

ABSTRACT

Provided is a vibration reduction section prefabricated ballastless track structure having a longitudinal connecting structure, comprising prefabricated crossties or prefabricated track plates (1), a cast-in-place layer (2), a vibration reduction layer (6), an under-track foundation (3), a junction filling portion (402), and a longitudinal connecting structure. The multiple prefabricated crossties or prefabricated track plates (1) are spaced apart from each other in a longitudinal direction. Two transverse ends of each prefabricated crosstie or prefabricated track plate (1) in a spacer region are assembled and connected to each other by means of the longitudinal connecting structure. In part or all of spacer regions, a reinforced concrete structure is used as the junction filling portion (402). The junction filling portion (402) and the prefabricated crossties or prefabricated track plates (1) form an assembled integral structure. The prefabricated crossties or prefabricated track plates (1) form a single force-bearing long-plate unit structure body, and enable assembly and connection, position limiting, and vibration reduction. In addition, the present application improves the precision of site laying and construction, facilitates removal and mounting, reduces construction difficulty, and improves construction speed.

[Figure 1]