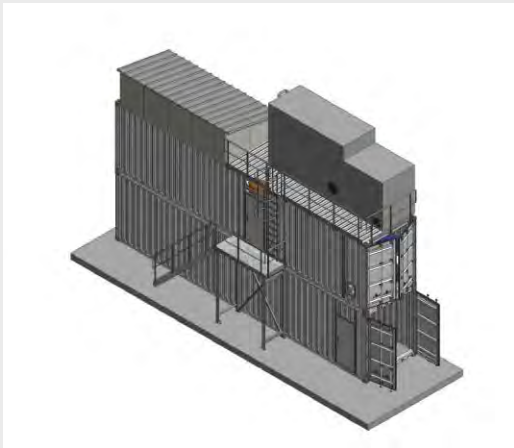


# STATEMENT OF ENVIRONMENTAL EFFECTS

## INSTALLATION OF A SNOWFACTORY & ASSOCIATED WORKS SMIGGIN HOLES, PERISHER SKI RESORT KOSCIUSZKO NATIONAL PARK



Prepared for:  
Perisher Blue Pty Ltd



JULY 2017  
Project: 28-17

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This report has been prepared by:

A handwritten signature in black ink, appearing to read 'I. Pasalich', is positioned above a horizontal line.

Ivan Pasalich

**Principal**

Dabyne Planning Pty Ltd

**JULY 2017**

**Project: 28-17**

**Dabyne Planning Pty Ltd**

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# 1. INTRODUCTION

## 1.1 Executive Summary

Dabyne Planning Pty Ltd has been engaged by Perisher Blue Pty Ltd (Perisher Blue), the operator of the Perisher Ski Resort to prepare a Statement of Environmental Effects (SEE) to accompany a Development Application (DA) to the NSW Department of Planning and Environment (DPE).

The proposal is for installation of a 'Snowfactory', a snow machine manufactured by TechnoAlpin that can produce snow at any temperature below 25C. This is a complimentary form of snowmaking to operate both independently and in conjunction with the approved Stage 1 and Stage 2 Smiggin Holes snowmaking infrastructure.

TechnoAlpin describes the Snowfactory as a *'production of snow by means of an innovative cooling technology. An efficient heat exchanger cools the water to its freezing point without using any chemical additives. The refrigeration circuit remains closed in the process, enabling the production of snow in any outdoor temperature.'*

The Snowfactory is housed within a portable structure comprising of two x 40ft shipping containers with ancillary plant on top and external staircase, to be erected on a retained and reinforced concrete slab.

The proposed Snowfactory and slab will be located to the skier's left (north-eastern) side of the Kaaten Triple Chairlift top station within Smiggin Holes. This area is highly disturbed and will require minimal impact on native vegetation.

The installation of the Snowfactory requires ancillary works including modifications to the Kaaten Triple Chair top station lift hut and platform and installation of an 11kv pad mount transformer.

The Snowfactory will rely on the approved trenching and services within the Stage 1 Smiggin Holes snowmaking infrastructure for water and power (DA 6918), utilising the water licence already in place and will operate independently to the approved pump station and water tank required for the Stage 1 snowmaking infrastructure.

The installation of a Snowfactory allows Perisher to make snow effectively at any temperature, providing a base for their key beginner and intermediate ski runs within Smiggins. This provides an improved beginner and intermediate skiing and snowboarding experience for guests, alleviates pressure on the Front Valley and Blue Cow ski areas of the resort, particularly during marginal conditions.

Together with the approved Stage 1 and Stage 2 snowmaking at Smiggins, this allows Perisher to open this part of the resort earlier and later into the season, with less reliance on snowmaking weather.

A detailed description of the proposal is provided in Section 3 of the report.

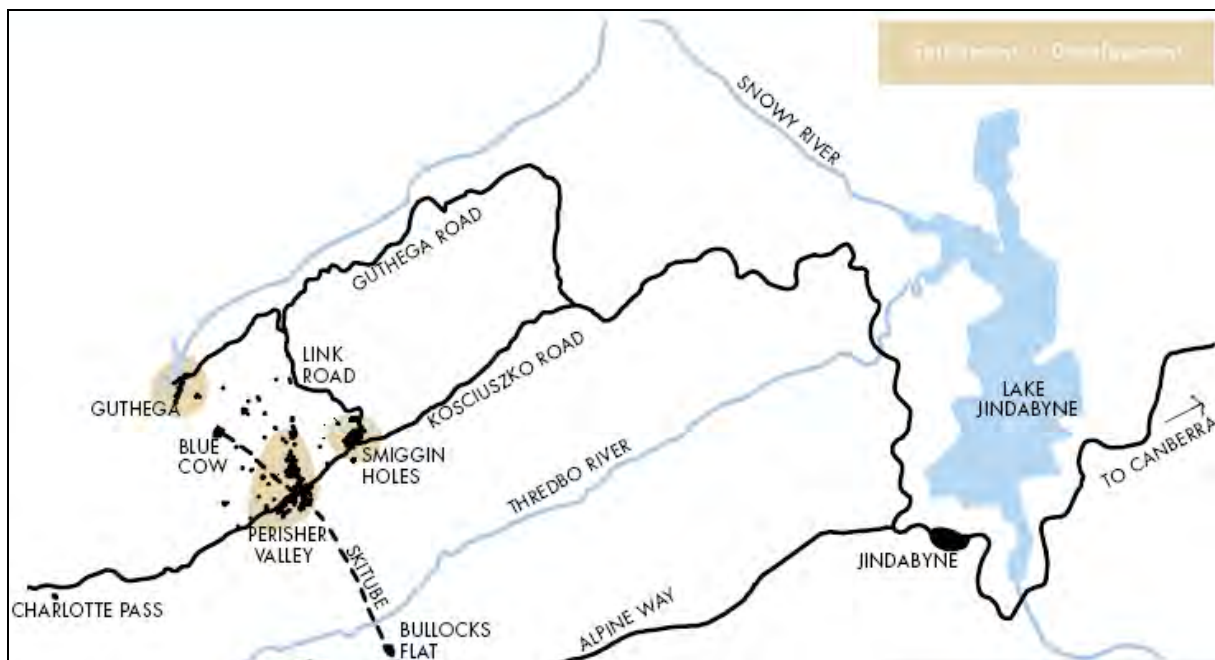
## 2. THE LOCALITY AND THE SITE

### 2.1 The Locality

The proposed installation of the Snowfactory within the Smiggin Holes ski area is located within the Perisher Ski Resort.

Perisher Ski Resort is located within the Perisher Range Resorts, approximately 35kms from Jindabyne. Access to the resort is via Kosciuszko Road.

The location of the resort is illustrated in context with the regional locality below:



*Figure 1: Location of Smiggin Holes in context with the Region  
(source: Perisher Range Resorts Master Plan)*

### 2.2 The Site

The subject site is located adjacent to the Kaaten Triple Chair top station within the existing Kaaten Triple Chair lease and within the central part of Smiggin Holes ski area as shown in figure 2 below.



*Figure 2: Perisher Ski Trail Map with the subject site area highlighted  
(Source: Perisher Blue Pty Ltd)*

Aerial maps of the Smiggins ski area is provided in figures 3-5 with the subject site highlighted.





*Figure 3: Aerial map of the subject site in context with the locality*



*Figure 4: Aerial map of the subject site*





*Figure 5: Aerial map of the subject site*

The area to the north-east, skiers left of the Kaaten Triple Chair between the top station platform and the tree island is highly disturbed and this is the location for the proposed development, as shown in figures 6 & 7 below.



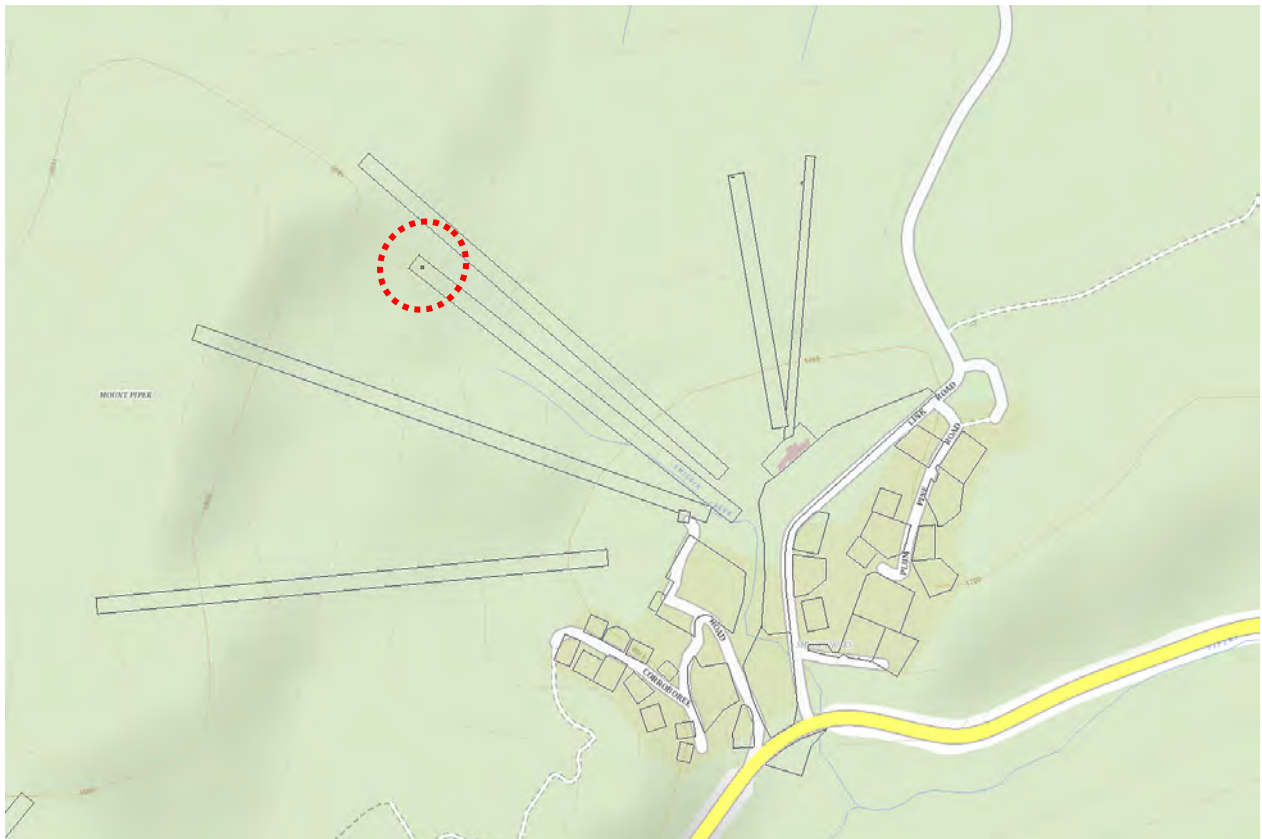
*Figure 6: Proposed location of the Snowfactory – looking downhill*





**Figure 7: Proposed location of the Snowfactory – looking uphill**

The Kaaten Triple Chairlift top station is located at approximately 1760m AHD and not located close to any watercourse as illustrated in figure 8 below.



**Figure 8: Topographic map of the subject site and its location in context with the locality**

### 3. DESCRIPTION OF THE DEVELOPMENT

#### 3.1 Purpose of the Development

The purpose of the development is to install a Snowfactory, a snow machine developed by TechnoAlpin.

TechnoAlpin explains the benefits of Snowfactory as follows:

*'No complicated building work or fittings are necessary for the installation of the Snowfactory. The snowmaking system is delivered in the container on site ready for operation. It only needs to be connected to the power and water supply, then snow can be produced around the clock, regardless of the outdoor conditions or the water temperature on site.'*

*'The Snowfactory is therefore also suitable for temporary installations. The snow gun is ready for series production and the technology has been tried and tested in many different cases, therefore a wide and diverse range of models and sizes can be produced and adapted to individual conditions. The installation size is dimensioned specifically for the refrigeration circuit in any given case, and the use of high-quality components enables snow to be produced with high levels of energy efficiency in any application and build environment'.*

TechnoAlpin illustrates the internal components and explains how it works in the extracts below.



*Figure 9: Internal components of the Snowfactory (Source: TecnoAlpin)*

*'The water is cooled to the freezing point through an efficient heat exchanger with an advanced and proven cooling technology. The machine is charged with a refrigerant, which stays in a closed and separated circuit. Snow is therefore made without any chemical additives. The snow is made out of small dry ice flakes. The Snowfactory is therefore the only system where the end product does not contain any residual moisture. The ice flakes have a temperature of -5°C (23°F). Due to this low temperature the snow comes with additional cooling energy and melts very slow. The quality of firm snow is achieved through being processed by a Pistebully. Only high quality components are used, which are characterised by a high energy efficiency. The construction is specifically sized for the particular cooling circuit.'*

As a Snowfactory allows for the making of snow effectively at any temperature, this provides a significant benefit to Perisher to establish a base for the key beginner and intermediate ski runs within Smiggins prior to and within the winter ski season.

Not being weather dependent, Perisher can provide more certainty for their guests in regards to the available ski runs for the opening weekend and other parts of the ski season subject to marginal conditions.

This provides an improved beginner and intermediate skiing and snowboarding experience for guests, alleviates pressure on the Front Valley and Blue Cow ski areas of the resort, particularly during marginal conditions.

A Snowfactory is a complementary piece of new snowmaking technology that will facilitate improved snow cover both in conjunction and independent with the approved Stage 1 and Stage 2 snowmaking at Smiggins.

Together this allows Perisher to improve seasonal length and viability; improve and maintain the quality of slopes during the season by topping up natural snow in areas which have poor cover; overcome restrictions on skier circulation caused by inadequate levels of natural snow and provide additional areas for repeat skiing during marginal snow conditions. This is particularly important as the Smiggins ski area is predominantly used by beginner and intermediate skiers and snowboarders and forms part of the lowest areas in altitude of the entire resort, therefore being vulnerable to marginal conditions.

## **3.2 General Description**

The proposed Snowfactory will be located adjacent to the top station of the Kaaten Triple Chairlift as this site is highly disturbed and being located at the top of the run, the system better utilises gravity to disperse snow downhill, allowing grooming machines to push downhill to create ski runs.

The infrastructure is housed within two x 40ft shipping containers with plant equipment on top providing an overall dimension of 12.192m long x 2.35wide for the structure, plus the external stair case which generates a total width of 3.5m.

The structure therefore has a footprint of 29m<sup>2</sup> plus the external stair case.

