BUSHFIRE RISK ASSESSMENT

FOR
A PROPOSED BOOM GATE AND CHANGE OF USE FROM STOREROOM TO STAFF ACCOMMODATION

AT
KOSCIUSKO MOUNTAIN RETREAT, WILSONS VALLEY NSW 2624

Prepared by:

Firebird ecoSultants Pty Ltd
ABN – 16 105 985 993

PO Box 354
Newcastle NSW 2300

Mob: 0414 465 990
Ph: 02 4910 3939
Fax: 02 4929 2727
Email: sarah@firebirdeco.com.au

Site Details:	Kosciusko Mountain Retreat, Wilsons Valley NSW 2624
Prepared by:	***Sarah Jones B.Env.Sc., G.Dip.DBPA (Design in Bushfire Prone Areas)*** ***Firebird ecoSultants Pty Ltd*** **A**BN – 16 105 985 993 PO Box 354, Newcastle NSW 2300 M: 0414 465 990 Email: sarah@firebirdeco.com.au T: 02 4910 3939 Fax: 02 4929 2727
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Author:	Azmina Shafie
Reviewer 1:	Liv Page
Reviewer 2:	Sarah Jones

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Executive Summary

A Bushfire Threat Assessment Report has been prepared by Firebird ecoSultants Pty Ltd at the request of Raheja Projects for a proposed boom gate installation and change of use from existing storeroom to staff accommodation building at Kosciusko Mountain Retreat, Wilsons Valley NSW 2624. This report forms part of a Development Application (DA) to be submitted to the Department of Planning, Housing, and Infrastructure.

The proposed development is located within the existing Kosciusko Mountain Retreat which is captured under the Snowy Mountains Special Activation Precinct (Snowy SAP). In accordance with Section 11.5 of the Snowy SAP, all new development in the alpine precinct must comply with the NSW RFS document Planning for Bushfire Protection 2019 (PBP, 2019). However, as the site is existing, the proposed development is to meet the requirements for Special Fire Protection Purposes Infill in Alpine Resort Areas as set out in Section 6.6 of PBP 2019. The proposed development must also consider Section 11.5 of the Kosciusko National Park Plan of Management in accordance with State Environmental Planning Policy (Precincts Regional) 2021 (Alpine SEPP).

The proposed development is classified as integrated development being that the existing site is a Special Fire Protection Purposes development and the Department of Planning, Housing and Infrastructure will refer the DA to the NSW Rural Fire Service. A Bush Fire Safety Authority (BFSA) will be obtained with General Terms of Approval to update the existing BFSA dated 4th January 2005. While the 2005 BFSA remains a historical reference, the controlling standard for this SFPP infill development is now PBP 2019 (Section 6.6), which supersedes older guidelines. Refer to Appendix D for previous BFSA.

The aim of PBP 2019 is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

The specific objectives that apply to SFPP infill development in the alpine resort areas are as follows:

- Provide an appropriate defendable space;
- Provide a better bush fire protection outcome for existing structures (e.g. via ember protection measures);
- Ensure new building work complies with the construction standards set out in AS3959;
- To ensure ongoing management and maintenance responsibilities are in place where APZs are proposed outside of the sub lease or leasehold area;
- Written consent from the land managers is provide for all proposed works outside of the sub lease or leasehold area;

- Proposed APZs outside of the sub lease or leasehold area are supported by a suitable legal mechanism to ensure APZs are managed under a binding legal agreement in perpetuity;

- Ensure building design and construction standards enhance the chances of occupant and building survival; and

- Provide safe emergency evacuation procedures.

The following recommendations have been provided for the proposed development to meet the requirements of SFPP Infill development in Alpine Resort Areas:

1. **Asset Protection Zones -**
   The APZ provides space and reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits and to prevent direct flame contact.

   The established areas of managed land implemented in accordance with the Bushfire Protection Plan (refer to Appendix B) and previous DA Determination Schedule as supported by NSW RFS (refer to Appendix C and Appendix D) are suitable for compliance with the managed land as set out in Table A1.12.7 – FFDI 50 – Alpine areas.

   As the proposed boom gate is classified as a class 10a structure, there are no requirements for compliance in accordance with Section 8.3.2 in PBP 2019. No habitable structures, including the proposed change of use from storeroom to staff accommodation, occurs within 6m of the proposed boom gate location.

   The existing storeroom that is to be converted to staff accommodation is constructed to a standard appropriate for the alpine area with the following areas of managed land already established within the Kosciusko Mountain Retreat:

   - North for a minimum distance of 52m; and
   - West for a minimum distance of 30m.

   It is noted that as the site is located within the Kosciusko National Park, the standard APZ maintenance set out in Appendix 4 cannot apply due to regard for the ecological constraints of the site. Regular lawn maintenance is undertaken as well as removal of tree barks/debris so as to not contribute to the fuel loads within the park.

2. Construction Standards -

Construction standards seek to increase the protection of the habitable buildings from bushfire. The shorter the APZ (distance between the external wall of the habitable building and the unmanaged vegetation), then the higher the construction standard, which is referred to as the BAL.

Based on the established areas of managed land provided above, the proposed staff accommodation building has been assessed as compliant with the appropriate construction standards for alpine conditions and provides a reasonable level of bushfire resilience.

No construction requirements / BAL ratings will be imposed on the proposed boom gate installation as the structure is classified as 10a and occurs >6m from any habitable structures.

As the proposal development occurs in the Kosciusko National Park, large-scale clearing to achieve the standard APZ is not feasible. Rather, maintenance of minimal vegetation and debris (mowing, debris removal) is conducted around the buildings. Existing alpine construction standards provide a reasonable level of bushfire resilience. As such, the proposed staff accommodation aligns with SFPP guidelines under PBP 2019.

3. Access -

Access standards provide for emergency evacuation and firefighting operations.

The Bushfire Protection Plan (refer to Appendix B) as recommended by the previous BFSA (refer to Appendix D) details the establishment of a firefighting trail around the habitable structures of the Kosciusko Mountain Retreat. Access was recommended to comply with the requirements of section 4.3.2 in Planning for Bushfire Protection 2001. While the 2005 BFSA remains a historical reference, the controlling standard for this SFPP infill development is now PBP 2019 (Section 6.6), which supersedes older guidelines.

The performance criteria for general access in SFPP development states "*firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation*". The Kosciusko Mountain Retreat has existing direct access to Kosciusko Road via a two-wheel drive, all weather road. All internal roads provide direct access to habitable structures within the site and these are through roads.

The proposed boom gate installation is to provide control over vehicles entering and exiting the Kosciusko Mountain Retreat. The proposed boom gates provide a separate lane for entering and existing the site. The proposed boom gate will include a mechanical override key to allow staff to disengage the motor and manually lift the arm if power fails. A dedicated procedure outlining these steps – covering the location of the override key, battery backup operation, and staff roles – will be included in the Park Management Plan. In the event of a complete power outage, staff are available on-site 24/7 to unlock and lift

the barrier. This ensures that emergency services will be provided with direct access to the property at all times and maintains compliance with SFPP requirements.

Given the above and the additional firefighting trail within the site, the existing access is compliant with the performance criteria in PBP 2019.

4. Water and Utility Services

A water supply is required for firefighting operations.

The existing water supply to the Kosciusko Mountain Retreat is sufficient for the purposes of firefighting operations in the event of a bushfire.

The property features underground fire hydrants (mains pressure) and a centrally located fire hose reel. Additionally, Sawpit supplies 2x potable water tanks; one metal tank with 100KL capacity & one concrete tank with 110KL capacity. These are gravity fed from upstream weir.

Annual fire inspections are performed across the premises. Both the drying room and staff room have interconnecting fire alarms and evacuation plans are displayed in every unit. These measures align with the site's bushfire safety obligations under PBP 2019.

5. Emergency Management

Provide suitable emergency and evacuation arrangements for occupants.

A park management plan is already existing for the site which includes a bushfire strategy. This is to be updated to include:

- The new staff accommodation details
- The boom gate override procedure
- The fire evacuation plans for the drying room and staff room, highlighting hydrant/hose reel locations.

Noted that annual fire inspections are performed across the premises. Both the drying room and staff room have interconnecting fire alarms and evacuation plans are displayed in every unit. These measures align with the site's bushfire safety obligations under PBP 2019.

This report provides recommended information to assist the RFS in determining compliance in accordance with the PBP 2019 and AS 3959-2018. In conclusion, subject to the implementations detailed in this report, the proposal will be acceptable from a bushfire perspective.

Sarah Jones
B.Env.Sc., G.DIP.DBPA (Design for Bushfire Prone Areas)
BPAD-A Certified Practitioner (BPD-26512)
Ecologist / Bushfire Planner

Terms & Abbreviations

Abbreviation	Meaning
APZ	Asset Protection Zone
AS2419 -2017	Australian Standard – Fire Hydrant Installations
AS3959-2018	Australian Standard – Construction of Buildings in Bush Fire Prone Areas
BCA	Building Code of Australia
BPA	Bush Fire Prone Area (Also Bushfire Prone Land)
BFPL Map	Bush Fire Prone Land Map
BPMs	Bush Fire Protection Measures
BFSA	Bush Fire Safety Authority
CC	Construction Certificate
EPA Act	*NSW Environmental Planning and Assessment Act 1979*
FDI	Fire Danger Index
FMP	Fuel Management Plan
ha	hectare
IPA	Inner Protection Area
LGA	Local Government Area
OPA	Outer Protection Area
PBP	Planning for Bushfire Protection 2019
PoM	Plan of Management
RF Act	Rural Fires Act 1997
RF Regulation	Rural Fires Regulation
SMR	Snowy Monaro Regional Council

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FIGURES

1 INTRODUCTION

Firebird ecoSultants Pty Ltd has been engaged by Raheja Projects to undertake a Bushfire Threat Assessment (BTA) for a proposed boom gate installation and change of use from existing storeroom to staff accommodation building at Kosciusko Mountain Retreat, Wilsons Valley NSW 2624, hereafter referred to in this report as 'the site' (Refer to Figure 1-1).

The intent of the BPMs is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting firefighting activities, while having regard for the natural environment of Kosciusko National Park.

This assessment has been based on the hazards within the site and surrounds in January 2025.

1.1 Site Particulars

Locality:	7693 Koscisuko Road, Wilsons Valley 2624
LGA:	Snowy Monaro Regional Council
Lot / DP:	Lot 30 / DP725492
Current Land Use:	C1: National Parks and Nature Reserves

1.2 Description of Proposal

The proposal is for a boom gate installation and change of use from existing storeroom to staff accommodation building at Kosciusko Mountain Retreat, Wilsons Valley NSW 2624. Refer to Appendix 1 – Site Layout and Plans.

Figure 1-1: Site Location (Six Maps)

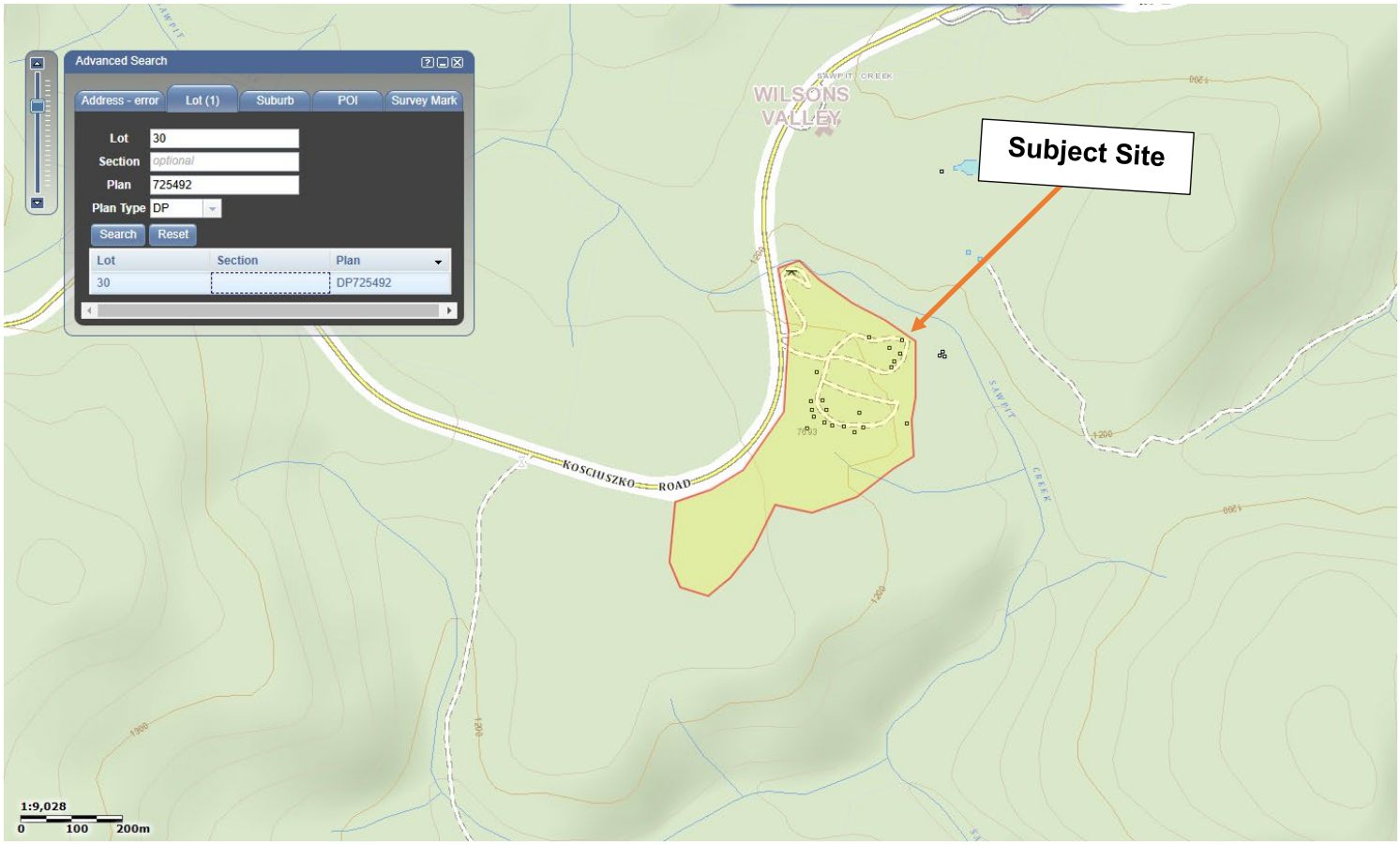

Figure 1-2: Bushfire Prone Land Map (NSW Planning Portal)

2 METHODOLOGY

2.1 Vegetation Assessment

Vegetation surveys and vegetation mapping carried out on the site has been undertaken as follows:

- Aerial Photograph Interpretation to map vegetation cover and extent
- Confirmation of the vegetation assemblage typology present.

