LAWRENCE-MITTY
PARK AND TRAIL MASTER PLAN

ENVIRONMENTAL SUMMARY REPORT

June 7, 2022

INTRODUCTION

In January 2022, the City of Cupertino and a consultant team lead by MIG, kicked off the *Lawrence-Mitty Park and Trail Master Plan* project, with the goal of transforming this recently acquired vacant site and existing trail corridor into a meaningful recreation resource for the Cupertino community. The first phase of the Master Plan process is to review background information, understand the site's existing conditions, and perform additional site studies to fully understand the site—both its opportunities and constraints.

The purpose of this report is to summarize this technical analysis and provide development recommendations to guide site design options towards an implementable plan. The findings in this report, along with input from the community on priorities, will drive development of three initial design alternatives for the site and, after more community feedback, a final, preferred design concept for the park and trail.

REPORT ORGANIZATION

The report is organized with a section for each topic below, each of which includes a summary of findings and development recommendations to guide the site design. Large exhibits and full versions of lengthier studies are located in the Appendix.

Technical Analysis

- Site Overview
- Citywide Goals and Regulations
- Access and Circulation
- Noise Reduction
- Easements and Utilities
- Soils
- Stormwater and Hydrology
- Biological Resources
- Trees & Landscape
-

Opportunities and Constraints

- Maps
- Next steps

Appendix

A. **Transportation Memo,** Hexagon Transportation Consultants, February 2022

B. **Noise Conditions Report,** MIG, April 2022

C. **Civil Site Exhibit,** BKF, April 2022

D. **Adjacent Utilities,** BKF, April 2022

E. **Title Report,** June 2018

F. **Soils Report:** Phase I Environmental Site Assessment Update and Phase II Soil Quality Evaluation**,** Cornerstone Earth Group, February 2022

G. **Biological Constraints Analysis,** MIG, April 2022

H. **Arborist Report**, SBCA Tree Consulting, February 2022

TECHNICAL ANALYSIS

SITE OVERVIEW

The 7.83-acre Lawrence-Mitty project site is situated on the east side of Cupertino, between Saratoga Creek and the Lawrence Expressway. The City of Cupertino acquired it with the intent to develop a new park and extend the existing Saratoga Creek Trail.

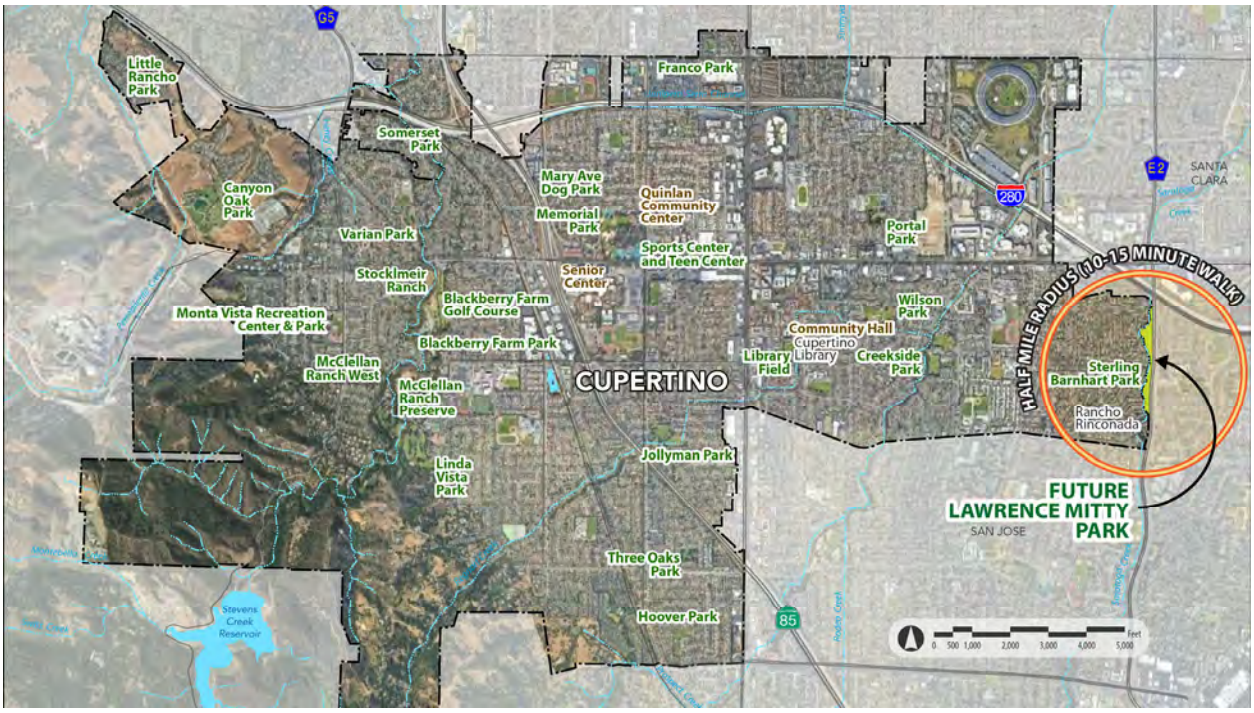

Figure 1: Site Context

The site is roughly a half mile in length and is located in the Rancho Rinconada neighborhood. The middle of the site lies just across the pedestrian bridge from Sterling Barnhart Park, a small and well-used neighborhood play area. To the south, reachable by the existing trail, is the Rancho Rinconada pool. The site is within a mile from Cupertino High school, Hyde Middle School, and Sedgwick Elementary School. Archbishop Mitty High School (private) is directly across the Expressway from the site.

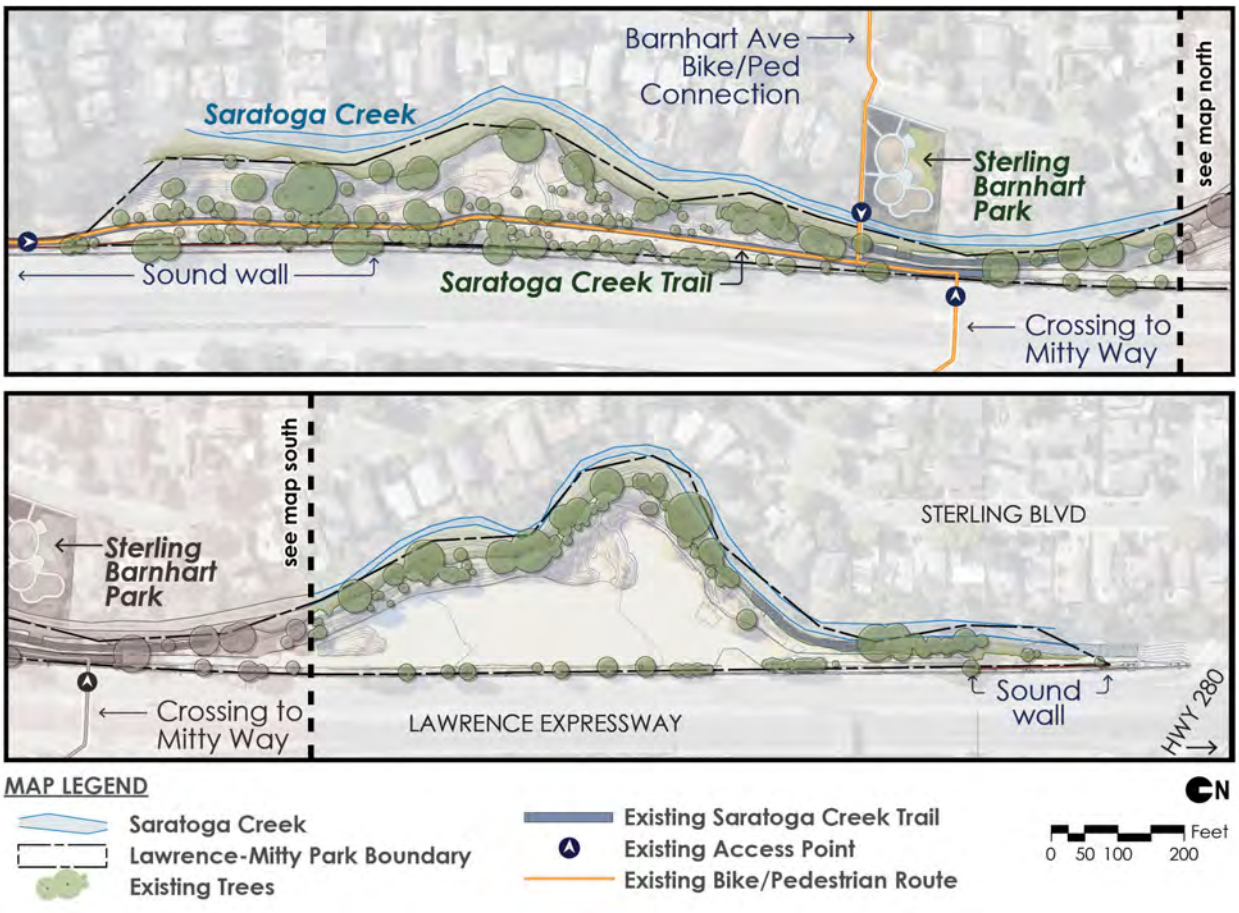

Figure 2: Existing Site Conditions

The ***south section*** of the site includes an existing section of the Saratoga Creek Trail, which extends north past the pedestrian bridge from Sterling Barnhart Park and to a crosswalk at Mitty Way. This portion has a paved multi-use trail, site furnishings, signage and irrigation. Trail improvements along the south section may be included in the Master Plan, depending on the community's priorities. There are also several small opportunity areas where the land widens out between the trail and creek. At the south end of the property is an existing sound wall that continues beyond the end of the parcel.

Figure 3: South end of the site with existing sound wall

The ***north section*** of the site, beyond the Mitty Way intersection, is currently fenced and locked, and offers a large flat space with the most recreation potential of the parcels. This area was last used as a construction storage and staging area by the County and holds several large soil piles and soil berms along the top of the creek bank, both made up of a combination of soil and construction debris. The former use has left behind an impervious surface, which will need to be addressed for successful drainage and planting.

Figure 4: North site with recreation potential

Recently purchased from the County, the site is near the end of the process of annexation from the City of San Jose into Cupertino. Its location at the edge of Cupertino and San Jose will require coordination with San Jose and Santa Clara County on several site factors, including traffic, access, and utility connections.

The adjacent ***Lawrence Expressway*** creates challenges with noise, particulates, access, and parking. In addition, ***I-280***, at the north end of the site, contributes additional background noise and makes bicycle and pedestrian connections to the north challenging.

Figure 5: Saratoga Creek

Saratoga Creek can provide the community with unique passive recreation opportunities and a greater connection to nature. Development work adjacent to the Creek will need to consider many factors, including environmental agency regulations, grading and stormwater management for water quality, habitat, and existing riparian trees.

Further details on these project opportunities and constraints are provided in the specific sections that follow. The City's and design team's shared goal is to create a master plan that addresses each challenge and is shaped by the site's possibilities and the community's vision. The Lawrence-Mitty site has the potential to provide new recreation uses for the neighborhood, improve ecological functions along the creek corridor, and serve as an important trail connector for the city and region.

CITYWIDE GOALS AND REGULATIONS

The City of Cupertino has developed multiple Citywide parks and planning documents to guide development, including the Parks and Recreation System Master Plan, Bicycle Transportation Plan, Pedestrian Transportation Plan, Climate Action Plan and General Plan. The Lawrence-Mitty Park and Trail Master Plan will be designed to align with the overall goals of each of these plans, along with the relevant points noted below.

CUPERTINO PARKS AND RECREATION SYSTEM MASTER PLAN

The 2020 Cupertino Parks and Recreation System Master Plan (PRSMP) creates a cohesive strategy to guide future development, renovation, and management of City parks, recreation facilities, and trails. The PRSMP was developed after an extensive public engagement process that helped assess community needs and goals while identifying opportunities to meet those needs in the future. It notes that acquiring the Lawrence-Mitty site is an opportunity to increase access to park space on the east side of Cupertino and prioritizes extending the Saratoga Creek Trail northward to Stevens Creek Boulevard. Maps within the PRSMP show the Lawrence-Mitty site as an opportunity for **Natural Corridor Enhancements (Creek/Riparian)** and for **Enhanced Pedestrian and Bike Connectivity**.

