Boring C							

AQUIFER SCIENCES, INC.

PROJECT NAME

212563

NO.

38

DRILLING LOCATION 12710 & 12750 Highway Rd San Jose, CA		ELEVATION AND DATUM (FT)			
DRILLING AGENCY ICM	DRILLER Brant	DATE STARTED 7/6/12	DATE FINISHED 9/6/12		
DRILLING METHOD Direct Push	DRILL BIT	BORING DEPTH (FT) 32	WELL DEPTH (FT)		
DRILLING EQUIPMENT Geoprobe 5410	SAMPLER	NO. OF SAMPLES	SOIL 3	GW 1	OTHER
SIZE AND TYPE OF CASING		DEPTH TO WATER (FT)	FIRST	COMPLETION	OTHER
TYPE OF PERFORATION	FROM	TO	FT.		
SIZE AND TYPE OF FILTER PACK	FROM	TO	FT.	LOGGED BY: 	
TYPE OF SEAL	FROM	TO	FT.	CHECKED BY: 	
TYPE OF SEAL	FROM	TO	FT.		

DEPTH (FEET)	DESCRIPTION	GRAPHIC LOG			SAMPLES			REMARKS (Drilling Rate, Fluid Loss, Odor, etc.)
		Lithology	Well Construction Diagram	Water Level	Sampling Interval	Recovery (%)	Blow Counts (per 6 in.)	
1	orgnics silty soil	ML						Art 112 @ 1130
2								2-pc 88-1 @ 1130
3	silty sand brown	SM						sample B7-5 @ 1137
4								
5								
6								sample B7-5 @ 1140
	lithology not recorded below 6'							
	Bottom of Boring = 32'							GW sample 58 @ 1145

BORING NUMBER

38

SHEET

1 of 1

APPENDIX B

LABORATORY REPORT

AND

CHAIN-OF-CUSTODY DOCUMENTATION



Analytical Report

Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Reported: 09/13/12
	Client P.O.:	Date Completed: 09/12/12

WorkOrder: 1209114

September 13, 2012

Dear Cheri:

Enclosed within are:

- 1) The results of the 14 analyzed samples from your project: #212563,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

1209114

AQUIFER SCIENCES, INC.

3680-A Mt Diablo Blvd. (925) 283-9098
Lafayette, CA 94549 (925) 283 9135 FAX

CHAIN OF CUSTODY

GLOBAL ID# _____

Project Number: 212563

Number of Containers and Preservative: _____

Sampler(s) Signature(s): *John K. ...*

Sample Identification	Date	Time	Sample Type	Number of Containers and Preservative					Analytical Parameters											
				Unpreserved	HCl	HNO ₃	H ₂ SO ₄	NaOH	Diesel	Motor Oil	Gasoline	EPA 624 (226)	EPA 625 (227)	EPA 2081	Metals	AM	CM	PCB	PAHs	Priority
B1-1	9/6/12	0939	Soil	1					X	X	X	X	X	X	X	X	X	X	X	X
B1-3		0941		1					X	X	X	X	X	X	X	X	X	X	X	X
B2-1		0955		1					X	X	X	X	X	X	X	X	X	X	X	X
B2-3		1000		1					X	X	X	X	X	X	X	X	X	X	X	X
B3-1		1100		1					X	X	X	X	X	X	X	X	X	X	X	X
B3-3		1105		1					X	X	X	X	X	X	X	X	X	X	X	X
B4-1		1119		1					X	X	X	X	X	X	X	X	X	X	X	X
B4-3		1121		1					X	X	X	X	X	X	X	X	X	X	X	X
B5-1		1245		1					X	X	X	X	X	X	X	X	X	X	X	X
B6-1		1230		1					X	X	X	X	X	X	X	X	X	X	X	X
B7-1		1230		1					X	X	X	X	X	X	X	X	X	X	X	X
B8-1		1130		1					X	X	X	X	X	X	X	X	X	X	X	X
B8-3		1137		1					X	X	X	X	X	X	X	X	X	X	X	X
B9-1	✓	1238	✓	1					X	X	X	X	X	X	X	X	X	X	X	X

Results: Email FAX EDI GeoTracker

Turn-around time: 10-day 5-day 3-day

Contact: *Becky or Chun*

Email: *(925) @aquifer.com*
ckhipp@aquifer.com, jervus@aquifer.com

Comments: *Quote # 2506*
Must need ESL 8081

Relinquished by	Date	Time	Received by	Date	Time
<i>John K. ...</i>	9/6/12	1528	<i>Monica ...</i>	9/6/12	1528

ICE# 38

GOOD CONDITION APPROPRIATE CONTAINERS

HEAD SPACE ABSENT PRESERVED IN LAB

DECHLORINATED IN LAB

Analytical laboratory: *McConnell Analytical*

PRESERVATION: Vials O&G METALS OTHER Shipping notes: *via MM*

Page 1 of 1

McC Campbell Analytical, Inc.

