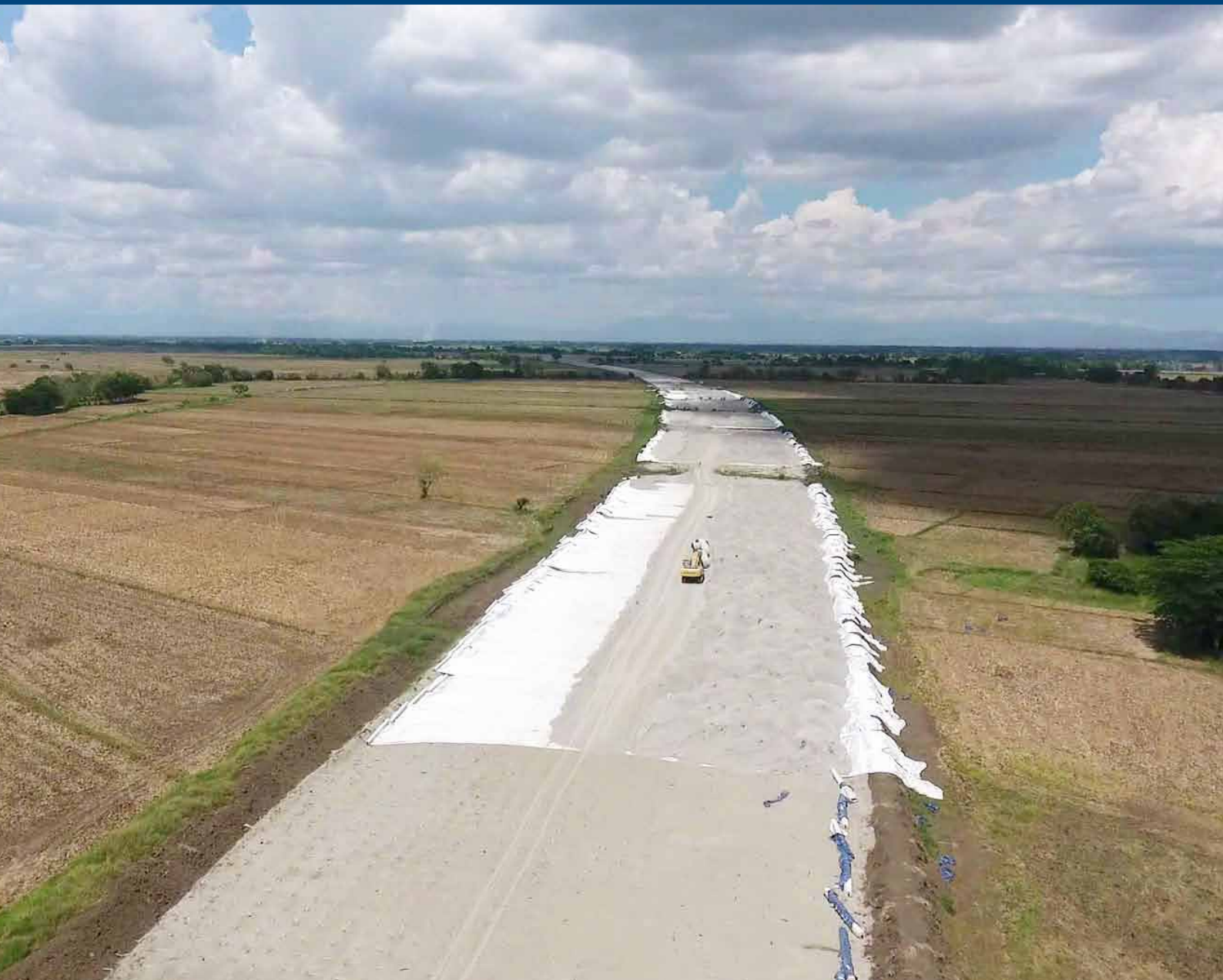


**Basal Reinforcement over Soft Clay Foundation
Central Luzon Link Expressway, Region III, Philippines**



Mirafi® PET – Solution for Basal Reinforcement

Region III, Philippines

Project Data

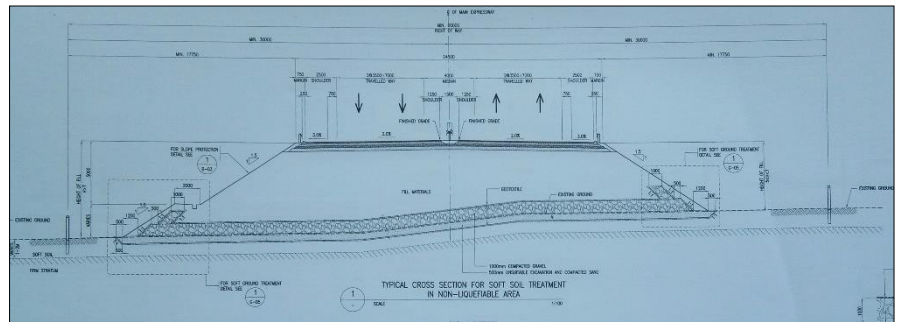
Project	: Central Luzon Link Expressway
Client	: Department of Public Works and Highways Region III
Contractor	: Hunan Road & Bridge Const. (P-1), China Road & Bridge Const. (P-2), Ilsung Const. & Pacific Concrete JV (P-3) Quingdao Construction (P-4)
Completion Year	: 2016 - ongoing
Material	: TenCate Mirafi® PET High Strength Reinforcement Geotextile

Overview

Central Luzon Link Expressway (CLLEX) is a toll road currently under construction in Central Luzon region that will connect the Subic–Clark–Tarlac Expressway (SCTEx) and Tarlac-Pangasinan-La Union Expressway (TPLEX) to the currently under-construction North Luzon East Expressway in Cabanatuan towards San Jose, Nueva Ecija.

