Background to “natural” events happening on and alongside Front Beach Maramaratotara Bay.

Purangi Road is at risk of further slipping damage on the section from Flaxmill Bay, #1047 to # 1071 approx.

Brief History: My parents purchased two sections at Ferry landing in the first sub division in around 1948. The road in was more of a track, single lane with a metal surface. There was a short, very steep section on the hill from Flaxmill Bay (then called Homestead Bay) where my Dad changed down to first gear to get up the steep grade. Sometimes he got us to walk up so we could push if he got stuck!

In the 1950s/60s Council decided to improve the road to two lanes and ease the grade up from Flaxmill Bay in anticipation of future sealing. Significant earthworks were involved in easing the grade on the steep section.

This involved bulldozing earth/soft rock downhill in front of now Eggsentrick Café.

From the crest of the hill along Front Beach to # 1071 the road was widened partly by digging into the hillside and pushing spoil over the bank and onto the beach below. This spoil consisted of “soft” rhyolite rock from the hillside soil and some ground cover, trees etc. Much of this material is still visible and is slowly being eroded by wave wash at high tide at several locations along the beach front. Continuing sea level rise will amplify this.

In essence this is what has in the past, caused some remedial work on and alongside the road. These works are still in place:

* Gabion wire baskets opposite the “Eggcentric Café”. These were placed where the beach sand meets the cliff face to prevent wave wash erosion. It appears that this is still working OK although some repairs to the gabion wire has occurred.
* Cliff face between Flaxmill Bay and Front Beach. A short section of cliff rock face is still being protected by a substantial concrete wall which has been in place for many years and is a credit to those who built it. The cliff face along here will continue to be eroded naturally. The large rocks at beach level are ample evidence of past events.
* Pedestrian Footpath – was built several years later, and, due to site restrictions, involved several timber pathway bridges to be installed. These are still in place and working. (Presumably these are routinely inspected?)

The Beach is changing also. The sand profile is changing as particle size becomes smaller and wave wash affects the beach profile.

The pedestrian pathway along the full length is an essential safety asset that is also affected by these events. As the storm wave wash run up erodes the base of the “cliff” face the loose “cliff” will collapse and stability of the pathway, and possibly the road, will be threatened.

There needs to be a contingency plan for the remedial works needed.

The footpath boardwalks in particular need to be inspected and maintained regularly. Some sections are basically bridges with long piled timber pile foundations. These “bridges” should be marked or fenced off to prevent vehicles from traversing them in part as a safety issue.

What to do....

1 The country up hill of the slip site, (All Council land) including the Mararmaratotara track (recently upgraded) appears to be an historical large land slip. This a threat to the road and should not be undermined.

2 Reinstatement and protection of the two road lanes and the footpath will be a costly work with no guarantees. Hence I suggest that this section of road be single lane only. This will also act as a "Traffic Calming" measure which will improve road safety for all users. Traffic volume is not high as most users are travelling to and from the ferry. Speed "humps" each side could also be introduced if warrented. It will also minimise the ongoing cost of road and reinstatement.

Erosion protection along the beach "cliff" below will need to be provided as sea level rises. The soft "rhyolite"cliff face is subject to wave attack, (similar to Shakespear Cliff where cliff falls occur.)

Bob Nicholls

Ferry Landing