The overall height of the structure is 8.532m.

Photos of the same structure recently installed at Mount Buller in Victoria are provided below.

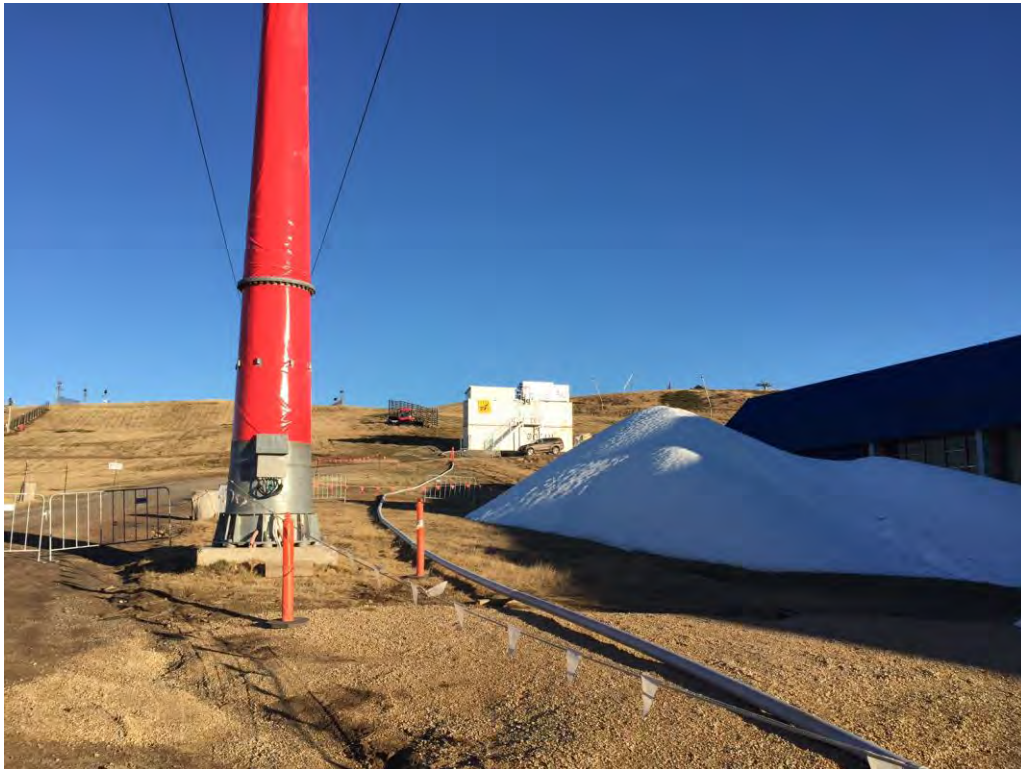




**Figure 10: Snowfactory recently installed at Mount Buller, Victoria**  
*(nb: colour is the factory standard white, not painted grey as proposed for the subject project)*

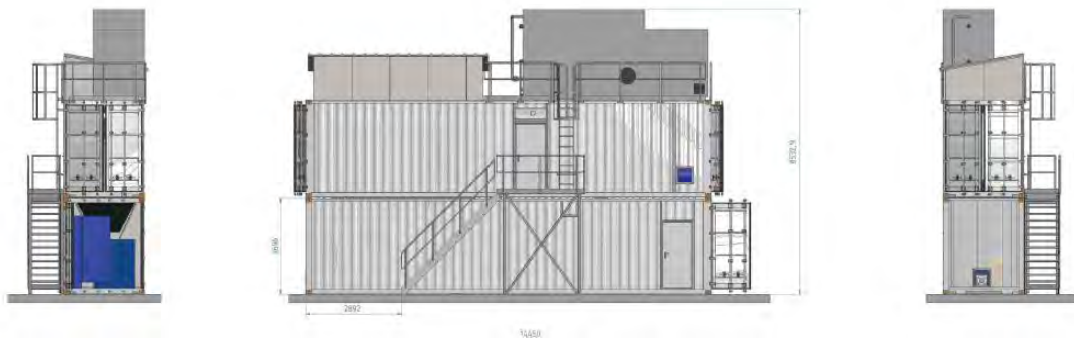


**Figure 11: Snowfactory recently installed at Mount Buller, Victoria**



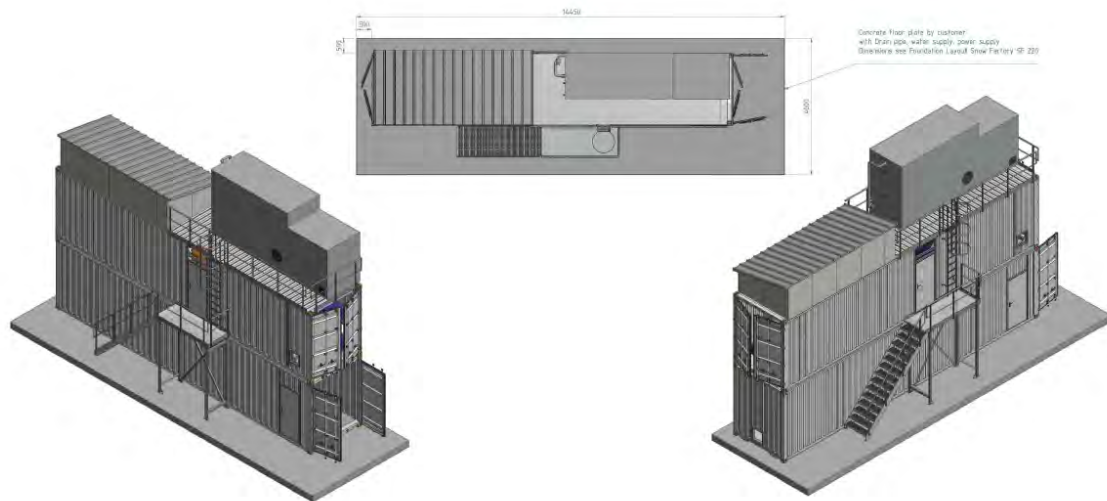
*Figure 12: Snowmaking pipe and snow generated by the Mount Buller Snowfactory*

Rendered two dimensional and three dimensional drawings of the structure are provided below.



*Figure 13: Elevation drawings of the structure provided by TechnoAlpin*

The snow factory includes an external snowmaking pipe and the structure is proposed to be painted Woodland Grey, to match the lift hut colour and colour used throughout the resort for most of the recent ski lift facilities (ie Freedom Chairlift, Guthega).



**Figure 14: 3D drawings and floor plan of the structure provided by TechnoAlpin**

The structure will be located on a suspended and reinforced concrete slab that is 14.45m x 4.6m. The slab will be retained by a core filled concrete block wall.

Excavation to lower the slab was not deemed possible due to the proximity to the existing footings associated with the ski lift adjacent and associated drainage problems with excavating into the slope.

The location of the proposed works are shown in the plans provided in Appendix A and the photos provided in Appendix B.

### **Top Station Modifications:**

To accommodate the Snowfactory structure and retained suspended concrete slab, the existing Kaaten Triple Chairlift top station will require some modifications, including:

- Remove the stair case and stair case beam to lift hut. Resort staff will use the existing ramp to access the platform, similar to other chairlifts in the resort.
- Remove the current lift hut and construct a smaller lift hut, partially cantilevered and supported by a new post, further along the platform with a dimension of 2m x 1.8m.
- Cut back the lift platform to facilitate the new structure.

### **Electrical Transformer:**

To reduce power from 11kV to 415v, a pad mount transformer will be installed above the Snowfactory structure adjacent to the lift platform. An example of a similar transformer to be installed is shown below.





*Figure 15: Example of an electrical transformer*

### **3.3 Construction Timing**

The proposed construction timing of the project has been scheduled to start in the summer of 2017/2018 and be completed and ready for the 2018 winter season.

### **3.4 Access & Machinery**

Access to the site is from the Link Road onto the existing access road up to the ridgeline and Back Wood Run to the top of the Kaaten Triple Chair.

As the construction access for Stage 1 snowmaking has already been approved and this development will rely on the trenching associated with the snowmaking installation along Wood Run, no additional impacts in relation to construction access will be required.

The approved construction access route will be fenced and is shown in yellow below.



**Figure 16: Construction Access Route**



## 4. KEY MATTERS FOR CONSIDERATION

### 4.1 Fauna and Flora

An assessment of potential impacts on fauna and flora has been undertaken by Ryan Smithers, Senior Ecologist with Eco Logical Australia.

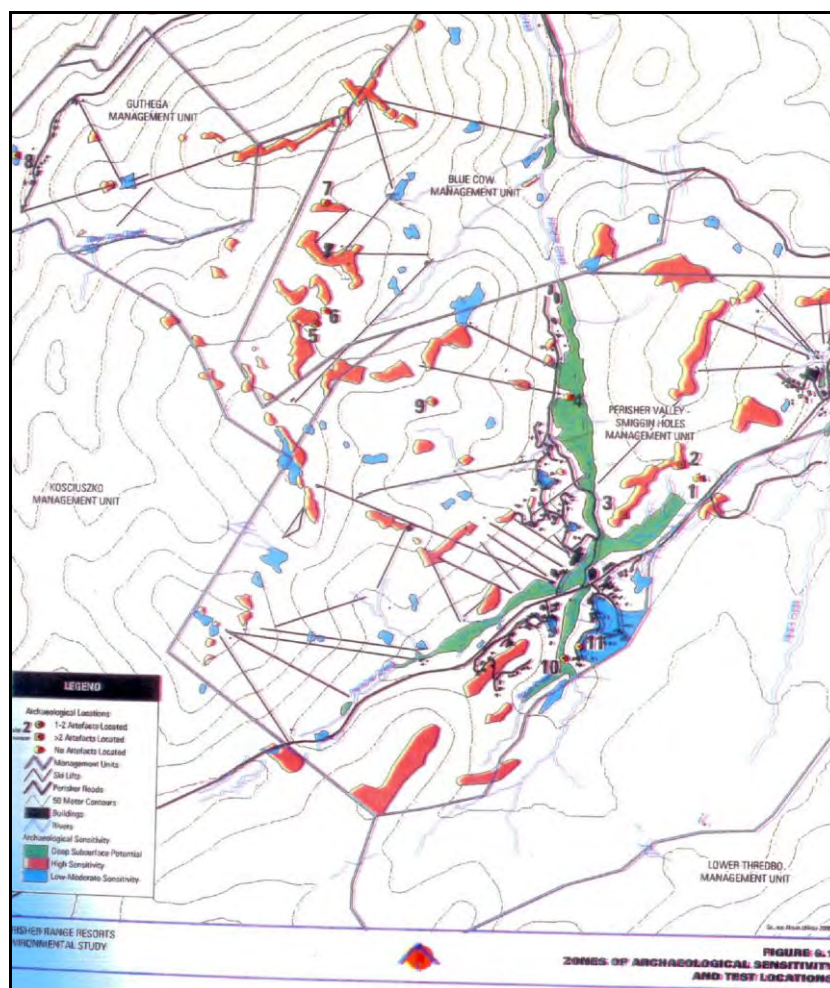
Given the highly disturbed nature of the development site, this assessment concluded that the proposal will not result in any adverse impacts on threatened species or endangered ecological communities, or on the environment generally.

This assessment is provided in Appendix C.

### 4.2 Aboriginal Cultural Heritage

The identification and mapping of known and potential area of Aboriginal cultural heritage values was undertaken by Navin Officer Heritage Consultants as part of the Perisher Range Resorts Environmental Study, undertaken in 2000 by Connell Wagner.

The study included a predictive model that mapped the zones of Archeological Sensitivity as provided below in figure 17.



*Figure 17: Zones of Archeological Sensitivity*

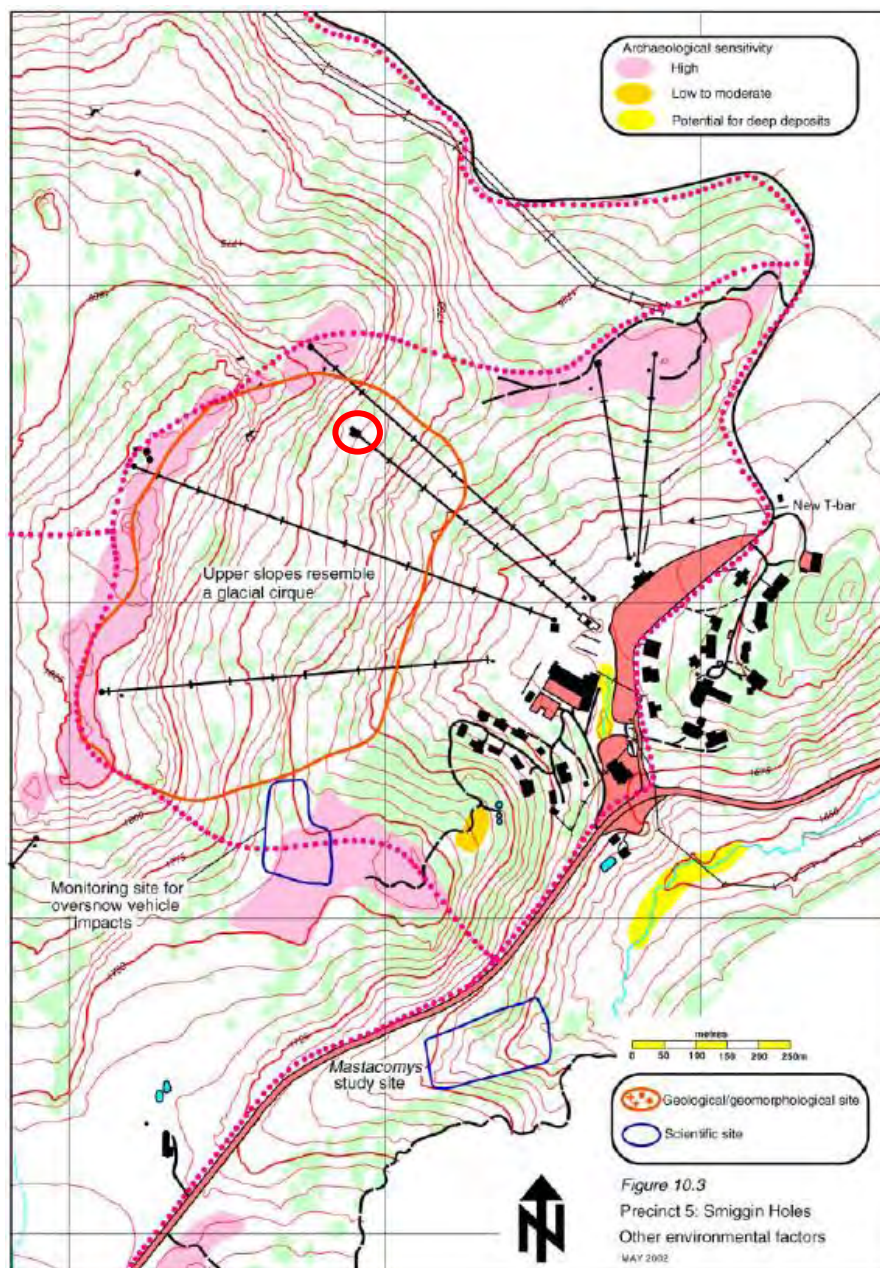
*(source: Perisher Range Resorts Environmental Study, Connell Wagner, 2000)*



Based on the above map, the proposed development is located outside of the zone of high archeological sensitivity as shown above. The below extract of the 'Other Environmental Factors Map' for the Perisher Valley Precinct as identified in the PSSMP provides a better scale and resolution. This map is based on the predictive model undertaken by Navin Officer for Connell Wagner.

