North East Freight Roads Bridport Main Road Upgrade

Submission to the Parliamentary Standing Committee on Public Works

Date: June 2012

Department of Infrastructure
Energy and Resources

Tasmania
Explore the possibilities

Contents

A. PROPONENT AND PROJECT DETAILS

A1. Proponent

Department of Infrastructure, Energy and Resources
10 Murray Street
HOBART TAS 7000

A2. Project Description

General

In 2007 the Government made an election commitment to upgrade freight roads in north east Tasmania under the North East Freight Roads (NEFR) Program. Five projects were put forward and include the upgrade of Bridport Main Road between Scottsdale and Bridport. A total of $42.5million dollars has been allocated to the North East Freight Roads Program. The Australian Government has committed $34million and the Tasmanian Government has committed $8.5million to the project. From the NEFR program approximately $14million has been allocated to Bridport Main Road.

Bridport Main Road is planned to be upgraded between Scottsdale and Bridport. The site is shown on the locality plan at Figure1.

Bridport Main Road connects Scottsdale, Bridport and Bell Bay. The road is gazetted as Higher Productivity Vehicle and Higher Mass Limit Vehicle route. It is the primary freight route out of the north east region which has large tracts of plantation forestry, dairy farming and other agriculture.

Freight Transport

Since the inception of this project the nature of the Forest Industry in Tasmania has changed. Some of these changes include:

- Some industry members are no longer logging Native Forests

Figure 1

- The soft wood mill located at Scottsdale has closed and another opened at Bell Bay.
- The market for hardwood timber is uncertain.

Notwithstanding this, the extensive hardwood and softwood plantations will result in forestry freight at high levels into the future and this freight will be the most significant freight task in the region.

Agricultural freight is the second largest freight task, with milk production the largest component of the agricultural sector in terms of freight. Irrigation schemes are resulting in improved water reliability and grazing land is rapidly being transitioned to

dairying and cropping. This change will result in increased product and associated increased input of fertilizer and will be a major contributor to projections of doubling of the agriculture freight task from the area over the next 20 years.

Agriculture production and particularly dairy is centred near the towns of Winnaleah, Ringarooma, Scottsdale, and Gladstone. Bridport Main Road acts as the primary transport link for all these localities and bisects one of the areas to be serviced by the major irrigation investment. Associated with the growth in freight will be increased farm employment and travel to work journeys on this section of road.

Between Scottsdale and Bridport the width of the road does not comply with the minimum standard for Higher Productivity Vehicles (HPV) and Higher Mass Limit Vehicles (HML). The road is also a school bus route and on school days there is a curfew in place between 8 and 9am, and between 3 and 4pm for HPV and HML vehicles because there is insufficient room for school buses to pull off the road.

Existing Road

There are two distinct sections of this road:

- The southern section between Burnside Road and Hurst Creek Bridge which is approximately 8 km long.
- The northern section between Hurst Creek Bridge and Bridport which is approximately 8.6k m long.

The physical attributes of Bridport Main Road between Scottsdale and Bridport are:

- The seal width varies but is generally between 6.9 m and 7.5 m. The narrowest seal width 6.4 m. Generally the southern section is narrower than the northern section.
- The pavement condition is variable. Some of the pavement is aged, rough and deformed while in other areas the pavement is in a reasonable condition. Generally the southern section is in a poorer condition than the northern section.
- The geometric alignment is deficient in places. There are some sections where the geometric alignment is not suitable for the current operating speed.
- Some junctions are deficient. There are some junctions that provide access for school buses and freight vehicles and these junctions have safety and geometric alignment issues.

- School bus bays are not consistent and do not comply with minimum standards. There are some school bus bays that have a long history of use and others that are temporary in nature.
- There are some sections of road safety barrier where the distance between the faces of barrier on opposite sided of the road is less than 8 m.
- Hurst Creek Bridge is narrow and the distance between the faces of the road safety barrier is 6.7 m.

Proposed Road Upgrade

The objectives of the road upgrade are to:

- Improve freight efficiency.
- Improve road safety for all road users.
- Enable the operation of school buses and HPV and HML vehicles at the same time.
- Minimise potential conflict for freight and general vehicles.

The design standard adopted is:

- 8.0 m seal width consisting of two 3.0 m sealed lanes with 1.0 m sealed shoulders and 0.5m verges on both sides of the road.
- Design speed – 80km/hr.

The proposed upgrade has been broken into 9 smaller projects and its key features are shown at Figure 2.

The planned road upgrade will involve:

In the Southern section (Projects 1 to 4. Burnside Road to Hurst Creek):

- Widen 8 km of the road and increase the seal width to 8 m. Widening will predominantly take place on one side only.
- Strengthening 8 km of the road pavement. This will improve the ride quality and extend the life of the pavement.

Bridport Main Road Upgrade

Figure 2 – Bridport Main Road Upgrade

- Provide a Basic Turn Treatment – Right (BAR) junction at each of Browns Road and Jetsons Road to provide freight vehicles with safe access to vegetable packing sheds.
- Improve the alignment of the Muskfield Road North Junction.
- Provide a BAR junction at the access to the Dorset Council Waste Transfer Station to provide safe access to this site.
- Upgrading 2 existing bus bays and providing 8 new bus bays. This will reduce conflict with HPV and HML vehicles and enable an application to be made to remove the HPV and HML vehicle curfew currently operating at school bus travel times.
- Replace and widen Hurst Creek Bridge.
- Relocation of public and private utilities
- Acquisition of property.

