

**TUNNEL REINFORCEMENT STRUCTURE AND TUNNEL CONSTRUCTION METHOD
CAPABLE OF CONTROLLING GROUND DISPLACEMENT USING PRESSURIZATION**

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ABSTRACT

The present invention relates to a tunnel reinforcement structure capable of controlling ground displacement using pressurization, including: reinforcements adapted to be forcedly
10 inserted into the bored holes formed along the outer surface of the section to be excavated of the tunnel; auxiliary reinforcements disposed between the reinforcements from a point between 4 m and 8 m inwardly from the ends of the reinforcements; steel ribs disposed on the inner four faces of
15 the excavation face of the tunnel; pressurizing bags each provided between the steel ribs and the excavated inner surface of the tunnel; a concrete part adapted to be cast between the steel ribs; and lining concrete adapted to be cast to the steel ribs and the inner surface of the concrete part.

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Figure 1