These related **Goals for the Saratoga Creek Trail** are noted in the PRSMP:

- Consider adding trail amenities
- Enhancing and protecting the riparian corridor
- Adding green infrastructure
- Encourage connections to regional destinations

The PRSMP also includes a **Goal and Community Priority Alignment Checklist,** shown below, for use in evaluating new projects to determine if they are consistent with the direction of the PRSMP. While it's an ambitious list, the design of the Lawrence-Mitty Park and Trail Master Plan has the potential to meet many of these expectations. As the design concepts progress, alternatives will be measured by this checklist.

Alignment with Master Plan Goals:

- Protect nature, trees, and natural areas in parks and throughout the city to support wildlife, ecological functions, and a stronger connection to Cupertino's natural environment
- Create a walkable, bikeable and accessible city by providing an interconnected network of multi-use trails, walkways and bikeways, close-to-home parks, and community destinations
- Distribute parks, facilities, and recreation opportunities throughout the community for easy and equitable access
- Parks and recreation offerings to support broad and inclusive recreation interests
- Support social gatherings, events, programs, and activities for people of all ages, abilities, cultures, and interests
- Create high quality recreation experiences, places and services that are welcoming, responsive, comfortable, and reflective of Cupertino's unique character
- Provide, manage, and maintain high-quality parks, recreation facilities, programs, and services for Cupertino residents through sound management and stewardship, sustainable choices and wise use of resources

Alignment with Community Priorities:

- Protect nature or support nature experiences
- Provide improved connectivity or trail opportunities
- Support park and facility access (geographic, ADA, bike/pedestrian entry)
- Increase the variety and diversity of recreation options
- Support social gatherings, special events or celebrations
- Provide unique or extraordinary play opportunities
- Empower teens or youth
- Reflect Cupertino's unique character and identity
- Improve user comfort, increase ease of use or create welcoming places and services
- Support the Arts in our community
- Promote partnerships
- Support diverse cultural interests

CUPERTINO BICYCLE TRANSPORTATION PLAN

In 2016, the City Council adopted this Bicycle Transportation Plan, a long-range planning document designed to encourage bicycling as a safe, practical, and healthy alternative to motor vehicles. It addresses present and future needs of the bicycling community, lays the groundwork for grant funding eligibility for bicycle projects, and is in close alignment with the goals set by the Cupertino Bicycle Pedestrian Commission to significantly increase the attractiveness and safety of bicycling throughout the City, with a particular focus on safe connectivity to schools.

Goals of the Cupertino Bicycle Transportation Plan that relate to the Lawrence-Mitty project:

- **Safety:** Improve bicyclist safety through the design and maintenance of roadway improvements.
- **Mobility:** Increase and improve bicycle access to community destinations across the City of Cupertino for all ages and abilities.

The Bicycle Transportation Plan recommends a series of Class I shared use paths, separated from vehicle traffic. When joined together with low-stress on-street facilities, they can provide easy access around Cupertino. This network would support both recreational riders and long-range bicycle trips.

The Lawrence-Mitty site is located at or linked with several **proposed bicycle transportation projects recommended in the Bicycle Transportation Plan:**

- **North Connection:** A Class I Bike Path beginning at the existing Saratoga Creek Trail (close to Mitty Way) and continuing north along the site, transecting Highway 280 and connecting to Stevens Creek Blvd. The plan notes that with further study and coordination, this could also link up to a proposed Cupertino Loop Trail.
- **Mid-Site Connection:** A proposed Class III Bike Boulevard along Barnhart Ave. to provide an east/west connection through the Rancho Rinconada neighborhood, leading to Sterling Barnhart Park and the existing pedestrian bridge to the Saratoga Creek Trail.
- **South of the project site:** Intersecting with the existing Saratoga Creek Trail, a proposed Class II Buffered Bike Lane to provide two miles of east/west connection along Bollinger Road.

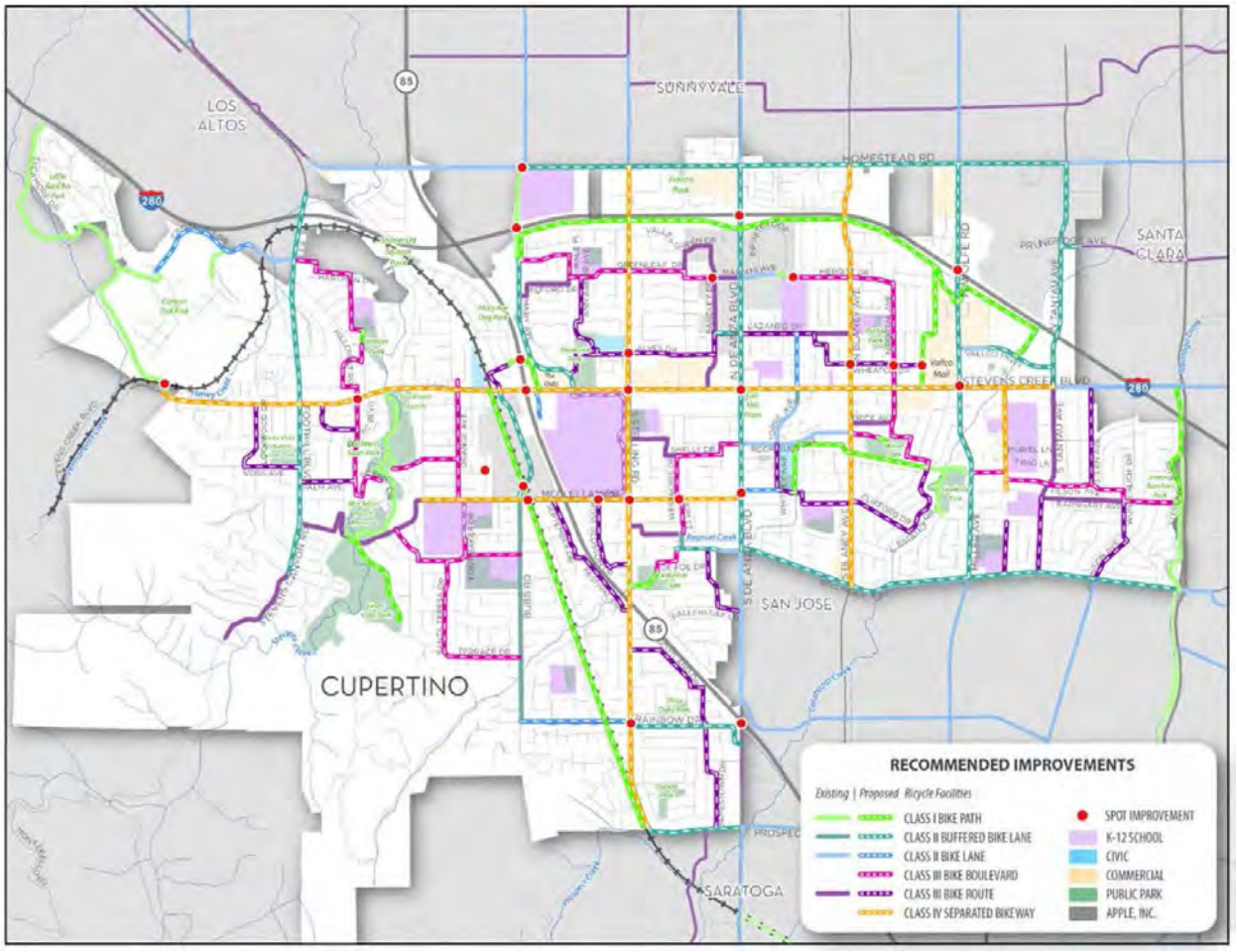

Figure 6: Bikeway Projects exhibit from the Cupertino Bicycle Transportation Plan

CUPERTINO PEDESTRIAN TRANSPORTATION PLAN

To encourage walking as a viable way to get around Cupertino, the City Council adopted the 2018 Pedestrian Transportation Plan. The Plan outlines physical improvements to the City that will provide improved access for all ages and abilities. The plan's vision includes three main goals, all of which apply to the Lawrence-Mitty project:

- **Safety:** Improve pedestrian safety and reduce the number and severity of pedestrian related collisions, injuries, and fatalities.
- **Access:** Increase and improve pedestrian access to community destinations across the City of Cupertino for people of all ages and abilities.
- **Connectivity:** Continue to develop a connected pedestrian network that fosters an enjoyable walking experience.

The Plan identifies a proposed extension of the Saratoga Creek Trail north to Stevens Creek Blvd., envisioned as a shared use path.

CITY OF CUPERTINO CLIMATE ACTION PLAN

The Cupertino Climate Action Plan (CAP) is a strategic planning document that identifies sources

of GHG emissions within the City's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic goals, measures, and actions to reduce emissions from the energy, transportation and land use, water, solid waste, and green infrastructure sectors. The Lawrence-Mitty Park and Trail Master Plan has an opportunity to align with the Climate Action Plan's specific goals as noted below.

The City's Climate Action Plan includes the following goals and measures related to transportation and land use emissions:

- **Encourage Alternative Transportation** – Support transit, carpooling, walking, and bicycling as viable transportation modes to decrease the number of single occupancy vehicle trips within the community.
- **Bicycle and Pedestrian Environment Enhancements** – Continue to encourage multi-modal transportation, including walking and biking, through safety and comfort enhancements in the bicycle and pedestrian environment.

The Plan also defines actions and implementation steps that the City could specifically take to reduce its own GHG emissions, including:

- **Improve Facilities** – Transform facilities into models of technology demonstration and conservation.
- **Conserve Water Through Efficient Landscaping** – Implement best management practices in landscaping design and share City successes communitywide to lead by example in water conservation action.
- **Reduce Solid Waste** – Effectively manage materials to shift behavior, consumption, and life-cycle impacts.
- **Construction and Demolition Waste Diversion** – Enhance construction and demolition waste diversion rates for municipal projects.

CITY OF CUPERTINO GENERAL PLAN

Cupertino's General Plan includes citywide goals, policies, and strategies. The following specific goals and policies in the plan are applicable to the Lawrence-Mitty Park and Trail Master Plan project:

Environmental Resources and Sustainability Element

- Ensure a sustainable future for the City of Cupertino (Goal ES-1).
- **Principles of Sustainability**. Incorporate the principles of sustainability into Cupertino's planning, infrastructure, and development process in order to achieve improvement, reduce GHG emissions, and meet the needs of the community without compromising the needs of future generations (Policy ES-1.1).
- Promote conservation of energy resources (Goal ES-2).
- **Conservation and Efficient Use of Energy Resources**. Encourage the maximum feasible conservation and efficient use of electrical power and natural gas resources for new and existing residences, businesses, industrial, and public uses (Policy ES-2.1).
- Protect the city's urban and rural ecosystems (Goal ES-5)
- **Urban Ecosystem.** Manage the public and private development to ensure the protection and enhancement of its urban ecosystem (Policy ES-5.1).

- **Landscaping in and near Natural Vegetation.** Preserve and enhance existing natural vegetation, landscape features and open space when new development is proposed within existing natural areas. When development is proposed near natural vegetation, encourage the landscaping to be consistent with the palate of vegetation found in the natural vegetation (Policy ES-5.3).
- **Recreation and Wildlife.** Provide open space linkages within and between properties for both recreation and wildlife activities, most specifically for the benefit of wildlife that is threatened, endangered or designated as species of special concern. (Policy ES-5.6).
- Ensure protection and efficient use of all water resources (Goal ES-7).
- **Natural Water Bodies and Drainage Systems**. In public and private development, use Low Impact Development (LID) principles to manage stormwater by mimicking natural hydrology, minimizing grading and protecting or restoring natural drainage systems (Policy ES-7.1).
- **Reduction of Impervious Surfaces**. Minimize stormwater runoff and erosion impacts resulting from development and use low impact development (LID) designs to treat stormwater or recharge groundwater (Policy ES-7.2).
- **Pollution and Flow Impacts**. Ensure that surface and groundwater quality impacts are reduced through development review and voluntary efforts (Policy ES-7.3).
- **Natural Water Courses**. Retain and restore creek beds, riparian corridors, watercourses, and associated vegetation in their natural state to protect wildlife habitat and recreation potential and assist in groundwater percolation. Encourage land acquisition or dedication of such areas (Policy ES-7.8).
- **Water Conservation and Demand Reduction Measures**. Promote efficient use of water throughout the City in order to meet State and regional water use reduction targets (Policy ES-7.11).

