

EDINBURGH TRAM (LINE ONE) BILL COMMITTEE

Monday 5 December 2005

Session 2

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EDINBURGH TRAM (LINE ONE) BILL COMMITTEE **24th 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:

Malcolm Thomson QC (Counsel for the Promoter)

Richard Vanhagen

THE FOLLOWING GAVE EVIDENCE:

John Adams

Peter Allan

John Barkess

Alison Bourne

Rosanne Brown

Mark Clarke

Patricia Craik

Iain Gaul

Mark Hallam

Ian Hewitt

Anne McCamley

Sue Polson

Graham Scrimgeour

Kristina Woolnough

CLERK TO THE COMMITTEE

Jane Sutherland

LOCATION

Committee Room 2

Scottish Parliament

Edinburgh Tram (Line One) Bill Committee

Monday 5 December 2005

[THE CONVENER *opened the meeting at 10:15*]

Items in Private

The Convener (Jackie Baillie): Good morning everyone. I welcome you all to the 24th meeting of the Edinburgh Tram (Line One) Bill Committee and what we believe will be our final oral evidence meeting on objections. Do not laugh; I intend to get through this today.

The first agenda item is consideration of items in private. With the conclusion of oral evidence taking, the committee will begin looking at the issues for its phase 1 consideration stage report. Given the volume of evidence that the committee has received, we have already agreed to consider papers drawing together evidence on a number of issues. It is my view that those papers are for discussion and, as they might not represent the final views of the committee, should be taken in private. Do members agree?

Members indicated agreement.

The Convener: Thank you. The committee will then consider its phase 1 draft consideration stage report as well as its draft appropriate assessment report. Again, as those draft reports might not reflect the final view of the committee, it is my view that they should be considered in private. Do members agree?

Members indicated agreement.

The Convener: Thank you. That concludes item 1.

Edinburgh Tram (Line One) Bill: Consideration Stage

10:17

The Convener: We move on to consider oral evidence from groups 33 to 35, 43 and 45.

At consideration stage, the committee considers the detail of the bill. Our job is to consider the arguments of the promoter and the objectors and to decide between any competing claims. All parties attending the meeting today will be aware of the procedures for taking evidence, so I do not propose to reiterate those.

One of the witnesses due to give evidence today is Peter Allan, who is to address the issue of planning policy, which is the first part of his witness statement. As members will recall, at our meeting on 27 September, the committee agreed that it had received sufficient evidence on the planning issue to enable it to reach a decision. As a result, I seek members' agreement not to take evidence from Mr Allan on planning policy today. Is that agreed?

Members indicated agreement.

The Convener: It is also my intention to take Mr Allan's statements on built heritage for groups 34 and 45 at the same time, and I understand that the promoter has agreed to that approach.

I have had a request from group 43 that Iain Gaul should be allowed to give evidence in place of Ms McCamley on the siting of the Roseburn station. Mr Gaul cross-examined the promoter's witness on the issue and group 43 believes that Mr Gaul would therefore be better placed to respond to the promoter's cross-examination on the issue.

In the circumstances, I could understand the committee's reluctance to agree that a witness is replaced purely on the basis of expertise and not because of exceptional circumstances. However, on balance, it seems to me that in this case, it might enable more detailed and focused evidence to be drawn out. I am therefore minded to agree. I understand that the promoter has also graciously agreed that it would not oppose such a replacement and I thank the promoter for its flexibility. I seek members' agreement that Mr Gaul should be allowed to give evidence for group 43 on the siting of the Roseburn station.

Members indicated agreement.

The Convener: Thank you.

As today is scheduled to be the final day for taking evidence from groups 33 to 36, 43 and 45, each group and the promoter will present their

closing statements today. At the end of all oral evidence for a particular group, the promoter will be given up to 10 minutes to make its closing statement. That will be followed by a closing statement of up to 10 minutes from a representative of the relevant group. As a result, closing statements will be made at various times throughout the day, starting with the promoter's 10-minute closing statement on group 36. Because that group rested on its original objections, it will not make a closing statement.

In considering the time allowed for closing statements, I agreed to extend the time for a closing statement to 10 minutes on the basis that up to five minutes can be taken to address the issue of an alternative route and the remaining five minutes can be used to address other issues. I remind all present that a closing statement should address only evidence that is already before the committee and not evidence that is outwith that group's objections.

We have a lot to consider today. I have already agreed to extend closing statements to up to 10 minutes. I intend therefore to be extremely strict with timekeeping.

Before we start oral evidence taking, I note that both groups 34 and 35 have submitted written information this morning. I thank them for the information but, given that it has been neither requested by the committee nor submitted as part of the written evidence procedure, I do not propose to consider it as part of our evidence.

Before we commence with oral evidence from Patricia Craik, I invite Mr Thomson to make the promoter's closing statement on group 36.

Malcolm Thomson QC (Counsel for the Promoter): The group 36 objectors are resting on their original objections, which have been answered in detail by the promoter in numerous witness statements from 19 witnesses. The objectors object to the impacts that will be caused by using the Roseburn corridor.

On the reasons for choosing the Roseburn corridor, I commend the evidence of Mr Oldfield and Mr Buckman on the route selection process. Once the principle of tramline 1 is accepted, it is inevitable that some people will be directly affected by it, during both construction and subsequent use. Many of those people will object even if, ultimately, they will benefit. They will object because of the prospect of the construction period. I ask the committee to remember that any other route would bring out similar but different objectors—probably more of them. Not only property owners but road traffic users would be affected by an on-road alternative route. If any one of those alternative routes was adopted, more people would be adversely affected to achieve a poorer scheme.

One of the reasons for preferring the Roseburn corridor is cost; it is likely to be cheaper to use the Roseburn corridor. There are very few utilities under the Roseburn corridor. Construction costs would be less than for any on-road alternative.

Because the line is separated from vehicular traffic and is off-road, a quicker run time can be achieved. For the same reasons, the service is less liable to delay, is more predictable and is more likely to tempt people out of their cars.

The route also meets the council's aspirations to increase social inclusion; the amount that can be achieved is inevitably a balancing exercise.

In respect of modal interchange, the route provides easy and convenient access to Scotland's third busiest railway station.

As a result of the run time, the reliability, the social inclusion and the direct access to Haymarket station, better patronage can be achieved than under any option that has been considered. That brings one back to the end cost. The route is not only cheaper to construct but more likely to be economically sustainable in the future.

It is accepted that there will be an environmental impact on the Roseburn corridor, but it is submitted that the impact, which can and will be mitigated, is outweighed by the other benefits.

I will discuss the particular issues that affect group 36. The environmental impact on badgers and vegetation can and will be mitigated. The costs of mitigation have been estimated and included in the estimate of expenses already submitted to the committee—as indicated in Ms Raymond's evidence at column 868 of the *Official Report*. A landscape and habitat management plan has been prepared and it will evolve as the detailed design is progressed. A badger mitigation plan, which will be a confidential annex to the LHMP, has also been prepared. The promoter is consulting and working with Scottish Natural Heritage on both those documents. As a result, SNH has withdrawn its objection to the bill.

The promoter has also consulted Edinburgh and Lothians badger group on the badger mitigation plan and will continue to do so. The committee has heard evidence of where mitigation is being changed as a result of such consultation—I refer to Mr Coates's evidence at column 1356 of the *Official Report*. In addition, the Protection of Badgers Act 1992 will apply. Finally, an amendment to the bill has been proposed in promoter's response 8 in committee paper ED1/S2/05/19/22. The LHMP will require to be approved by the planning authority prior to any works commencing. The planning authority can also take the necessary enforcement action in the event of any breaches. The promoter's witnesses

have conceded that the Roseburn corridor will be altered. However, it is the promoter's evidence that the character of the Roseburn corridor as a wildlife site can and will be maintained.

A 3m walkway and cycleway will be provided. That is the same width as the current walkway and cycleway. Although it is conceded that some categories of users may not use the Roseburn corridor following the introduction of the tram, it is submitted that it will still be used by a large number of people both on the cycleway and walkway and in the tram, especially given the commitment to ensure that all accesses comply with the Disability Discrimination Act 1995. Mr Harries's evidence at column 1420 of the *Official Report*, on acclimatising and raising the awareness of users of cycleways, should also be remembered.

On safety and speed, I refer the committee to the evidence of Dick Dapr  and Jim Harries, in particular their evidence on driving by line of sight, the setting of speed limits and the role of Her Majesty's railway inspectorate. The committee should consider Mr Harries's rebuttal of group 36 and his oral evidence at columns 1418 to 1421 of the *Official Report*. Mr Harries said:

"Safety is ingrained in the whole organisation's culture ... The industry is proud of, and cautious about retaining, its safety record."—[*Official Report, Edinburgh Tram (Line One) Bill Committee*, 7 November 2005; c 1420.]

All impacts from noise and vibration can be mitigated, whether at source through the design of the scheme, by noise barrier or at receptors through the promoter's proposed noise insulation scheme. A noise and vibration policy has been developed and, following a meeting with objectors, is being revisited to respond to objectors' concerns. In addition, the promoter has agreed to lodge an amendment to the bill on the approval of, and compliance with, the noise and vibration policy.

In conclusion, although the promoter understands and appreciates the concerns of group 36 objectors and accepts that the tram will have an environmental impact on the Roseburn corridor, we submit that the impacts of using the Roseburn corridor can and will be satisfactorily mitigated.

The Convener: Thank you, Mr Thomson.

We now move to consideration of evidence from objectors' witnesses for groups 33 to 35, 43 and 45. Today, we consider various aspects of value, health and safety and anything left over after that. Patricia Craik will need to take the oath or make a solemn affirmation. I remind Ms Woolnough and Mr Scrimgeour, who will give evidence later, that they remain under oath.

PATRICIA CRAIK *took the oath*.

The Convener: For group 33, Ms Craik will address the impact of vegetation on security. She will be questioned by Ms Bourne.

Alison Bourne: Ms Craik, has any representative of the promoter visited your garden to see the management that you have undertaken on your side of the boundary?

Patricia Craik: Sadly, no. That is despite my having issued a couple of invitations to the promoter to do so.

Alison Bourne: Has the promoter contacted you in any format to discuss your concerns, with a view to resolving your objection?

Patricia Craik: No. I can only imagine that the promoter has been more concerned with addressing and resolving business and third-party objections.

Alison Bourne: In their rebuttals of your witness statement, both Ms Raymond and Mr Turner suggest that the increased activity along the corridor resulting from the tram during tram operating hours will improve security. Do you agree with that?

Patricia Craik: No, I do not agree with that. I base my answer on the fact that if the proposed alignment goes ahead, not only I but neighbours and friends to whom I have spoken will use the corridor less. The results of the survey that was undertaken by the friends of Roseburn urban wildlife corridor also suggest that the corridor will not be used to the same extent that it is used at the moment. Clearly, fewer people will use the corridor. Hence, it will be less safe for people in the area. Even if there is closed-circuit television on the trams, that will not be effective as it will provide only a snapshot as the trams pass by. Mr Turner suggested that there will be roving patrols but, given the financial shortfalls, we wonder whether those will come about.

Alison Bourne: As you will be aware, a commitment to having a landscape and habitat management plan is to be included in the bill. Does that alleviate your concerns about boundary fencing and vegetation?

Patricia Craik: No. At the moment, my garden is bordered by a hawthorn hedge that is approximately 3m high—although its height can be higher or lower according to the season—and approximately 1m wide. The fact that the hedge provides good security was confirmed by a Lothian and Borders police community safety officer who visited my garden.

The landscape and habitat mitigation plan proposes that such hedges should be pruned to a height of about 2m and that adjacent vegetation should be removed. That is a cause of great concern to me and my neighbours, as such a

height will not provide the security that we have at the moment. For example, it will not be a deterrent to the throwing of stones at our windows.

Alison Bourne: In section 3.3 of her rebuttal statement, Ms Raymond stated that long-term maintenance would revert to the council. Does that give you comfort?

10:30

Patricia Craik: It does not. As far as the residents of Groathill are aware, the council has always had responsibility for maintaining the hedge on the Roseburn corridor. As long as I have lived in Groathill, that has never been enforced; the council has never maintained the hedge, despite requests for it to do so. I do not know that we can have confidence that the council will maintain the hedge in future.

Alison Bourne: Ms Raymond states in section 3.7 of her rebuttal that she is unsure why group 33 requests that the level of the walkway and tram remain at or below the existing level. Would you care to comment on that?

Patricia Craik: We mentioned that in our statement because if the walkway is at a lower level, that will help to screen our houses from people coming along the corridor. If the houses are not seen, they are not so vulnerable to the opportunist vandal or burglar. We also hoped that having the tram at the lower level would help to absorb any noise and vibration from the trams. On the original plans, it was suggested that the bridge at Groathill Road South be heightened, which the residents of Groathill very much opposed. The promoter has agreed that the bridge will remain at its present height. Although we have each had something in writing from the promoter, there is nothing in the bill or the tram design manual. Again, we do not have the confidence that that will be adhered to when construction begins.

Alison Bourne: Thank you. I have no more questions.

The Convener: Thank you, Ms Bourne. Mr Thomson?

Malcolm Thomson: Have you seen the letter from Lothian and Borders police about security and safety on the Roseburn corridor?

Patricia Craik: I have a letter that was addressed to me about safety in our properties.

Malcolm Thomson: The letter that I am thinking about says:

"the increase of natural surveillance opportunities from drivers and passengers on the proposed trams will be a positive factor. Furthermore the proposed removal of overgrown vegetation adjacent to footpaths will greatly increase the personal safety of all route users. This is especially important, as the most commonly reported crime is assault."

Do you think that the committee should pay attention to those views of the police?

Patricia Craik: The police's views should be paid attention to. The committee should also pay attention to the fact that we are talking about the security of properties along the Roseburn corridor. The police were impressed with the security that we have at present and said that it should not be reduced in any way.

Malcolm Thomson: But to some extent it is a balancing exercise between the safety of those using the corridor and the security of adjoining properties.

Patricia Craik: Indeed it is, in consultation with the residents of the area.

Malcolm Thomson: Indeed. You have obviously read Karen Raymond's rebuttal of your evidence. Do her comments go any way to easing your fears?

Patricia Craik: They do to some extent, but I come back to the fact that no one has come round to view the gardens from the householders' side. I think that that is very important, because the view from the other side is completely different. There are not so many households and I feel that each householder should have had someone visit them. We have elderly people in the area and ladies living on their own. They have great concerns and I feel that they are not being addressed.

Malcolm Thomson: I thought that you were concerned about the appearance of the houses from the Roseburn corridor, given your evidence about opportunistic thieves and so on.

Patricia Craik: I was concerned that at the moment people cannot always view the houses from the Roseburn corridor. If the hawthorn hedge that we are talking about was to be reduced to 2m, the houses would come more into view and therefore would be more vulnerable to opportunistic vandals and burglars. It is much better if they are not seen.

Malcolm Thomson: If we think for a moment about the risk of stone throwing, would the mitigation of that risk be improved if grass track were used, rather than rails sitting on sleepers sitting on piles of stone chips?

Patricia Craik: If there were not stones available to pick up and throw, yes. If people were armed with bottles and so on, no.

Malcolm Thomson: Thank you very much.

Patricia Craik: Thank you.

The Convener: Thank you. Committee members?

Phil Gallie (South of Scotland) (Con): Are you more concerned about the night-time or the daytime consequences of the removal of the existing security?

Patricia Craik: If I was to come down on one side or the other, I would say that the problem would be overnight. Who knows? It can sometimes be younger people who are of most concern in this regard, but they will hopefully be in school during the day.

Phil Gallie: Overnight, you would probably be reasonably safe from stone throwing and so on, but the opportunistic burglars to whom you referred might be the concern. Is that right?

Patricia Craik: Yes, that would be correct.

The Convener: There are no other questions from committee members. I invite Ms Bourne to ask any follow-up questions.

Alison Bourne: I would like to correct something that I think you said in your evidence. Is it not the case that Mr Murray of Transport Initiatives Edinburgh and Mr Mathie of the City of Edinburgh Council city development department came to have a look at the hedge at one of your neighbour's properties?

Patricia Craik: They came out to one of my neighbour's properties at one time, yes.

Alison Bourne: What were their conclusions?

Patricia Craik: Their conclusion was that the security could not be improved. They understood the concerns of the residents.

Alison Bourne: Are you surprised by the stance that the promoter has taken on this issue?

Patricia Craik: I would have thought that the promoter would have taken on board what Mr Mathie had reported back.

The Convener: There are no further questions for Ms Craik, whom I thank very much for giving evidence this morning.

The next witness is Graham Scrimgeour, who will address the issue of security and privacy for group 34.

Kristina Woolnough: Good morning. Could you briefly describe why group 34 is concerned about security and privacy?

Graham Scrimgeour: The key issue for group 34 is quite similar to that for the previous group: the impact of a reduction in vegetation along the Roseburn corridor. We do not think that the introduction of the tram will particularly increase or reduce the incidence of antisocial behaviour or the presence of thieves, for example. By removing the vegetation, however, it will be easier for people either to make illegal entry or to throw stones, eggs or whatever.

The committee might remember that, when we walked along the corridor in June, we could see that the vegetation had already been removed at one garden. That is almost an experiment to see what would happen more widely. A row of tall trees was removed about a year ago. Since then, that garden has been subjected to stone throwing, egg throwing and, during the summer, a break-in. There is a clear deterrent effect from vegetation being in place. There is evidence that, when it is removed, there are increased problems.

