



26 February 2016

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Department of Planning and Environment
PO Box 36
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Attn: Daniel,

**RE: MOD 7531 Mod 2 (DA 6869)
Statements of Environmental Effects (SEE)**

1. Description of the proposed development and the construction activities to be undertaken during the project,

Proposed development:

The development is to see the installation of fibre optical cable and associated infrastructure from a new Optus mobile phone tower located at the "Cat shed" at Thredbo to a telecommunications pit located on Friday drive. The distance of the build is 541 m.

The original route design (D.A. approved) saw the cable connecting to a Telstra pit, approximately 100m away from the Cat shed. However, ground truthing has revealed that the Telstra line does not contain conduit. The Telstra network had been "ploughed" directly in, meaning there is no capacity to add or haul the Optus cable through conduit.

This SEE addresses the issues associated with the revised route.

The start of the fibre route will be at the new Optus phone tower site, opposite the cat shed. The route is to then follow the Snowgum chair lift clearing, downhill, around the back of the chair lift terminal, around a disused tennis court and under the Thredbo river, coming up in a recreational park, where the nearest Telstra pit is located - see attached project design map and photos. The route length is 541m.

In order to comply with the original development consent, the construction methodology to be utilised, will be underboring. The route is entirely in an area cleared of all vegetation. No trees/shrubs will need to be removed. Underboring will install the conduit.

Further to comply with Kosciuszko Thredbo Pty Ltd conditions, the underbore is to be 1.6m deep.

A total of seven telco pits will need to be installed to permit hauling of cable and future access:

5 x P4 pits; size dimensions: 750mm long x 300mm wide x 700mm deep (smallest pits available)
1 x P5 pit: size dimension: 750mm long x 500mm wide x 700mm deep
1 A10 pit: size dimension: 2100mm long x 650 mm wide x 800mm deep.

Once the infrastructure (conduit) is installed, the cable can be hauled through. Optus marker posts can be installed (to indicate the presence of the cable) at the direction of Thredbo Pty management.

Works should take no longer than three weeks to complete.

2. Discussion of the environmental impacts of the development:

Impact to vegetation: All works are only to be undertaken in cleared ski field areas, commercial ancillary areas and a public park. No trees or shrubs will be impacted or removed.

Waste water: Underboring requires fluid (bentonite – inert water based fluid) to be applied to the bore head for cooling. A sucker truck will be on site at all times to collect the waste water. Waste water will be trucked out of the park and disposed of appropriately. Waste water receipts will be made available if requested.

Waste material: Crushed stone waste material will be disposed of at Thredbo's waste site – as discussed with Werner Siegenthaler.

Site remediation: Up to seven bore holes will be required, for the under boring. A one cubic metre square hole will be dug at the start and then at every alignment/route turn. Generally boring can only be done in straight lines. In the bore holes, telco pits will be placed back into the holes and dirt to be backfilled around them. The pit will be installed at ground level.

Noise: Works are anticipated to be noisy. This will be due to the fact that if the underbore machine is boring through granite rock – the bore machine will need to rev at a higher capacity.

3. How the environmental impacts of the development have been identified:

The route was chosen on the basis of being the most direct and minimizing the site environmental impacts. Optus's environmental planner was a part of the route planning / assessment.

Optus also employs environmental specialists to monitor works – in areas identified to be of high environmental value, such as in this case. The environmental planner will vet an Environmental Management Plan, prior to works proceeding to ensure site suitability.

The works will be subject to an environmental audit.

4. The steps to be taken to protect the environment or to lessen the expected harm to the environment:

Impact to vegetation: All works are only to be undertaken in cleared ski field areas, ancillary commercial areas and a public park. No trees or shrubs will be impacted or removed.

Waste water: Waste water will be trucked out of the park and disposed of appropriately. Waste water receipts will be made available if requested.

Waste material: Crushed stone waste material will be disposed of at Thredbo's waste site – as discussed with Werner Siegenthaler.

Site remediation: Bore holes (1m³) will have telco pits placed back into the holes and dirt to be backfilled around them. The pit will be installed at ground level and the sites to be leveled off.