Infrastructure Element

- **Planning and Management.** Create plans and operational policies to develop and maintain an effective and efficient stormwater system (Policy INF-4.1).

Land Use and Community Character Element

- **Enhance Connections.** Look for opportunities to enhance publicly accessible pedestrian and bicycle connections with new development or redevelopment (Policy LU-5.3).
- **Connectivity.** Create pedestrian and bicycle access between new developments and community facilities. Review existing neighborhood circulation to improve safety and access for students to walk and bike to schools, parks, and community facilities such as the library (Policy LU-11.1).

Recreation, Parks, and Community Service Element

- **Parkland Acquisition.** The City's parkland acquisition strategy should be based upon three broad objectives (Policy RPC-2.1):
  - Distributing parks equitably throughout the City;
  - Connecting and providing access by providing paths, improved pedestrian and bike connectivity and signage; and
  - Obtaining creek lands and restoring creeks and other natural open space areas, including strips of land adjacent to creeks that may be utilized in creating buffer areas, trails, and trail amenities.

- **Connectivity and Access.** Ensure that each home is within a half-mile walk of a neighborhood park or community park with neighborhood facilities; ensure that walking and biking routes are reasonably free of physical barriers, including streets with heavy traffic; provide pedestrian links between parks, wherever possible; and provide adequate directional and site signage to identify public parks (Policy RPC-2.4).
- **Range of Park Amenities.** Provide parks and recreational facilities for a variety of recreational activities (Policy RPC-2.5).
- Preserve and enhance access to parks that have significant natural resources (Goal RPC-3).
- Create an interconnected system of multi-use trails and provide safe pedestrian and bicycle access through the city and connections to local nodes and destinations (Goal RPC-5).
- **Open Space and Trail Linkages.** Dedicate or acquire open space land along creeks and utilities through regional cooperation, grants, and private development review (Policy RPC-5.1).
- **Pedestrian and Bicycle Paths.** Develop a citywide network of pedestrian and bicycle pathways to connect employment centers, shopping areas and neighborhoods to service including parks, schools, libraries, and neighborhood centers (Policy RPC-5.2).
- **Art and Culture.** Utilize parks as locations of art and culture and to educate the community about the City's history, and explore the potential to use art in facilities and utilities when located in parks (Policy RPC-6.3).
- **Sustainable Design.** Ensure that City facilities are sustainably designed to minimize impacts on the environment (Policy RPC-7.1).

ACCESS AND CIRCULATION

The existing Saratoga Creek Trail is a multi-use path that runs alongside the west side of Lawrence Expressway and extends from English Drive in the south to Mitty Way in the north. Because the adjacent Lawrence Expressway prohibits additional vehicle access and parking, the primary opportunities for increased access and circulation at the Lawrence-Mitty site are for bicyclists and pedestrians. The selection of recreation features will need to take this limitation into consideration.

The following summary draws on an initial assessment by Hexagon Transportation Consultants, Inc. of *Vehicle Miles Traveled (VMT), Multimodal Access, and Pedestrian safety at Lawrence Mitty Park and Trail in Cupertino, California*, completed in February 2022. See Appendix A: Transportation Memo for the full memo.

SUMMARY

Bicycle and Pedestrian Connections:

- The existing pedestrian and bicycle facilities are located at the Mitty Way intersection and to the south, including:
  - **Lawrence Expressway/Bollinger Rd. Intersection:** a signalized intersection with pedestrian crossing
  - **Sterling Blvd./Barnhart Ave. Intersection:** bicycle/pedestrian access from Sterling Barnhart Park, across an existing bicycle/pedestrian bridge, and joining the existing Saratoga Creek Trail
  - **Lawrence Expressway and Mitty Way Intersection:** a signalized intersection with pedestrian crossing
- **North of the site, at Calvert Drive and I-280**: There is a signalized intersection but no option for pedestrians to cross the Lawrence Expressway. Pedestrian facilities are limited to a crosswalk on the east side of the expressway, leading to a sidewalk and Doyle Road, which provides an indirect connection via this local neighborhood street to Mitty Way and the Saratoga Creek Trail.
- **Lawrence Expressway:** Bicycles are currently allowed to ride on the side of the expressway in the project vicinity. However, only the bravest of bicyclists would find this acceptable due to the high-speed traffic and noise.

Figure 7: Lawrence Expressway/Mitty Way intersection

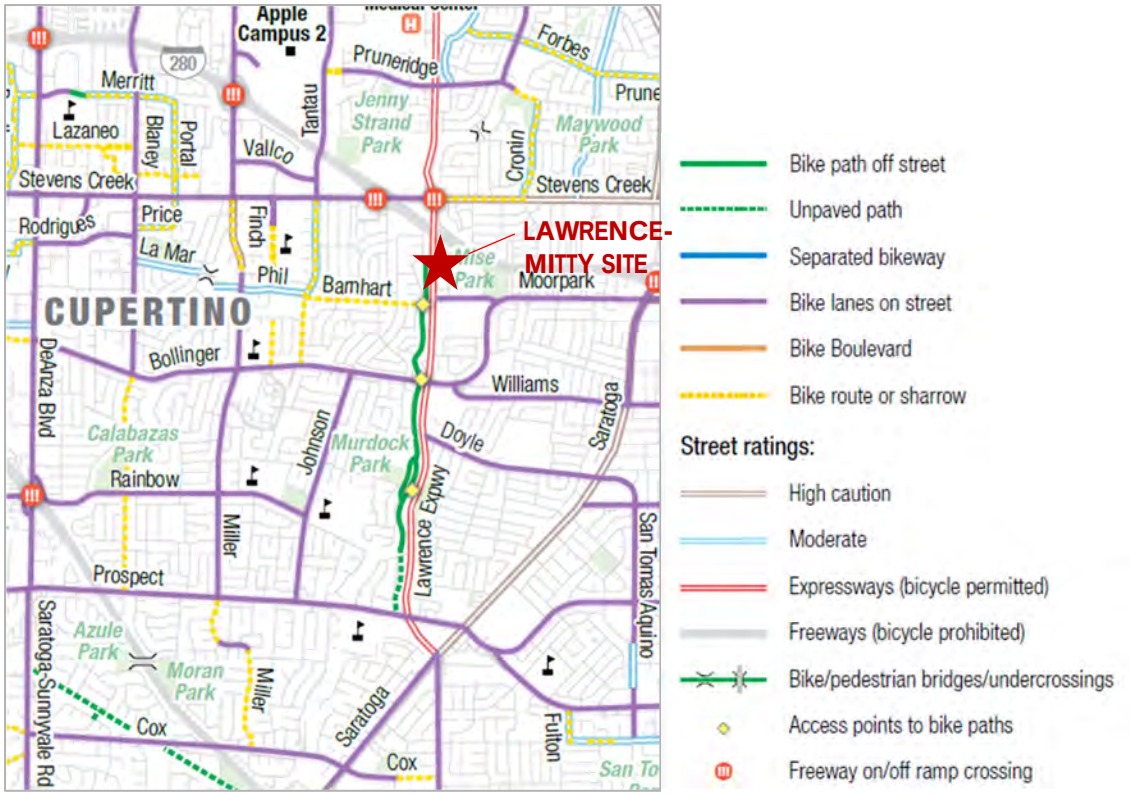

Figure 8: Section from Santa Clara Valley Bikeways Map

Public Vehicular Access and Parking:

There is no on-site public parking and no direct vehicular access to the project site for the public. To access the site by vehicle, visitors need to park on the adjacent residential streets near Sterling Barnhart Park, walk through the park and cross the pedestrian bridge to the multi-use path. Alternatively, park and trail visitors may also park in the residential neighborhood east of Lawrence Expressway and use the crosswalk on the south leg of the Lawrence/Mitty intersection. A third option is to park near Bollinger Road and travel via the existing portion of the Saratoga Creek Trail.

Figure 9: Pedestrian bridge from Sterling Barnhart Park connecting to the Saratoga Creek Trail

Maintenance & Emergency Access:

The project site has an existing driveway along Lawrence Expressway that is used by City maintenance vehicles. The existing driveway is located approximately 620 feet south of the Lawrence Expressway and Southbound I-280 On-Ramp/Calvert Drive intersection. The existing driveway provides sufficient storage for two vehicles to park side-by-side, without encroaching on the adjacent southbound shoulder area of Lawrence Expressway. An additional maintenance turnout exists approximately 700 feet south of the Mitty Way intersection and allows access to the existing portion of the Saratoga Creek Trail.

Vehicle Miles Traveled (VMT):

The potential new daily vehicle trips that may be generated by the proposed project were estimated by applying trip rates for public parks published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition (0.78 daily vehicle trips per acre) to the size of the project site (7.83 acres). Findings:

- Based on the ITE trip rate, the proposed project is expected to generate fewer than 10 daily vehicle trips each day. This is considered a conservative (high) estimate of project-generated traffic because a portion of the site has limited improvement potential due to Saratoga Creek and other areas will provide for open space with more passive recreational uses rather than more intense, active park uses like sports fields.
- Project vehicle trips are expected to be quite low because there is no direct public vehicle access to the project site.
- According to the Cupertino VMT policy, the project would qualify as a small project that may be screened out of a detailed VMT analysis and assumed to have a less than significant impact on VMT.
- In addition—the Lawrence-Mitty site is located within the east side of Cupertino, which is underserved in terms of park space and recreational opportunities for residents. Thus, it is likely that many residents in this area of Cupertino area travel to parks, trails, and open spaces outside the area. For this reason, the project is expected to result in a reduction in the total (boundary) VMT.

DEVELOPMENT RECOMMENDATIONS

Bicycle and Pedestrian Connections

Trail Extension: The new park open space area should be connected to the existing Saratoga Creek Trail, which currently ends near the Mitty Way intersection.

Lawrence Expressway/Mitty Way Intersection: The signalized crosswalk at the intersection of Lawrence Expressway and Mitty Way is adequate and there are no *required* changes to the existing pedestrian facilities at this intersection. However, recent pedestrian experiences showed a slow response time for the signal change. With new park uses planned, the timing should be investigated to see if pedestrian needs can better be met.

Sterling Blvd./Barnhart Ave. Intersection: Crosswalk visibility enhancements should be considered at the uncontrolled crosswalk at the intersection of Sterling Boulevard and Barnhart Avenue per the FHWA's Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations. Enhancements to improve crosswalk visibility may include high visibility crosswalk striping and parking restrictions on the crosswalk approaches so there is adequate sight distance for motorists on the approaches to the

crossings and ample sight distance for pedestrians attempting to cross. Alternatively, a bulb-out could be constructed to allow the pedestrian to see past the parked vehicle along the street.

Barnhart Avenue: Coordinate with the Bicycle Pedestrian Commission and City to determine if this proposed Class III Bike Boulevard can be implemented in the short term to connect bicyclists more safely to both the existing Sterling Barnhart Park and the proposed Lawrence-Mitty Park.

