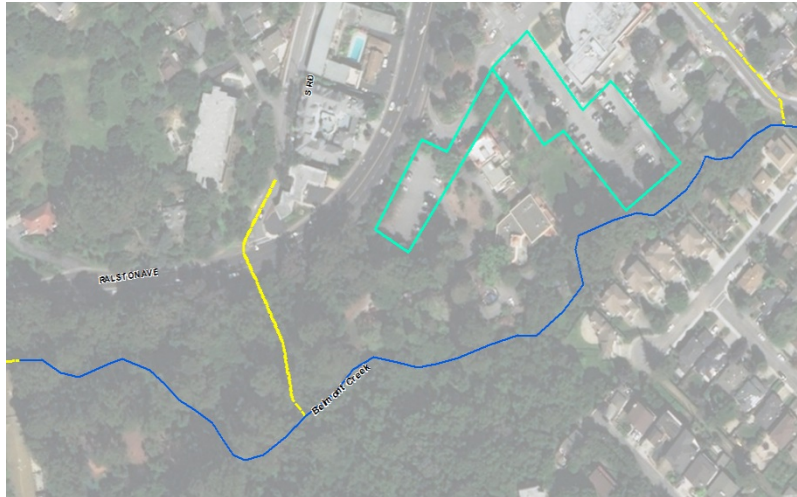


PRELIMINARY ALTERNATIVE 2E TWIN PINES PARK DETENTION BASIN

The Twin Pines Park detention basin consists of approximately 21.52 Ac-ft. The 43,000-square-foot underground detention basin requires 37,481 cubic yards of excavation, along with parking lot-specific surface improvements.

The ~1,600 linear feet of creek restoration such as riprap and vegetation is included in this project. A sediment basin about halfway through Twin Pines Park with a low flow channel is also included in the design to create a centralized O&M area for sediment removal.



Legend

- Belmont Creek
- Exist Pipes and Culverts
- Preliminary Alternative 2

Additional improvements should be negotiated between the stakeholders and the City and/or County. The current land use could incorporate aboveground detention/treatment, and other low impact development improvements (e.g. green infrastructure).

The existing parking lot would need specific improvements and appurtenances such as light poles, trees, wheel stops, and signing and striping.

The parking lot and portions of the park would be inaccessible to the public until construction is completed and the turf is established.

Funding Opportunities:

This detention basin is eligible for grants related to stormwater detention, school improvements, and creek restoration.

Adaptability:

This detention basin is located high enough in the watershed to avoid sea level rise impacts. The detention system is expandable to accommodate different configurations and larger storm events.

Environmental Benefits:

This detention basin would facilitate sediment and debris removal before the material enters the storm drain system. This project is in a moderate trash generating area and could include a trash capture device.

Peak flow reduction: 26 cfs
Design life: 100 years (detention basin only)

Construction Periods: 3-4 months
Estimated Annual O&M: \$38k
Estimated cost: \$17.6 million