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1209114

ClientCode: ASI

WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag

Report to:

Cheri Whipp
Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd
Lafayette, CA 94549
925-283-9098 FAX: 925-283-9133

Email: ras@aquifer.com; cwhipp@aquifer.com
cc: jevans@aquifer.com
PO:
ProjectNo: #212563

Bill to:

Accounts Payable
Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd
Lafayette, CA 94549

Requested TAT:

5 days

Date Received: 09/06/2012

Date Printed: 09/06/2012

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1209114-001	B1-1	Soil	9/6/2012 9:39	<input type="checkbox"/>	A	A		A	A									
1209114-002	B1-3	Soil	9/6/2012 9:41	<input type="checkbox"/>	A			A										
1209114-003	B2-1	Soil	9/6/2012 9:55	<input type="checkbox"/>	A	A	A		A									
1209114-004	B2-3	Soil	9/6/2012 10:00	<input type="checkbox"/>	A			A										
1209114-005	B3-1	Soil	9/6/2012 11:00	<input type="checkbox"/>	A		A											
1209114-006	B3-3	Soil	9/6/2012 11:05	<input type="checkbox"/>	A			A										
1209114-007	B4-1	Soil	9/6/2012 11:19	<input type="checkbox"/>	A			A										
1209114-008	B4-3	Soil	9/6/2012 11:21	<input type="checkbox"/>	A			A										
1209114-009	B5-1	Soil	9/6/2012 12:45	<input type="checkbox"/>	A			A	A									
1209114-010	B6-1	Soil	9/6/2012 12:35	<input type="checkbox"/>					A									
1209114-011	B7-1	Soil	9/6/2012 12:30	<input type="checkbox"/>					A									
1209114-012	B8-1	Soil	9/6/2012 11:30	<input type="checkbox"/>	A			A	A									
1209114-013	B8-3	Soil	9/6/2012 11:37	<input type="checkbox"/>	A			A										
1209114-014	B9-1	Soil	9/6/2012 12:38	<input type="checkbox"/>	A			A										

Test Legend:

1	8081 S	2	8260B S	3	CAM17MS S	4	PBASMS S	5	TPH(DMO)WSG S
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 003A, 009A, 010A, 011A, 012A contain testgroup.

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Aquifer Sciences, Inc.**

Date and Time Received: **9/6/2012 6:04:36 PM**

Project Name: **#212563**

LogIn Reviewed by: **Maria Venegas**

WorkOrder N°: **1209114** Matrix: Soil

Carrier: Client Drop-In

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: **3.8°C** NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

* NOTE: If the "No" box is checked, see comments below.

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/06/12
	Client P.O.:	Date Analyzed: 09/07/12-09/08/12

Organochlorine Pesticides by GC-ECD (8080 Basic Target List)*

Extraction Method: SW3550B

Analytical Method: SW8081A

Work Order: 1209114

Lab ID	1209114-001A	1209114-002A	1209114-003A	1209114-004A	Reporting Limit for DF =1	
Client ID	B1-1	B1-3	B2-1	B2-3		
Matrix	S	S	S	S		
DF	1	1	1	1	MDL	RL
Compound	Concentration				mg/kg	mg/kg
Aldrin	ND	ND	ND	ND	0.00027	0.001
a-BHC	ND	ND	ND	ND	0.0001	0.001
b-BHC	ND	ND	ND	ND	0.00025	0.001
d-BHC	ND	ND	ND	ND	0.00037	0.001
g-BHC	ND	ND	ND	ND	0.00097	0.001
Chlordane (Technical)	ND	ND	ND	ND	0.016	0.025
a-Chlordane	ND	ND	ND	ND	0.00047	0.001
g-Chlordane	ND	ND	ND	ND	0.00021	0.001
p,p-DDD	ND	ND	ND	ND	0.00014	0.001
p,p-DDE	0.00088,J	ND	0.0039	0.00067,J	0.00032	0.001
p,p-DDT	ND	ND	0.0070	ND	0.00043	0.001
Dieldrin	ND	ND	ND	ND	0.00033	0.001
Endosulfan I	ND	ND	ND	ND	0.00065	0.001
Endosulfan II	ND	ND	ND	ND	0.0002	0.001
Endosulfan sulfate	ND	ND	ND	ND	0.00063	0.001
Endrin	ND	ND	ND	ND	0.00097	0.001
Endrin aldehyde	ND	ND	ND	ND	0.0002	0.001
Endrin ketone	ND	ND	ND	ND	0.00013	0.001
Heptachlor	ND	ND	ND	ND	0.00021	0.001
Heptachlor epoxide	ND	ND	ND	ND	0.0002	0.001
Hexachlorobenzene	ND	ND	ND	ND	0.00027	0.01
Hexachlorocyclopentadiene	ND	ND	ND	ND	0.0004	0.02
Methoxychlor	ND	ND	ND	ND	0.00089	0.001
Toxaphene	ND	ND	ND	ND	0.035	0.05

Surrogate Recoveries (%)

%SS:	111	110	100	107	
------	-----	-----	-----	-----	--

Comments

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor.

surrogate diluted out of range or surrogate coelutes with another peak/sample contains surrogate.

J) analyte detected below quantitation limits



Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd
Lafayette, CA 94549

Client Project ID: #212563
Client Contact: Cheri Whipp
Client P.O.:

Date Sampled: 09/06/12
Date Received: 09/06/12
Date Extracted: 09/06/12
Date Analyzed: 09/07/12-09/08/12

