

ATTACHMENT B

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14 March 2016

Dear Werner,

RE: Trail 12 Alternate Alignment Inspection – DA 6751 Stage 1B MTB - Thredbo Alpine Resort

As requested I have completed an inspection of the proposed alternate alignment of Trail 12, as flagged by DirtArt and identified in **Figure 1**. The inspection was undertaken on 8 March 2016 over a period of approximately four hours. The results of the inspection are presented below.

Vegetation communities

The impacts on vegetation communities are very similar to the approved trail alignment. The proposed trail alignment primarily traverses the Tall Alpine Heath without Eucalypts vegetation community, as shown in Photo 1. The Tall Alpine Heath without Eucalypts vegetation community is extensive in the area. Where the alignment traverses Merritts Creek there are narrow bands of Alpine Stream Complex, however the impact on this community will be negligible given that two bridges are proposed to span the creek. As with the approved trail, there is a small area of Snowpatch towards the lower end of the alignment as shown in **Photo 2**. The vegetation is highly disturbed and primarily exotic where the alignment is within the batter to the Summer Road, as shown in **Photo 3**.

The alignment does not impact on any Upland Bog, although there are small areas of Upland Bog near the alignment in two locations, as shown in **Figure 1**. There are a couple of plants of *Richea continentis* where the alignment is in the batter to the Summer Road adjacent to the Snow Gums restaurant, as shown in **Photo 4**. These plants are not considered to be of any conservation significance given that the vegetation within the proposed alignment is highly disturbed in that area. The Summer Road traverses the toe of a patch of Upland Bog in this area, as shown in **Photo 5**, and the parts above the road remain in good condition. The Upland Bog does not extend significantly below the Summer Road and the *Richea continentis* plants below the road are restricted to the edge of the road batter. The proposed alignment, whilst it will result in the removal of a couple of *Richea continentis* plants, will have less impacts on vegetation and fauna habitats than any alternative through this area.

Whilst there are two small areas of Podocarp Heath immediately adjacent to the alignment, as shown in **Figure 1** and **Photo 6**, recommended minor modifications to the alignment will ensure that the alignment will not impact directly upon this community.

Threatened flora

No threatened flora species were detected along the proposed alignment and it is considered unlikely that any would occur there. A few individuals of *Podocarpus lawrencei* occur along the alignment, however the species is much more common in the Podocarp Heath which occurs immediately adjacent to the alignment in two locations and in other areas nearby. As such, the impacts on *Podocarpus lawrencei* will be very minor.

