TEA TREE SECONDARY ROAD PAVEMENT WATERING AND JUNCTION IMPROVEMENTS

Mr BRIAN DAWNS, SENIOR PROJECT MANAGER, PROJECT SERVICES ROAD PROGRAMMING AND DELIVERY BRANCH, DIER; AND Mr BRIAN WILLIAMS, DESIGN MANAGER, PITT & SHERRY WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR (Mr Hall) - Welcome, gentlemen. Thank you for the on-site inspection this morning, which is always valuable. I think most of us now have firmly in our minds the intention of the project. I will open it up to whoever wants to speak to the submission first and then we will give the members an opportunity to ask some questions.

Mr DAWNS - I will begin with the background of the project, the existing situation and some of the benefits and Brian can go into a bit more detail about the actual design of the road that we showed you this morning. The Tea Tree secondary road is located out near Brighton. It connects the Midland Highway with Colebrook Main Road near Campania. It is about 17 kilometres in total. The road is a category 2 regional freight route in the Tasmanian State road hierarchy and it is part of the nominated B-double truck route. Most of the section of Tea Tree secondary road was reconstructed and upgraded between 1988 and 1994, apart from the two sections that we looked at this morning. The total length of the two sections is about 4 kilometres.

The project is being done in four main phases: concept development, preliminary design, detailed design and the construction. During the concept phase we identified that the width of the road is less than desirable for the vehicles that use the road. Testing of the road pavement also revealed that the pavement strength is insufficient to carry the design loads for the next 20 years, which is the design life. We also identified that there are a number of crests, curves, property accesses and property and road junctions which also needed improvement. The project objectives were generated from the issues that were identified during the concept phase. In the preliminary design we went through and collated all the background environmental surveys.

We had consultation with the abutting landowners, the public utility owners, the Brighton Council and the Southern Midlands Council.

The detailed design and the construction phases have not been started yet and will commence once the approval is given to proceed.

We are also including a road safety audit as part of the construction phase to make sure that all the safety objectives have been achieved.
I turn to the objectives of the project. Based on issues that were developed identified in the concept development phase, the objectives have been identified as: widening the sealed pavement to provide a uniform width of the road for the vehicles; strengthening the pavement so that it can carry the vehicles for the next 20 years; increasing the radius of the kerbs so that they provide a consistent alignment throughout all of Tea Tree Road; improving the sight distance over the crests where it is prudent to do so; providing appropriate sight distances from junctions and property accesses; and improving the layout of the road junctions and accesses.

At the moment, the Tea Tree secondary road consists of a single lane in each direction. The lanes are typically 2.9 metres wide and they have an unsealed shoulder which varies from about 0.7 to 1 metre. Most of the table drains along the road are narrow, they are shallow and they do not actually provide effective protection for the pavement from any water ingress.

As you have seen this morning, there are also a number of junctions that cross with the Tea Tree secondary road in the two sections. There are also 13 property accesses across the project and some of these do not have adequate sight distance.

Going through the previous data on the Tea Tree secondary road, between January 2003 and February 2008 we were able to identify 10 vehicle crashes on the road and they ranged from one head-on crash to pulling out of the junction and leaving the carriageway.

The roadside environment is typically rural and it is dominated by grazing with some horticulture, mainly vineyards that you would have seen along the road this morning. Most of the land has been cleared with some trees still located along the roadside which also prove to be hazardous to vehicles.

We also have a number of Aurora power poles which are located at the various offsets from the road and these are as close as 3 metres. We also have Telstra in the vicinity and the Southern Midlands Council and Hobart Water have water mains in the area of the proposed works.

The justification for the project derives from the safety improvements, the reduction in the high maintenance costs and improvement in the operation of the road.

Safety benefits for the project will include: the increased stopping sight distance for the users travelling along the road; increased safety and protection of sight distance for the users at the junction and the property accesses; the wider pavement and sealed shoulders; improved delineation through the provision of edge lines and upgrading for guide posts; updating of the warning signs along the road; removal of roadside hazards; and, where required, the installation of safety barriers. The project will also significantly reduce the recurrent pavement maintenance costs through strengthening of the pavement, as it will be providing a granular overlay across both sections of the project and also the improvement to the pavement drainage system by upgrading the drains to reduce the water ingress.

The road user benefit will come from the widening of the sealed pavement, improved delineation, providing better bus stops, providing improved sight distance at property accesses and, as mentioned, safety barriers where required.
The public consultation that we have done is part of the project to date. It has been broken down into four phases. In phase 1 of the project, the concept development phase, DIER has consulted with both Brighton Council and the Southern Midlands Council to identify any issues from the ratepayers and the road users that the councils might be aware of. The extent of the project was discussed with both councils and both supported the upgrading of this section of the road.

