

BOARD OF INQUIRY

Northern Corridor
Improvements Proposal

TRANSCRIPT OF PROCEEDINGS

BOARD OF INQUIRY

Northern Corridor Improvements proposal

Hearing held at: QBE STADIUM, Stadium Drive, Albany, Auckland

on 21 July 2017

BOARD OF INQUIRY:

Judge Melanie Harland (Chair)

Mr Conway Stewart (Member)

Mr Nigel Mark-Brown (Member)

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Day 4, 21 July 2017 (9.01 am)

5

~Comments from the Board (9.01 am)

JUDGE HARLAND: Good morning. Just before we start today, one thing that we wondered was whether, and this is just while we remember it, mentioning it, if you could cover in your closing, if we were to approve the underpass as part of the project, whether there are any scope issues that arise?

10

MS MCINDOE: Yes, we will do that thank you.

JUDGE HARLAND: I thought you probably had that in mind, but just in case that would be helpful.

15

And also, to let the parties know that we won't require Mr Bluett or Mr Lee to be made available for questioning.

And that in terms of Mr Mitchell, the Watercare condition, providing that whatever is agreed is not contentious, I mean, it won't be obviously if it's agreed, and providing we can get it in through another witness, we won't require him for questions either.

20 MR BANGMA: Thank you Your Honour.

MS MCINDOE: Just in relation to Mr Bluett, he had prepared a summary statement. It simply confirmed that he had agreed with the changes to conditions relating to the Dust Management Plan which had been included in the latest -- well not the latest, the one before, planning conferencing statement. So perhaps that summary statement could just be put onto the record by consent?

25

JUDGE HARLAND: Yes, if no-one has any objection we'll just do it by consent and accept all of it as evidence and off we'll go.

MS MCINDOE: Great, thank you.

JUDGE HARLAND: So that now takes us to Mr Ridley, I believe.

30

~GRAEME JOHN RIDLEY (Affirmed) (9.04 am)

~Examination in Chief by Ms McIndoe (9.04 am)

MS MCINDOE: Mr Ridley, can you please confirm for the Board that your full name is Graeme John Ridley?

35 MR RIDLEY: It is.

MS MCINDOE: And you've prepared one statement of evidence for this hearing,
being statement of evidence dated 20 April 2017?

MR RIDLEY: That's correct.

MS MCINDOE: Do you have the qualifications and experience set out in section 1 of
5 that statement?

MR RIDLEY: I do.

MS MCINDOE: Do you have any corrections to make to your evidence?

MR RIDLEY: No, I don't.

MS MCINDOE: Can you please confirm for the Board that the evidence is true and
10 correct to the best of your knowledge?

MR RIDLEY: That's correct.

MS MCINDOE: Mr Ridley hasn't prepared a summary statement because he hasn't
been involved in conferencing and he doesn't have a rebuttal. He could read
his executive summary if you thought that would be useful? I suspect you've
15 read it already because it's been pre-filed.

JUDGE HARLAND: Yes.

~Questions from the Board (9.05 am)

MR MARK-BROWN: I just have a few questions for you in relation to your evidence
20 and how it intersects with the evidence of Mr Rama and response to tangata or
Mana Whenua concerns.

Firstly, this question of Mana Whenua requesting the use of organic
flocculants where practicable. Can you just give us a bit of an outline between
organic and non-organic and the practicalities of using those in terms of the
25 sediment control?

MR RIDLEY: Yes. Firstly, I should qualify that I'm not a chemist, so I'm not the
correct person to get into the specific details of organic flocculants versus
inorganic flocculants. However, I have had probably far too many years
experience working with flocculants on earthwork sites and I think there is a lot
30 of confusion and misconception out there about what organic flocculants may
be and the benefits and disbenefits of those types of flocculants.

Typically, in an Auckland context for the last 15 to 20 years we've been
using polyaluminium chloride, PAC, as the key flocculant that's used for settling
particularly the clay particles in earthwork sites and PAC has been tested
35 through Auckland Regional Council in the day, looking at residual impacts, and

everything's okay in terms of residual impacts from PAC from the research that's been undertaken.

5 However, my understanding from the consultation is there was some concern potentially about the use of some flocculants. I'm not too sure what flocculants they were specifically referring to, but I'm assuming they were referring to PAC, I'm not a hundred percent sure. And so, what we've suggested in the conditions, and if I just refer to condition EW6 (l) (iii) where we refer to flocculants, and what we've said there is that we would wish to see the use of organic flocculants where practicable provided that the most effective
10 flocculant in terms of sediment removal shall be selected. So, what we're saying there is we will consider and use organic flocculants, whatever they may be, and there's many products coming on the market all the time; however, we don't want to compromise water quality. And I guess water quality is our bottom line and what we don't want to compromise. But we're happy to look at the options, look at organic flocculants, look at the various options, and work with
15 iwi in that regard.

MR MARK-BROWN: I guess a potential concern of mine was that that might be a Clayton's clause. In other words, you use it if you can, but if it's likely that the say, for the PAC is a lot better, then you're going to go for that, but you don't
20 know that until you look at each --

MR RIDLEY: Yeah, I guess that --

MR MARK-BROWN: -- refer to the detailed design would that be true?

MR RIDLEY: That's correct, there is a link back to I think it's CMP.5 requires -- so I should just explain. Under the CMP we're required to submit one of the
25 management plans is the CESC. So, you're probably familiar with that. And then part of that CESC we have to detail the flocculants we're going to use. So it's a bit of a pathway to follow. But under that CMP, when we are developing that CMP under condition number 5, we have to provide a copy of the draft to the New Zealand Transport, Northern Mana Whenua Iwi Integration
30 Group, and seek their feedback. So, I'm comfortable there's a link back to the concerns that have been raised by iwi to look and consider the various options, yeah.

MR MARK-BROWN: Okay, thanks very much for that clarification.

35 My next question relates again to Mr Rama's evidence that he said, I don't expect you to look at that now, but I'll just quote from what he said. He said that:

"Mana Whenua requested treatment of stormwater and construction water to higher standards than those provided for in TP10 and TP90", be provided. And then he went on in his evidence to say that your evidence said that the treatment was " in accordance with TP10 and TP90 and treating to a higher standard is not practicable in this constrained urban environment". So, I
5 looked through your evidence; I couldn't see that, so I'm asking you now, is that what your evidence is?

MR RIDLEY: Without re-reading my evidence word-for-word I'm pretty sure I haven't said that. What I'm saying is that we have two guidelines that apply in this
10 Project and that's TP90 and the transport Transport Agency's own guidelines. The most stringent of those will apply. However, there is always opportunity through the way the conditions are set up and through the -- as spelt out in my evidence, for innovation and flexibility to look for options. I do stress however, that this job is not -- this Project is not a typical earthworks Project. Well, most
15 of it isn't. The only, if I can refer to it as traditional earthworks, part of this Project is really the State Highway 18 - State Highway 1 interchange, the rest of it is, putting it crudely, a road widening project. So, from an earthworks point of view it's effectively -- TP90 NZTA guidelines don't typically apply to those sort of road widening type projects.

20 MR MARK-BROWN: So, I guess -- are you saying that you're happy that the two guidelines that you use will give an adequate level of treatment and prevent sediment run off to the extent practical, would that be correct?

MR RIDLEY: I am. And just to put some more clarification around that, the experience that we're having, and I'm seeing on Lincoln to Westgate for
25 example, is where the similar sorts of approach in the southern corridor, similar sorts of approaches are used on the road widening components. I'm confident that we can achieve that.

MR MARK-BROWN: Just following on from that, we have had previous matters, the Board has had questions about implementation and how can we have some
30 comfort that once it goes to the Alliance, you know, all these conditions are going to be implemented and who's going to implement them. Can you give us an overview of how the implementation of the erosion sediment controls is going to work in practice with the Alliance and the various people involved, just a summary of how that works from your experience, how you expect it to work
35 here, and how successful that's likely to be?

MR RIDLEY: I guess a project of this nature, I'm trying to think of another project I'm working on which I can draw some experience from, but Puhoi to Warkworth, Transmission Gully, those types of projects and this project are different set ups. Those other projects are public private partnership. This is an Alliance, but the same principles will apply, where the Agency, who, if I understand correctly, is part of the Alliance, will need expertise in this field to add value and to make sure we comply with these conditions. So, from an implementation point of view the agency will have those expertise on board. The contractor will also have those expertise on board. Those expertise are available in an Auckland context and that gives me confidence that those two things alone will ensure that we comply with what we need to comply with.

The other, I guess, backstop for Auckland is Auckland Council, so through the CCPs, they need to be certified through Auckland Council. Auckland Council have an ongoing monitoring programme, as you are aware. They do weekly monitoring of these types of projects, specifically on these conditions, the EW conditions, and so they will certainly be keeping an eye on things, making sure things are performing as they should.

MR MARK-BROWN: Typically, does Auckland Council use experienced people, be they staff or Council, to do their monitoring role?

MR RIDLEY: They do. If they haven't got the internal expertise, which they struggle with sometimes -- this is just resourcing issues -- then they use external people if they need to, to do this.

MR MARK-BROWN: And again there is sufficient expertise, in your view, that those people are likely to be available?

MR RIDLEY: Yeah, based on the previous 15 years of ups and downs of earthworks. Over that period, yes, they seem to have managed quite well in getting that expertise onboard. They have a -- I guess, a selection of -- I don't know what it is, maybe half a dozen consultants, that they use for that particular role, and they're specialists in erosion sediment control.

MR MARK-BROWN: And then just going back to your comment about innovation, perhaps, you've got the guidelines and you'd be perhaps hoping -- or, if there's room for innovation? Could you explain how that might happen, say with the -- in the detailed design phases?

MR RIDLEY: So through the detailed design and through the development of the CSCPs, to support that implementation, we might find that the TP90 NZTA guidelines just aren't suitable for particular areas or specific activities. I can't

think of anything off of the top of my head; the causeway may be an example, where we have to look for options, and it may be going to -- moving away from structural controls, so physical silk fences, sediment ponds, to like, a non-structural methodology and it may be looking at duration of works, sequencing of works, more stringent staging of works; those sorts of things. One innovation which we've used on this Project is the use of check dams, which you would have seen in the evidence and in my reporting, where in the -- where any swale drains are established, we will use check dams, so effectively little flocculent check dams. So, there is options for those -- those innovative practices to be used.

MR MARK-BROWN: So is it fair to say that the practice is sort of improving all the time, with these innovative practices, and more product coming online?

MR RIDLEY: Yeah. Absolutely.

MR MARK-BROWN: Well, thanks very much. That's all I have.

JUDGE HARLAND: I just wanted to pick up on the iwi issue, which seemed from my read of it to be most concerned with the Lucas Creek area, is that your understanding?

MR RIDLEY: Oh sorry, I'm not familiar where their primary area of concern was.

JUDGE HARLAND: That's fine.

And the other thing I just wanted to double check was the predicted amount of earthworks, which I think you'd initially talked about, in very general terms, being ground disturbance of about 61 hectares but it was 54 by the time you had written your evidence; this is in section 7. I just wanted to double check that was still the overall estimated area?

MR RIDLEY: Yeah, so through -- the reason for the change from the 61 to the 54 was through more detailed -- well, detailed design and understanding of the Project. So, 54, as per table 1 of my evidence, remains, and I've split that into the eight construction zones, which you will see there.

JUDGE HARLAND: And that's still your current understanding of how things stand at this point?

MR RIDLEY: That's correct.

JUDGE HARLAND: Thank you very much. Anything arising?

MS MCINDOE: No thank you, Your Honour.

~(The witness withdrew - 9.17 am)

~DUNCAN BARRY TINDALL (Affirmed) (9.18 am)

~Examination in Chief by Mr Bangma (9.18 am)

MR BANGMA: Is your full name Duncan Barry Tindall?

MR TINDALL: Yes, it is.

5 MR BANGMA: And do you confirm that you've prepared a statement of evidence in this matter, on behalf of Auckland Council, and Auckland Transport, dated 25 May 2017?

MR TINDALL: Yes, I did, primarily Auckland Council.

MR BANGMA: And do you have the qualifications and experience set out in
10 paragraphs 1.1 through to 1.6 of that statement of evidence?

MR TINDALL: Yes, I do.

MR BANGMA: Are there any corrections you'd like to make to that evidence?

MR TINDALL: No, that is still true and correct in full.

MR BANGMA: Mr Tindall, I understand you've prepared a summary statement in this
15 matter?

MR TINDALL: Yes, I have.

MR BANGMA: Would you please like to read that to the Board, starting at paragraph
1.1?

MR TINDALL: Yes, thank you.

20 As outlined in my Evidence in Chief, having reviewed the evidence presented ...(Reads 1.1 - 1.8)... Drive and from Albany Interchange northbound to Bush Road.

MR BANGMA: Mr Tindall, following the presentation of the opening statement by Kiwi Self Storage, there was a question from the Board, in terms of how the
25 proposed changes in gradient to the busway, sought by Kiwi Self Storage, I think increasing that to 5.34% in gradient, about how that would impact on the conversion of the busway to rail, if that takes place at some point in the future. I'm just wondering if you are able to help us with that, first by explaining whether in your view that would affect the efficiency of rail in the future?

