



# **Site Environmental Management Plan**

Thredbo Sewer Trunk Main Rehabilitation

Thredbo Alpine Resort  
Kosciuszko National Park, NSW

November 2024

## Document Control

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# 1 Introduction

This Site Environmental Management Plan (SEMP) has been prepared for implementation by Kosciuszko Thredbo Pty Ltd (KT) (and its contractors) for the Sewer Main Rehabilitation (the Project).

This SEMF has been developed to outline how construction activities for the Project are to be managed in order to maintain and protect the environmental values of the Project site and surrounds.

## 1.1 Reference documentation

### 1.1.1 Legislation

The Development will be carried out in accordance with the applicable legislative requirements outlined in the following Acts and subordinate legislation:

- *Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)*;
- *Biodiversity Conservation Act 2016*;
- *Environmental Planning and Assessment Act 1979*;
- *Environmentally Hazardous Chemicals Act 1985*;
- *Heritage Act 1977*;
- *National Parks and Wildlife Act 1974*;
- *Protection of the Environment Operations Act 1997*;
- *Waste Avoidance and Resource Recovery Act 2001*;
- *Water Management Act 2000*; and
- *Work Health and Safety Act 2011*.

### 1.1.2 Guidelines

- Guideline for the Preparation of Environmental Management Plans (DIPNR 2004)
- Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition (Landcom 2004)
- Interim Construction Noise Guidelines (DECC 2009)
- NSW EPA Waste Classification Guidelines (NSW EPA 2014)

### 1.1.3 Procedures & policies

The following Kosciuszko Thredbo procedures and guidelines apply to the Project:

- Construction Site Incident and Emergency Procedures Thredbo Village, version 1.1
- Emergency Response Spill Procedure, version 1
- Standard Operating Procedure: Use and Maintenance of Wash Down Bay 2019
- Bushfire Danger Period Policy, version 2

## 2 Project Description

The Project site is located in Thredbo Alpine Resort, within the southern part of Kosciuszko National Park. Within the context of the resort, the proposed works are within the pre-disturbed pipeline service easement and shared use trail (known as the Pipeline Path), refer **Appendix A**.

The Project will involve repairs on the Thredbo sewer trunk main which runs along the existing pipeline easement adjacent to the Thredbo River. The works will involve re-lining the inside of 1.2km of pipe through existing pits, and the excavation and repair of an approximately 50 m length of pipeline.

## 3 Construction Management Details

### 3.1 Construction Activities

#### 3.1.1 Pre-construction activities

- Establishment of site boundary/fencing
- Erection of site signage and pedestrian/traffic controls
- Installation of erosion and sediment controls

#### 3.1.2 Vegetation removal

The minor vegetation clearing works will involve managing native vegetation, including trimming and the removal of a small number of trees. Vegetation clearing methods will include:

- Clearly marking trees to be removed with flagging tape or spray paint.
- Trees must be checked for fauna habitats and fauna by the Environmental Officer immediately prior to felling / removal. Trees with active nests should not be removed until the young have left the nest. If fauna is present, contact NPWS to assist with mitigation actions.
- Trees must be felled by hand using chainsaws only.
- Trees must be felled in segments and in a manner that minimises any impacts on adjoining vegetation
- Trees removed may be cut into pieces small or mulched to enable use in rehabilitation
- Where felled trees are unable to be processed onsite and removed, they will be cut into pieces small enough to enable them to be placed into adjoining native vegetation without damaging it where practical.
- Shrub trimming to be undertaking using brush cutters.

#### 3.1.3 Excavation and replacement of pipe section

- Temporary sewer bypass pipework setup between Manholes 11 & 12
- Excavation and removal of existing pipework. Installation of new pipework
- Reconnection and sealing of new pipework to upstream and downstream manholes
- Backfill excavation
- Pressure testing to ensure installation has no leaks.
- Removal of temporary bypass and commissioning of new section of line.
- Rehabilitation of surface as required with topsoil, jute mesh, native grass seed and straw.

### 3.1.4 Re-lining

- Set up of winding machine in the starting sewer manhole
- Positioning of the Expanda pipe reel or hand carrying of Expanda pipe to site
- Commencement of winding of Expanda Pipe into pipeline until desired upstream manhole is reached and secured at the upstream manhole
- Cutting of sacrificial wire lock and rewinding of cutting wire to expand the liner
- Connection of the new liner to the upstream and downstream manholes with sealant
- Pack down and moving of equipment to next section for reline.

### 3.1.5 Manhole repair

- Plug the inlet manhole with a flow through plug
- Reconstruction of the invert and benching with rapid set concrete as required followed by a strength patching product
- Removal of roots with a handheld grinder and resealing of joints with seal guard and render patching product
- Unplug of manhole and return to service.

### 3.1.6 Post-construction activities

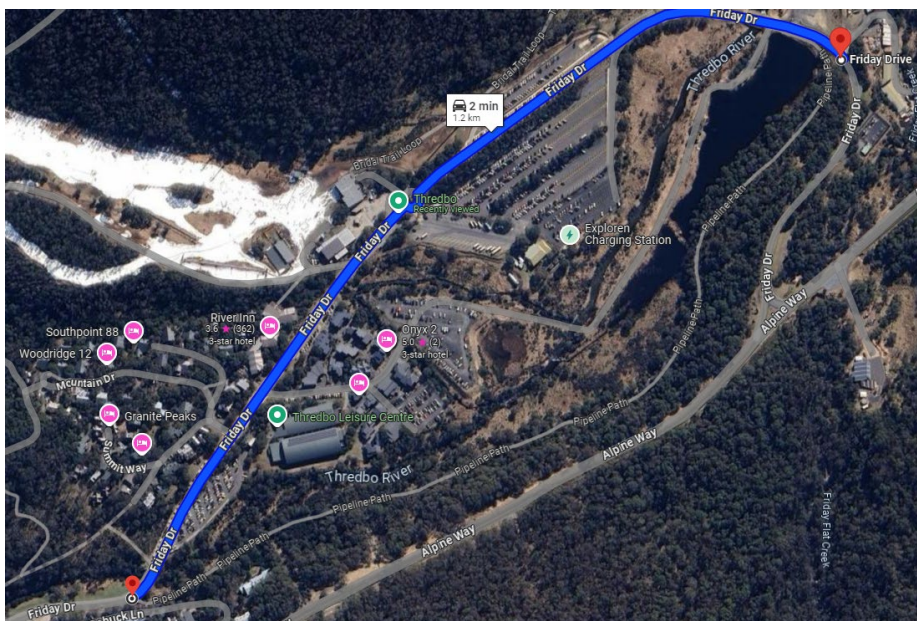
- Rehabilitation and landscaping in accordance with the Rehabilitation Guidelines
- Demobilisation of plant and machinery
- Site clean-up.

