Statement of Environmental Effects

Village Green Stormwater Infrastructure Repairs

Thredbo Alpine Resort
Kosciuszko National Park, NSW

August 2024

Document Control

Revision	Date	Revision Type	Author	Approved by
A	17/07/2024	Draft	K O'Sullivan; J.Best	C.Chalk
0	15/08/2024	Final	K O'Sullivan; J.Best	C.Chalk

Project Number: 24018ES

Kosciuszko Thredbo Pty Ltd

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Tables

1 Introduction

This Statement of Environmental Effects (SEE) has been prepared to support the Development Application (DA) for the Village Green Stormwater Infrastructure Repairs (hereinafter referred to as the Development).

1.1 Application Details

The application details are provided in **Table 1**.

Table 1: Application Details

Application Details	
Applicant	Kosciuszko Thredbo Pty Ltd (KT)
ABN	95 000 139 015
Applicant Address	1 Friday Drive, Thredbo NSW 2625
Development Address	Village Green, Thredbo Alpine Resort, Kosciuszko National Park, 2 Friday Drive, Thredbo NSW 2625
Lot/Plan	876/DP1243112 (Thredbo Head Lease)
Local Government Area (LGA)	Snowy Monaro Regional Council
Zoning	Zone C1 – National Parks and Nature Reserves
Planning Instrument	*State Environmental Planning Policy (Precincts – Regional)* 2021 (Precincts – Regional SEPP)
Integrated Development	N/A – Controlled Activity Approval exemption applies.
Consent Authority	Department of Planning, House and Infrastructure
Type of Development	Infrastructure Facilities
Summary of works	• Earthworks, including excavation and trenching • Replacement of existing stormwater pipe and pits • Rehabilitation

1.2 Supporting Documentation

This application is supported by the documentation listed in **Table 2**.

Table 2: Supporting Documentation

Document	Title / Description	Author/ Prepared by	Date	Document Reference
Site Environmental Management Plan	Site Environmental Management Plan – Village Green Stormwater Repairs	Kosciuszko Thredbo Pty Ltd	15/08/2024	Rev 0
Site Plan	Site Plan – 24018ES Village Green Stormwater Repairs	Kosciuszko Thredbo Pty Ltd, KOS	17/07/2024	Rev C
Plan	Stormwater Trench Cross Section, 24018ES Village Green Stormwater Repairs	K. O'Sullivan	10/07/24	Rev 0
Geotechnical Assessment	Proposed Village Green Stormwater Repairs, Thredbo Village NSW Geotechnical Assessment	Assetgeoenviro	14/08/2024	7613-R1
Geotechnical Form 4	Form 4 – Minimal Impact Certification	M.Bartel	14/08/2024	7613-R1

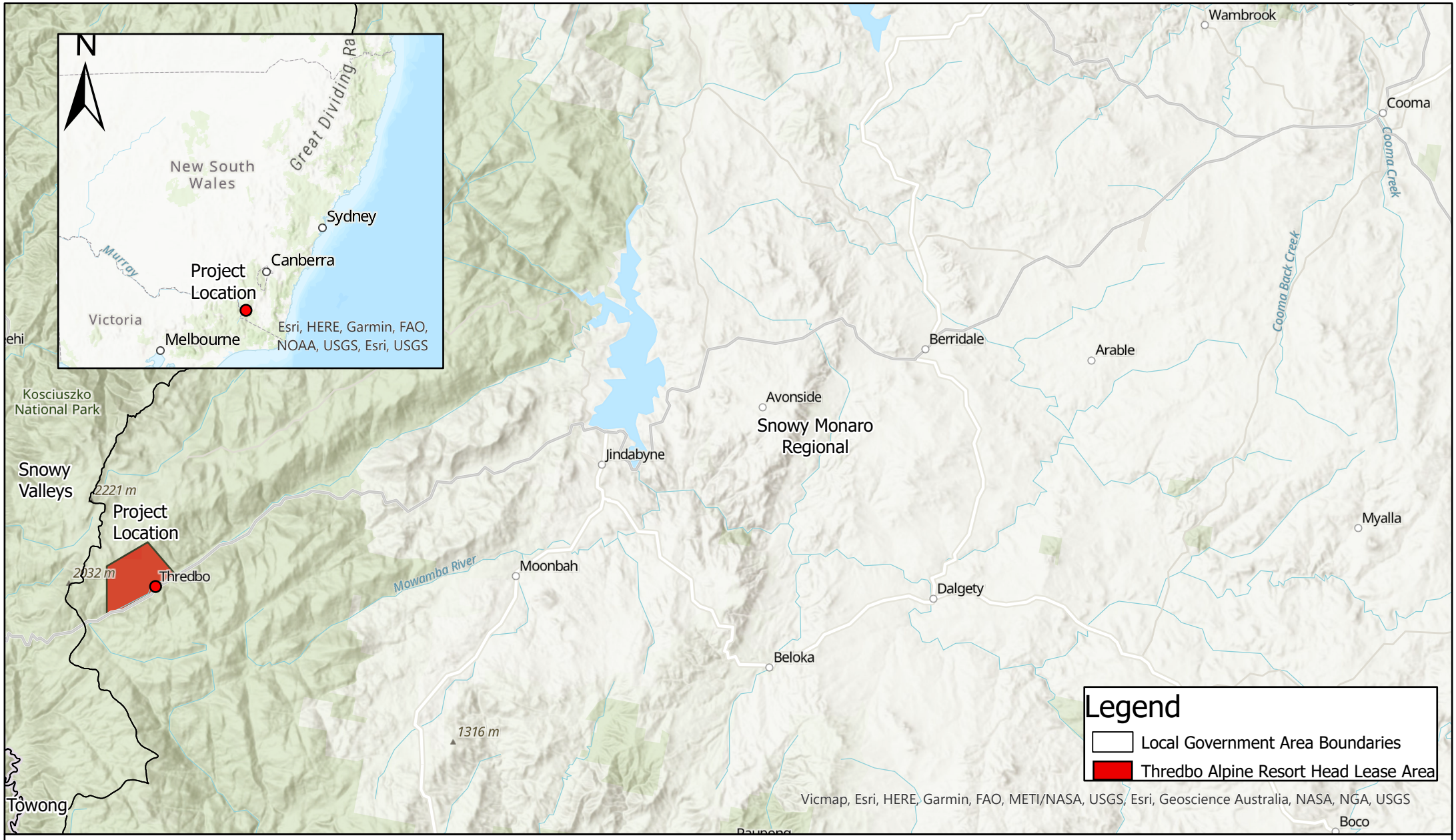
2 Site Context

Regionally, the Development site is located within Thredbo, in the southern part of Kosciusko National Park, New South Wales (**Figure 1**). Within the context of the resort, the site is located within the Village Green at the western end of the Village (**Figure 2**).

The pipeline traverses approximately 62 m south to north, from the open green space towards the edge of the car park on Friday Drive (refer **Figure 3** and **Figure 4**). The upstream pit is located on the southern side of the green space and the northern pit is located in a carpark immediately adjacent to the northern playground fence. The Development site is heavily disturbed comprising of exotic grasses, recreational infrastructure, footpaths and service infrastructure. There are no records of contamination within the site.

Previous approvals that relate to the site include DA 6877 (2015) Village Green Precinct Enhancement Project.

The site is considered suitable for the Development given the works are for the replacement of aging existing infrastructure within a highly modified site.



Scale: 1:305,832

3 1.5 0 3 6 9 12

Kilometers

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 2020
Grid: GDA 2020 MGA Zone 55

