

**Development of Ballastless Track for Existing Shinkansen-line
in Cold Region**

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The authors have been developing a ballastless track using the track bed of pre-packed concrete with ballast. Reducing the changes in track support stiffness and improving freeze-thaw resistance remains problems in practical use. We carried out a freezing and thawing test, a cyclic loading test for a real size track model, a wheel load variation analysis, etc., in order to solve these subjects. The results of these studies, we propose a construction method of pre-packed concrete and application of a new type elastic sleeper.