**Detailed Evaluation Method of Seismic Impact on Mountain Tunnel Entrance Using Response Displacement Method Considering Shepe of Ground**

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A detailed method for evaluating seismic impacts on mountain tunnel entrances was proposed, using response displacement method and static FEM structural analysis. The validity of the proposed method was confirmed by comparing the ground strain around a tunnel with the result of the ground response analysis. For the mountain tunnel entrance, the ground response analysis was performed by changing the gradient of the slope above the tunnel and the ground conditions to evaluate the influence of the slope, and restorability was checked using the proposed method. As a result, it was found that as the slope angle increases, the bending moment increases at the corners of some structures, and that changes in thickness and main steel bar of members might be necessary.