2.2 Slope Assessment

Slope assessment has been undertaken as follows:

- Aerial Photograph Interpretation in conjunction with analysis of electronic contour maps with a contour interval of 2m using Spatial Map Viewer.

3 SITE ASSESSMENT

The following assessment has been undertaken in accordance with the requirements of PBP (RFS, 2019).

3.1 Vegetation Assessment

In accordance with PBP (RFS 2019), an assessment of the vegetation and slope over a distance of 140m in all directions from the site was undertaken. Vegetation that may be considered a bushfire hazard was identified in all directions from the site. Refer to Table 3-1 for Vegetation and Slope Assessment and Figure 3-1 Vegetation Map.

Table 3-1: Vegetation Classification for Proposed Boom Gate and Staff Accommodation

Direction	Vegetation Type	Slope Assessment
North	Managed Land followed by forest vegetation	Downslope 10-15°
East	Managed Land	N/A
South	Managed Land	N/A
West	Forest vegetation	Upslope

NOTE: the areas of the site for distances of 80m Northwest and South of any habitable buildings and to the property boundary on all other elevations has been adopted as per the Bushfire Protection Plan prepared by KL & CM Gordon Drafting Service and dated 10/11/2004. Refer to Appendix B for Bushfire Protection Plan.

The biodiversity assessment prepared by WSP dated 22/03/2022 describes the existing condition of the vegetation surrounding the camping grounds/cabins as low condition. This shows that the understorey and ground layer are disturbed/managed and will continue so as part of the Bushfire Protection Plan while retaining canopy trees to address ecological habitat significance. Refer to Appendix F for Figure 14.1 showing biodiversity constraints of the Kosciusko Tourist Park sub precinct.

Legend

- Line Distance
- Building Outline

Assessment Area

- 100m
- 140m

Classified Vegetation

- Forest (wet and dry sclerophyll) ect.
- Elevation Contours
- Cadastre

Scale 1:1,300

0 40 80 m

firebird

Client: Raheja Projects

Project: Kosciusko Mountain Retreat, Wilsons Valley NSW 2624

Figure 3-1: Vegetation Map

4 BUSHFIRE PROTECTION ASSESSMENT

4.1 Asset Protection Zones (APZ)

The PBP (RFS, 2019) guidelines has been used to determine the widths of the APZs required for habitable buildings within the site using the vegetation and slope data identified in Section 3-1 of this report.

The site lies within the Kosciusko National Park alpine area therefore is assessed under a FDI rating of 50. Using the results from the Site Assessment (section 3-1 of this report) the deemed to satisfy APZ requirements for the proposed building within the site was determined using Table A1.12.7 in PBP (RFS, 2019). Refer to Table 4-1 and Figure 4-1 for existing managed areas for the proposed staff accommodation building.

Table 4-1: Existing Managed Area for Proposed Staff Accommodation

Direction from Building Envelope	Vegetation Classification within 140m	Effective Slope (within 100m)	APZ to be Provided	Comment
North	Forest	Downslope 10-15°)	An APZ of minimum 52m is established within the site.	Acceptable solution in accordance with PBP (RFS, 2019)
East	Managed Land	N/A	>100m managed land provided	Acceptable solution in accordance with PBP (RFS, 2019)
South	Managed Land	N/A	>100m managed land provided	Acceptable solution in accordance with PBP (RFS, 2019)
West	Forest	Upslope	An APZ of minimum 30m is established within the site.	Acceptable solution in accordance with PBP (RFS, 2019)

Given the information above, the proposed staff accommodation building has been assessed as compliant with a construction standard for alpine conditions. It is noted that the recommended areas of managed land in accordance with Table A1.12.7 in PBP 2019 are established within the site as per the NSW RFS and Determination Schedule for a previous DA. Refer to Appendix C and Appendix D. While the 2005 BFSA remains a historical reference, the controlling standard for this SFPP infill development is now PBP 2019 (Section 6.6), which supersedes older guidelines.

Legend

- Line Distance
- Building Outline
- APZ

Assessment Area

- 100m
- 140m

Classified Vegetation

- Forest (wet and dry sclerophyll) ect.
- Cadastre

Scale 1:1,300

0 40 80 m

firebird

Client: Raheja Projects

Project: Kosciusko Mountain Retreat, Wilsons Valley NSW 2624

Figure 4-1: APZ Map

5 BUSHFIRE ATTACK ASSESSMENT

Building design and the materials used for construction of future dwellings should be chosen based on the information contained within AS3959-2018, and accordingly the designer / architect should be made aware of this recommendation. It may be necessary to have dwelling plans checked by the architect involved to ensure that the proposed dwellings meet the relevant Bushfire Attack Level (BAL) as detailed in AS3959-2018.

The determinations of the appropriate BAL are based upon parameters such as weather modelling, fire-line intensity, flame length calculations, as well as vegetation and fuel load analysis. The determination of the construction level is derived by assessing the:

- Relevant FFDI = e.g. 100
- Flame temperature
- Slope
- Vegetation classification; and
- Building location.

The following BAL, based on heat flux exposure thresholds, are used in the standard:

(a) **BAL – LOW** The risk is considered to be **VERY LOW**

There is insufficient risk to warrant any specific construction requirements but there are still some risks.

(b) **BAL – 12.5** The risk is considered to be **LOW**

There is a risk of ember attack.

The construction elements are expected to be exposed to a heat flux not greater than 12.5 k/m2.

(c) **BAL – 19** The risk is considered to be **MODERATE**

There is a risk of ember attack and burning debris ignited by wind borne embers and a likelihood of exposure to radiant heat.

The construction elements are expected to be exposed to a heat flux not greater than 19 kW/m^2.

(d) **BAL-29** The risk is considered to be **HIGH**

There is an increased risk of ember attack and burning debris ignited by windborne embers and a likelihood of exposure to an increased level of radiant heat.

The construction elements are expected to be exposed to a heat flux no greater than 29 kW/m2.

(e) **BAL-40** The risk is considered to be **VERY HIGH**

There is much increased risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front.

The construction elements are expected to be exposed to a heat flux no greater than 40 kW/m^2.

(f) **BAL-FZ** The risk is considered to be **EXTREME**

There is an extremely high risk of ember attack and burning debris ignited by windborne embers, a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front.

The construction elements are expected to be exposed to a heat flux greater than 40 kW/m^2.

5.1 Determination of Bushfire Attack Levels

Using a FFDI of 50, the information relating to vegetation, slope and according to Table A1.12.7 of PBP 2019, the appropriate BAL is determined. The results from this bush fire risk assessment are detailed below in Table 5-1–Bush Fire Attack Level Assessment.

Table 5-1: Determination of Construction Level for proposed staff accommodation

Vegetation Type & Direction	Separation Distance from vegetation	Construction Level
Forest to the North	>52m	The construction standard of the existing building to be used for proposed staff accommodation is compliant with a level for alpine conditions and provides reasonable bushfire resilience.
Managed Land to the East	>100m	
Managed Land to the South	>100m	
Forest to the West	>30m	

6 COMPLIANCE

The proposal is for infill to an existing SFPP site therefore development standards apply. Table 6-1 details the proposed staff accommodation building compliance with Development Standards for Special Fire Protection Purpose Developments.

Table 6-1: Proposed Compliance with SFPP Development Standards

Acceptable Solutions	Performance Criteria	Compliance with PBP
ASSET PROTECTION ZONES		
〉 the building is provided with an APZ in accordance with PBP 2019 (Table A1.12.1 in Appendix 1).	〉 Manufactured home estates: APZs achieve radiant heat levels that are commensurate with the construction standard for the proposed dwellings.	**Complies with PBP –** Areas of managed land are already established for the proposed staff accommodation building based on Table A1.12.7 – FFDI 50 – Alpine areas.
〉 APZs are located on lands with a slope less than 18 degrees.	〉 APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.	**Complies with Acceptable Solution** – Managed areas are located on lands with a slope less than 18 degrees.
〉 the APZ is managed in accordance with the requirements of Appendix 4 of this document, and is wholly within the boundaries of the development site; 〉 APZ are wholly within the boundaries of the development site; and 〉 other structures located within the APZ need to be located further than 6m from the refuge building.	〉 APZs are managed and maintained to prevent the spread of fire to the building. 〉 the APZ is provided in perpetuity	**Complies with PBP –** The managed lands are already established are wholly within the boundaries of the site and are managed to a standard appropriate for Kosciusko National Park having regard for ecological constraints. Large-scale clearing is not feasible however regular minimal vegetation management is conducted around the buildings.

LANDSCAPING		
〉 landscaping is in accordance with Appendix 4; and 〉 fencing is constructed in accordance with section 7.6.	〉 landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions	**N/A –** Specific criteria for landscaping is not applicable to the site as it is for the Kosciusko National Park alpine area.
CONSTRUCTION STANDARDS		
〉 a construction level of BAL-12.5 under AS 3959 or NASH Standard and section 7.5 of PBP is applied.	〉 the proposed building can withstand bush fire attack in the form of wind, embers, radiant heat and flame contact.	**Complies with Acceptable Solution –** The proposed staff accommodation building has been assessed as compliant. Existing alpine construction standards provide a reasonable level of bushfire resilience.
ACCESS		
〉 SFPP access roads are two-wheel drive, all-weather roads; 〉 access is provided to all structures; 〉 traffic management devices are constructed to not prohibit access by emergency services vehicles; 〉 access roads must provide suitable turning areas in accordance with Appendix 3; and 〉 one way only public access roads are no less than 3.5 metres wide and have designated parking bays with hydrants located outside of these areas to ensure accessibility to reticulated water for fire suppression	〉 firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.	**Complies with Performance Criteria –** The Kosciusko Mountain Retreat has existing direct access to Kosciusko Road via a two-wheel drive, all weather road. All internal roads provide direct access to habitable structures within the site and these are through roads. An existing fire trail occurs around the perimeter of the habitable structures within the Kosciusko Mountain Retreat. The proposed boom gate installation is to provide control over vehicles entering / exiting the site. A failsafe and manual override will be provided in the event of an emergency so as to provide access at all times. Managers will be onsite 24/7.

		Given the above, firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.
〉 the capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges and causeways are to clearly indicate load rating.	〉 the capacity of access roads is adequate for firefighting vehicles.	**Complies with Acceptable Solution –** the capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges and causeways are to clearly indicate load rating.
〉 hydrants are located outside of parking reserves and road carriageways to ensure accessibility to reticulated water for fire suppression; 〉 hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005; and 〉 there is suitable access for a Category 1 fire appliances to within 4m of the static water supply where no reticulated supply is available.	〉 there is appropriate access to water supply.	**Complies with Performance Criteria –** The property features underground fire hydrants (mains pressure) and a centrally located fire hose reel. Additionally, Sawpit supplies 2x potable water tanks; one metal tank with 100KL capacity & one concrete tank with 110KL capacity. These are gravity fed from upstream weir.
PERIMETER ROADS		
〉 there are two-way sealed roads; 〉 minimum 8m carriageway width kerb to kerb; 〉 parking is provided outside of the carriageway width; 〉 hydrants are to be located clear of parking areas; 〉 there are through roads, and these are linked to the internal road system at an interval of no greater than 500m; 〉 curves of roads have a minimum inner radius of 6m;	〉 perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating as well as providing a safe operational environment for emergency service personnel during firefighting and emergency management on the interface.	**N/A –** Perimeter roads are not proposed at this site. Kosciusko Road provides direct access to the existing Kosciusko Mountain Retreat.

〉 the maximum grade road is 15 degrees and average grade of not more than 10 degrees; 〉 the road crossfall does not exceed 3 degrees; and 〉 a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.		
NON-PERIMETER ROADS		
〉 minimum 5.5m carriageway width kerb to kerb; 〉 parking is provided outside of the carriageway width; 〉 hydrants are located clear of parking areas; 〉 there are through roads, and these are linked to the internal road system at an interval of no greater than 500m; 〉 curves of roads have a minimum inner radius of 6m; 〉 the maximum grade road is 15 degrees and average grade of not more than 10 degrees; 〉 the road crossfall does not exceed 3 degrees; and 〉 a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided.	〉 non-perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating.	**N/A –** Non-perimeter roads are not proposed. The existing internal roads provides suitable access / egress.