N

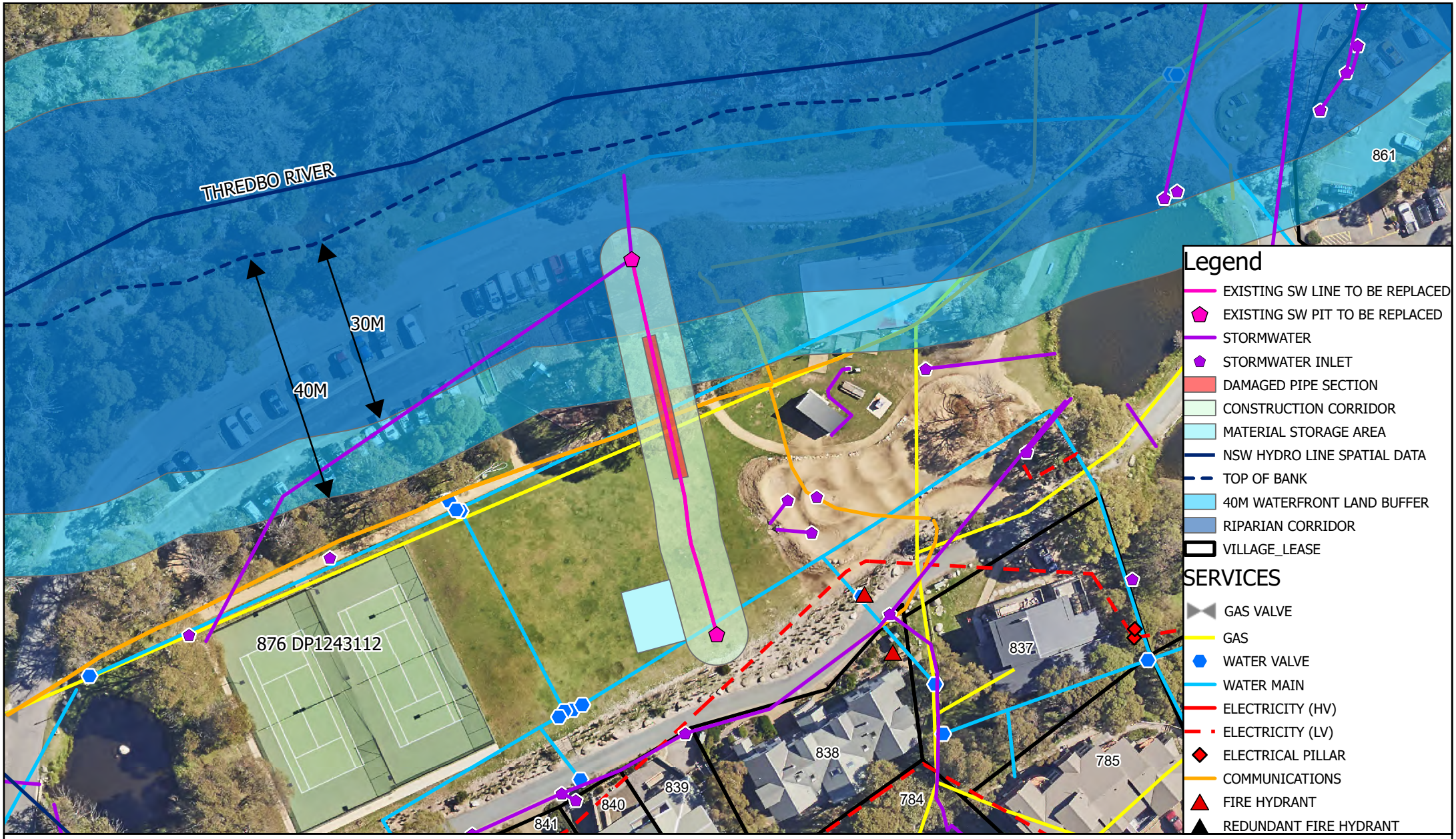
THREDBO

FIGURE 1: REGIONAL SITE CONTEXT

Revision: A

Date: 7/06/2022

Produced By: KO



Scale: 1:802

0 5 10 20 30 40 Meters

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 2020
Grid: GDA 2020 MGA Zone 55

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THREDBO

SITE PLAN

Project: 24018ES Village Green Stormwater Repairs

Revision: C

Date: 17/07/2024

Produced By: KOS

Figure 3: Upstream pit facing north towards the Playground and Thredbo River

Figure 4: Standing at the downstream pit looking south towards the upstream pit

3 Development Details

3.1 Purpose

The purpose of the Development is to replace an aged section of stormwater infrastructure that traverses the Village Green.

3.2 Development Components

The Development will include the following components:

- Excavation of existing pipeline alignment
    - A trench approximately 800 mm wide x 600-1800 mm in depth is required. Where a trench section deeper than 1500 mm is required, benching will be carried out to achieve a temporary batter slope no deeper than 1H:1V and with maximum individual bench height of 1500 mm.
- Removal of existing 200 mm concrete pipe and the upstream and downstream connecting stormwater pits
- Laying of new pipe
- Excavation and installation of two (2) new stormwater pits
    - Pit construction footprint is approximately 1000 x 1000 x 1000 mm deep
- Connection of new pipe and pits to existing services
- Backfilling and compaction of trenched alignment and stormwater pits.
    - It is proposed to excavate, remove and install new pipe sections in 10 m lengths backfilling each section before the next is excavated. This ensures only a small section of trench is required to be open at any one time.
- Site rehabilitation.

The village green is expected to contain a combination of disturbed and undisturbed soil. If rocks >75mm are found in the excavated material, these will be removed, and a small amount of fill will be imported from Thredbo's approved stockpile locations as required. The soil is expected to be sufficient quality for backfill of the new pipe in accordance with AS3500, once any unsuitable materials and compaction requirements are followed.

Construction materials will be temporarily stored onsite within the laydown area identified on the Site Plan (**Figure 2**), adjacent to the construction corridor.

The approximate disturbance footprint is 52 m^2.

3.3 Operational Details

Once operational, the stormwater infrastructure will form part of the existing stormwater network.

4 Legislation & Statutory Framework

4.1 Commonwealth Legislation

4.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage nationally and internationally important aspects of the Australian environment. The EPBC Act is administered by the Department of Climate Change, Energy, the

Environment and Water (DCCEEW). Under Part 3 of the EPBC Act, a person must not undertake an action (e.g. a development) that will have, or is likely to have, a significant impact on a protected matter (MNES), without approval from the Australian Government Minister for the Environment.

MNES that may occur, or relate to the search area (within a 5 km buffer) are provided in the EPBC Act Protected Matters Report (**Appendix A**). An assessment of EPBC Act considerations and potential impacts is provided in **Table 3**.

Table 3: EPBC Act Considerations

EPBC Act Considerations	Comment
MNES – World Heritage Properties	Not applicable
MNES – National Heritage Places	No impact on the Australian Alps National Parks and Reserves
MNES – Wetlands of International Importance	No impact
MNES – Great Barrier Reef Marine Park	Not applicable
MNES – Commonwealth Marine Area	Not applicable
MNES – Listed Threatened Ecological Communities	No impact
MNES – Listed Threatened Species	No impact
MNES – Listed Migratory Species	No impact
Commonwealth Land	No impact

An EPBC Act referral to the Commonwealth Environment Minister is not recommended as the Development is unlikely to have a significant impact on any MNES or Commonwealth land.

4.2 State Legislation

4.2.1 Environmental Planning and Assessment Act 1979 (EP&A Act)

A review of the Development against Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) is provided in **Table 4**.

Table 4: EP&A Act, Section 4.15 (1) Matters for consideration

EP&A Act, Section 4.15 – matters for consideration	Comment
(i) any environmental planning instrument	The Precincts – Regional SEPP is the only environmental planning instrument which applies to the site, refer **Section 4.2.3**.
(ii) any proposed instrument	Not applicable. There are no draft Environmental Planning Instruments that are applicable to the Development.
(iii) any development control plan	Not applicable. There are currently no development control plans applicable to the site.
(iiia) any planning agreement	Not applicable. There are no planning agreements applicable to Thredbo under the Precincts – Regional SEPP.
(iv) the regulations	The DA and supporting information has been prepared in accordance with the relevant requirements of the EP&A Regulation.
(a) the likely impacts of that development,	Refer **Section 5** for impact assessment.
(b) the suitability of the site for the development	Refer **Section 2** for site suitability.
(c) any submissions made in accordance with this Act or the regulations	Consideration will be given to submissions made.
(d) the public interest.	The Development is considered within the public interest as it will ensure the ongoing operation of stormwater services within the locality.

4.2.2 Biodiversity Conservation Act 2016

The purpose of the *Biodiversity Conservation Act 2016* (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ESD.

The *Biodiversity Conservation Regulation 2017* (BC Regulation) sets out threshold levels for when the BOS will be triggered. A review of the Development against the BOS triggers is provided in **Table 5**.

Table 5: BC Regulation BOS Triggers

BC Regulation BOS Triggers	Comment
whether the amount of native vegetation being cleared exceeds the area threshold	No vegetation clearing is proposed.
whether the impacts occur on an area mapped on the Biodiversity Values Map (BVM) published by the Minister for Environment	The site does not contain land mapped on the BVM, refer **Section 5.3**.
the 'test of significance' in section 7.3 of the BC Act identifies that the development or activity is likely to significantly effect threatened species or ecological communities, or their habitats	Unlikely, the 'test of significance' is provided in **Section 5.3**.
the works are carried out on a declared area of outstanding biodiversity value	The works are not located within an area of outstanding biodiversity value.

4.2.3 State Environmental Planning Policy (Precincts – Regional) 2021

A review of the Development against the relevant provisions of the *State Environmental Planning Policy (Precincts – Regional) 2021* (Precincts – Regional SEPP) is provided in **Table 6**.

Table 6: Precincts – Regional SEPP Considerations

Precincts – Regional SEPP Considerations	Comment
Section 4.2 Land to which Chapter applies	Thredbo Alpine Resort is listed as one of the Alpine Subregions on the *State Environmental Planning Policy (Precincts – Regional 2021 Thredbo Alpine Resort Map* referenced in Section 4.2.
Section 4.7 Land Use Table	Infrastructure facilities is permissible development with consent within the Thredbo Alpine Resort.
Section 4.21 Heritage Conservation	The Development will not impact upon any heritage items or Aboriginal heritage items or places.
Section 4.24 Flood Planning	Not applicable.
Section 4.25 Earthworks (3) (a) the likely disruption of, or adverse impact on, drainage patterns and soil stability in the locality of the development, (b) the effect of the development on the likely future use or redevelopment of the land, (c) the quality of the fill or the soil to be excavated, or both,	(3) (a) The disturbance footprint is relatively minor, as such unlikely to disrupt, or result in adverse impacts on drainage patterns and soil stability in the locality. (b) The Development will not affect the future use or redevelopment of the land. (c) All excavated material will be reused onsite for backfilling where possible.