30 MR TINDALL: To start with I need to explain I'm not an expert in the design of tram schemes. However, I have worked with trams and schemes in both Croydon and in Manchester, and also in Sheffield, in relation to the design and the way that interacts and interrelates with the road network. I have also -- and through that, I have an understanding of the issues of the gradient and how that relates
35 to the tram speed on approach to road intersections. Through that I've also

engaged recently with my colleagues who do have expertise in the design of light rail schemes, over the last couple of days, to confirm my understanding. The issue with high gradient for trams is two-fold. One is the ability for the tram to actually get up the track and the grip with which the wheels can hold, and that can be partly mitigated by putting additional drive engines on those, as happens in some places, but those are specific vehicles, but also, in the way that they can brake and slow on a descent. So, there's those two aspects to it, the braking and the acceleration to maintain speed.

Generally, trams would be considered able -- all tram rolling stock would be okay to 5%. Above that then there is the need for some consideration, and that also relates to the horizontal curvature of the track as well. However, above 7% is generally the point at which special vehicles would be needed and special measures, and so, in consideration of what's been proposed, an increased gradient to 5.34%, then it's unlikely that any special vehicles would be required.

What does happen is the additional gradient causes some additional running costs, as the track gets steeper, and as those gradients continue, there is additional work that the engines are doing and the -- there can be some slight additional travel time. What's been proposed here, with the small increase in gradient above 5%, and the length of that, in itself, is unlikely to be a significant adverse effect.

However, across the entire length of the track, and with multiple steep gradients, over the course -- should that be extended further north as well, that cumulatively could increase the operating costs and the journey time.

MR BANGMA: Mr Tindall, I understand you were here yesterday when Mr Willmott asked some questions of Mr Cross about the figure in Mr Cross' evidence of currently 30% of people who cross the Harbour Bridge in the morning peak doing so in buses or public transport and broadly speaking I understand Mr Willmott was seeking further information on the provenance of those figures or perhaps the methodology. I understand that following the end of the hearing you've had some discussions with Mr Willmott and you would be happy to assist the Board and Mr Willmott with a little bit of extra information on those figures and noting that the 30% figure is also a figure which you have also referred to in paragraph 7.5 of your evidence.

MR TINDALL: Yes, that's correct. In 7.5 of my Evidence in Chief I refer to 30%, approximately 30% of the people using public transport at the moment, crossing

the Harbour Bridge and going up to some 50% in 2026. That data came from modelled forecast information. So not actual recorded information, but the transport models which are used for the planning of the networks.

5 What I then did yesterday was require information from NZTA, or sourced from NZTA traffic counts of the number of vehicles crossing the Harbour Bridge back from March this year and that matched the information from the Hop card and the public transport user card data of the number of passengers on the buses for the same month and during the hours of 7 am until 8 am in the weekday morning. So, the Hop card data isn't a hundred percent record of the public transport users; people who pay cash wouldn't be included 10 within that, but during that 7 until 8 period that would be a negligible number and so that would be a slight underestimate of the percentage. What I don't have access to is specifically car occupancy for the Harbour Bridge. So, what we do have though is the number of cars, or number of vehicles crossing the 15 bridge and I've used an estimate as to how many people may be in each of those individual cars.

I've shared this information with Mr Willmott as well.

What I've calculated is that if we were to base this on 1.3 people per car, or per road vehicle --

20 JUDGE HARLAND: Can I just say I love the way engineers do this, because I'd love to know what a point 3 person was, but however stick with it, because it's really an interesting idea.

MR MARK-BROWN: It's an average.

JUDGE HARLAND: I know it's an average, but you know. Anyway, 1.3 people.

25 MR TINDALL: That would result in some 35% of people crossing the Harbour Bridge being in buses. Just to clarify, if we were to have three cars, one of those cars would have two people in.

JUDGE HARLAND: Thank you. I'm but a simple lawyer.

MR TINDALL: I'm at a loss as how to respond to that --

30 JUDGE HARLAND: Probably best not to.

MR TINDALL: -- my briefing wasn't that good.

JUDGE HARLAND: So 35% using the bus --

MR TINDALL: That's correct.

JUDGE HARLAND: -- for March 2017.

35 MR TINDALL: That's right. March is a busy month and so perhaps that could explain why it's slightly higher than the 30%. However, coming back to the strategic

modelling, we use that for investment decisions over 40 years, and so any minor discrepancy between that forecast model for 2016 and the long-term forecast which we are using for the 2026 and beyond, is not something which would significantly change the overall story of what would be used for good basis for planning.

5

MR BANGMA: Last question or area of questions, I understand you were here in Court when we asked questions of Mr Hale about the likely cost of traffic management measures for upgrading the Alexandra Stream Underpass if that was undertaken as a separate project.

10

I understand Mr Hale said that those separate traffic management measures could cost around \$1 million, do you have any comment on that figure?

MR TINDALL: Those figures were in line with what I would have expected. They are a substantial cost. They also, as you have just mentioned and as I heard, referred to purely the traffic management costs and didn't include additional costs which are often referred to as PNG, the "Project in general" costs that would be associated with doing the works as a standalone Project. A little bit like if we were to have a second hearing on that underpass, we would need to rehire the televisions, set up the room again, bring everybody back, as opposed to simply doing it within the day.

15

20

MR BANGMA: Sure. Well, just briefly on that point, I mean I take it other examples of those costs might include for instance also the construction yard and site management office as I put to Mr Schofield. He didn't feel qualified or comfortable providing a rough order of costs for those, is that something you'd be able to comment on?

25

MR TINDALL: So, in my experience from the cost estimates that have been provided for several of the schemes that I work on. A 10% estimate for that would not be untypical and indeed, for what could be a relatively small component Project could actually be higher than that. So, some \$500,000 if we were working on the basis of a half million dollar scheme.

30

MR BANGMA: And if this was done as a separate Project I understand that would require State Highway 18 to be cut open and then re-sealed? Do you have -- are you able to comment on the likely cost of resealing State Highway 18.

35

MR TINDALL: The additional costs of the tarmac itself or the road surface would be relatively minor compared to the cost of the traffic management, the

re-establishment of the site office. However, there are the additional costs of the material, which would be being repeated.

The primary, I guess cost, in my view, the primary cost to New Zealand is wider; it would be the disruption to the flow of the traffic and the efficiency and -- that's been delivered by the Project itself, which would of course then be not realised during the period of these works being progressed.

5
MR BANGMA: So on that Mr Tindall, this is my last question, that disruption is -- additional disruption is something which you've referred to in expert conferencing and I'm referring to the Joint Witness Statement transport and traffic site specific impacts dated 23 June 2017 and page 12 of that conferencing statement, it's two main bullet points down just before you get to subparagraph H, you refer there to the additional disruption to State Highway 10
18 flows if basically this upgrade was undertaken post-implementation. Are you able to provide any comment on, I guess, the likely period for that disruption if the underpass was upgraded as a standalone project? How long that would take?
15

MR TINDALL: I understand that the works -- without full access to the detail of what would be required it's very hard for me to be able to provide an exact time scale. I understand that from conversing with the agency's experts, that there is a requirement for significant piling, for that underpass, and therefore, whilst I can't be very accurate with the timing, I would expect a two month period with maybe a range of a month either side would not seem unrealistic. So somewhere between 1 month at the very least, up to three months for the entirety of the works.
20

25

~Cross-examination by Mr Willmott (9.38 am)

MR WILLMOTT: First of all, thank you indeed for the numbers you provided. I have no cause for questioning those numbers and they do indeed indicate that in the peak hour in the morning one third of traffic on the bridge is carried by buses. You expect that to increase to 50% at some time in the future. That presumes, I presume, an increase, a further increase in downtown development. Do you see that as a desirable and indeed feasible proposition? Given that increasingly customers are avoiding downtown, and people like this hearing, are moving their hearings out to places like Albany, and similarly there is and there will be an increasing trend for businesses to decentralise so that they continue -- can continue to attract customers.
30
35

So, to put the question more succinctly, is the 50% across the Harbour Bridge that you envisage really feasible given the feedback effects on lack of access to downtown that's increasingly the case with parking and so on being a problem?

5 MR TINDALL: So, first part is that I refer to the modelling which does show almost 50% by 2026; I think it was 49%. So that's by 2026 in just less than 10 years' time. I would expect therefore, that to happen, that modelling does take into account both congestion and the planned land use around Auckland. Is that possible to occur? I believe it is on the basis that the assumptions in
10 the modelling also take into account the transport infrastructure that's required to deliver.

There has been significant effort in recent years to tie the transport infrastructure, both road development and public transport infrastructure and network service provision together to be able to deliver the transport network
15 to allow both residential, commercial, and industrial developments to be delivered in this way. And so, yes, I do believe that that is feasible.

MR WILLMOTT: The vehicular traffic on State Highway 1 between Constellation and Greville is recorded in Ian's evidence as being currently 132,400, and with the Project, 161,000. That's almost as much as the 200,000 presently
20 crossing the Harbour Bridge. What percentage of the bus traffic crossing the Harbour Bridge do you expect to be on the buses between Greville Road and Constellation?

MR TINDALL: That is information which I'm afraid I wouldn't be able to provide to you here. And that question might have been better to have been addressed
25 to one of the Auckland Transport Metro witnesses I'm afraid.

MR WILLMOTT: Yes, well, thank you for the figures you provided on buses across the Harbour Bridge. Would you accept that 40% of the Harbour Bridge bus traffic would be on the buses between Albany and -- between Greville Road and Constellation, or maybe 50%, say 50%? Like, I'm guessing too, but the
30 point I'm making is that while the road traffic in this section that we're talking about is projected to be almost as much as across the Harbour Bridge, the bus traffic will be about half, that is one third will reduce to about a 6th or maybe a fifth, to be generous.

MR TINDALL: Whilst I would struggle to be the right person to provide definitive on that, I think it would be fair and possibly helpful to agree that there is likely to
35 be a high proportion of that traffic of the users that are on the Patron the

buses that are across the Harbour Bridge, which would be coming from that area of the network that you described.

MR WILLMOTT: Thank you. Moving on to your original statement, on paragraph 3.2 (g) you talk about one of your primary conclusions being the proposal adequately allows for future-proofing of the public transport system. Were you here yesterday when the future-proofing of the motorway was discussed between Greville and Constellation in a southbound direction?

MR TINDALL: Yes, I was.

MR WILLMOTT: Do you consider that to have been future-proofed as well?

10 MR TINDALL: I believe Mr Church answered that question relatively well. The future-proofing of the road network would require, as part of a much wider programme, and this particular Project is just one Project across the wider road network. I am aware that there are other projects being considered which would provide additional highway capacity across the Auckland region, including compatible with the Project as proposed.

15 MR WILLMOTT: So when under 5.1 (f) you say: "My evidence will address the following aspects of the Proposal: (f) future proofing of the transport system", as distinct from just the public transport system. And you really meant just the public transport system, you didn't mean the whole transport system including the local roads and the motorway?

MR TINDALL: The ability to provide the southbound ramps on State Highway 18 is included and been referred to within the evidence provided by the agency and within cross-examination. So that related to that. It also provides ability for additional multimodal elements of the scheme for both cycling and for public transport, the bus network and potential future light rail. So, on that basis that was where the transport in its wider sense came in.

MR WILLMOTT: So when under 7.1 (a), you talked about:

20 "My assessment has identified the following key relevant effects arising from the Proposal: "(a) Provision of a more resilient roading and public transport network ".

30 You didn't particularly mean to include for direct ramps between Albany Expressway and the motorway and the need for -- or the desirability of a fifth southbound lane to balance the five northbound lanes?

MR TINDALL: In terms of resilience of the scheme I believe that the resilience for road traffic, and particularly State Highway traffic, comes from the ability to efficiently go from State Highway 1 heading south onto the State Highway 18

Western Ring, and then be able to balance across that part of the network. It provides, therefore, a greater flexibility in case of incident, and indeed just in general use.

5 The busway provides resilience to the bus network in the sense that it provides an extension of the segregated lanes. So, on days where there are unavoidable delays or some delays on the motorway, those public transport users are not involved in that same delay.

So, I think that's where the resilience is provided and that's where my evidence stemmed from.

10 MR WILLMOTT: Well, I was pleased to see that you supported the idea of at least provision for south-facing ramps from State Highway 18 and you also recommended the provision for widening of McClymonts Road and Rosedale Road over the motorway. So, you anticipated future demand in both of those -- and all three of those situations. I'm just wondering why you aren't also anticipating the need for a future demand to increase from Albany Expressway to head south directly on to the motorway? Is it just that it's because it's too difficult and that the pedestrian and cycling people applied such pressure that it was easier just to go with that flow and then the pressure of the landfill restricting lateral expansion and the use of the motorway land already for busway meant that something had to give, and it had to be the motorway?

MR TINDALL: I referred earlier in the cross-examination to the wider programme of schemes which is across Auckland and that may result in future further capacity being provided to the south of the scheme heading towards the Harbour Bridge. In that situation, it would seem a possibility that those south-facing ramps would then have somewhere to discharge that traffic. And therefore, the ability to provide flexibility in the future would seem wise. In this case, the design of the scheme was able to provide for that future flexibility without unduly limiting the ability to deliver that roading capacity as it stands.