## 3.2 Construction timing

Construction is anticipated to take approximately 2 weeks and will be completed in the low visitation period in March 2025.

## 3.3 Site Access

The site is accessible at two locations via Friday Drive (**Figure 1**).



**Figure 1: Site access points**

### 3.4 Vehicles, machinery and equipment

The Development will require (but not limited to) the following vehicles, machinery and equipment:

- 12T tabletop truck
- Recycler vacuum truck and easement reel
- “Kubota” mini excavator modified as a lining support vehicle
- Expanda pipe winding cage and drive tray
- Spool off profiled Expanda Pipe PVC Strip
- Wire puller
- Silicone drum + pump
- CCTV equipment
- Chainsaw
- Brush cutter
- Light vehicles

### 3.5 Adverse weather contingencies

Adverse weather events have the potential to negatively impact upon construction activities. To ensure appropriate consideration of such events, the Project and Construction Manager will monitor weather conditions throughout the construction period. The Bureau of Meteorology (BoM) Thredbo AWS station provides daily weather observation data for the resort. The NSW Rural Fire Service website ‘Fires Near Me’ includes information on current bush fires and other incidents, as well as warnings for fires which may affect your location.

If adverse weather events are anticipated and/or occur during construction, contingencies will be implemented and arrangements will be made to postpone construction activities. The Construction Manager / Site Project Manager will be responsible for notifying construction staff of any impending adverse weather, and to implement appropriate controls onsite.

### 3.6 Material storage areas and stockpiles

#### 3.6.1 Material storage areas

A designated storage area will be available for contractor use on the bottom tip carpark (**Appendix A**). This will allow for overnight storage of equipment and vehicles as well as storage for extra relining spools when not in use.

#### 3.6.2 Stockpile sites

Temporary stockpiles will be required within the construction corridor to effectively manage excavated materials, spoil, soil and vegetation during the works. Soil will be separated so that it can be used during rehabilitation works.

All stockpiles will be managed in accordance with the environmental controls in **Section 5.2.2**.

### 3.7 Work hours

Standard works hours include (unless otherwise approved):

- Monday to Friday 7 am to 6 pm
- Saturday 8 am to 1 pm
- No work on Sundays or public holidays

## 4 Environmental Management

### 4.1 Roles and responsibilities

The roles and responsibilities are outlined in **Table 1**.

**Table 1: Roles and Responsibilities**

Role	Responsibilities
<b>Project Manager</b>	<ul style="list-style-type: none"> <li>• Ensure the SEMP is made available, communicated, maintained and understood by all Project staff.</li> <li>• Responsible for the overall management of the construction and operation of the Project.</li> <li>• Ensure the SEMP is updated with applicable conditions of approval following the provision of Development Consent from Department of Planning and Environment (DPE).</li> <li>• Ensure that the requirements of the SEMP and sub-plans have been addressed in all contractor environmental management documentation.</li> <li>• Review of incidents, non-conformances and non-compliance.</li> <li>• Ensuring Project personnel and contractors are adequately trained and qualified to fulfil their roles.</li> </ul>
<b>Site Project Manager</b>	<ul style="list-style-type: none"> <li>• Implement and maintain the SEMP.</li> <li>• Ensure all Project personnel comply with the requirements of the SEMP.</li> <li>• Report any incidents, non-conformances to the Project Manager.</li> </ul>
<b>Environmental Officer</b>	<ul style="list-style-type: none"> <li>• Oversee all works which are part of the Project on behalf of KT.</li> <li>• Ensure compliance with all environmental protection measures detailed in the SEMP, supporting management plans and conditions of approval.</li> <li>• Ensure all environmental controls are in place and adequately functioning during construction.</li> <li>• Conduct construction inspections and complete reporting requirements e.g. progress reports, environmental incidents, non-compliance, corrective action and auditing.</li> </ul>
<b>All Personnel</b>	<ul style="list-style-type: none"> <li>• Comply with requirements of this SEMP.</li> <li>• Report any actual or potential environmental incidents to the Construction Manager immediately.</li> <li>• Identify and report non-conforming or potentially hazardous work practices, equipment, machinery or products.</li> <li>• Only perform tasks for which they are trained and competent.</li> <li>• Assist with environmental incident investigations and applying corrective actions.</li> <li>• Ensure all machinery, plant and equipment are in good working order and condition prior to use.</li> </ul>
<b>Construction Contractor</b>	<ul style="list-style-type: none"> <li>• Comply with SEMP and legislative requirements.</li> <li>• Construction contractor to develop and implement management plans in accordance with this SEMP, conditions of approval and contractual obligations.</li> </ul>

## 4.2 Communication and consultation

All Project staff will be made aware of the site-specific environmental controls through a site induction, and pre-start meetings / toolbox talks prior to the commencement of construction.

Key contacts for the Project are provided in **Table 2**.

**Table 2: Key contact details**

Company / Agency	Role / Reason	Contact
<b>Government Agency Contacts</b>		
Department of Planning, Housing, Infrastructure (DPHI) (Alpine Resorts Team)	Development approval and compliance	(02) 6456 1733
National Parks and Wildlife Service (NPWS)	Flora, fauna, archaeology	(02) 6450 5600
Environment Protection Agency (EPA)	Water, noise, air pollution and regulation	131 555
NSW Soil Conservation Service	Soil erosion and sediment control	02 9842 8300
<b>Thredbo Village Services</b>		
Thredbo Medical Centre	General medical attention	(02) 6457 6254
Fire and Rescue Thredbo, NSW	Incident / emergency	(02) 6457 6144
<b>Emergency Contacts</b>		
NSW Police	In case of fire, medical or police emergency	000
NSW Fire and Rescue		
NSW Ambulance		

### 4.2.1 Notification protocols

A summary of the key notification protocols is provided in **Table 3**.

**Table 3: Regulatory agency notification protocols**

Party to Notify	What to Notify	When to Notify	Responsibility to Notify Regulatory Agency
DPE	Commencement of construction	DPE will be notified in writing at least 48 hours prior to the commencement of construction.	Site Project Manager
NPWS	Details of any material suspected of being a European or Aboriginal culturally significant site, relic or artefact.	Immediately upon discovery of any archaeological/culturally significant site or relic that are encountered. NSW Police to also be notified immediately upon discovery of human remains.	Site Project Manager
NSW Environmental Protection Agency	Details of pollution incident – who, what, when, where, how, any other supporting information and evidence (e.g. photos)	Immediately upon identification of pollution incident causing or threatening material harm to the environment, in accordance with <b>KT's Construction site Incident and Emergency Procedures Thredbo, version 1.1</b> .	KT Environmental Manager



### 4.3 Environmental incident and emergency response

All Project personnel are required to follow KT's **Construction site Incident and Emergency Procedures Thredbo Village, version 1.1**. The procedure will be available on-site and all Project staff will be trained on their implementation through the site induction. The procedure classifies examples of emergencies and incidents and provides specific procedures for response to such events. The procedure also outlines general site management principles, incident reporting and notification requirements and provides an emergency contacts list.