WATER SUPPLY		
〉 reticulated water is to be provided to the development, where available; or 〉 a 10,000 litres minimum static water supply for firefighting purposes is provided for each occupied building where no reticulated water is available.	〉 an adequate water supply for firefighting purposes is installed and maintained.	**Complies with Acceptable Solution –** The property features underground fire hydrants (mains pressure) and a centrally located fire hose reel. Additionally, Sawpit supplies 2x potable water tanks; one metal tank with 100KL capacity & one concrete tank with 110KL capacity. These are gravity fed from upstream weir.
〉 fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2005; 〉 hydrants are not located within any road carriageway; and 〉 reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads.	〉 water supplies are located at regular intervals. 〉 the water supply is accessible and reliable for firefighting operations.	**Complies with Acceptable Solution –** The property features underground fire hydrants (mains pressure) and a centrally located fire hose reel. Additionally, Sawpit supplies 2x potable water tanks; one metal tank with 100KL capacity & one concrete tank with 110KL capacity. These are gravity fed from upstream weir.
〉 fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2005.	〉 flows and pressure are appropriate.	**Complies with Acceptable Solution** – Water tank flows and pressures assumed to be appropriate.
〉 all above-ground water service pipes external to the building are metal, including and up to any taps.	〉 the integrity of the water supply is maintained.	**Complies with Acceptable Solution –** All above ground water service pipes external to the building are metal, including and up to any taps.
〉 a connection for firefighting purposes is located within the IPA or non-hazard side and away from the structure; a 65mm Storz outlet with a ball valve is fitted to the outlet; 〉 ball valve and pipes are adequate for water flow and are metal; 〉 supply pipes from tank to ball valve have the same bore size to ensure flow volume;	〉 water supplies are adequate in areas where reticulated water is not available	**N/A –** The property features underground fire hydrants (mains pressure) and a centrally located fire hose reel.

〉 underground tanks have an access hole of 200mm to allow tankers to refill direct from the tank; 〉 a hardened ground surface for truck access is supplied within 4m of the access hole; 〉 above-ground tanks are manufactured from concrete or metal; 〉 raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F AS 3959); 〉 unobstructed access is provided at all times; 〉 tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters; and 〉 underground tanks are clearly marked, 〉 all exposed water pipes external to the building are metal, including any fittings; 〉 where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel-powered pump, and are shielded against bush fire attack; Any hose and reel for firefighting connected to the pump shall be 19mm internal diameter; and 〉 fire hose reels are constructed in accordance with AS/NZS 1221:1997 Fire hose reels, and installed in accordance with the relevant clauses of AS 2441:2005 *Installation of fire hose reels*.		
ELECTRICITY SERVICES		
〉 where practicable, electrical transmission lines are underground; 〉 where overhead, electrical transmission lines are proposed as follow:	〉 location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	**Can comply with Acceptable Solution -** Electrical transmission lines installed where practical.

○ lines are installed with short pole spacing (30m), unless crossing gullies, gorges or riparian areas; and ○ no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines.		
GAS SERVICES		
〉 reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used; 〉 all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side; 〉 connections to and from gas cylinders are metal; 〉 if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion; 〉 polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used; and 〉 above-ground gas service pipes external to the building are metal, including and up to any outlets.	〉 location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.	**Can Comply -** reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities, and metal piping is used

EMERGENCY MANAGEMENT		
〉 Bush Fire Emergency Management and Evacuation Plan is prepared consistent with the: ○ The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan; ○ NSW RFS Schools Program Guide; ○ Australian Standard AS 3745:2010 Planning for emergencies in facilities; and ○ Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). ○ the Bush Fire Emergency Management and Evacuation Plan should include planning for the early relocation of occupants Note: A copy of the Bush Fire Emergency Management and Evacuation Plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.	〉 a Bush Fire Emergency Management and Evacuation Plan is prepared.	**Complies with Acceptable Solution –** A park management plan is already existing for the site which includes a bushfire strategy. This is to be updated to include: ➢ The new staff accommodation details ➢ The boom gate override procedure ➢ The fire evacuation plans for the drying room and staff room, highlighting hydrant/hose reel locations. Noted that annual fire inspections are performed across the premises. Both the drying room and staff room have interconnecting fire alarms and evacuation plans are displayed in every unit. These measures align with the site's bushfire safety obligations under PBP 2019.
〉 an Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and detailed plans of all emergency assembly areas including on site and off-site arrangements as stated in AS 3745:2010 are clearly displayed, and an annually emergency evacuation is conducted.	〉 appropriate and adequate management arrangements are established for consultation and implementation of the Bush Fire Emergency Management and Evacuation Plan.	**N/A – The development is not for an aged care or school**

7 CONCLUSION AND RECOMMENDATIONS

In conclusion, the proposed development is able to meet the aims and objectives of PBP 2019. The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.

The following recommendations have been made for the proposal to comply with Infill SFPP Development in Alpine Resort Areas:

1. **Asset Protection Zones -**
   The APZ provides space and reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits and to prevent direct flame contact.

   The established areas of managed land implemented in accordance with the Bushfire Protection Plan (refer to Appendix B) and previous DA Determination Schedule as supported by NSW RFS (refer to Appendix C and Appendix D) are suitable for compliance with the managed land as set out in Table A1.12.7 – FFDI 50 – Alpine areas.

   As the proposed boom gate is classified as a class 10a structure, there are no requirements for compliance in accordance with Section 8.3.2 in PBP 2019. No habitable structures, including the proposed change of use from storeroom to staff accommodation, occurs within 6m of the proposed boom gate location.

   The existing storeroom that is to be converted to staff accommodation is constructed to a standard appropriate for the alpine area with the following areas of managed land already established within the Kosciusko Mountain Retreat:

   - North for a minimum distance of 52m; and
   - West for a minimum distance of 30m.

   It is noted that as the site is located within the Kosciusko National Park, the standard APZ maintenance set out in Appendix 4 cannot apply due to regard for the ecological constraints of the site. Regular lawn maintenance is undertaken as well as removal of tree barks/debris so as to not contribute to the fuel loads within the park.

2. Construction Standards -

Construction standards seek to increase the protection of the habitable buildings from bushfire. The shorter the APZ (distance between the external wall of the habitable building and the unmanaged vegetation), then the higher the construction standard, which is referred to as the BAL.

Based on the established areas of managed land provided above, the proposed staff accommodation building has been assessed as compliant with the appropriate construction standards for alpine conditions and provides a reasonable level of bushfire resilience.

No construction requirements / BAL ratings will be imposed on the proposed boom gate installation as the structure is classified as 10a and occurs >6m from any habitable structures.

As the proposal development occurs in the Kosciusko National Park, large-scale clearing to achieve the standard APZ is not feasible. Rather, maintenance of minimal vegetation and debris (mowing, debris removal) is conducted around the buildings. Existing alpine construction standards provide a reasonable level of bushfire resilience. As such, the proposed staff accommodation aligns with SFPP guidelines under PBP 2019.

3. Access -

Access standards provide for emergency evacuation and firefighting operations.

The Bushfire Protection Plan (refer to Appendix B) as recommended by the previous BFSA (refer to Appendix D) details the establishment of a firefighting trail around the habitable structures of the Kosciusko Mountain Retreat. Access was recommended to comply with the requirements of section 4.3.2 in Planning for Bushfire Protection 2001. While the 2005 BFSA remains a historical reference, the controlling standard for this SFPP infill development is now PBP 2019 (Section 6.6), which supersedes older guidelines.

The performance criteria for general access in SFPP development states "*firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation*". The Kosciusko Mountain Retreat has existing direct access to Kosciusko Road via a two-wheel drive, all weather road. All internal roads provide direct access to habitable structures within the site and these are through roads.

The proposed boom gate installation is to provide control over vehicles entering and exiting the Kosciusko Mountain Retreat. The proposed boom gates provide a separate lane for entering and existing the site. The proposed boom gate will include a mechanical override key to allow staff to disengage the motor and manually lift the arm if power fails. A dedicated procedure outlining these steps – covering the location of the override key, battery backup operation, and staff roles – will be included in the Park Management Plan. In the event of a complete power outage, staff are available on-site 24/7 to unlock and lift

the barrier. This ensures that emergency services will be provided with direct access to the property at all times and maintains compliance with SFPP requirements.
Given the above and the additional firefighting trail within the site, the existing access is compliant with the performance criteria in PBP 2019.

4. Water and Utility Services

A water supply is required for firefighting operations.

The existing water supply to the Kosciusko Mountain Retreat is sufficient for the purposes of firefighting operations in the event of a bushfire.

The property features underground fire hydrants (mains pressure) and a centrally located fire hose reel. Additionally, Sawpit supplies 2x potable water tanks; one metal tank with 100KL capacity & one concrete tank with 110KL capacity. These are gravity fed from upstream weir.

Annual fire inspections are performed across the premises. Both the drying room and staff room have interconnecting fire alarms and evacuation plans are displayed in every unit. These measures align with the site's bushfire safety obligations under PBP 2019.

5. Emergency Management

Provide suitable emergency and evacuation arrangements for occupants.

A park management plan is already existing for the site which includes a bushfire strategy. This is to be updated to include:

- The new staff accommodation details
- The boom gate override procedure
- The fire evacuation plans for the drying room and staff room, highlighting hydrant/hose reel locations.

Noted that annual fire inspections are performed across the premises. Both the drying room and staff room have interconnecting fire alarms and evacuation plans are displayed in every unit. These measures align with the site's bushfire safety obligations under PBP 2019.

Given the above detailing the combination of restricted vegetation clearance (due to National Park rules), having 24/7 onsite staff, manual gate override capability and annual fire inspections, the proposed development meets the intent of compliance for SFPP standards in PBP 2019.

Sarah Jones
B.Env.Sc., G.DIP.DBPA (Design for Bushfire Prone Areas)
BPAD-A Certified Practitioner (BPD-26512)
Ecologist / Bushfire Planner

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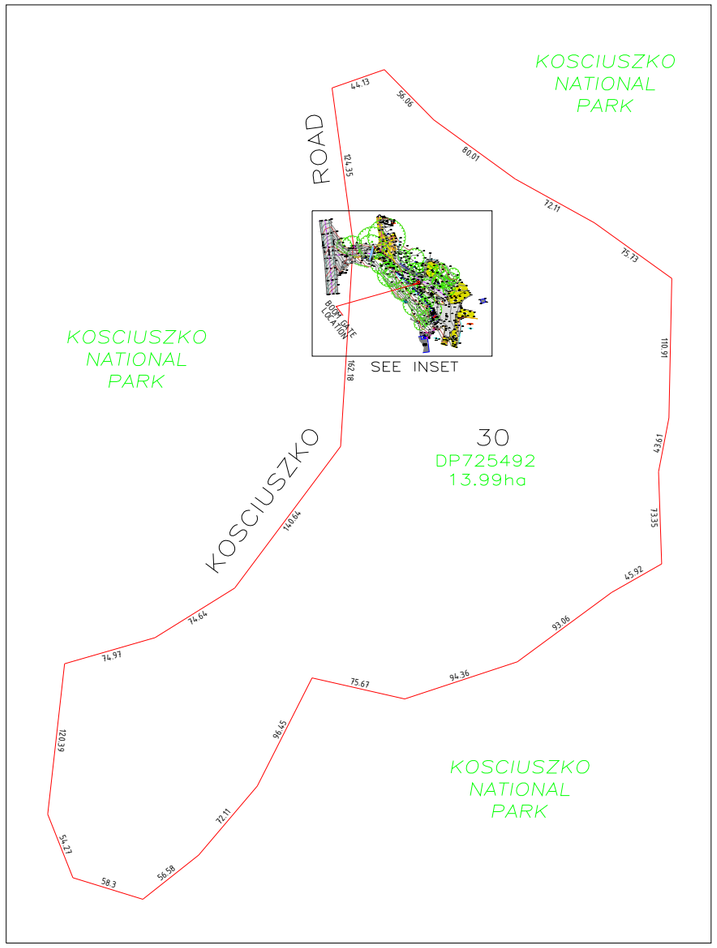
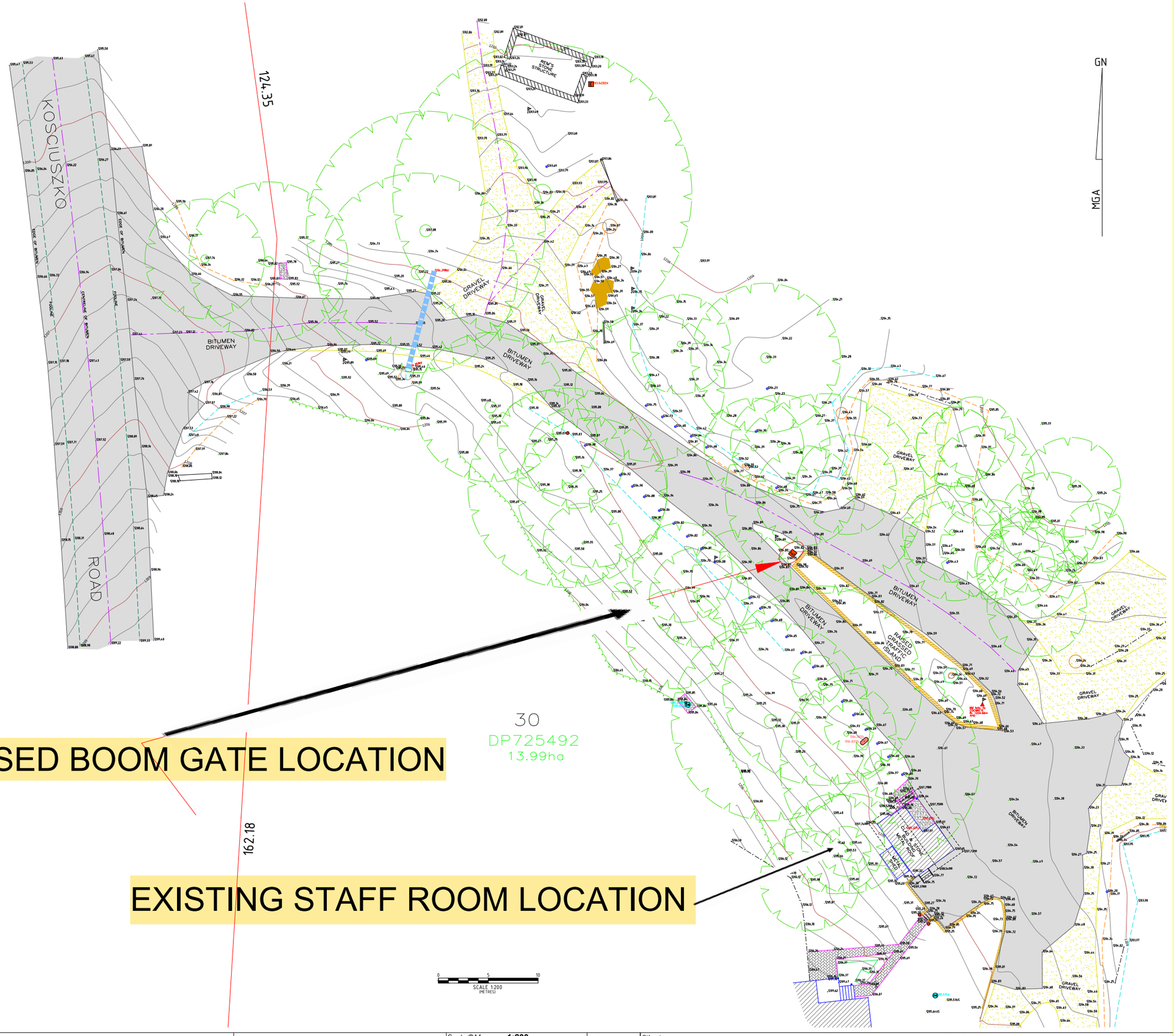
APPENDIX A PROPOSED PLANS