The scope of work in the Northern Section (projects 5 to 9. Between Hurst Creek and Bridport) includes:

- Widen 1.8 km of the road at two different sections. This will increase the seal width at these two sections to 8 m.
- Relocate existing road safety barrier at 4 locations to provide a minimum separation of 8 m.
- Upgrading two existing bus bays and providing four new bus bays. This will remove conflict with HPV and HML vehicles and enable an application to be made to remove the HPV and HML vehicle curfew during school bus hours.
- Relocation of public and private utilities
- Acquisition of property.

Works in the northern section will be delivered as a Separable Portion if funding permits.

Cost estimates have been prepared and it is forecast that upgrade works in the southern section can be funded by the current project budget. After tenders for the southern section have been awarded, the budget for the North East Freight Roads

Program can be reviewed and the feasibility of the upgrade works in the northern section considered. The value of works on the northern section is estimated to be $2.3 million at 50% confidence level (P50) and $2.5 million at 90% confidence level (P90).

In the northern section there are also populations of shiny grass tree (*Xanthorrhoea bracteata*), which is listed as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). An EPBC Act referral will be submitted to the Australian Government in relation to potential impacts of the proposed road works on the shiny grass tree. The feasibility of works in the northern section will be dependant on the assessment of the EPBC Act referral.

The Planning and Scoping phase of the project is complete and the following works have been undertaken:

- Agricultural Land Classification Assessment – The road upgrade will impact on approximately area 8300m^2 (0.83ha) of Prime Agricultural Land (classes 2 and 3). This is not considered to be in conflict with the Tasmanian State Policy for Protection of Agricultural Land 2009.
- Historic Cultural Heritage assessment – there are no permits required.
- Aboriginal Heritage Assessment – there are no permits required.
- An EPBC Act referral for potential impacts on shiny grass tree in the northern section will be submitted to the Australian Government in June 2012.
- An application to Policy and Conservation Assessment Branch of DPIPWE for a “Permit to Take” for direct impacts on State listed threatened and rare plants will be submitted in June 2012.
- Stakeholder Engagement – DIER has met with Dorset Council and visited all landowners directly affected by the proposed works. There are approximately 30 privately owned properties that will have land acquired and new fences and accesses constructed. Property will also be acquired from the Crown and Dorset Council. A Public Display of the proposed works was held for a two week period starting on 21 May 2012.
- Geotechnical Investigations.

- Preparation of a Development Application for Dorset Council. The proposed works are categorised as “Major Road Improvement” and is a discretionary activity.
- Cost Estimation

Construction will commence in the last quarter of 2013 and be completed by the end of June 2014. The final seal will be completed by the end of March 2015.

B. STRATEGIC FIT

The Scoping Phase was approved in July 2011 as an amendment to the original scoping phase approved in June 2010.

The North East Freight Strategy Project is identified in the MOU between the Australian and Tasmanian Governments.

The Strategic Merits Test was forwarded to the then Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) in June 2008 as the business case for this Nation Building Program Schedule A project.

C. PROJECT OUTCOMES

Achieving the project objectives will result in the following key outcomes:

- The road will have a consistent 8 m seal width and comply with the standard for HPV and HML vehicles.
- Freight movement will be more productive and efficient.
- Through provision of increased road width and bus bays, an application to remove the gazetted HPV and HML curfew during school bus operating hours can be made.
- Road safety will be improved due to improved road geometry.
- Road safety will be improved because the junctions at Browns Road, Jetsons Rd South, Muskfield Rd north and the Dorset Council Waste Transfer Station access will be upgraded.

- In the southern section eight new bus bays will be provided and two existing bus bays will be upgraded. In the northern section four new bus bays will be provided and two existing bus bays will be upgraded. This upgrading will be undertaken to Austroads guidelines.
- Maintenance costs will be reduced for the short to medium term.
- Road roughness will be less and vehicle maintenance and operating costs will reduce.

D. PROJECT APPROACH AND TIMING

The development and delivery program is underpinned by the need to complete the project by the end of the Nation Building Program which ends in June 2014.
Key milestones for the Development and Delivery Phase are described in the Table 1.

Table 1: Development and Delivery Phase Milestones

Key Milestones	Completion Date/Timing	Critical Path (Yes/No)
Submit EPBC Act referral	April 2012	no
Receive EPBC Act assessment (initial response)	June 2012	no
Submit application to Tas Government for Permit to Take threatened species	April 2012	no
Stakeholder Engagement – public display	April 2012	no
Submit Development and Delivery Phase PPR	April 2012	yes
Assessment and approval of PPR.	June 2012	yes
Development Phase		
Address EPBC Act requirements	April 2013	no
Preliminary Design	September 2012	yes
Property Acquisition and boundary verification	January 2013	no
Development Application – submit for approval	June 2012	no
Parliamentary Standing Committee for Public Works – Project approval	December 2012	no

Key Milestones	Completion Date/Timing	Critical Path (Yes/No)
Detailed Design and Tender Documentation	December 2012	yes
Delivery Phase		
Electricity and NBN assets relocated	April 2013	yes
Southern section		
Call Tenders – southern section	January 2013	yes
Award Contract – southern section	April 2013	yes
Construction starts – southern section	May 2013	yes
Construction complete – southern section	May 2014	yes

Northern Section (if feasible)		
Call Tenders – northern section (if feasible)	May 2013	no
Award Contract – northern section (if feasible)	July 2013	no
Construction starts – northern section (if feasible)	October 2013	no
Construction complete – northern section (if feasible)	May 2014	no
Final seal (northern and southern section)	March 2015	no

E. FINANCIAL ANALYSIS

E1. Anticipated project Total Outturn Cost

The total outturn cost has been identified for four options. The options are:

- Option A – includes the southern section only (projects 1 to 4)
- Option B – includes the southern section (projects 1 to 4) and project 5 in the northern section.
- Option C – includes the southern section (projects 1 to 4) and bus bays and guardrail improvements only in the northern section (reduced scope in projects 5 to 9)
- Option D – includes all works in the southern and northern section.

