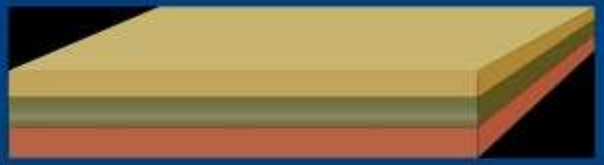
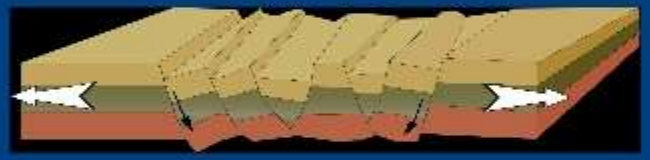
STRESS and STRAIN
In
GEOLOGICAL
ENGINEERING

Deforming Earth's Crust

Types of stress: Extension, Compression, Shear

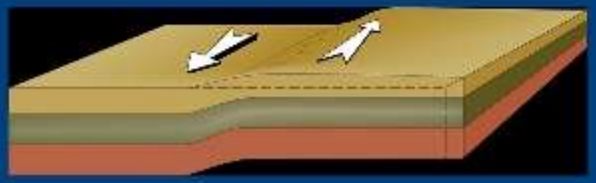


Undeformed beds: no stress applied.



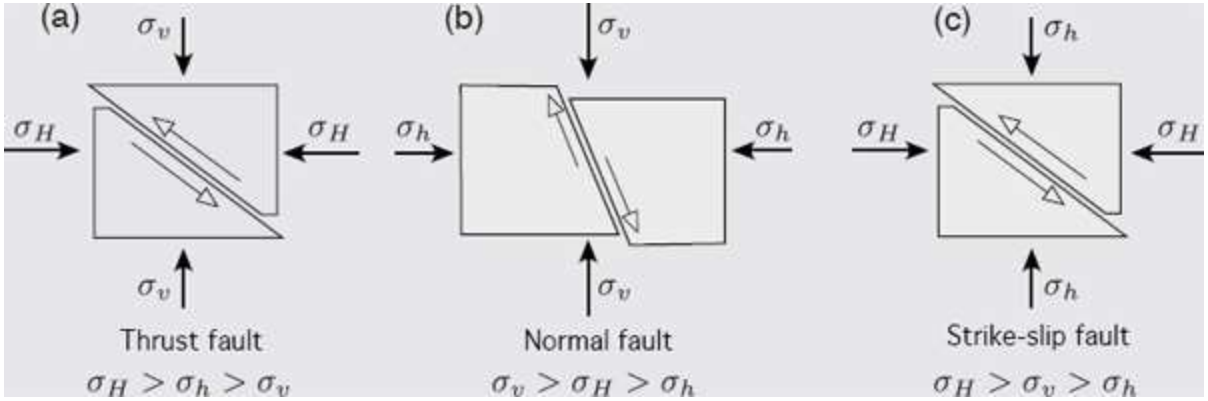
Extension makes faults and regional thinning. (Ex., Basin & Range.)

Compression makes faults and folds. (Ex., Rocky Mountains.)