LEGEND

- TREE - APPROX SIZE
- ROCKS
- MAJOR CONTOUR
- MINOR CONTOUR
- FENCELINE
- ROOFLINE
- BOTTOM OF BANK
- TOP OF BANK
- EDGE OF GRAVEL
- EDGE OF BITUMEN
- CENTERLINE
- FOGLINE
- PIPE
- RETAINING WALL
- BUILDING
- EDGE OF BRUSH

SYMBOL LEGEND

- SMH - SEWER MANHOLE
- I/O - INSPECTION OPENING
- HYD - HYDRANT
- WM - WATER METER
- SV - STOP VALVE
- EBOX - ELECTRICITY PIT
- TEL - TELSTRA PIT
- GV - GAS VALVE
- LP - LIGHT POLE
- PP - POWER POLE
- SIGN - ROAD SIGN
- BOL - BOLLARD/POST

NOTES:

- IF CONSTRUCTION WORKS ARE INTENDED TO BE UNDERTAKEN ON OR ADJACENT TO THE PROPERTY BOUNDARIES, FURTHER BOUNDARY REMARKING OR CONSTRUCTION SETOUT MUST BE UNDERTAKEN.
- RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES IS DIAGRAMMATIC ONLY. WHERE OFFSETS ARE CRITICAL THEY SHOULD BE CONFIRMED BY FURTHER SURVEY
- BOUNDARY DIMENSIONS & AREAS OF SUBJECT LAND ARE BY TITLE ONLY.
- THIS PLAN HAS BEEN PREPARED FOR THE EXCLUSIVE USE OF THE DESIGNATED CLIENT & MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS COMMISSIONED.
- TREE SIZES ARE ESTIMATES ONLY
- SERVICES OTHER THAN THOSE SHOWN MAY EXIST AND THEIR LOCATIONS MUST BE VERIFIED BEFORE ANY CONSTRUCTION WORKS ARE COMMENCED.
- UNDERGROUND SERVICES HAVE NOT BEEN LOCATED BEFORE YOU DIG AUSTRALIA (www.bdya.com.au) SHOULD BE USED BEFORE ANY EXCAVATION WORKS ARE UNDERTAKEN.
- CONTOUR INTERVAL - 0.5 metre - SPOT LEVELS SHOULD BE ADOPTED.
- CRITICAL SPOT LEVELS SHOULD BE CONFIRMED WITH SURVEYOR.
-
- THIS DOCUMENT SHOULD NOT BE REPRODUCED OR ALTERED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF SNOWY SURVEYING.
- AERIAL UNDERLAY PHOTO TAKEN N/A

No.	DESCRIPTION	DATE
B	PLAN AMMENDED TO SUIT UPDATED SITE CONDITIONS	03/10/24
A	CLIENT ISSUE	17/05/24

AMENDMENTS

SNOWY SURVEYING

LAND AND ENGINEERING SURVEYING SERVICES

Ph: 0403297791
Email: info@snowysurveying.com.au

ABN: 75270142975
12 Thredbo Tce Jindabyne NSW 2627

MAX WINDSHUTTLE
REGISTERED SURVEYOR
BOSSI NUMBER 8973

AZIMUTH: MGA	VERTICAL DATUM: AHD	Scale@A1: 1:200 DO NOT SCALE DRAWING	Surveyed: TB
COORDINATE SYSTEM: MGA 2020	B.M ADOPTED: PM51757	Contour Interval: 0.5m	Drafted: PD
MARKS ADOPTED: CORSnet NSW	R.L. 1201.672	Survey Date: 24/05/2024	
	SOURCE: SCIMS	LGA: SNOWY MONARO REGIONAL	Checked: MW
		Parish: MITCHELL	
		County: WALLACE	

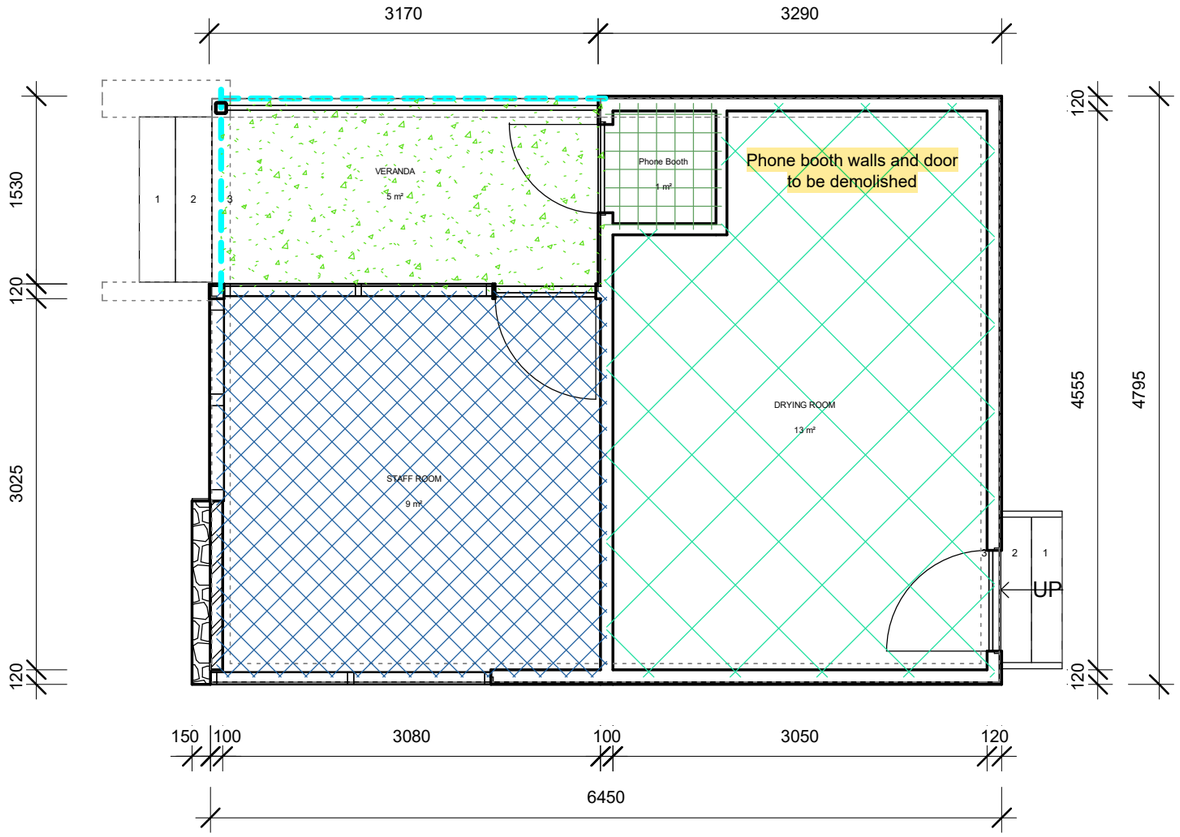
Client: **Kosciuszko Tourist Park**

Title: **PLAN SHOWING PARTIAL CONTOUR & DETAIL SURVEY LOT 30 IN DP725492 7693 Kosciuszko Road, Sawpit Creek - Kosciuszko National Park**

Sheet No.	Paper Size	Drawing No.	Job No.	Revision
01/01	A1	SS234_CD_B	SS234	B

1 Existing Floor Plan

1 : 50



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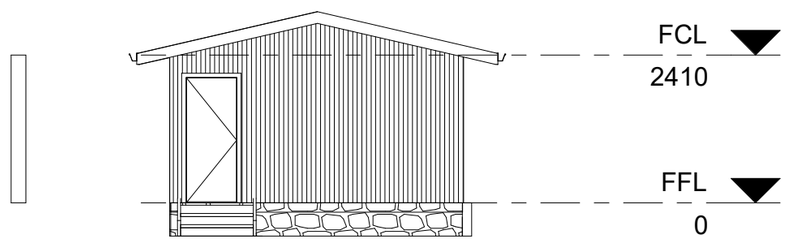
1 : 100



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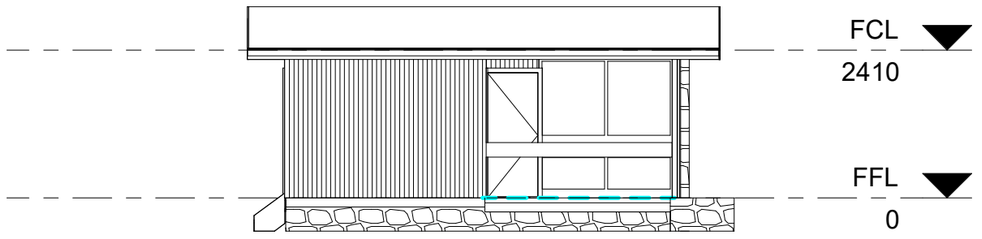

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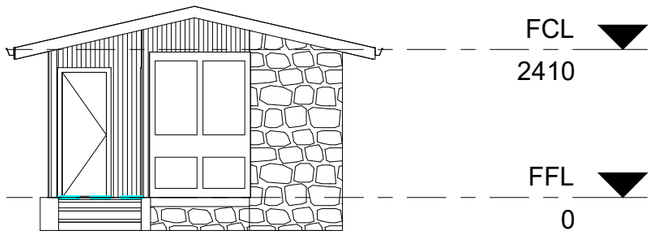
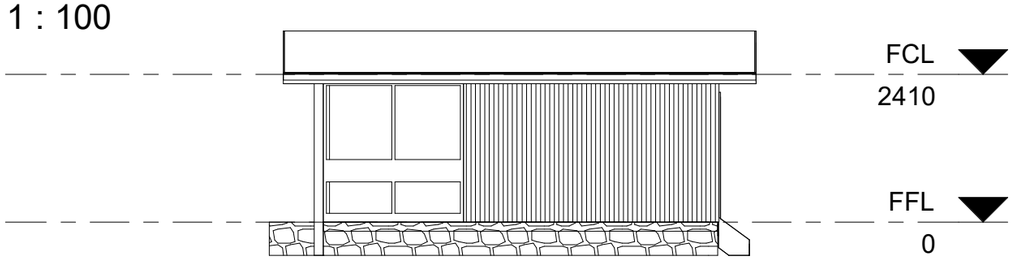


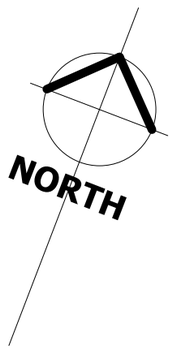
5 South

1 : 100



Room Legend

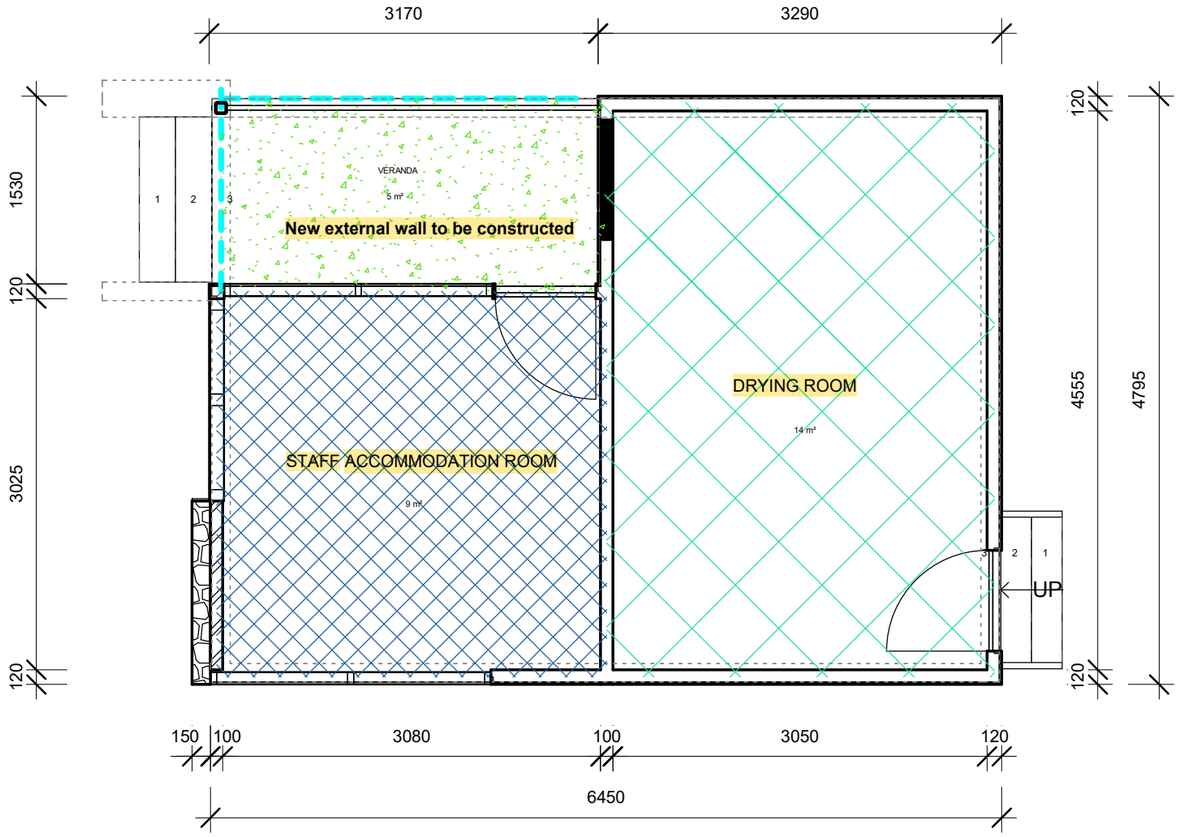
- **DRYING ROOM**
- **Phone Booth**
- **STAFF ROOM**
- **VERANDA**