North Extents of the Trail: To meet Citywide goals (in the PRSMP, Bicycle Plan, Climate Action Plan), it is desirable to provide bicycle and pedestrian connections past the Lawrence-Mitty park site to connect with existing bike lanes at Stevens Creek Blvd. Stevens Creek Blvd's existing bike lanes are currently Class II, and a Class IV Separated Bikeway is proposed for much of it in the future. However, several constraints make this connection difficult – narrow conditions, multiple fast-moving traffic lanes, elevated roadways, and multiple jurisdictions (City of Cupertino, City of San Jose, Santa Clara County, Caltrans, VTA, and environmental agencies overseeing the creek). Long-term solutions should continue to be explored to make this important connection a reality. Several potential scenarios to consider:

- The northern large park site could serve as the northern most point of the Saratoga Creek Trail. Without a connection across the expressway and onwards to Stevens Creek Blvd., it is not recommended to create a dead-end trail past the large project site. At a minimum, the park should be designed to allow for this future connection by leaving a clear space at the north end for it and avoiding new obstructions.
- Since bicycles are permitted on Lawrence Expressway, the project *could* consider providing one-way access into the site for only southbound Lawrence Expressway bikes, with the access point near the north end of the project site. The on-site design, signage, and pavement markings of this inbound bicycle access point would need to discourage and/or prevent wrong way bike use and pedestrian use. However, without the ability to also safely travel northward out of the site, and knowing human nature, this does not seem advisable. It also would not appeal to the average bicyclist.
- Multimodal improvements such as adding a Class II bike lane designation on southbound Lawrence Expressway and/or adding a crosswalk on the south leg of the Lawrence/Calvert/I-280 southbound on-ramp intersection that would connect to a Class I mixed-use trail on the east side of Lawrence Expressway.
- Multimodal improvements that could create a loop heading northwest along Calvert Drive to Stevens Creek Blvd. or neighborhood streets. This would avoid the I-280 intersection and create a quicker trip towards downtown amenities.

Figure 10: Overview of the existing north end

Figure 11: Street view of the existing intersection

Public Vehicle Access and Parking

Since the expressway prohibits additional access points and parking the site's chosen recreation features should limit large quantities of users at once (e.g. no sports fields, large group picnic areas, etc.). Some recreation features could be bicycle-focused to specifically attract park users arriving by bike.

Maintenance & Emergency Access

Location: The project site should continue to provide a city maintenance driveway adjacent to Lawrence Expressway. The driveway should be located at least 500 feet south of the Lawrence Expressway and Southbound I-280 On-Ramp/Calvert Drive intersection, which would be a sufficient distance to satisfy the California Department of Transportation (Caltrans) Highway Design Manual (HDM) stopping sight distance for a design speed of 55 miles per hour (mph). Note that Lawrence Expressway currently has a posted speed of 50 mph.

Configuration: The project driveway should provide sufficient space for a pick-up truck with a small trailer (i.e., a trailer that holds maintenance equipment such as a lawnmower) to park outside the gate without encroaching on the Lawrence Expressway roadway and should be designed per the County's standards for driveways on County expressways. Furthermore, the site plan should allow vehicles to safely occupy the turnout or turn around within the project site to avoid the need for vehicles to back out onto Lawrence Expressway. The configuration should be reviewed by the fire department. In Cupertino, firefighting services are provided by the Santa Clara County Fire Department (SCCFD).

Vehicle Miles Traveled (VMT)

Due to the assessment of a less than significant impact on VMT, the project qualifies as a small project that may be screened out of a detailed VMT analysis.

Trail Design

Align with the Cupertino Bicycle Transportation Plan goal to **include a Class I Bike Path** beginning at the existing Saratoga Creek trail and continuing north along the site, transecting Highway 280 and connecting to Stevens Creek Blvd.

Develop the new trail in accordance with **bicycle design guidelines from the Cupertino Bicycle Transportation Plan**, which includes information on regional and city connections, standards, wayfinding, and bike parking.

Develop the new trail section in accordance with the **goals for the corridor set forth in the Saratoga Creek Master Plan** (1999):

- To provide access to the creek at appropriate points, consider alternative alignments to ensure continuity of the trail and pursue opportunities with landowners as adjacent land is developed.
- To provide staging areas and use existing park facilities for such staging areas whenever possible.
- To maximize linkages to other trial systems and trail segments.
- To provide a safe and secure trail that's easy to maintain.
- To respect the property rights of adjacent landowners.
- To provide alternative transportation routes.
- To preserve and restore the natural creek environment wherever possible.
- To identify and preserve historical and cultural resources found along the creek.
- To encourage educational uses of the creek corridor.

Develop the new trail section in accordance with the relevant **design guidelines from the Saratoga Creek Master Plan** (1999). These include:

- A 17-foot-wide trail corridor where space allows with a minimum 10-foot setback from the riparian edge and 25-foot setback from all adjacent property lines. Refer to the typical proposed section in Figure 12.

- 5-foot widths for pedestrian-only soft surface trails.
- 2% cross slope that drains away from the creek on any trails or impervious surfacing.
- Trail pavement capable of handling H20 loading.
- Trail designs are to comply with the most current version of the Caltrans Highway Design Manual, the Americans with Disability Act Accessibility Guidelines, the Uniform Building Code, California's Title 24, and local and state codes governing outdoor paths of travel.
- The removal of mounds of debris and soil stored along the edge of the creek (where possible) to open views into the creek from the trail.
- Planting for habitat enhancement
- Security lighting of the trail is discouraged due to the environmental impact to wildlife.
- Benches sited along the trail at ½ mile intervals with a two-foot setback from the trail.

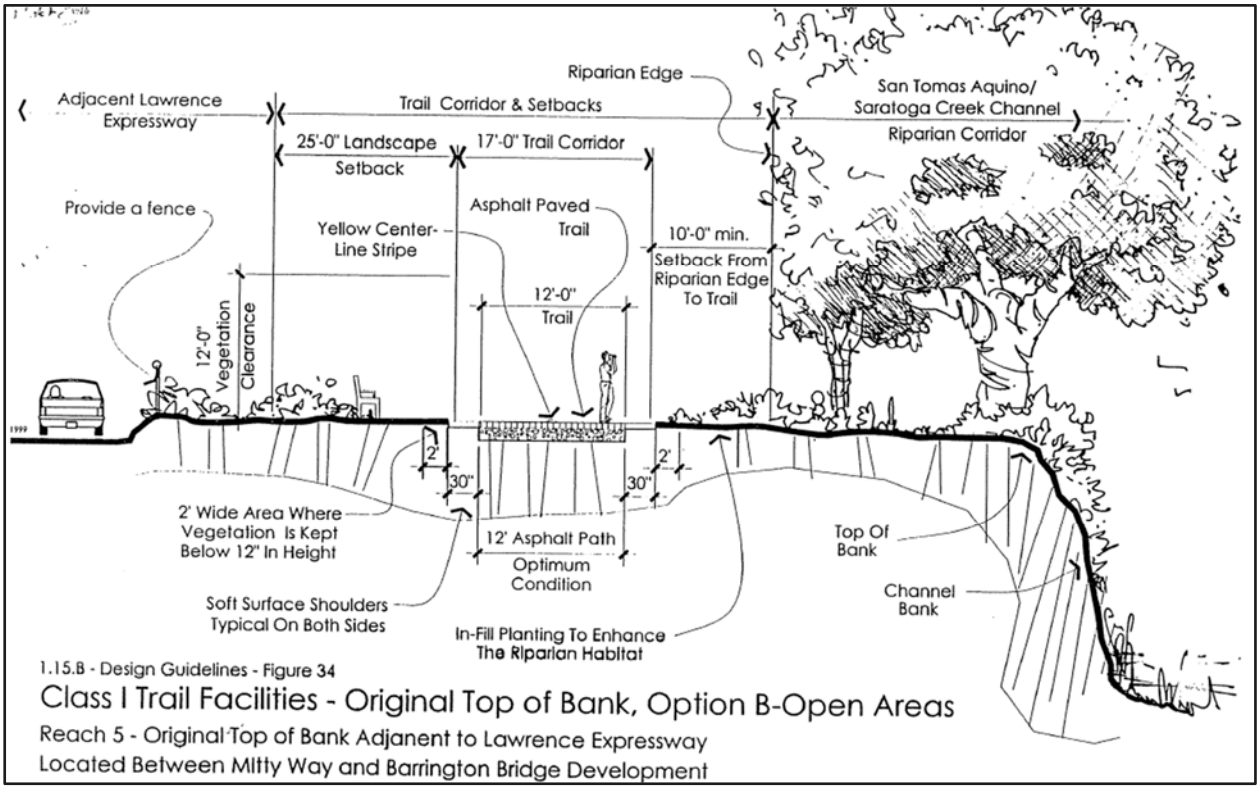

Figure 12: Saratoga Creek Master Plan figure showing the proposed trail section for the Lawrence-Mitty area

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NOISE REDUCTION

The Lawrence Mitty Park and Trail Master Plan area is located adjacent to Lawrence Expressway, a major arterial road with high traffic volumes that generate high levels of noise. At the far north and far south ends of the site, existing sound walls are in place, but most of the project site is open to the expressway to the east. The Master Plan area is also within approximately 1,000 feet of Interstate 280 (I-280), another source of high traffic noise levels. The potential noise levels generated by these roadways requires careful consideration in the Master Plan development process.

SUMMARY OF RESULTS

Ambient Noise Monitoring Survey

In February 2022, MIG conducted a survey to document ambient noise levels in the Master Plan area. For the full report, see Appendix B: Noise Conditions Report. The results of the ambient noise monitoring survey indicating the existing, hourly sound levels in decibels (dBA) in the Master Plan area are:

- Noise levels of approximately 55 dBA to 72 dBA, with the highest noise levels occurring adjacent to Lawrence Expressway and the lowest noise levels occurring along Saratoga Creek (more than 280 feet from center of Lawrence Expressway) and behind existing noise barriers (sound walls).
- For the highest levels, these are equivalent to noise commonly associated with gasoline-powered lawn mowers (at a distance of 50 feet) and small household vacuums (at a distance of 10 feet).
- Levels are consistent with noise levels for other major arterial roadways in Cupertino, San Jose, and other jurisdictions on the Peninsula.
- Levels are likely to increase by 1 to 3 dBA with time due to projected increases in traffic.

What is an Appropriate Noise Level for the Project?

The City's General Plan identifies 70 dBA to 75 dBA as a noise level range that is potentially incompatible with playgrounds and neighborhood parks, while 75 dBA to 80 dBA is the range that is potentially incompatible with golf courses, riding stables, water recreation, and cemeteries.

How Effective are Noise Barriers?

The existing 8-foot-tall concrete noise barriers on the west side of Lawrence Expressway provide approximately 8 dBA to 12 dBA of attenuation near the wall (within 10 to 30 feet of the wall). The existing barriers achieve this noise reduction by:

- Reflecting some of the sound energy coming from Lawrence Expressway back to the road;
- Blocking the direct transmission of sound into the Master Plan area; and
- Increasing the distance a sound wave travels to pass over the barrier.

Walls, berms, fences, and other structures generally reduce noise levels by 3 to 12 dBA, depending on their length, height, material composition, elevation and orientation relative to the noise source, and other factors. Driveways, gates, and other access or entry ways reduce the effectiveness of such structures. While vegetation visually screens a noise source, it is generally not dense enough to reflect, absorb, or otherwise meaningfully reduce noise levels.

Potential Noise Barrier Alternatives

Several options for physical barriers have been discussed for the site, as listed below. Cost and effectiveness, given the precise layout, including access points, will be evaluated in the design alternatives.

- A typical concrete masonry unit (CMU) sound wall, similar to the existing walls along the expressway.
- A combination of a soil berm and low wall, which will reduce some noise and also take up more space.
- Commercial products that provide transparency and noise control.

DEVELOPMENT RECOMMENDATIONS

- Use the results of the ambient noise monitoring to inform design of the three site alternatives, including:
  - Several options using physical barriers (sound walls or soil berms) and/or noise masking features
  - Locating recreation features based on their need for lower noise levels. For example, experiences that are shorter in duration or naturally louder may be located closer in areas with higher noise levels. Experiences that are a longer in duration or more nature-oriented may be located in the areas with the lowest noise levels.
  - Strategically locating maintenance access points and configurations, which will unavoidably allow more noise to reach the site at those points.
  - Minimize large hardscape surfaces that reflect and increase noise. Instead, use soft surfacing as much as possible (which also meets other project goals).
- Provide both costs and diagrams modeling noise contours for the three site plan alternatives for the City and community to evaluate noise abatement and provide input on priorities. Criteria for evaluation may include noise benefit, programming, cost, access and safety.
- Make it clear during community engagement that there is potential to *reduce* noise but not eliminate it. Educate participants about common misconceptions about noise abatement (for example, vegetation not being an effective noise solution).