The map shows that the predicted zone of high archeological sensitivity is located to the north associated with the ridgeline and to the west associated with the lower ridgeline that forms part of the Back Wood Run.

The proposed development therefore is not located within the high sensitive area as illustrated in figure 18 below.



**Figure 18: Other environmental factors maps for the Perisher Valley Precinct**  
(source: PSSMP)

In the unlikely event that Aboriginal items are uncovered during excavation, all work shall cease at that location and the NSW Office of Environment and Heritage (OEH) shall be notified.

### **4.3 Water Licence**

In 2012, Perisher obtained a new water licence for abstraction of up to 50 Mega litres (ML) of water from Smiggins Creek for snowmaking purposes.

The licence prescribes that the holder may divert up to twice (100ML) the licenced volume in one year provided diversions do not exceed three times (150ML) the licenced volume in any three year period. This provides Perisher with some flexibility with extracting more water than the 50ML allowed in poor (snow coverage) ski seasons and utilising less than 50ML in better (snow coverage) ski seasons.

The proposed Snowfactory requires a relatively small water supply when compared to a traditional snowmaking system and the Snowfactory is intended to operate within the current water licence allocation.

The proposed Snowfactory does not require the pump station or water tank approved under the Stage 1 snowmaking DA and will connect directly into the existing well.

### **4.4 Visual Impacts**

The proposed Snowfactory is 8.523m in height including the plant equipment. At the western end of the slab, the structure is located on grade, while at the eastern end, the slab is located 2.24m above ground level, providing an overall height of 10.8m to the natural ground level.

To determine the potential visual impacts of the structure, it is important to determine whether the subject site and specifically the proposed building can be viewed from a public place, public road or the Main Range.

A view shed analysis was undertaken and is provided in Appendix E (Attachment 1). The series of maps provided in the analysis illustrate the areas in the locality where the proposed top of the structure (at 9m at its western end) could be potentially viewed from (called a visibility cloak).

The maps were used to identify the key viewpoints where the subject site and proposed structure can be most visibly seen from a public place or road and verified on site.

#### **4.4.1 Viewpoints**

The view shed analysis maps provided in Appendix E (Attachment 1) indicates that due to Smiggin Holes being a bowl surrounded by a ridgeline and the Kaaten Tripe Chairlift top station sitting well below the ridgeline, the proposed structure can only be potentially viewed from a public road from the south including Kosciuszko Road and from the east from Munyang Road within Smiggin Holes. This is considered the optimum location along any public roads within the locality that the proposed structure can be viewed from (and therefore an analysis of the impacts generated can be most appropriately assessed). A map is provided below illustrating the location of the viewpoints in context with the subject site and proposed building.





*Figure 19: Aerial map illustrating the selected viewpoints (P1, P2 & P3) in context with the subject building site*

With regard to potential view points from the Main Range, the maps illustrate that the views from the Main Range cannot be achieved as the Kaaten Triple Chairlift top station sits well below the ridgeline along the western edge of Smiggin Holes.

#### 4.4.2 Analysis

The photos taken from viewpoints P1, P2 & P3 (Attachment 2 of Appendix F) illustrate that the subject building site is visible from various parts of the Smiggin Holes car park, adjacent to Munyang Road.

Due to the topography and built environment in the southern and eastern parts of Smiggin Holes, the existing Triple Chair top station and therefore proposed structure will not be visible from Kosciuszko Road.

To mitigate the potential visual impacts of the structure, the area immediately adjacent to Kaaten Triple Chair top station was selected, so that the structure would integrate with the top station, being located so it sits below the top of the lift tower and crosshead.

The proposed structure when viewed from a distance therefore integrates with the top station building, therefore 'read' as one combined piece of ski resort infrastructure, consistent with other constructed and approved resort infrastructure including ski lifts, lodges, water tanks, electricity transmission lines, mobile phone towers and snowmaking infrastructure.



By locating the Snowfactory adjacent to the top station and not isolating the development on the mountain, potential visual impacts are mitigated, particularly locating the structure adjacent to a lift tower that is slightly taller, located well below the ridgeline to the west and therefore not representing an intrusion into the skyline when viewed from the east.

Furthermore, Perisher proposes to paint the structure Woodland Grey, to match the existing lift hut which is consistent with most of the resorts lift buildings, including the Freedom Chairlift at Guthega.

Overall, the Snowfactory structure will be similar height to the adjacent Kaaten Triple Chair top station, located below the ridgeline and surrounded by existing vegetation and with its proposed Woodland Grey colour, it is not considered to be visually dominant and will be compatible with the existing built environment, commonly found within a ski resort.

## 5. ENVIRONMENTAL AND PLANNING LEGISLATION

### 5.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

#### 5.1.1 SECTION 79C(1)(a)(i) – ENVIRONMENTAL PLANNING INSTRUMENTS

The only applicable Environmental Planning Instrument to the proposed development and site is State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007 (SEPP Alpine Resorts). The relevant clauses contained within SEPP Alpine Resorts are addressed below:

#### Clause 11 - Land Use Table:

The land use table for the Perisher Range Alpine Resort specifies that 'Snow-making infrastructure' is permitted with consent.

#### Clause 14 - Matters for consideration:

Matter for Consideration	Response
Cl.14 (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:	
(a) the aim and objectives of this Policy, as set out in clause 2,	<i>The proposed Snowfactory and ancillary works forms a complimentary component of snowmaking infrastructure which is considered to be consistent with the aims and objectives of the Policy.</i>
(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),	<i>The proposed development does not require any measures to mitigate environmental hazards (eg geotechnical, bush fires or flooding) that would impact on the conservation of the natural environment.</i>

<p>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:</p> <p>(i) the capacity of existing transport to cater for peak days and the suitability of access to the alpine resorts to accommodate the development,</p> <p>(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,</p> <p>(iii) the capacity of existing waste disposal facilities or transfer facilities to cater for peak loads generated by the development,</p> <p>(iv) the capacity of any existing water supply to cater for peak loads generated by the development,</p>	<p><i>The proposed Snowfactory will not generate any additional demand on the capacity of the existing transport, reticulated effluent management system, existing waste disposal facility. As discussed above in Section 4.4, the proposal will also not impact on the existing water supply system at the resort.</i></p>
<p>(d) any statement of environmental effects required to accompany the development application for the development,</p>	<p><i>This Statement of Environmental Effects satisfies this sub-clause.</i></p>
<p>(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,</p>	<p><i>The proposed Snowfactory is a form of complimentary snowmaking infrastructure that will not significantly alter the character of the alpine resort.</i></p>
<p>(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</p>	<p><i>The proposed works are located within the 'G' line.</i></p> <p><i>To cover any potential Geotechnical issues, a Geotechnical Assessment and Form 4 Certificate has been prepared and provided separately with the DA.</i></p>
<p>(g) if earthworks or excavation works are proposed—any sedimentation and erosion control measures proposed to mitigate any adverse impacts associated with those works,</p>	<p><i>Excavation works are required for the structure. Sedimentation and erosion controls are outlined in the SEMP provided in Appendix D and these will mitigate any adverse impacts associated with such works.</i></p>
<p>(h) if stormwater drainage works are proposed—any measures proposed to mitigate any adverse impacts associated with those works,</p>	<p><i>The proposed development will require minor drainage associated with the slab, which will dissipate onto the adjoining disturbed ground.</i></p>
<p>(i) any visual impact of the proposed development, particularly when viewed from the Main Range,</p>	<p><i>See 4.4 of the SEE above.</i></p>



<p>(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,</p>	<p><i>The proposed Snowfactory is intended to be used for the ski season and will unlikely increase activities outside of the ski season.</i></p>
<p>(k) if the development involves the installation of ski lifting facilities and a development control plan does not apply to the alpine resort:</p> <p>(i) the capacity of existing infrastructure facilities, and</p> <p>(ii) any adverse impact of the development on access to, from or in the alpine resort,</p>	<p><i>The development does not involve the installation of a ski lift.</i></p>
<p>(l) if the development is proposed to be carried out in Perisher Range Alpine Resort:</p> <p>(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</p> <p>(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,</p>	<p><i>The proposed Snowfactory is a complementary piece of snowmaking infrastructure, located to operate within areas identified for future snowmaking expansion under the adopted PSSMP.</i></p>
<p>(m) if the development is proposed to be carried out on land in a riparian corridor:</p> <p>(i) the long term management goals for riparian land, and</p> <p>(ii) whether measures should be adopted in the carrying out of the development to assist in meeting those goals.</p>	<p><i>The development is located more than 40m from any watercourse.</i></p>
<p>(2) The long term management goals for riparian land are as follows:</p>	
<p>(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.</p>	<p><i>Not applicable.</i></p>
<p>(b) to ensure that the integrity of areas of conservation value and terrestrial and aquatic habitats of native flora and native fauna is maintained,</p>	
<p>(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.</p>	

[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.

### **5.1.2 SECTION 79C(1)(a)(ii) – DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS**

There are no draft Environmental Planning Instruments that are applicable to the site or proposed development.

### **5.1.3 SECTION 79C(1)(a)(iii) – DEVELOPMENT CONTROL PLANS**

There are no Development Control Plans applicable to the Kosciuszko Alpine Resorts under State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007.

### **5.1.4 SECTION 79C(1)(a)(iiia) – PLANNING AGREEMENTS**

There are no Planning Agreements applicable to the Kosciuszko Alpine Resorts under State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007.

### **5.1.5 SECTION 79C(1)(a)(iv) – REGULATIONS**

The development application has been made in accordance with the requirements contained in Clause 50(1A) of the Environmental Planning and Assessment Regulation 2000.

### **5.1.6 SECTION 79C(1)(b) – LIKELY IMPACTS**

#### **Natural and Built Environment:**

Impacts on the natural environment are expected to be minimal given that the subject site is highly disturbed, being directly located adjacent to the top station of a chairlift. To ensure that impacts on undisturbed vegetation were considered, a fauna and flora assessment was undertaken and provided in Appendix C.

This assessment determined that that the proposal will not result in any adverse impacts on threatened species or endangered ecological communities, or on the environment generally.

The impacts on the built environment are expected to be minimal given the location of the proposed structure adjacent to the top station structure, its proposed colour and location in context of the ski resort.

#### **Social and Economic impacts in the locality:**

The social and economic impacts from the installation of a Snowfactory is considered overwhelmingly positive as outlined in Section 3.1 of the SEE.

### **5.1.7 SECTION 79C(1)(c) – SUITABILITY OF THE SITE**

The subject site is considered suitable to accommodate the proposed development as the majority of the works have been located immediately adjacent to the Kaaten Triple Chair top station which is highly disturbed and is serviced by the already approved Stage 1 snowmaking services.

### **5.1.8 SECTION 79C(1)(d) – SUBMISSIONS**

The subject DA is not required to be either Advertised or notified as part of the assessment of the DA.

### **5.19 SECTION 79C(1)(e) – THE PUBLIC INTEREST**

The above assessment has demonstrated that the proposal satisfies the objectives and relevant clauses prescribed under State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007 and is therefore considered to be within the public interest.



## 6. CONCLUSION

The proposed development has been considered having regard to Section 79C of the EP&A Act, 1979 and State Environmental Planning Policy (Kosciuszko National Park – Alpine Resorts) 2007.

The proposal has been found to be consistent with the above legislation and Environmental Planning Instrument, as detailed in the above SEE.

The overwhelming key benefit of a Snowfactory and its installation within Smiggin Holes, is that it allows Perisher to make snow effectively at any temperature prior to and within the ski season.

This provides certainty for the operation of the resort and for guests visiting the resort. The installation of a Snowfactory is a complementary piece of snowmaking infrastructure, designed to integrate with traditional forms of snowmaking where combined a snow base and top up can occur under all weather conditions.

This provides an improved beginner and intermediate skiing and snowboarding experience for guests whilst also alleviating pressure on the Front Valley and Blue Cow ski areas of the resort, particularly during marginal conditions.

Both together and independent with the approved Stage 1 and Stage 2 automated snowmaking infrastructure, this allows Perisher to improve seasonal length and viability; improve and maintain the quality of slopes during the season by topping up natural snow in areas which have poor cover; overcome restrictions on skier circulation caused by inadequate levels of natural snow and provide additional areas for repeat skiing during marginal snow conditions. This is particularly important as the Smiggins ski area is predominantly used by beginner and intermediate skiers and snowboarders and forms part of the lowest areas in altitude of the entire resort, therefore being vulnerable to marginal conditions.

To minimise impacts on the environment, the proposed Snowfactory has been located immediately adjacent to the top station of the Kaaten Triple Chair within a highly disturbed area. This allows for the infrastructure to be wholly located within the existing chairlift lease area and visually be integrated with the chairlift top station when viewed from public roads and carpark.