Project Address: 30//DP725492 Kosciuszko Tourist Park Sawpit Creek NSW 2627	Sheet Name : FLOOR PLAN & ELEVATIONS	Project Name: Kosciuszko Tourist Park	Sheet No: A01	Scale:As indicated	Project Status: For Planning	Drawn by :MM
	Note:All design, construction & material to be in accordance with Building Code of Australia(BCA). Building regulations & local government plans and policies, current issues of Australian Standards, current manufacturers specification.		Issue Date:07.11.2020			Checker

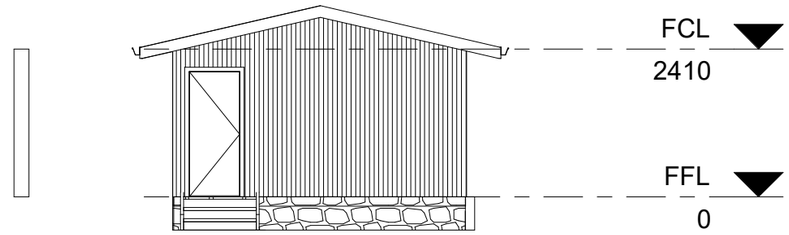
1 Proposed Floor Plan

1 : 50



2 East

1 : 100



3 North

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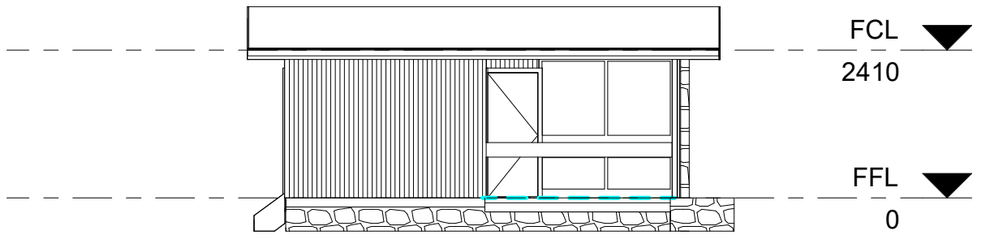
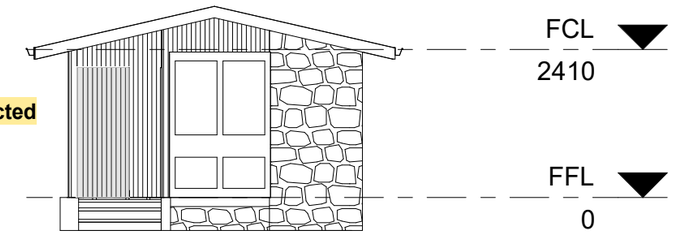


4 West

1 : 100

New external wall to be constructed to match existing wall



5 South

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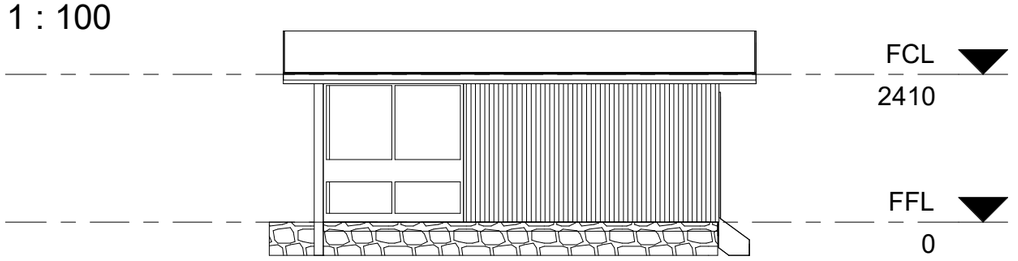
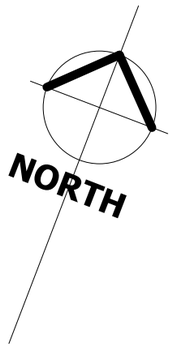


Room Legend

- **DRYING ROOM**
- **STAFF ACCOMMODATION**
- **VERANDA**



Project Address: 30//DP725492 Kosciuszko Tourist Park Sawpit Creek NSW 2627	Sheet Name : FLOOR PLAN & ELEVATIONS	Project Name: Kosciuszko Tourist Park	Sheet No: A01	Scale:As indicated	Project Status: For Planning	Drawn by :MM
	Note:All design, construction & material to be in accordance with Building Code of Australia(BCA). Building regulations & local government plans and policies, current issues of Australian Standards, current manufacturers specification.		Issue Date:07.11.2024			Checker

APPENDIX B BUSHFIRE PROTECTION PLAN

K.L. & C.M. GORDON

DRAFTING SERVICE

P.O. BOX 320 BEGA NSW 2550
200A CARP STREET BEGA 2550
PH (02) 6492 1723 FX (02) 6492 3293
Email: gordons@acr.net.au ABN 68 722 948

Member of BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

REF3676
11/04

BUSHFIRE PROTECTION PLAN

KOSCIUSKO MOUNTAIN RETREAT
LOT 30 D.P.725492
KOSCIUSKO ROAD SAWPIT CREEK

SNOWY RIVER SHIRE COUNCIL RFS MAP
BUSHFIRE PRONE LAND

refer to map

ORANGE	VEGETATION CATEGORY 1 WITH VEGETATION GROUP 1 AND 2
YELLOW	VEGETATION CATEGORY 2 WITH VEGATION GROUP 3
RED	VEGETATION 1 BUFFER 30 AND100M

PRECINCT LEVEL ASSESSMENT

PREDOMINANT VEGETATION CLASS

VEGETATION GROUP 3 – RAINFOREST, SHRUBLAND
OPEN WOODLANDS MALLEE
AND GRASSLAND

STRUCTURE 9

SLOPE **APPROPRIATE SETBACKS FROM THE VEGETATION GROUP**
TABLES A2.2 RESIDENTIAL PURPOSES

	APZ =	IPA +	OPA
0 – 5 DEGREES (0 – 1:11.5) UPSLOPE	30m	20	10
> 5 – 10 DEGREES (1:11.5 – 1:5.7) DOWNSLOPE	50m	40	10

DETERMINATION OF CATEGORY OF BUSHFIRE ATTACK FOR THE SITE
TABLE A 3.3

ADOPT AN APZ OF 80 METRES

MEDIUM	LEVEL 1 AS 3959
TO	
HIGH	LEVEL 2 AS 3959 ADOPT

	ASSESSMENT OF LEVEL OF CONSTRUCTION				
	DATE:11/04				
	PROJECT DESCRIPTION:		**ADDITION TO CHALETS**		
	APPLICANT:		**KOSCIUSKO MOUNTAIN RETREAT**		
	LOT DESCRIPTION:		**LOT 30 DP725492**		
	ADDRESS		**KOSCIUSKO ROAD SAWPIT CREEK**		
	COMMENTS		**ADOPT LEVEL 2 CONSTUCTION FOR ANY NEW BUILDING WORK**		
	EXTRACTS FROM AS3959 CONSTRUCTION OF BUILDINGS IN BUSHFIRE-PRONE AREAS				
	DEFINITIONS UPDATED				
	f.g.l.		Finished Ground Level.		
	f.r.t.		Fire Retardant Treated		
	F.I		Flammability Index		
	n.c.m.		non-combustible material		
	Bushfire		An uncontrolled fire burning in forest, scrub or grassland vegetation, also referred to as a wildfire.		
	Bushfire Attack		Attack by burning debris, radiant heat or flame generated by a bushfire which might result in ignition and subsequent destruction of a building		
	Bushfire-prone area		An area that can support a bushfire or is likely to be subject to bushfire attack		
	Combustible		Combustible as determined by AS1530.1		
	Fire Retardant		A substance of a treatment, incorporated in or applied to a material, which suppresses or delays the combustion of that material under specified conditions.		

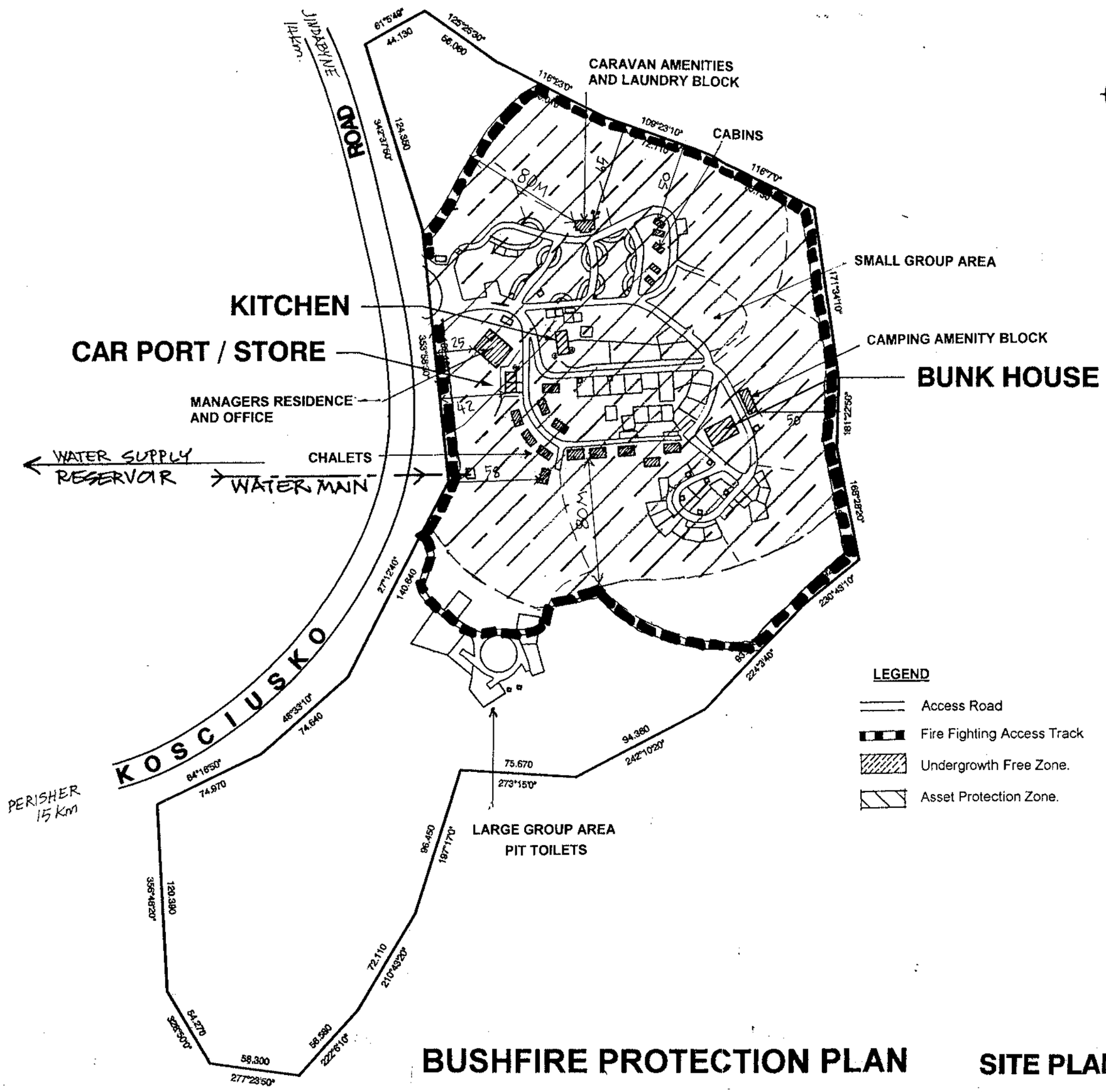
	Fire Retardant Treated Timber		Fire Retardant-treated timber is timber that is specified when tested to AS/NZS3838, and that meets the following parameters, after having been subjected to the regime of ASTM D 2898 Method B: a) ignition does not occur when the material is exposed to an irradiance level of 10 kW/m2. b) The maximum heat release rate is not greater than 100 kW/m2 and the average heat release rate for 10 min following ignition is not greater than 60 kW/m2 when the material is exposed to an irradiance level of 25 kW/m2.		
	Timbers satisfying the definition of f.r.t. timber include: (Reference Warrington Fire Research Consultancy - Report No 20550.2 Dated 26/11/01) - Blackbutt, Kwila (Merbau), Red Iron Bark, River Red Gum, Silvertop Ash, Spotted Gum, Turpentine				
	Foliage cover		Is the proportion of the ground that would be shaded by foliage when the sun is shining directly overhead. It is expressed as a percentage for each stratum, or identifiable layer of vegetation (See Figure 2.1)		
	Non-combustible		Not deemed combustible as determined by AS1530.1 and not deemed combustible pursuant to Clause C1.12 of Volume One of the BCA		
	Site		The part of the allotment of land on which a building stands or is to be erected.		
	Wildfire		See Bushfire		
	LEVELS OF HOUSE CONSTRUCTION.				
	Level 1 Construction for Medium Bushfire Attack		**Level 2 Construction for High Bushfire Attack**		
3.3	**Flooring Systems**		**Flooring Systems**		
3.3.1a	Concrete Slab on Ground or	3.3.2	As for Level 1.		ADOPT CONCRETE SLAB ON GROUND
3.5	**External Walls**		**External Walls**		
3.5.1a	One or a combination of the following	3.5.2	As for Level 1 except PVC cladding is not permitted and all external timber wall cladding to be f.r.t.		ADOPT FIBRE CEMENT SHEET CLADDING TO MIN 400MM ABOVE FINISHED GROUND LEVEL

