

# Concrete again, from recycled waste bits



Channel Drain Installed at Merryn Road.



Road Kerbs Installed at Car Park C4, East Coast Park Service Road.

**Firm lays drain with concrete waste; if trial succeeds, kerbs and carpark floors can be done this way**

By **BRYAN LEE**

THE road kerbs you stand on may soon contain recycled materials.

A construction-waste management company has managed to make the materials for them from sand and stone recovered from leftover bits of concrete waste at building and demolition sites.

Three weeks ago, the company, Hock Chuan Hong Waste Management, laid a 50 m drain along Merryn Road in

the Bukit Timah area using the recycled materials to see if it can be used for non-structural items like road kerbs and the floors of multi-storey carparks.

If all goes well, the company estimates that the material could reduce construction waste by up to a third. Currently, 170 tonnes of it are sent daily to the Pulau Semakau landfill.

Recycling concrete is one of several projects being studied to minimise waste pollution by the construction industry, which recycles about 85 per cent of its waste. Still, it is the second largest contributor to the Pulau Semakau landfill.

Other projects include recycling soft marine clay for filling material in tunnels and a new supply-chain process for raw materials used in concrete manufacturing.

Earlier this month, concrete dealer Hong Leong Asia and Japan-based building-materials company Taiheiyo Singapore teamed up with the National University of Singapore to examine how marine clay excavated during construction could be used. About 3 million cubic metres of it is expected to be removed from various road and MRT projects this year. Disposing of this would cost

\$5 per tonne.

Meanwhile, seven companies here, led by concrete supplier RDC Concrete, have streamlined the handling and storage of raw materials used to make concrete.

RDC business development manager Michael Williams said the innovation should cut the amount of land needed to make the substance by about 70 per cent.

Under the system, raw materials are stored in containers at the port and sent to distribution points in or near project sites only when needed.

Now, the raw materials are kept and mixed at 100 plants around the island.

To encourage the industry to be environmentally responsible, the Building Construction Authority made it compulsory last year for top-grade contractors to be ISO 14001 certified by July 2004. Certification requires them to meet a minimum standard in pollution control and waste minimisation.

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**No different** from a normal drain, this one, in Bukit Timah, was made with concrete waste.