Geophysical Research Abstracts, Vol. 8, 00097, 2006

SRef-ID: 1607-7962/gra/EGU06-A-00097 © European Geosciences Union 2006



Instability problems investigation at Borg Al-Arab, Alexandria, Egypt.

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Instability problems in the power lines cables net were found at Borg Al-Arab near to Alexandria governorate, Egypt. The results of geoelectrical study show that, the concrete base of the power lines cables pillar is constructed in alluvial deposits. Alluvial deposits contain salt and intercalations of sand and mud. Ground penetrating radar (GPR) results show existence of joints and cracks around the pillar. Joints and cracks were good environment to conduct water from the surface down to the concrete base of the pillar causing salt dissolution and mud sliding, which lead to deterioration and instabilities problems.