Precincts – Regional SEPP Considerations	Comment
(d) the effect of the development on the existing and likely amenity of adjoining properties, (e) the source of any fill material and the destination of any excavated material, (f) the likelihood of disturbing relics, (g) the proximity to, and potential for adverse impacts on, a waterway, drinking water catchment or environmentally sensitive area, (h) appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.	(d) Unlikely to result in adverse impacts on amenity of adjoining properties, refer to **Section 5.** (e) The sourcing and management of soil, fill and excavated materials will be in accordance with the SEMP (KT 2024). (f) unlikely, refer to **Section 5.6.** (g) The Development is located within 40 m of a watercourse, refer to **Section 5.2.1.** (h) Appropriate environmental controls have been incorporated into the design and construction of the Development to avoid, minimise or mitigate the potential impacts of the Development.
Section 4.26 Master plans	The Snowy SAP Master Plan is applicable to the site. The Development is considered consistent with the Master Plan. The site is marked as a 'Development area' on the Thredbo Village West structure plan.
Section 4.27 Consultation with National Parks and Wildlife Service	The DA will be referred to NPWS as part of the assessment process.
Section 4.28 Consideration of mater plans and other documents	
(1)(c) a conservation agreement under the Environment Protection and Biodiversity Conservation Act 1999 of the Commonwealth that applies to the land,	Not applicable.
(d) the Geotechnical Policy —Kosciuszko Alpine Resorts published by the Department in November 2003,	Refer **Appendix B** for a copy of the Geotechnical Assessment (Assetgeoenviro 2024).
(2) In deciding whether to grant development consent to development in the Alpine Region, the consent authority must consider— (a) a master plan approved by the Minister under section 4.26 that applies to the land, or	The Snowy SAP Master Plan applies to the site.
Section 4.29 Consideration of environmental, geotechnical and other matters	-
(1) (a) measures proposed to address geotechnical issues relating to the development,	Recommendations to address geotechnical matters are provided in the Geotechnical Assessment (**Appendix B**).
(b) the extent to which the development will achieve an appropriate balance between— (i) the conservation of the natural environment, and (ii) taking measures to mitigate environmental hazards, including geotechnical hazards, bush fires and flooding,	The Development does not require any measures to mitigate environmental hazards that would impact on the conservation of the natural environment.
(c) the visual impact of the proposed development, particularly when viewed from the land identified as the Main Range Management Unit in the Kosciuszko National Park Plan of Management,	The Development is not visible from the Main Range Management Unit. The Development is for the replacement of underground services.
(d) the cumulative impacts of development and resource use on the environment of the Alpine Subregion in which the development is carried out,	The impacts of the Development are addressed in **Section 5**. With the implementation of appropriate environmental controls the Development is not anticipated to result in any significant adverse

Precincts – Regional SEPP Considerations	Comment
	impacts on environmental values of the site and surrounds.
(e) the capacity of existing infrastructure and services for transport to and within the Alpine Region to deal with additional usage generated by the development, including in peak periods,	The Development will not impact upon the capacity of existing infrastructure and services for transport to deal with additional usage generated by the Development.
(f) the capacity of existing waste or resource management facilities to deal with additional waste generated by the development, including in peak periods.	The Development is for replacement of existing stormwater infrastructure, as such will not impact upon the capacity of existing waste or resource management facilities.
(2) For development involving earthworks or stormwater draining works, the consent authority must also consider measures to mitigate adverse impacts associated with the works.	Temporary controls will be implemented during construction to mitigate potential adverse impacts associated with earthworks, refer to the SEMP (KT 2024).
(3) For development the consent authority considers will significantly alter the character of an Alpine Subregion, the consent authority must also consider— (a) the existing character of the site and immediate surroundings, and (b) how the development will relate to the Alpine Subregion.	The Development will not alter the alpine resort character.
Section 4.30 Kosciuszko National Park Plan of Management	The Development is consistent with the relevant provisions of the Kosciuszko National Park Plan of Management.

4.2.4 Integrated Development Considerations

Integrated development requires development consent and one or more of the approvals outlined in Section 4.46 of the EP&A Act. A review of the *Development referrals guideline* (DPIE 2021) has been undertaken to inform this application. The Development is not integrated development, requiring any of the approvals listed in **Table 7**.

Table 7: Integrated Development Considerations

Act	Trigger	Approval/Permit	Applicable (yes/no)
Water Management Act 2000	Works within waterfront land	Controlled Activity Approval	No, exemption applies, refer **Section 5.2.1**
Rural Fires Act 1997	Bush Fire Prone Land; subdivision of land that could lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes	Section 100B, Bush Fire Safety Authority	No
National Parks and Wildlife Act 1974	Harming an Aboriginal object or declared Aboriginal place	Aboriginal Heritage Impact Permit	No
Fisheries Management Act 1994	activities involving dredging and reclamation work; activities temporarily or permanently obstructing fish passage; using explosives and other dangerous	Part 7 Fisheries Management Act Permit	No

Act	Trigger	Approval/Permit	Applicable (yes/no)
	substances; harming marine vegetation.		

4.3 Plans

4.3.1 South East and Tablelands Regional Plan 2036

The *South East and Tablelands Regional Plan 2036* (Regional Plan) provides directions for land use planning for the South-east and tablelands region. The Regional Plan promotes well planned, efficient and sustainable development that complements the area's natural and cultural values. The Development will integrate with the existing services in the locality, and ensure the ongoing operation of critical infrastructure within the Village.

4.3.2 Snowy Mountains Special Activation Precinct Master Plan 2022

The Snowy Mountains Special Activation Precinct Master Plan 2022 (Master Plan) applies to the NSW Alpine Resort Areas, including Thredbo. The Development is for the replacement of aged critical infrastructure within the Village. It is therefore considered consistent with the aims and performance criteria for services infrastructure in the Master Plan.

5 Impact Assessment

The assessment for the development consisted of a desktop review of publicly available data sources. A preliminary site assessment was undertaken by KT Project personnel and various technical consultants to validate the desktop assessment results, inform the design process and ensure appropriate environmental controls are implemented to avoid, mitigate and/or management potential impacts on environmental and cultural values.

5.1 Geotechnical Considerations

The Development is not located within the "G" area of the maps accompanying the Geotechnical Policy Kosciuszko Alpine Resorts (DIPNR 2003) (Geotechnical Policy), therefore a geotechnical report is not required. Refer to **Appendix B** for a copy of the Geotechnical Assessment (Assetgeoenviro 2024).

Figure 5: Geotechnical Policy Overlay (NSW Government 2024a)

5.2 Water

5.2.1 Waterfront Land Assessment

The Development site is located within 40 m of Thredbo River (**Figure 2**), classified as a third order watercourse under the Strahler System. The Development is exempt from requiring a Controlled Activity Approval (CAA) as it meets the provisions of Schedule 4, Part 2 (31) (a) of the *Water Management (General) Regulation 2018* which states (refer **Figure 6** and **Figure 7**):

31 Controlled activities on certain waterfront land

*Any controlled activity that is carried out on waterfront land in relation to a minor stream or **third order stream, where the activity is separated from the bed** of the minor stream or third order **stream by one or more of the following that has been lawfully constructed**—*

*(a) **a public road,***

(b) a hard stand space (such as a car park or building),

(c) a levee bank, but only if the levee bank is in an urban area, was the subject of a development consent under the Environmental Planning and Assessment Act 1979 and is located within a designated high risk flood area (within the meaning of clause 45 of this regulation).

Figure 6: Friday Drive separates Development from Thredbo River

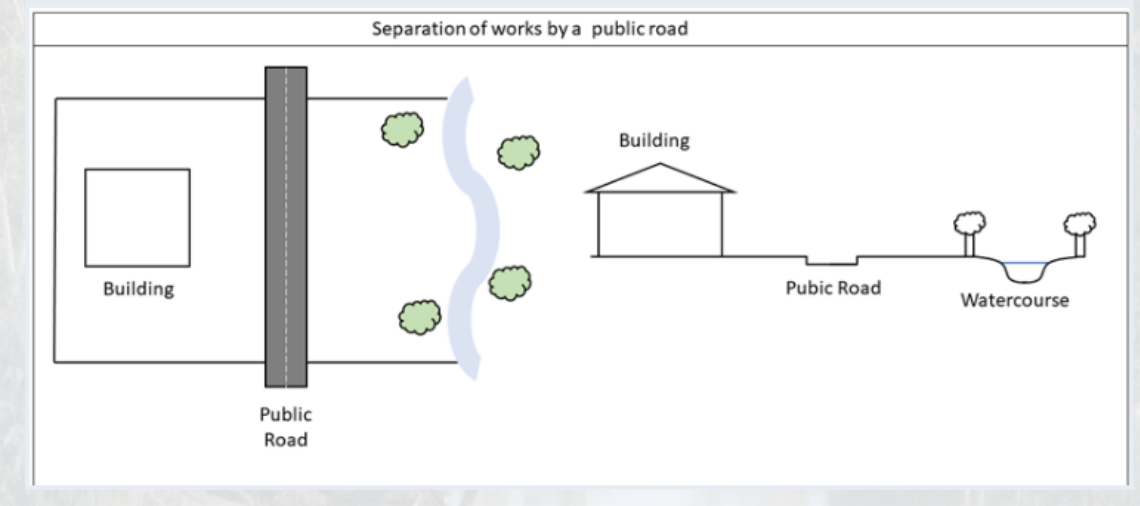

Figure 7: Extracted from Controlled activity exemption e-tool (NSW Government 2024e)

The potential impacts to Thredbo River can be mitigated by:

- Thredbo River is separated from the works by Friday Drive, therefore no disturbance within the riparian zone.
- No riparian vegetation removal is required.
- The construction contractor will implement appropriate erosion and sediment control measures during construction to ensure no sediment or uncontrolled surface water runoff leaves the site.
- The trench will be opened in stages and progressively backfilled to limit the amount of disturbance ground at any one time.
- The repair works will ensure the environmental functions of the riparian corridor are maintained by ensuring stormwater run-off is adequately treated before discharging into the river.

