Presented to His Excellency the Governor pursuant to the provisions of the Public Works Committee Act 1914.

MEMBERS OF THE COMMITTEE

Legislative Council
Mr Farrell
Mrs Taylor

House of Assembly
Mr Brooks (Chairman)
Ms Ogilvie
Mrs Rylah
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1 INTRODUCTION

To His Excellency the Honourable Justice Alan Blow OAM, Lieutenant-Governor in and over the State of Tasmania and its Dependencies in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY

The Committee has investigated the following proposal: -

Macquarie Heads Development Road

and now has the honour to present the Report to Your Excellency in accordance with the Public Works Committee Act 1914 (the Act).

2 BACKGROUND

2.1 This reference recommended the Committee approve an upgrade of the Macquarie Heads Development Road to contemporary standards to provide for the forecast increase in traffic generated by the expansion of the aquaculture industry at Macquarie Harbour and development of shore based facilities at Smiths Cove. In recognition of the increased heavy vehicle traffic giving rise to increased potential conflict with pedestrians, the reference also included work focussed upon increasing the level of safety of pedestrians in Harvey Street, Strahan.

2.2 The proposed works include:-

• Upgrading of the Lyell Highway (Reid Street) and Harvey Street junction to cater for the turning movements of semi-trailers and improvement of pedestrian facilities.
• Construction of a footpath in Harvey Street from the Henty Main Road (Andrew Street) roundabout to the Manuka River Bridge.
• Widening of Ocean Beach Road from the Manuka River Bridge to Macquarie Heads Road to accommodate the tracking of High Productivity Vehicles.
• Strengthening of the existing pavement where required.
• Re-prioritisation of the Ocean Beach Road/Macquarie Heads Road junction.
• Widening and sealing of Macquarie Heads Road from the Strahan Airport to Smiths Cove Road.

2.3 The design speed for Harvey Street and Ocean Beach Road from the Manuka River Bridge through to west of Sarson Close is 50km/h and from west of Sarson Close to Smiths Cove Road is 70km/h. These design speeds are appropriate for the road environment which commences in a residential area and then passes through a recreational/commercial area.

2.5 The full submission of the Department of State Development (formerly Department of Infrastructure, Energy & Resources) in support of this reference can be found on website of the Committee at:-
3 PROJECT COSTS

3.1 Pursuant to the Message from His Excellency the Governor-in-Council, the estimated cost of the work is $5.25 million.

3.2 The Department of State Development submitted a Strategic Cost Estimate for the project using the Department of Infrastructure and Regional Development’s Best Practice Cost Estimation Standard for Publicly Funded Road and Rail Construction. The outputs of the Strategic Cost Estimate (including cost escalation of 5%) are:

- P50: $5.10 million
- P90: $5.80 million

3.3 For the purpose of preparing the cost estimate the works were separated into the following sections:

- Lyell Highway/Harvey Street junction including pavement repairs on Harvey Street through to the Andrew Street roundabout;
- Harvey Street from the Andrew Street roundabout to the Manuka River Bridge;
- Ocean Beach Road from the Manuka River Bridge to east of the Ocean Beach Road/Macquarie Heads Road Junction (chainage 1250 to 2850);
- The Ocean Beach Road/Macquarie Heads Road junction (chainage 2850 to 3150); and
- Macquarie Heads Road (chainage 3150 to 5200).

4 EVIDENCE

4.1 The Committee commenced its inquiry on Wednesday, 9 July last with an inspection of the site of the proposed works. The Committee then returned to Parliament House whereupon the following witnesses appeared, made the Statutory Declaration and were examined by the Committee in public:

- Mark Iles, Project Manager Planning and Design, Transport, Regulatory and Customer Service, Department of State Growth;
- Alan Lee, Engineering Project Manager, Department of State Growth;
- Dianne Coon, Secretary, Strahan Streets Working Group; and
- Mark McDermott, Convenor, Strahan Streets Working Group

Background

4.2 Mr Iles provided the following background to the proposed works:

I became involved in this project just before Christmas last year when the previous State (Government) governed, through negotiations with the salmon industry and the West Coast Council, allocated a budget of just over $5.2 million to upgrade the roads between Lyell Highway and Smith Cove Road. That actually came out of conditions on a development application permit issued by the West Coast Council for the shore-based
facilities at Smith Cove, where effectively the previous Department of Infrastructure, Energy and Resources, now State Growth, agreed to take on the conditions applying to the road upgrades.