Noise: Works to be limited to standard business hours:

Monday to Friday: 7am – 6pm

Saturday: 8am to 1pm

No works on public holidays

Most of the boring works are generally at a substantial distance from residential or commercial premises. For the last drill shot, the boring machine will be located on the ski slope side of the Thredbo river, 120m+ away from residential or commercial premises

5. The suitability of the site for the development:

All works are only to be undertaken in cleared ski field areas, ancillary commercial areas and a public park. No trees or shrubs will be impacted or removed. The route has been chosen for least impact to the environment and commercial operations.

6. That the proposed modification is of minimal environmental impact, that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted:

This planning modification does not alter the need to provide an optical cable connection to a new mobile phone tower.

The original consent also included an optical fibre connection from the new tower to a network (Telstra). However, the original cable route was never proven and there is no conduit available to make a cable connection to the new tower, back to the Optus network.

Optus is still able to meet the requirement to minimise the impacts on the environment by underboring and installing mostly the smallest pits available.

Note that all works are in areas where the land has been previously cleared for the purpose of providing ski runs, skiing infrastructure and recreational use.

7. How the development achieves the aims and objective (clause 2) contained in State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007 (Alpine SEPP):

2 Aim and objectives of Policy

(1) The aim of this Policy is to protect and enhance the natural environment of the alpine resorts, in the context of Kosciuszko National Park, by ensuring that development in those resorts is managed in a way that has regard to the principles of ecologically sustainable development (including the conservation and restoration of ecological processes, natural systems and biodiversity).

The project route is contained within areas cleared for the purpose of skiing and recreational use. No vegetation is to be removed for these works.

(2) The objectives of this Policy are as follows:

(a) to encourage the carrying out of a range of development in the alpine resorts (including the provision of services, facilities and infrastructure, and economic and recreational activities) that do not result in adverse environmental, social or economic impacts on the natural or cultural environment of land to which this Policy applies,

The development is to improve telecommunications at Thredbo. The development will improve economic development at Thredbo by offering high quality telecommunications, including data, with very little impact to the environment.

(b) to put in place planning controls that contribute to and facilitate the carrying out of ski resort development in Kosciuszko National Park that is ecologically sustainable in recognition of the fact that this development is of State and regional significance,

The project route is contained within areas cleared for the purpose of skiing and recreational use. No vegetation is to be removed for these works. The improved communications will enhance recreational, commercial and residential amenity.

(c) to minimise the risk to the community of exposure to environmental hazards, particularly geotechnical hazards, bush fire and flooding, by generally requiring development consent on land to which this Policy applies.

The bore will be 53mm in diameter at 1.6m below ground level. The below ground level infrastructure will not be subject to bushfire. The network is not affected by water/flooding, as all components are water proof.

8. How the development addresses the additional matters (clause 14) of the Alpine SEPP, and a brief discussion in relation to soil, water and wastewater management:

14 Matters to be considered by consent authority

(1) In determining a development application that relates to land to which this Policy applies, the consent authority must take into consideration any of the following matters that are of relevance to the proposed development:

(b) the extent to which the development will achieve an appropriate balance between the conservation of the natural environment and any measures to mitigate environmental hazards (including geotechnical hazards, bush fires and flooding),

All works are only to be undertaken in cleared ski field areas, ancillary commercial areas and a public park. No trees or shrubs will be impacted or removed. The bore will be 53mm in diameter at 1.6m below ground level. The below ground level infrastructure will not be subject to bushfire. The network is not affected by water/flooding, as all components are water proof.

(c) having regard to the nature and scale of the development proposed, the impacts of the development (including the cumulative impacts of development) on the following:

This is linear infrastructure development. The bore hole will be 53mm in diameter for 541m long. Eight telco pits are to be installed, mostly of the smallest size. There will be no cumulative impacts. The network will be 1.6m under the ground.

(i) the capacity of existing transport to cater for peak days and the suitability of access to the alpine resorts to accommodate the development,

The development will have no effects on resort accommodation.

