

Revegetation Plan

Townsend Rd and Coolgardie Esperance Highway Material Pits



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December 2008

Photo: Townsend Rd Pit

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1. PROJECT BACKGROUND

1.1 Proposed Works

Main Roads Goldfields-Esperance region is in the preliminary stages of carrying out a road realignment project at the intersection of Coolgardie Esperance Highway (CEH) and Tom Starcevich V.C. Rd. These works have been deemed necessary for safety reasons due to a railway line running parallel to CEH. The railway line has been causing stacking distance issues for 36.5m road trains (in the form of local grain trucks) entering or exiting Tom Starcevich V.C Rd. Several near misses have recently been recorded and therefore the project will involve realigning the highway to the west in order to increase stacking distances available to such road trains.

In order to complete the works, suitable road building materials are required and have subsequently been identified at two different locations. An existing gravel pit suitable as a base course material has been identified on a farmer's property with access off Townsend Rd. A fill material source has also been identified in close proximity to the proposed road works with the area located just off of CEH.

Since the clearing of native vegetation is required at both pits, and more than 0.5ha is required to be cleared in total, a revegetation plan is required to be prepared and submitted to the CEO of DEC in order to satisfy the conditions of Main Roads State-wide Purpose Permit (CPS 818/4). This report fulfils this requirement.

The actual clearing amounts for the two pits are likely to be restricted to 1ha for the Townsend Rd site and 0.3ha for the CEH site. If the quantity and quality of road building material available at these sites is insufficient however, clearing up to 5ha at the Townsend Rd site and 1ha at the CEH site may be required. All of these areas have already been assessed in a project specific Preliminary Environmental Impact Assessment, with no likely variance with any of the 10 clearing principles identified.

1.2 Project Location

The two proposed pit sites are located near the small town of Grasspatch within the Shire of Esperance. For detailed maps showing the general pit locations, environmental constraints in the area, and up close aerial images of each pit, please see Appendix A. Site photos are provided in Appendix B.

2. REVEGETATION AND REHABILITATION

2.1 Site Preparation

During clearing, vegetative material will be stockpiled and mulched in preparation for respreading. Top soil will also be stripped to a depth of approximately 10cm and heaped in windrows 1-2m in height.

Following extraction works, cleared areas will be returned to their natural profile as far as is possible, and the topsoil and vegetative material replaced. The surface will also be ripped to a depth of approximately 500 mm to encourage root growth.

2.2 Weed Control

Given the low prevalence of weeds at both sites, no weed control is required prior to clearing. This also means that all of the stripped vegetation and topsoil can be reused for the rehabilitation work as outlined in section 2.1. After project completion, monitoring will be carried out in accordance with section 2.6.

2.3 Hygiene Management

Since the project area receives less than 400mm of average annual rainfall (nearest meteorological station is Salmon Gums with an average annual rainfall of 349.2mm), dieback (*Phytophthora cinnamomi*) is not considered to be an issue. Management procedures to reduce the risk of weed spread will still be employed however including:

- All machinery, plant and equipment to be free of soil and vegetative material prior to entering and leaving the project area.
- No entry to be permitted to vegetated areas outside of the required work areas.

2.4 Revegetation Method

CEH Pit: Given that this pit is relatively small in size and surrounded by remnant native vegetation, the revegetation method of natural regeneration will be employed for this pit. With the short turnaround time involved between clearing and rehabilitation, it is expected that any seed stored in the stockpiled topsoil and vegetative material will not be significantly compromised. Furthermore the low prevalence of weeds and close proximity of surrounding native vegetation is considered to provide more than favourable conditions for a successful revegetation outcome using this method.

Townsend Rd Pit: Given that clearing in this pit will mainly consist of isolated shrubs or isolated stands of shrubs, rehabilitation and revegetation of an equitable area will be carried out in a more confined section of the pit. This area will be chosen based on its value to the local ecological community, and also its potential future land use. The revegetation method will once again involve natural regeneration from seed stored in stockpiled topsoil and cleared vegetation. Given the small area likely to be involved and the fact that natural regeneration of considerable vigour is already evident within the pit boundaries, the proposed revegetation method is considered to be sufficient to achieve a satisfactory revegetation outcome.

2.5 Vegetation Establishment Period

The vegetation establishment period for this project will be two years. This period will begin upon completion of the rehabilitation and revegetation works. Monitoring and maintenance (including any corrective works) will be carried out in accordance with Section 2.6

2.6 Monitoring and Maintenance

Photographic records will be maintained for the sites at 6 monthly intervals for a minimum of two years. On ground species identification will also be carried out at similar intervals to evaluate the biological diversity of any new recruits.