In the event of an environmental incident, emergency or near-miss, the following steps should be taken:

- 1) **STOP** works in the area and if safe to do so ensure the safety of personnel within the vicinity.
- 2) **NOTIFY** relevant persons e.g. emergency services or Construction Manager.
- 3) **ISOLATE** the risk or hazard e.g. turn off machinery/plant, implement immediate site controls, set up exclusion zone. and
- 4) **REPORT** and notify relevant persons (e.g. Project Manager, regulatory agencies).

Environmental incident and near-miss reporting requirements are detailed in **Section 6**.

External contractors are required to prepare and implement an emergency and incident response procedure. The contractor will be responsible for responding to any environmental emergency caused by any action (or inaction) of the contractor's staff, including notification requirements to external parties such as EPA and Fire, Fire and Rescue NSW.

## 5 Environmental Controls

### 5.1 General

- Ensure works are conducted by suitably qualified and trained personnel.
- Ensure all site environmental management controls relevant to that stage of work are implemented in accordance with the approved plans and conditions of consent.
- Provide approved plans and relevant documentation in the site office or other suitable location so that they are easily accessible by all construction staff.

#### 5.1.1 Site establishment

- Establishment of site boundary with temporary fencing, rope or flagging to clearly delineate the construction corridor and "no-go" areas.
- Erection of site signage and pedestrian/traffic controls.
- Installation of erosion and sediment controls.

#### 5.1.2 Machinery and storage

- All equipment, machinery and vehicles used during construction of the Project must be cleaned prior to entry into the Park and prior to site mobilisation to ensure they are free of mud and vegetative propagules.
- Equipment, machinery, and vehicles must be regularly maintained and manoeuvred to prevent the spread of exotic vegetation.
- Storage of equipment, machinery, vehicles and material is to be restricted to existing disturbed areas (i.e. at the stockpile, formed roads and within the construction corridors) and avoid undisturbed areas.

- All vehicles and machinery entering Thredbo must adhere to the **Standard Operating Procedure: Use and Maintenance of Wash Down Bay**

## 5.2 Erosion and sediment control

### GENERAL

- Appropriate sediment control measures should be implemented prior to any construction work for the proposal and retained in place until exposed areas of soil or vegetation are stabilised and/or revegetated (ELA 2024).
- Sediment control measures are to have particular regard to the prevention of any sedimentation of watercourses or vegetation communities adjoining the study area (ELA 2024).
- Only weed-free straw or natural thatch/litter should be used in sediment control activities (ELA 2024).

### TRENCHING, EXCAVATION & BACKFILLING

- Schedule excavation works for periods when rainfall is low.
- Ensure excavation depths and widths are the minimum necessary.
- Leave excavations open for the minimum practical time.
- When excavating, place excavation soil on upslope of trench to divert water from away from the trench line.
- Where excavations are to be left open overnight, provision shall be made so that any fauna entering the excavations can escape.
- Clean excavated material may be temporarily stockpiled on-site for reuse for backfilling, landscaping and rehabilitation works. Any unused material must be removed off-site and disposed of at an authorised site.
- Excavations are to be properly guarded and protected to prevent them from being dangerous.
- Imported fill material shall only be obtained from authorised locations.
- Progressively rehabilitate disturbed land immediately post construction.
- Maintain ESCs during works until the site has been stabilised.
- Excavation soil is not to be placed on roads, in areas of concentrated runoff.

#### 5.2.1 Control installation and construction notes

Control	Activity	Purpose	Timing	Location	Standard Drawing Reference <sup>1</sup>
Sediment fence	Excavations; Stockpiling for Services installation, road construction, construction of new golf holes/bunkers	To prevent sediment run-off by filtering medium to coarse-grained sediment from runoff	Install prior to, or in conjunction with earthworks. Retain in place until exposed areas of soil are stabilised.	Downslope side of any excavations; wetter areas; downslope of earth stockpiles; need to be placed following contours where possible	Sediment fence (SD 6-8)
Straw bales <sup>2</sup>	Cross-slope excavations, trenching	Divert water around and	Install prior to, or in conjunction with earthworks. Retain in	To be installed on the uphill side of excavations running	Straw bale filter (SD 6-7)



Control	Activity	Purpose	Timing	Location	Standard Drawing Reference <sup>1</sup>
		away from excavation works	place until exposed areas of soil are stabilised.	cross-slope (where required).	
Trench breakers	Trenching	Reduce erosion and flow velocity	During trenching	Trench stops, such as sandbags may be used as plugs or trench stops across the trench invert.	-
Temporary filter pond	In the event water needs to be pumped out of an excavation.	To capture sediment and pollutants and prevent them leaving the filter pond	During excavation works, in the event water needs to be pumped out.	Where required, on flat area away from drainage lines/watercourses and native vegetation.	Refer to best practice guidelines such as Blue Book and IECA. Control installation notes provided below.

<sup>1</sup>Landcom 2004; NSW DECC 2008.

<sup>2</sup>All straw bales used for sediment and erosion control or rehabilitation must be weed free.