We have spoken today about the police's opinion on the subject. When we cross-examined Mr Turner back in October, he spoke about evidence taken from Lothian and Borders police and he undertook to provide that to us. As far as I know, we have not received that. I have therefore not seen exactly what the police have said on the subject. However, our concerns are how I have just described them.

Kristina Woolnough: In summary, is it fair to say that residents are basically concerned about exposure to any of those elements at any time of the day or night? Presumably, school holidays and so on might extend periods of—

Graham Scrimgeour: There could be different problems at different times of day, as Mr Gallie indicated in his question. Those might vary but, either way, vegetation provides screening day and night.

Kristina Woolnough: The promoter has suggested that trams will facilitate security, as they will have CCTV cameras on board. Might residents benefit from that?

Graham Scrimgeour: If we take the case of stone throwers, a teenager could be innocently walking along the corridor when a tram passes but, when they are no longer being watched by anybody, they might pick up some stones and start throwing them. I am not sure whether CCTV would help there. Unless they are actually seen throwing the stones, there is no evidence either way.

Kristina Woolnough: Whereas vegetation is tried and tested, is it not?

Graham Scrimgeour: People are unlikely to start throwing stones at things that they cannot see. If the angle of throwing is more difficult, that also makes it less likely that they will throw stones.

Kristina Woolnough: What would group 34 like the committee to do about the issues of security and privacy with regard to tramline 1?

Graham Scrimgeour: We submitted a number of suggested amendments to the bill and the supporting documents on landscape and habitat management and vegetation. On 4 November, a document was submitted to us with proposals for

the enforcement of the landscape and habitat management plans. This morning, we submitted by e-mail a document that compares the two positions.

Essentially, we are looking for the maintenance and reinstatement of vegetation and a requirement to maintain the height of vegetation, neither of which the promoter has committed to at the moment. We are also looking to maintaining privacy at present levels during construction, by which we mean that if vegetation is removed, something else should be put in its place until the vegetation is reinstated, but the promoter has not committed to that at the moment.

Furthermore, we are looking for a commitment to reinstate the vegetation after construction in a way that ensures that it quickly re-establishes. Again, the promoter has not committed to that at the moment. We are also looking for a commitment that the promoter will maintain all vegetation throughout the operational lifetime of the tram. Although a vague commitment to do so was made in the 4 November paper, the commitment is not robust.

We are also looking for a monitoring mechanism that looks at the maintenance of the mitigation measures and for a commitment on the enforcement of the mitigated levels. Again, the promoter has made no proposal on that front. The 4 November paper refers to the responsibilities of the council—I forget the name of the department—in respect of the monitoring. Again, the commitment that is made is not robust.

There are a number of elements of the scheme on which we are looking for maintenance, monitoring and enforcement. The promoter has not committed to most of that at the moment, not even in its response to our suggested amendments. We would like to see those things being achieved.

Kristina Woolnough: Without seeing Mr Turner's police report, we cannot know whether the police suggested that the hedging and so on should be kept.

Graham Scrimgeour: I do not know what the report says.

Kristina Woolnough: Thank you.

The Convener: Thank you, Ms Woolnough. I call Mr Thomson.

Malcolm Thomson: Good morning, Mr Scrimgeour. I am sorry that you have not seen the letter from the police. It was made available to the committee. I put to you the same quote that I put to Miss Craik:

"the increase of natural surveillance opportunities from drivers and passengers on the proposed trams will be a positive factor. Furthermore the proposed removal of

overgrown vegetation adjacent to footpaths will greatly increase the personal safety of all route users. This is especially important, as the most commonly reported crime is assault."

The figures that are given in the letter indicate that the most common crime on the corridor is minor assault, with breach of the peace a close second. Do you agree that those views of the police are important and that the committee should take account of them?

Graham Scrimgeour: I am sure that they are important. Obviously, the police were asked to comment from the point of view of the users of the corridor. Perhaps they should also take account of the way in which the tram will change the use of the corridor. Given that users will be hemmed in between fences and so on, they will be subject to other risks. On the point about people lurking in the vegetation, the addition of fences will mean that the removal of vegetation would not make such a difference. The police have not yet commented on the issues of security and privacy for the adjoining properties.

Malcolm Thomson: In order to keep the whole thing in perspective, I will put more of the letter to you. The letter from the police goes on to say:

"However the planting of dense growing/thorny vegetation should be considered (where appropriate) around adjacent property boundaries to enhance their level of security against intrusion from the tram route."

I take it that you would agree with that.

Graham Scrimgeour: We do. We are looking to the promoter to give us a robust commitment that that will happen. We do not have that at the moment.

Malcolm Thomson: The letter from the police goes on to talk about CCTV. It says:

"Should the trams be fitted with internal and forward facing CCTV systems, as proposed, the surveillance opportunities will be further increased.

Criminals rarely commit crimes when they can be seen and indeed possibly caught."

As long as the trams are running and the CCTV is operating, that would, of course, go for crime on the corridor as well as for crimes that involve breaking into adjoining property.

Graham Scrimgeour: As I said in answer to one of Kristina Woolnough's questions, the trams will pass periodically. People will see them coming, so they will be able to behave in a responsible manner when they are being filmed and to change their behaviour once the tram has gone.

10:45

Malcolm Thomson: That would apply to CCTV systems on the trams. Static systems would cover the corridor as well.

Graham Scrimgeour: I am sure that they would. I am not aware that the entire corridor is to be subject to surveillance of that nature.

Malcolm Thomson: Constable Cameron goes on to say:

"It is also reassuring to see that you have considered the removal of traditional ballast (stone) material from underneath the tracks."

That is a reference to the grass track that is proposed. He continues:

"Unfortunately other modes of public transport around the city, especially buses, frequently fall victim to irresponsible incidents of stone throwing. This design feature should reduce the likelihood of similar attacks on the trams."

Do you agree with that statement?

Graham Scrimgeour: I understand that from the start it has been proposed that there should be a grass track, mainly for the sake of noise reduction. We support the proposal, but it is not a new development.

Malcolm Thomson: I was not suggesting that it was new. However, will it not help to reduce the supply of missiles for would-be vandals who are thinking about throwing stones at houses?

Graham Scrimgeour: Providing ballast would be a disaster in terms of missile throwing.

Malcolm Thomson: So at least you think that the proposed grass track is a good thing.

Graham Scrimgeour: Yes. There are currently a lot of loose stones on parts of the corridor, as a result of other construction work, so removing stones would be great along the whole corridor.

Malcolm Thomson: Planting is proposed to replace the vegetation that is lost in the construction process. Do you accept that there are benefits in mixed planting? By that I mean planting some mature trees, to give early cover. Given that those mature trees are unlikely to thrive as well as younger trees, should not the mix include plenty of young trees that are likely to thrive and to provide better and healthier cover in the long term?

Graham Scrimgeour: My answer is a broad yes. However, we want someone who is an expert at producing a boundary to do so in the best way possible and as quickly as possible. That may be the way in which to proceed.

Malcolm Thomson: Thank you, Mr Scrimgeour.

The Convener: We will now take questions from committee members.

Phil Gallie: I will pursue the same line of questioning, referring to the police's letter. Perhaps Mr Scrimgeour will take some comfort from the emphasis that has been placed on providing prickly hedges once construction has

taken place. I want to ask about the number of people who use the corridor and to return to my earlier point about overnight security. Could the massively increased number of people using the corridor on trams increase the number of opportunist burglars, given that the scene will have been opened up and that people will take account of that?

Graham Scrimgeour: It is hard to say whether a burglar would use the tram to escape the scene.

Phil Gallie: I was thinking not about burglars using the tram to escape the scene but about surveillance. As people move around during the day, they look around them and see properties. Would the presence of the tramline increase the potential for burglars?

Graham Scrimgeour: It could. I have not formed an opinion on the issue of surveillance.

Phil Gallie: I note that you are reluctant to commit yourself. I have no other questions.

The Convener: Does Kristina Woolnough have any follow-up questions for Mr Scrimgeour?

Kristina Woolnough: I have a few that have arisen as a result of the police report, if the committee will bear with me. As members have heard, we had not seen the report before. We are not experts on police reports, but is it not possible, Mr Scrimgeour, that break-ins of houses that might be accessed from the Roseburn corridor would not be recorded as Roseburn corridor incidents, and that the letter that we have heard about from Mr Thomson describes incidents on the corridor, as opposed to incidents in houses that might have been accessed from there?

Graham Scrimgeour: We have no way of knowing that.

Kristina Woolnough: There is lighting on the corridor at the moment, although it is poorly maintained by the promoter. Is it possible that additional lighting as a result of the tram would displace people with antisocial intentions into gardens, which are not lit?

Graham Scrimgeour: That is possible. People may also disable the lighting before continuing with what they plan to do.

Kristina Woolnough: To pursue Mr Gallie's point, is it not the case that gardens would be a good hiding place? Might not criminals be displaced and conduct their activities more persistently in people's gardens?

Graham Scrimgeour: Potentially.

Kristina Woolnough: I know that you have attended community liaison group meetings. Is it the case that they have not discussed

householders' security and that there have been no attempts to resolve that issue?

Graham Scrimgeour: I am not sure that I remember what has been covered. Many of the promoter's witnesses were also at the community liaison group meetings. I hope that householders' security will be covered in future, but as we have discussed, we feel that this is our last chance to influence the scheme at this level. We would like to see those issues hardwired into the scheme.

Kristina Woolnough: Might there still be rubble in the Roseburn corridor, as there is now? The rubble displaces from the sides of the cuttings and embankment, and there is currently an issue about the council removing the rocks, rubble and so forth that it has caused to be there.

Graham Scrimgeour: Or not removing. It was about to emerge from Mr Thomson's questioning that as well as considering grass track, the whole corridor beyond the boundaries of the tram alignment needs to be considered to see what is happening with stones, rocks and so on. It would take wider action to remove missiles.

Kristina Woolnough: Is it the experience of local people that the council, which is, after all, the promoter of the bill, does not move with any alacrity to remove rubble that it has introduced into the corridor?

Graham Scrimgeour: Earlier this year a lot of rubble was left behind when some of the drains were renewed. Teenagers threw some into gardens, and I sent an e-mail to the council official who had been dealing with it. I did not get a response; nothing happened at all.

The Convener: While that is very interesting, it is not directly relevant to the bill.

Kristina Woolnough: Is it also possible that people who walk their dogs, perhaps late at night, may be dissuaded from using the corridor if the tram is there? Is not the best means of security for the corridor and for householders perhaps for ordinary people to continue to use the corridor as much as possible?

Graham Scrimgeour: I agree. Other dog walkers and local pedestrians provide the greatest comfort and security to users. They feel safer when other local people are there.

Kristina Woolnough: Thank you.

The Convener: There are no further questions for Mr Scrimgeour on this issue, so I thank him for giving evidence.

While Ms Woolnough and Mr Scrimgeour swap places, I remind questioners that their cross-examinations should stick to issues that have been raised previously. If they want to lead more detailed evidence, that should be part of the evidence-in-chief, not the cross-examination.

The next witness will be Tina Woolnough, who will address safety on the walkway and speed for group 34. I understand that you are adopting Ms Hudson's statements on safety on the walkway and speed. Is that correct?

Kristina Woolnough: Yes.

Graham Scrimgeour: Will you tell the committee why you are concerned about speed and safety on the Roseburn corridor?

Kristina Woolnough: We strongly believe that speeds of up to 50mph are inappropriate in a highly residential area that is also a safer route to school for several local schools. In fact, the Roseburn corridor falls into 20mph safer routes to school zones. Many vulnerable groups also use it because it is traffic-free.

Using the corridor, and thereby impacting on that safer route to school, is contrary to the relevant national guidelines. We are fully aware that the corridor is used by children in schools and nurseries both formally and informally for nature trails, running, fundraising projects and whole-school walks. In his rebuttal of my statement, Dick Dapr  described the corridor as a recreational facility and, in his rebuttal, Jim Harries agreed that there would be an adverse effect on some families.

Graham Scrimgeour: Why has the group requested a speed restriction in the corridor?

Kristina Woolnough: Throughout the evidence-taking process, we have heard a lot about the importance of run times through the Roseburn corridor. In asking for a speed restriction, we are concerned about protecting the safety of local users, enabling vulnerable users to continue to use the corridor and protecting some of the amenity from fast vehicular traffic—people are not allowed to drive that fast on some nearby roads.

We are conscious that the arguments about journey time and run time are unproven. In our cross-examination, we have asked for evidence of what the speed profile will be. That has been discussed at CLGs but has not been put before us. We think that the line is much longer than the one that our group proposes, so we are not convinced by what is being said about cost.

Mr Harries described educational and awareness-raising work that would be done when the tram is introduced into the corridor. However, we still think that there are speed and safety issues that could be mitigated by speed restrictions, which is what we are arguing strongly in favour of.

Graham Scrimgeour: The promoter has made some commitments in relation to safety. Have they provided the group with reassurance?

Kristina Woolnough: On the discussion about barriers and so on, I do not doubt that the promoter is extremely committed to meeting safety requirements—and, obviously, will be made to be committed by the HMRI—but we do not know what those requirements will be. We do not know how they will impact on the design and feel of the corridor or on its current semi-rural aspect.

Speed restrictions might be required for safety reasons in the vicinity of tunnels, platforms and various crossing points, but if we do not know what the speed profile of the Roseburn corridor will be, we cannot accept that the run time is so crucial that that is why the Roseburn corridor must be used. If we could see the restrictions that will be imposed or required, we think that we would see that the run time on the Roseburn corridor will be quite slow. It will have to be, because there are many bridges, tunnels, pinchpoints and crossing points. With all that baggage, we cannot see how the run time in that area will be good. If we do not see any evidence to the contrary, we will not be convinced at all.

Graham Scrimgeour: What do you think the impact of speed will be on the current amenity value of the corridor?

Kristina Woolnough: I think that it will be devastating. Having trams coming along that enclosed space at speeds of up to 50mph every three and three-quarter minutes will be extremely unpleasant—it will be akin to walking along a road with fast-moving cars on it. Some of the promoter's witnesses have said that the corridor will not be the same once it has trams on it and that there will be an impact. It is a matter of common sense to say that the change will be extremely unpleasant and will impact heavily on any amenity use of the corridor, and not only for vulnerable people such as young children. There is no getting away from that.

A speed restriction might mitigate the unpleasantness to a degree but, as we have argued before, we would prefer an alternative, on-road alignment, as the impact would be less devastating.

Graham Scrimgeour: That concludes my questions.

The Convener: Mr Thomson, you may question Ms Woolnough.

11:00

Malcolm Thomson: In your evidence, you draw attention to what you see as being an inconsistency between the 20mph safer routes to school policy on roads and what is proposed for the tramline. I suggest to you that there are important differences between the safety

considerations on a roadway and those on a tramway, particularly in relation to intervisibility—what the driver of a tram and the driver of a car can and cannot see, and what a child using the walkway can and cannot see—the particular difference being the presence of parked cars and vans along the side of a road but not by the side of a tramway. Do you accept that difference?

Kristina Woolnough: I accept that you are describing an on-road situation and that the Roseburn corridor is an off-road situation. However, the Roseburn corridor throws up a load of other visibility issues, about which you have heard lots of evidence—with the embankments, the cuttings, the bridges, the lack of barrier, the definite barrier, the tunnels and so on. I would not have thought that it would be beyond the realms of possibility to have had a design before us for a relatively short stretch of the tramline 1 route through the Roseburn corridor, but without that we cannot know what it will look like, what the driver's visibility will be or what visibility the pedestrians and cyclists using the corridor will have. The corridor is on a curve, but we do not know how gradual a curve the alignment will follow or what the speed profile that the tram drivers will need to observe will be. That is why we are concerned that the urgent run times may not, in fact, prove to be as suggested.

Malcolm Thomson: Do you accept that parked cars and vans pose a serious safety threat to children using roads because of the lack of intervisibility of drivers and children?

Kristina Woolnough: No, I do not accept that, and you will be delighted to know that school road-crossing training now involves training children to cross roads with stationary obstacles nearby. It is speed that kills children, not parked vehicles.

Malcolm Thomson: Well, there has to be a collision first, and the parked vehicles are likely to lead to the collisions. Speed is then the factor that decides how serious the collision is and whether or not the child is killed.

Kristina Woolnough: In an urban context, parked cars are the norm. I am not sure of the purpose of your question in relation to the Roseburn corridor, where there will be no parked cars but where there will be speed.

Malcolm Thomson: That is the very point. In the urban road situation, parked cars create a danger for children because of the lack of intervisibility, whereas in the Roseburn corridor, where there will be trams, there will not be parked cars.

Kristina Woolnough: I do not believe that poor visibility is a direct cause of accidents involving children. I do not have the evidence in front of me, but I would be glad if you were able to share with

me your evidence about that. It is speed that kills children. If you reduce speed to 20mph, they have a better chance of survival. That is why 20mph zones are being introduced around schools in Edinburgh.

Malcolm Thomson: There has to be a collision between the child and the vehicle first.

Kristina Woolnough: But the collision between the child and the vehicle may not be caused by a parked vehicle. It may be caused by a child chasing a ball, going after their dog or just seeing their friend, or for any number of other reasons. I am not aware of any information that suggests that parked vehicles are directly attributable in a significant way to accidents involving children. I am aware of information that says that speed is directly attributable to whether a child lives or dies.

Malcolm Thomson: Can we change to a different topic?

Kristina Woolnough: That would be helpful, thank you.

Malcolm Thomson: Do you accept that the tram might well encourage the use of public transport by children going to and from school?