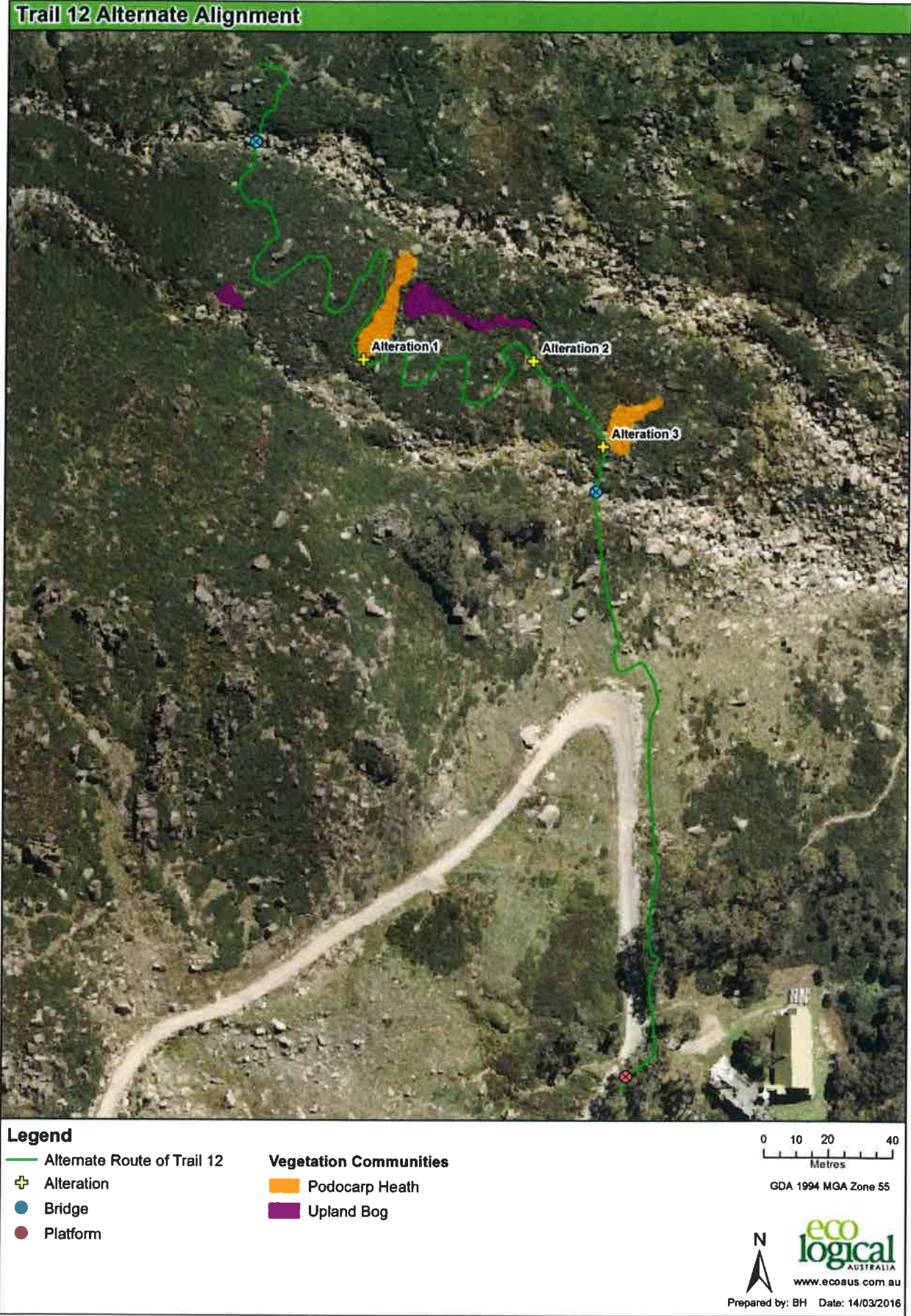


Figure 1: Trail 12 alternate alignment.



Photo 1: The proposed alignment is almost entirely within Alpine Heath without Eucalypts.



Photo 2: The proposed alignment traverses a small area of Snowpatch near the Summer Road.



Photo 3: The lower parts of the proposed alignment traverse primarily exotic vegetation.



Photo 4: The proposed alignment will affect a few plants of *Richea continentis* growing on the batter to the Summer Road.

