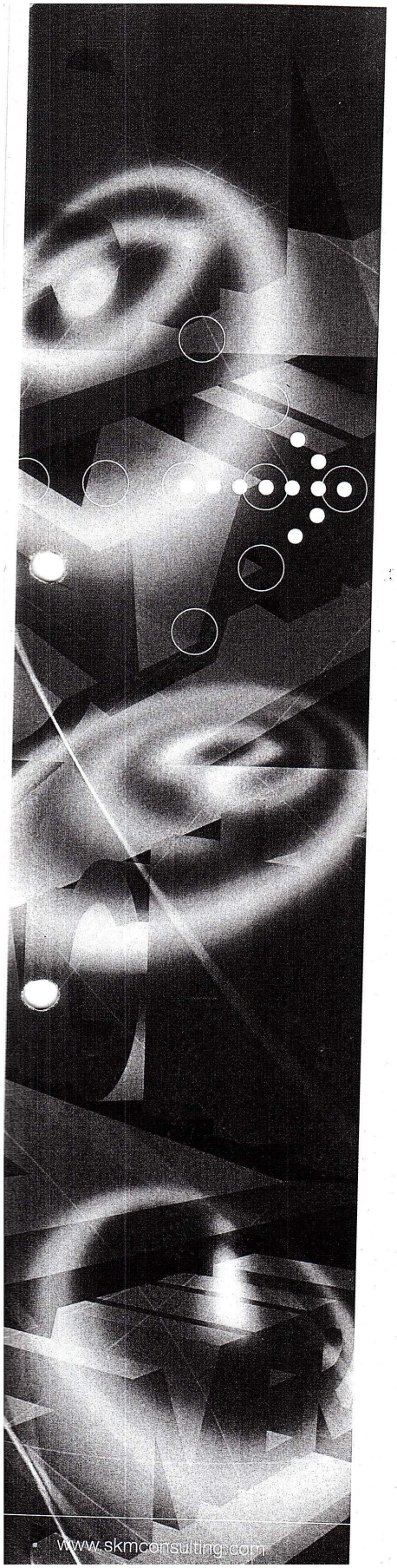


New Lorinna Access Road

Kentish Council

Development Proposal and Environmental Management Plan (DPEMP)

February 2002

SINCLAIR KNIGHT MERZ

6. Proposed Construction Methods and Infrastructure

6.1 Construction Methods

It is proposed to construct the road using external Contractors.

6.2 Design Standards

The road will be constructed to Council standards, and Department of Infrastructure Energy and Resources (DIER) standards where appropriate and will comply with Austroads Guidelines where applicable. It is proposed that the design speed of an successive curves will be checked on site and where appropriate warning signs in accordance with the guidelines will be erected.

6.3 Speed Limits

The speed limit on the new road is expected to be 50 km/h, however slower speed advisory signs may be installed on several bends for safety reasons and to slow traffic down as it enters Lorinna.

6.4 Traffic Control and Incident Management

Traffic will be controlled with a variety of signs, guideposts and guardrail where considered necessary to ensure safe passage of vehicles using the road. This will minimise any potential incidents along the road.

6.5 Alignment

The alignment has been marked on the ground along the centreline, and is based on minimising grades below 15% ie 15 metres is 100 metres rise, or 8.5 degrees.

GPS coordinates have been picked up along the proposed alignment to determine its location in relation to roads, property boundaries and other features eg aboriginal significant sites.

6.6 Pavement

The proposed unsealed road pavement is:

- Approved subgrade with CBR > 4%
- 150mm Subbase
- 50mm Wearing surface using Subbase material

The carriageway width will be 5.1 metres wide. In addition to the pavement width, a verge will be formed on the embankment side of the road, and this will vary depending on what safety barriers are required as detailed below:

Guideposts only:

- Pavement 5.1 metres
- Verge 0 metres — TOTAL = 5.1 m

With guardrail:

- Pavement 5.1 metres
- Verge 0.6 metres — TOTAL = 5.6 m

No verge is required on the cut side of the road due to the presence of table drains. Two standard road cross sections for the pavement are included in **Appendix C.**

6.7 Cut and Fill

Due to the nature of the terrain, a considerable amount of cut and fill will be undertaken as part of the road construction.