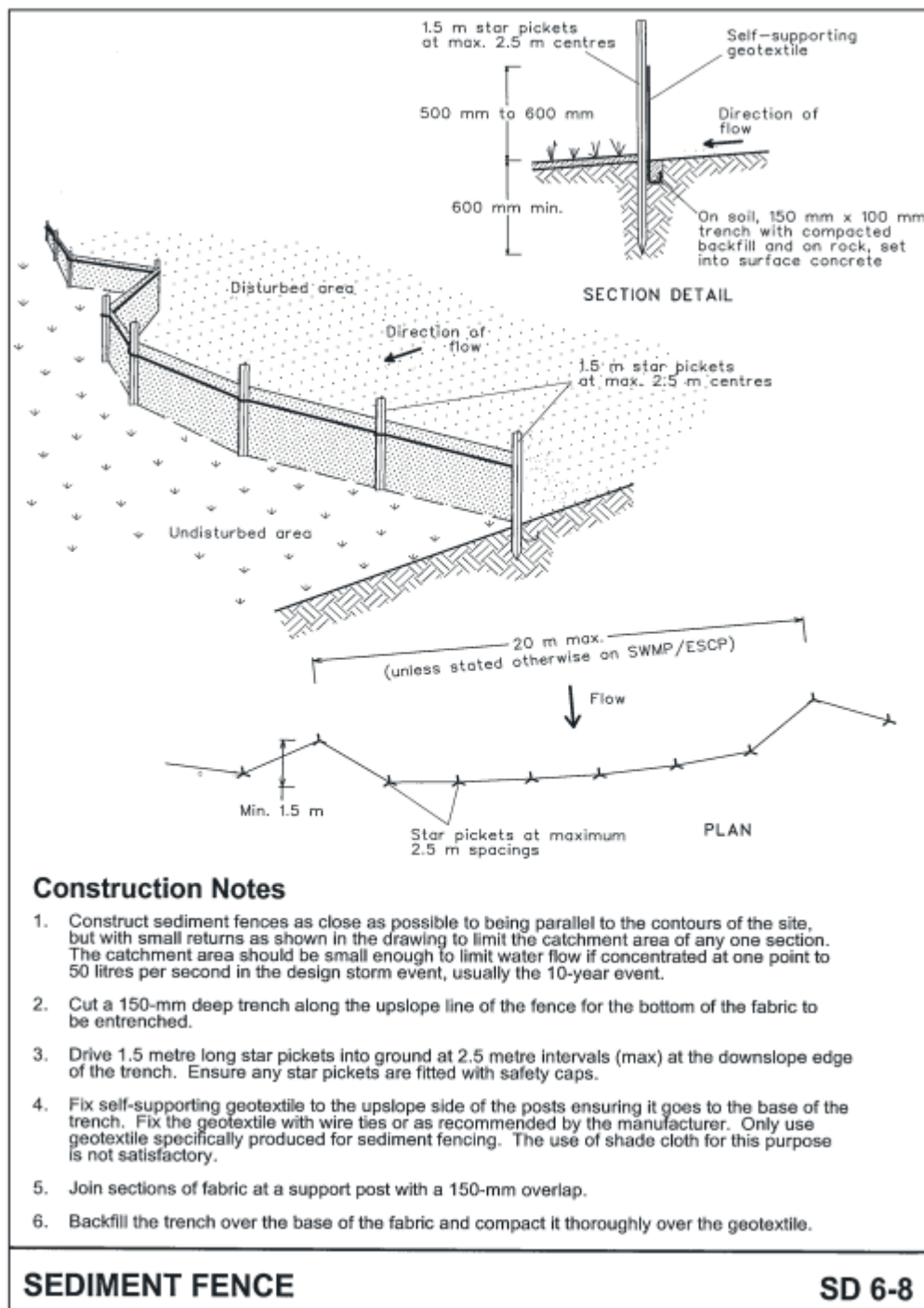


Figure 2: Sediment fence installation notes (Landcom 2004)

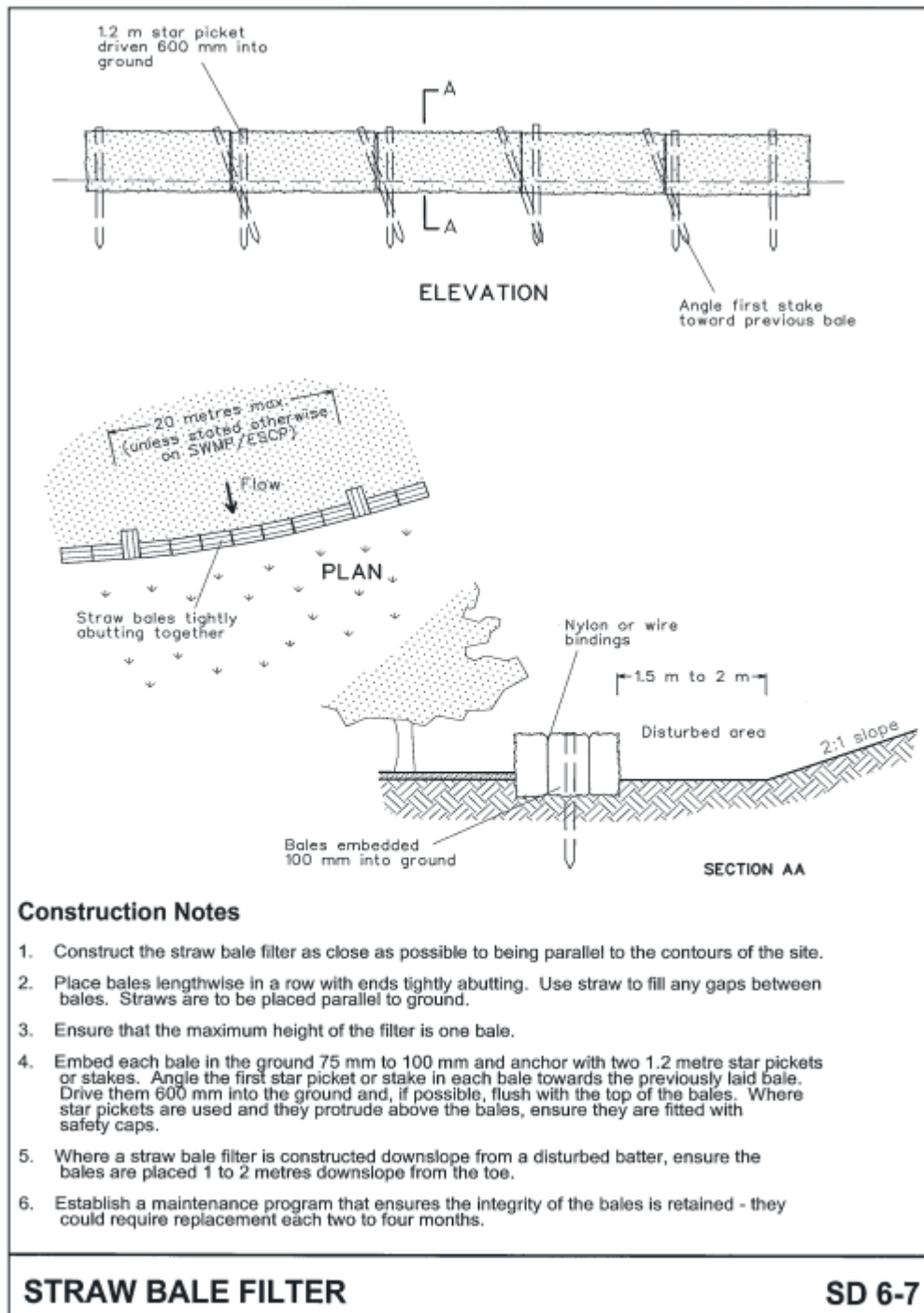


Figure 3: Straw bale filter installation notes (Landcom 2004)

## Cross Drainage and Sediment Barriers

The recommended spacing for cross drainage and sediment barriers is provided below:

Slope Grade (%)	Cross Drain / Sediment Barrier (m)
5-10	15-20
10-15	10-15
15-25	8-10
>25	5-8

Source: NPWS 2007; Parr-Smith and Polley (1998)

Note: To calculate the grade of a slope: (rise/run) x 100 = slope grade

## Trench breakers

Construction notes:

- Trench breakers may comprise soil or straw bales (or a combination).
- The recommended spacing of trench breakers to be determined on-site according to the slope and potential for subsurface flow, refer to table above for recommended spacing.

