THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET AT HENTY HOUSE, LEVEL 4, CIVIC SQUARE, CHARLES STREET, LAUNCESTON, ON THURSDAY, 9 FEBRUARY 2012.

WEST TAMAR HIGHWAY NEAR BRADY'S LOOKOUT

<u>Mr DAMION BEETY</u>, PROJECT MANAGER, <u>Mr PETER HUBBLE</u>, DIER MANAGER TRAFFIC PROJECTS AND <u>Mr DAVID ROLPH</u>, GHD PROJECT MANAGER, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR (Mr Harriss) - Welcome. David is familiar with the processes of this committee but Damien and Peter are not.

Mr ROLPH - Yes.

Mr BEETY - No, I am not.

- **CHAIR** The process is that we keep our procedures pretty informal and we encourage you to reciprocate somewhat informally as that is the way we think it is pretty productive so we will take your verbal evidence to the committee and I presume, Damion or whoever is going to lead that in terms of an introduction to the project and an overview if you wish. As we said out on site, we have had your submission for some time and we have been able to familiarise ourselves with the detail of the proposal so once we start that interaction again from a productive way into the process we might interact with you rather than just hear your presentation and sit mute. It seems the way to go so we will commence our process.
- **Mr BEETY** I will do the introduction. It is the West Tamar Brady's Lookout project. It is approximately 3 kilometres long in the existing overtaking lane section of the highway that has deteriorated considerably. There have been a lot of requests from a lot of sources to upgrade this section of the highway. It has been identified from crash history that it is a fairly serious area that needs some work so the project is to widen the road, improve the vertical and horizontal geometry and install a tension-wire rope barrier system. That is really in a nutshell what the project is so from that we have developed a design, we have done a couple of options and we have come up with what we think is a reasonable project at this stage to go to tender and present to this committee.
- **Mr HALL** I notice that we've retained the same configuration of the passing lanes 2 and 1, except we are doing the realignment, as you have already talked about. I think I asked a question on site as to where you could have a single lane, that there is more provision, you aren't constricted as much as you are, for example going down Constitution Hill, so there is more room there in that respect.
- **Mr BEETY** We have widened the shoulders on the single-lane side to 2 metres. The through lane itself is 3.5 metres and then the wire rope is positioned so that it's closer to the two-lane side, so there's another 1.15 metres that's a total of 6.65 metres of sealed

pavement for the single-lane side, which would provide provision for a vehicle to break down, pull off the side and maintain flowing traffic.

- **Mr HALL** It's a perennial question, I suppose, but you no doubt know that there are plenty of cyclists who use the West Tamar highway, it's a major cycling route. I have spoken to quite a few cyclists in regard to the matter and I think their main concern obviously they'd like a dedicated cycle lane, but that's not there that was put to me, was if indeed there was more width on the shoulder and it was kept brushed, that would certainly assist with safety. That has been provided and you have an extra bit of width outside that audible white line. How much width would that give them, 1.5 metres?
- **Mr BEETY** Approximately 2 metres of seal for the single-lane section, and that reduces to 1 metre for the two-lane side.
- **Mr HALL** In regard to the fact that the road surface has deteriorated so badly over time and is a major landslip area, as you explained out on site, obviously there is mitigation and you don't want to be back in five years or a decade having redo the whole job. For the purposes of *Hansard*, could you explain why it will last longer than perhaps five years or a decade?
- **Mr BEETY** I guess that comes out of the geotechnical investigation that was undertaken. One of the main recommendations of that was the three in one batters. Normally we would go two in one batter - there are quite a lot flatter batters through this area because of the stability of the sites.
- Mr BOOTH Is that both sides of the road?
- **Mr BEETY** Yes. That's really where we were looking at trying to limit the amount of acquisition. The main area for the pavement improvement comes out of that report.
- **Mr ROLPH** We are proposing to put a modified pavement in there and cement stabilise it, so it will stiffen up the pavement and make a stronger road base. Below the sub-base there will be subgrade lay-off, as you can see on the drawings, the modified 300 subgrade. That will be a 1.5 per cent cement mixture down into that, so it will stiffen it up, and then it'll have the normal two 150 layers 150 of base and 150 of sub-base. We also propose that we'll put in a wider table drain. One of the recommendations out of the geotech report was to provide good drainage. Normally on a road like this we'd put a 2.1 metre wide table drain but in this case we're putting in a 2.8 metre table drain. This means the water will be below the pavement. We intend to put a subsoil drain all the way down on the cut side so that any water will filter into the subsoil drain and won't infiltrate the materials below the pavement. A lot of the pavement up there is reactive clay and when it gets wet it swells, so improving the drainage and putting this modified base on it will improve the quality and it will last for 20 years which is what the pavement is designed for, it is a 20-year life.
- **Mr HALL** Thank you. Mr Chairman, I have that representation from Councillor Kearney there and somebody else might talk about that in a minute.
- **Mr BOOTH** Chair, I want to follow on with what Greg was trying to explore there with regard to the cycle safety or other vehicle safety that use those lanes. Why is it that it

goes to a metre wide? In other words, that would be a lined-off area of pavement, would it? There would be a solid line on the side of the road and then there is a clear metre strip where you have a double lane and 2 metres, I think you said, where it is a single lane.

- **Mr ROLPH** There would be an edged line down the edge of the running lane, between the running lane and the shoulder, and that will be on both sides so that will be a clear 1 metre from that edge line to the edge of the seal.
- Mr BOOTH What is the logic to have a metre where you have a double lane and 2 metres?
- **Mr HUBBLE** Our normal standard is to have a metre shoulder and in this instance where we are having a two plus one with a single lane we have decided that we will have it wider to try to get that field of the bend wider and not being so constrained and that is why we have gone to the 2 metres.
- Mr BOOTH Is that more in case a car breaks down or something?
- **Mr HUBBLE** Correct, so they can pull over. Therefore they pull over and they are not impeding through traffic.
- **Mr BOOTH** If you were creating a bicycle lane to meet a standard, what would you have to do on that road? What would the standard be?
- **Mr HUBBLE** A bicycle lane would have to be between 1.2 and 1.4 metres wide if that is what you were doing for a designated bicycle lane so 1 metre is within that region where they would have an area where they could cycle safely away from the traffic.
- Mr BOOTH It would have to be 1.2 minimum normally. That is a standard, is it?
- Mr HUBBLE If you are providing cycle lanes.
- **Mr BOOTH** Yes. How close to the sealed part of the verge do you get in the total drain? Where does the total drain start?
- **Mr HUBBLE** You have your traffic lanes, a white line and then you have the sealed shoulders and then beyond that we also have some gravel shoulder.
- Mr BOOTH Yes, that is the width. I am wondering what it is.
- **Mr ROLPH** That is 1 metre wide. The latest thinking on that, Peter, is to put just a prime on the verge for maintenance purposes so it won't actually be a gravel verge, it will be a prime.
- Mr HUBBLE Okay. Can you explain what the prime does?
- **Mr ROLPH** Basically it is maintenance to stop weeds and so on growing up through the verge, it is a maintenance issue, and they have just recently started doing that but previously most of the roads around the place had a gravel verge.

- **Mr BOOTH** If you drive on that prime it would just break through. It is just like a crust rather than a seal.
- Mr ROLPH It is not designed to be ridden on.
- **Mr BEETY** It would be designed for low traffic. Shoulders are normally designed for 10 per cent of the normal traffic and the verge, if it is a spray, would probably be a little bit less than that. It should hold up reasonably well but it is not for its intended purpose.
- **Mr BOOTH** Greg touched on the West Tamar Highway. As everybody would know, a huge number of bike riders utilise that and it is true that they run the Rosevears loop but my understanding is that they also want to run the other route but it is so bloody dangerous on that road for bicycles that you put your life on hold. I think it is something that we have to take very seriously, that there is an increasing percentage of the population who want to ride bikes. There are a lot of fatalities as a result of bicycle, car or truck accidents and if we are putting down new infrastructure, it would be good to have it fit for purpose so that people are not discouraged, if you like, or prevented from taking that route which then ultimately turns up in statistics like this where you advise that most travellers don't go there. It is a self-fulfilling prophesy; if you don't put in a decent surface they are not going to go there, are they?

Mr BEETY - Yes.

- **Mr BOOTH** In conjunction with that then what is the standard of the sealed shoulder as opposed to the road tarmac?
- Mr BEETY Exactly the same thickness.
- **Mr BOOTH** Greg talked about brushing the sides of the road, but if you go on the West Tamar Highway it appears that the area that is set aside for cyclists is of an inferior standard in various sections. The tarmac is different. Apart from the gravel and loose stuff that seems to have accumulated that should be brushed off, the actual surface appears to be very lumpy with sharper gravel and more dangerous for cyclists perhaps.
- **Mr BEETY** That probably comes out of standard maintenance practices in resealing. When we resurface the sections that have traffic rolled in, we usually provide a fairly even mat. Where the sections on the shoulders don't get very much traffic, they tend to sit up a lot more and it gives that appearance. Over two or three seals that surface has the texture that is always a lot bigger and higher than the section that is rolled with vehicles on it.
- **Mr BOOTH** What can you do? I'm raising that because I think it is a safety issue and something that pushes cyclists out into the car lanes. You will regularly see that. They probably want to get off but they can't because the surface isn't good enough.
- **Mr BEETY** We did a recent reseal last year on the Bass Highway where we put a 7 mm seal, which is a smaller stone, on the shoulder. It has come up really well. We couldn't put anything else on it anyway, it wouldn't stay, so we resealed the road as per normal and then put a 7 mm seal on that. That came up with a very good surface, so they are the options we could look at if it becomes an issue on this site.

- Mr BOOTH Right. It is long-term maintenance then?
- Mr BEETY Yes.
- **Mr BOOTH** Why did you conclude then not to make this a 1.2 metre-wide dedicated cycle area?
- **Mr BEETY** It was more towards our standard road infrastructure policies on this type of category road. It's a 3 and we have specified requirements that we need to make these shoulders and lane widths for these types of roads and that's the approach we have adopted.
- **Mr BOOTH** In other words, your design brief was to design this road and construct it in accordance with the criteria for a category 3 road?
- Mr BEETY Yes.
- **Mr BOOTH** So is there no ministerial direction or policy position in DIER, that comes from the Government, that you should be putting cycle lanes along the side of all new road infrastructure?
- **Mr BEETY** Cyclists don't really go well next to fast-moving traffic, but we appreciate that that's an area where they would want to ride and that's why we have made provision for a 1-metre-wide sealed shoulder. We wouldn't want to encourage them to put a cycle lane there, which would encourage the activity, because of the conflict with the high-speed traffic.
- **Mr BOOTH** What you're saying is that you have acknowledged that they'll be on there so you have provided a 1-metre seal but you haven't made it to standard, which would be 1.2 metres as a minimum standard?
- **Mr HUBBLE** It's 1.2 metres if you mark it as a cycle lane, but we have no intention to mark it as a cycle lane and that's why have come to the conclusion of 1 metre.
- **Mr BOOTH** Can you give the committee an indication of what the additional cost would have been to simply seal that extra 200 mm and make it into a dedicated cycle lane?
- **Mr ROLPH** No. The concept of the design was to cut into the hillside rather than go over the batter because once you went over the batter there are some significant drops there so we'd have to go back and rework; the earthwork batters have to be calculated. There would be extra infrastructure, culverts required to be extended. We would have to go back and look at the walling that we intend to put up there. Moving it 200 mms may seem an insignificant amount but it would create a lot of work, and there would be our consultancy fee on top of that.

Mr BOOTH - That would be the biggest part, you reckon?

Laughter.

- **Mr ROLPH** I wouldn't be able to give you an answer here but if you want an answer we could go back and do some calculations on that.
- **Mr BOOTH** With the table drain I think you described as on the side of the road being a bit wider and therefore deeper than normal.

Mr ROLPH - Yes.

- **Mr BOOTH** Is it normal practice to have a total drain drop-off like that where vehicles that leave the road end up falling in a hole? I appreciate you have to create some form of drain and maybe it is a lot cheaper for you to do it this way.
- **Mr HUBBLE** What is the distance, David, between the edge line and the beginning of the table drain?
- **Mr ROLPH** Between the edge line and table drain, if you haven't got a safety barrier, you would have 2.5 metres to the top of the table drain. You will notice we have put in a 4:1 slope on the table drain which is flatter than what we have done in the past and that makes it a bit more forgiving if a car goes off there. On the other side it is 1.5 metres but if we have a safety barrier in there it is another half a metre we have widen the verge by half a metre where we have a safety barrier. We need that width to get the safety barrier in.
- **Mr BEETY** There is a significant amount of safety barrier going in on the outside of the drop, the drop side as well, so that has increased quite a lot over what is there now.
- Mr ROLPH Does that answer your question?
- **Mr BOOTH** Yes, I suppose it is in the context of some works done on the West Tamar highway some years ago which were a death trap effectively, in my view, that the drains were dug very close to the tarmac so if you went off the edge, especially at night when you were more likely to do it, the wheels would fall into an almost vertical drain. Obviously that is not what you are proposing to build here but I am interested to make sure that the width of the thing is adequate to make sure that there is not effectively a man trap or a car trap so close to the road. I think you have answered that, you said a couple of metres -
- Mr HUBBLE- Two metres, minimum, and in one area it is 2.5 metres.
- **Mr BOOTH** Mr Chairman, I am finished on that line I did have some questions about the type of barrier but others might have questions.
- **Mr HALL** Was the barrier raised in with the consultation of the motor cycling fraternity? They have always had some issues with the cheese-cutter effect, if you like.
- Mr HUBBLE The department has been working with the Tasmanian Motorcycling Council since 2009 regarding some of their concerns, and obviously they have concerns about the wire rope or what we call flexible barriers, safety barriers. The concern originally, back in 2009, was the cheese-cutting effect but I don't think it is the case at this stage where most of them have difficulty. When the rider loses control or separates from the vehicle

and actually slides along the pavement then he would encounter the upright and that would do the damage to the rider. What we have looked at, working with the motorcyclists, are options of providing improvements to the design. For instance, with the wire rope, we are considering providing on tight corners, where there is a likelihood they could be unstable and separate from their motorcycle, padding around the upright posts.

- Mr BOOTH Speed cushions?
- **Mr HUBBLE** We have tried the speed cushions they are actually called stack cushions in some locations. There is a new product that Victoria is using at the moment called mquad which is used for a median barrier. I have brought it along to show you - it is a product that Victoria is using at the moment and we are considering, which provides a padding around the uprights and which gives a 360° protection from both directions.
- Mr BOOTH Is it like a hollow tube thing, like a foam -
- Mr HUBBLE Yes, and they have done some testing in New South Wales about that.
- **Mr HALL** What sort of cost differential is there between something like that and an armco railing divider as we have on many of our highways?
- **Mr ROLPH** The initial installation costs are similar. We quoted at about \$120-\$130 a metre.
- **Mr HUBBLE** I have some figures. We looked at the options and there are three options. Safety barriers can come in three different forms: flexible, which is the wire rope; semirigid, w-beams; and rigid, which is the concrete barriers. We looked at all the options with the costings. Our initial preference is the wire-rope safety fence. To put in, for the whole job, the steel w-beam would be an extra \$800 000. For New Jersey barrier for the whole 3 kilometres would be \$1.5 million.
- Mr BOOTH That's the concrete one, is it?
- **Mr HUBBLE** Yes. With this sort of protection, for the wire-rope posts, for what we're looking at is to provide them onto the tighter curves where there is a higher likelihood that the motorcyclists could separate from their vehicle. For the stack cushions we're looking at around \$12 000 to \$15 000 roughly.
- Mr BOOTH That's the additional cost to put it in?

Mr HUBBLE - Yes.

- **Mr BOOTH** Given that you've identified that there are some areas which you think are high risk and you're going to put in these speed cushions -
- Mr HUBBLE We call them 'stack cushions'.
- Mr BOOTH They are described as 'speed cushions' in your last report to us. The Motorcycle Riders Association hasn't advised me that they're not so concerned about the

cheese-cutting effect, or the decapitation effect, of the wire. I'm surprised that they've come to that conclusion because the impact on the posts was always a fairly major problem. It's the same, whether its an armco - you can slide under an armco post as well - so I am surprised that they are less concerned about that. They clearly had a preference for the concrete barriers the last time I spoke to them. They had analysis suggesting their life-cycle cost was far less on a concrete barrier than it was for a wire-rope barrier. I want to ask you a question regarding the life-cycle cost of different safety barrier measures. What is the difference in cost, given that you've identified those areas of high risk that you're going to put the stack cushions on, if you used concrete barriers on those parts and used the wire rope on the rest?

- **Mr HUBBLE** Our preference is to have flexible systems. Flexible systems reduce the severity of the collision, if a collision occur. In this case, there is a crash history of people losing control. A number of people have lost control and had head-ons, so that's why the median fence is going through. The flexible barrier is much more forgiving for people who make an error; it brings the vehicle to a gradual stop and also absorbs the energy from that collision.
- **Mr BOOTH** Are you talking about the wire dividers in the middle, the actual lane dividers rather than an edge barrier? I understood that the barriers were going to be on the edge of the road to stop people going over the crest.
- **Mr HUBBLE** There will be some barriers on there. There will also be a median. That's our preference. The concrete barrier is less forgiving to an errant vehicle and they're more likely to have sustained injuries from a collision with a concrete barrier compared to a flexible barrier, the wire rope.
- **Mr ROLPH** Also, the wire rope will pull the vehicle up against the wire rope. If they impact a concrete barrier or a steel beam, there is potential for that car to be pushed back and stop in the lane.
- Mr HUBBLE It will be redeflected.
- **Mr ROLPH** It's a safer option. I've been told, and I am not sure if this is true or not, but 90 per cent of vehicle that impact a wire rope are drivable; they can drive them away. If they impact the other ones, it is a tow-truck job.
- **Mr BOOTH** I am aware of the advantages of effectively catching a vehicle like that, but I am concerned specifically for the motorcycle riders, whether there has been some sort of proper analysis done given that it is a certainty that motorcycle riders are going to fall off and hit these wire barriers, and I think you would pretty well say it is a certainty given that you have also said that cars are going to definitely come off the road and crash so both cars and motorbikes will end up hitting this barrier and it is a value judgment, I guess, and I am wondering whether it is supported by statistics in terms of the likely harm. A motorcycle accident is generally much more damaging to the rider or driver than that of a car so here we have a certainty that both of those events will occur. What sort of financial weighting have you put on it?
- Mr HUBBLE I would like to make a comment on that. At this stage motorcyclists represent 4 per cent of the registered vehicles so out there we have 96 per cent of

passenger vehicles and heavy vehicles. I would like to refer to a paper that was presented at the 2011 Road Safety Conference in Western Australia which talked about motorcyclists and safety barriers. The conclusion from that was that there is no statistical significant association between the barrier types, meaning if a motorcyclist lost control or is losing control if they hit a wire rope or concrete barrier the outcome is going to be similar but David has described that for a passenger vehicle hitting a solid barrier compared to a flexible barrier it has definitely significant safety benefits. I hope I have described that.

- **Mr BOOTH** You have described it very well and in your department's view you have analysed the different types of safety measures and concluded that in fact statistically there is no real difference.
- Mr HUBBLE Yes.
- **Mr BOOTH** You would not support the contention that I put, and effectively it has been put to me through the MRT.
- Mr HUBBLE As I said, we work with them and we are happy to have that discussion.
- **Ms WHITE** In your report I have noticed that you talk about the ability to have a better line of sight with the wire barrier as opposed to the other barrier types which of course assists all motorists.
- Mr HUBBLE That is correct.
- **Ms WHITE** I guess that would be a large part of your consideration in determining what kind of barrier type you install, particularly around corners where it is more difficult to see; the line of sight is not as clear. Would that be correct?
- Mr HUBBLE That is correct.
- Mr HALL Obviously you would be aware of Councillor Kearney's representations.
- Mr HUBBLE No, we are not.
- **Mr HALL** Okay. It is in the vicinity between Bradys Lookout and Bembroka Lodge, land owned by Mr and Mrs Torian. Would you like to comment on Mrs Torian's concerns?
- **Mr BEETY** She would like an access to the highway. It is a limited-access highway and as such, the department is very reluctant to grant her a gate access near Bradys Lookout. We have met with her on a number of occasions and we have given her some fairly extensive comments back as to why we can't provide an access at this stage and we have asked her to talk to her adjacent property owner who does have an access at the moment and whether a gate through their property would be another possibility.
- Mr BOOTH They have no access to their property at all?

- Mr BEETY They have an access off Rosevears and they have had for 40 or 50 years.
- Mr BOOTH Have they ever had an access off the West Tamar Highway?
- **Mr BEETY** No. The concern she has, and it is a reasonably valid one, is that Telstra, Ben Lomond Water and Aurora from time to time are required to come onto their property to access services that run through their property that do run up to the West Tamar Highway.
- **Mr BOOTH** But they can access them through the property off Rosevears?
- Mr BEETY They can come through their front gate, yes.
- Mr BOOTH So once they're in there, there is no problem dealing with those services?
- Mr BEETY I don't believe so.
- **Mr HALL** Councillor Kearney referred to the concerns he has and I will talk about those briefly. At this time the major works, I believe, will be approved to design and build the access to Pembroker Lodge in such a way that emergency access to the land owned by the Torians is created. That is his main contention so that emergency services can access that land. Do you have any comment on that?
- **Mr BEETY** I'm not aware of that angle. I'm not quite sure of the purpose for emergency access to a private property in that case. I believe that as part of our design there is a safety fence to go through that section, so it would compromise the installation of the safety fence. I would have to verify that, though.
- **Mr ROLPH** Once you get past the cutting it drops off really significantly, so to get any sort of access in there would be very difficult and expensive, I believe.
- **Mr HALL** Where we were standing this morning we were looking down on that, were we? He says, 'The location of the land is beneath and around Bradys Lookout site that attracts thousands of visitors each year. Given the additional fire risk from Bradys Lookout and the heavy infrastructure that crosses the land, the provision of emergency access is prudent'.
- Mr ROLPH Mrs Torian's property is to the south of Bradys Lookout.
- Mr BEETY It encloses just below and to the south of the Lookout.
- **Mr HALL** Obviously Councillor Kearney has spoken to somebody in the department at some stage about this issue.
- Mr BEETY Not that I'm aware of.
- Mr HALL Okay. It says here that he has.
- **Mr BEETY** He may very well have but it might not have filtered through to me as project manager.

- Mr ROLPH We were up at the access here to the lookout and Mrs Torian's property is around about that first bend.
- Mr BEETY It runs all the way down to Rosevears.
- Mr HALL So they've never had access at all in the past?
- **Mr BEETY** No. We suggested that they talk to Mr Roche, their neighbour. He has an access, although it is limited. If he sells that property, I believe he loses that access. There is a caveat on that property and we believe he loses that access if he sells the property. He has an access from Rosevears.
- **CHAIR** Aren't there a couple of issues here that the Torians specifically refer to? That is, there is no expectation that providing such an access would facilitate use by them, the landowners. It's just for emergency purposes, to get access to the services that you have mentioned. They also go on to talk about the fact that their driveway is somewhat narrow and doesn't lend itself conveniently to access by larger vehicles. Has that ever been an issue in the past, from your investigations? Has that ever been an issue in the past for your investigations? That is their proposition, that it is in fact somewhat impractical for access by the larger vehicles coming into the services given that their driveway is only a normal old narrow one.
- **Mr BEETY** Yes, it is only a gravel driveway although even if they were provided with a gate, I don't imagine they would be putting any sort of track in from the top so it would be just driving across a paddock in effect. I don't think we certainly have looked at that from that perspective -
- **CHAIR** So an access through the existing gate from the neighbouring property and then another gate through the boundary?
- **Mr BEETY** The boundary with the property. It would have been considered as a short-term possibility subject to that property selling but actually providing another access onto the highway is contrary to what we are trying to achieve with the limited access highways, even if it is only a gate for stock, or the like.
- CHAIR And in this case only a gate access for service vehicles.

Mr BEETY - Yes.

- CHAIR So even that challenges you in terms of the access to the highway?
- Mr ROLPH I suppose it would depend on what the service vehicle is.
- **Mr BEETY** I imagine with a big crane-type thing accessing any direction would be difficult no matter what we provided.
- Mr ROLPH I believe even a car would be difficult.
- CHAIR Given the topography?

Mr ROLPH - Yes, given the topography.

Mr BEETY - It's quite steep.

- **CHAIR** My reflection on the communication with Councillor Kearney was to the extent that it seems to me that the Torians are really saying it is a bit inconvenient for us that the service vehicles are using our driveway. I think that is probably the message that was coming through to me. Is that how you see it in your discussions with the Torians?
- Mr BEETY Yes, that is the impression I was given, that it can be a bit inconvenient.
- CHAIR All right, we can reflection that. Anything else on that, Kim?
- **Mr BOOTH** Not on that one but I wanted to talk about the Aboriginal Heritage Report. Basically the proposed roadworks, because they are within the same corridor effectively, that is why there is no likelihood of further disturbance of Aboriginal heritage?
- Mr BEETY We did undertake a report I might have it here -
- Mr BOOTH It says in the document provided by DIER -

'that Aboriginal Heritage Tasmania was consulted in regard to Aboriginal heritage. AHT advised that an Aboriginal heritage assessment of the site is not required.'

- **Mr ROLPH** Yes. It is standard practice for us, as consultants on behalf of DIER, to consult with Aboriginal Heritage Tasmania on every road design project and normally that process is to initially approach them and outline the project and they can sometimes give us an answer straightaway, sometimes they require more information to make a judgment, and their judgments either are, 'Because of the disturbed nature of the site we don't need an Aboriginal heritage investigation'. Obviously they will go back and search their records and if there are Aboriginal heritage sites previously recorded they will sometimes request us, sometimes they don't. It is their call and because it's their call you go and do it.
- **Mr BOOTH** You have some process there, you have to tick the box that you have written to them do you write to them to advise them and do you get a written response?
- **Mr ROLPH** We normally get a transfer of e-mails which makes a record of what we have done that is early in the process, in the preliminary design phase and that will be recorded in the preliminary design document report that we go through to DIER with.
- **Mr BOOTH** So in this case they have been advised by electronic communication and they have advised back that there is no assessment required.
- Mr BEETY Kim, it may be e-mail there will be some -
- Mr BOOTH But definitely some formal process that is documented.

- Mr ROLPH We couldn't provide something in a report that we didn't have evidence of.
- **Mr BOOTH** Drilling a bit further on that, the corridor that the road currently is in, has that changed at any place, is there significant battering of the banks to widen that?
- **Mr BEETY** There is a portion of acquisition required to realign the roads but where we can we have actually looked at walls, gabion or a mass block-type wall; firstly, to reduce the acquisition and, secondly, because we would have been just chasing slopes all the way up the hill because of the terrain. Where we can we have really limited the amount of acquisition considerably and we have not taken it more than 3 or 4 metres off the front of the average frontage as we have gone through.

Mr BOOTH - Okay.

- **Mr HALL** I have a quick one, Mr Chair, on the costs. Normally we have a contingency cost there and I am looking at page 11 and I can't pick anything up there.
- **Mr BEETY** I can clarify that. P50 and P90 is the best practice estimating that we are using at the moment that the department is heading towards and the P50 and P90 has the contingency built into it so in this case it is 314 000 for a P50 which means 50 per cent of our projects will meet that budget, so 50 per cent of our projects should meet that 7.595 million and in the worst case a P90 is used as the contingent risk on the balance of that. That looks at a range of pricings, a range of values, it assesses all the contingent type risks including Aboriginal heritage, all the risk factors that we can think of. It is a fairly robust process and we are trying to go along that line to really improve our process.
- Mr HALL It is something new that the department -
- **Mr BEETY** It is quite new, yes. We are still coming to grips with how it all works. There is a really complex iteration process in behind it and we are still working out all the processes on that one but the idea is it really should give us a more robust estimate with a much more accurate this is what the cost will be. It drills down. As you go through the design phases it is designed to drill down to that number.
- **Mr HALL** Another question I had was if the committee approves the project, what was the intended tender and/or start time?
- **Mr BEETY** I am looking at at this stage, subject to the approval. We are almost at final design so we can do our design reviews and then we go to tender and I am looking at late March early April at this stage subject to when the response from this committee comes through.
- Mr HALL And obviously there is quite a bit of disruption along there -
- **Mr BEETY** We won't start any works until October on site. We won't be disrupting in winter. We are not going to open any pavements or anything like that in winter.
- **Mr HALL** Is there any intention to perhaps divert traffic along Rosevears Drive in that time at all?

- **Mr BEETY** Not at this stage. We have three lanes there so that should allow us 90 per cent of the time to maintain two lanes of traffic all the time. It is a little bit of a bonus that we have the three lanes there.
- **Mr BOOTH** I have a question on the buses, if I could. I am a bit concerned but I may not be concerned depending on your answer in terms of access to buses. You have mentioned in the report that there are up to four informal stopping locations currently but it is intended to design the project so the shoulder widening just south of Masons Road to allow buses to pull completely clear of the through lane and that is the only access for buses or a pull-off area for buses that you have designed into it?
- **Mr BEETY** We have also been looking at some widening at Bradys Lookout Road and there is provision obviously to use the lookout itself as a bus-type interchange and we are having discussions with the bus company, Manion's, about that. The use through there is really inconsistent as well; some days there are a lot of students being dropped off and picked up through this area and other days there is almost none. We are working with Manion's on the best approach on that one.
- **Mr BOOTH** It seems to me a bit counterintuitive to acknowledge that there are four that are informally used, and I don't know if they're used at all in a place where a child gets on a bus and goes to school, and to then say, 'They're casually used so we will just put one pull-off area', which is incorporated in the design with a shoulder widening and not make sure that the buses that currently pick up students anywhere along that road at the moment can pull off and do that. Notwithstanding the fact that you are formally widening that bit south of Masons Road, will the buses be able to safely pick up children in the same way they currently do on the road or will the barriers and so forth preclude that?
- **Mr BEETY** There are a number of issues there. One issue is that there's nothing formal there so if we start encouraging use we are then required to provide significant infrastructure for the safe passage of students.
- **Mr BOOTH** Like what?
- **Mr BEETY** We would probably have to provide some sort of footpath, crossing point or the like.
- Mr BOOTH Are you doing that south of Masons Road?
- **Mr BEETY** At Masons Road they can pull off; it is right adjacent to Masons and they're off the highway. On the other side of the road we would be forcing them to cross at a specific point and we are quite concerned about that. The requirement that we understand for buses to pick up and drop off is that the parent is required to transport the child to that location and if it is a safe pick-up point they can do so. If you looked at every road, we would be providing bus stops every couple of hundred metres for five or six years and then the student goes to a different school, a high school or finishes school and we would have bus stops everywhere.

- **Mr BOOTH** In this case, this particular road at the moment caters for at least four informal stopping places that you have identified. What is going to happen to the kids who are currently picked up and dropped off at those informal spots?
- **Mr BEETY** We are working on that and looking at whether that can be done at Bradys Lookout. We are making sure there's sufficient room in there for that. There is also the possibility of a bit of widening at Bradys Lookout in the southbound direction. We could have a pull-in area, one in each direction, but we haven't completely finalised that yet because we are still trying to ascertain exactly how often a lot of these manoeuvres are occurring. There is also an informal bus that drives from Beaconsfield through to Launceston and they would pick someone up if there is someone there.
- **Mr BOOTH** As a result of the roadworks, will there be anything that occurs as a result of that that prevents buses doing what they do now, which you have just described?
- **Mr BEETY** Which is pulling up in the middle of a junction. We will be trying to discourage that.
- **Mr BOOTH** But all four aren't junctions, are they, the current four informal stopping places?
- **Mr BEETY** The informal ones pulling up opposite Bradys Lookout Road and the two inbound ones are also in the location, so three out of four are at Bradys Lookout Road and the other one is just a drop off at Masons. We have had a discussion with some of the residents in Masons and there are a few more students coming through in the next few years. If they're heading towards Launceston we are encouraging those parents to bring them to a spot where the bus can safely pull up and we'll try to provide one of those near the Bradys Lookout Road location.
- Mr BOOTH Do they safely pull up now?
- **Mr BEETY** No, not from what we can see. From what I understand, they pull up in the junction of Bradys Lookout Road. They're not there for very long, they just drop the students off, but they effectively block the traffic until such time as they pull out. Some days there are quite of lot students who may head down Bradys Lookout to Rosevears so we are looking at providing something at that location.
- Mr BOOTH Have you consulted with the schools?
- **Mr BEETY** We have been talking to Manions, the bus company. They say it fluctuates. It might only be one day a week but it is still something we are looking at.
- **Mr BOOTH** If you ultimately did not put in any more than the Masons Road one and the Bradys Lookout that you are thinking about doing at the moment, do you have any idea of how far children would now have to walk? Is it a big distance between the current pick-up point to the ones that you propose?
- **Mr BEETY** I think it is less than 200 metres from Masons Road to Bradys Lookout Road, so it is not. It is not significant but it is in a 100 kilometre-an-hour zone and we would like to discourage any movement of pedestrians in those areas but it is a difficult one in

that that occurs pretty well statewide on every rural road depending on where buses drop off students now. We are definitely still looking at the Bradys Lookout Road as something we can provide fairly reasonably easily.

- **Mr BOOTH** So that would then just be an add-on to the project, effectively, but not part necessarily of the formal tender?
- Mr BEETY Yes, just a little bit of localised widening.
- **CHAIR** Thanks, gentlemen. We will be considering another project today and we will deliberate on the evidence which you have presented to us in our consideration of the project. We get our reports written as quickly as we possibly can, recognising the importance of getting decisions about capital projects so that the various sponsoring departments are aware as early as possible. We will proceed to that process having heard your evidence. We thank you for that.

THE WITNESSES WITHDREW.