

LAKE SECONDARY ROAD MIENA TO HAULAGE HILL ROAD SEALING

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Committee on Public Works

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Authorisation

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1 Introduction

1.1 Background

The Tasmanian Government has identified the visitor economy as a strategic economic growth opportunity for the State and the beauty of the Tasmanian environment is widely marketed. Increased visitor demand will require localised infrastructure upgrades at popular sites, particularly in regional areas. The Lake Secondary Road, known as Highland Lakes Road on local maps, is an increasingly popular drive for visitors and the Department has progressively upgraded the road by providing a sealed surface. A sealed road surface provides a greater level of safety, particularly for visitors.

The primary objective of the project is to seal the remaining gravel section of the road. The section from Miena to Haulage Hill encompasses the last three sections of the Lake Secondary Road which currently remain unsealed.

These sections are:

- Miena to Liawenee, a length of 9.33 kilometres,
- Liawenee to Brandum Bay, a length of 9.60 kilometres, and
- Haulage Hill, a length of 1.65 km.

Construction work is currently underway on sealing the 9.33 km section from Miena to Liawenee. This section is due for completion in February 2018.

This Parliamentary Standing Committee on Public Works (PSCPW) Report provides information regarding the works from Miena to Haulage Hill.

1.2 Project Objectives

The objective of the project is to seal the last remaining sections of unsealed pavement on Lake Secondary Road thus increasing the reliability of travel. The outcomes will be:

- Improved access for all road users
- Increased usage of the road particularly by tourists but also by some commercial vehicles travelling between the South and North West of Tasmania with flow on economic benefits to the region
- Environmental benefits
 - i. Reduction in generation of road dust under dry conditions with improvement in water quality for adjacent residents who rely on tank water collected from roof tops.
 - ii. Reduction in dust impacts on roadside flora
 - iii. Reduction in erosion and sediment build up in adjacent watercourse
 - iv. Gravel loss from the road surface will be eliminated. The road is re-sheeted on an annual basis to replenish gravel that is lost due to the action of road traffic and maintenance grading operations that tend to push gravel to the road verges over time. The majority of this gravel collects in roadside drains and watercourses with ongoing impacts on water quality.
 - v. The section of the Lake Secondary Road from Liawenee to Reynolds Neck is within the Tasmanian Wilderness World Heritage Area and the reduction in dust, erosion and sedimentation are particularly important outcomes in this area which has high environmental values. The road sealing will eliminate the future need for road re-sheeting. Whilst the pavement will require strengthening with pavement material the amount required is equivalent to the quantity used for re-sheeting over a period of approximately three years. Over a 30 year pavement life the amount of re-sheeting material saved is approximately 100,000 cubic metres which is a substantial quantity. This material is currently obtained from local gravel pits and the reduction in extraction of gravel

from these sources is a major environmental gain.

- Social benefits of sealing the road arise from the improved reliability and predictability of the road surface helping to reduce the isolation of the region and improve connectivity within and to, the region.
- Economic benefits will result from a reduction in maintenance costs with road grading and resheeting being regular activities several times per year. There will also be substantial travel time savings because of the increased travel speeds that will apply on the sealed surface.
- A further economic benefit will result from increased visitors to the area. A sealed surface will permit use by hire cars and more locals will be encouraged to use the road as an alternative route between Melton Mowbray and Deloraine. Whilst travel time between Melton Mowbray and Deloraine via the Midland Highway and Bass Highway is approximately 15 minutes shorter than the Highland Lakes route, the travel distance via the Highland Lakes Road is approximately 12 kilometres shorter.

1.3 Project Location

The Lake Secondary Road, Miena to Haulage Hill road sealing extends from the end of the seal just north of the Great Lake Hotel to the start of the sealed section at Brandum Bay and from the end of the existing sealed section at Breona to the start of the sealed section at the Great lakes lookout at Haulage Hill. Figure 1 is a locality plan.