## Temporary geofabric filter pond

Construction notes:

- 1) Where practicable, locate the filter dam at least 50 m from the edge of a waterbody.
- 2) Suitably clear and prepare the surface where the filter dam will be installed.
- 3) Arrange straw bales to form an enclosure and securely anchor each bale with at least one (1) star picket or stake.
- 4) Securely attach the filter fabric to the straw bales and reinforce with stakes. If more than one sheet of fabric is used, then overlap within a minimum of 600 mm at all joints.



**Figure 4: Temporary filter pond example**

### 5.2.2 Soil and stockpile management

- All stockpiles will be constructed and managed in accordance with *Soil Stockpile Guidelines for the Resort Areas of Kosciuszko National Park* (OEH 2017)
- Temporary stockpile sites within the construction corridor should adhere to the following criteria (Landcom 2004; OEH 2007):
  - not exceed 2 m in height, have a slope <50% (26°)
  - be at least 2 m from vegetation, concentrated water flows, roads, publicly accessible areas or hazardous areas
  - avoid impacts to native vegetation and be located on disturbed areas
  - located directly adjacent to the works
  - located on relatively flat ground, where possible
  - in areas with sufficient room to accommodate the volume of material being stockpiled
  - be contained by appropriate erosion and sediment controls.

Any excess excavated material will be removed from site and transported to the designated soil stockpiles sites.

### 5.2.3 Material sourcing

Authorisation from NPWS is to be sought where imported gravel or fill material is required, unless the material is sourced from the following NPWS approved locations:

- McMahon's Earthmoving quarry, located on Alpine Way, Crackenback NSW; or
- Kraft Earthmoving / Snowy Mountains Sand and Gravel quarry located on Kosciuszko Road, Jindabyne NSW.

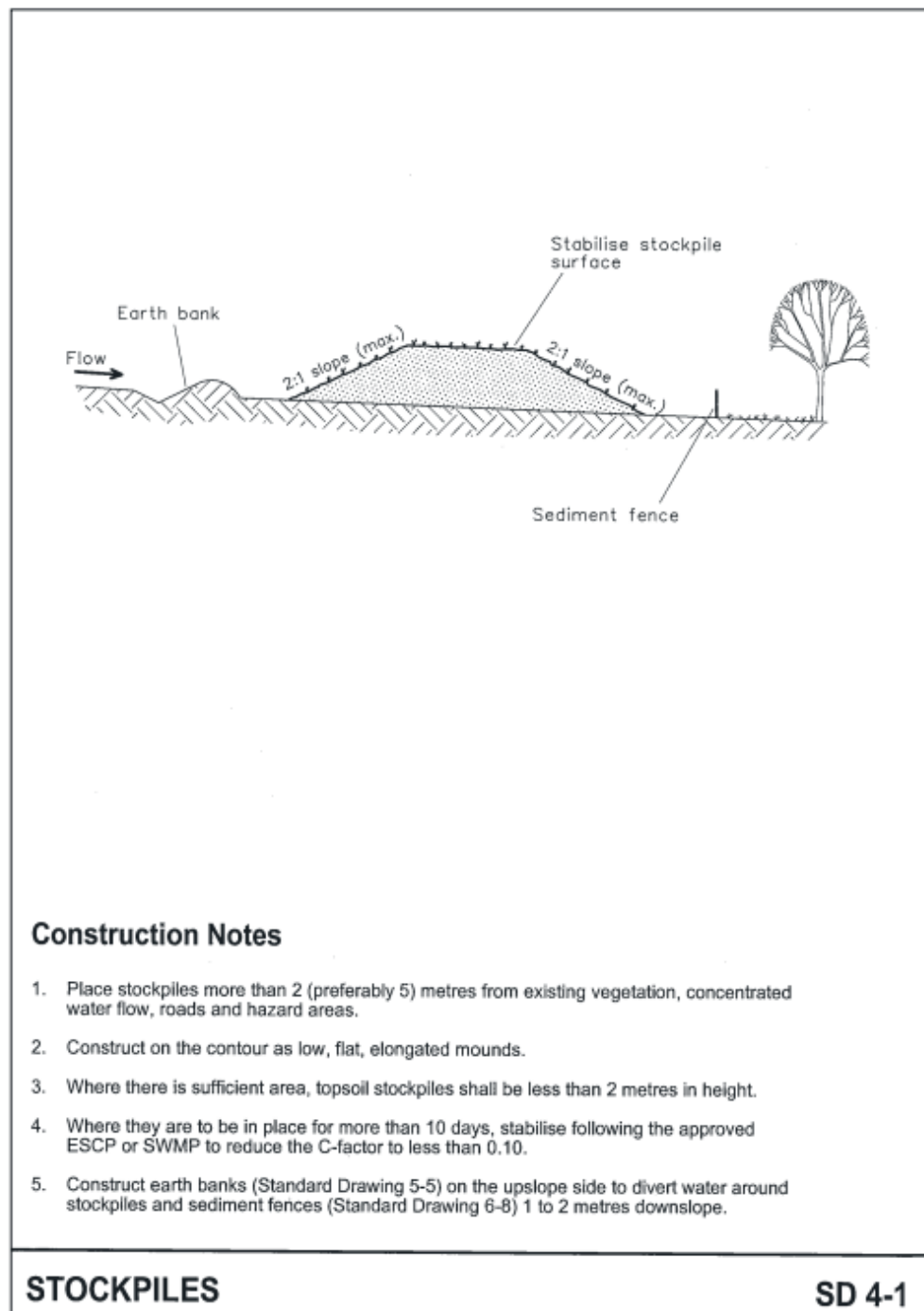


Figure 5: Stockpile management notes (Landcom 2004)

### 5.3 Rehabilitation

- The rehabilitation activities are to consist of stabilisation and revegetation works.
- Rehabilitation activities are to take place on all areas disturbed as a component of the works including excavations, areas disturbed by vehicles or machinery, material storage areas and any areas disturbed adjacent to the works corridor.
- The rehabilitation and stabilisation works are to be consistent with the Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park (NPWS).