Cut and fill batter slopes shall be based on the typical cross section drawing in **Appendix C,** and will vary depending on the material encountered.

On this section towards the top of the ridge where the road passes through a rocky outcrop, based on the initial assessment by Coffeys (2000) near vertical slopes are expected. In areas where the natural slope exceeds 31 degrees, the road will be located entirely in cut to ensure a stable road formation.

6.8 Road Drainage

Road drainage infrastructure will be a significant aspect on the new road in order to drain the road pavement, collect natural run-off in an appropriate manner, and to protect local waterways.

Drainage works will take the following form:

1) Installation of major culverts across existing watercourses
2) Concrete or rip rap drains down batter slopes
3) 300mm deep table drains down side of road in cut with invert 0.6 metres horizontally from the edge of the shoulder
4) Regular concrete culverts under road pavement with a maximum spacing of 120 metres, with less spacing along steeper sections of road
5) Sump pit at culvert upstream end in table drain
6) Rock lined or concrete rip rap on downstream end of culvert to minimise erosion where the culvert discharges
7) Subsoil drains alongside and across the road through areas that have been highlighted as ancient landslips at the base of the escarpment and onto Botts Road

6.9 Local Traffic Arrangements and Improvements

In addition to the construction of the new road, sections of Botts Road will be upgraded as a separate project.

6.10 Local Access and Access Limitations

The proposed new road will be a Council road and access will not be limited for vehicles using the road.

Local access to the property owner affected by the new road will be installed as part of the works.

The sections of Lorinna Road and Cockatoo Road to be closed as part of the project will be done at the completion of the new roadworks. This will involve appropriate signage and the installation of barriers to limit access to recreational users like bike

8. Road Construction Environmental Management Plan

8.1 Introduction

A Road Construction Environmental Management Plan is detailed below, and will be finalised in conjunction with the road construction crew prior to any works commencing on site. This plan is considered essential in order to ensure that the impact on the immediate and surrounding environment is minimise both in the short and long term.

Traffic volumes on the new road are expected to be less than 30 vehicles per day, and the new road will not be constructed under traffic. The exact location of the new road will be finalised on site to minimise the impact on the environment eg retain large trees, incorporate additional bends, maximise batter slopes as required.

8.2 Proposed Route

The proposed route from Lemonthyme Road to Lorinna travels through several different terrain types and this will determine the method of construction.

4) Ch 0 to 1100 – Lemonthyme Road to Top of Ridge
   This section travels through an existing forestry coupe and utilises an old access track. The route is undulating and will require widening to provide the 6m formation width. The area has been logged and replanted in immature eucalypt regrowth and / or plantation.

5) Ch 1100 to 2600
   This section descends along the side of the escarpment for 1.5km on steep sidling country to the bottom of the escarpment. The terrain is forested with advanced regenerated eucalypt Delegatensis on State Forest and private land. The natural side slope is about 2 H: 1V (27°). The grade of the road is approximately 8% except for a short 200m section that has been increased to avoid some cliffs and mass rock. Where the natural side slope exceeds 31° the road will have to be placed in full cut and the excess fill transported out to adjacent fill areas to balance the earthworks.

6) Ch 2600 to 3800
   This section of the route descends from bottom of the escarpment to Botts Road through moderate to steep terrain on generally cleared private land.
   The last 500m traverse some old landslip sites and appropriate measures will need to be taken to ensure stability of the formation.

8.3 Pre Construction Activities

The following tasks will be required before construction commences.

1) Obtain a Forest Practices Plan to enable salvage and disposal of any surplus timber (assuming this activity is not undertaken by Forestry Tasmania prior to commencing roadworks).

2) Ensure all construction plant and equipment is washed down before being brought onto the site.