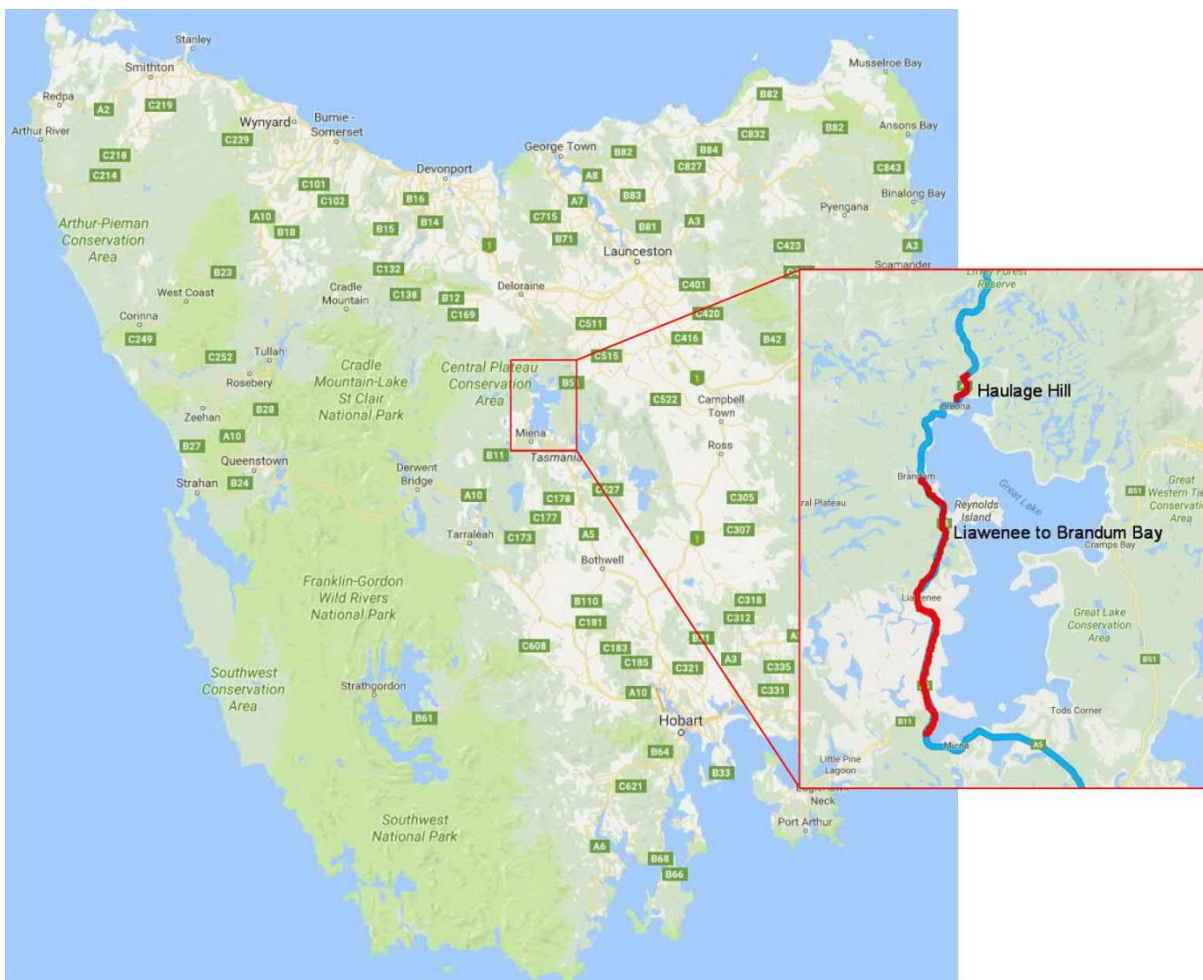


Figure 1 Locality Plan

1.4 Strategic Context of the Project

The Lake Secondary Road upgrade forms part of the Visitor Infrastructure Upgrade Program.