EASEMENTS AND UTILITIES

The project team's civil engineer has reviewed existing documentation, regulations, and permit requirements for the project site to design and construct a new park and trail connection. Easement information has been accounted for in evaluating development options and site improvement recommendations for the proposed Lawrence Mitty Park (See Appendix C, Civil Site Exhibit). The site zoning is stated as PR-Parks and Recreation, and the land use is Parks and Open Space.

A review of the existing ALTA/NSPS Land Survey completed by Giuliani & Kull and verification of site improvement and topo accuracy was done for the project site. The ALTA survey provided site topographic information, including trees, site features, property lines and mapped easements. Record mapping data was reviewed for properties and landowners adjacent to the property.

When inspecting the site, the noted tree quantities and locations shown on the ALTA Land Survey provided were found to be deficient and the tree canopies did not match the field conditions. The project's arborist tagged and assessed all missing trees on the site and adjacent creek slope and a field survey was performed to locate all trees.

SUMMARY

Easements

All easements located on the property are for existing utilities that provide access to their respective utility owners. No easements found would act as a major barrier for development. Parties having jurisdictional authority on and around the site are the City of San Jose, City of Cupertino, Santa Clara Valley Water District (SCVWD), and Santa Clara County. The City of Cupertino is annexing the park land from San Jose to Cupertino and will provide any easement language or requirements pertaining to the site. Easements on this site are:

- **Storm Sewer Easement:** A 15' storm sewer pipe easement for the benefit of the City of San Jose for a 27" pipe is located on parcel 2 of the property for the conveyance of storm drainage from Lawrence Expressway and San Jose into Saratoga Creek.
- **Electrical/Communication Easements:** There were two electrical/communication easements for PG&E that were recorded on the project site, but their location cannot be determined from record information. These easements may have been recorded in regard to the vaults noted below.
- **Trail Easement:** Sterling Barnhart Park contains an 18' trail easement to the bridge that spans Saratoga Creek, which connects the project site to this park.
- **Water Line Easement:** A water line easement is also shown through Sterling Barnhart park and to Saratoga Creek.
- Refer to **Appendix C: Civil Site Exhibit** for locations and **Appendix E: Title Report** for additional background on Easements.

Existing Utilities

Onsite existing utilities must be accounted for in the proposed site concepts, including:

- **Large Storm Drainline:** An existing 27" storm drainage pipe passes through the site and discharges directly to Saratoga Creek by culvert (Appendix D, Page 1 - San Jose Storm Drainage Map). This storm drainage pipe and culvert acts as an outfall for Lawrence Expressway and the

City of San Jose. There is an existing onsite catch basin that collects the majority of the storm water and connects to this 27" storm drainpipe.

Figure 13: Existing 27"diameter storm drainpipe

- **Onsite Catch Basin:** Another onsite catch basin collects the rest of the onsite storm water discharges directly to Saratoga Creek.
- **Water:** A 12.75" water pipe is located on the property near the Saratoga Creek Trail and Mitty Way. (See Appendix D, Page 2 - San Jose Water Company Map). This pipe is owned by San Jose Water Company (SJWC) and a 5' water easement is recorded on Parcel one and Parcel two of the property for access and maintenance. This line connects to other water lines through Sterling Barnhart Park and the Lawrence Expressway and Mitty Way intersection.
- **Sanitary Sewer (San Jose):** The closest sanitary sewer line would be at the Lawrence Expressway and Mitty Way intersection. This is a City of San Jose owned 6" sanitary sewer line and manhole (See Appendix D, Page 3 - San Jose Sanitary Sewer Map).
- **Sanitary Sewer (Cupertino):** The closest Cupertino Sanitation District sewer line and manhole would be the 8" main in Sterling Blvd (See Appendix D, Page 4 - Cupertino Sanitary Sewer Map).
- **PG&E Electrical Vaults:** Along the eastern edge of the property there are two locations that PG&E electrical vaults and lines encroach into the property (See Appendix C: Civil Site Exhibit).
- **Signal Vaults:** Two signal vaults encroach onto the property on the eastern side of the property outside the fencing and sound wall. These vaults do not have easements associated with them and provide service to Lawrence Expressway.

DEVELOPMENT RECOMMENDATIONS

Site improvements will conform to citywide park goals and regulations. Specific utility design recommendations are:

- **Storm Drainage:** It is recommended that any proposed onsite storm drainage conveyance be done through the existing catch basin that does not connect to the City of San Jose's 27" pipe and culvert. Access to maintain that storm drain line would be expensive and potentially cause conflicts with the City of San Jose's interests in it. If possible, the catch basin connected to the 27" pipe should not be affected and accounted for in the grading design for the project.
- **Water:** All required water services for the project site should connect to the existing SJWC 12.75" water line that is located on the property near the Saratoga Creek Trail and Mitty Way. SJWC will have to be notified of the proposed services to confirm the existing line has capacity for the project's demand. If a restroom is included at the park, then a water service line would be required for plumbing fixtures. A fire hydrant will likely be required to provide water coverage as there are no existing fire hydrants nearby to the open space areas of the park.
- **Sanitary Sewer:** If a restroom is incorporated into the design, a potential sewer connection to the Cupertino Sanitation District would have to go through Sterling-Barnhart Park. The 8" main would be large enough for sewer demand from a public park restroom but would have to pass over Saratoga Creek and would be unlikely to be approved. The connection length, SCVWD permitting for crossing Saratoga Creek, and overall cost makes this option not feasible. A

connection to the City of San Jose 6" sanitary sewer line in the Lawrence Expressway and Mitty Way intersection is recommended as it would be closer to the site and would not need to cross Saratoga Creek. The lateral connection would need to be coordinated with the City of San Jose and an encroachment permit would be required with the City of San Jose for this connection.

- **Electrical:** The PG&E and signal vaults that are located on the eastern property line, outside the existing fencing, should be kept in their locations to reduce utility relocation costs. Informational requests and quitclaims may be issued to PG&E and the City of San Jose to provide more information on these easements and utilities.

Related Permits

The following permits may be required, depending on the specific site plan developed. Also see the Biological Resources section of this report for detailed information about review bodies and permitting related to Saratoga Creek.

City of Cupertino:

The City of Cupertino requires multiple permits for construction within the City's limits.

- **Development Permit** for demolition and construction of the park.
- **Demolition Permit** for off haul of concrete debris on the existing site.
- **Tree Removal Permit** is needed to remove trees that are not in the riparian habitat.
- **Streamside Permit** will be required for any Cupertino project within 100' of a stream/river.
- **Encroachment Permit** could be required if the project connects to utilities in Sterling Road.

City of San Jose:

An **Encroachment Permit** would be required for any work connecting to utilities in Lawrence Expressway.

County of Santa Clara:

An **Encroachment Permit** is necessary for work in Lawrence Expressway.

SCVWD:

An **Encroachment Permit** will be needed for activities that may impact SCVWD facilities, riparian setbacks, or SCWVD easements and land.

SOIL INVESTIGATION

A Phase I Environmental Site Assessment (ESA) Update and Phase II Soil Quality Evaluation was prepared by Cornerstone Earth Group, Inc. (Cornerstone) for the site of the proposed Lawrence Mitty Park and Trail project. The report updated the Phase I ESA and Preliminary Soil Quality Evaluation dated April 18, 2016, that was previously prepared for the site by Cornerstone, and was intended to evaluate Recognized Environmental Conditions at the site. The work performed by Cornerstone included a review of the prior Phase I ESA and subsequent studies, a site reconnaissance, a regulatory agency database review, interviews with persons knowledgeable of the site history and conditions, and preparation of the update summarizing their findings and recommendations. In addition, Cornerstone collected and analyzed additional soil samples to evaluate the extent of lead impacted soil at the site and discuss any appropriate management protocols For the full evaluation, see Appendix F: Soils Report.

Background

In the 2016 Phase I ESA and Preliminary Soil Quality Evaluation, Construction and Demolition Waste (CDW), consisting mainly of asphalt and concrete mixed with soil, was observed to have been placed on-site along the top of the eastern bank of Saratoga Creek, and extending along most of the Site's western boundary. The debris appeared likely to have been generated by the County during road repair or construction activities. In general, the piled material appeared to be approximately five to ten feet higher than the original ground surface elevation. The stockpiled debris/soil contained fine to coarse asphalt and concrete grindings, along with larger pieces of asphalt and concrete. Some of the concrete debris was observed to have fallen from the top of the creek bank to the creek bed.

Cornerstone performed a limited soil quality evaluation at the site. Elevated lead concentrations were detected in several soil samples collected at the base of the chain-link fence line that separates the site from Lawrence Expressway (several feet from the edge of the Expressway pavement). Lead concentrations in three of the soil samples exceeded the residential screening level threshold of 80 mg/kg for lead. The elevated lead concentrations were likely to be the result of aerially deposited lead associated with auto exhaust from the adjacent expressway. None of the samples exceeded the commercial screening threshold of 320 mg/kg for lead. For park settings, there is not a requirement to adhere to residential thresholds, and it has been included as a frame of reference.

The detected organochlorine pesticide concentrations in the soil samples did not exceed their respective residential screening level thresholds, and no PCBs, VOCs, TPHg, or asbestos were detected. The detected total metal concentrations appeared to be typical of natural background concentrations. The detected soluble metal concentrations did not exceed their respective soluble threshold limit concentrations.

Phase I ESA Update and Phase II Soil Quality Evaluation (2022)

To observe current site conditions and note any significant changes since completion of the prior Phase I ESA, Cornerstone visited the site on January 13, 2022. The site reconnaissance was conducted by walking the site. In general, no significant changes to site were apparent since completion of the prior Phase I ESA (2016). The northern portion of the site was observed to be undeveloped and used for storage of rock and gravel, along with storage or disposal of CDW. Debris from homeless encampments was observed at several locations.

Most of the northern portion of the site was asphalt paved, except for perimeter areas bordering Lawrence Expressway to the east and Saratoga Creek to the west. The southern portion of the site was observed to

have been developed with a section of the San Tomas Aquino/Saratoga Creek Trail, along with associated landscaping and features such as park benches.

In January 2022, Cornerstone collected an additional 69 soil samples to evaluate the extent of lead impacted soil at the site and to facilitate the development of appropriate management protocols, if necessary. Eight of the samples were advanced in previously unsampled areas of the site to further evaluate soil quality for potential lead impacts. At four previous boring locations, "step-out" borings were advanced to help delineate the extent of lead impacted soil identified during Cornerstone's 2016 investigation. (see attached Site Plan) This assessment identified the following Recognized Environmental Conditions, which are defined under ASTM E 1527-13 as "…the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

- Lead was detected at concentrations exceeding the residential/unrestricted use screening level thresholds[1] in several soil samples collected on-site near Lawrence Expressway. The elevated lead concentrations appeared likely to be the result of aerially deposited lead associated with the auto exhaust from the adjacent expressway.
- Lead was detected at concentrations exceeding the California Hazardous Waste Limit in two soil samples collected on-site near Lawrence Expressway. The elevated lead concentrations appear likely to be the result of aerially deposited lead associated with the adjacent expressway.

A large volume of CDW (consisting mainly of asphalt and concrete mixed with soil) is present on the site, both in stockpiles and in berms adjacent to the creek. In general, the piled CDW appeared to be approximately 5 to 10 feet higher than the original ground surface elevation and contained fine to coarse asphalt and concrete grindings, along with larger pieces of asphalt and concrete with dimensions ranging from a few inches to several feet. Some of the concrete debris was observed to have fallen from the top of the creek bank to the creek bed. Cornerstone concluded that the presence of CDW does not appear to meet the definition of a Recognized Environmental Condition per ASTM E 1527-13. However, the CDW does not appear to have been properly placed adjacent to the creek under regulatory oversight and its presence could impact development plans for the site. Refer to the biology section for greater detail on review bodies and oversight.