The preferred option is Option C.

The location of each project is shown on Figure 2. A summary of the 50% confidence level (P50) and 90% confidence level (P90) cost estimates are presented in Table 2.

Table 2: North East Freight Roads –Strategic Cost Estimate Summary

Component of Strategic Cost Estimate	Option A Projects 1,2,3&4 ($mill)	Option B Projects 1,2,3,4&5 ($mill)	Option C Projects 1,2,3,4,5#,6,7, 8# & 9 ($mill)	Option D Projects – all ($mill)
P50 Total Out-turn Cost	12.8	13.8	13.4	15.4
P90 Total Out-turn Cost	14.4	15.5	15.1	17.3

projects 5 and 8 in Option C includes bus bays only.

E2. Benefit Cost Analysis

The Benefit Cost Analysis (BCA) was carried out for the four different project options (A, B, C and D) and the sensitivity of the Benefit Cost Ratio (BCR) was tested by assessing each option for:

- The P50 estimate and the P50 plus 10% estimate
- The P90 estimate and the P90 plus 10% estimate
- A discount rate of 4%, 7% and 10%.

At the discount rate of 4% applied to the P50 and P90 estimates, the Benefit Cost Ratio and Net Present Value for option C is presented in Table 3.

Table 3: BCR / NPV– Option C

	Benefit Cost Ratio	Net Present value
P50 estimate	2.01	$14.0m
P90 estimate	1.95	$14.4m

F. RISK AND GOVERNANCE

DIER has established a Governance Structure and Risk Assessment process, both of which have been set up to support delivery of the North East Freight Strategy. Governance for this project fits in with the overall NEFR governance structure set out in

the May 2010 PPR (Scoping) – North East Freight Roads and reiterated in the May 2011 Amendment.

The Governance structure is detailed in Appendix B.

Key risk areas:

- Delivery of project by the end of June 2014
- Design time and DIER review and approval time
- Scope creep during design or construction
- EPBC Act referral and impacts on delivery the northern section
- Development Application - representations impact on timeframe
- Aurora Energy – undertaking design, landowner way leave agreements and relocation of poles in the required timeframe
- School Bus Bays – not able to accommodate and/or satisfy all Parents of school children catching school buses.
- Houses that are very close to the road – widening the road towards houses that are already close to the road – objections from landowners.
- Location and identification of underground services.

The critical path for the project is based on all works being completed by the end of June 2014.

F1. Environmental and cultural legislation?

The project will trigger the following Commonwealth and State Legislation:

Commonwealth legislation:

The Environment Protection and Biodiversity Conservation Act 1999

- An EPBC Act referral is required as the roadworks impact the Shiny Grass Tree in the northern section and for the secondary impact that that Root Rot Fungus (P*hytophthora cinnamomi*) may have on the Shiny Grass.

State legislation:

Environmental Management and Pollution Control Act 1994

- There is no requirement under Schedule 2 for an Environmental Impact Assessment.

Aboriginal Relics Act 1975

- There are no Aboriginal Relics known in the area and Aboriginal Heritage Tasmanian (AHT) have advised that no further investigations are required as the road upgrades are deemed to be in low risk areas**.**

Threatened Species Protection Act 1995

- A Permit to Take will be required for impacts on the Shiny Grass Tree and the showy willowherb (*Epilobium pallidiflorum*).

Weed Management Act 1999

- There are several species of declared weeds in the area of roadworks. Declared weeds will be managed through the implementation of an integrated Weed and Plant Pathogen Management Plan.

Historic Cultural Heritage Act 1995

- There are no properties listed under the Tasmanian Heritage Register within the vicinity of the proposed road upgrades. Approval under the *Historic Cultural Heritage Act 1995* is not required.

State Policy on the Protection of Agricultural Land 2009 (PAL Policy)

- The area of Prime Agricultural Land impacted by roadworks is approximately 8300m^2 (0.83ha) and this is not considered to be in conflict with the Tasmanian State Policy for Protection of Agricultural Land 2009.

Land Use Planning and Approvals Act 1993

Dorset Planning Scheme 1996

- The project will require a Planning Permit from Dorset Council.

F2. Public Consultation

DIER has held a variety of meetings with the freight transport industry, school bus operators, and Dorset Council between 2008 and 2011. In 2011 DIER staff drove

through the site as a passenger in a B-double log truck provided by a local transport operator and experienced first hand the ride quality of the road. In 2011, DIER also met with representatives of the two local school bus operators. DIER was also a passenger on the Bridport School bus run to experience first hand the drivers comments about bus stops.

In 2011 all landowners directly affected by the works have been visited and the scope of the works discussed with them. In May 2012 DIER had started making contact with landowners again to keep them informed about the project.

A Public Display was held in May 2012 and comments received are being reviewed. .

