

EDINBURGH TRAM (LINE ONE) BILL COMMITTEE

Tuesday 25 October 2005

Session 2

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EDINBURGH TRAM (LINE ONE) BILL COMMITTEE

17th Meeting 2005, Session 2

CONVENER

*Jackie Baillie (Dumbarton) (Lab)

DEPUTY CONVENER

*Phil Gallie (South of Scotland) (Con)

COMMITTEE MEMBERS

*Helen Eadie (Dunfermline East) (Lab)

*Rob Gibson (Highlands and Islands) (SNP)

*attended

THE FOLLOWING ALSO ATTENDED:

Mark Clarke

Alex Cuthbert

Mark Hallam

Anne McCamley

Mrs Odell Milne

Frazor Murphy

Graham Scrimgeour

Malcolm Thomson QC (Counsel for the Promoter)

Richard Vanhagen

Kristina Woolnough

THE FOLLOWING GAVE EVIDENCE:

Ian Kendall (Transport Initiatives Edinburgh Ltd)

Scott McIntosh (Mott MacDonald)

Archibald Rintoul (Scotland South East Valuation Office)

Gary Turner (Mott MacDonald)

CLERK TO THE COMMITTEE

Jane Sutherland

LOCATION

Committee Room 1

Scottish Parliament

Edinburgh Tram (Line One) Bill Committee

Tuesday 25 October 2005

[THE CONVENER *opened the meeting at 10:08*]

Edinburgh Tram (Line One) Bill: Consideration Stage

The Convener (Jackie Baillie): Good morning and welcome to the 17th meeting this year of the Edinburgh Tram (Line One) Bill Committee. We are at consideration stage, when the committee will examine the detail of the bill. Our job is to consider the arguments of the promoter and the objectors and ultimately to decide between any competing claims. All parties attending today will be aware of the procedures for taking evidence, so I do not propose to reiterate them again.

As members will be aware, the oral evidence timetable for groups 33 to 36, 43 and 45 has slipped by one meeting, which has necessitated the addition of 5 December as a full day's oral evidence-taking session. At the meeting on 29 November, which is a morning-only meeting, I have agreed to take oral evidence from some of the objector witnesses. Although I recognise that the timetable change may cause some disruption to witnesses, I am sure that members will agree that, in the interests of the flow and continuity of oral evidence, the relevant arguments should be allowed to develop and that the additional oral evidence meetings are therefore necessary. Nevertheless, I remind all present that the committee continues to welcome clearness and brevity both in questions and in answers.

Before we commence oral evidence taking, members will note that Lord Marnoch is due to give evidence on 8 November on vibration and structural damage. As the promoter has provided no rebuttal witness statement, the promoter is not entitled to cross-examine Lord Marnoch. Having reviewed Lord Marnoch's witness statement, I have come to the view that it is comprehensive and clear and provides us with sufficient evidence. I therefore seek members' views as to whether the committee wishes to take any further evidence from Lord Marnoch on his witness statement.

Phil Gallie (South of Scotland) (Con): I am happy with the information that we have.

Rob Gibson (Highlands and Islands) (SNP): It is closely argued and I think that we will be able to understand it perfectly well when we weigh things up.

Helen Eadie (Dunfermline East) (Lab): I agree.

The Convener: Excellent. There is agreement from the committee, so we will not take any further evidence from Lord Marnoch on vibration and structural damage.

We now move to consideration of evidence in respect of groups 33 to 36, 43 and 45. I remind our two witnesses, Scott McIntosh and Gary Turner, that they are still under oath. We begin with oral evidence from Scott McIntosh, who will address a number of issues, starting with the issue of the construction programme in relation to groups 33 to 36, 43 and 45. I invite Mr Thomson to ask his first question.

Malcolm Thomson QC: Mr McIntosh, a number of objectors have expressed concerns about the construction process for the tram. Could you give us some idea of where the tram construction project fits in with other types of civil engineering projects that might be comparable?

Scott McIntosh (Mott MacDonald): The important thing to say is that, although tramway projects are complicated and complex, they do not consist of individually difficult or extremely demanding pieces of work. That is particularly true for off-street sections of construction. Tramway projects are well precedented. There is now a lot of experience of building such projects across the European Union and here in the United Kingdom—more than 130km of tramway have been built in the past few years.

Malcolm Thomson: Where does a tramway project stand in relation to, say, constructing a block of flats?

Scott McIntosh: The difficulty is that, whereas most construction projects are compact and contained, a project such as a tramway is long and thin, so it may impinge on more people and it requires greater control of logistics to get things into place at the right time. However, constructing a tramway is no more difficult or complicated than constructing the sort of blocks of flats that we see going up in Granton harbour and in Leith.

Malcolm Thomson: I draw your attention to Mr Mark Clarke's rebuttal statement of your evidence. Could you comment on the seven bullet points in his conclusion at the end of that document?

Scott McIntosh: Mr Clarke has produced a long, exhaustive and somewhat baroque collection of possibilities of things that might go wrong. One must temper that by asking whether, although such things may be possible, they are likely to happen and whether they are not things that any competent contractor would already have taken into account in constructing public works projects. Although the things that he refers to may be possible, I would say that they are highly unlikely

to happen. Given the quality and expertise of contractors working in the field and the close control that is exercised over them by the inspectorates responsible for construction and construction safety, the possibility of most of the things listed happening is vanishingly small. A competent contractor and an experienced contractor manager would be able to mitigate and eliminate the risks from all those elements.

Malcolm Thomson: I think that that covers bullet point 1. Are bullet points 2 to 7 anything to do with construction?

Scott McIntosh: Some of them are and some of them are not. I think that it would be appropriate to deal with those points by referring them to my colleague, Mr Turner, who has considerable experience of managing construction sites.

10:15

Malcolm Thomson: Do you consider that any of those concerns relates to what one might describe as real safety issues?

Scott McIntosh: As I said, risk has to be considered in two ways. The first is the effect of the possible event occurring and the second is the likelihood of the event occurring. Most of the events are extremely unlikely to occur, but they would all be taken into consideration by any responsible contractor.

Malcolm Thomson: Do they apply equally to other civil engineering projects?

Scott McIntosh: Indeed they do.

Malcolm Thomson: Finally, will you comment on the criticisms of the proposed working hours in the code of construction practice? I believe that the hours are from 7 am to 7 pm.

Scott McIntosh: Indeed they are. Such working hours are well preceded in public works contracts. They have been used on all the tramway projects in the United Kingdom, particularly on the Croydon and Nottingham projects. The times were discussed in detail during consideration of the Merseytram (Liverpool City Centre to Kirkby) Order 2005 and the inspector found them to be reasonable. That order has now been signed by the secretary of state.

Those hours of work are also included in major new contracts such as crossrail and several other civil engineering contracts in London. In Edinburgh, the hours of 7 am to 7 pm are included in the advice note about construction noise that was given by the City of Edinburgh Council; they are considered to be appropriate working hours.

It is also worth saying that, if a piece of civil engineering work will take a discrete number of hours to complete, there is the choice of a shorter

number of longer working days or a larger number of shorter working days. Although one accepts that any contract will cause some disturbance to local people, if it is to be done,

“‘twere well it were done quickly”.

I therefore think that the hours are reasonable and are well preceded in other schemes that are being planned or that have already been executed.

Malcolm Thomson: Was that balancing exercise between a lower number of long days and a higher number of short days considered by the Liverpool inquiry?

Scott McIntosh: Indeed it was.

Malcolm Thomson: Thank you.

The Convener: Thank you, Mr Thomson. I call Mr Clarke for group 34.

Mark Clarke: On your final point, Mr McIntosh, would you say that in construction terms 72 hours per week is a normal period?

Scott McIntosh: As I have said, it is a normal period for such public works contracts. Having lived next to one of those works being executed, I have considerable experience that those hours are regularly worked on this sort of project.

Mark Clarke: Would you say that they are normal for construction projects in general?

Scott McIntosh: I would say that they are normal for this sort of large public works contract.

Mark Clarke: That was not the question that I asked.

Scott McIntosh: With respect, I think that it is the answer to the question that you asked.

Mark Clarke: Would you say those hours are normal for construction projects in general?

Scott McIntosh: Would you define the sort of construction project to which you are referring?

Mark Clarke: I could talk about things such as bridge construction, roads, housing or factories.

Scott McIntosh: As I have said, they are perfectly normal hours for this sort of construction project and are well preceded within the United Kingdom.

Mark Clarke: Can you answer my question please?

The Convener: In fairness, Mr Clarke, I think that he has.

Mark Clarke: Okay.

You made a point about a longer number of hours for a shorter period as opposed to shorter

hours for a longer period. Where do resources come into that?

Scott McIntosh: Are you talking about the availability of staff?

Mark Clarke: Yes, or operatives, machines or whatever.

Scott McIntosh: Of course, machines are available for 24 hours a day subject to their normal maintenance time, but we would not normally work during those periods. Obviously it is more efficient to work longer days with two shifts if necessary than it is to work shorter days. During a shorter day, we would tend to want to work only one shift and we must always acknowledge that there are times in the morning when staff and equipment are being mobilised and at the end of a shift when equipment is being put away. A longer number of days tends to be more inefficient than longer days in terms of work produced per day.

Mark Clarke: Could you repeat that?

Scott McIntosh: Yes, if you wish.

Mark Clarke: I thought that you used the word "longer" twice in the same sentence, which did not make much sense to me.

Scott McIntosh: Let us do it simply. In a normal working day, time is taken at the beginning of the day for mobilising staff and plant and at the end of the day for returning plant to storage. For that reason, longer days will tend to have more hours available for effective work than shorter days. If you work longer days, you get more productive hours per day than if you work shorter days. There is no direct relationship between the number of days and the number of hours. It is more efficient to keep plant and machinery working than to keep stopping and starting. The shortest period of disturbance to anyone adjacent to a construction site will be achieved if reasonably long days are worked.

Mark Clarke: Is it not also the case that, if more resources were deployed in a given area, the amount of time spent in that area could be reduced? Is that not standard programming practice?

Scott McIntosh: Yes. However, as you are aware, there is a balance to be struck between the amount of plant and machinery available and the efficiency of its deployment. Simply doubling the amount of equipment may not mean that the programme is shortened significantly. There is ample experience that days of the length that we propose provide the optimum in deployment of plant, machinery and capital and minimise disturbance to other people in the area.

Mark Clarke: Is it not the case that, if you increased the number of operatives, which would

increase employment opportunities in the area, and provided all the machinery that was required, and if you programmed the work properly and carefully, you could complete it within a shorter period?

Scott McIntosh: We are not building a pyramid and we do not have an unlimited supply of labour to do the work. There is efficiency to be gained from optimum management of the day. Simply throwing more plant and equipment at the job may not result in an efficient deployment of that equipment or of people, leading to a shorter construction period.

Mark Clarke: I agree. However, is it not the case that, if the work were planned properly, you could deploy more operatives and machinery to effect an earlier completion? Is that not what would be described as acceleration?

Scott McIntosh: I think that you are playing games with me and the committee by attempting to produce an arithmetical relationship. With respect, I have said that there are efficiencies to be gained from certain working periods and lengths of time. Experience has shown that the sort of working days for which we are asking produce the most efficient deployment of plant, machinery and staff.

Mark Clarke: Was it not you playing games? You said that, if a task takes 1,000 hours and a 39-hour week is worked, it will take just short of 26 weeks to complete, whereas if a 72-hour week is worked, it will take just under 14 weeks. You have completely ignored the use of resources in that example. To me, that is playing with the committee and with anyone who looks at the information that you have submitted. Surely the equation will be changed completely if one doubles or adds 10 or 20 per cent to the resources that are deployed. You know that.

Scott McIntosh: I gave a simple example of the number of hours that could be used. It does not take into account the sum of the inefficiencies on which we touched earlier.

Mark Clarke: It does not take into account resources.

Scott McIntosh: I think that you are attempting to say that, if we double the resources, we may halve the number of working hours. As someone who is experienced in working on sites, you will know that that is not necessarily the case. There will be inefficiencies with overprovision.

Mark Clarke: I know, too, that working 12-hour days is a guaranteed way of reducing efficiency.

Scott McIntosh: I defer to your expertise. All that I will say is that every other scheme in the United Kingdom has been built and, in the main, delivered within the normal limits of time and cost

using the sort of timescale that we are proposing. What we propose is nothing unusual; it is well precedented. The experience of contractors has been that that is the optimum time to take.

Mark Clarke: I hear what you say, but I disagree.

I return to your witness statement. In paragraph 3.1.1, which is your statement on the health and safety issues that arise from construction, you say:

“The promoters contend that the CoCP”—

the code of construction practice—

“will answer all questions raised in section 1.6 of the objection.”

Did you mean section 6.1 of the objection? I had a great deal of difficulty in trying to locate section 1.6.

Scott McIntosh: I am sorry. Are you talking about paragraph 3.1.1 of my statement, which is entitled “Construction Impacts & Disturbance”?

Mark Clarke: Yes. In the final sentence, you say:

“The promoters contend that the CoCP will answer all questions raised in section 1.6 of the objection”.

Should the reference have been to section 6.1 of the objection?

Scott McIntosh: I believe that that may well have been the case. I apologise if I got the reference the wrong way round.

Mark Clarke: Thank you for that.

In paragraph 3.1.1 of your statement, you wrote:

“It is the promoter’s contention that the long-term benefits of the scheme will far outweigh any short term inconvenience”.

Do you agree that the long-term benefits are based on projections that do not concur with what the National Audit Office report on tram use said?

Scott McIntosh: No, I do not. I am saying that the benefits of the scheme from the point of view of use and the support that it will provide for the future development of Edinburgh are well established. It has been established in the discussions on the preamble to the bill that the scheme is of major public benefit to the city. I accept that some schemes in the UK have not done as well as was originally intended, but even some of those that have not achieved the intended ridership figures have certainly achieved, for example, a modal shift that was well within the predicted parameters. That is the case in Sheffield. The performance of other systems, such as those in Croydon and Nottingham, now exceeds the predicted figures. We are well within the bracket that the NAO established as being the likely outcome from predictions.

The Convener: I remind Mr Clarke that the committee considered the NAO report and patronage at the preliminary stage. We are dealing with construction.

Mark Clarke: I have no further questions on that.

The Convener: Excellent.

Mark Clarke: In paragraph 3.1.2 of your statement, you say:

“The CoCP has been subject to consultation with all the parties involved in developing the project”.

Do you agree that adjacent residents will be most affected by the construction works?

Scott McIntosh: I agree that adjacent residents all the way along the alignment will be affected by the construction to some extent.

Mark Clarke: Were residents consulted on the development of the code of construction practice?

Scott McIntosh: Residents were not consulted, although the code has been published on the tramline website and has been available for a considerable amount of time.

Mark Clarke: But they were not consulted on its development.

Scott McIntosh: No.

Mark Clarke: In paragraph 3.2.4, which is on noise control, you talk about an effective monitoring regime and say that

“a suitably qualified practitioner shall be agreed between the Contractor, tie and The City of Edinburgh Council.”

Do you agree that the parties referred to have an interest in the construction of the tram development?

Scott McIntosh: The contractor and Transport Initiatives Edinburgh Ltd have an interest in the delivery of the project in a timely and efficient manner. The City of Edinburgh Council has statutory duties to examine public health issues and to act on them—that is over and above its interest in promoting the scheme. The council is a democratically elected body that is responsible to the people of Edinburgh. I believe that it will discharge its duties in a fair and equitable manner.

10:30

Mark Clarke: Would it not be better if an entirely independent body was appointed to monitor the noise?

Scott McIntosh: It would be difficult to find a body that is more representative of the people of Edinburgh than the one that has been elected by them.

Mark Clarke: Do you agree that by reducing the working hours the noise would be mitigated?

Scott McIntosh: No. If noise is created by work and the work has to be done, reducing the working hours will simply lengthen the number of days on which people may feel that they are exposed to noise.

Mark Clarke: Unless more resources are employed.

Scott McIntosh: No. The same amount of work has to be done.

Mark Clarke: Yes, but by using more resources the work can take less time.

The Convener: I think that we have got the point about resources.

Mark Clarke: In paragraph 4.1, you state:

"The rate of construction will depend upon a number of issues, including;

- any particular construction problems encountered within the corridor
- constraints on construction imposed for environmental or wildlife considerations".

Who will bear the risk and the cost of unforeseen events in the Roseburn corridor?

Scott McIntosh: You should direct that question to the promoter and ask it about what is in the contract. However, I believe that construction risks will be borne by the contractor, within the terms of the contract that is let for the construction of the system.

Mark Clarke: If the risks are to be borne by the contractor, the contractor will presumably have to allow for that in his costs.

Scott McIntosh: As any prudent contractor would in bidding for any job.

Mark Clarke: In paragraph 4.2, you say:

"The Contractor shall appoint a liaison officer to manage all public relations, information and press related matters, who shall liaise with tie ... the statutory bodies, members of the public"

and so on. Do you agree that the contractor has an interest in anything produced or published?

Scott McIntosh: I think that you misunderstand what the liaison officer is for. The liaison officer is the person who will liaise between the contractor who is carrying out the works and the interested bodies. He is not meant to be an independent arbiter; he is the person who will receive information and complaints and ensure that they are passed to the appropriate person within the contractor body and he will speak for the contractor to those who are objecting. I would say that that is not an independent role; it is a role of liaison within the contracting body and between the contracting body and affected parties.

Mark Clarke: Paragraph 4.3, on the information centre and website, talks about the contractor maintaining an information centre for the progress of the works and so forth. If incidents take place during the construction process, will those be recorded?

Scott McIntosh: Yes. There are two points. As you are well aware, there are requirements to keep accident and incident logs for the relationship with the building inspectors. The complaints hotline keeps a publicly available log of every complaint or contact between the public and the contractor during the works time. That will be freely available. It will also be inspected at regular intervals by the most senior person responsible for the works on the part of the contractor and the nominated liaison officer of the council and of TIE.

Mark Clarke: But will the incidents and accidents be recorded on the website?

Scott McIntosh: We had not expected them to be reported on the website; they are freely available at the information centre. If you would wish them to be put on the website, you could request the promoter to do that.

Mark Clarke: Incidents occur from time to time in any construction field. However, the repeat of incidents should be eliminated. My interest is that, if incidents are recorded and publicly available to everyone, people should be able to expect that they will not recur.

Scott McIntosh: Although I speak without instruction from the promoter, I believe that, given its commitment to the open and transparent recording of complaints, it would consider such a request favourably. That is in the spirit of what is already set out in the code of construction practice.

Mark Clarke: I refer you to paragraph 2.2.2 in the objector rebuttal statement, about the contacts log. In my rebuttal, I raised a point about the availability of sanctions and suggested that parties who had been disturbed should be compensated. Would sanctions influence a contractor's actions?

Scott McIntosh: Indeed they would. As has been said, the code of construction practice will form part of the contractual documents. Therefore, any contractor who breaches the requirements of the code will be open to sanctions under the contract. The promoter has already made that clear on previous occasions.

Mark Clarke: Do you agree that parties whose residences are disturbed should be compensated?

Scott McIntosh: There is already an established route for seeking compensation through the law. We should not be making some sort of byelaw in this case to supersede the normal workings of the public law.

Mark Clarke: Paragraph 3.4.4 of the rebuttal concerns communications about noise. It says:

"The Contractor shall provide the City of Edinburgh Council ... with a list of contacts who will be responsible for investigating and resolving noise issues".

Is it not in the contractor's interests to be somewhat circumspect in investigating himself?

Scott McIntosh: It is not stated that he will investigate himself. The City of Edinburgh Council department of environmental and consumer services is a statutory appointed body required to investigate such legal breaches. Therefore, that department will investigate. It is in the contractor's interests to minimise the likelihood of those occurrences and that is the burden of the way in which the code is constructed and incorporated into the contractual document. If breaches occur, the council, which has a statutory duty to investigate, will have access to the data.

Mark Clarke: The statement says:

"The Contractor shall provide the City of Edinburgh Council Department of Environmental and Consumer Services with a list of contacts who will be responsible for investigating and resolving noise issues".

Does that not mean that the contractor will carry out the investigation?

Scott McIntosh: No. The contractor will be responsible for investigating noise issues as they arise and if complaints arise. However, because the contacts and complaints logs are available to TIE and the City of Edinburgh Council, they will inform the department of environmental and consumer services of breaches that have occurred; it is that department that has a duty to investigate them.

We are saying that there will be a double check on the risk of repeated incidents in the form of the contractor and the environmental services department. It is in the contractor's interests to make sure that, if incidents occur, they are remedied as soon as possible and a recurrence is prevented. It is the duty of the City of Edinburgh Council to investigate complaints and to ensure that the incidents do not happen again. If there are continuing events, it is the council's duty to ensure that they cease.

Mark Clarke: In part 5 of your statement about experience of other systems, you talk about Edinburgh being able to cope with major disruptions and you cite the Scottish Parliament as a good example. Although I was pleased that the Scottish Parliament won what I thought was an entirely deserved award for architecture in the past week or so, is it not the case that the project overran by several years and is therefore not a model of how to avoid disruption to the public?

Scott McIntosh: You must not put words in my mouth. I have not said, as you claim, that the

tramline is an example of everything that can go wrong. What I have said is that major construction works have taken place in the city—including the Edinburgh International Conference Centre and the Scottish Parliament—which have been achieved without major disruption and damage to the economic life of our city. That has no bearing whatever on anybody's opinion of how well or how badly the projects were managed. What we are saying is that a thriving and lively city such as Edinburgh constantly faces major construction projects and that there is ample experience of dealing with such projects, even large-scale projects such as this one. They have not paralysed the city, and neither would the construction of the Edinburgh tram.

The questions about whether the project is delivered on time and to price are to do with the precise details of the project management of each project. I am sure that we have all learned valuable lessons, and will continue to learn, as we pay the money off on large public contracts that have gone before. I speak as an Edinburgh rates payer and as a taxpayer.

Mark Clarke: I do not think that we should discuss the money and the burden that parties will have to bear in paying for public schemes in the future.

Have the tramway projects in which you have been involved all finished on time?

Scott McIntosh: On average, they have been completed within 10 to 15 per cent of the projects' timescales. I have worked on projects in which complicated schemes, such as the extension to Lewisham of the docklands light railway, have been delivered early and on budget. The Croydon tramlink was delivered approximately five months late on a 40-month construction programme and within 10 per cent of its budget price. I believe that that is a pretty good record and is average for the industry. Given the complexity of such projects, I think that is a fairly acceptable record.

Mark Clarke: Would you agree that, given their complexity, it is not unusual for such projects to overrun their original contract period?

Scott McIntosh: It is also not unusual for some to be delivered early. On balance, you would have to say, you win some and you lose some. The contractor's skill is in trying to deliver projects on time and to budget.

Mark Clarke: I disagree with you. In 30 years in the construction industry—

The Convener: Ask a question, Mr Clarke. This is not a debate.

Mark Clarke: I disagree with your comments, Mr McIntosh.

The Convener: I do not think that that was a question, either.

Mark Clarke: It was not a question.

I turn to the code of construction practice to which you referred. On page 4, the fourth paragraph of section 1.2—

The Convener: Could you tell us where that is mentioned in the rebuttal statement? I am keen to ensure that all questions refer to the rebuttal statement.

Mark Clarke: In the rebuttal statement, Mr McIntosh regularly refers to the code of construction practice as being his source for the response.

The Convener: Sure, but your rebuttal of his statement should have included reference to the bits of the statement that you were looking at. The only reference is specifically to sections 5.2 and 5.4. I am keen to keep everybody focused on what is in the rebuttal statements.

Mark Clarke: Yes, but surely if my statement has been rebutted by reference to the code of construction practice, I am entitled to refer to the code of construction practice.

The Convener: In terms of the issues in dispute, you are absolutely entitled to do so, but not to refer to the entirety of the code of construction practice.

Mark Clarke: No—I intend to pick up purely on the issues.

The Convener: Okay. I will be watching.

10:45

Mark Clarke: On page 4, the fourth paragraph of section 1.2 states:

“Tie intends that the provisions of the Code will be incorporated in the contract(s) for the construction of the Edinburgh Tram.”

Why is the word “intends” used, rather than “shall”?

Scott McIntosh: The operative word is “will”. TIE intends that, in the future—once we have the powers, if the committee sees fit to allow the scheme to be constructed—the code will be incorporated in the contracts.

Mark Clarke: The code also states:

“Contractual provision will be made for auditing compliance and rectifying any breaches”.

That suggests that breaches will take place. Do you agree?

Scott McIntosh: I wish that I lived in a perfect world where everything happened as we planned it. I do not, however. Obviously, there will be a risk

that breaches will occur. If breaches occur, the code exists to ensure that there is a swift and speedy remedy.

Mark Clarke: Will a single main contractor be responsible for adhering to the code, or will there be a multiplicity of suppliers?

Scott McIntosh: I refer you to the notes at the foot of page 3 of the code, which state that the term “the Contractor” shall apply to the contractor, his sub-contractors and all suppliers. Therefore, all persons will be covered.

Mark Clarke: Is not there a danger that responsibility will become diffuse? That is a concern that I have experienced in the context of contracts elsewhere. Identification of who is liable or who is to blame for any particular matter becomes totally scattered. People say, “It’s not me—it’s him”, and so on.

The Convener: I understand. I am giving you a degree of flexibility, but I am having trouble finding that matter in your rebuttal or in Mr McIntosh’s rebuttal. I have no intention of going through every word of the code of construction practice, so I would really appreciate it if you narrowed the focus of your questioning.

Mark Clarke: Let us turn to complaints. On page 6 of the code of construction practice, the first paragraph of section 2.4 states that complaints and remedial action will be logged in the contacts log; however, there is no mention of how complaints will be investigated and what action will be taken to prevent the complaint from arising again. The code also does not address the potential for a multiplicity of complaints arising that will merely be logged and actioned without any serious effort being made to stop them arising in the first place. Do you agree that that is the case?

Scott McIntosh: I refer you to what I said previously: there is a requirement that the complaints that are logged be investigated and that a reporting procedure be put in place to say what the contractor has done or will do. I refer you to section 2.4 of my statement, which sets that out. The nominated city officer for the City of Edinburgh Council will have copies of the log and a report containing all complaints that are made. Therefore, the pressure within the document to achieve a satisfactory settlement of any complaint is very strong.

Mark Clarke: My concern is about the potential for repetitive complaints and for the same issues to come up time and again. There is no clarity on how that will be avoided.

Scott McIntosh: The document sets out the requirement, not the methodology for achieving the desired result. The way in which the document is set out and what it seeks to achieve are fair at

this point. I do not think that it would be appropriate at this time to set out the precise remediation or amelioration for any problems that arise. I repeat that the point is that three interested parties—the project director for the contractor, the representative for TIE and the City of Edinburgh Council—will all be made aware of every complaint that is made. Therefore, the pressure in the contract is between TIE and the contractor to ensure adherence to the standards that are set out.

Mark Clarke: I turn to paragraph 4.2, page 10, of the code of construction practice, entitled “Fencing and Hoardings”. How will hoardings be erected on embankments such as are on the Roseburn corridor?

The Convener: Before we continue, Mr Clarke, may I say that I can find none of this in the rebuttal statements. You may answer the question, Mr McIntosh, but can we focus on rebuttal statements? I am running out of my flexible time.

Scott McIntosh: Erection of hoardings will vary from place to place. If hoardings are constructed at the foot of the embankment, they will be constructed in the way that any other hoardings would be constructed. If they are constructed at the top of an embankment, it may be necessary to insert stakes or piles into the foundations to support them. As I say, it will vary from place to place.

Mark Clarke: My concern is that if the hoardings are erected at the bottom of the embankment, dust and debris will blow into the adjacent properties.

Scott McIntosh: That is why paragraph 4.1 of the code refers to the requirements for good site housekeeping and why there are also provisions for amelioration of dust and other nuisances that may occur from the site. You would not expect a hoarding 2.4m high necessarily to contain those things. The point is that the requirement in paragraph 4.1 is to operate a good site housekeeping system that will reduce the risk of such nuisances.

I also refer to the requirements to comply with the normal statutory requirements for worksites, which set out rules for minimising dust, dirt, litter and rubbish on construction sites.

Mark Clarke: All the purposes of the barriers for containment—

The Convener: Mr Clarke, we have pursued this sufficiently.

Mark Clarke: Okay. I refer to paragraph 4.3 on page 11 of the code, entitled “Access and Loading”. The Roseburn corridor is very narrow. How will that allow for vehicle and excavator passing?

Scott McIntosh: The walkway and cycleway is a nominal 3m wide. As you are aware, heavy goods vehicles are 2.5m wide; therefore, they could use the walkway to access the area if necessary. We have identified several points along the corridor where there is access from the public highway that can be used for delivering and taking away plant and materials.

Mark Clarke: Paragraph 4.3 talks about a one-way system operating; therefore, vehicles will have to pass along the walkway.

Scott McIntosh: I am sorry. Where does it refer to a one-way system?

Mark Clarke: Paragraph 4.3 states:

“Lorries shall enter and exit the site in a forward direction at designated locations, except where space restriction does not permit this. If the reversing of vehicles into public spaces is required, then the movement shall be properly controlled by a responsible person”

It appears to me that there would be a one-way system in operation.

Scott McIntosh: That is not what the paragraph says at all.

Mark Clarke: What do you understand paragraph 4.3 to mean?

Scott McIntosh: Perhaps you might care to read it again. It is self-explanatory.

Mark Clarke: Paragraph 4.3 says that

“Lorries shall enter and exit the site in a forward direction at designated locations, except where space restriction does not permit this.”

I do not see where the lorries will turn, especially on the embankment—

Scott McIntosh: Can I save time and refer you to the next sentence?

The Convener: Can we save everybody’s time and confirm that the lorries can move in two directions?

Scott McIntosh: Yes.

The Convener: Excellent.

Mark Clarke: I turn now to page 11 of the code of construction practice and paragraph 4.7 on pest control. When the existing habitat for the rodents and vermin that live on the Roseburn corridor is removed, do you agree that those creatures will seek shelter in the nearest available areas?

Scott McIntosh: That would be logical, yes.

Mark Clarke: I refer now to paragraphs 6.1(b)(i) to 6.1(b)(iii) on page 17. Do you agree that a piece of construction machinery could cause a continuous noise equivalent to 74.9dB(A) for 12 hours 1m from an occupied building?

Scott McIntosh: I am sorry, convener, but I am somewhat lost. I do not see where this point has been raised in the rebuttal of my evidence.

The Convener: Noise control is raised at paragraph 3.2.4 of the rebuttal. However, we have to acknowledge that Mr McIntosh is not the expert on noise; I believe that the expert is Mr Mitchell. If Mr Clarke wishes to put questions to Mr McIntosh on noise control during construction, that would be appropriate. However, anything else should be put to another witness.

Mark Clarke: My point relates to the code of construction practice, which I understood Mr McIntosh to be—

The Convener: The point in your rebuttal is about noise control.

Mark Clarke: Mr McIntosh, do you agree that noise control measures by the contractor could be in place but would only restrict the noise to below an average of 75dB over a 12-hour period?

Scott McIntosh: The requirement in the code of construction practice sets a 12-hour noise level. That is in paragraph 6.1(b)(i). Paragraph 6.1(b)(iii) then sets a lower level for

“1 metre from any school, college or other teaching facility”.

In other words, we are setting—as always in the code—a minimum general standard to be achieved, and we are accepting that more onerous standards have to be achieved in particular locations. Paragraph 6.1(b)(iii) sets that tighter noise limitation for particular areas.

Mark Clarke: But it would not apply to dwellings.

Scott McIntosh: Dwellings are not listed.

Mark Clarke: The reference is to a 12-hour period, which means that the noise level could be significantly higher for, say, eight or nine hours during that period, and then significantly reduced for the remaining three or four hours, to bring you within the required average.

Scott McIntosh: You will have to refer to Mr Mitchell's evidence for information on how averaging out is achieved in L_{Aeq} figures over a 12-hour period.

Mark Clarke: Do you agree that, after February 2006 and the enactment of the European Union directive on noise at work, it will be mandatory for operatives to wear hearing protection when noise exceeds 85dB(A)?

Scott McIntosh: I refer you to Mr Mitchell and possibly to my colleague Mr Turner on the precise impact of the EU directive on construction matters.

11:00

The Convener: I cannot find that issue in the rebuttal, so you will not refer the matter to anybody.

Scott McIntosh: I am sorry for usurping your role, convener.

Mark Clarke: On section 3.2.4 of your witness statement, the Health and Safety Executive does not advise when it must visit a workplace. How can the public be assured that a monitoring practitioner who is employed by the promoter will apply the same approach and standards as the Health and Safety Executive would apply?