Phase 2 of the public consultation consisted of meeting with the property owners, firstly, to explain the reasons for and the objectives of the project to them; secondly, also to provide them with the opportunity to raise any issues directly with the project team; and thirdly, to provide them with a mechanism of input into the development of the project. During the discussions with the landowners DIER's process for the necessary land acquisition was also explained to them.

There were discussions held with the school bus operator who has the bus route along Tea Tree secondary road to identify any operational issues they currently have, particularly at the bus stops.

We have also had meetings with the public utility owners - Telstra, Aurora and Hobart Water - to identify the location of their utilities and any impact we will have.

Through this phase the landowners identified a number of issues including the sight distance from their access and road junctions; the lack of a sealed shoulder; and poor facilities for school buses, which was also identified during the concept development phase. All of those who were consulted as part of phase 2 were supportive of the improvements proposed to the specific issues that were identified for the work in general.

During the third stage of public consultation we will focus on the landowners to precisely define the extent of the work, particularly in relation to land acquisitions, the works at driveways, replacing fencing and any public utilities that may affect their property.

The final phase of the public consultation will be during the construction. During this period DIER will be keeping the travelling public informed of possible impacts on them through the use of signage on site and through notices in the press. The contract administration team will also be liaising closely with all the property owners so that they know when they will be impacted and how.

For the planning approval the project goes through Brighton Council, which is the first section, and Southern Midlands Council, which is the second section. Both of these sections were exempt from the planning approval and this has been confirmed through the planning officers.

Brian, do you want to go into the design of the project?

Mr WILLIAMS - Yes.

CHAIR - Okay.
Mr WILLIAMS - The project design has a number of elements. Probably the main ones are widening the road and improving the geometry plus the vertical plane - the crests - and also improving the horizontal alignment. As Brian has already mentioned, we are widening the road to provide a uniform cross section. We have tried to do that generally on one side of the road so that we only impact on owners on one side the road and not on both sides. This will also help with the construction operations - they have less impact on the travelling public if we are only working on one side of the road. We do have to come back and put an overlay right across the whole width of the road over the full length to strengthen the road and we have tried to minimise those impacts by designing on one side.

Mrs NAPIER - So you are not going to dig the road up and improve the base, you are just going to put another layer on?

Mr WILLIAMS - Another layer on top. It is sufficient for the lower deck if it is lower down in the pavement but not right at finished surface level, where the wheels impact on the road.

Mrs NAPIER - Are you saying the base of the road is okay?

Mr WILLIAMS - The base is all right as a sub base but not as the top layer, so we need to put a new top layer on to strengthen it.

Mrs NAPIER - How long will that give us?

Mr WILLIAMS - That will give us the 20 years. It is normally 175 mm thick. The existing road is a bit rounded and a bit out of shape so it won't be a uniform thickness, but it will be approximately 175 mm. That will give us that 20-year design life. On the widening bits you have to have three layers of paving. You have to have a full depth of paving, about 450 mm, to get the strength on the outside.

Mrs NAPIER - Is the outside sufficiently strong or is it just dirt?

Mr WILLIAMS - Outside the seal it is not strong. We will cut out all the existing narrow shoulders and put a full pavement thickness in.

As I mentioned when we were on the site visit, the horizontal alignment changes are fairly minimal. It is the first curve as you come out of Tea Tree before you get to Vineyards Drive, just improving that curve a little. The first curve on the second section - the right-hand curve where the off-cut exists already - at the very eastern end is where we take that little S-curve out. So the horizontal alignment changes are fairly small and we try to use the existing road and not go off that to save the asset. There are more changes in the vertical and they are more complex for what we want to achieve. As we mentioned, to try to keep the budget under control, we are not tackling the major crest at the water tank on section 2 to use the funds to get better benefit for the amount of money we expect. On those crests where we are not improving the alignment, the road will be widened a little further so that motorists have somewhere to manoeuvre if there is an object on the road. If you look on the back of the report, the preliminary design drawings, and go to P8, if you look at that black pavement there is a little bit of orange
between the yellow and the black. That is a little bit of widening at the shoulders because there is a little crest there.

**Mrs NAPIER** - What's the significance of the yellow and the ochre in these drawings?

**Mr WILLIAMS** - If we start from the centre, the black is obviously the road, then it normally goes to yellow, which is the wide line on the bottom side of that plan - that is the total drain, the drain coming down to the invert. The ochre is the cut batter going up to the natural ground. So we've got a V-shaped drain coming down into the ground. On the other side you will notice a little bit of green on the top; that is a bit of fill.