9. References

a) Forestry Tasmania, 2000; Feasibility and Design Study for Kentish Council – Botts Road to Lemonthyme Road Link; Unpublished report for Kentish Council, Forestry Tasmania, Hobart, Tasmania.

b) Kentish Council, 1996; Lorinna Road Assessment of Options Report, Kentish Council, Sheffield, Tasmania.

c) Stornoway, Photos of construction of the "Road to Nowhere" Tarkine Wilderness, West Coast, Tasmania

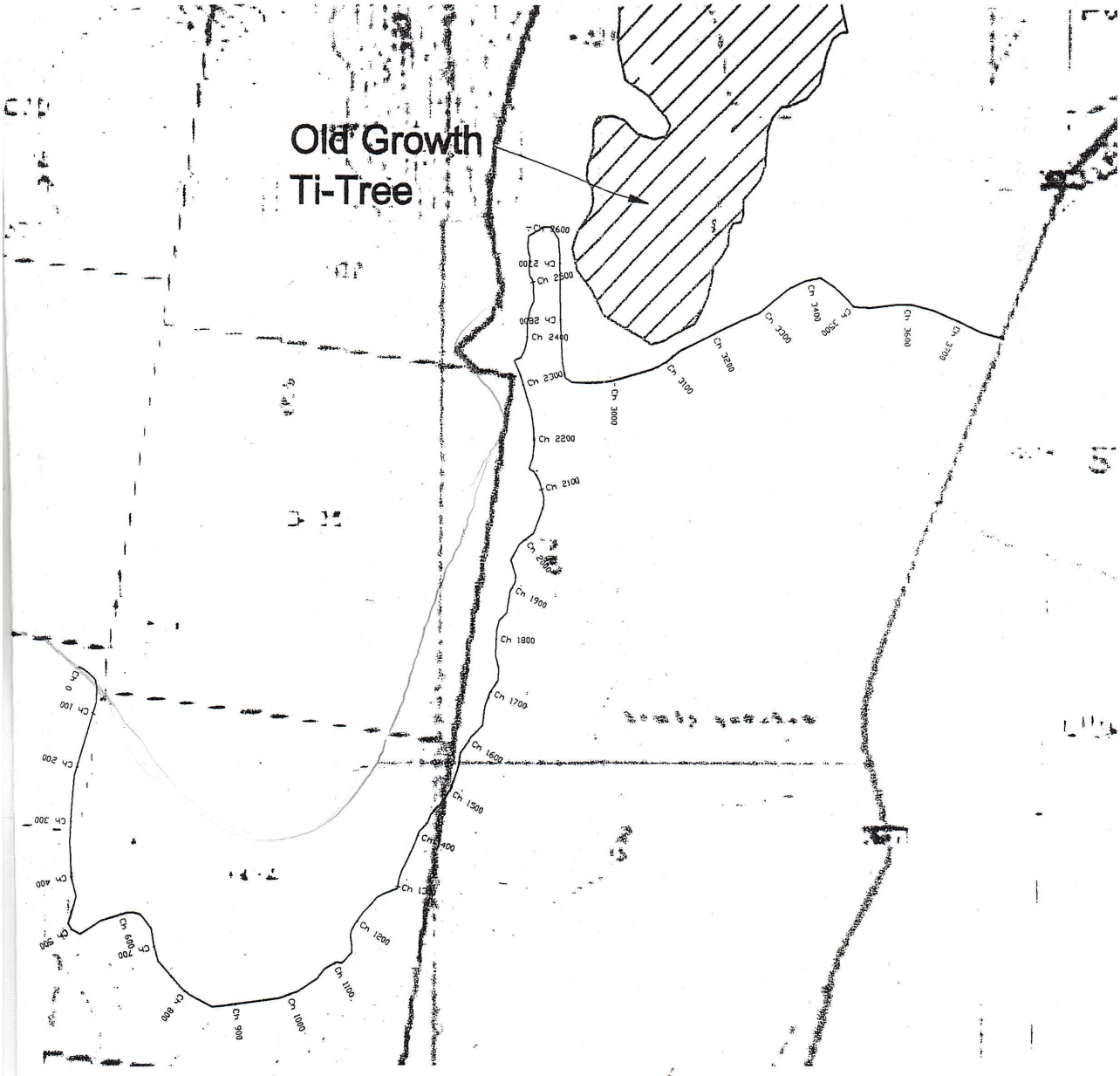
10. Appendices

10.1 Reports

1) Aboriginal Cultural Heritage Survey
2) Flora Survey
3) Fauna Survey
4) Geoetechnical Reports
5) Public Consultation Report
6) Economic Justification Report
7) Property Owner Agreements
8) Hydro Tasmania letter re Lemonthyme Road
9) Tasmanian Fire Service letter re Fire Safety

