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## PE.1 ATTACHMENT 5

Project No. 467

3 September 2020

### **Final Letter Report: Vegetation Impact Assessment – Mount Gisborne Reserve, Woodlands Drive, Gisborne.**

#### *1. Proposal and Background*

A replacement telecommunications tower is proposed near the summit of Mount Gisborne within the council-owned Mount Gisborne Reserve in Gisborne. The previous telecommunications tower that existed at the site failed at the base in July 2019 and fell to the ground during a significant storm event. This tower provided key communications services for Western Water, the Country Fire Authority (CFA) and other local businesses. The loss of the 30 year-old telecommunications tower has resulted in reduced levels of communications from the site, despite the installation of temporary towers. A replacement tower is required to maintain adequate communications and emergency responses.

Atlas Ecology have been engaged by Western Water to assess the vegetation impacts associated with the installation of the replacement telecommunications tower, and to provide mitigation and management measures to address any impacts. This letter report will be provided to Macedon Ranges Shire Council in response to their request for further information.

Mount Gisborne Reserve is currently managed by Macedon Ranges Shire Council under an Environmental Management Plan prepared for the Reserve – *Environmental Management Plan – Mount Gisborne Reserve, Gisborne* (Atlas Ecology 2013). An additional management plan which specifically addresses access to telecommunications infrastructure has previously been prepared for Western Water – *Management Plan – Access to Infrastructure at Mount Gisborne Reserve, Gisborne* (Atlas Ecology 2018). The local community group Friends of Mount Gisborne Reserve assist in implementing the actions specified within the management plans.

A site meeting and assessment was conducted at the site on the 22<sup>nd</sup> of July 2020 to discuss the project, possible impacts and mitigation measures.

#### *2. Addressing 'Avoid, minimise, offset' three-step approach (as per The Guidelines for the removal, destruction or lopping of native vegetation [DELWP 2017])*

Avoidance of the Mount Gisborne summit altogether was investigated when siting the replacement telecommunications tower. A separate property adjacent was previously flagged as a potential site for the tower during the preparation of the *Access to*

*Infrastructure* management plan. Seeking an alternative site nearby was mentioned in the management plan as a long-term management aim.

This alternative was investigated during the planning phase of this project and was deemed unfeasible. To replicate the functionality of the tower in a different geographic location would be difficult, time consuming and there would be reduced effectiveness and coverage, and an increased risk of critical failure to water supply and firefighting (Western Water pers.comm. and planning report prepared by Calibre Professional Services Pty. Ltd. 2020).

The existing location was therefore considered the best option for the replacement tower, as existing infrastructure and cable routes can be used in the exact same location.

Minimisation of impacts to native vegetation will be employed through re-use of existing conduit and cabling, buildings on the neighbouring property boundary and tower foundation and bolts. The mitigation and management measures outlined below will also demonstrate further minimisation of native vegetation impacts.

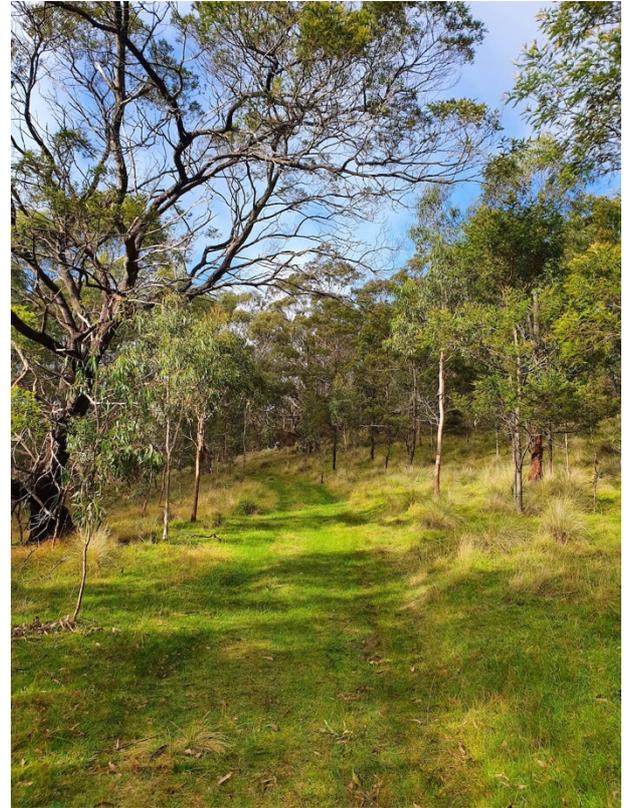
### 3. *Likely impacts to native vegetation*