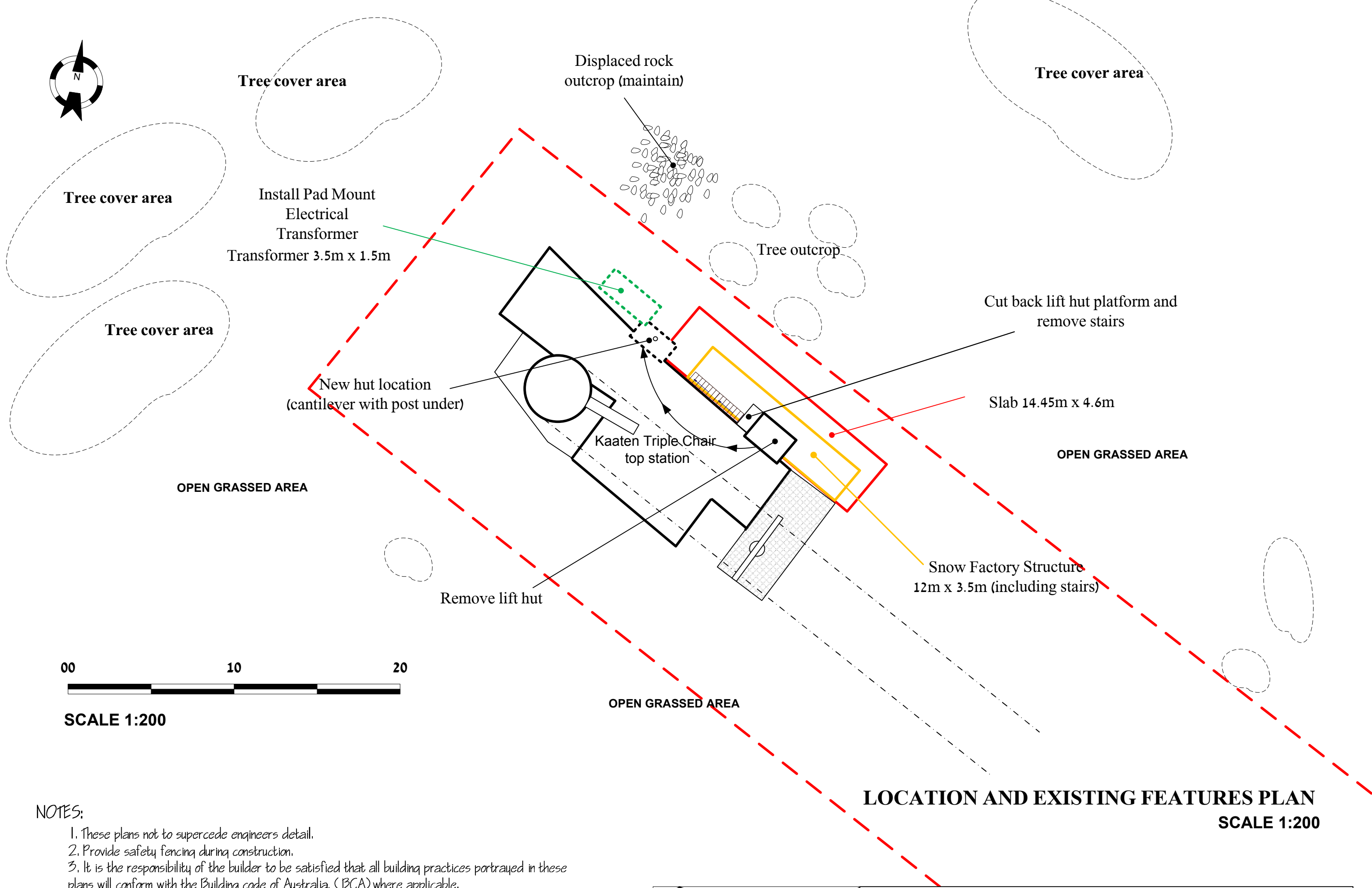
This also allows for the already approved water and electrical services that formed part of the Stage 1 snowmaking approval to be used for the Snowfactory, reducing additional trenching and associated impacts.

Any associated impacts with the installation of the Snowfactory will be further minimised through the application of the measures identified in the Site Environmental Management Plan.

On balance, the proposed installation of a Snowfactory adjacent to the Kaaten Triple Chair top station, will generate positive social and economic impacts for the resort and wider region whilst minimising impacts on the natural and built environment.

## APPENDIX A

### PLANS

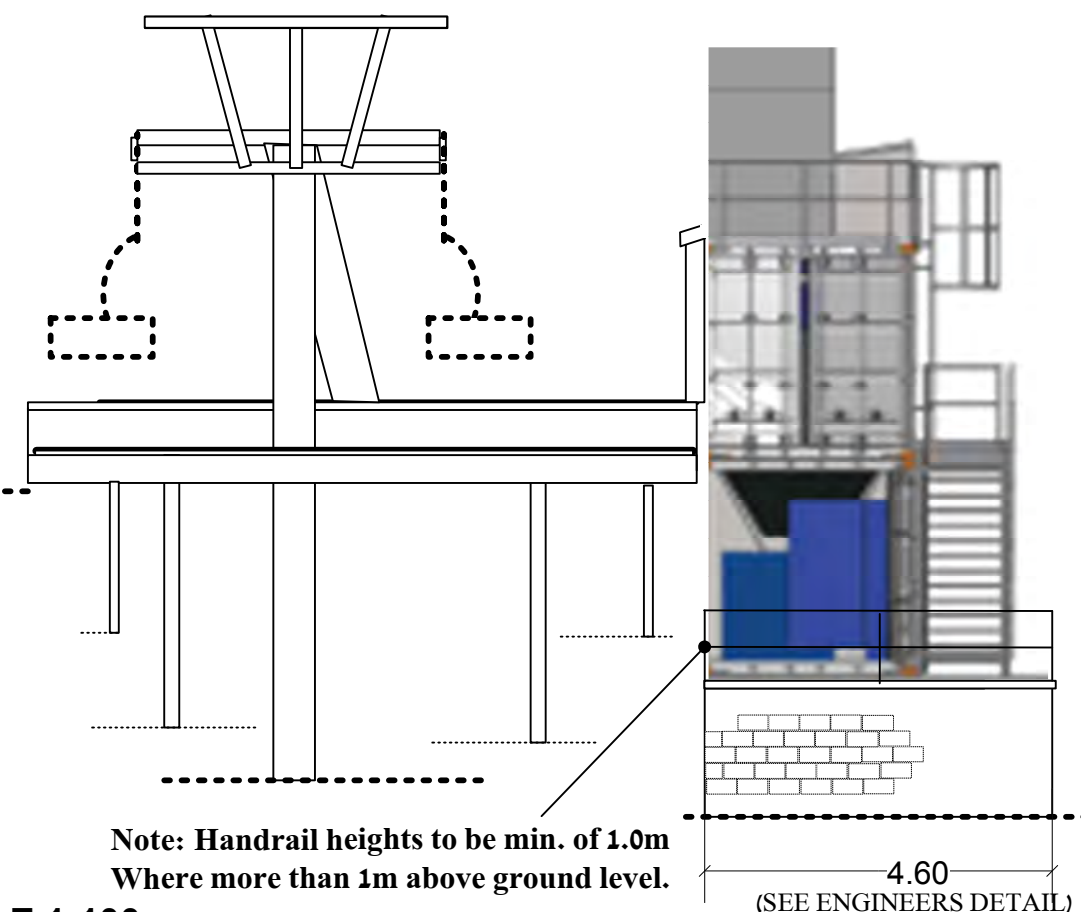
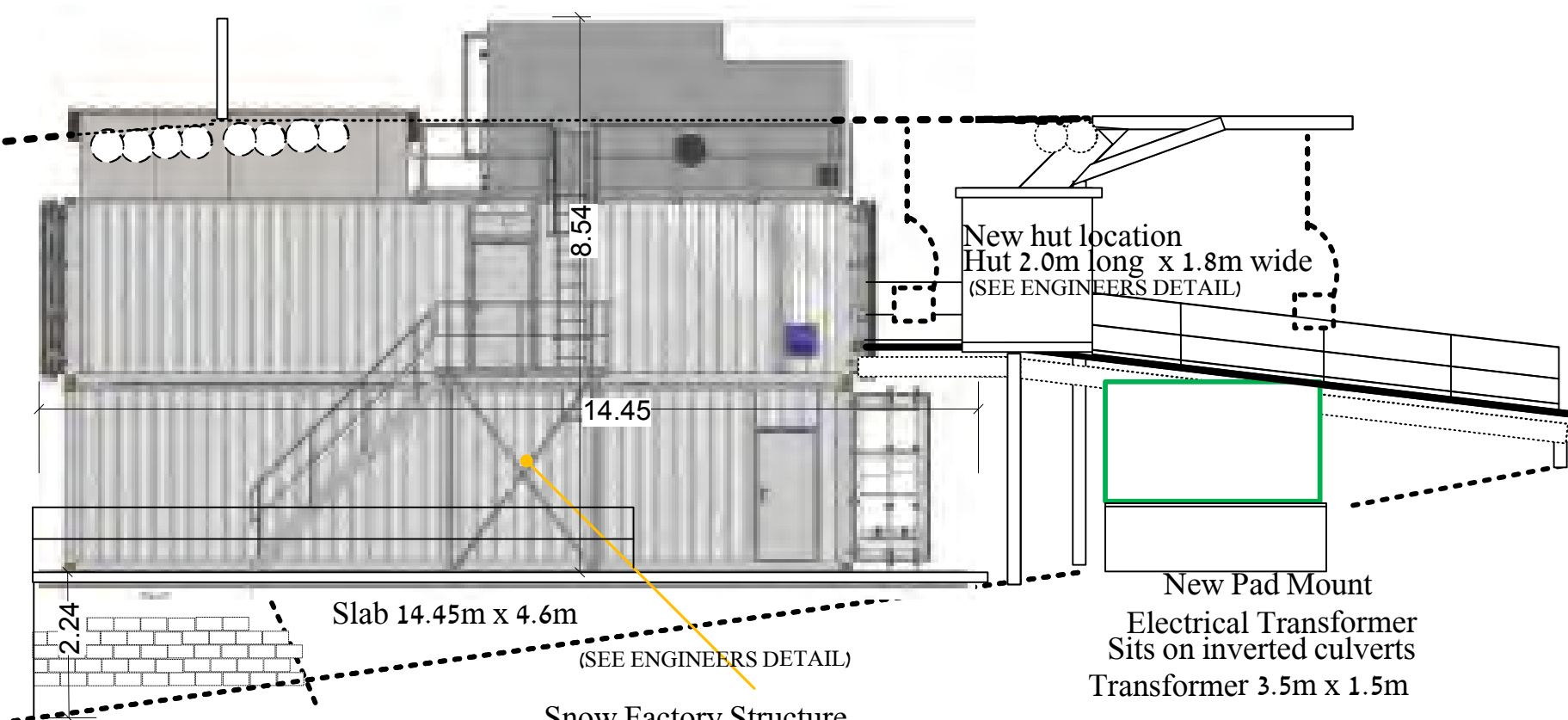
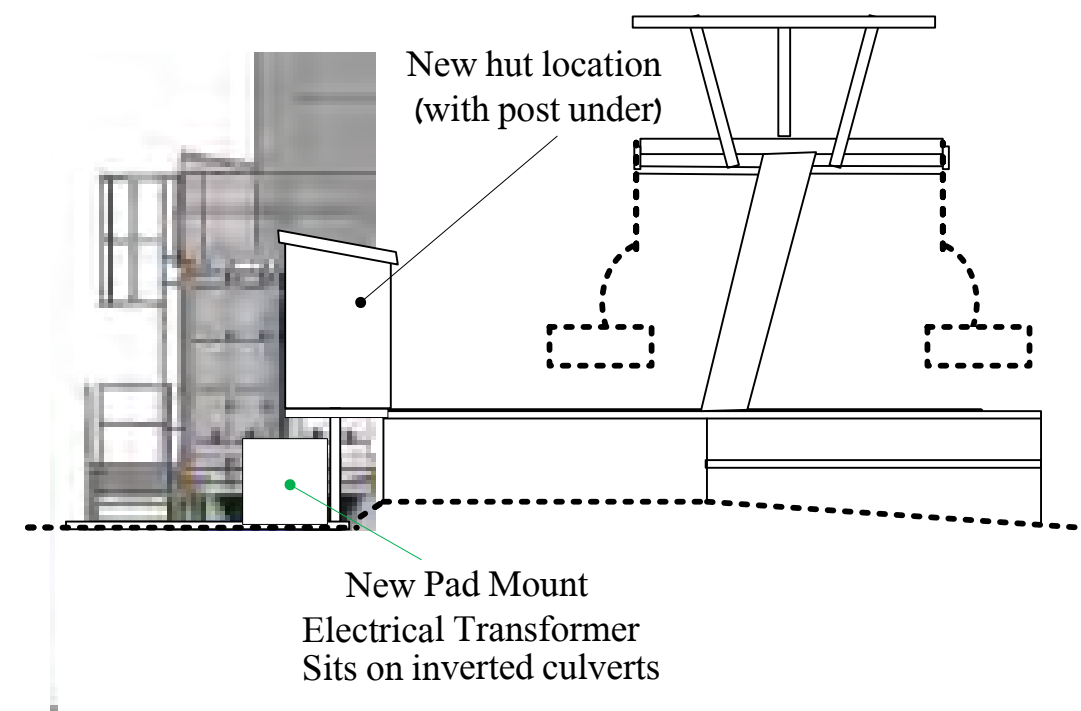
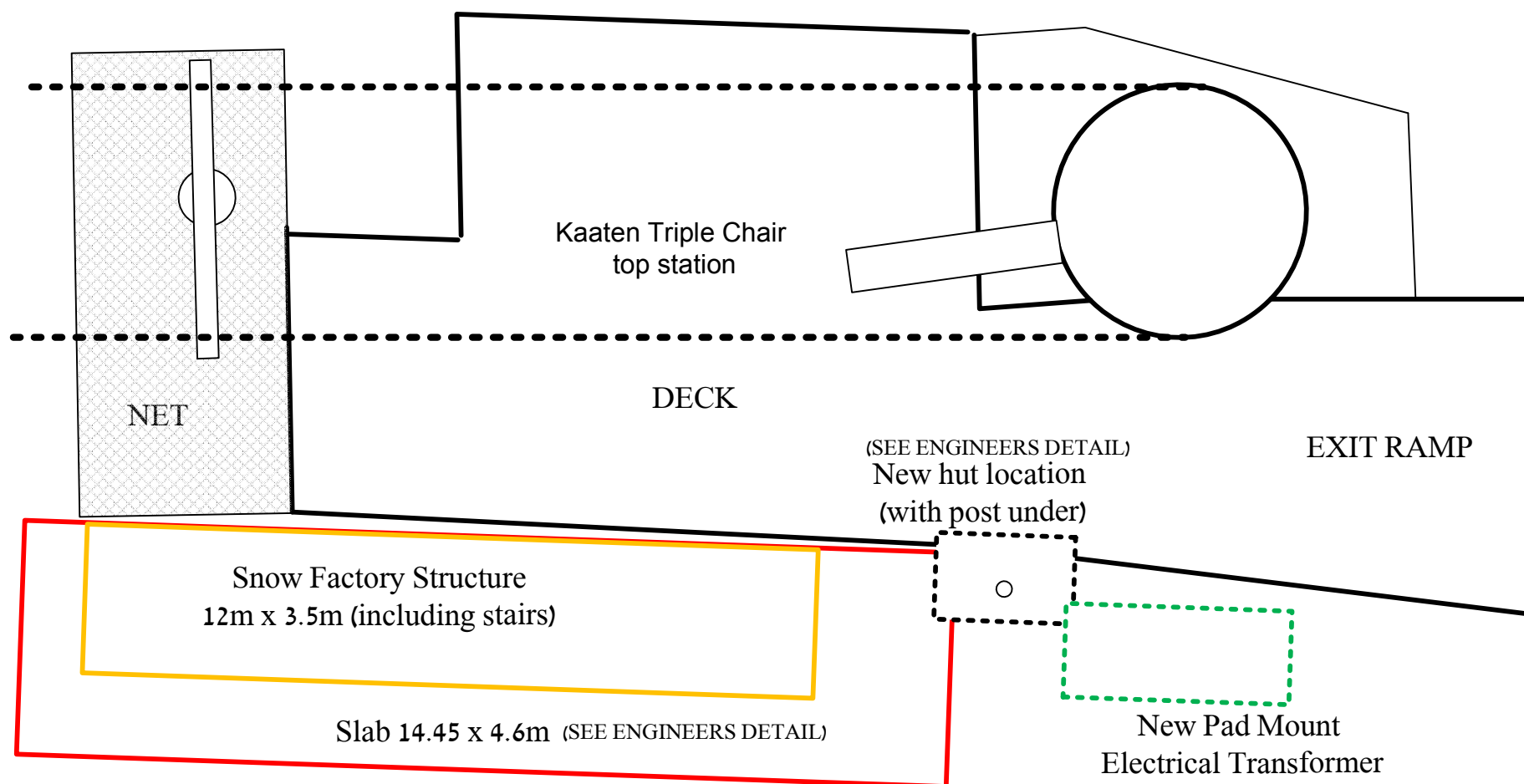