5.3 Biodiversity

The Development site is heavily disturbed and not located within an area mapped as containing biodiversity values on the Biodiversity Values Map (**Figure 8**). No vegetation clearing is required for the works.

Figure 8: Biodiversity Values Map (NSW Government 2024c)

An assessment of the Development against the 'test of significance' outlined in Section 7.3 of the BC Act is provided in **Table 8**. The assessment concludes the Development is unlikely to significantly affect threatened species or ecological communities, or their habitats.

Table 8: Test of Significance

Test of Significance	Comment
(1) The following is to be taken into account for the purposes of determining whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats—	
(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,	The disturbance footprint is approximately 52 m^2, within a highly modified environment, providing very limited suitable habitat for native fauna species (refer to site photos). Minor exotic grass clearing is required. Significant impacts to Commonwealth and State listed threatened flora and fauna, ecological communities or their habitats is considered unlikely. The Development will not adversely affect habitat connectivity or any other biodiversity value of conservation significance. The Development is unlikely to adversely affect the life cycle of listed threatened species, such that a viable local population of the species is likely to be placed at risk of extinction.
(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity— (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,	There are no endangered ecological communities or critically endangered ecologically communities within the site or immediate surrounds.
(c) in relation to the habitat of a threatened species or ecological community— (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,	Unlikely. Refer comment against (a).
(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),	Not applicable. The site and immediate surrounds do not comprise any land declared an area of outstanding biodiversity value.

Test of Significance	Comment
(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.	The Development is not part of a key threatening process outlined in Schedule 4 of the BC Act, nor is it likely to increase the impact of a key threatening process.

5.4 Socio-economic

The Development is considered within the public interest as it will ensure the ongoing function of the stormwater infrastructure within the locality.

5.5 Heritage

The Development will not impact on any heritage listed items or places.

5.6 Aboriginal Cultural Heritage

To establish due diligence for the Development, an assessment against the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW 2010) is provided in **Table 9**.

Table 9: Aboriginal Cultural Heritage Due Diligence Process

Due Diligence Process	Comment
1. Will the activity disturb the ground surface or any culturally modified trees?	The Development will result in ground disturbance within a highly disturbed area. There are no culturally modified trees within the site.
2. Are there any: a) relevant confirmed site records or other associated landscape feature information on AHIMS? And/or	There are no confirmed site records or other associated landscape features within the site, refer to **Appendix B** for AHIMS search results.
b) any other sources of information of which a person is already aware? And/or	The SEE (Dabyne 2014) for DA 6877 (Village Green Enhancement Project) concluded the Village Green is highly modified and the project was unlikely to impact Aboriginal objects.
c) landscape features that are likely to indicate presence of Aboriginal objects?	The Development site is located in a highly disturbed environment, which has been subject to previous construction disturbance including clearing and earthworks, removing potential for Aboriginal sites to remain within these heavily disturbed areas. There are no landscape features within the Development site that would indicate the presence of Aboriginal objects due to the extensive disturbance that has occurred. As such, it is considered the Development has low potential to impact on unrecorded Aboriginal objects or sites. There is no requirement to move onto Steps 3 and 4.
3. Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	Not applicable.
4. Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?	

As identified above, all reasonable steps have been undertaken to ensure the Development fulfils the requirements of the Aboriginal Cultural Heritage Due Diligence Process. Potential impacts from the Development on objects or sites of Aboriginal Cultural Heritage significance are considered unlikely. In the unlikely event that Aboriginal objects are discovered, management measures outlined in the SEMP (KT 2024) will be implemented.

5.7 Visual Impacts

The Development is for the replacement of underground services, as such will not alter the landscape character or impact on the visual amenity in the area.

5.8 Air and Noise

There is potential for air-borne emissions (e.g. dust, machinery exhaust emissions) to be generated during earthworks. Potential noise sources from construction may include loading/unloading materials, reversing alarms and excavation works. All construction works will be carried out during standard work hours. Construction is anticipated to take approximately one week, as such, potential impacts will be short-term and negligible with the proposed environmental controls outlined in the SEMP (KT 2024).

5.9 Access and Traffic

No temporary closures of Friday Drive will be required. Temporary closure of three carparking spaces will be required during the removal and replacement of the northern stormwater pit which is in the carpark. The Village Green footpath will also be closed when the pipeline replacement crosses underneath the footpath. Temporary closures and diversions will be managed in accordance with the controls outlined in the SEMP (KT 2024). Construction is expected to take approximately one week, as such temporary closures and diversions are expected to have negligible impacts within the locality.

5.10 Waste Management

The Development is expected to generate minimal waste. Storage and disposal of construction waste will be managed in accordance with the SEMP (KT 2024).

6 Conclusion

This application is seeking development approval for the replacement of aged stormwater infrastructure within the Village Green.

In accordance with the requirements of the EP&A Act, EP&A Regulation and Precincts – Regional SEPP, this SEE has assessed the potential impacts of the Development on the human, built and natural environment of the site and surrounds. The works will result in minimal impacts to the existing environment given the highly disturbed nature of the site, no native vegetation clearing is required and the relatively minor disturbance footprint.

The repair works are considered within the public interest as they will ensure the ongoing function of stormwater infrastructure in the locality.

7 References

Assetgeoenviro 2024, Proposed Village Green Stormwater Repairs, Thredbo Village NSW Geotechnical Asset, 7613-R1.

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DAWE 2023, *National Heritage Places – Australian Alps National Parks and Reserves*, Department of Agriculture, Water and the Environment, https://www.environment.gov.au/heritage/places/national/australia-alps

DCCEEW 2024, *Protected Matters Search Tool*, Department of Agriculture, Water and the Environment, https://www.environment.gov.au/epbc/protected-matters-search-tool

DoE 2013, *Matters of National Environmental Significance: Significant Impact Guidelines 1.1*, Department of the Environment.

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DECC 2007, *Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park*, New South Wales, Department of Environment and Climate Change, National Parks and Wildlife Service.

DIPNR 2003, *Geotechnical Policy Kosciuszko Alpine Resorts,* Department of Infrastructure, Planning and Natural Resources, NSW Government.

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NSW Government 2024c, NSW BioNet, https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet

NSW Government 2024d, *Water Management (General) Regulation 2018 Hydro Line spatial data*, https://www.industry.nsw.gov.au/water/licensing-trade/hydroline-spatial-data

NSW Government 2024e, Controlled activity exemptions, https://water.dpie.nsw.gov.au/our-work/licensing-and-trade/controlled-activity-approvals/controlled-activity-exemptions

8 Appendices

Appendix A Desktop Search Results

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 01-Jul-2024

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	2
Wetlands of International Importance (Ramsar	8
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	45
Listed Migratory Species:	10

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	15
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	1
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	4
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

National Heritage Places [Resource Information]

Name	State	Legal Status	Buffer Status
Historic			
Snowy Mountains Scheme	NSW	Listed place	In feature area
Natural			
Australian Alps National Parks and Reserves	ACT	Listed place	In feature area

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Banrock station wetland complex	700 - 800km upstream from Ramsar site	In buffer area only
Barmah forest	200 - 300km upstream from Ramsar site	In buffer area only
Blue lake	Within 10km of Ramsar site	In feature area
Gunbower forest	300 - 400km upstream from Ramsar site	In buffer area only
Hattah-kulkyne lakes	500 - 600km upstream from Ramsar site	In buffer area only
Nsw central murray state forests	200 - 300km upstream from Ramsar site	In buffer area only
Riverland	700 - 800km upstream from Ramsar site	In buffer area only
The coorong, and lakes alexandrina and albert wetland	700 - 800km upstream from Ramsar site	In buffer area only

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status

Community Name	Threatened Category	Presence Text	Buffer Status
Alpine Sphagnum Bogs and Associated Fens	Endangered	Community known to occur within area	In feature area
Natural Temperate Grassland of the South Eastern Highlands	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Stagonopleura guttata](#) Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
CRUSTACEAN			
[Euastacus diversus](#) Orbost Spiny Crayfish [66782]	Endangered	Species or species habitat may occur within area	In buffer area only
[Euastacus rieki](#) Riek's Crayfish [83155]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
[Galaxias supremus](#) Kosciuszko Galaxias [87878]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
[Galaxias terenasus](#) Roundsnout Galaxias [87175]	Endangered	Species or species habitat likely to occur within area	In buffer area only
[Maccullochella peelii](#) Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Macquaria australasica](#) Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In buffer area only
[Prototroctes maraena](#) Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area	In feature area
FROG			
[Litoria spenceri](#) Spotted Tree Frog [25959]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
[Litoria verreauxii alpina](#) Alpine Tree Frog, Verreaux's Alpine Tree Frog [66669]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
MAMMAL			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Burramys parvus			
Mountain Pygmy-possum [267]	Endangered	Species or species habitat likely to occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population)			
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
Mastacomys fuscus mordicus			
Broad-toothed Rat (mainland), Tooarrana [87617]	Endangered	Species or species habitat known to occur within area	In feature area
Petauroides volans			
Greater Glider (southern and central) [254]	Endangered	Species or species habitat may occur within area	In buffer area only
Petaurus australis australis			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)			
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Pseudomys fumeus			
Smoky Mouse, Konoom [88]	Endangered	Species or species habitat known to occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In buffer area only
PLANT			
Argyrotegium nitidulum			
Shining Cudweed [82043]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calotis glandulosa			
Mauve Burr-daisy [7842]	Vulnerable	Species or species habitat may occur within area	In feature area
Colobanthus curtisiae			
Curtis' Colobanth [23961]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat may occur within area	In feature area
Leucochrysum albicans subsp. tricolor Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat may occur within area	In feature area
Pimelea bracteata [8125]	Critically Endangered	Species or species habitat may occur within area	In feature area
Prasophyllum bagoense Bago Leek-orchid [84276]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Prasophyllum petilum Tarengo Leek Orchid [55144]	Endangered	Species or species habitat may occur within area	In feature area
Pterostylis oreophila Blue-tongued Orchid, Kiandra Greenhood [22903]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Ranunculus anemoneus Anemone Buttercup [14889]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rytidosperma pumilum Feldmark Grass [66716]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Viola improcera Dwarf Violet [3879]	Endangered	Species or species habitat may occur within area	In feature area
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Cyclodomorphus praealtus			
Alpine She-oak Skink [64721]	Endangered	Species or species habitat known to occur within area	In feature area
Liopholis guthega			
Guthega Skink [83079]	Endangered	Species or species habitat known to occur within area	In feature area
Liopholis montana			
Mountain Skink [87162]	Endangered	Species or species habitat likely to occur within area	In feature area
Pseudemoia cryodroma			
Alpine Bog Skink, Alpine Bog-skink [84408]	Endangered	Species or species habitat known to occur within area	In feature area