There are three key areas during the implementation of this project where there are likely to be some impacts to native vegetation. The first area is along the access track leading from Woodlands Drive to the telecommunications tower site near the summit. Two types of telescopic crane will be employed to carry out the required works. The first is a 'Self-propelled telescopic boom' (see Plate 1, below left). The length of this vehicle is 12.17 metres with the boom lowered and jib tucked under, the width is 2.49 metres when in transit with the axles retracted, and the height when in transit is 3.1 metres. The second crane is an 18 tonne crane (see Plate 1, below right) where the length of the vehicle is 9.7 metres, the width is 2.5 metres and the height in transit is 3.1 metres. Both vehicles were selected based on their compact nature as well their ability to carry out the works on this type of terrain (Western Water, pers.comm.).



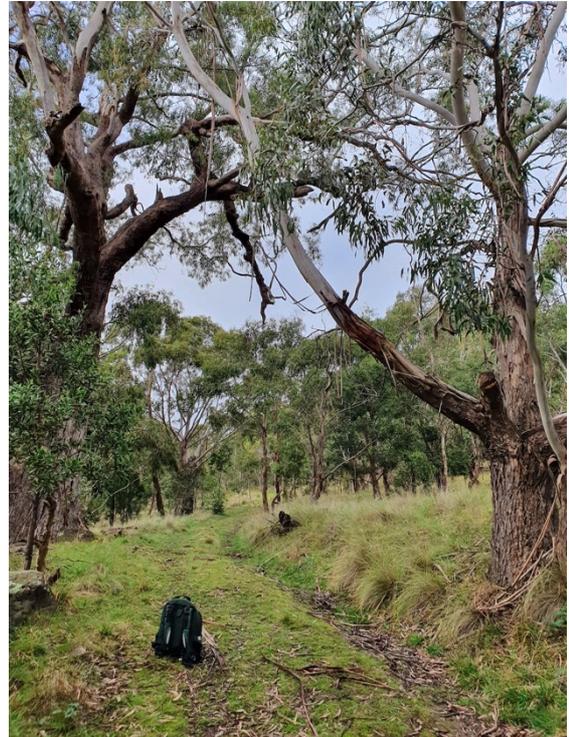
**Plate 1.** The two types of crane proposed to be used for the project

The access road leading up to the summit is approximately 2.5 metres wide. Both vehicles are 2.5 metres wide therefore there will be some impacts to native vegetation along the edges of the access road. These impacts include mainly temporary compaction of native grasses and herbs such as Tussock-grasses *Poa*, the loss of tree limbs (particularly Blackwoods *Acacia melanoxylon*) and some minor lopping of eucalyptus limbs (see Plate 2). Austral Bracken *Pteridium esculentum* will also be impacted. Several mitigation and management strategies can be employed on-site to minimise these impacts (see mitigation measures below).



**Plate 2.** Left- indigenous Tussock-grasses near the summit; right- regenerating eucalypts, wattles and grasses lower down the mountain

One area in particular at the base of the mountain approximately 30 metres from the entrance gate will require more intensive supervision and management. A low eucalypt limb here partially crosses over the access road. The limb crosses over the centre of the access road at a height of 4 metres, which is well clear of the height of the cranes; however the limb is 2.5 metres above the edge of the access road (see Plate 3). As the cranes' widths narrow higher up where their booms are stowed, it's been deemed that this limb can be cleared with micro-siting and careful management on the days of crane entry into the reserve (see mitigation measures below).



**Plate 3.** Left- eucalypt limb crossing over above access road, looking towards entrance gate; right- the same tree looking up towards summit

The second area of impact is the access track itself. The cranes weigh between 18-20 tonnes therefore there is likely to be impacts to the track, such as soil compaction, soil disturbance, vegetation compaction and damage and changes to water run-off patterns (see Plate 4).