We then undertook an assessment of the type of vehicles which would be using the road where effectively Henty Main Road through Harvey Street, Ocean Beach Road and Macquarie Heads Road becomes a B-double route for the industry. Fish feed comes mainly from Hobart but also some comes from the north-west coast, mainly on semitrailers, using the Lyell Highway. That is where the upgrade of Lyell Highway/Harvey Street, or Reid Street as it’s called, comes into it as well.

We began our concept designs and planning process. We had to do normal survey works, which include heritage and environmental surveys, to see if we need to go through a permit process, either federal or state, to apply for those permits. Our assessments required that we did not need to go through that process. We will be checking with West Coast Council if we need a development application. We received written confirmation from West Coast Council that we are complying with the conditions on the permit, so we did not need to go through any further process. We have undertaken significant consultation with industry and the local population in Strahan, including a public information day. We have had various meetings with community groups.

Road design

4.3 The Committee questioned the witnesses as to whether the proposed design was adequate to accommodate present traffic flow, particularly with tourist traffic, together with projected traffic growth. Mr Iles responded:-

The road work design is based on a national standard. For a B-double it is an 8-metre traffic width. That is what we are designing for - to meet those minimum standard requirements.

... The road itself is designed to cater for a particular type of vehicle. We are taking the evidence that was provided to council in the traffic impact assessment based on the growth of the industry - when it reaches that peak. I am not sure when it reaches that peak, whether two years, five years or 10 years. We are basically in accordance to what was submitted to council.

4.4 The Committee questioned Mr Iles as to whether there would be ‘B-double’ use of Reid Street. Mr Iles responded:-

No, there won’t. B-doubles have to have a licence issued by our department, and that section will not be an issue.

(From the north they will use) Henty Main Road and Murchison.

4.5 The Committee later questioned the witnesses as to the adequacy of the design given the close proximity in some parts to Macquarie Harbour. Mr Lee responded:-

This was an issue I raised with the project team when I was first made aware of the project. Because of the high water table issues I was concerned that the design be appropriate to cope with those conditions and therefore requested that the design consultants provide additional information to verify the ground conditions on that part of the route and to modify, if required, the design to cope with that scenario. I haven’t seen the outcome of that geotech report and any change that may have arisen from that, but certainly there was a concern from a constructability perspective that we needed something that would be able to cope with trucks under a 12-month code scenario. In the
past there have been trucks coming from Macquarie Heads from the pine plantations, but
that tends to be seasonal cartage. If you are carting 12 months of the year, which this
industry will be doing, we need to make sure the road is fit for purpose. That was an issue
I identified and asked for additional information to be provided.

Noise mitigation

4.5 The Committee questioned the witnesses as to what considerations, if any, had
been made in regard to the mitigation of noise on that road. Mr Iles responded:-

... we work on what we call a 63dBA - and I know that sounds very scientific - over an 18-hour
period because we have an environmental document. When we upgrade major roads,
particularly very busy highways, we put in noise mitigation processes and go through a process
where we do all the measurements and when it gets above that policy, which is worldwide, we
then take mitigation processes.

The initial modelling shows that because the number of heavy vehicles here is spread out
over 24 hours, we do not need to initiate that policy. However, we do not dispute the
amenity of residents will change. That should have been taken into account with the
development permit issued by the West Coast Council. We inherited the conditions on the
permit which was issued to the industry. There is no denying there will be some impact on
existing residential amenity in Harvey Street and Andrew Street.

... You have to remember that we are talking about, from my understanding, up to an
extra 40 vehicles a day, and that would be spread out over 24 hours. We have also been
working with the industry and have sat down with them to enter into a code of practice.
That code of practice is currently being developed and my understanding is that industry
has already talked to its drivers and they will enter into an agreement on what the speed
of the trucks will be - I understand it would be roughly 40 kph but I have not seen that yet
- and also not using engine brakes in residential areas.

... The code of practice is developed between the industry, us and the council. It is not a
legal document in itself but a memorandum of understanding. You find in most
communities, where we have entered into those agreements, that they work effectively
because, in the end, the industry, the drivers and everyone else have to live with the
community. We had one in Scottsdale for a number of years on the Tasman Highway
where B-doubles where not to use the Tasman Highway between school hours and things
like that. That worked very effectively and we have done it in other small communities
around the state.

