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(57) Abstract :
ABSTRACT: Title: A Method for Designing a Driven Soil Nailing System in Granular Soil The present disclosure proposes method is based on coherent gravity approach mobilising sufficient pullout resistance and maintains minimum recommended factors of safety against tension and pullout failures. The proposed method ensured safety of nailed walls based on adequate pullout resistance in deep excavations. The proposed method is provided for design of soil nailing systems in granular soils possessing minimum cohesion of 7kPa. The proposed method combines longer nails, optimized design approaches, and consideration of alternative techniques can ensure the stability and integrity of these crucial support systems for soil retention in excavations. The proposed method considers a two-wedge failure plane with the top most reinforcing layer critical for pullout failure to offer distinct advantages for designing safe and stable soil nail walls with driven nails.

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