SUMMARY OF RESULTS

Hazardous Waste

Four soil samples collected during Cornerstone's 2022 investigation were selected for additional analyses. Two of the samples contained lead concentrations that were greater than its threshold limit concentration, defining the soil as solid hazardous waste under California Title 22 regulations. If off-site disposal of this soil were performed, the cost of transport and disposal would be significantly greater than a non-hazardous soil. Estimates provided by Cornerstone for disposal at a Class I landfill (Cal Haz), transport and disposal

1 No screening levels are published for properties used for park or recreational purposes. The available screening levels are based on potential health risks and exposure assumptions in residential and commercial settings. Exposure assumptions for park users would be different from residential and commercial users. For example, the anticipated length of time that a park visitor would be exposed to impacted soil in a park setting would be less than the duration of exposure in a residential setting. Thus, the residential screening levels may be lower than what is adequate to protect human health in a park setting.

were $180 - $200 per ton; and at a Class II landfill (Deep Burial), transport and disposal were $100 - $110 per ton. For disposal of non-hazardous soil at a Class II landfill (Daily Cover), the cost estimate was $50 - $60 per ton.

Construction and Demolition Waste

Based on the sampling conducted in 2016, the existing CDW on the site did not appear to be impacted with contaminants at concentrations that would present a significant threat to human health. However, the CDW did not appear to have been properly placed under regulatory oversight at the creek bank.

DEVELOPMENT RECOMMENDATIONS

Hazardous Waste

Given the short duration of time that park visitors would be expected to be present within the planned park, it is Cornerstone's opinion that the observed lead concentrations do not pose a significant risk to human health under the planned land use scenario. The statistical analysis of the lead data shows that soil quality at the site is not significantly impacted by lead with the exception of a thin strip (less than approximately 20 feet) of shallow soil (upper approximate 1 foot). Given this, the City could consider three options for addressing the lead impacted soil: 1) leave the soil in place; 2) apply a cap of clean soil at a minimum depth of two feet; or 3) excavate and remove the soil to a depth of 1 to 2 feet for an approximately 20-foot-wide strip adjacent to eastern boundary of the site adjacent to Lawrence Expressway. Option 3 would also apply to impacted areas on the south side of the site, between the existing trail and the expressway. If the City desires to remove the lead impacted soil from the site, then prior to any excavation and off-site transport and disposal of soil from the site additional soil profiling, sampling, and laboratory analyses would be required by the disposal facility prior to soil acceptance. An oversight agency may require detected lead concentrations greater than the residential screening level to be removed. Cornerstone recommended that a copy of their report be provided by the City to the desired facility for their review.

To better understand the potential cost premiums that may be associated with disposal of soil classified as hazardous, Cornerstone recommended providing the report to a grading and/or hauling contractor licensed to handle and transport hazardous materials. Cornerstone estimates that the current cost for off-haul and disposal at a Class I landfill (for hazardous waste) is approximately $180 to $200 per ton.

Construction and Demolition Waste

Disposal of CDW is regulated by the California Department of Resources Recycling and Recovery (CalRecycle). Title 14, Division 7, Chapter 3, Article 5.95 of the California Code of Regulations sets forth standards for the handling and disposal of Construction and Demolition Waste. Because the berms containing CDW are located adjacent to the creek, leaving this material in place or removing it for off-site disposal could necessitate involvement of various state agencies such as CDFW and RWQCB, the evaluation of which is beyond the scope of the Phase I ESA Update. Cornerstone therefore recommended contacting the appropriate regulatory agencies regarding the disposition of the Construction and Demolition Waste. Cornerstone estimates that the current costs for off-haul and disposal at a Class II landfill (for non-hazardous waste) is approximately $100 to $110 per ton for deep burial and $50 to $60 per ton for daily cover.

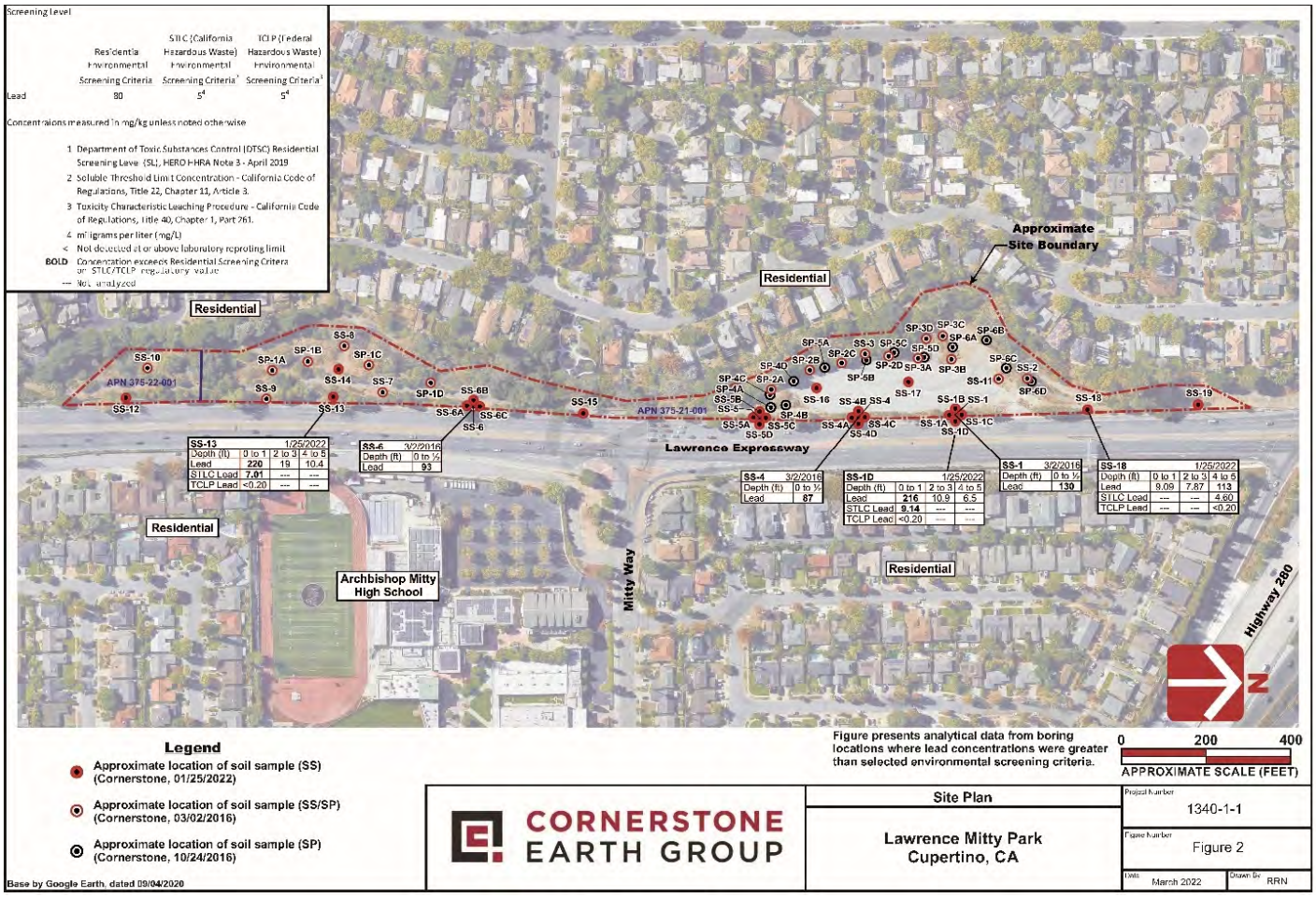


Figure 14 Soil Sample Locations

STORMWATER AND HYDROLOGY

A proposed park site at this location would provide access to Saratoga Creek and its associated riparian habitat and link to pedestrian and bike trails along the Lawrence Expressway. The creek must be protected from the harmful effects of erosion, sedimentation and post-construction runoff pollution resulting from any site improvements. The project will incorporate site design, pollutant source controls, and on-site stormwater treatment controls in conformance with the requirements of the Municipal Regional Stormwater NPDES Permit (MRP) to reduce pollution, sedimentation and erosion impacts to the creek. On-site treatment controls will be designed using low-impact development (LID) techniques, which emphasize infiltration and bioretention as pollutant removal mechanisms, and will incorporate hydromodification management elements as needed to match pre-project discharge.

According to the Federal Emergency Management Agency's Flood Insurance Rate Maps, the project site is located in an area designated as Flood Zone D. Flood Zone D areas are not within a flood hazard zone (100-year flood zone), however, there is a risk of flooding within these areas, although the base flood elevations have not been determined. There are no mandatory flood insurance requirements for Flood Zone D areas, and most of the Bay Area falls within this zone designation.

SUMMARY

In its present condition, the site contains degraded asphalt spread out across the majority of the large open space that the future park will occupy. No stormwater treatment is occurring on the site for runoff that currently discharges into Saratoga Creek. Soil borings taken at the site indicate a high clay content and low infiltration rate for existing soils. (See Appendix F: Soils Report) This would limit the use of infiltration-based treatment controls, but favor the use of other types of LID-based controls such as bioretention (rain gardens). The project site is located within the Saratoga Creek watershed, which is considered to be less than 65 percent impervious, making any new or redevelopment proposals exceeding one acre in size subject to the hydromodification management regulations of the MRP. The intent of these regulations is to reduce erosion impacts to receiving waters from increased runoff flows generated by increases in impervious surface area from new or redevelopment projects. The regulations require that post-development runoff flows be modified for new and redevelopment projects so that they do not exceed flows from the pre-project condition of the site.

DEVELOPMENT RECOMMENDATIONS

No impervious surface improvements should be proposed within the riparian setback for the creek. Valley Water and the California Department of Fish & Wildlife should be contacted to establish restrictions and requirements for development within riparian setback areas. A net reduction of impervious area for the site would be important for meeting hydromodification management requirements, and LID-based treatment controls measures will be implemented for the project to treat stormwater runoff prior to it entering Saratoga Creek. Infiltration of the project's stormwater runoff into native soils is not recommended due to the poor infiltration rates, but pervious pavement is a design solution that can be used in certain circumstances (i.e., adjacent to paved trail surfaces, pedestrian paths) to supplement LID-based treatment controls such as bioretention areas in developing a compliant and effective on-site stormwater management plan for the site. Bioretention areas could be used throughout the site to treat runoff from hardscape areas. If necessary, bioretention facilities can be designed to fulfill hydromodification requirements to match pre-project discharge.

BIOLOGICAL RESOURCES

The following is a summary of the biological constraints analysis, including sensitive biological resources that were observed or have potential to occur in the study area, regulated habitats that are present, relevant local policies, potential development constraints, and design considerations. For the full Biological Constraints Analysis, see Appendix G.

SUMMARY OF BIOLOGICAL RESOURCES AND POTENTIAL CONSTRAINTS

Existing Land Cover Types, Habitats, and Natural Communities

The study supports four natural communities, habitats, and land cover types in the project area: (1) Mixed Oak Forest and Woodland Alliance, (2) Coast Live Oak Woodland and Forest Alliance, (3) intermittent stream, and (4) Developed.

Waters of the U.S./State & California Department of Fish and Wildlife Regulated Habitats

Within the study area, Saratoga Creek meets the definition of both *Waters of the U.S.* and *Waters of the State. Waters of the U.S.* has broad meaning and incorporates both deep-water aquatic habitats and special aquatic sites, including wetlands. *Waters of the State* includes rivers, streams, lakes, wetlands, mudflats, vernal pools, and other aquatic sites. These habitats would be subject to jurisdiction by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB). Within the study area, waters of the U.S. include the channel of Saratoga Creek up to the ordinary high water mark (OHWM). Waters of the state include the same features regulated by the USACE but may also extend to the top of bank (TOB) of the creek or beyond. The RWQCB may assume jurisdiction along both sides of the creek to the outer drip line of the riparian canopy beyond the TOB, depending on whether the project could potentially result in water quality impacts to the creek. Saratoga Creek including the bed and banks of the creek up to the outer limits of the riparian canopy, which extends beyond the TOB, are subject to to California Department of Fish and Wildlife (CDFW) jurisdiction. CDFW also may exert jurisdiction beyond the TOB and riparian vegetation depending on an assessment of the potential impacts to wildlife and habitats within the project area. CDFW considers the riparian communities, such as the Mixed Oak Forest and Woodland Alliance, to be sensitive because they provide important ecological functions and values.