- Rehabilitation activities are to include:
  - Soil removal
    - Place topsoil & subsoil separately during excavation
    - Adhere to Soil Stockpile Guidelines for Resort Areas of KNP
  - Soil replacement
    - All excess soil gained from construction works is to be spread over the disturbed areas prior to rehabilitation
    - Ensure subsoil and topsoil are replaced in correct order
  - Direct seeding
    - Areas that have been disturbed by the works and are dominated by EXOTIC species are to be seeded using a 1:1 mix of Chewings fescue & *Poa fawcettiae*
    - Areas that have been disturbed by the works and are dominated by NATIVE species are to be seeded using only 100% native *Poa* endemic to the area
    - Seeding rate:
      - Slope grade <40% use 15-20g/m<sup>2</sup>
      - Slope grade >40% use 20-30g/m<sup>2</sup>
    - Broadcast Dynamic Lifter @ 100g/m<sup>2</sup>
    - Weed free rice straw mulch to be applied over seed to protect soil and provide a favourable environment for establishment
  - Stabilise disturbed areas
    - Spread weed free rice straw on slope grades <40% @ 1 bale per 25m<sup>2</sup> and weigh down using native thatch / litter gained from works or Jute mesh if thatch amount insufficient
    - Install Jute mesh (or similar) over straw on batters & embankments >500mm height & with a slope >40% (Grade% = Rise/Run x 100)
    - Direct seed at rates listed above to stabilise disturbed areas including batters & embankments
  - Watering
    - If required, water rehabilitation areas to assist in seed germination and straw retention
  - Weed control
    - Monitor all areas disturbed by the works (including areas adjacent to the works) for signs of weed infestation
    - Treat weeds with methods appropriate to weed species being treated including low pressure spot spraying and hand removal techniques
    - Limit off-target damage by only spraying in the appropriate conditions
    - Weed monitoring & control is to be conducted on an on-going basis and included in annual resort weed control activities.

## 5.4 Vegetation and habitat management

- All disturbance should be kept to the minimum required to achieve the proposal (ELA 2024)
- The proposed works should be constructed and implemented in accordance with best practice design standards to ensure that there are no adverse modifications to the hydrological environment that may impact on surrounding vegetation and associated habitats (ELA 2024).

- If trenches and excavations are to be left open overnight, fauna escape ramps should be installed to enable fauna to escape. Open trenches and excavations should be inspected regularly for the presence of any fauna that may have fallen in.

## **5.5 Exotic species management**

- All relevant weed species that occur within the construction corridor and associated staging and stockpile sites must be treated prior to works commencing to ensure these weeds are not spread further at the site or within KNP.
- If an area of vegetation proposed for removal includes any relevant weed species then the vegetation must be removed completely from site, not spread out within the existing vegetation or used in rehabilitation and stabilisation works.
- All machinery and equipment used during construction must be cleaned prior to entry into KNP and prior to site mobilisation to ensure the machinery is free of mud, vegetative propagules, and pathogens. This includes machinery that may have been working in an area of the resort that contains weeds and is preparing to be redeployed in the construction corridor and associated stockpile and staging areas.
- All vehicles and machinery entering Thredbo must adhere to the Standard Operating Procedure: Use and Maintenance of Wash Down Bay, March 2019 (KT055). The wash down bay is located at the Thredbo Waste Transfer Station for use by KT staff and contractors.
- All machinery and equipment must be stored on existing disturbed areas (i.e. at the stockpile and staging areas proposed on the ski slopes) and should not be stored on native vegetation.
- All machinery to be regularly maintained and manoeuvred to prevent the spread of weeds and pathogens.

## **5.6 Dust control**

- Dust generation will be managed through typical dust suppression that will include covering stockpiled spoil, minimising ground disturbance and covering loads.
- Plant and equipment to be maintained and operated in an efficient manner to reduce air pollution.
- Vehicles are to adhere to speed limits to minimise dust general and potential spill of hauled materials.
- All vehicles carrying material to/from site should be covered to prevent the escape of dust or other material. Covers are to be adequately secured.

## **5.7 Noise control**

- Awareness training and information will be provided to project personnel in relation to minimising noise pollution as much as practicable when in close proximity of sensitive receivers.
- Selection of the most appropriate plant and equipment to minimise noise generation.
- Construction works will be undertaken during standard work hours.
- Works are to be carried out in accordance with the Australian Standard AS 2436-2010 Guide to noise and vibration control on construction, demolition and maintenance sites.
- Regular checks are to be undertaken to ensure all equipment and vehicles are in good working order and are operated correctly.
- All plant will be maintained in accordance with the manufacturer's requirements.



## 5.8 Fuels and chemicals

- Environmental spill kits containing suitable spill response materials shall be kept on site at all times. Spill kit materials shall be used in the event of a spill. Any oil spilt during the oil transfer or at other times shall be immediately contained and cleaned up.
- In the event on an on-site spill, construction staff will follow KT's Construction Site Incident and Emergency Procedures Thredbo Village, version 1.1.
- Hazardous substances, toxic materials or dangerous goods must not be stored or processed on-site at any time without prior approval from the DPE Secretary or nominee.
- Fuel and chemicals will be appropriately stored and handled in accordance with relevant Australian Standards and Codes of Practice.
- Appropriate controls will be implemented when refuelling Project vehicles and machinery.

## 5.9 Traffic management

### 5.9.1 Pedestrian and bike riders

The Pipeline Path shared use trail will be closed to the public during the construction period. Traffic controls will be installed at either end of the trail to exclude public access. Construction is anticipated to take approximately 2 weeks during the low visitation period in March 2025.

### 5.9.2 Vehicle traffic on Friday Drive

Temporary traffic control to close the southern lane adjacent to the Waste Transfer Station will be required at times to ensure truck, lining spool and crew have sufficient room to safely enter the northern access track into Pipeline Path for lining of Manholes 2 – 19.

## 5.10 Waste

- All waste shall be managed and disposed of in accordance with the legislative requirements and the Waste Classification Guidelines (DECCW 2009).
- Where possible, construction materials will be salvaged for reuse to divert waste from landfill.
- All receptacles will be in good condition.
- All waste transportation vehicles will be covered appropriately to ensure waste cannot spill, leak or escape onto the road or wash into stormwater drains.
- Ensure that the waste is being transported to a place that may be lawfully used as a waste facility.
- Excavated soils to be reused for backfilling where possible.