Scott McIntosh: I refer you to the requirements to comply with the environmental management system in section 1.5 of the code of construction practice.

Mark Clarke: What does that section say?

Scott McIntosh: Section 1.5 states:

“The Contractor will implement an Environmental Management System in accordance with ISO 14001”.

Mark Clarke: That does not indicate whether the noise practitioner will monitor noise at random periods or agreed periods.

Scott McIntosh: The requirement is that the contractor shall comply fully with all relevant legislation, codes, standards and general guidance from the Health and Safety Executive at all times. That requirement applies to any construction site anywhere in the United Kingdom. Again, it is clear that the code of construction practice has set a very high minimum standard to be achieved, but it does not seek to replace other legislation that may impose requirements over and above those that are set out in it.

Mark Clarke: Item 8 in section 6.1 of my rebuttal refers to water escaping from the site. How would water that is to be used to keep dust down be contained on the site? I refer to the embankments in particular.

Scott McIntosh: Section 10 of the code of construction practice deals with water and control of polluting materials. Section 10.1 lists in very great detail the requirements for control of waste water and run-off. I contend that that section covers all the relevant points to do with waste water run-off from sites.

Mark Clarke: Do you agree that removal of trees and vegetation will increase the risk of inundation of the embankments?

Scott McIntosh: No. I agree that any removal of vegetation may result in the risk of an increased flow of the water that is already there and that, if vegetation is removed, it will be the contractor's duty—as it would be in other situations—to ensure that provision has been made for protection of earthworks.

Mark Clarke: Item 7 of 6.1 in my rebuttal refers to dust being blown into properties. The code of

construction practice states that there will be a window-cleaning proposal. What guarantee is there that the windows will be cleaned to a professional standard and not damaged by removal of residue?

The Convener: I ask Mr McIntosh to answer that question, but the question asks for a level of detail that I do not, although it is interesting, consider significant. Sufficient evidence has been provided and we are able to read and interrogate the construction code of practice. You would expect me to add that I think that groups 35 and 45 will not be allowed this degree of forensic questioning because I assume that Mark Clarke is doing most of it for them.

Scott McIntosh: To refer back to the question, if excessive dust arrives on the façades of people's buildings, there is a requirement that the buildings be cleaned. It would be unusual to expect that a contractor would employ anybody who was a less than competent and professional cleaner, in accordance with ISO recommendations as to how they conduct themselves in doing the work. If the work is done in a manner that damages a house, the householder would obviously have cause for complaint and could follow normal complaints procedures. If the householder failed to get a satisfactory solution through that, normal claims at law for damages would be available to them.

Mark Clarke: How would the dust be contained in windy conditions, particularly for people who live beneath embankments?

Scott McIntosh: Dust will be contained in the normal ways that it is contained on building sites. It will be contained first by seeking to contain or collect dust at its source and, secondly, by normal methods of dampening down. After that, if dust is uplifted and dispersed by wind, that is an effect that we all have to accept from any working site. I do not believe that people who are at the foot of embankments will suffer a greater risk of wind-blown dust affecting them than will any other persons in the area. A certain *de minimis* must be applied: Do we seriously believe that very large quantities of dust will be generated and allowed to be dispersed into the air?

Mark Clarke: I will turn again to item 6.1.

Scott McIntosh: Sorry. Is this item 6.1 of your rebuttal?

Mark Clarke: Yes. I have listed a range of points, from 1 to 21, with regard to various concerns that I have about potential risks, accidents and so forth. I will not go into those in detail because I have covered the matter in my statement. When you responded to the initial questioning you commented that competent contractors and so on would deal with all those matters. Do you agree that it is not unusual for accidents to occur on site?

Scott McIntosh: No. I would say that accidents occasionally occur on site; it is not usual for accidents to occur on site.

Mark Clarke: I accept that comment. My concern in compiling the list is that, particularly with regard to the embankment area in the Roseburn corridor, which is of great interest to me, clearly a wide range of incidents could occur. Do you agree?

Scott McIntosh: Yes.

Mark Clarke: I have no further questions.

The Convener: Thank you, Mr Clarke. Does Mr Vanhagen have any questions?

Richard Vanhagen: Mr McIntosh, in your witness statement, you acknowledge that

"the carrying out of a large construction project such as the Edinburgh Tram has the potential for causing disruption to residents".

However, in response to our suggestion for a reduction in working hours, paragraph 3.1 of your rebuttal statement refers simply to

"the duration of the potential annoyance that the objectors claim that they will suffer".

Do you admit, as you seem to do in your witness statement, that such disruption is likely to occur?

Also, why does paragraph 3.1 of your rebuttal suggest that the objectors propose that work should be prevented on Saturdays? The paragraph immediately above that—paragraph 2.1—clearly states:

"The objector proposes that construction working hours should be restricted to 0800 – 1700, Monday – Saturday".

Scott McIntosh: I am sorry, but I am not with you. Where did I propose reducing work on Saturdays?

Richard Vanhagen: I refer to paragraph 3.1 of your rebuttal of 12 August 2005.

Scott McIntosh: We certainly do not intend to restrict work on Saturdays.

The Convener: Mr Vanhagen is referring to paragraph 3.1 of Mr McIntosh's rebuttal to John Barkess.

Scott McIntosh: My paragraph 3.1 states:

"Shortening the working day, and preventing work on Saturdays will simply have the effect of lengthening the duration of works at any given point."

My rebuttal provides a worked example to show that accepting the objectors' proposal to restrict working hours and not to allow work on Saturdays and Sundays would lead to a considerable extension to the period within which works would need to be done. I discussed that point with Mr Clarke. My rebuttal statement says not that we

propose to prevent work on Saturdays, but that, if we were to do so, there would be knock-on effects.

Richard Vanhagen: Did you mean to write “reducing work on Saturdays” rather than “preventing work on Saturdays”?

Scott McIntosh: No. The rebuttal gives an example to show the deleterious effect that would result from agreeing to the objectors’ proposal to limit working hours and to limit work on Saturdays. I am saying that, if we were to accept that proposal, it would have disadvantageous effects.

Richard Vanhagen: Obviously, you have given us only an example of what might happen. Our proposal is simply that the working day should be reduced by three hours. That would reduce the working week from 72 hours to 54 hours, but it would still allow work to be done on Saturdays. There is a clear precedent for doing that—

The Convener: Mr Vanhagen, you must ask a question.

Richard Vanhagen: Why do you ignore the clear precedent for reducing the working day that, as we mention, has been set elsewhere? Why do you stick to the requirement for 72 working hours each week?

Phil Gallie: Convener, we heard the answer to that question in Mr McIntosh’s response to Mr Clarke.

Richard Vanhagen: Mr McIntosh, in citing the example that is given in your rebuttal statement, are you suggesting that prolonging the work schedule by five weeks per 1,000-hour task would be against our best interests?

Scott McIntosh: Indeed I am. I do not believe that lengthening the construction programme by 36 per cent would be in the interests either of local residents or of the population of Edinburgh, who will eventually benefit from the operation of the scheme. It would simply delay a good thing.

11:15

Richard Vanhagen: Yes, but we are not the majority of Edinburgh citizens. We are in the Roseburn corridor—

The Convener: A question, Mr Vanhagen.

Scott McIntosh: You are indeed not the majority.

Richard Vanhagen: No, we are not, but we are the people who are involved. Would you have preferred to go for 24/7 working to cut down the construction period to six weeks to complete the task? You would probably get a large bonus for that. You suggest that 72 hours, with all the extra hours on Saturdays, Sundays, in the evenings

and—who knows?—perhaps through the night, is reasonable to minimise disruption. From an efficiency point of view, would you not like 24/7 working if you could get it?

Scott McIntosh: No, I have never suggested that. We have always said that there must be reasonableness. In any construction project of any sort, there must be a degree of reasonableness. We believe that the working days that are proposed for the scheme have many precedents over the years and are fair, equitable and reasonable. We certainly will not seek to extend the hours beyond those that are worked on comparable projects in other parts of the UK.

The Convener: I point out to Mr Vanhagen and Ms Woolnough, who is coming next, that the committee believes that it has sufficient evidence on working hours to last us a lifetime.

Richard Vanhagen: Okay; I will ask another question. How will the four-year construction programme, which was to be undertaken from 2006 to 2010 for the entire loop, apply to what is now termed the Roseburn spur?

Scott McIntosh: Neither I nor any of the other representatives of the promoter has ever referred to a Roseburn spur, nor is there any proposal in the bill as submitted and supported by our evidence to suggest that that is a title or objective that we seek. The construction programme will be a matter for the detailed design of the system, once the contractor is in negotiation with the detailed designers of the scheme.

Richard Vanhagen: You mentioned that you have been involved in about 30km of completed off-road work in recent years.

Scott McIntosh: I mentioned 130km of tramway, both on and off road.

Richard Vanhagen: From that experience, could you give us an idea of how long out of the four-year period the construction work for the Roseburn corridor would take?

Scott McIntosh: As I said in my statement, several issues affect that, such as the phasing of the programme, weather conditions and other external matters. However, I can say that the experience on other schemes where sections of former railway alignment have been rebuilt and upgraded to tramway is that the total length of time from commencement of works on those sites to the point at which the tramway is ready for final commissioning is considerably less than two years and that, during that total elapsed time, works are not continuous, but are done in phases. The preparation and clearing away of existing debris, the preparation of the sub-base, the laying of the track, the erection of the overhead line and the final production of the finishes will normally be

done in separate phases with discrete gaps between them, but the total elapsed time from commencement of the first shovel going into the ground to the point at which everything is ready for testing is less than two years.

Richard Vanhagen: You say that the code of construction practice will come into force if the bill receives royal assent. How long will it be in force?

Scott McIntosh: It will be in force as long as the contracts for the construction of the scheme are extant, which means from the moment that construction commences to the moment that the constructors hand over the scheme to the operational entity.

Richard Vanhagen: What if there is a delay in construction? We have evidence that some tram orders are still in force 13 years after the go-ahead was given. How long do you envisage the code of construction practice being in place?

Scott McIntosh: I think that I have just answered that question by saying that it covers the entire construction period whenever it begins and whenever it ends.

Richard Vanhagen: So that could be some considerable time beyond the four years that we are talking about for the construction programme. If that slips, the code will still be operational.

Scott McIntosh: It will still cover the programme. The code is not time limited, but task limited.

Richard Vanhagen: It is not time limited. Thank you.

Why does the City of Edinburgh Council not work on Saturdays on some of its tasks that are being undertaken in the city at the moment?

The Convener: We have a sufficiency of evidence on working hours, Mr Vanhagen, which includes whether work is done on Saturdays.

Richard Vanhagen: Thank you.

When trams are reintroduced in Princes Street, will you be likely to modify hours to suit the traders and hoteliers on the street or will you stick strictly to the 72-hour rule?

The Convener: I think that I just said that we have heard enough on hours of working. You then asked another question about hours of working.

Richard Vanhagen: I suppose that the question is on hours of working, in a way. I am sorry about that.

The Convener: That is okay.

Richard Vanhagen: The new access points on the Roseburn corridor are supposed to be shown in the landscape and habitat management plan.

You spoke today briefly about the fact that there will be access points to deliver and remove materials and staff and so on. There is an indication that those points will be retained to improve access to the corridor. Are you in a position to tell us where in our area, which runs from Ravelston Dykes to Balbirnie Place—or anywhere in the corridor—those access points have been established in your planning?

Scott McIntosh: I refer you to the drawings that were submitted in support of the bill, which identify work sites and accesses. The drawings that are referred to commonly as the P5 drawings—the context drawings of the system—also identify accesses to be retained and new accesses to be provided. I believe that they are the definitive list. As far as I am aware, no changes are proposed to them. In fact, there are no powers in the bill for any accesses other than those that we are seeking.

The Convener: That is helpful, given that that point was not rebutted by Mr Vanhagen. I hope that you take some comfort from that response.

Richard Vanhagen: Thank you.

There is no indication that you have a construction safety plan or a safety planning supervisor, which I understand you are supposed to have by law. I could not see that anywhere in the document.

Scott McIntosh: As I have said previously, the document sets out certain minimum standards that are to be achieved. I refer you to section 1.5 of the code of construction practice, which requires the environmental management system, and to section 1.3, which states:

“The Contractor shall fully comply with all relevant Legislation, Codes”—

and so on.

I suggest that a safety management plan for the construction of the project is a requirement for the contractor to produce once the detailed design has been completed and as part of the tendering process and the later execution of the works. It is quite clear that those are requirements and that they are not superseded—nor is there any attempt to suggest that they should be superseded—by the code of construction practice.

Richard Vanhagen: You are leaving that to the contractor. That is what you are saying.

Scott McIntosh: I am leaving it to the place where it is statutorily required to be.

Richard Vanhagen: Thank you. I have no further questions.

The Convener: Thank you, Mr Vanhagen. We come to Ms Woolnough for group 45.

Kristina Woolnough: Thank you.

Mr McIntosh, just to help me, can you advise me how well you know the Roseburn corridor?

Scott McIntosh: Yes. I lived away from Edinburgh for more than 30 years, but I have been back here for the past two years and I have walked the Roseburn corridor on several occasions and have examined aerial photographs and drawings of it.

Kristina Woolnough: Can you give me a rough estimate of how many times you have walked the Roseburn corridor?

Scott McIntosh: I should think that in the course of this project I have walked various sections of the corridor six to 10 times.

Kristina Woolnough: Again, to clarify, were you aware that attendees at the community liaison groups had asked to be consulted on the code of construction practice?

Scott McIntosh: I do not attend the liaison groups, but my colleague Mr Turner does, so your question might be better addressed to him.

Kristina Woolnough: I was asking whether you were aware, but obviously you were not. I accept that you do not attend the groups and that a colleague perhaps did not advise you.

Your statement describes long-term benefits at the expense of short-term impacts from construction of the tramline. Do you accept that the short-term impacts of construction on wildlife and usage of the corridor by cyclists and pedestrians may, in fact, be long-term impacts? That is, do you accept that there will be longer-term consequences of construction?

Scott McIntosh: I suppose that we are in danger of debating what is meant by long and short term. The project probably has a life of over 80 years. As I said earlier, construction in the corridor will probably be spread over about 24 months. Some wildlife might migrate and it will obviously not queue up on the day that the system opens to return to its previous habitat. However, I believe that there is plenty of evidence along the corridor that, since it ceased to be a railway, it has been colonised and recolonised by wildlife. Therefore, I believe that wildlife will recolonise the corridor and that the same thing will happen with users of the corridor. Some may find equally attractive ways of making their journeys and so may not come back; some will take longer than others to come back. However, I believe that, in the context of the overall life of the project, those events will be relatively short term.

Kristina Woolnough: I appreciate that, apart from your final sentence, you acknowledge that short-term impacts may be longer term. My next

question is about impacts on and disturbance of wildlife and impacts on the wildlife corridor's function; by that, I mean the fact that it is currently a continuous wildlife corridor. Have the impacts of construction on wildlife been factored into the construction process?

Scott McIntosh: I am sorry, but I do not quite understand the question.

Kristina Woolnough: Okay. We heard from Environmental Resources Management (Scotland) Ltd about the landscape and habitat management plan, badger mitigation and so on. An important function of the corridor is its linear effect, on which construction will have an impact; I do not know whether it will interrupt the linear effect totally or temporarily, or whether there will be mitigation for that. It is a grey area about which, as far as I am aware, there is no information. I am asking you as a construction expert whether construction impact was factored into the code of construction practice and your construction proposals.

Scott McIntosh: Yes, I understand the point—sorry. The effect of linearity on different social and genetic pools within long corridors is something with which I have dealt a number of times in the past. We always endeavour to ensure that, after construction is completed, we do as little as possible to break linearity and that there will be a continuous corridor in the long term. I remember, for example, a long debate about the genetic effects of separating the rabbits of Wimbledon from the rabbits of Croydon and the requirement to maintain a corridor to allow rabbits to do what rabbits do.

I believe from the LHMP that the effort will be made to maintain the corridor's linearity. I have witnessed several pieces of work to maintain access for badgers through bridge holes, across structures and so on. I believe that every effort has been made and that the corridor will continue to maintain that linearity for wildlife.

11:30

Kristina Woolnough: Will that apply throughout the construction period?

Scott McIntosh: It will not necessarily apply throughout the construction period. However, once the corridor has been turned into the combined footway, cycleway and tramway, linearity will be maintained.

Kristina Woolnough: I am sure that you understand that the concern is about the impacts of the construction process. Perhaps I should have made it clear that I am speaking for group 45, which comprises the friends of the Roseburn urban wildlife corridor. The group is concerned about the wildlife, the amenity and the cycleway's human users.

Have the Scottish Natural Heritage guidelines on badgers and construction, which include recommendations on restricting work hours and hand digging near setts, been factored into the construction process? They are not mentioned in the code of construction practice. Should they be? Do you speak to ERM? I am concerned about construction, not operation.

Scott McIntosh: Indeed.

Kristina Woolnough: I am sorry—I did not mean to sound offensive when I asked whether you speak to ERM; I am just trying to establish the communication channels.

Scott McIntosh: I refer you to the point that I made before: the code sets a high minimum level that is to be achieved and refers to legislation and codes with standards above that, which set higher standards for specific matters. We are talking about precisely one of those matters. The code says, “You can do this, unless some other thing intervenes.” Obvious other matters are the statutory protection for badgers, bats and other creatures and the requirements that are set out by SNH and others for achieving higher standards in identified spots. My clear understanding from talking to ERM, which has spoken to SNH and others, is that it is clearly comprehended in how the code is framed that those higher standards will be met when they apply. They are over and above the guaranteed minimum level that the code of construction practice sets out.

Kristina Woolnough: I am sure that you can understand our anxiety that the code of construction practice does not specify wildlife issues.

The Convener: Ms Woolnough, I ask for questions, not comments.

Kristina Woolnough: I am sorry. Do you understand our concerns? Do you acknowledge that we see no mechanism set out for liaison between all the bodies about wildlife and the construction process? You describe worthy measures. Are they set out somewhere for us?

Scott McIntosh: I refer you again to section 1.3 of the code of construction practice, which refers to legislation, codes and standards, and to section 11, which deals with ecology. Section 11.1 sets out a series of requirements for encroachment into wildlife areas and habitats. I accept that not every document is listed, but all the documents are the ghosts in the machinery. They are clearly set out and must all be referred to. It is the contractor’s duty to make himself aware of all those documents and to comply with them. The code does not attempt to suggest in any way that abiding by the code would absolve a contractor of the need to abide by those more onerous requirements.

Kristina Woolnough: I know that we are not talking about work hours, but the SNH guidelines on badgers and construction restrict work hours in periods of dusk and so on. Will that be factored in? The code of construction practice gives different hours from those that might fit in with badgers.

Scott McIntosh: That is exactly the same issue. According to the code of construction practice, contractors may work from 07:00 to 19:00 hours, except when other codes require them to abide by shorter working hours.

Kristina Woolnough: Are the access alternatives for pedestrians and cyclists likely to be on road?

Scott McIntosh: That may be the case in some places.

Kristina Woolnough: Such alternatives will not be traffic free. Are you unable to provide like for like?

Scott McIntosh: The requirement is to provide access of the same quality, so the alternatives will be of the same structure, width and so on. In some cases, that might require some parts of the roadway that is used by motorised vehicles to be coned off to ensure that the footway and cycleway are of comparable width.

Kristina Woolnough: Good, but how would that happen? I am not aware of any easy method of doing that in our neighbourhood around the Roseburn corridor. After all, we are talking about a 3m-wide shared walkway and cycleway. Do you just put out traffic cones?

Scott McIntosh: It will be subject to road traffic measures, but coning off is certainly a possibility. You will have seen in Edinburgh how, with construction sites that encroach on the pavement, there are build-outs into the highway to ensure that the pavement’s continuous width remains acceptable. I believe that the same could happen in this case. Obviously, such matters are for detailed design and consideration at a later stage.

Kristina Woolnough: What about alternative means of access for wildlife?

Scott McIntosh: Unfortunately, wildlife will not follow signs and arrows. However, ERM and SNH have had many discussions about how to mark out alternative and appropriate routes for badgers. Similarly, we are also statutorily required to provide alternative nesting for bats.

Kristina Woolnough: In your statement, you say that

“the widths of diversions shall not be less than that of the existing way”.

That brings me back to my earlier point. You feel that a 3m-wide combined walkway and cycleway will be created in our area.

Scott McIntosh: I believe that that is the burden of what the code contains.

Kristina Woolnough: On site housekeeping, we are concerned about the impact on wildlife and the function of the wildlife corridor of work-site fencing and hoardings. Will ERM work with the contractor on that matter? What will be the mechanism for ensuring that hoardings and fences do not prevent badgers, for example, from foraging?

Scott McIntosh: They will prevent foraging from happening in the hoarded area; after all, that is their specific function. We do not want animals in the work compounds.

In so far as fences and hoardings might obstruct badgers' natural runways, I return to the previous question and my response about trying to identify ways of mitigating such an impact, which might include the provision and marking of badger ways. As I said, that matter will have to be considered in dealing with SNH and obtaining licences for working close to badgers. Such detailed matters are contained in the requirements to obtain the licence.

Kristina Woolnough: Has the impact of construction on wildlife and the wildlife corridor function been assessed? I realise that the question is a bit unfair, because you do not represent ERM. However, you are involved in the project's construction.

Scott McIntosh: We have obviously taken into consideration the general view that it is pointless to maintain wildlife space after construction if you have frightened all the animals away or—heaven forbid—if there is no next generation because you have prevented them from breeding. I believe that due consideration of the matter will form part of the consideration of the environmental management plan for the project's construction.

Kristina Woolnough: You have kindly agreed that there could be a longer-term impact on walking and cycling. However, has anyone assessed the situation and established whether, even in the short term, closing sections of the Roseburn corridor will discourage people from walking and cycling?

Scott McIntosh: No, that would be very difficult to establish. We are aware of the number of people who use the corridor and that, when the corridor is completed, there will be a walkway that is more than sufficient to meet expected demand. We accept that, in the interim period, people will suffer inconvenience; however, it will be the same as the inconvenience that people suffer whenever a building is constructed at the back of an existing footway anywhere in the city.

Kristina Woolnough: I want to move on quickly. Do you expect noise control, as well as the impact

of emissions—such as dust—on wildlife including badgers, on foraging grounds and on vegetation to be picked up in consultation with SNH? Is that the comfort that local people and people who care about the corridor can draw?

Scott McIntosh: SNH is a statutory body and must be consulted. It is probably the body with the most time and expertise to assist the contractor in working on the issue. We need to understand that the works in the Roseburn corridor, which mostly involve the digging up of existing ground surface and the laying of new materials, are unlikely to introduce dust of an alien nature into the corridor. For that reason, the effects on animals are likely to be minimal.

Kristina Woolnough: However, there may be an intense amount of dust, compared with what is there now.

Scott McIntosh: There may be, but you need to understand the scale of the works that are likely to be undertaken in the Roseburn corridor. The number of occasions on which dust will be generated will be relatively small.

Kristina Woolnough: The landscape and habitat management plan, which we heard will be incorporated into the bill, does not include sections on construction practice. Would it be possible to request that it did and that such provisions should be enforceable? Although there is legislation relating to wildlife, it does not cover everything, and there would need to be a degree of vigilance that some of the monitoring bodies may not be able to accommodate. Would it be reasonable for objectors to ask that construction should appear in the landscape and habitat management plan?

Scott McIntosh: It is up to you to decide what you want to ask for. The promoter would say that it believes that the issues are covered adequately by the requirement to comply with existing statutory requirements. I have no doubt that SNH and others will monitor the works as part of their programme to protect the natural habitat. I hope that the friends of the Roseburn urban wildlife corridor will be out there as well. In that case, you will have a hotline number to ring.

Kristina Woolnough: That leads neatly on to my next question. Will there be a 24-hour emergency helpline? I note that there will be a line during working hours.

Scott McIntosh: The code of construction practice states that a member of staff will be able to answer questions from the hotline during working hours and for an hour after the end of working hours every day. Experience shows that, if there are problems, they are likely to occur then. For the rest of the time, there will be a recorded system that will be interrogated at the beginning of the next working day.

Kristina Woolnough: By working hours, do you mean construction working hours?

Scott McIntosh: Yes—construction working hours plus one.

Kristina Woolnough: If you were involved in a prolonged or all-night session—

Scott McIntosh: The code refers to construction hours plus one.

Kristina Woolnough: That is excellent, although it will be difficult to meet the requirement if you have a 24-hour construction job.

Scott McIntosh: I am afraid that I do not have a time machine.

Kristina Woolnough: I intended to ask about the policing of concerns and complaints about wildlife. You have said again that the council may be able to deal independently with complaints from affected residents. Do you imagine that the policing of complaints about wildlife would be an SNH function?

Scott McIntosh: Yes. A number of other bodies, such as the Bat Conservation Trust, are involved. I am sure that the friends of Roseburn urban wildlife corridor will also police such complaints.

Kristina Woolnough: If we last the pace. That is all that I have.

The Convener: Thank you. Do committee members have any questions for the witness?

Phil Gallie: I have one or two. The first relates to 7 am to 7 pm working. I recognise what you say about efficiency and the best use of resources. However, when you remove the machinery from site to what you describe as a “place of storage”, it would be efficient to ensure that routine and general maintenance is carried out on that machinery in a way that does not disturb residents. Have arrangements been made to cover that issue?

Scott McIntosh: Although this is not stated specifically, I believe that routine maintenance of large items of plant and machinery will not take place on the work sites along the route. That would be better done at a specified, dedicated workshop. The hours do not make provision for maintenance activities on large items of plant and machinery to be conducted outwith working hours. That is appropriate. It would be normal to expect such machinery to be taken away to an appropriately equipped workshop for that sort of work to be carried out.

11:45

Phil Gallie: I accept your description of the tramway as a long and thin construction site. I think that, in an earlier discussion, you said that

work on the tramway will be done section by section so that minimum disruption will occur. You said that the work on the Roseburn corridor will take two years. Do you intend to carry out the work in sections, splitting up work on the corridor so that the time that is spent on construction work adjacent to particular houses is minimised?

Scott McIntosh: Yes. The assessment of contractors' bids for the work will consider how effectively they intend to carry out the work and the quality of their planning. The code of construction practice states that areas should be taken for the minimum possible length of time and should be cleared as soon as possible, with hoardings being removed after work has been completed. That puts extra pressure on a contractor to have an efficiently organised programme. It is in a contractor's interest to minimise the length of time for which jobs drag on.

Phil Gallie: It is also very much in the residents' interests for the length of time to be minimised. From what you have just said, I presume that the construction programme will be devised in such a way that the time that is spent on construction adjacent to residents is minimised.

Scott McIntosh: TIE has taken on board experience from other projects, which shows that, when construction programmes alienate local residents, people are less than enthused about the scheme when it opens for commercial operation. That can have an effect on its commercial success. That may have been the case in Sheffield. In Croydon and Nottingham, contractors made considerable efforts to be good neighbours during the construction phase. That is shown by the fact that both schemes exceeded their expected passenger numbers in their first year. People felt ownership of the schemes; they were pleased that the public work had been completed and that it was good. It is not in anybody's interest to do anything that will alienate the people of Edinburgh, who will, after all, be the system's customers.

Phil Gallie: That partly answers my next point. Mr Clarke mentioned independent scrutiny of working practices. You suggest that councillors, as elected representatives, are there to ensure that residents are protected, but the council is very much a part of the project and it is perhaps in councillors' interests to advance the interests of the promoter and the constructors in getting the job done as quickly as possible. Is there not some merit in Mr Clarke's suggestion that, in contentious areas, someone other than the council should provide independent scrutiny?

Scott McIntosh: You need to distinguish between the council's two roles. Certain statutory burdens are laid upon the council's environmental and consumer services department and there is

no way in which council officers or elected members can deflect it from those duties. Therefore, I believe that its duty to monitor pollution, noise and so on cannot be influenced. It would be improper for any councillor to attempt to influence decisions on those matters.

As far as the council itself is concerned, councillors are in the uncomfortable position of having to be re-elected at regular intervals. When people decide whether to re-elect councillors, they consider not only what the council has achieved but the methods that it adopted in doing so. It is better to use that control mechanism than to have some other authority that is responsible for the work—that authority which might consist of people like me, who do not have to be elected. Elections are a pretty good idea and they are probably a fair way of ensuring that the work is carried out in a just and equitable way.

Phil Gallie: I think that there is a debate to be had there. However, I would say to you that, with regard to the question of whether those who live beside the tramline are happy about the construction work, which you mentioned earlier, people's perceptions of what council responsibilities are might differ from what you envisage them to be.

Scott McIntosh: I am also a taxpayer in Edinburgh and might also complain about the council's actions. However, at least once every four years, if at no other time, I have a method open to me by which I can remedy that.

Rob Gibson: The code of construction practice has been under some scrutiny today. I understand that it is not a statutory part of our consideration and is merely a supplementary document. Nevertheless, will it be developed in any way between now and the project starting up?

Scott McIntosh: The document has been adopted by TIE, which has published it on its website. As I said before, it guarantees the minimum standard—and I think that it is a high minimum—that TIE promises to meet. Obviously, if TIE thinks, "If we'd known that then, we'd have done something different," it can change the document in order to toughen it up. However, it is not open to TIE to walk back from what it has promised, as the document has been published and now forms part of the evidence that is before this committee.

The Convener: Mr Thomson, I will place on the record the fact that I would like the promoter to write to the committee to confirm whether it will put complaints and details of accidents on its website.

You may ask Mr McIntosh any follow-up questions that you might have.

Malcolm Thomson: Mr McIntosh, in response to Ms Woolnough, you referred to section 11.1 of

the code of construction practice, which deals with encroachment into wildlife areas. Would it be appropriate also to note section 11.2, on protected species, which deals specifically with the consents and the licensing arrangements in respect of badgers and contains other provisions in relation to other protected species?

Scott McIntosh: Yes, I would like people's attention to be drawn to that section.

Malcolm Thomson: For the record, am I right in remembering that the environmental statement contains a specific section on the impact of construction works?

Scott McIntosh: Indeed, it does.

The Convener: Before I invite Mr McIntosh to address other matters, I will declare a two-minute comfort break.

11:53

Meeting suspended.

12:00

On resuming—

The Convener: I restart the meeting. We are at the stage of asking Mr McIntosh to address property values in relation to groups 33, 34, 35, 36 and 43.

Malcolm Thomson: Mr McIntosh, witnesses from some of the groups with which we are concerned today suggest that your evidence on property values has little relevance to the property values of established residential areas in Edinburgh, and to the area along the Roseburn railway corridor in particular. Will you comment on that criticism?

Scott McIntosh: That is a little unfair. The areas under discussion in Croydon and Dublin represent a wide spread of types of property and value. Indeed, some of the properties in central Dublin have similar values to those in Croydon and Edinburgh. I point out to you some of the areas that have experienced the most impressive value growth in Croydon, such as those around Sandilands, where properties run in value from upwards of £200,000 to upwards of £1 million. Those areas are similar in value and social background to those along the Roseburn corridor, which range from simple flats to large family villas.

The Convener: Thank you, Mr Thomson. Mr Scrimgeour for group 34.

Graham Scrimgeour: My first question is whether you accept my rebuttal of your statement?

Scott McIntosh: No.

Graham Scrimgeour: Do you accept elements of it?

Scott McIntosh: I have difficulty with almost every paragraph of the arguments in it, although I accept those in which you tell me exactly where your house is and so on.

Graham Scrimgeour: The situation is about houses to a certain extent. Do you have a qualification in property valuation?

Scott McIntosh: No, I have 20 years' practical experience of tramways and I have owned houses adjacent to public transport corridors. I rely on reports of evidence produced by what I believe to be disinterested third parties and I have reported those in my statements.

Graham Scrimgeour: Some of the evidence in your statement comes from chartered surveyors and some is from estate agents. What is the difference between an estate agent and a chartered surveyor?

Scott McIntosh: Chartered surveyors do not normally involve themselves in the sordid world of commerce. The major function of estate agents is the sale of houses, but allied to that they have the function of attempting to give fair valuations of properties to prospective vendors and purchasers. They have an interest in giving fair and equitable evidence to independent third parties who request it.

Graham Scrimgeour: My view is that a chartered surveyor is a professionally qualified—

The Convener: Question.

