

FIGURE 2 – REACH 2: L'AVENIDA TO WHISMAN SCHOOL



## Feasibility and Site Analyses

# REACH 2

## L'AVENIDA TO WHISMAN SCHOOL

### Location

Reach 2 would begin on the west bank of Stevens Creek at L'Avenida and extend to Whisman School on the east bank of the creek. This 3/4 mile section of the trail would pass beneath Highway 101, cross Moffett Boulevard and bridge over the creek to Whisman School (See Figure 2).

### Trail Alignment

The trail alignment would begin on the top of the Santa Clara Valley Water District levee on the west bank of the creek at L'Avenida. At Highway 101, the trail would be ramped below the roadway into the concrete-lined flood control channel which would be excavated to widen the embankment for the trail (See Figure 3). Excavation of the concrete lining would be used in order to preserve the current flood carrying capacity of the channel. The trail beneath Highway 101 will be approximately 6 feet above the creek bed and, therefore, must be monitored for closure periods during the winter rainy season and closed if necessary. The

constricted nature of the channel does not allow for year-round trail use (See Illustration 1).

After passing beneath Highway 101, the trail would continue along the west bank of the creek until reaching the southern most boundary of a 6.69-acre parcel of open space land owned by Santa Clara County Parks located on the east bank of the creek adjacent to the PG&E substation on Moffett Boulevard. A pedestrian bridge would be constructed in this location to bring trail users over the creek into the open space parcel (See Figure 2).

The trail would leave the creek and meander through the large trees growing on the open space parcel to Moffett Boulevard where the crosswalk and streetlight would be rearranged to take trail users across the street. The current arrangement of the intersection would require trail users to cross both Moffett Boulevard and Leong Drive. The crosswalk would be moved to the southern end of the intersection and the streetlight relocated so that trail users cross only one street, Moffett Boulevard. Once across the street, the trail would turn south along a short

stretch of sidewalk which would be redesigned to provide an improved path to the City-owned open space land on the west bank of the creek across from Whisman School (See Figure 2).

The San Francisco Water Company Hetch-Hetchy corridor intersects the Stevens Creek Trail in this open space parcel. A pedestrian bridge would be placed adjacent to the Hetch-Hetchy corridor to connect the trail to Whisman School and Whisman Park on the east bank of the creek (See Illustration 2). The pedestrian bridge would complete Reach 2 by linking the trail to the school and park and to City bicycle lanes.

The City has proposed the construction of a Class I pedestrian and bicycle path along the Hetch-Hetchy corridor. The Whisman School pedestrian bridge constructed for the Stevens Creek Trail would also meet the engineering requirements of this future trail.