Organochlorine Pesticides by GC-ECD (8080 Basic Target List)*

Extraction Method: SW3550B

Analytical Method: SW8081A

Work Order: 1209114

Lab ID	1209114-005A	1209114-006A	1209114-007A	1209114-008A	Reporting Limit for DF = 1	
Client ID	B3-1	B3-3	B4-1	B4-3	MDL	RL
Matrix	S	S	S	S		
DF	1	1	1	1		
Compound	Concentration				mg/kg	mg/kg
Aldrin	ND	ND	ND	ND	0.00027	0.001
a-BHC	ND	ND	ND	ND	0.0001	0.001
b-BHC	ND	ND	ND	ND	0.00025	0.001
d-BHC	ND	ND	ND	ND	0.00037	0.001
g-BHC	ND	ND	0.00021,J	ND	0.000097	0.001
Chlordane (Technical)	ND	ND	ND	ND	0.016	0.025
a-Chlordane	ND	ND	ND	ND	0.00047	0.001
g-Chlordane	ND	ND	0.0014	ND	0.00021	0.001
p,p-DDD	ND	ND	0.0017	ND	0.00014	0.001
p,p-DDE	0.0044	0.00087,J	0.23	0.0010	0.00032	0.001
p,p-DDT	ND	0.0067	0.036	ND	0.00043	0.001
Dieldrin	ND	ND	ND	ND	0.00033	0.001
Endosulfan I	ND	ND	ND	ND	0.00065	0.001
Endosulfan II	ND	ND	ND	ND	0.0002	0.001
Endosulfan sulfate	ND	ND	ND	ND	0.00063	0.001
Endrin	ND	ND	ND	ND	0.00097	0.001
Endrin aldehyde	ND	ND	ND	ND	0.0002	0.001
Endrin ketone	ND	ND	ND	ND	0.00013	0.001
Heptachlor	ND	ND	ND	ND	0.00021	0.001
Heptachlor epoxide	ND	ND	ND	ND	0.0002	0.001
Hexachlorobenzene	ND	ND	ND	ND	0.00027	0.01
Hexachlorocyclopentadiene	ND	ND	ND	ND	0.0004	0.02
Methoxychlor	ND	ND	ND	ND	0.00089	0.001
Toxaphene	ND	ND	ND	ND	0.035	0.05

Surrogate Recoveries (%)

%SS:	102	104	110	89
Comments				

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor.

surrogate diluted out of range or surrogate coelutes with another peak/sample contains surrogate.

J) analyte detected below quantitation limits



Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/06/12
	Client P.O.:	Date Analyzed: 09/07/12-09/08/12

Organochlorine Pesticides by GC-ECD (8080 Basic Target List)*

Extraction Method: SW3550B

Analytical Method: SW8081A

Work Order: 1209114

Lab ID	1209114-009A	1209114-012A	1209114-013A	1209114-014A	Reporting Limit for DF = 1	
Client ID	B5-1	B8-1	B8-3	B9-1		
Matrix	S	S	S	S		
DF	1	1	1	1	MDL	RL
Compound	Concentration				mg/kg	mg/kg
Aldrin	ND	ND	ND	ND	0.00027	0.001
a-BHC	ND	ND	ND	ND	0.0001	0.001
b-BHC	ND	ND	ND	ND	0.00025	0.001
d-BHC	ND	ND	ND	ND	0.00037	0.001
g-BHC	ND	ND	ND	ND	0.000097	0.001
Chlordane (Technical)	0.018,J	ND	ND	ND	0.016	0.025
a-Chlordane	0.0032	ND	ND	ND	0.00047	0.001
g-Chlordane	0.0015	ND	ND	ND	0.00021	0.001
p,p-DDD	0.00080,J	ND	ND	ND	0.00014	0.001
p,p-DDE	0.047	ND	ND	0.0060	0.00032	0.001
p,p-DDT	0.036	ND	ND	0.0072	0.00043	0.001
Dieldrin	ND	ND	ND	ND	0.00033	0.001
Endosulfan I	ND	ND	ND	ND	0.00065	0.001
Endosulfan II	ND	ND	ND	ND	0.0002	0.001
Endosulfan sulfate	ND	ND	ND	ND	0.00063	0.001
Endrin	ND	ND	ND	ND	0.00097	0.001
Endrin aldehyde	ND	ND	ND	ND	0.0002	0.001
Endrin ketone	ND	ND	ND	ND	0.00013	0.001
Heptachlor	ND	ND	ND	ND	0.00021	0.001
Heptachlor epoxide	ND	ND	ND	ND	0.0002	0.001
Hexachlorobenzene	ND	ND	ND	ND	0.00027	0.01
Hexachlorocyclopentadiene	ND	ND	ND	ND	0.0004	0.02
Methoxychlor	ND	ND	ND	ND	0.00089	0.001
Toxaphene	ND	ND	ND	ND	0.035	0.05

Surrogate Recoveries (%)

%SS:	113	106	97	102	
Comments					

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor.

surrogate diluted out of range or surrogate coelutes with another peak/sample contains surrogate.

J) analyte detected below quantitation limits



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
	Client Contact: Cheri Whipp	Date Received: 09/06/12
	Client P.O.:	Date Extracted: 09/06/12
		Date Analyzed: 09/11/12

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209114

Lab ID	1209114-001A						
Client ID	B1-1						
Matrix	Soil						
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes, Total	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	114	%SS2:	112
%SS3:	113		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/06/12
	Client P.O.:	Date Analyzed: 09/11/12