Graham Scrimgeour: I will ask Mr McIntosh to agree with me. A chartered surveyor also has professional indemnity insurance and follows standards to arrive at a valuation for a property, whereas an estate agent is an employed salesman. An estate agent will give all the information that they can to try to achieve a sale, so they will not give an independent valuation; they will give the best view of a property. Is that fair?

Scott McIntosh: I dispute that. Some estate agents that I have met are chartered surveyors and some are solicitors. Yes, their interest is in ensuring that the value of properties is maintained. If, in giving evidence to independent organisations such as the South London Partnership, or the people who sought evidence on behalf of Transport for London and the Department for Transport, estate agents saw that the construction of the kind of projects that we are discussing was depressing the market for houses, it would be in their interest to make that point, and they have not.

Graham Scrimgeour: In paragraph 3.4 of your statement, you talk about changing the image of the area and achieving urban renewal as being relevant to Croydon. Is that relevant to the Roseburn wildlife corridor?

Scott McIntosh: In fact, you say in your rebuttal of that paragraph that the Craighleith, Ravelston and Dean areas

“do not need an improvement in image”.

I agree that they are some of the most attractive parts of Edinburgh. However, it is in all our interests that there is an improvement in the public perception of the quality of life in Edinburgh and a subsequent willingness of people to bring much-needed skills to our city and invest in it. The improvement in the image of the whole city will have a beneficial effect on everyone, whether they live in the poorest parts of the city or the richest.

Graham Scrimgeour: But in your statements you are using a comparison between one area and another and talking about a specific area. Do you think that that is relevant?

Scott McIntosh: Yes, I do. As I have said, there are areas of comparable economic performance and quality in Dublin and Croydon that have benefited from the introduction of a public transport system.

Graham Scrimgeour: That is not what you referred to in your statement. You referred to areas that are in need of urban renewal.

Scott McIntosh: As I said, you will benefit from the city's continuing economic success.

Graham Scrimgeour: I hope to, but I am not sure that what you said is relevant.

In the final sentence of your paragraph 3.5 you say that

“prices have risen by 4% more in wards served by the tram than those that are not, while in the other Boroughs served there has been no discernible difference.”

Scott McIntosh: No. There will be no discernible difference in areas not served.

Graham Scrimgeour: That is not what it says here.

Scott McIntosh: I also dispute your claim that there will be a relative fall in value. I have seen no evidence of that. Where there have been attempts—and if the committee wishes I will go into more detail later—to establish some guarantee of minimum value on houses, or to insulate people against a fall in value, no one has ever made a claim under that provision.

Graham Scrimgeour: That is not the question I asked. I asked about paragraph 3.5, which says

“in the other Boroughs served there has been no discernible difference.”

You are saying that there has been no impact in several areas that are served by the Croydon tram.

Scott McIntosh: It says comparable areas.

Graham Scrimgeour: No, it says:

"in the other Boroughs served there has been no discernible difference."

I am just asking you to clarify that you are saying that there are areas where the Croydon tram has had no effect on property values.

Scott McIntosh: Yes. If the property is far from the tramway, it will have a minimal effect.

Graham Scrimgeour: Our concern is that the tram could have an effect on properties that are some distance away, and a different effect on properties that are immediately adjacent to the tram. So if the tram causes noise and disruption to a street, property values might fall, while two streets away the benefits that you have described might increase property values. Do you think that that is reasonable?

Scott McIntosh: As a proposition, it is; but in 20 years I have seen no evidence of it happening.

Graham Scrimgeour: Do you have evidence that that has not happened in Croydon or Nottingham?

Scott McIntosh: Yes, I do.

Graham Scrimgeour: Have you set that evidence out in your statement?

Scott McIntosh: No, I have not. It is always difficult and unreasonable to be required to prove a negative. If you wish, we can adduce evidence to show that. As I say, the evidence is that everyone experiences a benefit; no one has experienced a disbenefit.

Graham Scrimgeour: The whole purpose of my response to your paper and of our original paper is that we are concerned about an impact. You are saying that there is evidence, but you have not presented it. I would interpret that to mean that you do not have the evidence and that you are not able to give it to us.

Scott McIntosh: No. It is inevitable that the evidence presented is a selection of the available data. I have presented the evidence that I believe to be most relevant to your paper and to the deliberations of the committee. Obviously, more evidence could be adduced if you wish, but there is a limit to the time and patience of those who have to read it.

Graham Scrimgeour: Point not proven.

Scott McIntosh: No. I am sorry. Was that a question?

Graham Scrimgeour: I asked whether you have evidence to show that properties that are immediately adjacent to the tram are not negatively affected and that those further away might be positively affected.

Scott McIntosh: I have said that in my evidence and in my experience, there are no such cases. That is not not proven; it is a dispute.

Graham Scrimgeour: But you have no information either way to present to us.

Scott McIntosh: I did not say that I have no information; I said that I did not present any.

Graham Scrimgeour: You have no information to present to us today.

Scott McIntosh: I am prepared to present evidence if you wish, but I doubt that it is relevant. I am in the hands of the convener.

The Convener: We have sufficient evidence from this debate to enable us to come to a conclusion. I have no doubt that if committee members want to probe further, they will do so, but preferably not at this stage, if that is okay.

Graham Scrimgeour: We have talked about Croydon. In paragraph 4.1 of one of your witness statements on group 34, you talk about the regeneration effects in Nottingham. Is that relevant to the area around the Roseburn corridor?

Scott McIntosh: Yes. The tramline will benefit the whole city; therefore it will have an effect on everybody's house prices.

Graham Scrimgeour: But the example that you have used considers an area that was previously in need of regeneration.

Scott McIntosh: Indeed, it was. I suggest that your area will be in need of improvements in public transport accessibility over the next 15 to 20 years; you are getting the benefits early rather than waiting until there are problems.

Graham Scrimgeour: That is probably going somewhere that we do not have time to go. In paragraph 4.1 you refer to information in the *Nottingham Evening Post*. There are no facts or surveys on property values in Nottingham to support that.

Scott McIntosh: It is difficult to see why the *Nottingham Evening Post* would invent reported speech from estate agents in the city, who presumably read the newspaper and are capable of challenging the article.

Graham Scrimgeour: But it is not independent research.

Scott McIntosh: I suggest that journalism is independent.

Graham Scrimgeour: The research was by a journalist, rather than a surveyor.

The Convener: Mr Scrimgeour, the committee can assess the relative weight of pieces of evidence.

Graham Scrimgeour: In relation to Dublin, I have challenged some of the mathematical assessments you made in your statement. Do you accept my challenge?

Scott McIntosh: We are playing with numbers here, are we not, Mr Scrimgeour? Let us be honest: the evidence from South County Dublin suggests that house prices in areas without a tram have increased by 55 per cent, while values of properties that are served by the tram have increased by 70 per cent. That gives us a difference of 15 per cent. It depends which way we interpret the figures; an alternative reading of the figures could result in a difference of 9.7 per cent. The way in which the figures are presented in the article is fair and transparent. Whether you dispute that the result is 15 per cent or just short of 10 per cent, it is still a significant increase.

Graham Scrimgeour: But the figures that I have calculated are lower than yours.

Scott McIntosh: The figures that you have calculated are not my figures.

Graham Scrimgeour: But they are lower than yours.

Scott McIntosh: Indeed, they are. Possibly there is an interest in presenting a lower figure.

Graham Scrimgeour: Or, in your case, an interest in presenting a higher one.

The Convener: I think that we have got the point, gentlemen.

Graham Scrimgeour: Is there any information from Dublin on the relative impact on properties immediately adjacent to the tramline and on those further away?

Scott McIntosh: Some properties that are very close to the tramline are reported in the article. I would be the first to accept that it is still too early for a detailed assessment to have been carried out. What I can say is that evidence from elsewhere, including from Croydon, is that properties close to the tramline experience benefits and that, as one would expect, the range of those benefits tends to diminish the further away you go.

Graham Scrimgeour: Because of the topography of the Roseburn corridor, while many of the properties would be immediately adjacent to the tramline, someone might have to walk 800 metres to get to a tram stop. What do you expect would be the impact on value of being some distance from a stop, but adjacent to the tram? Such properties would not have the benefits but they would have the impact.

Scott McIntosh: We are talking about small percentage variations within the general value of the area.

Graham Scrimgeour: You said that you doubt that there would be a fall in value. Later on this afternoon, if we get to it, Mr Rintoul will speak on compensation. In his statement he disputes the level of fall in value, but does not dispute the principle that a fall in value may occur. Do you accept his comments?

Scott McIntosh: I cannot comment on Mr Rintoul's statement. You would have to ask him that question.

Graham Scrimgeour: You both give evidence on the same subject. I wonder why your views appear to be different.

Scott McIntosh: You will find that Mr Rintoul is talking about whether the compensation code would apply if there were such falls in property value. I am saying that, in my experience, I have never seen such a fall in property value.

Graham Scrimgeour: If we wish to ask questions about the Land Compensation (Scotland) Act 1963 and the Land Compensation (Scotland) Act 1973, should they be addressed to you or to Mr Rintoul?

Scott McIntosh: They should be addressed to Mr Rintoul.

12:15

Graham Scrimgeour: Having considered the issues, do you accept the amendments that we have proposed to provide compensation for a relative fall in value? If a person can at present move from property A to property B at the same price, and if the tram scheme reduced the value of A relative to B so that the person could no longer make that move, would it not be reasonable for the scheme to compensate them so that they could still move from A to B?

Scott McIntosh: The evidence that you will have from Mr Rintoul will explain the appropriate mechanisms for people to apply for compensation if they feel that they have suffered from that sort of problem. The same applies to blight, if we are talking about the ability to sell property during the construction period. It would not be appropriate for the bill to set out a procedure that set aside the established public law of the country on compensation.

Graham Scrimgeour: The bill will give the power to do what is necessary to enable the tramline to be built.

Scott McIntosh: Indeed, it will. I would not seek to direct the committee's decision, but I believe that it is not in the public interest to include such a provision—that is my opinion.

Graham Scrimgeour: I have no more questions.

The Convener: We now turn to Mr Cuthbert, for group 35.

Alex Cuthbert: Mr McIntosh, you are an expert in tramways. My understanding is that a tramway is a light railway. Is that correct?

Scott McIntosh: Yes. A tramway is defined as a railway system that has a significant element of its operation within the public highway. It is a form of light railway.

Alex Cuthbert: Obviously, there are other forms. Would it surprise you to learn that I am in principle in favour of tramways, where appropriate?

The Convener: Is this relevant, Mr Cuthbert? I will be firm in keeping people to their rebuttal statements.

Alex Cuthbert: The issue was in my original objection.

The Convener: You are questioning on your rebuttal statement.

Alex Cuthbert: Certainly, convener.

Mr McIntosh, is it correct that you are currently employed by Mott MacDonald?

Scott McIntosh: Yes.

Alex Cuthbert: Would you be good enough to let us know how long you have been employed with Mott MacDonald?

The Convener: Mr Cuthbert, I understand the point that you are attempting to make, but let me give you some guidance. The committee appreciates brevity, so you should make the point and not lead us into it through a series of questions. We have the papers, including detailed information on Mr McIntosh and his professional qualifications, and we will consider everything that is presented in that context. We want to know about the outstanding issues that are in dispute between you and Mr McIntosh.

Alex Cuthbert: I do not intend to trawl through Mr McIntosh's statement, but I have taken one or two examples from it. Page 3 states:

"The new tram has seen prices increase by about 10%".

Is that a valid statement? I ask because it seems to be incomplete. It is a bit like saying that a car travels at 50 miles. Unless we define the period of time, the statement is without meaning and ill defined.

Scott McIntosh: That was a shorthand statement. I refer you to the evidence that we adduced from the Croydon research and to the Dublin evidence. Mr Scrimgeour's figures show that the lowest increase in the period referred to is 9.7 per cent. Therefore, the statement that average prices have gone up by about 10 per cent is fair.

Alex Cuthbert: I return to the example of a vehicle travelling at 50 miles. Surely we would have to know whether that is 50 miles an hour, a month, a year or whatever.

Scott McIntosh: I refer you to the evidence of the South London Partnership on the period before the opening of the tramway and the period after it. The Dublin evidence covers the current period. The system has been open for only a year, so the figures refer to the period since the tramway opened. I hope that I have made that clear; I apologise if I have not.

Alex Cuthbert: So it is since the tramway opened and not from the start of construction.

Scott McIntosh: The South London Partnership has adduced evidence, as you will see in my report, that house prices started to rise during the construction period. People look to the future and see that the value of a house will increase and so it is worth buying now.

Alex Cuthbert: I am still puzzled. Is it 10 per cent a month, in six months or in a year? That is all that I am asking.

Scott McIntosh: The examples from Dublin refer to the year since the system opened. The examples from south London refer to the period from the opening of the tramway. I believe that that is made clear in the evidence.

Alex Cuthbert: So it is over a range of periods.

Scott McIntosh: Yes.

Alex Cuthbert: You mentioned Ingletons of Mitcham in your statement. Do you have any knowledge of them?

Scott McIntosh: I know that they are reputable estate agents in that part of London.

Alex Cuthbert: We have been unable to find a firm called Ingletons. However, we have found a firm called Singletons. Four telephone calls have failed to bring a response, apart from a telephone answering machine. Does that surprise you?

Scott McIntosh: It disappoints me; whether it surprises me, I do not know.

Alex Cuthbert: That is just one name that we picked out.

Scott McIntosh: I am not quite sure of the point that you are attempting to make.

Alex Cuthbert: I am supposed to be asking the questions, convener.

The Convener: Indeed, go ahead.

Alex Cuthbert: The point is that Ingletons was just one name that I picked. It has to do with the credibility of some of the information in the statement.

I do not intend to trawl through the statement in any detail. I picked two names, and this is the one that I wish to highlight. In response to four telephone calls, we got an answering machine with a recorded message from someone called Rita. Mr McIntosh is asking us to accept that as support for his case.

Scott McIntosh: No; I am asking you to accept the evidence that has been adduced by reputable bodies, including Transport for London, the Department for Transport and the South London Partnership. Obviously, one has to rely on what those bodies provide, but it is not in their interests to adduce evidence that is based on a fabrication.

Alex Cuthbert: You have not even got the name of the company correct. That is the point.

I wish to move on.

The Convener: Fine, Mr Cuthbert; do so.

Alex Cuthbert: Mr McIntosh, your submission states:

"Marginal businesses dislodged by construction are replaced with dynamic enterprises."

Would you please be good enough to explain how that statement relates to the Roseburn corridor?

Scott McIntosh: It does not relate to the Roseburn corridor, as there are few businesses there. It is an example of the improvement in economic activity that, we contend, results from the introduction of an improved public transport system.

Alex Cuthbert: Therefore, it does not relate directly to the Roseburn corridor.

Scott McIntosh: There are several businesses in the corridor, but I accept that it does not relate directly to where you live. I do not believe that there are many businesses in your area.

Alex Cuthbert: So it is irrelevant to the Roseburn corridor. Is that correct?

Scott McIntosh: I am in difficulty here, because the objectors seem to imagine that they live in a bubble, entirely divorced from the life of the rest of the city. I believe that there would be benefits to the city from the introduction of this major public work and that it would have a beneficial effect on the objectors in many ways.

Alex Cuthbert: One of my other questions would simply be a duplication of one that I now realise has been addressed, so I shall bypass it.

The Convener: Okay.

Alex Cuthbert: Mr McIntosh said that Nottingham estate agents have been using proximity to the tramline there as a selling point. I do not doubt that that might be beneficial for some and perhaps even most properties, but is it not

true that estate agents will use anything and everything to sell properties—after all, that is their business—and that they would hardly highlight the downside for properties, for example for properties that are immediately adjacent to the line?

Scott McIntosh: With respect, that is the point that I am making. They see proximity to the tramline as a benefit. If they did not see it as a benefit, they might indeed keep quiet about it. However, they see it as a benefit, so they are using it. I believe that the same thing would apply in Edinburgh.

Alex Cuthbert: I thought that I had made clear my question. I was questioning not the benefit for many properties but the benefit for properties that are immediately adjacent to the line, which would be affected by noise. The question, as I recall it, was: is it not true that estate agents will find it convenient to omit the downside for some properties, albeit a small minority?

Scott McIntosh: In which case they would not apply blanket coverage of the issue to all properties in the area, would they? They would not mention it if they thought it had a deleterious effect on certain properties.

Alex Cuthbert: So they would not mention it. They would be selective, would they not?

Scott McIntosh: But the evidence is that they are not applying it selectively; they are applying it to all properties within walking distance of the stations.

Alex Cuthbert: Perhaps you have dealt with different estate agents from the ones that I have dealt with. That was the question.

You tell us that you are an expert on light railways and that you have been dealing with them for more than 20 years.

Scott McIntosh: Yes.

Alex Cuthbert: That has been in different countries. Is that correct?

Scott McIntosh: Yes.

Alex Cuthbert: Over those approximately 20 years, how many of the systems with which you have been involved have been other than steel on steel—steel wheels on steel rails?

Scott McIntosh: I have been involved in a number of busway schemes—

Alex Cuthbert: I was thinking of tramways.

Scott McIntosh: There are no rubber-tyred tramway systems in the world. There are guided bus systems of different sorts of technology. I have been involved in the development of a number of proposals for those and in the delivery of one of them, which was an electronically guided bus system in London.

Alex Cuthbert: So, in essence, the answer to the question is none. Is that correct?

Scott McIntosh: As I have just said, I do not believe that the creature to which you are referring exists.

The Convener: Can I check where this is in the rebuttal statement, Mr Cuthbert, which is of course what we should be focusing on?

Alex Cuthbert: It would take me more time than you would be likely to give me.

The Convener: We have checked and we cannot find it. I am giving you gentle encouragement to move on to something that is in the rebuttal statement.

Alex Cuthbert: I wonder whether I might ask one simple question.

The Convener: Absolutely.

Alex Cuthbert: Have you heard of Cannes and Nancy in France, Mr McIntosh?

Scott McIntosh: Indeed I have.

Alex Cuthbert: I add Paris: large sections of the Paris metro are rubber on—

12:30

Scott McIntosh: Yes. You asked me about tramways. Of course I have heard of the systems in Cannes and Nancy. Anyone in my profession not only would have heard of them but would have visited them. As you are aware, the system in Nancy is a guided bus—it is a trolleybus that is capable of being driven by electrical or diesel power. A guide rail is used for part of the system. The system in Cannes uses precisely the same technology and all of it is guided. As well as being aware of those systems, I am aware of the evidence on them and the tests that have been carried out by the Paris public transport authority, although I am not quite sure of the relevance of that.

The Convener: I will stop you there because we have a sufficiency of information on such matters. We are dealing with property values. We have double-checked that the issue that is being raised is not anywhere in the rebuttal statement. You need to move on, Mr Cuthbert.

Alex Cuthbert: If I stray, I risk arousing your wrath, but I will risk that, if I may.

The Convener: You can live dangerously if you wish.

Alex Cuthbert: My subject is the effect that noise will have on property values and my question relates to package deals. Is it correct to say that we are talking about a light railway or tram system that, by and large, is predetermined

within certain parameters? The other parameters—those that are on the periphery—are being argued out but, in effect, it is a package system. In other words, the whole package will be bought by TIE, in which City of Edinburgh Council has an interest.

Scott McIntosh: Indeed. The system will use a well-understood, well-precedented technology. If certain technological aspects had not been fixed at an earlier stage, we could not have said with certainty whether the tram would be likely to fit within the limits of deviation that are specified in the bill and the environmental impact statement could not have made the adjudications that it has made. We would be in an extremely difficult position if we were seeking to build a public transport system without having defined what technology was to be used.

Alex Cuthbert: My next question relates to property values, too. Approximately how often has your company—or previous companies that you have worked for—been involved in laying resilient rails? Perhaps I should say resilient track, as I understand that resilient rail is not quite the correct terminology. The track is resilient in the sense that an amount of absorption is built in.

Scott McIntosh: With the exception of the first sections of the docklands light railway, which was opened in 1985, every system with which I have been involved has used resilient track mounting in the street and some form of resilient track mounting in sections of alignment that have not been in the street.

Alex Cuthbert: Is it possible to give us a rough approximation of the percentage?

Scott McIntosh: If you are asking what percentage of the systems on which I have worked have been fitted with resilient track, as I said, every system that I have been involved in has had all the track in the street laid in resilient material. On the other sections, different forms of resilient mounting have been adopted in different areas, when it has been thought that to do so would produce a benefit.

Alex Cuthbert: Who decides whether a benefit would be produced?

Scott McIntosh: That always comes out in the environmental impact assessment.

Alex Cuthbert: That relates back to noise, which has an impact on property values. That completes my questioning.

The Convener: Thank you, Mr Cuthbert. Do committee members have any questions?

Phil Gallie: Mr McIntosh said that no one has ever felt a negative impact from the construction of a tramline, but he then corrected that by stating

that, in his experience, no one has ever felt such an impact. As a committee member who is required to take an overall view of the bill, I would tend to accept that, with any tram scheme, there will be winners and losers. On that basis, it seems strange to me that although the changes to good environmental surroundings will be disruptive to households, they will have no impact on house sales. Even if such changes did not have a major impact, at the very least the loss of attractiveness could make the difference to an individual's choice such that they choose to purchase one house rather than another. Is that not the case?

Scott McIntosh: I crave the committee's indulgence if I become slightly anecdotal.

Because people concentrate—as they are quite right to do—on matters such as noise and loss of visual amenity, there is a danger that we end up believing that those impacts will be very large. In fact, the noise impacts of most tram systems over most of their route are very small indeed.

I recall that some people in Croydon were afraid that having a tramway in close proximity to their house would have an effect on their property's value. In one area, we had to construct in front of people's houses not only a tramway but a viaduct so that the tramway could deal with the inclined plane. For some of those people, the tramway was built opposite their front doors on the other side of a 6m-wide road; for others, it went past their bedroom windows. In that instance, the local council agreed that, if local residents who had had their house valued before works began could prove within three years of the tramway's opening that their property had lost value, they would receive compensation from the council. Not a single claim was made.

In other cases, people have been worried about the possible loss of views, through the loss of trees for example, due to the reuse of a railway line. Such issues have arisen in areas varying from some that contain relatively small one and two-bedroom flats to areas with large houses that were being sold for in the region of £500,000 to £600,000 even in the early 1980s. Not one of those owners was able to sustain a claim for loss of value.

Although we recognise that such issues are material, there is perhaps a danger of people not recognising that they have seldom been of sufficient size and impact to have had an impact on property values.

At the risk of stretching the committee's patience a little bit further, I point out that the last house that I sold in Croydon was within 40m of not only a tramline but a tram stop. The existence of the tramline certainly had no effect on the number of people who were willing to see the house or who

wanted to make me an offer to buy what was a three-bedroom family house.

Phil Gallie: As you have used a personal situation to justify your comment, let me ask a further question. Did that house previously border a road of flowing traffic? Alternatively, did it border a lane like the Roseburn corridor, which is to some extent a nature reserve in the heart of the city?

Scott McIntosh: The house was in a cul-de-sac on a private road. No through traffic previously passed in front of the house. The tram was built facing the side of the house, so any noise impact would have been felt on both the front and back of the house. It was a 1960s house and its windows were formed of continuous panels of glass on all three floors.

Phil Gallie: Finally, I want to pick up on one other aspect. Earlier, we heard that construction will take something like two years. In your experience, was there a slowdown in the sale of surrounding houses during the construction period? Such a slowdown could have a serious impact on individuals, especially if they purchased another property but failed in the short term to sell their first property.

Scott McIntosh: The relevant answer is that there was perhaps some evidence of a slowdown in the sale of properties before the works commenced. People are naturally fearful of something that they do not know. There is always a fear that the works will be more intrusive than was first thought and that huge problems will result.

I bought while construction was going on and the evidence was that, once people saw the scale of the work in the street and realised that, while it was not the most fun-filled activity they had ever seen in their lives, it was not anywhere near as unpleasant, noisy or disturbing as they may have feared, the problem ceased. Again, the evidence from the South London Partnership and the TFL and Department for Transport report showed that house prices picked up during the construction period. The problem in all such schemes is a justifiable fear of the unknown. What I am attempting to demonstrate to you is that that fear is unfounded in the overwhelming majority of cases.

Phil Gallie: Thank you for that.

The Convener: There are no further questions from members. Mr Thomson, do you have any follow-up questions for Mr McIntosh?

Malcolm Thomson: I have just one.

Mr McIntosh, you said in reply to a question from Mr Scrimgeour that you thought that, in 15 to 20 years, the area of housing in proximity to the Roseburn corridor would be likely to be in need of

public transport improvements. I wonder whether you can sketch out for the committee the events that you envisage would bring about that state of affairs in that timescale.

Scott McIntosh: I will have to be careful that I do not induce fear in the hearts of people here. However, it is my belief, having come back to Edinburgh after being away for a very long time, that traffic conditions in Edinburgh are not as unpleasant and difficult as they are in many economically successful cities in England and that traffic here flows, if not perfectly, rather better than it does, in my experience, in cities such as Leeds, Manchester, Birmingham and London. However, the scale of likely development in Edinburgh over the next few years and the housing demand that is likely to result from our city's success in attracting inward development will mean that if a high-quality public transport system is not in place as people move into their houses, they will tend to use the motor car for commuting.

Evidence from, and my experience of, other places is that if public transport is available early, people will use it; but if they have established the pattern of using the private motor car, it is much more difficult to get them to shift. I do not want to be a doom-monger, but I think that the danger is that much of Edinburgh will experience traffic conditions over the next few years approaching those found in, for example, London or Dublin and other busy cities in England and Wales. The early provision of a high-quality public transport system in Edinburgh, part of which is the tram system, will have a very beneficial effect over the next few years. Without it, traffic congestion will continue to grow. I am sure that there will be huge resistance—rightly—to road widening and road improvements in Edinburgh. We will move from attempting to get a quart into a pint pot to attempting to get a gallon into the pot. Therefore, I believe that there are benefits in the early provision of good-quality infrastructure and that the tram is part of that.

Malcolm Thomson: In your view, would the adverse effects of congestion over time strike at Craighleith, Ravelston and Murrayfield?

Scott McIntosh: Indeed they will. In the absence of the provision of helicopters, people living along the waterfront who want to get to either the city centre or Edinburgh Park in South Gyle will travel through the areas to which you referred twice every day. That is a huge potential problem.

Malcolm Thomson: Thank you, Mr McIntosh.

The Convener: Thank you, Mr Thomson. It is now quarter to one and I propose that we have a one-hour lunch break. We will resume at one forty-five with further evidence from Mr McIntosh, which will be on emergency vehicles.

12:44

Meeting suspended.

13:51

On resuming—

The Convener: We resume with Mr McIntosh addressing the issue of emergency vehicles in relation to groups 33 to 36 and 43.

Malcolm Thomson: Mr McIntosh, in the event of a tramway being constructed along the Roseburn corridor, what provisions are proposed to enable emergency vehicles to use the corridor?

Scott McIntosh: The current proposal is that the walkway and cycleway will be 3m wide over the majority of its length and, therefore, of a width that will accommodate ambulances and police vehicles. The detailed design will come up with the solution for how those vehicles will be able to pass through all the bridges, or it will determine that, rather than a continuous access, there will be a series of cul-de-sacs along the length of the alignment.

Malcolm Thomson: Thank you, Mr McIntosh.

The Convener: Thank you. Mr Scrimgeour will ask questions for group 34.

Graham Scrimgeour: I am just processing what has just been said. I have some fairly simple questions. Will it be possible for a police car, ambulance, maintenance vehicle or fire engine to make its way from one end of the corridor to the other?

Scott McIntosh: As I say, it will depend on the detailed design of the way through the bridge holes, in particular, which is a matter for detailed design at a later stage. Whether vehicles will be able to drive from one end of the corridor to the other or whether they will be able to access it and drive up and down it along different sections is a question that will be developed in consultation with the emergency services as part of the detailed design.

Graham Scrimgeour: Will there be space on the walkway and cycleway for two such vehicles to pass each other?

Scott McIntosh: No, there will not. There is not at the moment, without one vehicle driving off the hard paving. There will have to be some control. All emergency vehicles are now in radio contact with one another and with their central control. In future, they will also be expected to be in contact with the control of the tramway. It will require some control and management, but that will be covered by radio control.

Graham Scrimgeour: In your rebuttal to me, on emergency vehicles, you state at paragraph 3.1

that emergency vehicle access “will be improved”. How will it be improved from what it is currently?

Scott McIntosh: In the design of the new access points, consideration will be given to ensuring that they are suitable for emergency vehicles. That will make the corridor more accessible. Also, the whole of the paving along the walkway will be of a uniformly high standard.

Graham Scrimgeour: The latest design that we have in any detail is in the landscape and habitat management plan. I have looked at the drawings that form part of that and I cannot see that it would be possible for any of those vehicles to negotiate any of the newly created accesses, as there are switchbacks, turns, and so on.

Scott McIntosh: I understand that the promoter is willing to give an undertaking that all sections of the walkway will have at least one high-quality access point for emergency vehicles and that there will be sufficient access to meet the requirements of the emergency services.

Graham Scrimgeour: One amendment that we proposed was to include a requirement to maintain emergency access. Do you agree that such an amendment appears to be required?

Scott McIntosh: No, because issues such as the design of the system have already been the subject of general discussions with a number of bodies that represent the emergency services and, obviously, Her Majesty’s railway inspectorate will look at safety and access. Those bodies are particularly concerned with such issues and will take due cognisance of what is proposed and advise whether that is sufficient and acceptable.

Graham Scrimgeour: Why should such a requirement not be in the bill?

Scott McIntosh: I return to what we said this morning. Adequate mechanisms are already in place. We should not overburden the Parliament by adding additional requirements that are already adequately dealt with in other places.

Graham Scrimgeour: That is obviously a matter for the committee.

My final detailed questions are on paragraph 3.2 of your rebuttal to me, which states that a tram can provide emergency assistance. Compared with the emergency assistance that an ambulance or fire engine can provide, what form of emergency assistance can a tram provide?

Scott McIntosh: From our experience of other systems—particularly those in which there are no large walkways that are suitable for vehicular access—it is clear that the most efficient way of evacuating passengers and bringing emergency services equipment on to sites is to load the passengers or equipment on to a tram. Similarly,

taking passengers off a disabled tram, putting them on to a rescue tram and taking them away will get them directly into the corridor and provide the advantage that they can get away to wherever they need to go without being trapped in traffic congestion. Such evacuation procedures have been practised on a number of tramways with considerable success.

Graham Scrimgeour: Would it be quicker to provide medical assistance using a tram or an ambulance?

Scott McIntosh: That depends on what the paramedics or emergency medical services decide at the incident. However, from our experience at places where passengers have had heart attacks, for example, it appears that one of the quickest methods of providing assistance is to put people on a tram and run it non-stop to wherever the incident has taken place. That procedure has been practised on a number of occasions.

Graham Scrimgeour: Once the tram reaches the end of the corridor, it will be back in traffic and will not have priority over other traffic in the same way that an ambulance has.

Scott McIntosh: Trams do have priority over traffic.

Graham Scrimgeour: One cannot put a blue light on a tram and run it round stationary traffic as one could an ambulance.

Scott McIntosh: Indeed, but there could then be a transfer to an ambulance, or a clear path could be found for the tram to get to wherever it needs to go, particularly if there was police car cover. I have seen a police car ensuring that the road ahead of a tram is clear. Admittedly, that happened during an exercise, but the procedure worked extremely well. Of course, trams have signal priority and signals can be interrupted to provide priority for trams.

Graham Scrimgeour: I will stop that line of questioning, as we do not agree.

We have talked about the detailed design that is necessary to determine whether it is possible to obtain emergency access right through to an incident. The Telford Road bridge appears to be a key issue. The walkway is to be reduced to something like 2.5m wide, which is approximately the width of a heavy goods vehicle or a fire engine. Would the width of the tramway have to be reduced in such circumstances, perhaps by making the route one way at a time?

Scott McIntosh: No. Obviously, the option is to pave the section of tramway that goes through the bridge and treat it in the same way that a section of paved track in the street would be treated by allowing emergency vehicles to drive on it. Of course, the tram track would be nearly 7m wide,

so there would be plenty of elbow room for emergency vehicles to drive on it for that short distance.

Graham Scrimgeour: Okay. That concludes my questions.

The Convener: Thank you. I invite Mr Vanhagen to ask questions.

14:00

Richard Vanhagen: I have two questions on access for emergency vehicles—first, to the Roseburn corridor and, secondly, to Garscube Terrace Lane.

Mr McIntosh, you state that the development of emergency service access plans

“will require the full cooperation of the Emergency Services and it is unlikely that they could devote a significant resource to such strategic planning until they are assured that the promoter has the powers to build the scheme.”