(ii) the capacity of the reticulated effluent management system of the land to which this Policy applies to cater for peak loads generated by the development,

No impacts

(iii) the capacity of existing waste disposal facilities or transfer facilities to cater for peak loads generated by the development,

Not applicable. Optus to truck offsite the construction waste water.

(iv) the capacity of any existing water supply to cater for peak loads generated by the development,

Not applicable

(d) any statement of environmental effects required to accompany the development application for the development,

Note : This Policy applies to land that is in the

"ski resort area" described in clause 32A of Schedule 6 to the Act and certain other land. Regulations made under the Act set out requirements relating to the preparation of the statement of environmental effects required to accompany a development application, including specific requirements for a statement of environmental effects relating to the ski resort area if the proposed development is advertised development.

See above.

(e) if the consent authority is of the opinion that the development would significantly alter the character of the alpine resort-an analysis of the existing character of the site and immediate surroundings to assist in understanding how the development will relate to the alpine resort,

The consent authority has not advised this.

(f) the Geotechnical Policy-Kosciuszko Alpine Resorts (2003, Department of Infrastructure, Planning and Natural Resources) and any measures proposed to address any geotechnical issues arising in relation to the development,

The bore will be 53mm in diameter at 1.6m below ground level. Seven bore holes will be dug at 1m³, none of which are expected to create geological issues.

(g) if earthworks or excavation works are proposed-any sedimentation and erosion control measures proposed to mitigate any adverse impacts associated with those works,

Seven bore holes will be dug at 1m³. Telco pits will be placed back into the bore holes and dirt will be placed around the pit. The boreholes will not be left open overnight. At this scale it is not anticipated there will be "adverse impacts".

(h) if stormwater drainage works are proposed-any measures proposed to mitigate any adverse impacts associated with those works,

Not applicable

(i) any visual impact of the proposed development, particularly when viewed from the Main Range,

Not applicable. Infrastructure to be underground.

(j) the extent to which the development may be connected with a significant increase in activities, outside of the ski season, in the alpine resort in which the development is proposed to be carried out,

Not applicable.

(k) if the development involves the installation of ski lifting facilities and a development control plan does not apply to the alpine resort:

(i) the capacity of existing infrastructure facilities, and

(ii) any adverse impact of the development on access to, from or in the alpine resort,

(l) if the development is proposed to be carried out in Perisher Range Alpine Resort:

(i) the document entitled Perisher Range Resorts Master Plan , as current at the commencement of this Policy, that is deposited in the head office of the Department, and

(ii) the document entitled Perisher Blue Ski Resort Ski Slope Master Plan , as current at the commencement of this Policy, that is deposited in the head office of the Department,

(m) if the development is proposed to be carried out on land in a riparian corridor:

(i) the long term management goals for riparian land, and

(ii) whether measures should be adopted in the carrying out of the development to assist in meeting those goals.

Not applicable.

(2) The "long term management goals" for riparian land are as follows:

(a) to maximise the protection of terrestrial and aquatic habitats of native flora and native fauna and ensure the provision of linkages, where possible, between such habitats on that land,

The underbore will be 2m under the river. See river cross sectional drawing.

The bore shot will be more than 75m from the river's edge and surface next to an existing pit in a recreational park. The bore is only 63mm in diameter.

(b) to ensure that the integrity of areas of conservation value and terrestrial and aquatic habitats of native flora and native fauna is maintained,

There will be no impact due to the construction methodology – underboring.

(c) to minimise soil erosion and enhance the stability of the banks of watercourses where the banks have been degraded, the watercourses have been channelised, pipes have been laid and the like has occurred.

There will be no impact due to the construction methodology – underboring.

(3) A reference in this clause to land in a riparian corridor is a reference to land identified as being in such a corridor on a map referred to in clause 5.

There will be no impact due to the construction methodology – underboring.

The underbore will be 2m under the river. See river cross sectional drawing.

The bore shot will be more than 75m from the river's edge and surface next to an existing pit in a recreational park. The bore is only 63mm in diameter.