3.5.1ai	external leaf of masonry, concrete, pise, rammed earth or stabilised earth.				
3.5.1aii	Framed wall incorporating either				
3.5.1aiiA	breather-type sarking to AS/NZS4200.1 F.I. Max 5. Installed immediately behind external cladding or				
3.5.1aiiB	an insulation material conforming to the appropriate A.S for that material.				
3.5.1aiii	A wall of timber logs with butting faces of adjacent logs gauged-planed the space between sealed to prevent the entry of burning debris and allows for building movement.				
3.5.1b	An external leaf or cladding of combustible sheet <400mm above f.g.l. to be protected for not less than 400mm above f.g.l. (See Figure 3.3)				
3.5.1bi	by covering with a suitable non-combustible material or f.r.t. timber sealed to the existing cladding to prevent entry of burning debris. (See Figure 3.3a and 3.3b)				
3.5.1bii	by substituting with suitable non-combustible sheet material or f.r.t. timber (See Figure 3.3c) or				
3.5.1biii	if external cladding is timber, by using f.r.t.				
3.6	**Windows**		**Windows**		
3.6.1	All openable windows to be screened with corrosion resistant steel, bronze or aluminium mesh max. aperture 1.8mm, fitted so that the entire opening is screened with window is open.	3.6.2	As for Level 1 except that aluminium mesh shall no be used and		ADOPT POWDER COATED ALUMINIUM FRAMED WINDOWS WITH GALV STEEL MESH SCREENS TO ALL OPENING WINDOWS
		3.6.2a	if timber framed, shall be f.r.t except where protected by non-combustible shutters		
		3.6.2b	Where lead-light, shall be protected by shutters of non-combustible material or with toughened glass.		
3.7	**External Doors**		**External Doors**		
3.7.1	External Doors shall be fitted with	3.7.2	As for Level 1 except that aluminium mesh shall no be used.		
3.7.1a	weatherstrips or draught excluders to prevent penetration or build up of burning debris beneath the door AND		If leadlight glazing panels, they are to be protected by shutters on n.c.m. or toughened glass.		ADOPT
3.7.1b	tight fitting door screens, having corrosion resistant steel, bronze or aluminium mesh max. aperture 1.8mm,				ADOPT

3.8	**Vents and Weepholes**		**Vents and Weepholes**		
3.8.1	Shall be protected with spark guards made from corrosion resistant steel, bronze or aluminium mesh max. aperture 1.8mm. (See Figure 3.4)	3.8.2	As for Level 1 except that aluminium mesh shall no be used.		ADOPT
3.9	**Roofs**		**Roofs**		
3.9.1.1	General requirements shall apply to all types of roofing systems	3.9.2	As for Level 1 except that all roof sheeting shall be n.c.m. and sarked, and rooflight glazing shall be wired glass. Thermoplastic material or toughened glass shall not be used as the glazing for rooflights. The case of the evaporative cooler shall be manufactured from a n.c.m.		
3.9.1.1a	Timber shakes or shingles shall not be used.				
3.9.1.1b	roof/wall junction shall be sealed either by the use of fascias and eaves linings OR				
	by sealing the gaps between the rafters with suitable n.c.m.				
3.9.1.1c	sarking shall have F.I. Not more that 5.				
3.9.1.2	Tiled Roofs shall be fully sarked (3.9.1c). Sarking shall be located directly below the tiling battens and shall cover the entire roof area including the ridge				
	Where roofing systems are fully sarked, effectively restricting or excluding airflow, it may be necessary to provide ventilation to prevent moisture from occurring in the roof space. If roof vents need to be provided to address moisture, they need to be sealed, to protect against the entry of sparks and embers, with corrosion-resistant steel or bronze mesh having a maximum aperture size of 1.8mm.				
3.9.1.3	Sheeted Roofs				ADOPT COLORBOND METAL ROOFS
3.9.1.3a	Only metal or fibre-cement shall be used				
3.9.1.3bi	All gaps under the corrugations or ribs of the roofing material where it meets the fascia or wall line shall be sealed or protected				
3.9.1.3bi	by fully sarking the roof OR				

3.9.1.3bii	by providing corrosion-resistant steel or bronze mesh with an aperture size of 1.8mm, profiled metal sheet, neoprene seal, compressed mineral wool or similar material.				
	Note: Method ii can only be achieved on a roof without valleys and having the deck fixed directly to, but not structurally supported by the fascia.				
	Note: It is generally recognised that where compressed mineral wool is used for sealing against bushfire attack or for other purposes, adequate ventilation should be provided to stop condensation on the mineral fibre causing corrosion in the roof sheeting or supporting structure.				
3.9.1.4	**Rooflights**		**Rooflights**		
3.9.1.4a	All penetrations of the roof space for the installation of rooflights and associated shafts shall be sealed with a non-combustible sleeve or lining.		As for Level 1 except that rooflight glazing shall be wired glass. Thermoplastic material or toughened glass shall not be used as the glazing for rooflights		ADOPT
	Thermoplastic sheet in a metal frame may be used for a rooflight, but the diffuser installed at ceiling level shall be of wired or toughened glass in a metal frame. (See AS1288 & AS4285)				
3.9.1.4b	Vented rooflights shall be provided with corrosion-resistant steel or bronze mesh having a maximum aperture size of 1.8mm				
3.9.1.5	**Roof Ventilators**		**Roof Ventilators**		
	All components of roof ventilators, including rotary type, shall be constructed of n.c.m. and shall be sealed against the entry of sparks and embers with corrosion-resistant steel or bronze mesh having a maximum aperture size of 1.8mm		As for Level 1.		ADOPT
3.9.1.6	**Roof mounted evaporative cooling units**		**Roof mounted evaporative cooling units**		
	Roof mounted evaporative cooling units shall only be used if the openings to the cooling unit are encased in corrosion-resistant steel or bronze mesh with a maximum aperture size of 1.8mm.		As for Level 1 except that the case of the evaporative cooler shall be manufactured from a n.c.m		ADOPT
3.10	**Eaves**		**Eaves**		
3.10.1	All eaves shall be enclosed, and the fascia or the gaps between the rafters shall be sealed. (See Clause 3.9.1.1)	3.10.2	As for Level 1 except that all timber eaves lining and joining strips shall be f.r.t.		ADOPT FIBRE CEMENT SHEET LINING

3.11	**Fascias**		**Fascias**		
3.11.1	No requirements	3.11.2	All materials used for fascias shall be either non-combustible or f.r.t. timber.		ADOPT COLORBOND METAL FASCIAS
3.12	**Gutters and Downpipes**		**Gutters and Downpipes**		
3.12.1	Any materials or devices used to stop leaves collecting in gutters shall have F.I of not greater than 5 when tested in accordance with AS1530.2	3.12.2	As for Level 1		ADOPT EASYFLOW LEAFLESS METAL GUTTERS
3.13	**Verandahs and Decks**		**Verandahs and Decks**		
3.13.1	Verandahs, Decks and the like; forming part of a building shall comply with one or a combination of the following	3.13.2	As for Level 1 except that if spaced decking is used, f.r.t. timber shall be used for the decking material.		ADOPT SPOTTED GUM IRONBARK OR SIMILAR FRT SPECIES
3.13.1a	Slab. A reinforced concrete suspended slab floor, supported by posts or columns complying with Clause 3.4, or walls complying with Clause 3.5, or a slab-on-the-ground floor complying the Clause 3.3				
3.13.1bi	Sheeted or tongued and grooved Solid Flooring. As follows		As for Level 1 except that if spaced decking is used, f.r.t. timber shall be used for the decking material.		
3.13.1bi	Compliance with the flooring requirements shall be in accordance with Clause 3.3				
3.13.1bii	Where clearance between f.g.l. and underside of floor is not greater than 400mm, all joints in the flooring shall be covered (above floor level) or shall be sealed.				
3.13.1ci	Spaced Decking as follows				
3.13.1ci	Decking timbers fixed with a clearance of not less than 5mm between adjacent timbers.				
3.13.1cii	External perimeter beneath the decking shall not be enclosed nor shall access to the space beneath the decking be impeded				
3.13.1ciii	Any supports for the decking shall be treated as set out in Clause 3.4				
3.13.1civ	Decking timbers shall not be allowed to connect with the remainder of the building unless measures are used to prevent the spread of fire into the building.				
3.14	**Service Pipes (Water & Gas)**		**Service Pipes (Water & Gas)**		
3.14.1	All exposed piping for water and gas supplies shall be metal. Pipes of other materials shall be buried to a depth of a least 300mm below f.g.l.	3.14.2	As for Level 1		ADOPT



LEGEND

- Access Road
- Fire Fighting Access Track
- Undergrowth Free Zone.
- Asset Protection Zone.

BUSHFIRE PROTECTION PLAN

SITE PLAN

ISSUE	REVISIONS	APPROV DATE
A	PRELIMINARY	

PLAN OF PROPOSED SCHOOL CAMP BUNK HOUSE, CAMP KITCHEN & CARPORT / STORE AT LOT 30 DP725492

KOSCIUSKO MOUNTAIN RESORT

KOSCIUSKO RD SAWPIT CREEK

D:\DWG\sawpit_ck\sp01.dwg 19/03/03

KL & CM GORDON DRAFTING SERVICE
PO BOX 320 BEGA 2550
200A CARP ST. BEGA
PH(02) 6492 1723 FAX(02) 6492 3293
E-MAIL: gordons@acr.net.au
MEMBER OF BUILDING DESIGNERS ASSOCIATION OF NEW SOUTH WALES INC.

1:2500@A3

0 40 80 120

NOT FOR CONSTRUCTION

ISSUE A	JOB 3676
DRAWN S.L.G.	DRAWING SP.01
DATE 3/03	

APPENDIX C DETERMINATION SCHEDULE

Department of
Infrastructure, Planning and Natural Resources

ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

DETERMINATION OF DEVELOPMENT APPLICATION No. DA 155-6-2004

(File No. J04/00099/1)

CONSTRUCTION OF A FRONT ENTRY GATE PLUS ADDITIONS & ALTERATIONS TO TWELVE (12) CABINS USED FOR TOURIST ACCOMODATION AT LOT 30, 725492, KOSCIUSKO MOUNTAIN RETREAT, SAWPIT CREEK, KOSCIUSZKO NATIONAL PARK

I, Jim Corrigan, Team Leader, Urban Assessments as delegate for the Minister for Infrastructure and Planning under Instrument of Delegation dated (6 July, 2004) pursuant to Section 80 (1)(a) of the Environmental Planning and Assessment Act 1979 determine the Development Application referred to in Schedule 1 subject to the conditions referred in Schedule 2.

The reasons for the imposition of conditions are:

(1) Ensure the proposed works are carried out in accordance with the relevant Australian standards, provisions of the Building Code of Australia and are completed in a satisfactory manner;

(2) Protect the environment and amenity of the locality;

Jim Corrigan
Team Leader
Urban Assessments
(Alpine Resorts Assessments Team)

10 / 2 / 2005

SCHEDULE 1

PART A—TABLE

Application made by:	Kosciuszko Mountain Retreat Pty Ltd
Application made to:	Minister for Infrastructure and Planning
Development Application:	DA No. 155-6-2004
On land comprising:	Lot 30, 725492, Kosciusko Mountain Retreat, Sawpit Creek, Kosciuszko National Park
For the carrying out of:	Front Entry Gate, Additions & Alterations to twelve (12) Cabins used for tourist accommodation
Estimated Cost of Works	$350,000
Type of development:	Integrated Development
S.119 Public inquiry held:	No
BCA building class:	Cabins: Class 1b Front Entry Sign: Class 10b
Approval Body / Bodies:	NSW Rural Fire Service
Determination made on:	10 · 2 · 2005
Determination:	Development consent is granted subject to the conditions in the attached Schedule 2.
Date of commencement of consent:	This development consent commences on the date identified in the accompanying letter.
Date consent is liable to lapse	This consent will lapse 5 years from the date of commencement of consent, unless: a shorter period of time is specified by the Regulations or a condition in Schedule 2.

PART B—NOTES RELATING TO THE DETERMINATION OF DA No. 155-6-2004

Responsibility for Other Approvals / Agreements

The applicant is solely responsible for ensuring that all additional consents and agreements are obtained from other authorities, as relevant.

Appeals

The applicant has the right to appeal to the Land and Environment Court under Section 97 of the *Environmental Planning and Assessment Act, 1979.* The right to appeal is only valid:

(1) for a development application, within 12 months after the date on which the applicant received this notice, or

(2) for a modification to the consent, within 3 months after the date on which the application received this notice.

Legal Notices

Any advice or notice to the consent authority shall be served on the Director-General.

PART C—DEFINITIONS

In this consent,

Act means the *Environmental Planning and Assessment Act, 1979* (as amended).