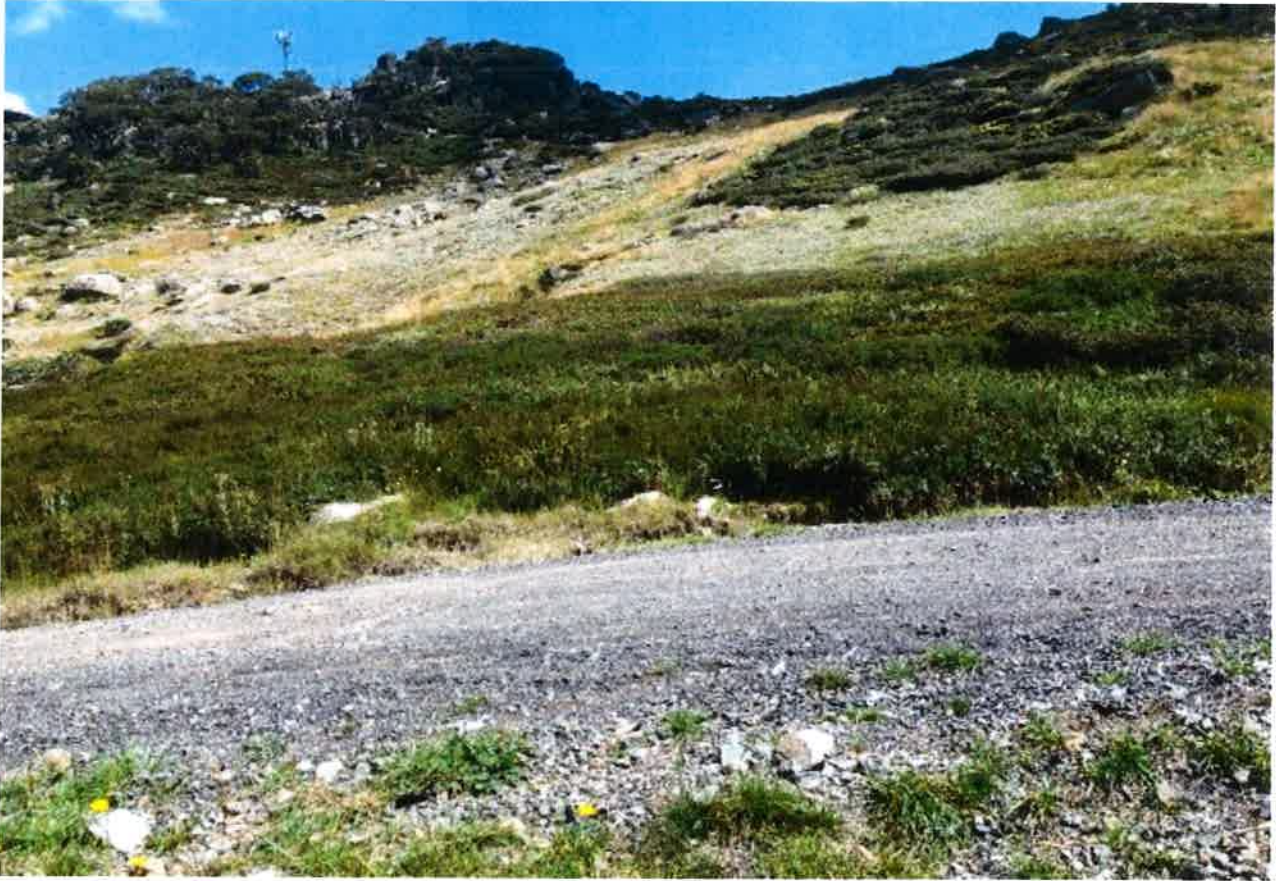


Photo 5: The Upland Bog above the Summer Road remains in excellent condition.



Photo 6: The proposed alignment will avoid direct impacts to the small patches of Podocarp Heath which occur in two locations adjacent to the alignment.

Fauna habitats

The fauna habitats within the alignment are very similar to the approved route, primarily comprising alpine heath with scattered rock outcrops, and a small areas of Snowpatch, Podocarp Heath and Alpine Stream Complex.

There was only minor evidence of Broad-toothed Rat scattered in places throughout the alignment. As such, potential impacts on the species are minor and similar to those associated with the approved alignment.

Habitats for the Guthega Skink appear marginal, and no evidence of the species, such as animals or obvious burrow entrances, was observed during the inspection. Given that the species was not detected in similar habitats nearby despite extensive targeted surveys for the flora and fauna assessment (ELA 2014), it is considered unlikely that it occurs along the proposed alignment. There is only a very small area of potential habitat for the Alpine She-oak Skink, in association with the Snowpatch in the lower parts of the proposed alignment, so adverse impacts on the species are unlikely.

The patches of Podocarp Heath along the alignment provide a small area of potential foraging and summer sheltering habitat for the Mountain Pygmy-possum. However, there are no known core habitats for the species in the Thredbo Resort area, with the nearest records of the species being more than 1.5 km away in the Ramshead area. As such, it is considered unlikely that the species would be adversely affected by the proposed alignment.

Recommended alterations

Notwithstanding the conclusions with respect to the impacts of the proposed alignment on vegetation communities and fauna habitats, three alternations to the proposed alignment are recommended as discussed below:

- It is recommended that the alignment be modified slightly so that the alignment does not affect the areas of Podocarp Heath, as shown in **Photo 7** and **Photo 8** and **Figure 1** (Alterations 1 and 3).
- It is recommended that the alignment be modified slightly so that the alignment does is further from a minor watercourse, as shown in **Photo 9** and **Figure 1** (Alteration 2).

Conclusion

I confirm that after inspecting the proposed alternate alignment of Trail 12 I believe that the proposed alignment is preferable to the approved alignment, primarily as it has a lower average grade, and thus there is less potential for erosion and sedimentation issues. Given the lower grade it is also likely to result in a lower average width of disturbance. As such, the batters and cuttings will be smaller, with less over all disturbance to vegetation and fauna habitats.

Should you require any further information please contact me on 4476 1151 or 0422 802 447.

Yours sincerely,



Ryan Smithers
Senior Ecologist



Photo 7: It is recommended that the alignment be modified slightly, along the lines of what is indicated by the red line, to further buffer the Podocarp Heath from the trail alignment (as indicated by the pink line).



Photo 8: It is recommended that the alignment be modified slightly, along the lines of what is indicated by the red line, to further buffer the Podocarp Heath from the trail alignment (as indicated by the pink line).



Photo 9: It is recommended that the alignment be modified slightly, along the lines of what is indicated by the red line, to further buffer the minor watercourse (blue line) from the trail alignment (as indicated by the pink line).

References

Eco Logical Australia 2014. *Flora and Fauna Assessment - Proposed Mountain Bike Trails – Stage 1B - Thredbo Alpine Resort*. Prepared for Kosciuszko Thredbo Pty Ltd.