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Construction Technology of Modified Vacuum Pre-Loading Method for Slurry Dredged Soil

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Abstract : Slurry dredged soil at coastal area has a high water content, poor permeability, and low surface intensity. Hence, it is infeasible to use vacuum preloading method to treat this type of soil foundation. For the special case of super soft ground, a floating bridge is first constructed on muddy soil and used as a service road and platform for implementing the modified vacuum preloading method. The modified technique of vacuum preloading and its construction process for the super soft soil foundation improvement is then studied. Application of modified vacuum preloading method shows that the technology and its construction process are highly suitable for improving the super soft soil foundation in coastal areas.

Keywords: super soft foundation, dredger fill, vacuum preloading, foundation treatment, construction technology

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