The Tasmanian Government has identified the visitor economy as a strategic economic growth opportunity for the State and the beauty of the Tasmanian environment is widely marketed. Increased visitor demand will require localised infrastructure upgrades at popular sites, particularly in regional areas. The Lake Secondary Road is an increasingly popular drive for visitors and the Department has progressively upgraded the road by providing a sealed surface. A sealed road surface provides a greater level of safety, particularly for visitors.

The Lake Secondary Road is an important link in the Tasmanian State Road Network. It is 156 kilometres long and runs from the Midland Highway at Melton Mowbray (approximately 70 kilometres north of Hobart) to the Meander Valley Highway in Deloraine (approximately 50 kilometres west of Launceston). As well as providing access to the Central Highlands, the Highland Lakes Road provides an alternative route to the more commonly used Midland Highway - Bass Highway route from the South to the North West region of the State.

2 Project Details

2.1 Proposed Works

The works involve the upgrading the three sections of the Lake Secondary Road from:

- Miena at the end of the existing seal north of Great Lake Hotel to the Liawenee Canal Bridge
- The Liawenee Canal Bridge to the start of the sealed section at Brandum Bay, a length of 9.6km; and
- The end of the existing sealed section at Breona to the start of the sealed section at the Great Lakes lookout at Haulage Hill a length 1.65km.

The upgrade works on all sections include:

- 3.0m seal lanes;
- Sealed shoulders and verges to a maximum combined width of 1.0m; and
- A granular pavement overlay to improve the existing pavement strength.

2.2 Design Speed

The design speed for the works is 80km/h, consistent with the existing speed limit on the existing sealed sections.

2.3 Road Cross Section

The typical cross section from the Liawenee Canal Bridge to the start of the sealed section at Brandum Bay is:

- 3.0m lanes;
- 0.5m sealed shoulders; and
- 0.5m sealed verges.

The typical cross section from the end of the existing sealed section at Breona to the start of the sealed section at the Great Lakes lookout at Haulage Hill is:

- 3.0m lanes; and
- 0.3m sealed shoulders.

2.4 Pavement Overlay

The works involve overlaying the existing gravel road with a pavement overlay. The existing gravel road has an average cross fall of 7%. The overlay will provide additional pavement strength and correct the curve cross falls (superelevation).

2.5 Drainage

The existing drainage consists of table drains and culverts at approximately 100m intervals. Generally, culverts have no headwalls or headwalls constructed from stabilised sand sandbags. Where the budget permits culverts will be extended and mass concrete headwalls installed.

The tabledrains are generally free flowing. However the tabledrains will be regraded to ensure there is no ponding.

2.6 Utilities

The following public utilities are located within the road reservation:

- Underground telecommunication cables, owned by Telstra; and
- Water mains, owned by local residents.

2.6.1 Telecommunications Cables

There are telecommunication cables located in the road reservation which are aligned approximately parallel to the road. The cables are not expected to be impacted by the works except where drainage works are required. Generally the cables located parallel to the highway appear to be located clear of culverts and may not require relocation. However, some culvert extension works may require some of the cables to be lowered.

2.6.2 Water

There are existing water service connections owned by local shack owners which have been installed through existing culverts. The services will be temporarily disconnected to allow the extension of culverts and or installation of headwalls.

3 Social, Environmental Impacts and Stakeholder Engagement

3.1 Property Acquisition

The project will not require any property acquisition.

3.2 Property Access and Junctions

There are junctions and accesses to shacks along the proposed works. The junctions and accesses will remain open during the construction works. The pavement overlay will be constructed to match into the existing junction and access levels.

3.3 Noise

The *Tasmanian State Road Traffic Noise Management Guidelines 2015* provides guidance regarding traffic noise mitigation decisions by firstly defining 'eligible scenarios', which are scenarios where noise mitigation will be considered, and then defines 'eligible buildings', which are buildings within a scenario for which mitigation will be considered.