G. FREIGHT DEMAND FORECASTS

Forestry Freight

Forestry freight is the dominant freight task within the north east and on all major roads within the region. In DIER's 2009 Tasmanian Freight Survey just over 1 million tonnes of hardwood logs and 680,000 tonnes of softwood logs were harvested from the region, representing 22% and 50% of the total state harvest respectively. To date, quantification of the forecast forestry task in the region has been calculated using DIER's Forestry Freight Model (FFM) which utilises industry supplied projected harvest volume data and timber destinations. Two sets of data have been analysed with the FFM:

- Combined plantation (including hardwood and softwood) and non-plantation timber resource utilising data collected in 2003
- Plantation only data utilising data collected in 2011.

The plantation only data represents a conservative estimate of future forestry freight, while the original data, which includes non-plantation timber, is likely to now represent an upper harvest limit. The plantation only data was obtained in 2011, during a period of industry down-turn, making the forecast volumes for 2011-2015 below the long-term forecast average. Consequently, analysis of the future forestry task in the region uses data from 2015 onwards.

The Tasmanian Forests Intergovernmental Agreement (2011) has seen 430,000 hectares of native forest immediately placed into informal reserves, with an independent verification group examining a total of 572,000 hectares for their conservation value. While the IGA will see changes to harvest forecasts across Tasmania, it is important to note that in the north east region a high proportion of timber is contained within the plantation estate. There are also significant areas of State Forest that have not been identified for reservation under the IGA, and which may also be available for future harvesting (see green areas on figure 4). It is on this basis that future harvest volumes from the region are likely to be higher than the plantation only dataset.

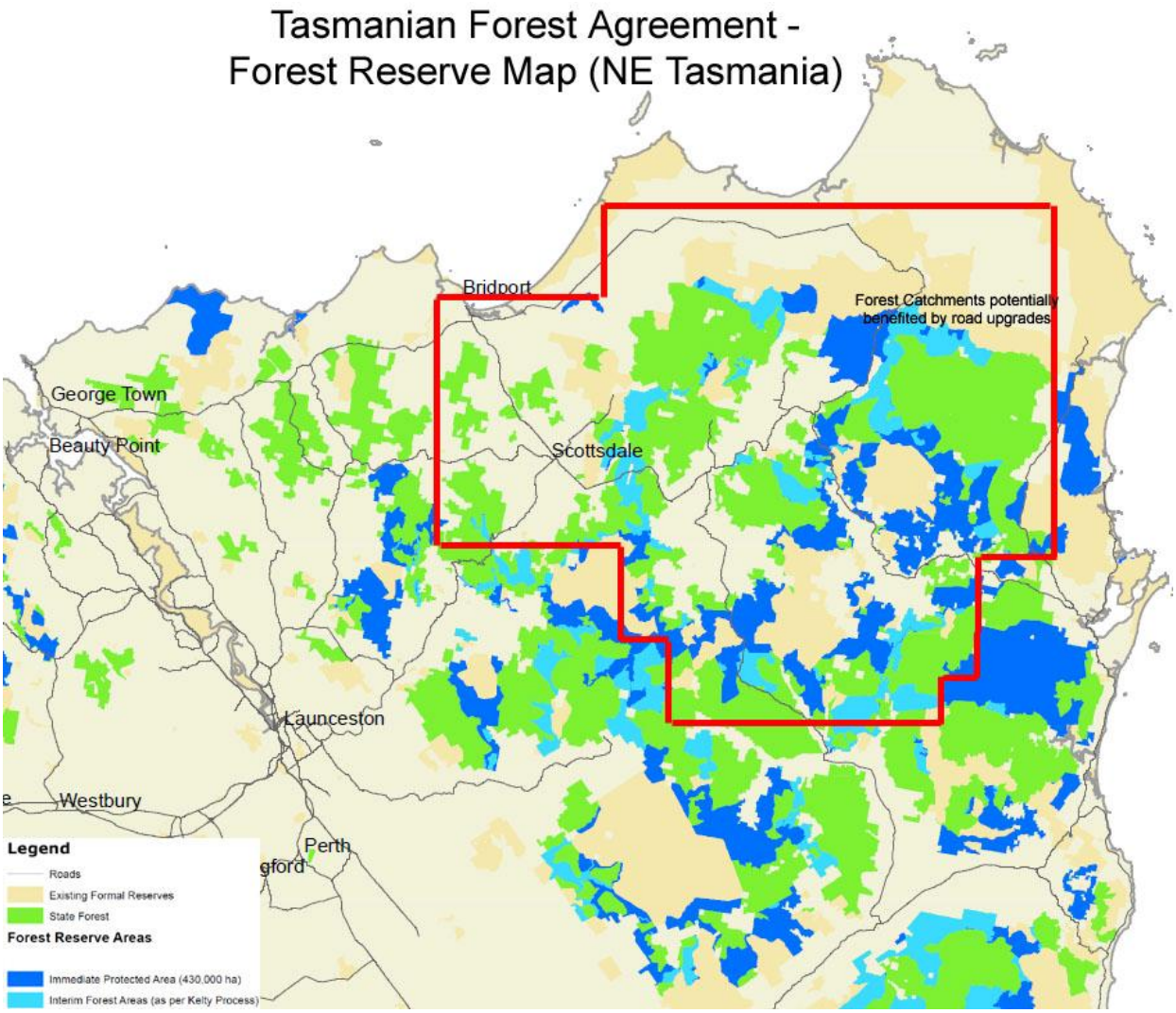


Figure 3: Tasmanian Forest Agreement – Forest Reserve Map (NE Tasmania)

In 2009 Transport of Forestry Freight on Bridport Main Road was 768,000 tonnes, represented over 60% of all freight transported. This consisted of approximately

338,000 tonnes of hardwood logs, 325,000 tonnes of soft wood and 105,000 tonnes of woodchips.