Why not? Is the issue not serious enough for the emergency services to be consulted before the scheme is given the go-ahead? Is it not possible that the emergency services might dictate that the corridor is unsuitable?

Scott McIntosh: We should be clear that the police have been consulted on the scheme on a number of occasions. There is significant pressure on the time of the emergency services and our experience from elsewhere is that they say, “Once we know that the scheme is going ahead and you are in the detailed design stage, we would like to work with you to devise the most effective method of developing plans.” That seems to me to be fair and sensible.

We are not saying that there will be no commitment to the provision of suitable and acceptable emergency access for any eventuality that could reasonably be expected in the corridor, however that access is achieved. A safe operating plan for the tramway has to be approved by HM railway inspectorate before permission is granted to operate the tramway in public service and that plan will have extensive sections that refer to emergency evacuation from the tramway and, in the case of the corridor, from the footway alongside it. The appropriate time to do the work is during the detailed design stage, when the emergency services can be assured that the scheme is not abortive. That does not mean that the promoter is not prepared to devote a significant amount of time and effort to the matter. It is a requirement that a satisfactory solution is achieved before the tramway can be put into passenger service.

Richard Vanhagen: Is that not putting the cart before the horse? Surely the safety of the public is as serious a matter as other considerations.

Scott McIntosh: Indeed it is, but I would not disagree with the view of the emergency services, which is that they have a lot of calls on their time and that they should devote their time to the scheme only when we know that it is going to happen. It is for the committee to decide whether and in what shape the scheme should happen. The appropriate time to ensure that we have a safe design is after the committee has done so and before we start building, commissioning and seeking to operate the scheme.

Richard Vanhagen: We have two separate papers on emergency vehicles and access to the garages in Garscube Terrace Lane, which is behind Garscube Terrace. Are you familiar with Garscube Terrace Lane?

Scott McIntosh: I have not walked Garscube Terrace Lane in the past two years.

Richard Vanhagen: Have you sent someone down to inspect it, in view of the objections that we have raised?

Scott McIntosh: Indeed. We have sent people down there on a number of occasions.

Richard Vanhagen: Have you looked at a street plan and examined the questions that people are asking about the restrictions on the lane?

Scott McIntosh: Yes.

Richard Vanhagen: The committee walked part of the lane during its visit, so it knows the lie of the land. I have produced a rough sketch to try to clarify the position that residents of Garscube Terrace are in. I hope that you have a copy of the sketch.

Scott McIntosh: I do.

Richard Vanhagen: Garscube Terrace comprises three-storey Victorian terraced villas. There are 28 houses, with large gardens and garages at the rear. There is access at the north and south to the narrow lane at the back. On the sketch, the cutting and the embankment are on the right. The south access is the main entrance to St George's school and provides access to St George's bridge. I believe that that is why the promoter was intent on compulsorily purchasing a plot of land at the south end of the lane. Of course, there are about 50 or 60 garages in that lane. You are suggesting some action that could be taken to alleviate the problem that people face.

The Convener: Are you coming to your question, Mr Vanhagen?

Richard Vanhagen: Yes; I was giving the background to the sketch. Am I right in thinking that you are no longer intent on compulsorily purchasing land adjoining Garscube Terrace Lane?

Scott McIntosh: This question should probably be directed to my colleague Gary Turner. However, I can say that the promoter is prepared to give an undertaking that the land identified will not be permanently acquired.

Richard Vanhagen: We would like to accept that position. I am addressing myself to both gentlemen who are at the table. I will ask my next question and you can decide who will answer.

We accept that you are not proceeding with that purchase but—

The Convener: It is for the committee to accept such matters. I look forward to receiving that undertaking in writing from the promoter.

Richard Vanhagen: Am I right in thinking that the works that will be carried out on St George's bridge are the only reason for the use of the plot of land?

Scott McIntosh: It is my understanding that the plot is indicated because it might be necessary to carry out work on St George's bridge. If any work were carried out on the bridge, we would want to ensure that it blended in with the existing paving and so on.

Richard Vanhagen: Until recently, we did not know that. We are glad that we now have clarity about the reason why that piece of ground is required.

Would you agree that my sketch shows that an equivalent diversion access would be impossible because of the embankment and cutting on the east side of that lane? Do you agree that, having deposited building materials there, you could not provide a diversion that would be comparable with the existing lane width and that, therefore, the people who use those garages would be unable to gain access to them and emergency and large vehicles could not enter the area?

Scott McIntosh: Given what I have just said, I do not think that there is any suggestion that materials will be dumped in the area. There might be some requirement for surfacing, and that might require some limitation for temporary periods. There is an undertaking in the code of construction practice that emergency vehicle access will be maintained. To illustrate that point, I will give an extreme example. If the lane were being resurfaced, we would like to prevent residents from driving across it for a period of hours until the surfacing had set. However, if one of the houses in Garscube Terrace burst into flames, the requirement to prevent damage to the surfacing would be secondary to the requirement to get emergency vehicles to the house to put out the fire. I think that the same thing would apply in the case of the garage. In all such situations, all bets are off in an emergency. We would not want to do

anything that would permanently hinder access for emergency vehicles.

Richard Vanhagen: Are you saying that you are not going to deposit building materials at the end of the lane? That would pose a safety and access risk because you would be unable to move them in a short space of time. That is one of the concerns that we have. Obviously, there is not—

The Convener: Question, Mr Vanhagen.

Richard Vanhagen: I am asking a question.

The Convener: It did not sound like one.

Richard Vanhagen: Mr McIntosh, are you aware that, when there was a garage fire in the lane at a point within the past five years, a fire engine was unable to gain access from the north because the lane can take only cars? The firefighters did not realise that, which meant that there was a delay; they had to go around and come in the south end. The fire engine could only drive up the lane—

The Convener: Mr McIntosh is not responsible for what happened five years ago. The issue is not in the rebuttal statement, so considerable latitude is being given. I ask you to come to the point.

Richard Vanhagen: Okay. What I am trying to get at is the importance of the southern access to the lane. In the case of a recent fire in Abinger Gardens, which is close by—

The Convener: Again, Mr Vanhagen, I am trying to give you latitude. If you can get to the point that you are trying to make and put it to Mr McIntosh as a question, we will get his response.

Richard Vanhagen: I am trying to show that there is a precedent in that fires have occurred and fire engines have not been able to get in. I suggest that a grass verge on the side of the main school entrance could be used. It would not be necessary to go anywhere near the lane entrance at all, but that could be allowed for people to get access to their garages and for any vehicle that goes up and down there regularly. The grass verge would be able to take some of the materials and equipment that you talk about. That would solve the problem and we would not have all this debate about costs, compensation and so on.

Scott McIntosh: I am obliged to you for the information, but I refer you back to section 5.11 of the code of construction practice, which states:

"Routes for emergency service vehicles and personnel to gain access to work sites, the construction corridor and neighbouring sites along the route shall be agreed with the emergency services and The City of Edinburgh Council prior to the start of construction."

If you will forgive the pun, I am sure that the problems that were experienced last time are burned on the memory of the operational officers

of the fire brigade. I am sure that that will be a material consideration. It is not the wish of the promoter to reduce the safety of the area by permanently obstructing the lane. Works will be carried out on the bridge, if necessary—we do not yet know the scale of the works—and will then consist only of additional works that are necessary to ensure a smooth and safe transition from new works to old. It is not the intention to acquire the piece of land and use it as a dumping ground for plant, machinery or equipment.

Richard Vanhagen: I think that that would be fine. Obviously, we are concerned in the sense that you have stated that the emergency services would not really be involved in the strategic planning stage—

The Convener: Ask a question please, Mr Vanhagen. You will have the opportunity to give evidence as a witness and you can talk ad nauseam then.

Richard Vanhagen: I will leave it there. Thank you very much.

The Convener: Superb. I invite questions from committee members.

Phil Gallie: Given the persuasive, innovative and reassuring response that he gave to Mr Scrimgeour on the use of trams as emergency vehicles, does Mr McIntosh agree that that adds weight to the importance of having direct access to the Western general hospital?

Scott McIntosh: I am obliged to you, Mr Gallie. Perhaps I can quote the first part of your question in my next curriculum vitae, but you will not catch me that easily.

No, I do not agree. I believe that access and evacuation along the corridor are very important. As we have said before, the corridor is reasonably close to the Western general hospital. Just as there is a commitment from the promoter to provide a feeder bus from the northern end of the corridor to the hospital, I suggest that anybody who was evacuated by tram would be transferred to a waiting ambulance—no doubt standing on the platform at the stop at Crewe Toll—and taken directly to the hospital. That would be a lot better than taking them for a long wander round the residential streets of north Edinburgh.

Phil Gallie: We note your comments.

Rob Gibson: I was interested to discover that you sent people to look at Garscube Terrace Lane. Will scaffie wagons—or what you might call dust carts—be able to get along that street? Indeed, do they need to? I do not know whether people put their bins out at the front of their houses. We have already mentioned emergency vehicles such as fire engines, which must be about the same size. Perhaps Mr McIntosh will

confirm whether dust carts can get along that street.

14:15

Scott McIntosh: I am afraid that I do not know whether they can or cannot. I am sorry to sound boring, but all I can do is refer members to paragraphs 5.1 to 5.11 of the code of construction practice, which make it clear that diversions and blockings-up will be agreed with the City of Edinburgh Council. I am sure that the representatives of whatever the cleansing department is called this month will want to ensure that access for their vehicles is maintained.

The Convener: For the benefit of some of my colleagues, I should point out that there is no accident and emergency service at the Western general hospital and that the scenario that you have painted is irrelevant.

Scott McIntosh: I bow to your superior expertise on the matter, convener.

The Convener: Excellent.

Phil Gallie: Shameful!

The Convener: If members have no more sensible questions, I ask Mr Thomson whether he has any follow-up questions for Mr McIntosh.

Malcolm Thomson: No, convener.

The Convener: We will now move on to address the issue of health and safety effects on infrastructure in relation to groups 33 to 36 and 43. I ask Ms Woolnough and Mr Hallam to join us at the table.

Malcolm Thomson: Certain of the group 34 objectors raise various health and safety issues that are not covered in your written evidence. Will you comment on those matters?

Scott McIntosh: Indeed. It is probably my fault—I did not think that such remote issues would be raised. I am certainly happy to deal with them as and when they are raised, if that would be most convenient.

Malcolm Thomson: It is not that you are trying to hide from them.

Scott McIntosh: Indeed not. I am trying to save the committee time.

Malcolm Thomson: Thank you, Mr McIntosh.

The Convener: Thank you, Mr Thomson. I ask Kristina Woolnough to question Mr McIntosh for group 34.

Kristina Woolnough: If I might just cheekily put on record the fact that the accident and emergency department is still—

The Convener: No, you cannot put that on the record. Please address your question to Mr McIntosh.

Kristina Woolnough: Mr McIntosh, I wonder whether you are aware that the accident and emergency department is still being lobbied for by local—

The Convener: I must stop you, Ms Woolnough. This section of questioning is on health and safety effects on the infrastructure, not the Western general hospital.

Kristina Woolnough: I politely but seriously request that I can ask Mr McIntosh to retract his statement that objectors live in a bubble.

The Convener: The committee will look at all the written and oral evidence. Not to put it too delicately, I believe that there has been some needling on both sides, all of which we will ignore. Is that helpful?

Kristina Woolnough: That is very helpful.

I am unsure what to do about questions that objectors had raised but which Mr McIntosh—as he has just said—did not address in his rebuttals. Shall I carry on and ask them?

The Convener: There would be a point in putting the generality of the concerns to Mr McIntosh and seeing where we get to. If he helps, we might not need to go into detail.

Kristina Woolnough: Mr McIntosh, our objectors have concerns about trees or branches falling, carnage that is out of control, water escape, smoke and exhaust pollution, chemical contamination, vibration damage, light pollution, glare, disturbance of vermin and landslips during construction. What plans are in place to deal with those issues? I know that you have said that they will be dealt with later. How will they be dealt with later? How will local people gain comfort?

Scott McIntosh: I refer you to the evidence that I gave this morning in my cross-examination by Mr Clarke. He gave us the benefit of an extremely long, not to say exhaustive, list of possible incidents. As I said, we all recognise that such events are possible but not probable or even likely in many cases. However, all such issues are covered in a safe working plan, which is a requirement of any contractor that works on a large public works scheme these days, so all such incidents would be covered by the normal safe-working requirements of a responsible contractor, subject to the normal workings of the law of the country. That covers most of the issues.

Kristina Woolnough: Our concern was a what-if scenario. If a health and safety problem arose from any of the issues that we described and it inhibited or prevented entirely the tram's operation, what would happen?

Scott McIntosh: We have just moved from construction to operation.

Kristina Woolnough: Sorry.

Scott McIntosh: I could imagine incidents happening. I lived through the great storm of 1987 and the storms of 2002, which blew down trees across roads, railways and tramways. When a tree is blown down, the tramway stops until the tree is removed. When a tree blows into a garden, enjoyment of the garden is somewhat diminished until the tree is removed. Such incidents happen, but the tramway's presence will not add to their risk of happening.

Kristina Woolnough: I am still talking about construction. If a landslip occurred or something emerged later that had not been anticipated and which jeopardised the tram along the proposed alignment, what would happen?

Scott McIntosh: What happened would depend on the incident. If a landslip occurred, the first task that any responsible contractor would be required to undertake would be to stabilise the rest of the embankment to ensure that no further slippage took place. Once that had been done and they were sure that the remaining structures were safe, the next task would be to start working on a plan to remove the slippage and restore the land to its previous condition. That would be the normal approach of any contractor doing public works anywhere in the country.

Kristina Woolnough: I am sure that you understand the local concern that, although such issues will be dealt with at a detailed design stage or in safety risk assessments, that is too late to give local people comfort during the approval process for the bill.

Scott McIntosh: That is not the case. Your comfort should come from the code of construction practice—not only what it states but its requirement that contractors should abide by the codes, laws and current best practice that are set out in other places. Therefore, the works on the tramway will be no more inherently dangerous or likely to give rise to serious problems than any other construction works in the country, all of which are covered by well-established codes, practices and industry best practice to deal with unforeseen accidents as they happen.

Kristina Woolnough: I will move on to operation. Would reducing the trams' speed assist in avoiding the risk of derailment?

Scott McIntosh: No.

Kristina Woolnough: On the issue of vandalism and the potential derailment that might result, what can be done to avoid that?

Scott McIntosh: I think that you are asking two questions: first, what can be done to minimise

vandalism; and, secondly, what might the consequences of vandalism be? You did not ask the second question, but I am sure that you were about to do so.

Kristina Woolnough: Mr McIntosh, I am sure that you are better at asking questions than I am, but please answer your own questions. That will be very helpful.

Scott McIntosh: On the first question, we are all aware that the potential for vandalism always exists. We all live with the problem. However, I refer you to the opinion that was expressed by the police. They said that the increased use of the corridor, the provision of uniform lighting and the presence of the trams, which will be equipped with closed-circuit television, are likely to lead to a reduction in antisocial behaviour within the corridor. It is useful to bear that background in mind.

At some time, somebody will doubtless attempt to see what will happen if they do something incredibly stupid. To my knowledge, when such things have happened elsewhere, the tram has almost always been able to stop short of the obstruction. On the one occasion that I know of in which a serious incident occurred when a tram collided with an object that was deliberately placed on the track with the intention of derailing it, although the first tram bogie was derailed, the rest of the vehicle remained on the track and the tram did not continue much further down the track. Nobody was seriously injured.

I believe that the tram will mean that the likelihood of vandalism in the Roseburn corridor will be diminished. I also believe that the consequences of such vandalism are containable and foreseeable within a safe operating plan.

Kristina Woolnough: What measures will be put in place to mitigate the impacts of a possible derailment in the Roseburn corridor, where the tram will often run very close to, and even above, people's houses? What will be done to protect those residents and any passers-by who are below the bridges?

Scott McIntosh: I am afraid that I will need to get a little bit technical, but I will try not to bore you too much.

The structure of the tram will be such that the front of each tram will be fitted with a guard rail that will run the full width of the tram and will remain a small distance—perhaps 75mm to 100mm—from the head of the rails. It is designed so that, if it hits anything, it will push the object out of the way. If it fails to do that and the tram derails, it will come into contact with the rails as soon as the tram drops between the rails, so the tram will end up sliding along on it. That is a very effective way of stopping the tram.

In the Roseburn corridor—unlike in the sections of on-street operation in the tram systems in Nottingham, Sheffield and Croydon—the promoter's intention is that we will have the additional benefit of grass, so any derailed tram will drop into soil rather than stone. That would have an additional braking effect on the tram.

As I am sure you are aware—the details can be seen on the web—a Croydon tram running at speeds of more than 40kph derailed last week at a turnout, where it had been moving from a single-track section to a double-track section. In that case, the front tram bogie derailed, but the rest of the tram remained on the rails. The emergency brakes on the second and third bogies operated, with the result that the tram came to a stop, still on the rails, within approximately 10m of the point where the first bogie came off. The tram remained upright and did not depart from the track.

Her Majesty's railway inspectorate, which is very interested in accident containment matters, believes that the structures that have been adopted on all tramways in the United Kingdom are perfectly adequate for such circumstances. On bridges, where there might be a solid deck, some form of kerbing is required outside the rails to contain the tram so as to ensure that a derailed tram would not deviate from the track.

As I say, the incident in Croydon is, to my knowledge, the first accident in the United Kingdom in which a tram moving at speed derailed. I am glad to say that it stopped within a very short distance. It is almost inconceivable that there would be enough energy stored in a tram—even one moving at 80kph—to allow it, once it had been derailed, to run through earth or ballast far enough for it to come off an embankment and fall down the sides.

14:30

Kristina Woolnough: My understanding is that the grass track has not been confirmed. Could you clarify that for me? Is it also the case that there will be a raised tram track above a grass bed and that that has other safety consequences, such as people tripping over it?

Scott McIntosh: My understanding is that the promoter has stated in evidence, has put in the drawings that it deposited with the bill and has shown in its artists' impressions that the track in the Roseburn corridor will be laid in grass.

Whether the rails are flush with the grass or are slightly proud of it—there are different systems for producing grass tracks—does not detract from what I say about the rail itself being approximately 6in high. Should the grass not be up to the level of the head of the rail and the tram wheels plough directly into it—if the tram derails—the guard fitted

to the front and rear bogies will come into contact with the rails. The suspension will then allow the wheels to drop and they will become engaged in the grass, whether at the foot of the rail or at its head.

I believe, and I believe that the railway inspector believes—I have had discussions with an inspector on the matter—that either system offers a more than adequate containment for the derailment of any tram.

Kristina Woolnough: I will move on to ask questions about HMRI. In your rebuttal on safety of operation, you say at paragraph 5.1 that I have “no evidence” for the assertion that I make. I submitted a freedom of information request for all correspondence with HMRI, and that correspondence confirmed my assertion. However, my request went up only to about March. Have you had discussions with HMRI about low kick-rails since March 2005? If so, what conclusions have been reached?

Scott McIntosh: The problem with freedom of information requests is that the absence of evidence is not evidence of absence. The fact that you have not had a document disclosed does not mean that discussions have not been going on about that point for some considerable time. I can point to discussions that I have had with the railway inspectorate about kick-rails in use on tramways going back to 1993, because they were proposed for and introduced in Croydon.

I personally had a discussion with the railway inspectorate on the matter some 18 months ago, and we have a file copy of a note of a meeting between one of my colleagues from Mott MacDonald and Mr David Thornton, a railway inspector, on 4 May 2005. There was a discussion about how one could delineate the difference between the footway and cycleway and the tramway. Low kick-rails were one of the issues that were discussed at that meeting.

Kristina Woolnough: That was the update that I was seeking, as my request went only about as far as March. It revealed that there were—

The Convener: Please, a question, not a statement.

Kristina Woolnough: Were there meetings with HMRI in August?

Scott McIntosh: I believe that the promoter had a meeting with the railway inspectorate, at which we were not present. I believe that there was a subsequent meeting on the issue.

Kristina Woolnough: Has HMRI approved kick-rails as an effective mechanism for segregating the tramway and the cycleway?

Scott McIntosh: The railway inspectorate does not approve anything until it has been shown it.

The question is whether the railway inspectorate has an objection, and it has said that it has no objection whatsoever to the use of kick-rails generally in the style that has been used in Croydon.

Kristina Woolnough: Have you shown the inspectorate the plans of the Roseburn corridor with the kick-rail in place? Does it have any objections to that, as opposed to anything in the Croydon example?

Scott McIntosh: At the meeting I had with the railway inspectorate two years ago, we showed it a possible conceptual cross-section of the area showing a kick-rail. I asked specifically the question whether it was happy about a kick-rail of the type that was used in Croydon, and the inspectorate said yes.

Kristina Woolnough: On the Roseburn corridor?

Scott McIntosh: Yes.

Kristina Woolnough: In paragraph 5.3 of your rebuttal, you make the point that eight trams an hour in each direction is only 16 vehicles an hour, which

“would be considered an extremely quiet country lane”.

Do you accept that that does not compare directly with the Roseburn corridor as it is now?

Scott McIntosh: Yes, I accept that it is not a direct comparison.

Kristina Woolnough: Good. So an extremely quiet country lane is not as attractive to users of the Roseburn corridor, which is not a lane at all; it is a cycleway and walkway.

Scott McIntosh: First, that is a subjective view. Secondly, while what is proposed—a more managed structure along the Roseburn corridor than what exists currently—may be marginally less attractive to the up to 1,000 people a day who, according to your count, use it, it will certainly be more attractive to the 3,000 people an hour who, potentially, will use the tram.

Kristina Woolnough: Your figure of 3,000 people an hour is untested, whereas our figure of 1,000 people who use the corridor between 8 and 5.30—not a day—is established.

Scott McIntosh: You counted them on one particular day. I do not think that we want to go into the background to the modelling again, but I believe that the figures are robust.

Kristina Woolnough: But your figures are untested. Ours are tested. They are real—I am not talking about modelling.

The Convener: This is straying quite far from the rebuttal statement.

Kristina Woolnough: I will move on to crossing places. Could you clarify whether they will be clearly marked and so on? Local people are not sure what is meant. What will the crossing places be like? How will they be marked? How will they translate from a kick-rail into something more defined?

Scott McIntosh: There will be a number of crossing places over the tram tracks. Obviously, there will be one at either end of each tram platform. In a number of cases, access to the Roseburn railway corridor is from the wrong side of the tracks, if you like, in which case people will have to cross the tracks to access the footway and cycleway. In all those cases, the crossing point will be paved to the level of the railhead, so it will be the equivalent of crossing the tramway on Princes Street or Leith Walk. Crossings will be level and will be delineated by appropriate levels of markings and tactile paving to a standard that meets the requirements of the disability discrimination legislation. Crossings will be in exactly the same form as is provided on every other tramway in the United Kingdom. They will be marked in the same way, will be of the same quality, will be level with the railhead and, in this case, they will be lit, because the Roseburn corridor is to be lit.

Kristina Woolnough: You mention that the tram drivers will be trained in relation to the pedestrian crossing points. Assuming that a low kick-rail is included, will the tram drivers be carefully trained on the movement of dogs, wildlife and small children?

Scott McIntosh: I assure you that any incident is just as distressing for the driver as it is for the victim, whether human or animal. The drivers will be well aware of the risks posed by people and animals along the corridor. Their driving style will take into account any risks that they perceive, just as, when I drive my car along the road and see people with dogs that are not on leads, I take suitable avoiding action or at least calculate the likelihood of the dog getting in my way or of my hitting the dog.

Kristina Woolnough: Do you accept that the tramline completely changes the character of the Roseburn corridor for amenity users?

Scott McIntosh: I am not sure about the word "completely". It is certainly true that we have all accepted that there will be a change from the current wild and unmanaged nature of the corridor to a more managed approach.

Kristina Woolnough: Are you aware that the promoter, which is the current manager of the wildlife corridor, has a number of management plans but has not implemented them?

The Convener: That question is going wide of the rebuttal.

Kristina Woolnough: It is difficult when the answers that I get are not to do with the questions that I ask.

The Convener: I understand that. You will have the opportunity to do likewise when the promoter questions you. The committee will weigh up who it believes.

Scott McIntosh: I apologise to Ms Woolnough if she does not feel that I answered her question; it is not my intention not to answer her questions.

Kristina Woolnough: Paragraph 5.6 of your rebuttal states

"there is no rational reason why trams should be restricted to abnormally low speeds".

Are you prepared to retract that phrase or to acknowledge that it is subjective and that local people see plenty of rational reasons why tram speeds should be restricted on the corridor? You have a lot of experience, but local people have a lot of experience as users. Do you accept that your comment is a subjective view?

Scott McIntosh: With respect, I do not. I would say that any argument for any safety measure must be based on evidence. I fully understand and fully accept—it may be my fault as well as that of others—that we have not been able to convince you that the disinterested advice that we offer is based upon evidence. However, I point you to the walkways alongside the track in Croydon. In one case, the speed of trams is 80kph on track that is on the other side of the kick-rail from the walkway; in another case, the speed of trams is 70kph alongside what is not only a walkway but a bridleway that is regularly used by horse riders, including learners. All accidents have to be reported to the railway inspector but, in both cases, there have been no accidents that have led the railway inspector to conclude that a lower speed should be introduced or the operator to require its drivers to drive at a speed lower than that which was previously agreed with the railway inspector. In five years of operation, there have not been accidents in those areas. That argument is evidence based and it supports my view.

I recognise that it is natural that there is apprehension about something new. As the scheme develops, it is necessary to demonstrate to people that that apprehension is unfounded and is not supported by the evidence. There is no evidence that, where walkways of a similar type to that which is being proposed for Edinburgh have been used, they have been the cause of accidents of a severe or minor nature. All accidents on tramways are reportable accidents.

Kristina Woolnough: You describe the examples that you mention as being similar and you have given us photos. The two locations are similar but they are not the same, are they?

Scott McIntosh: No two places are identical, but I believe that the conditions are broadly exactly the same as those that are being encountered in Edinburgh.

14:45

Kristina Woolnough: Are the confined space of the Roseburn corridor, particularly at pinch points, and the level of usage of the Roseburn corridor the same in those other corridors? Those are measurable pieces of evidence. Have your examples of similar places been measured to see whether they are the same in that way?

Scott McIntosh: The first example is in Croydon, in Lloyd park, which is 270 acres of open public amenity space. It has very high visitor numbers every day. People walk their dogs there, and there are tennis courts and football pitches that attract a large number of people. It is in a built-up urban area with houses of a similar type. I accept that the area is level and not in a cutting but I promise you that, in the past five years, I have never seen anyone leap sideways into the open area for any reason. I would therefore say that the fact that someone could not step sideways away from the track in the Roseburn corridor is not relevant.

The second example is fenced on the other side, if you like, and so, in your terms, it is enclosed. The area is visited frequently. It is on a direct walking route between at least two schools and some residential areas. It is used by horse riders of all skill levels at different times. It is a designated area of outstanding natural beauty, a site of special scientific interest and a public recreational open space. There are car parks adjacent to the walkway. I would therefore suggest that, particularly at the weekend, the level of usage is at least equal to that of the Roseburn corridor.

Kristina Woolnough: Could I have a straight yes or no, please? Is there an example of an area that has the same speed proposals, the same constrained space and the same user profile as the Roseburn corridor? Does anywhere have those three ingredients?

Scott McIntosh: With respect, I have answered your question to the best of my ability. Also, with respect, your question has no meaning.

Kristina Woolnough: It is about evidence.

Scott McIntosh: I have just given you the evidence. I could repeat what I have just said, but I will not do so before the committee.

Kristina Woolnough: You have very kindly given us a composite picture of several different schemes, which, if we put them all together, would have the same ingredients, but is there one that is the same?

Scott McIntosh: Two schemes are never identical.

Kristina Woolnough: That is fine. Thank you.

Scott McIntosh: That is not a reason why evidence adduced from other places is not relevant.

Kristina Woolnough: The clerks kindly circulated the accident statistics that you supplied. Am I able to ask questions about them, convener?

The Convener: Yes.

Kristina Woolnough: I have two questions about the supplementary documents. Why did you use those four systems as examples?

Scott McIntosh: They are self-selecting, in that they reported from a wider number than I polled. I polled every single new tramway in the United Kingdom and two others, one of which was at Beamish, where a tramway was built using more conventional techniques in a large, living, open park that has a large footfall. The other example has a very long history of successful electric operation in a very busy street in a city that is comparable in size and amount of traffic to Edinburgh; usage in that city is also comparable to potential usage in Edinburgh. We went to The Hague in the Netherlands and asked the questions; we asked people at Beamish, where the tramway uses very conventional techniques and there is a large number of visitors; and we asked representatives of every tramway in the United Kingdom that has been built in the past 20 years. What we have is the response of tramway representatives who were able to respond.

Kristina Woolnough: Is that the entirety of the responses?

Scott McIntosh: Yes.

Kristina Woolnough: You have cited Dublin and the Croydon system quite often. Did they reply? Did you question them?

Scott McIntosh: I did not question Dublin because the tramway there is very new—it is less than a year old—and so it did not seem to me to be significant. I questioned Croydon, but its representatives expressed regret that they were very busy and had other things to do. However, I have had several discussions with the managing director of operations and the system's maintenance engineer—I asked him the questions personally. I did not believe that it would be appropriate to use that system as part of our data because its representatives did not respond in the same terms as others.

Kristina Woolnough: Is it possible that the Croydon and Dublin figures would have skewed the result that you wanted? I accept your point about evidence, but evidence is only as good as the angle for which it is required.

Scott McIntosh: The answer is two-fold. First, do I have the time to skew the evidence, and secondly, do I have an interest in doing so? On the first point, no I do not; on the second point, it would not do my reputation any good if I was found to be cooking evidence. Therefore I refute the charge.

Kristina Woolnough: But might not Croydon and Dublin have higher accident figures?

Scott McIntosh: The Dublin system is new; I do not think it would be appropriate to consider the first year, although I would be happy to request evidence from Dublin if you felt that that would be useful. In the case of Croydon, I do not believe that the figures would be higher. I am aware of the number of occasions on which the service has been stopped. If the picture changed at all as a result of adding the Croydon figures, it would be to make the situation look better. To my knowledge, there has not been a single failure of the overhead wires on any occasion.

Kristina Woolnough: You said that the first year of operation of the Dublin scheme would not provide a good enough picture. Is that because there are more accidents and health and safety issues in the first year of operation of a scheme?

Scott McIntosh: No. I simply believe that the operators have other things to deal with at the moment. The evidence is being requested as a favour; they probably have other things to do. I have attempted to restrict the information to UK systems, with one check system from the rest of the European Union. You might have said that going to another city in the EU but not in the UK would give an unfair balance of statistics.

Kristina Woolnough: Can you confirm that the selection that you have made is a snapshot and is not necessarily universal?

Scott McIntosh: Indeed.

Kristina Woolnough: No one can draw a generalisation from it about a particular scheme.

Scott McIntosh: I would not say that one cannot draw a generalisation from it. I would say that it is a snapshot; that is fair. The systems that have responded have done so honestly. The selection represents a significant proportion of the systems polled.

Kristina Woolnough: My last question is about overhead lines and the circumstances of the Roseburn corridor, such as the bridges and tunnels. What are the proposals for that? You have overhead cables in cuttings and on bridges. People could, theoretically, touch them as they could reach them more easily. Local people have raised those concerns.

Scott McIntosh: I think someone would find it difficult to touch the wires unless they were extremely tall.

Kristina Woolnough: I mean with an implement.

Scott McIntosh: The requirements set out in the safety principles and guidance given by the railway inspector are that in any location where road vehicles are likely to pass under the wires, the wires must be set at a minimum height of 5.8m above the ground. In areas where road vehicles are not likely to pass under the wires but there are pedestrians, the wires must be set a minimum of 5.2m above the ground. There is an additional requirement that a radial distance of 3m should be maintained between the wire and anywhere that people can get to. In other words, you cannot allow people to stand on the roof of a hut that just happens to be convenient for them to reach the wire.

In addition, the traction columns that support the overhead wire must be considered to be unclimbable by normal people—they are not open-lattice structures but tubular or smooth girders. Where the wires pass under an overbridge, a series of requirements are imposed by the railway inspector to do with the height of the parapet. The top of the parapet must have a shaped stone or cap on it, which is, for want of a better description, Toblerone shaped, so people cannot sit on the parapet and dangle things over. If, notwithstanding all that, the wire is still within a reasonably contactable distance of the bridge, there are requirements to provide protecting cowls, which are attached to the bridge and which are insulated and stretch out over the wire for a distance sufficient to make it impossible for anyone accidentally to come into contact with the wire. Those steps are all well precedented and are in place already in Sheffield, Birmingham, Croydon and Nottingham. Examples of them can be shown to the committee or the objectors at any time. They are all requirements of the railway inspector and are subject to his prior approval.