The Guidelines also explicitly identify scenarios, such as safety upgrades, where mitigation will not be considered. Whilst the project is not primarily a safety upgrade, provision of a sealed road surface will provide a safer operating environment and combined with a reduction in the speed limit will reduce the traffic noise levels. The project is therefore not considered an eligible scenario and as a consequence further noise mitigation will not be provided.

3.4 Flora

A flora survey for the road corridor was undertaken. Review of the survey findings indicates that the works are unlikely to impact on any threatened flora.

A survey of weeds within the road reservation was included in the flora and fauna habitat survey. There are several varieties of weeds within the extent of the works including:

- *Senecio jacobaea* (ragwort)
- *Marrubium vulgare* (horehound)
- *Verbascum virgatum* (twiggy mullein)
- *Navarretia squarrosa* (skunkweed)
- *Leucanthemum vulgare* (oxeye daisy)
- *Potentilla anglica* and *P. reptans* (cinequefoils)

It is intended to treat weeds through the incorporation of appropriate weed management clauses into the construction specification.

3.5 Fauna

A fauna habitat survey for the road corridor was undertaken. Review of the survey findings indicates that the works are unlikely to impact on any threatened fauna.

3.6 Aboriginal Heritage

An Aboriginal Cultural Heritage Survey of the Haulage Hill was undertaken in June 2007. No Aboriginal sites have previously been registered within the Limit of Works and no Aboriginal sites or cultural landscape values were identified within the modified landscapes adjacent to the project area.

To ensure there are appropriate mechanisms in place for the unlikely event that an item of Aboriginal heritage is identified during construction of the works an Unanticipated Discovery Plan will be developed and incorporated into the construction tender documents.

3.7 Historic Heritage Assessment

An Historic Cultural Heritage Survey was undertaken in July 2007. A desktop search of all authoritative registers undertaken prior to the field survey revealed the following:

- There are no places in the study area that are listed on the National Heritage List, the Commonwealth Heritage List or the Register of the National Estate as historic places.
- There are no places in the study area that are listed on the Tasmanian Heritage Register.
- There are no places within the study area currently listed in the Central Highlands Planning Scheme 1998.
- The Tasmanian Historic Places Index indicates that there are three sites located nearby to this section of the road, but well outside the project area.
- The field study discovered the following features:
 - Concrete Mileposts
 - Department of State Growth Link 58 chainage 0.88
 - Department of State Growth Link 58 chainage 2.48
 - Department of State Growth Link 58 chainage 4.11
 - Department of State Growth Link 58 chainage 5.69
 - Department of State Growth Link 58 chainage 7.29
 - Department of State Growth Link 58 chainage 8.92
 - Department of State Growth Link 63 chainage 0.40
 - Department of State Growth Link 63 chainage 1.99
 - Department of State Growth Link 63 chainage 5.20
 - Department of State Growth Link 77 chainage 1.31
 - Department of State Growth Link 77 chainage 2.87

- Former land route - between Department of State Growth Link 77 chainages 1.67 - 1.76 and 1.92 - 2.04 on the eastern side of the road.

Concrete mile posts will be removed prior to the works and reinstated on completion of construction in the same relative position, and where they will not pose a hazard to road users.

Road improvements will generally be confined to the existing road formation. In the event that drainage works are required to impact upon the former land route, the disturbance will be limited to as much as necessary and as little as possible.

3.8 Landscape and Visual Impacts

No significant changes are proposed to the existing road alignment. The works involve overlaying the existing pavement to improve pavement strength and sealing. The works will therefore have low landscape and visual impacts on the surrounding area.

3.9 Stakeholder Engagement

The Department consulted with a number of stakeholders during the planning, design and construction phase of the Miena to Liawenee stage of the project. Consultation was undertaken with adjacent landowners and the Central Highlands Council to discuss how the road works would affect their properties.

