



**SEALGRID
M4 Northbound
La Lucia to Umhlanga, KZN**

CASE STUDY

PROJECT: Sealgrid: M4 Northbound - Aubrey Dr to Inca Drive bridge, KZN
CLIENT: Ethekewini Municipality **DATE:** March 2004
CONSULTANT: Ethekewini Municipality **QUANTITY:** 2680 m² (2 lanes x 335m)
CONTRACTOR: Ethekewini Municipality **TRAFFIC:** 22 407 AADT (2.2%);01-03-2000

EXISTING: 235 mm Asphalt (top 80mm layers indicating recovered penetration values below 16) on 155mm G6 quartzite crusher run over fine sand G8/G9

DESIGN: The top 80mm asphalt was milled out, replaced and overlaid with 50mm asphalt (Mix 'D' asphalt with 3% latex and pre-coated chips) for strengthening. A trial section of Sealgrid was installed over the existing surface and overlaid with 50mm asphalt. To mill out and replace 80mm asphalt cost R25/m² and R74/m² respectively, whereas Sealgrid cost, including extra bitumen was R24/m², giving a R75m² saving.

INSTALLATION: The existing surface was swept clean. A 1.0 l/m² tack coat of Colpave™ was sprayed by hand and allowed to break for approximately one hour. Initially the breaking time took up to two hours due to the existing damp surface as a result of overnight rain. Sealgrid was rolled out by hand and all folds and creases removed with the aid of the back of a hard broom. Extra bitumen was applied to the 150mm overlap after placing the adjacent 2.45m wide Sealgrid roll. The Sealgrid installation was then rolled with a pneumatic-tyred roller prior to placement of the 50mm asphalt overlay.



1. Condition of existing surface – 27 February 2004
 2. Roll out Sealgrid into broken Colpave™ tack coat.
 3. Broom out bubbles, folds and creases.
 4. Roll with PTR.