30 In terms of the ramps that you are referring to, those, if they were to be provided now, my understanding from the options assessment is that that would create a definite detriment to the scheme, the Proposal, as it stands today, with no clear benefits that would come in the long run, which is different to the provision of the south-facing ramps -- sorry, the ability to provide the south-facing ramps which doesn't create a loss of the scheme as

it's proposed. I am not aware in any way of any pressure that was put on by any walking, cycling groups. I have noted from the consultation and the evidence that's been presented that engagement was had with both Bike Auckland and Auckland Transport Walking and Cycling. However, I don't believe that went any further beyond what you would call as consultation and engagement.

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10 MR WILLMOTT: You would have heard yesterday my suggestion that traffic from the Rosedale area from Constellation and from State Highway 18 heading south was being placed in a second-class category compared with traffic coming onto the motorway at Esmonde Road for example. I did develop two other questions there.

15 Firstly, do you think it's desirable for Auckland to hang on the single thread which is State Highway 1 north for access to the city, given that we're in a volcanic and potentially earthquake, although that is much much less than Wellington, for example. As it stands everything is on this one thread, so what we're saying is that "oh, that's at capacity already", so future, Auckland will have to do without any extra capacity and let's not add -- allow any traffic, local traffic, access to the motorway from this area of Constellation or from Huapai across State Highway 18, compared with the traffic from Esmonde Road. What about the traffic wanting to head down to Wairau Road from the Constellation area and get off the motorway before it gets to the bridge? There is no provision been made for that, in other words, is the motorway not to service this area at all, but only to service other areas?

20 MR TINDALL: Apologies, I will try and answer the question as best I can.

25 JUDGE HARLAND: The question is that there's more priority been given to certain parts of the network than others, and it's really a fairness issue, isn't it? And if we're at capacity for the future and that's the prediction how will that ever be met in another way? Did that really summarise that very generally or not enough?

30 MR WILLMOTT: That's a reasonable first half if the question, yes.

JUDGE HARLAND: Let's let him answer that bit and then you can ask your second bit.

MR TINDALL: I think there was a bit there about the resilience and the volcano.

35 But the connection -- the ramps that are proposed from 1 to 18 do provide that better increased connection across 18, which then provides the

route via State Highway 16 and back around. So, this scheme I would say actually does provide that resilience that I referred to within my evidence.

In terms of the Esmonde Road connection, again, the provision of the ramps from 18 -- sorry, from 1 to 18 north to west, that allows for more time at the traffic lights underneath for vehicles to turn right today. So, they will experience an improvement in the conditions even without the ramps itself.

5 MR WILLMOTT: Well, there are signals of course on the on-ramp from Constellation. Do you think those -- the phasing of those signals and the percentage of green time should be reduced to allow more traffic from Northland to use the motorway instead of traffic from the Rosedale area, from the Constellation area?

10 MR TINDALL: The timing of the signals, both at the intersection underneath and at the ramp meters, or further on, the on-ramps, are timed to be able to provide an efficient transport network. If more traffic is allowed to enter the motorway, then what happens is you get a flow breakdown, and the actual capacity and throughput of the State Highway reduces to that which we can maintain by some level of ramp metering. The timings of those are therefore set to provide the most efficient transport network in its entirety.

15 MR WILLMOTT: So the green time allowed for Esmonde Road could be reduced to allow more traffic from the north, such as from Rosedale?

20 MR TINDALL: Esmonde Road is outside of the scope of this project. It's not something that I've specifically studied outside, and so I don't think I can help you at this point.

25 MR WILLMOTT: No, I accept that. But what I'm saying is that it's being regarded as a fixity that traffic from Esmonde Road must be allowed access as it is at the moment but that traffic from the Rosedale area should not be allowed access, or at least it should be only allowed access by the present signalised and underpass congested network, which will be marginally relieved, I do accept, by the northbound ramps. But only marginally, because the traffic turning left from Paul Matthews Drive extension turning left to go north coming in from west Auckland, for example, is relatively minor and doesn't get congested back onto Paul Matthews Drive at the moment as the right turning traffic does to head to the city.

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35 ~Comments from the Board (9.56 am)

JUDGE HARLAND: So, what was your question in that?

MR WILLMOTT: Well, I would like to use that as the framing, together with Mr Tindall's talk about the resilience of the road network and in particular the improvements that he sees as being delivered to the Greville Road intersection, where according to --

5 JUDGE HARLAND: Sorry, can I just interrupt there? I think what we have to try really hard to do is not to mix the submissions about what you want to say with questions to this witness. Now, if you are challenging what he has -- some of the conclusions or the information upon which the conclusions he reaches are based then it's quite appropriate for you to put those
10 questions to him to get him to comment on them. But you can't just use this as a platform to put your own submission, because you will get that opportunity later.

MR WILLMOTT: Thank you. I do agree.

JUDGE HARLAND: It's difficult. I'm not trying to constrain you, because there
15 could be a question in there, but we just have to make sure it gets put.

~Cross-examination continues by Mr Willmott (9.58 am)

MR WILLMOTT: I do understand. Well, I was trying to set the background for the next question, which is that the traffic on the motorway, State Highway 1 that
20 is, south of Greville Road, is recorded as 161,000 with the project, which represents a 30,000 increase from the reference case, that is no Project, whereas traffic north of Greville Road increases only 5,000. In other words, a net 25,000 is disgorged onto or attracted onto Greville Road on top of existing Greville Road traffic, that's traffic on Greville Road itself at the
25 underpass.

Do you not see that as a -- when you talk about the road network being more resilient, do you not see that as contradicting your claim?

MR TINDALL: The scheme's providing improved connection across State Highway 18 to 16; it provides a greater resilience to the State Highway network. As I
30 say, the assessment of the scheme has taken into account the planned land use growth across the Auckland wider region and provides several schemes to -- several elements of the Proposal to increase the resilience by different modes. So, the local networks have been assessed and the connections there, that's included within the modelling, which the agency has presented.
35 If there had been significant adverse effects on that local network, that would have been identified through the assessment which had been put together,

and where Auckland Transport witness went through that particular aspect of the scheme, and the modelling was not challenged, and the assessment affects therefore remains as per the assessment the agency presented.

MR WILLMOTT: Yes, I'm not challenging the modelling. I'm aware of the nature of
5 modelling and its limitations. It is useful, but has to be considered by somebody like yourself in terms of what's on the ground.

Now, given that you talk about the resilience of the network, which I take to include that Greville Road underpass and the intersections on either side, and given the land use increases that you talk about, such as the
10 doubling of the generation of the Albany centre and if possible, 30% increase in the Albany University traffic, would that not additional, quite apart from the traffic added by the 30 -- the net 25,000, which I alluded to before, onto that underpass. I would interject here. I would make the point that maybe only
15 15,000 of that goes into the underpass, maybe 10,000 goes outwards towards the east, Browns Bay and the like, so it's not as bad as 25,000 dumped on to the road in both directions. It's only about 15,000 added on to the underpass from the increase in traffic on the motorway. So, you've got that 15,000 increase from the motorway and you've got the additional increase from the land use that you talk about. Are you not concerned about
20 the resilience of that underpass area?

MR TINDALL: Not in the context of the Proposal here. The overall Project is providing several ways of improving the capacity of the roading network. It also provides significant benefits to the potential efficiency of the public transport network and the ability for the people to connect to that.

25 So, as we go forward in the future, and the land use is developed, people have more options to be able to connect and move around. And this perhaps is where my evidence goes in the resilience of the transport network, rather than -- so there are ways that those people who are generated by the land use changes are able to do the journeys more resiliently. I am not
30 aware of any specific issues that would arise from the roading scheme as portrayed in the Proposal. As I say, that has been assessed by Auckland Transport.

MR WILLMOTT: Right, yes. I know provision is being made for walking and cycling and public transport.

Just as a general question, drawing upon your experience as a transport planning engineer, do you consider Auckland has been prudent enough with its transport planning in the last 10, 20, years?

5 ~Comments from the Board (10.05 am)

JUDGE HARLAND: No, I'm not going to let you ask that question.

MR WILLMOTT: Yes, I agree, I'm sorry about that.

JUDGE HARLAND: We're getting into the political here.

10 ~Cross-examination continues by Mr Willmott (10.05 am)

MR WILLMOTT: 7.9 -- I've already covered that.

On the Paul Matthews Drive State Highway 18 section under point 7.24, you mention "that the interchange layout with Caribbean Drive is highly unusual and is of a form that I am not aware of being used elsewhere." I rather share your sentiments there. But can you be more explicit just what
15 you mean by that?

MR TINDALL: Yes, it was related to the alignment of traffic coming southbound from Paul Matthews Drive that then would almost U-turn to be able to get on to the State Highway. Shown on the screen at the moment, which is
20 inverted. So, the traffic heading from the bottom right of this plan, which is going across the overbridge and then would be heading from right to left, where it then approaches parallel to State Highway 18 and to get onto State Highway 18 would U-turn around there, and equally traffic that may be
25 coming from the left of the screen, that would want to join State Highway 18 heading westbound, that would need to do a slightly odd right turn manoeuvre before joining the on-ramp. So, this layout, which has been presented in the lodged design, would have some layouts which I have not seen on the ground before.

MR WILLMOTT: Yes, would you agree that the alternative design I proposed with a
30 half diamond on either side of the overbridge, the Paul Matthews Overbridge of State Highway 18 would resolve those sorts of problems?

MR TINDALL: A half diamond would be much more common and legible to drivers should that be feasible to provide in this location.

MR WILLMOTT: Thank you. You say in 7.26 that you understand that the current
35 separation of Caribbean Drive and Paul Matthews Drive is insufficient to allow separate interchanges to be delivered at some 500 metres, yet

sufficiently separated to prevent a skewed diamond interchange. I can't understand what you mean by that, where the overbridge is angled, because it seems to conflict with your previous statement that the half diamond would be more conventional and desirable?

5 MR TINDALL: So my answer to your question was would a diamond be more conventional which was yes, if it was feasible. And then my evidence that you have just drawn reference to states that I don't believe that it is feasible to fit that due to the alignment and the spacing of the intersections. So, whilst that intersection form would be more legible it can't be delivered. I
10 understand the evidence option analysis suggests that; I assessment backs that up and in Joint Witness Statements it also refers to the challenges of the ramp spacing that would arise if we were to try doing that.

MR WILLMOTT: Right so the 500 metres refers to the ramp spacing then does it?

MR TINDALL: So what the diagram on screen at the moment which is figure -- the
15 diagram, the sheet of Paul Matthews Drive intersection shows the spacing between Paul Matthews Drive and Caribbean. If you were to try putting a direct link over that, a bridge, the angle would not work. The length of that span would be too great and essentially you would be at the angle that would still have that U-turn in all practicalities, just not as quite as explicit as shown
20 here. It's a joint --

MR WILLMOTT: I'm not quite sure I understand you when you talk about some point 500 metres is that between Caribbean Drive and Paul Matthews Drive rather than the weaving distance between Albany Highway and Paul Matthews Drive?

25 MR TINDALL: That's correct.

MR WILLMOTT: Right. So, you don't challenge the distance between Albany Highway and Paul Matthews Drive of 950 metres less the length of the ramps which have allowed 150 metres each which is a total of 650 weaving distance? I beg your pardon, no it's 1500 odd, so the weaving distance is
30 about 1200 metres between Albany Highway and Paul Matthews Drive.

~Comments from the Board (10.11 am)

JUDGE HARLAND: So is one of your issues that you want to put to the witness about weaving?

35 MR WILLMOTT: Yes, he talks about weaving.

JUDGE HARLAND: But he's just said, as I understand it, that the figure you were referring to was not referring to weaving, it was referring to separation distance?

MR WILLMOTT: Right I've jumped ahead of the section on weaving.

5 JUDGE HARLAND: Well let's ask about the weaving now, so what's your actual question about the weaving, that there is sufficient with your design to enable that to not be a difficult?

MR WILLMOTT: That's much better put than I would put it.

JUDGE HARLAND: Thank you.

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~Cross-examination continues by Mr Willmott (10.12 am)

MR WILLMOTT: I showed you this morning some distances between roads being woven between and you didn't have time to absorb those before this morning's presentation. So, I will attempt to get those to you first thing
15 Monday morning, because I'm being cross-examined on Tuesday. So, you will have time then to question my figures on the weaving between Albany Highway and Paul Matthews Drive. So perhaps I better leave that questioning on weaving until then, provided you will be able to attend or brief your lawyer?

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~Comments from the Board (10.12 am)

JUDGE HARLAND: Hold on a second Mr Willmott, we're not doing a stream of consciousness series of witness calling back. This should have all been done ages ago. You were given plenty of notice that if you wished to
25 question people, you had to let us know because there are other people that get inconvenienced if we just have a random approach to this. So, I will reserve whether I am going to let you do that.

MR WILLMOTT: Yes, in the Joint Witness Statement we discussed this.

