This is a regular update on progress with the Millennium Challenge Corporation Vanuatu Project compiled by the Design and Build Contractor – Downer EDI Works Vanuatu Ltd on behalf of the Project Team.

# MCA Update #13: Efate Ring Road & Santo East Coast Road

## Highlights:

This week we again focused on constructing pavement - although a succession of nights with heavy overnight rainfall disrupted our plans somewhat.

## Efate Work Done Last Week

We completed shaping the road to Siviri village and then moved our pavement team to the Malafau straight to continue placement of the basecourse overlay. Culvert construction was ongoing between Saama and Emua villages. We marked out the road Right of Way with blue topped sticks between Saama and Savaki. PWD and villagers are continuing with their fence relocation work between Emua and Savaki. We commenced a maintenance grade of the existing road between Klems Hill and Tanoliu. This included ripping up and relaying the badly potholed sections of old seal as well as dealing with areas that had scoured due to heavy rainfall. Several sections of overgrowing vegetation have been trimmed back between Onesua and Eton.

#### Efate Work Planned for This Week

If weather permits we will continue placing the basecourse overlay and construct the pavement to its final shape along the Malafau straight, then work past Meten Hill towards Emua (in succeeding weeks). Side drains will also be cut to their final shape in this sequence. Culvert construction will continue in the Saama to Emua section and fence relocation will continue between Emua and Savaki. Clearing on the inland side of the road between Lelepa Hill and Tanoliu will recommence in a few weeks. The maintenance grading and vegetation trimming activities will also continue.

#### **Road Corridor**

We have placed sticks with blue tops between Saama and Savaki. These mark a road corridor that is 15 m wide within which we expect to construct the new road. Any vegetation and fences etc located between the row of sticks and the existing road may be affected by the road works. Last year, Land Owners and Leaseholders signed their consent for their properties that can be potentially affected by the road works. They are now kindly advised to check that the situation now is in accordance with the consent that they have given. If there is a difference or any uncertainty they should contact MCA-Vanuatu (phone 26918). Where a fence, tree or another structure is close to the row of sticks we may adjust our design to leave the fence unaffected by the work. Our design is also locally adjusted to avoid conflict with important items close to the road edge such as large rocks or Nabanga trees or avoid significant changes to the expected impact of the work. NB in many places the existing road Right of Way is 20 m wide. Using a road corridor 15 m wide for construction purposes does not reduce the width of the legal road Right of Way - it remains at 20 m.

# **Culvert Outlets**

The large pipes that carry water under the road are called culverts. We are using 750 mm diameter reinforced concrete rubber ring joint (RCRRJ) pipes for the new work. This size has been chosen as it is the smallest size that can be safely cleaned out by hand. The original road had pipes made from 44 gallon (or 200 litre) drums that were just under 600 mm diameter. If our design calculations show that storm flows will exceed the capacity of one pipe then two (double barrel) or three (triple barrel) rows of pipes are laid side by side. Many, many times when we dig the trench to lay a new culvert we find that the old oil drum culvert is still intact but completely buried and blocked with sediment.

To work properly the pipe under the road not only needs to be the correct size and be clear of blockages, it also needs to have a drain on the outlet side so that the water can flow away from the culvert. Establishing the location and excavating the culvert outlet drains is part of our Drainage Sections work.

In areas that are flat or have little slope the outlet drain may need to be over a 100 metres long, in these flat areas water tends to flow over the surface of the ground and pond until it soaks away. Providing an outlet drain also serves to remove this surface water quickly from an area and generally improves the value of the land served by the drain.

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Next update will be provided on Thursday 2 April 2009

