Paved Roads
№ 438

Belfast Film Studio

Belfast, Ireland

Benefits

Increased
flexural stiffness of the granular foundation layer using Tensar Mechanically Stabilised Layer

Increased
pavement design life by mitigating differential settlement

Lights, camera, stabilisation

At the North Foreshore Film Studios, being built next to Belfast Lough, Tensar's geogrid played a key role in mitigating long term differential settlement of car parking and hardstanding areas.

CLIENT'S CHALLENGE

The studios were built on a former landfill site and the ground was very weak, with CBRs as low as 1%. It was important to mitigate long term differential settlement of car parking and hardstanding areas as there were concerns that if this occurred, it would damage the pavement structure.

TENSAR SOLUTION

Placing Tensar stabilisation geogrid in the aggregate created a Mechanically Stabilised Layer (MSL), increasing the flexural stiffness of the pavement's granular foundation layer. Granular particles partially penetrate through the stabilisation geogrid's apertures, which in turn confine and restrain them to form the resulting MSL. Construction of this MSL allowed the contractor to build pavements where the potentially damaging effect of differential settlement form low strength and variable subgrade soils would be mitigated.

