

MINERAL RESOURCES TASMANIA
Kimberley Lookout - Badgers
Rehabilitation Plan
Stage 1



Issue Date 14/6/02
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Criteria for Stage 1 Rehabilitation

A meeting between Forestry Tas., the Kentish Council and Mineral Resources Tasmania was held on site on 22/5/02. The Badgers Rehabilitation Plan Draft 1, 20/5/02 relating to the total area was presented at the meeting for discussion, and a site inspection was held to develop means to assist the natural revegetation of the site. It was decided that the most appropriate manner to address rehabilitation of this area was in stages (budgetary constraints, economy of scale with respect to establishment costs, as well as doubts concerning the damage created by the rehabilitation process). Both Forestry Tas. and the Kentish Council agreed to support a "trial treatment" on the northern end of the area funded by the Mining Rehabilitation Trust Fund. ACV (Australian Conservation Volunteers) Areas 10, 11 and 12 were decided to be the minimum area considered economic to treat in a single campaign (See Tables Appendix B).

Summary Stage 1 Rehabilitation

The aim of this documentation is to provide a rational basis for the initial rehabilitative treatment of land owned and administered by various Tasmanian Government Departments in the Badgers area (see Appendix C). The document will provide the various public sector authorities with both an overview and detail on the works proposed to be undertaken under the Mining Trust Rehabilitation Fund in the Badgers area.

The Conservation Volunteers Australia had previously undertaken a survey of the area. They had listed Areas 3 to 12 for treatment. These areas were subsequently found to require further subdivision for clarity of treatment.

To carry out the major works associated with the project an Earthworks Contractor will be selected on the following criteria:

1. Type of equipment proposed
2. Timing
3. Emergency Response Plan (incl. Lighting of no fires, Hydrocarbon Management and Spill Kit onsite availability), and Workplace Safety Plan
4. Hygiene Procedure Checklist
5. Evidence of Insurances
6. Exclusions from Tender
7. Total Price

The Earthworks Contractor will undertake all works described herein (unless specifically excluded) under the terms of a formal Minor Works Contract AS 4305.

Statutory Requirements

At all stages of the Earthworks Contract, works will comply with the obligations of all Statutory Authorities and all Acts and Regulations relating to, but not limited to:

- Occupational Health and Safety (specifically the Tasmanian Workplace Health and Safety Act, 1995 and subsequent Regulations)
- Environmental Protection

Project Prerequisites

A Workplace Safety Plan for the Project is to be submitted with the Contractor's Tender for Tender Assessment purposes. The plan will describe, in detail, procedures to minimise risks associated with the proposed Scope of Works. Details to be included in the Plan are:

- Introduction
- Aim

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- Scope
- Responsibility
- Method (including but not limited to - Risk Assessment, Control of Risk, Training, Induction, Emergency Response Plan with “emergency evacuation”, “working in isolation”, and First Aid Provision components, and Hazardous Substances)
- Record Keeping (including initial risk assessment and procedure proformas for risk assessment during the Project)

Project Duration

Proposed Start Date

Completion Date

Duration 2 Calendar Weeks

Tender Closing

Tenders shall be returned to the following address by 12.00 noon on the **INSERT DATE**

INSERT ADDRESS

Tenders faxed to **INSERT FAX NO.** before the closing time will be considered provided all requested information is attached to the Tender to allow full assessment.

Evidence Attached yes/no

Evidences of insurance are to be submitted with the Tender for Tender Assessment purposes. These evidences are to include Workers Compensation, Public Liability, and Contractors Risk. Preference will be given to policies that particularly note the interests of Mineral Resources Tasmania, D.I.E.R., or the State Government of Tasmania at Tender Assessment.

Evidence Attached yes/no

A Hydrocarbon Management Plan is required to ensure that hydrocarbon fuels and lubricants are handled, used and disposed of appropriately. This plan is to be submitted with the Tender for Tender Assessment purposes.

Evidence Attached yes/no

The Tenderer will need to assure that plant inspections and plant hygiene protocols are observed for all plant and machinery brought to site and provide documented evidence of it. A copy of the pro-forma to be utilised is to be submitted with the Tender for Tender Assessment purposes.

Evidence Attached yes/no

Attendance at the Pre-Tender Site Meeting is a Tender Prerequisite to determine the Tenderers appreciation of the site, the Scope of Works and associated risk management for compliance with the Statutory Requirements.

