



A Tensor Mechanically Stabilised platform incorporating Tensor InterAx geogrid was used to reduce construction cost, time and carbon footprint

 Working Platforms
Nº 463

Fujifilm, Project Borealis

 Billingham, UK

CONSTRUCTED IN 2022

Benefits

Tensor MSL incorporating Tensor InterAx geogrid halved the platform thickness compared to the original BR470 design which suggested a 30kN/m biaxial geogrid

Time and carbon savings due to reduced excavation on site

Estimated £60,000 reduction in construction cost

'Design & Supply' service level provided by Tensor

Tensor defies convention

Seymour Civil Engineering approached Tensor at tender stage to value engineer a large piling platform where a 30kN/m biaxial geogrid had initially been proposed to reinforce the platform. Could Tensor offer further savings by designing a Mechanically Stabilised working platform utilising their best performing geogrid, Tensor InterAx, with the tried and tested T-Value design approach?

CLIENT'S CHALLENGE

The initial design used illustrative calculations in BR470, proposing to use a 30kN/m biaxial geogrid. Seymour Civils were looking for a competitive advantage in their tender and this solution did not offer sufficient project savings, therefore, a technical and commercial alternative was needed. The project required excavation into existing ground and so minimising this would be beneficial to the cost and sustainability credentials.

TENSOR SOLUTION

A Mechanically Stabilised Layer (MSL) incorporating Tensor InterAx geogrid was designed using the Tensor T-Value methodology. This methodology, developed following guidance from the BRE (authors of BR470) has been shown to offer engineers a viable and realistic alternative to the often-conservative BR470 approach. This solution reduced the platform thickness by approximately half which gave the contractor a commercial advantage at tender stage due to the significant cost, time and carbon savings proposed by Tensor.