10.2 Drawings and Pictures

A) Locality Plan
B) Plan of Proposed Route
C) Typical Road Cross Section
D) Typical Sediment Control Measures
   1 – silt trap fence
   2 – straw bail sediment trap
   3 – open drain check dams
E) Details of road closure locations
F) Photos of past vehicular accidents
G) Typical Rock Wall Standard Drawing 1941
H) Construction Management Plan Attachments
J) Environmentally Sensitive Areas
   1 – Sensative areas from reports
   2 – Stormwater catchment areas through new road



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(A3) 1:10000 200 100

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Job No: TA09400

CLIENT: Kentish Council			
PROJECT: Lorinna Road			
DRAFTER: JEP	DRAFTER CHECK	REVIEWED PROJECT MANAGER	APPROVED PROJECT DIRECTOR
DESIGNED	DESIGN REVIEW		

Catchment A
691 ha
Catchment Area 2
759 ha
Proposed new
Road Alignment
STATE FOREST
Olivers Plains
CEMONTHYME ROAD
OLIVERS
Lorinna
CETHANA
LAKE
ROAD
1
2
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CLIENT
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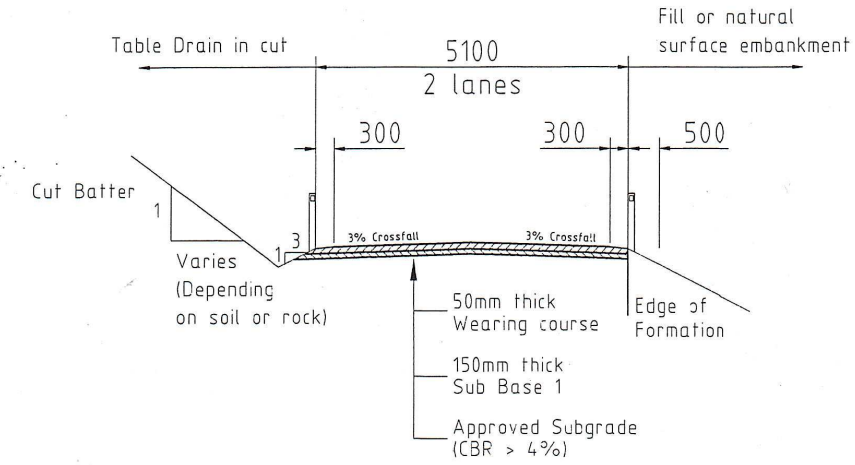
PROJECT
Lorinna Road
DRAWN
J.P.
DESIGNED
DRAWING CHECK
E.M.
DESIGN REVIEW
REVIEWED
PROJECT MANAGER
APPROVED
PROJECT DIRECTOR
COPYRIGHT
REFERENCE DRAWING TITLE



Typical Cross Section - Standard

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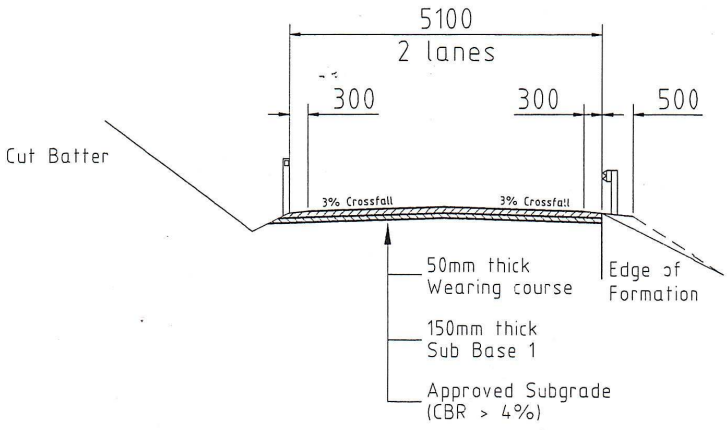

Typical Cross Section - with Guardrail

1:100

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DRAFTER	DESIGN REVIEW	PROJECT DIRECTOR
J.P.		
DRAFTING CHECK	PROJECT MANAGER	
E.M.	E.M.	/ /

TITLE

Lorinna Road Realignment

Typical Cross Section

SCALE	DRAWING No	AMD
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