Listed Migratory Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava			
Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca			
Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons			
Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris acuminata](#)			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#)			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Calidris melanotos](#)			
Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Gallinago hardwickii](#)			
Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
[Actitis hypoleucos](#)			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Apus pacificus](#)			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Bubulcus ibis as Ardea ibis](#)			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
[Calidris acuminata](#)			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#)			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
[Haliaeetus leucogaster](#) White-bellied Sea-Eagle [943]		Species or species habitat may occur within area	In feature area
[Hirundapus caudacutus](#) White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
[Merops ornatus](#) Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
[Myiagra cyanoleuca](#) Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
[Neophema chrysostoma](#) Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
[Rhipidura rufifrons](#) Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis as Rostratula benghalensis (sensu lato)			
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Kosciuszko	National Park	NSW	In feature area

Regional Forest Agreements			[Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
Southern RFA	New South Wales	In feature area

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
Aerial baiting for wild dog control	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : Village Green SW Repairs

Client Service ID : 905575

Kosciusko Thredbo

Date: 01 July 2024

Attention: Jocelyn Best

Email: jocelyn_best@evt.com

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -36.5066, 148.3009 - Lat, Long To : -36.5045, 148.3048, conducted by Jocelyn Best on 01 July 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.

A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

Level 6, 10 Valentine Ave, Parramatta 2150
Locked Bag 5020 Parramatta NSW 2124
Tel: (02) 9585 6345

ABN 34 945 244 274
Email: ahims@environment.nsw.gov.au
Web: www.heritage.nsw.gov.au

Appendix B Geotechnical Assessment

assetgeoenviro
Suite 2.06 / 56 Delhi Road
North Ryde NSW 2113
02 9878 6005
assetgeoenviro.com.au

Our ref: 7613-R1
14 August 2024

Kosciuszko Thredbo Pty Ltd
1 Friday Drive
Thredbo NSW 2625

Attention: Kyra O'Sullivan

Dear Kyra,

Proposed Village Green Stormwater Repairs, Thredbo Village NSW
Geotechnical Assessment

1. Introduction

This report presents the results of a geotechnical assessment for Proposed Village Green Stormwater Repairs at Thredbo Village NSW (the Site). The assessment was commissioned by Kyra O'Sullivan of Kosciuszko Thredbo Pty Ltd. The work was carried out in accordance with the proposal by AssetGeoEnviro (Asset) dated 13 August 2024, reference 7613-P1.

Documents supplied to us for this investigation comprised:

- Site Plan (Prepared by: Kosciuszko Thredbo Pty Ltd, ref: 24018ES; rev B; dated: 11 July 2024) (attached).
- Stormwater Trench Cross Section Plan (Prepared by: Kosciuszko Thredbo Pty Ltd, ref: 24018ES; rev 0; dated: 10 July 2024) (attached).

We understand the project involves replacing damaged stormwater pipes and pits along the existing alignment west of Thredbo Pump Track, as shown in the attached site plan from Kosciuszko Thredbo Pty Ltd. The 65m long, 300mm diameter concrete stormwater pipe will be replaced with a 300mm diameter Stormpro PVC pipe. The old stormwater pits will be replaced with concrete pits of the same size (0.8m x 0.8m x 0.7m). The invert level of the pipe at the inlet is about 600mm deep, but excavation to about 1.8m to 2m depth will be required at the deepest point near the playground fence.

The site appears to be outside the "G" area as per Department of Infrastructure, Planning and Natural Resources "Geotechnical Policy – Kosciuszko Alpine Resorts" and is also expected to be of minor impact.

2. Scope of Work

The objective of the Geotechnical Assessment is to provide information on the surface conditions and likely subsurface conditions, and to provide a Site Classification to AS2870-2011 'Residential Slabs and Footings' and a Form 4 certification with design recommendations.

The following scope of work was carried out to achieve the project objectives:

- A review of existing regional maps and reports relevant to the Site held within our files.
- Review of general site observations from numerous trips to Thredbo by the undersigned.
- Review of supplied site photos (attached) of water main installation in Village Green nearby the proposed works.
- Engineering assessment and reporting.

This report must be read in conjunction with the attached "Important Information about your Geotechnical Report" in Appendix A. Attention is drawn to the limitations inherent in site investigations and the importance of verifying the subsurface conditions inferred herein.

3. Regional Topography & Site Geology

The regional topography comprises moderately to steeply sloping terrain flanking the north-easterly flowing Thredbo River, with ground slopes over the land flanking the river generally ranging from 10° to 30° and some locally steeper sections, and more gentle slopes over the river shoulders. Numerous drainage depressions and watercourses flow towards the river, with some of the persistent watercourses to the north of the river carved several metres into the underlying granite bedrock. Side slopes to creeks and watercourses are typically steeper at 20 to 35°, and typically include numerous granite boulders and cobbles.

The 1:250,000 Tallangatta Geological Map indicates the site is underlain by Silurian aged intrusive granite.

4. Site Observation

The proposed stormwater pipes and pits are understood to occupy the same footprint as the existing layout (shown in the Site Plan).

The ground surface over the region slopes gently to the north-west at about 5° reducing to less than about 3°. Existing development includes various playground equipment and ground surfacing with mulch, flanked by grassed area within a fenced enclosure in the east. Car parking areas are located to the north and west of the playground. Friday Drive is located to the north. Large gum trees are located within the northern part of the Site.

There are no major structures located in the vicinity of the pipes.

It is likely that historic development of the site has involved some filling, more likely within the playground area where a slightly steeper slope is observed, which flanks the level grassed field. Additionally, the pictures provided by the client for the adjacent water mains trench in Village Green support the evidence that the site is filled with Sandy CLAY, dark grey and mottled light grey.

5. Discussions and Recommendations

The proposed work involves excavation ranging from 0.7m to 2.0m depth for the pipe layout. The stormwater excavation will be slightly larger than the pit (0.8m x 0.8 x 0.7m deep). Filling is not expected, except for trench backfill.

The proposed works will have 'minimal or no geotechnical impact' on the site, based on the generally relatively shallow depths of excavation required, and the lack of obvious signs of hillside instability observed or expected. We therefore consider that a geotechnical report prepared in accordance with the Geotechnical Policy for Kosciuszko Alpine Resorts (2003) is not required. A completed Form 4 – Minimal Impact Certification is attached to this report.

The following recommendations are provided for the development:

- Based on our site observations, we expect that due to likely previous site disturbance, the site is Class 'P', in accordance with AS2870-2011 'Residential slabs and footings'.
- Excavation is anticipated to be predominantly within soils of variable nature including fill and possibly completely weathered granite and cobbles and boulders. Excavation could be achieved by suitably sized excavator.
- Temporary excavation up to about 1m depth may be cut vertical in clayey soils, and nominally 1H:1V in sands and gravels. Deeper temporary excavations up to about 2m depth should be benched / battered at no steeper than 1.5H:1V.
- Permanent excavations should be formed no steeper than 2H:1V and should be provided with erosion protection.
- Filling should be placed in horizontal layers over prepared subgrade and compact as per Table 1.

Table 1 – Compaction Specifications

Parameter	Cohesive Fill	Non-Cohesive Fill
Fill layer thickness (loose measurement):		
• Within 1.5m of the rear of retaining walls	0.2m	0.2m
• Elsewhere	0.3m	0.3m
Density:		
• Beneath Pavements	≥ 95% Std	≥ 70% ID
• Beneath Structures	≥ 98% Std	≥ 80% ID
• Upper 150mm of subgrade	≥ 100% Std	≥ 80% ID
Moisture content during compaction	± 2% of optimum	Moist but not wet

- Subgrade for pipe laying should be prepared as follows:
    - Strip existing fill and topsoil. Remove unsuitable materials from the Site (e.g., material containing deleterious matter). Stockpile remainder for re-use as landscaping material or remove from site.
    - Excavate soils to design subgrade level, stockpiling for re-use as engineered fill or remove to spoil.
    - Compact the upper 150mm depth to a dry density ratio (AS1289.5.4.1–2007) not less than 100% Standard.
    - Areas which show visible heave under compaction equipment should be over-excavated a further 0.3m and replaced with approved fill compacted to a dry density ratio not less than 100%.

6. Limitations

In addition to the limitations inherent in site investigations (refer to the attached Information Sheets), it must be pointed out that the recommendations in this report are based on assessed subsurface conditions from limited observations.

