

Amendments and Additions to Part 3 of Submission #360
(Manawatū River: Source to Sea)

re

Te Ahu A Tūranga Manawatū Tararua Highway.

Part 1: **Biodiversity**

Part 2: **Cycling and Walking**

Part 3: **UNESCO Global Geopark: Retention and Enhancement of Significant Geological Features.**

UNESCO Global Geoparks:

- Raise awareness of the importance of the area's geological heritage in history and society today.
- Give local people a sense of pride in their region and strengthen their identification with the area.
- Generate new sources of revenue through sustainable geo-tourism.
- Protect geological resources of the area.

The Te Ahu A Tūranga Manawatū Tararua Highway proposed for the Manawatū Gorge will essentially cut through 2 million years of geological history. Road construction has the opportunity to uncover significant geological features (geo-sites) which could be important in a UNESCO Global Geopark.

We ask that, during induction courses, machine drivers and operators, staff and site workers be informed of this possibility and specifically of a need for a 'geo-vision' during road construction. We ask that a formal process be established so that NZTA geologists and staff are informed quickly of discoveries.

This increased awareness would be similar in nature to that already in practice for cultural discoveries - the unexpected uncovering of old cultural sites during construction activities. However, cultural discoveries usually are found in the top 2 metres, whereas geological discoveries may be in deep cuttings and hard rock as well as in upper layers.

Discoveries may be serendipitous. Fossils and fossil sites may become evident only after completion of earth moving operations and following inspection. We ask that

machine operators, staff and site workers be informed that fossil discoveries should be left *in situ* if at all possible so they may be preserved for public viewing.

Deep cuttings should not be vegetated but retained in a state to reveal sedimentary successions and profiles wherever possible. In response to our submission #360, NZTA have stated in Submission 26 (Updated Preliminary Cultural and Environmental Design Framework 3.3, page 18,) “where the ground is stable, the cut face should be steep and left as rock, exposing any geological features”. We agree with this process.

One of the stated aims of the NZTA (Submission # 27, page 11) for the new road is “creating memorable experiences for users views of landscape features provision of lookout points and safe stopping places”. The inclusion of lookouts and stopping places is in accord with a request in our original submission.

However, there appears to be ambiguity about provision of lookouts. This requires clarity and confirmation. In NZTA Submission #26, lookouts are designated as *potential* lookouts (Updated Preliminary Cultural and Environmental Design Framework 2.4: Project Constraints and Opportunities, page 13). Does this mean that lookouts are optional rather than guaranteed - or does the word *potential* refer to their location? We ask for more information on this.

How many lookouts will there be? Will they be established during the construction phase? Lookouts are the essential features for tourist/visitor experiences. Lookouts are key destination points, locations for signage and information boards and for digital linkages explaining geological vista and other features. They can be departure points for trails such as those to geo-sites.

On page 13, Updated Preliminary Cultural and Environmental Design Framework 2.4 in NZTA Submission #26, a potential lookout site on the Western Rise is marked as an observation site for the confluence of the Pohangina River.

We ask that this site also include good sight lines to the north-west – it may be possible to move this lookout site to the north to accomplish this depending upon the local topography. The north-west vista is a striking view over the Pohangina river terraces and the Pohangina anticline with Mount Ruapehu in the background. The river terraces and anticline are important geological features worthy of inclusion in the proposed UNESCO Geopark.

We ask that *Manawatū River: Source to Sea* be allowed to have input into the detailed locations of lookouts in the development of the final Design Framework in order to maximise opportunities for the Geopark.

1 April 2019