**SCALE 1:200**

1. These plans not to supercede engineers detail.
2. Provide safety fencing during construction.
3. It is the responsibility of the builder to be satisfied that all building practices portrayed in these plans will conform with the Building code of Australia. (BCA) where applicable.
4. Confirm location of all services, including those not shown, prior to commencement of construction.
5. Provide silt erosion protection fence during construction

*PROPOSED NEW SMIGGIN HOLES SNOWMAKING FACTORY  
ADJACENT TO KAATEN TRIPLE CHAIR TOP STATION  
for PERISHER BLUE P/L  
Plans by Steve Gibb -email [steve\\_gibb@bigpond.com](mailto:steve_gibb@bigpond.com)*

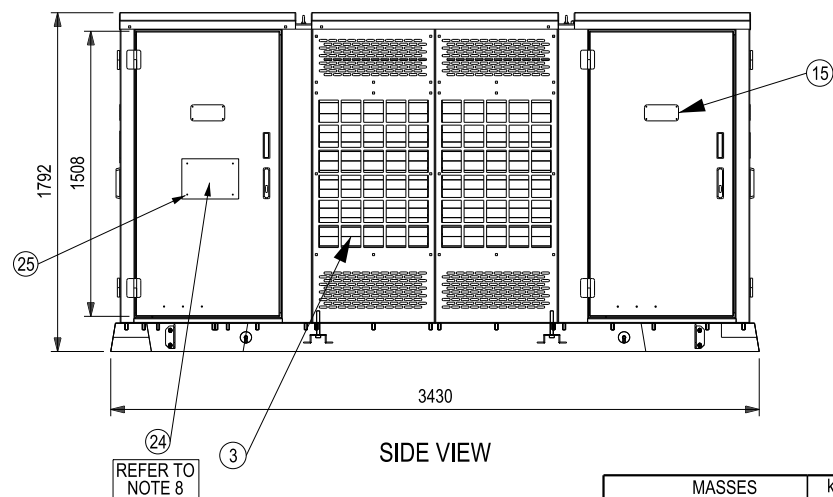
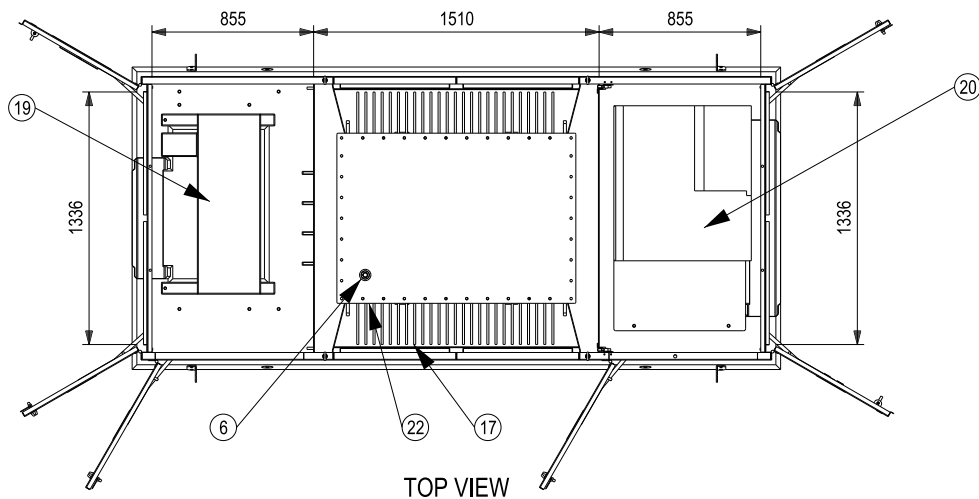
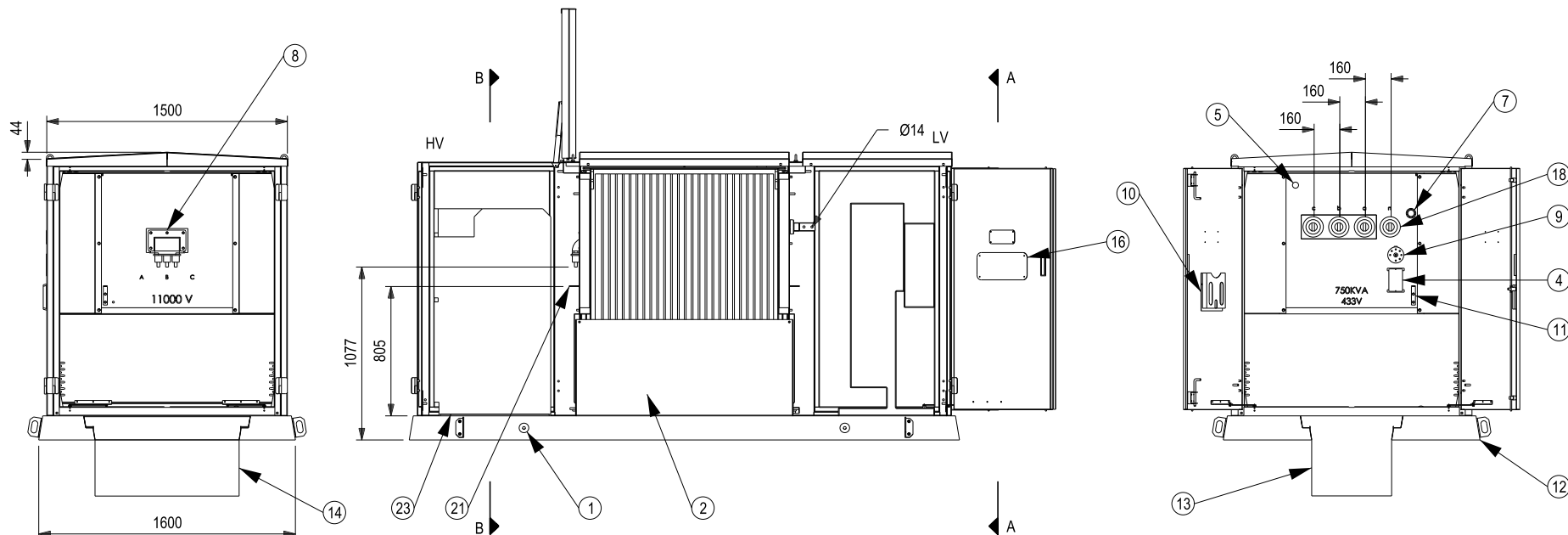




Snow Factory Structure  
12m x 3.5m Colour "woodland grey"  
Note: Handrail heights to be min. of 1.0m  
Where more than 1m above ground level.

## FLOORPLAN & ELEVATION PLAN SCALE 1:100





ELECTRICAL CLEARANCES IN AIR (mm)		
	PHASE-PHASE	PHASE - EARTH
HV	INSULATED	INSULATED
LV	100	60

MASSES	kg
TANK AND FITTINGS	955
ENCLOSURE AND PLINTH	2350
OIL VOLUME (965 Litre)	840
CORE AND COIL	1365
SWITCHGEAR	600
TOTAL	6110

#### AMENDMENT DETAILS

3 DRAWN J. DOWLING  
CHCKD D. KELLY  
DATE 07/05/2014

ITEMS 24 & 25 ADDED.  
REFER TO SHEET 2.

2 DRWN K. SMITH  
CHCKD D. KELLY  
DATE 05/10/2012

REFER TO SHEET 2.



SCALE NTS

ISSUED 19/09/2012

DRAWN BY SG / W.G

CHECKED BY D. KELLY

AUTHORISED BY

**Graeme Barnewall**

PRINCIPAL ENGINEER UNDERGROUND  
CONSTRUCTION STANDARDS

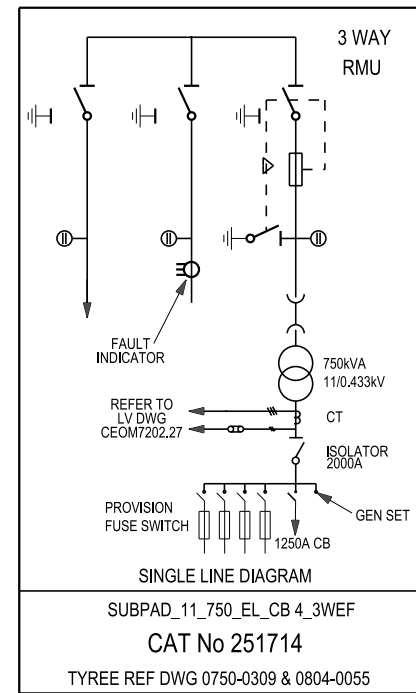
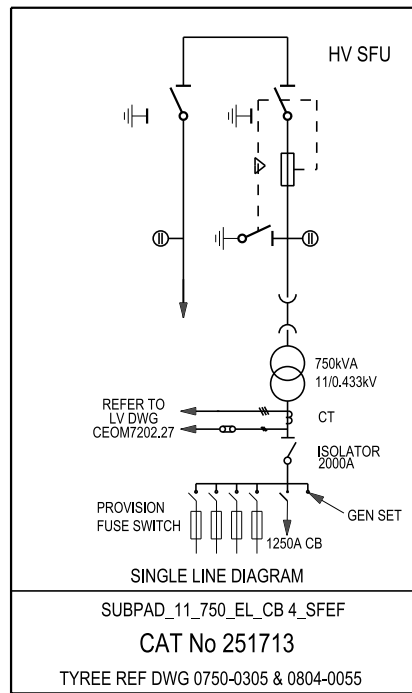
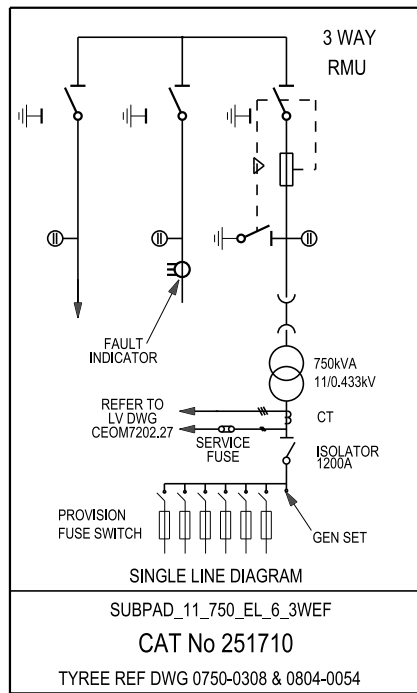
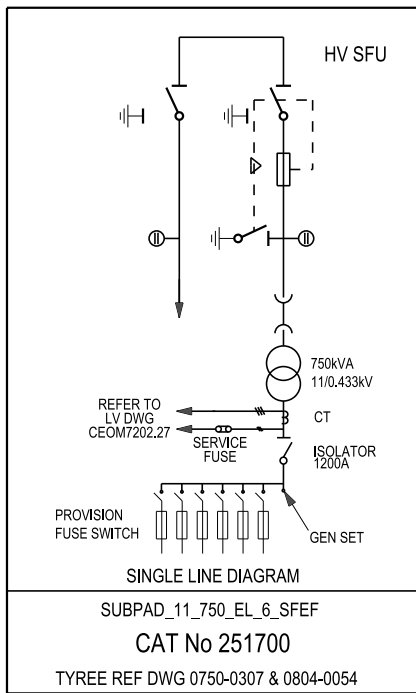
DATE 12/10/2012



**CEOM7203.81**

# 1 of 2 A4

**PADMOUNT  
SUBSTATION  
11kV, 750kVA  
GENERAL  
ARRANGEMENT  
(TYREE) ELONGATED**





AMENDMENT DETAILS		
3	DRAWN	J. DOWLING
	CHCKD	D. KELLY
	DATE	07/05/2014
REFERENCE TO LV DRAWING WAS CORRECTED FROM CEOM7202.07. ITEMS 24 & 25 ADDED. NOTE 8 ADDED.		
2	DRWN	K. SMITH
	CHCKD	D. KELLY
	DATE	05/10/2012
ALL SINGLE LINE DIAGRAMS UPDATED.		
		