... my understanding is that once Smiths Cove is up and running it will be a 24-hour
operation. I have taken this from the traffic impact assessment. It is my understanding
that the fish will be harvested on demand and transported where it needs to go to the
north-west coast for processing and probably out the following day. From my
understanding of the industry, it is often harvested on demand, and that could be the
middle of the night. Do not take that as a certainty, however; you need to ask the
industry that.

Community engagement

4.6 The Committee sought clarification from the witnesses as to the nature and scope
of the community consultation process which had been undertaken. Mr Iles responded:-

Community consultation has been done a number of ways in that we have had informal
meetings with groups and gone through an information day process. A number of issues
have been raised, particularly safety issues, including a request for a bypass and additional footpaths and also noise. The noise issues we have tried to address through entering into that agreement, and safety issues as well to a certain degree by reducing speed limits. The development application for the permit required us to put in the footpath on Harvey Street from the Andrew Street roundabout through to the bridge. Additional issues raised during the stakeholder consultation included a request for a footpath in Andrew Street up to the last residential street, Henty Main Road, and also in Reid Street, part of the Lyell Highway. We acknowledge those concerns and have been working with council on those issues. We encouraged council to put in an application under our vulnerable road users program for funding.

Effectively under legislation with the Roads and Jetties Act, our department does not have (jurisdiction over footpaths) it maintains all the black stuff but, at the same time, in many projects we do build them and then hand them over to council. The biggest constraint in this project is that we have a $5.2 million budget and our P50 estimate is bordering on that. In an ideal world we would like to construct those footpaths in Andrew Street and Reid Street and there may still be provision to do so if when the contract goes to tender it there is the potential for us to work with council to build them. My understanding from discussions with council is that they are going to evaluate the process of building a temporary footpath in Reid Street, and when I say temporary, I am not sure to what standards but obviously not to the concrete standard which most of the footpaths are constructed from.

Some residents have raised the issue of vibrations in the bottom end of Andrew Street in the houses. Andrew Street was basically a cul-de-sac when they built Henty Main Road back in the 1980s from Zeehan and that area was raised slightly and was basically built over a swamp to a certain degree, so trying to mitigate that is not easy. There are some issues there in relation to the pavement. The bottom end of Andrew Street basically looks like golf balls have been indented in the pavement. Structurally it is okay but that may be causing some of the issues as far as vibration is concerned; we are not sure at this point. Again, subject to budget, there may be ways that we can reseal part of that road there. We do not know at this point whether that is causing the vibration but that is just an observation at this point.

**Mill Bay Precinct**

4.7 The Committee received a submission from Scott and Sharon Newett who are the leaseholders of a jetty site at Mill Bay. Mr & Mrs Newett expressed their concern that the proposed works would be detrimental to the current amenity of the Mill Bay precinct and detailed their concerns in relation to the following specific points:-

- removal of vegetation from the foreshore or road verge;
- no thorough environmental impact study undertaken;
- no heritage study undertaken;
- impact of the concrete wall in relation to: the visual amenity; traffic noise amplification/mitigation measures; and the possible ‘wind tunnel effect’; and
- in acknowledging the economic significance of the salmon farming industry in Macquarie Harbour, suggested the appropriate solution was a bypass.

4.8 The Committee sought a response in relation to each of the concerns raised by the Newetts from Mr Iles who responded as follows:-

> We have undertaken extensive environmental studies. We undertook environmental studies back in January, both flora and fauna, to see if there were any threatened species. We have to do that to see if we then have to go through a permit process, whether state or federal. That has been done within a heritage assessment under what is listed under
state and local planning schemes. We do not impact on any heritage listed items of property. We do not have to go through a process there. When it was raised by the Newetts, and at the community information day, we went out there and did another survey approximately one month ago, just to double-check to see if there was any potential for burrows or anything else there. We realise there is potentially a foraging habitat in areas around Mill Bay, at both the streams and on the foreshore area, so we are actually taking special consideration. Where the turn facility is, there is actually a stream there. We will take special consideration there - sedimentation process and everything through proper screenings. They reckon through the construction process they were not impacting on it.

As I said before to, most of our works are on the northern side. We are deliberately doing that to minimise impacts on the southern side regarding removal of vegetation on the Mill Bay side itself. In parts of it, as you approach Mill Bay, there will be some vegetation clearance, or at least cutting, to improve sight lines. We have to do that to meet minimum standards, only 50 kilometres, but again we are trying to minimise any impacts on the southern site vegetation.