JUDGE HARLAND: Well you may have discussed it, but the information you just
30 mentioned this morning to this witness and anybody else should have been prepared and given to them some time ago. You hadn't even indicated that you wanted to cross-examine this witness.

So, I've been tolerant about that because we have been making good time. But it might not be convenient for people to come back, and there's a
35 cost associated with it.

I am just going to ask this witness a question about the weaving, so you have an issue with the proposition that Mr Willmott has that there is sufficient within his design to prevent undesirable weaving occurring, you disagree with his figures on that, or his proposition?

5 MR TINDALL: That's correct. The Proposal that he puts forward which is the weaving -- results in weaving to the east of Paul Matthews Drive is where the constraint would be, not to the west. Apologies, I got possibly slightly lost the dimensions that Mr Willmott was putting forward, I thought he was referring between Albany and Paul Matthews Drive, which was the 1.5.

10 JUDGE HARLAND: Right, well what I'm going to do is -- have you got other questions for this witness Mr Willmott?

MR WILLMOTT: One or two under weaving.

JUDGE HARLAND: Well let's have those.

15 ~Cross-examination continues by Mr Willmott (10.14 am)

MR WILLMOTT: Under 7.55 which is weaving, you say that weaving is a key element of determining Project design and I'm quite sure you refer particularly to the distance between Greville Road and Constellation Road there is that correct?

20 MR TINDALL: That is correct.

MR WILLMOTT: So you talk about "the additional lane change manoeuvres may lead to an increase in the number of severity of crashes". The word "crashes" carries quite some weight. What sort of -- what's the nature of crashes that occurs in weaves and are they frequent and can you elaborate
25 on your understanding of what crashes means in terms of weaving?

~Submissions from Ms McIndoe (10.15 am)

MS MCINDOE: Sorry Your Honour, I don't wish to interrupt Mr Willmott, but Mr Clark has kindly pointed out that many of these matters were addressed
30 in expert witness conferencing and recorded in the Joint Witness Statement relating to general design, layout model alternatives, and it might be that the Board considers that a more efficient way to have these matters addressed, because Mr Willmott's view is recorded there as well as the other transport experts. I just wanted to raise that so that you were aware of it!

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~Comments from the Board (10.16 am)

JUDGE HARLAND: Thank you for that. Well how it works is this, how it works is this Mr Willmott. If there have been agreements reached but you have disagreed with that in the Joint Witness Statement, you are perfectly entitled to put your propositions about the disagreement to this witness. But I want you to be -- it's not constrained. We're not just opening up everything. If there's been some things that you've agreed with during the witness conferencing, but not the conclusion, we don't need to go back and revisit that, but if there is a difference in the conclusion, then the basis for that difference you can ask the questions about.

MR WILLMOTT: Right. Well perhaps you might adjudicate on this, what I looked to explore with this witness was the ability to "influence the weaving problem" we have different interpretations as to how much of a problem it really is and how many and what's the nature of the crashes that would occur. But the question I was -- the generality of the question that I was going to put was that is there not mechanisms such as a slowing down of traffic given a problem like that, and also the ability to ramp meter to restrict the on-flow of traffic.

JUDGE HARLAND: All right, yes, you signalled those questions and you did ask these yesterday and I think they're perfectly proper questions to put to this witness and you are welcome to put those. But if we could just cut to the chase and put them. We understand that there is a difference of opinion about the weaving. Whether a) if it's going to occur and b) if it is going to occur how serious the problem might be. And so, you are welcome to put your questions about how that could be controlled to this witness and if he can answer them he will tell us.

MR WILLMOTT: It gets down to a balance between the weaving problem and your ability, or the traffic's own ability to ameliorate that, versus the problem of congestion on Greville Road and the ability to substantially relieve that congestion by adding the flyover ramps.

JUDGE HARLAND: Well can I say that's an overall conclusion which is very proper to make in terms of a submission, because that's a weighting issue, which should be given more weight. And that's a submission point.

If part of your approach, and this would be a legitimate approach, if part of your approach is to say well the weaving problem isn't as serious as you make out because you can put a number of things in place to ameliorate

that, and in any event, you've underestimated or whatever, then that's a factor, that's a factual matter that we can put to this witness. But the overall conclusion is a matter of submission, does that help?

5 So why don't you put to this witness, why don't we get him to answer those specific questions about the methods that could be used to -- what you say could be used to control weaving, all right?

~Cross-examination continues by Mr Willmott (10.19 am)

MR WILLMOTT: Given that you talk about the resilience of the network and in particular the road network and the public transport network, therefore, you are concerned about that and potential congestion on the Greville Road underpass. How -- can I ask you to compare your concern about that, given the additional traffic both from the motorway and from Albany expansion, versus the problem of the weave and the ability to ameliorate it? Are you prepared to address the balancing between those two issues?

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JUDGE HARLAND: No, he can't do that, that's a matter for us, but I'll just see if I can help a bit here.

So Mr Willmott has suggested there might be methods by which the weaving problem can be made better. And one of the things he's suggested is the ramp signals, is that correct Mr Willmott?

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MR WILLMOTT: That's one.

JUDGE HARLAND: Right, that's one. Do you agree that that could assist to help ameliorate the weaving problem? And if so, to what degree?

MR TINDALL: It may provide some assistance during some periods of the day. Without specific assessment of the exact flows, the distances; it's hard to say how much that would help over and above what's shown at the moment.

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JUDGE HARLAND: What other method were you suggesting would improve the weaving Mr Willmott?

MR WILLMOTT: Well to me the overriding comparison is the likely value of the crashes versus the value of the congestion economic argument.

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JUDGE HARLAND: Well that's a submission, if you are challenging him or want --

MR WILLMOTT: I'm just giving him the opportunity to comment given his comments about resilience.

~Comments from the Board (10.22 am)

JUDGE HARLAND: Well the other thing we have to be careful about is opinions are two a dozen. In other words, my opinion is just as good as yours and yours is just as good as mine, it's just an opinion. All right, we do not permit
5 opinions to be expressed about everything and then people to be relying on opinions that aren't based on expertise. So, if it's just an opinion, it's got to be based on an expert view for us to give it any weight, all right?

MR WILLMOTT: Well, I thought I had compared -- I talked about the economic comparison.

10 JUDGE HARLAND: Yeah, but this man is not an economic expert, he is a transport expert.

MR WILLMOTT: He talks about crashes.

JUDGE HARLAND: Well he does, but that's not an economic issue.

MR WILLMOTT: Well I suggest it's either an opinion or it's got some weight and
15 some facts behind it.

JUDGE HARLAND: I will ask him, but I'm getting a little bit impatient with the very random approach you are taking to matters that should have been sorted out a long time ago. You have had plenty of time. You have been through joint witness hearing and you understand what the issues are and the concerns
20 and it seems to me that it's not particularly focused. And if you are to be permitted to depart from what our inquiries procedures set down you will need to be much more focused in the future.

I don't want you to comment on that thank you.

25 ~Questions from the Board (10.23 am)

JUDGE HARLAND: I'm going to ask this witness. You've made a comment in your Evidence in Chief at paragraph 7.57 or thereabouts, I think it was there, about the severity of crashes and that the weaving issue might lead to an increase in the number of severity of crashes all right. What evidence did
30 you base that opinion on?

MR TINDALL: So I've been a practising traffic engineer transport planner now for almost 20 years including on the Ramp Metering Pilot Scheme in the UK, which is where we trialled the introduction of ramp metering signals and looked at the effects of those motorway merge conditions and weave
35 conditions as a result of on-ramp changes to behaviours and free flow behaviours, and part of that did include the crash rate as well as the

efficiency of the motorway network. So my comment here regarding the safety of the crash and the frequency of those crashes resulted from modelling and observation of motorway on-ramp merge behaviour with and without controls and the way that that affects the merge and the weaving that goes on.

So the typical crashes would be where vehicles run into the back of a stationary vehicle on the main motorway as result of a shadow queue where vehicles come to a stop for no obvious reason and that happens when motorways are running at capacity. One of the things that we establish triggered that was where vehicles are changing lanes, they need essentially twice as much space as they exist, need the space in two lanes at the same time and that results in vehicles behind braking and driver behaviour research of that passes back through the network. So, the more lane changing in high density traffic the more crashes occur. Due to the speeds on motorways then any collision between vehicles has a high chance for a severe accident. Modern vehicles are designed to limit that, but there are still fatalities that do arise as a result of those type of motorway crashes.

JUDGE HARLAND: All right. So, you've explained that that opinion is based on some research that you undertook in the UK?

MR TINDALL: That's correct.

JUDGE HARLAND: And so it is a general observation, is it, or a general conclusion from that research?

MR TINDALL: That's correct and also that is followed through with the design principles that are applied and included within AUSTRROADS standards which we use motorway interchange spacing, weaving calculations, which also references to the work undertaken in the United States as well, related to the efficiency and safety of these schemes.

JUDGE HARLAND: So, you've established that there is some research behind this conclusion; your conclusion was that it may lead to an increase in numbers of severity of crashes, that would be difficult to predict would it not at this current stage of the Proposal?

MR TINDALL: The nature of these crashes -- all crashes is very hard to predict. We are talking the vast majority of people drive through any intersection any road without any problem at all and yet we still unfortunately see those very small minority of situations where several things line up and unfortunately a

crash occurs and a smaller proportion of that results in an injury to the occupants of the vehicle.

5 Work has been done to assess the weaving at this intersection in several different ways. The information presented in the transport assessment showed that there was some concern and that the Applicant had investigated regarding the weaving. During expert conferencing, or prior to expert conferencing we discussed further research that had been done. I undertook additional research to look at the weaving. We concluded that what had been presented was not unreasonable, which is there is a chance
10 that the scheme would produce more crashes within this stretch of the scheme. However, the benefits from removing some of the traffic from the local networks was -- would offset the crash risk from this stretch of the motorway network.

JUDGE HARLAND: Thank you. Mr Willmott we're now at the morning break time.
15 We're going to take 15 minutes, do you have other questions for this witness?

MR WILLMOTT: I would like to explore one more area which is the basis of those weaves which he has undertaken, for example, under 7.58 and 7.59, those are the areas that I would like to explore.

20 JUDGE HARLAND: All right, well let's do that at 10.45 and we will move on after that.

~(Adjourned 10.29 am - 10.47 am)

25 ~Cross-examination continues by Mr Willmott (10.47 am)

JUDGE HARLAND: Just when you are ready thank you Mr Willmott.

MR WILLMOTT: At 7.58 you talk about the Highway Capacity Manual, that's an American source with which I'm reasonably familiar. You will be familiar, I presume with UK standards. When I worked there in the early 60s there were
30 only roads in urban areas as a very mild and in my opinion inadequate basis for calculating weaves. The Highway Capacity Manual i.e. then used and recognised that it was inappropriate in the UK situation, as have you I note. You talk about using an alternative method which has been added to the Highway Capacity Manual, because the original manual was developed for
35 interstate highways for which a high level service, minimal C was allowed, whereas we're operating to the, in Auckland, at a level of service E and F for which lower standards are appropriate. You talk about the distance being

adequate provided a fifth lane is added between Constellation Drive and Greville Road to allow for the weaves. But would you agree that a similar weave distance would be appropriate on the eastern side for southbound traffic if an overpass was provided as I have suggested between Albany Expressway and State Highway 1 south. In other words, what's good for the goose is it not also good for the gander? Would not the addition of a fifth lane southbound achieve as good an effect as the additional lane which you approve of northbound?

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MR TINDALL: I only assessed the scheme as proposed to be able to ascertain any adverse effects that may arise from the Proposal. I did have a look at the options assessment process that had been undertaken and which resulted in the decision to come out with the layout as shown. So I haven't expressly calculated what the addition of a fifth lane would be with one of the rejected options that was considered earlier in the scheme design. However, to assist with the conversation, it is possible that the addition of a fifth lane would reduce any problems that would arise, but you'd need to check and see whether or not the flow pattern actually resulted in the same utilisation of that fifth lane which has been assumed arises with the northbound. And there is no -- not necessarily the case that that would be symmetrical. So, the fifth lane that's been proposed assists in the northbound direction by allowing more traffic to essentially move out a lane and leave less vehicles, lower density in the lanes for which weaving would occur. Without assessing the explicit turning movements, on and off movements, I wouldn't be able to say whether that definitively would happen with a fifth lane southbound should an alternative scheme be proposed or progressed.

MR WILLMOTT: Thank you. With regard to British standards today, would you be familiar with the weaving standard used in the UK today?

MR TINDALL: Not today, no. I left the UK seven and a half years ago and at that time the Design Manual for Roads and Bridges was the appropriate document to use. I have looked and seen that that has been updated several times since I departed from the UK, so would not be able to talk about those standards, no.

MR WILLMOTT: I note that you considered the alternative method that's been added to the Highway Capacity Manual to allow for familiarity such as occurs in peak periods in urban situations, but you didn't consider it useful to use the latest UK standards?