This report and details for the proposed development should be submitted to relevant regulatory authorities that have an interest in the property (e.g. Department of Planning) or are responsible for services that may be within or adjacent to the site for their review.

Asset accepts no liability where our recommendations are not followed or are only partially followed. The document "Important Information about your Geotechnical Report" in Appendix A provides additional information about the uses and limitations of this report.

❖❖❖

Please do not hesitate to contact the undersigned if you have any questions regarding this report or if you require further assistance.

For and on behalf of
AssetGeoEnviro

Mark Bartel

Mark Bartel
BE, MEngSc, GMQ, CPEng, RPEQ/NER(Civil), DEP/PRE (NSW)
Managing Director | Senior Principal Geotechnical Engineer

Encl: Site Photos
Important Information about your Geotechnical Report
Soil and Rock Information Sheets
Site Plan
Stormwater trench cross-section Plans
Department of Planning & Environment Form 4

Document Control

Distribution Register

Copy	Media	Recipient	Location
1	Secure PDF	Kyra O'Sullivan	Kosciuszko Thredbo Pty Ltd
2	Secure PDF	Mark Bartel	Asset Geotechnical Engineering

Document Status

Rev	Revision Details	Date	Author	Reviewer	Approver
0	Initial issue	14 August 2024	AM		MAB

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ISO 9001:2015
ISO 14001:2015
ISO 45001:2018 AS/NZS 4801:2001

Site Photos

Photo 1 – view of water main install in Village Green (17 May 2007). Source: Kosciuszko Thredbo Pty Ltd

Photo 2 – view of water main install in Village Green (17 May 2007). Source: Kosciuszko Thredbo Pty Ltd

Important Information about your Geotechnical Report

Scope of Services

The geotechnical report ("the report") has been prepared in accordance with the scope of services as set out in the contract, or as otherwise agreed, between the Client and Asset Geotechnical Engineering Pty Ltd ("Asset"), for the specific site investigated. The scope of work may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

The report should not be used if there have been changes to the project, without first consulting with Asset to assess if the report's recommendations are still valid. Asset does not accept responsibility for problems that occur due to project changes if they are not consulted.

Reliance on Data

Asset has relied on data provided by the Client and other individuals and organizations, to prepare the report. Such data may include surveys, analyses, designs, maps, and plans. Asset has not verified the accuracy or completeness of the data except as stated in the report. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations ("conclusions") are based in whole or part on the data, Asset will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented, or otherwise not fully disclosed to Asset.

Geotechnical Engineering

Geotechnical engineering is based extensively on judgment and opinion. It is far less exact than other engineering disciplines. Geotechnical engineering reports are prepared for a specific client, for a specific project and to meet specific needs, and may not be adequate for other clients or other purposes (e.g., a report prepared for a consulting civil engineer may not be adequate for a construction contractor). The report should not be used for other than its intended purpose without seeking additional geotechnical advice. Also, unless further geotechnical advice is obtained, the report cannot be used where the nature and/or details of the proposed development are changed.

Limitations of Site Investigation

The investigation program undertaken is a professional estimate of the scope of investigation required to provide a general profile of subsurface conditions. The data derived from the site investigation program and subsequent laboratory testing are extrapolated across the site to form an inferred geological model, and an engineering opinion is rendered about overall subsurface conditions and their likely behavior regarding the proposed development. Despite investigation, the actual conditions at the site might differ from those inferred to exist, since no subsurface exploration program, no matter how comprehensive, can reveal all subsurface details and anomalies.

The engineering logs are the subjective interpretation of subsurface conditions at a particular location and time, made by trained personnel. The actual interface between materials may be more gradual or abrupt than a report indicates.

Therefore, the recommendations in the report can only be regarded as preliminary. Asset should be retained during the project implementation to assess if the report's recommendations are valid and whether changes should be considered as the project proceeds.

Subsurface Conditions are Time Dependent

Subsurface conditions can be modified by changing natural forces or man-made influences. The report is based on conditions that existed at the time of subsurface exploration. Construction operations adjacent to the site, and natural events such as floods, or ground water fluctuations, may also affect subsurface conditions, and thus the continuing adequacy of a geotechnical report. Asset should be kept appraised of any such events and should be consulted to determine if any additional tests are necessary.

Verification of Site Conditions

Where ground conditions encountered at the site differ significantly from those anticipated in the report, either due to natural variability of subsurface conditions or construction activities, it is a condition of the report that Asset be notified of any variations and be provided with an opportunity to review the recommendations of this report. Recognition of change of soil and rock conditions requires experience, and it is recommended that a suitably experienced geotechnical engineer be engaged to visit the site with sufficient frequency to detect if conditions have changed significantly.

Reproduction of Reports

This report is the subject of copyright and shall not be reproduced either totally or in part without the express permission of this Company. Where information from the accompanying report is to be included in contract documents or engineering specification for the project, the entire report should be included to minimize the likelihood of misinterpretation from logs.

Report for Benefit of Client

The report has been prepared for the benefit of the Client and no other party. Asset assumes no responsibility and will not be liable to any other person or organization for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organization arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of Asset or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own inquiries and obtain independent advice in relation to such matters.

Data Must Not Be Separated from The Report

The report presents the site assessment and must not be copied in part or altered in any way.

Logs, figures, drawings, test results etc. included in our reports are developed by professionals based on their interpretation of field logs (assembled by field personnel) and laboratory evaluation of field samples. These data should not under any circumstances be redrawn for inclusion in other documents or separated from the report in any way.

Report Recommendations not Followed

Where the recommendations of the report are not followed or are only partially followed, there may be significant implications for the project (e.g., commercial loss, property loss or damage, personal injury, or loss of life). Consult Asset if you are not intending to follow all the report recommendations, to assess what the implications could be. Asset does not accept responsibility where the report recommendations have not been followed or have only been partially followed.

Other Limitations

Asset will not be liable to update or revise the report to consider any events or emergent circumstances or fact occurring or becoming apparent after the date of the report.

Soil and Rock Explanation Sheets (1 of 2)

Log Abbreviations & Notes

METHOD

borehole logs		**excavation logs**	
AS	auger screw *	NE	natural excavation
AD	auger drill *	HE	hand excavation
RR	roller / tricone	BH	backhoe bucket
W	washbore	EX	excavator bucket
CT	cable tool	DZ	dozer blade
HA	hand auger	R	ripper tooth
D	diatube		
B	blade / blank bit		
V	V-bit		
T	TC-bit		

* bit shown by suffix e.g. ADV

coring
NMLC, NQ, PQ, HQ

SUPPORT

borehole logs		*excavation logs*	
N	nil	N	nil
M	mud	S	shoring
C	casing	B	benched
NQ	NQ rods		

CORE—LIFT

‖	casing installed
⊢	barrel withdrawn

NOTES, SAMPLES, TESTS

D	disturbed
B	bulk disturbed
U50	thin-walled sample, 50mm diameter
HP	hand penetrometer (kPa)
SV	shear vane test (kPa)
DCP	dynamic cone penetrometer (blows per 100mm penetration)
SPT	standard penetration test
N*	SPT value (blows per 300mm)
	* denotes sample taken
Nc	SPT with solid cone
R	refusal of DCP or SPT

USCS SYMBOLS

GW	Gravel and gravel-sand mixtures, little or no fines.
GP	Gravel and gravel-sand mixtures, little or no fines, uniform gravels
GM	Gravel-silt mixtures and gravel-sand-silt mixtures.
GC	Gravel-clay mixtures and gravel-sand-clay mixtures.
SW	Sand and gravel-sand mixtures, little or no fines.
SP	Sand and gravel sand mixtures, little or no fines.
SM	Sand-silt mixtures.
SC	Sand-clay mixtures.
ML	Inorganic silt and very fine sand, rock flour, silty or clayey fine sand or silt with low plasticity.
CL, CI	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays.
OL	Organic silts
MH	Inorganic silts
CH	Inorganic clays of high plasticity.
OH	Organic clays of medium to high plasticity, organic silt
PT	Peat, highly organic soils.

MOISTURE CONDITION

D	dry
M	moist
W	wet
Wp	plastic limit
Wl	liquid limit

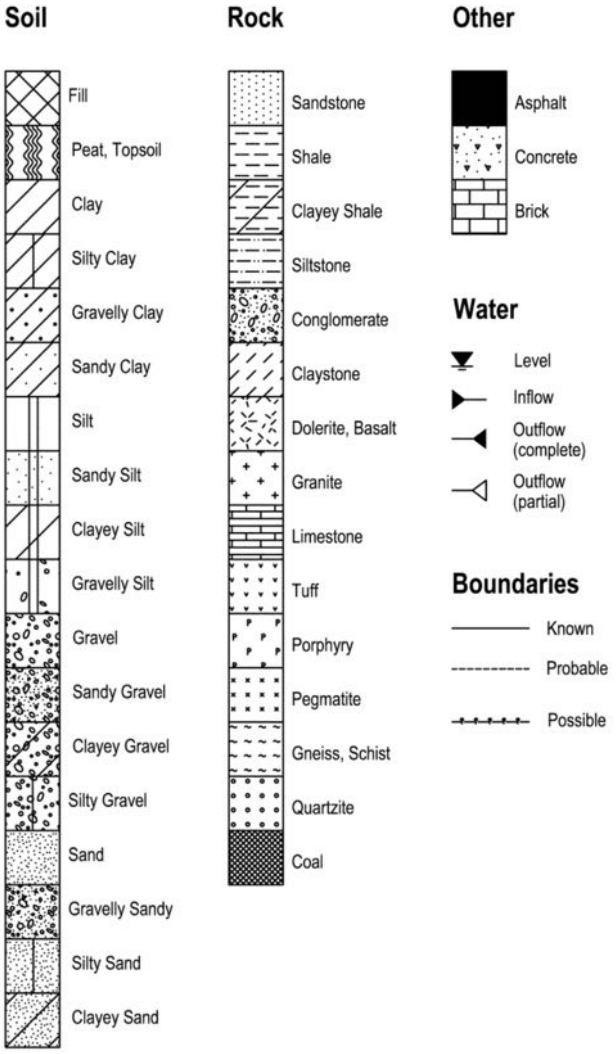
CONSISTENCY

VS	very soft
S	soft
F	firm
St	stiff
VSt	very stiff
H	hard
Fb	friable

DENSITY INDEX

VL	very loose
L	loose
MD	medium dense
D	dense
VD	very dense

Graphic Log



WEATHERING

XW	extremely weathered
HW	highly weathered
MW	moderately weathered
SW	slightly weathered
FR	fresh