Applicant means Kosciuszko Mountain Retreat Pty Ltd.

Approval Body has the same meaning as within Division 5 of Part 4 of the Act.

BCA means the Building Code of Australia.

Certifying Authority has the same meaning as Part 4A of the Act.

DA No. 155-6-2004 means the development application and supporting documentation submitted by the applicant on 23 June 2004.

Department means the Department of Infrastructure, Planning and Natural resources.

Director means the Director of the Urban Assessments Unit (or its successors) or a delegate of the Director of the Urban Assessments Unit within the Department.

Director-General means the Director-General of the Department.

Minister means the Minister for Infrastructure and Planning.

PCA means the Principal Certifying Authority as prescribed in Part 4A of the Act.

Regulations means the *Environmental Planning and Assessment Regulations, 2000* (as amended).

Subject Site has the same meaning as the land identified in Part A of this schedule.

Team Leader means the Team Leader of the Urban Assessments Unit (or its successors) or a delegate of the Team Leader of the Urban Assessments Unit within the Department.

SCHEDULE 2

CONDITIONS OF CONSENT

DEVELOPMENT APPLICATION NO. DA 155-6-2004

This consent is granted subject to the following:

A. THE APPROVED DEVELOPMENT

A1 Development in Accordance with Plans

The development shall be in accordance with Development Application No. DA 155-6-2004 submitted by Kosciusko Mountain Retreat Pty Ltd on 23 June 2004, and in accordance with the supporting documentation submitted with that application and detailed below.

- Architectural plans, labelled as:

Title:	Received :
Proposed Type A Floor Plan	23 June 2004
Proposed Type B Floor Plan	23 June 2004
Proposed Type C Floor Plan	4 Jan 2005
Proposed Type D Floor Plan	4 Jan 2005
Elevations	23 June 2004
Stone Entrance Plan	23 June 2004
Stone Entrance Elevation	23 June 2004
Car Park Plan	23 June 2004

- Statement of Environmental Effects, prepared by NGH Environmental Pty Ltd, dated September 2004.
- Site Environmental Management Plan prepared by NGH Environmental Pty Ltd, dated September 2004.
- Site Classification Report prepared by Geotechnical Consultants Pty Ltd, Project No. 04073, dated 19 January 2004.

A2 Completion of Works

The works described by the plans and specifications and approved under this consent, once commenced, shall be completed within five (5) years of the date of commencement.

A3 Compliance with the Building Code of Australia (BCA)

The works must be carried out in accordance with the requirements of the Building Code of Australia.

A4 Removal of Concrete Lip & Continuation of Granite Rock Facing

The existing concrete lip that accesses each of the existing carports is required to be removed as part of the upgrade works to the subject cabins. The granite rock facing is to be continued underneath the proposed timber cladding where the concrete lip is removed.

A5 Access for Disabled Persons (AS 1428)

One (1) of the cabins for redevelopment is required to provide access for disabled persons in accordance with Australian Standard 1428.1.

The following areas to and within the cabin are to be undertaken in accordance with AS1428:

- Access into the cabin through a ramp with a minimum gradient of 1:14.
- Access to and through the main entry to the cabin as well as an accessible bathroom.

The Department suggests that the Cabins located on the lower side of the road (eg 2 or 3) would be the most suitable cabins to provide access.

B. PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE

B1 Structural Details

The applicant shall submit the following details to the satisfaction of the certifying authority prior to the issue of the Construction Certificate:

Structural drawings prepared and signed by an appropriately qualified practising Structural Engineer that comply with:

(i) the relevant clauses of the Building Code of Australia;
(ii) the relevant development consent;
(iii) drawings and specifications comprising the Construction Certificate;
(iv) the relevant Australian Standards listed in the BCA (Specification AI.3);
(v) the recommendations set out in the Site Classification report prepared by Geotechnical Consultants Pty Ltd, Project No. 04073, dated 19 January 2004.
(vi) All structural works to comply with a wind speed of 51 m/s or N4 classification.

B2 Structural Engineer Declaration and/or Verification

Form 2A of the Department of Infrastructure, Planning and Natural Resources Geotechnical Policy – Kosciuszko Alpine Resorts is required to be completed and submitted to the satisfaction of the certifying authority prior to the issue of the Construction Certificate. If the Department is not the certifying authority, the appointed certifying authority to provide a copy of the signed Form 2A of the Departments Geotechnical Policy to the Department with the copy of the Construction Certificate.

B3 Commencement of Demolition or Excavation

Demolition or excavation must not commence until a Construction Certificate has been issued for the proposed development pursuant to the *Environmental Planning and Assessment Act, 1979.*

B4 Long Service Levy

Prior to the issue of the Construction Certificate, receipt of payment to the Long Service Payments Corporation in accordance with Section 34 of the Building Construction Industry Payments Act 1986 must be presented to the Department.

B5 Tree Protection Bond

A Tree Protection Bond of **$1000** (consisting of bank cheque) shall be lodged with the Department prior to the issue of the Construction Certificate to ensure that Eucalyptus trees located within close proximity of Cabin 3 & 8 are maintained in the same condition as found prior to commencement site development work.

The bond will be returned following the issue of the final occupation certificate, provided the trees are undamaged.

In the event that any specified trees are found damaged, dying or dead as a result of any negligence by the applicant or its agent, or as a result of the construction works at any time during the construction period, the Department will have the option to demand the whole or part therefore of the bond.

B6 Existing trees located within proposed Deck Footprint

The existing native Eucalyptus trees located within the deck footprint are to be protected and the deck is to be constructed around the deck. The support posts for the deck shall be located such that no roots of a diameter greater than 50mm shall be severed or injured in the process of any site works during the construction period.

The location and details of the deck in relation to the trees and the location of post supports shall be submitted to the satisfaction of the Team Leader of the Department or nominee prior to the release of the Construction Certificate.

B7 Fire Safety Upgrade

Details to the satisfaction of the PCA are to be provided with the application for a Construction Certificate which demonstrates that the proposal complies with the following requirements of the Building Code of Australia (BCA) as required by clause 94 of the *Environmental Planning & Assessment Regulations 2000*:

(a) **Potable Fire Extinguishers**; installed in accordance with AS 2444-2001. One 4.5kg ABE fire extinguisher to be installed on the wall adjacent to the front door and a 2.3kg ABE fire extinguisher installed in each kitchen.
(b) **Fire blankets**; a fire blanket will be required in each kitchen of minimum size of 1.2m x 1.8m as per AS 2444-2001.
(c) **Emergency Lighting**; An emergency light in accordance with Part E4 of the BCA needs to be installed in the main living/dining room and externally above the entrance/exit door way leading to open space.
(d) **Smoke and Thermal Detection**; A smoke alarm system complying with AS 3786, which includes a smoke detector in each bedroom and a thermal detector in the kitchen/living room.

B8 Compliance with the AS 3959 – 1999

Details are to be provided to the satisfaction of the PCA prior to the issue of the Construction Certificate, which demonstrate that the proposal complies with the requirements of AS 3959 – 1999 level 3 'Construction of Buildings in bushfire prone areas.

B9 Details of Access for Disabled Persons

Details of the proposed cabin to accommodate access for disabled persons in accordance with Condition **A5** is to be provided to the satisfaction of the Team Leader of the Department or nominee prior to the issue of the Construction Certificate. The details are to include floor plans illustrating compliance with the condition and AS 1428.1

C. PRIOR TO COMMENCEMENT OF WORKS

C1 Notification to Consent Authority of PCA and Date of Commencement of Works

The consent authority shall be given written notice, at least 2 days prior to work commencing on site, of the name and details of the PCA and the date construction work is proposed to commence.
Inspections to be undertaken by the Department as the PCA.

D. DURING CONSTRUCTION

D1 Inspections to be undertaken by Department of Infrastructure, Planning and Natural Resources (Department) as the Principal Certifying Authority (PCA).

Where the Department has been appointed as PCA for the development, the following inspections are required to be carried out. The Department is to be notified at least 24 hours prior to any inspection to be undertaken:

(i) Site Environmental Management Inspection (Prior to works commencing on site) including Tree protection measures
(ii) Footing inspections
(iii) Slab inspections
(iv) Wet area's inspection
(v) Plumbing and Drainage inspections
(vi) Hot and Cold Water Rough-In Inspections
(viii) Final Occupancy at completion of works

If the Department has not been appointed as PCA, the Department will still be required to carry out the following inspections;

(a) Site Environmental Management Inspection (Prior to works commencing on site)
(b) Plumbing and Drainage inspections.
(c) Hot and Cold Water Rough-In Inspections.

At least 24 hours notice is to be given prior to any inspection being undertaken

D2 Municipal Service Main Connections to be supervised by NPWS Municipal Services Unit

All new connections (sewer/water) shall be carried out in accordance with National Parks and Wildlife Service Municipal Services Unit's specifications and under the supervision of the Municipal Services Unit. The Manager Municipal Services Mr Merv Eagle shall be contacted a minimum of seven (7) days prior to commencement of works. Mr Eagle can be contacted Mondays to Fridays, between 8:00 am and 3:30 pm on pH 02 6457 5214. Any cost associated with new connections shall be borne by the proponent.

D3 Approved Plans to be On-Site

A copy of the approved and certified plans, specifications and documents incorporating conditions of approval and certification shall be kept on the site at all times and shall be readily available for perusal by any officer of the consent authority, or the PCA.

D4 Site Notice

A site notice(s) shall be prominently displayed at the boundaries of the site for the purposes of informing the public of project details. The notice(s) is to satisfy all but not be limited to, the following requirements:

(a) Minimum dimensions of the notice are to measure 841mm x 594mm (A1) with any text on the notice to be a minimum of 30 point type size;
(b) The notice is to be durable and weatherproof and is to be displayed throughout the works period;
(c) The approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice;
(d) The notice(s) is to be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted.
(e) If the Principal Certifying Authority (PCA) is not the Department then the name and contact details of the PCA are to be identified on the site signage.

D5 Dirt and Dust Control Measures

Adequate measures shall be taken to prevent dirt and dust from affecting the amenity of the neighbourhood during construction. In particular, the following measures must be adopted:

(a) All vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust or other material;
(b) Covers are to be adequately secured;
(c) Cleaning of footpaths must be carried out regularly;
(d) Roadways must be kept clean;
(e) Gates are closed between vehicle movements;
(f) Gates are fitted with shade cloth; and,
(g) The site is hosed down when necessary.

D6 Loading and Unloading of Construction Vehicles

All loading and unloading associated with construction shall be accommodated on-site. If this is not feasible, an application may be made for the provision of a construction zone.

D7 Hours of Work & Construction Activities

The following requirements apply to the hours of demolition, excavation and construction work on the development:

(a) All work, including building/demolition and excavation work in connection with the proposed development must only be carried out between the hours of 7.00am and 5.00pm on Monday to Friday inclusive, and 8:00am to 5.00pm on Saturdays, with no work allowed on Sunday or Public Holidays, or as otherwise approved by the consent authority;
(b) All construction activities are limited to the summer period which commences following the October long weekend and ceases no later than 30 April, unless the applicant can demonstrate that that the site is made safe and secure by undertaking the following:
    - Removal of all waster materials;
    - Removal and/or securing of all stockpiles of soil and gravel;
    - Construction materials to be removed from around the building and stored within the building or contained within designated areas;
    - The construction site is to be fenced with para-webbing or other suitable visible protection fencing around the perimeter of the site to limit access to and from the site;
    - Ensure appropriate signage is erected outlining that unauthorised access to the site is prohibited and that the site is a construction zone;
    - External scaffolding to be dismantled and removed from the site;
    - All external plumbing and drainage works are to be completed;
    - Any other specific matters raised by the Department staff during the course of construction.

    If the applicant can demonstrate that the site complies with the above requirements, then construction will be allowed to proceed up until May 30 or as otherwise approved by the Team Leader or nominee.
(c) Prior to the commencement of the works the applicant shall forward to the consent authority 24 hour telephone number and shall ensure that the number is continually attended by a person with authority over the works for the duration of the development.
(d) This development consent does not extend to the use of appliances, which emit noise of a highly intrusive nature (such as pile drivers and hydraulic hammers). A separate application for approval to use any of these appliances must be made to the Department.

D8 Plumbing and Drainage works

All plumbing and drainage works undertaken as part of this consent are to comply with AS 3500 and are to be carried by an appropriately licensed plumber.

D9 Aboriginal Relics or Artefacts

Should any material suspected of being an Aboriginal relic or artefact 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.* The proponent is required to immediately contact the Department and the National Parks and Wildlife Service (NPWS) to arrange for representatives to inspect the site. All workers on the site are to be made aware of this condition.

Upon the request of the Department and/or the NPWS, the proponent is to provide the Department and NPWS personnel safe access to the construction site for the purposes of undertaking further cultural heritage related assessments as considered appropriate by the NPWS.

D10 Services

The applicant shall ensure that the proposed works do not interfere or disrupt existing servicing in the area. The applicant must make the necessary arrangements with each appropriate service provider to ensure that no conflicts occur. Any damage to any service shall be rectified immediately at the applicant's expense.

D11 Protection of Trees

All trees shall be protected at all times during construction. Any tree, which is damaged or removed during construction, shall be replaced, to the satisfaction of the consent authority. The damage or removal of trees may also warrant further action to be undertaken in accordance with the *National Parks and Wildlife Act 1974* or the *Environmental Planning and Assessment Act 1979.*

D12 Animal Proofing of Buildings

All buildings shall be constructed to prevent animal species and the establishment of nesting & roosting sites. The applicant shall give particular focus toward wall cavities and external features. All electrical writing should be protected in animal proof conduits.

