

*Press release from Jan de Beer, cell 082 456 3677:*

# Concrete Selected As Construction Material For Ekurhuleni's New Bus Lanes

Concrete is the preferred material for the new concrete bus lanes of the Ekurhuleni Integrated Rapid Public Transport Network (IRPTN) now under construction on the East Rand.

The bus lanes of Phase One of IRPTN will cover some 38kms to link Tembisa, Kempton Park CBD, Oliver Tambo International Airport, Boksburg CBD, and Vosloorus. Commissioned by the Ekurhuleni Metropolitan Municipality, the IRPTN will, on completion, be an integrated and expansive Bus Rapid Transit (BRT) network incorporating existing and new buses, state-of-the-art bus stops and stations. The BRT routes will be supported by complementary and feeder services such as new taxi routes, revitalised rail networks, enhanced walkways and cycle paths.

The new public transport network will include 4m wide, red pigmented, dedicated concrete bus lanes located in the middle of the network's main roads. Consulting engineers, UWP, is handling the design of the IRPTN in a joint venture with Pretoria-based consulting engineers, SMEC. The Concrete Institute's cncPave computerised concrete road design program was used for the design of the new bus lanes.

Bryan Perrie, Managing Director of The Concrete Institute, who has played an advisory role on site for contractors involved in the segmentalised IRPTN, says continuously reinforced concrete pavements are proving extremely popular globally for heavily trafficked routes such as bus lanes and were also used for major sections of the Gauteng Freeway Improvement Project (GFIP).

"CRCP is constructed with steel reinforcing bars placed within the concrete along the entire length of the pavement. CRCP naturally forms tight transverse cracks to evenly transfer loads. The reinforcing bars control the width of the transverse cracks that form and hold them tightly closed. It is not generally realised that the narrow, closely-spaced transverse cracks do not impair the structural integrity of the pavement. CRCP provides a continuous, smooth-riding surface capable of withstanding heavy traffic loads in adverse environmental conditions. Because of its greater durability, longer life expectancy, and minimal maintenance requirements, CRCP can provide the best long-term value of any pavement type."

He said The Concrete Institute's cncPave design program is constantly being updated to keep abreast with new developments and technology. The program can predict the performance of all concrete pavements, including Ultra-thin Continuously Reinforced Concrete Pavements (UTCRC). The latest version of the cncPave program has recently been released and is now web-based.

Construction on the Ekurhuleni IRPTN dedicated bus lanes, surfaced sidewalks, pedestrian walkways and cycle paths is already underway and contractors are currently on site at:

- Reverend RTJ Namane Drive between George Nyanga Road and DM Marokane Road, Tembisa;
- Brian Mazibuko Drive East and West, Tembisa;
- Pretoria Road, between Beukes Road and Riebeeck Park Rail Station, Kempton Park; and

- Rondebult Road, between Wildesering Road and Barry Marais Road, Boksburg.

Phase Two of the IRPTN will involve construction on the main trunk route, Reverend RTJ Namane Drive, between Flint Mazibuko and Brian Mazibuko Drive, which will be widened from one lane to four lanes.

*(For more details of the cncPave design program, contact Loré de Bernier, on tel 011 315 0300).*

Ends

**Caption:**

**Red pigmented concrete is being used for the construction of the new bus lanes of the Ekurhuleni IRPTN. Pictured: a section constructed by King Civil Engineering Contractors.**

Ends

*Issued for The Concrete Institute, Midrand / Further info: Bryan Perrie, tel 011 315 0300/  
[www.theconcreteinstitute.org.za](http://www.theconcreteinstitute.org.za)*