STRENGTH

VL	very low
L	low
M	medium
H	high
VH	very high
EH	extremely high

RQD (%)

= sum of intact core pieces > 2 x diameter x 100
total length of core run drilled

DEFECTS:

type		*coating*	
JT	joint	cl	clean
PT	parting	st	stained
SZ	shear zone	ve	veneer
SM	seam	co	coating

shape		*roughness*	
pl	planar	po	polished
cu	curved	sl	slickensided
un	undulating	sm	smooth
st	stepped	ro	rough
ir	irregular	vr	very rough

inclination
measured above axis and perpendicular to core

Soil and Rock Explanation Sheets (2 of 2)

AS1726–2017

Soils and rock are described in the following terms, which are broadly in accordance with AS1726–2017.

Soil

MOISTURE CONDITION

Term	Description
Dry	Looks and feels dry. Fine grained and cemented soils are hard, friable or powdery. Uncemented coarse grained soils run freely through hand.
Moist	Soil feels cool and darkened in colour. Fine grained soils can be moulded. Coarse soils tend to cohere.
Wet	As for moist, but with free water forming on hand.

Moisture content of cohesive soils may also be described in relation to plastic limit (W_P) or liquid limit (W_L) [>> much greater than, > greater than, < less than, << much less than].

CONSISTENCY OF FINE-GRAINED SOILS

Term	Su (kPa)	Term	Su (kPa)
Very soft	< 12	Very Stiff	>100 – ≤200
Soft	>12 – ≤25	Hard	> 200
Firm	>25 – ≤50	Friable	–
Stiff	>50 – ≤100		

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Term	Density Index (%)	Term	Density Index (%)
Very Loose	< 15	Dense	65 – 85
Loose	15 – 35	Very Dense	>85
Medium Dense	35 – 65		

PARTICLE SIZE

Name	Subdivision	Size (mm)
Boulders		> 200
Cobbles		63 – 200
Gravel	coarse	19 – 63
	medium	6.7 – 19
	fine	2.36 – 6.7
Sand	coarse	0.6 – 2.36
	medium	0.21 – 0.6
	fine	0.075 – 0.21
Silt		0.002 – 0.075
Clay		< 0.075

MATERIAL DELINEATION

Sand or gravel	>65% above 0.075mm
Clay or silt	>35% below 0.075mm

MINOR COMPONENTS

Term	Proportion by Mass:	
	coarse grained	*fine grained*
Trace	≤ 5%	≤ 5%
With	>15% ≤ 30%	>5% – ≤12%

SOIL ZONING

Layers	Continuous across exposures or sample.
Lenses	Discontinuous, lenticular shaped zones.
Pockets	Irregular shape zones of different material.

SOIL CEMENTING

Weakly	Easily broken up by hand pressure in water or air.
Moderately	Effort is required to break up by hand in water or in air.

USCS SYMBOLS

Symbol	Description
GW	Gravel and gravel-sand mixtures, little or no fines.
GP	Gravel and gravel-sand mixtures, little or no fines, uniform gravels.
GM	Gravel-silt mixtures and gravel-sand-silt mixtures.
GC	Gravel-clay mixtures and gravel-sand-clay mixtures.
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OL	Organic silts
MH	Inorganic silts
CH	Inorganic clays of high plasticity.
OH	Organic clays of medium to high plasticity, organic silt
PT	Peat, highly organic soils.

Rock

SEDIMENTARY ROCK TYPE DEFINITIONS

Rock Type	Definition (more than 50% of rock consists of .....)
Conglomerate	... gravel sized (>2mm) fragments.
Sandstone	... sand sized (0.06 to 2mm) grains.
Siltstone	... silt sized (<0.06mm) particles, rock is not laminated.
Claystone	... clay, rock is not laminated.
Shale	... silt or clay sized particles, rock is laminated.

LAYERING

Term	Description
Massive	No layering apparent.
Poorly Developed	Layering just visible. Little effect on properties.
Well Developed	Layering distinct. Rock breaks more easily parallel to layering.

STRUCTURE

Term	Spacing (mm)	Term	Spacing
Thinly laminated	<6	Medium bedded	200 – 600
Laminated	6 – 20	Thickly bedded	600 – 2,000
Very thinly bedded	20 – 60	Very thickly bedded	> 2,000
Thinly bedded	60 – 200		

STRENGTH (NOTE: Is50 = Point Load Strength Index)

Term	Is50 (MPa)	Term	Is50 (MPa)
Very Low	0.03 – 0.1	High	1.0 – 3.0
Low	0.1 – 0.3	Very High	3.0 – 10.0
Medium	0.3 – 1.0	Extremely High	>10.0

WEATHERING

Term	Description
Residual Soil	Material is weathered to an extent that it has soil properties. Rock structures are no longer visible, but the soil has not been significantly transported.
Extremely	Material is weathered to the extent that it has soil properties. Mass structures, material texture & fabric of original rock is still visible.
Highly	Rock strength is significantly changed by weathering; rock is discolored, usually by iron staining or bleaching. Some primary minerals have weathered to clay minerals.
Moderately	Rock strength shows little or no change of strength from fresh rock; rock may be discolored.
Slightly	Rock is partially discolored but shows little or no change of strength from fresh rock.
Fresh	Rock shows no signs of decomposition or staining.

DEFECT DESCRIPTION

Type

Joint	A surface or crack across which the rock has little or no tensile strength. May be open or closed.
Parting	A surface or crack across which the rock has little or no tensile strength. Parallel or sub-parallel to layering/bedding. May be open or closed.
Sheared Zone	Zone of rock substance with roughly parallel, near planar, curved or undulating boundaries cut by closely spaced joints, sheared surfaces or other defects.
Seam	Seam with deposited soil (infill), extremely weathered insitu rock (XW), or disoriented usually angular fragments of the host rock (crushed).

Shape

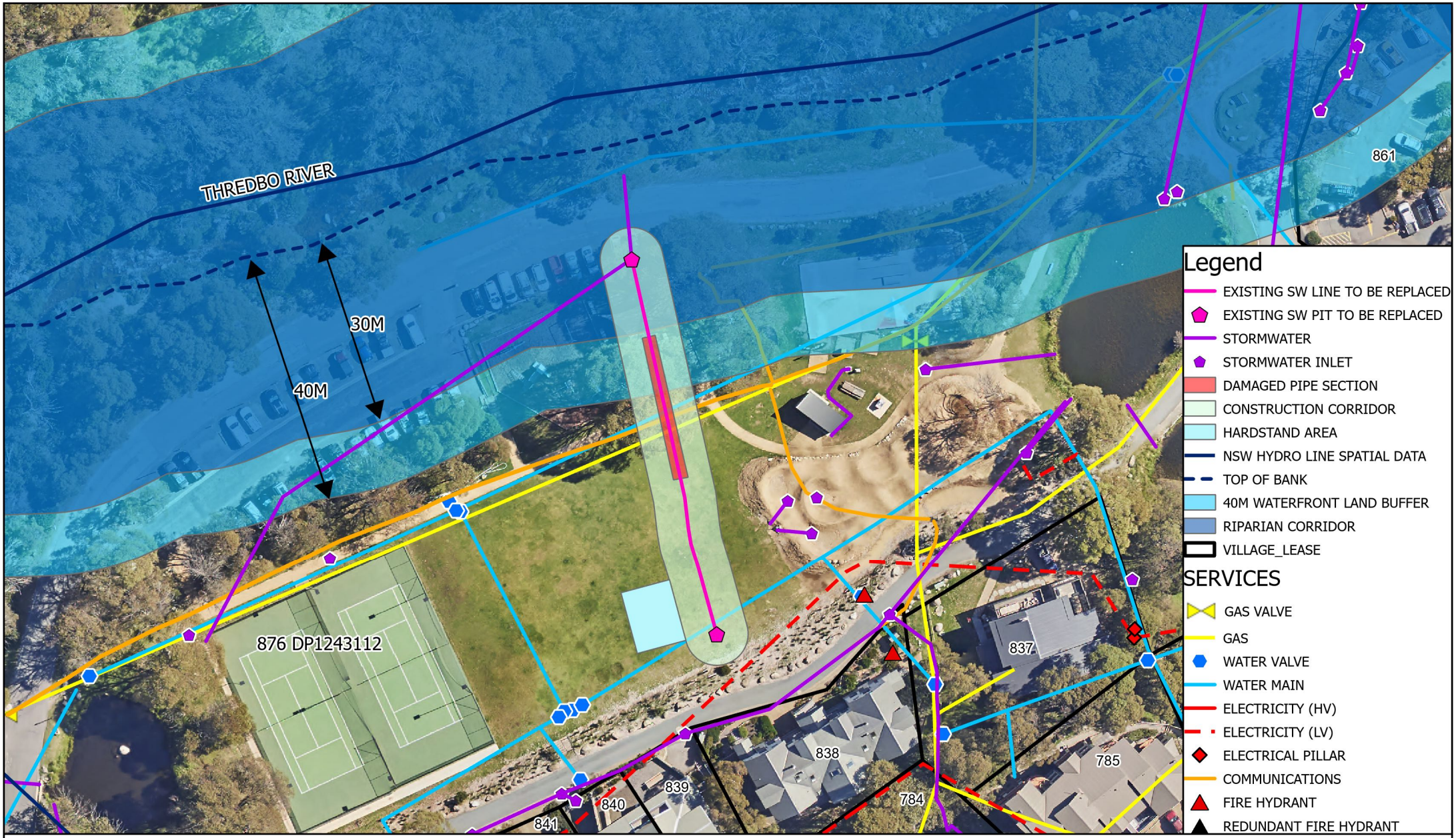
Planar	Consistent orientation.
Curved	Gradual change in orientation.
Undulating	Wavy surface.
Stepped	One or more well defined steps.
Irregular	Many sharp changes in orientation.