SCALE		NTS
ISSUED		19/09/2012
DRAWN BY		S.G / W.G
CHECKED BY		D. KELLY
AUTHORISED BY		
Graeme Barnewall		
PRINCIPAL ENGINEER UNDERGROUND CONSTRUCTION STANDARDS		
DATE		12/10/2012
CEOM7203.81		
#	2 of 2	A4
PADMOUNT SUBSTATION 11kV, 750kVA GENERAL ARRANGEMENT (TYREE) ELONGATED		
		

25	4	RIVET POP S/S 4mm DIA 3.2 - 6.4 RANGE	101920
24	3	EMERGENCY CALL SIGN	851302
23		RMU - MOUNTING PLATE	AS PER SINGLE LINE DIAGRAM
22		COVER ASSEMBLY	
21		EARTH BAR	
20		HV SWITCHGEAR - EFACEC FLOUOFIX	
19		LV SWITCHBOARD - WEBER	
18		#73 BUSHING ASSEMBLY 3.3kV 1050A	
17		TANK ASSEMBLY	
16		PADMOUNT SUBSTATION LABEL	
15		DANGER LABEL	
14		HV END-FILL PANEL	
13		HV END-FILL PANEL	
12		PLINTH	
11		EARTH BAR	
10		DRAWING POCKET	
9		TAPSWITCH HANDLE 7 POSITION	
8		REROLLE BUSHING EMC TBRA12	AS PER SINGLE LINE DIAGRAM
7		25NB BRASS OIL SIGHT	
6		PLUG 25NB FLANGED BRASS	
5		25NB FILLER CAP	
4		3 PHASE RATING PLATE	
3		LOUVRE ASSEMBLY	
2		BUND ASSEMBLY	
1		2.5t SWITFT-LIFT MAIN LIFTING EYES	
Item No.	Qty	Description	Cat. No.

## NOTES

- The EFACEC switchgear for the 750kVA padmount will require three fuses (Cat No. 210016 - Fuse 12kV 80A Backup HRC).
- The appropriate number of padlocks (Cat No. 112666) are required for the high voltage switchgear.
- The appropriate number of padlocks (Cat No. 112666) are required for all doors.
- This drawing to be read in conjunction with CEOM7203.48
- All bolts, nuts and washers to be stainless steel.
- Both transformer and plinth to be earthed back to main earth bar.
- Danger and identification signs to be fitted to all doors and transformer access door.
- Item 24 to be centrally located on the doors of the HV switchgear. Where there are two doors the label is to be placed on the left hand door. Item to be fixed with item 25.

## APPENDIX B

### PHOTOGRAPHS





**Figure 1 – View of the site looking down the slope**



**Figure 2 – Expanded view of the site looking down**





Figure 3 – View of the site looking up the slope



Figure 4 - View of the lift hut to be relocated and platform to be cut back and stairs to be removed





Figure 5 – View of stairs to be removed and snow factory location from above



Figure 6 – View of the site location from above





**Figure 7 – View of the lift hut to be relocated and platform to be cut back**



**Figure 8 – View of the site from Woodrun, looking west**





**Figure 9 – View of the site from Woodrun, looking west**

## **APPENDIX C**

### **FLORA AND FAUNA ASSESSMENT**

Ivan Pasalich  
Dabyne Planning  
PO Box 179  
Jindabyne NSW 2627

ECO LOGICAL AUSTRALIA PTY LTD  
ABN 87 096 512 088  
www.ecoaus.com.au

**Ref/Job No: 17HNG\_7591**

10 July 2017

Dear Ivan,

**RE: Snowfactory- Smiggin Holes – Perisher Ski Resort**

As requested, I inspected the site of the proposed Snowfactory at Smiggin Holes at Perisher Ski Resort on 21 June 2017. Find below a description of the site and assessment of the potential impacts on flora and fauna.

**Site Description**

The site of the proposed Snowfactory, which is immediately adjacent to the Kaaten Triple Chair Top Station, is highly disturbed in association with the construction of the Top Station. It is characterised by exotic grasses and forbs, as shown in **Photo 1** and **Photo 2**. To the immediate north of the proposed Snowfactory footprint, there is a small tree island, as shown in **Photo 1** and **Photo 2**. This tree island supports six remnant *Eucalyptus niphophila* (Snow Gum) trees (dead trunks and limbs with basal regrowth only), heath shrubs and groundcovers, and on the margins, some very small patches of remnant bog plants. The proposal has been specifically designed to avoid impacts on the vegetation within the tree islands, particularly the very small areas of remnant bog plants.

The tree island supports the heath shrubs *Ozothamnus secundiflorus*, *Ozothamnus alpinus*, *Ozothamnus cupressoides*, *Olearia phlogopappa*, *Tasmannia xerophila*, *Grevillea australis*, *Oxylobium ellipticum*, and *Hovea montana*, with scattered groundcovers including *Pimelea alpina*, *Stellaria pungens* and *Lycopodium fastigiatum*. The small patches of remnant bog plants are dominated by *Empodisma minus* and *Richea continentis*, but also includes some *Poa costiniana*, *Carex incomitata* and *Sphagnum cristatum*. Exotics such as *Acetosella vulgaris* and a range of weedy grasses are common on the margins on the tree island.

**Potential Impacts**

The proposal will not result in any adverse impacts on threatened species or endangered ecological communities, or on the environment generally. The footprint of the proposed Snowfactory will be contained entirely in exotic grassland and will not result in any impacts on any Bog. There are extensive areas of excellent condition Bog to the south of the Kaaten Triple Chair Top Station.

The footprint of the proposed Snowfactory does not provide suitable habitat for *Rytidosperma vickeryae* nor important habitat for any other threatened species, given the level of disturbance and modification. No evidence of *Mastacomys fuscus* (Broad-toothed Rat) was observed within the Snowfactory footprint nor the adjoining tree island, and it does not support any habitat for *Liopholis guthega* (Guthega Skink).





**Photo 1: The site of the proposed Snowmaking Factory is already heavily modified and is dominated by exotic grasses.**



**Photo 2: The Snowmaking Factory has been located to avoid impacts on the native vegetation within the remnant tree island.**



Notwithstanding these conclusions, the proposal should incorporate appropriate measures to protect the vegetation within the tree island during construction, particularly the areas of remnant bog plants.

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

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ryan Smithers', with a stylized flourish at the end.

Ryan Smithers  
**Senior Ecologist**



## **APPENDIX D**

### **SITE ENVIRONMENTAL MANAGEMENT PLAN**

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# **1. INTRODUCTION**

## **1.1 Executive Summary**

Dabyne Planning Pty Ltd has been engaged by Perisher Blue Pty Ltd (Perisher Blue) the operator of Perisher Ski Resort to prepare a Site Environmental Management Plan (SEMP) to accompany a Statement of Environmental Effects for the installation of a Snowfactory and ancillary works adjacent to the Kaaten Triple Chairlift top station located within the Smiggin Holes ski area of the Perisher Ski Resort.

The project is anticipated to commence in the summer of 2017/18 and be completed within one summer.

## **1.2 SEMP Context**

This SEMP is to be read in conjunction with:

- Statement of Environmental Effects prepared by Dabyne Planning, July 2017 (which this SEMP forms part of).
- Perisher Blue Ski Resort: Ski Slope Master Plan 2002 (PBSSMP) which outlines best practice for development within the Resort.

The following construction practices identified in the PBSSMP are relevant to the proposal, as follows:

- Movement on Tracks
- Movement off Tracks
- Planning and Design of erosion and sediment control works
- Sediment control
- Topsoil Management
- Stockpile Management
- Protection of Trees
- Monitoring of revegetation
- Fencing and Protection of sensitive areas
- Washing of construction equipment

The guidelines for the above construction practices are contained within Appendix A of the PSSMP.

## **1.3 SEMP Objectives**

The objectives of this SEMP are to:

- ensure compliance with the requirements of all relevant environmental legislation;
- identify specific responsibilities for ensuring the safeguards are implemented;



- ensure that works are managed to reduce adverse impacts on the environment;
- ensure environmental safeguards are implemented correctly; and
- provide a basis for the auditing, monitoring and reporting of environmental performance.

## 2. ENVIRONMENTAL ACTIONS

### 2.1 Environmental Actions

The environmental actions required for the proposed works are listed in Table 1 below.

This table also provides the timeframe and frequency for the actions and subsequent monitoring, as well as the designation of responsibilities.

This provides an all-inclusive checklist for the efficient use by Contractors and relevant staff.

**Table 1 Environmental Actions Checklist****Flora**

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/date)</b>
<b>PRIOR TO CONSTRUCTION</b>			
All site personnel shall observe the limits of the works area and be made aware of the importance of vegetation of significant value during the site induction.	Site Environmental Manager	Site Induction / Prior to Commencement / During Construction	
Identify sensitive areas during site induction.	Site Environmental Manager	Site Induction / Prior to Commencement	
<b>DURING CONSTRUCTION</b>			
To reduce the risk of further spread of weeds; machinery and vehicles used on site are to be thoroughly washed before entering Kosciuszko National Park; and footwear and equipment are to be washed prior to being utilised to ensure they area free of weed seeds.	Site Supervisor/ Contractor	Prior to Park Entry	
<b>POST CONSTRUCTION</b>			
The site is to be progressively stabilised as works are completed.	Site Supervisor	Upon Completion	
The condition of rehabilitated areas shall be monitored seasonally until permanent vegetation cover is achieved.	Site Environmental Manager	At the end of the summer following construction and the subsequent summer after	
Follow up weed control (spot spraying) is to be carried out if deemed necessary.	Site Environmental Manager	At the end of the summer following construction and the subsequent summer after	

**Fauna**

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/date)</b>
<b>DURING CONSTRUCTION</b>			

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
Accidental leakages and spillage of concrete, fuel or lubricant from machinery shall be dealt with by taking immediate measures to contain the spill.	Site Supervisor	During Construction	
Any disturbed areas that are left open overnight are to be inspected early in the morning for trapped fauna. If significant fauna are found, sheets of hessian or similar are to be left in sections of the disturbed areas to assist escape.	Site Supervisor	At the Start of Each Day	
<b>POST CONSTRUCTION</b>			
Areas which have been disturbed are to be rehabilitated immediately following the completion of works.	Site Environmental Manager / Site Supervisor	Upon Completion	

## Erosion and Sedimentation

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
<b>PRIOR TO CONSTRUCTION</b>			
Where areas are to be disturbed, temporary sediment control structures are to be implemented.	Site Environmental Manager / Site Supervisor	Prior to Commencement	
<b>DURING CONSTRUCTION</b>			
Wherever practicable, during the course of construction, exposed areas shall be provided with a cover to minimise erosion and sedimentation.	Site Supervisor	During Construction	
Erosion and sedimentation controls shall be monitored on a daily basis or immediately following a rainfall event.	Site Environmental Manager	Following Rainfall/ Daily	
Construction activities shall be programmed to minimise the area of disturbed ground that is exposed to erosion at any one time.	Site Supervisor	During Construction	
<b>POST CONSTRUCTION</b>			

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/date)</b>
All exposed soil areas shall be appropriately stabilised to prevent erosion.	Site Supervisor	During Construction / Prior to Rainfall	
All exposed soil areas shall be appropriately revegetated following stabilisation to prevent erosion.	Site Environmental Manager / Site Supervisor	Upon Completion	

## Water Quality

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/date)</b>
<b>DURING CONSTRUCTION</b>			
Spills of any liquids shall not be hosed or flushed away but swept or collected.	Site Supervisor	During Construction	
Equipment shall be properly maintained to prevent water pollution. All plant and equipment should be inspected daily to avoid leakage of fuel, oil or hydraulic fluid.	Site Supervisor	During Construction	
No maintenance other than emergency repairs shall be undertaken on site.	Site Supervisor	During Construction	
All plant/equipment shall be washed out in an appropriately protected area to prevent erosion and pollution to existing drains or natural areas.	Site Supervisor	During Construction	
Spill kits shall be readily accessible.	Site Supervisor	Prior to Commencement	

## Site Working Area

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/date)</b>
<b>DURING CONSTRUCTION</b>			
All flammable and/or explosive materials shall be kept in an approved Workcover area.	Site Supervisor	During Construction	



<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
Ensure that access to the site is restricted to authorised personnel only.	Site Supervisor	During Construction	
Ensure site and associated plant and equipment is secured when site activities conclude at the end of the day.	Site Supervisor	End of Each Day	
<b>POST CONSTRUCTION</b>			
Upon completion of construction, the site working areas shall be removed, and the area reinstated as found originally.	Site Supervisor	Upon Completion	

### Air Quality

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
<b>DURING CONSTRUCTION</b>			
Materials transported in open trucks shall be covered to prevent generation of dust.	Site Supervisor	During Construction	
The tailgates of all vehicles transporting material from the construction site shall be securely fixed prior to loading and immediately after unloading.	Site Supervisor	During Construction	
<b>POST CONSTRUCTION</b>			
Areas no longer required for construction activity shall be progressively stabilised as soon as practicable to assist in controlling dust.	Site Supervisor	Upon Completion	

### Fuel, Chemicals & Hazardous Material (Explosives)

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
<b>DURING CONSTRUCTION</b>			

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
A container of spill absorbent is to be made available and used for emergency spills of fuel, oil or other chemicals.	Site Supervisor	Prior to Commencement	
No fuel will be store on site.	Site Supervisor	During Construction	
<b>POST CONSTRUCTION</b>			
Any contaminated material (empty drums, rag, contaminated soil etc) shall be removed immediately from the site and disposed of in accordance with the appropriate regulations.	Site Supervisor	End of Each Day	

## Plant and Equipment

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
<b>DURING CONSTRUCTION</b>			
All plant and equipment used on the subject site is to be placed in existing disturbed corridors to prevent minimal disturbance to the native vegetation.	Site Supervisor	Prior to Commencement / During Construction	
Emergency procedures shall be displayed in a prominent position in the site working area.	Site Supervisor	Prior to Commencement / During Construction	
<b>POST CONSTRUCTION</b>			
All work sites shall be restored in a satisfactory manner and where necessary in accordance with the appropriate regulations.	Site Supervisor/ Environmental Manager	Upon Completion	

## Waste Management

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
<b>DURING CONSTRUCTION</b>			
All litter generated on site is to be placed in small garbage bags. At the end of each day, these bags are to be disposed of in appropriate bins.	Site Supervisor	End of Each Day	

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
A daily inspection shall be carried out to ensure the worksite is left in a rubbish free state.	Site Supervisor	End of Each Day	
All employees shall be informed of the need to maintain a clean worksite.	Site Supervisor	Prior to Commencement / During Construction	
Any excess spoil is to be removed from the site and deposited at the Smiggin Holes stockpile site.	Site Supervisor	During Construction	
All loads of rubbish removed shall be securely covered to ensure no spillage.	Site Supervisor	During Construction	
To the furthest extent possible, efforts shall be made to reduce, reuse and recycle materials used onsite.	Site Supervisor	During Construction	
<b>POST CONSTRUCTION</b>			
The worksite shall be left in a tidy and rubbish free state upon completion of the Project.	Project Manager	Upon Completion	

## European and Aboriginal Heritage

<b>ACTION CHECKLIST</b>	<b>Who's Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial/ date)</b>
<b>DURING CONSTRUCTION</b>			
All efforts and actions to minimise ground disturbance should be taken. This includes installation of infrastructure and positioning laydown areas an ancillary construction activities to previously disturbed areas.	Project Manager	During Construction	
All staff and contractors working on the site shall be advised of the need to notify their supervisor and cease work, if either indigenous or non-indigenous heritage items are encountered.	Project Manager	Prior to Commencement	
Any evidence of Aboriginal relics discovered during construction shall be reported to OEH. Work in subject area to cease.	Project Manager	During Construction	

## Noise and Vibration

<b>ACTION CHECKLIST</b>	<b>WHO'S Responsible</b>	<b>When to be undertaken</b>	<b>DONE (Initial / date)</b>
<b>PRIOR TO CONSTRUCTION</b>			
All equipment to be used shall be correctly maintained and in good working order.	Site Supervisor	Prior to Commencement	
<b>DURING CONSTRUCTION</b>			
All construction activities shall be restricted to the hours as stipulated in the development consent issued by the Department of Planning & Infrastructure.	Project Manager	During Construction	
All site works shall be ceased by 30 May unless otherwise agreed to in writing by the Department of Planning & Environment.	Project Manager	30 May of relevant year	

## 2.2 Soil, Water & Construction Management

A comprehensive manual for soil, water and construction management procedures in relation to all the components of snowmaking infrastructure are provided Appendix A of the PSSMP. The manual provides an 'Environmental Best Practice' for Construction Practices specifically tailored for the resort, which has been adopted by the OEH (NPWS).