In terms of future forestry freight, modelled forecasts are summarised in Table 9. Truck numbers are on the basis of trucks carrying plantation logs only (lower limit) and both plantation and non-plantation logs (original FFM data - representing an upper limit). Comparing 2015 to 2025, on Bridport Main Road laden log truck numbers from plantation rise from 61 to 74 per day (average 68), with upper limit values decrease from 162 to 119 per day (average 146).

Table 9: Forestry Freight Modelling for selected years

PLANTATION ONLY Forestry Freight using Bridport MR

Location	measure	2012	2015	2020	2025	average	unit
Bridport MR (sth Bridport)	[annual tonnage]	351,573	471,391	536,408	568,637	496,494	tonnes / year
	[Laden weekly trucks]	211	283	322	342	298	trucks /week
	[Laden Daily trucks]	46	61	70	74	65	trucks/day

ALL TIMBER Forestry Freight using Bridport MR

Location	measure	2012	2015	2020	2025	average	unit
Bridport MR (sth Bridport)	[annual tonnage]	773,500	1,243,360	1,213,740	911,180	1,035,445	tonnes / year
	[Laden weekly trucks]	465	747	729	548	622	trucks /week
	[Laden Daily trucks]	101	162	158	119	135	trucks/day

Notes: trucks per day assume 32 tonne payload per truck operating 240 days per year.

Doubling of figures required to include un-laden truck trips

2012 Plantation data provided with knowledge of current downturn in forestry industry. Upper-limit data provided before downturn

Agriculture Freight:

Regional production from the dairy industry is forecast to grow by nearly 50% by 2015, while longer term projections out to 2030 for the agricultural sector as a whole utilise growth figures of 150% above 2009 levels. Recently completed and future proposed irrigation schemes will improve water reliability resulting in expansion of the area suitable for dairy production, and will be a major contributor to the projected growth in the entire agricultural sector.

Agricultural freight has been estimated based on information direct from Fonterra and DIER's 2009 Tasmanian Freight Survey.

In 2011, over 140,000 tonnes of raw milk was produced in the north east with mini B-double trucks (57 tonne GVM, milk capacity approximately 37 tonnes) used to transport raw milk to a processing facility at Fonterra's Spreyton plant in the north west of Tasmania utilising Bridport Main Road between Scottsdale and the East Tamar

Highway. Milk production fluctuates throughout the year with peak production in September to November resulting in up to 22 truck-loads per day on Bridport Main Road. The average throughout the year is 11 trucks per day.

DIER's Tasmanian Freight Survey was conducted in 2009, and provides heavy truck freight estimates for the north east region. Estimated non-dairy agricultural freight on Bridport Main Road was 91,000 tonnes. Including raw milk, the total 231,000 tonnes of agricultural freight represents 20% of all freight on Bridport Main Road and contributes 32 laden truck movements per day (various size trucks).

Appendix A – Risk Assessment

RISK ASSESSMENT MATRIX		LIKELIHOOD (Refer to Definitions right)				
		1. Rare	2. Unlikely	3. Possible	4. Likely	5. Almost Certain
CONSEQUENCES (Refer to Definitions Overleaf)	6 - Catastrophic	B	B	A	A	A
	5 - Extreme	C	B	B	A	A
	4 - Severe	C	C	B	B	A
	3 - High	D	C	C	B	B
	2 - Medium	D	D	C	C	B
	1 - Low	D	D	D	C	C

	Risk Action Levels
A - Extreme	▪Immediately stop the process; ▪Minister/Secretary decision/direction required.
B - High	▪Take immediate action to further control the risk; ▪General Manager/Governance Group action required.
C - Medium	▪Specific risk management plan to be implemented. ▪Review for improvement opportunities.
D - Low	▪Implement normal procedures and processes. ▪Monitor risk, reduce if practicable.

Likelihood Definitions: ***What is the likelihood of the selected consequences occurring?***	
Rating	***Criteria***
5. Almost Certain	▪ **Over 90% probability; or** ▪ "Happens Often"; or ▪ "Unlikely that it won't happen"
4. Likely	▪ **Greater than 50% probability; or** ▪ "Could easily happen"
3. Possible	▪ **Greater than 10% probability; or** ▪ "Could happen, has occurred before".
2. Unlikely	▪ **Greater than 1% probability; or** ▪ **"Hasn't happened yet but could".**
1. Rare	▪ **Less than 1% probability; or** ▪ Conceivable, but only in extreme circumstances.