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209114

Lab ID	1209114-003A						
Client ID	B2-1						
Matrix	Soil						
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	0.05	tert-Amyl methyl ether (TAME)	ND	1.0	0.005
Benzene	ND	1.0	0.005	Bromobenzene	ND	1.0	0.005
Bromochloromethane	ND	1.0	0.005	Bromodichloromethane	ND	1.0	0.005
Bromoform	ND	1.0	0.005	Bromomethane	ND	1.0	0.005
2-Butanone (MEK)	ND	1.0	0.02	t-Butyl alcohol (TBA)	ND	1.0	0.05
n-Butyl benzene	ND	1.0	0.005	sec-Butyl benzene	ND	1.0	0.005
tert-Butyl benzene	ND	1.0	0.005	Carbon Disulfide	ND	1.0	0.005
Carbon Tetrachloride	ND	1.0	0.005	Chlorobenzene	ND	1.0	0.005
Chloroethane	ND	1.0	0.005	Chloroform	ND	1.0	0.005
Chloromethane	ND	1.0	0.005	2-Chlorotoluene	ND	1.0	0.005
4-Chlorotoluene	ND	1.0	0.005	Dibromochloromethane	ND	1.0	0.005
1,2-Dibromo-3-chloropropane	ND	1.0	0.004	1,2-Dibromoethane (EDB)	ND	1.0	0.004
Dibromomethane	ND	1.0	0.005	1,2-Dichlorobenzene	ND	1.0	0.005
1,3-Dichlorobenzene	ND	1.0	0.005	1,4-Dichlorobenzene	ND	1.0	0.005
Dichlorodifluoromethane	ND	1.0	0.005	1,1-Dichloroethane	ND	1.0	0.005
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.004	1,1-Dichloroethene	ND	1.0	0.005
cis-1,2-Dichloroethene	ND	1.0	0.005	trans-1,2-Dichloroethene	ND	1.0	0.005
1,2-Dichloropropane	ND	1.0	0.005	1,3-Dichloropropane	ND	1.0	0.005
2,2-Dichloropropane	ND	1.0	0.005	1,1-Dichloropropene	ND	1.0	0.005
cis-1,3-Dichloropropene	ND	1.0	0.005	trans-1,3-Dichloropropene	ND	1.0	0.005
Diisopropyl ether (DIPE)	ND	1.0	0.005	Ethylbenzene	ND	1.0	0.005
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.005	Freon 113	ND	1.0	0.1
Hexachlorobutadiene	ND	1.0	0.005	Hexachloroethane	ND	1.0	0.005
2-Hexanone	ND	1.0	0.005	Isopropylbenzene	ND	1.0	0.005
4-Isopropyl toluene	ND	1.0	0.005	Methyl-t-butyl ether (MTBE)	ND	1.0	0.005
Methylene chloride	ND	1.0	0.005	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.005
Naphthalene	ND	1.0	0.005	n-Propyl benzene	ND	1.0	0.005
Styrene	ND	1.0	0.005	1,1,1,2-Tetrachloroethane	ND	1.0	0.005
1,1,2,2-Tetrachloroethane	ND	1.0	0.005	Tetrachloroethene	ND	1.0	0.005
Toluene	ND	1.0	0.005	1,2,3-Trichlorobenzene	ND	1.0	0.005
1,2,4-Trichlorobenzene	ND	1.0	0.005	1,1,1-Trichloroethane	ND	1.0	0.005
1,1,2-Trichloroethane	ND	1.0	0.005	Trichloroethene	ND	1.0	0.005
Trichlorofluoromethane	ND	1.0	0.005	1,2,3-Trichloropropane	ND	1.0	0.005
1,2,4-Trimethylbenzene	ND	1.0	0.005	1,3,5-Trimethylbenzene	ND	1.0	0.005
Vinyl Chloride	ND	1.0	0.005	Xylenes, Total	ND	1.0	0.005

Surrogate Recoveries (%)

%SS1:	113	%SS2:	110
%SS3:	113		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



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Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received 09/06/12
	Client Contact: Cheri Whipp	Date Extracted 09/06/12
	Client P.O.:	Date Analyzed 09/08/12

CAM / CCR 17 Metals*

Lab ID	1209114-003A	1209114-005A	Reporting Limit for DF = 1; ND means not detected above the reporting limit	
Client ID	B2-1	B3-1		
Matrix	S	S	S	W
Extraction Type	TOTAL	TOTAL	mg/Kg	mg/L

ICP Metals, Concentration*

Analytical Method: SW6020

Extraction Method: SW3050B

Work Order: 1209114

Dilution Factor	1	1	1	1
Antimony	1.6	0.54		0.5 NA
Arsenic	10	10		0.5 NA
Barium	490	240		5.0 NA
Beryllium	0.55	ND		0.5 NA
Cadmium	0.48	0.26		0.25 NA
Chromium	65	56		0.5 NA
Cobalt	14	12		0.5 NA
Copper	59	53		0.5 NA
Lead	25	23		0.5 NA
Mercury	0.087	0.066		0.05 NA
Molybdenum	0.93	0.83		0.5 NA
Nickel	86	71		0.5 NA
Selenium	ND	ND		0.5 NA
Silver	ND	ND		0.5 NA
Thallium	ND	ND		0.5 NA
Vanadium	52	44		0.5 NA
Zinc	230	61		5.0 NA
%SS:	126	111		

Comments

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.

TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.

DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard

DF = Dilution Factor



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Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/06/12
	Client P.O.:	Date Analyzed: 09/08/12-09/11/12

Arsenic and Lead*

Extraction method: SW3050B

Analytical methods: SW6020

Work Order: 1209114

Lab ID	Client ID	Matrix	Extraction Type	Arsenic	Lead	DF	% SS	Comments
001A	B1-1	S	TOTAL	6.3	7.6	1	129	
002A	B1-3	S	TOTAL	9.5	8.4	1	126	
004A	B2-3	S	TOTAL	7.5	15	1	116	
006A	B3-3	S	TOTAL	9.1	8.7	1	130	
007A	B4-1	S	TOTAL	8.6	14	1	121	
008A	B4-3	S	TOTAL	7.9	7.5	1	111	
009A	B5-1	S	TOTAL	6.3	17	1	103	
012A	B8-1	S	TOTAL	8.5	48	1	116	
013A	B8-3	S	TOTAL	6.3	6.3	1	109	
014A	B9-1	S	TOTAL	8.3	13	1	124	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA
	S	TOTAL	0.5	0.5	mg/Kg

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

**Soil final results are based on 17% water content relative to Soil initial.

means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.
 TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
 DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard
 DF = Dilution Factor