**Mrs NAPIER** - The green is fill?

**Mr WILLIAMS** - Yes, we are just up above the ground slightly there.

**Mrs NAPIER** - So, for example, that road going in near the Geard's, that is quite an elevated road?

**Mr WILLIAMS** - No, they're cut batters - the ochre colour is a cut batter.

**Mrs NAPIER** - So you've got the road and a cut.

**Mr WILLIAMS** - No, the other way. The road is down here and the natural ground is up here.

**Mrs NAPIER** - Okay.

**Mr WILLIAMS** - There is a crest we are lowering at the cross access.

**Mrs NAPIER** - Where you see green, such as that section on the left near Woodlands, that is filled in?

**Mr WILLIAMS** - Where it is slightly above the natural ground, so it is the slope down to the natural ground from the edge of the road.

The other issue with cutting is the major improvement to the sight distance at Grices Road. That is on P10.

**Mr BEST** - It's good how you have put in exit space. That extra space gives you that bit of safety margin, doesn't it?

**Mr DAWNS** - There are two P10s.

**Mrs NAPIER** - I was going to ask about the old schoolhouse. You would not normally have two accesses so proximate for one property, so why are we allowing two accesses there? Given it is a heritage property, I would have thought that it would be important not to have an access right next to the property, running into the property.

**Mr BEST** - They cannot get around the front of the house.
Mr WILLIAMS - They probably cannot get around but -

Mr BEST - How are they going to get around there?

Mrs NAPIER - The driveway goes down to their back yard down behind the house.

Mr WILLIAMS - There are a couple of issues there. Tea Tree Road is not a limited access road under the Roads and Jetties Act so DIER has no statutory control over access. The only control over access is through the council. I think the heritage impacts would be something for Heritage Tasmania to take up, with respect to the road design.

Mrs NAPIER - So you are saying that, given that they already have two accesses, you are not going to change anything?

Mr WILLIAMS - Not going to change it.

Mr DAWS - We are not going to close it down because it is already an existing situation.

Mrs NAPIER - I would have thought, from a road safety point of view, that having two accesses onto the one property was not a good thing to have. On the west I do not have a problem with that access, that makes a lot of sense, but this is just a pull-off for a car, or so it looks to me.

CHAIR - But it was fairly level along there, wasn't it? I do not think there were sight distance problems.

Mrs NAPIER - It was not a sight distance issue.

Mr WILLIAMS - There is a little bit more sight distance at the moment and the changes we are making will improve that.

Mrs NAPIER - My impression was that the road is relatively close to the old schoolhouse. There is a drop from the side of the road. I cannot see why they have two accesses. I would have thought they should only have one access off the road - from a road safety point of view.

Mr BEST - You have two properties there; you have Ransley behind at the rear and you have the old schoolhouse at the front. Is that right?

Mr WILLIAMS - No, that is all owned by Ransley.

CHAIR - It is all one title.

Mr WILLIAMS - The provision of two accesses won't generate any more traffic entering the road.

Mrs NAPIER - But it is money - the cost of doing the access?

Mr WILLIAMS - The cost of doing the access, yes. We are talking about a $4 million project it is probably $3 000 to seal an access.
Mrs NAPIER - But even so. Who has control over accesses? In this case it would be the Southern Midlands Council?

Mr WILLIAMS - Yes, through their planning scheme.

Mr BEST - I know you are putting in a new thing, but is that something to do with the way the school was? I remember when we drove past it and you explained why it was positioned there. The old school is there adjacent to the road. I think you mentioned that you have done some survey work and pretty much that is where the road sat. There has been no alteration of the road so one presumes then that it has had those two access points. I do not know if there is a heritage issue with having two accesses and whether you maintain the existing arrangement.

Mr DAWS - I do not know but when you look at the property they have the garage on the eastern side and the access road down to the sheds at the back, so they have had two accesses for quite a long time.

Mrs NAPIER - Can they get a car down the side of the house? It did not look as if they could.

Mr BEST - Yes, there were two cars parked there.

Mrs NAPIER - Yes, but it didn't look as though they could actually get down the side of the house.

CHAIR - It's pretty tight against the boundary.

Mr DAWS - Part of the project will be just maintaining the status quo for that house.

Mrs NAPIER - I suppose you can't stop it, but -

CHAIR - Yes. I think heritage listings do sometimes have anomalies that creep in compared to a normal dwelling. As you say, it depends on the Southern Midlands planning scheme. I'm a bit surprised; I thought that DIER overrode the planning schemes when it came to junctions and all that sort of thing.

Mr DAWS - I guess we'll have to take that one on notice because there is a lot of history at Tea Tree about exactly who owned it, when DIER owned it and when the accesses were actually put in, so without knowing the background information we have to look into that.

CHAIR - Yes. Thank you.

Mr BEST - Have you removed any accesses? Have you reduced any or haven't you really worried because the alignment tis more important?