Kristina Woolnough: One of the rebuttal statements to my witness statement made that suggestion. In cross-examination, I asked that witness exactly which schools children would be able to access as a result of the tram that they could not currently access by bus. I am not aware of any.

Malcolm Thomson: Do you trust HMRI to have a role in relation to safety?

Kristina Woolnough: Of course.

The Convener: Committee members have no questions. Mr Scrimgeour, do you have any questions for Ms Woolnough?

Graham Scrimgeour: I have a brief question. Do you know whether it is possible for a child or a dog to run in front of a tram in the situation that we have just been describing?

Kristina Woolnough: As far as I understand it, it is, but without the detailed design and without knowing whether there will be a significantly high barrier down the middle of the Roseburn corridor, or how the tram will run through tunnels, it is difficult to say, but I consider it possible.

One of the rebuttal statements says that children will have to be mature to use the Roseburn corridor safely. I have no idea what that means or whether the promoter will be able to illuminate the matter or will seek to impose an age barrier on users of the corridor.

Graham Scrimgeour: If a car and a tram were heading towards a child, which vehicle would have the better chance of deviating around them?

Kristina Woolnough: I guess that a car would have more of a chance in that respect.

Graham Scrimgeour: Thank you.

The Convener: As there are no more questions for Ms Woolnough, I thank her for giving evidence. I invite Mr Scrimgeour and Ms Woolnough to swap places.

Ms Woolnough will question Mr Scrimgeour for group 34 on the issue of emergency and maintenance access.

Kristina Woolnough: Why is group 34 concerned about emergency and maintenance vehicle access?

Graham Scrimgeour: Our concerns arise from the observation that emergency vehicles currently use the corridor and are able to make their way along its length. In many places, they are able to turn around, if that is necessary, and verges make it possible for pedestrians and cyclists to pass them. Indeed, committee members will recall that, when we all walked along the corridor, we met many cyclists and when a minibus drove up the corridor, we were able to step back on to the verge to let it pass. If the tramway is constructed as proposed, there will be a 3m-wide path bounded by fences, kick-rails and what have you that will make it impossible to get off it.

Moreover, according to the plans, the path will narrow in some places to 2.5m to allow it to pass under bridges. However, the tram will require most of that width. Such restrictions will make it impossible for any two vehicles to pass each other. For example, two or three ambulances or a police car and an ambulance involved in an incident would not be able to follow each other down the corridor, turn around and head off to hospital. If the scheme as described is introduced, pedestrians and cyclists will find it much more difficult and dangerous to pass such vehicles.

At one point, Mr McIntosh argued that a tram could act as an emergency vehicle. We dispute that, because trams do not carry specialised personnel or specialist equipment such as handcuffs, fire extinguishers, fire hoses or defibrillators; they are not part of the 999 system; they cannot deviate from the route to get to, for example, the Edinburgh royal infirmary at Little France or to police stations; and they cannot overtake each other or other vehicles. Once they leave the corridor, they will become stuck in traffic. That is simply inadequate. We just do not think that it is possible to provide the same level of safety and access to emergency systems if the walkway is as restricted as the promoter has

proposed. In relation to that—[*Interruption.*] I am sorry—perhaps you should ask the next question before I carry on.

Kristina Woolnough: What would group 34 like the committee to do?

Graham Scrimgeour: We have suggested some amendments that would, for example, require emergency access to be maintained and ensure that viability of access is assessed. If the overall width of the tramway is a problem in some places, the lines should be squeezed together, for example underneath bridges. That would require signalisation, but it would allow emergency vehicles to make their way along the full length of the corridor. Our overall preferred option would be an alternative route that did not impact on the corridor.

Kristina Woolnough: Thank you.

The Convener: Mr Thomson, it is your turn to question the witness.

Malcolm Thomson: Mr Scrimgeour, I know that you heard Mr McIntosh's evidence, because you were cross-examining him. In answer to one of your questions, he said:

"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."—[*Official Report, Edinburgh Tram (Line One) Bill Committee, 25 October 2005; c 1255.*]

Does that statement satisfy your concerns at all?

Graham Scrimgeour: It might do, if its terms were enforced in the way that I have described. However, after looking at the current draft of the landscape and habitat management plan, which is the most detailed plan available, I believe that any vehicle would find it difficult to negotiate most of the access points indicated in the relevant diagram. I find it difficult to reconcile Mr McIntosh's response at that time with the plans that we have seen.

Malcolm Thomson: The detailed design work has not yet been carried out and the promoter has undertaken to consult police and other emergency services. Are not those considerations and Mr McIntosh's undertaking sufficient to meet your concerns?

Graham Scrimgeour: They do not address some issues that I have raised such as vehicles' ability to pass each other or the ability of pedestrians and cyclists to pass vehicles.

Malcolm Thomson: I presume that you are talking about emergency vehicles going in opposite directions to different emergencies.

Graham Scrimgeour: What would happen if more than five people were injured in an incident

and more than one ambulance were needed? Those ambulances would need to be able to pass each other; moreover, an ambulance might have stopped to tend people and another ambulance might have to pass it. That would not be possible with the scheme as described.

Malcolm Thomson: And you do not think that consultation with the emergency services would allow such issues to be raised adequately.

Graham Scrimgeour: I am sure that the issues would be raised. However, I do not know whether it would be possible to resolve them all within this scheme.

Malcolm Thomson: Thank you, Mr Scrimgeour.

The Convener: Thank you, Mr Thomson. As committee members have no further questions, I ask Ms Woolnough whether she has any follow-up questions for Mr Scrimgeour.

Kristina Woolnough: In line with the police report that the promoter has issued, would you have expected the promoter to have sought advice from the emergency services before now, Mr Scrimgeour, to allay concerns that you expressed some time ago?

Graham Scrimgeour: Given that we raised these concerns in May, it would probably not have been unreasonable to have received a response or to have had such an investigation carried out. I am not aware that either of those things has happened.

Kristina Woolnough: Do you imagine that it will be a bit late to address this issue once construction begins?

Graham Scrimgeour: It will certainly be harder to change things.

The Convener: There being no further questions for Mr Scrimgeour, I thank him for giving evidence.

We will have a one-minute break to allow Mark Clarke, Mark Hallam, Rosanne Brown and Anne McCamley to come to the table.

11:12

Meeting suspended.

11:14

On resuming—

The Convener: Mark Hallam and Anne McCamley will need to take the oath or make a solemn affirmation. I remind Mark Clarke and Rosanne Brown that they remain under oath.

MARK HALLAM *made a solemn affirmation.*

ANNE MCCAMLEY *took the oath.*

The Convener: The first witness will be Mark Clarke, who will address health and safety in relation to construction for group 34. Mr Scrimgeour will question him.

Graham Scrimgeour: Mr McIntosh referred to the code of construction practice to rebut issues that you identified in your witness statement. What are your concerns about the code?

Mark Clarke: In the main, the code of construction practice deals with high-level processes, such as public liaison, access, protection of the water environment and archaeology. Although it contains some specific comments on noise, vibration and pollution, they provide very limited detail. Overall, the code is a one-size-fits-all document. In the main, Mr McIntosh's rebuttal does not address concerns about specific construction issues such as landslip and actions that might arise from the use of plant, or from trips or falls by the public, which were included among the 21 issues that I raised in my original witness statement. As people who live at the bottom of an embankment, concerns about landslip, plant damage and so on are extremely important to me and my neighbours. In that regard, more clarity on the proposals is required.

Graham Scrimgeour: What would you like to happen?

Mark Clarke: I would like the points that are raised in my witness statement to be addressed in detail, following the general approach that the landscape and habitat management plan adopts. I want TIE to conduct an individual safety issues review of each section of the route. Details of proposed actions should be recorded and made available to the public, and the risk register for the construction works should be published for comment by members of the public and other interested parties.

Graham Scrimgeour: Will you briefly describe your concerns about vermin?

Mark Clarke: Mr McIntosh agreed that vermin are likely to go to the nearest point of shelter if their existing habitat is disturbed or removed. My concern is that vermin will naturally migrate to houses, garages and sheds adjacent to the walkway when the works take place. The code of construction practice does not consider the dangers, including disease, to the public that such migration poses.

Graham Scrimgeour: What would you like to be done about that?

Mark Clarke: I would like TIE or the local authority to check for the presence of vermin and to eradicate them in advance of the works, and to accept responsibility for dealing with vermin in households adjacent to the works during construction and for one year thereafter.

Graham Scrimgeour: What are your concerns about working hours?

Mark Clarke: The working-hours figure of 72 hours that is referred to in the documents is almost double the number of hours that is recorded in the construction working rule agreement, which specifies a 39-hour week. The figure also far exceeds the number of hours that is allowed under the European working time directive. Both those arrangements apply to single workmen, so I presume that TIE plans to operate using double shifts. Changes in shift always result in loss of production.

Mr McIntosh suggested that keeping to a normal 39-hour week would result in the works' taking much longer. That would be true only if the contractor kept deploying his resources at the same level. If the contractor's hours were limited and the same end date was kept, he would have to employ better planning, use off-site construction—which would reduce the impact on site and would improve quality overall—and employ more operatives, which would benefit local employment rates. The public would suffer much less disturbance, especially during the early evening and on Saturdays, when more people are at home.

Graham Scrimgeour: What do you propose could be done on that front?

Mark Clarke: I looked for other codes of construction practice on the web and found one for Plymouth City Council that limits work to between 8 am and 5 pm from Monday to Friday, and between 8.30 am and 1 pm on Saturday. That appears to be much better practice than TIE proposes. I ask that the hours be limited to a similar scope, except for emergencies or where major disruption would be caused to traffic.

Graham Scrimgeour: Will you describe briefly your concerns about how the code of construction practice addresses general health and safety, particularly related to noise and vibration?

Mark Clarke: The levels of noise vibration that are proposed as being acceptable in the code of construction practice are excessive. I am particularly concerned that monitoring will be carried out either by the contractor or by parties that have been appointed by TIE or the local authority. It would give everyone more confidence if monitoring of all health and safety issues were carried out by an independent body that was not monitoring its paymaster.

Graham Scrimgeour: Mr McIntosh's rebuttal of 12 August notes that you ask for details of risk assessments and sums that have been set aside for liability for health and safety incidents. Why do you ask for that information?

Mark Clarke: I thought that it would make TIE's approach to risk more apparent. I have noticed that home insurance may be affected by the works, so I feel that it is important that the public be given assurances that consequential damage and loss will be met by TIE.

Graham Scrimgeour: What would you like to happen on that front?

Mark Clarke: I want the risk register to be published on the website and made accessible to the public. An independent assessor should be appointed to examine complaints of loss or damage and to decide liability without the need for the public to take legal action.

Graham Scrimgeour: Thank you, Mr Clarke.

Malcolm Thomson: You have considerable experience in the construction industry over many years.

Mark Clarke: That is correct.

Malcolm Thomson: Is there anything inherently different between building a tramway and building either a major utilities project or a block of flats?

Mark Clarke: Only that a tramway is spread across a greater geographic area.

Malcolm Thomson: A utilities project might also be spread across a greater geographic area.

Mark Clarke: That is possible.

Malcolm Thomson: Can I take it that you would accept that the contractor for a tram project would be bound to comply with all relevant health and safety legislation?

Mark Clarke: Yes.

Malcolm Thomson: The contractor would be bound in the same way as any other contractor on any other project.

Mark Clarke: That is correct.

Malcolm Thomson: In his evidence, Mr McIntosh described the list of contingencies that you set out in your statement as 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."—[*Official Report, Edinburgh Tram (Line One) Bill Committee*, 25 October 2005: c 1206.]

Do you agree with any of that?

Mark Clarke: If risks did not materialise in construction projects, there would be no need for Her Majesty's railway inspectorate or for the Health and Safety Executive. There are risks on building sites and accidents do occur; such environments are very dangerous. The points that

I, as an experienced worker in the construction industry, identified would normally be considered significant issues. I was concerned that they should be addressed as early as possible. That would give me confidence that I would remain reasonably safe if the project went ahead.

Malcolm Thomson: As for just listing umpteen possibilities as concerns, am I right in thinking that if one just listed all the things that might possibly go wrong, one would probably never build anything?

Mark Clarke: No—that is not true. The process of construction is about balancing risks. The industry has adopted a standard procedure of developing risk registers for all projects. Risk registers help to guide both the contractor and the employer through the process. My feeling was that making the risk register—which must exist for this project—a transparently available document would inform the public and other interested parties about what TIE proposes.

Malcolm Thomson: Once a risk has been identified, it has to be assessed.

Mark Clarke: Correct.

Malcolm Thomson: You referred to working hours and a project in, I think, Plymouth.

Mark Clarke: No—I referred to Plymouth City Council's code of construction practice.

Malcolm Thomson: What sort of project was that?

Mark Clarke: It was not a project; it was Plymouth's standard code of practice for construction projects.

Malcolm Thomson: Have you found a tram project that has been built using working hours other than those that are proposed by the promoter?

Mark Clarke: When I searched the web for other codes of construction practice, I did not come across a tram project.

Malcolm Thomson: Thank you, Mr Clarke.

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

Phil Gallie: Were you involved in construction contracts from a project management or a design concept viewpoint?

Mark Clarke: I was involved primarily in the construction side. I managed both design and construction for certain projects, but my role was with a construction contractor.

Phil Gallie: No doubt, at all times your interest was the safety of the personnel who worked for you as well as the general area in which you were working.

Mark Clarke: Absolutely.

Phil Gallie: How many projects had constraints such as you have asked for imposed on them, especially in respect of working time?

Mark Clarke: In terms of working time, what I have asked for is not uncommon. I am surprised that 72 hours has been proposed. When I built a major leisure centre in the west of Scotland, our working hours were restricted. I would need to check the documents, but I remember that on Mondays to Fridays, we had about nine hours available and on Saturdays we had a half day unless we got special permission.

Phil Gallie: Have you ever used hours outside those in projects that you have managed?

Mark Clarke: Yes, I have. I worked on the Sullom Voe oil terminal, where the hours that were worked were significant—there was a standard 12-hour day. However, that was an exception. Normally, when works are directly adjacent to the public and contractors are working in and around people's houses, working hours are restricted to hours when people are likely not to be at home—in effect, office hours. It is not uncommon to restrict working hours in such locations.

Phil Gallie: Okay. Thanks very much.

The Convener: Are there any other questions from committee members?

Helen Eadie (Dunfermline East) (Lab): What is your experience of meeting construction deadlines in that context? If there was adverse weather and contractors had to go off site, a project could run on beyond the completion date, with financial implications for the bigger project. What is your comment on that?

Mark Clarke: All projects run the risk of running over time if the situation that is first conceived when the project is planned varies because of new work, adverse weather, unusual ground conditions and so on. However, the essence of projects is good-quality planning. If there is good-quality planning and if contingency is built into the programme during the planning period, there is the opportunity to complete on time. Complex projects are and have been completed on time.

Phil Gallie: If the tram project were given the go-ahead, would not it be in the best interests of the people who live in the area to have the work carried out as swiftly as possible? Would not it be better if, on that basis, constraints on the contractor were limited to ensuring safety and to causing no inconvenience to the public in general? That might mean that the best way of working would be to work outside the hours to which you wish to restrict the project.

Mark Clarke: I hear what you say, but that is not the case. Programming and programme time—

which is what we are referring to—have two key attributes: the time and the resources that are involved. There is an equation. If it takes one man two hours to dig a hole, the chances are that it will take two men one hour to dig the same hole. Both attributes must be brought into balance. In the case of the tramlines, if the resources were planned properly, the work would not need to continue beyond the hours that I have suggested; the same volume of work could be carried out in a reduced period—especially if off-site construction techniques were used.

11:30

Phil Gallie: I find that slightly surprising, because there are all kinds of variables; for example, hours of daylight have to be taken into account. I am sure that any responsible construction outfit will attempt to plan properly. The whole idea of planning is always to have something in the back pocket—a contingency—to address problems. If too many restrictions are placed on the constructors, they will be unable to deal with the unexpected efficiently and reasonably.

Mark Clarke: I hear what you say, but the reality is that there is a balance to be struck. The time and the resources that are employed work together. If we push the envelope and work 24 hours a day, the chances are that a two-year programme might take only 18 months. However, that would depend entirely on the resources that were deployed. If we deploy half the resources over the 24-hour period, the programme will extend. It is a case of getting the planning, the resources and the timing correct.

Phil Gallie: I point out that I am not suggesting that there should be 24-hour construction working on the Roseburn corridor.

Mark Clarke: I am delighted to hear that.

Phil Gallie: I am concerned that we have a practical working span. I want to press you on whether a tight constriction of working from 8 am until 5 pm would be practical.

Mark Clarke: I can only reiterate what I have said. In its code of practice—which is general, and does not relate to a specific job—Plymouth City Council adopted 8 am to 5 pm as normal hours. It is not unusual to have such a restriction placed on contractors working in built environments close to where people occupy houses.

The Convener: Mr Scrimgeour, do you have any follow-up questions for Mr Clarke?

Graham Scrimgeour: No, thank you.

The Convener: Mr Clarke, I cannot let you go, I am afraid. You are now going to address health

and safety in relation to the operation of trams for group 34.

Graham Scrimgeour: Mr Clarke, in your evidence you say that you are concerned about the risk of tram derailment. Why is that of particular concern?

Mark Clarke: It is a concern at any location. TIE's adviser says with justification that derailment is unlikely, but cannot say that it will not happen. With such an event the greatest risks arise from a resultant collision of trams, trams running down an embankment—such as the one adjacent to my house—and colliding with houses at speed, and trams running at speed into houses that are parallel to the track. In the Roseburn corridor, where there are proposals for the tram to run at high speed, the risk is greater.