QC SUMMARY REPORT FOR SW8081A

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70513

WorkOrder: 1209114

EPA Method: SW8081A		Extraction: SW3550B					Spiked Sample ID: 1209114-005A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/kg	mg/kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Aldrin	ND	0.050	115	117	1.36	108	70 - 130	30	70 - 130	
g-BHC	ND	0.050	105	106	0.368	95.6	70 - 130	30	70 - 130	
p,p-DDT	ND	0.050	108	110	2.00	70.8	70 - 130	30	70 - 130	
Dieldrin	ND	0.050	111	115	3.61	103	70 - 130	30	70 - 130	
Endrin	ND	0.050	106	108	2.20	96.1	70 - 130	30	70 - 130	
Heptachlor	ND	0.050	118	120	1.33	108	70 - 130	30	70 - 130	
%SS:	102	0.050	106	111	5.01	93	70 - 130	30	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70513 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209114-001A	09/06/12 9:39 AM	09/06/12	09/08/12 2:48 AM	1209114-002A	09/06/12 9:41 AM	09/06/12	09/08/12 6:54 AM
1209114-003A	09/06/12 9:55 AM	09/06/12	09/08/12 6:20 AM	1209114-004A	09/06/12 10:00 AM	09/06/12	09/08/12 10:27 AM
1209114-005A	09/06/12 11:00 AM	09/06/12	09/08/12 8:26 AM	1209114-006A	09/06/12 11:05 AM	09/06/12	09/08/12 7:29 AM
1209114-007A	09/06/12 11:19 AM	09/06/12	09/08/12 9:50 AM	1209114-008A	09/06/12 11:21 AM	09/06/12	09/08/12 1:52 AM
1209114-009A	09/06/12 12:45 PM	09/06/12	09/07/12 11:03 PM	1209114-012A	09/06/12 11:30 AM	09/06/12	09/08/12 8:38 AM
1209114-013A	09/06/12 11:37 AM	09/06/12	09/08/12 8:04 AM	1209114-014A	09/06/12 12:38 PM	09/06/12	09/08/12 9:13 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
surrogate diluted out of range or surrogate coelutes with another peak
N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70482

WorkOrder: 1209114

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1209093-012A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	0.60	125	123	1.01	122	70 - 130	20	70 - 130	
MTBE	ND	0.10	110	109	1.09	112	70 - 130	20	70 - 130	
Benzene	ND	0.10	116	111	4.23	112	70 - 130	20	70 - 130	
Toluene	ND	0.10	114	110	3.79	111	70 - 130	20	70 - 130	
Ethylbenzene	ND	0.10	114	111	2.34	111	70 - 130	20	70 - 130	
Xylenes	ND	0.30	116	114	1.43	113	70 - 130	20	70 - 130	
%SS:	108	0.10	100	113	12.1	94	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70482 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209114-001A	09/06/12 9:39 AM	09/06/12	09/08/12 7:12 PM	1209114-003A	09/06/12 9:55 AM	09/06/12	09/08/12 8:12 PM
1209114-009A	09/06/12 12:45 PM	09/06/12	09/07/12 7:42 PM	1209114-010A	09/06/12 12:35 PM	09/06/12	09/07/12 8:13 PM
1209114-011A	09/06/12 12:30 PM	09/06/12	09/07/12 8:43 PM	1209114-012A	09/06/12 11:30 AM	09/06/12	09/08/12 8:42 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70485

WorkOrder: 1209114

EPA Method: SW8260B		Extraction: SW5030B					Spiked Sample ID: 1209093-012A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
tert-Amyl methyl ether (TAME)	ND	0.050	75.3	77.2	2.54	84.2	56 - 94	30	50 - 135	
Benzene	ND	0.050	87.2	87.5	0.352	94.3	60 - 106	30	70 - 137	
t-Butyl alcohol (TBA)	ND	0.20	88.4	89	0.738	96.1	56 - 140	30	50 - 143	
Chlorobenzene	ND	0.050	85.9	89	3.58	93	61 - 108	30	69 - 133	
1,2-Dibromoethane (EDB)	ND	0.050	83.3	85.8	2.95	89	54 - 119	30	61 - 135	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	87.7	87.3	0.361	91.4	48 - 115	30	64 - 133	
1,1-Dichloroethene	ND	0.050	86.4	88.8	2.70	87.1	46 - 111	30	65 - 142	
Diisopropyl ether (DIPE)	ND	0.050	85.7	85.3	0.451	91.8	53 - 111	30	65 - 134	
Ethyl tert-butyl ether (ETBE)	ND	0.050	82.4	82.4	0	89.1	61 - 104	30	61 - 127	
Methyl-t-butyl ether (MTBE)	ND	0.050	82.7	83.5	0.993	88.4	58 - 107	30	65 - 130	
Toluene	ND	0.050	94.7	95.5	0.874	99.8	64 - 114	30	70 - 146	
Trichloroethene	ND	0.050	94.3	94.6	0.309	99.3	60 - 116	30	66 - 143	
%SS1:	104	0.12	104	102	1.47	102	64 - 117	30	70 - 130	
%SS2:	109	0.12	111	111	0	110	79 - 133	30	70 - 130	
%SS3:	109	0.012	97	98	0.778	104	88 - 121	30	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 70485 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209114-001A	09/06/12 9:39 AM	09/06/12	09/11/12 5:14 PM	1209114-003A	09/06/12 9:55 AM	09/06/12	09/11/12 5:54 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample dluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW6020

