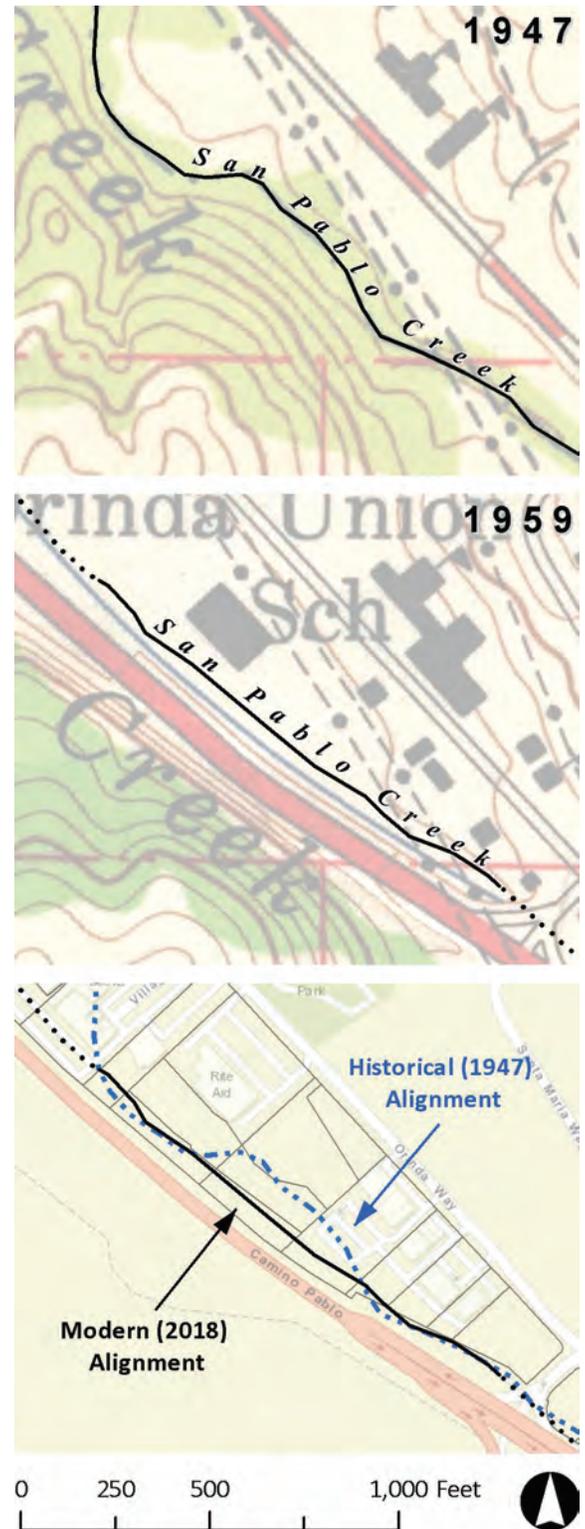


## Example Design

### Example Design for Downtown San Pablo Creek Restoration Project

We have already visited San Pablo Creek, and have already begun to think about possibilities for the site. While we are eager to discuss FOC's ideas for the site, the figure below illustrates potential design concepts we might consider if selected. We started our design process by reviewing the historical topographic maps and historical aerial photographs from the 1940s and 1950s. We used the 1947 USGS 1:24,000 scale topographic map to delineate the original channel alignment. This alignment matches the channel corridor in the 1946 aerial photograph. The channel was straightened in the early 1950s when Camino Pablo was constructed. We propose restoring the historical alignment that has one meander in Downtown Orinda. We feel that a single meander is appropriate for the site and that multiple meanders as shown in the 2000 design is likely to blow out during high flows. We feel that maintaining multiple meanders will require significant bank armoring that will reduce habitat value and the natural feel of the creek. We proposed modeling the existing condition as the no action alternative, the 2000 conceptual alignment and cross sections, and our proposed alignment.

Our example conceptual design includes a trail on both sides of the creek with a pedestrian bridge connecting the both sides of the creek from the Chevron Station. The pedestrian bridge will provide access to the both the restored riparian forest and the De La Veaga Trailhead on the opposite side of Camino Pablo. We plan to setback the banks on both sides of the channel and remove the existing shotcrete that is failing. The existing sheet pile grade control structures will be replaced with redwood logs that cross the channel. We will use velocity estimates from the hydraulic model to determine if the toe of slope needs to be armored with boulders. If boulders at the toe of slope are required, we will specify planting willow stakes between rocks to maintain a natural channel feel. By increasing the cross sectional area of the channel we can maintain flood conveyance while also increasing the riparian vegetation planted in the active channel area. We also envision a bio-swale along the parking lot side of the channel to capture pollutants from the parking lot runoff. Our design includes an educational area with seating that looks out over San Pablo Creek. This area can be used for educational programs for local students with interpretative signs to identify native riparian vegetation. As the City of Orinda considers redevelopment of the downtown, buildings could be changed to front the restored channel that could serve as an amenity for restaurants, multi-story housing developments, and pedestrian visitors and residents. The revitalization and redevelopment of downtown San Luis Obispo is a great model for this type of redevelopment.



# Example Design