The consultation during the planning phase also included letters and emails to adjacent landowners, local bus operators, transport operators and associations, heavy vehicle operators and the Central Highlands Council. In addition, advice was also sent to emergency services, local businesses in the region and the local visitor information centre prior to road works commencing.

Further stakeholder engagement activities are planned for the next stage of works from Liawenee to Haulage Hill, including an information flyer to be mailed to adjacent landowners and approximately 300 nearby shack owners and local businesses. Start of works information will also be published in the Central Highlands Newsletter.

Information about the project has been on the Department's road project webpage since March 2015 during the planning phase of the project and has been regularly updated as the project has progressed. <http://www.transport.tas.gov.au/road/projects>

The key stakeholders for the road sealing works between Miena and Haulage Hill are:

- Adjacent landowners
- Shack owners nearby to the road works sites
- RACT
- Tasmania Farmers and Grazers Association (TFGA)
- Department of Primary Industry Parks Water and Environment
- Central Highlands Council
- Public utilities
 - Hydro Tasmania
 - Telstra
- Heavy vehicle Industry
- Transport associations
- Emergency services
- Local visitor information centre
- Local bus operator: GL & IS Glover
- The Great Lakes Hotel, General Store and Thousand Lakes Lodge

3.10 Development Approvals

The scope of works clearly fit within the scope of the exemption for minor upgrade of existing infrastructure under the Planning Scheme. The Central Highlands Council have been informed of the project and have not raised any concerns.

4 Project Program and Costs

4.1 Project Program

The key activities and their completion dates are outlined in Table 4.

Table 4 Project Program

Activity	Completion
PPR (Scoping, Development and Delivery)	February 2017
Detailed Design and Preparation of Tender Documents	August 2017
Tender Process	September 2017
Award of Construction Contract	October 2017
Construction	November 2017

4.2 Costs

A cost estimate has been prepared based on the design presented in this report. Quantities have been taken from field measurements and rates estimated from similar jobs and past experience. The Department's standard procedure of preparing P50 and P90 cost estimates has been adopted. The P50 estimate has a probability of 50% that the cost will not be exceeded and the P90 has a 90% probability that the cost will not be exceeded. The inherent risks and contingent risks used to calculate the P50 and P90 cost estimates have been informed by similar jobs and past experience.

Table 5 Cost Estimate

Costs	
Development Phase	\$128,580
Delivery Phase	\$448,094
Total Costs**	\$8,619,267

+ Including the works currently underway from Miena to Liawenee.

* Total Cost inclusive of P50 Contingency and cost escalation.