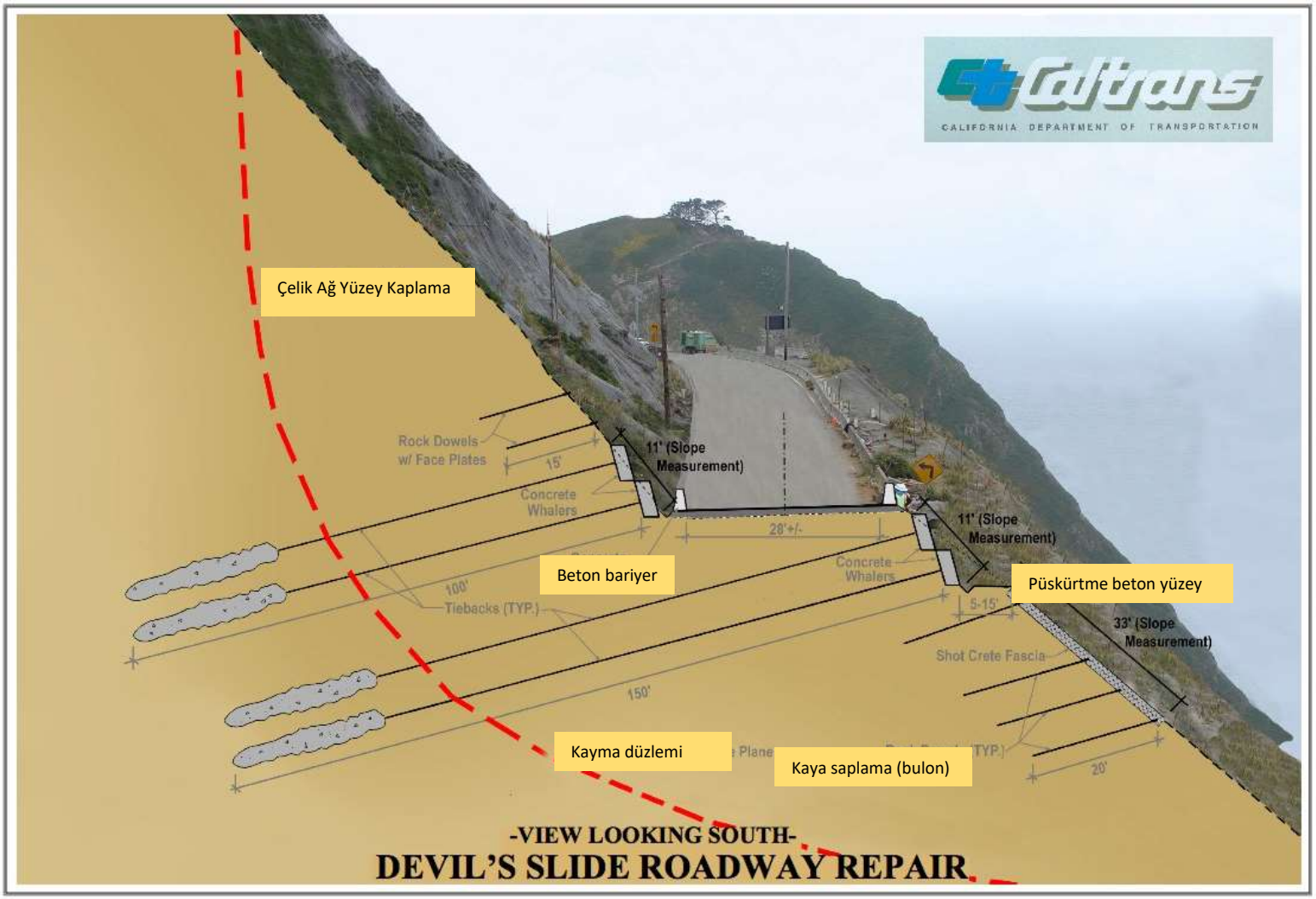


Shearing displaces layers horizontally and can result in strike-slip faulting. (Ex., San Andreas Fault, California.)

https://www.slideshare.net/lynnmccartney/plate-tectonics-10799192

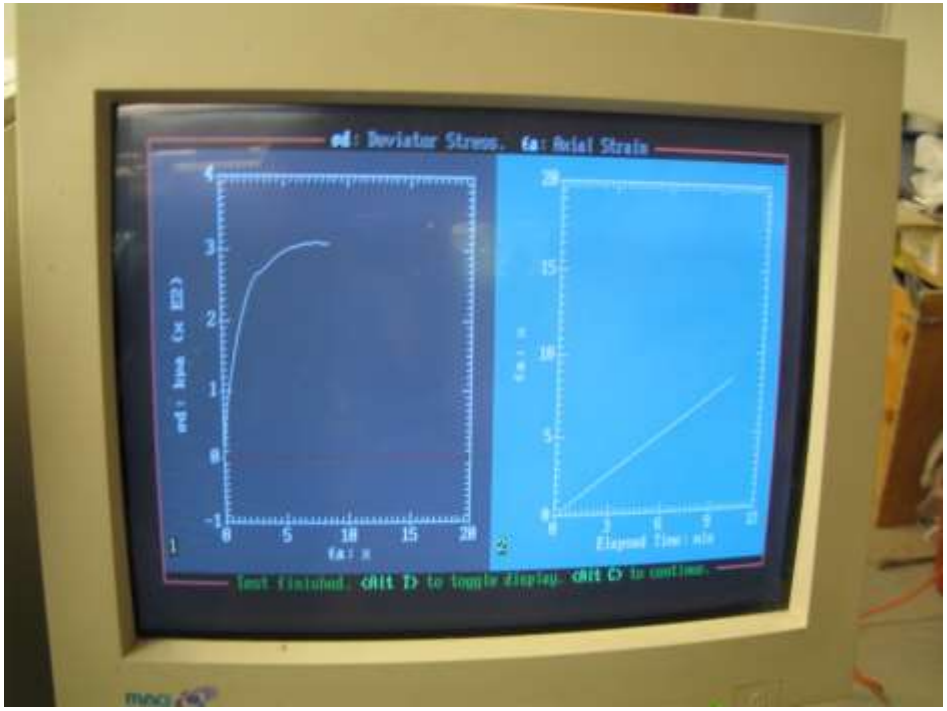


https://www.nap.edu/read/13355/chapter/5


Çelik Ağ Yüzey Kaplama
Beton bariyer
Püskürtme beton yüzey
Kayma düzlemi
Kaya saplama (bulon)
Rock Dowels w/ Face Plates
15'
Concrete Whalers
11' (Slope Measurement)
28'+/-
11' (Slope Measurement)
Concrete Whalers
100'
Tiebacks (TYP.)
5-15'
33' (Slope Measurement)
Shot Crete Fascia
150'
20'
-VIEW LOOKING SOUTH-
DEVIL'S SLIDE ROADWAY REPAIR


2016 7 24


PATENT PENDING


σd: Deviator Stress, εa: Axial Strain
σd : kpa (x E2)
εa: %
Elapsed Time: min
Test finished. <Alt T> to toggle display, <Alt C> to continue.


DEVELOPMENT
SOILS SPECIALTIES
BY
Research Engineers
12192 MINERO CT., GRASS VALLEY, CA
PATENT PENDING


TEST MARK


Interface failure on the geopolymer side
Cracking failure in the cement mortar side
Cement mortar side
Geopolymer side