

**The Influence of the Variation of Track Support Rigidity Around an Overbridge  
on Ground Vibration**

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The areas on both sides of overbridge existing in the embankment section are border areas between the embankment and the girder, at which support rigidity of the ballast varies, and track subsidence tends to occur. Therefore we investigated the influence of the variation of the ballast support rigidity and the track subsidence on dynamic force and characteristics of propagation of the ground vibration by the parameter study using the dynamic analysis model. We also evaluated the effect of a countermeasure for ground vibration generated around the girder.