... We built the wall only because we are trying to minimise excavations. We would have to actually impact on that hill and the scaring, in our opinion, would be of far more visual impact than a wall.

... It is hard to answer that question (about the impact of wind conditions) given we are trying to minimise impacts on vegetation on that southern side.

4.9 The Committee sought further clarification regarding the proposed retaining wall. Mr Iles responded:-

We had some discussions with the Newetts. They raised the issue of potentially putting in a gabion wall - the cages we put rocks in. When we first looked at this that was one of the things we thought would be appropriate, but our design engineers will not sign off on a gabion wall. From a construction point of view they are not confident that a gabion wall would hold that bank up, so what we have actually gone for are these concrete blocks. From a constructability perspective, you can excavate a small section of the road, place a block in and then move without having to impact hugely on that bank and having far less destruction to traffic during a peak tourist season.

... Basically (the blocks) are a cubic metre and they lock into each other. They come in various colours. Rather than grey concrete we will try and get a colour which blends in more.

Project budget/Contingencies

5.0 The Committee sought clarification of the proposed budget detailed in the submission. Mr Iles responded:-

Our estimates are based on a document produced by Evans and Peck for national road projects. The Commonwealth Government was getting upset that when the states put in a proposal for a road or bridge project, when it came to construction it always came up. The idea with the P50 and P90 is that with the P50 you are 50 per cent confident you can deliver the project for that price with a fair bit of contingency, but there is a lot more contingency for the P90, which says you are 90 per cent confident you can deliver it for that price. With most road construction projects there are a lot of unknowns until you get out there. Even if you do every bit of work you think you can do, you always come across something - the unknown unknowns, as they say. The more you get into the detail of the design, by rights the P50 or P90 will come down.
There is a lot of contingency in there. We find that when it comes to the tender price it often depends on how buoyant the industry is. We have had very competitive costs over the last 18 months whereas four years ago when we had a lot of large construction projects, including the East Tamar Highway, the Bass Highway west of Wynyard, the Kingston Bypass and the Brighton Bypass, the quotes were coming in far higher. At the moment industry is at a lot lower ebb. We would be hoping this would still come under the current level.

At the moment, before we get into the final design, we put in a contingency to cater for (landscaping).

... There are a lot of unknowns until you get out there. That is the reason you have these (contingency figures). Our costs, once upon a time, were based on estimated cost of construction but that is literally not what happens.

... A lot ... is quite often to do services. As part of this we do potholing and everything to find where services are. We acknowledge there is going to be a cost in relocation of certain services. That can be a huge cost, particularly if it comes to Telstra and everything else. We are reasonably confident that we have identified all services. That is why you have these contingencies - when you come to construction and a service is located where it should not be.

Project timeline/Traffic management

5.1 The Committee questioned the witnesses as to the time frame for the delivery of the works and how traffic movements would be managed during the construction phase. Mr Iles responded:

We are aiming for final design being completed in the next few weeks. Draft tender documents will come into the department next Friday week for us to review, with the idea of those documents being finalised by early August and the potential for the tender to be advertised during August and finalised during September. The construction would then be from late September or early October, depending on when the contractor can get on the ground, and completed by next March. That is our timeline.

... This project has moved fast from the period we inherited the project in February when the road handover was completed. Being the west coast you have a very limited construction season because of the weather, more from upper areas of the state. If we miss that timeline you may add a year to the project.

... The contractor will have a traffic management plan during the construction phase, which will need to be approved by our department. That usually involves traffic management from safety perspectives. As well, during the construction phase we will initiate our own community information early in the piece by putting out flashing signs on the back of trailers. We have only talked about it at this point but where the Lyell Highway entrance is coming off the Murchison Highway you can have a number of trucks bringing in material in the early part so you will need to warn people, whether they're tourists or local residents using the Lyell Highway into Strahan, that they may potentially be stuck behind a slower vehicle. We will need to work in with school buses carrying children going to Queenstown High School. It involves careful management and that is usually worked out between the contractor and the department during the construction phase.

Strahan Streets Working Group
5.2 Dianne Coon, Secretary of the Strahan Streets Working Group made the following representation in support of the proposed works:

This process started back in February when we called a public meeting ... and the Strahan Streets Working Group was established...