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MR TINDALL: No, I focused on the Highway Capacity Manual, that's the one which is also referenced indirectly through the AUSTRROADS design guide which is the appropriate standard for use in New Zealand. I undertook that assessment and having assessed it in two different ways noting also the work that had been done by the Applicant, and the additional information that was sent through following the issues I raised -- sorry the issues that were raised in the Auckland Council submission. I established that all of these methods that we were looking at, largely showed that the weaving was going to be less than the desirable by these designed standards, and therefore, we were in an area where the local conditions were likely to be the dominant factor on whether or not the efficiency of the network and the safety of the network and that was where I then put forward in my evidence the request that the weave distance did not get reduced any further and we discussed that in conferencing which I believe was in section 7O, sorry on page 17 of the conferencing where we established in the northbound direction that no further shortening of the weaves was desirable.

MR WILLMOTT: Thank you. Just briefly then, on 7.60, you would approve it so long as the additional fifth lane was added in the north bound direction, I read that --

MR TINDALL: I don't have approval rights of this, but I would -- in considering the weaving situation, then I would consider it to be desirable to include the fifth lane northbound; also I'm referring to the information which the safety audit team had come up with after they had been through this, the panel of specialist safety assessors that investigated this very issue, they also recommended that fifth lane.

MR WILLMOTT: I note the word "desirable" there, would you accept that four lanes would have been acceptable, if marginal, but that a fifth lane was better?

JUDGE HARLAND: Sorry which paragraph are you looking at?

MR WILLMOTT: Just in his response he used the word "fifth lane is desirable".

JUDGE HARLAND: Yes all right, so you are referring -- yes.

MR WILLMOTT: So the fifth lane is desirable, but would you consider it to be absolutely necessary, or would four lanes be still acceptable, if less desirable than a fifth lane?

MR TINDALL: My assessment was undertaken on the fifth lane. My review of all of the evidence put forward by the Transport Agency witnesses and in the safety audit highlighted that a fifth lane was to be included in the application as it

stands. And that is what I've assessed. I wouldn't be able to assess -- I wouldn't be able to comment on an assessment of four lanes.

MR WILLMOTT: All right. Thank you, no further questions then.

5 ~Cross-Examination by Ms McIndoe (10.57 am)

MS MCINDOE: First just a matter of clarification, when Mr Bangma introduced you he said you were appearing as a witness for both Auckland Transport and Auckland Council, and you replied "primarily Auckland Council".

MR TINDALL: That's correct.

10 MS MCINDOE: Now my understanding is that you are a witness for Auckland Council only, is that correct?

MR TINDALL: That is correct, as my Evidence in Chief, and also the summary statement I signed. I have had conversations with the Auckland Transport team on matters through joint witnessing and matters on that side. However, my client here is Auckland Council and my advice is as per my expertise.

15

MS MCINDOE: But as you say you've been involved in discussions that the transport experts have undertaken as a group?

MR TINDALL: That's correct.

MS MCINDOE: I'd like to ask you some questions about Alexandra Stream

20

Underpass. Can you see the screen from where you are Mr Tindall? I understand there are plans behind you if you would rather have a hard copy in front of you.

MR TINDALL: Are you referring to sheet 4?

MS MCINDOE: I was going to 8, 9 and 10 really, in order to get the whole State Highway 18 context.

25

MR TINDALL: I think I will be okay, if I struggle I shall ask. Thank you.

MS MCINDOE: If we look at the existing situation on State Highway 18 and we think about how pedestrians and cyclists can cross State Highway 18 from north to south or south to north, we can see on this General Arrangement Plan that there's -- this one shows the Alexandra Stream Underpass, that is an existing underpass that allows pedestrians and cyclists to cross.

30

JUDGE HARLAND: I'm sorry to interrupt but we need to have the number of it.

MS MCINDOE: This is sheet number 9 of the General Arrangements Plan.

JUDGE HARLAND: Sorry you might need to repeat your question.

35

MS MCINDOE: Sheet number 9 shows Alexandra Stream crossing and that's crossing for pedestrians and cyclists, isn't it?

MR TINDALL: That's correct.

MS MCINDOE: And if we go to sheet 10, can you confirm that there's existing crossing facilities for pedestrian and cyclist at Albany Highway Interchange which is shown on sheet 10?

5 MR TINDALL: There are on-road cycle facilities on the Albany Highway itself. There is no ability to cross on crossings if you were a cyclist. There is no shared use path facilities to cross, you would have to use the road.

MS MCINDOE: Cyclists would use the road?

MR TINDALL: Correct.

10 MS MCINDOE: And that would allow them to get to the north side of State Highway 18 and vice versa correct?

MR TINDALL: That's correct.

MS MCINDOE: And pedestrians, is there a footpath provided on Albany Highway?

MR TINDALL: On Albany Highway south yes, and on one side -- sorry, to the north,
15 apologies the plan's been reversed --

MS MCINDOE: Yes, I also find it confusing.

MR TINDALL: -- to the north and there are footpaths on both sides of Albany Highway.

MS MCINDOE: And if we go to plan 8, so the other end of State Highway 18,
20 Caribbean Drive, now there is no pedestrian crossing facilities at Caribbean Drive, is there, for pedestrians to get across State Highway 18, currently?

MR TINDALL: There is no explicit crossing facility for them, for pedestrians at that point, no.

MS MCINDOE: And if we go further east again and now I'm looking at General
25 Arrangement sheet 6 at Constellation, there's the ability for pedestrians and cyclists to cross State Highway 18 at Constellation, isn't there?

MR TINDALL: There is the ability for pedestrians to cross. I'm not aware of the cycling crossing facilities. I am not aware of those facilities there.

MS MCINDOE: But would there be anything to prevent cyclists, for example, walking
30 their bike across at the pedestrian crossing facility?

MR TINDALL: Oh alongside State Highway 18 at the moment there is nothing to stop cyclists from riding on the road with traffic as it stands at the moment, no anywhere along State Highway 18.

MS MCINDOE: And then if we consider how this stretch of State Highway will be once
35 the Project is complete --

MR TINDALL: Yes.

MS MCINDOE: -- the Albany Highway Interchange pedestrian and cycling crossings will continue to be permitted in that area, is that correct?

MR TINDALL: That is correct.

MS MCINDOE: And the Alexandra Stream Underpass will remain?

5 MR TINDALL: I understand so, yes.

MS MCINDOE: And there will be a new crossing over State Highway 18 provided by the new Paul Matthews Road Bridge, or Drive bridge.

MR TINDALL: That's correct, the details of how its accessed are not clear. So, if on the path, on the shared use path as shown on screen in the top left corner at
10 the moment, then you are right, you are able to crossover to the south side -- to the north side of State Highway 18.

MS MCINDOE: The General Arrangement Plans show a crossing, that's my point, are you disputing that?

MR TINDALL: You were talking about cycling as well, and the General Arrangement?

15 MS MCINDOE: Walking and cycling.

MR TINDALL: The General Arrangement Plans did not show how cyclists could get onto that, but they would be able to use that road crossing bridge, yes.

MS MCINDOE: On the shared used path?

MR TINDALL: Yes.

20 MS MCINDOE: And just to complete the picture, the ability to cross at Constellation Interchange would remain after the project, wouldn't it?

MR TINDALL: As discussed for pedestrians, yes, there is no cycling facilities shown as to how a cyclist would cross there without dismounting.

MS MCINDOE: But it would be the same as the current situation?

25 MR TINDALL: I believe so.

MS MCINDOE: So overall, we have one additional crossing after the Project is complete, do you agree?

MR TINDALL: There is the addition of the overbridge at Paul Matthews Drive, yes. But there are also the, for cyclists, there is the inability for cyclists to make the manoeuvres by riding on-road given the restrictions that would be in place for
30 cyclists on State Highway 18 where pedestrians and cyclists would not be permitted.

MS MCINDOE: But in terms of the ability to cross State Highway 18 there would be an additional crossing provided?

35 MR TINDALL: At the moment you are able to cycle along State Highway 18 and cross between several access points to 18 which would not be permitted as a cyclist

following this scheme. And so, there is the bridge that you refer to which is not there at present, and there are journey paths, links, which are available at the moment which would not be available in the future for cyclists.

MS MCINDOE: I have to say I'm struggling to understand what these "journey paths"

5 are, could you please explain them to the Board and me?

MR TINDALL: Yeah, so you could come in and out of Paul Matthews Drive --

MS MCINDOE: Sorry could you -- with reference to a plan?

MR TINDALL: Yeah, of course, apologies. So, on sheet 8 -- sorry, sheet 9, from Paul Matthews Drive you could come out of it and go along the road to Unsworth in a

10 direct route.

MR MARK-BROWN: Going which way?

MR TINDALL: Heading right.

MS MCINDOE: Sorry, so you are suggesting cyclists should cross State Highway 18 at the location of Paul Matthews Drive, agree?

15 MR TINDALL: I'm saying you could.

MS MCINDOE: What's the -- it's an 80 kilometre speed zone in that area, isn't it?

MR TINDALL: Yes.

MS MCINDOE: Would you agree it's a hostile environment for cyclists?

MR TINDALL: Oh yes.

20 MS MCINDOE: You are not aware of that route commonly being used by cyclists turning right out of Paul Matthews Drive?

MR TINDALL: I am not aware of it being commonly used no.

MS MCINDOE: Do you agree that a shared use path would be a more, I'm trying to find a technical way of saying "friendly" environment to cyclists.

25 MR TINDALL: Assuming it was providing a link in connection that was in the direction they wished to travel. People make a journey for several reasons. Sometimes they go for a leisure trip in which case the quality of the journey and the environment is a primary factor. In other cases, that journey is for a commute journey, an ability to get from A to B, in which case the directness of the route is
30 significant.

MS MCINDOE: Do you agree that in future, the cyclists who might want to cycle from Paul Matthews Drive to Unsworth, they could use Alexandra Stream Underpass, couldn't they?

MR TINDALL: Yes.

35 MS MCINDOE: And do you agree that the shared use path provided on Paul Matthews Drive is a benefit as compared to the current situation?

MR TINDALL: It comes back to the type of journey that people are doing and where exactly they're getting to and from as to whether that links where they are starting from and where they are wishing to finish their journey.

MS MCINDOE: What I'm trying to establish is whether you consider that inclusion of
5 the shared use path within the Project is a good idea or are you suggesting that actually it doesn't provide a benefit and there is no reason to include it?

MR TINDALL: It's one of the key objectives of the scheme to include it, so my evidence would have to change significantly if it wasn't there because I
10 concluded the scheme as proposed to the objectives of the scheme and of Auckland Council policy strategy, and therefore the inclusion of the shared use path with the connections to the local network is very important for the scheme.

MS MCINDOE: Now you are aware that the Transport Agency proposes to upgrade the Alexandra Stream Underpass by including lighting, do you agree that would be a benefit to users of the underpass?

15 MR TINDALL: From a traffic and transport point of view partly I think it's -- as I understand it, the CPTED which is more of an urban design, decide the lighting applies from a traffic and transport point of view. There are other factors which are more important than the lighting.

MS MCINDOE: So that's really something which we should ask Mr Brown about?

20 MR TINDALL: Indeed, please.

MS MCINDOE: What about the change to the approach to the underpass so that to improve visibility on the approach, do you see that as an advantage from a traffic and transportation perspective?

MR TINDALL: Indeed the safety element of the visibility which there are -- there are a
25 90 degree bend, which it's impossible to see through, which does lead to the risk of cyclists in particular colliding with either pedestrians or other cyclists coming the other way.

MS MCINDOE: In your evidence you include a statement at paragraph 7.12, you say in the last sentence of 7.12:

30 "The Proposal will take that poor level of accessibility and amenity for cyclists and result in it becoming completely inaccessible".

Would you agree that there is an element of overstatement in that sentence?

MR TINDALL: I believe if you read it in conjunction with the sentence prior which
35 says:

"In my view, State Highway 18 already creates a strong disincentive for pedestrian cycling movements".

And it is in that context that the following sentence states that it will become completely inaccessible, which is with the view that State Highway 18 will not be available for pedestrians and cyclists; and so, I'm comfortable with that sentence that you read being not an overstatement when read in context.

5 MS MCINDOE: So you're referring there to the fact that it will become a motorway and therefore cyclists won't be legally allowed to ride on State Highway 18?

MR TINDALL: Correct.

10 MS MCINDOE: Have you considered the Joint Witness Statement that was prepared by the Recreation and Reserves experts?

MR TINDALL: I have seen that.

MS MCINDOE: You have seen that?

MR TINDALL: Yes.

15 MS MCINDOE: Now in that statement the experts agreed that there was no loss in connectivity as a result of the Project. And if you'd like to pull that up it's paragraph 5.8 so they say:

"The experts agree that while there is no loss in connectivity as a result of the Project, there are good opportunities to improve connectivity for pedestrians and cyclists across State Highway 18 to the west of Paul Matthews Road."

Would you agree with that statement?

MR TINDALL: I agree that's what's within their Joint Witness Statement, yes.

MS MCINDOE: But do you agree with the sentiment?

25 MR TINDALL: I believe we've discussed that my view is that there is still a loss of connectivity there. I do accept that that loss of connectivity is from a level of a relatively hostile or a hostile environment to nothing at all. But I would say that there is still -- there are some cyclists and pedestrians who would cross who would not be permitted to, and therefore, from a traffic and transport perspective, there is an element of loss of connectivity. And that may be a different interpretation from expert view.

