

CASE STUDY

SANPAC AFRICA LIMITED

THIKA BYPASS ROAD PROJECT

<u>PROJECT:</u>	THIKA BYPASS ROAD PROJECT
<u>CLIENT:</u>	KURA (KENYA URBAN ROAD AUTHORITY)
<u>CONSULTANT ENGINEER:</u>	
<u>CONTRACTOR:</u>	TOSHA HOLDINGS LTD.
<u>DATE:</u>	2019 - 2021
<u>PRODUCTS:</u>	180 GSM NON-WOVEN, NEEDLE-PUNCHED, POLYESTER GEOTEXTILE

The 11 km Thika Town Bypass Road Project, under the Kenya Urban Road Authority (KURA), a state corporation charged with managing, developing, rehabilitating and maintaining national trunk roads, commenced this project in 2019.

Upon completion, the infrastructure project will not only spur economic developments in the region but also see a massive reduction of traffic snarl ups in the area.

The road had a total of 3 kms of swampy area where the soil type was black cotton.

These areas were first filled with boulders (approximately 1 to 2m depth) and compacted as per engineer's specifications.

The 180 gsm geotextile was placed over the compacted boulders, serving as a filter fabric. The aim was to allow surface water to pass through whilst retaining the soil on top.

A 300mm layer of suitable subgrade material (murrum – gravel) was placed over the geotextile and compacted to engineer's specifications.

Above this a 100mm layer of graded crushed stone mixed with 2% cement, in a batching plant, was laid and compacted.

This was followed by a 125mm layer of Dense Bitumen Mecadam and finally a 50mm layer of Asphaltic Concrete. Both layers were compacted as per engineer's specifications.



Laying the 180 gsm non-woven, needle-punched geotextile over the compacted boulders.

Laying the 180 gsm non-woven, needle-punched



Complete Road.



Complete Road.