Mr WILLIAMS - There are relatively few accesses on the road for a road that has a lot of roadside developed, as you noticed this morning. Some of the properties that come in off Grices Road, the two corner properties, don't access onto Tea Tree Road; they access
onto Grices Road. The same at Rekuna Station Road; the property there actually comes in off it there rather than off Tea Tree Road. So it's not a major issue. We have been able to achieve appropriate intersection sight distance for those accesses, which complies with the requirements of the planning scheme, even though we are not required to lodge a development application because of certain exemptions. We still meet those requirements for sight distances.

I think the accesses are up to an appropriate standard. We've talked to the owners, as Brian mentioned, about what sort of vehicles they take in and out. The access opposite Williams Road, for instance, is fairly elaborate. The owner of that property has a truck bodyworks. He has big trucks going in and out so the access there is quite elaborate.

Mrs NAPIER - What number is that?

Mr WILLIAMS - P12 on the second series. You can see that is to get into the driveway and to get into both paddocks separately. There is a fair bit of work to that.

Mrs NAPIER - So that is the steel one.

CHAIR - Yes.

Mrs NAPIER - I was going to ask, while we're looking at the different kind of intersections, it seems to me that Middle Tea Tree Road is quite a busy road.

CHAIR - Yes, it is.

Mrs NAPIER - We did have a discussion when we were on the bus about the nature of the intersection, the fact that there were no pull-off areas.

CHAIR - Or right-hand turning lane.

Mrs NAPIER - That's right. Whereas if you compare the design with Vineyards Drive, it does have at least a left-turning access even though there is no right-hand pull-off lane. That would seem to me to be a much safer kind of entrance. I thought that would at least be applied to Middle Tea Tree Road.

Mr WILLIAMS - The reason for the left-turn lane at Vineyards Drive is that it hasn't quite got the sight distance we'd like for that crest, so we were proposing to put some widening of the shoulder in this area. What turned out was that it came along the road and then went out with the shoulder widening and then came back in. Then there's Vineyards Drive access immediately after we've terminated the widening. That is where it needs to be to manoeuvre around an object on the road.

Mrs NAPIER - So that was on the crest of the hill?

Mr WILLIAMS - Yes. We thought somebody might misunderstand what that piece of widening was and go in there thinking they were going to be able to turn into Vineyards Drive because it was very close and then suddenly they would come back out because it stopped. If somebody comes through and thinks also that they were turning, there's a potential hazard so we decided to extend that lane through to Vineyards Drive and turn it
into a left-turn lane so it could be used for a left turn and for avoiding an object on the road because of the slightly restricted sight distance on the crest. That's how it came to that. The warrants for the junction operation don't require that left and right. But as we were going to build this situation which, in our view, was going to be slightly hazardous, we thought this was a better solution.

Mrs NAPIER - That explains that relative to the plan. Coming back to that Middle Tea Tree Road, which I thought was probably the busiest connector on the sections of road that we saw -

Mr WILLIAMS - That would be the only through-road.

Mrs NAPIER - I was a bit surprised that we weren't allowing at least a pull-off there.

Mr WILLIAMS - As you can see from the marking on the plan, the dashed line on the northern side, it is a lane where if there is somebody propped to turn right into Middle Tea Tree Road somebody can drive over that dashed line and pass them on the left-hand side. That is standard for junctions.

Mrs NAPIER - You mean the bus stop area?

Mr WILLIAMS - No, in between the bus stop and that little piece there. So you have the through line where you have the -

Mrs NAPIER - So there is an allowance for people to go on the other side of there?

Mr WILLIAMS - Yes, but not a marked separate right-turn lane. It's a widening of the pavement with a full width of lane.

Mrs NAPIER - So you have a right-hand turn lane but you don't have a left-turn lane.

Mr WILLIAMS - No, we haven't got a left. From a traffic point of view I would suggest that very few people would make that left turn.

Mrs NAPIER - Because?

Mr WILLIAMS - Because it's not a very big catchment of people between there and Colebrook Main Road.

CHAIR - Which one?

Mr WILLIAMS - Right at the far end of the job. Once you get to Colebrook Main Road, if you want to go to Richmond, you'll go straight down. You will not come down Middle Tea Tree.

CHAIR - This is the one that goes down past Casimaty's down further, the Middle Tea Tree Road?

Mr WILLIAMS - I don't know.
Mr BEST - Would you have the trucks coming back that way, though?

Mr WILLIAMS - No.

Mr BEST - So the trucks go towards Campania, do they then come back through towards Brighton from Campania?

Mr WILLIAMS - There is a bit of truck traffic across but I don't know where the turning thing is.

Mr BEST - If you're turning off here, you don't really want a truck -

Mr DAWS - You do have a pretty good sight distance. It's a long straight and you can see the junction well in advance.

Mr BEST - From which direction?

Mr DAWS - When you're coming from Campania heading towards Brighton. You've got a good sight distance leading up to the junction, whereas with Vineyards Drive we only provided the left-turn lane because you didn't have that sight distance.