Kristina Woolnough: You helpfully described the height requirements. What happens when there is not enough headroom—in the tunnels on the Roseburn corridor, for example? What about the visual appearance of the cowls? The tram will pass through conservation areas and it is possible that four of the bridges will be listed. What would the impact of that be? Sorry—I asked several questions at once.

Scott McIntosh: Having looked at the bridges already, we believe that it will be possible always to maintain the height of 5.2m between the track and the overhead wire. If for any reason the footway through the bridge hole is raised—there have been suggestions that that might happen in one or two places to allow for a badger underpass to be installed beneath it—the requirements for the radial distance of 3m would come into play. For

the short length of track where the 5.2m could not be achieved, the railway inspector would require the placing of some sort of reasonably impenetrable barrier to ensure that people could not accidentally or deliberately come into contact with the wire. The usual barrier in such circumstances would be a glass panel.

The protecting structures on the bridges are quite small and fairly inconspicuous. They have been applied with considerable success to a large number of bridges throughout the United Kingdom on electric railways and tramways. I do not believe that they would form a significant visual intrusion. I accept that that is a matter of opinion, but I would be happy to take people to examine any of the systems where such structures have been installed.

Kristina Woolnough: I have a final question. Is it your professional opinion that for the length of the Roseburn corridor we will have only a low-level kick-rail segregating the cycleway from the tramway?

Scott McIntosh: The promoter has always said that it will propose a fencing structure that will be agreed in consultation with the local residents. If you were to ask me what I would recommend, I would say that a low kick-rail along the length of the corridor would be perfectly adequate to meet safe operating requirements. If you were then to ask whether a kick-rail could be replaced with ornamental planting and low shrubs, I would say that that would be adequate as well. If you went on to ask for a fence, my view would be that that would be more than was required, but that if the residents wanted it, there would be no reason why it could not be considered. The only places where anything different might be required would be if there were a pedestrian crossing of the line that came from the blind side, if you like, and was obstructed by existing trees that we wanted to preserve, as people might step out without an adequate sightline. In that case, the short guard-rail that is used in similar situations on roads to make sure that people do not just run out unthinkingly without being able to see might be required. However, I do not recall from the current alignment that there are such situations anywhere along the alignment.

Kristina Woolnough: So it is your professional expectation that HMRI will not require a more substantial barrier than a kick-rail.

Scott McIntosh: That is my belief.

Kristina Woolnough: Thank you. We have been asking that question for two years, so I appreciate the answer.

The Convener: I think that that was your third final question.

Kristina Woolnough: Sorry.

The Convener: It is okay.

The Convener: I call Mr Hallam.

Mark Hallam: Most of my questions have been covered. The only additional apprehension of constituents in group 35 relates to electromagnetic fields. You will appreciate that most of the properties are family residences where there may be small children. Most of the evidence that we have found is non-consensual and there is a good deal of inconsistency. Will you give us a categorical statement that there will be no danger to residents from electromagnetic fields?

15:00

Scott McIntosh: I would say what I said before: I accept that absence of proof is not proof of absence. However, there are 400 tramways in the world, nearly all of which use the traction system that we propose for Edinburgh. There are 390 trolleybus systems that use it, too. The London underground system uses comparable voltages and currents, as does the Tyne and Wear metro, the docklands light railway and the entire southern electric railway network. There has not been a single case in which anyone has made and sustained a claim that any injury or harm has resulted from the electromagnetic influence of those systems. I point out that more than 1 billion passenger journeys a day are made on networks that use such systems—and that excludes the number of journeys that are made on the southern electric railway network.

Furthermore, I have been involved in working on such systems for 20 years and have lived adjacent to one for a significant period. The witnesses and members of the committee may have views on my stability, but I do not believe that my mental state has been at all affected by the electromagnetic influence of the systems with which I have come into contact. There is no sustainable evidence that establishes a biomedical link between the levels of current that we are talking about and any perceivable medical condition.

The Convener: Do committee members have questions?

Helen Eadie: Will there be a switching mechanism for the overhead cables or will the cables be permanently electrified?

Scott McIntosh: A number of safety measures will be employed. There is always an automatic switching system that responds to a sudden rise in current. If there is a short circuit for any reason, the system will react quickly and the sections affected will be isolated. Similarly, if a wire comes down and comes into contact with earth, the rails or anything else that is conductive, the power will

be switched off automatically. At the same time, the entire system will be monitored continuously from the control centre. It is a requirement of the railway inspectorate that a responsible person is at the monitoring console for the whole time that the traction current is on, so there will be not only an automatic system, but a person in the control room who will have the power remotely to isolate any section of the wire at any time.

There are additional safety devices that may be carried by the operational crews of the railway and which, in the case of the DLR, are available to the fire brigade. That allows them to short-circuit the system safely to guarantee that the wires are electrically isolated and de-energised. The fire brigade is particularly keen on that because it does not like its firefighters playing hoses on live electrical equipment. There is equipment for the safe discharge of the electric power, which I have witnessed being used. A series of levels of safety and control is available.

Helen Eadie: In relation to Mr Hallam's concern, you are saying that electricity will not be going through the lines constantly and that, because the electricity will not be on 24/7, the electromagnetic field is not an issue.

Scott McIntosh: I do not believe that the electromagnetic field is an issue any time that the power is on. You raise a number of questions. Sometimes the power will be switched off at night for maintenance purposes. We do not often tell people when the power is turned off, because the wire is made of copper, which is extremely attractive to certain classes of individual in the community. We do not tend to tell people that the power is off in case they try to nick the copper wire. A lengthy safety procedure has to be followed before the power is put back on to ensure that no one has inadvertently left anything hanging on the wire, such as a colleague.

Normally the traction current is left on all the time, until maintenance work needs to be done. That is the procedure that is followed on most tramways and I think that it would be followed in Edinburgh. I know of no evidence that shows that the sort of voltages and currents that we are talking about are likely to give rise to any medical conditions. I am aware that there is some dispute over the effect of very high voltage alternating current power transmission lines, but they operate at 33,000V AC; tram wires operate at 750V and normally carry a maximum current of about 1,000A. That is not much more beefy than the things that are whizzing around this room as we speak, which is an encouraging thought.

The Convener: Mr Thomson, do you have any further questions?

Malcolm Thomson: No.

The Convener: Mr McIntosh will now address the issue of slipstreaming in relation to groups 33, 34, 35 and 43. Mr Thomson, do you have any initial questions?

Malcolm Thomson: No.

The Convener: Ms Woolnough?

Kristina Woolnough: There will be slipstreaming on the Roseburn corridor, will there not?

Scott McIntosh: If you ask me that as a matter of physics, I would say that of course there will be. The trams will displace air. If you ask me whether that will have any effect or will even be noticeable, I would say that the effect will be so small that you will not even notice it.

Kristina Woolnough: But there will be slipstreaming. What will happen when two trams pass, in terms of slipstreaming?

Scott McIntosh: I apologise, convener, but my explanation will require more than a couple of seconds. Effectively, when a tram moves forward, it pushes the air away from it, in the same way as a boat pushes water away from it, creating ripples. At the other end of the tram, the air falls back into the place in which the air used to be and the tram used to be but no longer is. There is, therefore, a slight ripple effect outwards at the front of the tram and inwards at the tail of the tram. The ripples are proportional to the square of the speed of the vehicle. Given the sort of speeds that we are talking about, the effects are extremely small.

Obviously, what happens when two trams pass is the same as what happens when two boats pass: the ripples pass each other and meld together, resulting in a small amount of turbulence. However, the levels of turbulence that we are talking about, generated by a tram moving at the speeds about which we are talking, are extremely low.

All the European railways are working to establish safe figures. In my evidence in relation to groups 34 and 45, I gave what are likely to be the European safe figures. You will see that we are well below the figures that are judged to be perfectly acceptable for passengers standing on a platform next to a high-speed passenger train or a freight train passing.

We have taken the liberty of going to a number of tramways with this issue in mind. A couple of weeks ago, in Lloyd park, I stood alongside the tramway—right next to the kick rails—as trams passed me. I must say, it did not even blow my hat off.

Kristina Woolnough: You had a hat on, did you?

Scott McIntosh: I was carrying a newspaper and hoping to take a photograph, but I am afraid that I did not.

Kristina Woolnough: I do not think that we questioned the safety aspect of slipstreaming—certainly not the effects on a substantial adult. Rather, we were questioning the amenity impact. Is slipstreaming a pleasant experience, for people other than tram enthusiasts, for whom it clearly might be? Is it less pleasant than having no slipstreaming?

Scott McIntosh: Is it more pleasant sitting in your garden on a still day or when a gentle breeze is blowing? It is a question of perception. Again, I state that the effect of slipstreaming is small.

Kristina Woolnough: And, if you are a tram enthusiast, it is a pleasant effect.

Scott McIntosh: Do you know, I have never asked a tram enthusiast that question.

The Convener: I am struggling to see the relevance of the question, but we will go with the flow.

Kristina Woolnough: Do weather conditions affect slipstreaming?

Scott McIntosh: No, slipstreaming is an effect of displacement of the air, which is always there.

Kristina Woolnough: And it does not matter whether it is windy or the air is still.

Scott McIntosh: That is correct.

Kristina Woolnough: Would slipstreaming be reduced by a reduction in speed?

Scott McIntosh: Yes. As we have said, slipstreaming is a function of the cross-sectional area of the vehicle moving through air, the shape of the vehicle—which is one of the reasons why trams have a gently rounded shape—and speed. To reduce the argument to the point of absurdity, you could point out that a stationary tram produces no slipstream. Does the slipstream increase as the tram travels faster? Yes, which is why speed parameters are being included in the work that is being done to establish European Union levels, which are referred to in paragraph 3.6. You will notice that those speeds are somewhat faster than those at which it is proposed the trams will run.

Kristina Woolnough: As you are aware, we are concerned about the amenity of the Roseburn corridor. Are you aware that we are asking for a reduction in speed on the Roseburn corridor because we wish to preserve that amenity? If slipstreaming is an impact, the corridor would benefit from a speed reduction. We recently discovered that the trams will be wider than other British trams. Will that have an impact on slipstreaming?

Scott McIntosh: The width proposed for the tram in Edinburgh is 2.65m, which is the same width as for trams in every British system except Nottingham, where the tram width is 2.40m. The width of the tram will have no significant effect. I would suggest that the shape of the front end of the trams is likely to have more effect on slipstreaming than the trams' width, but any slipstreaming effect will be extremely tiny.

Kristina Woolnough: Do children—or smaller, lighter human frames—experience more impact from slipstreaming?

Scott McIntosh: No. I would suggest that the impact is to do with the surface area of the person and their bulk, which might be why I am more likely to suffer from slipstreaming than a small child would be. I regret to say that I have a larger surface area than most people.

Kristina Woolnough: Would it be reasonable to assume that, in a confined space, people might move away from a slipstreaming impact, even if, as you say, it is minimal—or even enjoyable if one is a tram enthusiast?

Scott McIntosh: I am sure that the first time a tram passes them, people will be defensive. It is something new, which the majority of people in Edinburgh have not experienced. I have seen the same thing happening in pedestrian areas and on footways adjacent to tramways elsewhere. However, people rapidly gain confidence, knowing that, unlike other road vehicles, the tram is on a fixed path. Therefore, once people have identified the things that mark the safe area, clear of the tram, they rapidly accept it and find that it is not a problem in terms of the space that they have to use or the wind or noise effects and so on of the tram passing them.

Kristina Woolnough: Do you accept that the three photographs that you attached to your rebuttal do not resemble the Roseburn corridor, particularly in the cuttings sections? In a cutting, is slipstreaming exacerbated? Is one more conscious of it in a smaller space?

Scott McIntosh: The photographs were selected to show the close proximity of the footway to the tramway. Given that the effect of slipstreaming is very small, to talk about it travelling across 3m of footway, rebounding off the embankment sides and coming back again—therefore multiplying the impact—is to talk about micro-effects, so tiny that they may be detectable by machinery but not by human beings.

Kristina Woolnough: But if we compare what will happen with the current situation, where there is no slipstreaming at all—apart from cyclists, I suppose—there will be a difference and that difference will be felt.

Scott McIntosh: It will not be a felt difference; there will be a difference in perception. Nobody has ever disguised the fact that some of the character of the Roseburn corridor will change with the construction of the tramway.

The Convener: May I helpfully suggest that committee members have had sufficient evidence on slipstreaming?

Kristina Woolnough: Does slipstreaming have an impact on noise?

Scott McIntosh: No. The energy dispersed is very small.

The Convener: I call Mr Murphy for group 35.

Frazor Murphy: Am I allowed to talk about slipstreaming?

The Convener: As long as it is not in such microscopic detail. We are looking for the headline issue that you want to extract from Mr McIntosh.

15:15

Frazor Murphy: Mr McIntosh, you have just said that there is no effect from exterior weather forces on slipstreaming. I came across a Rail and Safety Standards Board report on train slipstream effects on platforms, which states:

"Although it is known that cross-winds can exacerbate slipstream effects very considerably, relatively little work has been carried out to quantify the problem. Such work is essential for the setting of slipstream safety limits."

It goes on to say:

"In addition, the platform criterion should take account of vulnerable groups of people (e.g. children, the elderly, and the frail)".

That contradicts what you just said.

Scott McIntosh: The report refers to an effect that I am sure many will have experienced. If someone is standing on a railway platform, which is 1m up in the air, when a strong cross-wind is blowing across it, a long train going past will shield them from the wind. People in that situation subconsciously lean into the wind and, when that wind ceases suddenly, there is a significant effect. However, to my knowledge, no place on the Roseburn corridor has comparable conditions. People are not exposed there as they would be on a railway platform, there are no high-level winds and a tram is not as fast or as long as a train. Therefore, there would be only a small effect from the sudden loss of wind pressure from a tram shielding someone from a howling gale beating across the corridor. I agree that that kind of effect is worth considering for high-speed railways, but I stand by what I said, which is that I do not believe that there is a significant effect on tramways.

Frazor Murphy: Would that be the case even on the viaduct, which is open to the elements? Would a cross-wind there have no effect at all?

Scott McIntosh: Well, if someone was shielded from the wind—

Frazor Murphy: So it would have an effect.

Scott McIntosh: Yes, but anyone walking across the viaduct would know that they would be exposed to the wind.

Frazor Murphy: But if they were shielded—

Scott McIntosh: That is not an additional effect of the tram.

Frazor Murphy: But if they were shielded and—

The Convener: Please do not talk over each other, as that makes things difficult for the official reporters and committee members—so one at a time.

Scott McIntosh: Sorry.

Frazor Murphy: Do you want to go on? Or shall I?

Scott McIntosh: Please.

Frazor Murphy: So we agree that a cross-wind on the viaduct could be dangerous.

Scott McIntosh: If a wind blowing up the Water of Leith was of such strength that it was likely to cause someone to fall over if they were suddenly exposed to it, there might be an effect. I believe that stepping out from shelter at either end of the Coltbridge viaduct on to the exposed section of the viaduct could have a similar effect. I do not believe that the effect from a passing tram would be a danger over and above what would be experienced by someone walking across the Coltbridge viaduct in the teeth of a strong wind.

Frazor Murphy: Okay—thank you. What would the effect of slipstream be in a confined space—for example, under St George's bridge—when two trams pass? You said that when two trams pass, there would be turbulence. However, if that dispersed energy hits a brick wall, it must obviously go somewhere.

Scott McIntosh: Indeed it must. However, as I said, the amount of turbulence will be so small that the effect will be very small indeed. You are multiplying a small effect by a factor, but it will remain a small effect. I fully understand the point and appreciate that if a large and bulky vehicle were passing through at high speed, it would have significant effect. We have all experienced a similar effect when, for example, we meet an on-coming lorry that is travelling at 70mph. However, as I said, the size and shape of a tram and its speed are such that the effects of two trams passing will be very small. Even multiplying them

by a reflection would result in something very small.

Frazor Murphy: But the wave coming back off the wall would create a greater effect than if the trams were just passing as someone was going into a nice open space.

Scott McIntosh: Instead of creating a continuous pressure in one direction, there would be a small amount of turbulence, which is less likely to move someone. Multiplying something vanishingly small, even by a large factor, will not result in a detectable problem.

Frazor Murphy: You spoke about this previously: if an adult is walking under the bridge when two trams are passing and a small child is walking through at the same time, you are saying that there would be a greater effect of instability on the adult than on the child.

Scott McIntosh: I said that it depends on the size of the person and how much of their body was exposed.

Frazor Murphy: Shall we use an example? Of you and a four-year-old child who weighed three and a half stone, who would be the most affected?

Scott McIntosh: Probably I would.

Frazor Murphy: Really? You would stand by that.

Scott McIntosh: I have a larger bulk than a child does.

Frazor Murphy: That is fine. If that is what you are saying, I believe you.

Scott McIntosh: I wish that I could say that I have experienced the effect so that I could tell you what it is. However, having stood in such places trying to experience the effect, I have not detected anything apart from a gentle wind passing over, such as that experienced by Ms Woolnough's tram enthusiast.

Frazor Murphy: I would like to ask about the British rail network, as there is not a great deal of research on trams. Why is it not common for paths to be next to railway lines if flow stream is not an issue?

Scott McIntosh: Actually, paths are adjacent to railway lines: they are called safe walking routes. They are provided alongside railways virtually continuously, although they are not for general public use; they are used by staff.

Frazor Murphy: Why are they not for general public use?

Scott McIntosh: For two reasons. First, historically, railways are private places from which the public are excluded, except in such places where they are permitted to be—railway stations,

for example. The situation is different with tramways, which are assumed to be in public places.

Secondly, railway trains are driven on line of sight and do not have the sort of effective brakes that trams have. Railway trains are driven from signal to signal; the assumption in a railway system is that, if one is given a green signal to proceed, it is safe to proceed until one sees the next signal. Railway drivers are not expected to look out for persons or trespassers on the track. Of course, they do, but they do not have the equipment to stop the train when that happens.

Frazor Murphy: You mentioned earlier the Dublin tramline. One stretch of the green line is quite similar to the Roseburn corridor. On the Dublin tramway, pedestrians are not allowed anywhere except the stations and the trams travel at the same speeds as you are talking about. Why has Dublin decided to keep pedestrians away from what could be dangerous and why are you not doing the same?

The Convener: This is considerably beyond slipstreaming, Mr Murphy. I will make that your last question, unless you return to slipstreaming.

Frazor Murphy: I have one more slipstreaming question.

Scott McIntosh: The answer is because the previous railway did not form a continuous public footpath. Obviously, it is easier on a former railway line to construct a new tramway and nothing else than it is to construct a tramway and a walkway. You will see that considerable design effort and ingenuity have gone into introducing both the tramway and the walkway and cycleway in Edinburgh. However, if something does not have to be done, do not do it.

Are there places in which similar things have happened? Yes. They exist in Birmingham and in Croydon. I have been responsible for producing designs for schemes where we had exactly the same thing. They exist, too, on the latest proposals in Washington DC. Maintaining a walkway that has existed on a disused railway is a political commitment. That is a political commitment by the City of Edinburgh Council. It was not a requirement in Dublin and it is cheaper and easier not to have to do it. However, Edinburgh council has decided that it wants to do it for what it considers to be perfectly valid reasons.

Frazor Murphy: One of the general recommendations in the Rail Safety and Standards Board's "Review of train slipstream effects on platforms" states:

"Strongly recommended that the position of safety for trackside personnel given in the Rule Book (1.25m from nearest rail)"—

this is for people who have experience of working on railway lines all the time—

“be revised on basis of trackside tests for freight vehicles at speeds >50mph”.

Our trams will possibly be travelling at 50mph. Why is the Rail Safety and Standards Board worried about trains travelling at that speed, but we are not worried about the effect of trams on our children?

Scott McIntosh: For several reasons. First, the safety requirements for railways are being upgraded because of the increase in the speed of trains. The requirements that you mention refer to railways that will be operating higher-speed trains, both passenger and freight. Freight trains that operate at speeds of more than 80mph are something of a step change in some parts of the United Kingdom. Freight wagons are considerably larger in cross-section and considerably less smooth in surfaces than our trams, so it is to be expected that they will generate larger wind effect.

That also relates to a problem that has arisen on a number of occasions on heavy railways: parts of the load or parts of the lashings-down on the freight wagon may shift. On a number of occasions railway workers have become entangled in those and dragged along the track. Those situations do not arise with the trams, whose external surface is smooth. A requirement of the railway inspectorate in approving designs to be used on tramways in the United Kingdom is that the trams must not have protuberances that are likely to snag people. As I have said, trams move at considerably lower speeds.

Frazor Murphy: It is funny that the report does not mention any of that; it just mentions slipstreaming.

The Convener: Thank you very much. Do committee members have questions?

Members: No.

The Convener: Does Mr Thomson have any questions?

Malcolm Thomson: No.

The Convener: In that case, Mr McIntosh will be delighted to hear that we have finished with him. I thank him very much for giving evidence.

I declare a two-minute break, but we will return to hear from Mr Turner.

15:26

Meeting suspended.

15:34

On resuming—

The Convener: Let us resume. There is no escape for you, Mr Turner. I was advised by some of the objectors that Mr McIntosh did indeed invite further questions. I hope that you will do no such thing. We will start with loss of the cycleway and walkway and bridge clearances, in relation to groups 33 to 36, 43 and 45. Mr Thomson will begin the questioning.

Malcolm Thomson: Mr Turner, I think that there is an error in one of your statements about underline and overline bridges.

Gary Turner (Mott MacDonald): That is correct.

Malcolm Thomson: I wonder whether you can clarify for us the difference between an underline bridge and an overline bridge.

Gary Turner: Certainly. I apologise, convener, for the fact that I made an error in my witness statement. An overline bridge is a bridge that goes over the tramline. That sounds quite simple, but I said in my witness statement that the tram went over such a bridge, whereas the tram should go under such a bridge. Similarly, an underline bridge goes under the tramline; therefore, the tram goes over such a bridge. That has caused confusion for the witnesses, who have rebutted that and have said that I have made an error in the structure design. It is not the structure design that is incorrect, it is my description of the relationship between the tramline and such structures. I apologise to the committee and to the objectors.

Malcolm Thomson: Thank you, Mr Turner.

The Convener: Thank you very much, Mr Thomson. With that explanation, I invite Ms Woolnough to ask her questions for groups 34 and 45.

Kristina Woolnough: Can we call them bridges and tunnels, from a Roseburn corridor perspective? You have lost me with the overlines and underlines.

Gary Turner: Yes. We do not normally call them tunnels, but I will know what you mean.

Kristina Woolnough: Thank you. I want to talk about the impact of widths on the cycleway and walkway and on the possibility of the tram getting through bridges and tunnels. What was your contribution to the landscape and habitat management plan? The only illustrations that we have of how it will all fit together at specific locations are in that document.

Gary Turner: As you will be aware, the landscape and habitat management plan proposes how the corridor will be treated for the introduction of the tram. It is an evolving document and, as the

detailed design develops, the document will continue to evolve. During the parliamentary process, our contribution to that has been to advise the consultants who are looking after the landscape and habitat management plan on the likely impacts of the structures.

Kristina Woolnough: Did you give the consultants the measurements for the drawings?

Gary Turner: We set out the tramline alignment as we perceived it to be along that section of the corridor. We did not give them physical measurements; we gave them the relationship of the tramline alignment to the structures.

Kristina Woolnough: Included in the landscape and habitat management plan are measurements of gaps between the tramline and the—

Gary Turner: That is correct. Those figures would have been supplied by us.

Kristina Woolnough: Good. Thank you. Would a wider tram have an impact on those measurements, or does the plan factor in a wider tram?

Gary Turner: There would be an impact. At the early stages—until a vehicle is decided on—all the dimensions are based on a generic vehicle with generic characteristics. The width of the tram, its overhang and how it performs as it goes round a bend in the track are all taken into account. Therefore, the plan gives a very generic swept-path envelope.

Kristina Woolnough: Obviously, that has a considerable bearing on how a tram gets through a tunnel and what is left for the cycleway and walkway.

Gary Turner: A worst-case scenario would have been developed.

Kristina Woolnough: Did that scenario include measurement of width of the tram as 2.65m?

Gary Turner: Yes—the worst-case scenario would have been developed.

Kristina Woolnough: Would the generic specification have included the widest specification of tram?

Gary Turner: Yes—that is correct. The general specification is for the opportunity to use a 2.65m wide tram.

Kristina Woolnough: Can we assume that those measurements will not change?

Gary Turner: Sorry?

Kristina Woolnough: Are the measurements accurate? I know that the drawings say that they are illustrative and indicative. Are the figures accurate for the purpose of assessing whether the

two tram tracks and whether the cycleway and walkway will fit through tunnels?

Gary Turner: I take it that the measurements that you are referring to are—

Kristina Woolnough: The figures are in the landscape and habitat measurement plans.

Gary Turner: No. Are the measurements that you are referring to as being fixed the ones concerning the spaces that are available or those concerning the width of the tram?

Kristina Woolnough: I am referring to all the measurements that are given in the landscape and habitat management plan.

Gary Turner: The dimensions that have been given are as illustrative as they can be at the moment. What will change that is not the width of the tram but the detailed design. If the alignment of the track is altered, its relationship to the structure will—understandably—alter. Our development of the landscape and habitat management plan demonstrates that one can get a tram alignment through the structures and provide the clearances, the dimensions of which are in the document.

Kristina Woolnough: So, you can guarantee that the cycleway and walkway with the minimum widths that I think you gave in your witness statement, and the twin tram track will fit through all the tunnels.

Gary Turner: I can give assurances that the dimensions that have been shown will comply with HMRI requirements. If the designers who are going to take the project to the detailed design stage do not change the alignment, the dimensions will remain as accurate as they can be.

Kristina Woolnough: If there are changes, is it possible that the project might not all fit together as has been conceived and illustrated to the public in the landscape and habitat management plan?

Gary Turner: If, for some unknown reason, the designers decide to move the tram alignment 1m to one side, the cycleway and walkway would diminish by 1m. I see no reason why they would have to do that.

Kristina Woolnough: The plan is illustrative and indicative.

Gary Turner: That is right. The outcome is that all the dimensions that have been given in the document show that the tram can fit through the structures and that a walkway and cycleway can be accommodated that is in the order of 2.5m to 3m wide.

Kristina Woolnough: Were barriers in the tunnel, which we heard described by Mr McIntosh, factored into that?

Gary Turner: The discussions that we had with HMRI were that at locations where we had the structures—we are talking about four structures in particular where the measurement could drop below 3m—we could go for a higher barrier than a kick-rail.

Kristina Woolnough: That was factored into your worst-case scenario, which is illustrated in the landscape and habitat management plan, and it fits.

Gary Turner: It is reflected in that document.

Kristina Woolnough: Does that give the minimum measurement of the cycleway and walkway under the tunnels, for example?

Gary Turner: The dimensions that we give reflect the requirements of the current version of the HMRI document.

Kristina Woolnough: You can tell that I am trying to hold you to some of the figures.

Gary Turner: I do not have a problem with that. The figures that we have given and the clearances that we have developed are based on discussions with HMRI and the current clearances. We are comfortable that the dimensions that are available for the structural locations are achievable and that HMRI will support them.

Kristina Woolnough: Is it possible that the cycleway and walkway would have to go off the Roseburn corridor, or are you, in your professional capacity, convinced that there will always be room for it to run alongside the tram?

Gary Turner: As we currently propose it, there is no intention to take the cycleway and walkway off the corridor.

Kristina Woolnough: Might circumstances arise in relation to detailed engineering design—

Gary Turner: There is none that I am aware of.

Kristina Woolnough: That is the case at this time, but that might change. Will it not change?

Gary Turner: I would be very surprised if that did change. I am not sure what your concerns are that make you believe that it might change.

Kristina Woolnough: I promise that I will turn this into a question. Our group proposed that the bill be amended to include the word “walkway” as well as “cycleway” and that such a walkway would be alongside the tram. Would you support that?

Gary Turner: Absolutely. It is entirely up to the members of committee how they approach amendments, but there is not necessarily a requirement for that. My understanding is that where the bill says “cycleway”, the intention is that it means cycleway and walkway.

Kristina Woolnough: I am sure that you are aware that a cycleway is not the same as a footpath or walkway.

Gary Turner: I think that you are giving a sinister interpretation. I assure you that the intention—certainly from the design team and the promoter—is that there will be a walkway and cycleway.

Kristina Woolnough: We are gaining a lot of comfort from that; we would just like it to be enshrined in legislation. You see no engineering reason why we cannot include the word “walkway” with “cycleway” in the bill.

Gary Turner: I also see no reason why the promoter cannot give an undertaking that it will be a walkway and cycleway.

Kristina Woolnough: Thank you. That is helpful. The landscape and habitat management plan shows gaps between the trams ranging in distance from 10cm to 23cm. Is that normal in a tram proposal?

15:45

Gary Turner: The gap will depend on where the trams are in the alignment. Generally, if the alignments are parallel on a straight section, there is no reason why the kinematic envelope between the trams should be greater than 10cm. That is fairly normal. Where the trams run on a curved horizontal alignment, we get end throw and centre throw, which cause the tram to overhang the edges of the track slightly. In those circumstances, to maintain the kinematic envelope at a minimum distance of 10cm, the tracks will move apart marginally, which is why there tends to be a slight variation in the gap between the trams.

Kristina Woolnough: The safety gap is not always there.

Gary Turner: I am sorry—what do you mean by “safety gap”?

Kristina Woolnough: In tunnels, a safety gap is to be incorporated in the cycleway and walkway but, in other circumstances, a whole metre is set aside.

Gary Turner: Are you referring to the safe egress routes?

Kristina Woolnough: Yes, I think I am.

Gary Turner: Normally, if a tram had to come to a halt and there was a need to evacuate the passengers, there would be a safe egress route. The trams will generally be longer than the bridge structures, so it is not likely that a tram will be wholly contained within a bridge structure—there will always be one doorway that is not within the bridge. However, if a tram was wholly contained,

the controller would be notified and other trams would be made aware that something on the line had caused a tram to stop. Other trams would be brought to a halt or told to proceed with caution. There is no reason why people could not be evacuated on to the tram tracks and then on to the corridor. That would also happen if a tram on the track that is further away from the cycleway and walkway came to a halt—people would proceed across the track to the walkway. That is one advantage of having a tram system with an incorporated walkway and cycleway.

Kristina Woolnough: In tunnels or at other points where a barrier may be required, such as pedestrian crossings, would people use the tram track in the event of an evacuation?

Gary Turner: As I mentioned, the bridge structures to which we are referring are such that the tram will always be longer than the structure. Therefore, there will always be tram doors at an area where there is free access to the walkway.

Kristina Woolnough: So people will go down the tram.

Gary Turner: Yes. People could also evacuate on to the adjacent tramline, because, if an incident occurs, the control room would notify the other trams.

Kristina Woolnough: There is an issue about the demolition or alteration of bridge and tunnel structures. You say in your statement that only one such structure has been designated, but is it possible that others may require demolition?

Gary Turner: At present, there is no foreseeable reason why that would happen. I put in the caveat because, although the City of Edinburgh Council has assessed all the structures that carry a highway over them because of a requirement for an on-going programme of assessment of the load-carrying capacity of bridges, those which are in private ownership—such as the one that leads to the access road to the hotel at Craighleith—have not been assessed. All bridges that carry highways have been assessed and their load-carrying capacity is known. There is no reason to think that there will be any requirements to do anything to the structures.

Because the structures that will carry the trams do not carry highway vehicles, there has been no requirement to assess them. Therefore, it would be prudent for the promoter and the design team in developing the scheme's detailed design to assess those structures to ensure that they have not deteriorated and that their load-carrying capacity is sufficient. As the trams will be considerably lighter than the heavy rail vehicles that used to run on the alignment, I do not see any reason why the load-carrying capacity should be in question.

Kristina Woolnough: Obviously, putting the walkway and cycleway at the side of the track on some of the bridges—by which I mean structures that the tram will go over rather than those that it will go under or through—will increase the required width. Can you guarantee that that will be possible in every case?

Gary Turner: Yes. There is no engineering reason why that cannot be. As I said, it is possible that some modifications to the structure will be required relating to its load-carrying capacity, but the actual loads associated with pedestrian movements are significantly low. The engineering method that is undertaken is considered, rather than the load-carrying capacity.