ILLUSTRATION 1 – STEVENS CREEK TRAIL BENEATH HIGHWAY 101



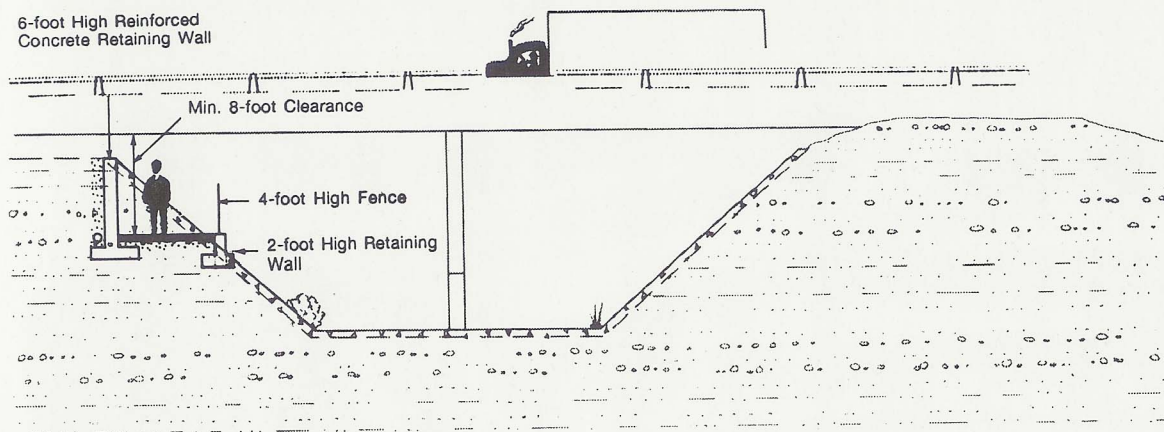


FIGURE 3 – CONCEPTUAL ENGINEERING DESIGN OF HIGHWAY 101 UNDERPASS

## Trail Alignment Alternatives

Improvements to Highway 85 at its intersection with Highway 101 were planned as part of the Measure A initiative. The Highway 85 plans call for developing a frontage road along the northern border of Highway 101. Vehicles traveling north on Highway 85 could access the frontage road, thereby reaching the North Bayshore, or merge with Highway 101. At the time of writing, these improvements had been dropped from the Measure A Plan due to a lack of funds and were scheduled for construction in approximately ten years. The future realignment of Highway 85 may provide an opportunity for an improved trail alignment at Highway 101. The improvements proposed for Highway 85 may impact Reach 2 of the Stevens Creek Trail. In this event, an overpass at Highway 101 could be constructed to bring trail users above the highway and the proposed frontage road.

An alternative creek crossing to that which is recommended at the County property on Moffett Boulevard is feasible a few hundred yards upstream on PG&E-owned property. This site is close to Moffett Boulevard and a PG&E transmission tower and is therefore a less favorable crossing, but could be used if easements through the County property are unobtainable. This alternative is stated with the knowledge that the County may be considering selling the property and the intentions of a new owner are unknown. It is recommended that the City acquire the property or a recreational easement and add it to the Stevens Creek Park Chain.

## Land Use and Ownership

North of Highway 101, the trail would be located on Santa Clara Valley Water District land. The property adjacent to the side of the creek on

which the trail would be located is used primarily for light industry. Moffett Naval Air Base housing is located on the opposite creek bank. The continuing development of the North Bayshore and the planned closure of Moffett Naval Air Base may, in the future, change the land use patterns adjacent to the creek. All future planning efforts should preserve or enhance the integrity of the creek corridor.

South of Highway 101, the trail would be located on City-owned Stevens Creek Park Chain land. Highway 85 borders the creek throughout the City. The Stevens Creek park chain land is typically located between Highway 85 and the creek. These strips of land, bordered by freeway and creek, were deeded to the City for recreational purposes. None of these sites have been developed. Land use patterns on the creek bank opposite the roadway vary. In Reach 2, a County-owned maintenance site, a PG&E substation, several apartment buildings and a school are located along the creek. In most areas, the proposed trail alignment is located on the creek bank opposite that of development. Pedestrian bridges would be used to connect developed areas to the trail.

## Creek Character, Plant Community and Animal Life

Downstream from Highway 101, the creek is channelized by earthen levees created from dredgings from Stevens Creek and topped with imported Alviso clay (The Planning Collaborative Inc., 1980). Indigenous riparian scrub species persist in areas where naturally occurring soils remain. Various willows (*Salix sp.*) dominate the creek channel.





ILLUSTRATION 2 – PEDESTRIAN BRIDGE AT WHISMAN SCHOOL



This native vegetation competes with a variety of non-native species that have taken hold in disturbed areas. Exotics including the tobacco tree (*Nicotiana glauca*) and pampas grass (*Cortaderia selloana*) are present.

At Highway 101, the creek is lined with concrete walls on either side of the overpass. A heavy drapery of blackberry vines hangs over the concrete embankment visually mitigating the effects of the engineered wall.

Upstream of Highway 101, the creek is channelized by both earthen and concrete reinforced levees. The riparian scrub community begins to give way to a cottonwood-sycamore riparian forest south of Highway 101. This plant community includes Fremont Cottonwood (*Populus fremontii*), Sycamore (*Plantanus racemosa*), Coast Live Oak (*Quercus agrifolia*), California Buckeye (*Aesculus californica*), Big Leaf Maple (*Acer macrophyllum*), White Alder (*Alnus rhombifolia*) and California Hazelnut (*Corylus cornuta californica*) (Holland, 1986).

The Santa Clara County Park property on Moffett Boulevard hosts many mature native riparian trees as well as many ornamentals. The ornamentals include the pepper tree (*Schinus molle*) and stone pine (*Pinus cembra*). A pair of great-horned owls inhabit this site making their nest in the mature tree canopy.

## Opportunities

A Santa Clara Valley Water District service road on the north side of Highway 101 provides access to a section of the creek where water flows

into a broad, shallow pool. An open-air nature study area focusing on the intertidal plant and animal community would be ideal in this location (See Figure 2).

