

# Infrastructure in a slope movement: new Charmaix viaduct

Subject: Crossing of a slow slope movement with a road infrastructure (excavation and viaduct)

Stakes: Reinstatement of an important road access with buildings underneath

Key words: build an infrastructure, slope movement, works, masterpieces, durability

The Charmaix Viaduct suffered parasitic stresses due to the movement of a mountain's slide slope. This viaduct underwent a partial recovery of its foundation through the nineties. SFTRF launched studies and works to rebuild a new viaduct at the uphill proximity of the actual one with high excavation. The new viaduct uses drifting and wider supports (except one which is fixed) that follow the slope movement and enable the deck to be displaced. The visit presents the particular conditions of the site, the design for high excavation and open cut for foundation, difficulties that underwent during construction and the means used to overcome them.



*View of the Charmaix side, the access road to the head of the Fréjus tunnel and the ancient viaduct.*





*View of the ancient viaduct that will be deconstructed at ended term*



*Excavation of access cuttings to the new Charmaix viaduct, drilling of nails*





*Realization of the Moroccan well for the future fixed P2 pile of the new viaduct*