Construction waste and excess spoil from excavations will be taken off-site to one of the following locations:

- Thredbo Waste Transfer Station
- Jindabyne Landfill, 6013 Kosciuszko Road, Jindabyne NSW
- Cooma Landfill, 8448 Monaro Highway, Cooma NSW.

## 5.11 Aboriginal Cultural Heritage

Past Traces (2024) recommended the following:

**Recommendation 1: Works to proceed without further heritage assessment with caution.**

The proposed works can proceed without further assessment as no Aboriginal or historical heritage sites (objects or places) have been identified within the project area. The potential for impacting on unrecorded heritage sites within the project area is assessed as extremely low, based on landform analysis, high degree of past disturbance and field survey.

#### **Recommendation 2: Discovery of Unidentified Aboriginal cultural material during works.**

Under the NPW Act 1977 all Aboriginal places and objects are protected from harm, even if they have not been previously identified during the assessment process. If Aboriginal material is discovered during works then the steps as outlined below should be followed:

- All work must cease in the vicinity of the find and project manager notified immediately.
- A buffer zone of 10m should be fenced in all direction of the find and construction personnel made aware of the 'no go' zone.
- NSW Heritage must be notified of the find and advice sought on the proper steps to be undertaken.
- After confirmation with NSW Heritage a heritage consultation should be engaged to undertake assessment of the find and provide appropriate management recommendations to the proponent.

#### **Recommendation 3: Alteration of impact footprint**

Further archaeological assessment would be required if the proposal activity extends beyond the area of the current investigation. Implementation of the above management recommendations will result in low potential for the project to impact on heritage values or result in damage to heritage sites.

### **5.12 Bushfire protection**

The construction contractor would be responsible for determining relevant requirements for the site and ensuring staff are aware of bushfire avoidance, evacuation, and management measures e.g. prior to undertaking works the construction contractor should confirm that there is no current total fire ban or Kosciuszko National Park fire ban as this may place restrictions of activities such as use of plant or machinery in grass/bush settings.

The **Construction Site Incident and Emergency Procedure** outlines procedures for responding to fire and bushfire incidents or emergencies. This procedure is made available to all construction staff. In the event of a bushfire, Kosciuszko Thredbo (the head lessee) would implement the resort-wide Bushfire Evacuation Plan. The plan has been designed to assist management and emergency services to protect life and property in the event of a bush fire or other emergency.

## **6 Monitoring and Reporting**

All incidents and near misses will be managed in accordance with KT's **Construction site Incident and Emergency Procedures Thredbo Village, version 1.1**. The document provides procedures for responding to incidents and emergencies, reporting and notification requirements and emergency contacts. The construction contractor is responsible for reporting all environmental incidents.

## 7 References

Department of Environment and Climate Change (DECC) 2007, Rehabilitation Guidelines for the Resort Areas of Kosciuszko National Park, NSW Government.

Department of Environment and Climate Change (DECC) 2009, Interim Construction Noise Guideline, July 2009, <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/noise/09265cng.pdf?la=en&hash=EF4576FD79DBB25D5AC22DFA1A883A2BADA1F77B>

Eco Logical Australia Pty Ltd 2024, Ecological Assessment – Sewer Trunk Main Rehabilitation-Thredbo Alpine Resort.

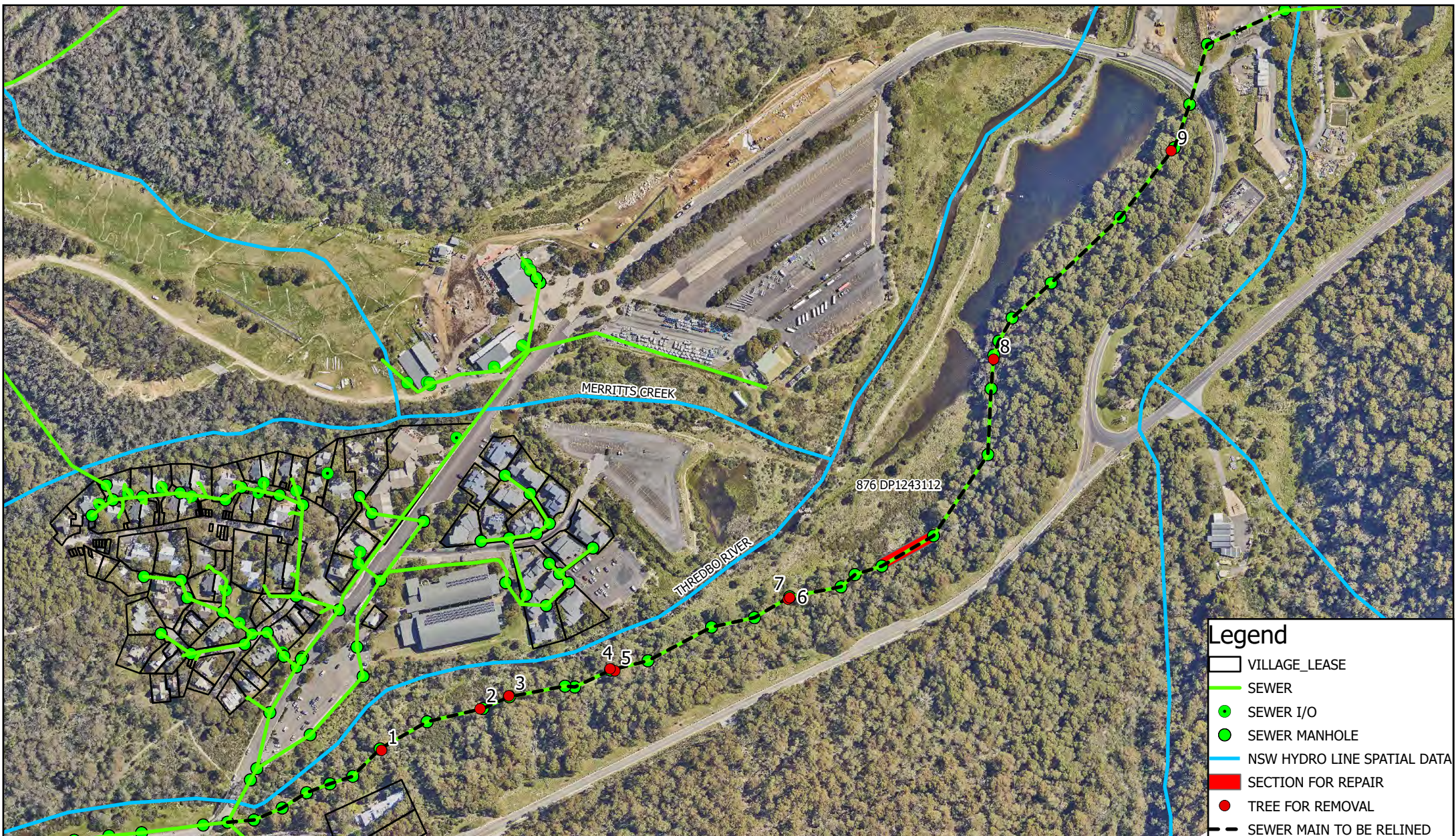
Office of Environment and Heritage (OEH) 2017, *Soil Stockpile Guidelines for the Resort Areas of Kosciuszko National Park, version 1.0, October 2017*, NSW National Parks and Wildlife Service.