Mr BEST - I understand that, but if you have a heavy rigid vehicle on your tail and you want to turn left - there may not be a lot of traffic but I'm not sure where you listed the collisions and what occurred at that intersection -

Mrs NAPIER - Is there much evidence to say there have been collisions in this area?

Mr BEST - There is a listing of one here. It doesn't say where the head-on crash was but there was one car pulling out of Middle Tea Tree. One would assume if it pulled out - I don't know which way it was turning but -

Mr WILLIAMS - A left-turn lane is not going to help you probably. If he's coming out of a junction he's made a wrong decision as to how big the gap was.

Mr BEST - What I was interested in is that that bank seems to sit up a little bit there. When we were in the bus looking across it seemed to be up maybe half a metre or so. Say you are coming from Richmond and heading towards Brighton - I see how you've laid the set-up here, you've put a bit of an angle there so that increases your view, but you have a bit of bank with trees. I thought you might have opened that up a bit better.

Mr WILLIAMS - They don't restrict the sight because when you come up to the hold line on Middle Tea Tree Road you can see a fair distance. We checked all that. If you come back, the bank that you identified there in front of the church limits your sight distance but you can still see far enough when you come up to the hold line.

Mr BEST - So if you bring your vehicle to here, say, how far along can you see from there? What would be the sight distance?

Mr WILLIAMS - I don't think I can answer that off the cuff, Brenton.
Mr BEST - I'm not trying to give you a hard time, but I just wonder how far you can see. You are saying you measured that, or somebody has.

Mr WILLIAMS - I can't answer that without checking.

Mrs NAPIER - If you allowed at least for the left-hand turn - say, if someone is coming from Campania, if you allowed a bit more of a left-hand lane that would not only provide a better pull-off to the people coming in that direction but if you were sitting in Middle Tea Tree Road and wanting to turn right that would also improve your vision because you would have a bit more of a -

Mr BEST - I don't think you would see very far.

Mr WILLIAMS - To get another lane in there would require us to push the whole road to the north so we don't go into the church property.

Mrs NAPIER - You would need to move the road on the northern side?

Mr WILLIAMS - Yes. At the moment we have it sitting just about where the existing road sits. There is a bit of a drain and a cut batter on the churchyard fence is almost right on top of the batter.

Mrs NAPIER - They don't have any cemetery headstones in there, though. You'd just lose a couple of trees, I suppose.

Mr DAWS - We can't be sure how close the graves are to the actual fence line.

Mr WILLIAMS - I don't know how close the closest graves are. You probably can't rely on the headstones; you would have to check that there aren't graves closer.

Mr BEST - I am not saying you haven't done it, but can you check that sight distance because it might make a big difference - another half metre or something. But, as you say, maybe you could see a distance along there.

Mrs NAPIER - The rest of the intersections are, in a sense, similar but even on the Williams' one, on P14, it is a friendlier pull-off than the connection into Middle Tea Tree Road. Good luck to them with the one on the right. I am looking at P14, Williams and Burns, and the road heading into the Williams' place. That is quite a user-friendly connection for their property.

Mr WILLIAMS - Actually that's not what it is for. That is better widening for a bus stop. There is also a bit of additional widening at Rekuna Station Road on the opposite side of the road - notice how that tapers out - that is a bit of space to put a bus stop.

Mrs NAPIER - Where the connections are?

Mr WILLIAMS - Yes, and you get the dual use of the pavement. A little left turn as well and the bus can pull in.
Mrs NAPIER - And that stops a car pulling out and running over a kid at the same time. That's not a bad idea.

CHAIR - Can we go back to P9, the Middle Tea Tree Road? The property on the western side is owned by Woodlands Wines. Have they done any development or looked at a reception winery, that sort of thing? I'm looking at the little shed there at the moment. If they did any development they would probably want to come off the Middle Tea Tree Road, wouldn't they, so that's going to increase the traffic volume perhaps there?

Mr WILLIAMS - I am sure that DIER would encourage them to come off Middle Tea Tree Road.

CHAIR - I am sure they would. Some of those wineries become pretty successful and they attract a lot of traffic.

Mr WILLIAMS - I think Woodlands Wine have a number of properties out this way, so where they would want to build -

CHAIR - I'm just looking at where their vines are.

Mr WILLIAMS - I think they own more properties down Middle Tea Tree Road as well.

Mrs NAPIER - You are saying you have to move the road over to the north in order to do it. What would the additional cost be to try and give you a better left hand turn into Middle Tea Tree Road coming from Campania?

Mr WILLIAMS - I don't think it would be enormous additional cost.

Mrs NAPIER - We could take it away from the old school house and turn in there.

Laughter.