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70486

WorkOrder: 1209114

EPA Method: SW6020		Extraction: SW3050B					Spiked Sample ID: 1209093-014A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Antimony	ND	50	113	105	7.74	92.6	75 - 125	20	75 - 125	
Arsenic	2.2	50	113	102	9.88	99.2	75 - 125	20	75 - 125	
Barium	50	500	122	111	8.71	89.6	75 - 125	20	75 - 125	
Beryllium	ND	50	114	104	8.78	96.4	75 - 125	20	75 - 125	
Cadmium	ND	50	111	101	9.39	95.1	75 - 125	20	75 - 125	
Chromium	21	50	116	103	8.33	110	75 - 125	20	75 - 125	
Cobalt	5.0	50	115	104	9.87	95.9	75 - 125	20	75 - 125	
Copper	6.9	50	113	103	8.17	108	75 - 125	20	75 - 125	
Lead	2.2	50	111	100	9.36	94.1	75 - 125	20	75 - 125	
Mercury	0.068	1.25	117	107	8.71	99.4	75 - 125	20	75 - 125	
Molybdenum	ND	50	105	96.4	8.58	98	75 - 125	20	75 - 125	
Nickel	21	50	117	105	8.18	108	75 - 125	20	75 - 125	
Selenium	ND	50	110	104	5.09	99.8	75 - 125	20	75 - 125	
Silver	ND	50	104	97.6	6.58	95.5	75 - 125	20	75 - 125	
Thallium	ND	50	107	101	6.04	93.3	75 - 125	20	75 - 125	
Vanadium	33	50	119	104	8.27	108	75 - 125	20	75 - 125	
Zinc	19	500	114	104	8.67	104	75 - 125	20	75 - 125	
%SS:	114	500	125	114	9.41	92	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70486 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209114-001A	09/06/12 9:39 AM	09/06/12	09/08/12 8:16 AM	1209114-002A	09/06/12 9:41 AM	09/06/12	09/08/12 8:24 AM
1209114-003A	09/06/12 9:55 AM	09/06/12	09/08/12 8:32 AM	1209114-004A	09/06/12 10:00 AM	09/06/12	09/08/12 8:40 AM
1209114-005A	09/06/12 11:00 AM	09/06/12	09/08/12 9:11 AM	1209114-006A	09/06/12 11:05 AM	09/06/12	09/08/12 9:19 AM
1209114-007A	09/06/12 11:19 AM	09/06/12	09/11/12 4:16 AM	1209114-008A	09/06/12 11:21 AM	09/06/12	09/11/12 4:24 AM

MMS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is Inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
N/A = not applicable to this method.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW6020

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70515

WorkOrder: 1209114

EPA Method: SW6020		Extraction: SW3050B					Spiked Sample ID: 1209114-014A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
Arsenic	8.3	50	88.6	86.7	1.90	102	75 - 125	20	75 - 125	
Lead	13	50	87.2	87.5	0.230	102	75 - 125	20	75 - 125	
%SS:	124	500	109	107	1.59	110	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 70515 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209114-009A	09/06/12 12:45 PM	09/06/12	09/11/12 4:31 AM	1209114-012A	09/06/12 11:30 AM	09/06/12	09/11/12 4:39 AM
1209114-013A	09/06/12 11:37 AM	09/06/12	09/11/12 4:47 AM	1209114-014A	09/06/12 12:38 PM	09/06/12	09/08/12 1:43 PM

MMS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = $100 * (MS - Sample) / (Amount Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.
 * MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not applicable to this method.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample dluted due to high matrix or analyte content.



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QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil

QC Matrix: Soil

BatchID: 70412

WorkOrder: 1209114

EPA Method: SW8015B		Extraction: SW3550B/3630C					Spiked Sample ID: 1208797-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	17	40	NR	NR	NR	129	N/A	N/A	70 - 130	
%SS:	100	25	NR	NR	NR	117	N/A	N/A	70 - 130	
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE										

BATCH 70412 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209114-001A	09/06/12 9:39 AM	09/06/12	09/11/12 8:48 AM	1209114-003A	09/06/12 9:55 AM	09/06/12	09/12/12 1:31 AM
1209114-009A	09/06/12 12:45 PM	09/06/12	09/13/12 1:15 PM	1209114-010A	09/06/12 12:35 PM	09/06/12	09/13/12 3:47 PM
1209114-011A	09/06/12 12:30 PM	09/06/12	09/12/12 12:22 AM	1209114-012A	09/06/12 11:30 AM	09/06/12	09/07/12 3:11 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = $100 * (MS - Sample) / (Amount Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



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Analytical Report

Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Reported: 09/12/12
	Client P.O.:	Date Completed: 09/11/12

WorkOrder: 1209113

September 19, 2012

Dear Cheri:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: #212563,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

1209113

AQUIFER SCIENCES, INC.

3680-A Mt Diablo Blvd (925) 283-9098
Lafayette, CA 94549 (925) 283-9133 FAX

CHAIN OF CUSTODY

Project Number: 212563				Number of Containers and Preservative				<input checked="" type="checkbox"/> Motor Oil <input checked="" type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> EPA <input type="checkbox"/> EPA 624 <input checked="" type="checkbox"/> EPA 625 <input type="checkbox"/> EPA <input type="checkbox"/> Metals <input type="checkbox"/> Priority Poll.				Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> FAX <input type="checkbox"/> EDI <input type="checkbox"/> GeoTracker			
Sampler(s) Signature: <i>Just R. B.</i>				<input type="checkbox"/> Halogenated VOCs <input checked="" type="checkbox"/> Aromatic VOCs <input type="checkbox"/> Fuel Oxygenates <input type="checkbox"/> PAHs <input type="checkbox"/> PCBs <input type="checkbox"/> DDTs				Turn around time: <input type="checkbox"/> 10-day <input checked="" type="checkbox"/> 5-day							
Sample Identification	Date	Time	Sample Type	Unpreserved	HCl	HNO ₃	H ₂ SO ₄	NaOH					Contact: <i>Becky at Client</i> Email: <i>ms@aquifer.com</i>		
+1 B2	11/6/12	1306	H ₂ O						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Quote # 2606
+2 B8	9/6/12	1145	H ₂ O						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Next ESLs for 8091 Filter & preserve thru analysis
ICF: 3.8 GOOD CONDITION HEAD SPACE ABSENT DIESEL ORNATED IN LAB PRESERVATION: <input checked="" type="checkbox"/> VOAS <input checked="" type="checkbox"/> D&O <input checked="" type="checkbox"/> METALS <input checked="" type="checkbox"/> OTHER				APPROPRIATE CONTAINERS PRESERVED IN LAB											