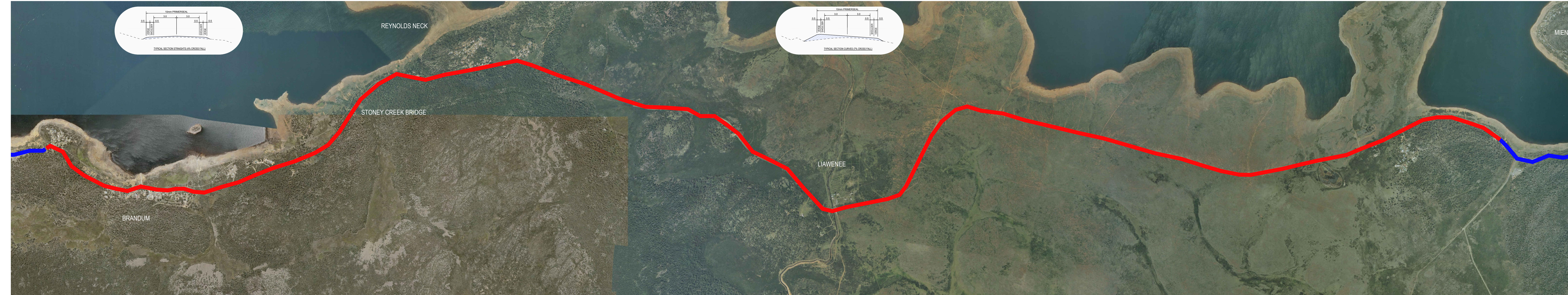
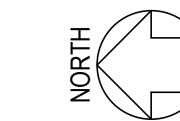
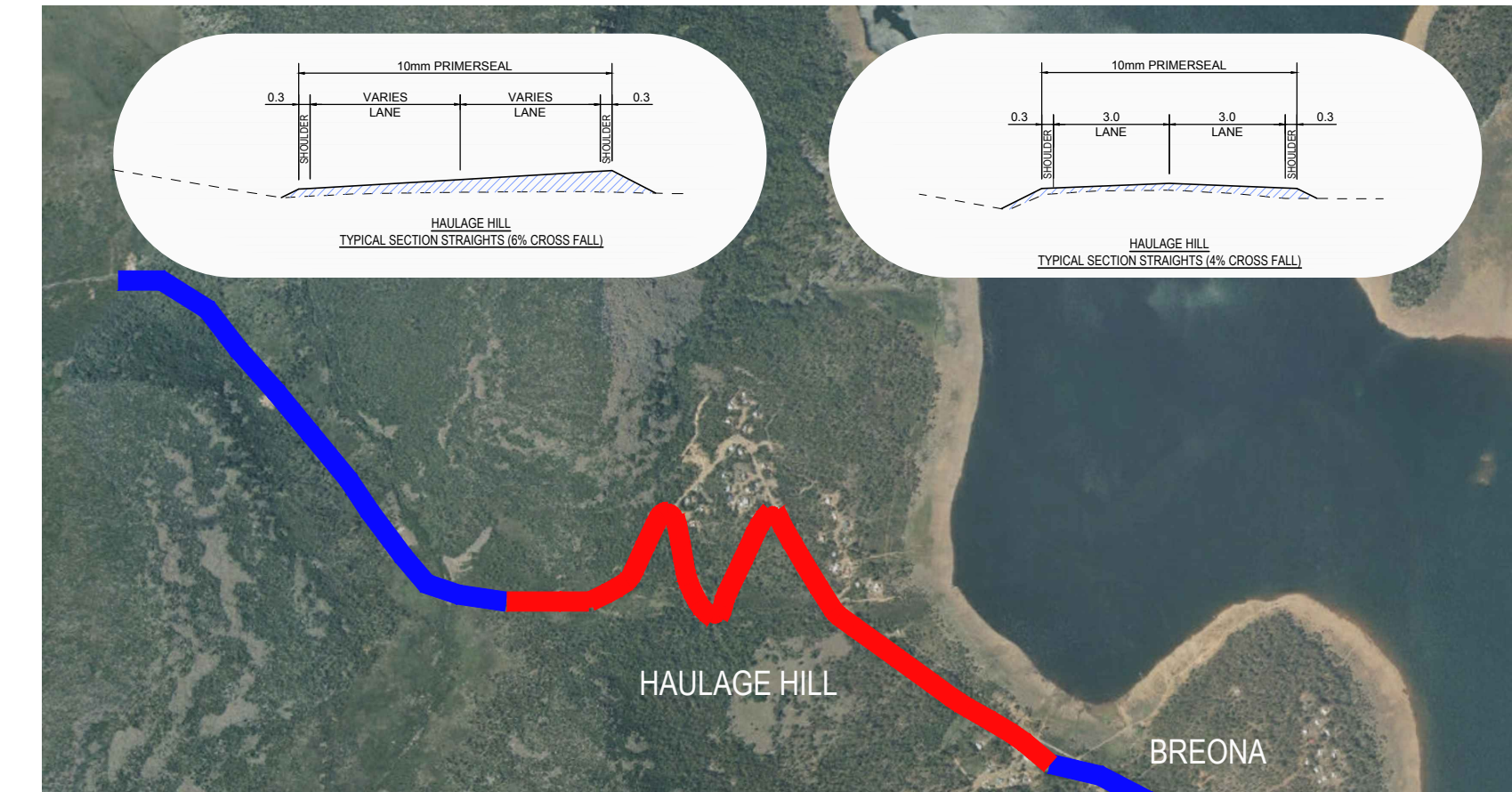
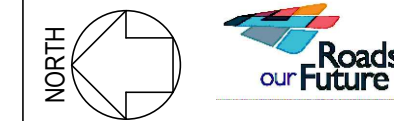
The Australian Federal Government is contributing \$5M towards the construction of this project.