Kristina Woolnough: I meant the structure of the existing bridges and the impact of hanging bits on the side of them, and whether they would be able to take that load in a different location to where they took a railway train load.

Gary Turner: There are two ways of approaching that. One is to incorporate modifications within the existing structure and make them an integral part, and the other is to have an independent structure that sits alongside.

Kristina Woolnough: So there is no doubt in your mind that it is entirely feasible that there will be no engineering obstructions going through and on top of all the bridges and tunnels on the Roseburn corridor.

Gary Turner: From the point of view of load-carrying capacity, that is the case. The only area where I see that there may be some requirements in respect of the overline structures that the trams go through—your “tunnels”. You mentioned the clearances for the overhead line equipment. In some of those locations the alignment of the tram requires the solum to be reduced. Where the solum goes through it will be relative to the substructure of the bridge itself, therefore there is potential for the bridge structure to be undermined. If that occurs, it will depend on where the foundations are relative to the solum. In most circumstances, it may be more practical to replace the structure rather than to strengthen it.

Kristina Woolnough: At what stage will we know that?

Gary Turner: We will know fairly soon. My understanding is that the promoter has a series of site investigation works to undertake. As part of those, trial pitting will be undertaken to establish the levels of the foundations of the bridge structures relative to the solum levels that are proposed in the design.

Kristina Woolnough: People are concerned about the pinch points where the cycle walkway goes on and off the narrow bridge structures. In

effect, the cycle walkway and the track will have to be built out. Will engineering difficulties be associated with that?

Gary Turner: Do you mean where the tram goes over the bridge?

Kristina Woolnough: I mean over the bridge; there is a pinch point at either end of the bridge. What will happen there?

Gary Turner: I am not aware of any pinch points where the tram goes over the bridges.

Kristina Woolnough: I mean at Craighleith Drive bridge.

Gary Turner: But the embankment will be widened—

Kristina Woolnough: That is what I am asking. Do you plan to widen the embankment?

Gary Turner: Yes—that is correct. The only areas of which I am aware where there is a potential for reduction of the width of the walkway and cycleway are the four locations where the tram goes under bridges, which are referred to in my rebuttal.

Kristina Woolnough: In terms of required engineering works to access the bridge structures, for example for the pedestrian walkway, you are going to widen the embankments.

Gary Turner: The engineering works will accommodate the 3m-wide walkway and the tram.

Kristina Woolnough: The design for that will come when?

Gary Turner: The detail designers are now engaged by the promoter. My understanding is that the preliminary work will comprise site investigations and collection of all the additional information that will be required. Understandably, there will be a period when the new designers—Systems Design Services—will be on board to take note of all the work that has been developed as part of this parliamentary process. As they get under way, they will start to develop the design. However, I do not know the programme for that.

Kristina Woolnough: Do you understand the local concern that the tramline is not technically feasible, with all the tunnels, bridges and so on?

Gary Turner: No. At most of the community liaison group meetings that I attended and at which you were present, the promoter tried to give the local community as much assurance as possible that the thing is feasible. What has tended to frustrate the residents has been the fact that the detail has not been available to them. Unfortunately, the detail will not be available until the bill has received royal assent. The promoter has made as much effort as is practical to assure the residents that such matters will be addressed.

Kristina Woolnough: Do you understand my concern that it would be disastrous, although we have had assurances that all the aspects of the scheme are possible, if it became clear that it was not possible to use the Roseburn corridor at a too-late stage?

Gary Turner: I do not think that we will find ourselves in that position.

Kristina Woolnough: Would the listing of the bridges by Historic Scotland impact on your ability to demolish or seriously alter them?

Gary Turner: Are you referring to the potential listing of structures by Historic Scotland?

Kristina Woolnough: Yes.

Gary Turner: If any work needs to be done to those structures, the promoter will work closely with Historic Scotland to ensure that it is done in a manner that that body finds acceptable. That will be the case whether the structures are listed or not. Certain procedures will need to be followed as part of the process of getting acceptance for what will be undertaken at particular locations.

Kristina Woolnough: Would listing the bridges represent an engineering constraint?

Gary Turner: I would not have thought so.

Kristina Woolnough: Are you saying that there is a technical solution for everything, including protection of listed bridges?

Gary Turner: Yes. The purpose of listing is to preserve parts of our heritage. Any modifications to the structures in question would assist with the linearity of the corridor and would enable the functionality of the tram and human usage to co-exist.

Kristina Woolnough: I move on to the width of the cycleway and walkway. The promoter is the City of Edinburgh Council, which produced the cycle design guide to which we have referred. Do you understand that, because of that, we feel that the promoter should go for the optimum as opposed to the minimum cycleway and walkway width?

Gary Turner: No. I think that I deal with that issue in my rebuttal. We can have a 4m-wide cycleway and walkway only when that is possible. Besides, the City of Edinburgh Council recommends that a balanced view be taken of the demands. At the moment, demand in the Roseburn corridor does not warrant a 4m-wide cycleway and walkway.

Kristina Woolnough: Will you refer us to the document that says that more than 1,000 people movements a day is not large demand? Where is that stated?

Gary Turner: That is stated not in the council's guidance, but in a document that the Scottish Executive produced, which suggests that a 2m-wide cycleway is a workable solution for handling 200 movements an hour. If we assume, as you did, that the day is 10 hours long, that represents about 2,000 movements a day, which is twice the usage rate in the Roseburn corridor.

Kristina Woolnough: In your rebuttal, you set out figures on how many cyclists and pedestrians a minute use the Roseburn corridor. Do you accept that you took an average and that, often, that is not how things work in reality?

Gary Turner: I accept that whole-heartedly.

Kristina Woolnough: When one monitors the numbers of people who use the corridor, one finds that there are peaks and troughs. I cannot find a polite way of saying that your assessment is rather arbitrary and does not reflect what actually happens. In reality, one gets pinch points or bunch points, when many cyclists and pedestrians use the corridor all at once, perhaps during the morning peak.

Gary Turner: The first point that you made is that the figures that you cited were for a day and did not indicate any sort of trend. I wholly accept that. You might recollect that you were kind enough to give me the details of how you collated your information. I contacted you to establish whether you had information on the flows during peak hours. I gather that the way in which the figures were recorded meant that you did not have that information. Even if we assume that the peak-hour flows are twice the average flow, that would still keep the usage rate within 200 movements per hour which, according to one of the Executive's guidance notes, is acceptable for a 2m-wide cycleway and walkway.

16:00

Kristina Woolnough: Can I just correct you? I know that you contacted me about the—

The Convener: Committee members have received a sufficiency of evidence on that point. It might be better if you focused on what is in dispute.

Kristina Woolnough: Okay.

I can share with you the hourly figures. I was not aware that you asked me for those at any point, but they show that there are peaks. The issue in dispute is whether usage will be high. You acknowledge that there are peak commuter times.

Gary Turner: Yes.

Kristina Woolnough: So your figures for one cyclist per minute and less than one pedestrian per minute will not apply to peak times.

The Convener: Question, Ms Woolnough.

Kristina Woolnough: Will it?

Gary Turner: I accept that there will be peaks. I was giving an average of the information that was available to me.

Kristina Woolnough: In paragraph 3.9 of your rebuttal of my statement, you compare the number of passengers on the tram with the number of people movements at present. Do you agree that one figure is known and one is untested?

The Convener: We have covered that before as well.

Kristina Woolnough: We did, but it is in Mr Turner's rebuttal.

The Convener: We are interested in what the issue is. That is being lost in the level of the detail that is being pursued here.

Kristina Woolnough: The issue for us is that we requested that a wider cycleway and walkway be considered in accordance with the council's objectives. Would that cause an engineering difficulty in the Roseburn corridor?

Gary Turner: If there were to be a wider cycleway and walkway, which I do not believe is justified, there would be pinch points. All that would be achieved in the rest of the corridor would be a larger loss of the vegetation that you are so keen to keep.

Kristina Woolnough: Okay. Do access and compliance with the DDA come under local accessibility?

The Convener: Yes, we will come on that later.

Kristina Woolnough: Okay. The difficulty is just that the issues are covered in the same rebuttals. That is everything.

The Convener: Thank you, Ms Woolnough.

Mark Hallam: Mr Turner, I want to return to the issue of the bounding of the cycle path. Earlier we established that we might get a low kick-rail. Could you describe a low kick-rail to me?

Gary Turner: It would be a series of posts that come to about knee height, on top of which would be a timber rail.

Mark Hallam: That is in effect a bounding of the cycle path.

Gary Turner: It would be the demarcation between the tramway and the cycleway and walkway.

Mark Hallam: It would be described as a bounding in the cycle guide. It is a physical object on one side of the walkway and one side of the cycle path.

Gary Turner: I was going to make the point that it does not define a boundary, but I agree that the area cannot be freely wandered on to, so it would be classed as a bounded area.

Mark Hallam: Your rebuttal statement says:

"On the outside of the walkway/cycleway current proposals for fencing and retaining walls will impact on less than a third of the route along the Roseburn Corridor."

It is a question of emphasis. In effect, you are saying that the entire route will be bounded.

Gary Turner: Are you talking about it being bounded by the kick-rail?

Mark Hallam: The whole route will have some form of bounding.

Gary Turner: Do you mean by the kick-rail?

Mark Hallam: Yes.

Gary Turner: Yes.

Mark Hallam: And a third of the route will be bounded by retaining walls or fencing.

Gary Turner: Yes, on the outside edge.

Mark Hallam: Do you know how much of the current cycle path is bounded?

Gary Turner: Predominantly, it is bounded only at the structures.

Mark Hallam: And how bounded are the structures in terms of encroachment on to the cycle path?

Gary Turner: All the underline structures are bounded.

Mark Hallam: Right up to and encroaching on to the cycle path? I have cycled down that path many times and I know—

The Convener: A question, Mr Hallam, rather than a discussion.

Mark Hallam: I think that he is wrong, I am sorry.

The Convener: When you give evidence, you will have an opportunity to put that on the record.

Mark Hallam: Fundamentally, the position is that little of the cycle path is bounded at present but, in future, all of it will have some bounding and some of it will be enclosed. Will that make the path more or less attractive to users?

Gary Turner: I think that it will change the use of the area. The question whether it will be made more or less attractive depends on whether you are talking about the issue from the perspective of the cyclist or the walker. The issue is one of perception; I would have no problem with the proposed set-up.

Mark Hallam: Your view appears to go against what we have discovered in the survey, in which a

number of people said that the proposal would make the path less attractive to them. Do you agree that that is the case?

Gary Turner: I do not disagree that people said that in that survey. However, as Ms Woolnough stated earlier, you can give a survey whatever slant you like. Having read the questions that were asked, I do not think that they were unbiased.

Mark Hallam: In what circumstances do you feel that that the absolute minimum requirement—2.5m, plus 0.5m where bounding is required—should be applicable? Should that be applicable in an open space or adjacent to a tramline?

Gary Turner: The City of Edinburgh Council gives no guidance notes as to when one should apply a boundary of 4m or 2.5m. The Scottish Executive gives some examples of how decisions are made on the widths of walkways and cycleways. For walkways and cycleways that are subject to general levels of usage—200 movements an hour—it states that its preference for the width of an unbounded walkway and cycleway is 3m. However, it accepts that, in areas in which the movements are mostly in a linear direction—rather than areas that are adjacent to shops and in which people will be wandering from side to side as well—a 2m-wide combined walkway and cycleway would be acceptable for a usage level of 200 movements an hour.

Mark Hallam: Do you agree that the fact that one side of the cycleway will have a tram moving at 40mph makes it more desirable that the path be wider?

Gary Turner: Given the number of movements that take place on the railway corridor, I would say that 3m—even where the path is bounded—would be adequate.

The Convener: If committee members have no questions for Mr Turner, I invite Mr Thomson to ask any that he might have.

Malcolm Thomson: To your knowledge, Mr Turner, is it a long-standing commitment of the council that there should be a cycle track and walkway running alongside the tramway in the Roseburn corridor?

Gary Turner: My understanding is that that has been the commitment of the council from the outset.

Malcolm Thomson: Will that be a cardinal requirement of any design contract?

Gary Turner: I would believe so, yes.

The Convener: We will now turn to the issue of local accessibility. Mr Thomson, do you have any questions?

Malcolm Thomson: No.

The Convener: Ms Woolnough?

Kristina Woolnough: In paragraph 3.2 of your rebuttal of me and Mr Clarke, you describe formal access at points in Queensferry Road. What is that access? Do you mean Craigleith Crescent rather than Queensferry Road?

Gary Turner: I am trying to get my head round it.

Kristina Woolnough: Perhaps you can get back to the committee on that.

Gary Turner: I am sorry.

Kristina Woolnough: It is difficult. I am trying to get to grips with new proposed accesses and suchlike, so I seek clarification.

In paragraph 3.3, you talk about the introduction of additional formal access points. Where would they be? I asked a witness earlier in the proceedings where the new access points were going to be and they referred me to you.

Gary Turner: At each of the proposed new stops, provision has been made to have DDA-compliant access. You will be aware that the majority of the access to the corridor at the moment does not quite meet the requirements of DDA regulations. There is a proposal for an access point at Roseburn Terrace. There is an old access up to the railway corridor that has been disused for a while, although it is occasionally open. It is intended that it will be opened up as a DDA-compliant access and it will be in addition to the access that is adjacent to that area.

Kristina Woolnough: Are there to be any new ones? I know that it is confusing, but I am representing group 34, which is to do with Ravelston Dykes northwards. Are any new formal access points proposed for that stretch? I have looked at the landscape and habitat management plan and at your rebuttal. Your rebuttal refers to new access points, but not to any that I could see in the landscape and habitat management plan.

Gary Turner: An access point is proposed for the section between Craigleith Drive and Craigleith View. I know that you asked about that. Where that footpath—I apologise for any confusion that I caused by referring to it as two footpaths—dog-legs, there is an informal access on to the Roseburn corridor at present and it is intended to formalise that path down the bank into steps. That is why I tend to refer to that access point as having two options.

Kristina Woolnough: So where are we—Craigleith View and Craigleith Drive?

Gary Turner: That is correct.

Kristina Woolnough: The bank there does not have an informal access; it has a steep climb that people occasionally use. Are you referring to that?

Gary Turner: Yes. I would say that it is an informal access.

Kristina Woolnough: It will be formalised.

Gary Turner: It will be formalised with the introduction of steps.

Kristina Woolnough: But it will not be DDA compliant.

Gary Turner: It is proposed that access at all stops will be DDA compliant.

Kristina Woolnough: At all stops, but not at all access points.

Gary Turner: The intention is that if other access points are not affected, they will remain as they are. If there is to be some alteration or introduction of new access points, they will meet the DDA requirements, but steps by themselves are not DDA compliant.

Kristina Woolnough: I am confused. Will the proposed new access, which will be steps up from the alleyway between Craigleith Drive and Craigleith View, be DDA compliant?

Gary Turner: They will be steps and therefore not DDA compliant.

Kristina Woolnough: The existing access point at what I think you call Queensferry Road—I am not sure that that is what you mean—and what I call Craigleith Crescent because the access is in Craigleith Crescent, has steps. I do not see any proposals in the landscape and habitat management plan to turn that access into a DDA-compliant ramp.

Gary Turner: If an access point is not at a stop location, then there is no such proposal.

Kristina Woolnough: Right, I understand. DDA compliance is required just at stop locations.

I have asked about the formalisation of crossing points. I will leave that with your colleague.

You state in paragraph 3.4 of your rebuttal statement:

“Where access points to the corridor are remote from tram stop locations ... further formal crossing points will be provided.”

What does that mean? There are quite a number of access points. Do you mean only the ones on the opposite side from the cycleway and walkway? That would not affect the bits in my area. Is that correct?

16:15

Gary Turner: Towards the southern end of the corridor, one or two of the access points on to the corridor are on the opposite side of the alignment from where it is proposed to have the walkway and

cycleway. We are saying that at those access points there will be formal crossing points to allow people to get to the walkway and cycleway.

Kristina Woonough: On a number of occasions, it is stated that access will be improved because it will be made DDA compliant. In fact, we have described two access points that will not be DDA compliant and that will not improve access for cyclists or people with prams.

Gary Turner: Sorry, which are those? The one that we have discussed, which is off the footpath—

Kristina Woolnough: The access points at Craighleith Crescent and at Craighleith View and Craighleith Drive will not be ramped, so they will not improve access to the corridor as I think is claimed in a blanket way in the rebuttal statements.

Gary Turner: Where people at the moment scurry down the embankment, formal steps will be put in place to improve access. I find it difficult to get down that section, and steps will certainly improve access for me.

Kristina Woolnough: But steps will not improve access in terms of DDA compliance at some of the access points to the walkway and cycleway.

Gary Turner: I did not claim that steps will improve access with DDA compliance in mind.

The Convener: If it is helpful, we get the point.

Kristina Woonough: You get the point. Thank you very much. That is helpful.

In paragraph 3.5 of your rebuttal statement, you talk about

“the ‘invisibility’ of tram stops”.

Would it not be better if the tram stops were visible?

Gary Turner: They will be visible to the users. You have stated that the corridor is quite well used by people, and it will be visible to them. The tram users will be aware of where the tram stops are and, as part of the introduction of trams to Edinburgh, there will be signage to show where the tram stops are.

Kristina Woolnough: You say that in your statement. That is what I am asking about. Because you recognise that there is an issue to do with the “invisibility” of tram stops, you say that the matter

“will be addressed through suitable signage”.

I am asking you whether it would not be better to have an on-road alignment that was visible. A more visible tram scheme would be more ideal. The fact that you propose to use signage shows that you recognise visibility as an issue.

Gary Turner: No. A fully segregated tramline alignment would be far better, as there would be no interaction with traffic.

Kristina Woolnough: We have talked about the landscape and habitat management plan. When will illustrations of new accesses be produced?

Gary Turner: As the proposals have been developed, they have been introduced into the landscape and habitat management plan. As I mentioned earlier, as the detailed design of the scheme evolves, that document will continue to be live. I would like to think that those sorts of issues will continue to be discussed in the community liaison groups.

Kristina Woolnough: Will local people be consulted on whether they wish to have the informal access that you describe from the alleyway between Craighleith View and Craighleith Drive formalised? Is that an option?

Gary Turner: I anticipate that it will become an option through the CLGs. I am sure that any opportunity to increase access to the corridor will be welcomed.

Kristina Woolnough: In paragraph 3.2 of your witness statement, which I rebutted, you state:

“Existing access arrangements to tram stops from adjacent streets will be improved in accordance with the appropriate Disability Discrimination Regulations affording high quality accessibility for all groups of users.”

Do you mean the accessibility of the tram, as opposed to the accessibility of the corridor? We have just described one new access point and one existing access point that will not be improved.

Gary Turner: No. The tram promoter is not discriminating against those who use the corridor. The people who gain access to the corridor can equally use the facilities that are provided for access to the tram stops.

Kristina Woolnough: Do you have an exact assessment of which access points to the corridor do not meet regulations, which of them will meet regulations after the tram proposals have gone in, and which of them will still not meet regulations? You said that most will, but it might be helpful if you had an exact assessment of them.

Gary Turner: I do. If the committee wishes, I could forward them. However, my understanding is that only the points at Craighleith would currently comply with the DDA.

Kristina Woolnough: And the one near Roseburn Maltings?

Gary Turner: That would not comply with the DDA.

Kristina Woolnough: Okay.

Gary Turner: However, the new provision will.

Kristina Woolnough: I suggest that the new access arrangements at Craighleith View are no more onerous than those at Roseburn Maltings and Russell Road.

Gary Turner: I think that you will find that the gradients are steeper.

Kristina Woolnough: Getting it in black and white would be very helpful.

I would like to ask you about rights of way and DDA-compliant access, which I discuss in my rebuttal to you. The landscape and habitat management plan is evolving, but it will be enforceable in its final version. How can we be sure that the proposed accesses will materialise in the form in which they appear in the plan? Is that part of the detailed design engineering work?

Gary Turner: It will be, yes.

Kristina Woolnough: So we will not know whether they are technically feasible until that time.

Gary Turner: We have our information because we looked at the feasibility of the accesses.

Kristina Woolnough: In paragraph 3.2 of my rebuttal to you, I ask where your evidence is that there will be greater access to a wider group of users. What is your evidence for that claim?

Gary Turner: The tram itself will generate far higher footfall in the corridor.

Kristina Woolnough: Right.

I wish to ask about the lift at Ravelston Dykes, which Sue Polson raised and which you rebutted. You probably do not need to refer to it. What is the state of play with the lift?

Gary Turner: It is exactly as it is in my rebuttal: the need to rely on mechanical means to get down to the stop has been engineered out.

Kristina Woolnough: Originally, a lift was shown accessing from Ravelston Dykes.

Gary Turner: That is correct. The P5 plans showed a lift. At the time, the level difference between the highway and the solum was about 10m. We believe that that can be reduced to 7m and that we can therefore get a DDA-compliant ramp between those levels.

Kristina Woolnough: Has that plan been changed and relodged with the Parliament?

Gary Turner: There is no requirement to do so. The plan that was submitted to Parliament covers changes to the height of the alignment.

Kristina Woolnough: So the absence of a lift does not figure as—

Gary Turner: The inclusion of a lift is a matter for consultation with the general public. In fact, we

have been liaising with the Mobility and Access Committee for Scotland, which will continue to discuss such issues with the promoter and design team. Rather than our making an arbitrary decision about whether a lift is applicable, the matter will be discussed with the relevant bodies and advice will be sought from the Scottish Executive and other informed bodies. From that, a considered judgment will be made as to whether a DDA-compliant access ramp will have to be supplemented with a lift.

The Convener: Although I am sure that this kind of discussion is of interest to many people, focusing on the issues in dispute will enormously assist the committee and will maintain our focus on what concerns the objectors.

Kristina Woolnough: The issue for the objectors is that they found the lift a more desirable mechanism of access. Will that be factored into the ultimate design?

Gary Turner: The opinions of the people affected in that area will certainly be taken on board.

Kristina Woolnough: My next question concerns the technical feasibility of the ramp and the raised platform. How will that affect access on and off the corridor?

Gary Turner: It will not. It is not the platform but the solum that is raised, so the level of the corridor itself will be higher.

Kristina Woolnough: How will it get through the tunnel, then? Will the height be dramatically reduced so that it can get through the tunnel at Ravelston Dykes?

Gary Turner: The structure at Ravelston Dykes is extremely tall, as I am sure you are aware.

Kristina Woolnough: It is tall but it is narrow. Might you have to change the position of the track?

Gary Turner: The impact will be only on the vertical alignment, not on the horizontal alignment. There is more than adequate clearance for the solum to be raised. That is why we have taken that into consideration.

Kristina Woolnough: Can you appreciate that we seem to be looking at a moving target, and that what we thought was a certainty is no longer a certainty? Do you understand that that is our concern?

Gary Turner: I am not sure what your certainty was.

Kristina Woolnough: That there was a lift in the plan. Apparently—possibly—there is not a lift any more. I shall leave that point.

At what point does DDA compliance come into your design for the tram scheme? I do not mean the tram vehicles; I mean the access to them.

Gary Turner: All the stops on the proposed alignment will be DDA compliant and access to them will be DDA compliant.

Kristina Woolnough: Do you factor that in at the detailed design stage?

Gary Turner: That will be a requirement of the scheme itself.

Kristina Woolnough: What I am getting at is the fact that DDA-compliant access to the trams per se is not the same as DDA-compliant access to the cycle and walkway.

Gary Turner: It will be one and the same.

Kristina Woolnough: Except that we have talked about the new access points that will not be DDA compliant.

Gary Turner: We are talking at cross-purposes, I believe. You have asked what the DDA compliance will be for the tram alignment, and I have said that all stop locations will be DDA compliant.

Kristina Woolnough: I have a few possible questions for group 45, although it may be that I have covered them. In your rebuttal of my witness statement for group 45, you talk about raising the level of the tram alignment by 2m. Has that been agreed with HMRI as desirable?

Gary Turner: The issue of raising the solum has not been discussed with HMRI, whose interest is in an alignment that it believes is safe and operable. The issue of access ramps and lifts has been discussed with HMRI, and its interest is in whether they meet current legislation. If the access ramp meets DDA compliance requirements, HMRI will have no requirement for us to incorporate a lift as well.

Kristina Woolnough: Does the 2m increase in the solum reduce gradually? Obviously, there will not just be a little lump where the stop or platform is. Does it have a knock-on effect?

Gary Turner: No, we will provide a natural introduction to the alignment. There will be a certain amount of excavation works at the stop location because of the need to comply with DDA access requirements. It is quite probable that we will end up having a balance of cut and fill.

16:30

Kristina Woolnough: Will there be significant changes in the landscape and habitat management plan to provide for the run-up to, and run-away from, that 2m increase in the solum?

Gary Turner: No, there will be no significant changes.

Kristina Woolnough: But there will be changes.

Gary Turner: I am not so sure. I would need to recall what provision has been made. In the bigger picture, there will be no noticeable change.

Kristina Woolnough: Okay. I think that I have now covered just about everything.

The Convener: Thank you, Ms Woolnough. Do committee members have any questions?

As members have no questions, Mr Thomson may ask his follow-up questions.

Malcolm Thomson: Mr Turner, will you clarify whether it is the promoter's intention that all tram-vehicle stops and accesses to stops should be DDA compliant?

Gary Turner: That is correct.

Malcolm Thomson: On a separate issue, are there existing access points to the Roseburn corridor?

Gary Turner: The Roseburn corridor has existing access points that can provide access to stop locations.

Malcolm Thomson: Are some of the existing access points like the one at Ravelston, which is almost on top of the proposed Ravelston stop?

Gary Turner: That is correct.

Malcolm Thomson: However, there is no reason why the existing access arrangements should not continue, in addition to the new access provision for the stops.

Gary Turner: That is correct. There will be an additional provision.

Malcolm Thomson: So, at Ravelston, people will be able to use either the existing old access ramp or the new access provision to go down to the platform.

Gary Turner: That is correct.

Malcolm Thomson: Thank you very much.

The Convener: We will now consider the issue of security in the corridor. Mr Thomson may put his opening questions to Mr Turner.

Malcolm Thomson: I invite Mr Turner to update the committee on events relating to security that have occurred since his statement and rebuttal.

Gary Turner: I think that my rebuttal refers to our discussions with the police. Since I wrote that, Lothian and Borders police have written to us with information on the misdemeanours that tend to occur in the vicinity of the Roseburn corridor and adjoining area. They have also commented on

what I view as the current Edinburgh tramline 1 proposals. In general, the police say that the majority of misdemeanours that occur in the area tend not to be related directly to the corridor itself. They believe that the proposed introduction of the tram into the corridor will be beneficial to security along the corridor.

Malcolm Thomson: Do the police sound any warning notes?

Gary Turner: The police mention two things—the promoter hopes to address these issues with the objectors—both of which relate to vegetation. First, they say that they would welcome better management of the vegetation that is adjacent to the walkway so that, instead of having bushes and trees right next to the walkway, we would have more cover at lower levels and at ground level. They would also welcome any improvements to the lighting in the corridor. In addition, they acknowledge the concerns of residents by asking that hedging and deterrent planting be retained in the corridor and incorporated into the boundaries that are adjacent to the properties.

The Convener: Mr Scrimgeour may now ask questions of the witness on group 34.

Graham Scrimgeour: There are small areas of difference, but I hope that they can be quickly assessed. I will summarise what I think those differences are and ask Mr Turner whether he agrees with my summary.

The main thrust of your statement is that the tram will not increase antisocial behaviour and will not attract troublemakers. You go on to say that the tram may even reduce such behaviour. However, our view is that the tram will not change—it will neither increase nor decrease—the presence of antisocial elements.

Gary Turner: I think that the objectors' concern was that the introduction of the tram, the increase in footfall and the potential loss of vegetation might increase both antisocial behaviour and—if I may define it in this way—the numbers of those who might trespass into people's gardens with ill intent. By pointing to anecdotal evidence from other tram schemes, we have tried to assure the residents along the Roseburn corridor that the presence of trams, passengers and other people on board the trams, as well as people at stops, tends to discourage antisocial behaviour.

Graham Scrimgeour: There are two issues: the presence of troublemakers and how much trouble they can cause. Our concern is that, if the vegetation is reduced, the likelihood might be the same, but the impact might be greater, to use Mr McIntosh's argument. If there is less vegetation, stone throwing, egg throwing and illegal entry to gardens might be more possible. Our concern is about the barrier or screening effect.

Gary Turner: We recognise those concerns. One of the intentions of the landscape and habitat management plan is to address those concerns and to give assurances that, although the natural hedging that occurs at the boundary of the corridor and adjacent to people's properties may in the early stages be managed and thinned out, there will be supplementary planting. The height of the hedge after the management process will still give the level of privacy and security that the residents seek. That is certainly the promoter's intention. In a letter to us, Lothian and Borders police endorse and welcome the promoter's approaches to work with them and state that they are prepared to advise on how we can find the best means of developing the corridor for the tram while retaining the privacy and security that the residents currently enjoy.

Graham Scrimgeour: I will pick up on one or two points in your rebuttal and then consider our proposed amendments. Your rebuttal mentions that in pedestrianised town centres in Karlsruhe and Freiburg antisocial behaviour was reduced as a result of trams. Is that analogous to the situation in the Roseburn corridor?

Gary Turner: I cited those examples to point out that it is recognised that the movements of people on trams discourage antisocial behaviour. I take the point that we are comparing a city centre with a corridor, but the intent was to demonstrate that the physical presence of tram and other public transport systems is a deterrent to such behaviour.

Graham Scrimgeour: I was going to ask about the level of endorsement that Lothian and Borders police have given to the scheme, but you have given more information on that. Can all the information from Lothian and Borders police be shared?

Gary Turner: I have no problem with that.

The Convener: I ask for the response from the police to be shared with the committee, after which it will be shared with everyone else.

Gary Turner: Certainly.

Graham Scrimgeour: Paragraph 3.5 of your rebuttal refers to patrol staff. Do you anticipate that there will be patrols through the corridor or are they more likely on other parts of the route?

Gary Turner: The corridor is one of the areas that will be patrolled. We have discussed the issue with the tram operator, which anticipates that patrol staff will work partly on the tram system, to monitor what is happening on the trams, and occasionally on foot. Lothian and Borders police have said that one advantage of a tram system is that, as they like to have bobbies on the beat, they will encourage their colleagues to use the tram system in the line of duty—police officers will

board trams and use the system to get round the city centre. The police will make their presence felt and observe what is happening in the tram system.

Graham Scrimgeour: Your rebuttal states that grass track is better than ballasting because ballasting provides missiles and grass does not. Is that a recognition of the security value of the grass track and a commitment to use such track?

Gary Turner: As Mr McIntosh said, as far as the team that is promoting the bill through the parliamentary process is aware, the promoter is totally committed to a form of grass track in the corridor.

Graham Scrimgeour: The rest of my questions relate to the amendments that we proposed in our original objections and in the witness statement. The landscape and habitat management plan gives a lot of detail on mitigation, but we propose that it should be given enforceable status by the bill. Do you agree?

Gary Turner: It is for the committee to make a decision on what is required to be in the bill. Certainly, however, the promoter has undertaken to work with Lothian and Borders police and the residents to ensure that the implementation of the landscape and habitat management plan will take into account the concerns of the residents about security and privacy.

Graham Scrimgeour: There is a number of stages in the process. There will be a need for fencing during construction, when vegetation is removed and in the early years of operation, when the replacement vegetation will be immature. We would want secure screening to be achieved as quickly as possible rather than taking 10 or 15 years.

Gary Turner: I accept that. The majority of the hedging that is there at the moment is hawthorn, which is not like sapling trees in that it grows and thickens quite quickly—certainly more quickly than the 10 to 15 years that it would take for saplings to mature into larger trees. My understanding is that the promoter will address the issue of the vegetation at the edges of the corridor as soon as possible so that the hawthorn hedging can become established as soon as possible.

Graham Scrimgeour: Is the promoter committed to doing that, or might it be lost in the detail later?

Gary Turner: As far as I am aware, that is an undertaking that the promoter is quite happy to give.

Graham Scrimgeour: We would welcome that. Mr McIntosh suggested that the tram would have an operational life of 80 years. Given that people in authority will change throughout that period, we

seek a mechanism for ensuring that that screening is maintained. As has been mentioned before, the council has responsibility for managing vegetation but that has not happened over the past 10 or 15 years. From where do we get comfort that the vegetation will be maintained and managed in the future?