30 MS MCINDOE: In your summary statement, paragraph 1.8 you refer to additional works to achieve a direction to the proposed shared used path. And you use the word "required". They're not required to mitigate any effects of the Project, are they?

35

MR TINDALL: They are required in my view from a traffic and transport perspective to deliver the objectives of the Project, which was to -- shared use path and connections to local transports and the local network. These connections, the additional connections link to the shared use paths, cycling, walking and cycling facilities that are available.

MS MCINDOE: So these connections are required in order to achieve a better outcome for pedestrians and cyclists than the one that's proposed by the Transport Agency in the lodged documents?

MR TINDALL: No, I come back to it is my reading of the -- what the Project was setting out to achieve from the executive summary of the transport assessment which is to provide safe walking and cycling facilities adjacent to State Highway 1 and 18 in connection to the local transport networks. So, my statement there is referring to that, the word "required" and my consideration of this comes from delivery of that objective of the Project, that's where "required" comes in.

MS MCINDOE: Would you accept that another organisation could provide these connections that would assist to achieve those objectives?

MR TINDALL: From my perspective who delivers these things doesn't -- wouldn't change my expert view on the requirement of it. It's just the application and the supporting evidence said that to deliver the outcomes that were sought, these needed to be provided. I'm not an expert on funding of these schemes.

MS MCINDOE: Now if all of these measures which you list in paragraph 1.8 of your summary, if they were to be provided do you accept that there would be -- the shared use path scheme resulting would be a significant asset for walking and cycling on the North Shore as a result of this Project, and these additional connections?

MR TINDALL: It would prove beneficial to the community and would deliver on several aspects of strategy and planning policy -- sorry, strategy and policy, transport policy, yes.

MS MCINDOE: I have just one more question about this cyclist using State Highway 18, you said before you weren't aware of it being -- of cyclists generally travelling from Paul Matthews Drive to Unsworth Drive, have you in fact ever seen a cyclist undertaking that manoeuvre?

MR TINDALL: No.

~Questions from the Board (11.20 am)

MR MARK-BROWN: Mr Tindall, in your summary you've given us today, 1.2 you've expressed an opinion that the Proposal will deliver benefits and that several specific issues that have been identified could be mitigated through minor amendments to the design.

5 So, what you consider a minor amendment, does that include replacing Alexandra Creek Underpass?

MR TINDALL: The use of the word "minor" is subjective. In the context of a cycling scheme the replacement of the underpass would be quite a significant scheme. In the context of the overall transport package of the segregated busway, the motorway enhancements and some of the other works on the local roading network, I would say that would be relatively minor in the grand context of the overall scheme.

MR MARK-BROWN: So on this question of your -- in your 1.7 you consider the underpass should be replaced. So, are you saying that that is to mitigate what you see as an adverse effect on cyclists for the proposed Project as it stands?

MR TINDALL: The underpass at the moment does not deliver the safety and amenity from a transport point of view for cyclists that a connection across State Highway 18 either today or in the future would be desired.

20 The replacement as a standalone scheme would seem to be -- create quite significant adverse effects in terms of the disruption that would be required to implement that in the future and in terms of the congestion that would be incurred and the additional costs that would arise from this once it's a motorway to upgrade it in the future. Investigations into some of the other planned networks around there that have been undertaken by the Applicant during the scheme design and discussed at joint witness conferencing have shown that the connections that are on the planned networks may not be feasible elsewhere, which almost puts more eggs in the basket of the Alexandra Underpass. There are challenges to the connection, I understand, at the Bluebird Reserve and that would put more emphasis on the quality and amenity and indeed the number of users potentially that would be coming through Alexandra Underpass. And as an increase in the potential users that were coming here compared to where the other schemes are that's where the narrowness particularly of that underpass with only 1.5 metres width, means that if somebody's got a pushchair or two cyclists are coming through there,

that's well below what the design standard would require for a cycle shared use path.

MR MARK-BROWN: So it seems to me what you're saying, can I just check with you, that if we are to consider the need to mitigate the effects of the Proposal and cycling, we need to consider not only as of now, but in some time in the future as well, because you're saying that -- it seems to me what you're saying is a large aspect of your recommendation that this be done now does relate to what's happening in the future -- what might happen in the future. So, would that be true that we shouldn't just consider the issue now, but into the future and, if so, what sort of period would be reasonable, the full length of the Project or the design life of the Project, which is what 2032?

MR TINDALL: So my conclusion that it should be done now was related to the fact that once the upgrade has occurred here on the roading network to motorway standards, the adverse effects that would be arising while attempting to deliver this in the future would be significantly higher.

MR MARK-BROWN: So that is the main aspect of what you see to be the adverse effects?

MR TINDALL: Indeed. The need for this in the future, I believe for this upgrade to occur has come out of the fact that the investigations have shown that some of the parallel routes, the Bluebird Reserve particularly, which was identified as an underpass or as an overbridge, the investigation that's been undertaken and the multi-criteria assessment referred to show that's unlikely to be achievable. Which, to me, suggests that the upgrade of the underpass will be more important to happen either now or in the future, and there would be adverse conditions in the future to upgrading it compared to today.

MR MARK-BROWN: Just pursuing that issue of another option of an overbridge. So is your evidence that you think there's been enough investigation done now about potential other options for overbridges or similar that means that you can safely say that you need to do -- make the underpass -- redo that now because that's definitely going to be better than other options which might include doing the underpass in the future, or doing overbridges.

MR TINDALL: I would not be able to be as definitive as that. I would say that the work that has been presented through this strongly indicates that the underpass at Alexandra would be the most likely way of addressing the connection anywhere between William Pickering Drive and here, and Alexandra.

MR MARK-BROWN: Thank you.

MR STEWART: Mr Tindall, one of the advantages I suppose of being tail end Charlie is that a lot of the questions I was going to ask you have basically been answered, but bear with me and I'll just go through these.

5 Just going first to your paragraph 1.8 of your summary statement, and I think you briefly answered the questions to counsel, but just talking about this what I call the "stubs" or where the shared use pathways end. And as I understand it, the position of the agency is that they've put in these SUPs and they end at certain place where somebody, some agency, can take them on and pursue them and bring them into the rest of the network.

10 And I gather from what you're saying is that you think it should be done, but you are not saying who should do it. But would you accept that what is being proposed allows for the potential in the future for the SUPs to be extended by somebody?

MR TINDALL: I have been out on site and had a look at what space is available as to
15 how this could be delivered. In some cases there isn't the space to be able to deliver to the design standards now. However, from a practical and pragmatic approach then there are ways forward to be able to deliver a connectivity that would provide benefit and enable the shared use path that the agency is proposing alongside State Highway 1 and 18 to connect to that existing
20 network. I understand that through -- there is no funding available to provide this, these stub connections outside of this Project or even within this Project in the current budget plans of Auckland Council or Auckland Transport.

MR STEWART: Okay, so can I take that as you saying that there is potential there for the extension of the SUP in future, not necessarily by the agency, but by
25 Council or by somebody else?

MR TINDALL: Yes.

MR STEWART: I had some questions about the Alexandra Creek Underpass but I think we've just about done that one. But let me just have a look.

30 One of the questions I had which really arose out of your answers to another question was that you are saying that at the present time cyclists can travel down State Highway 18 and exit at Unsworth Drive and that the Proposal will cut off that possibility. And, as I understand it, it would be replaced more or less by cyclists being able to go over the new bridge, the new Paul Matthews Road overbridge, is that your understanding?

35 MR TINDALL: That's correct.

MR STEWART: So on the one hand it seems to me and I'd like you to comment on this, we have a situation where the cyclists may not be able to go down State Highway 18, which I think you agreed was fairly unsafe possibly, I think those might have been the words of the Council, not you. And on the other hand, it would be replaced more or less with a route which is very safe, what's your comment on that?

MR TINDALL: It will still require crossing of roads, albeit there are facilities to cross -- crossing upgrade at the signal intersection at Paul Matthews Drive. So, you would still be crossing those ramps which I would say would be relatively safe, there is a crossing point there. It is certainly safer and there is the ability to use the Alexandra Underpass to be able to connect between those two points as well as an alternative method.

MR STEWART: And I think in answer to Mr Mark-Brown you've made some comments about the possible replacement of the underpass, and there's just one thing I just wanted to see whether you'd agree that the, shall we say rather limited, or maybe that's unkind, the measures that are being proposed to do some works on the underpass, and I think we're talking about the approaches and the lighting and there's some improvements being made, would you agree that these go some way towards offsetting or mitigating any adverse effects that might arise through this Project?

MR TINDALL: My view of the adverse effects relate to the difficulty in providing a wider, straighter underpass at this location in the future and the significant costs that would arise resulting from that. The provision of the lighting in the underpass I would not, from a traffic and transport perspective see that as a significant offsetting of that, no.

MR STEWART: In your paragraph 7.41 of your main evidence where you refer to the ramps, I suppose you could call them, at Rosedale Road which enables cyclists to get off the shared use pathway down to the road. And you've made some critical comments about there, or said it's not very good. But I think I understand, do I not, that there's been some changes proposed, some improvements or changes proposed to that arrangement, are you aware of that?

MR TINDALL: At Rosedale?

MR STEWART: Yes.

MR TINDALL: I'm aware of discussions which would lead to a significant change at this location, yes, some amendments to the design including stairs that would

do that. I think it likely that that would be addressed in the future and also with potentially other schemes that may work in parallel with what's proposed.

MR STEWART: And if that was done, would that, in your view, be an improvement to the present situation as in the General Arrangement Plan?

5 MR TINDALL: Most definitely, yes.

MR STEWART: Now Mr Willmott, I was interested to hear Mr Willmott yesterday talk about the possibility of bikeways and walkways, pedestrian walkways to the east and to the west of State Highway 1. He was referring in particular to the Apollo Drive, Hugh Green Drive on the eastern side, and also the Paul
10 Matthews Drive and the Bush Road route, which I hadn't thought of before, but I suppose arguably could be said to be at the present time two alternatives routes going basically from State Highway 18 towards the Albany commercial centre, what's your view on that?

Now, his view I think was that one of the reasons you don't need the
15 SUP next to the Rosedale Landfill is because you already have these alternatives, did you have any view on that?

MR TINDALL: Yes Mr Willmott makes a good point, there are alternative routes. In the same way though that the busway is being provided is to provide a slightly different set of alternative routes, so there are alternative routes for buses,
20 there are alternative routes for cars on the local road network. But we provide motorway for people to be able to use in a slightly different way, which is those people who may be going a little bit quicker, wanting to go a bit further. The cycle way provides a different type of connection and with potentially different type of cyclists or maybe runners as much as pedestrians along those routes,
25 it's people who want to be able to do a continuous journey without interruption, crossing intersections and the segregation that occurs from that, it gives them journey time reliability and indeed, over those lengths, safety benefits as well.

MR STEWART: So would you agree then, is it your position that the SUP on the eastern side is actually a significant improvement in the existing cycling and
30 pedestrian network?

MR TINDALL: Once people are on that they are able to, I think, very safely and efficiently travel reasonable -- good distances, so yes. And once they're able to access that.

MR STEWART: Okay. Thank you, Mr Tindall. I think the rest of my questions were
35 basically answered by you to other people.

JUDGE HARLAND: Yes, thank you, and forgive me if you had already dealt with this elsewhere, but I just need to cover it off to make sure. In the JWS transport and traffic general design layout at page 18Q, in relation to matters concerning cycling, there were a number of matters that were listed to still be outstanding, which I think when we look back at -- but the idea was that we would be updated about that at the hearing, as to whether they were still outstanding or not.

I just need to be sure that they have been addressed somewhere and if so, where? Or not, as the case may be.

10 MR TINDALL: Over the last couple of weeks, I mean, there have been continuing conversations and I understand in the opening there was a mention of a side agreement? And the --

JUDGE HARLAND: So those are to be covered by the side agreement, are they?

MR TINDALL: I understand that the side agreement covers these, or will do, yes.

15 It's my understanding at the moment.

JUDGE HARLAND: Thank you. That's helpful.

And then my only other question is just picking up on this mitigation point in relation to the Alexandra Underpass, because you understand that in order to legally justify what -- an upgrade, it would need to be related to some kind of mitigation of an effect arising from the Project. And what I understand you to be saying is well, it's really to do with the ruling out, if you like, of future options because of the alignment and the difficulty that it would be to provide the upgrade in the future, and that that somehow doesn't relate back to one of the objectives of the Project, that you would therefore say is not being able to be fulfilled? Or not? Because you had referred, in your evidence, to the AEE objectives and I've got that in front of me, the need for the project, and I just wanted you to flesh that out for me, so I understand how your reasoning follows.

20 MR TINDALL: So this is to provide the safe walking and cycling facilities adjacent to State Highways 1 and 18 and connections to the local transport networks.

That's the particular point.

JUDGE HARLAND: Yes. Right. Yes, well I think that's where I've got it. So, I'm glad we're all looking at the same place. Isn't that a question of degree?

MR TINDALL: I would say so, yes.

JUDGE HARLAND: So, using that as a starting point, how does that -- I want you to help me with the degree issue and why you've reached your conclusion that you have, in relation to that, if you follow what I'm asking?