A 6.69-acre open space parcel owned by Santa Clara County Parks located at the intersection of Moffett Boulevard and Highway 101 would provide an excellent staging area and a site for trail maintenance facilities. Present on the site are several maintenance buildings which are currently used to house the County's Vector Control Program. In 1988, the site was used as the staging area for the Medfly Eradication Program. These buildings could be modified to serve the maintenance needs of the trail.

The Hetch-Hetchy corridor intersects the Stevens Creek Trail in Reach 2 just north of Whisman School. The connection with the proposed Hetch-Hetchy trail would allow pedestrians and bicyclists to access the east-west reaches of Mountain View.

Whisman School and Park would serve as a staging area for the trail. Parking, restroom and drinking water facilities are located at Whisman Park and would jointly serve the needs of park visitors and trail users.

## Constraints

A pedestrian and bicycle underpass at Highway 101 is required to connect the trail to the North Bayshore. Permits will be required by a variety of agencies (See Summary of Findings Chart).

The street crossing at Moffett Boulevard is located within State Department of Transportation right-of-way, and permits will be required from Caltrans for any changes to the streetlight or crosswalk.

Two pedestrian bridges are required for creek crossings. Permits will be required from the Santa Clara Valley Water District and Santa Clara County Parks (See Summary of Findings Chart).



REACH	OPPORTUNITIES	CIRCULATION
<b>REACH 1</b> <b>SHORELINE TO L'AVENIDA</b> Design: In-House Construction: \$ 82,000 Total Reach 1: \$ 82,000	<ul style="list-style-type: none"> <li>• Provides a safer bike route</li> </ul>	<ul style="list-style-type: none"> <li>• Connects with Bay Trail</li> <li>• Connects with City bike lanes</li> <li>• Connects with Shoreline trails</li> </ul>
<b>REACH 2</b> <b>L'AVENIDA TO WHISMAN SCHOOL</b> Design: \$ 96,000 Construction: \$ 898,000 Total Reach 2: \$ 994,000	<ul style="list-style-type: none"> <li>• County Property at Moffett Boulevard could serve as staging area and trail maintenance facility</li> <li>• Restrooms, drinking fountains and trash receptacles available at Whisman Park</li> </ul>	<ul style="list-style-type: none"> <li>• County bus stop at Moffett Boulevard</li> <li>• Neighborhood access points at Leong Drive and Whisman School</li> <li>• Intersects with the Hetch-Hetchy corridor for east-west access</li> </ul>
<b>REACH 3</b> <b>WHISMAN SCHOOL TO LANDELS SCHOOL</b> Design: \$ 375,000 Construction: \$ 3,401,000 Total Reach 3: \$ 3,776,000	<ul style="list-style-type: none"> <li>• Land adjacent to the creek at Evelyn Avenue could serve as staging area and would connect the trail to the downtown and the light rail</li> <li>• Restrooms, drinking fountains and trash receptacles available at Landels School. Utilities also available for additional trail facilities</li> <li>• City Well Site #18 at Gladys Avenue could be added to park chain to serve as access point and mini-park</li> </ul>	<ul style="list-style-type: none"> <li>• Closest access to downtown</li> <li>• Intersects with light rail and CalTrain</li> <li>• Neighborhood access point at Central Avenue</li> <li>• Neighborhood access point at Landels School</li> </ul>
<b>REACH 4</b> <b>LANDELS SCHOOL TO SLEEPER PARK</b> Design: \$ 258,000 Construction: \$ 2,243,000 Total Reach 4: \$ 2,501,000	<ul style="list-style-type: none"> <li>• Private property at end of Mercy Street could be added to park chain to improve the trail alignment and provide neighborhood access</li> <li>• Eighteen-acre parcel at El Camino Real and Highway 85 on-ramp could serve as natural park</li> </ul>	<ul style="list-style-type: none"> <li>• Neighborhood access points at Sleeper Park</li> </ul>
<b>REACH 5</b> <b>SLEEPER PARK TO FREMONT AVENUE</b> Design: \$ 286,000 Construction: \$ 2,520,000 Total Reach 5: \$ 2,806,000	<ul style="list-style-type: none"> <li>• Twenty-two acres of City-owned property available adjacent to the creek for trail</li> <li>• City-owned property off Bryant Avenue</li> </ul>	<ul style="list-style-type: none"> <li>• Neighborhood access points at Mockingbird Lane and Fremont Avenue</li> <li>• Connects with bike lanes on Fremont Avenue</li> </ul>