The meeting that night tasked us with a number of things, many of which are now part of what DIER and co are doing. A key priority was the footpaths. For the public meeting, the key priority was the footpath coming down the Lyell Highway, which is Reid Street, where we have great concerns that there are families living there, people wishing to walk down that street, and there are currently serious numbers of trucks coming through there. The second priority was Andrew Street and the third priority was the Harvey Street footpath. We would like all of them but they were a key concern.

A local trucking contractor was at the meeting and he was very helpful in talking about how noise could be abated somewhat by speed limits and curfews. We were instructed to pursue that. We were also instructed to pursue something that we, as a group, have decided after subsequent consultation that we will not continue. The community is so concerned about traffic on the Lyell Highway that we were initially instructed to explore diverting traffic from Queenstown via Zeehan so it did not come down the Lyell Highway at all. We would love that to happen but we understand the practicalities of that not being the case, but for the committee's interest, that is the level of concern.

The community had much discussion at that meeting about trucks and school buses and access. It might be worth at this point saying that the community has a different view to DIER and what a B-double is, because my understanding from my discussions with Mr Iles is that a B-double is technically a vehicle 26 metres and longer, but the community believe it must only be 19-plus metres long. They are actually a truck and trailer, but as far as the community are concerned they are B-doubles and they go down the Lyell Highway. As far as we are concerned, it is an administrative difference. They are still huge trucks that cause people difficulty.

They were the things we were tasked with doing. We quickly were able to get into very good and positive communications and consultation with DIER, and we would like to congratulate our colleagues in DIER. We have read the 39-page report on the website and find it to be a thorough and accurate document. They even have all our names spelt correctly - well done them.

Before the public meeting we were approached by Adam Main from the Tasmanian Salmonid Growers Association saying, 'If you've got a problem, we've got a problem, let's works together.' We would like to put on record that we have had very good communications with the TSGA. We assured them before the public meeting and reinforced at the public meeting and in every subsequent discussion with our community that everybody we have spoken to is in full support of the aquaculture industry in general and of the development at Smith Cove. Nobody wants to see this stopped; we are very much in support of that process. However, along the same lines, the amenity of the community is currently affected and given the proposed increased truck traffic, will continue to be more affected by that traffic, so we need to work together.

... The view of the Strahan Streets Working Group is that this road is necessary and needs to be built well, and presumably quickly. Even were a bypass road to be built later on, there will always be traffic going out there. There is a volume of tourist traffic, particularly in the summer months, and there will always need to be some traffic going out there, so it is about time that road was improved. We believe that is appropriate, whatever happens. I believe last-hour discussions with TSGA were that down the track a bypass road ought to be considered. We understand the issue of funding. We don't
expect buckets of money to be found but we believe, if this is the appropriate thing for the community, we should be putting this on the agenda.

The important part of the agenda is that the Strahan community is currently being affected by the trucks coming into town. You would have been informed that two of the fish farms are moving away from the waterfront in the next few months - we hope. That would reduce the pain to a smaller part of the community, to the streets around the esplanade. Thankfully the trucks won't go past the school or around the post office or past the clinic.

5 DOCUMENTS TAKEN INTO EVIDENCE

5.1 The following documents were taken into evidence and considered by the Committee:

- Macquarie Heads Development Road – Department of Infrastructure, Energy and Resources - Submission to the Parliamentary Standing Committee on Public Works, May 2014
- Scott and Sharon Newett, Submission dated 3 July 2014;
- Dr Adam Main, Chief Executive Officer, Tasmanian Salmonid Growers Association Ltd, Submission undated;
- Mark Ryan, Managing Director & CEO, Tassal Group Limited;
- David Morehead, General Manager Projects, Huon Aquaculture Group Ltd.;
- Macquarie Heads Road – Pavement Investigation, Pitt & Sherry, 21 July 2014; and
- Copy of Memo dated 16 July 2014 from Jose Pereira, Senior Pavement Engineer, Pitt & Sherry entitled Macquarie Heads Development Road Upgrade – Additional test pitting at Mill Bay.

6 CONCLUSION AND RECOMMENDATION

6.2 The Committee is satisfied that the need for the proposed works has been established. Once complete, the works will provide a safer and higher standard road corridor from Strahan to Smiths Cove Road to provide for the anticipated increase in traffic generated by the expansion of the aquaculture industry at Macquarie Harbour.

6.3 Accordingly, the Committee recommends the project, in accordance with the documentation submitted.