MR TINDALL: Yeah. So, the Project, as a whole, has roading components, TPT,
5 bus improvements, potential for light rail, and walking and cycling
components. It's a multimodal Project with a number of different objectives.
In the case of the busway, there's the connection that goes into the bus
interchange which clearly at the northern end makes sense. It's the way that
it enters the bus station, and therefore allows the benefits to be delivered. I
10 imagine it's the same with the other connections to that shared use path.
The communities on either side of the State Highway 18 who wish to use that
path would need to be able to connect to it in some way, and the Alexandra
Underpass is one of the ways in which somebody from Unsworth Heights can
get on to that shared use path, by going through the underpass. In the
15 future, the transport network plan, which has been included within the
assessment, showed that there was to be a connection across Bluebird
Reserve, which, the information provided through this process has shown
may be quite challenging to provide. And therefore, to be able to deliver on
that safe and -- walking and cycling facilities, you have to be able to get on to
20 the facility, the shared use path, to be able to use it. And that's why the
Alexandra Underpass is such a key part of that whole network. Otherwise
people can't get on and off it with safety amenity.

Again, thinking of different users. That off-road type of path could
have people who are quite young kids that would be using it where -- and to
25 travel distances, the cycle distances aren't as long as some of the others.
And that's why that local connection at the Alexandra Underpass, rather than
the requirement to go to Albany Interchange, which is one and a half
kilometres further to the west, or Constellation Drive, to be able to cross and
get on to it, or even going as far as the Paul Matthews Drive overbridge, and
30 could reduce the distance on to that path.

JUDGE HARLAND: But isn't the problem that it's -- the difficulties with the safety of
all of this, and the usefulness of it are existing? They're already there. So,
it's already a problem of accessibility. You would say it's exacerbated by the
fact that --

35 MR TINDALL: Yeah, I don't doubt that. That underpass is not getting any narrower,
due to the -- in terms of the scheme. The agency did -- did I understand look

to extend it to 2 metres wide by raising the bottom of the underpass to try and give that width and recognition of the fact it is very narrow, and the drainage, I understand from others, as it was to do with the drainage through that, that that was not possible. And therefore, through this process, it's been
5 established that the ability to deliver the amenity that's intended from it, is constrained, currently, and can't readily be mitigated other than by replacing that underpass in its entirety.

JUDGE HARLAND: All right, well, I think the reality is it's probably just a difficult thing to link, and I would invite your view on this -- to link the actual mitigation
10 with anything particularly specific now. It's more a future issue?

MR TINDALL: Today it would mean that the cost of upgrading that -- the day after -- sorry, the day the construction finishes on the State Highway 18, the cost of upgrading this underpass is significantly higher.

JUDGE HARLAND: Right. So, you would take the cause and effect through to that
15 particular point? So that the effect whilst it might be in the future, is caused by what's happening as a result of this Project?

MR TINDALL: From my traffic and transport there; I'd say that I am aware of other conversations with the experts with different views, but from a traffic and transport point of view, it's the ability to deliver this upgrade and to meet the 3
20 metre minimum standards that would be challenging.

JUDGE HARLAND: All right, well, I think that's probably as far as we can take that. Thank you. Anything else arising from our questions?

~Re-examination by Mr Bangma (11.47 am)

25 MR BANGMA: Yes, I just have one or two brief matters, Your Honour.

Mr Tindall, just in relation to this issue of weaving, you were asked some quite lengthy questions by Mr Willmott, and the Board, and in those questions I think focused at least in part on paragraphs 7.55 to 7.63 of your Evidence in Chief, where I think to be fair you expressed some initial concerns about the
30 Project's potential to cause weave effects and therefore, perhaps crashes, as I understand it.

However, if we turn to the Joint Witness Statement transport and traffic general design layout model alternatives, dated 26 June 2017, at page 17, in paragraph O, the third bullet point under O notes
35 that -- Mr Church has noted that safety audits will be undertaken where the

performance of the weave will be reviewed. And the following bullet point says:

"Mr Tindall considers this will address his concern, provided there are no significant departures from what is currently included in the NCI Project designation."

So, I take that to mean your concerns in your Evidence in Chief will be addressed by this safety audit. Does that remain your view after the questions from Mr Willmott?

MR TINDALL: Throughout the process, from when I prepared my Evidence in

Chief, through the formal engagement with the applicants' experts prior to joint witnessing, the conversation that we had at joint witnessing, then that has allayed my concerns. And, therefore, I stand by the statement that's within the Joint Witness, which I've signed off, to say that my concerns have been addressed.

MR BANGMA: Thank you. Changing topic, there were, in response to questions

from Ms McIndoe talking about the -- I guess, the issue of the existing level of connectivity for cyclists, along State Highway 18 prior to this scheme going ahead, and I just wanted to give you the chance to clarify; I've only got my handwritten notes, but I understand that you talked about the Project foreclosing -- I've written down, "some other journey path links would not be available as a result of this Project." There's been discussion of Paul Matthews Drive and that link, and what might happen there as a result of the project, but I just wanted to check. Your use of "some" suggests that there might be other journey path links which you consider might be affected. Are you able to assist the Board and parties by clarifying what those might be?

MR TINDALL: Yeah, again, it's the ability to use the roading network. So anywhere at the moment where you are able to get on or off the existing State Highway 18 between Albany Interchange and Constellation, anything there would cease to be available.

MR BANGMA: And then, last topic or area, Her Honour I think, quite rightly, picked up on -- referring to the same Joint Witness statement, transport and traffic general design layout, 26 June 2016, Her Honour referred you to page 18 d), and obviously it lists -- it lists up there a range of matters on which the witnesses were to provide an update, and on the connections that are to be provided between those areas listed in the four bullet points with a fifth bullet point over the page. And you confirmed your understanding that those

conditions will be addressed by way of a side agreement, which has been indicated in opening submissions for the Council, which I understand you've read?

MR TINDALL: Yes.

5 MR BANGMA: And then just to clarify so we're completely clear, there was a question from Commissioner Stewart I think, where he was talking about stubs and the future connections. I understand that's a -- the stubs and the future connections which will be provided by someone else, that's a different matter, and as indicated in the opening, that's by reference to a future
10 connection at the Rosedale Road Closed Landfill and Centorian Reserve?

MR TINDALL: Apologies for the confusion on that one. Indeed, the stubs -- you are right; those are separate things and those at any point in the future could be connected. I understand the Applicant has confirmed that the design will facilitate those future connections at other's cost.

15 MR BANGMA: So that's different from the matters listed in the conferencing statement at Q --

MR TINDALL: Apologies.

MR BANGMA: -- where there is a future connection which is to be addressed through the side agreement?

20 MR TINDALL: Apologies, yes.

MR BANGMA: I'm not sure that it was you that created the confusion, I just wanted to make sure we are all clear.

The last question I have, and it is following on in relation to -- well, it relates to the addition at Q, in the conferencing statement. So, you were
25 asked some questions by Ms McIndoe, I think, in relation to paragraph 1.8 of your summary statement. And she focused in on the words where you say:

"I also think that additional works are required to achieve a connection to the proposed shared use path".

And then you list those additional connections there.

30 I think Ms McIndoe was trying to explore what you mean by that.

You've said they were required to achieve a connection between those points; you haven't said they're required to mitigate an effect? I just -- you could read those words quite literally and say that it's necessary to provide a connection between those two points and that's he's envisaged under the
35 side agreement. I just wonder if you could clarify to the Court what you intend by those words?

MR TINDALL: Well, as there is no shared use path at the moment, along the side of State Highway 1 or -- State Highway 1 in particular, then there is no demand there which a poor level of connectivity to nothing, and needs mitigating, is that the provision of the shared use path, in itself, creates a -- because of the lack of connection to where anybody can get on or off it, is what creates the need, which is why I've used the word "required" to connect on to that shared use path. And it is from that literal point which is a shared use path without the ability to get on and off it, at the locations we've discussed, would seem not to be easy to then demonstrate how you're achieving the objective of the scheme. So, I always understood the intention was for the shared use path to provide connections to allow people to get on and off it, to get benefits that are outlined and that's how I assessed the scheme, and these additional little links to those, that then is what allows the outcomes and the benefits of the scheme, which I assessed to be achieved.

15 MR BANGMA: Thank you. I have no further questions.

JUDGE HARLAND: Yes, thank you. Are there questions arising from the questions that we asked Mr Willmott?

~Questions arising by Mr Willmott (11.56 am)

20 MR WILLMOTT: Yes. With regard to the Alexandra Underpass, it might help the Board, with regard to the proposed widening of that, if it knew the existing usage of that underpass and what difference the widening would make to that usage. Would the witness be aware of the actual usage at the moment?

JUDGE HARLAND: Well, we've actually received some updated evidence about that, because there was some survey material provided.

MR WILLMOTT: Oh, right.

JUDGE HARLAND: Thank you. But we could ask him, are you familiar with the recent survey and the evidence that was prepared to show a snapshot, albeit for a small period of time, I think over one week, on various times of the usage of that particular underpass?

MR TINDALL: I am. It was appended to the Joint Witness Statement, I believe from the Construction Joint Witness Statement. I was actually reading that this morning, where the hourly -- it is in one of the annexes to this, the hourly usage was some 20 cyclists an hour at peak and some, up to, I think it was another 15, 16 pedestrians through the -- as well, that was the peak on a Saturday from memory.

JUDGE HARLAND: Yes, we've received that as evidence. You should have it in your bundle of material too, but I appreciate there's a lot of it.

Thank you.

~(The witness withdrew - 11.58 am)

5

~MARTIN JOHN PEAKE (Affirmed) (12 pm)

~Examination in Chief by Mr Bangma (12 pm)

MR BANGMA: Is your full name Martin John Peake?

MR PEAKE: It is.

10 MR BANGMA: Do you confirm that you've prepared a Brief of Evidence on behalf of Auckland Transport in this matter, dated 25 May 2017?

MR PEAKE: I have.

MR BANGMA: And that your qualifications and experience are as set out in paragraphs 1.1 through to 1.6 of that statement?

15 MR PEAKE: That's correct, yeah.

MR BANGMA: Are there any corrections you'd like to make to that statement of evidence?

MR PEAKE: There is one correction I'd like to make, yes. I have included that in my summary statement.

20 MR BANGMA: Your Honour, we could address it as part of the summary statement?

JUDGE HARLAND: Yes, that's fine.

MR BANGMA: Okay. With that correction that we'll come to, do you confirm that your statement of evidence is true and correct to the best of your knowledge?

25 MR PEAKE: I do, yeah.

MR BANGMA: And as you have just indicated, you've also prepared a summary statement in this matter. I understand everybody should have a copy. Could you please read that statement starting at paragraph 1?

30 MR PEAKE: My name is Martin John Peake. I am a traffic engineer and Director of Progressive Transport Solutions Limited ...(Reads 1 - 6 (c) Summary of Evidence Statement)... Albany Highway, this is Albany Highway South, should not form part of the North Island Project and will continue to work with NZTA to monitor this road and if necessary prioritise funding through the appropriate processes and mechanisms.

What is left open ...(Reads 7 - 7.2 Summary of Evidence Statement)...
as to the principles of a condition or side agreement but understand that the
exact wording is still being worked through.

MR BANGMA: Two very brief points of clarification arising from your summary
5 Mr Peake, so your reference at paragraph 5 (f) to CTMP.6 and adverse
effects on public transport and Auckland Transport being involved in any
review on that where thresholds are not being met, you are familiar with the
opening statement for Auckland Transport where we indicated at paragraph
4.8 that that's something which the agency has agreed in principle is
10 acceptable?

MR PEAKE: Yes, I am.

MR BANGMA: Thank you, I just wanted to clarify that. And lastly at paragraph 7.1
of your opening statement so that's the bits where you are referring to what is
left open, you are referring then to the number of lanes on Rosedale Road
15 under the motorway, which remains unresolved, as this is linked to a
separate Project, for a connection to a possible Rosedale Road busway
station at that location.

Again, with reference to Auckland Transport's opening, which I have
understand you're familiar with, that is a matter that's left open, is it your
20 understanding that's something that will be pursued through a side
agreement between Auckland Transport and the agency?

MR PEAKE: That's my understanding, yes.

MR BANGMA: And Her Honour has asked the Auckland Transport to comment on
the appropriateness of that in its closing submissions.

25 That was all. Please answer any questions. I can see Mr Willmott has
one.

~Cross-examination by Mr Willmott (12.11 pm)

MR WILLMOTT: Thank you. Please excuse me if you've already addressed this
30 only question I have, I haven't got a copy of your evidence and I wasn't able
to understand what you were saying. So, my question is, in 3.2 you say: "I
have considered the operational effects of NCI on the local road network, and
have identified a number of matters that require further investigation and
potentially mitigation during the design phase. I consider these could be
35 managed (a) provision for the future widening of McClymonts Road Bridge

and (b) ensuring the design of Rosedale Road at State Highway 1 and future proofs for widening of Rosedale Road."

Given what was discussed earlier on this morning -- were you here for the whole of the morning?