Mr DAWKS - I guess one of the issues that we haven't actually mentioned yet is the project does have a budget of $4 million. When you look at the preliminary design estimate, which has been done to date, I think we are up to $4.24 million, so we are slightly over. So part of the detailed design we're already looking at ways to refine the estimate to make sure that we're only pricing what we need to price. Also to -

Mrs NAPIER - You have a contingency of 12 per cent though, haven't you?

Mr DAWKS - That's all included, but that's spread out on the different elements of the design. There's a spreadsheet right the way down the back that actually details the contingency percentage for all the different items and that's where during this next stage we will refine those contingencies as we identify exactly where the power lines are going to be. So we might be able to reduce some of those costs. We are already looking at ways to try to refine the price and to make sure we're not getting a blow out. I guess we are all just aware that we don't want to over-commit ourselves to the project and deliver something which is going to be outside our budget.
Mrs NAPIER - Talking about the cost sheet - I found it was quite useful to have this kind of breakdown and presumably you had to do it as part of the project anyhow, so it's useful to provide us with a copy - I was interested in the overhead allocation of close to $1 million right through from design to the consultation process. I notice the consultation process is $50 000 - and I suppose is a lot of money but it's actually not a large percentage of it - is that an amortisation of the department's budget costs across the project?

Mr DAWS - A lot of those fees already rolled up into the consultancy are for the design of the project as such. With the contract administration and project management and those types of overheads, at this stage we're using a nominal percentage of the overall project budget to say that this is what we think it's going to be at this stage and that's been revised down as the project goes on. For instance, $180 000 for project management is just based on a typical project of $4 million - so I guess these numbers are put there to say that if we do have a typical project based on past experience this is the type of order we're looking at. We may actually come down a bit but that's also why we haven't contingencies through there because we're already basing them on an average, whereas when you look at the pavement or the drainage, Brian is able to say that to construct a 400mm pavement we know will cost us $ amount of dollars so we've got a better feel of where the numbers are coming from.

Mr BEST - Minor accommodation works - what does that mean?

Mr WILLIAMS - That's really doing things on people's properties. It ranges from the minuscule of just moving a letter box right through to sorting out their wrecked water supply arrangements, where their meters are and things like that; doing that sort of work. So it's really on-property works to facilitate the development of the road.

Mr DAWS - So you'll find if you go to Grices Road when the project's completed they'll have a nice line of mail boxes down the edge of the road rather than all haphazard like they are now.

Mr BEST - You might lose the milk tin?

Mr WILLIAMS - When you try to move those things they fall to bits, so you finish up with new ones.

CHAIR - The item, traffic facilities, I take that is generic, except for signage and all those things. What does that cover?

Mr WILLIAMS - If you go into the detail that is explained.

CHAIR - Is it?

Mr WILLIAMS - Right at the back, the very last sheet.

Mrs NAPIER - You have been on about contingencies for some time and you have it all.

Mr BEST - There it is. It is all there. You cannot argue with that.
Mr WILLIAMS - So the traffic facilities in this case are a safety barrier, pavement marking and signs.

Mrs NAPIER - Would it cost $300 000 or something like that if you had to move a section of the road across or is a bit on the high side?

Mr WILLIAMS - I think that would be a bit on the high side. I would not have thought it would be that much. We do not have to build that much more pavement. Exactly at that point where we have the existing pavement sitting on the current one, if we move it over and we do not use as much as the current ones -

Mrs NAPIER - You have to put more base in?

Mr WILLIAMS - We have to put more sub-base layers in. So it is really complicated to talk about what the impact of moving it over one lane width, which is 3 metres, would have.

Mrs NAPIER - On that middle Tea Tree Road if we are doing the work then it seems to me that it makes sense to build that, if it is not going to be too expensive, to be able to improve that left-hand turn-off. Whether that is taking a bit of the churchyard or whether it is moving the whole road across, I do not feel strongly either way. If it is cheaper to take a little bit off the churchyard, as long as you are not interfering with cemeteries and things like that, I would do that.

Mr WILLIAMS - The church is listed on the heritage list, and the whole property is.

Mrs NAPIER - Is the yard?

Mr WILLIAMS - Yes, it is the whole title that is listed. They all are.

Mrs NAPIER - Okay.

Mr BEST - I thought that there was just a little bit of space there, at least to open up the sight lines. I assuming it is that black line. Is that the boundary?

Mr WILLIAMS - The difficulty will be that the fence is not there. If you look on the photo you can see where the fence is under that darker line. There is a row of shrubs along there which is the fence line. So legally we might be able to come up to the boundary. But coming up to the fence, what the occupation is and what is in the space in between the true title boundary and the fence line we have to investigate.

Mr BEST - Okay. There is still some space there to open the sight, though, perhaps, if you looked at the fence line that you are referring to.

