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2nd Workshop on Geotechnical Earthquake Engineering
"Dealing with the Consequences of Liquefaction"

Influence of depth of liquefaction on estimated settlements

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Abstract

In 1985 Prof Ishihara, based on case history observations, showed that the surface damage resulting from soil liquefaction was a function of the thickness of the liquefied layer relative to the thickness of the non-liquefied surface layer. In recent years there has been increased use of methods to estimate post-earthquake settlements using accumulated volumetric strains calculated from either SPT or CPT data. This presentation will review past experience and discuss simple ways to adjust post-earthquake volumetric strains as a function of depth using the Ishihara experience as a guide.