Past Traces 2024, Aboriginal Cultural Heritage Due Diligence Assessment Thredbo Sewer Trunk Main Rehabilitation. Report prepared for Kosciuszko Thredbo Pty Ltd.

## 8 Appendices

### Appendix A Plans





### Legend

- VILLAGE\_LEASE
- SEWER
- SEWER I/O
- SEWER MANHOLE
- NSW HYDRO LINE SPATIAL DATA
- SECTION FOR REPAIR
- TREE FOR REMOVAL
- SEWER MAIN TO BE RELINED

Scale: 1:4,198

0 30 60 120 180 240  
Meters

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



## SITE PLAN

Project: Thredbo Sewer Trunk Main  
Rehabilitation

Revision: B

Date: 4/11/2024


Produced By: KOS





## Legend

 Stockpile Site

0 4.5 9 18 27 36  
 Meters

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



**STOCKPILE AND  
MATERIAL STORAGE  
LOCATION  
WASTE TRASFER FACILITY**

Revision: A

Date: 14/09/2023

Produced By: KOS



## **Appendix B      Environmental Schedules**

## THREDBO ENVIRONMENTAL SERVICES

### Record of complaint

Sheet \_\_\_\_\_ of \_\_\_\_\_

Project: \_\_\_\_\_

Date / Time: \_\_\_\_\_

Received by: \_\_\_\_\_

Reference Number: \_\_\_\_\_

[illegible]

# Environmental Incident Reporting Form

## Confidential document after first entry

The purpose of this form is to report any incident that may have resulted in Environmental harm on Kosciuszko Thredbo Pty Ltd premises. Remember to be succinct, stick to the facts and do not make assumptions. Only record information you know to be correct.

**The only persons authorised to contact external agencies eg EPA in relation to environmental incidents are the Kosciuszko Thredbo General Manager and Environmental Services Manager or their approved delegates.**

Return completed form to the Environmental Services Manager as soon as practicle, on completion of the Environmental incident.

<b>Date of Incident:</b>	<b>Time of incident:</b>
<b>Reported by:</b>	<b>Department:</b>

## Location of Incident

EXACT location of the incident (include landmarks and features, nearest cross street etc to make it easier to identify later)		
Site:	Building:	Room:

## Description of incident

Provide description and extent of incident:
.....
.....
.....
.....
.....
Have relevant photos been taken and attached? Yes <input type="checkbox"/> No <input type="checkbox"/>
If 'No', provide sketch and attach to the rear of this document.
What was the estimated duration of the incident?

## Type of incident

<input type="checkbox"/> Spill (including fuel,oil,waste material or other polluting substance)	<input type="checkbox"/> Erosion and sedimentation incident	<input type="checkbox"/> Contaminated water discharge
<input type="checkbox"/> Noise emission/complaint	<input type="checkbox"/> Unauthorised/accidental damage to heritage item	<input type="checkbox"/> Unauthorised/accidental vegetation removal or harm
<input type="checkbox"/> Air Emission	<input type="checkbox"/> Wildlife habitat/nesting area disturbed	<input type="checkbox"/> Other (specify)



# Environmental Incident Reporting Form

## Level of incident

Level	Example
<input type="checkbox"/> Minor	eg. No material has escaped the site or caused material harm to the environment – it is easy to clean up without additional assistance.
<input type="checkbox"/> Major	eg. Material has escaped the site causing pollution downhill/downstream areas, which will require clean up involving other agencies and/or additional resources not available to local site management. Damage has occurred or is likely to occur to the environment.

## Hazardous Material Spilt

<input type="checkbox"/> Petroleum based products/ Hydrocarbons	<input type="checkbox"/> Chemicals domestic or industrial grade
<input type="checkbox"/> Biological waste / Clinical and related waste	<input type="checkbox"/> PCB insulating liquids
<input type="checkbox"/> CFC containing equipment	<input type="checkbox"/> Paints or paint products
<input type="checkbox"/> Radioactive waste	<input type="checkbox"/> Other (specify)
Detail type/ingredient spilt: (UN, MSDS details)	
Detail concentration of material spilt:	
Detail quantity of material spilt:	

## Type of Spill

<input type="checkbox"/> Spilt onto ground	<input type="checkbox"/> Spilt into stormwater drain
<input type="checkbox"/> Spilt into waterway	<input type="checkbox"/> Poured down sink
<input type="checkbox"/> Poured down sewer	<input type="checkbox"/> Released into atmosphere
<input type="checkbox"/> Caused odour	<input type="checkbox"/> Caused fire/explosion
<input type="checkbox"/> Caused infectious contamination	<input type="checkbox"/> Other (specify)

## Immediate Actions

Was spill contained? Yes <input type="checkbox"/> No <input type="checkbox"/>
Detail immediate actions/controls measures taken to rectify or contain the incident
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

## Environmental Incident Reporting Form

### Corrective Actions

Detail corrective clean up action taken

.....

.....

.....

.....

### Disposal

Detail disposal method/plans and location

.....

.....

.....

### Recommended follow up and preventative actions

Detail recommendations

.....

.....

.....

### Persons present at Incident

Were there any witnesses to the accident? Yes ☐ No ☐ If 'Yes', please provide names

.....

.....

### Declaration

**The information and answers given above are true in every detail and no information has been withheld.**

Departmental Supervisors Name

Departmental Supervisors signature

Date

Departmental Managers Name

Departmental Managers signature

Date



**Diagram: (do not scale)**

A blank sheet of graph paper with a grid pattern. In the top-left corner, there is a north arrow pointing upwards, labeled with the letter 'N'. The grid consists of small squares covering the entire page.

**Created By:** Paul Corcoran  
**Created Date:** 24 Mar 2009  
**Review Date:** 24 Mar 2017  
**Reviewed Date:** 7<sup>th</sup> January 2020, by E Diver