



## Shoreline Middle School Santa Cruz County, California

## Civil and Structural Engineering



### Client Reference:

Steve Sutherland, Principal  
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**Budget:** \$9 million

Mesiti-Miller Engineering designed the civil and structural site improvements for this state-funded middle school in Santa Cruz County. Site improvements included vehicle access and parking facilities for 90 cars, an outdoor amphitheater, several masonry and concrete retaining structures, a lengthy gabion retaining structure and the storm water collection system including an outfall structure for a 54-inch pipe discharging into a sensitive riparian habitat.

To minimize erosion of the adjacent riparian habitat, we developed a simple, cost-effective energy dissipater to reduce the storm water outflow velocity from 6.5 fps to 2.4 fps, less than the scouring velocity of fine sands.