Relinquished by: <i>M. Miller</i>	Date: 9/6/12	Time: 1528	Received by: <i>M. Miller</i>	Date: 9/6/12	Time: 1528
Analytical laboratory: <i>McCarroll Analytical</i>			Shipping notes: <i>via MSA</i>		
			Page: 1 of 1		

McC Campbell Analytical, Inc.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1209113

ClientCode: ASI

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Report to:

Cheri Whipp
Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd
Lafayette, CA 94549
925-283-9098 FAX: 925-283-9133

Email: ras@aquifer.com; cwhipp@aquifer.com
cc: jevans@aquifer.com
PO:
ProjectNo: #212563

Bill to:

Accounts Payable
Aquifer Sciences, Inc.
3680-A Mt. Diablo Blvd
Lafayette, CA 94549

Requested TAT: 5 days

Date Received: 09/06/2012

Date Printed: 09/06/2012

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1209113-001	B2	Water	9/6/2012 13:00	<input type="checkbox"/>	B	C	A	C									
1209113-002	B8	Water	9/6/2012 11:45	<input type="checkbox"/>	B		A										

Test Legend:

1	8260B W	2	CAM17MS DISS	3	G-MBTEX W	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A contain testgroup.

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



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http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **Aquifer Sciences, Inc.**

Date and Time Received: **9/6/2012 5:47:57 PM**

Project Name: **#212563**

LogIn Reviewed by: **Maria Venegas**

WorkOrder N°: **1209113** Matrix: Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 3.8°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

Comments:



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http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/12/12
	Client P.O.:	Date Analyzed: 09/12/12

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209113

Lab ID	1209113-001B						
Client ID	B2						
Matrix	Water						
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	2.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	Chloroform	ND	1.0	0.5
Chloromethane	ND	1.0	0.5	2-Chlorotoluene	ND	1.0	0.5
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromethane	ND	1.0	0.5
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane (EDB)	ND	1.0	0.5
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzene	ND	1.0	0.5
1,3-Dichlorobenzene	ND	1.0	0.5	1,4-Dichlorobenzene	ND	1.0	0.5
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropane	ND	1.0	0.5
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloropropene	ND	1.0	0.5
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloropropene	ND	1.0	0.5
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113	ND	1.0	10
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Isopropylbenzene	ND	1.0	0.5
4-Isopropyl toluene	ND	1.0	0.5	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes, Total	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	111	%SS2:	100
%SS3:	108		

Comments: b1

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment



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http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Aquifer Sciences, Inc. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/10/12
	Client P.O.:	Date Analyzed: 09/10/12

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1209113

Lab ID	1209113-002B						
Client ID	B8						
Matrix	Water						
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	10	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	2.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	Chloroform	ND	1.0	0.5
Chloromethane	ND	1.0	0.5	2-Chlorotoluene	ND	1.0	0.5
4-Chlorotoluene	ND	1.0	0.5	Dibromochloromethane	ND	1.0	0.5
1,2-Dibromo-3-chloropropane	ND	1.0	0.2	1,2-Dibromoethane (EDB)	ND	1.0	0.5
Dibromomethane	ND	1.0	0.5	1,2-Dichlorobenzene	ND	1.0	0.5
1,3-Dichlorobenzene	ND	1.0	0.5	1,4-Dichlorobenzene	ND	1.0	0.5
Dichlorodifluoromethane	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	1,3-Dichloropropane	ND	1.0	0.5
2,2-Dichloropropane	ND	1.0	0.5	1,1-Dichloropropene	ND	1.0	0.5
cis-1,3-Dichloropropene	ND	1.0	0.5	trans-1,3-Dichloropropene	ND	1.0	0.5
Diisopropyl ether (DIPE)	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Freon 113	ND	1.0	10
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Isopropylbenzene	ND	1.0	0.5
4-Isopropyl toluene	ND	1.0	0.5	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes, Total	ND	1.0	0.5

Surrogate Recoveries (%)

%SS1:	110	%SS2:	101
%SS3:	101		

Comments: b1

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment



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AQUIFER SCIENCES, INC. 3680-A Mt. Diablo Blvd Lafayette, CA 94549	Client Project ID: #212563	Date Sampled: 09/06/12
		Date Received: 09/06/12
	Client Contact: Cheri Whipp	Date Extracted: 09/06/12
	Client P.O.:	Date Analyzed: 09/08/12-09/11/12

CAM / CCR 17 Metals*

Lab ID	1209113-001C	Reporting Limit for DF = 1; ND means not detected above the reporting limit		
Client ID	B2			
Matrix	W		MDL	RL
Extraction Type	DISS.		µg/L	µg/L

ICP-MS Metals, Concentration*

Analytical Method: E200.8	Extraction Method: E200.8	Work Order: 1209113	
Dilution Factor	10	1	1
Antimony	ND<2.6	0.26	0.5
Arsenic	ND<1.8	0.18	0.5
Barium	36,J	0.45	5.0
Beryllium	ND<0.70	0.07	0.5
Cadmium	ND<0.40	0.04	0.25
Chromium	3.3,J	0.16	0.5
Cobalt	2.5,J	0.03	0.5
Copper	4.0,J	0.07	0.5
Lead	ND<1.0	0.1	0.5
Mercury	0.21,J	0.01	0.025
Molybdenum	8.0	0.05	0.5
Nickel	8.7	0.08	0.5
Selenium	22	0.12	0.5
Silver	ND<1.2	0.12	0.19
Thallium	ND<0.40	0.04	0.5
Vanadium	1.5,J	0.07	0.5
Zinc	41,J	0.71	5.0
%SS:	N/A		