CONSTRAINTS/SOLUTION	NEIGHBORHOOD IMPACT	LAND/DEVELOPMENT ISSUES	PERMITTING AGENCIES
<ul style="list-style-type: none"> <li>• None</li> </ul>	<b>Minimum</b> <ul style="list-style-type: none"> <li>• Mobile home park on west bank</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 85 improvements at Highway 101 (10 years away)</li> </ul>	<ul style="list-style-type: none"> <li>• SCVWD</li> </ul>
<ul style="list-style-type: none"> <li>• Crossing at Highway 101 solved with seasonal underpass</li> <li>• Crossing at Moffett Boulevard solved with the rearrangement of the streetlight and crosswalk</li> <li>• Two creek crossings solved with pedestrian bridges</li> </ul>	<b>Minimum</b> <ul style="list-style-type: none"> <li>• Apartments on bank opposite of trail alignment at Walker Drive</li> </ul>	<ul style="list-style-type: none"> <li>• County Property at Moffett Boulevard may be available to the City</li> <li>• Hetch-Hetchy corridor development</li> </ul>	<ul style="list-style-type: none"> <li>• SCVWD</li> <li>• Army Corps of Engineers</li> <li>• Caltrans</li> <li>• PG&amp;E</li> <li>• County Parks</li> <li>• San Francisco Water Co.</li> </ul>
<ul style="list-style-type: none"> <li>• Narrow trail under Middlefield Road adjacent to Highway 85 solved with retaining wall</li> <li>• Crossing at Highway 85 solved with underpass</li> <li>• Crossing at Central Expressway, SPRR and Evelyn Avenue solved with overpass that could be jointly designed with light rail</li> </ul>	<b>Moderate</b> <ul style="list-style-type: none"> <li>• Two single-family residences abut trail at Central Avenue</li> <li>• Apartments abut trail between Evelyn Avenue and Dana Street</li> </ul>	<ul style="list-style-type: none"> <li>• Evelyn Avenue Corridor Study</li> <li>• Light Rail Development</li> <li>• Old Mountain View Neighborhood Study</li> </ul>	<ul style="list-style-type: none"> <li>• SCVWD</li> <li>• Army Corps of Engineers</li> <li>• Caltrans</li> <li>• PG&amp;E</li> <li>• County Transportation</li> <li>• SPRR</li> </ul>
<ul style="list-style-type: none"> <li>• Narrow east bank of creek at end of Mercy Street is solved with engineered trail under Highway 237</li> <li>• Steep and unstable creek banks downstream from Yuba Drive solved with engineered ramps</li> <li>• Crossing at El Camino Real solved with underpass or tunnel</li> </ul>	<b>Moderate</b> <ul style="list-style-type: none"> <li>• Three apartment buildings at end of Mercy Street</li> <li>• Two single-family residences at end of Yuba Drive</li> <li>• Single family residences opposite trail at Pastel Lane and Sleeper Avenue</li> </ul>	<ul style="list-style-type: none"> <li>• Acquisition of private property at the end of Mercy Street would decrease development cost</li> <li>• A portion of PG &amp; E property on either side of creek at Yuba Drive may be available for purchase</li> <li>• Seismic safety of Yuba Drive bridge is uncertain</li> <li>• Residential development on west side of creek south of El Camino is ongoing</li> <li>• Water main under Highway 85</li> </ul>	<ul style="list-style-type: none"> <li>• SCVWD</li> <li>• Army Corps of Engineers</li> <li>• Caltrans</li> <li>• PG&amp;E</li> </ul>
<ul style="list-style-type: none"> <li>• Crossing at Highway 85 solved with an overpass</li> <li>• Crossing at Fremont Avenue needs joint study with adjacent cities</li> <li>• Development requires coordination with neighboring cities</li> </ul>	<b>Moderate</b> <ul style="list-style-type: none"> <li>• Single-family residential neighborhood in Sunnyvale located on creek bank opposite that of the trail at Knickerbocker Drive, Cardinal Way and Robin Way</li> </ul>		<ul style="list-style-type: none"> <li>• SCVWD</li> <li>• Caltrans</li> <li>• PG&amp;E</li> <li>• Neighboring Cities</li> </ul>