

# **Aseismic Diagnosis Method for Existing Embankments in Consideration of Shear Strength of Unsaturated Soils**

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In the aseismic diagnosis for existing embankments there is a possibility that their seismic stability is underestimated, and the aseismic reinforcement is conducted excessively due to the design based on the shear strength of the saturated soil which results in evaluated on the safe side rather than the actual shear strength of the embankment. In this study, the aseismic diagnosis method in consideration of the shear strength of unsaturated soils is proposed, and the trial design for the aseismic reinforcement is performed to grasp the effectiveness of the method proposed. As a result, through a comparison between the conventional method and the method proposed, we confirmed that the aseismic reinforcement designed by the method proposed is more rational than that designed by the conventional method.