Graham Scrimgeour: What would you like to be done in relation to that concern?

Mark Clarke: Ideally, the trams would not come through the Roseburn corridor. A second option would be to reduce the speed of the trams to, say, 20mph along the corridor, because speed is the main contributing factor to derailment.

Graham Scrimgeour: Why are you concerned about the risks to users of the new walkway that is parallel to the tramline?

Mark Clarke: Unless there is a substantial barrier between users and trams, the risks from trams passing at speed are numerous, particularly in adverse weather, when spray and draught could add to the problems. Cyclists in particular are likely to want to be clear of the trams. People travelling in the opposite direction—moving away from the trams—would be more likely to collide with or be knocked into the path of trams or others. They will generally be at greater risk than they are in the present safe environment of the Roseburn corridor. Cyclists would change from being a feature of the walkway to being one of the main sources of risk.

Graham Scrimgeour: In relation to that concern, what would you like to happen?

Mark Clarke: I go back to my general position: trams should be kept away from Roseburn corridor or, as a second choice, the trams' speed should be reduced.

Graham Scrimgeour: What are the risks to children?

Mark Clarke: Children's natural curiosity and daring will be likely to put them at much more risk from high-speed trams. Unfortunately, children are also more inclined towards vandalism and they do not fully understand the potential consequences. The walkway could change from being a place of relative safety for play to being a place where a

high level of parental supervision would be required.

Graham Scrimgeour: What would you like to be done about that?

Mark Clarke: Again I go back to the same record: there should be no trams on the corridor, or, if there are, they should travel at a much reduced speed.

Graham Scrimgeour: In your evidence, you mentioned the risks from high-voltage equipment and cables. Will you describe those risks?

Mark Clarke: Those risks are a particular concern on the corridor because it is a quiet location. Children exploring the apparatus would be likely to suffer electric shock, with serious or fatal consequences. Even on railways where tracks and equipment are fenced off, children are killed by electric shock. The Roseburn corridor and the tramway will be more accessible. It is also a quieter location, which must increase the risk.

Graham Scrimgeour: What would you propose to address that risk?

Mark Clarke: The trams should be kept to the existing highway, where children would be much more easily observed if they trespassed and climbed on the equipment.

Graham Scrimgeour: In summary, what do you ask the committee to do?

Mark Clarke: My first position is that trams should not use the Roseburn corridor. If that position is not accepted, I ask that the speed of the trams on the corridor be kept low—say 20mph. All monitoring of health and safety issues, including those to do with noise and vibration, should be carried out by an independent body. Issues of insurance and risk should be transparent, and residents' interests should be protected without the need for them to take legal action or to incur the costs of investigations.

Malcolm Thomson: Have you heard or read the evidence of Mr Jim Harries in relation to the role of HMRI in the safe operation of the tram scheme and in relation to the views of the operator on the safe operation of the scheme?

Mark Clarke: In fairness, I have to say that I have not.

Malcolm Thomson: Thank you.

The Convener: Mr Scrimgeour, do you have any follow-up questions?

Graham Scrimgeour: No, thank you.

The Convener: In that case, thank you very much for giving evidence this morning, Mr Clarke.

The next witness will be Mark Hallam, who will address health and safety for group 35. The questioner will be Mr Vanhagen.

Richard Vanhagen: Mr Hallam, is group 35 satisfied that the safety measures and the infrastructure that the promoter has outlined—although they are not yet confirmed—will be sufficient to ensure the safety of users of the Roseburn corridor when trams are travelling at the suggested operating speeds?

Mark Hallam: We remain unconvinced. I will remind the committee of the position. The promoter has stated that trams in the corridor would run at speeds of up to 50mph and would be segregated from the cycleway and walkway by a kick-rail, which will not be a solid barrier. The distance between the shell of the tram and people on the walkway could be 600mm, which is only about 2ft. It is difficult to imagine what it is like to be close to a large moving vehicle at such speeds. In his statement, Mr McIntosh kindly shared his experience of standing beside a tramway. He gave the impression that it was pleasurable, with the slipstream of the tram barely moving a hair on his head. I have not had the chance to stand beside a tramway, but I have stood by the side of roads; standing close to road traffic that is moving at 50mph is decidedly unpleasant.

In the Roseburn corridor, we are talking about an extremely fast-moving vehicle operating in a confined space. The argument that the infrequency of the trams should lessen the danger cuts two ways. The absence of traffic will give children in particular the impression of safety, which will bring its own danger.

The promoter has argued that the line of sight of tram drivers will provide additional safety. However, my recent surfing of the internet turned up a recent accident in Zurich that resulted in 24 injuries. The accident involved a stationary tram at a stop being rammed by another tram. I can believe only that the driver of that tram, too, had a line of sight. A line of sight would also appear not to have helped the two unfortunate 14-year-old girls who were, sadly, killed at the weekend after stepping in front of an on-coming train, despite apparently clear signalling advising them that it was not safe to cross. I am sure that there were other contributory factors in both those cases, and I am aware that the train at the weekend was travelling at 70mph rather than 50mph. Nevertheless, the simple fact is that, in Mr Harries's words,

“the speed of the tram is an important factor in the system's safety.”

Accidents can and will happen, and limiting the speed of the tram in what is hoped to be an area that people will use for recreational purposes

might save lives. We should not forget that the promoter has admitted to the committee that a collision between a human being and a tram that is travelling at 50mph would in all likelihood result in a fatality.

Richard Vanhagen: How do you see the issue in relation to the schools in the area?

Mark Hallam: We do not see why the different rules that apply to roads around schools should not apply to the shared tramway and walkway. It is a simple fact that there are more children in the vicinity of a school. Kids do stupid things on roads, and they are equally likely to do stupid things near the tramway. Children are easily distracted. Reducing the tram's speed would be a simple preventive measure.

Richard Vanhagen: Do you think that the promoter is striking the correct balance between the loss of amenity, safety and speed in the current proposals? What amendments would you propose?

Mark Hallam: We do not feel that the correct balance is being struck. In his evidence to the committee, Mr Harries admitted that loss of amenity had had no bearing whatever on the determination of the speed of the tram. The promoter is indulging itself in a flight of fancy to imagine that people will believe that there will be no loss of amenity as a result of the introduction of trams running at high speeds in a relatively confined area.

We have concerns about the safety of the current proposals, as I have noted. We believe that, in its proposed form, the tram will frighten people away from using the walkway for recreational purposes. That would, of course, provide the promoter with the safety record that it is looking for.

We appreciate that there must be a trade-off between the efficient, cost-effective running of the system and its safety, but what cost a life? We assume that certain levels of serious accidents and fatalities are built into economic models to enable the transport industry to make decisions; however, those would be of little interest to the parent of a child who was killed in an accident.

We have an opportunity to minimise the risks of the tram system at this early stage. We feel that it is imperative to maintain the corridor as a recreational facility and to ensure the safety of all its users. Accordingly, we propose an amendment to the bill that would require trams to run no faster than 20mph in the corridor—certainly, within the vicinity of schools along the corridor.

Richard Vanhagen: Are you satisfied that the proposed dimensions of the walkway and cycle path will be adequate to ensure the safety of users?

Mark Hallam: We believe that, unfortunately, pedestrians and cyclists have been sold short by the proposals—or, perhaps, sold narrow in this case. Rather than being a comfortable width, the suggested width of 3m is stated as the least desirable minimum width for bounded multi-usage paths in the City of Edinburgh Council's "Cycle Friendly Design Guide". We cannot believe that it is envisaged that the least preferable option is appropriate in this case, where trams will run at 50mph alongside the facility. I use the route regularly. I have checked it and, as far as I can see—my view is unlike Mr Dapré's view, as stated to the committee—there is, at present, no direct bounding of the path whatever within the corridor. There can be no doubt, therefore, that the proposed arrangements represent a loss of amenity.

I have cycled down the path innumerable times. Even at present there is the opportunity for accidents—we are well aware of that—partly because of the aggressive riding of cyclists. The introduction of a more confined space and the presence of fast-moving trams is not an attractive cocktail. The bill should reflect the fact that everything should be done to limit the potential for serious accidents, so we propose that the recommended width of the pathway be increased to at least 4m.

11:45

The Convener: Mr Thomson has no questions; do committee members have any?

Phil Gallie: Sorry, convener, but I have one brief question. Mr Hallam raised the issue of tram speeds of 50mph on the route. I accept that we will move from what is a quiet route to something different, but would it seem reasonable to you if we amended the bill to introduce a lower speed in the corridor but with a provision to allow for a review and upward lifting of the speed limit?

Mark Hallam: We would welcome a maximum speed limit. The proposed speed of the trams has crept up during the process—it started below 50mph. We would welcome an initial maximum that was potentially open to review.

The Convener: Does any school have direct access to the corridor?

Mark Hallam: St George's School is virtually built on top of the proposed tramway and it has a bridge that will pass directly over it.

The Convener: That would be over the tramline, but I am interested in direct access to the corridor.

Mark Hallam: At the start of the bridge, there is an access straight down to the path. I walk along the corridor every morning and, every morning, I see St George's pupils walking the other way.

Rob Gibson (Highlands and Islands) (SNP): Can you remind us how long the pathway is between the road and the corridor?

Mark Hallam: Between St George's School and the corridor it is a matter of 10m—there is just the descent from the bridge to the cycleway.

The Convener: Mr Vanhagen, do you have any follow-up questions for Mr Hallam?

Richard Vanhagen: I know that Mark Hallam has young children and that he and his family use the cycle path frequently. Mr Hallam, given the current proposals for the corridor, will you be happy to allow your children to continue to use the path when the trams are in operation?

Mark Hallam: I have seen or heard nothing in the procedures to give me comfort that the environment will be safe for young children. As I said, the fact that the trams' speed has crept up during the procedure is worrying.

The Convener: I thank Mr Hallam for his evidence.

The next witness will be Rosanne Brown, who will address safety for group 43. As Mrs Brown does not have a questioner, she may make a brief opening statement and, following cross-examination by the promoter, brief closing remarks.

Rosanne Brown: My evidence is contained in my witness statement. One of the features of representing group 43 is that, by the time it comes to our turn, most of what we might have said has been said. I would echo the comments of Ms Woolnough, Mr Scrimgeour, Mr Clarke and Mr Hallam on safety. Group 43 feels that nothing that the promoter has said on safety deals adequately with the specific problems on the Roseburn corridor, which arise from its confined nature. If we replace a walkway and cycleway that currently have only grass verges, embankments and cuttings beside them with a walkway and cycleway and two tram tracks, it is obvious that there will be no leeway and that cyclists and pedestrians will be hemmed in, in close proximity to trams that will be travelling at speed.

The Convener: As there are no questions from Mr Thomson or from members, I assume that Mrs Brown does not wish to make any closing remarks. I thank her for her evidence.

The next witness is Anne McCamley, who will address tram speed for group 43. As Ms McCamley does not have a questioner, she may make brief opening remarks and, following cross-examination by the promoter, brief closing remarks.

Anne McCamley: I am in a similar position to Mrs Brown. Group 43's view on speed has been

dealt with by preceding speakers and I am happy to rest on that, apart from raising one point. During cross-examination, Tina Woolnough mentioned the speed kills campaign and the twenty's plenty signs that are appearing on roads near schools. Interestingly, we are told that it is speed that kills, not parked cars, and that the mitigating measures that local authorities are putting in place address speed rather than parking. Those of us who live in Edinburgh will know that the City of Edinburgh Council is delighted to deal with parking at every opportunity. If it felt that it was necessary to stop cars parking within half a mile of schools, I am sure that it would just paint yellow lines in front of people's houses. Therefore, if any kind of formal assessment has been made of the danger for children that arises from traffic, a reasoned decision will also have been made that it is speed that kills and that parked vehicles do not cause the problems.

The Convener: As there are no questions from Mr Thomson or committee members, I assume that Ms McCamley has no closing remarks. I thank her for her evidence.

We will now take a short break of two minutes, to enable Ian Hewitt, Alison Bourne, Graham Scrimgeour, Peter Allan and John Adams to take seats at the table.

11:51

Meeting suspended.

11:55

On resuming—

The Convener: Peter Allan and John Adams will need to take the oath or make a solemn affirmation. I remind Ian Hewitt and Alison Bourne that they remain under oath.

PETER ALLAN and JOHN ADAMS *took the oath.*

The Convener: The first witness, who is Ian Hewitt, will address the issue of the impact on parking for group 33. As the promoter has not rebutted this witness statement, it may not cross examine. The committee members may of course ask questions should they wish to do so. Mr Hewitt, do you wish to make any opening remarks?

Ian Hewitt: They will be very short, you will be pleased to know. You have already seen my witness statement, so I do not need to regurgitate it all to you. I still find it strange that the bill does not have provisions for stations. In theory, we could be building a toy track with no stations at all, although the promoter has indicated that there will be stations, possibly at certain locations.

Assuming that there is a station at Groathill Avenue—which is a big assumption—the problem

that we have is that there is no provision for parking. As I said in my witness statement, if the promoter is serious about using the Roseburn corridor, that will be the first point at which traffic from the west of Edinburgh and Fife will meet the tramway. Where are people to leave their vehicles so that they can transfer to the tramway? They will not be able to transfer, because there is no provision for parking.

The situation will get worse, because the extension to the Craighleith retail park is being built. As recently as yesterday, I asked two motorists who were parking on Groathill Avenue why they were parking there and where they were going. They said that they worked in Marks and Spencer in the retail park and that their manager had told them not to park in the retail park car park because they would be taking spaces from potential clients. As that is what is happening already, and as the retail park is being extended by a huge amount, the situation can only get worse.

The problem is that the tram is going in the wrong place. The majority of the current parking is taken up by people who go to the Western general hospital. I have spoken to them and asked them whether they would use the tram if it went to the Western general and they have said yes.

The Convener: I ask you to stick to car parking, rather than alternative routes, Mr Hewitt.

Ian Hewitt: The point is that those people would not be using local streets for car parking if they could go to the Western directly by tram.

I am going to deviate slightly from parking if I may, convener.

The Convener: No, you may not. I am sorry, Mr Hewitt. I am being very strict about time out of respect to the people who will follow you; you would be eating into their time.

Ian Hewitt: I have said all I need to say on this. There is a major problem that will only get worse if trams are allowed along the Roseburn corridor.

The Convener: Thank you very much, Mr Hewitt. There are no questions from committee members. I assume that you do not require to make any brief closing remarks, Mr Hewitt, so I thank you very much for giving evidence this morning.

The next witness is Alison Bourne, who will address her rebuttal witness statement on the issue of visual impact of overhead line equipment for group 33. As Ms Bourne does not have a questioner, she may make brief opening remarks. Following cross-examination by the promoter, she may make brief closing remarks.

Alison Bourne: Thank you, convener. I have nothing further to add to what I said in my statement.

The Convener: Thank you very much. Mr Thomson?

Malcolm Thomson: Did you hear or have you read Roger Jones's evidence about the design of overhead line equipment?

Alison Bourne: I read Mr Jones's statement.

12:00

Malcolm Thomson: He gave evidence to the effect that methods of designing the equipment to minimise its impacts could be used. He referred to the use and colour of the paint, the incorporation of lighting in the same poles as are required for the overhead system and their positioning. Does any of that go any way to give you comfort in respect of your concerns about design?

Alison Bourne: Mr Thomson, I must confess to feeling a little bit sheepish about what I said in my rebuttal statement. When I prepared it, I had just finished the rebuttals on the Western general hospital and for some reason it amused me that Mr Jones's statement could take 19 pages to say what you have just said—that it will come down to the size of poles, the spacing between poles and the colours of poles. It does not really address the concern that all that amounts to visual impact. There is no proper mitigation for OLE.

Malcolm Thomson: Thank you. I have no further questions.

The Convener: Do committee members have questions? They do not. Does Ms Bourne wish to make closing remarks?

Alison Bourne: No.

The Convener: I thank you very much for giving evidence. That concludes the oral evidence taking on group 33, so we now move to closing statements for the group. As you may recall, I have agreed that the promoter in each group will be given up to 10 minutes to deliver their closing statement. Five minutes should relate to the alternative route and the remaining five minutes should be used to address any other issues that have arisen in written or oral evidence.

Mr Thomson has up to 10 minutes to make closing remarks about evidence that relates to group 33.

Malcolm Thomson: The group 33 objectors have objected to the use of the Roseburn corridor. They have proposed and given evidence on an alternative route, which uses Crewe Road South and Craighleith Road. I commend to the committee the evidence of Mr Oldfield and Mr Buckman on the route selection process.

A considerable amount of work has been carried out. The first step was the north Edinburgh rapid transit study. It showed that the best way to link north Edinburgh with the city centre and Haymarket station was by means of a tram loop. The next step was the work package 1 report in which 61 possible route lengths, 25 of them to the west, were assessed by reference to technical, economic, transport and environmental considerations. The links were given a score and a ranking, neither of which took account of their connectivity—their suitability to fit into a loop with other high-scoring links. Based on those findings, four possible combinations of links that would produce four different loops were considered and the bill option was preferred.

I commend the work package 1 report to the committee as it gives a full understanding of the careful and realistic work that was undertaken.

I will add three comments. First, the work package 1 report has been criticised for the weighting that was given to different factors in the assessment process. In my submission it was a realistic process that took proper account of the practicalities of life. We have heard that engineers can achieve almost anything, but at a cost—both financial and environmental—to the built environment and the natural environment, which have to be considered.

Even when weighting was stripped out of the comparison exercise, the bill route still came out as the preferred option—I refer to paragraphs 2.8 and 2.9 of Mr Buckman's rebuttal.

Secondly, once the principle of tramline 1 is accepted, it is inevitable that some people will be directly affected by it during construction and during subsequent use. Many of those people will object even if, ultimately, they will benefit. They will object because of the prospect of the construction period. I ask the committee to remember that any other route would bring out similar, but different, objectors—probably more of them. Not only property owners but road traffic users would be affected by an on-road alternative route. If any one of those alternative routes was adopted, more people would be adversely affected to achieve a poorer scheme.

Thirdly, there is no point in spending large amounts of public money on very detailed assessments of a large number of route options if it is already known that a particular route option goes to the wrong place, does not achieve the objectives of the scheme or is not technically feasible at realistic cost. A full environmental statement is produced only for the preferred option.

One of the reasons for preferring the Roseburn corridor is cost. It is substantially cheaper than the

group 33 option—the difference is about £22 million. The cost reflects many factors other than the substantially greater length of the section of route in question. For example, there are very few utilities under the Roseburn corridor, so construction costs would be less than for any on-road alternative.

Because the route is separated from vehicular traffic and is off-road, a quicker run time can be achieved without impeding road traffic at the Crewe Toll roundabout in the way described by Mr Turnbull at columns 811 to 812 of the *Official Report*. For the same reasons, the service is less liable to delay, is more predictable and is more likely to tempt people out of their cars.

Both routes serve the Western general hospital effectively. Arguably, the feeder bus to which the promoter is committed—as given in Mr Cross's evidence at columns 809 to 810 of the *Official Report*—would be more convenient for certain categories of user.

Although group 33's alternative route would achieve higher local patronage, because the Roseburn corridor would lead to a quicker run time and greater reliability, it would achieve better through patronage. That brings one back to the end cost. The Roseburn corridor route is not only cheaper to construct; it is more likely to be economically sustainable in the future.

Although it is accepted that the Roseburn corridor route has a greater ecological impact than the group 33 option, that impact can and will be mitigated. The cost of that mitigation has been estimated and included in the estimate of expense that is already submitted to the committee. I refer to Karen Raymond's evidence at column 868.

There are particular issues for group 33. On loss of vegetation, the tram's impact can and will be mitigated. A landscape habitat and management plan has been prepared and that will evolve as the detailed design is progressed. A badger mitigation plan has also been prepared and it will be a confidential annex to the LHMP. The promoter is consulting and working with SNH on both documents and, as a result, SNH has withdrawn its objection to the bill.

The promoter has also consulted ELBG in relation to the badger mitigation plan and will continue to do so. The committee has heard evidence of where mitigation has been changed as a result of such consultation. I refer to Mr Coates's evidence at column 1356. The Protection of Badgers Act 1992 will also apply.

Finally, an amendment to the bill has been proposed. I refer to the promoter's response number 8 in committee paper 22. The LHMP will require to be approved by the planning authority prior to the commencement of any works. The

planning authority can also take the necessary enforcement action in the event of any breaches. The promoter's witnesses have conceded that the Roseburn corridor will be altered. However, it is the promoter's evidence that the character of the Roseburn corridor as a wildlife site can and will be retained. I refer to the evidence of Ms Raymond at column 902 to 903, and that of Mr Turner at column 307 to 308 and in his rebuttal.

Lothian and Borders police believe that the introduction of the tram into the Roseburn corridor will be beneficial to security in the corridor. In addition, the promoter is committed to introducing other measures to maximise safety along the Roseburn corridor, such as the use of grass track and the installation of closed-circuit television.

In conclusion, although the promoter understands and appreciates the group's concerns, the promoter's commitment to a feeder bus addresses the primary concern about the use of the Roseburn corridor. In addition, it is submitted that other impacts can and will be satisfactorily mitigated as demonstrated by, for example, the LHMP.

Thank you, madam.

The Convener: Thank you, Mr Thomson. I now invite Alison Bourne to make her closing remarks. You have up to 10 minutes, Ms Bourne.

Alison Bourne: The Western general hospital is a key generator of great social importance. Thousands of people, many of whom are elderly or ill, go there throughout the day and night and we believe that there is an urgent need for improved direct public transport to that facility, particularly with the arrival of new developments in north-west Edinburgh.

It is our firm belief that the initial sifting method employed for line 1 was seriously flawed and, specifically, that the omission of the national criteria of integration and accessibility resulted in an alignment that directly serves very few existing key generators in north-west Edinburgh and that provides inadequate access to the tram in socially deprived areas. The proposed alignment is, therefore, contrary to the promoter's high priority tram system aspirational objective of giving direct, easy access to key generators, as well as to the Scottish transport appraisal guidance and planning objective of giving priority to socially deprived areas and the elderly and infirm.

We are of the opinion that the sifting method that allowed the tram to use the Roseburn corridor, to go through a poor catchment area and to be virtually cut off from the general road network in order to form part of the preferred alignment was distorted. We are horrified by the scale of the environmental impact on the corridor, particularly as we can see no significant social benefit arising from it.

The Scottish transport appraisal guidance—STAG—procedure seeks to ensure that publicly funded transportation projects maximise a range of benefits, while minimising environmental impact. For tramline 1, where the level of public expenditure is so high, it is surely vital that all potential links should be assessed, without weightings, against the national criteria. That was not done until the promoter had arrived at a preferred alignment that it then attempted to shoehorn into the national criteria, in order to demonstrate that the alignment somehow achieved national and scheme objectives.

Objectors have studied the assessments for lines 2 and 3 and were struck by the different method of assessment that was used and the priority that was given to serving the new Edinburgh royal infirmary. We are at a loss to understand why both the City of Edinburgh Council and the Scottish Executive failed to ensure that line 1 was assessed in an identical manner, with open-mindedness so that the best alignment in terms of STAG objectives was progressed.

The National Audit Office representatives were very clear in their opinion that the patronage base arises from key generators. The City of Edinburgh Council's city development department was dissatisfied with the three work package 1 options that were identified in relation to the Western general and ordered a further examination of route options in the location. Inexplicably, such an examination was not carried out. We note that no rebuttal of my statement was provided by Aileen Grant, so the council planning section clearly recognises that it let down the public in relation to provision for the Western general. We also note that no representatives of the city development department gave evidence to the committee to refute my evidence. We draw our own conclusions from that.

Other bodies have expressed a clear desire that the Western general should be served directly by tram. NHS Lothian gave evidence concerning the increasing problems that are being experienced by people in accessing the facility and explained the importance of having a direct tram stop for the hospital on Crewe Road South. It is not satisfactory for the promoter to offer feeder buses from Crewe Toll. The most important stakeholder, which will foot the bill for the tram scheme—the public—made clear as far as it reasonably could, given two unsatisfactory route options, that the tram should serve the Western general properly.

We respectfully remind the committee that, of the three links that were assessed in the vicinity of the hospital, the Crewe Road South and Orchard Brae link performed best. The public were never given that option on which to comment, although

the promoter now admits that it is perfectly feasible technically. The promoter presented new evidence indicating that junctions on group 33's alternative alignment would incur significant delay. We refute absolutely that assertion, on the basis that junction delay does not seem to be a problem at any of the other 73 junctions on tramline 1.

The promoter stated its opinion on the effect of journey time on patronage. That opinion is rejected on the basis that it is contrary to the findings of the National Audit Office and FaberMaunsell and Semaly and to the tram system aspirational objectives. There is also no competing direct bus route from Haymarket to Granton. It is a matter of regret to group 33 that we did not ask for the bill to be amended to ensure that there is a front-door stop at Edinburgh's Telford College's new campus, rather than at the British Gas headquarters.

The tram scheme will be expected to operate for many decades to come and will cost a great deal of public money. It is therefore imperative that the alignment that best meets the needs of the public should be chosen. We believe that serving the waterfront should not and need not preclude serving social and economic centres directly, especially the Western general hospital. We sincerely hope that the committee will bear in mind the situation in Sheffield in relation to the Royal Hallamshire hospital. We ask the committee to give careful consideration to the evidence that has been submitted by the objectors and their witnesses on the issue. It should correct this important omission and recommend the inclusion in the bill of provision for a tram stop at the front door of the Western general.

Previously, the committee remarked that the majority of objections have arisen from the Roseburn corridor area. We believe that that is the case because residents do not believe that the tram will bring significant benefits to the area. On the contrary, there is a widely held belief that the tram will bring significant disbenefits. If the tram ran along busy transport corridors to the front of residential properties, it would be hoped that, depending on the route, it would result in reduced congestion and less severe environmental impact.

12:15

For the past 40 years, the properties that lie adjacent to the Roseburn corridor have enjoyed relative peace and quiet to the rear, together with the benefits of a pleasant local park because of the urban wildlife corridor. We believe that the trams will change the corridor significantly. Its conversion to a major transportation corridor will render the affected neighbourhoods an informal park and ride site. In addition, the trams will do nothing to address the existing problems that arise

from the Western general, the Craigleith retail park and the level of traffic that currently enters those neighbourhoods.

Group 33 objectors remain firmly of the belief that, during the construction period, the tram scheme will result in significant noise, dust, vibration and general inconvenience. In the longer term, it will create increased parking problems, noise, vibration, sleep disturbance, visual intrusion, decreased security for adjacent properties, loss of amenity and a severe, adverse impact on flora and fauna such that the desirability of the directly affected properties and their neighbourhoods will be seriously reduced. In short, we are dismayed that our community and the Roseburn corridor should be required to suffer such a high level of pain with little corresponding social gain purely so that commuters can benefit from what is argued will be a shorter journey time to and from the waterfront.

We have listened carefully to the promoter's assurances on its intention to mitigate the adverse effects of the tram scheme. Although we are quite prepared to accept that the promoter aspires to mitigate the negative impacts, we are deeply concerned that the promoter's repeated use of the phrase "where reasonably practicable" means "if, among other things, we can afford it." Given the major shortfall in construction funding that tramlines 1 and 2 face, we suspect that the promoter, whose remit is merely to introduce the tram system, will not be overly keen to incur additional mitigation costs.

Without a number of the suggested amendments to ensure that the highest level of mitigation measures are required before work proceeds, our neighbourhoods and residences will be exposed to potentially severe adverse impacts. Therefore, we request that the committee consider the inclusion in the bill of appropriately worded enforceable amendments to ensure that the promoter provides high standards of mitigation measures before it proceeds to carry out any works.

At a meeting at Tynecastle High School during the public consultation, Mr Alex Macaulay of TIE stated that if you want to move but cannot sell your house because of the proposed tram, even though it is not yet operational, you can serve notice on the promoter to buy your house at the market value and your legal expenses will also be paid. At the consultation meeting in Blackhall, Mr Macaulay stated that no one would suffer any financial loss as a result of the tram. In those comments, the promoter acknowledged that the tram might bring serious disbenefits and that affected properties might suffer blight. It is most disappointing that the promoter has completely altered its position and appears unwilling to

honour Mr Macaulay's undertaking by agreeing to an appropriate amendment to the bill that would allow objectors some peace of mind.

The residents whom I represent are most unhappy at the prospect of noise and vibration with little social benefit in return. The possibility that they could sustain substantial personal financial loss merely rubs salt into the wound. We respectfully request that the committee consider amending the bill to safeguard our position.

Finally, group 33 objectors take this opportunity to thank the committee for its patience and its stamina. We look to the committee to consider the evidence before it and to determine the means by which our concerns might at last be addressed.

I have one last point, but I am not sure whether I may raise it as it does not relate to the evidence.

The Convener: You may put on record the point that you raised with me earlier.

Alison Bourne: In a rebuttal statement, the promoter made some quite hurtful and offensive comments regarding my personal integrity and motivations. In August, Mr Cross telephoned me to apologise for what he described as highly unprofessional behaviour. I have never had my personal integrity questioned in any way before.

I am concerned that the promoter's comments may have created a bad impression in the committee's mind such that both my and other objectors' genuine concerns in respect of the hospital may have been undermined. It is disappointing that the promoter has not had the courtesy to advise the committee of its apology and to withdraw its remark, but I want to put on record the fact that the promoter has apologised to me for its highly unprofessional conduct.

The Convener: Thank you very much, Ms Bourne. I should say that, in deciding what weight it will attach to any evidence, the committee can choose to consider or to disregard any comments that have been made. That concludes oral evidence taking on group 33 objections.

I intend to press on to group 34. Our next witness is Graham Scrimgeour, who will address the issue of drainage. Ms Woolnough may question the witness.

Kristina Woolnough: All I can say is that I wish we were in group 33's position.

The Convener: You can be soon.

Kristina Woolnough: Yes—soon. Mr Scrimgeour, what is the issue that concerns you with regard to drainage?

Graham Scrimgeour: The existing drainage system has failed, in that it collects rainwater in the cutting section of the route, while the water

leaks out of the sides of the embankment section into gardens behind Blinkbonny Road and Blinkbonny Avenue. That has been patched up by the City of Edinburgh Council, but it is still a problem to some extent.

During cross-examination, Mr Turner acknowledged the problem. He indicated that a new drainage system should address the problem and that an undertaking would be taken in that regard. If the tramline is built, it will be very difficult to remedy drainage problems once the tram is in operation. We would like there to be a commitment to ensure that the failed drainage system is fully overhauled during construction and before operation.

Kristina Woolnough: What would you like the committee to do?

Graham Scrimgeour: We would like to see the undertaking that has been proposed by Mr Turner. The previous drainage system has deteriorated over time, so we would ask for the bill to be amended to provide for the imposition of a duty on the part of the authorised undertaker to ensure that all run-off is channelled into a drainage system and to ensure that drainage systems within the works are maintained to prevent run-off or leaching into neighbouring properties. We ask for the bill to require a monitoring mechanism that is independent from the operator to provide periodic—not daily—monitoring; to require enforcement of mitigation, which, in this case, is adequate drainage; and to provide a remedy for when systems fail. In other words, we want the bill to make those things happen.

The Convener: There are no questions from Mr Thomson or committee members and there are no follow-up questions from Ms Woolnough, so I now ask Mr Scrimgeour to address the issue of frequency and hours of operation for group 34.

Kristina Woolnough: What is the issue that concerns you with regard to frequency and hours of operation?

Graham Scrimgeour: Essentially, this is about noise and disruption. We understand that a key reason for proposing the route that the promoter has chosen is that, many years ago, it was used for a railway line. That assumption perhaps needs to be examined. When a railway line was operated along the route, there was one train in each direction every 40 minutes between 8 am and 7 pm from Mondays to Saturdays, or a total of 15 trains a day. With the proposed tram scheme, there will be 128 trams a day in each direction—a 750 per cent increase compared with the historic use of the Roseburn corridor. It has been proposed that trams should operate from 5 am until midnight, and that they should operate on Sundays. At no point in its history has there ever

been traffic of that nature along the corridor in the evening, and there has never before been traffic of that nature on a Sunday.

We are concerned that although the environmental statement has been prepared on the basis of using the specified hours of operation, the builders could permit operation outside those hours—24 hours a day. Given the consideration that the committee has already given to the application of the European convention on human rights, we are particularly concerned that operation between 11 pm and 7 am could trigger the application of article 8 of the ECHR with regard to sleep disturbance and so on.

Kristina Woolnough: So, in essence, you are describing a disparity between the environmental statement and the impacts that were assessed in that light and the slack that might be created by the bill in terms of hours of operation?

Graham Scrimgeour: Yes. The environmental assessment is made on one basis, but the bill permits wider use.

Kristina Woolnough: What would you like the committee to do about that anomaly?

Graham Scrimgeour: We would like to restrict the hours of operation, ideally to 7 am to 11 pm, but absolutely to those hours that have been assessed in the environmental statement. In the earlier evening—say, between 8 pm and 11 pm—we would like speeds to be restricted, which ought to reduce the noise level during that period of the evening when children are going to bed and so on. We would ask for a restriction of maintenance, so that it is not undertaken at weekends.

Ideally, we would ask for the route to be amended to avoid the Roseburn corridor. In relation to that point and to noise in general, we have submitted a number of amendments to the bill. On 4 November, the promoter submitted a response with respect to the enforcement of the noise and vibration policy.

Considering what we have asked for in the past and what has been included now, we would ask for there to be a requirement to consider the following matters: the impact of the use of the bell and the horn is not covered in noise assessments; the matter of maintaining mitigated levels of noise throughout the operational lifetime of the tram is not clear in what has been proposed; managing the target to something closer to the current baseline is not covered; the monitoring mechanism independent from the promoter is perhaps described but it is not clear how that will be achieved; and although there is some discussion of enforcement of mitigated levels and providing a remedy where they are breached, it is not clear how that would be robustly delivered.

Those are our concerns. We are looking for robust enforcement and robust restrictions.

Kristina Woolnough: Thank you.

The Convener: Mr Thomson?

Malcolm Thomson: Thank you, madam. Mr Scrimgeour, are railways constrained in any way in their hours of operation?

Graham Scrimgeour: That would depend on the railway.

Malcolm Thomson: You are not aware of any case.

Graham Scrimgeour: No. I have not researched that.

Malcolm Thomson: Are you aware of any legislation that restricts the operating hours of buses?

Graham Scrimgeour: No.

Malcolm Thomson: Are you aware that in the past few years the intensity of night-time bus use has gradually increased?

Graham Scrimgeour: Yes. It has increased on key routes around the city, such as main roads and other arteries.

Malcolm Thomson: So that the daytime running times of buses has progressed from 11 pm to midnight.

Graham Scrimgeour: That may be the case.

