GRAVEL ROADS TEST KIT

The implementation of labour-based construction techniques is beneficial in that it creates opportunities and assists with the development of small contractors whilst upgrading the transportation network.

The performance of a gravel road is primarily a function of the material selected, as well as testing and control of constructed layer work. A field test kit to evaluate borrow materials for use as wearing course on unsealed roads and to ensure that the quality of the construction is appropriate, has been developed in conjunction with the International Labour Organisation (ILO).

The **Field Gravel Road Test Kit** allows materials grading, cohesion (liquid limit and linear shrinkage), compacted strength and aggregate strength of the borrow material to be determined. The thickness probe and RCCD in the kit ensure construction quality assurance. The kit is designed to make use of local water and solar energy (solar oven and calculator) and therefore does not require electricity and running water to be available. A manual describing the step-by-step test methods with result worksheets and practical guidelines is supplied with every kit.

CONTENT OF KIT

OPTION 1

Size 700 x 385 x 295 mm Mass = 31.2 kgCanvas sheet for quartering sample 5 test sieves with pan and cover Balance with leveling platform and windshield 2 stiff and 2 soft brushes 5 pans 3 shrinkage moulds Steel rule Spatula Drop cone apparatus Silicone spray Water bottle Thickness probe Clip board with result worksheets and manual Solar oven in separate steel trunk Size 720 x 720 x 325 mm. Mass = 26.6 kg

For further information contact:

Alan Crawford CSIR Built Environment e-mail: <u>acrawford@csir.co.za</u> Tel: (012) 841 3495 Fax: (012) 841 3232

OPTION 2

Treton hammer plus option 1

Size 950 x 565 x 450 mm Mass = 88.7 kg

Solar oven in separate steel trunk. Size 720 x 720 x 355 mm Mass = 26.6 kg

OPTION 3

RCCD plus option 2

Size $950 \times 565 \times 450 \text{ mm}$ Mass = 94 kg

Solar oven in separate Steel trunk. Size 720 x 720 x 355 mm Mass = 26.6 kg