5 Conclusion

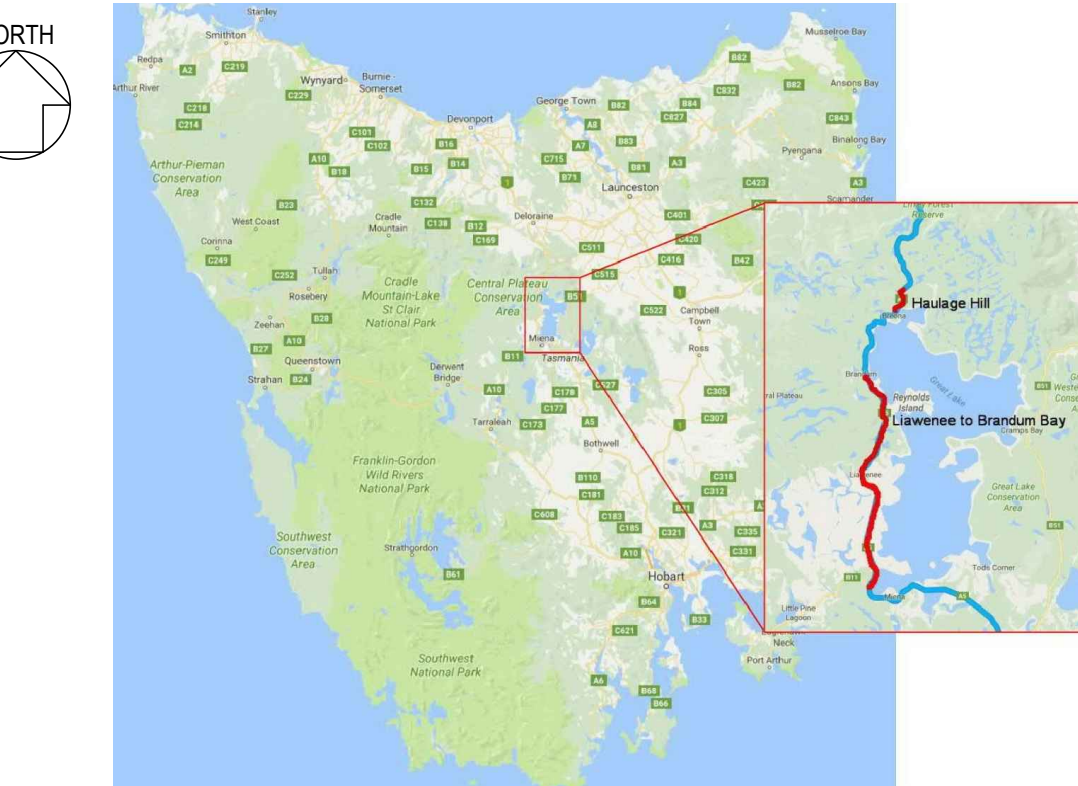
The works align with the objectives of the Visitor Infrastructure Upgrade Program and will complete an important link between South and North West region of the State via the increasingly popular Central Highlands.

It is recommended that the project be approved to enable tendering and construction to proceed.

Appendix A. Plan



Lake Secondary Road - Miena to Haulage Road Sealing



LOCALITY PLAN
N.T.S



DESIGN