# CSIR on Gravel Road Test Kit

The field Gravel Road Test Kit (GRTK) allows the evaluation of borrow materials for use as wearing course on unsealed roads and to ensure construction quality on site.

## **Challenge**

Road construction requires detailed pre-analysis of the current infrastructure before any construction and design can take place on an unsealed road. This pre-analysis needs to be quantified to ensure that correct decisions can be made before construction and approval. Some of these new gravel road developments are situated far away from a formal test laboratory, with shortage of electricity and water.

### Solution

The GRTK is a mobile laboratory as it still ensures the quality of an established laboratory. The advantage of this mobile laboratory is that is it fully equipped and reaches remote areas. Test apparatus include sieves, shrinkage moulds, the rapid compaction control device or the dynamic cone penetrometer for material strength, a Trenton for aggregate strength and the thickness probe for layer thickness control. The energy problem is solved by the solar oven used for drying and the calculator supplied is powered by solar energy.

#### Track record

The GRTK is a multinational tool currently being used throughout Africa.



### **FEATURES**

- Robust design with one-year warranty.
- Easy-to-understand step-by-step guide for use.
- Mobile and easy to transport.

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