In accordance with Main Roads State-wide Purpose Permit (CPS 818/4), weed monitoring and control will be carried out every 12 months as a minimum for the duration of the permit.

Where the success of revegetation at either site is deemed to be unsatisfactory, the necessary corrective works will be carried out as a matter of priority.

Note: All monitoring will be carried out by the Main Roads Goldfields-Esperance Environment Officer. In their absence monitoring is to be carried out by the relevant regional Project Manager.

APPENDICES

APPENDIX A – Project Location

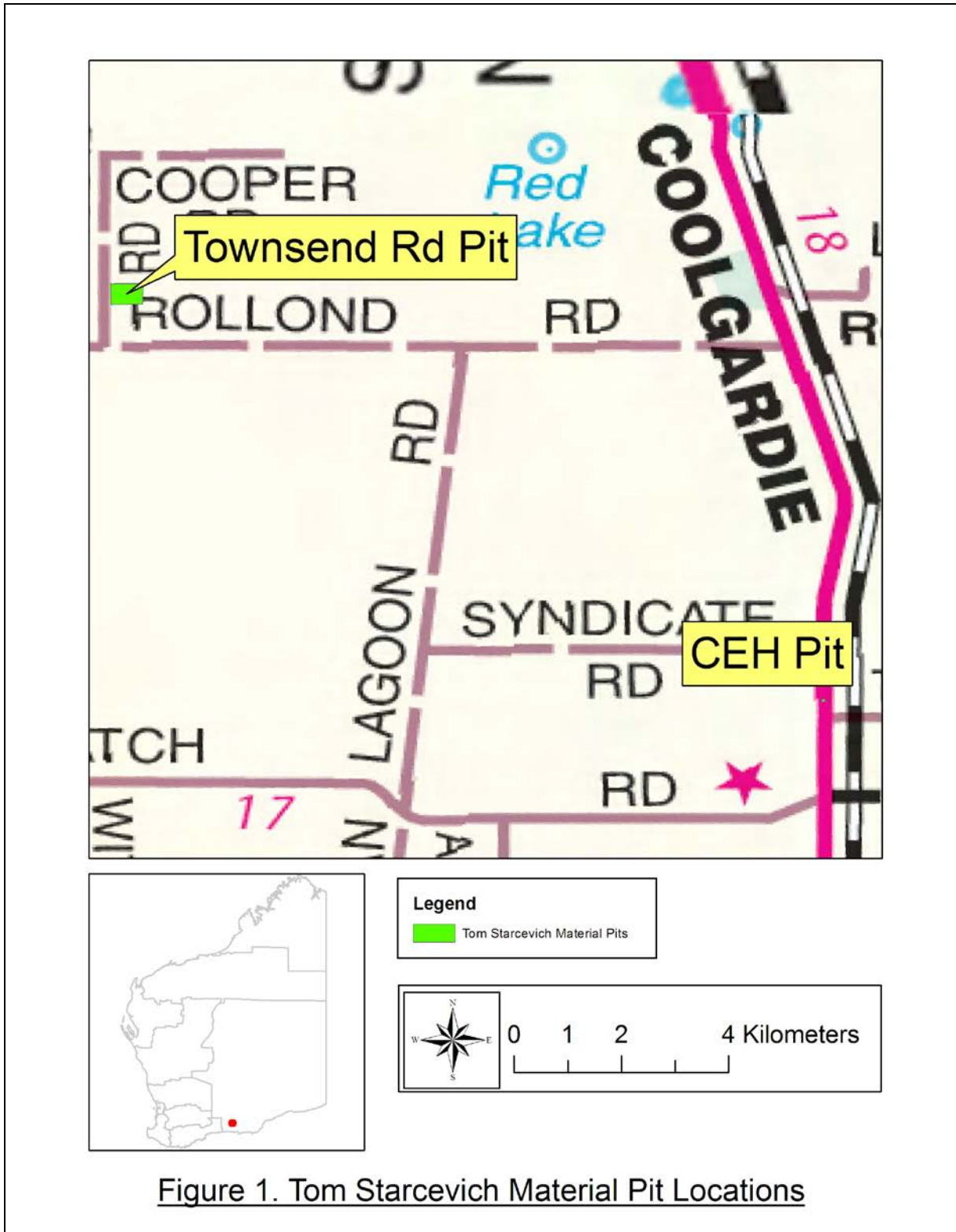


Figure 1. Tom Starcevich Material Pit Locations

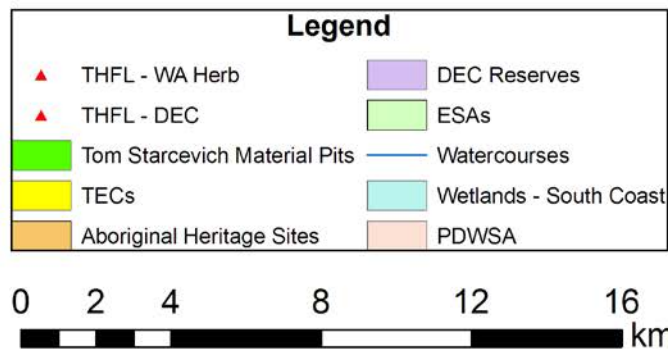
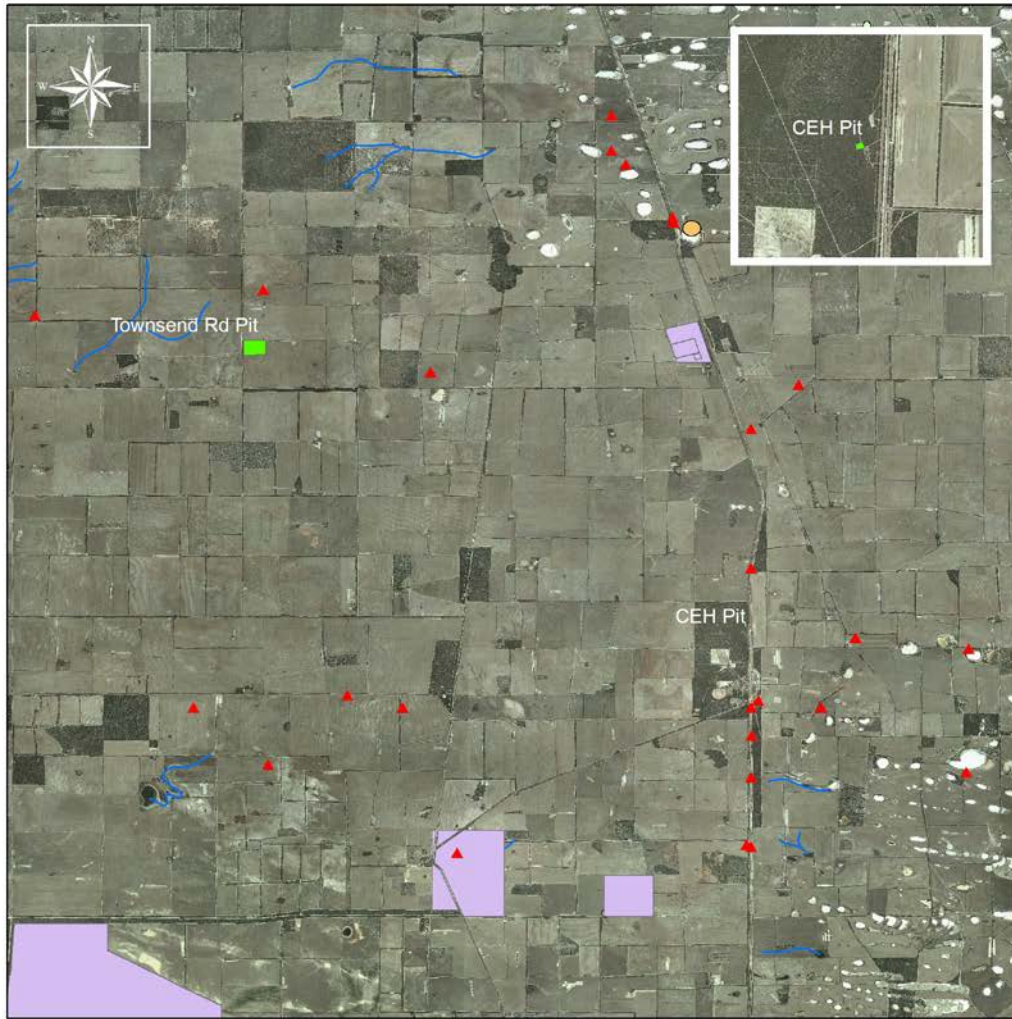


Figure 2. Tom Starceвич Material Pits Environmental Constraints Map



0 50 100 200 300 400 Meters

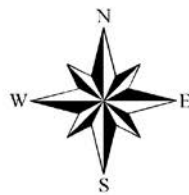


Figure 3. Townsend Rd Pit



0 25 50 100 150 200
Meters

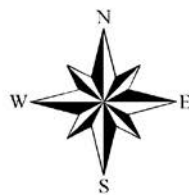


Figure 4. CEH Pit

APPENDIX B – Site Photos

Photos taken on the 3/11/08.

Townsend Rd Pit:





CEH Pit:

