THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS MET AT VICTORIA MEMORIAL HALL, KEMPTON, ON WEDNESDAY 30 SEPTEMBER 2015.

MANGALORE TO BAGDAD, MIDLAND HIGHWAY - STAGE 1

Mr ALLAN LEE, PROJECT MANAGER, PROJECT SERVICES; AND Mr ANDREW FOWLER, SENIOR PROJECT MANAGER, PROJECT SERVICES, DEPARTMENT OF STATE GROWTH, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR (Mr Farrell) - Thank you for appearing before the committee today. Before you begin giving your evidence, I would like to inform you of some important aspects of committee proceedings. A committee hearing is a proceeding of parliament and this means it receives the protection of parliamentary privilege. This is an important legal protection that allows individuals giving evidence to a parliamentary committee to speak with complete freedom without the fear of being sued or questioned in any court or place out of parliament. It applies to ensure parliament receives the very best information when conducting its inquiries. It is important to be aware that this protection is not accorded to you if statements that may be defamatory are repeated or referred to by you outside the confines of the parliamentary proceedings. This is a public hearing and members of the public and journalists may be present and this means your evidence may be reported.

Would you like to now make your opening statements?

Mr FOWLER - I would like to thank the committee for hearing this project today. I am the program director of the Midland Highway upgrade under the 10-year action plan. With me is my colleague, Allan Lee, the project manager for this project.

The project we are having today is the Mangalore to Bagdad stage 1 project, which is the first component of the two-stage project. The scope of that project is to upgrade the highway between the vicinity of Eddington Road up to Swan Street, north of Bagdad. This is being done with two different schemes. In the southern part of Bagdad up to East Bagdad Road, that work is going to be completed with the installation of a 3.1 metre central turning lane median without a physical separation barrier. To the north of East Bagdad Road, that will be done with a 2.1 metre median with a central flexible safety barrier within it. Also, in the project scope is the widening of shoulders, junction upgrades and other safety treatments.

The project requires some acquisition and that process is already in train. There has been public consultation associated with this project as well, and there has been a public display. There was a development application for the project as well.

Mr LEE - The application was deemed to be exempt.

Mr FOWLER - Sorry, I thought it was permitted but not exempt. Okay. If I can correct that.

This is the first stage in the project. The second stage, which is still in planning, will be possibly up to a year away. This project will upgrade and increase safety through the current speed reduced zone - the 80 kph zone. It is proposed, post construction, for that speed limit to stay the same at 80 kph, once the safety features have been incorporated.

Mr LEE - In terms of additional scope, because of the widening process there will be a strengthening of an existing bridge, Horfield Creek Bridge. This is to meet new and future standards requirements for heavy vehicle usage. This is in anticipation to allow future usage of heavy vehicles on the Midland Highway [inaudible] arterial route. Additional safety features, apart from the widening in the median and widening of the shoulders, are shielding of any safety hazards which might be in the clear zone. To that end there will be acquisition, as mentioned by Andrew.

CHAIR - Thank you. The committee did tour the site this morning and had a look through and no doubt have some questions.

Mrs TAYLOR - How is the whole program proceeding? Is it a 10-year program?

Mr FOWLER - Yes, it is a 10-year program.

Mrs TAYLOR - This is the second year?

Mr FOWLER - This will be the second season coming up.

Mrs TAYLOR - Are you satisfied it is currently progressing as planned and hoped?

Mr FOWLER - It is proceeding as expected. The season, the 2014-15 season, was a series of smaller projects. We took existing three-lane sections, widened them and installed the central flexible safety barrier and median and then returned them back to three lanes. They were projects we could get to the market fairly quickly and get constructed quickly and realise the safety benefits as soon as we could.

While that work was happening we were planning and developing this second season of projects. These projects will be completed in the 2015-16 summer and they are more complex projects. Typically we are starting projects which will be about 10 kilometres long rather than the several kilometres of the first season's projects.

There is allocated funding for the first five years of the 10-year program. After the first year we spent a little less than we expected to, partly because the work was completed for a lower cost than we thought and allowed for, which is a big positive.

In the second year, they are more ambitious, bigger projects. There are areas in this second season which have more demand to be done because of deficiencies in the highway or where crashes have been occurring. For example, the White Lagoon to Mona Vale project will also start this season, where there are recurring crashes that will be fixed as part of the upgrade.

We are satisfied that things are proceeding as we thought they would, but we have also taken the step, as with this project, to divide it into two halves, knowing that the nominal 10-kilometre-long project was not able to taken out to the market in one go. We have

taken the fairly straightforward component, which is the stage 1, the Bagdad component, to get that constructed first, with the Mangalore section to follow latter on. After another year or so we would have caught up with our cashflow across the whole program.

Mrs TAYLOR - Of the projects you did last summer, how many of them have not quite been completed and do you expect to complete them before you go onto this year's stages?

Mr FOWLER - Last year's program had seven projects in it and one is still remaining to be completed - the south of Kempton project. There, due to the onset of winter, a fairly miserable summer and again, a cold, wet autumn and then winter hitting early, we were not able to seal that project before the weather turned. It was deemed there was a high risk of seal failure if we sealed that section, south of Kempton. We left in place two sealed lanes for the winter. Our contractor has advised us it will be returning to the site next month to complete that sealing work and then complete the barrier installation and that project will be finished. That will be the seven projects completed.

Mrs TAYLOR - When you say next month, do you mean October?

Mr FOWLER - October.

Mrs TAYLOR - Why do this project at all?

Mr FOWLER - There is not a high number of crashes in this area, but we want to have the entire highway upgraded. The 10-year action plan is all about upgrading all of the high-speed sections of the highway, but also this 80 kph section through Bagdad still has its own particular hazards. There are a lot of access and a lot of junctions, a lot of vehicles turning across oncoming traffic and being vulnerable on the road in the left-hand traffic lane with vehicles trying to get past them. We see there is a fairly ready treatment available to deal with that. We did look at different options. We were settled on the central turning lane option, which provides sheltered turning when vehicles are turning right, either into accesses or into minor junctions. We can achieve a significant safety improvement for not a great deal of cost. Then we get a consistent improvement along the whole highway, even though the treatment that will be used here through Bagdad will be slightly different to what you see on the high-speed sections of the highway.

Mrs TAYLOR - Is this for the sake of the highway traffic or is it for the sake of the safety of the Bagdad community, or both?

Mr FOWLER - It is for both. The greater benefit will be felt by the residents and the people who live in Bagdad itself. They have raised concerns before with having to get access to their properties from the National Highway. That is the situation that currently exists. They live along the side of the National Highway, be that on side roads or direct access onto the highway. They certainly will see a benefit. With the turning lane treatment they will be able to turn safely into their properties from a sheltered position in the centre of the highway.

Mrs TAYLOR - I note you have said you have done a good amount of community consultation and a number of residents have come forward and attended those consultations. Are you satisfied that you have been able to address their issues?

- **Mr FOWLER** Allan has had more direct liaisons with the community on this project than I have. I should also explain that until recently this project was managed by another project manager. It has progressed from the planning side of the department into the delivery side. We have had a change of manager, but Allan would have been involved in elements of that consultation too.
- Mr LEE I have not had a huge amount of consultation because I was handed the project from my predecessor, Mark Iles. My understanding is that Mark had meetings with the community at Bagdad to discuss the concept as proposed. The concept as proposed has not changed. Having moved onto more detailed design, there has been very little change. Basically the concerns or issues that were raised at the concept design stage the design as proposed now has not changed to any material effect.
- Mrs TAYLOR Have you been able to address the issues that people raised at those consultations?
- **Mr FOWLER** We have our designer present. He was involved in those consultations and perhaps provides better continuity as far as any communication goes. Allan has only recently inherited this project from our planning area.

<u>Mr ROSS MANNERING</u>, DESIGNER, PITT AND SHERRY, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - This committee hearing is a proceeding in Parliament. It means it receives the protection of parliamentary privilege. This is an important legal protection that allows individuals giving evidence to a parliamentary committee to speak with complete freedom without the fear of being sued or questioned in any court or place out of parliament. It applies to ensure that the Parliament receives the very best information when conducting its inquiries. It is important to be aware that this protection is not accorded to you if statements that may be defamatory are repeated or referred to by you outside the confines of the parliamentary proceedings. This is a public hearing. Members of the public and journalists may be present and this means your evidence may be reported. Do you understand?

Mr MANNERING - Yes.

- **Mrs TAYLOR** The question is about the public consultation; were you able to satisfy at least most of the people who brought issues before you, or address the issues?
- Mr MANNERING I think we have been able to satisfy the vast majority of the issues. The public display we had was back in June and there was a lot of interest. I don't have exact numbers, but I would say more than 100 people came through the door on that Saturday we were there and had a look at the plans that we had up on display. We had multiple people there that talked to lots of different landowners, some that were directly adjacent and others further away from the road. Once we talked through the concept with them and they were able to understand how the centre-turn lane was going to work we got a lot of positive feedback around that and the safety benefits that is going to provide. A few people wanted to make sure the footpath was maintained, so we have been able to accommodate that and in places we are actually improving that.

The only one issue raised through that consultation that we have not changed as part of the design, because we feel that we are providing the infrastructure to make it safe, is that a few people were interested in trying to see the speed limit lowered. We are maintaining the speed limit as it is. That is because we are confident that with the safety features we have incorporated into the design we are going to get the safety benefits we are after.

- **CHAIR** Is this type of system active anywhere else in the state at the moment? Are there are other areas we can look to where a similar system is being utilised?
- Mr MANNERING This sort of treatment is in other places in the state Sandy Bay Road and Main Road, Moonah and some of those places. The speed limit in those areas is a little lower than the 80 kph that we have at Bagdad; they are generally 60 or 50 kph zones. These treatments are used quite a lot on the mainland. Victoria and New South Wales have very good established design guidelines and things around the implementation around these schemes. We have used some of those design guidelines in developing the design for this. What we have here is a treatment that is going to be consistent with those that people can see on the mainland as well. It has not been used in this sort of environment in Tasmania before.

- **Mrs RYLAH** My question is regarding the bus stop at Chauncy Vale Road. I could not see whether the costing is in there and I couldn't see whether it is actually there. Where is it on the design? Have I missed it?
- Mr MANNERING We haven't been able to incorporate the bus stop opposite Chauncy Vale Road there. One of the main reasons for that is problems with getting people across the road safely. On other places on the job we've been able to incorporate pedestrian refuge crossings so that people can stop in the middle of the road and then cross the road. Because of Chauncy Vale Road being there itself we have to provide room for vehicles that are going to turn into there to decelerate and that means that we cannot physically fit that pedestrian crossing refuge in the median at that place for people to cross. If we were to put the bus stop in that would cause people to want to cross the road in that location, which we believe is unsafe. The reason we haven't got it there is to discourage the bus from pulling up in that spot and letting people cross the road.
- **Mrs RYLAH** Where is the bus stop?
- **Mr MANNERING** There are a couple of bus stops on the project. There are two down near Winstead Road, which is a little bit further to the south. There is one on the northbound side of the road and one on the southbound. Then there are also two up near Iden Road and Swan Street as well, which we are maintaining as well.
- Mrs RYLAH The cost of building all of that is in the costing of this project?
- Mr MANNERING Yes, it is incorporated into the cost estimate.
- **Mrs TAYLOR** Could you talk about the bicycle and pedestrian improvements that are incorporated in this design?
- **Mr LEE** In terms of the bicycle improvements there is a two metre sealed shoulder which has to be an improvement over what is already there.
- **Mrs TAYLOR** That will be on the outside of the ripple strip?
- **Mr LEE -** Yes, you have the lane, the centre line, the lane line and the interim lane line. Then you have a two-metre sealed shoulder outside the edge line of the main line. Also in terms of improvements for pedestrians, we have included these pedestrian refuges within the three-metre holding lane. That gives some comfort to pedestrians standing in the middle of the road, for want of a better word.
- **Mrs TAYLOR** You have talked already about maintaining footpaths, so those pedestrian refuges are all linked to footpaths?
- **Mr LEE -** Yes, unless Russell tells me otherwise, we have linked them so that they all link together; so there is continuity.
- **CHAIR** Were there any particular heritage issues that you had to overcome during the planning stages?

Mr LEE - One of the planning issues that was identified was the church at Chauncy Vale Road. What we have done there is to maintain minimal disturbance to those particular features. Another issue which was raised - a potential issue - was the hawthorn hedging north of Winstead Road. We obtained advice from consultants that those particular hawthorn hedges had no heritage value. So on that advice we considered it not to be an issue in terms of the removal of those hedges.

Mrs TAYLOR - They are on private property, though?

Mr LEE - Yes.

Mrs TAYLOR - And the landowner?

Mr LEE - The landowner, I understand, has concerns about their removal. I note, before my time, that there was discussion about relocation of the hawthorn hedges within the new boundary alignments. However, after advice from horticulturists, it was suggested that any relocation would not be very successful. The problem is that with the hedges, the root system is quite caught up and entangled. Separating those particular roots to replant them would probably kill them anyway. The advice was that it was not feasible to relocate those hedges.

Mrs TAYLOR - That is relocating the existing trees, but what about satisfying the privacy issue that the landowner was concerned about?

Mr LEE - We are starting negotiations.

Mr MANNERING - Yes, we have been talking to the landowner on an ongoing basis as we have developing the design. We have been getting close to a point where we will be able to satisfy them with what we can do in terms of the replacement of this. There are still some discussions going on around whether it is screening for a fence or whether it is replacement plantings. We need to get that finalised with the landowner. We are conscious of the fact that the hawthorns provide some amenity value for them and we need to replace that in some way. It is just the actual treatment and the way we achieve that.

Mrs TAYLOR - That is within the costings and that will be able to be done within the confines of the project?

Mr MANNERING - Yes, there is allowance in the cost estimate.

Mr FOWLER - If I can clarify one small thing, the hawthorn hedge is on an area that will be acquired. So that is land that is required for the road construction purposes. I believe some of the hedge is actually already located on the road reservation itself, not necessarily on private property.

Mrs RYLAH - The topography of the area near this highway is a line of hills on whatever side that is?

Mr FOWLER - Both sides.

- **Mrs RYLAH** Coming down to this road, I have seen a lot of water in this area at times. Is there an impact? What is being done to mitigate that in terms of increasing the size of the road and all the drainage that goes down there?
- **Mr FOWLER** I might suggest our designer responds to that directly.
- **Mr MANNERING** On the western side of the road, for a portion of it, Horfield Creek is not that far away from the road. So a lot of the water that comes down from the western side gets captured in Horfield Creek which crosses the road just south of Winstead Road and then joins into Bagdad Rivulet. On the eastern side, a lot of that water that runs down out of the hills comes across quite a lot of flat private property, coming across towards the highway. What we have done as part of developing the design is to make sure the capacity of the roadside drains we are going to construct on either side of the road will be able to take that flow.

Mrs RYLAH - One in 100 years?

- Mr MANNERING The culverts that go across the road are designed for one-in-100; the roadside drains are for one-in-20 years. The difference is mainly around the functionality of the road. We want the highway to be open, obviously; so we have different design periods for different types of scenarios. We have sized those roadside drains for a one-in-20-year rainfall event. One of things we have been doing in talking to the landowners through the consultation process is finding where landowners have installed some drainage on their own property to try to protect their properties from that water. We're making sure we are connecting those back into the roadside drain to make sure there is that connectivity for them. We are confident we've got the design sorted out to provide the protection there and we are improving the scenario rather than making it worse.
- **Mrs RYLAH** The speed of the flow of water, because there are drains and pipes, et cetera, the water will travel a lot faster is Horfield Creek and the rivulet sufficient and clear enough to get the water away so it doesn't back up?
- Mr MANNERING One of our main challenges is getting the water to flow towards it. Because it is so flat, one of the things we've had to do through the design process is make sure we are designing the drains to get enough grade on them to get the water to flow to there. The majority of the design emphasis has been on getting the drains to flow to Horfield Creek to get the water in. We have a couple of little spots where, to fit with existing culverts that go across the road, we have had to steepen drains in places. In those places we will put some rock protection or a similar sort of treatment to protect against erosion and that sort of thing.

Mrs TAYLOR - Do you know the history of flooding in the area?

Mr MANNERING - Through discussions with the landowners in dribs and drabs. A lot of it is anecdotal and there are no good historic records on it. We have been through the design process and analysed all the catchments to determine their size and worked out what sort of runoff we expect for the rainfall intervals. We have checked the sizes of the culverts. It indicates in the report there was only one culvert along the whole length of the road that didn't quite have enough capacity for a one-in-100-year event, but it did have enough capacity for a one-in-50-year event; so it still has substantial capacity.

- **Mrs TAYLOR** I can't recall ever hearing that the highway would be closed at this point because of flooding. You have talked about strengthening the bridge, so you are not widening it?
- Mr LEE We are widening and strengthening.
- Mrs TAYLOR To what extent?
- **Mr LEE** Basically, we are putting in an extra lane; so we have to put in an extra three or maybe four metres.
- **Mr MANNERING** Yes, probably, but I don't have those details with me. It's a combination of widening and strengthening. We will be strengthening the existing bridge with carbon fibre to try to increase the structural capacity of it and then widening it to accommodate the wider cross-section of the road.
- **Mrs TAYLOR** Do the bicycle lanes on the bridge continue?
- **Mr MANNERING** They are separated. At Horfield Creek bridge, there are separate pedestrian bridges that were constructed a few years back and we don't impact on those; they will stay as they are.
- **Mr FOWLER** The two-metre shoulders on the standard highway cross-section will continue across the bridge, with some extra space as well.
- **Mrs TAYLOR** My other question is about access from private properties. I am only talking about this particular project. Have there have any issues unresolved with access to private property?
- **Mr LEE** We had a concern from one landowner in terms of the prioritisation of one of his properties. I think it was Mr Tutty. Currently, he has one authorised access from this, and one unauthorised one. There was some discussion Ross could correct me he wanted an upgrade onto the other one as well. I think we agreed for that to be done. I think he wanted an improvement to allow for a bed and breakfast access to the property.
- **Mr MANNERING** This particular landowner had a condition that came from council a long time ago about upgrading of his access.
- Mrs TAYLOR His authorised access, or both?
- Mr MANNERING His authorised access. Some of that work had been completed, but maybe not quite to the standard that you would expect. He also has another access, which he claims he needs for heavy vehicle access into the back of his property for maintenance purposes. We have agreed with him that we will improve his main access, basically to deliver what he probably should have done in the first place. We will not be doing any formal upgrades of the other access, rather than just making sure that there is a flat enough grade on the side of the road, so that if he did need to get heavy machinery into the back of the property for maintenance purposes, he could still do that.

Mrs TAYLOR - What is the situation with unauthorised accesses onto the highway?

Mr FOWLER - We would normally seek to close them, but in a semi-urban area like this sometimes you have a situation where you cannot get a heavy vehicle past a house, or some other consideration. I am not aware of what the particular circumstances are here. It sounds like this individual has a casual access, if you like, to some balance [? 1:36:57] area of the property. We would not provide a new formal access if someone requested one. We also would not upgrade a second access if it is not an authorised access, but we may, if we do not consider there to be any safety considerations, allow one to remain if it is only used on a very casual basis, and if there is no other practical means to access the section of the property.

Mrs TAYLOR - I am aware that generally speaking on highways you try to close, as you say, unauthorised accesses. I imagine there would be use rights if you let a landowner do it for a number of years - it would then become in effect, authorised.

Mr FOWLER - I am not aware if that is the case with the Crown, but I also was not aware of this situation, so it is something I might inquire about later to see what the details are.

Mrs TAYLOR - Thank you.

Mr MANNERING WITHDREW.

KEMPTON TO MELTON MOWBRAY, MIDLAND HIGHWAY - STAGE 1

Mr ANDREW FOWLER, SENIOR PROJECT MANAGER, PROJECT SERVICES, AND Mr ALLAN LEE, PROJECT MANAGER, DEPARTMENT OF STATE GROWTH, WERE RECALLED AND EXAMINED.

CHAIR - Our witnesses are already sworn in, so would you begin with your overview please, Mr Fowler.

Mr FOWLER - I would like to thank the committee for hearing submissions on this project today and taking the time to inspect it with us.

The Kempton to Melton Mowbray stage 1 project is part of the 10-year Midland Highway action plan.

I am the program director for the Midland Highway upgrade and Allan Lee, my colleague with me, is the project manager for the Kempton to Melton Mowbray stage 1 project.

The scope of the project is the first stage of the Kempton to Melton Mowbray project. We believe stage 2 will proceed within months of the stage 1 project. Stage 1 starts just to the north of the Mood Food roadhouse and proceeds to several hundred metres north of the Lake Secondary Road junction. The scope of the project is, as with the balance of the Midland Highway action plan, to upgrade the safety of that section of the highway to a minimum AusRAP three star. Predominantly, that is being done through the construction of a central 2.1-metre median, with a flexible safety barrier in the centre.

Another part of the safety scope is to widen the shoulders, so provide extra run-off road space, and also to upgrade the Lake Secondary Road junction. As well as safety improvements, there are also efficiency improvements with the addition of two overtaking lanes: a northbound overtaking lane starting at the beginning of the project, which will be extended and taken back to the Mood Food Roadhouse as part of the stage 2 project. Also, an overtaking lane south of the Lake Secondary Road, to provide overtaking of any slow vehicles that are coming down off the hill from the highway, or also coming out of Lake Secondary Road.

As far as environmental matters go on the project, we do not have anything significant out there environmentally.

As far as consultation goes, there have been a good number of meetings with local property owners. There is a number of significant-sized properties along this project. I have had various meetings with them, just to clarify certain details and incorporate as much as we reasonably can things that assist property owners in that area, given the upgrade of the highway will restrict some right-turn movements on and off the highway. To aid in that, we are installing turning facilities as part of this project. Roughly in the centre of this stage 1 project there will be two turning facilities, which will provide an internalised right turn, so vehicles heading down the highway can turn off to their right from the sheltered turning facility and then head back in the opposite direction, be that to the north or to the south.

We would also like to construct a turning facility on Lake Secondary Road, but we still need to go through the acquisition process for that one. We have not yet started that process. We have just had initial conversations with the property owner about that one.

- **Mrs TAYLOR** That is a council road, is it not, the secondary road?
- **Mr FOWLER** No, the Lake secondary road is a state highway as well. There are some different options there as to where a turning facility would be located, but our preferred location is on private property. It fits well with turning off to the right side of the road, which is our preference.
- Mrs RYLAH It is only a small area of private property. It looks like the corner of their block.
- **Mr FOWLER** It is quite a small area. That is right. We are hoping that will proceed okay.

That is basically the scope. Budget wise, you have the information in the report, and the budget is allocated for the project.

- **Mrs TAYLOR** My first question again, why do this? I understand what you are trying to achieve with the Midlands Highway, but why is this project particularly at this time and -
- **Mr FOWLER** This project, unlike some on the Midlands Highway some areas which have a crash cluster, as we call it, or a particular situation that is contributing to more crashes than you would expect through the random nature of most crashes we do not have that on this project. Other ones we will be starting in this 2015-16 season do have recognised crash clusters that we will be addressing.

This is part of the ongoing upgrade to upgrade the whole of the high-speed highway between Pontville and Perth. It is a project that allows us to proceed from the south and get an area treated. We are soon going to complete the South Kempton project with the Kempton to Melton Mowbray stage 2 project. We will complete that Kempton precinct. With the Bagdad-Mangalore project, we will then complete that. We will have the whole highway treated up until the Lake Secondary Road junction by that stage.

We are also doing a similar thing in other areas where we are trying to have uniform treatments rolled out, which then give you a consistent upgraded environment through significant sections of the highway. We are trying to approach in several different zones at a time, so we are not concentrating the impact in one particular area. Over a period of 10 years, we do need to upgrade 150-odd kilometres of highway. We need to be doing that on a steady basis for the next nine years, nine construction seasons.

- **Mrs RYLAH** Andrew, can you characterise the difference? This is a high-speed 110 kph section and the previous section we looked at was an 80 kph section. Can you tell me in simple terms the difference in character between those, because to me they look quite similar?
- **Mr FOWLER** The treatment that will be used on the Mangalore-Bagdad, stage 1 project, north of Bagdad, will be very similar to what is used on the Kempton-Melton Mowbray stage 1 project in that there is a 2.1-metre median with a safety barrier, so nominally a 1-metre shoulder on either side of that central median and a 2-metre shoulder on the outside.

It is a very similar section. The difference in characterisation with this project is that it is in much more open territory, therefore high speed, and it has existing overtaking and risks around existing overtaking. There are large properties with heavy vehicle movements but there is not the high density of accesses we have at Bagdad, so it is different.

The treatment we have adopted all the way up the highway in the high-speed sections is to have that 2.1-metre median with a central safety barrier. That effectively eliminates the opportunity for head-on crashes. Around 60 per cent of fatalities on the highway at the moment are from head-on crashes and most of the balance are from similar loss-of-control crashes resulting in driving off the road. Where we can't have a simple, safe run-off area into a paddock at a fairly low slope so a car can drive safely off the road, we will be having safety barriers on the outside of the road as well. It is a different environment but we strongly believe the treatment we are installing there is the best treatment to save lives on the highway.

Mrs RYLAH - I didn't note safety barriers in the other section, but there are safety barriers to be installed on this section, aren't there?

Mr FOWLER - Yes. Do you mean the central safety barriers or outer safety barriers?

Mrs RYLAH - No, side safety barriers.

Mr FOWLER - I would have to check with my colleague, Allan Lee, about whether there are any on the Bagdad stage 1 section. I am not aware there are outer barriers.

Mr LEE - There are none on the Bagdad stage 1 section, to my recollection. In the Kempton stage 1 section we are installing barriers on the outside where we can't provide a 6:1 side slope. A 6:1 side slope is there so you don't get rollover-type scenarios. Where we can't provide a 6:1 side slope because we're trying to minimise the amount of construction in terms of acquisition, that's where we provide a barrier on the outside. It's about recognising where there are hazards at the sides in what is called the clear zone. If there are hazards identified within the clear zone - for instance, a tree or something - the most effective treatment is to put a barrier on the outside.

Mrs TAYLOR - Supplementary to that - and this is personal experience - where you already have done that on other sections of the highway, when I am driving along there I feel almost claustrophobic because there is just one lane and a central barrier of some kind, whether it is a flexible wire or whatever, and a barrier on the outside. I understand why you are saying you need to put those there but it gives you no room to move as a driver. If something unforeseen were to happen in that lane, there is nowhere to go, or as we discussed earlier, if an emergency vehicle needed to get through there is no moving room so you would almost have to have an accident. Have you addressed that risk?

Mr FOWLER - We believe we have. We are providing 7 metres of clear space, where there is a barrier both in the centre of the road and on the outside. When you consider the 3.5-metre traffic lane and the shoulders on either side, there is still 7 metres, which is enough space to have a vehicle broken down and other vehicles to get past. There is even room to have two-way flow, if necessary, in the case of an emergency. If there is some sort of incident on the other side of the road we can get traffic diverted into the single-lane section, so we believe we have that covered. We strongly believe this is the safest

- treatment we have to prevent the fatalities that occur on this highway, which are mainly the head-ons and the run-off-roads.
- **Mrs TAYLOR** Okay, I'm thinking around Woodsdale or somewhere where we already have that sort of section. Are they all a minimum 7 metres wide?
- **Mr FOWLER** The one at Symmons Plains at the moment might be just under 7 metres. Symmons Plains was installed a couple of years ago.
- Mrs TAYLOR It feels very narrow.
- **Mr FOWLER** It is a little narrower. Conversely to your opinion, we have other people saying they feel a lot safer because they're not worried about oncoming traffic and what they're doing, so they know they have protection there.
- Mrs TAYLOR The last trip I had up the highway, it was perfectly safe because the road was two lanes wide, but sheep appeared in the middle of the road and I was thinking had that happened at a narrow section it would have been very difficult to avoid. A sheep is not supposed to wander onto the road, I understand that, but that is the kind of incident I suppose I'm talking about that could happen. All the traffic just stopped and waited for the sheep, which was interesting because it was the highway and all the traffic just stopped in both directions so the sheep could come across the road, but it could easily have been an accident.
- **Mr FOWLER** That sort of thing has the potential to result in an accident. I'm not aware of any significant crash that has occurred or fatality on this highway due to livestock, whereas we are all aware of many fatalities that have occurred due to head-ons and run-off-roads.
- **CHAIR** Getting back to the overtaking lanes, I notice on the plans the northbound overtaking lane is 1 kilometre long and the southbound from the Lake Secondary Road is 1.5 kilometres long. What length is ideal for overtaking lanes? What is the minimum safe overtaking lane length?
- Mr FOWLER We typically aim for 1.5 kilometres but they can be shorter. We can seek a specific response from our designer if you like, but 1.2 km tends to be the minimum we go for. If it's less than that you find that not all vehicles which are typically queued behind a slow vehicle can get past. If they're longer than 1.5 km typically they can be longer than you need and you're better off to invest in another opportunity somewhere else. They're pretty much the optimum size, I would say. I'm just waiting for a nod from our designer and I got the nod.
- CHAIR The one being 1 km long isn't of -
- **Mr FOWLER** That one will be added on to as part of stage 2, which will extend that northbound overtaking lane all the way back to the Mood Food roadhouse. That will also be around 1.5 kilometres. There is a space in between, which is the vicinity of the turning facilities, the P turns, so properties can be accessed turning right by turning at the turning facility and then doubling back for some distance.

- **CHAIR** In relation to the Lake secondary road, has there been a number of incidents resulting in crashes from traffic entering or departing the highway in that particular section that you are aware of?
- **Mr LEE** I will take advice.
- **CHAIR** It would be good to have the number of incidents.
- **Mr FOWLER** We might have the data with us, so I might be able to provide a response to that if you like.
- **CHAIR** We will give them some time to have a look through while we ask some more questions.
- **Mrs TAYLOR** We can carry on with that one, I suppose, at least with the P-turns. They are unusual on the highway.
- Mr FOWLER Yes.
- Mrs TAYLOR Are these the first time we are using them on the highway and are you intending to have more? My question specifically is about signage. I am a bit concerned that people will not know whether they are allowed to turn right or left only. What kind of signage are you going to put up to make sure that people know where they are being guided to and what is and is not permitted?
- Mr FOWLER The P-turns are a fairly new feature. There are similar turning facilities on the Bass Highway, where you have a right turn from the centre rather than the other type of turn, which we call a G-turn, which is a turn on the left-hand side of the road. You see them up and down the Midland Highway and the Bass Highway as well. The difference is a G-turn requires a vehicle to leave the road on the left-hand side, then stop, being able to see traffic coming from both directions, and then cross all lanes of traffic to then go back the way they come, whereas a P-turn provides a channelized right turn, so it is a sheltered turn in the middle of the highway. That allows vehicles to slow down, other vehicles behind to pass on their left and then the vehicles that is turning only needs to give way to traffic that is coming from the opposite direction. They leave the road into the turning facility, crossing just one single lane of traffic. They can check for any vehicles following behind them, and if the path is clear they can continue their turn and pull out onto the highway and back in the other direction.

A P-turn in a two-lane area, so one lane either way, is considered a much safer treatment because you are only ever crossing one lane of traffic rather than looking at two or potentially more than two. It is the treatment that is being adopted for the Midland Highway safety upgrade, and you will see a lot of them. There might also be a G-turn or two here and there to suit particular locations. Our strategy is to have them signed as heavy vehicle turning facilities, so they will be signed not quite as a junction but with quite obvious signage. The issue there is that if you do not sign them then driver get confused. A new lane opens up; they do not know if it is an overtaking lane or if it is the junction they are waiting to come up, so you need to sign it as a turning facility and to take the right lane to use the turning facility, so it certainly will be signed.

- **Mrs TAYLOR** At least one of the P-turn facilities goes onto access to another property. What happens in that case if someone is exiting from that property? Are they going to be allowed to do a right turn onto the highway or will they need to do left turn only?
- Mr FOWLER We have had a number of meetings with the property owners in the area. We knew we had a need to put turning facilities somewhere and then we have met with them and tried to position them so it suits the operation of the significant properties as much as possible. There are two aspects there. One, where a property needs to get access by turning right of the highway into the property access. Either the turn has been positioned in a safe area and also to suit where the overtaking lanes need to go, but in a position where the property access can join into the turn, which then allows you to turn right into the turning facility and just continue straight through onto the access to the property.

The other aspect is turning right out of the property. For some of those properties the owners and other operators of vehicles will be able to turn right out of the turning facility as well, against what you would call the notional traffic direction around the turning facility, but given their very low use and the fact that vehicles on the highway have right of way over the vehicles entering the highway from private property, we do not see that as being a significant safety concern. There is good visibility in all of these locations as well. For many of the properties, they are not overly inconvenienced by the installation of the flexible safety barriers that have access both turning right off the highway and turning right onto the highway. Failing that, there are some others which can also turn in the P-turn so if they have to turn left up the highway and travel a short distance then they can also turn in the P-turn and head back the other way if they need to. As much as we possibly could we have tried to accommodate the needs of the different farming businesses and the vehicles they need to use.

- **Mrs TAYLOR** I see that B-doubles are a slightly different situation, or heavy vehicles, so that they will not be able to do a right turn, one presumes, onto the highway; they will need to use the P-turn and then go along the left. I am concerned about signage indicating who can do what.
- **Mr FOWLER -** The typical property access that is designed for B-doubles, where a B-double is the design vehicle, and these days they are becoming more and more common. A lot of the contractors and property owners would use B-doubles. At a typical access they will be able to turn left without any impedance. I am not aware of any access where they will not be able to turn left.

Mrs TAYLOR - There is one, isn't there?

Mr FOWLER - In our earlier discussions on site in the tour I think I suggested that there is one where they could not turn left, but they can.

Mr LEE - Yes.

Mrs RYLAH - They can?

Mr LEE - Yes, they can turn left.

Mrs TAYLOR - We had a discussion about that earlier.

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- Mr LEE The confusion was with the right-hand turn basically.
- **Mr FOWLER -** With a light vehicle, if you are turning right from a turning facility onto the highway, if there is a P-turning facility or turning facility opposite you on the opposite side, there will not be room to get a heavy vehicle to turn right directly into the traffic lane into the highway. What that vehicle needs to do is to cross the highway, to cross both lanes, and use the turning facility, which has the suitable geometry for a B-double vehicle, and then come out as if they'd turned using it as a turning facility.
- Mrs RYLAH And there is enough space for that in the P-turn?
- **Mr FOWLER** It works a bit better because the trailers are lined up, so they will be able to turn left at any access.
- **Mr LEE** What we will have to do is upgrade people's left-hand in and left-hand out because, with the presence of the wire-rope median, properties owners in the past had the opportunity to wander over the centre line and then turn in. With the presence of the wire rope median they won't have that opportunity and therefore we have to have greater attention to vehicles turning left-in and left-out. We have to make sure the design vehicles and the turning movements act as a design for that particular turn.
- Mrs TAYLOR When we were on site we were talking about -
- **Mr LEE** Yes, and I apologise for that.
- Mrs TAYLOR Okay, so that was incorrect. I think you said the turn was too tight and therefore B-doubles wouldn't be able to turn there. So it is okay. Good.
- **Mrs RYLAH** In this left-turn scenario and these are farming properties are we taking into account large farming implements the big articulated, ungainly machines that go round corners?
- **Mr LEE** We can only take advice from the information the property owners provide us as to the design vehicles. They have been telling us to design for B-doubles.
- Mr FOWLER We know in the last 50 years vehicles have grown astronomically, and if that trend continues there might be minor upgrades in the future to cope with new equipment at accesses. We have asked the property owners what vehicles they use, the latest vehicle they use, and their main concern has been B-doubles rather than harvesters and other things. A lot of those big vehicles have four-wheel steering and reasonable turning geometry, although they can tow quite wide implements at times. Anything over 2.5 metres, I believe, needs a permit anyway, and anything much wider than that needs an escort. I gather they go through a process to move those sorts of vehicles and loads around on the highway anyway.
- Mrs RYLAH What are you intending to do because of the irrigation schemes that are coming in? I don't know how close these properties are in this section but I think it is important we design the intersections to enable that to happen, that we don't have to retro-change these intersections to these large properties.

Mr FOWLER - We don't believe we will need to. The property owners would have spoken up and said, 'My design vehicle isn't a B-double'. It's whatever piece of equipment it may be. That hasn't arisen in any of the conversations we have had. We are having conversations with the people who know what their vehicles are and what their requirements will be, so it would have come up if there was a different design vehicle.

Another thing we are looking at incorporating is where we know there is a lot of slow tractor-type movements, to have passing bays here and there - say, every kilometre, normally, to allow a tractor driver to pull over and allow any following traffic to pass, if it's a section where there is no overtaking lane nearby or where it is a single-lane section. I am not aware if we have any of those in this project at the moment, but on other projects we are looking at putting in short passing bays as well to improve safety and convenience.

Mrs TAYLOR - We talked in the previous project about the consultation process. Have you been able to address the issues of the people you have consulted with?

Mr LEE - The issue that has been raised with landowners as a group is the presence of the central wire rope median because of access issues, loss of right-hand in and right-hand out. We have gone through the process of how we have arrived at the design in terms of the positioning of the overtaking lanes and where we are able to put turning opportunities in terms of the P-turns. We are trying to locate the P-turns in a location which minimises the inconvenience to the landowners, also recognising that where there are existing junctions at Lake Secondary Road, there is a proposal for a P-turn. I understand there is another proposal for a P-turn in stage 2, which is at the north of Kempton entrance. That again puts the turn locations within regular distances. That is the P-turn issue, or the wire rope median issue.

Fog has been raised generally as an issue, not just amongst individual landowners. We had a public consultation and fog was raised as an issue. This was in particular regarding the entrance in and out of Kempton. They say that since they come over Constitution Hill and down the valley, it acts as a fog zone.

We undertook to review what options were available to us and the response from our road safety people are that - for instance, in Victoria they proposed the use of static signs which say, 'Fog zone - turn your lights on'. At the end of the day, in terms of fog, it is about visibility and educating people to turn their lights on when there is fog. That is why we are thinking about putting up signs indicating fog zones.

It is about education because, at the end of the day, a lot of the landowners come to the entrance and exit into Kempton and say they can't see anything. They literally have to wind their windows down to hear the traffic. Obviously, for them it is an issue. It is about being visible and about people driving to the conditions. It is an education process.

Mr FOWLER - By far the predominant concern of landowners has been the inability in some cases to turn right into their property or to turn right out of their property onto the highway. This is why we have worked with them as much as we can to position turning facilities where they can line up with accesses or where they can be most conveniently used. We have had to consider where overtaking lanes need to go as well, so that gives us windows of opportunity put in turning facilities. Unfortunately, it leaves some people potentially

- with a bit of trip up the highway to turn, which is why we are trying to locate those facilities as closely-spaced as we reasonably can, considering the types and numbers of vehicles used at each property.
- **Mrs TAYLOR** Do you know the longest distances that a landowner might now be inconvenienced by?
- **Mr FOWLER** We haven't had any particularly long ones but I can anticipate that somewhere along the highway we will have someone who needs even a five-kilometre round trip, perhaps, if they have very low numbers of vehicles.
- Mrs TAYLOR That is not at this stage?
- **Mr FOWLER** Not on this one. Allan might know the exact distance. We have one property towards Lake Secondary Road where vehicles leaving that property to the north would have to head south, turn around and then head back to the north. Do you have that number off the top of your head?
- Mr LEE No, not off the top of my head. It would be close to three kilometres, I think.
- **Mr FOWLER** Someone in unusual circumstances, because there is an overtaking lane right where that access is, means the property-owner or any drivers would need to head south and then turn around to where we can accommodate a safe facility and then head to the north.
- **Mrs TAYLOR** I have had concerns raised with me about the flexible wiring. I am sure you have had the comparison of flexible wire as opposed to a solid barrier and the risks that poses to motorcyclists, in particular. Can you address that issue?
- **Mr FOWLER -** Yes. There are a number of different barrier treatments that are available. Where we do not need a barrier on the outside of the road, we would much rather not have one. The safety barrier itself is a hazard. We would rather not have any barrier. Where we need to separate oncoming streams of traffic, there is no option but to have physical separation. That can be done through three main treatments. It could be a rigid barrier a concrete barrier, like you see in more urban low-speed areas.
- Mrs RYLAH Like at Spring Hill?
- Mr FOWLER Yes. That is a steel one. The concrete barrier is another option as well. There is very high costs associated with that. There are drainage concerns. It interrupts the drainage paths on the highway. Also when vehicles hit them at high speeds, they tend to ricochet around and actually cause more damage than if they had a different sort of barrier. The intermediate option is what we call a 'W-beam'. Armco used to be the proprietary name. Everyone knows it as an Armco W-beam steel barrier.

That has some give in it. It obviously does not interrupt drainage. It is more cost-effective. You still have vehicles hitting it if someone has lost attention or if they are perhaps even asleep. If they hit it at quite an angle, it does not absorb energy very well, and it tends to bounce vehicles back into other vehicles or onto the other side of the road. It can cause a lot of damage to the occupants and to the vehicle as well.

The preferred treatment by far is the flexible safety barriers. They are used around the world. They absorb vehicle energy. They can be repaired quite readily. They obviously do not interrupt drainage. They are very cost-effective. They will always redirect light vehicles. They are tested according to quite rigorous tests. They have been known to redirect even heavy vehicles as well. No barrier is good for a motorcyclist to hit. Typically, the issue with motorcycles is they typically slide along the ground in a crash more often than not, and they hit the posts. None of the posts are going to be very friendly to a motorcyclist.

We do on sharp curves install what we call 'crash cushions', which are the foam or rubber pads that go around the posts to at least give that a bit more shock absorbency if a motorcyclist was to hit a post. As far as reducing the issue we have with fatalities from head-on crashes and run-off roads, the flexible safety barriers are by far the best treatment that we have available - and education of motorcyclists, perhaps.

Mrs TAYLOR - I do not think motorcyclists intend to run into things; it happens sometimes. There might be an oil spill or anything like that. My last question is about completion. Do you intend this stage and the previous one to be completed this summer? Is that the plan? How long will the road works be going on?

Mr FOWLER - When you say the 'previous stage', which one do you mean?

Mrs TAYLOR - Stage 1, the one we talked about - Mangalore to Bagdad.

Mr LEE - Ideally, we would like to complete Bagdad stage 1 by May next year.

Mrs TAYLOR - Before winter?

Mr LEE - Yes, before winter. Obviously, that is contingent on us getting our documentation together and getting our tender before that can occur. For Kempton stage 1, that is envisaged to be the other two construction seasons because of the nature of the works. For instance, with Quoin Rivulet Bridge, we are talking about having to replace the existing superstructure and strengthen the existing substructure. Before we can do that, there are a lot of works involved. We are looking at that going into not next year, but the year after.

Mrs TAYLOR - During construction, will there be one lane open each way all the time, or will there be, for that length only, one lane so that people have to stop?

Mr LEE - What we will be putting in that particular contract is for one lane to be open at all times during working hours.

Mr FOWLER - In each direction.

Mrs TAYLOR - I am thinking that if it is going to take that length of time - over two seasons - then that is a long time for diversion.

Mr FOWLER - That is right. We want to minimise the effect on the travelling public. To do that, we really need to have one lane in each direction open at all times. We can foresee that with the bridge replacement there is some fairly significant work to do there. There

might be a need for a short period to have the highway limited to just one flowing traffic lane, but we don't know yet. That will come out in the detail. That will be for a period rather than for the duration.

Mr LEE - After hours, our intention will be there will always be at least one lane going in each direction.

Mr FOWLER - Sealed lanes as much as possible.

Mrs RYLAH - Is the road surface different between these two projects? In one of them we have the issue of road noise would be much more relevant to the landholders than in this one. Can you explain that?

Mr LEE - Kempton stage 1, there will be a chip seal - the bitumen with the gravel on top and rolled in. The reason that will be required is that on the Midland Highway the chip seal has a greater texture in terms of skid resistance. For instance, we have had a pretty rugged winter and the problem with an asphalt sealed surface is that skid resistance, under most circumstances, is quite low and that is a different kettle of fish. For Bagdad it will be an asphalt hot mix.

Mrs TAYLOR - Through the 80 kph zone?

Mr LEE - Yes, it is horses for courses. There is a speed limit and we are trying to achieve a noise objective. Whereas, on the Kempton section, open speed limits, high speeds require higher skid resistance. That is why there are different seal treatments.

Mr FOWLER - Our preferred treatment on a high speed road is always to have a sprayed seal or a chip seal, as Allan called it. The reasons are there, we typically use a 14 millimetre stone so you get the texture so you have better skid resistance. You have some depth for the water to flow through, so you don't get the same aquaplaning risk. You also don't get the reflection you tend to get on an asphalt road. With asphalt, your headlight bounce off at night or in the wet and you can't see anything. Whereas, the stone will reflect back at you, so you get much better visibility, as well as being a very cost-effective treatment. It ticks all the boxes.

Mrs TAYLOR - I wouldn't mind if you did that in some urban areas - when it is wet you can't see the lines on the road at all because of the smooth surface.

Mr FOWLER - But it is noisier.

Mrs TAYLOR - Yes, I understand.

Mrs RYLAH - Going back to the question regarding tendering. In this outline of the dates, you are looking at the awarding of the construction contract in November for one and the other one in December. Is that enough to get the project finished? The contractors have to get organised and get people onsite, et cetera, to have these projects finished.

Mr FOWLER - The Kempton project will take two seasons. Although, we have a wish to get the Bagdad stage 1 project completed in one, it will depend on which contractor gets it, how they schedule the work, and how much other work they have on. There is potential

to get it completed in one season and that is our preference. There is a risk or an expectation that it may take more than one season. It may take until towards the summer of the second season, through towards perhaps December 2016. At this stage it is a bit hard to tell.

We are aiming to get both out to tender later in October, next month, and we are trying to set an expectation amongst the contractor market that we want it done in one season. But we expect it is also quite an ask at the moment to get that Bagdad section completed in one construction season. It will depend on the weather as well. The last construction season we had terrible weather. It was not a very good road construction season at all. If we had a good season we could well get it done. It is a matter of trying to set the expectations right.

Mrs TAYLOR - You will put that expectation in the tender?

Mr FOWLER - Not necessarily. We will try to convey that message, but whether we do it contractually or not is another thing. If we set a target that is seen as overly ambitious, then it could well cost us more to do that. We need to weigh up what it might cost to get something we possibly do not need. We don't want to be pushing the community in Bagdad too hard with a lot of construction and a lot of disruption. We need to think that over carefully with our designers and other people within the department to see how we set that date for completion.

CHAIR - Thank you very much. We have some other witnesses to hear from, but we will probably hear from you gentlemen a little later on.

THE WITNESSES WITHDREW.

Mr BOB CAMPBELL WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Mr Campbell, thank you for your submission and appearing before the committee. The committee hearing is a proceeding in parliament. This means that it receives the protection of parliamentary privilege. This is an important legal protection that allows individuals giving evidence to a parliamentary committee to speak with complete freedom without the fear of being sued or being questioned in any court or place out of parliament. It applies to ensure that parliament receives the very best information when conducting its inquiries. It is important to be aware that this protection is not accorded to you if statements that may be defamatory are repeated or referred to by you outside the confines of the parliamentary proceedings. This is a public hearing and members of the public and journalists may be present. This means that the evidence may be reported. Do you understand?

Mr CAMPBELL - I understand.

CHAIR - Thank you for your submission and I invite you to make some opening remarks.

Mr CAMPBELL - I have been listening to what has been put and some of the concerns that I have put in my submission have been addressed. But having received a letter from Rene Hidding after I put the submission in, it works out that if you add two metres to the three-lane system that you are discussing you would have four lanes.

I also have been associated with heavy rigid transport and semi-trailers. There is a bit of concern when it comes to doing a U-turn with livestock, because livestock is unstable. I am a little bit hesitant about the U-turn set up.

I am also hesitant about the wire cabling. I know in my own bodyworks experience, having been an owner of a bodyworks for 23 years, I have repaired cars that have smashed into wire cables, I have repaired cars that have smashed into solid steel barriers and concrete barriers, and with cars that have crashed into wire cables front-on the bulkhead area gets damaged and the car can no longer be repaired. Under a solid barrier it can be repaired and you are allowed five degrees tolerance, otherwise the vehicle has to be written off. If it is not within that five degrees it is unsafe and you cannot do a wheel alignment.

Another question comes up when it comes to stability. I have been watching some of the roadworks that are being done. I question whether [inaudible] is being used in the base, the foundation, to make sure that the base, the foundation, is sound, solid and secure. The last thing you want is break-ups. In the days of PWD they did good roads and a lot of those roads are still standing solid and have minimal maintenance, yet some of the modern roads are being done and they are breaking up in a very short period of time.

When I commented in relation to foam cushions on posts in relation to motorbikes, the modern practice now is moving on to silicon memory cushioning, but I notice nothing has been mentioned in that area.

One of the concerns I have is people with horse floats who have to stop to turn off the highway. A classic example is at the old boys' home at Mangalore. If she stops in a single

lane, does the traffic behind stop, or do you have an idiot using an iPad or a mobile phone not paying attention and crashing into her?

The other concern I have is that people do not necessarily move over to the left for an emergency vehicle. Having had a heart attack and being caught going down Constitution Hill, none of the traffic moved over.

When you look at the Australian policy, wider roads are safer roads, with room to run off. I notice your previous ones have been touching on that, which leads me to ask the question: are they going by a common Australian code, or are they adopting a system for Tasmania only? Also, if heavy vehicles are in a single lane, how the hell do they pull over?

- **Mrs TAYLOR** We have tried to address some of those issues in the previous questions. Are you not satisfied with the answers about the flexible wire cable being not only more cost-effective, but also affecting drainage, and being better than no barrier being installed to avoid head-on collisions?
- Mr CAMPBELL I am not a lover of wire cables. Never have been, and I probably never will be. Where you have head-ons coming across the centre, and because we do not consider others on the road, therefore, we are not concentrating on the road there needs to be more education in that area. I had an experience going down Constitution Hill with a car behind me, and she was using laptop computer on the dashboard. When it comes to the wire cables, I go back to the statement of the Australian code: wider roads are safer roads. Room to run off. If we are going to have to have a wire cable down the middle, so be it, but make sure heavy rigid vehicles and heavy semi-trailers and B-doubles have plenty of room to get round, especially if they have an unstable load. The last thing you want is a vehicle over on its side. They do provide drainage and do the job where there is a deep spoon drain or a deep drop off, but I notice they still have not fitted them on Mud Walls Road.
- Mrs TAYLOR The aim of this, as you would realise, is to improve safety, partly because of what you say that it is often driver error or inattention, perhaps deliberate sometimes, that head-on crashes occur. That is why this is happening. I do not think we can entirely eliminate either human error or intent, but this is an attempt to do that. Do you think this is achieving that?
- **Mr CAMPBELL** Going back to human error, I remember going to a forum where we moved from accident to crash because people were passing the buck, 'It is an accident, not my fault', so it became crash, human error. You are not going to eliminate human error.
- **Mrs TAYLOR** No. As much as we all would like to stop people using electronic devices while they are driving, we cannot regulate for that. We can regulate for it, but we cannot make people always behave, just the same way we cannot make people obey all the road rules, much as we would like them to.
- **Mr CAMPBELL** That is where the mobile users are going to love single lanes. If you have five vehicles, and vehicle number three wants to use a mobile phone, the police are not going to be able to book them in a hurry. Think about it.
- **Mrs TAYLOR** I understand your issue about education, I think that is the way to go.

Mrs RYLAH - In your opening statement you mentioned U-turns on the highway. Were you referring to the P-turns?

Mr CAMPBELL - Exactly.

Mrs RYLAH - Okay. I didn't understand how you would have a U-turn on a divided road.

- **Mr CAMPBELL** They have used that sort of system for many moons by the Flinders Street Railway Station. It actually works if you have the room to move. But if you have not the room to move, it is crash, bang, wallop. You have to allow for those vehicles to accelerate when they have done their U-turn. Recently, in the north of the state, a vehicle coming onto the Midland Highway pulled out into a stream of traffic with a B-double. Cars were in panic mode trying to stop.
- **Mrs TAYLOR** Can I ask about the foundation of the roads? Perhaps we will ask the engineers when we get to that later. You are questioning the quality, I think. We will ask them about whether we are adhering to national road standards. I understand we are, but we will ask that question of the engineers later.
- **CHAIR** Thank you very much, Mr Campbell, for your submission and appearing before the committee today.

THE WITNESS WITHDREW.

Mr ALEX GREEN WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Mr Green, thank you for your submission to this committee. A committee hearing is a proceeding of parliament. This means it receives the protection of parliamentary privilege. This is an important legal protection that allows individuals to give evidence to a parliamentary committee to speak with complete freedom without the fear of being sued or questioned in any court or place out of parliament. It applies to ensure that Parliament receives the very best information when conducting its inquiries. It is important to be aware that this protection is not accorded to you if statements that may be defamatory are repeated or referred to by you outside the confines of the parliamentary proceedings. This is a public hearing. Members of the public and journalists may be present. This means your evidence may be reported. Do you understand?

Mr GREEN - Yes, I do.

CHAIR - I invite you to make your opening statements.

Mr GREEN - I thank the committee for the opportunity to present evidence this afternoon. I welcome both these projects. Road safety is a very important public interest issue. I commend the Department of State Growth for going a long way to advancing the interests of road safety.

My submission addresses a couple of concerns regarding safety. The introduction of the wire rope barrier certainly does remove the head-on accidents, which of course are often very high speed with quite severe injuries and in many cases morbidity. My concern is largely based on some admittedly limited knowledge of experiencing jurisdictions in Ireland and Britain where wire barriers have been introduced. Where there are gaps in the barrier the head-on accidents no longer occur, but instead these crossover points become the focal point of accidents, with vehicles being hit side-on as well as head-on accidents. Again, a lot of that is introduced by human error, but I guess the challenge when introducing safety changes to the physical infrastructure is trying to limit the damage caused by human error. Even with plain, straight sections of road with perfect visibility now we have fatal head-on accidents, seemingly without any explanation except human error.

The solution I suggest for some of these more important junctions is that roundabouts be put in place. There are a number of roundabouts already on the Midland Highway; from Granton through to Pontville there are four. If there are accidents at roundabouts they are generally of much less severity because all vehicles are travelling at a harmonised lower speed.

We have some areas such as Black Brush Road on the Mangalore-Bagdad section which are accident hotspots, as is the Lake Road-Midland Highway junction. You asked witnesses earlier about accidents and there have been a number of severe accidents at that junction. Given that the objective of this program is to improve safety I think we could probably draw upon experiences elsewhere where they have made a major investment in wire barriers and later they have had to retrofit roundabouts onto where they would have

P or G turnabouts. I have an opportunity to present that view, because we will have accidents at these gaps; it is indisputable that we will.

One of the issues raised by Mrs Taylor in a specific question was about the signage associated with these junctions, particularly for the travelling public who aren't familiar with those particular sections. There is a lot more tourists using these roads these days. We have a mixture of traffic. Agricultural equipment was mentioned, as was B-doubles, and we have cyclists as well. We have a whole range of traffic travelling at a different range of speeds and the experience overseas is that where you have these gaps in the wire with these different modes of transport it is, sadly, a deadly mix. I'm not suggesting that flyovers and tunnels under the road is the solution but roundabouts don't require a great deal of maintenance, unlike a junction with traffic signals which cost a large amount of money to maintain. Roundabouts work on the Midland Highway. We have them already. People are familiar with the operation of roundabouts generally and I would submit they are a lot less confusing than a G- or a P-turn.

CHAIR - I'm happy to lead off with this. As to your proposal on the Lake secondary road, the other issue around that is one of access to one of the properties. Do you think the roundabout, if constructed at that point, would be of any benefit to that property? I don't know if it's a hard one to answer not being -

Mr GREEN - I don't think it will be far removed from the current situation or what is suggested. There will be a gap in the barrier there under the current proposal, so a roundabout replacement won't make it any more difficult. In fact, I think it will be easier for that property owner to access their property because they have a roundabout rather than having to negotiate traffic travelling at 110 kph as they're trying to negotiate a right-hand turn. I think the principle of left-in, left-out is very important to maintain to try to reduce those gaps. I don't think you can get rid of all of them but for those ones which we know will have higher volumes of traffic I would suggest a roundabout would be preferable.

Mrs TAYLOR - You talked about Black Brush Road, but I can't see that on the map.

Mr GREEN - That is the Mangalore-Bagdad section.

Mr FOWLER - That would be in the stage 2 project.

Mrs RYLAH - Mr Green, regarding the issue with the gaps, seeing we are decreasing the frequency of those places where people can turn, one would expect you would get an increased frequency because of the decreased number of these turns to be occurring in one point. Are you suggesting that overseas there is evidence that the increase at the single place of turning is greater than it would have been if there were multiple places along the highway?

Mr GREEN - I don't know if you could say if there were more gaps there would be less accidents. The experience is that where there are gaps, that's where the accidents occur. Where they have either filled in those gaps there are no accidents because there is no opportunity for the traffic to become mixed. With the roundabouts, because the speeds are harmonised to, say, 60 kph an hour, the severity of the accidents are much less. It all comes back to the motivating principle for this entire project. It is not motivated by increasing efficiency or productivity, it is road safety.

Mrs RYLAH - One of it is to increase the efficiency of the road.

Mr GREEN - Is it?

- **Mrs RYLAH** An overarching principle is to increase the efficiency of the Midland Highway, as I understand it.
- **Mr GREEN** My understanding from the public statements was that this is a road safety initiative, but I'm happy to stand corrected.
- **Mrs TAYLOR** One of the ways this plan tries to address your issue about junctions is that there will be a turning lane so people will be able to get off the road and vehicles won't be under pressure because of vehicles behind them to turn more quickly than they safety should. You don't think that's a way of addressing that issue?
- **Mr GREEN** It may go some way to mitigating but it doesn't remove that factor of human error and unfortunately where you have high speed you have that morbidity.

From Mood Food and the northern entrance to Kempton it is a critical issue. Mood Food is a high-speed section where you have a lot of traffic exiting and entering the highway. I have discussed it with a former DIER engineer and he thought a roundabout had some merit and was worth investigation. You could have that northern entrance to Kempton and entrance and exit to Mood Food incorporated into the one roundabout. You would have four different streams of traffic - the two multi direct from the highway, as well as those two other sites. The Mood Food issue has been the cause of a number of redesigns and I think it's a rather vexed issue as to how to best resolve that. I would humbly submit, as a non-engineer but a very interested layperson, that a roundabout might be the way to go.

- **Mrs TAYLOR** We have upset other people by the number of roundabouts in towns. So you are suggesting really two roundabouts, aren't you? One at the Lake Highway and one at the northern end of Kempton?
- **Mr GREEN -** Yes, it is a high-speed section of the highway but it is a low-volume highway; there is not a huge amount of traffic on it. The roundabouts will not cause any significant delay in the traffic.
- Mrs TAYLOR It just slows down traffic, as you say.
- **Mr GREEN -** Yes, the Midland Highway is quite disrupted with the number of settlements the highway still continues through. I continue to make the point that there are other roundabouts on the highway. I do not think an ideological opposition to roundabouts can be mounted because, if that is the case, then why are there roundabouts already on the highway?
- **CHAIR** Any further questions? No. Thank you very much for taking the time to appear before us. We will certainly put some of your comments back to the department when they come back to us. Thank you.

THE WITNESS WITHDREW.

Mr EDWIN BATT WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Thank you very much for your time, Mr Batt, and for your submission where said would be happy to come to our public hearing. The committee hearing is a proceeding in Parliament. This means it receives the protection of Parliamentary privilege, this is an important legal protection that allows individuals giving evidence to a Parliamentary committee to speak with complete freedom without the fear of being sued or questioned in any court out of Parliament. It applies to ensure that Parliament receives the very best information when conducting its enquiries. It is important to be aware that this protection is not accorded to you if statements that you make may be defamatory, repeated or referred to you outside the confines of the Parliamentary proceeding. This is a public hearing; members of the public and journalists may be present and this means your evidence may be reported. Do you understand the conditions?

Mr BATT - Yes, I do, Mr Farrell.

CHAIR - Thank you very much, Mr Batt, and I will give you the opportunity to make your opening statements.

Mr BATT - My submission was short and largely driven by self-interest. It is one of those delightful occasions where self-interest coincides with the public good. We have a road that has been built under the guise of a safety upgrade for the purpose of making a high-speed highway. I do not think there is much doubt about that. It seems me that the toing and froing about road safety is largely a guise for making people have the opportunity to keep the foot to the floor from Launceston to Hobart.

From a point of view of small communities in which we live, that is disastrous. A little community in Melton Mowbray, for instance, where I live, is going to be divided by a wire rope down the middle, so ordinary community communing is now limited. These are small factors in the scheme of things - the fact that to get my eggs from Athol across the road, I have to walk somewhere else or hike up over the divided road; if my wife wants to push her pram with our newly-acquired baby to her friends across the road, she has to pedal further along to try and do a turn somewhere else.

These are small things but it is a community in which we live. Our road, our area is a small number of car movements in comparison to some of the road upgrades that are related to other areas. We find that the way the road is being constructed is not providing sufficient help, I suppose, to the agricultural businesses that are nearby, as is necessary. It is providing more help, if you like, for those who are commuting from one end of the state to the other.

It is in respect to the specific area that I made my short submission. There are a few matters that perhaps I should direct you to. I have a number of licensed entrances from the Woodlands property but perhaps the first one I will deal with is the one at the Quoin Rivulet. These access points are not often used - that one isn't often used. But in my view, if the bridge at the Quoin Rivulet is to be widened, that access - you can see where it is on your maps - becomes a bit of a danger point, especially as that access point is going to be at the end of a very short overtaking lane. I think, on all views, that overtaking lane is too

short. Even on the department's own figures and the road people's figures, it is too short. It doesn't comply with the required 1.5 and it is too short. It is a road access for me at the end of it and then it runs into what is to be a new P-turn - on a left-hand bend further up the road.

I think you have some issues at that juncture. Coming back up to my next licensed access, which is the one that is shared. There are two properties that have that access - me and the Joneses, behind me, who have a property called The Follies. That property is one that has been heavily upgraded in terms of the use of the irrigation scheme and they are intensive farmers now. That means that they have quite a lot of large machinery going in and out to utilise the water in different ways. They also conduct a farm to the north at Redside, which is at the bottom of Spring Hill - a big farming operation.

I also conduct a farm to the north of Melton Mowbray, at Lower Marshes. The Joneses don't have a woolshed at The Follies and I don't have a woolshed at Lower Marshes. Both of us are sheep-movers north.

I take up Councillor Campbell's point in relation to the livestock because there is a movement of double-decker sheep vehicles turning around having to travel some distance south - one or two kilometres, I'm not too sure - to the actual turn point before we can go north. I think that turning point. As it is largely being constructed for 'my' convenience and 'the Joneses' convenience - I don't know who else is going to be using it - it needs to be a fairly gentle one if it is going to be constructed for the reasons Councillor Campbell brought up. Obviously, the fact that we have to turn and go left before we go north is going to provide a major level of inconvenience to us as farmers and developers of farming in that area.

The fact also that they share - the Joneses, in particular - I don't do it myself because I don't take agricultural equipment much to the north; I do occasionally but they do it regularly - will mean there is going to be agricultural equipment slowly going down the new overtaking lane to the point where it gets to the turn and then he has to go back to his property at the bottom on Spring Hill. He often drives the tractor home. I know that for a fact because it comes in front of my house. They have a fairly large operation and they put on the road a lot of slow moving traffic.

The other issue that needs be raised is a road safety issue. The road is going to be widened at that licensed access, that gate point, for Woodlands and the other property. In doing so, a large vehicle, when it comes up to my gate to get out and open the gate, will be hanging over into the road. That will create an obstacle. I take Mrs Taylor's point about being confined in the road in these circumstances and the worry about sheep. It is not sheep, so much as -

Mrs TAYLOR - Livestock, I should have said.

Mr BATT - It is not livestock so much but kangaroos and possums and all those things that litter our highway because of laws and regulations in relation to their maintenance in the wild. Those animals are there and inexperienced drivers are not prepared to plant the foot and run over a kangaroo these days, which is understandable. They will swerve and accidents happen. That is another point. Focusing on that design construction, that is an issue that needs to be addressed.

Going back to the Lake Highway intersection, I have always been concerned about the exit of vehicles from the Lake Highway, turning right to go south, because that road is very typically used by slow moving vehicles, particularly wood trucks and the like. You have probably seen them at Bothwell and those back areas. That section of road is notoriously used by a lot of slow moving vehicles, and they come out onto that intersection. I know the road builders have taken measurements to take into account the necessary distances you need for sight from that point to the point where vehicles can slow. It needs to be a bit longer in some respects because the type of vehicles that are coming out of there will normally be very slow moving vehicles, not sedans. The curvature of the road and the hill that is to the north of that intersection does make it more difficult to see. I am concerned about the fact those vehicles approaching that intersection will have just seen a sign that says 'overtaking lane ahead'. That is frightening for me, because once they see 'overtaking lane ahead', plant the foot, move over, let's go. They are going to approach the intersection, they are going to approach a slow moving vehicle coming out of the Lake Highway, they are going to approach Mr Jones driving a super spreader or something down the highway, they are going to find a B-double hanging out of my gate, about to turn left - all problems, all accidents, all difficult road safety issues.

How you address those is a matter for the experts and I merely pose the problems. I can see them addressed by simply widening the road a little bit by commencing the divide, if you must have that divide, south of the Woodlands gate. You would save a lot money and I don't think there would be any risk to lives

In respect to the actual design and the physical nature of the current design - and there have been a few, and I don't think there has been a final design yet - it is to shift the traffic from the Lake Highway across all the lanes of the Midland Highway and come into a single wired-off funnel lane, which runs for about 100 or 150 metres before it opens out into a double lane. That to me is creating an issue there, because you will find that the traffic coming around the turn going south approaching that intersection will funnel up behind a slow moving vehicle caught in that lane, that has nowhere to go, slow, and you have cars coming around approaching an overtaking area, as they are going to perceive it, with speed and then coming into a funnel point. That is a dangerous situation in my view and I hope that is not going to be the final design.

The other point I make in my submission in respect to the dealings of the department people with the farmers was a general point. Obviously these men have all been very polite and great to me, and I want to commend them for their restraint, politeness and niceness; that is fantastic. It is very difficult to sell something or to present something to farmers and people in the community that they don't like, and be nice about it. I appreciate their difficulties. Having said that, if there is to be acquisition of land then I think that the farmers and landowners need to be told what their rights are, and there needs to be a person that they can go to within the department to find that out. I think the issues about, 'You have a little pocket handkerchief of land here that's worth \$500. That is all you're going to get. There is no more compensation, that is it, you are getting \$500.' The money is not really the case. If they were told there is an acquisition and you have the protection of section 27 of the Land Acquisition Act, the principles for paying proper compensation are set out there. I know that is time-consuming. Time doesn't worry me; we're not moving and we don't need the money tomorrow so that is not really an issue, but a proper consideration of all the issues I think is important. If some sort of deal is made whereby

there isn't a formal notice to treat served, then the actual amounts of money, what is going to be done, for whom and how that is all going to be taken into consideration, needs to be done by a specific officer who has definite authority from the minister to do that negotiation. I'm not confident that the person that I am going to say, 'Look, I want A, B, C and D done and I will settle it on that basis', is going to happen or I have such a person that I can have that specific dealing with.

If there does have to be compulsory acquisition, or there does have to be a voluntary surrendering or a voluntary arrangement, there should be a designated officer who deals with that specifically, and the person is properly compensated. As I understand it, the scheme for compensation is that if the section 27 provisions are taken into account all the inconvenience that this roadwork has been to me as a land-user is in some respects compensable, which does make it a little bit easier for me to swallow if that is the case. Whereas if I don't go through the formal notice under section 27 and the notice to treat then basically it's a bit of toing and froing and we come up with some kind of figure that suits us both, and that may not necessarily be what is properly entitled to. I think the farmers and the people who are surrendering the land need to be praised and properly treated in relation to whatever compensation is necessary for them.

- **CHAIR** A previous witness spoke about a roundabout at that particular point. Would that have any benefit to your access?
- Mr BATT No, because if I came onto the roadway at that junction I would only be adding to the problem. It's bad enough as it is having three roads intersecting if you're saying a northbound and a southbound Midland Highway intersecting with the Lakes and to get a fourth one, you're going to create more trouble. Also my view to the right, to the north, from there, I don't think would be sufficient for me to do that safely. The position where the current access point is is a good one but I think it will need an upgrade. I'm quite happy to surrender land, if it can be done, and I'm not asking for money for that side of things, but I think that entrance will need to be set back a bit off the road because everybody's agreed it is too close to the widened road for the current access to be safely negotiated.
- **CHAIR** Yes, you can see looking at the map where it's been an extension of a T-junction from the old highway out to the new one from the old main road.
- **Mrs RYLAH** You raised the issue of trucks pulling in and opening gates and stopping. Is that the situation with your entrance? Is the gate onto your property close to the highway?
- **Mr BATT** It will be closer, because the southbound lane or the eastern side of the highway is going to be widened to get closer to my boundary.
- Mrs RYLAH And you don't think there's enough distance between?
- **Mr BATT** There isn't. I think they've measured it up and realised there isn't. If a B-double is parked at my gate and the driver is getting out to open the gate, his truck is going to be on the road.
- Mrs TAYLOR So the solution to that would be that they relocate your gate a bit further in?

- **Mr BATT** There's a number of solutions. The first one is that you don't widen the road at that point; second, you don't have a wire rope there; or alternatively, you take a little bit of my land -
- **Mrs TAYLOR** Having a wire rope there doesn't make any difference because the tail of the vehicle would still be sticking out.
- Mr BATT That's true, if you're going to have the road widened at that point. The only solution I can come up with and we have discussed it but it hasn't been satisfactorily factored into a design process or compensation process is that a certain portion of my land be taken and the gateway set further into my property. That way trucks can pull in safely to my property and open the gate. Also, because it is safer for everybody, I will realign that road that is currently used as a right-of-way for The Follies behind me and take it in another direction, a little bit more to the right. In answer to your question, the solution is to set that access point in.
- **Mrs RYLAH** I don't know whether you could used a raised cattle grid instead of a gate so that B-doubles can keep moving forward over the grid.
- **Mr BATT** I'm not a big fan of them. Moving stock onto a major highway, having a cattle grid can be a bit problematic.
- Mrs RYLAH Not secure enough?
- **Mr BATT** No, and it also invites people into the property who I may not want. I've thought about a raised cattle grid and we've discussed it a number of times but I think a gate is probably a bit more secure from all points of view.
- Mrs TAYLOR Going back to one of the early issues you raised about dividing the community, I understand how that happens because I'm the member for Elwick and when the Brooker Highway was built it totally separated the community from the river and it has taken a lot of work to bring those accesses back, so I know what you're talking about. The fact is that that high-speed highway is there now so short of reducing the speed on that section, which is probably unlikely, we are looking at safe ways to reconnect that community and to make it safe to cross the highway. I understand what you're saying about the barrier stopping people crossing the highway at whatever point they wish but it's probably not the safest thing for people to be crossing that road with a pram or whatever.

Mr BATT - No.

- Mrs TAYLOR You don't have any pedestrian crossings built into that section?
- Mr BATT There is no pedestrian crossing. All the houses are on the western side of the road more or less. It's totally driven by self-interest, but me and the Jones's, who've got young kids as well, all come to the gate. That is also where the school bus stops. Basically the school bus lives at our farm at Melton Mowbray and commences its run from there. I'm not sure what arrangements are going to be made but clearly it's going to be chaos if an arrangement isn't made with the school bus driver to collect from somewhere else other than there. There is going to be a range of inconveniences, but you can't have kids jumping over the rail or mums parked on the other side of the rail to pick up their kids.

Mrs TAYLOR - No, absolutely not.

Mr BATT - It's just a complete mess. I didn't even mention that because I realised it's too -

Mrs TAYLOR - But this is about safety so it's a real issue. Do they currently cross the road from the bus?

Mr BATT - It depends where the mums or dads park their cars but basically they would, yes.

Mrs RYLAH - Do they park on the Melton Mowbray side?

Mr BATT - The bus comes out of my driveway and that's where it sits and waits for the kids to come.

Mrs RYLAH - Do they get driven there?

Mr BATT - There are a few kids that walk. It's a collection point for the people with children around the district.

Mrs TAYLOR - The issue here is that there's going to be an extra lane so we really don't particularly want people walking across the road, children in particular, I would think.

Mr BATT - No. I think there ought not be a divided lane there myself at all. I think it's wrong in principle but I know I'm going to run second on that. My view is that there shouldn't be a divider.

Mrs TAYLOR - There should not be?

Mr BATT - No, I think it's wrong. I think dividing the road with a chain at that point north of Athol's house as well - if it's going to be divided and the chain goes in, it should be south of my house, south of our road. It would save a lot of problems.

Mrs RYLAH - You're suggesting you would like the median thing to finish south of your entrance?

Mr BATT - That's right.

Mrs RYLAH - And not restart until -

Mr BATT - North of the -

Mrs RYLAH - The Lake secondary road?

Mr BATT - Yes.

Mrs TAYLOR - I will ask the engineers this, but I am presuming they are not putting any pedestrian traffic islands in this design because you are looking at crossing three lanes?

Mr BATT - I assume that's right.

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Mrs TAYLOR - That is a safety issue, I guess.

Mrs RYLAH - It is 110 kph.

Mrs TAYLOR - I imagine it is not safe to cross that road now.

Mr BATT - Obviously we all do and the children do. We just live with it, you see. That's the thing, as you probably well know with the Brooker. It's a high-speed highway through communities.

Mrs TAYLOR - I also know that in front of Goodwood School a barrier has been put there because people just crossed that road and it is only 80 kph as opposed to this. We certainly had issues with schoolchildren from Goodwood and the community is divided, with the school on one side and a lot of the population on the other. They tried to resolve that issue by fencing. There is a bridge over the top, but people if they can will take the easiest way, which is walking across the road.

Mr BATT - It is pretty hard to take your pram or your wheelchair up over the bridge.

Mrs TAYLOR - We haven't had a submission from Mr Jones, have we?

Mr BATT - I think it would be safe to say that Mr Jones would agree with everything that I have said, only he would say a lot more and a lot more forcefully and probably be better informed, because he has some experience in traffic management and I haven't. I am sure he would concur with pretty much all of what I have said. I did speak to Mr Jones last night and he did not know about it. He didn't realise that there was a -

Mrs TAYLOR - What didn't he realise?

Mr BATT - He didn't realise that there was this hearing today.

Mrs TAYLOR - I see.

Mr BATT - That is why he is not here, but his concerns are my concerns. He may have more - and as I say he would probably be more articulate and certainly more forceful.

Mrs TAYLOR - Again we will ask the proponents of the project about that. Can I ask you - as you say because Mr Jones is not here - but you are aware of perhaps the frequency of stock movements or heavy vehicles that cross that? You have said it is frequently.

Mr BATT - It seems like a lot to me.

Mrs TAYLOR - Do you mean like daily or weekly?

Mr BATT - Yes.

Mrs TAYLOR - Daily?

Mr BATT - Yes. I know that because it obviously goes right by my house.

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- Mrs TAYLOR Yes, that's right.
- **Mr BATT** There's always something coming through there.
- **Mrs TAYLOR** The frequency makes a difference, you know, if it's one a day or one a week or 10 a day, it makes a big difference.
- **Mr BATT** I'm sure he's probably given those figures to the department. I wouldn't want to swear to it, but I would imagine if he said it was daily I certainly agree with him, but I'm not sure what information he has given the department about that.
- **CHAIR** I gather, Mr Batt, you would be happy to continue discussions with the department if that was what was -
- **Mr BATT** Absolutely. I am very pleased to be cooperative and helpful. It is just that our viewpoints differ in some respects about all of this. I don't want to be an old stick in the mud. I am quite happy to help the best I can.
- **CHAIR** Relating back to your submission, this is what this committee is about, so you can have direct access to the elected members.
- Mrs TAYLOR You can take as much of our time as you like.
- Mr BATT Thank you.
- **CHAIR** We thank you for putting your time aside today to come and address the committee.
- Mr BATT Thank you very much for allowing it.

THE WITNESS WITHDREW

Mr ANDREW FOWLER, SENIOR PROJECT MANAGER, PROJECT SERVICES, AND Mr ALLAN LEE, PROJECT MANAGER, PROJECT SERVICES, DEPARTMENT OF STATE GROWTH, WERE RECALLED AND EXAMINED.

- **CHAIR** Welcome back. You have heard the concerns and the comments of our three witnesses, so if you would like to start before we fire some questions at you.
- **Mr FOWLER** Thank you, Mr Chairman. I would like to thank the witnesses for their questions and comments.

To start with Mr Campbell and the suggestion that only another two metres of widening would be required for a fourth lane. Although the highway is in a lot of locations three lanes wide, in other locations it is two lanes, so it would be more than that. The minimum you would need to add to get a fourth lane of traffic would be 3.5 metres, which is a standard traffic lane.

A dual carriageway, which is the sort of road environment that you see in the vicinity of Hobart Airport near Cambridge Park, that is what we call a traditional dual carriageway where you have separation of anything up to about 15 metres between opposing streams of traffic, and that is obviously a much wider footprint again. The cost to upgrade along the length of the highway with that sort of environment would be in the billions, several billion at least, as opposed to the \$500 million we have for the safety upgrade we are currently completing.

With regard to the comment on U-turns, the main concern there was in relation to stock vehicles. With the P-turns we are proposing to install there, the movement will not be greatly different to what they would have to do at the moment, although there are more movements. You have to turn once and then turn in again, rather than doing a single turn but that can be done at low speed, giving way to one lane of oncoming traffic at all our proposed turning facilities. I take onboard that livestock are inherently unstable in the back of a truck. I don't believe it is an issue with the way they are normally carted in trucks and that it can be done at low speed and it is a safe operation.

With regard to the flexible safety barriers, one thing we seek to do and all road authorities do these days is to use a safe system approach. We accept that people make mistakes and do the wrong thing and they break laws, and they go to sleep and they use phones or whatever it may be, they get distracted. We make the road environment so it is safe for them and safe for the wrong things that humans do from time to time. The flexible safety barriers are by far the best treatment we have to prevent head-on crashes and run-off road crashes.

You raised a point about pavement life. It is true that a lot of the pavements -

Mrs TAYLOR - Mr Campbell also raised the issue of silicone cushioning.

Mr FOWLER - That may be a new technology I am not aware of. I am presuming that is a more absorbent material perhaps. The crash cushions are put on barrier posts these days are still quite stiff. I don't know if they break on impact or how they work. I know very little about them but I gather there is possibly a new treatment. The department's policy -

Mrs TAYLOR - Would you be happy to take that on board to have a look at that?

Mr FOWLER - Yes, I would be interested to look into that, and that is something I would have a look at. The department's policy is to install crash cushions on barriers only on sharp curves where there is a significantly greater risk to motorcyclists of impacting those barrier posts. Along the Midland Highway, all the curves are wide enough or big enough radius to not be a high risk.

You raised a comment about pavement life and we are finding so far that in a lot of areas on the Midland Highway the pavement is still in reasonable condition, despite the variable materials that were used. Also in other places, the pavement is in poor condition. In many cases, due to natural deterioration rather than design or construction issues, but in other cases it could be a bit of those as well.

With our road construction these days, the pavement materials are required to meet particular specification requirements. The materials are tested both as a raw material and also as a final product in various ways. There is always an inherent risk with anything you buy, whether it is a car or a road, that something might go wrong with it after a period. We have what is called a defect liability period which gives us some protection to ensure there is reasonable quality out there. Before that, we do contract administration and surveillance activities during construction to ensure the work is being done according to our specifications. There can be issues with how work is constructed, or drainage issues, or unforeseen circumstances that add to the risk of a road deteriorating.

There have been a couple of high profile issues with surfacing and pavements in recent years. Much of that has come down to a contractor's choice of material, or a contractor presuming to take on the risk of doing something they have not been permitted to do by the department which has resulted in issues for us and them and the travelling public and everybody else. It is something we stay on top of and we don't believe we are going to have a prevalence of those issues. With the use of specifications and effective administration of works onsite, we don't think that is a significant risk.

Mrs TAYLOR - The quality hasn't downgraded over the years as to what those construction standards are?

Mr FOWLER - There has been a fundamental change in recent decades with the way highway construction is completed. We have gone from an internal workforce to external private industry completing the work, and also in recent times to having the contract administration task completed by consultants rather than inhouse. They are different ways of doing things; you can achieve the same results either way, but it is different. Whether there has been a big shift in the way that work is done or the prevalence of quality issues arising, I am not really aware, but it is something we certainly try to stay on top of as much as we can.

Mrs TAYLOR - But the specifications haven't gone down?

Mr FOWLER - No, the specifications are still good. They are always evolving, that's for sure. It is quite a process to keep on top of it. I am not aware of any significant issues in our specifications at the moment. We have made changes to specifications in recent years

with, in particular, a material that seemed to sneak into the marketplace, and so some additional requirements were needed to be met in our specifications. That was in response to quality issues occurring on site with a material that complied with specifications, yet we knew it shouldn't have done so we looked at specifications to ensure that issue couldn't occur again. So it was basically a quality control issue with a product out of one particular quarry.

Mrs TAYLOR - Mr Campbell was talking in particular about foundation, rather than surface.

Mr FOWLER - If he was talking about what we call subgrade, which is the natural material underneath the pavement, a lot of the Midlands is fairly flat. You have a combination of fairly flat areas which are wet, and cuttings through rocks, and where you go from cutting in rock to coming back out, to being in field across a low-lying area you do tend to get drainage issues. It is something we tend to deal with in our standard designs. Either that or identifying issues during construction and dealing with those.

The process of designing a road to provide a particular life is fairly straightforward, but as with anything there are always risks, and you apply generic treatments which are cost-effective and simple to construct. There is always a risk you might have some minor issue occurring during construction, but we do design our pavements to have a particular life. It depends on a number of factors as to what life we go for, whether it is 20 years, 30 years. Twenty years is a pretty common figure. The expectation is that after that time you have to come back and do some major rehabilitation work. That is a more cost-effective approach than to construct a much more durable pavement earlier on, which would cost a lot more money. We are better off to have a pavement which will last for a couple of decades and then you come back and do some significant rehabilitation work, most likely after 30 years or something like that. There would be some repair in between and then we would come back and do some more comprehensive rehabilitation.

Mrs TAYLOR - But that's pavement rather than foundation?

Mr FOWLER - Pavement, yes, but most pavement issues arise due to movement, either in the subgrades or drainage issues and the like. We would certainly always seek to identify where those issues might occur during the design process, and if not during design, if there is something unusual we find on site, then we typically deal with that at that time too.

Mrs RYLAH - I thought Mr Campbell asked specifically about polyconcrete - did I hear the word correctly?

Mr FOWLER - We use a number of different treatments in our rehabilitation for stabilising either subgrades or pavements, so it is a rehab-type treatment rather than an initial construction treatment. In this case we are taking an existing highway, so some of it is existing pavement. We are reusing as much pavement as we can but where materials have deteriorated, typically we would use it in the lower levels on a widening. You might appreciate that as you get further down below the road surface the pavement has a bit less work to do, the loads of the traffic are distributed over a wider area, so we can accommodate a weaker material or a slightly deteriorated material in the lower levels and we would import a new layer to provide strength and uniform shape and workability and to hold a good effective seal in the upper level, in the base course, as we call it. I am not aware of that particular material; it is certainly a treatment that we do use and are using

more. We are looking at different innovative treatments to rehabilitate pavements these days as well.

Mr LEE - Just keeping in mind that there is no rehabilitation per se on this particular job.

Mr FOWLER - The next one I have is in relation to emergency vehicles. Where there is a barrier on the outside of the road, on the outer shoulder, we are providing 7 metres of clearance. It is always the obligation of the vehicle in front of an emergency vehicle to pull over and make space for that vehicle. They are very visible vehicles with lights and sirens. I am not aware of any issues happening, although Mr Campbell did refer to some known issue with emergency vehicles having difficulty getting past. As I have said several times, this is the best treatment we have to save lives on the highway. If there is a need for some education campaigns to remind people of their legal obligations to give way to emergency service vehicles, that might be something we would do fairly quickly if there is an issue. I am not aware of it happening.

We design to national guidelines - Austroad geometric design guidelines. There is a suite of documentation from the Austroad organisation, which is the combined road authorities around the country. They cover everything from interchanges, gravel roads, to rural highways. The geometry and pavement requirements are all covered under Austroads guidelines. They are not standards, they are guidelines, but we very seldom depart from those guidelines. They are based on sound experience.

Mr Campbell talked about space for heavy vehicles. That was similar to the point about emergency vehicles. There is seven metres of space. If a heavy vehicle was to have a blown tyre, say, we will not have outer barriers in all locations. We will have some widenings, where they can get off the road every kilometre or so. There will also be turning facilities where they could potentially have a bit more space to stop. We would not encourage people to stop there, but if there is an emergency you would stop there because it is a safer place than stopping elsewhere. We feel seven metres is wide enough. It is enough to get a heavy vehicle right against the barrier and have ample space, another four metres or so of clear space, for vehicles to go past in the single lane sections.

Mrs TAYLOR - Mr Campbell mentioned Wybra Hall, which is not in this section. Will that section of road be looked at as well, or is that in the future?

Mr FOWLER - That will certainly come to this committee in the future. It is still in planning, so we do not have a preferred option to bring to the community yet. We will within the next number of months.

Mrs RYLAH - Can I clarify the seven metres? I was not clear on that.

Mr FOWLER - If the question is about how that seven metres is made up, there is a 3.5-metre single traffic lane, a one-metre shoulder on the inside, a two-metre shoulder on the outside, and a half-metre verge back to the barrier itself.

Mrs TAYLOR - So 6.5 metres is sealed?

Mr LEE - It is all sealed.

- **Mrs TAYLOR** Except for the half-metre verge?
- **Mr LEE** No, the half-metre verge will be sealed. What we are doing to reduce maintenance beneath the wire rope on the edge is that we are extending the seal beyond that.
- **Mr FOWLER** The difference is, the shoulder is fully trafficable as a full-depth pavement. The shoulder can effect take traffic loadings, but the verge can not.
- Mrs RYLAH Where would the outer line be?
- **Mr LEE** You will have the wire rope median with the 2.1 metres, the 3.5 lane, and on the outside of that lane will be another white line.
- **Mr FOWLER** From the central barrier, there would be a one-metre separation between the face of the barrier and the centre line of the white line on your right-hand side. Then you would have the traffic lane, which is 3.5 metres, which would have an audible edge line, and then you would have 2.5 metres to the barrier, if there was a barrier. So two metres of that is a trafficable shoulder, and then it would be a seamless connection to the half-metre verge.
- **Mrs RYLAH** There is no line differentiating where the two metres goes into the 0.5 metre verge?

Mr FOWLER - No.

Mrs RYLAH - Thank you.

- Mr FOWLER Mr Green in his statement was talking about flexible safety barriers which might be covered enough in other responses. He referred to Ireland and Britain experiencing crashes in the breaks. I'm not aware of that occurring but I think Ireland has removed flexible safety barriers due to public pressure, even though there is no sound scientific basis for the removal of those barriers. When I questioned that before I learned they didn't remove them from a traffic safety point of view but due to public perceptions that the barriers aren't the safest treatment, whereas we and I understand other road authorities in Australia are convinced they are the preferred and best treatment for protecting people on the highway.
- **Mrs TAYLOR** If that was true, why would the Irish people not accept that as well? Is it lack of an education campaign?
- Mr FOWLER I don't know. I am just asking our designer if he has heard of it. I asked that direct question to our traffic engineers in the department who said there is a campaign to remove them and they have given in to political pressure to remove flexible safety barriers. Even though they are considered the safest treatment, people did not like them so they were removed. It is something we looked into in the early days to see if there was anything in it but apparently there is no sound basis for it.

Mr ROSS MANNERING, DESIGNER, PITT & SHERRY, WAS RECALLED AND EXAMINED.

- **Mr MANNERING -** I'm not aware of the particular Irish situation but I am aware of the statistics around the history of crashes on the Midland Highway with 60 per cent of those crashes being head-on collisions. That is a pretty good case for having a barrier between the opposing directions of traffic to reduce the number of head-on collisions. From a road safety point of view it makes sense.
- Mr FOWLER We are seeking to reduce both the lengths and the number of breaks as much as possible in the barrier. Where there is a right turn into the turning facility, a P turn, we would make that gap just long enough to get a large vehicle into the turning facility and some margin for error allowing for the tracking vehicles. Typically that break is almost as long as the vehicle itself, so when a vehicle stops and they're waiting to turn right, waiting for a gap in oncoming traffic, the tail of the vehicle is almost past the end of the barrier. We don't want to have any heavy vehicles ever colliding with the barrier and dragging the barrier across the highway.

Typically a break would be not much more than 30 metres; that would be close to the minimum we would need. We would minimise those breaks as much as we can to identify that each one has a weak point and if someone is inattentive they could sneak through the gap in the barrier. Our objective is to eliminate head-ons. We know we can reduce them significantly but we can never truly eliminate them. This is the best treatment we have to try to do that.

- **Mrs RYLAH -** Mr Green also suggested what I would describe as T-boning, when the vehicle exits to cross to go right or whatever he is doing to cross, the driver clearly has not seen them and there is an accident. Is there any evidence that that increases because we put the vehicles in the middle of the road and they're very quickly into the other lane?
- **Mr FOWLER -** I'm not aware of any statistics on that and personally I can't see how that could happen, although I accept that if you took, for example, 50 junctions or accesses and you put them all into one place you're obviously concentrating movement somewhere, so if you're going to get crashes they would be in that one location rather than spread over kilometres of highway. I can see there could be an increase in the risk at a particular location, but I can't even imagine you could get anything near the pre-existing number of crashes you get along the length of the highway if you're concentrating those movements into places which are signed and visible.

We are choosing locations which are quite visible. In the case of the P turning facilities we're taking the pressure off the driver so they can safely stop in their own channelised right turn and just give way to oncoming traffic without worrying about who is behind them, who they're slowing down or whatever might happen. I really can't see that. We don't have any intention of putting turning facilities where they would be unsafe. We have been very careful to put them where they are safe and where there is good sight distance.

Mrs TAYLOR - And there will be signs so oncoming traffic on the highway would see that there is a turn coming up?

Mr FOWLER - There will be signs. As they are a full right-turn treatment they look like a junction so we need to make sure people don't misinterpret them as a junction, so there will be signs saying they are a turning facility or they could also be misinterpreted as the start of an overtaking lane. We don't want people entering the lane when they shouldn't be there and then coming back out or stopping where they're not expecting to. They will certainly be clearly signed.

On the matter of roundabouts, they are a very good low-speed urban treatment and possibly the best treatment we have. On an intrastate highway which connects Hobart not only to northern Tasmania but to the ports that serve Hobart these days to the mainland and the rest of the world, it is an intrastate freight highway and to install and construct roundabouts which require heavy vehicles to decelerate, negotiate tight curves around them and accelerate again would be highly unproductive. There are much better treatments which is what we're doing on a fairly low-volume highway with only 5 000 vehicles a day in some places and having junctions which don't carry a lot of traffic, up to 1 000 vehicles per day on some of the other highways that join into the road or some of the big service centres - for example, Mood Food roadhouse, around that number of vehicles. We don't have a need to install roundabouts and they're not a suitable treatment for this area. They could potentially be very large roundabouts which might provide for that but they come with a big footprint and a very high cost in the millions of dollars per roundabout to make them very large so they are heavy vehicle-friendly, if I can call them that. It is not something we have considered on the 110 kph sections of the highway.

I acknowledge that there are roundabouts north and south of the highway. On the East Derwent Highway there is a roundabout to connect two busy highways together. At Hobart Road at Breadalbane and Evandale Main Road there is a roundabout. Part of the project you will be hearing about tomorrow, the Perth to Breadalbane duplication project, is to bypass that roundabout with a new link connecting into the Midland Highway and the Southern Outlet into Launceston and leave that as a local connection.

Mrs TAYLOR - If there was ever a bypass of Bagdad that would eliminate the roundabout at the south as well, wouldn't it?

Mr FOWLER - Yes, and the one at Pontville too; we should have mentioned that. That is in a 60 kph environment so a much lower speed environment. When the Bagdad bypass goes ahead in decades' time, that would depart around the east of that.

Mrs TAYLOR - It would eliminate that?

Mr FOWLER - Yes, it would.

Mrs RYLAH - I know at the roundabout at Howth probably every six months there is a major truck rollover.

Mr FOWLER - That is one that's in a 100 kph environment, although it is signed at a lower speed down to 60, I believe.

Mrs RYLAH - It is 80 kph.

Mr FOWLER - The other one is 60 kph.

- **Mrs TAYLOR** Certainly within the urban environment on the Brooker Highway there is a lot of issues with the heavy vehicles not liking to slow down because it is inefficient for them. I also hear from local residents that every time they slow down and speed up again it is quite noisy.
- Mr FOWLER A lot of noise, a lot of wear and tear and a lot of time.
- **Mrs TAYLOR** Which might not suit the people at Melton Mowbray either, if they had that noise happening all the time.
- **Mr FOWLER** No. It is on a downgrade there too which adds to the issues if you're coming from the north.
- Mrs RYLAH It is on a slope downhill.
- Mr FOWLER Yes.
- **Mrs TAYLOR** Mr Green raised what I think is a question that is essential to this whole program. What is the purpose of this? Is it safety or is it efficiency of the highway? We are assuming it is safety issues we are addressing.
- Mr FOWLER It is a safety upgrade with an efficiency component. Although there are other ways you could make the highway as safe they're not suitable for a major intrastate highway. Speed limits is one that comes to mind. Not everyone will comply with speed limits. You would not resolve all the issues but you might resolve some of them. In this case the major objective of the project is to improve safety and eliminate head-on crashes and fatalities.
- **Mrs TAYLOR** I think he was relating in particular to roundabouts. He has suggested roundabouts that would be safe?
- Mr FOWLER Yes, that would be safe. Other than vehicle rollovers, we know that heavy vehicles can roll over. You can design roundabouts in different ways with drainage complications and other things, but there are still comfort issues and safety issues with centre of gravity with heavy vehicles and negotiating quite tight curves. Although that could be done in a safe way that would be very expensive and very disruptive and inefficient.

Another key objective is to improve efficiency on the program. Across the program there will be a number of new overtaking opportunities. I believe up around eight new overtaking opportunities. Each overtaking opportunity would be just several minutes apart, so you would have no more than a few minutes to drive until you came to another one. Efficiency obviously links with safety and you don't get people making impatient and poor decisions to overtake in marginal conditions, for example. They would rather just sit back and wait for the next overtaking, which might be just a minute after you come across another vehicle in front of you, so they do tie in together very well.

Mrs RYLAH - Is the frequency of the overtaking lanes part of AusRAP 3?

Mr FOWLER - No, AusRAP is a safety measurement. When you have a wider road environment it might come into it, though. It is a calculation that is done using a computer modelling application to calculate what your AusRAP rating is. There may be a slightly different AusRAP rating if you have a wider sealed surface. I would have to take it on notice if you wanted a response on that, or the designer might be able to answer that one about whether having an overtaking opportunity increases your AusRAP score?

Mr MANNERING - No, it looks at the lane width -

Mr FOWLER - Mrs Rylah, sorry, what was the question exactly?

Mrs RYLAH - The question is the frequency of overtaking lanes and the distance between them, is that part of making the roads safer?

Mr MANNERING - That was no. It looks at the highway in 100-metre sections, but does not look at the difference of those cross-sections across the whole length. AusRAP is a system that has been developed for people to be able to assess the safety of roads without actually going to have a look at them. A lot of people use them for investigating the safety of roads in foreign countries, where getting to those countries to do the assessments is dangerous or risky, so they will have a vehicle drive down the road with a camera on it and record the road. Then they watch the video and assess the roading cross-sections and evaluate the safety of the road based on those cross-sections and then they string that together. The difference in cross-section along the length of the road and overtaking opportunities doesn't get factored in as part of that. Certainly having frequent overtaking opportunities definitely provides a safety benefit in terms of discouraging people from unsafe overtaking opportunities.

One of the things we have put in the flexible safety barrier down the middle on a straight section of road, we might be taking away an existing overtaking opportunity where you could pull onto the wrong side of the road and pass. If we are taking one of those away we need to provide another one. That is what the department's program does is make sure across the whole of the program that we are increasing overtaking opportunities and providing safe ones to eliminate some of those scenarios we have at the moment where people take risks with overtaking.

Mrs TAYLOR - You are going to eliminate, as the program unfolds, a number of occasions where on a straight road you might overtake going into the oncoming lane, because there will be a barrier.

Mr MANNERING - That's right.

Mr FOWLER - Those opportunities will no longer exist, which is why we will put in some new ones, quite a number of new overtaking opportunities and they will be quite closely spaced so then everyone can overtake quite conveniently when they get to the next overtaking area.

Mrs RYLAH - To follow on, the frequency of those is a standard that is set by us as a state? Is it a Tasmanian Road Authority/State Growth initiative?

- Mr FOWLER There are Austroad requirements or recommendations about spacing of overtaking based on a number of different parameters. Over the top of it all is State Growth wanting to do this in an efficient way. We recognise that efficiency of the highway is also important, but safety is paramount. I will ask our designer to confirm this, but I would suggest that what we are proposing to provide in the way of length and spacings of overtaking would comply with Austroad and possibly go a little beyond that. Would that be right?
- **Mr MANNERING** I would have to get the book in front of me to check, but it is certainly consistent, and yes, I think you might be right that it goes a little bit beyond that. As Andrew mentioned before, their guideline is not standard, so there is some flexibility around it. With this area the department has to be at least consistent with the guidelines.
- **Mrs FOWLER** Mr Batt suggested that this work is being done in the guise of a safety upgrade, which I would like to confirm is certainly not the case. Safety is our ultimate objective and it is a safety upgrade program, even though it does, as we just discussed, have efficiency improvements as part of it as well. There is no guise involved here. It is quite overtly a safety upgrade program.

As far as not helping agricultural businesses, we have certainly had a lot of consultation with Mr Batt and others in the area because it is the first of our projects where we recognise there is some impact to significant businesses. That is what they are. They are very important businesses for the state, which is why we have as much as possible tried to negotiate and improve our designs and settle on something that works as much as possible for as many property owners as possible.

In addition to Mr Batt there is one other property owner who is impacted more than some others on this Kempton/Melton Mowbray stage 1 project. He is potentially not as concerned about that impact as Mr Batt might be. He is not present today, for example. We have had a recent conversation with him just last week about not just Kempton stage 1, but about the stage 2 project as well because he sits on the interface.

- **Mrs RYLAH** Could I suggest that might be because Mr Batt and I do not want to verbal you, Mr Batt has a property north and this other property owner may not have a second property, or he might be on the other side of the road. His circumstances might be different.
- Mr FOWLER He does have other properties, I believe. He is still moving around. I do not know how much he moves between properties and how the properties are structured between other members of the family. So I am not too sure about how that works. We find a lot of the property owners do have multiple holdings and they are up and down the highway either locally or over quite reasonable distances as well, in some cases more than Mr Batt. We are developing a good understanding of that. We already knew that, but we are developing an understanding of just how much they move around between one property and another and how their larger business works, rather than just one particular property. We are looking at how they run the entire business, rather than just what is going in and out of the gate at one property.
- Mrs RYLAH The interoperability of a farm it is such a large capital investment; you are moving machinery as Mr Batt pointed out, you are not going to have shearing sheds all

over the show. You are going to move livestock, move machinery. That interoperability is really important, I think. We consider that particularly because of the irrigation.

Mr FOWLER - It is. We appreciate that due to the presence of irrigation that land use might change as well. There is already dairy developments talked about and such things as irrigation becomes available. We will expect to see some further change along the highway as well.

Typically at these farm gate accesses, the design vehicle we are designing for is a B-double vehicle. Most farmers are using those vehicles already. A lot of contractors are using them. It is just becoming quite a commonplace vehicle. We are trying to accommodate not just the vehicle type and its geometry, but the number of vehicles and considering where they are going to, where they are coming from as well. The property owners share with us about what is coming from Launceston and what is going to Hobart; where things come from and go to.

We are as much as we can within our constraints trying to work with the property owners to have something presented to them that will work for them as well as we can make it work. We do have limitations on what we can do. Because we are doing the safety upgrade we need to install the safety barrier and the median and that will impact some properties, but we try to minimise that as much as we reasonably can.

Mrs RYLAH - I wonder if we have an educational issue in that we need to advise farmers along the Midland Highway that it is the intent of the Government to have a divided road all the way. Therefore considerations of purchasing property will have a significant impact on whether they are on left-hand or right-hand side of the road, and whether they should be buying north or south of them. It is a significant issue and it is going to be very real.

Mr FOWLER - It is. There have been changed in the last 40 years with the upgrades on the highway from the 1970s onwards. They have seen changes similar to this in a lot of cases, with the highway bisecting properties and the like. There have already been change and this is another evolution. It is a smaller evolution, a smaller step than the earlier highway re-alignment. That will be useful. We have developed some documentation in-house to help property-owners under both the property acquisition process and also the reason for the installation of flexible safety barriers. We have some brochures on those two things and we will possibly develop more as particular issues become commonplace. We need some documentation to leave with people to have a look through at their leisure, to understand what we are doing. There is also information around the 10-year action plan that is available on the website and in hard copy, to assist them.

Mr Batt also mentioned the entrance into the Woodlands property; it is one of his properties, the one on the project. We have met with Mr Batt and talked about options for relocating his gate to provide for a heavy vehicle to turn. Where we have done that elsewhere on other highways and also on other projects associated with this 10-year action plan, we have not acquire that land, so it still the property owner's land that sits outside their gate to their boundary. It is an indentation of the gate for the benefit not just for them and their contractors and employees but for the people driving on the highway. We cannot tolerate having a vehicle parked partly on the highway just because the gate is in a certain place; the gate will have to move but that land will remain the property-owner's land. It is a position we have taken and property-owners we have come across so far are very happy

for that to happen, as long as we do the work. It will be at no cost to them. If there is a need for a new, wider gate, or whatever it may be, then we would install that and we do all the fencing work that is required to indent that so you can get even a B-double vehicle right off the road.

The other thing we do is to install what we call a taper, which is a curve leading into the access, so there is no need for a heavy vehicle to move out of the traffic lane and use the inner shoulder to swing in; they can drive straight in and the extra curve - the taper that we construct - will accommodate the rear axles of a B-double vehicle or the design vehicle.

Mrs TAYLOR - Would that be sealed?

Mr FOWLER - Yes, that would be sealed.

Mrs RYLAH - With a proper base?

Mr FOWLER - Yes. It would be a new pavement where a new pavement is needed. We also consider that it does not receive a lot of traffic, compared to the highway. It might not be the same pavement, but we would make sure there is a reliable pavement there to hold the seal. As with all accesses onto a public road, that would remain the property owner's responsibility to maintain that access in the future. We construct a good access with suitable geometry for left-in and left-out turning. We would seal it back to the boundary or say 10 metres, depending on how far away the fence line is. The main reason for that is to ensure we do not get gravel carted out onto the highway, getting stones and gravel fines on the highway. So we would seal the first part of the access.

We will continue discussions with Mr Batt about how we do that. What we would like to do is to move that gate back so you can safely get heavy vehicles up there.

Mrs TAYLOR - Are you doing this with a number of landowners?

Mr FOWLER - Yes, we are. There are a number of accesses which will be relocated slightly and upgraded as part of this. One of the items of scope on all of the projects is to upgrade the accesses. The vehicles are already in use. We are modifying the highway. We need to interface again with the accesses and get them safely back to the boundary.

With regard to the extra travel distance for Mr Batt and also the Joneses from the Follies, due to the presence of the overtaking lane just south of the Lake Highway junction, we can't accommodate a right turn there. I appreciate Mr Batt says that if we had a long gap in the barrier of around 400 metres then he could turn right-in, right-out, although it is physically possible to leave the highway not upgraded in that location and not have any extra width, the bare minimum we do at any gap is to still have a 2.1 metre median, so the widening of the highway overall would remain the same. We are in the early days of this program and we haven't yet had any significant issues with property-owners not being satisfied with what we are doing. Where we can we have worked with them to try to locate turning facilities where they are going to be safe for us and convenient for the property-owners and other highway users. In Mr Batt's case, given he is close to the Lake Highway junction but not far enough away from that for us to do anything different, I can't see we can find another solution there, other than to be requiring him when he is heading north to his property at Lower Marshes to first drive south, turn around and then come back. We

- have had a number of discussions with Mr Batt about that. We can't not upgrade the highway in the location and we can't install a break of that size, otherwise there will be a significant weak point in the treatment we are installing.
- Mrs RYLAH I thought Mr Batt was persuasive in his contention about the complexity of that intersection with the Lake secondary road. People coming down the highway and seeing a sign that might tell them there is an overtaking lane ahead could be funnelled in with a P-turn at the Woodlands entrance coming onto the highway and then the overtaking lane. That was persuasive to me to ask if we are we creating a problem in that configuration.
- **Mr FOWLER** I don't know if our design is quite at that stage yet but you would be aware that elsewhere along the highway, and on other highways, we have a sign indicating well in advance of when there is an overtaking opportunity coming. In this case, it wouldn't be too long because through Serpentine Valley there is overtaking there in a four-lane section.
- **Mrs RYLAH** I would suggest that we would not want to indicate there is an overtaking lane ahead; we would want to be warning people to be very cautious because there is a lot happening here before you overtake. That way, you don't encourage them to get closer to the vehicles in front of them as they anticipate the overtaking lane.
- Mr FOWLER I would have to review the detailed design to see if we are at that stage, but what I expect we will be doing is having an advance sign that might say, 'Overtaking lane 3 kilometres ahead'. Then we would have the large green intersection direction signage indicating there is a right turn off to Bothwell and the Lakes. After that sign, you would have one telling you there is an overtaking lane coming up. The spacings are quite close but we are going to seek not to cause confusion. We wouldn't be showing an 'Overtaking ahead' sign right before the junction because then it is reasonable people could get mixed up and think that right-turn treatment is the start of an overtaking lane.
- Mrs TAYLOR That green sign you're talking about is going to be very important, isn't it?
- **Mr FOWLER** Yes. There is one there now and it will be relocated or replaced, or whatever we need to do.
- **Mrs TAYLOR** You are making it worse in a sense in that the Lake Highway people are going to be coming into one lane together with the others as they are now, then the overtaking lane comes after that.
- Mr FOWLER There are a number of different treatments you could use at junctions, and they probably all exist around Tasmania in different places. We have evaluated all the different options and came up with the option of turning right out of a minor road into the highway and into a single lane as being the preference rather than having two lanes, in which case a driver coming out of the Lake secondary round could take either the right lane or the left lane. They might presume someone would stay in the left lane so they would take the right lane, whereas the driver heading south might presume the entering vehicle is going to take the left and they are ready to take the right, so we need to remove that indecision there. The other treatment would be to have an acceleration lane, so you have a line marking that keeps vehicles heading south in the left lane, and vehicles entering from the Lake secondary road in the right lane. Then they have to merge from the right-hand side, which is a more difficult move than merging from the left. We have

considered very carefully, and have decided that entering into a single lane and then as soon as practicable after that, opening up into an overtaking opportunity, is the safest option. So if a slow vehicle comes from the Lake secondary road, it is only a few seconds before a vehicle can get past. There is significant sight distance to the north for a vehicle coming out to choose a large enough gap to safely come out. Even if they have come out very slowly and a vehicle coming fast down the hill from the north meets them, the overtaking lane would have opened up. They can go past without having to take any avoiding action. That is the design we are progressing. That is the final design. We are proposing to use that across the highway as uniform treatment.

- Mrs RYLAH The next element of Mr Batt's comments that concerned me was the issue of the school bus.
- Mr FOWLER There is a lot happening there. We have multiple property owners using the same access, different sorts of business going on, vehicles going north and south, the junction, and the school bus. There has been a conversation with the school bus operator. It has been suggested that when the turning facility is constructed, or the proposed facility on the Lake secondary road, they would use that as the bus stop. There is a small cluster of houses on the old highway, on Blackwell Road on the western side, so that would still be convenient for those.

We are expecting either on this project or on others, that school bus routes will need to change slightly. There may be a need for bus drivers to have a longer route to loop through areas. Although the flexible safety barrier and the median almost eliminate the opportunity for head-on crashes, we accept they do have some other side effects we would rather not have. There is no way to avoid them. Disruption to school bus routes might be one of them. There are still safe options for children to be picked up and dropped off.

- **Mrs TAYLOR** Are you suggesting the bus stop might not be on the eastern side of the highway?
- **Mr FOWLER** It might not be. I am aware that the bus parks on Mr Batt's land.
- **Mrs TAYLOR** The bus driver might have to go down to the P-turn and pick up on the other side of the road and do a loop, as you say.
- Mr FOWLER Yes, perhaps. There has been a discussion with the operator. Apparently they saw that as not being a big issue. There might be other areas where there could be something that is not as easily dealt with. That is something that can be resolved. School buses are a perpetual issue. This year, I am aware there is at least one school child in that area. There might be a couple, I do not know. In a few years, they could have moved, or Mr Batt's child might be getting picked up by the school bus there. It moves with time. You make allowances for one situation, and in five years' time, it is no longer applicable. It is a difficult issue.
- **Mrs RYLAH** I am happy with that response. What I do not want is to have young children trying to cross a highway where there is a fixed barrier. That is a disaster waiting to happen.
- **Mr FOWLER** There needs to be a change, both from the bus operators and also from parents of children. At the moment they might wait on one side of the road and the child crosses

the road, or they walk across the road, take the child's hand and bring them back to the car. It may be that the parent needs to drive a bit further and meet them in a safer location. We are hoping in the context of a safer and even more efficient highway, people will be happy to do that, and drive that kilometre or three.

To add a bit of geometry again on the Lake secondary road junction. The design indicates that the overtaking lane would start just 160 metres south of the junction. With several hundred metres of sight distance to your left as you pull out to the right, you do not have that far to go before a vehicle can get past you. We do not have any closer than that, but that is about as close as we can get it before the overtaking lane starts.

Mr Batt raised some good points about the acquisition process. That is one of those flyers I mentioned that we put together to explain the acquisition process. The Land Acquisition Act details how the property can be acquired by government agencies. The Valuer-General would do that process, but it also provides for purchase of land by agreement. Mr Batt mentioned a particular dollar figure, saying, 'That is what it is.' There are two elements to property acquisition. If the compulsory acquisition process is used, then the Land Acquisition Act provides a lot of information on how that compulsory power is used. It is quite a significant power that can be used by government departments and other levels of government.

The value of the land is one element. He said a pocket handkerchief of a portion of a paddock is not worth very much. Due to its use, it might be quite important. It might be a strategic corner of a paddock. The actual per square metre value of rural land in this area is a low number. If no offer has been made to Mr Batt, but if an offer was to be made, it would be an offer to compensate him for the value of the land, which is a figure that is calculated by the Valuer-General. Also, in accepting that he has had time in dealing with this and getting other advice, there would be some other amount offered as well, I expect, recognising he has had costs in dealing with the matter. No offer has been made. That would be purchase of land by agreement rather than the compulsory process, which is two people agreeing, 'This land for that many dollars.' If there is no agreement, then there is no process. There is certainly no compulsory requirement to accept any offer that is made by anybody to sell land.

If there was an agreement to purchase land for a particular price, we could complete the transaction. If not, we would revert to the compulsory acquisition process if we were to proceed with the acquisition of the land. As Mr Batt mentioned, there are sections within that act that detail how compensation is calculated, as well as the value of the property itself. That would follow its course. The Valuer-General would look after that particular process.

Mrs TAYLOR - There were a couple of issues that I thought were important when Mr Batt raised them. One is, anybody whose land you need to acquire - do you acquaint them with the act and the sections of the act, rather than just say, 'Can we sit down and make an agreement?'. I think his implication was that there might well be people who do not know what they might be entitled to, or that they do not have to reach an agreement with you, with the figure you might say. They might not be aware of what it might be worth, or what they might be entitled to. In natural justice for the person that you are dealing with, the landowner that you want to acquire from needs to have all the information. Do you make sure that the landowner has all the information?

- **Mr FOWLER** We do at the appropriate stage. If compulsory acquisition is to be used, then the owner would be acquainted with that.
- **Mrs TAYLOR** Not necessarily by agreement? Let us take the step beforehand. If it is done by agreement, I still think that the landowner needs to know what his rights are and what might be a just figure, rather than you say, 'Look, we offer you this much.' He might think that is all that he is entitled to, and therefore, agree in some degree of ignorance.
- **Mr FOWLER** The property owner always has the right to obtain their own valuation advice, and legal advice, in relation to it.
- Mrs TAYLOR That costs money.
- **Mr FOWLER** It does, but you also would be paid for that. We have not progressed to that stage with Mr Batt.
- **Mrs TAYLOR** No, I am talking about anyone.
- Mr FOWLER We have not made an offer. That offer would be made on the basis that anybody can secure their own advice. At the end of the day, an offer is made. If the offer is accepted, the transaction can be completed. If a counter offer is made, that can be considered. A new offer might be made, or otherwise, if it proceeds to compulsory acquisition, the Valuer-General will complete that process and provide that advice. In my experience, a property owner always gets that valuation and legal advice. I cannot think of any exceptions. Some people might not be bothered to, but they can, and they are reimbursed for those costs. I do not see why they would not always do that.
- **Mrs TAYLOR** You would pay for the subdivision? One imagines that if you shift boundaries that has to be paid for, so you pay the subdivision cost and any fencing costs?
- Mr FOWLER Yes. The fundamental principle is that the property owner shouldn't lose out of the transaction. Property owners often think they're going to make a lot of money out of the Government acquiring their land but if they come out it at the end of the day and they haven't lost that is where the Government and the Tasmanian population, I expect, would like things to land that the land is bought for a fair price.
- **Mrs TAYLOR** I suppose that's the question as long as it's a fair price.
- **Mr FOWLER** Yes. We haven't made an offer to Mr Batt. We've talked about making an offer but we haven't done so yet.
- Mrs RYLAH As a general matter there was the difficulty in culling browsing animals and the failure of people to drive over them. We just had a death on West Mooreville Road and the contention is that that was a young person avoiding a wallaby and it resulted in the death of one, and potentially two, people. What can we do about that? Clearly there are two issues there: education and the ability to cull animals more readily on a major highway.

- **Mr FOWLER** It is probably something better responded to by someone other than me, but with our environment in Tasmania, with lots of farming land and bushland and not that much traffic on most of our roads, there is always going to be a roadkill risk, and we know it's a perennial issue. Someone else within the department may be able to respond better to that.
- **CHAIR** It is probably something for the Road Safety Taskforce to have a look at. I don't think young drivers are educated on the best way to tackle native animals on the roads.
- **Mr FOWLER** Often it's not only not advisable to be swerving to avoid animals, it's illegal. Often people cross barrier lines and leave their traffic lane to do it, which is illegal as well.
- **CHAIR** Yes, it's a first reaction but it's a road safety education issue. We might make a note to follow that through.
- **Mrs TAYLOR** It's an issue depending on the size of the animal.
- Mrs RYLAH The issue is the behaviour of the driver.
- **Mr FOWLER** One important aspect of the flexible safety barriers is they are quite low they are only 600-odd mm high so you can see easily over the top in any vehicle. You can't necessarily see a wallaby which might be lower than that, but you can partially see through them as opposed to other more solid barriers.
- Mrs TAYLOR With the barrier there you're not going to cross into the oncoming traffic.
- **Mr FOWLER** No, at least you're protected. If you had a panic reaction and swerved when there is nowhere to go, the barrier will stop you either leaving the road into a hazardous environment or going to into oncoming traffic. We have that particular risk covered and I guess the consequences can be similar to any other distraction or loss of concentration type of accident.
- Mrs TAYLOR We talked about dividing the community and ways you might be able to minimise that. Obviously you're not going to have pedestrian traffic refuges in the middle of the way but have you thought about the impact on the community in terms of further dividing the community? I'm not suggesting people should be able to cross a highway when you put another lane on because that is a real safety issue.
- Mr FOWLER The Mangalore to Bagdad stage 1 project we discussed earlier had pedestrian refuges because it is a different environment. There are houses on both sides of the road and low speed. On this high-speed section we don't want to have traffic islands in the middle of the highway, we don't want people standing in the middle of the highway, even if they are in a secure area because it is still much too close to vehicles. I would hate to see a pram in a refuge. I expect there will need to be some change to people's behaviour, which might be an unfortunate side effect of a significant safety upgrade. It is something we are aware of. At Melton Mowbray we know there is a small cluster of houses. In the case of Mr Batt wanting to buy his eggs from Athol, that might be something he does in his car rather than just popping across the road to do. There will be a change but we're hoping overall that people will perceive the significant benefit and will be more

comfortable on the road and happy to do those extra little things they haven't had to do because they're seeing the advantage of the program at the same time.

Mrs TAYLOR - Which means doing it by car rather than on foot?

Mr FOWLER - Perhaps.

Mrs TAYLOR - Was Mr Jones made aware of the fact there was a hearing today and he could make a submission? I think you indicated in discussions with us earlier that Mr Jones appeared to be happier at least than Mr Batt with the arrangements you have made. Would you like to talk about that?

Mr FOWLER - In our interactions with Mr Jones he certainly seemed to be more satisfied. Perhaps he is affected in a different way to how Mr Batt is affected but he certainly seemed to be okay with things.

As a rule, we don't contact people to tell them there is a hearing. The hearing is advertised and word of mouth will get around. I'm not aware we have ever actively sought to invite people to come along. We wouldn't avoid telling them that if we had the opportunity but we don't create the opportunity to do that, which I think is okay.

As far as I know Mr Jones has several family members who are involved in different properties and they are each moving from property to property on both sides of the highway north of Melton Mowbray. I believe they are accepting of what we are doing. I think most of the property owners understand why we are doing it and although they might be negatively affected most seem to be satisfied that we're doing what we can. It is just unfortunate that in Mr Batt's circumstances there is really nothing we see we can do, whereas with some of the others we could move facilities around or allow them to relocate their accesses to join into turning facilities to give them access out and such things.

Mrs TAYLOR - Mr Jones is obviously in the same position as Mr Batt?

Mr FOWLER - He is in quite an equivalent situation, I think.

CHAIR - To clarify, there was an advertisement in the *Mercury* public notices on 4 September.

Mrs TAYLOR - I don't read public notices but word of mouth is usually what happens in a small community. It is unfortunate if he did not know about that. Have you talked to Mr Jones about the frequency of the times he needs to use heavy vehicles and access his other properties and whether that is a big issue? Obviously frequency is an issue.

Mr FOWLER - We have. We have asked property owners to provide us with a list of various movements. We've had some property owners who have been able to give us that information and detail particular times of the year as to what activities they are doing, how many vehicles are coming and going, be it shearers, grain, chemicals or whatever it may be, or sending livestock in and out. We have that information. I am not aware we have it from Mr Jones but we've certainly had conversations with him about that. I am not aware, for example, that there is a heavy vehicle, a B-double, coming in and out every day but I expect there would be tractors in and out every day with their contracting business and

- their movements to the north to Redside and Muddy Plains as well. I don't believe we have any hard data on that, do we, Allan?
- **Mr LEE** No. In all our meetings with the landowners specifically with the P turns, we have stated quite openly that we want to understand what their movements are and for them to please provide us with that information so we can make an assessment in terms of the various impacts. To my recollection I don't think we received anything from Mr Jones at all.
- **Mrs TAYLOR** In terms of cyclists, we have now said the 2-metre shoulder will be suitable for cyclists. Are we putting any signage up, not really for the cyclists but for the cars, that there may well be cyclists on the road?
- **Mr FOWLER** I don't believe we would specifically do that unless there was a particular route that was favoured by cyclists. Around Greater Hobart there are certain routes they prefer for different reasons, so unless there was a particular prevalence of cyclists, which there isn't on the Midland Highway at the moment, then I don't believe you would.
- Mrs TAYLOR There isn't yet and there hasn't been because the highway has not been very friendly to cyclists, but if we're putting a 2-metre sealed road we might well increase the number of cyclists. When you get towards Launceston, for instance, you see a lot more people using that last section of the highway as their cycling training routes. Cycling is something we're trying to encourage as recreation as well as a sport. I'm not necessarily thinking you should put up a million signs for cyclists but you might put up the occasional one or paint on the road on the actual cycling route, just so that motorists become a little more aware, because a real education campaign is needed in our state for motorists to realise there could be cyclists on the road. We have had too many cyclists killed on our roads because riders haven't seen them or been aware they might be there.
- Mr FOWLER We need to consider the need for that. If there were a large number of cyclists connecting through part of the highway and we could have a zone there that connected one town to another, that would be something I expect would be looked at, but there would need to be an advantage and a need for it. Fortunately the Midland Highway has quite an open alignment, meaning good visibility, unlike other roads which might have very narrow or no shoulders and poor visibility but are still favoured by cyclists. There there is a particular need to warn people that cyclists are on the road but here, given there is no commuting cycling in this area and not a lot of cycling otherwise, I don't think there is any need at the moment but it's something we would look at. The safe cycle passing signs that have gone up in the last six months was in reaction to the number of cyclists using some roads and of course there was a change of law behind it regarding crossing barrier lines to safely pass cyclists. It's something I expect the department will monitor over time and if there is greater adoption of cycling we would consider if there is any benefit from such lanes.
- **CHAIR** I think that's it from the inquiry side of things, so thank you for your time and showing us the project today.
- **Mrs TAYLOR** Chair, I am not sure if the witnesses are aware that this committee doesn't have the capacity to alter anything within the program. The only thing we can do is approve or not approve.

CHAIR - Thank you. That concludes the public part of the hearing.

THE WITNESSES WITHDREW.