Gary Turner: I think that a formula is being developed in relation to who will take on the maintenance liability for the Roseburn corridor and the rest of the tramline. That decision has not yet been made, but the undertaking is that the vegetation will be maintained. Certainly, it is in the operator's interests that it be maintained in a proper form.

Graham Scrimgeour: Our concern was that perhaps the bill should be amended to enforce that.

The Convener: That was not a question, but your point is noted.

Graham Scrimgeour: I would just like to clarify that that is a point of difference that remains.

The Convener: We got that.

I ask Mr Hallam to ask questions on behalf of group 35.

Mark Hallam: We welcome what Lothian and Borders police have said and note that things might improve with the introduction of the tram. However, if there were better habitat management and illumination and a bobby on the beat, would not security improve anyway? How relevant is the tram?

Gary Turner: I would say that it is quite relevant, because it means that the corridor has a high profile and that many more pairs of eyes—more than 1,000 pairs of eyes a day—will see what is happening on the corridor.

Mark Hallam: Most vandalism happens at night when CCTV on trains and so on is not in operation anyway.

Gary Turner: My understanding is that the promoter plans to have CCTV at all the stops and perhaps also on the trams. Lothian and Borders police have offered to discuss with the promoter the types of lighting and CCTV that they believe would act as a crime deterrent rather than as an informative system.

Mark Hallam: Might we see CCTV along the whole stretch of the Roseburn corridor?

Gary Turner: I do not think that there is a need for that. We have to strike a balance between a Big Brother system and what is practical.

16:45

Mark Hallam: Sabotage has been referred to. Your rebuttal does not say much about sabotage. Even if we allow for Lothian and Borders police's view that safety and security will improve, trams could be sabotaged. It is hard to believe that the introduction of trams will improve safety and security in that respect.

Gary Turner: I presume that you are referring to acts of terrorism rather than acts of vandalism. Are you referring to terrorism, vandalism or both?

Mark Hallam: I am talking about abuse of the trams.

Gary Turner: I understand that on-board as well as outward-facing CCTV systems will be introduced.

Mark Hallam: But people could lay things on the tram tracks at night and commit acts of sabotage. Things will not improve with the introduction of trams—to say that they will is a contradiction in terms.

Gary Turner: Obviously, there are no trams at the moment—

Mark Hallam: That is what I mean.

Gary Turner: If we legislated to deal with people's antisocial behaviour and chose to ignore that behaviour rather than be positive, society would not move far forward.

Mark Hallam: But is it not right to say that the introduction of trams might increase security risks?

Gary Turner: It could also be said that if buses had not been introduced, people would not throw stones at them. There would be no public transport system in Edinburgh. People must take a realistic view. If we introduce a system and an antisocial element out there tries to abuse it, it is up to society, as well as a promoter that wants to improve public transport, to ensure that the requirements of a good public transport system are met and that the acts of a few people are not succumbed to.

Mark Hallam: That is a nice idea, but the issue is the difference between what we experience now in the Roseburn corridor and what we will experience when the trams are introduced.

Gary Turner: Lothian and Borders police have said that people lurking in bushes and trees are one of the biggest factors behind assault incidents that it has to deal with. A balance must be achieved with a natural corridor, and part of the effect of introducing trams will be to reduce the potential for such incidents to happen. There will also be many more people in the corridor who will see antisocial behaviour by other people.

The Convener: We will now address the loss of garden work and works within the limits of

deviation. Do you have any questions, Mr Thomson?

Malcolm Thomson: No, thank you.

The Convener: I invite Mr Scrimgeour to ask questions for group 34.

Graham Scrimgeour: We are moving quickly now. I want to restate briefly what I think the differences are and to ask Mr Turner whether he agrees with me.

It has been helpful to confirm that the limits of deviation are limits of deviation and that the diagrams that showed trams straying outside those limits were simply erroneous. There are strips on either side of the corridor of uncertain ownership, and that matter has been investigated separately. Some gardens have been extended—

Helen Eadie: I am sorry to interrupt, but will Mr Scrimgeour speak up? I am having trouble hearing him.

Graham Scrimgeour: I am sorry—I will try to do so.

There are strips of land on either side of the corridor whose ownership is unclear, which are to be acquired as part of the proposal. Some gardens have been extended into those strips. Whatever the rights and wrongs involved and whether people have a title to that land, sheds have been put up, fences have been moved and gardens have been landscaped. How will the tram developer address such matters in practice?

Gary Turner: If it is established that the land is required in order for the tram works to be undertaken and that the owner has a title to it, they will be duly compensated. If they do not have title to it, I am not sure how the compensation acts will come into play. However, the issue is primarily a form of compensation.

I know that the promoter is looking at those areas quite closely. Although it does not accept that title belongs to other parties, if it can construct the works without having to enter into those lands, thereby easing the problem for both parties, it will be prepared to do so. However, it must undertake that investigation. As you will appreciate, the section is one of the narrowest, but the promoter is prepared to examine how that can be addressed. I say as a backstop that it will come down to a form of compensation, the level of which, I presume, will be determined by who owns the land.

Graham Scrimgeour: If ownership could not be demonstrated—if the land was simply being occupied—how would that be dealt with in terms of practicalities such as putting up a new fence or moving a shed?

Gary Turner: It depends on the practicalities of when the person occupied the land, and who paid

for the fence to be put up or the shed to be erected.

Graham Scrimgeour: I ask the question because, potentially, that will need to be dealt with.

Gary Turner: I accept that point. At the moment, that is not an engineering issue and I will have to refer it back to the client.

Graham Scrimgeour: Fair enough. That is useful, but inconclusive.

The Convener: I call Mr Murphy for group 35.

Frazor Murphy: I have your letter stating that the area at the back of 11 Upper Coltrbridge Terrace will not be permanently used by you. As you requested, we got our lawyers to write to you to confirm the details legally, but we have had nothing back. Can you shed any light on the matter?

Gary Turner: Unfortunately, I cannot. I will investigate that on your behalf following the committee meeting. I am not aware of the situation. Certainly, the request was made with good intent.

It is timely that the discussions are about the St George's access bridge. If we undertake any works on the bridge—whether that will happen has not been determined—the land will not be required permanently. The same applies to the piece of land to the rear of Garscube Terrace, access to which was discussed at some length with Mr McIntosh. Just as we sent a letter to you stating that the land would not be required permanently, a similar letter was sent to the other residents in July stating that their access would not be required permanently; I was, therefore, a little surprised when they said that this was the first that they had heard of it. The intention was to write to you to give you the information, so that we could get agreement and it would not be an issue. Had that been resolved, you may have had the opportunity to remove the objection on the basis that it was no longer relevant.

Frazor Murphy: Yes. It would have saved a lot of work.

Gary Turner: I can only apologise on behalf of the promoter. I undertake to find out the position.

Frazor Murphy: Right. We can get a copy of the letter.

The Convener: The committee would welcome confirmation that, as stated in the rebuttal, the promoter will enter into a formal agreement to that effect.

Gary Turner: I can only apologise.

Frazor Murphy: In the couple of months that I have been coming here, I have been hit

continually with the phrase, "There is no final design." How can you say that our garden will not be used, when for every other issue that we come across we are told that there is no final design?

Gary Turner: That is one of the issues to which I referred earlier. Although the detailed design has not been undertaken, a reviewed design has, understandably, been developed, so that we can see the practicalities of what we are promoting. From that, and from looking at the road access bridge, we know that if there are any requirements to undertake works to the structure, they can be done within the confines of the corridor. The extended area of land is required so that the works can be undertaken, but there is no requirement to permanently retain that land. An overview has been looked at.

Frazor Murphy: Can I say one last thing?

The Convener: You cannot say anything, but you can ask a question.

Frazor Murphy: Could someone come round and talk this through with me? The day I moved into the house I received a letter saying that I was losing half the garden. A lot of time, trouble and effort could have been saved with some communication.

Gary Turner: Certainly. My understanding was that Mr Murray, the scheme's project manager, had visited you and taken you through some of the points.

Frazor Murphy: I wish that he had.

Gary Turner: My apologies; I believed that he had done so. I am quite prepared to do that myself.

Frazor Murphy: I would enjoy that, thank you.

The Convener: Fine. We do not need to be party to the arrangements.

Frazor Murphy: You can come too.

The Convener: No, thank you. Does that conclude your questioning?

Frazor Murphy: Yes.

The Convener: Are there any questions on the loss of garden and works within the limits of deviation from committee members?

Members: No.

The Convener: Does Mr Thomson have any follow-up questions?

Malcolm Thomson: No.

The Convener: In that case, we will move to discuss errors in submitted plans. However, before we do that, I will raise the matter of the drafting of the bill on this issue. Members might well recall

that the clerks wrote to the promoter in July with several questions about the drafting of the bill. No response has been received from the promoter so far. You are not the only one, Mr Murphy.

In light of that, it is my view that it would be appropriate for members to put to this witness those questions about the bill drafting that relate to the issue of errors in the submitted plans. Naturally I encourage the promoter to respond, because any further delay might cause a delay in our reporting. I am sure that the promoter would not want that to happen, nor would you want us to call you back to give evidence on the matter. A letter in response would be much appreciated.

Mr Thomson, do you have any questions?

Malcolm Thomson: I have no initial questions.

The Convener: Ms Woolnough?

Kristina Woolnough: I simply want to ask about the issues raised in my rebuttal statement, which were about difficulties with the plans and errors. Part of the mechanism that was used was aerial photography. Did vegetation cover impact on what you assessed was there?

Gary Turner: The corridor was walked and structural reports were produced well before the topographical survey work was undertaken.

Kristina Woolnough: Are there any other oversights besides the kitchen extension in Groathill?

Gary Turner: I am not aware of any oversights at the moment. As I reported, there are no actual errors in the submitted plans. The Ordnance Survey plans did not include some of the extensions that have been built recently, but they were taken into account during the assessment work that was undertaken. If that has caused any distress to you or any of your colleagues, the promoter sincerely apologises.

Kristina Woolnough: You have moved on neatly to my next question. Can you understand that those early difficulties have led to mistrust?

Gary Turner: I can apologise on behalf of the promoter. If that was a question to me, I do not see why mistrust should have developed, and certainly not, I hope, in myself.

Kristina Woolnough: Can we agree then that we hope that there are no other googlies like that?

Gary Turner: I am not aware of anything.

Kristina Woolnough: We agree to hope.

Gary Turner: Yes.

Kristina Woolnough: Thank you. I like to end on a note of agreement.

Phil Gallie: Section 36 of the bill provides for the authorised undertaker to alter the books of

reference in parliamentary plans if they are inaccurate about the description of ownership of land. It does not, however, provide any objection period for the persons who are affected prior to such alteration. Why is that? Surely such persons should not be treated less favourably than those who object to the bill?

Gary Turner: That question needs to go back to my legal colleagues. I will get them to respond.

Phil Gallie: I suspected that that would be the case.

Gary Turner: I apologise, Mr Gallie.

Phil Gallie: You are caught in the crossfire, although I think that my point follows on from Ms Woolnough's points.

If there were to be any engineering alterations, would the parliamentary plans or books of reference be sent to partner libraries? Would that be part of your remit?

Gary Turner: I am trying to understand the question in terms of engineering changes. Are you saying that if the engineering changes impact—

Phil Gallie: I was simply trying to get you into the argument; perhaps I should not do that.

I will accept your first answer and look to the promoter to answer my original question and a couple of other questions that will follow on from that.

Gary Turner: I appreciate that; thank you.

The Convener: I will attempt to put a question to you, although you may deflect it if you wish.

Gary Turner: I assure you that I have no intention to deliberately deflect questions.

The Convener: No, but I suspect that you might need to. In section 73 of the bill, the authorised undertaker is to

"submit copies of the book of reference, the Parliamentary plans and the Parliamentary sections to Scottish Ministers for certification".

What is the certification? Do you have any idea, because we do not?

Gary Turner: I will refer that question. You have made me feel better by making your admission.

The Convener: That is fine.

Just for clarification, will Scottish ministers do the certification? They will not have sight of the original documents lodged because they are lodged with the clerk to the Parliament. Perhaps you could encourage the promoter to reflect on that and respond to the letter that we sent in July.

Gary Turner: I think that your comments will have been noted.

The Convener: Thank you. Are there any other questions from members?

Members: No.

The Convener: Mr Thomson, do you have any follow-up questions for Mr Turner?

Malcolm Thomson: No, I do not.

The Convener: In that case, we turn to the issue of the Craighleith Drive and Groathill Road South bridges. [*Interruption.*]

I have just been passed a note to say that there is tea and coffee outside. We could pursue the issue if there are lots of questions, or we could have a short break, in which I would encourage people to bring their tea and coffee back to the table so that we can continue to make progress. Is that the preference of the meeting?

Members indicated agreement.

The Convener: That was a slightly desperate sigh. I will give you two minutes and if people could bring their cups in here, that would be excellent.

17:01

Meeting suspended.

17:10

On resuming—

The Convener: That suspension took marginally longer than two minutes, but it has allowed some negotiation to take place. Members will see that we have been joined at the witness table by Ian Kendall. We propose at some point to move his evidence up the agenda; I gather that everybody is comfortable with that and I thank members for their flexibility.

We will resume with Mr Turner, who may well have to return if we do not complete all his evidence today. We will move on to group 34's issues in relation to the Craighleith Drive and Groathill Road South bridges. I call Mr Thomson.

Malcolm Thomson: I have no initial questions.

The Convener: Ms Woolnough?

Kristina Woolnough: I seek clarification of an issue that is in my rebuttal statement. Paragraph 3.1 of Mr Turner's statement refers to "Both footpaths". What does that mean?

Gary Turner: Is that in paragraph 3.1 of my rebuttal?

Kristina Woolnough: No—I refer to paragraph 3.1 of your statement and my rebuttal. It says:

"Both footpaths are to be retained".

I do not know which footpaths they are.

Gary Turner: I think that we are speaking at cross-purposes. We are now discussing the Craighleith Drive and Groathill Road South bridges.

Kristina Woolnough: I am sorry—I am at cross-purposes. Have we not discussed that subject already?

The Convener: If you wish to assume that the matter has been dealt with, we can move on.

Kristina Woolnough: What are we doing?

The Convener: We must test all the evidence, so let us return to the Craighleith Drive and Groathill Road South bridges.

Kristina Woolnough: I am sorry about that.

Gary Turner: That is okay.

Kristina Woolnough: We have so many statements and rebuttals to deal with. In my rebuttal to your statement on bridges, I wrote:

"Whilst residents welcome the retention of clearances, the caveat 'subject to satisfactory structural condition' is of concern."

Will you assure us that existing clearances will be maintained if a new bridge is required?

Gary Turner: As I said, we do not envisage that such structures will be replaced. The promoter has sent residents letters to say that the Groathill Road South bridge will be retained as is. If a replacement is needed, it will have pretty well the same constraints on traffic as the existing bridge has. The promoter extends that undertaking to Craighleith Drive bridge.

Kristina Woolnough: Have letters been sent out? I believe that we requested them but I am not aware that they have been sent.

Gary Turner: Letters about Groathill Road South underline bridge have certainly been sent.

Kristina Woolnough: What about Craighleith Drive?

Gary Turner: I am not too sure of the status, but I know that an undertaking has been given. I can speak to the promoter to ensure that letters to that effect are sent if they have not been sent.

Kristina Woolnough: That would help. Thank you.

Gary Turner: That is no problem. On that basis, we agree to agree.

The Convener: Excellent. Do committee members agree to agree, too?

Members indicated agreement.

The Convener: Does Mr Thomson have further questions?

Malcolm Thomson: In that happy state of affairs, I have no questions.

The Convener: We will move on to drainage, which concerns groups 33 to 35 and 45. I call Mr Thomson.

Malcolm Thomson: I have no questions.

The Convener: I call Mr Scrimgeour for group 34.

17:15

Graham Scrimgeour: I hope that the differences are small. I will summarise what I think they are and examine them.

We have agreed that the existing drainage system has failed or is failing. A commitment has been given that the tram system will have its own new drainage system. The remaining concern is that if the existing drainage system continues to collect water successfully but to discharge it in the wrong place, the new drainage system will need to take over the old drainage system as well. Otherwise, we will have two parallel flows of water: the new drainage system, which takes the water away, and the old one that continues to deposit water in the wrong place. That is where we have been trying to get to in the exchanges on the documentation.

Gary Turner: It is generally acknowledged that, with the passage of time and because the old railway line no longer utilises the railway alignment, the drainage facilities that were installed have become clogged up with root systems and everything else. One requirement for the tramline will be to make changes to the solum. It is recognised that a new positive drainage system will have to go in to replace the existing failed system.

Graham Scrimgeour: And the failed system will be removed so that it does not just do half its job.

Gary Turner: There will be a requirement for that to happen, because of the adverse impact that it would have on the tramline. The whole thing will be looked at as a collective picture and, if elements of the existing drainage system are operating successfully, they will be incorporated into the tramline drainage and will not be cut off and left in isolation. The simple answer to the question is yes.

Graham Scrimgeour: We appear to be reaching agreement. In our original submission, we proposed some amendments to the bill to enforce that. Do you support those amendments?

Gary Turner: As the issue is an engineering one, the promoter would be prepared to give an undertaking that it can be addressed. There is no need for an amendment to the bill.

Graham Scrimgeour: But an undertaking will be given. I presume that we will see that.

Gary Turner: Yes.

Graham Scrimgeour: Thank you.

The Convener: Thank you, Mr Scrimgeour. Does any member have a question?

Phil Gallie: It sounds as if, with regard to drainage, for a change people in Roseburn will get a benefit from the work that is to be done.

Gary Turner: Yes, in addition to the benefit of the tram.

Phil Gallie: Okay. Thank you.

The Convener: I was getting too excited there and missed you out, Tina. Would you care to address the question of drainage, Ms Woolnough?

Kristina Woolnough: That is right; Mr Turner rebutted a question about badger drainage.

The Convener: I understand that in a witness statement there are no issues with regard to badger drainage.

Kristina Woolnough: Yes. I did not know whether the issue would come under badgers or under another heading. Mr Turner, in your rebuttal to Patricia Alderson, you said:

"There are no issues in dispute with regard to drainage of badger tunnels."

Gary Turner: That is correct. Where provided, badger tunnels will have adequate drainage so that they do not flood.

Kristina Woolnough: Okay. So, we agree—again—that the badger mitigation proposals will take on board and resolve any drainage concerns in respect of badger tunnels.

Gary Turner: Yes, that is correct.

Kristina Woolnough: Good. We have agreed again.

The Convener: Excellent. Let us keep up this pattern of behaviour. Does any member want to reflect on badger drainage?

Members: No.

The Convener: Okay. In that case, do you have any follow-up questions, Mr Thomson?

Malcolm Thomson: Tempting as it sounds, the answer is no.

The Convener: Thank you.

We move on to address the footpath at Craighleith Drive in relation to group 34. I call Mr Thomson.

Malcolm Thomson: I have no questions at this stage.

The Convener: I call Ms Woolnough.

Kristina Woolnough: I have now got to the question that I asked earlier in the wrong place. I

refer to Mr Turner's statement and my rebuttal in relation to the footpath. In paragraph 3.1, what do you mean by "Both footpaths"?

Gary Turner: I think that we half touched on the issue when we discussed accessibility. The current footpath goes from Craigleith Drive through to Craigleith View. Where it dog-legs, the intention is to put formal steps up on to the corridor. At the moment, people have informal access only down the bank. From my perspective in respect of the tramline, people have two options: they can go either to Craigleith Drive or to Craigleith View. That is why I referred to the footpath as two footpaths. I apologise if that caused any confusion.

Kristina Woolnough: So you mean the footpath that goes under the tunnel.

Gary Turner: I refer to the footpath that goes from Craigleith Drive: the one that is parallel to the corridor before it kicks off at 45 degrees to the right and goes down to Craigleith View. At that elbow there will be steps up to the Roseburn corridor.

Kristina Woolnough: I would like to ask you about diversion routes during construction. I describe in my rebuttal the three footpath access routes. Does your statement about the diversion routes refer to them?

Gary Turner: You refer to the access underneath the bridge, the footpath to Craigleith Drive and the one to Craigleith View. The construction work on tramline 1 will not affect them.

Kristina Woolnough: Are you sure? I believe that a temporary compulsory purchase order for a crane movement over the top of the Craigleith Drive bridge is in place as part of the bill. Would that necessarily mean that the footways would be kept open?

Gary Turner: Even if there was work on the bridge overhead, pedestrian routes at that location could be maintained.

Kristina Woolnough: Even with a crane moving across?

Gary Turner: The works for the crane could be undertaken with a crash deck. That would allow one of the footpaths to be kept open.

Kristina Woolnough: Okay.

I rebutted your paragraph 3.3, but I do not have a question about it. I questioned your colleague about the code of construction practice.

We heard concerns about the City of Edinburgh Council and the promoter being one and the same. What will happen if there is a conflict of interest for the City of Edinburgh Council as tram

promoter and as City of Edinburgh Council? If agreement cannot be reached, is there an independent arbiter?

Gary Turner: You covered that issue earlier with my colleague Scott McIntosh. I am sure that his response was far more eloquent than mine would be.

Kristina Woolnough: I accept that. I have no will to go on either. I will accept anything at this time of day—I am sure that we all will. *[Laughter.]*

The Convener: Not at all; we are hanging on every word.

Kristina Woolnough: I have raised the other issues with Mr Turner's colleague. That is it, then. Thank you very much.

The Convener: Excellent. Thank you, Ms Woolnough.

Malcolm Thomson: I have no questions, madam.

The Convener: As we are making such good time, I intend to continue. I turn again to Mr Turner and ask him to address the issue of access to garages that was raised by group 35.

Malcolm Thomson: Mr Turner, you heard Mr Vanhagen raise this issue with Mr McIntosh earlier. Am I right in thinking that you dealt with it in paragraph 2.1 of your rebuttal to, among others, Mr Vanhagen under the heading "Agreed Issues"?

Gary Turner: Yes.

Malcolm Thomson: At the same time as producing that rebuttal statement, you produced as an example a copy of a letter that was written by Mr Kevin Murray, the project manager for tramline 1, to one of the Garscube Terrace residents, Mrs Isabella Endsleigh at number 8/2. The letter set out the state of affairs in the agreement that you described in your rebuttal.

Gary Turner: That is correct.

Malcolm Thomson: And, as far as you are aware, nothing has happened since.

Gary Turner: Not that I am aware of.

Malcolm Thomson: Thank you.

Richard Vanhagen: We have already discussed this, Mr Turner, but can you ensure that there will be no cost involved to the residents by rescinding the intention to make a compulsory purchase of plot 236? Will any legal costs that have been incurred be absorbed by the promoter? I do not know how far the compulsory purchase has gone, if you see what I am getting at. I just want to ensure that no costs will fall on the residents of Garscube Terrace.

Gary Turner: The issue has been resolved. However, any costs incurred by the residents to date will have to be paid by them.

Richard Vanhagen: Which costs are they?

Gary Turner: I do not know. Are you asking whether costs that have been incurred to date can be reimbursed?

Richard Vanhagen: I am talking about conveyancing costs and such. Obviously, we have not proceeded to the stage of taking that piece of ground.

Gary Turner: It will depend on the form of the agreement between the parties. I am certain that the promoter is happy to give a letter of undertaking that it will not require the land permanently. If the residents in the area are happy to accept that, no legal costs would be associated with the process.

Richard Vanhagen: That is what I was looking for. Can we take it that you will not require use of plot 236 at all, either permanently or temporarily, but will seek to use the grass verge that I mentioned, which belongs to St George's School for Girls? Will you negotiate directly with the school on the issue? I thought that we had got to that stage, but perhaps you did not take on board my suggestion. Will you consider it?

Gary Turner: The statement that has been made is that the land will not be required permanently. If it is required temporarily, it will be handed back once any construction works that are associated with its occupation have been undertaken. The land will be required if engineering works are needed on the bridge structure at that location. If no engineering works are needed, there will be no requirement to take the land even temporarily.

Richard Vanhagen: I was hoping that my grass verge proposal would remove the need to take the plot at all under any circumstances. That is what I thought we were proceeding towards, which is why I wanted clarification.

Gary Turner: I can give an undertaking that the land will not be required permanently, but it may be required temporarily, depending on whether engineering works are required. Provision is made in the bill to take the land so that there will be adequate space to undertake any engineering works that are required. As Mr McIntosh explained, provision for 24-hour access for emergency services will be made during that period.

Richard Vanhagen: I have tried to make a point and have obviously failed.

Will you confirm that the promoter will make good at total cost to it any damage that arises from

heavy usage of the lane as a result of bridge works?

Gary Turner: I have no knowledge of any need for the contractor to use the access lane. The access to the bridge would be required to undertake the work and to bring in materials, but the contractor would not need to use the access to the garages.

Richard Vanhagen: I was thinking that the south end of the lane might be used as a turning area for reversing and moving machinery—I was not saying that machinery would go right down the lane.

Gary Turner: The area will be returned in the condition that it is in at present.

Richard Vanhagen: Can we have an assurance that fly parking by construction workers who are employed on the bridge or the cycleway and walkway will not be allowed in the lane? We want to ensure continued free access to residents using their rear door access, car garages and forecourts.

The Convener: While that question is clearly outwith the scope of the bill, the issue is about good housekeeping, so Mr Turner might want to respond.

Gary Turner: The good housekeeping point is that the contractor will be required to maintain access at all times—that is addressed in the COCP. It is difficult to monitor and police what employees do, but it is part of the requirement that they would not be able to obstruct access for residents.

Richard Vanhagen: That is fine. I read somewhere in the papers that there would be a parking area for workers in the enclosure.

Gary Turner: There will be designated areas for the contractor.

Richard Vanhagen: I hope that that would be enforced. Obviously, there is heavy parking during the day because of the school and it is difficult to determine who the offenders are who are parking illegally. It takes only one car to completely block the whole place and nobody knows where to go.

The Convener: As I said, that matter is clearly outwith the scope of the bill, but your point has been well made.

Before I invite members to ask questions, I want to clarify one matter. An undertaking has been given that there will be no permanent requirement for the plots of land in question, but the bill specifies that the plots are to be acquired permanently. Will the promoter lodge an amendment to the bill in due course?

Gary Turner: No. The intention is—oh, yes. Yes.

The Convener: Mr Thomson's colleague is nodding. Excellent. Because the *Official Report* cannot record a nod, the fact that you have said yes is most helpful. Do other committee members have questions?

Members: No.

The Convener: Mr Thomson?

Malcolm Thomson: I have no further questions.

17:30

The Convener: Mr Turner will now address the removal of steps at the Water of Leith, which has been raised by group 35. I call Mr Thomson.

Malcolm Thomson: I have no initial questions, convener.

The Convener: Okay. Do committee members have any questions?

Members: No.

The Convener: I take it that there are no follow-up questions for Mr Turner on that point, Mr Thomson.

Malcolm Thomson: I have no further questions.

The Convener: Just checking. There being no further questions for Mr Turner, I thank him for giving evidence this afternoon.

We have at the table Ian Kendall and I hope that we will be joined by Archie Rintoul in due course. I remind Ian Kendall that he is still under oath. He will address damage to property, which has been raised by groups 33 to 36 and 43.

Malcolm Thomson: I have no initial questions.

Mark Clarke: Mr Kendall, I refer to my rebuttal of your response to me. On behalf of TIE, you acknowledge that there is the possibility of damage to property as a result of the construction of tramline 1. You state that there are no construction processes that are unique to the project. The same point was made by Mr McIntosh earlier. However, do you agree that what is unique is that, if the project did not take place along the Roseburn corridor, it would be highly unlikely that the area and the residents who have been undisturbed for more than 40 years would encounter either the acknowledged risk or the potential disturbance that lies ahead?

Ian Kendall (Transport Initiatives Edinburgh Ltd): If there is no construction, is there no risk—that what you are asking?

Mark Clarke: Correct.

Ian Kendall: Patently.

Mark Clarke: Let us move on to assessment. Would not it instil confidence in those who were

affected by the works if an entirely independent assessor was appointed to monitor and report to all parties on any damage events that arose during the construction?

Ian Kendall: The assessment of whether there has or has not been damage as a result of construction is something that we need to monitor and take care over. Clearly, we will undertake assessment of the likelihood of any construction-related damage taking place. The code of construction practice sets out what we are to do in the event of such damage. We will undertake a site survey prior to the construction works. If it is established that problems have been caused by the construction, we will reinstate to an appropriate standard. That is what we have said that we will do.

Mark Clarke: I am talking about the confidence of the householders, and so on. My proposal to you is that it would instil more confidence if the assessor was an entirely independent individual—that is, independent from TIE and the contractor.

Ian Kendall: On behalf of the promoter, TIE will engage a contractor. Such assessments will be made as are deemed necessary by virtue of risk assessment on the individual properties concerned. The discharge of the construction works will be undertaken by a contractor, and any disputes that arise as a result of that will come back to TIE for resolution. In so far as that is, in effect, what we are establishing, TIE will have to resolve any matters that are not resolved satisfactorily through the contract. Matters will come back to the council, through TIE, for resolution.

The Convener: Before you come back in, Mr Clarke, I need to check something. Mr Kendall, I made an assumption that you were already under oath or had taken the affirmation.

Ian Kendall: That is correct.

The Convener: Excellent. That is fine. There was some confusion. Now that we have clarified that, please proceed.

Mark Clarke: You say that TIE will arrange a pre-construction condition survey of the affected properties. In place of the TIE survey, would it be acceptable for me to arrange for a surveyor to undertake pre and post-construction surveys of my property and present them for acceptance to TIE?

Ian Kendall: For what purpose?

Mark Clarke: It would give me confidence that the survey would be correct.

Ian Kendall: If TIE wants to undertake or decides through the contractor that we will undertake a survey of your property, that is what we will do. If you want to obtain your own property

survey, for your own purposes, you are free to do so.

Mark Clarke: Do you understand the point that I am making? Why should I have confidence in TIE's survey if TIE would have no confidence in my survey?

Ian Kendall: I presume that we are talking about the assessment of whether there has or has not been construction-related damage. Is that correct?

Mark Clarke: Yes.

Ian Kendall: As I say, we will undertake a risk assessment and surveys, as required. In your case, we may already have decided—or I may decide as of this minute—that we will undertake a survey of your property to protect ourselves and to enable us to resolve matters if anything happens.

Mark Clarke: The issue is you protecting yourselves. I, too, have a certain interest to protect. If I have to accept your findings, why should you not accept my findings?

Ian Kendall: I am sorry, but we have agreed, following any problems that are shown to be the result of the construction works, to reinstate to the standard that is laid down in our code of construction practice. That is what we will do.

Phil Gallie: Can I come in on this, Mr Kendall? Will you give an assurance that, if you have an assessment carried out on Mr Clarke's property, details of that assessment will be passed to Mr Clarke prior to any construction work going ahead? At that point, if he has doubts about the assessment, he can have a private assessment carried out. Will you give him the results of the assessment that you have had done?

Ian Kendall: Yes.

Phil Gallie: Okay. That was meant to be helpful, Mr Clarke.

Mark Clarke: I appreciate that. The concern that I have been pursuing is that the content of the survey is something over which I have no control. It may be arguable whether any effect has arisen. It is not clear to me exactly how the survey process will—

The Convener: Mr Clarke, Phil Gallie has been extraordinarily helpful to you. Let us move on from that point.

Mark Clarke: Right. Fine.

Paragraph 7.2(c) of the code of construction practice states:

"Any damage that is identified as being caused by construction of the tram system shall be repaired within a reasonable time of identification at the expense of the Contractor".

Several points arise from that. Where does the burden of proof lie, with respect to the cause of damage and the scope of repair?

Ian Kendall: Paragraph 7.2(c) says that

"the owners of properties ... may, upon providing reasonable evidence of damage, request ... a second ... survey".

That survey will then be undertaken. If the damage is shown to have been caused by the construction of the tram system, it shall be repaired.

Mark Clarke: How can one prove it either way?

Ian Kendall: The paragraph goes on to mention

"the reasonable satisfaction of the property owner"

with respect to the standard of repair. The property will be

"returned to the standard of repair ... existing before construction works".

That requires us to understand what the standard was before construction and at the time that the second survey is undertaken. Appropriate professionals would determine whether the construction works had been the cause of the damage.

Mark Clarke: Where does the burden of proof lie?

Ian Kendall: In the first instance, the code of construction practice says that the owner of the property shall provide "reasonable evidence of damage". So, for example, you might believe that a particular problem had been construction related and had led to damage. You would then provide evidence—either photographic or otherwise—to the contractor. From that point on, the process will be such as to determine whether the damage was in fact a result of construction works.