Pre-Tender Site Meeting **INSERT DATE AND TIME**

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Item	Description of Works	Lump Sum Price incl. GST
1	Establishment and Disestablishment	\$
2	Earthworks & Drainage Improvements	\$
	Total	\$

Signed

Position

Dated

Company Seal

Scope of Works

Works prescribed at each location have been detailed in the subsequent tables and detailed plans are attached at Appendix A and Appendix B. These works will include

- Site establishment and disestablishment.
- Earthworks to establish tree screens as specified.
- Drainage improvements to manage rainfall run off, minimise erosion and promote soil surface stability to allow optimal chance of revegetation success.
- Earthworks to reshape the existing contour to promote drainage improvements. Surface contours, where specified, are to be regraded to improve long-term stability. Recovery of topsoil and spreading is included in this activity. Recovery of rock to line steeper drains is included in this activity.
- Growth medium (surface) preparation by ripping along the contours for the areas designated.
- Provision of documented evidence that the Project Prerequisites have been addressed.

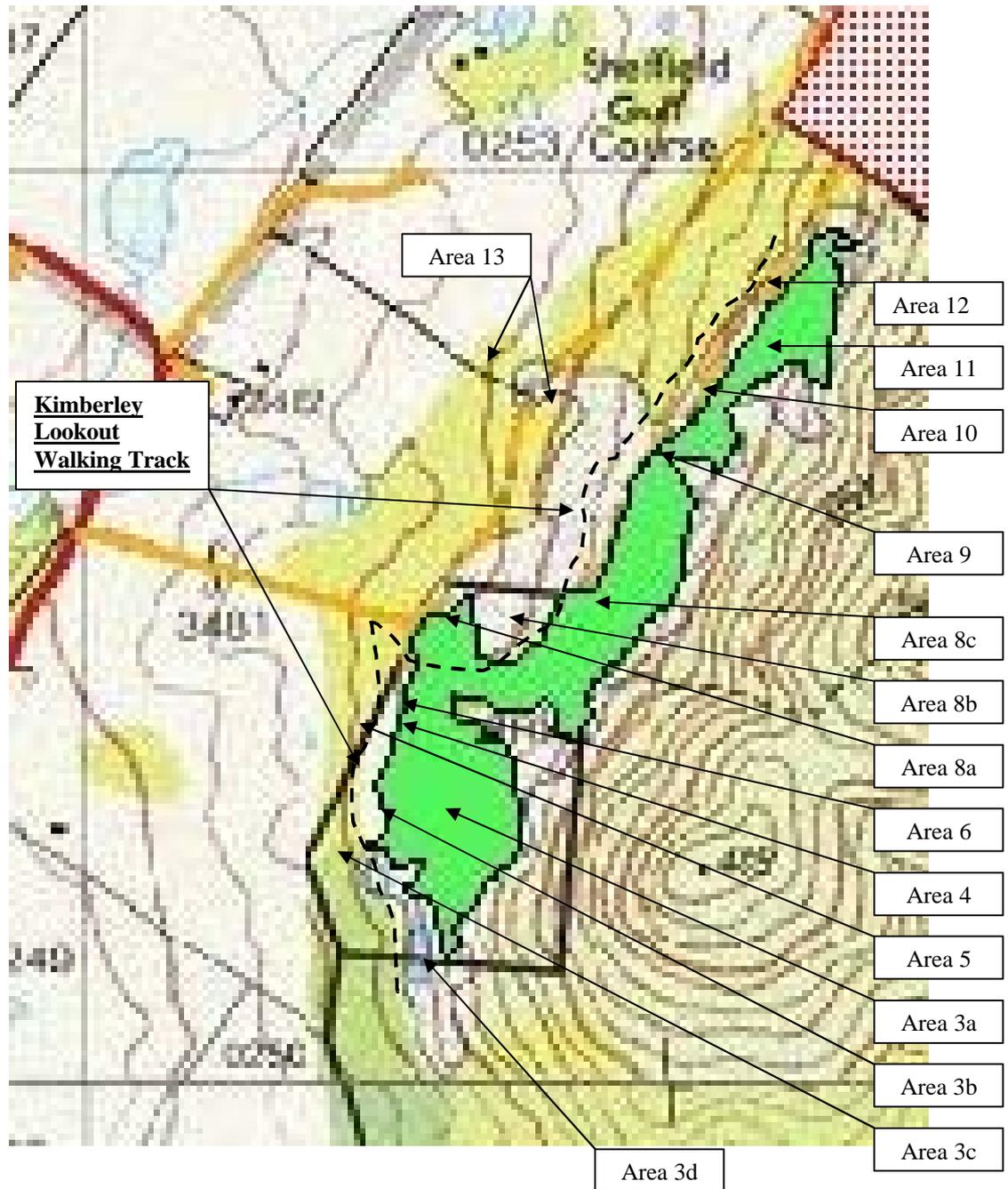
Seeding and fertilising are not included in the Earthworks Contract.