Roughness

Polished	Shiny smooth surface.
Slickensided	Grooved or striated surface, usually polished.
Smooth	Smooth to touch. Few or no surface irregularities.
Rough	Many small surface irregularities (amplitude generally <1mm). Feels like fine to coarse sandpaper.
Very Rough	Many large surface irregularities, amplitude generally >1mm. Feels like very coarse sandpaper.

Coating

Clean	No visible coating or discolouring.
Stained	No visible coating but surfaces are discolored.
Veneer	A visible coating of soil or mineral, too thin to measure; may be patchy
Coating	Visible coating =1mm thick. Thicker soil material described as seam.



Scale: 1:802

0 5 10 20 30 40 Meters

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 2020
Grid: GDA 2020 MGA Zone 55

N

THREDBO

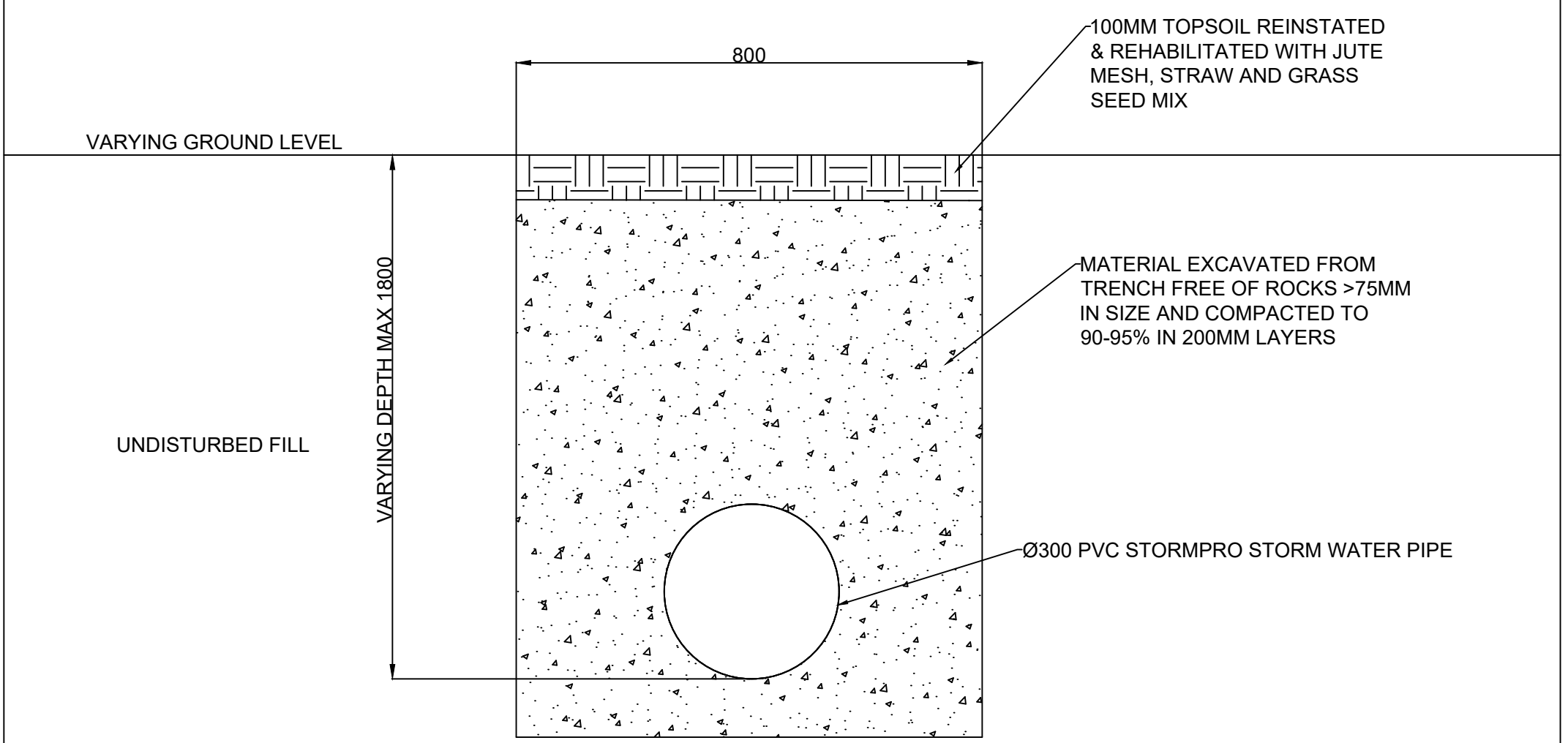
SITE PLAN

Project: 24018ES Village Green Stormwater Repairs

Revision: B

Date: 11/07/2024

Produced By: KOS



NOTES

1. Depth will vary to maintain the consistent 4.8% slope of pipe from inlet to outlet
2. Backfill and pipe bedding will meet AS/NZS 3500.3 Plumbing and Drainage - Stormwater drainage
3. If trench seciton is deeper than 1500mm, then bencing must be carreid out to achieve a temporary batter slope no deeper than 1H:1V and with max individual bench heights of 1500mm

DRAWING

Stormwater Trench Cross Section

PROJECT

24018ES Village Green Stormwater Repairs

THREDBO

REV	DATE	DESCRIPTION
0	10/07/24	Original for DA

DESIGNED BY K. O'Sullivan	CHECKED BY E. Diver
SCALE NTS	FILE NAME 24018ES Village Green SWRepairs.dwg
SHEET 1/1	

Form 4 – Minimal Impact Certification

DA Number: _____

This form may be used where minor construction works which present minimal or no geotechnical impact on the site or related land are proposed to be erected within the "G" line area of the geotechnical maps.

A geotechnical engineer or engineering geologist must inspect the site and/or review the proposed development documentation to determine if the proposed development requires a geotechnical report to be prepared to accompany the development application. Where the geotechnical engineer determines that such a report is not required then they must complete this form and attach design recommendations where required. A copy of Form 4 with design recommendation, if required, must be submitted with the development application.

Please contact the Alpine Resorts Team in Jindabyne for further information - phone 02 6456 1733.

To complete this form, please place a cross in the appropriate boxes ☐ and complete all sections.

1. Declaration made by geotechnical engineer or engineering geologist in relation to a nil or minimal geotechnical impact assessment and site classification

I,

Mr [x] Ms ☐ Mrs ☐ Dr ☐ Other ☐

First Name	Family Name
Mark	Bartel

OF

Company/organisation

Asset Geotechnical Engineering Pty Ltd (trading as AssetGeoEnviro)

certify that I am a geotechnical engineer /engineering geologist as defined by the "Policy" and I have inspected the site and reviewed the proposed development known as

Proposed Village Green Stormwater Repairs, Thredbo Village NSW

As a result of my site inspection and review of the following documentation

(List of documentation reviewed)

Site Plan by Kosciuszko Thredbo Pty Ltd, Project 24018ES, Rev B, dated 11/07/2024

Stormwater Trench Cross Section Plan by Kosciuszko Thredbo Pty Ltd, Project 24018ES, Rev 0, dated 10/07/2024

I have determined that;

- ☒ the current load-bearing capacity of the existing building will not be exceeded or adversely impacted by the proposed development, and
- ☒ the proposed works are of such a minor nature that the requirement for geotechnical advice in the form of a geotechnical report, prepared in accordance with the "Policy", is considered unnecessary for the adequate and safe design of the structural elements to be incorporated into the new works, and
- ☒ in accordance with AS 2870.1 Residential Slabs and Footings, the site is to be classified as a type

(insert classification type)

Class P

- ☒ I have attached design recommendations to be incorporated in the structural design in accordance with this site classification.

I am aware that this declaration shall be used by the Department as an essential component in granting development consent for a structure to be erected within the "G" line area (as identified on the geotechnical maps) of Kosciuszko Alpine Resorts without requiring the submission of a geotechnical report in support of the development application.

2. Signatures

Signature

Mark Bartel

Chartered professional status

CPEng 35641 NER (Civil)

Name

Mark Bartel

Date

14 August 2024

3. Contact details

Alpine Resorts Team
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