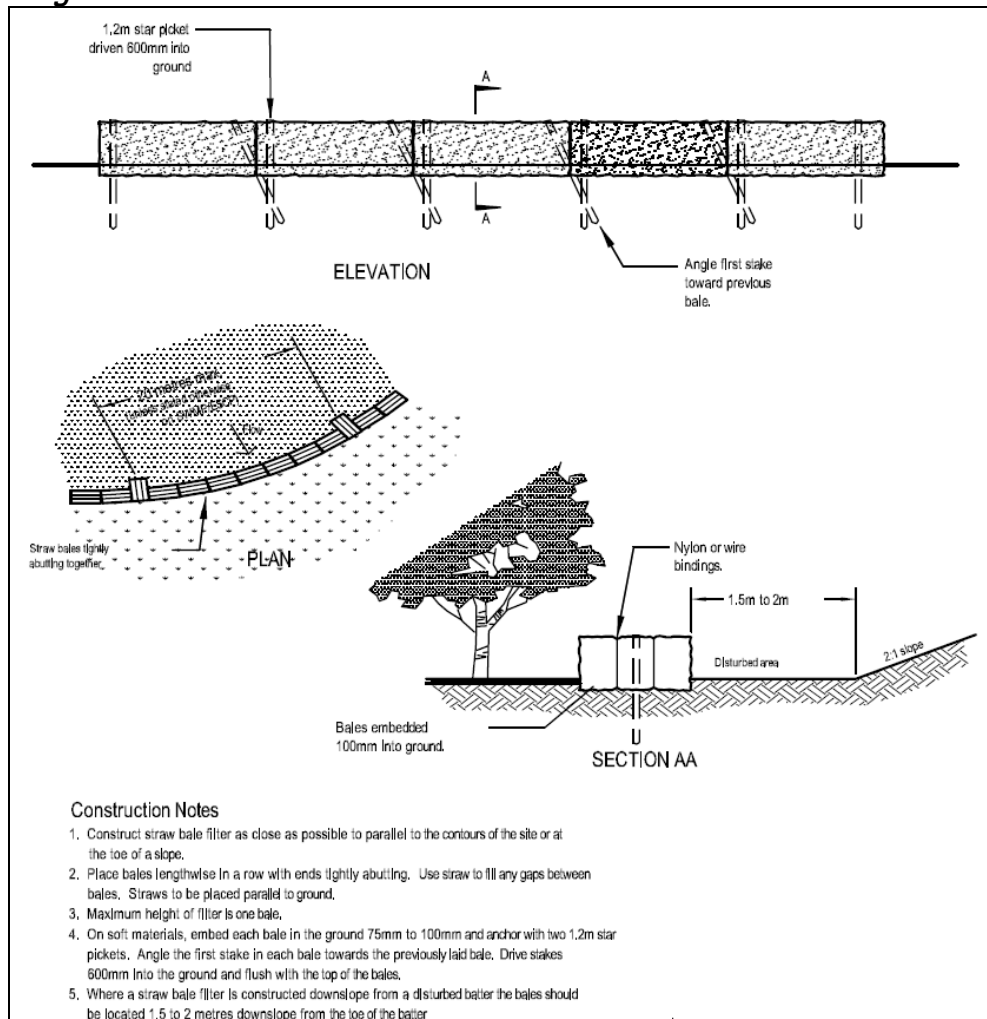
The construction methods prescribed in Appendix A of the PSSMP are to be read in conjunction with the above Environmental Actions Checklist.

For the purposes of clarity and consistency the specific controls required for the development are expanded and discussed below.

### 2.2.1 Erosion and Sedimentation Control

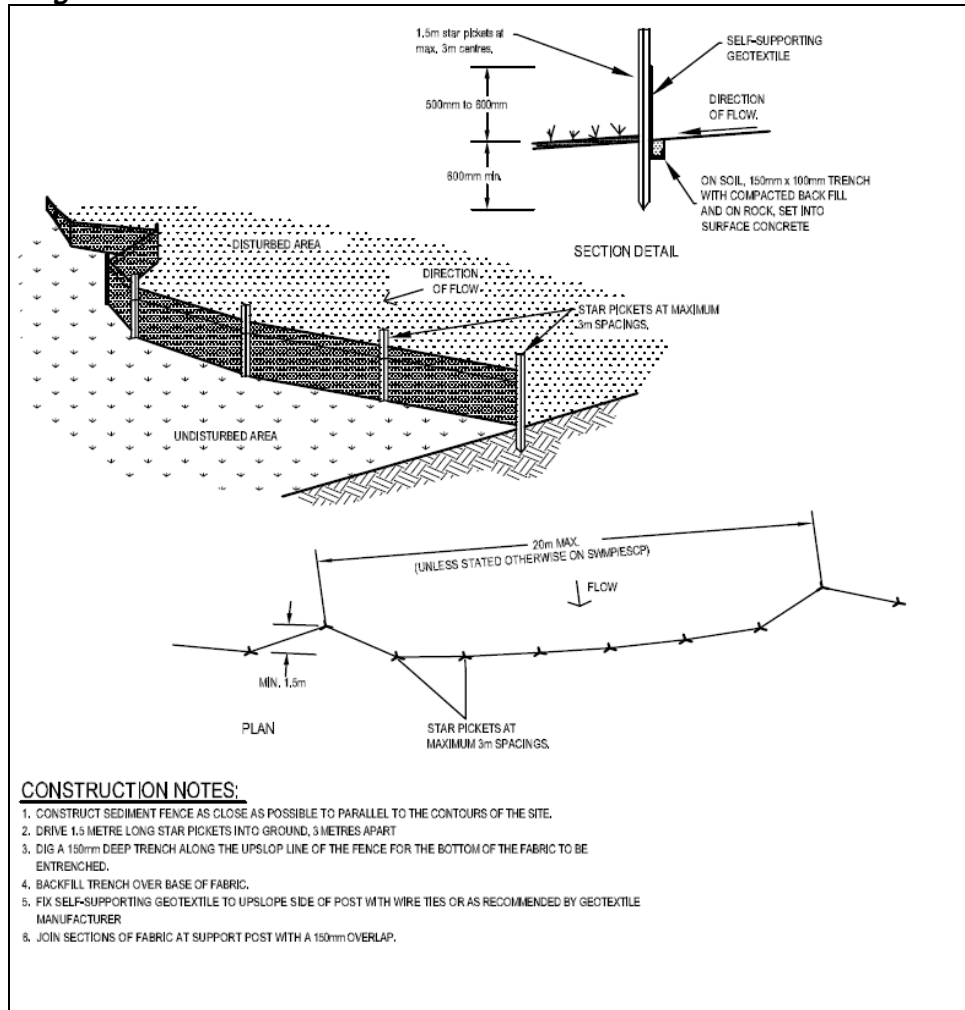
Appropriate environmental management controls may be required to manage soil and surface water during the construction of the development. Temporary controls will include either a straw bale filter, installed as illustrated Diagram A or a sediment fence in accordance with Diagram B below.

**Diagram A: Standard Straw Bale Filter Installation**





**Diagram B: Standard Sediment Fence Installation**



Erosion and sediment controls are to be installed in accordance with the following suite of criteria:

- Both straw bale and sediment control fencing should be installed on the low side of the work site;
- Both straw bale and sediment control fencing should be installed as close as possible to follow the existing contours of the site;
- A provision for the diversion of water, and stabilisation of channels, around the excavation site should be installed; and
- Areas where soil is to be stockpiled is to be surrounded by sediment control fencing and protected from runoff water.

## 2.2.2 Protection of Native Vegetation & Fauna

To ensure that the native vegetation and fauna within the development area is protected, a perimeter rope shall be erected on the edge of all the disturbance and access corridors located within native vegetation to prevent persons and machinery entering any areas comprising of native vegetation and potential habitat.

The nominated project Site Environmental Manager will be responsible for ensuring that the perimeter fencing is installed appropriately and is regularly maintained and monitored.

## **2.3 Toilet Facilities**

Toilet facilities are currently provided for staff at Smiggin Holes workshop building. If required, additional portable toilet can be installed.

## **2.4 Aboriginal Heritage**

Should any material suspected of being an Aboriginal object become unearthed in the course of works associated with the proposed works, all work at that location shall cease immediately as per Section 90 of the *National Parks and Wildlife Act 1974*, and the Office of Environment and Heritage (OEH) shall be contacted immediately to arrange for representatives to inspect the site.

## **2.5 Rehabilitation of the site**

Rehabilitation of the site will be undertaken in accordance with the rehabilitation guidelines for the KNP resort areas (NPWS 2006).

## 3 Responsibility and Requirements

### 3.1 On-site Structure and Responsibility

**Table 2: Allocation and Responsibility**

Environmental Responsibilities		
Title	Name and Contact No.	Responsibility
Operations Director for Perisher	Michael Fearnside – 6459 4408 / 0428 484 273	Project Manager: <ul style="list-style-type: none"> <li>• Oversee the project and manage contractors.</li> <li>• Liaise with Perisher Blue staff and Contractors.</li> <li>• Respond to complaints &amp; inquiries of environmental matters.</li> <li>• Liaise with DPE and NPWS.</li> </ul>
Mountain Manager, Perisher	Andrew Kennedy - 6459 4408	Site Supervisor: <ul style="list-style-type: none"> <li>• Day to day supervision of the project.</li> <li>• Ensure conditions of consent are complied with.</li> <li>• Implementation and maintenance of environmental controls as detailed in the SEMP.</li> </ul>
Environmental Manager, Perisher	Tanya Bishop – 6459 4504 / 0424 946 365 (or delegate)	Site Environmental Manager: <ul style="list-style-type: none"> <li>• Site induction.</li> <li>• Staff training.</li> <li>• Oversee environmental management of the project.</li> <li>• Audit implementation and maintenance of environmental controls as detailed in the SEMP.</li> <li>• Manage rehabilitation and offsets program.</li> <li>• Monitor the site.</li> </ul>

### 3.2 Legislative Requirements

The following legislation applies to the proposed development:

#### 3.2.1 Relevant Legislation

##### Environmental Planning Legislation

*Environmental Planning and Assessment Act, 1979* (NSW)

##### Conservation and Heritage Legislation

*National Parks and Wildlife Act, 1974* (NSW)

*Threatened Species Conservation Act, 1995* (NSW)

*Environment Protection and Biodiversity Conservation Act, 1999* (Cwlth)

**Pollution and Waste Management Legislation**

*Protection of the Environment Operations Act, 1997* (NSW)



## 4. Implementation

### 4.1 Emergency Response Contacts

The following key environmental emergency response contacts are provided as follows:

#### Key Environmental Emergency Response Contacts

Organisation	Emergency Phone	Non Emergency Phone
NSW Police	000	Jindabyne: 6456 2244
NSW Fire Brigade	000	Perisher: 6457 5037 Jindabyne: 6456 2476
NSW Ambulance	000	Perisher: 131 233
Medical Centres	Perisher (Winter Only): 6457 5266 Jindabyne: 6457 1221	
National Parks and Wildlife Service (NPWS)/DECCW	1800 629 104	Perisher: 6457 5214 Jindabyne 6450 5555
Roads and Traffic Authority	Traffic incidents & road conditions: 131 700 Road closures and special events: 132 701	
Environment Protection Authority Environment Line	131 555	
NRMA Road Service	Jindabyne: 6456 2170	

### 4.2 Environmental Training

All the contractors and staff involved with the works are to be made aware of the relevant requirements of this SEMP. Site induction is to be undertaken prior to the commencement of works by the Perisher Environmental Manager.

It is the responsibility of the Environmental Manager to ensure that all staff and subcontractors working on the site are provided with environmental training to achieve a level of awareness and competence appropriate to their assigned activities. Persons, including subcontractors' personnel, without appropriate environmental training should not be permitted to work on the site.

The Environmental Manager should establish and maintain a register of environmental training carried out including dates, names of persons trained and trainer details.

Site induction is to include:

- a) Environmental awareness, the principal of due diligence, and other relevant codes of practice.
- b) Specific environmental issues including:
  - *This SEMP*
  - *Relevant legislation (as identified in this Report)*
  - *Emergency preparedness/procedures*
  - *Incident reporting*
  - *Community consultation*
  - *Site environmental procedures*

## **4.3 Communication**

### **4.3.1 External Stakeholders**

Given the location and extent of the proposed works on the ski slopes, consultation is not considered necessary, outside of the regulatory authorities.