Appendix A	Treatment Notes
Appendix B1	Specific Treatment Table Stage 1 Estimate – To be removed prior to Tender Offer
Appendix B2	ACV Areas
Appendix B3	Treatment Types
Appendix C	Location Plan
Appendix D	Estimate – To be removed prior to Tender Offer

Appendix B1 Specific Treatment Table Stage 1

Specific Treatment Table Stage 1				
ACV Area Identifier	Approx. Area	Treatment	Works	Cost Estimate \$
10a	0.2 HCT	1. Recover topsoil from either side of area taking care not to disturb gums, contour rip. Seed and fertilise. Combination seed acceptable. 2. Surface rocks to scoured drains	1. Excavator and dozer 0.5 x 10 hr days at \$160/hr = \$800	\$800
10b	0.1 HCT	1. Area adjacent to walking track. Recover topsoil from either side of area taking care not to disturb gums, contour rip. Seed and fertilise. Combination seed acceptable. 2. Surface rocks to scoured drains	1. Excavator and dozer 0.3 x 10 hr days at \$160/hr = \$480	\$480
11a	0.05 HCT	1. Establish tree screen by creating ramps C to F to G to H . Ramp to 7m wide, drain established on inside to channel water back down ramp, recover topsoil from opposite side of walking track, spread generously and contour rip. 2. Level area to be treated at same time. Eucalypt dominant planting required.	1. Excavator and dozer 1.25 x 10 hr days at \$160/hr = \$2,000 2. Incl. Above	\$2,000
11b	0.05 HCT	1. Area adjacent to walking track CIJ . Recover topsoil from either side of area taking care not to disturb gums, rip with excavator bucket. Seed and fertilise. Combination seed acceptable.	1. Excavator and dozer 0.3 x 10 hr days at \$160/hr = \$480	\$480
12a	0.05 HCT	1. Establish tree screen by creating ramps D to E to F . Ramp to 7m wide, drain established on inside to channel water back down ramp, recover topsoil from opposite side of walking track, spread generously and contour rip.	1. Excavator and dozer 0.5 x 10 hr days at \$160/hr = \$800	\$800
12b	0.05 HCT	1. Area adjacent to walking track, 7m wide. Recover topsoil from either side of area taking care not to disturb gums, contour rip. Seed and fertilise. Combination seed acceptable.	1. Excavator and dozer 0.3 x 10 hr days at \$160/hr = \$480	\$480
All areas		Recovered rock to drain scours to moderate velocity of runoff.		