Special-status Species

No special status plant species are expected to occur within the study area; thus, there are no constraints related to special-status plants. One special-status animal, the San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) a California species of special concern, is present and nests of this species would either need to be avoided or relocated. The southwestern pond turtle (*Emys pallida*, a California species of special concern) has a low potential to disperse through the site and avoidance and minimization measures would be required to avoid impacting this species. The yellow warbler (*Setophaga petechia*, a California species of special concern) is only expected to be an occasional visitor outside the breeding season; thus, no avoidance and minimization measures would be needed for this species. No other special-status animals are expected to occur on the site.

Common Nesting Birds and Roosting Bats

The site is expected to support common nesting birds and may support bats roosts in suitable trees and the adjacent Calvert Drive Bridge.

Local Ordinances

The site supports a large number of protected trees. Removal or pruning of such trees would not present a major constraint to the Master Plan design and the City is expected to comply with their ordinance to replace and/protect ordinance trees as needed.

The study area is on land being annexed by the City of Cupertino, whose property boundary extends to the centerline of Saratoga Creek. Valley Water has an easement over the creek, and work within their property would require an encroachment permit. Considerations for landscaping and trail construction within their easement must be consistent with Valley Water's Water Resources Protection Ordinance.

Wildlife Corridors

Within the study area, Saratoga Creek functions as an isolated corridor primarily for wildlife that are commonly found in developed areas. However, due to the highly developed conditions in the project region, the vegetation communities along Saratoga Creek within the study area function as an important corridor for a variety of resident and migratory species to shelter, forage, and breed. Artificial lighting that may be desired in the project design have some potential to impact wildlife that rely on Saratoga Creek and adjacent habitats as a wildlife corridor.

DEVELOPMENT RECOMMENDATIONS AND DESIGN CONSIDERATIONS

Based on the existing biological resources described above, we have identified several issues that should be considered when designing and planning for the trail and park development of the study area. Our recommendations are provided below:

- **Berm and Soil Pile Removal.** Because portions of the berm are within the jurisdiction of the CDFW and the RWQCB, berm removal, removal of trees within the berm, and any substantial amount of tree trimming and vegetation removal from the berm will likely require permits from the CDFW and RWQCB. Further, if the project requires any fill below the OHWM, such as an outfall for new drainage, a permit will also be required from the USACE. However, in our opinion, the project will likely have no issues gaining regulatory approvals from the agencies because it will result in a net gain in vegetated features and a net loss in impervious surfaces along the creek. Since the regulatory agencies prefer to review projects in their entirety, we recommend waiting to remove the berms and applying for permits for that work, until the agencies can review the entire project. Waiting to remove these features until the entire project can be reviewed by the agencies will be less costly, as it will avoid having to apply for regulatory approvals twice. However, since the soil piles in the main park site are located outside jurisdictional habitats, they can be removed prior to project activities without authorization from CDFW and RWQCB. We recommend that the City incorporate best management practices (BMPs) to protect water quality in Saratoga Creek during any removal of the soil piles. The following list of BMPs would protect water quality and biological resources in Saratoga Creek:
  - Erosion-control materials (e.g., baffles or hay bales) should be placed between the soil piles and Saratoga Creek. To prevent trapping of animals, plastic mono-filament netting (erosion control matting), rolled erosion control products, or similar material will not be used at the project site.
  - Remove the soil piles during dry weather. In the event of rain, all work is to cease immediately.
- **Nesting Birds.** If the City intends to move forward with soil pile removal before August 31 this year, we recommend that a pre-activity survey for nesting birds be conducted within seven days

of the work to ensure that active nests of protected bird species (i.e., birds protected under the Migratory Bird Treaty Act and California Fish and Game Code) are not impacted by this work. Implementation of take-avoidance measures for nesting birds should also occur once the full project is approved. Typical measures are as follows:

  - Avoid initiating project activities during the nesting bird season (generally February 1 to August 31 in Santa Clara County) to the extent feasible.
  - Remove potential nesting substrate (trees, shrubs) that may be removed for the project outside the nesting bird season. This would help to preclude some nesting activity.
  - Conduct pre-construction surveys within 7 days of disturbance, and if active nests are identified then appropriate disturbance-free buffers should be established. Typical disturbance-free buffers are typically 300 feet for raptors and 100 feet for other species.

- **Regulatory Permit Timing.** Communication with the agencies is typically not initiated until the project design/project description is at a later stage since the agencies generally prefer design plans at a roughly 50% CD level. Although not required, it may be possible to schedule an interagency meeting earlier in the process to introduce the project to the agencies and gain their initial feedback on the design.
- **Formal Delineation and Jurisdictional Determination.** If the project will impact the channel bed and banks of Saratoga Creek (i.e., below OHWM and TOB), we recommend having a formal delineation of jurisdictional habitats and waters of the U.S. performed for any areas that may be impacted by the project and having that delineation verified by the USACE. A formal delineation includes collection of data on the soils, vegetation, and hydrology in potential waters of U.S. and state necessary to complete a formal delineation report. This report would be suitable for submission to the resource agencies. The Jurisdictional Determination issued by the USACE would then legally establish the boundaries of waters of the U.S. and facilitate project and mitigation planning and the permit application process. Even though the RWQCB and CDFW do not have as well-developed guidance and methodology for determining the extent of their jurisdiction described previously for the USACE, both agencies accept the USACE methodology for identifying wetlands and other waters. Should a formal delineation be prepared, the OHWM and TOB shown in the figure below (and related figures in Appendix G for the full project site) are not expected to change. The formal delineation and jurisdictional determination should be completed before initiating permitting discussions with the agencies.

Figure 15: Biological Resources in the Lawrence-Mitty study area

- **Stormwater Runoff.** Projects in Santa Clara County must also comply with the RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2009-0074). This permit requires that all projects implement best management practices and incorporate Low Impact Development practices into the design that prevent stormwater runoff pollution, promote infiltration, and hold/slow down the volume of water leaving the site. To meet these requirements, the project should incorporate the following features:
  - Incorporate the use of permeable surfaces, grassy swales, bioretention, and/or detention basins or similar features to treat runoff before it enters Saratoga Creek.
  - Incorporate permeable trail surfaces such as pervious concrete to the extent feasible to reduce trail runoff.
  - Design any new trails, regardless of the trail's permeability, with a 2 percent slope to allow runoff to drain away from the creek.
- **Western Pond Turtle:** Avoidance and minimization measures for western pond turtles typically include installation of temporary wildlife exclusion fencing along the riparian corridor adjacent to areas of disturbance, worker environmental awareness training, preconstruction surveys and biological monitoring by a qualified biologist. No compensatory mitigation for impacts to western pond turtles or their habitat would be required specifically for this species. These measures would likely also be conditions of CDFW approval for work in stream and riparian habitats.
- **San Francisco Dusky-footed Woodrat Middens:** There are 11 woodrat middens in areas most likely to be developed by the Master Plan. Three of these middens are located within CDFW's jurisdiction (within the riparian corridor). However, as a trustee agency of California's biological resources, CDFW will likely make recommendations to protect or provide adequate avoidance and minimization measures for all middens during the CEQA public comment period. Based on our experience, CDFW typically requests minimum no-disturbance buffers of 25 feet around woodrat middens. If such buffers cannot be maintained, this can be relatively easily mitigated by relocating the middens to suitable habitat away from disturbance areas, such as within the riparian corridor. Additionally, CDFW may also require live trapping if middens cannot be relocated close to their existing location (e.g., within 50 feet of the original location). To the extent feasible, we recommend avoiding these nests to keep project costs down.
- **Roosting Bats:** A focused habitat assessment for roosting bat habitat should be conducted during the time of year when bats are active (March 1 – October 15) to evaluate if suitable roosting habitat is present in trees proposed for removal, or there is potential for noise impacts within 50 feet of potential roost sites. If the Master Plan design features are planned to occur within 50 feet of the Calvert Drive Bridge to the north, this bridge should also be surveyed to evaluate potential indirect noise impacts on roosting bats in this bridge and determine appropriate avoidance and minimization measures. If a CDFW authorization is required for the project, such a habitat assessment may be required within 30 days prior to work as a permit condition. We recommend that a habitat assessment be conducted several months to one year prior to project initiation to allow sufficient time to plan for appropriate mitigation.
- **Protected Trees.** The study area supports 119 trees protected by Chapter 14.18 of the City's Municipal Code. It is assumed that the City will comply with their ordinance, including replacing protected trees lost at a 1:1 or 2:1 replacement ratio and tree protection measures, such as implementation of tree protection zones (i.e., protecting trees that are intended to remain on the site from incidental project disturbance) and development of a tree protection plan by a certified arborist, for trees that will be preserved

- **Valley Water.** If it is determined that any portion of the project would need to occur on Valley Water fee title property, is within a Valley Water easement, or may impact Valley Water facilities, the project will require an encroachment permit. Any such work would need to comply with Valley Water's Water Resources Protection Ordinance and Water Resources Projection Manual. Per Valley Water's Encroachment Permit website, permit review may take up to 8 weeks to review, depending on the complexity. The first step is to fill out an encroachment permit to determine if the permit is required. For more information on encroachment permits and the Water Resources Projection Manual, visit https://www.valleywater.org/contractors/doing-businesses-with-the-district/permits-working-district-land-or-easement
- **Artificial Lighting:** If the project design will include artificial lighting, we recommend incorporating measures to mitigate potential impacts on the wildlife corridor associated with Saratoga Creek such as orientation or shielding of lights so they do not project upward or toward riparian habitat, use of glare shielded lights, limiting fixture heights, restriction of hours of operation for lighting components, and planting of vegetation to shield the riparian area against lights.

TREES AND LANDSCAPE

SUMMARY

Existing Tree Survey

An arborist was employed to survey all trees with DBHs (trunk diameter measured in inches at 4.5 feet above soil grade) four inches and larger in the project area. The arborist recorded data on tree species, size, condition, and critical root zones. More information on notable tree species and conditions can be found in Appendix H: Arborist Report, along with detailed data for each tree recorded.

The tree survey included 364 trees and identified 26 different tree species on site. Each tree was rated for its suitability for retention based on tree health and structural safety. Valuable tree specimens were identified as large Coast Live Oaks ***(Quercus agrifolia)*** and Valley Oaks (***Quercus lobata***) growing adjacent to the creek bed.

Due to the overlap with the Saratoga Creek riparian corridor and adjacent soil berms remaining from the construction staging use, many trees on the Lawrence-Mitty site pose an additional challenge for construction and root disturbance. 129 of the trees were identified with trunks or roots located in the berm.

Figure 16: Existing Oak along the creek

Existing Plantings

The Biological Resources field survey identified four natural communities, habitats, and land cover types in the study area. (See Appendix G: Biological Constraints Analysis, figures 3a through 3d, for locations of each type.)

- **Mixed Oak Forest and Woodland Alliance:** Located along the creek, this natural community contains valley oaks, coast live oaks and California sycamores, among others. This designation makes up the entire riparian habitat and has significant wildlife value, despite the understory including many non-natives.
- **Coast Live Oak Woodland and Forest Alliance:** Located adjacent to the creek, this natural community is dominated by coast live oaks, with California buckeyes, toyon, and others. Here, the understory is open and sparsely vegetated with a variety of native and non-native shrubs.
- **Intermittent Stream:** The stream channel is mostly natural, with a bottom made of sand, gravel, and cobble, and lacking in vegetation. At the north end the creek becomes an engineered concrete channel. At several points, the banks are made of steep gabion walls which are mostly bare of vegetation (see Appendix C: Civil Site Exhibit).
- **Developed:** This category contains the existing Saratoga Creek Trail, pedestrian bridge, and large opportunity area in the north section. This large area contains soil berms and piles, and the ground plane is mainly gravel and asphalt, with very little vegetation.

Existing Irrigation

An existing irrigation system is in place for many trees along the existing portion of the Saratoga Creek Trail. Beyond that to the north, there is no existing irrigation. An additional water connection is possible on site near Mitty Way (see Utilities section for more information).

Storage & Maintenance

Maintenance staff need the ability to pull a truck and trailer (for a mower) into the turnout off the expressway. Responsibility for on-going operations and maintenance of the site may be a shared responsibility between Cupertino Grounds Staff and the Trail Maintenance Staff.