Mr DAWS - Yes. We also have the problem through there that because the graveyard is 1 or 2 metres above the existing road level, we have the table drain -

Mr BEST - You might have one roll out do you reckon?

Mr DAWS - and the batter there as well. By moving the road over towards the graveyard, by the time you then put the new table drain and the new batter in, it also start to encroach
onto the property. It is very tight through there which is why we initially pushed the road to the north.

Mrs NAPIER - You are already doing it, aren't you, by having that pull-over over there, and presumably that is the bus stop as well?

Mr DAWS - Yes.

Mrs NAPIER - If something can be done to try to enable that left-hand entrance and better sight line for people turning right, it seems to make sense to me.

Mr BEST - It is hard to look at it. We should have driven the bus over. I never realised it at the time.

CHAIR - If you are travelling from west to east my immediate gut feeling was that there should be a right-hand turning lane going that way because if you have trucks and everything else coming up behind you there, I felt if it could be accommodated, that would still be a better option.

Mrs NAPIER - I do not have quite as much concern about that given that they have that pull-over. If you are sitting in the lane then at least the trucks or the cars can go around on the left-hand side and pass you. You are right, if you had a designated right-hand turn it would be marked and safer in a sense.

CHAIR - I don't know if they can, Sue. If you're going from west to east you have a solid line there, haven't you? You can't -

Mrs NAPIER - No, that's where that dotted line is.

Mr BEST - It's almost three lanes there; there's a bypass lane and a bus stop. It's one-and-a-half lanes.

Mrs NAPIER - Yes, you've got that left-hand lane in effect and you've got the bus stop, so it seems to me that's catered for pretty well. The problem is that there's nothing there for people coming west turning left into Middle Tea Tree Road. That's the one that worries me.

CHAIR - I noticed there, with the curves you talked about 90 kph. Are you going to sign them? It's a 100 kph road but for curves are you going to put a 90 kph sign up there?

Mr WILLIAMS - No. Good design practice is that you don't have different elements on the road, so you come down one curve to the next if they're right and lefts really close together and there is not more than a 10 kph speed differential between those two curves. So there's only a little change in speed. The traffic data on the road indicates that the 85th percentile speed - that is the speed at which 85 per cent of motorists are travelling - is about 100 kph. They do that on the straights so that the following curve we can design at 90 kph because there is a 10 kph speed differential, and that's accepted practice Australia wide. So we really don't need to have this sort of road designed at the speed limit; you can design it for 10 kph less. If you have a series of curves you can wind them down as it gets bendier and then up again at the other end because if someone comes the
other way it's got to be down for them as well. You shouldn't have that speed differential, so that's why we've designed the curves for 90 kph.

CHAIR - Obviously water seepage under roads can cause a lot of problems. Obviously you've budgeted in there to provide sufficient drainage. I know it's as dry as chips out there at the moment, but are there any issues with water getting under that road at times? Have there been any, in the past, to cause the surface to start to pack up?

Mr WILLIAMS - You'd think some of the deterioration is caused by softening of those upper layers, of water coming. As you say, it's not happening currently. Hopefully it will rain again.

CHAIR - Yes.

Mrs NAPIER - There was a section further back when we were coming in, though, where it looked as though there'd been some water or something like that. There was quite a bit of a dip in the road.

Mr BEST - Where it had been patched in the pavement, yes.

Mrs NAPIER - Yes.

CHAIR - Regarding the public consultation, the landowners are all relatively mollified at this time, are they?

Mr WILLIAMS - Yes, we've spoken to them all and they're all pretty happy that the road's being improved.

CHAIR - We certainly haven't had any representations from any, so that's probably an indication that they're -

Mr WILLIAMS - A good indicator.

CHAIR - On page 7 it says that the project area is class 4, 5 and 6. It's only a pedantic point, I know. It goes on to say: 'and not capable of sustaining agricultural production. Consequently the proposed works are consistent with the State policy of PAL 2000'. I would say that classes 4 and 5 can sustain agricultural production without any problem at all, which is probably a -

Mr WILLIAMS - That probably comes out of a State policy or it comes out of the mapping documentation.

CHAIR - Yes, 1, 2 and 3 are prime, of course, but most agricultural pursuits, probably the biggest majority, are carried out on class 4 in Tasmania. However, there is very little being acquired so it's not an issue.

Mr WILLIAMS - The issue probably is about whether we need to deal with the State policy and make an application to the RPDC, I think, to transfer it out of prime agricultural land; you can't use the prime ag land for other purposes.
CHAIR - No.

Mr WILLIAMS - Just on that, there are a couple of other approvals that we do need. On page 5 we mention a number of threatened species where we need to get a -

Mrs NAPIER - I thought there were a fair few threatened species out there because of drought.

Mr WILLIAMS - Yes, but these ones are still surviving or they were when we did the survey. We need to get a permit from CAS.

