



Storm Damage Repair Project – Vienna Drive

County of Santa Cruz

Civil and Structural Engineering



30ft-long steel piles were lowered into drilled holes to support the 18ft-tall, 100ft-long wall.

Client Reference:

Tim Bailey, P.E.
County of Santa Cruz
Public Works Department
701 Ocean Street, Room 410
Santa Cruz, CA 95060
(831) 454-3419

Budget: \$500,000

A series of storms in March 2011 resulted in an excess of \$15 million in widespread damages to 35 County maintained roads and infrastructure. 14 inches of rain was recorded within 14 days at the Ben Lomond gage. Capitola Village was flooded after a storm drain failure along Noble Gulch Creek and a major landslide closed Nelson Road in Scotts Valley. Governor Jerry Brown formally issued an Emergency Proclamation for Santa Cruz County after the two-week-long blast of heavy rain, flooding, winds and landslides.

The Santa Cruz County Department of Public Works retained MME to design the 18ft-tall and 100ft-long wall along Vienna Drive in Aptos. The scope included a geotechnical investigation, topographic survey, civil and structural design, site improvement plan and profile, erosion control plan, specifications, and engineer's estimate of probable construction cost.

MME designed a tie-back soldier beam retaining wall, gabion end structures, storm drain repair, and new down drain. MME assisted with a design change during construction due to conflicts in the location of an existing sewer line, which allowed the project to keep moving at a rapid pace. We exceeded our client's expectations and completed the project under budget.