The project aims to provide a faster access from Metro Manila to Cabanatuan City which is the base (or hub) city for Pacific Ocean Coastal Area Development. It will also decongest the traffic along the Pan- Philippine Highway (Daang Maharlika).

The soil conditions where the expressway will be constructed consist of soft clay foundations which could lead to localized failure of road embankment. Failure occurs due to lack of shear strength to support the road embankment.



Cross-section for basal reinforcement



Proposed layout plan for CLLEX

TenCate's Mirafi® PET reinforcement geotextiles provided the most cost-effective solution while achieving a greater and quicker stability of the embankment constructed over the soft foundations.

Construction

Installation of the Mirafi® PET geotextiles was carried out by laying the reinforcement geotextiles in the traverse direction of the embankment.

Solution

Mirafi® PET reinforcement geotextiles have been chosen to address the basal reinforcement for the expressway project.

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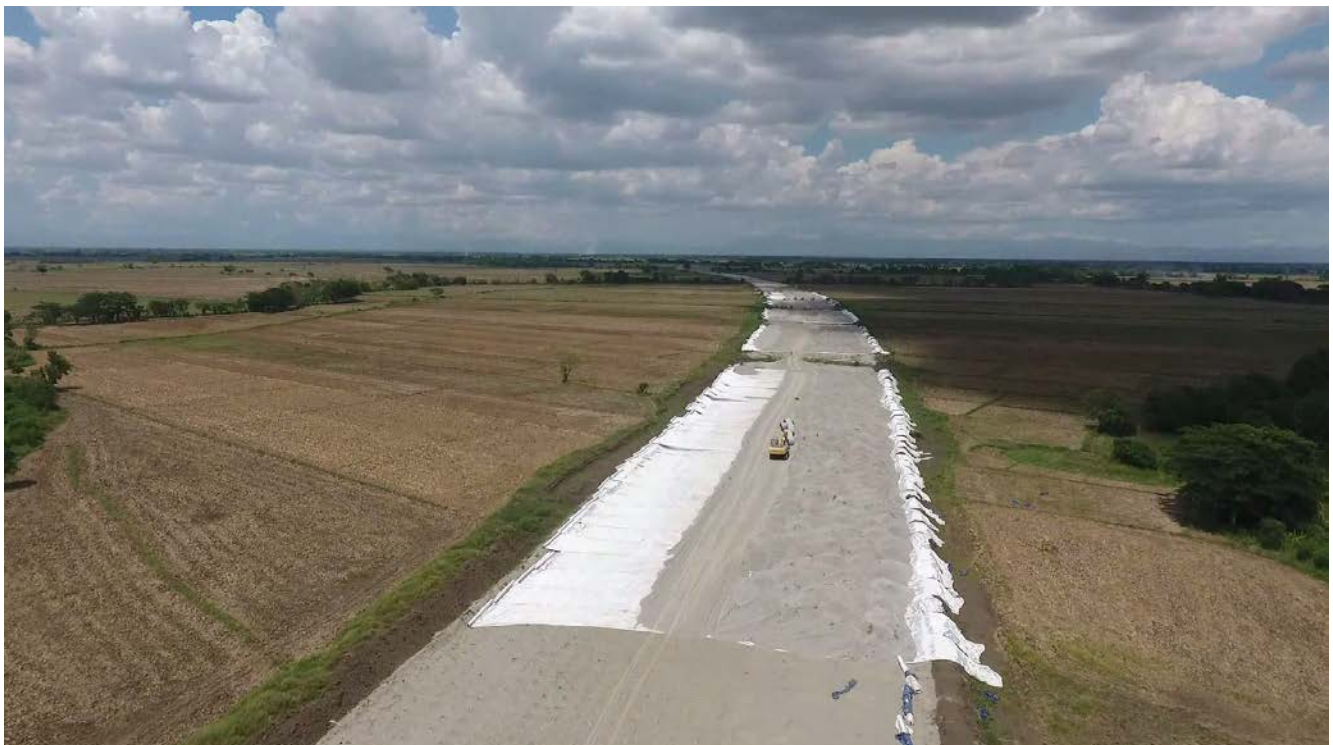
Mirafi® PET – Solution for Basal Reinforcement Region III, Philippines

Geotextile tensile strength of 600 kN/m were used to reinforce the embankment. Each geotextile panel were sewn together on-site with the use of high strength polyester thread. Thereafter, embankment fill was carried out over the Mirafi® PET reinforcement geotextile where the expressway is to be constructed.

The use of Mirafi® PET reinforcement geotextiles provided a greater and quicker stability of embankments constructed on the soft clay foundation.



Mirafi® PET 600/50 high strength reinforcement geotextile unrolled over soft foundation



Embankment fill over Mirafi® PET 600/50 reinforced geotextile

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