### **4.3.2 Liaison with EPA**

The Project Manager must notify the EPA Regional Manager of pollution incidents on or around the site (or the EPA Pollution Line on telephone 131 555 should the incident occur outside normal EPA business hours), which have occurred in the course of the activities (to comply with the PEOA), in the following circumstances:

- if the actual or potential harm to the health or safety of human beings or ecosystems is not trivial,
- if actual or potential loss or property damage (including clean-up costs) associated with a pollution incident exceeds \$10,000.

The Project Manager should notify OEHL verbally within 2 hours and in writing within 24 hours of any pollution incidents that involve the EPA.

### **4.3.3 Complaints Register**

Any complaints made by the community & other stakeholders shall be recorded on a complaints register managed by the Project Manager.

All complaints should be responded to within 24 hours of receipt.

## **4.4 Working Hours**

As per the Department of Planning & Environment standard condition of consent, the proposed working hours for the project will be between 7am and 6pm on Mondays to Saturdays with no work be carried out on Sundays or public holidays.

Should these hours need to be varied, the Project Manager will request a variation from the Department of Planning & Environment in accordance with the conditions of consent.

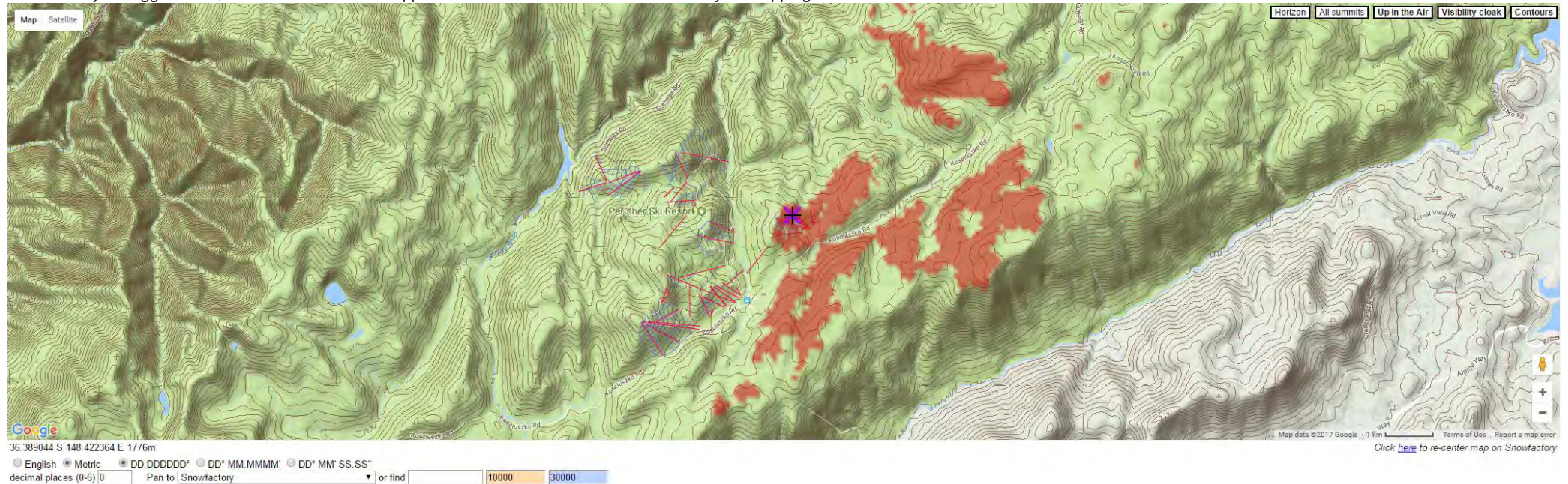
## **4.5 Auditing**

The Contractor and Site Supervisor in consultation with the Site Environmental Manager will both undertake an audit of the works to ensure the environmental safeguards and controls are being implemented effectively.

## APPENDIX E

### VISUAL IMPACT ANALYSIS

Snowfactory - Smiggin Holes, Perisher Ski Resort ♦ Appendix E – Attachment1: View Shed Analysis Mapping

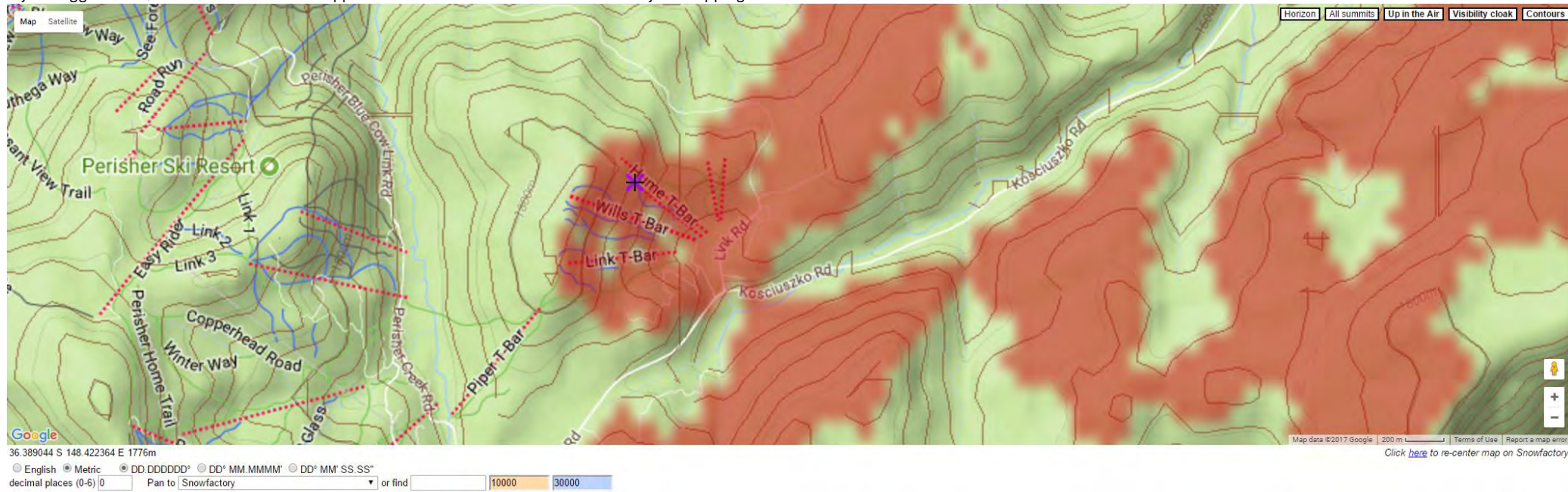


+ = Denotes the proposed location of the Snowfactory



= Denotes the visibility cloak – areas where the highest point of the structure can be potentially seen from, measured at 9m above the ground  
(nb: does not take into account vegetation, localised land forms or existing buildings that would otherwise screen the structure)

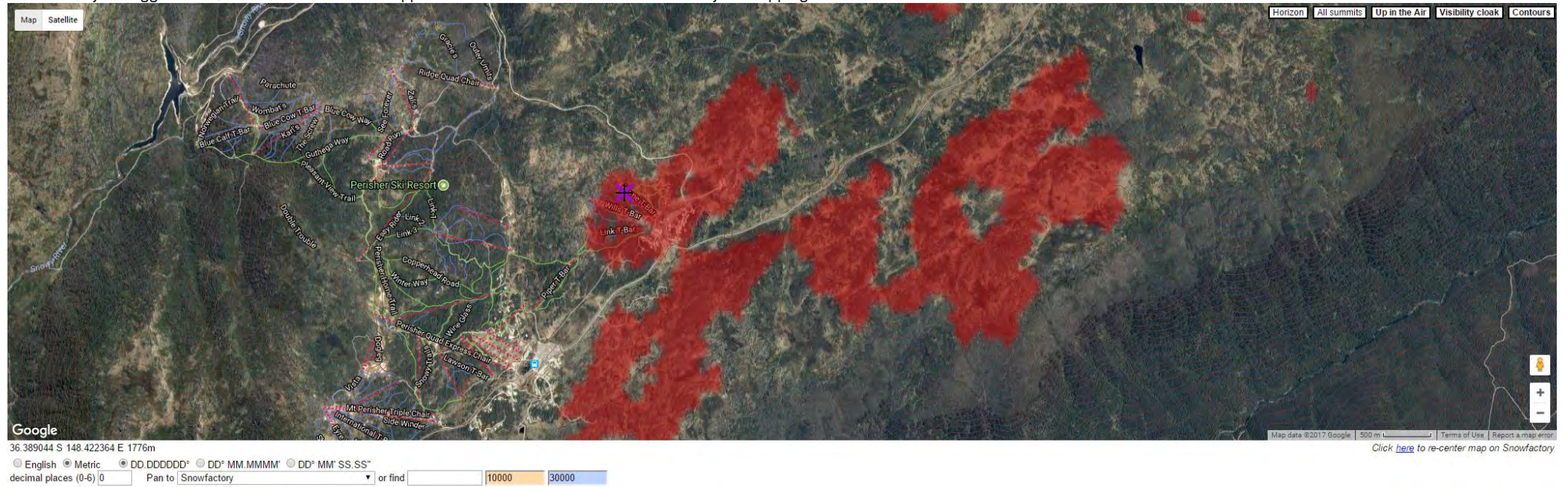




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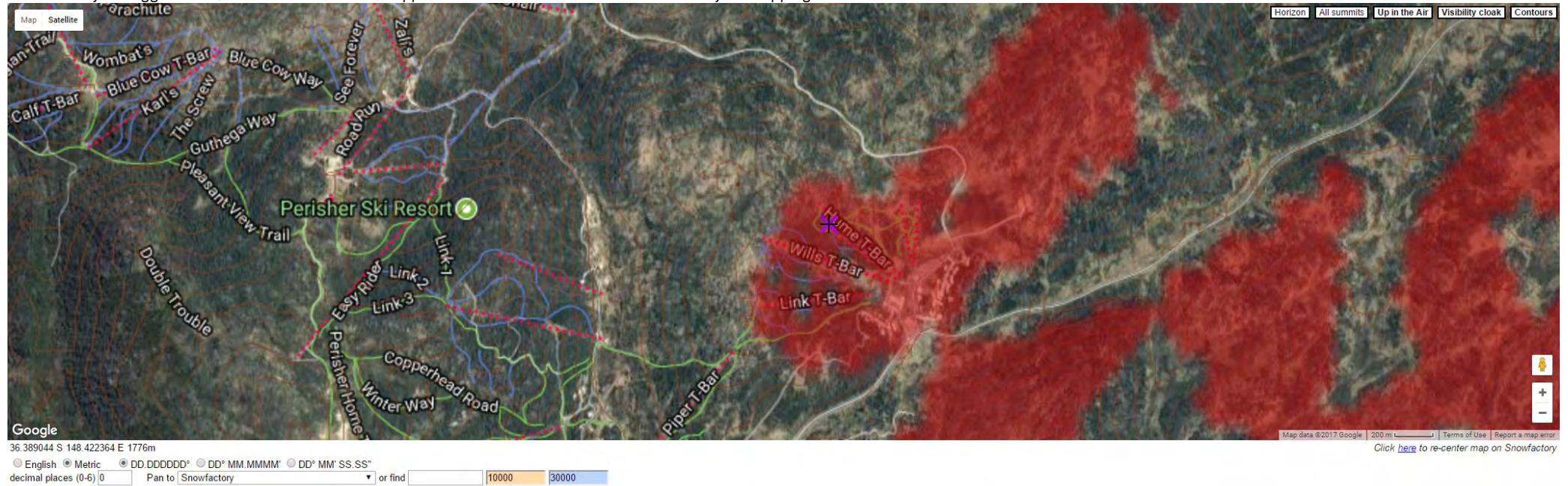


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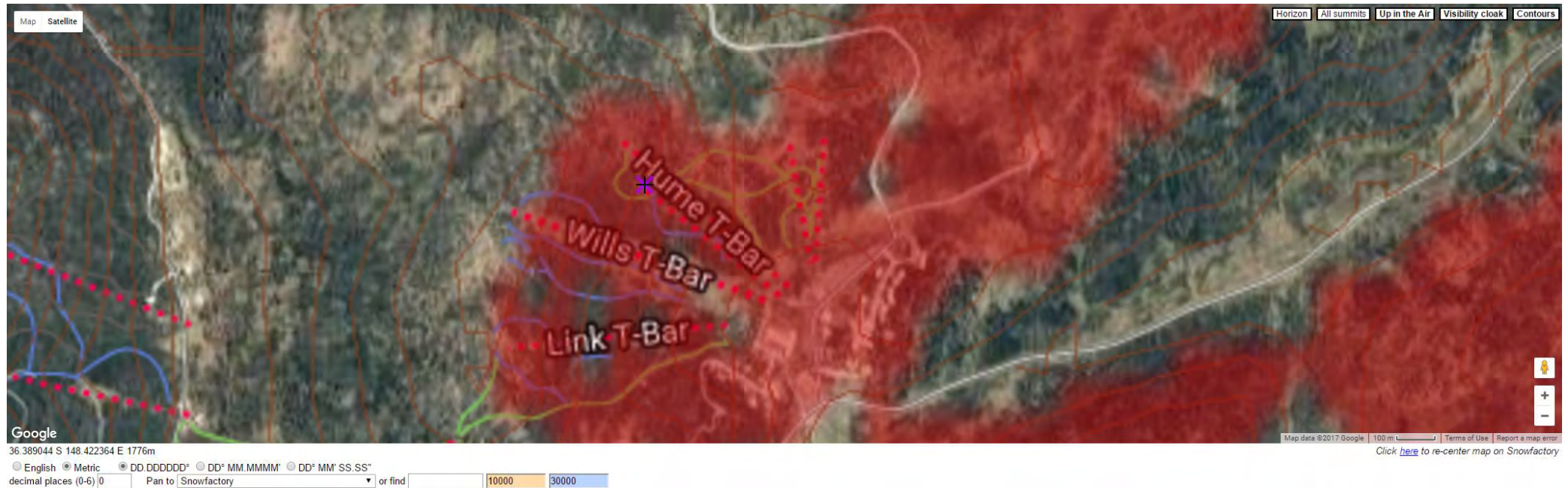


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Photo taken from Viewpoint P1 with the subject building site indicated by the red arrow





Photo taken from Viewpoint P2 with the subject building site indicated by the red arrow





Photo taken from Viewpoint P3 with the subject building site indicated by the red arrow