Malcolm Thomson: The night-time frequency some nights has increased from hourly to half-hourly.

Graham Scrimgeour: That may be the case.

Malcolm Thomson: Do you know of any tram schemes in the United Kingdom that are constrained by reference to their hours of running?

Graham Scrimgeour: I am not aware of any that operate through the night. The environmental statement does not include any assessment of the noise impact of running trams through the night. In the example that was discussed in cross-examination, the noise impact of night flights at Heathrow was a significant issue in relation to the ECHR. Noise impact could be an issue with the tram scheme, but because that has not been considered in the environmental statement or the bill it is a gap in the proposal.

Malcolm Thomson: At the moment I am asking you about trams and whether you are aware of any legislation restricting the hours of operation of trams in the UK.

Graham Scrimgeour: I am not aware that trams operate outside those hours, but I have not investigated the legislation.

Malcolm Thomson: If the bill was to be amended in the way in which group 34 proposes, how would a tram operator be able to respond to changing requirements? For example, it might turn out that there was a market for trams to run between 11 pm and midnight. Also, there are special events such as hogmanay or the MTV awards at Ocean Terminal. Would those require the act to be amended?

Graham Scrimgeour: I suppose that that is the issue. The corridor is a completely quiet place at night. If transport is required to events that run late in other parts of the city, it is for the council to consider how it achieves that, but it should not be assumed that noise can simply be added to a quiet area in order to do so.

Malcolm Thomson: You think that legislation is the way to do it.

Graham Scrimgeour: The current proposal does not consider that trams would operate between midnight and 5 am. That should be clarified, either by revisiting the process of environmental assessment or by confirming that because it is not proposed, it will not happen. Our line at the moment is that, as it has not been assessed, it should not be permitted.

Malcolm Thomson: Thank you, Mr Scrimgeour.

The Convener: Committee members?

Helen Eadie: In big cities such as London, trains run past people's back gardens until 1.30 am. Politicians frequently hear that a big problem when people visit Scotland is that they are unable to get communication links at such a late hour. How would you respond to that?

Graham Scrimgeour: I am not a politician, but I understand that the underground, which is perhaps the most comparable system in London, does not operate as late as that. The City of Edinburgh Council has to decide on balance whether it wants a 24-hour-city nirvana, as some would prefer, or a city in which a lot of people live close to the city centre. The latter has been a policy of the City of Edinburgh Council for many years. Edinburgh is very much a lived-in city; it is not a place where the inner city has become ghettoised because people have decided that they want to live elsewhere to avoid a noisy city centre. The decision on how to balance those different objectives for the city is a political one.

12:30

Helen Eadie: How do you respond to the people who do not live in Edinburgh but who are compelled to bring their cars in because they like to have a drink in the city after work of an evening? Those people might prefer to travel by public transport, but they cannot do so because no

trains—or trams—run late into the night. Although in London the trams and the underground do not operate late into the night, I can assure you that the train network does.

Graham Scrimgeour: People may well wish to avoid using their cars if they are drinking, but tramline 1 will not help them to get out of the city. Its route does not go to the boundaries of the city, so in that instance late running would not help.

Helen Eadie: I am thinking of the periphery of the city to where the route extends.

Graham Scrimgeour: As far as I know, the night bus network and taxi services are probably equally adequate late at night. One of the principal arguments that has been made for the tram is the benefit that it will bring during rush hours. Outside those hours, it is not thought of as the number 1 transport option.

Helen Eadie: Thank you.

The Convener: Ms Woolnough, do you have any follow-up questions for Mr Scrimgeour?

Kristina Woolnough: I have just a couple. Mr Scrimgeour, is it fair to say that your concern hinges on the anomaly arising from the fact that the measurement of the impact of the tram in the environmental assessment does not include night running, whereas the bill allows for such operation?

Graham Scrimgeour: Certainly, it is a fundamental concern that, although night running has not been assessed, it will be permitted. The biggest impact of the tram is the one that has not been assessed, yet it is permitted by the bill.

Kristina Woolnough: In terms of our discussion on human rights, would you describe that as a serious omission?

Graham Scrimgeour: The issue should be dealt with one way or another. Night running should either be assessed or prevented; it should not be allowed by default.

Kristina Woolnough: Our group is aware that the bill includes a dispensation that allows the City of Edinburgh Council to shut, as it were, tram operations for special events. I think that the dispensation applies to the hogmanay event and the festival cavalcade, but perhaps it could be extended to night-time running.

Graham Scrimgeour: That is a brilliant example of what is wrong with the route. Princes Street, which is frequently closed for events, is a key part of both tramlines 1 and 2. In such instances, the route would be completely severed.

Kristina Woolnough: I assume that it would be possible to amend the bill to create some small exemptions or flexibility in the way in which night-time running is operated.

Graham Scrimgeour: One night a year for hogmanay perhaps.

Kristina Woolnough: If your suggestion were to be adopted, that could be specified in the bill.

Graham Scrimgeour: I would have thought that that would be possible.

Kristina Woolnough: Thank you.

The Convener: Thank you, Ms Woolnough. Mr Scrimgeour will now address his rebuttal witness statements on the issues of visual impact, loss of land and damage to property for group 34. As he does not have a questioner, he can make some brief opening remarks and, following cross-examination by the promoter, he may also make some brief closing remarks.

Graham Scrimgeour: If I may, convener, I will run through it all in one go.

The Convener: Yes.

Graham Scrimgeour: On visual impact, our key concern is that the mitigation proposals are loosely described. As a result, we are concerned that mitigation may not be achieved and that the vegetation might not be maintained during the lifetime of the tram. How will the environmental, financial and operational pressures be balanced? If the budget is tight, will the visual impact mitigation measures go by the wayside?

We would like the bill to recognise the environmental statement and the landscape and habitat management plan and to require their implementation. Earlier, we referred to a paper that represents a move towards enforcing that. We want the scheme to require mitigation to be achieved quickly; we do not want many years to elapse before the vegetation will grow to replace what may have been removed.

We also want the scheme to include a requirement on the operator to maintain the vegetation and monitor its condition; if that does not happen, we want enforcement action to be taken. Because we live alongside the corridor, we know that the City of Edinburgh Council has done little or nothing to maintain the vegetation for which it is currently responsible. That reduces our confidence in what will happen in 10 or 15 years' time, when the tram is no longer a new and exciting development and other budgetary pressures apply. We want on-going maintenance.

I turn to the issue of loss of land. During cross-examination, Gary Turner was asked what would happen where gardens had been extended—not necessarily with a transfer of land—into the unclaimed strip of land behind the houses that the promoter seeks to acquire. That does not apply to me, but I raise it because it applies to some of my neighbours. We want to know what would happen

if fences and sheds and bits of garden need to be moved as part of the tram proposal. How would the promoter approach that? We have not had a response about the practicalities. Someone will have to move the sheds. Will that be done by a bulldozer?

As for damage to property, objectors in the group—particularly those who live closest to the Craighleith Drive bridge—are concerned about damage to property during the construction process. Again, those concerns apply to other members of the group, not to me. Construction work will be taking place above those residents' houses and gardens. Therefore, we would like the bill to be amended to require the enforcement and monitoring of the construction code of practice and to facilitate compensation if damage were to occur.

The Convener: Thank you, Mr Scrimgeour. Mr Thomson, do you have any questions?

Malcolm Thomson: No.

The Convener: Do committee members have any questions? I assume, Mr Scrimgeour, that you do not require to make any closing remarks.

Graham Scrimgeour: No.

The Convener: Excellent. There being no further questions, I thank you for giving evidence this morning.

The next witness is Peter Allan, who was to address the issue of planning policy for groups 34 and 45. However, we have agreed that we have sufficient evidence on that issue and that we do not need to hear from Mr Allan on it. Instead, I invite him to give evidence on the issue of built heritage for groups 34 and 45.

Kristina Woolnough: Mr Allan, could you briefly describe the importance of the built heritage on the Roseburn corridor? We have heard much from the promoter about the importance of the world heritage site elsewhere in the city.

Peter Allan: The built heritage is protected by law and by the council's policy, as it is considered to be inherently important. Historic Scotland seems to take a combination of age—how old the structure is—and quality into consideration when making its decisions. That reflects public perception as well.

To people of my age—and possibly of the age of Barry Cross, whom I questioned about this—the Roseburn corridor is a disused railway. That is how Barry Cross referred to it. However, for the majority of people who live in Edinburgh—and certainly to those who use it—the Roseburn corridor is a linear park of huge interest. Part of that interest derives from the fine bridges that cross it and the platforms. Heritage is an

important—indeed, intrinsic—part of people's enjoyment of the Roseburn corridor.

Kristina Woolnough: Is that your personal view?

Peter Allan: It is. However, even if it were not, there is a wealth of protection for such features in law, in guidance from Government and in local policies. The crucial thing to remember is that, although the protection of listed buildings is an important part of preserving heritage, it is not the only thing that matters; the setting of the buildings is of equal importance.

In that respect, Historic Scotland's memorandum of guidance refers to the principle of conservation as found. In other words, what is relevant is what our built and natural heritage is like today, not the Barry Cross view—if I can put it like that—of the Roseburn corridor being a disused railway corridor. That is not the concept of conservation as found.

Listing is not subjective: Government decides what should be imposed. However, there is some subjectivity in the idea of the setting of a listed building. The environmental profession now has huge experience on that issue and, as I have indicated, there is considerable guidance from Government about it as well.

Kristina Woolnough: Overall, you are referring to the fact that Historic Scotland is minded to list four of the bridge structures on the Roseburn corridor, are you not?

Peter Allan: That is right. Historic Scotland wrote to your organisation in June to say that.

Kristina Woolnough: In one of the rebuttals to your witness statement, the promoter said that it might like to use the platform stone as part of the future designs on the Roseburn corridor. Does that give you any comfort?

Peter Allan: Where listed buildings are to be demolished or where other features are to be removed, mitigation is sometimes proposed as you have described. The flagstones that make up those platforms, which are fine pieces of stone, will be reused elsewhere. However, I would argue that that is very much a second-best option. The platforms are integrated with the bridge that takes Queensferry Road over the railway. In my view, if they were removed, that would detract significantly from the setting of that structure.

Kristina Woolnough: The committee has heard a lot about the vegetation, wildlife and human amenity values of the corridor. As far as you are aware, was the built heritage along the Roseburn corridor factored into the route selection process?

Peter Allan: Not as far as I am aware. To be fair, the promoter did not know at that point that

there was a proposal to list the structures. However, as far as I am aware, the concept of industrial heritage was not taken into account.

Kristina Woolnough: Is it reasonable to assume that, during an analysis of routes, such features should have been recognised and taken into account?

Peter Allan: Under the heading of environment, most certainly, yes.

Kristina Woolnough: What impact do you imagine overhead line equipment would have on the context and setting of these examples of industrial archaeology as it passed through the bridges?

Peter Allan: There is a picture towards the back of the LHMP of how the trams might go under the bridges. The picture shows the Queensferry Road overbridge. The difficulty is that there is not sufficient headroom between the top of the overhead lines and the strata on which the tram would run. As Gary Turner pointed out in his rebuttal statement to me, the promoter is considering digging down through the solum of the bridge to get the tram underneath. The tramline would dip down and then rise up again.

In the Historic Scotland letter to which I referred, there is a description of all the bridges—I will not go through them in detail. They represent something of considerable value. They are described as elliptical arched bridges and the letter goes on to talk about

“bull-faced ashlar voussoirs ... bull-faced ashlar walls ... projecting, plain ashlar impost course”.

They are not mere functional bridges; they are a combination of function and art, which has produced something of considerable value. If the contractor dug down through the foundations of the bridge in the picture, the designed abutments and the facings made of stone—as I have just described—would then have to be rebuilt down to the lower level and the bridge would not be the same thing. I foresee considerable difficulties as a result of having to do that.

Kristina Woolnough: The promoter has suggested that the visual aspect of the corridor may be improved by the tram. I presume that that is not your conclusion, given what you have just said.

Peter Allan: No. The impact on the setting of the structures will be adverse. That is just part of the cumulative impact on the users of the Roseburn corridor—animal and human—that makes the corridor an unacceptable choice of route. It is sticking a quart into a pint pot.

Kristina Woolnough: The promoter and various rebuttal statements have suggested that existing

structures should be retained wherever possible. Is that of comfort to you? Does that satisfy you?

Peter Allan: I have no doubt that that is the honest intention of the promoter. However, although Gary Turner’s rebuttal statement to me is only a page and a half long, the phrases “as far as is practical”, “current proposals” and “wherever possible” are used on seven occasions. I am sure that Mr Turner is being entirely honest in saying that he simply does not know what the possible consequences will be—ranging from, in my judgment, the removal of one or more of the structures to nothing being required, and, in between those, various alterations being made, some of which I have described.

Kristina Woolnough: Are you concerned about the precedent that the tram proposal might set for future developments that might similarly impact on the built heritage?

12:45

Peter Allan: In my experience, adverse effects on listed buildings or settings are hardly ever acceptable in normal circumstances. The promoter is the planning authority, which ought to mean that the highest possible standards should be achieved. If, on this occasion, the Roseburn corridor is to be used for the tramway and if, at worst, the risk to the bridges turns out to be too great and one or more is demolished, developers elsewhere will point to this example.

Kristina Woolnough: Mr Turner also suggests in his rebuttal that the planning authority would have to agree to any changes to bridges and so on. Is that of comfort to you, bearing in mind the fact that no structural assessments have been performed on any of the bridges and that there may be unforeseen circumstances?

Peter Allan: We are simply in the realm of the unknown. It is also my understanding that the planning authority would have to agree to any changes, but it is stretching the imagination to think that the council will tell itself that the tram scheme will have to be rerouted and the process started again if at a late stage—during construction, for example—some difficulties are discovered. Now is the time to decide whether this important issue should be properly taken into account in the selection of the route.

Kristina Woolnough: Would you like the bill to be amended to protect the valuable bridges?

Peter Allan: Yes. I have listed measures in the back of my witness statement. The bill should have a clear requirement that the structures will be retained in situ, as they stand.

Kristina Woolnough: Given your view of the built heritage in the corridor, is it fair to say that the

impact of the scheme has been underestimated by the promoter?

Peter Allan: In light of my answers to your earlier questions, the answer is yes—the built heritage has not been properly taken into account.

The Convener: Thank you. Mr Thomson?

Malcolm Thomson: Mr Allan, am I right in thinking that, as of today, none of the bridges that crosses the Roseburn corridor or even the Coltbridge viaduct is a listed building?

Peter Allan: That is correct.

Malcolm Thomson: Do you know whether the request to Historic Scotland that they should be listed was made after the bill was presented to the Parliament?

Peter Allan: There have been two requests. The request by the friends of the Roseburn urban wildlife corridor was made after the bill was presented. I understand that the City of Edinburgh Council made the second request in relation to the Coltbridge viaduct, but I do not know when it did so.

Malcolm Thomson: Am I right in thinking that the Dean bridge and the Belford bridge are already listed buildings?

Peter Allan: That is my understanding.

Malcolm Thomson: I take it that you would not want a tram running over either of those.

Peter Allan: I do not think that the question is whether there should be a tram running over a bridge. The question is what the effect will be. In relation to the structures that I am talking about, we have the uncertainty—as is admitted in Mr Turner's rebuttal statement—that there might have to be alterations of one kind or another. The uncertainty is the difficulty.

Malcolm Thomson: But do you think that it would be appropriate to have a tram running over the Dean bridge or the Belford bridge, given their setting as listed buildings?

Peter Allan: My concern is not the tram per se, but the consequences of the physical construction of the route, the overhead lines and so forth for those listed structures or the to-be-listed structures, in the case of the Roseburn corridor.

Malcolm Thomson: You said that the promoter of the bill was the planning authority. I take it that you are not suggesting that the planning authority is promoting the bill.

Peter Allan: The City of Edinburgh Council is promoting the bill.

Malcolm Thomson: You do not see a difference.

Peter Allan: I see a difference but, on the other hand, people such as Aileen Grant have come to the committee on behalf of the council as the planning authority and have made statements—with which I agree—about the importance of the environment, the public realm and so on. There is clearly a relationship between the two heads of the council in that regard. Indeed, the bill was taken to the planning committee for its comments.

Malcolm Thomson: Indeed, but anything that the council does by way of works would be subject to planning legislation.

Peter Allan: I accept that, but my point in response to Tina Woolnough was that there must come a point in the process—for example, during the physical construction of the track bed as it goes underneath the Queensferry Road bridge—when it could be discovered that, unfortunately, the works would lead to the demolition of a structure. It would be difficult for the planning authority at that point to say, “Oops, sorry, you can't do that.” My worry is the timing, because the matter simply has not been properly investigated as yet. If it had been properly investigated, perhaps we would not be having this conversation.

Malcolm Thomson: But you are not suggesting that the council's planning department will not carry out its statutory functions properly.

Peter Allan: Of course not.

The Convener: Do committee members have questions?

12:50

Meeting suspended.

12:54

On resuming—

The Convener: For the record, I point out that that suspension was because of broadcasting difficulties. When we suspended, Rob Gibson was about to ask Mr Allan a question.

Rob Gibson: Mr Allan, you have spoken about walkers and cyclists on the corridor. I am interested in the use, maintenance and current condition of the bridges. What is the current state of play with the Queensferry Road bridge?

Peter Allan: First, I would say that I am an architect and, although I have not looked at the bridges professionally, I do look at them with a certain amount of judgment. They seem to me to be in quite good condition. Historic Scotland's June letter refers to the condition of the bridges, to certain features that have been removed and to damage that has been caused as a consequence. There has been some brick infilling where stones

either have been removed or have failed. A degree of maintenance is required but, given that the bridge that you mention carries a major arterial route, it has stood up quite well.

