



Bridging the Gap

Your Connection to Engineering Services

December 2025

Geotechnical Services Piezometer Destruction Program

In 2017, Geotechnical Services consultants began the Statewide Borehole Resolution Program (SBRP) to catalog and destroy old boreholes and wells, and to negotiate closure with the Local Enforcement Agencies who regulate groundwater and wells. At the end of the SBRP, Geotechnical Services still had a large inventory of “orphan” wells without funding for destruction and initiated the in-house Piezometer Destruction Program.

What is a well?

Wells are temporary, exploratory borings used to design bridges, retaining walls, and roadways. They are typically sealed immediately after being created. Permanent installations, the focus of the Piezometer Destruction Program, may be used for months or years to measure groundwater depth, water quality, or landslide movement. They are typically 50 to 150 feet deep, cased with two to four-inch acrylonitrile butadiene styrene pipe, with sand or grout filling the space between the casing and the surrounding soil.

What does it mean to ‘destroy’ a well?

To protect aquifers from contamination and to prevent injury to humans or animals, Caltrans mobilizes a drill rig to over-drill the existing well, then seal it with grout. In some cases, simply applying grout under pressure is enough to crack the casing, penetrate the surrounding soil, and seal the hole. However, some old steel-cased wells require explosives to crack the casing.

Policy Moving Forward

Under the California Water Code, ultimate responsibility for wells lies with the owner. As the owner of the State Highway System, it is Caltrans’ responsibility to see that our contractors and permittees follow the law.



The Division of Engineering Services, Structures and Engineering Services, Office of Electrical, Mechanical, Water, and Wastewater developed Standard Specifications and Standard Plans that apply to all contract types on the State Highway System. The specifications require a licensed driller and documentation with the California Department of Water Resources. The new Standard Plans will ensure wells are developed in compliance with the California Water Code. To incentivize third-party destruction, Geotechnical Services will recommend higher-performance bonds for Encroachment Permits with wells.

As the Piezometer Destruction Program draws to a close, Caltrans has destroyed or resolved 992 wells. Through collaboration across the Department and Local Enforcement agencies, we have made the communities that we work and live in safer by protecting California’s water resources. This program is just one of the many ways Caltrans displays its commitment to its values of collaboration, equity, integrity, and stewardship. For more information about working with DES, visit the [Working with the Division of Engineering Services page](#).