Consequence Definitions – *What are the likely consequences in the event of a failure?*

Rating	Community	Environment & Heritage	Legal & Compliance	Reputation	Management Impact	Financial Impact	Program Impact
Catastrophic	▪ Complete loss of trust by affected community leading to social unrest & outrage.	▪ Very serious long term impairment of ecosystem or damage to a species; ▪ Total destruction of significant heritage items and complete loss of heritage values	▪ Major litigation with significant damages costs; ▪ Jailing of Minister or Secretary; ▪ Court or NGO imposed fine	▪ Minister or Government forced to resign;	▪ Requires management at Ministerial level. ▪ Requires new or amended Legislation.	▪ Project unable to proceed; ▪ Loss of Federal funding; ▪ Election commitment projects cancelled or deferred to balance budget	▪ Project is never able to proceed
Extreme	▪ Prolonged community outrage;	▪ Serious medium term environmental effects; ▪ Partial loss of significant heritage items and values	▪ Major litigation ; ▪ Class action; ▪ Possibility of custodial sentence for Senior Management.	▪ Secretary leaves; ▪ National press reporting. ▪ Vote of no confidence in Minister	▪ Critical event that requires considerable Secretarial time to handle over many months.	▪ Additional funding required from Federal Government at project level ▪ Additional funding required from State to balance program budge	▪ Project is delayed indefinitely
Severe	▪ Long-term community irritant leading to disruptive actions & requiring continual management attention	▪ Moderate short-term effects but not affecting ecosystem function; ▪ Disturbance of heritage items and moderate impact on heritage values	▪ Major breach of regulation with punitive fine; ▪ Significant litigation involving many weeks of Divisional Management time.	▪ Divisional Manager leaves; ▪ State-based media reporting.	▪ Will require the involvement of the Secretary and will take the time of R & T General Manager over an extended period	▪ Other projects cancelled or deferred (Internal budget reallocation.)	▪ Critical timeframe for delivery cannot be met
High	▪ Short term community outrage or longer term unrest & dissention	▪ Minor effects on biological or physiological environment; ▪ Minor effects on heritage values	▪ Serious breach of regulation with investigation or report to authority with prosecution and/or moderate fine possible.	▪ Manager disciplined; ▪ Significant level of discussion in Parliament; ▪ Local media reporting.	▪ Significant event that can be managed with the careful management attention; ▪ Will take some Branch-level Management time over several weeks.	▪ Scope reduced on other projects in the program. ▪ Internal budget reallocation.	▪ Significant delay against non-critical timeframe for delivery
Medium	▪ One-off community protest requiring intervention and management attention	▪ Limited damage to minimal area or low significance;	▪ Minor legal issues, non-compliances and breaches of regulation.	▪ Employee disciplined; ▪ Public awareness.	▪ Will require Section Manager attention over several days.	▪ Scope reduced on this project	▪ Moderate delay against non-critical timeframe for delivery
Low	▪ One complaint	▪ Small impact;	▪ Minor breach of regulation.	▪ No visible impact on the portfolio	▪ Impact of event absorbed in normal management activity.	▪ Use of contingency funds is required.	▪ Minor delay to program

Development Stage

The Risk	Consequence	Risk Rating	Mitigation measure	Risk Rating
Tasks in this stage take too long and impact on overall project timeframe.	• Project goes beyond June 2014. • Completion of construction occurs in 2014-15 and this is beyond the end of the Nation Building Program.	B	• Develop detailed program early. • Identify critical tasks. • Provide adequate resources for tasks. • Monitor program monthly and identify delays and mitigate asap.	C
EPBC Act referral for northern section – (projects 5 to 9) - controlled action imposed and difficult to comply.	• Project 5 to 9 has onerous EPBC Act assessment requirements and requires significant work. • Additional work will take time and add significant cost.	B	• Ensure EPBC Act referral proposes measures to reduce impacts. • Submit EPBC Act referral ASAP.	C
Development Application – There are representations lodged against the Development Application. In particular representations regarding acquisition of prime agricultural land, removal of mature stands of Pine Trees and impacts on houses close to road.	• Creates additional work and costs money. • Delays the project.	B	• Understand the Planning scheme and ensure that all proposed works are allowed by the Planning Scheme. • Well understood requirements for the development application – addresses requirements of council planning scheme.	D
Public Display – Leads to objections and issues that have not previously been considered.	• Creates additional work and additional costs. • Delays the project.	B	• Ensure all key stakeholders are consulted before public display.	C
Project scope reduces due to cost over run.	• Requires re-design and re-scoping. Adds additional cost and delays the	B	• Ensure cost estimating is based on sound information, sound risk	C

The Risk	Consequence	Risk Rating	Mitigation measure	Risk Rating
	project.		assessment and is accurate.	
School Bus bays are provided and curfew is lifted. Public outcry that school children are near the edge of the road while HPV vehicles are operating. Public outcry could gain momentum and political influence.	• Ministerial intervention • Public dissatisfaction • Creates additional work and costs the project money. • Delays the project.	B	• Ensure safest possible bus bays are provided. • Identify other HPV routes where school buses operate.	B
Aurora Energy is the owner of the electricity assets and agent for the NBN asset. Aurora Energy will undertake the design and on ground works for relocation of poles and wires. Aurora does not meet project timeframes.	• Delay to relocation of electricity and NBN assets. • Delay to overall project.	B	• Gain commitment from Aurora to complete design and on ground works to meet DIER critical path. DIER to work actively with Aurora.	C
Relocation of Electricity poles onto private land will require legally binding "wayleave" to be established. Property owner consent with wayleave are not gained and delays pole relocation design and delivery.	• Property owner consent not obtained. • Delays obtaining wayleaves may delay on ground works and delay overall program.	B	• Ensure process in place to achieve required timelines. • DIER agrees process with Aurora to gain owner consent.	C
Between chainage 3600 and 4000 there are four houses close to the road. Landowners may raise various issues that need to be addressed or make formal complaint. Issues may include: • Noise • Amount of acquisition	• Noise fence to be designed - Additional cost • Other landowners will want a noise fence. • DIER Noise Policy not complied with.	B	• Carry out noise assessment ASAP. • Liaise with landowner, provide options	C