Rob Gibson: So you would expect the local authority, as the roads authority, to be looking after that bridge. If the Roseburn corridor is to become a transport corridor again, would we expect that bridge and other bridges to be maintained by the tram operator?

Peter Allan: I think that the answer to that is yes. However, my concern has not been to do with maintenance per se, although maintenance is important; it has been to do with whether the physical changes that would be required to accommodate the trams can be achieved in a way that is consistent with the character of the structures.

Rob Gibson: Do you agree that, as railways or tramways develop, they may change original structures so that those structures can accommodate new uses?

Peter Allan: Certainly. Indeed, that is fine and to be welcomed. Reusing older buildings and structures for modern purposes is to be applauded when it can be done without sacrificing the integrity and character of the structures. Otherwise, it is rather pointless.

The Convener: Ms Woolnough, do you have any follow-up questions for Mr Allan?

Kristina Woolnough: Just a couple, in response to Mr Thomson's questions. Is it the case that, although the bridges are not yet listed, the listing process takes a considerable time? The importance of Historic Scotland's intention to list is that it recognises the value of the bridges. Is that the crucial part of your case?

Peter Allan: Yes. If this were a different forum—a planning inquiry, for example—and if Historic Scotland's letter were before that inquiry, it would carry considerable weight because of the wording. It says that the bridges

“have been recommended for inclusion on the Scottish Ministers' list of buildings of special architectural or historic interest.”

There would have to be something pretty wrong with the inspectors' assessment and with the various opinions that have been expressed for that recommendation now to be overturned. However, it is true that the bridges are not yet listed.

Kristina Woolnough: Is it the case that the listing proposal—which is what the letter represents—is currently out for consultation with the council?

Peter Allan: The council among others, yes.

Kristina Woolnough: So a response is awaited from the council. I presume that it will be interesting to hear what it says.

Peter Allan: Comments had to be made some time ago, so I take it that they have been made and we are now simply awaiting ministers' decisions.

Kristina Woolnough: Mr Thomson asked about the Dean bridge and whatnot. Will the trams introduce the clutter of streetscape—barriers, signage, columns and so on—to the bridges? We cannot differentiate between one bridge and another in the way that Mr Thomson suggested.

Peter Allan: That is right.

Kristina Woolnough: Your point is that the value of the Roseburn corridor bridges has been grossly underestimated.

Peter Allan: Exactly.

The Convener: There being no further questions for Mr Allan, I thank him very much for giving evidence this morning.

12:59

Meeting suspended.

14:05

On resuming—

The Convener: I welcome everyone back to the 24th meeting of the Edinburgh Tram (Line One) Bill Committee. We left off this morning in anticipation of John Adams giving evidence. Mr Adams will address the issue of visual impact for group 34.

Kristina Woolnough: Mr Adams, is your prime concern regarding visual impact the removal of vegetation?

John Adams: That is correct.

Kristina Woolnough: In her rebuttal of your statement, Ms Raymond agrees

“that there will be a change in views”

for residents, but argues that that will be mitigated by

“scrub and young tree planting”.

Does that go any way towards reducing your concern?

John Adams: Not at all. TIE has classed most of the visual impacts at Maiden Craig as major. If we remove mature vegetation and replace it with young vegetation that may take up to 10 years to mature, we will have to wait a long time before that vegetation is effective. We do not agree that young plants should be put in.

Kristina Woolnough: That brings me on to another issue. What would you like to be put in?

John Adams: If the tramline is built there, we would like mature trees to be planted, so that there is a visual screen between the residents of Maidencraig and the tramline. At the moment, there is only open space. We look out on to a wooded area and the walkway. We would like that to be maintained. If the landscaping that is done after the tramline has been built involves the planting of small bushes and immature trees that take many years to mature, it will be many years before we get back to the current situation. It could take as long as 10 years, which is too long to wait for the visual impact to be reduced.

Kristina Woolnough: Is it also the case that the area that you describe is the proposed location for the temporary badger sett?

John Adams: That is correct.

Kristina Woolnough: Do we have any information on how the badger sett will be constructed and on whether planting will occur or is possible before, after or during construction of the sett?

John Adams: We have no such information.

Kristina Woolnough: In her rebuttal, Karen Raymond suggests that the promoter would give individual undertakings regarding boundary treatments. Has the promoter been in touch with you or any other residents about that?

John Adams: No.

Kristina Woolnough: Thank you.

The Convener: Mr Thomson, do you have any questions for the witness?

Malcolm Thomson: I have no questions.

The Convener: Do committee members have questions for the witness?

Rob Gibson: Does Mr Adams have an idea of the cost of planting mature trees?

John Adams: The cost of buying half a dozen mature trees that has been quoted in the press would be a very small drop in the ocean compared with the overall costs of the scheme. It would take 10 years for young trees to grow properly, which is far too long to wait if the vegetation is to be effective.

Rob Gibson: So you do not know the cost of a mature tree?

John Adams: No.

Rob Gibson: I would not like to comment on what the cost of such planting on the whole circuit of the tramline would be.

John Adams: I speak not only for myself but for all the residents of Maidencraig Court and Maidencraig Crescent and all the people who live along the railway line from Craighleith through to Roseburn. They will all be in the same situation. If mature trees are replaced by young trees, the visual impact will be quite immense and it will take a long time for the area to return to its previous state.

Rob Gibson: It is interesting that you should say that. No woodland landscape is settled; it is always changing. From the time when the railway ceased to be used more than 40 years ago, trees have matured, died and so on. You agree that change is going on all the time?

John Adams: I have lived in my house for 38 years. I remember that, when the trains stopped using the corridor, nature took over and the trees, scrub and bushes all grew naturally. I know how long it will take to re-establish what is there just now.

Rob Gibson: I understand that. Of course, a strong wind could fell a lot of the mature trees. That is part of the problem with all woodland areas. You have to take account of the way in which nature takes its toll in relation to what you see before you.

John Adams: Yes, I know that mature trees have been blown down on the corridor. However, they are the ones that have been there for many years. No mature tree in the Maidencraig Crescent area has ever been brought down by the wind.

The Convener: Ms Woolnough, do you have any follow-up questions for Mr Adams?

Kristina Woolnough: Mr Adams, you are a bailiff of the Water of Leith, so you will be fully au fait with the natural cycle. Do you agree that there is a difference between natural evolution of woodland and the deliberate felling of trees in order to put a tram through an area?

John Adams: Yes.

The Convener: There being no further questions for Mr Adams on that issue, I invite him to address the issue of tram stops for group 34. Ms Woolnough, you may question Mr Adams.

Kristina Woolnough: Mr Adams, in his rebuttal of your statement, Scott McIntosh says that common experience suggests that informal park and ride will not occur in relation to the trams. What is your local experience at present?

John Adams: A lot of people drop their cars off at Maidencraig and get the bus into town. As the Craighleith shopping area develops, people are parking in our area and walking to the shopping centre because they cannot get into the car park there. We have lots of little narrow streets and the

emergency services are always expressing concern that they might not be able to get access to the houses if the parking gets any heavier.

Kristina Woolnough: So your local experience is that a park-and-ride system already operates to a degree, associated with the bus stops.

John Adams: Yes.

Kristina Woolnough: Is that why you think an informal park-and-ride system—or fly parking—will occur if the tram is introduced?

John Adams: Yes. TIE's patronage figures suggest that 300 people will board the tram in the Craigleith area each day. A survey that we conducted showed that between 80 and 100 people board the buses in the Maidencraig/Craigleith area each day. That is well below TIE's patronage figures. The extra people will have to come from somewhere. As has already been explained, the first place people who are coming to Edinburgh from Fife or parts of West Lothian will hit the tram area will be the Maidencraig/Craigleith area. They are the people who will make up the patronage figures and they will all want to park somewhere.

The council is also rolling out a system of on-street parking charging over three years. By the third year, when the trams are supposed to be running, the parking charges will also hit us in the Maidencraig/Craigleith area. When you put all those facts together, you can only assume that the parking will be horrendous.

14:15

Kristina Woolnough: Why do you think that parking congestion around the Craigleith tram stop might cause a problem for emergency vehicles?

John Adams: It will be horrendous for a fire engine, which is about 2.8m wide and 8m long, to get into a narrow street on which cars are parked on both sides. Ambulances are about 2.5m wide and 3m or 4m long and they, too, will have problems getting round some of our streets. A serious parking problem will be associated with the tram stops, which will make it difficult for residents who need to get emergency services into their area.

Kristina Woolnough: There is a vehicular access point on to the Roseburn corridor in Maidencraig, where you live. Is it true to say that what applies to emergency vehicles that needed to access Maidencraig would also apply to emergency vehicles that needed to access the Roseburn corridor?

John Adams: That is correct. There is a vehicular entrance to the Roseburn corridor in Maidencraig.

Kristina Woolnough: In his rebuttal, Mr McIntosh describes the two things that we say will happen as "two improbable theses". Does your local knowledge and current experience suggest that both those things are highly likely to happen?

John Adams: They are happening now—there is fly parking and people are already having problems accessing buildings. Craigleith retail park is expanding—about 25 per cent is being added to its capacity—so it will attract more vehicles. As we have already said, some of the people who work there have been told to park in the side streets to leave parking spaces for customers.

Kristina Woolnough: Would it have been helpful to local people if the promoter had engaged with them to work up solutions or had even discussed the issues before describing as "two improbable theses" the problems that they will face?

John Adams: We have had no discussions about the parking problems that will arise because of the existence of the tramline, especially in the areas in which there will be tram stops.

Kristina Woolnough: Thank you.

The Convener: Mr Thomson.

Malcolm Thomson: Am I right in thinking that controlled parking involves the provision of some spaces for residents parking and some for visitor parking and that the two are laid out to accommodate, among other things, emergency services?

John Adams: That is correct, but there is no controlled parking in Maidencraig and the new restrictions on on-street parking will stop just before Maidencraig, so people who have been forced out of the city will park there. Maidencraig will be the first place that they will come to when they are looking for a parking space that they do not have to pay for. Whoever gets there first will bag whatever spaces are available.

Malcolm Thomson: I presume that the proposed extension of controlled parking is a response to the uncontrolled parking that you call fly parking.

John Adams: Yes, but that will only make the situation in Maidencraig worse because Maidencraig is not covered by the proposals. Maidencraig sits right next to the edge of the proposed controlled zones, so it is reasonable to assume that people who cannot find parking in the controlled zones or who do not want to pay for parking will move 50yd into the non-controlled areas.

Malcolm Thomson: Unless those zones are extended further, which might happen if there continues to be a problem.

John Adams: The council has issued no such proposals and TIE does not propose to do anything about parking, either.

Malcolm Thomson: This is still a bill for the tram.

John Adams: Yes. There are no proposals to do anything about the parking situation.

The Convener: Do committee members have questions?

Phil Gallie: In response to Ms Woolnough, you suggested that you would have welcomed some discussion with TIE. As no discussion has taken place, will you tell us what your proposals would have been if TIE had discussed the matter with you?

John Adams: It should discuss with local residents where the tram stops will be so that they will not be in areas where the streets are so narrow that there will be horrendous parking problems.

There is council-owned land on Groathill Road, for instance, that the council could easily turn into a little car park to accommodate people who wish to drive as far as that point and leave their cars. I do not know why the council will not use that land. It is an obvious solution, or part solution. Lots of places along the corridor, all the way from Roseburn down to near the waterfront, will need tram stops. Parking will be horrendous there because the roads are so narrow—there never were any parking places; no thought was given to parking when the trains ran. Nowadays, most people have their own transport.

Phil Gallie: Your comments about the piece of land on the Groathill Road are interesting. In the future, I would be interested to hear from the promoter why on earth it has not considered that.

There is a possible stop location at Craighleith. Given that we are trying to create access for the tram, where would you prefer that stop to be?

John Adams: When TIE first published its plans, the tram stop was to the south of the road bridge over Queensferry Road. That made sense: people could come in on a bus from the outer limits of the city, get off at Queensferry Road and immediately access a tram to other parts of the city. The tram stop was then moved to the area behind Maidenraig Crescent. When I asked TIE why it had done that, it said that it had asked for public opinion. I represent 42 families in one block of flats in that area, and there are another 36 families in a block immediately across from us. Neither the residents of those two blocks nor the residents in Maidenraig Crescent have ever been consulted about this tram stop. TIE then said that it would not move the stop unless there was public consultation. When problems then arose with the

sites for the tram stops for the Western general, TIE said that it would move the tram stops to suit the hospital. We do not understand where TIE is coming from. It says that it will consult, but it does what it likes anyway. This is our reason for coming to the committee to ask whether we can please include the parking situation in the bill so that there can be consultation and the problems can be addressed.

Phil Gallie: Would it be possible to move the tram stop into that plot of land on Groathill Road?

John Adams: Yes. That would make sense because this piece of land is directly opposite the entrance to the retail park. Fewer people would need to bring their cars into the area to visit the retail centre. They could just access it by walking across the road.

Phil Gallie: Bearing in mind that the tram stops are not fixed, it appears to me that there is room for discussion between you, your neighbours and the promoters. Perhaps that will happen.

John Adams: We hope so; thank you.

The Convener: I have one question for you. Can the City of Edinburgh Council introduce measures at any time to deal with traffic management, irrespective of the trams?

John Adams: I suppose so, but I do not know and cannot answer that question.

The council has sometimes sited bus stops in our area that have not been neighbour friendly. We have had many problems trying to get it to shift them to areas where they would not lead to a nuisance of vandalism and people going into gardens or throwing rubbish over garden fences when they stand at the stops. Thinking that we could go to the council and ask it to intervene does not give us a lot of succour because we do not think it would intervene.

The Convener: Thank you very much.

Miss Woolnough, do you have any follow-up questions for Mr Adams?

Kristina Woolnough: I have just a couple. Mr Gallie made a point about tram stop locations and suggested that a stop might go on the piece of land opposite the retail park. Would a tram stop there be nearer the current public access points to the retail park, equidistant between Telford Road and Queensferry Road and furthest away from anybody's house?

John Adams: Yes. If there has to be a tram stop in that area, that would be the natural place to put it because it would be convenient for those who want to get to the Western general hospital or the retail park and it would be surrounded by trees and therefore have the least noise impact on local residents.

Kristina Woolnough: Have you heard the view locally that the council might like to develop that piece of land for housing to create developer contributions for the tram and that that might be why it has not considered it as a tram stop location?

John Adams: We have heard that view. The council also tried to threaten the residents of Maidencraig Court with compulsory purchase of our back gardens so that it could sell them to a developer to build a block of flats to raise funds to help fund the tramline.

The Convener: Can I stop you at that point? Some of those comments are new and unsubstantiated, so I am not keen that we continue that line of questioning. If Kristina Woolnough has a question that brings us back to the topic that is under discussion, it would be helpful to hear it.

Kristina Woolnough: I have one last question. Has the problem of possible fly parking arisen because no formal park-and-ride facility is associated with tramline 1 in our area?

John Adams: That is a serious problem, because the parking around tram stops has not been dealt with at all. According to TIE, fly parking will not happen.

The Convener: I thank Mr Adams for giving evidence. We will take an extremely short break to enable Sue Polson, John Barkess and Richard Vanhagen to take a seat at the table.

14:27

Meeting suspended.

14:28

On resuming—

The Convener: I remind Ms Polson and Mr Vanhagen that they remain under oath.

JOHN BARKESS *took the oath.*

The Convener: The first witness is Sue Polson, who will address disabled access for group 34.

Kristina Woolnough: Good afternoon, Ms Polson. Your concern is primarily disabled access at the Ravelston stop. Is that correct?

Sue Polson: Yes.

Kristina Woolnough: After reading Mr Turner's rebuttal statement, do you have further concerns about the proposed access at the Ravelston stop?

Sue Polson: I thank Mr Turner for his statement, but I still have a number of concerns. Initially, I am concerned that the plan for that part of the corridor has changed like the seasons, from

a lift to showing nothing and now to a multiramp. What is next? I cannot keep up with it. If the bill proceeds, who will oversee the changes and who will protect the interests of the disabled, given that all the parties who will be involved in future decision making are answerable to the council?

14:30

Kristina Woolnough: Do you have any comment on Mr Turner's rebuttal statement that all existing accesses will be DDA compliant?

Sue Polson: Yes. I am concerned that Mr Turner's glib response that all access will be DDA compliant does not pin the promoter down to adopting best practice, particularly given the fact that the promoter is the City of Edinburgh Council. Best practice means not the bare minimum, which I suspect the promoter would be all too happy to settle for to save some cash.

The proposed ramps might meet statutory requirements individually, but one has to inquire whether anyone among the promoter's agents has tried pushing a heavy wheelchair, or indeed a heavy pushchair, up a multiramp system whose length, according to landscape and habitat management plan drawing number 0018991C502, revision A, is in excess of 180m—or 220yd in real money. That is an eighth of a mile. Does the promoter have any idea how hard, if not impossible, it would be for a self-propelled wheelchair user to ascend such a long ramp, no matter how flat it is? From the bottom of the proposed multiramp, the person would have to travel under Ravelston bridge to reach the tram stop. Will oxygen be provided halfway up?

The 2005 building regulations recommend a maximum distance of 45m, or approximately 55yd, from a roadway or car park to the entrance of a building. I mention that just for interest, but it illustrates the mindset behind the new regulations that are gradually coming in.

Kristina Woolnough: Do you have further concerns about the use of the proposed multiramp?

