



# FERGUSON SLIDE

## Restoration Project



## Geotechnical Study

Using remote monitoring and survey techniques, Caltrans Geotechnical experts were able to estimate that the slide has lost as much as 60% of its original potential landslide/rockfall energy.

However, despite only 40% of the original potential landslide/rockfall energy remains, results from the Geotechnical Report included a recommendation that Alternative E (remove rockslide & restore State Route 140 on existing alignment) is not a viable option.

Alternative R (construct a rockshed/tunnel through rockslide on existing alignment) was also rejected as a viable alternative. Geotechnical reasons for rejecting Alternative R include potential exposure to dormant rockslides in the area and exposure of construction personnel, equipment, and structures to potentially falling rocks.

Remaining alternatives C, S, and T are still viable from a Geotechnical standpoint.

Additional geotechnical recommendations include excavation slope ratios no steeper than 1:4 (horizontal to vertical lengths).

Additional safety recommendations include 10-20 foot wide rockfall catchment areas at-grade to prevent problems from the minor rockfalls that are expected to occasionally result from excavation cuts made to construct the permanent restoration of State Route 140.