Appendix B2 ACV Areas

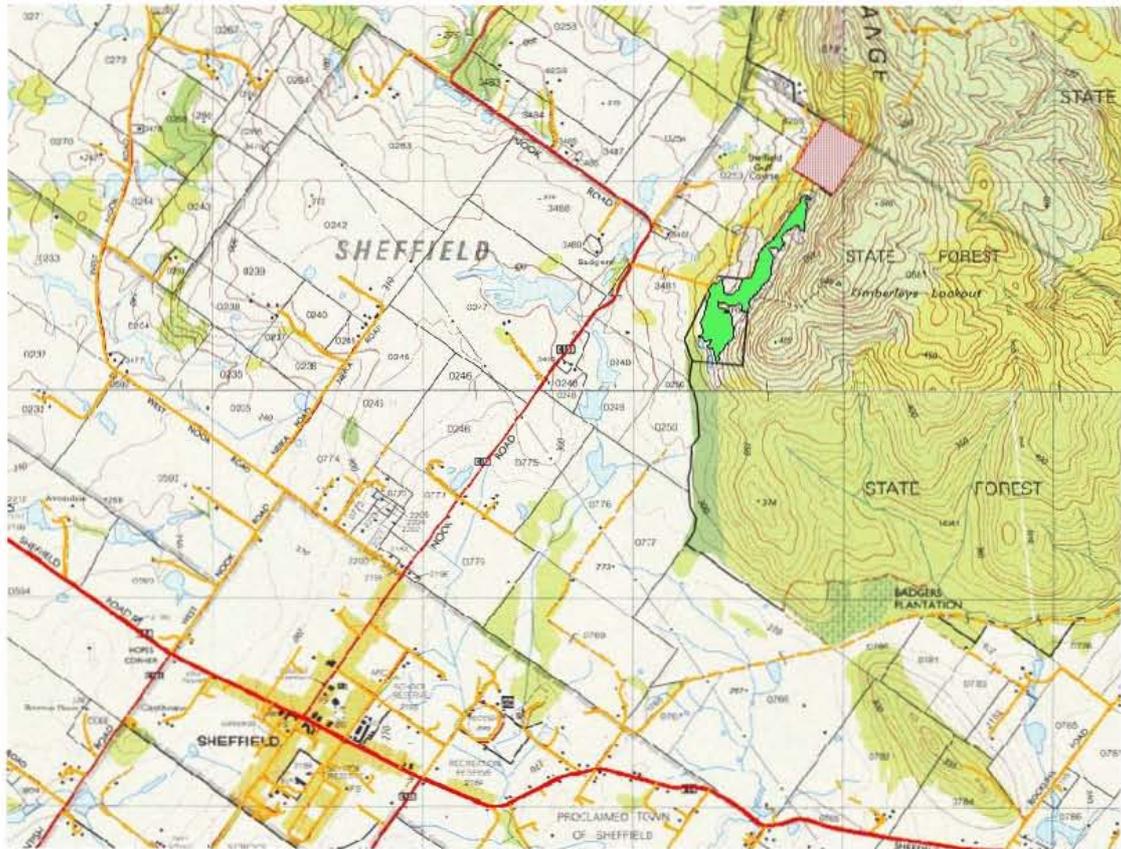


Areas 10a & 11a are higher altitude areas
Areas 10b & 11b are adjacent to the walking track
Area 12a is northern section of Area 12
Area 12b is southern section of Area 12

Appendix B3 Treatment Types

Treatment Summary Table		
Environmental Issues	Problem	Response
Visual Intrusion of Disturbed Areas (From a distance)	Visible from Sheffield Main Road, Main Road Sheffield, and Nook Road in far and near distance	Treatment A Strategically placed tree (eucalypt dominant) plantings to be established to screen higher altitude disturbed areas. This involves recovery of topsoil and full preparation of subgrade for revegetation.
Visual Intrusion of Disturbed Areas (From Kimberly Lookout walking track)	Walking Track meanders through disturbed area to the north of the access road	Treatment B Focus rehabilitation funds adjacent to track. Recover topsoil from adjacent stockpiles (without causing loss of the established tree screen at this altitude) spread adjacent to track and full preparation of subgrade for revegetation
Erosion and Soil Transportation Management adjacent to walking track and maintenance of existing drainage system	Existing drainage system requires maintenance to ensure Service Club can access track within disturbed areas	Treatment C Redirect runoff at washouts. Fill scours with rock recovered on site. Culvert required.
Erosion and Soil Transportation on steep un-rehabilitated slopes		Treatment D Incorporate drains to inside of new tree screen establishments as per Treatment A
Steep Slope Rehabilitation (Between undisturbed tree-line and the top of worked pit areas)	No soil cover.	Treatment E Handwork by volunteers? Ti tree slash to be placed horizontally on contours. Fertilise.
Rehabilitation (Within worked pit areas)	Split areas so that results from treatment are cost effective.	Treatment F Treat areas that are practical and economic (packaged to complement A and B, as well as meet budget constraints). Rely on revegetation fringe effects for no treat areas.
Weed Control	Radiata pines in evidence. Weed infestation on lower access road to South	Treatment G Spray weeds on lower access road with biodegradable Roundup
Promoting growth in areas already rehabilitating		Treatment H Fertilise

Appendix C Location Plan



Appendix D Estimate

Cost Estimate	
Sub Total	\$5040
Establishment	\$1200
Risk	\$1000
GST	\$724
Running Total (Rounded)	\$8,000
Consultant's Fees	\$750
Total	\$8,750