Comments a12,b1

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

TOTAL = Hot acid digestion of a representative sample aliquot.
TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

J) analyte detected below quantitation limits
a12) reporting limit raised due to high non-reported metals content.
b1) aqueous sample that contains greater than ~1 vol. % sediment



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 70624

WorkOrder: 1209113

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	110	108	1.71	94	70 - 130	20	70 - 130
Benzene	ND	10	97.4	96.1	1.25	96.3	70 - 130	20	76 - 106
t-Butyl alcohol (TBA)	ND	40	118	115	1.98	86.7	70 - 130	20	70 - 130
Chlorobenzene	ND	10	98.7	96.1	2.69	98	70 - 130	20	79 - 105
1,2-Dibromoethane (EDB)	ND	10	114	110	3.22	98.2	70 - 130	20	76 - 116
1,2-Dichloroethane (1,2-DCA)	ND	10	100	99	1.34	94.6	70 - 130	20	69 - 111
1,1-Dichloroethene	ND	10	95.5	95.8	0.248	97.5	70 - 130	20	70 - 104
Diisopropyl ether (DIPE)	ND	10	102	99.9	1.80	95.8	70 - 130	20	79 - 111
Ethyl tert-butyl ether (ETBE)	ND	10	108	106	1.38	98	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	109	107	1.86	93.8	70 - 130	20	70 - 130
Toluene	ND	10	95.5	93.7	1.92	96.3	70 - 130	20	70 - 130
Trichloroethene	1.2	10	99.9	98	1.84	100	70 - 130	20	70 - 130
%SS1:	109	25	111	111	0	106	70 - 130	20	70 - 130
%SS2:	100	25	99	99	0	101	70 - 130	20	70 - 130
%SS3:	106	2.5	99	100	1.59	102	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70624 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209113-001B	09/06/12 1:00 PM	09/12/12	09/12/12 4:03 AM	1209113-002B	09/06/12 11:45 AM	09/10/12	09/10/12 11:13 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = $100 * (MS - Sample) / (Amount Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



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QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 70475

WorkOrder: 1209113

Analyte	EPA Method: E200.8 Extraction: E200.8						Spiked Sample ID: 1208640-014A		
	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Antimony	ND	50	105	104	1.36	106	70 - 130	20	85 - 115
Arsenic	2.2	50	104	105	0.386	104	70 - 130	20	85 - 115
Barium	36	500	99.3	99	0.320	100	70 - 130	20	85 - 115
Beryllium	ND	50	105	104	0.630	111	70 - 130	20	85 - 115
Cadmium	ND	50	101	101	0	106	70 - 130	20	85 - 115
Chromium	ND	50	99.4	100	0.761	103	70 - 130	20	85 - 115
Cobalt	ND	50	101	102	0.433	107	70 - 130	20	85 - 115
Copper	20	50	97.3	99.7	1.71	106	70 - 130	20	85 - 115
Lead	ND	50	102	102	0	106	70 - 130	20	85 - 115
Mercury	ND	1.25	114	114	0	108	70 - 130	20	85 - 115
Molybdenum	3.0	50	103	102	0.974	104	70 - 130	20	85 - 115
Nickel	0.64	50	97.4	98.9	1.49	105	70 - 130	20	85 - 115
Selenium	0.82	50	102	103	0.904	105	70 - 130	20	85 - 115
Silver	ND	50	99.4	97.9	1.52	105	70 - 130	20	85 - 115
Thallium	ND	50	102	102	0	105	70 - 130	20	85 - 115
Vanadium	4.1	50	103	104	0.681	104	70 - 130	20	85 - 115
Zinc	5.9	500	98.7	99.8	1.08	107	70 - 130	20	85 - 115
%SS:	112	750	114	113	0.129	110	70 - 130	20	85 - 115

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70475 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209113-001C	09/06/12 1:00 PM	09/06/12	09/08/12 3:57 PM	1209113-001C	09/06/12 1:00 PM	09/06/12	09/11/12 6:18 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



McC Campbell Analytical, Inc.

"When Quality Counts"

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 70579

WorkOrder: 1209113

EPA Method: SW8021B/8015Bm

Extraction: SW5030B

Spiked Sample ID: 1209113-002A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex) ^E	ND	60	102	99.3	2.97	104	70 - 130	20	70 - 130
MTBE	ND	10	103	93.4	9.93	90.4	70 - 130	20	70 - 130
Benzene	ND	10	99.8	101	0.783	103	70 - 130	20	70 - 130
Toluene	ND	10	100	101	0.934	105	70 - 130	20	70 - 130
Ethylbenzene	ND	10	103	104	0.726	106	70 - 130	20	70 - 130
Xylenes	ND	30	105	107	1.76	108	70 - 130	20	70 - 130
%SS:	86	10	92	95	3.19	92	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70579 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209113-001A	09/06/12 1:00 PM	09/07/12	09/07/12 2:23 PM	1209113-002A	09/06/12 11:45 AM	09/07/12	09/07/12 2:54 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

^E TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



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QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 70512

WorkOrder: 1209113

EPA Method: SW8015B		Extraction: SW3510C/3630C					Spiked Sample ID: N/A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	112	N/A	N/A	70 - 130
%SS:	N/A	625	N/A	N/A	N/A	98	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 70512 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1209113-001A	09/06/12 1:00 PM	09/06/12	09/07/12 3:11 AM	1209113-002A	09/06/12 11:45 AM	09/06/12	09/07/12 4:17 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = $100 * (MS - Sample) / (Amount Spiked)$; RPD = $100 * (MS - MSD) / ((MS + MSD) / 2)$.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.