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Numerical Studying the Real Analysis of the Seismic Response of the Soil

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Abstract : This work is to theoretical and numerical studying the real analysis of the seismic response of the soil with an Elasto-plastic behavior. To perform this analysis, we used different core drilling performed at the tunnel T4 in El Horace section of the highway east-west. The two-dimensional model (2d) was established by the code of finite element plaxis to estimate the displacement amplification and accelerations caused by the seismic wave in the different core drilling and compared with the factor of acceleration given by the RPA (2003) in the area studying. Estimate the displacement amplification and accelerations caused by the seismic wave.

Keywords : seismic response, deposition of soil, plaxis, elasto-plastic
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