The Risk	Consequence	Risk Rating	Mitigation measure	Risk Rating
• Accommodation works A noise assessment is not required by the State Noise Policy but is required by the DIER Noise Policy. A noise assessment has not been carried out.				
Tasmanian Government threatened species permit to "take" – not granted or has conditions.	• The proposed scope of work has to be changed, requiring re design, change of direction.	C	• Submit application early and get approvals in place ASAP.	C
Project team – key team member leaves the project.	• Project knowledge is lost. • Project is delayed leading to delayed construction start. • Additional cost to project.	C	• Ensure all relevant information and agreements is documented and recorded.	C
The location of the Optic Fibre is not known accurately in some places. This may impact on the side of the road chosen for widening.	• There may be insufficient room to widen the road without impacting on the optic fibre. • May require redesign.	C	• Locate the Optic Fibre ASAP by potholing.	D
Relocation of services requires additional environmental permits.	• Creates additional work and costs money. • Delays the project.	C	• Ensure that scope of services relocation is identified ASAP and impact on environmental matters addressed ASAP.	D
Delivery Stage				
Service authorities have not been engaged to relocate services or delay on ground works.	• Delays to construction	B	• Ensure that Service Authorities engaged and commit to the delivery on schedule.	**C**

The Risk	Consequence	Risk Rating	Mitigation measure	Risk Rating
Procurement Process delayed due to cumulative effect of delays in carrying out Development stage tasks and tasks leading up to Tendering.	• Delays critical path activities. • Makes it difficult for all works to be completed by the end of June 2014. • Construction completed in 2014-15 after conclusion of NBP	B	• Prepare detailed program. • Identify critical path. • Ensure sufficient resources • Frequent monitoring of program, identify delays early and prepare mitigation strategy.	**C**
Contract Period extended beyond end of June 2014 due to weather or other delay.	• Impact on Federal funding. • Project extends beyond the end of the Nation Building Program, June 2014.	B	• Ensure program has sufficient float to cater for potential unforseen delays. • Arrange funding / cashflow to ensure Federal funding is spent first.	**C**
Tender Prices exceed the project budget	• Project scope needs to be reduced to fit budget. • Contingency and escalation amounts are insufficient • Impact on other NEFR projects.	C	• Implement sound cost estimating practices. Review rates. Use first principles methods where appropriate. • Review inherent and contingent risks and escalation. • Risk management.	**C**
Contractor makes a substantial claim and it is paid.	• Value of claim approved exceeds contingency amount available.	C	• Ensure Tender documents are well documented, all risks managed and suitable contingency provided. • Design is correct and comprehensively reviewed. • Quantities and bulking factors for	**D**

The Risk	Consequence	Risk Rating	Mitigation measure	Risk Rating
			earthworks are accurate. • Comprehensive geotechnical investigation.	
Landowners require changes or additional works to fences, accesses or other works.	• Additional cost • Minor delays	C	• Ensure that all reasonable landowner issues are identified and documented at an early stage. • Landowner interviews are comprehensive and recorded. • Landowner agreements are comprehensive and signed.	**D**