Mark Clarke: How will that process take place?

Ian Kendall: It will take place by virtue of the contract with the contractor requiring him to attend and to determine, reasonably, whether the damage was a result of construction works. If there is a dispute, TIE will make provision for the escalation of the problem.

Mark Clarke: Could you explain that further? How will TIE make provision for that?

Ian Kendall: It will write it into the contract.

Mark Clarke: It will be written into the contract?

Ian Kendall: Yes.

Mark Clarke: Will the local authority and/or TIE champion the householders' rights against the contractor? I am thinking about protection or, if things come to the worst, recompense for any costs.

Ian Kendall: The code of construction practice requires the provision of “reasonable evidence”. If the evidence is not reasonable, the answer to your question will be no; if the evidence is reasonable, the answer will be yes. It will depend on the outcome of the review that is undertaken and on the specific cause of the damage. There can be no blanket answer to your question.

Mark Clarke: Who will be responsible for organising repairs?

Ian Kendall: The contractor.

Mark Clarke: So responsibility will fall not on the householders but on the contractor.

Ian Kendall: If damage is shown to have been caused by the construction works, the standard of repair of the property will be returned, by the contractor, to the standard that existed before the construction works.

Mark Clarke: Who will be liable if the contractor goes bust?

Ian Kendall: It is extremely unlikely that any contractor will have gone bust as a result of this particular issue. The contract that we are talking about is for a construction project worth many hundreds of millions of pounds. The project will be undertaken by companies with significant financial standing and significant bonding requirements to TIE. If there is a failure of the contract, the protections of the bonds will apply to our benefit. Obligations would then arise for us, as the party responsible for delivering the system. The obligations will therefore fall back on TIE.

Mark Clarke: They will fall back on TIE.

Ian Kendall: Yes.

17:45

Mark Clarke: Do you agree that there is a greater risk of damage to properties along the Roseburn corridor where the works take place on an embankment, as opposed to a cutting that has the potential to contain discharges and so on?

Ian Kendall: At every location where there is a difference, we will require the contractor to carry out a risk analysis and to produce a method statement appropriate to the location, so that the construction can be undertaken in a safe, workmanlike manner and in accordance with the code of practice. Adequate response will be made where there are differences between locations A and B.

Mark Clarke: You have not really answered my question. Are there greater risks in working on an embankment or in a cutting?

Ian Kendall: Doing what?

Mark Clarke: Doing the work that TIE's contractor has to do.

Ian Kendall: I am afraid that I do not understand the point of the question. You ask whether the risks are greater working on an embankment or in a cutting. Are you asking about the risks involved in building an embankment or creating a cutting?

Mark Clarke: No. The Roseburn corridor goes through a series of cuttings and embankments. My property is located at the bottom of an embankment. I am concerned that significant risks to me and others whose properties are located in the same situation will arise because of overhead working and so on. In the case of a cutting, the work is contained physically by the banks. In the case of an embankment, the properties and people below are effectively exposed. Is there a greater or lesser risk in that situation?

Ian Kendall: Thank you for that explanation. You are referring to the risk of men, materials or parts of work on an embankment—as opposed to works contained in a cutting—falling from or down the embankment on to the rear or side boundary of your property or areas adjacent to it.

Mark Clarke: That is correct.

Ian Kendall: Clearly, there is a risk of that happening when one is working on an embankment. A method statement and protective provisions that are responsive to the particular situation and that are assessed to provide a safe method of working will be produced by the contractor in advance of the works being undertaken on the embankment behind your house. That is standard construction practice.

Mark Clarke: I have no further questions.

The Convener: Anne McCamley may question the witness on group 43.

Anne McCamley: Mr Kendall, have you read Michael Bruce's witness statement, which remains un rebutted?

Ian Kendall: No.

Anne McCamley: It might be helpful if the statement could be given to you.

The Convener: Given that the promoter has chosen not to rebut the statement, you may not ask questions on it. We take it that the statement has been accepted.

Anne McCamley: It would appear from the unchallenged statement of Michael Bruce that there is a known risk if construction work is carried out at the rear of his property and other properties on Wester Coates Terrace.

The Convener: This morning, we took a decision, based on the fact that there was no

rebuttal of the statement by the promoter and that the statement stood, that there was sufficient evidence on the point and that we did not desire to take any further evidence on it. If you plan to concentrate on that statement, I can save you some effort by telling you that the committee has reached a view on how it wishes to proceed in that regard.

Anne McCamley: Has the committee accepted that there is a known risk involved in any construction work that might be undertaken to the rear of the properties on Wester Coates Terrace?

The Convener: You can base any assumption on the fact that the statement has not been rebutted. The committee will consider the matter and will, of course, issue that decision with all its other decisions in its report.

Anne McCamley: If that view appears to have been accepted, Mr Kendall, do you think that it is appropriate to instruct works to be undertaken to the rear of Wester Coates Terrace in the face of this known risk?

Ian Kendall: Yes.

Anne McCamley: We are not talking about accidental or casual damage. There is a very real danger of significant structural damage to the properties in Wester Coates Terrace. You are saying that, despite that danger, you are prepared to instruct that the construction work should go ahead.

Ian Kendall: In developing the project, we have identified and are seeking to manage the risks associated with constructing a tram system. If a construction-related risk emerges in any part of the tram system, we will design the construction methods adequately, undertake risk and safety assessments and develop the project in accordance with our quality assurance systems. Indeed, any construction company or promoter would usually discharge such undertakings or commitments in such a project. The question is whether we are able to manage the risk associated with the location that you have highlighted. In the assessment of the engineers who work for TIE, we can.

Anne McCamley: Well—

Malcolm Thomson: Convener, I wonder whether I could interrupt for a moment.

The Convener: Absolutely.

Malcolm Thomson: Mr Kendall has not read Lord Marnoch's statement, which, as we know, relates to an incident during the construction of the cycle track that he said caused a crack in his wall. If it is going to be suggested to Mr Kendall that that incident equates to a known risk—which was what was being put to him—it is not fair to do so

until he has had a chance to read Lord Marnoch's statement. I wonder whether, if that line is to be pursued, Mr Kendall could be given the opportunity to read the statement.

The Convener: I have already ruled that we will not consider Lord Marnoch's statement. I was giving Ms McCamley some flexibility but, in light of your intervention, I must ask her to come to the point. The committee is mindful of what was said earlier and I should make it clear that, although the exchange is interesting, we are sticking to our initial position on this matter. Ms McCamley, you can by all means ask questions on the issue of damage to property if the evidence lies outwith Mr Kendall's statement and has been rebutted. However, I have already given you our position in relation to his statement.

Anne McCamley: In that case, Mr Kendall, can we have an undertaking that site surveys of the properties in Wester Coates Terrace will be carried out?

Ian Kendall: Yes.

Anne McCamley: If those surveys indicate that there will be substantial damage to the properties or that there will be—

The Convener: In fairness, Ms McCamley, you have asked for the site surveys. I would let the matter rest.

Anne McCamley: Given that there appears to be a very real danger of significant damage being caused to the properties, would it not have been a good idea to carry out site surveys before the route was chosen?

The Convener: You have been developing the point about significant damage to the properties, but we have already heard from Mr Thomson. Unless you want me to cease all questioning, I suggest that you avoid such language.

Anne McCamley: I beg your pardon.

Would it not have been more sensible to carry out site surveys before you chose this route?

Ian Kendall: No.

Anne McCamley: Why not?

Ian Kendall: Because it is a matter of judgment and we judged that such an approach was not necessary.

Anne McCamley: What are your intentions regarding any damage to the properties? If there is damage to the properties, are your remedies all contained in the code of construction practice?

Ian Kendall: Paragraph 7.2 of the code of construction practice refers to inspection of buildings and other structures pertaining to vibration. The code sets out that, in the event of

construction works causing damage, the damage will be remedied to the reasonable satisfaction of the owner. That is the remedy that is proposed.

Anne McCamley: Remedy to the reasonable satisfaction of the owner seems to the owners to be inadequate. Is there any reason why damage should not be remedied to the entire satisfaction of the owners? Who will be the judge of reasonableness in those circumstances?

Ian Kendall: TIE will be the judge of what is reasonable at the end of the day.

Anne McCamley: That seems an outrageous suggestion.

The Convener: Is that a question or a comment?

Anne McCamley: I am sorry. It was a comment.

The Convener: I suggest that we get to the point. I should say, Mr Kendall, that you are softly spoken and my committee members are having difficulty in hearing everything that you are saying.

Anne McCamley: Thank you. I shall leave it at that.

The Convener: Well, you have been spared raising your voice, Mr Kendall—unless, of course, committee members have questions.

Phil Gallie: I have a couple of questions. Mr Clarke referred to the assessment of his building and to the damage that might result during construction. Is it fair to say that Mr Clarke's building is fairly mature and has been there for some time?

The Convener: Mr Clarke cannot comment at this point in the proceedings.

Phil Gallie: I shall ask Mr Kendall if he knows how old Mr Clarke's building is.

Ian Kendall: Its exact age? I cannot give a figure.

Phil Gallie: I do not expect you to tell me to the n^{th} year, but perhaps you could say whether its age is 10 years, 20 years, 30 years or more. Do you have a clue at all?

The Convener: I am not sure how long Mr Kendall has been in his post—or in this city, for that matter—but it might not be appropriate to ask him to judge the relative age of buildings based on their architecture.

Phil Gallie: The point that I really wanted to make is that, if a building is relatively mature, any damage that resulted during the two-year construction period in the Roseburn corridor would almost certainly be attributed to construction damage if it had not been assessed as creeping damage beforehand. Would it be fair to say that?

Ian Kendall: All damage that is associated with, or is found to have occurred during, the construction period will be said by a certain subset of people to be construction damage irrespective of its cause. We must ensure that what is called construction damage is construction damage; it is entirely appropriate that we should do so by carrying out a satisfactory survey before and after construction in areas of high risk. The last tram system that I built went past almshouses that were built in 1654. We designed in accordance with codes of practice that were the same as the promoter's codes of practice for the Edinburgh scheme and we conducted surveys before and after construction. Several years after the operation of that system began, there are no problems.

That is my expectation of what we will do in Edinburgh. We are not going to set out to create damage. We will instruct contractors and designers to undertake appropriate inspections and to design according to the risk of the building under consideration, depending on its proximity and on the risk to the fabric of the building, its structure and the continued enjoyment of the performance of the building by the owner.

18:00

Phil Gallie: That is fine but, at the same time, it is the owner's property. If you do not mind me saying so, you made a rather high-handed statement when you said that TIE will be the judge. Surely, TIE will be the judge in conjunction with the owners—there will be an element of negotiation and the degree of assessment will be taken into account.

Ian Kendall: I am sure that that will be the way in which the process happens.

Phil Gallie: I much prefer to hear that that is the intent.

Mr Clarke asked what would happen if a contractor went bust during the construction period. It is not unheard of for major contractors to go bust. I am well aware of many subcontractors and others who have been caught out in such situations. What are your comments on the bond that will be put in place? Where do the owners of properties stand with respect to preference on payments that are made from that bond? Frequently in the past, we have found that the banks have a first claim. We must think about the owners and determine how they will be protected.

The Convener: The question is whether TIE will give a commitment to assume responsibility for the undertakings in the event of a contractor going bust. That is what we want to know.

Phil Gallie: Totally.

The Convener: Perhaps Mr Kendall wants to reflect and write to confirm the position on who would be responsible in that eventuality. I understand from his previous comment that TIE would be responsible, but we want that to be confirmed, because the issue is important.

Phil Gallie: I await the response with interest.

Helen Eadie: I am interested in Phil Gallie's line of questioning—he was absolutely right on those issues. To follow on from that, in the event that no amicable solution was reached between TIE and the individuals concerned, what—if any—recourse would there be for an approach that would be independent of TIE or the City of Edinburgh Council?

Ian Kendall: TIE is a 100 per cent subsidiary of the City of Edinburgh Council. Recourse would normally be through the council to the appropriate person in charge of our project.

Helen Eadie: So, if an impasse is reached, it will be down to individuals to go to court—that is the only remedy that will be left to them.

Ian Kendall: I am sure that individuals would, before they went to court, want to correspond on the issue with their councillor and council officers in the appropriate department in order to bring the issue to their attention. At the end of the day, we are looking to give undertakings and not to deflect the issues. We are looking to resolve and to achieve reasonable satisfaction. However, we would want to be assured—the committee would want us to be assured—that any damage is related to construction rather than to something else before the public purse is asked to pay for it. We must be careful and be seen to act properly, which is what we will do.

Helen Eadie: Are you saying that, for every household in the corridor, a survey will be carried out and pre-construction photographs taken of all aspects of the properties, which will be signed off and agreed by both parties?

Ian Kendall: I do not expect that a pre-construction survey on every residential property in the corridor, on the loop or on the other tramline would be necessary. I have not found that to be necessary in other systems or in other construction activities associated with tram systems.

Helen Eadie: Given the experience that I have had with Rosyth dockyard—in relation to Trident—and Scottish Coal during a lifetime in public service, I would advise every resident to take their own independent photographs prior to construction.

The Convener: I am sure that, although the views of committee members may be of interest, that comment does not necessarily come within the scope of the bill.

Malcolm Thomson: I shall try to recap the position as I understand it. In respect of any particular domestic property or commercial property, for that matter, a risk assessment would be carried out before work started to see whether the building was significantly likely to be damaged as a result of the contract works.

Ian Kendall: That is correct.

Malcolm Thomson: If one put a tick in that box, a pre-contract works survey of the property would then be carried out at the employer's expense.

Ian Kendall: That is correct.

Malcolm Thomson: If, after the works had been carried out, some damage to the property was believed to have been sustained, and if prima facie evidence, such as a photograph of a crack, was shown by the owner or occupier to the contractor, a second survey would then be carried out.

Ian Kendall: That is correct. With respect to the example of photographic evidence to which you refer, as long as it is reasonable, the answer is yes.

Malcolm Thomson: Looking at pre-works and post-works surveys, with no crack being shown by the first but with a crack being evident in the second, would the basic assumption be that the probability was that the crack had been caused by the works?

Ian Kendall: That would be the case unless there was another compelling reason, which would be determinable by virtue of the second inspection.

Malcolm Thomson: Such reasons would include, perhaps, a falling meteorite or the fact that the house was brand new.

Ian Kendall: Photographic evidence of a crack that was the result of a falling meteorite would, depending on the scale of the meteorite, not be necessary. The crack would not be to do with construction.

Malcolm Thomson: The inference might otherwise be that the crack was caused by the works.

Ian Kendall: Unless an alternative and viable reason was given, there would potentially be no reason other than construction.

Malcolm Thomson: Would the code of construction practice remedy then kick in? In other words, would there be remediation by the contractor?

Ian Kendall: That is correct.

Malcolm Thomson: Further protection would then be afforded through the construction bond to

which you have referred—details of which will duly be provided.

Ian Kendall: Yes.

Malcolm Thomson: If there was a dispute between the householder or business holder and the contractor about the appropriate extent of remediation, and if an impasse was reached between the contractor and the claimant, would possible remedies such as arbitration or alternative dispute resolution be available before the necessity for legal action against the contractor?

Ian Kendall: The draft contract that we have reflects the current contracts that we have with our designers and other parties, such that we have alternative dispute resolution processes embedded within the contract. There is a mechanism whereby all disputes of any magnitude can be resolved, first by escalation to appropriate levels within TIE and the contractor and following that, by mediation and, ultimately, court. In this case, any such dispute between a property owner and a contractor would be flagged up to TIE under the contract. If there were a dispute between the contractor and TIE as to the outcome and the reasons for the particular defects in the property, TIE would resolve the situation through the alternative dispute resolution process between itself and the contractor.

Malcolm Thomson: To that extent, would TIE be operating as the champion of the claimant?

Ian Kendall: Page 4 of the construction code of practice says:

“Tie will establish an appropriate person (‘the Client Representative’) to ensure compliance with the Code by all contracting parties.”

I am such a person. I would absolutely be minded to ensure that justice was achieved in the resolution of each and every case. That is the undertaking that I would give personally and which I would have to discharge in my role as the client representative.

Malcolm Thomson: That concludes my questions.

The Convener: There being no further questions for Mr Kendall, I thank him for giving evidence.

The final witness for today’s meeting will be Archie Rintoul, who will address compensation, which was raised by groups 33, 34, 35, 36 and 43.

Do you have any initial questions, Mr Thomson?

Malcolm Thomson: No.

The Convener: Mr Scrimgeour, for group 34?

Graham Scrimgeour: Paragraph 2.1.2 of your statement says:

“In cases where no land is required, compensation is payable for reduction in value caused by the physical factors associated with the scheme”.

In the area that we are considering, how would that apply?

Archibald Rintoul (Scotland South East Valuation Office): According to the Land Compensation (Scotland) Act 1973, if you have no land acquired from you, you are compensated only for the reduction in value that is caused by certain physical factors that are named in the act, such as noise, vibration, smoke, fumes, artificial lighting and so on.

Graham Scrimgeour: Is there a process by which one has to try to prove that the change in value was caused by those factors? What is the burden of proof on the claimant?

Archibald Rintoul: There would be a process of discussion between the two parties. The claimant would be entitled to have a chartered surveyor or agent act on his or her behalf—no fees would be paid—and the outcome would be negotiated between the parties.

Graham Scrimgeour: Would it be necessary to demonstrate a change in value and the fact that the physical factors exist?

Archibald Rintoul: Yes, it would have to be demonstrated that there had been a change in physical factors first of all, and that that had affected the value of the property.

Graham Scrimgeour: In the group, there has been discussion over whether the Land Compensation (Scotland) Act 1973 will apply to a scheme that is being promoted by a statutory undertaker such as TIE, rather than being promoted directly by a local authority. Could you clarify that situation?

Archibald Rintoul: The 1973 act will apply. Like the Land Compensation (Scotland) Act 1963, the 1973 act is automatically incorporated into any compulsory acquisition.

18:15

Graham Scrimgeour: What if houses directly adjacent to the proposed tramline changed in value and houses that were 100m further away had a different change of value such that one could no longer move from house 1 to house 2 at the same value? What would happen if there was a relative fall in value, if not an absolute one? Would such a relative fall in value be covered by the provisions?

Archibald Rintoul: We would consider the difference between what the value would be if the scheme were in place and the value without the scheme, if we were considering just the physical factors.

Graham Scrimgeour: Would you compare it with a house that was not so directly affected?

Archibald Rintoul: That is right. When we look at a reduction in value, we look at the value of properties that were sold nearby.

Graham Scrimgeour: What are the start and end points for comparing values for a scheme such as this? We have a long lead-in period from when the scheme was announced in 2003—or even 2002—to 2009, and it will be 2010 before the provision would be available.

Archibald Rintoul: That is correct. If the line opens in 2009, the first claim day will be in 2010. It is the circumstances on that date that we would consider. The one-year delay is essentially to let things bed down so that perspective purchasers can see what effect the works have on the area, which would no doubt be reflected in house values.

Graham Scrimgeour: At paragraph 3.1 of your rebuttal, you dispute the point that was made about the amount of reduction in value. You say that it is unlikely that it would reach 20 per cent. I presume that that is not guaranteed; such a reduction could happen.

Archibald Rintoul: I can make no guarantee before the tramline has been laid and we have seen its effects. I have experienced very few occasions when a reduction in value has reached 10 per cent; therefore, it is unlikely that the reduction would reach 20 per cent.

Graham Scrimgeour: You have not said that any fall in value is unlikely, so it is quite likely that the value of properties near the new tram scheme will be adversely affected.

Archibald Rintoul: That is possible, but the tram scheme could equally have a positive effect on property values. It is possible that being close to a tram stop, but not so close as to be affected to any great extent by the physical factors, could increase the value of some houses.

Graham Scrimgeour: What effect could the long period between the announcement of the tram scheme and the end point have on values? Could house values be particularly badly affected during the construction period when the benefit of the trams has not yet come into effect but there is noise and disruption to roads? Could property values be at their lowest during construction, only to recover afterwards?

Archibald Rintoul: During any public works, whether it is a tramline or a road, there will be some disruption from construction noise. In such circumstances, nobody particularly wants to sell their house, because people may not be happy to buy a house until the works have been completed. Such problems do occur.

Graham Scrimgeour: I have two questions relating to that. First, this morning we heard about other tram schemes in which there have been increases in property values from the date of opening. Could such increases have been due to a previous reduction in value during the construction period? The statistics that we looked at—and which you have not prepared—might have selected such a period.

Archibald Rintoul: I am sorry, but I am afraid that I cannot comment on that because I am not sure which schemes were discussed earlier.

Graham Scrimgeour: That is fair.

Secondly, we are talking about a seven-year period, or potentially longer. There are many reasons why people might need to move during such a period. They might need to move out of the area because of their job, because they have been made redundant or been promoted, because their family has broken up or because their family has grown. If people have to sell before the end of the period after which the compensation provisions kick in, how would they be compensated?

Archibald Rintoul: If somebody's land is being acquired, they would be compensated in any event because the date of valuation would be that on which ownership was vested in TIE. If somebody is not having their land acquired and they sell a property while construction is being carried out, they would not be eligible for compensation.

Graham Scrimgeour: Do you agree that people could suffer because they could potentially have large mortgages that they need to clear? Is that a reasonable scenario?

Archibald Rintoul: Yes.

Graham Scrimgeour: Towards the end of our documents, we suggest that the bill should change the circumstances in which compensation should be given and go beyond the existing 32-year-old provisions. Is that reasonable?

Archibald Rintoul: I must leave the question of reasonableness to the legislators. I am afraid that I take the legislation as I find it. Unfortunately, some people would not receive compensation in such circumstances, but I must leave the legislators to decide whether that is reasonable.

Graham Scrimgeour: I think that you know the objector in question—he is a former colleague of yours. He has commented that, on average, 10 per cent of properties a year will be traded in an average street. In a seven-year period, many people could therefore be affected as a result of needing to sell their property, but being unable to reach a price that they might otherwise have reached. Amending the bill would therefore appear

to be helpful to the residents who would be affected.

Archibald Rintoul: I must leave it to the committee to decide whether such amendment is appropriate.

Graham Scrimgeour: Okay.

You mentioned the different effects if land is acquired or is not acquired. Of the properties along the Roseburn corridor, how many are you aware of that are to be acquired and for which the easier provisions would therefore apply?

Archibald Rintoul: I do not know the exact number of properties, but there are relatively few properties along the Roseburn corridor whose land would be acquired compared with the number of properties whose land would not be acquired.

Graham Scrimgeour: So the most important provisions for most of the residents who are affected are the non-acquisition provisions where there are physical factors.

Archibald Rintoul: That is correct.

Graham Scrimgeour: I have moved quickly through my questions and have lost track of what I have written down. May I have a few seconds to check what I have covered, convener?

The Convener: Sure.

Graham Scrimgeour: On reflection, I think that we have covered everything. I was leading to the suggestion that we would look for the bill to be amended in order to provide the support and compensation that we have discussed. Mr Rintoul has not disagreed with us.

The Convener: I think that he said that such matters were for the committee.

Graham Scrimgeour: But he did not—

The Convener: We will not debate that point. You are here to ask questions, not to debate such points with me.

If you have finished, I thank you very much. I invite Mr Cuthbert to ask questions for group 35.

Alex Cuthbert: Thank you, convener. I would like to start—

The Convener: Will you speak up, Mr Cuthbert? Members are finding it difficult to hear what you are saying.

Alex Cuthbert: I would like to start by saving a little bit of time and concern—I hope that I will do so. There are four proposed amendments—A, B, C and D—in our witness statement. We have been satisfactorily assured by Mr Rintoul about three of them, but I have a problem with proposed amendment C. I think that my problem is similar to Mr Scrimgeour's problem. If I duplicate what has

been said, it will not be intentional. I understand that, if a part of someone's garden is acquired, the situation is quite clear. It is covered automatically by legislation and a process can be set in train.

Archibald Rintoul: That is correct.

Alex Cuthbert: However, there are properties that could be more adversely affected, even when part of the garden is not acquired. I refer to effects on people's lifestyles, such as noise. If I understand your rebuttal statement correctly—I may not have—you take exception to the fact that our proposal would include any adversely affected owner, subject to that owner proving the case through the normal processes. We are certainly not talking about trivial claims, but situations in which people are adversely affected when land is not acquired.

Archibald Rintoul: People are certainly adversely affected when land is not acquired.

Alex Cuthbert: In paragraph 3.7 of your rebuttal, you respond to our proposal that any loopholes in the 1973 act should be plugged. We ask that the committee takes that point on board. I take note of the point that you made only minutes ago that your job is to work within the parameters set by the 1973 act and not to go beyond it.

Archibald Rintoul: That is correct.

Alex Cuthbert: So this is a matter for the committee to consider.

Archibald Rintoul: Yes.

Alex Cuthbert: You were extremely helpful in clarifying a point of which we were not aware in relation to amendment C. Do you agree that it is reasonable for the committee to consider the amendment, with your clarification of what is intended?

Archibald Rintoul: That is entirely a matter for the committee.

Alex Cuthbert: I have no further questions.

The Convener: Thank you, Mr Cuthbert. Mrs Milne, you may question the witness.

Mrs Odell Milne: Do you agree that section 1(2) of the 1973 act does not mention certain factors and that, therefore, there is no compensation for loss of amenity or visual impact for people from whom land is not taken?

Archibald Rintoul: That is correct.

Mrs Milne: Do you agree that the factors that I mentioned may have an effect on value?

Archibald Rintoul: Yes.

Mrs Milne: There would be no compensation for that loss of value.

Archibald Rintoul: That is correct.

Mrs Milne: Do you also agree that there is no compensation for certain physical factors, such as noise, if they do not result in loss of value?

Archibald Rintoul: That is correct. The compensation is essentially for loss of value, although if the noise increase is particularly great people may qualify for double glazing under the provisions of the 1973 act. I expect that, if they qualify for that, there will also have been a reduction in value, although that is not necessarily the case.

Mrs Milne: Leaving aside double glazing for the moment—which would not help people who sleep with their windows open—do you agree that if I am woken up every night for the rest of my life, that may not affect the value of my house, but I will not be compensated for the disturbance?

Archibald Rintoul: You would be compensated only for the reduction in value caused by the noise, not for personal inconvenience.

Mrs Milne: How would you quantify what noise is sufficient to create a loss of value?

Archibald Rintoul: We expect that, prior to the scheme, fairly extensive noise readings would be taken. Extensive noise readings would also be taken after the scheme, when the public works were complete and the trams were running. Prior to the scheme's introduction, we would also consider changes in the value of properties that the scheme did not affect. If similar houses to those that would be affected were located a couple of streets away and would not be affected, we would monitor their change in value and compare that with any sales of houses that were affected. We would have to make some adjustments, but that is how we tend to examine the reduction in value.

18:30

Mrs Milne: Others have covered the next couple of questions, so I ask you to give me a minute.

Do you agree that the 1973 act contains a strange provision that entitles you to set off against the compensation that you might decide to award somebody for loss of value the benefit that they gain from the existence of a tramline, railway or whatever?

Archibald Rintoul: The act does allow that set-off.

Mrs Milne: Therefore, you may determine that the value of my house has dropped by 10 per cent but then say, "You have a wonderful tramline behind your house, so you will be compensated to the tune of only 5 per cent."

Archibald Rintoul: That will be taken into account.

Mrs Milne: Is that equitable?

Archibald Rintoul: As I said to an earlier questioner, whether that is equitable is not a matter for me. I must undertake the work in accordance with the act.

Mrs Milne: Somebody who lives on the other side of the road from me will have the same benefit from the tramline, but you will not turn up to ask for 5 per cent of the value of their house because the tramline has been built beside it, will you?

Archibald Rintoul: You are correct.

Mrs Milne: So full compensation for loss of value might not be given.

Archibald Rintoul: That is certainly the case and that frequently happens in compulsory purchase cases.

Mrs Milne: Do you agree that no additional compensation is payable if use intensifies in future, which might result in greater noise after we claim for five trams and item a certain level of noise, one year after operation commences? Section 9(7) of the 1973 act says that intensification of use does not justify a further compensation claim.

Archibald Rintoul: We would take into account any intensification of use that was foreseeable on the date when we considered the reduction in value. If something that was not foreseeable happened later, that would not be taken into account. You would not have occasion for another claim.

Mrs Milne: So things could become worse and no additional claim for compensation would be possible.

Archibald Rintoul: That might be the case. I am not sure whether the situation is likely to worsen, as you suggest, or whether future intensification of use is likely.

Mrs Milne: I do not know.

When assessing the loss of value for the purposes of section 1(1) of the 1973 act, which concerns situations

"Where the value of an interest in land is depreciated by physical factors",

you said that you would take into account other property prices, but the act says nothing about that. The act talks about value being depreciated. To what extent would you take into account the fact that other Edinburgh property prices might be rising? My house might not drop in value, but it might not rise by as much as others.

Archibald Rintoul: If we examined that area, we would consider movements in the prices of houses that were relatively close to where you are and which the scheme was unlikely to affect. We would normally assume that, if the scheme did not exist, your house price would behave similarly.

Mrs Milne: In effect, you consider the value as it would have been—what it would have risen to. You will not say, “The price hasn’t dropped, so forget it—you get nothing.”

Archibald Rintoul: You are correct.

Mrs Milne: Those are all my questions. Thank you.

The Convener: Thank you, Mrs Milne. I call Rob Gibson.

Rob Gibson: I will take the global picture on detriment to the value of property. Should the tram detrimentally affect the value of property, could a claim be made under the bill?

Archibald Rintoul: Any property that is being compulsorily acquired as a result of an act of Parliament automatically incorporates the provisions of the 1963 act and the 1973 act. It is by that means that compensation can be claimed.

Rob Gibson: If that is the case, is there a time limit on claiming for compensation?

Archibald Rintoul: My recollection is that there is no time limit for claiming, but there is a time limit beyond which a claim cannot be referred to the Lands Tribunal for Scotland.

Rob Gibson: Could that time limit be specified to us? It is important from the point of view of the debate about the length of time between deeming and construction, and what happens thereafter.

Archibald Rintoul: It would probably not matter, because if property is being acquired, the date of valuation is the date when ownership of the land being acquired vests. If land is not being acquired, the appropriate date is once the scheme is up and running and a year has passed.

Rob Gibson: But if you are not clear about the question about the lands tribunal, we could do with an answer specifically about that; in writing would be fine.

Phil Gallie: Mr Rintoul, the exchange you had with Mr Scrimgeour reference short-term value effects was quite interesting. Effectively, many people could suffer because of perceptions, such as fear of the unknown. As an earlier witness said, that could be quite costly with respect to things like bridging loans, for which there is no compensation. Is it fair to say that if the committee—and ultimately the Parliament—was to give the go-ahead to the proposal, and there was then a considerable delay in getting the proposal

up and running, that short period would be greatly extended and might embrace many people along the route?

Archibald Rintoul: The proposal could certainly affect a number of people along the route. As Mr Scrimgeour suggested, the period when it is most likely to affect people is during construction, when householders would have problems with noise and other disturbances. However, you are right that there could be difficulties in perception once it is known that the scheme will go ahead, if it does not start immediately.

Phil Gallie: In the interests of those people who will not be compensated for short-term loss, the answer would be to find a way of ensuring that if the project were to be approved, it is approved on a tight timescale.

Archibald Rintoul: That is true. It is always better if things happen quickly.

The Convener: Is it not the case that there are five years from the date of royal assent in which the tram should be built, or at least construction started?

Archibald Rintoul: In this case, there is a time limit.

Phil Gallie: The committee might want to shorten that timescale in the interests of those to whom we have just referred.

Archibald Rintoul: That would be up to the committee.

The Convener: Indeed—it would be subordinate legislation. We will deal with that separately if the committee is minded to consider it.

Phil Gallie: I just wanted to make that point, convener.

The Convener: Absolutely. You never miss an opportunity, Mr Gallie. Any other questions from committee members?

Members indicated disagreement.

The Convener: Mr Thomson, any follow-up questions?

Malcolm Thomson: I have no questions, madam.

The Convener: There being no further questions for Mr Rintoul I thank him very much for giving evidence.

That concludes this item on our agenda. We move to item 2, which is our discussion in private of the oral evidence that we have heard today. Members will recall that we agreed to meet in private at the end of each evidence-taking meeting to enable the committee to give some

consideration to the evidence that it has heard.
That will greatly assist us in drafting our report at
the end of phase 1 of the consideration stage.

18:39

Meeting continued in private until 19:00.

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