**Plate 4.** A tight hairpin turn near the summit is likely to impact soil, vegetation on the track and native vegetation adjacent

The third area of impact is the area near the summit surrounding the existing tower infrastructure. Native vegetation here will be temporarily impacted by equipment and machinery that need to use this area to install the tower. A turning circle of at least 8 metres is required at this site to allow for the movement of machinery. Tussock-grasses and some native herbs will be the main species impacted in this area (see Plate 5).



**Plate 5.** Left- View of existing infrastructure and cable route from tower site; right- marked out tower site on right with access track on the left. Proposed turning circle in foreground

### 3. *Proposed mitigation measures*

The following mitigation and management measures will assist to minimise impacts to native vegetation before, during and post any permitted works:

- All equipment and machinery must be made free of soil, seed and plant material before being taken to the works site and again before being removed from the works site. This is to help prevent the spread of noxious weeds listed under the *Catchment and Land Protection Act 1994*.
- All personnel involved with the transportation and work of the cranes, and the installation of the tower itself, must be made aware of the values of the site prior to entering. Strict no-go zones and adherence to established work procedures must be enforced.
- The 18 tonne crane used to transport equipment and materials to the summit will ascend and descend the mountain twice, as the monopole (part of the new tower) is in two pieces. The telescopic boom crane will ascend and descend only once to carry out the tower installation. Only the minimum number of trips to carry out the works required will be undertaken.
- It is recommended that a spotter and representative from Council be present when the cranes are ascending and descending the access track. Careful navigation of

the cranes will assist in reducing damage to soils and adjacent native vegetation. With instruction from a nearby spotter, the cranes can avoid some tree lopping and native grass compaction.

- Planks of wood or similar are recommended to be used on the ground during the ascent and descent, to assist with traction where required. This may assist to minimise soil disturbance.
- Any compaction or damage to native vegetation should be rectified immediately after the works have been completed. This will involve some manual work and perhaps some shovel and rake work on the access track.
- Any damaged areas, such as the edges of the access track or turning circle, are to be re-assessed after any permitted works to address possible rehabilitation measures. These may include: cordoning off more damaged areas to avoid further disturbance from people and vehicles and to allow natural recovery, manual work within specific areas where damage has occurred (such as stabilisation of plant roots by hand, movement of soil to original location etc.), and possible re-seeding of indigenous species such as grasses where damage has occurred and where natural recovery and establishment may not be successful. These measures should be established post works through a site assessment with council or an ecologist.
- Materials and equipment storage must only be located within cordoned off areas near the tower location. To the south of the tower location there is an area more cleared of native vegetation (*Poa*) which is the best location for materials and equipment storage (Plate 6). This area should be used as much as practicable. The works area and turning circle should ideally also be delineated near the summit in order to provide a clear boundary as to where machinery and equipment can go. Temporary fencing such as orange para-webbing is recommended.



**Plate 6.** A more cleared area occurs to the south of the tower location where materials and equipment can be stored (however some *Poa* will be impacted).

- Any damage or disturbance to trees' roots must be reported to Council. Damaged tree root zones may deem the tree unviable.

#### 4. *Legislative implications*

- A permit to impact native vegetation (which in most cases is likely to be a temporary impact) under Clause 52.17 of the planning scheme may not be required for this project. As the proposal is for the installation of a telecommunications tower to assist with water utility, it may be exempt from requiring a permit under the 'Utility installation' or 'Lopping and pruning for maintenance' exemption under Clause 52.17. The possible use of this exemption needs to be clarified with Macedon Ranges Shire Council. If a permit is deemed to be required, a Biodiversity Assessment Report which addresses Clause 52.17 requirements, will need to be provided to Council. The existing permit application needs to be amended to also include approval to impact native vegetation.
- A permit to impact native vegetation will be required under the Significant Landscape Overlay (SLO2) which covers the site.



Should you require further clarification or additional assistance with this project, please do not hesitate in contacting me on 0422 001 945.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Bianca".

Bianca Aquilina  
Principal Botanist  
Atlas Ecology Pty Ltd