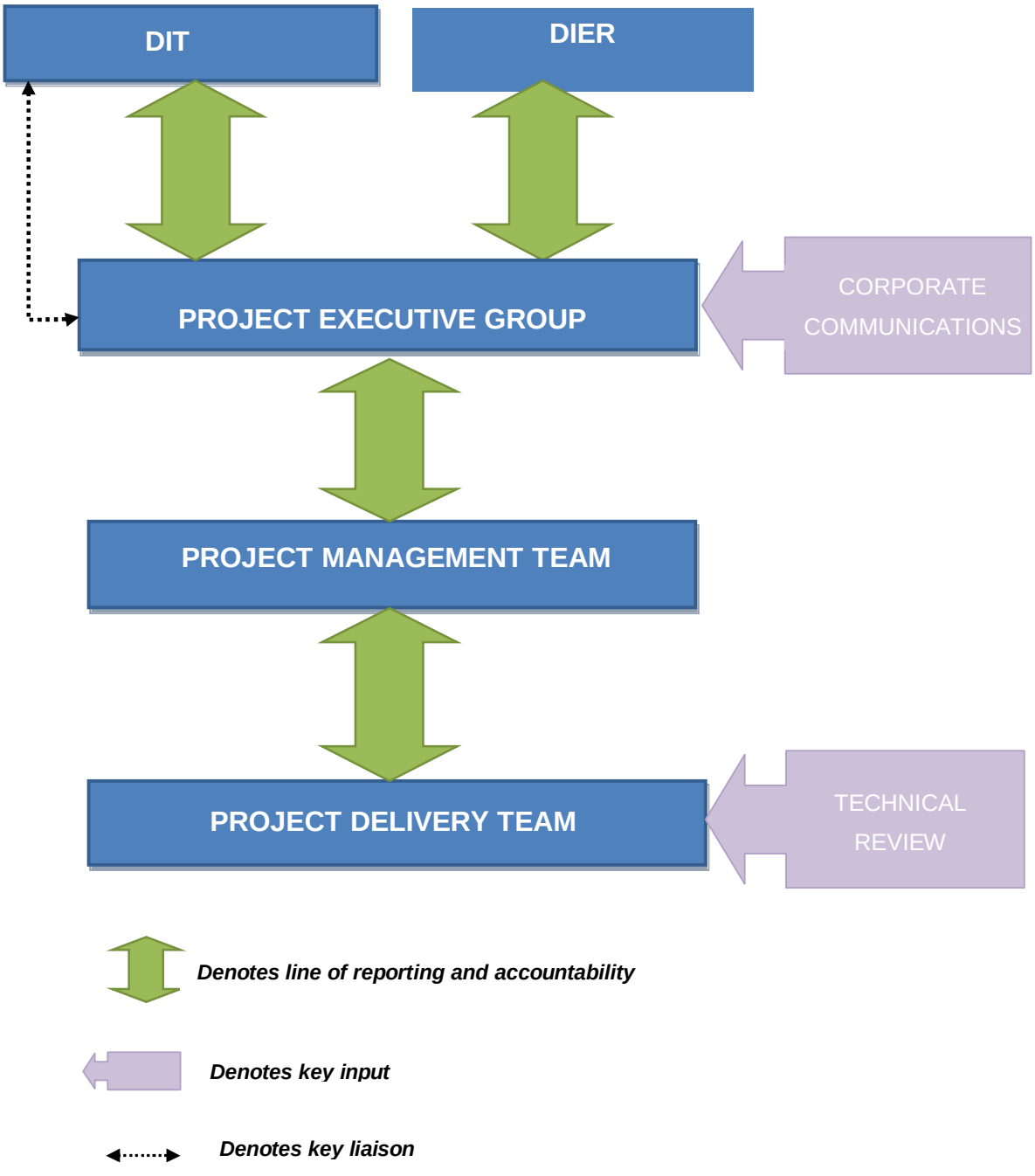
Appendix B – Governance Structure

Governance Structure

The project will be run with an alliance philosophy under a Governance Structure, clearly defining lines of reporting and accountability. The structure is shown in the following chart, and defined further on the following page.

- Blue boxes indicate key levels within the structure for accountability and reporting.
- Green arrows define the lines of reporting, accountability and direction within the structure.
- Purple boxes indicate where key inputs are derived from resources or groups external to the lines of reporting.

Project Governance Structure



Governance for this project fits in with the overall NEFR governance structure set out in the May 2010 PPR (Scoping) – North East Freight Roads and reiterated in the May 2011 Amendment.

PROJECT EXECUTIVE GROUP

The Project Executive Group provides the link between Government Policy and the Project Management and Project Delivery teams.

The role of the Project Executive Group is to oversee the delivery of the project, ensuring that:

- Outcomes meet strategic intent and are consistent with long-term planning for infrastructure in Tasmania.
- Public funds are being expended in an appropriate manner;
- Progress is being made in the delivery of the project in accordance with the Project Plan;
- Public consultation messages and communication are consistent with the broader intent of the Agency and State Government;
- The Agency Executive, Minister and Government are kept informed of progress on, and issues arising from, the project;
- Strategic risks have been recognized and appropriate mitigation strategies implemented and
- Keep DITRDLG informed on progress, critical issues, timeframes and future opportunities.

The Project Executive Group shall specifically:

- Approve the project objectives and outputs of the proposed planning activities;
- Provide direction on strategic issues that arise during the course of the project;
- Liaise with Corporate Affairs on critical stakeholder issues and critical communication; and
- Provide strategic advice to the Minister, Secretary and Deputy Secretary.

The Project Executive group has the sole authority to amend the project objectives, amend the project scope, extend project timeframes or increase project budget.

The Project Executive Group shall comprise:

- General Manager Roads & Traffic Division, DIER (Chair)
- General Manager Infrastructure Strategy Division, DIER
- Director Traffic and Infrastructure Branch, DIER
- Manager Corporate Affairs

The Project Executive group shall meet with the Project Management Team at regular intervals to review progress of the project. Project Governance meetings will be held on an as needs basis as determined by the Chair.

In the event that a Project Executive Group member cannot attend a scheduled meeting, they may nominate a proxy who shall assume their full rights and responsibilities.

The Project Executive Group is active for the North East Freight Roads Strategy, has endorsed the PPR and has set direction for project prioritisation for delivery within the allocated funding.

PROJECT MANAGEMENT TEAM

The role of the Project Management Team is to manage the delivery of the project in accordance with the agreed objectives and directions from the Project Executive Group. The Project Management Team is specifically responsible for the management of the project risks, budget, programme and outputs.

The Project Management Team has the authority to reallocate funds within the approved budget and reorganise activity timeframes within the approved programme, without prior approval of the Project Executive group. Any changes of this nature are to be reported to the Project Executive Group in normal monthly reporting.

The Project Management Team shall organise Project Governance meetings as requested by the Chair.

The Project Management Team shall comprise:

1. Project Manager, DIER
2. Director

The DIER representative on the Project Management Team shall be responsible for officer level liaison with the DITRDLG.

PROJECT DELIVERY TEAM

The role of the Project Delivery Team is to deliver the technical and statutory requirements of the Project Brief through the application of relevant Legislation, Technical & Design Guidelines, Australian Standards, standard specifications and sound engineering and planning judgement.

The Project Delivery Team reports directly to, and takes direction from, the Project Management Team. While the Project Delivery Team will seek technical input and guidance from other areas of the Agency it has no reporting line or accountability other than to the Project Management Team.

The Project Delivery Team shall comprise:

1. Project Manager, Planning & Design
2. Technical Manager, relevant consultant
3. Technical Resources