E. PRIOR TO OCCUPATION OR COMMENCEMENT OF USE

E1 Fire Safety Certificate

A Fire Safety Certificate shall be submitted to the PCA for all the Essential Fire or Other Safety Measures forming part of this approval prior to issue of an Occupation Certificate. Where the Department is not appointed as the PCA, a copy of the Fire Safety certificate must be submitted to the Department by the PCA.

E2 Occupation Certificate

An Occupation Certificate must be obtained from the PCA and a copy furnished to the Department prior to the occupation of the building or commencement of the use.

E3 Removal of Temporary Structures – Builder's Signs

Any temporary builder's signs or other site information signs are to be removed upon completion of the site works and prior to the occupation of the building(s) or commencement of the use.

E4 Electrical Installation Certification

Certification that all electrical works have been installed by a qualified and licensed Electrician and installed in accordance with the relevant Australian Standards must be submitted to the satisfaction of the PCA prior to the issue of an Occupation Certificate.

E5 Site Clean Up

Prior to the issue of the Occupation Certificate, the subject site is to be cleaned up and appropriately rehabilitated to its original condition, subject to any changes as part of the approval to the satisfaction of the Team Leader or nominee. The site clean up includes but is not limited to the removal of any waste generated from the works and the like.

E6 Structural Certification

Where the Department has been appointed as PCA for the development, a Structural Engineer's certificate is required to be submitted to the PCA prior to issue of an Occupancy Certificate. This certificate is to verify that structural works have been completed in accordance with approved plans and specifications. In all cases the structural certification is to comply with the provisions of the BCA and relevant standards.

E7 Geotechnical Certification

Form 3A of the Departments Geotechnical Policy – Kosciuszko Alpine Resorts is required to be completed and submitted to the satisfaction of the PCA prior to occupation. If the Department is not the PCA, the appointed PCA is to provide a copy of the signed Form 3A of the Departments Geotechnical Policy to the Department with the copy of the Occupation Certificate.

E8 Landscape Rehabilitation

All disturbed areas are to be rehabilitated and revegetated to the satisfaction of the Department prior to the issue of the Occupation Certificate. Landscape and rehabilitation works must be commenced as soon as practicable following the completion of each section of work to minimise exposed areas. All native grass species which are proposed to be removed are to be sodded and stockpiled for re-use in rehabilitation of the site.

E9 Replacement Trees

The applicant is to provide replacement trees at the rate of two (2) new trees to every one (1) tree removed within the lease boundary and prior to occupation. The applicant is to maintain the establishment of the new trees for a minimum of 5 years. Trees species shall be endemic to the Kosciuszko National Park. In the event that any of the trees do not survive, replacement species are to be planted.

E10 Plumbing & Drainage

Works-as-executed drawings are required to be submitted, detailing the plumbing and drainage, and hot and cold water pipe work installed in each cabin and the location of each connection points to the main sewer and main water lines.

E11 Submission of Bushfire Evacuation Plan

A Bushfire Evacuation Plan as required in Condition **G1** is required to be submitted to the NSW Rural Fire Service for approval and a copy to the PCA prior to the issue of the Occupation Certificate.

E12 Termite Protection

The additions to the buildings shall be protected from attack from subterranean termites in accordance with Australian Standard AS 3660.1-1995: Protection of Building Form Subterranean Termites – New Buildings.

On completion of the installation of the barrier, the Principal Certifying Authority shall be furnished with a certificate prior to the issue of the Occupation Certificate from the person responsible, stating that the barrier complies with AS 3660.1.

A durable notice shall be permanently fixed to the building in a prominent location, such as the meter box or the like indicating:

i) the method of protection;
ii) the date of installation of the system;
iii) where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label; and
iv) the need to maintain and inspect the system on a regular system.

F. POST OCCUPATION

F1 Prohibition of Hazardous Materials

Hazardous or toxic materials or dangerous goods shall not be stored or processed on the site at any time.

F2 Annual Fire Safety Statement

An Annual Fire Safety Statement must be provided to the Department and the NSW Fire Brigade every 12 months commencing within 12 months after the date on which the consent authority initial Fire Safety Certificate is received.

F3 Change to Environmental Conditions

If the existing trees in the vicinity of the works area demonstrate significant signs of die-back as a result of changed environmental conditions (eg. drainage), leading to visual or public safety impacts, the Department is to be notified and will determine whether the tree(s) should be removed. Replacement species will be required in the event of any tree removal.

F4 Future Relocation of Services

Any costs associated with relocating any services in the future shall be borne by the applicant.

G. NSW RURAL FIRE SERVICE CONDITIONS

G1 Bush Fire Evacuation Plan

A Bush Fire Evacuation Plan is to be submitted to the NSW Rural Fire Service – Development Control Services for approval prior to occupation. The evacuation plan is to detail the following:

(a) Under what circumstances will the complex be evacuated.
(b) Where will all person be evacuated to.
(c) Roles and responsibilities of persons co-ordinating the evacuation.
(d) Roles and responsibilities of persons remaining with the complex after evacuation.
(e) A procedure to contact the NSW Rural Fire Service District Office/NSW Fire Brigade and inform them of the evacuation and where they will be evacuated to.

G2 Asset Protection Zones

The following asset protection zones shall be provided for any habitable buildings and maintained in accordance with Section 4.2.2 of Planning for Bushfire Protection 2001:

- There shall be a minimum of 80 metres from habitable buildings to the west (65m of Inner Protection Area & 15m of Outer Protection Area).
- There shall be a minimum of 75 metres from habitable buildings to the north, south & east (60m of Inner Protection Area & 15m of Outer Protection Area).

G3 Ember Protection Upgrade

Any existing habitable buildings should be upgraded to improve ember protection by enclosing all openings (excluding roof tiles spaces) or covering openings with a non-corrosive metal screen. This may include all subfloor areas and eaves.

G4 Additions & Alterations to comply with AS 3959

The construction of the proposed additions and alterations shall comply with AS 3959-1999 level 1 'Construction of Buildings in bush fire prone areas.

G5 Water Supply

If the reticulated water supply is unreliable then a tank with a capacity of 5,000 litres for a dedicated fire fighting supply shall be provided for each habitable building or alternatively a centrally located tank for the whole development with 50,000 litres. A 65mm Storz fitting and ball or gate valve shall be installed in the tank.

G6 Compliance with NSW RFS Planning for Bushfire Protection 2001 Manual

Access shall comply with section 4.3.2 of Planning for Bushfire Protection 2001.

APPENDIX D PREVIOUS NSW RFS BFSA

All communications to be addressed to:

Development Control Services
NSW Rural Fire Service
Locked Mail Bag 17
Granville NSW 2142

Telephone: (02) 8741 5555
e-mail: danielle.simpson@rfs.nsw.gov.au

Development Control Services
NSW Rural Fire Service
15 Carter Street
Homebush Bay NSW 2127

Facsimile: (02) 8741 5433

The Team Leader
Alpine Resorts Assessment Team
Dept Infrastructure,
Planning & Natural Resources
PO Box 36
JINDABYNE NSW 2627
Attention: Jim Corrigan

Your Ref: 155-6-2004
Our Ref: D04/1756
A04/5650
DA04113015935 DS

Date: 04-Jan-2005

Dear Sir,

Integrated Development: Lot 30 DP 725492, "Kosciusko Mountain Retreat" Kosciusko Road, Sawpit Creek NSW

I refer to your letter dated 22-Nov-2004 seeking our General Terms of approval for the above integrated development proposal in relation to the requirement for a Bush Fire Safety Authority under section 100B of the Rural Fires Act 1997.

Based upon an assessment of the plans and documentation received for the proposal, the NSW Rural Fire Service is prepared to grant a Bush Fire Safety Authority subject to the following conditions:

1. A Bush Fire Evacuation Plan is to be submitted to the NSW Rural Fire Service - Development Control Services for approval. The evacuation plan is to detail the following:
a) under what circumstances will the complex be evacuated.
b) where will all person be evacuated to.
c) roles and responsibilities of persons co-ordinating the evacuation.
d) roles and responsibilities of persons remaining with the complex after evacuation.
e) a procedure to contact the NSW Rural Fire Service District Office / NSW Fire Brigade and inform them of the evacuation and where they will be evacuated to.

2. The following asset protection zones shall be provided for any habitable buildings and maintained in accordance with section 4.2.2 of Planning for Bushfire Protection 2001:

- There shall be a minimum of 80 metres from habitable buildings to the west (65 IPA and 15 OPA)

- There shall be a minimum of 75 metres from habitable buildings to the north, south and east (60 IPA and 15 OPA)

3. Any existing habitable buildings should be upgraded to improve ember protection by enclosing all openings (excluding roof tile spaces) or covering openings with a non-corrosive metal screen. This may include all subfloor areas and eaves.

4. The construction of the proposed additions and alterations shall comply with AS3959 – 1999 level 1 'Construction of Buildings in bushfire prone areas'.

5. If the reticulated water supply is unreliable then a tank with a capacity of 5,000 litres for a dedicated fire fighting supply shall be provided for each habitable buildings or alternatively a centrally located tank for the whole development with 50,000 litres. A 65mm Storz fitting and ball or gate valve shall be installed in the tank.

6. Access shall comply with section 4.3.2 of Planning for Bushfire Protection 2001.

This Reponse is to be deemed the Bush Fire Safety Authority as required under section 100B of the Rural Fires Act 1997.

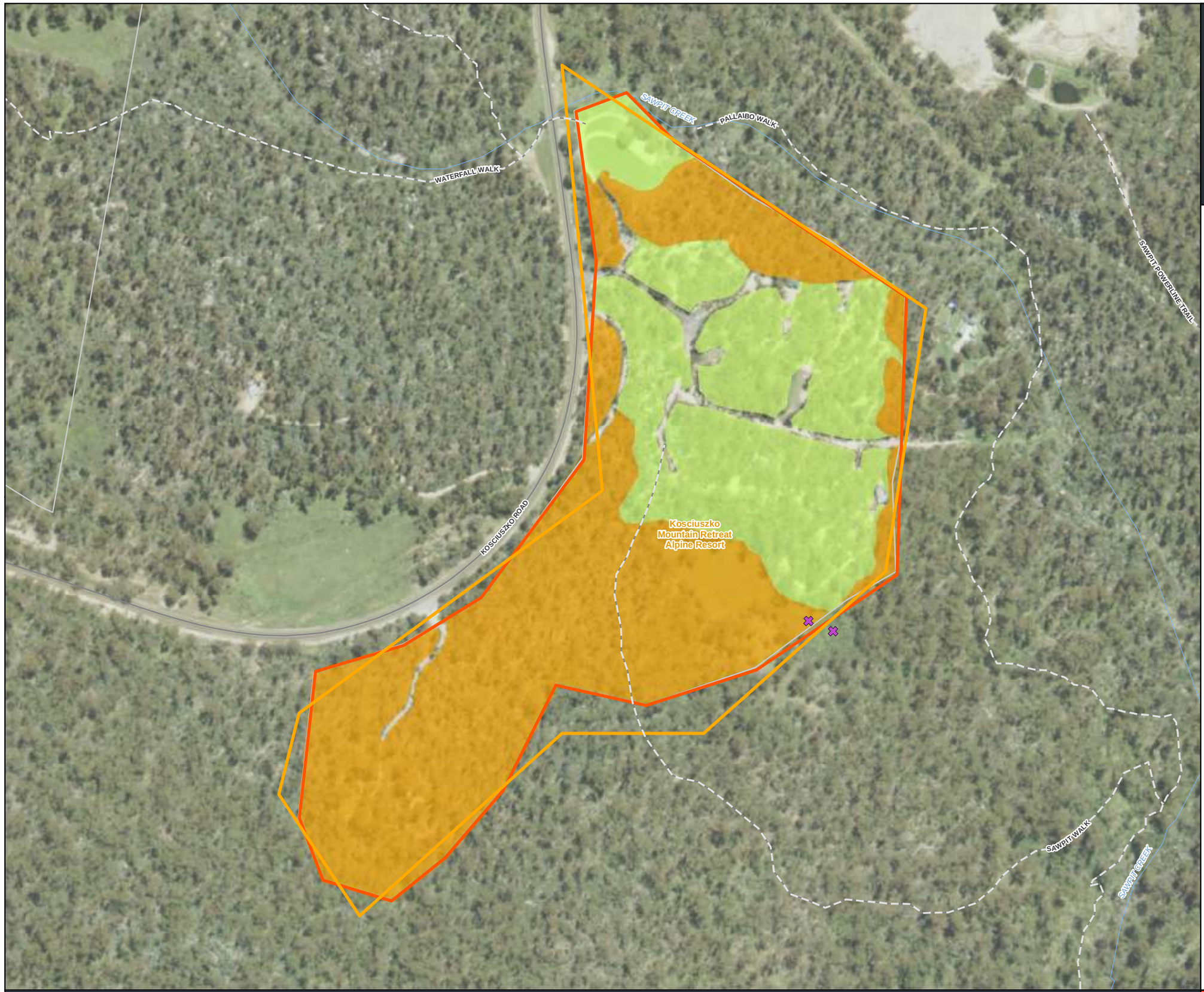
For any enquiries regarding this correspondence please contact Danielle Simpson.

Yours faithfully,

Lew Short
Manager, Development Control

APPENDIX E SITE PHOTOS

APPENDIX F BIODIVERSITY CONSTRAINTS MAP – WSP 2022



Snowy SAP - Biodiversity Constraints

Figure 14.1

Kosciuszko Tourist Park sub-precinct
Alpine SEPP Sub-precinct

Legend

- Study Area
- SAP Precincts
- Cadastre
- Watercourse
- Roads

Threatened Flora Species

- *Carex sp.*

Biodiversity Constraints

- Moderate
- Low

0 0.075 0.15 km

Coordinate system: GDA 1994 MGA Zone 55

Scale ratio correct when printed at A3

1:3,000 Date: 22/03/2022

Data sources: - NSWSS, Geoscience Australia, DPIE, Metromap