



(Left) Connecting geogrid to the cast-in-panel reinforcement using bodkin joint | (Right) Construction in progress



Wall and Slopes Nº 478

Khai Dinh Highway Bridge

📍 Thua Thien Hue
Province, Vietnam

CONSTRUCTED IN 2022

Benefits

Easy installation
with a concrete panel facing

Rapid construction
using a small plant and
equipment

Cost effective solution
using HDPE Tensor uniaxial
geogrid instead of inextensible
steel reinforcement

A better alternative choice

A reinforced soil structure with concrete facing panels was constructed as a bridge approach for Khai Dinh bridge in Thua Thien Hue Province, Vietnam. Tensor RE uniaxial geogrid was used to reinforce the retaining structure instead of the inextensible steel reinforcement.

CLIENT'S CHALLENGE

Khai Ding Bridge is part of THE XL10 construction package of the Cam Lo - La Son section, which passes through Thua Thien Hue and Quang Tri Province. The package consists of the construction of a reinforced soil structure, featuring a maximum height of 10m. As the bridge is located in the vicinity of a residential area, small machineries and equipments were preferred to minimise traffic disruptions.

TENSAR SOLUTION

Tensor uniaxial geogrids were used to replace steel reinforcement for the bridge approach retaining structure construction in Khai Dinh Bridge project. Geogrid tabs were casted into the 1.0m x 1.2m x 0.2m thick concrete panel with minimum 65mm embedment and connected at site to design length using bodkin connection. The length of the structure is 41m long with maximum height of the wall of 10m.