5 MR PEAKE: I was, yes.

MR WILLMOTT: Yes, you will be aware that we've discussed a 50% increase in the traffic on the underpass Greville Tawa just from the impact of the new motorway changes, together with another perhaps 50% at least from development of the Albany commercial area and intensification of residential
10 development, together with the University, on Albany Expressway.

Are you happy that the operational effects on Tawa Road to Greville Road underpass are acceptable, and if not, how would you propose ameliorating those effects in the same manner as you are promoting amelioration of McClymonts Road Bridge and Rosedale Road?

15 MR PEAKE: I think from the assessment of the information that was provided to me, I didn't see any operational issues with that particular link. I think the traffic modelling that's been undertaken would have -- has taken -- taken the -- I think, taken into account future land uses in that area, and therefore, traffic that might be generated by that should have been included in the
20 modelling. And if there was an effect on that particular link, it would have been picked up in the traffic modelling. So, I'm satisfied that that particular link should be able to accommodate forecast traffic flows.

~Questions from the Board (12.14 pm)

25 MR STEWART: Just one question, I think. I have got a note here in my list of questions that there are several paragraphs in your statement of evidence and I refer to 6.5, 6.7, 6.30, etc. These are all paragraphs where you have made some comments about matters in the Project with which you have a problem. Now, I just would like you to confirm for me, because I think I
30 understand from your summary, at the end in paragraph 7, it appears that what you're saying as a result of expert conferencing is that those concerns which you've expressed in your evidence are now reduced to two, is that right?

MR PEAKE: That's correct.

MR STEWART: Good. Yes. So, I'm glad that that means I don't need to ask you any other questions, because I'm quite clear about the two that you referred to.

JUDGE HARLAND: So I just have a question dealing with Waterview, the
5 difficulties that occurred during Waterview, with patronage drop off because that was a matter that you had referred to in your Evidence in Chief, at paragraph 6.44, and despite the fact that you now say that's been resolved, I did ask questions of another witness to perhaps flesh out what those
10 difficulties were and how they were not able to be appropriately managed through that Project, so that I could reach a view, or we could reach a view, about whether what's now proposed, regardless of what the experts say, is really going to do the job.

So, if you could help me please with that?

So, what happened during Waterview that wasn't managed properly
15 that led to this difficulty with the bus services?

MR PEAKE: So, at that time I was actually working for Auckland Transport in their traffic operations team, and I was sort of involved partly in the sort of works that followed, highlighting the fact there was an issue in terms of the passenger drop off. So, the background to it is that when they were doing
20 the construction work particularly along the causeway, they took out some of the shoulder running bus lanes and some of the priority measures that were on the westbound on-ramp at the Great North Road interchange, and as a result of that there was quite an impact on the operation of those buses in terms of they were caught up in the general traffic congestion along State
25 Highway 16. So as a result of that there was a lot of people who chose to use alternative modes of transport. There wasn't a specific condition, I don't believe, within the Waterview conditions that sort of enabled them to monitor the effects on the buses, which meant that the Transport Agency and Auckland Transport had to be very reactive in terms of looking at measures
30 to win back some of the priority measures that they lost and to try and get that patronage back. So, there was a significant amount of effort put into coming up with some significant changes to basically provide that bus priority. So, there was some works that went on at Great North Road interchange to put in a priority lane underneath the interchange. They did
35 some changes to the on-ramp, and they also looked at some significant changes elsewhere on that motorway network. So, it was a whole lot of

effort, and time put into -- basically, trying to address those problems that occurred. So, coming to this project, I certainly felt that it was important, given the importance of the busway and bus priority measures that are on State Highway 16, and the potential effects at Paul Matthews Road if that gets closed off for the right turning movements, that there are monitoring measures in place so that we can be more proactive in terms of identifying that potential drop off and having something in place that can mitigate that effect.

JUDGE HARLAND: So again, this is not said to be critical of anybody, it's simply -- it's understood that people learn as they go along and every Project hopefully gets better, but when you say there was the reactive approach needing to be taken by Auckland Transport, was the agency responsive to the difficulties when they were discussed, even though there wasn't a condition? Or was it really Auckland Transport who had to fix the problem?

15 MR PEAKE: It was a joint.

JUDGE HARLAND: A joint.

MR PEAKE: Yeah, it was between the Transport Agency, the Alliance, and Auckland Transport.

JUDGE HARLAND: So the relationship was good enough for that to be dealt with, even though it was after the event rather than being able to be dealt with quickly as you might have liked?

MR PEAKE: Yes.

JUDGE HARLAND: All right. Now yesterday I asked Mr Maule, and he might not have been the right person; you might be the right person to talk about the monitoring situation, and how regularly you think that monitoring needs to be early on within the Project to check whether or not there are in fact problems for buses at certain pinch points, and he indicated early on I think once a week, and then perhaps at some point monthly. I'd just like your expert view on what might be required and if it is different for different parts of the Project with which you're familiar, if you could help me with that, I'd be grateful?

MR PEAKE: I think, from my perspective, I would probably concur with Mr Maule's assessment that certainly initially a weekly monitoring would be sensible, so that sort of small changes can be picked up quite early, and then as the Project develops, and there's confidence there that the patronage isn't just rapidly dropping off, that that monthly reporting then just gives you that confidence that things are moving forward in an acceptable fashion. There

might be times within the Project where having gone to maybe a monthly report, that you then go back to a weekly one. So for instance, if you are closing off the right turn movements into and out of Paul Matthews Road, there might be -- I think you would at that stage want to have a more rigorous monitoring exercise about that, because there's quite a significant right turning movement there that's going to get displaced, and that could potentially have an effect on the buses, particularly at Constellation Drive Interchange, where the buses come out of that Constellation Drive Bus Station and then onto the motorway. There is a potential there for some additional delays for those buses.

JUDGE HARLAND: So, in terms again of how that might find its way into an arrangement between the people who need to know about this, we heard yesterday from Mr Maule that the monitoring would in fact be undertaken by Auckland Transport. Is that correct -- or who would do it?

MR PEAKE: So I think Auckland Transport are in the best place to do the monitoring in terms of putting the data into the system, and basically looking at that data to say well, is this an effect on our buses or not? Because I don't think the Transport Agency or the Alliance would have the necessary knowledge to know what's -- what is an effect and what's not. So, I would see that Auckland Transport will pull that data off, do some analysis on it, and then feed that through to the Alliance, and then the Alliance would then work with Auckland Transport to address anything that comes out of that monitoring.

JUDGE HARLAND: Right. So, in terms of condition obligations, and where it might find itself, do you think there needs to be something in a condition, in a construction management plan, or one of the various plans under that, perhaps the public transport one or something, to pick up on that point specifically?

MR PEAKE: I think CTMP.6 --

JUDGE HARLAND: I was going to ask you about that, because that is the one -- is it 6 -- let me just see. 6D is it? 6 to 6D -- well, it might not be necessary for you to answer this question specifically, but the point is you think it's got to be there to a certain degree?

MR PEAKE: That's correct.

JUDGE HARLAND: Is there an additional cost to Auckland Transport to do the monitoring, that you're seeking to recover or anything like that, or is it just something that you would do anyway?

MR PEAKE: I think it's something that Auckland Transport does anyway, and I think
5 on a project on this scale they would probably want to be across that.

JUDGE HARLAND: So the feedback loop you think would be sufficient?

MR PEAKE: Yeah, so the feedback loop is to make sure that the traffic management measures are being put in place, and so that there's -- to make sure that those traffic management measures are actually addressing what
10 they were meant to address, so they're actually improving the situation.

JUDGE HARLAND: All right. Well, I think that's been helpful. Thank you very much for that. Is there anything further anyone wants to ask questions about that are arising from the questions that we've asked? No.

15 ~Questions arising by Mr Willmott (12.26 pm)

MR WILLMOTT: I've got an extension of my previous question.

Are you aware of the level of service existing at the moment on the Tawa Road Greville Road underpass?

MR PEAKE: I couldn't quite say exactly what that service is; I'll be honest.

20 MR WILLMOTT: It's generally accepted it's congested; I haven't seen a level of service established anywhere, but I would guess it's about D, or possibly E, which is the bottom before you get to F, forced. When you said you're happy with the modelling, do you know what level of service that modelling came up with, for that underpass?

25 MR PEAKE: I don't recall off the top of my head. I don't think I have those details exactly with me here.

~Questions from the Board (12.17 pm)

JUDGE HARLAND: Perhaps I could help. It would be pretty unusual for a model to
30 put in an F, wouldn't it, as an input? Or as a desirable outcome? You wouldn't want to model it at that would you?

MR PEAKE: But the model, I guess it's what it's predicting it to be?

JUDGE HARLAND: Yes, I see the output.

MR PEAKE: Yeah, that's right. So, I can't exactly recall what it was at that location,
35 but I don't think it was significantly worse than the base case, if I remember rightly.

JUDGE HARLAND: The base case being what's there at the moment?

MR PEAKE: Yeah, the reference case.

~Comments from the Board (12.28 pm)

5 JUDGE HARLAND: Yes, is it difficult to find that out? I see Mr Cross is coming forward he might be able to put something?

MS MCINDOE: I think if we can just have a couple of minutes we might be able to provide you with something.

JUDGE HARLAND: Yes, certainly. We might be able to answer this. The other
10 option, Mr Willmott, if this creates too much pressure now, is would that be something you would be comfortable being fed to you before you actually give your evidence, next week?

MR WILLMOTT: Yes.

JUDGE HARLAND: And then if there is a question you've got about that it looks like
15 Mr Cross may or may not be around, but we might be able to deal with that? Would that be acceptable?

MR WILLMOTT: Yes, I would be happy to leave it to the Board once it knows the various inputs.

JUDGE HARLAND: Right. Well, perhaps if we leave it to you; I will leave that
20 option open to you because you might want to ask some questions about it, but if I could rely on you, Ms McIndoe please, to make sure that Mr Willmott gets that information and we can go from there, because it sounds as if this witness can't actually answer that question.

MS MCINDOE: No. I will leave that with him, but we will have the discussion with
25 Mr Willmott.

JUDGE HARLAND: You are happy with that Mr Willmott?

MR WILLMOTT: Yes.

JUDGE HARLAND: Very good. All right. Well, that concludes today. Now we just
need to do a bit of a round up to see how we are going.

30 ~-(The witness withdrew - 12.30 pm)

~Timetabling matters discussed (12.30 pm)

JUDGE HARLAND: For next week we've indicated at the outset today that we
didn't need Mr Bluett or Mr Lee, at least for Monday, and then we get into
35 Tuesday, into Mr Willmott's case and Mr Fogarty's case and then Mr McGarr because he's going to be on leave thereafter for a little bit. So, the plan I

think looks as if for the rest of that week people are getting to grips with the conditions and things so that we can presented with one set of conditions that have been agreed and then we can look at those and see whether they are appropriate or not. Is that what's planned?

5 MS MCINDOE: Yes. I have been trying to arrange a meeting and I understand Mr Bangma and Mr Berry are both available on the Wednesday so we will take the opportunity if the Board is not sitting on Wednesday to meet with the Council and the planners and also other relevant experts if they are able to attend, with the hope that we can present you with a new set when the
10 hearing recommenced the next week.

JUDGE HARLAND: The only difficult with that is that Mr McGarr talked about Tuesday, but we will talk about that outside of here as to how that might fit in and how we might need to work that. It might not be a significant point at all, I don't know. Was it intended that then the rest of the week would be left with
15 us not doing anything?

MS MCINDOE: That's what I had thought, on the basis that there was nothing in the schedule. Of course, there's plenty to do if the Hearing doesn't sit. So, I think you can rest assured.

JUDGE HARLAND: You'd be grateful for that?

20 MS MCINDOE: We'd be very grateful yes.

JUDGE HARLAND: Well all right. That's helpful and then everyone can prepare what they need to.

So thereafter, we're looking towards Monday the 31, we have already scheduled individuals, or people, who would be inconvenienced if that were
25 to be changed, and then there are some expert witnesses also. Taking us through to Tuesday with the noise people, and then we start planning.

We consider it's unlikely, as we mentioned at the outset, that we'll need Mr Mitchell, subject to however that pans out over the next week, and then we get into Kiwi's case thereafter.

30 MS MCINDOE: Your Honour, I understand Ms Williamson for the Hockey Charitable Trust, we had discussions with her last night, and her preference would be to appear later in the programme. You are probably aware while the appeal period is still running there is some sensitivity with her discussing the decision relating from it. She would be much happier discussing it once
35 the appeal period has finished, and she will be able to then tell you whether an appeal as been lodged or not.

JUDGE HARLAND: That's entirely acceptable.

MS MCINDOE: And I wonder if the EPA might be able to reschedule Ms Williamson
for later in the programme, after the 31st of July. I know that will put her
immediately before the planning witnesses, but I feel she'll be more useful to
you at that point in time.

5

JUDGE HARLAND: That makes absolute sense. So, all right, we will be back here
on Monday then. Thank you very much everybody this week for your
courteous and helpful support to us. We are well underway and that's a good
thing, and we will now take the break and adjourn again Monday 9 o'clock
thank you.

10

~(The hearing adjourned at 12.34 pm to resume at 9 o'clock Monday, 24 July
2017)

15