Mrs NAPIER - The blue wallaby grass.

Mr WILLIAMS - Some of those plants have beautiful names. That wallaby grass is also nationally listed so we had to go to the Commonwealth to get a permit under the PBC act.

CHAIR - Apart from that then you have a solitary oak and a few radiata. Regarding the solitary oak, that is always a bit of a shame, but is it a good one?

Mr WILLIAMS - The owners are disappointed about that.

CHAIR - Yes, I reckon they would be.

Mr WILLIAMS - But they do understand what we are trying to do to make the road safer and move the hazards away from the road.

Mrs NAPIER - Talking about hazards, I note on page 3 you talk about the Aurora poles located at various offsets in the road with the minimum being approximately 3 metres. Some of those poles were really close, it seemed to me. Some of them looked as if they were relatively new poles, too, or replacement poles. Is there a protocol between DIER and Aurora about what might be expected when poles are being replaced - sometimes there will be a couple of poles that are going to be replaced - about making sure that they are moved from their existing location back off the road?

Mr BEST - It is private land, I would think.

Mr DAWNS - It is something that we are still trying to work through with DIER and Aurora and we had a meeting yesterday afternoon to discuss exactly that - issues on other projects. Because the road has been there for donkey's years and the powerlines have always been put next to the road, Aurora will go through and where they have just individual poles to replace they are not going to try to adjust the entire powerline easement just for one pole. For that reason, Brian has identified that there is a whole series of powerlines through here which we are moving right away from the powerlines as part of this work.

Mr BEST - Sorry to interrupt you, what you are saying is that first of all Aurora would have to adjust the easement because you are acquiring land to widen the road. Otherwise they would put it on someone's block.
Mr DAWNS - Yes. At the moment we acquire enough land so we can put the power poles within the road reserve without an easement on the actual landowners. There are other ways around it, which we are still in the process of trying to work out, which involves Aurora easements through private properties but it is still something which is in the process.

Mrs NAPIER - If they have a program of pole replacement then I just wondered if there was a protocol that would encourage them to move them back where they are fairly close to the road. It does not make sense then for a road redevelopment team to come along and ask that you move new poles. Otherwise you end up paying for it and Aurora ends up paying for the original replacement poles. It seems to me that if there are some ways of saving some money in doing it once then it is a good thing.

Mr DAWNS - As we discussed yesterday with Aurora, there is now an agreement between the department and Aurora that they have a life cycle of 30 years for their power poles so if the power poles through here were 30 years of age, for example, and we needed them relocated, there is a cost sharing between the two because Aurora would have had to replace them anyway so we do not pay the full value of a pole which has reached its use-by date. So there are those arrangements in place as well to try to offset that cost.

Mrs NAPIER - Thank you for that answer. As we were going along there it struck me that this is an example of another road that services quite a few residents that is likely to be appealing to cyclists, whether that is for recreation, fitness or whatever else. It is 0.5 metre, isn't it, that they put on the national roads, the side verge?

Mr WILLIAMS - A sealed shoulder?

Mrs NAPIER - A sealed shoulder. What did we put on that Legana one? That was 1 metre, I think.

Mr WILLIAMS - More like a metre.

Mrs NAPIER - What would it cost to put a metre on either side of a road like this, per kilometre? It's a very relevant issue in the context of the obesity debate in health. If we're going to encourage people to become more physically active - and cycling is one of those activities - then in certain areas we need to build appropriate infrastructure. Some would say, 'Let them use a back road', but it seemed to me that this would be a very popular link between Hobart, Brighton, Richmond and then back into Hobart. I am interested in what it would cost per kilometre to put a cycle verge on either side - the 1 metre for cyclists to use?

Mr DAWNS - We would probably have to take that on notice to make sure that we're telling you the proper width et cetera.

Mrs NAPIER - Could you let us know? I know that you can't just add it in here, it would need to be a specific policy and for designated roads.

Mr DAWNS - We will have to determine exactly what our traffic engineering branch would require as a minimum extra width.
Mrs NAPIER - I appreciate that - it's not just this road. There is obviously the same issue in terms of the road to New Norfolk. I am very concerned to hear that we are not going to put cycle lanes on that road because that is a very popular road. I would have thought it makes a lot of sense to connect that one - it is flat and an obvious road to have a cycle link on. It is probably as much a broader policy issue and you can't just go ahead and put it on there, but it would have to be government policy to have a fund for designated cycle roads.

CHAIR - Thank you, gentlemen, for your presentation today.

Mrs NAPIER - Thank you for the detail that was provided in the report.

Mr BEST - I would like to add, too, I think it is a very good report and a very good project. I congratulate DIER on this one.

Mrs NAPIER - And the fact that no-one came to us to say that they were unhappy about the consultations.

THE WITNESSES WITHDREW.