DEVELOPMENT RECOMMENDATIONS

Existing Trees

- **Removals:** Sixteen trees have been recommended for removal due to poor health, condition, or in some cases, current and expected future decline. Removals for site design reasons along the creek edge should be limited as much as possible to preserve existing tree cover and habitat value.
- **Pruning:** Thirty-nine trees have been recommended for pruning to improve tree health and longevity.
- **Specimens:** The tree identified as Valley Oak #172 is in the early stages of decline but has an opportunity to remain as a valuable specimen if it can be fenced off.
- **Tree Protection:** Tree protection treatments will apply to valuable tree specimens if regrading or construction occurs within the identified Root Protection Zones (RPZ- radial distance in feet from the tree base designated to be under strict control of project arborist during construction). This will involve hand digging to expose roots and possibly allowing them to lay down at the new grade.
- **Replacements:** Refer to Appendix G: Biological Constraints Analysis for replacement quantities required for each particular tree condition/classification (10:1 ratio for some instances, 1:1 for others).

Figure 17: Valley Oak #172

New Trees & Plantings

- Consider trees and planting to screen the visual impacts of Lawrence Expressway.
- Plant shade trees at the trail, benches and amenities for natural shade and human comfort.
- Extend riparian and native plantings along the creek corridor to enhance habitat value.
- Use native and/or drought tolerant plantings to comply with California's Model Water Efficient Landscape Ordinance (MWELO).
- Provide bioretention planting areas to coordinate with site drainage, meet stormwater goals and improve water quality.
- Refer to the local plant lists for appropriate species (Bay-Friendly plant lists, C3 Stormwater guidelines, and Saratoga Creek Master Plan planting palettes, for example).

Irrigation

- Comply with Citywide plans' calls for sustainable design and construction by employing efficient water-saving irrigation strategies.
- Comply with California's Model Water Efficient Landscape Ordinance (MWELO).

Storage & Maintenance

Because of the site's more difficult access, it would be ideal for maintenance staff to have a larger storage area onsite—roughly the size of a one-car garage. If a restroom structure is planned, it would be efficient to place it within the same building. Storage and/or the restroom may be located to form one edge of a noise barrier.

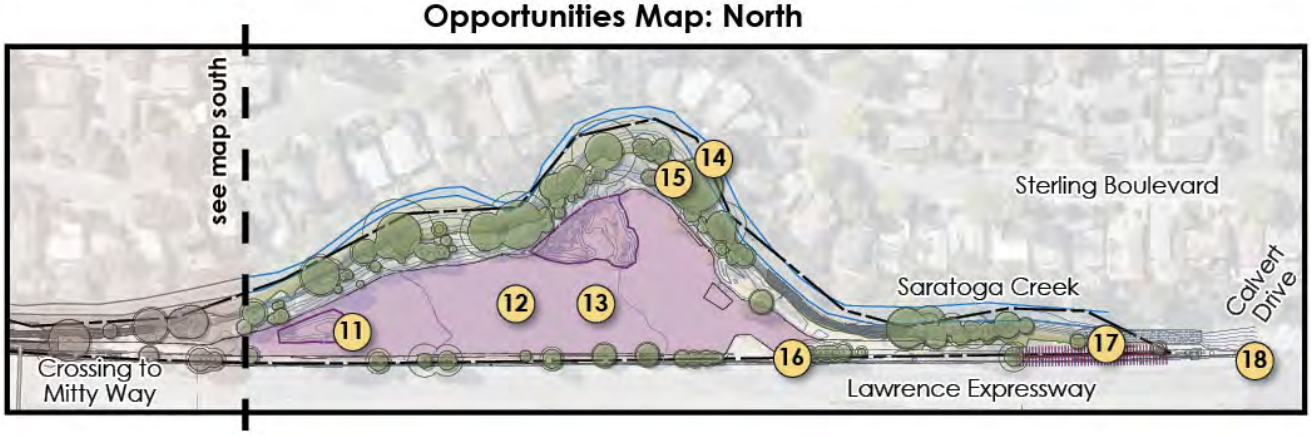
As the design progresses, we will want to receive feedback from both the Cupertino Grounds Staff and the Trail Maintenance Staff, due to the shared maintenance responsibilities noted.

OPPORTUNITIES AND CONSTRAINTS

This report is the culmination of Phase 1 of the *Lawrence-Mitty Park and Trail Master Plan* process. It provides a summary of the site's existing conditions and site studies and offers recommendations to help guide the upcoming site design. Through this process, a set of opportunities and constraints is becoming clear. These are graphically summarized on the following pages in an *Opportunities Map* and a *Constraints Map* for the purpose of providing design direction for the next steps.

Opportunities Map: South

Opportunities Map: North



MAP LEGEND

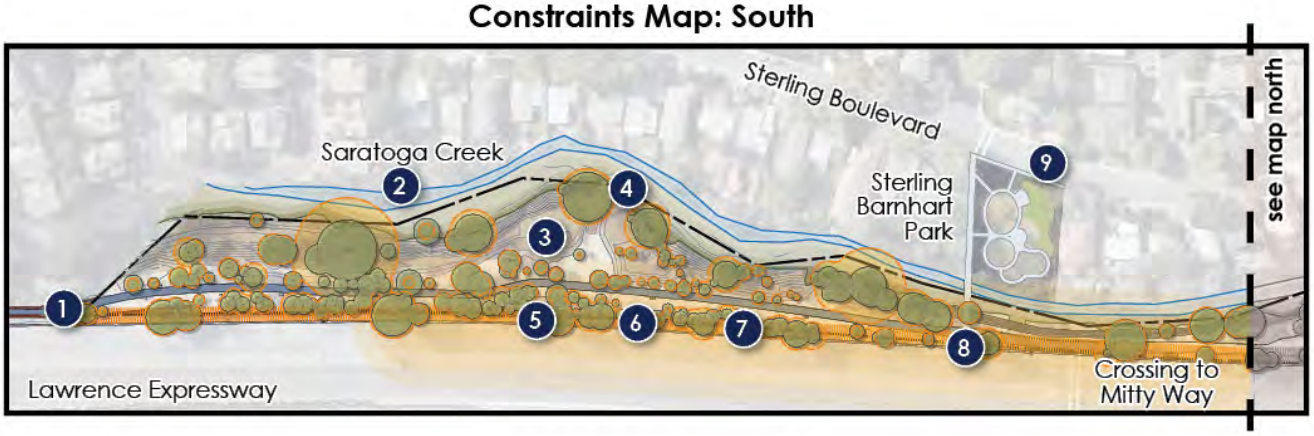
- Saratoga Creek
- Lawrence-Mitty Park Boundary
- Existing Trees
- Existing Saratoga Creek Trail
- Existing Bike/Pedestrian Route
- Tree Root Protection Zone
- Existing Sound Wall
- Open Space for Recreation
- Soil Piles for Removal

N

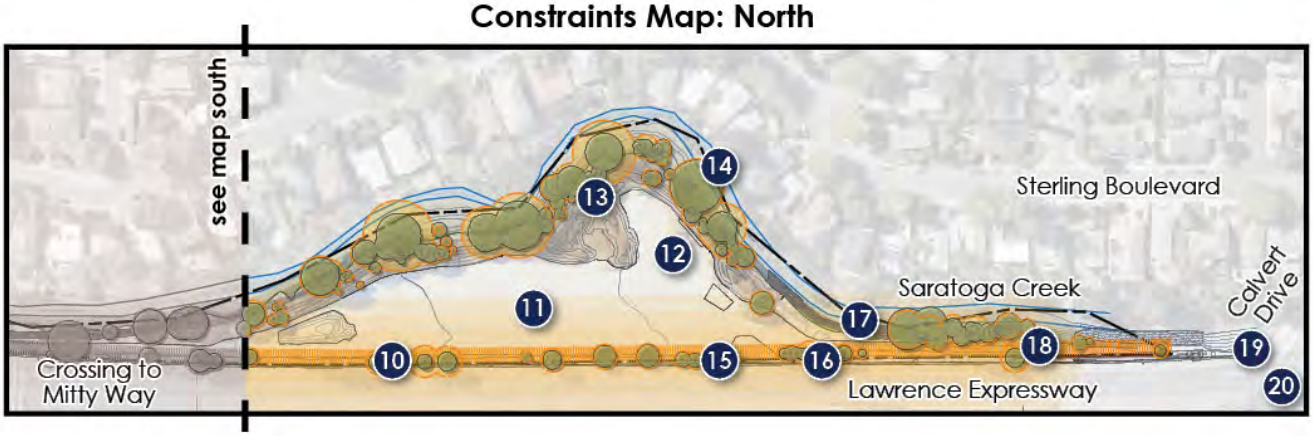
Feet
0 50 100 200

1. Regional trail connection to Rancho Rinconada pool and beyond
2. Reduced noise level at sound walls
3. Views to the creek possible with berm and soil pile removals
4. Small open spaces for passive recreation or creek overlooks
5. Existing maintenance/emergency access
6. Existing trail and park amenities
7. On-street connections to parks and three schools less than a mile away
8. Potential collaboration with schools for environmental education opportunities
9. Existing small neighborhood park with play area and pedestrian bridge
10. On-street connections to Arch Bishop Mitty High School and John Mise Park
11. Removal of soil piles (construction debris)
12. Reduction of impervious surface, improving creek health
13. Large open space for a range of recreation opportunities
14. Views to the creek possible with berm and soil pile removals
15. Lower noise levels far from expressway
16. Existing maintenance/emergency access
17. Lower noise levels at sound wall
18. Potential bike/pedestrian connection north to Stevens Creek Blvd

Constraints Map: South



Constraints Map: North



MAP LEGEND

- Saratoga Creek
- Lawrence-Mitty Park Boundary
- Existing Trees
- Existing Saratoga Creek Trail
- Tree Root Protection Zone
- Soil Adjacent to Expressway
- Gap in Existing Sound Wall
- Soil Berms and Piles (approximate)

N

Feet
0 50 100 200

1. Limited visibility at sound walls
2. Saratoga Creek constraints: environmental agency regulations, no development below top of bank, limited tree removal
3. Remnant soil piles (construction debris)
4. Remnant berms with mature tree roots limit removal options
5. Maintenance/emergency access points from expressway impact potential noise mitigation
6. Road noise and visibility
7. Elevated levels of lead in soil adjacent to expressway
8. Utility coordination required with San Jose (water, sewer, stormwater)
9. Limited parking (on-street only)
10. Elevated levels of lead in soil adjacent to expressway
11. Remnant impervious surface negatively impacts creek health
12. Remnant soil piles (construction debris)
13. Remnant berms with mature tree roots limit removal
14. Saratoga Creek constraints: environmental agency regulations, no development below top of bank, limited tree removal
15. Road noise and visibility
16. Maintenance/emergency access points from expressway impact potential noise mitigation
17. Steep creek edge with stepped gabions
18. Constrained park space
19. No current bike/pedestrian connection north
20. Highway noise from I-280

Next Steps

Phase 2 of the process, Community Vision, is close to completion, and involved an online survey, two pop-up events, a virtual community meeting and a site tour. This input from the Cupertino community combined with the findings in this Environmental Summary Report will inform the development of three initial design alternatives for the site

These concept alternatives will be shared with the community in Phase 3 for further feedback. In Phase 4, a final, preferred design concept for the park and trail will be developed and reviewed for final approval by City Council. Phase 5 is the final step in the Master Plan process and includes the required documentation for CEQA (California Environmental Quality Act).

APPENDIX

- **A. Transportation Memo,** Hexagon Transportation Consultants, February 2022
- **B. Noise Conditions Report,** MIG, April 2022
- **C. Civil Site Exhibit,** BKF, April 2022
- **D. Adjacent Utilities,** BKF, April 2022
- **E. Title Report,** June 2018
- **F. Soils Report:** Phase I Environmental Site Assessment Update and Phase II Soil Quality Evaluation**,** Cornerstone Earth Group, February 2022
- **G. Biological Constraints Analysis,** MIG, April 2022
- **H. Arborist Report**, SBCA Tree Consulting, February 2022