Sue Polson: I am concerned that the multiramp will cause problems during the autumn and winter. Ravelston is very much a frost hollow, with frost and snow lasting long after they have cleared in many other parts of Edinburgh. The proposed siting of the multiramp will be in shadow. It will be dogged by ice in winter and by lots of slimy leaves in autumn. Is it proposed to grit the ramps and clear the leaves? If not, the surface could be lethal for the blind, the less steady, those with a dicky hip and wheelchair pushers—indeed, for many of the population of the area. Health and safety comes into play with a ramp like that.

Kristina Woolnough: Do you have anything else to say regarding Mr Turner's rebuttal statement?

Sue Polson: So far, I do not think that Mr Turner's rebuttal shows an intention to use best practice when it comes to disabled access. Would he suggest using multiramps to get disabled passengers up from the platforms of Haymarket station, for example? I doubt it very much.

I feel strongly that a mechanical lift should be installed at Ravelston bridge. That would create a DDA best-practice environment for all disabled travellers, whether they are walking or intend to board a tram.

Kristina Woolnough: Are some of the problems around disability access due to the use of the Roseburn corridor?

Sue Polson: Yes. The line is a long way down. That would not be the case elsewhere. Out on the road, a massive long ramp would not be required. As it is, there are nice stairs for ordinary people to trip down to the bottom of what is a great big hill, so that is fine, and the cyclists can go off on their cycle path. Perhaps we would be better getting dropped off the bridge. The proposals are a joke.

Malcolm Thomson: Did you hear Mr Scott McIntosh's evidence to the committee about the experience in Croydon, where a lift was installed?

Sue Polson: Yes. He said that people were urinating in it.

Malcolm Thomson: Yes. He also said that the disability consultation group that was set up there requested that there be a ramp instead.

Sue Polson: That was a very strange request. Perhaps they did not have to go an eighth of a mile down a hill.

Malcolm Thomson: Would you be comforted if there was a disability consultation group that advised the promoter on what sort of DDA compliance there should be at the various sites, including at Ravelston?

Sue Polson: I would be most surprised if the promoter was interested in doing that.

Malcolm Thomson: Am I right in thinking that the existing access to the Roseburn corridor at Ravelston is down a fairly long ramp?

Sue Polson: It is down too steep a ramp.

Malcolm Thomson: Do you know whether the present ramp is DDA compliant?

Sue Polson: I would not think so.

Malcolm Thomson: Have you used the ramp? Do you use it at the moment?

Sue Polson: I have used it. It is very difficult to use.

Malcolm Thomson: Did you use it gingerly?

Sue Polson: Very slowly, holding on. We did not come back up the ramp, because it would have killed my husband.

Malcolm Thomson: Do you accept that, if the tram comes to pass, it will provide significant benefits for people with mobility disabilities, as it will be possible to propel a wheelchair up a ramp on to the stop, and then to propel it straight from the stop, at the same level, with a minimal gap, on to the tram? There will be room on the tram for the process to be reversed for alighting.

Sue Polson: We can already do that with certain buses. If we had better buses, we could do it without going an eighth of a mile to get to the tram. By the time that someone has travelled that distance, gone under the bridge, got on to the tram, gone to Princes Street, done their business and travelled back, they will be in hospital; they will be unable to cope with going home again. The current plan makes the tram inaccessible.

Malcolm Thomson: You are thinking purely of people who journey from the Ravelston bank stop.

Sue Polson: Yes.

Malcolm Thomson: Do you accept that there may be significant benefits for those suffering from mobility impairment who travel from destinations and starting points other than Ravelston Dykes?

Sue Polson: Unless Edinburgh never buys any decent buses, I do not believe that a tram would provide me with any more benefits than a bus provides. At least a bus allows me to get all over the city.

Malcolm Thomson: You are thinking about what are described as kneeling buses, with flaps that come out.

Sue Polson: Yes.

Malcolm Thomson: Thank you.

Rob Gibson: Am I right in saying that, on a light railway in London, it was suggested that a lift be made with see-through glass walls?

Sue Polson: I have not heard that.

Rob Gibson: I think that the point was made in evidence that we received from Mr McIntosh. Such a lift is the preferred option at the site that has been mentioned. Do you agree that having a lift with glass walls would go some way towards stopping the offending behaviour to which you referred earlier?

Sue Polson: One can only hope that it would. However, there are always weirdos around. I would be in favour of having such a lift, as long as it was strong enough. I would much rather be seen and see who was using the lift.

Rob Gibson: So you would be happy if the proposed disability group were to produce such a solution.

Sue Polson: It would be one solution.

Helen Eadie: Have you or other members of the group considered other ramps? The literature that we received over the weekend gives the specification for the ramp that we are discussing, but have you visited other sites to make comparisons?

Sue Polson: When I am using my wheelchair, I come across ramps that are feasible and ramps that are harder to negotiate. I have never come across a ramp that is an eighth of a mile long. I presume that there are some in Britain, but I do not know where they are.

Helen Eadie: I think that there is one in Dalgety Bay, although I would not want to be quoted on that. What is the best ramp that you have come across?

Sue Polson: All the best ramps are shorter. They are ramps to get from a car park to a building such as an art gallery. They are all ramps for a purpose. Stations are notoriously awful for wheelchair users. That is why people are greeted by helpers who help them on to trains. I hope that we are moving forward from that state.

The Convener: There are no other questions from committee members. Does Kristina Woolnough have any follow-up questions?

Kristina Woolnough: No.

The Convener: I thank Sue Polson for giving evidence this afternoon.

The next witness was to have been Andy Aitken, on access to garages, for group 35, but he is not able to attend today. I understand that the promoter has agreed to let his written evidence on the issue stand. Does Mr Thomson wish to make any further comments?

Malcolm Thomson: Yes. I will make one minor point. The promoter has already agreed to take plot 236 out of the limits of deviation. The promoter now also proposes to take plot 238 out of the limits of deviation in a further attempt to meet the concerns of this group and to improve access to the garages in question.

The Convener: Are you taking out plot 238 permanently or are you making an alteration that allows temporary use?

Malcolm Thomson: Plot 238 will still be in the limits of land to be acquired or used; it is taken out only of the land that can be permanently stopped up.

The Convener: Thank you. That is helpful.

The next witness was to be Frazor Murphy but, unfortunately, he cannot attend. He was going to address visual impact, slipstreaming and damage to property for group 35. I understand that the promoter has again agreed that the written evidence can stand. Does Malcolm Thomson have any further comments?

Malcolm Thomson: No.

The Convener: That is fine.

I move us on swiftly to the next witness, John Barkess. He will address visual impact, built heritage and working hours for group 35. I understand that Mr Barkess has no questioner, so he will be entitled to make a brief opening statement. Following cross-examination by Mr Thomson, he will have the opportunity to make a brief closing statement.

John Barkess: Would it help if I separated the first two subjects from the third?

The Convener: You can deal with them all together. It is entirely up to you, but I will consider them all together.

John Barkess: The case that I present on visual impact and the built heritage is one and the same in that there is no commitment in the design manual for OLE and there is no commitment in any of the replies that I have received over the years in respect of how the bridges will be affected. I was given a copy of the second draft of the design manual. I looked forward to finding something concrete in it, but appendix 1 on Princes Street and appendix 2 on Haymarket express only aspirations. Nothing gives me any confidence that the promoter has adopted my suggestion that the OLE and the treatment of structures should be the same for the rest of line 1 as they are for the world heritage site. The promoter has ignored the suggestion to such a point that one wonders what its aspirations really are, especially when one takes into account the expediency of allowing for cheaper structures and OLE where the promoter feels that the impact will not be so great.

One other point is that I produced a volume of photographs from many different projects. I would have thought that the promoter would at least have been able to say, "It will definitely not be the Croydon industrial look or the Nottingham semi-industrial look. Why not something like the Princes Street 1922 look or the Dublin 2004 look?" However, there has not even been that, which I find strange at this stage in the project.

The Convener: Thank you.

14:45

Malcolm Thomson: Mr Barkess, are you aware that the poles are to be subject to the prior approval procedure under the bill?

John Barkess: Yes.

Malcolm Thomson: Are you aware that the council has now approved the design manual?

John Barkess: Yes.

Malcolm Thomson: Have you considered Mr Scott McIntosh's evidence about working hours—in particular the point that, if working hours are reduced, the duration of the contract period and the cost are both likely to increase?

John Barkess: Yes, but I have not touched on that subject yet. I was going to address that next.

Malcolm Thomson: I am sorry. I am ahead of myself. I hope that you do not mind answering that question now, anyway.

John Barkess: The matter was touched on in quite a novel way this morning. It was pointed out that, with more resources, the construction time and the working day would be reduced, to everyone's benefit—including that of the workers, I would have thought. Something in Mr Clarke's evidence this morning struck a chord, when he was asked whether there were precedents in the construction of similar works using reduced working hours. Indeed, there are—they are mentioned in my witness statement, although the fact that the matter came up this morning makes me wonder whether Mr Thomson has seen my witness statement. For the Hampshire County Council and Portsmouth City Council tram, the order, which is yet to be implemented, sets working hours of 7 am to 6 pm on Mondays to Fridays and 8 am to 3.30 pm on Saturdays.

Malcolm Thomson: I am sorry, but the question that I asked was whether you accept Mr McIntosh's evidence that if the working hours are reduced, the working period and the cost will be increased.

John Barkess: Well, yes. I suppose that I did go on too much. I should have stuck to the answer that was given quite neatly this morning. With proper resources, the construction period would not need to be lengthened because the working day was shortened. I cannot think of a better way of putting it.

Malcolm Thomson: That is your evidence—that the workforce should simply be increased to take account of the reduction in working hours.

John Barkess: Yes.

The Convener: I do not want to interrupt an interesting conversation, but I seek clarification. Are you dealing with working hours separately, Mr Barkess? In your opening statement, you dealt only with the built heritage and visual impact.

John Barkess: Yes, that is true. However, Mr Thomson asked me about—

The Convener: I appreciate that.

Malcolm Thomson: It is my fault, convener. I thought that, at your invitation, Mr Barkess was going to deal with all the topics together.

The Convener: So did I, which is why I am trying to clarify whether he has covered everything that he wants to cover in his opening statement or whether he is going to talk to us about working hours.

John Barkess: There seems to be some confusion. I was going to treat the overhead line equipment and the bridges as one subject and the working hours as another.

The Convener: That is fine. You can come back to the issue of working hours; I just wanted to clarify—to avoid further confusion—that the questions from Mr Thomson at this stage will be purely on the visual impact and the built heritage. We will then go on to address working hours.

Malcolm Thomson: In that case, I wish to clarify one further point. Are you aware that the design manual has been approved by the planning committee of the council, Mr Barkess?

John Barkess: Yes, I am aware of that. Quite where that leaves us in the debate that we are having today is a question that is probably best answered by the committee.

Malcolm Thomson: Did you respond to the consultation on the design manual and raise the points that you are raising with the committee today?

John Barkess: Yes, I did.

Malcolm Thomson: Those are all the questions that I have at this stage.

The Convener: Are there any questions from committee members on the visual impact and the built heritage?

Members: No.

The Convener: Mr Barkess, do you want to make a closing statement on those two aspects, or do you want to make a closing statement covering absolutely everything?

John Barkess: I will make a statement covering absolutely everything, please.

The Convener: In that case, we will defer your closing statement. I invite you to make your opening statement about working hours.

John Barkess: I repeat that there is a precedent, of which I hope the committee takes due cognisance, of an order that is on the statute book whose provisions are virtually identical to the bill, but which limit the hours of working to 7 am to 6 pm on Mondays to Fridays and 8 am to 3.30 pm

on Saturdays. Those hours are enshrined in legislation that was, I presume, drafted by the promoter of that scheme.

Malcolm Thomson: You referred to the Portsmouth tram order. Those hours were fixed in an order 13 years ago, for a scheme that has never been built.

John Barkess: I presume so.

Malcolm Thomson: For all we know, the hours of operation in the order could be the reason why the scheme was never built.

John Barkess: That could be one of the many reasons, but it is probably not the most important one.

The Convener: Do members have any questions on working hours?

Phil Gallie: Is the number of people who are employed on a construction job at any one time directly proportional to the time that it takes to do the job?

John Barkess: There are many factors other than just the number of workers. The word that was used this morning was “resources”, which is probably as good as any. If parts and materials do not keep pace with the workforce—and vice versa—problems will arise. If delays or shortages occur in any part of the project, that will give rise to problems, but that is an issue for managers to work out.

Phil Gallie: Yes, but managers should have flexibility to do that.

The example that was given this morning was that it would take one man twice as long to dig a hole as it would take two men to dig it. Is that a true statement?

John Barkess: Scientifically, it probably is but, in human terms, it probably is not, because one man would get in the way of the other.

Phil Gallie: Precisely. That is the point that I wanted to make. I do not want to be unfriendly, but it does not necessarily follow that if the manpower is doubled, the time will be halved.

John Barkess: Perhaps in such simple terms that does not follow but, in the overall project, it is wrong to say that we need 12 hours of working a day. Why are we debating the issue if a precedent does not exist for reduced working hours? One could say about any building project that working hours of 7 am to 7 pm on Mondays to Fridays are extreme.

Phil Gallie: I am interested in the matter, because it has been accepted that environmental conditions, for example, in relation to wildlife, apply to the Roseburn corridor. That suggests that

the construction timescale on that stretch of the route should be compressed to the minimum possible. If we imposed inflexible regulation on the construction people, might not that adversely affect commitments that have been given on the effects on the environment and neighbouring people?

John Barkess: Are you talking about the people or the wildlife?

Phil Gallie: I am talking about both. Work has to be carried out at certain times. However, people who live alongside the line want those times to be compressed to minimise the effect on them and on wildlife.

John Barkess: That is exactly our point. We want the times to be compressed. For the promoter to say, “We need from 7 until 7 on Mondays to Saturdays,” shows a slack attitude to the operation.

Phil Gallie: This is important because you are asking us to include time restrictions in the bill. In certain periods in the winter, the promoter might choose to work from 10 o'clock in the morning until 3 o'clock in the afternoon, but in the longer summer days it might be convenient and reasonable to work from 8 o'clock in the morning until 9 o'clock at night simply to push the job along. Is that not something that you would favour?

John Barkess: I do not see that that would be an issue. Do you mean that they would do that to use the daylight?

Phil Gallie: It will be an issue if the times that were suggested earlier today are imposed by the bill. The suggested times are tight. I cannot remember what they were—I think they were 8 o'clock until 5 o'clock.

John Barkess: I have no knowledge of daylight being a particular problem in civil engineering contracts. I would have thought that there are ways around that. We all know that the building industry suffers when there is heavy rainfall, but I am not sure about the daylight aspect.

Phil Gallie: I accept that.

The Convener: Are there any other questions from committee members?

Members: No.

The Convener: In that case, I invite Mr Barkess to make a brief closing statement covering visual impact, built heritage and working hours.

John Barkess: I have nothing further to add.

The Convener: On that basis, I thank you for giving evidence this afternoon.

The next witness was to have been Richard Vanhagen, who would have addressed his rebuttal witness statement on the issue of construction for group 35. I invite the promoter to agree that the written evidence stands.

Malcolm Thomson: Yes, madam.

The Convener: Do you wish to make any further comments?

Malcolm Thomson: No, thank you, madam.

The Convener: Excellent. That concludes oral evidence taking on group 35. We move on to closing statements for that group. I have agreed that the promoter and the objectors will be given 10 minutes each to make their closing statements. Up to five minutes of the statement should relate to the alternative route and the remaining time should be used to address any other issues that arose in written or oral evidence.

Before I invite Mr Thomson to commence, I invite Mr Barkess and Ms Polson to leave the table if they wish to do so.

Mr Thomson has up to 10 minutes to make his closing remarks on the evidence on group 35.

Malcolm Thomson: The group 35 objectors object to the use of the Roseburn corridor and have proposed and given evidence on an alternative route, which would use Crewe Road South, Queensferry Road, Queensferry Terrace, Belford Road, Belford Bridge, Douglas Gardens, and terminate at Palmerston Place.

I refer to the observations that I made about group 33 on the general route selection process. I do not propose to repeat those remarks but, in relation to group 35, I add that the advantages of serving rail stations—particularly Haymarket station—were set out at section 3.1 of the work package 1 report.

The first reason for preferring the Roseburn corridor route is cost. In the professional opinion of the promoter's witnesses, the Roseburn corridor option is likely to be cheaper than group 35's option, which involves the Belford bridge. That reflects not only the substantially greater length of the alternative route, but many other factors. For example, there are very few utilities under the Roseburn corridor; there are no steep gradients to contend with; and the construction costs will be smaller than the costs of any on-road alternative.

Because the Roseburn corridor route will be off-road and separate from vehicular traffic, a quicker run time will be achieved and road traffic will not be impeded at the Crewe Toll roundabout in the way that Mr Turnbull described at columns 811 to 812 of the *Official Report*. For the same reasons, the service will be less liable to delay, more predictable and more likely to tempt people out of their cars.

15:00

The tramline will meet the council's aspirations to increase social inclusion. The amount that can be achieved is inevitably a balancing exercise, but the Roseburn corridor route provides better access to Haymarket station, and from there to employment centres that would otherwise be out of reach.

The tramline provides easy and convenient access to Scotland's third-busiest railway station. A tram that came only as close as Palmerston Place would not truly serve the station. One has only to think of a visitor arriving at Haymarket station by train on a wet evening, carrying luggage and being told that the tram connection is at least two pedestrian crossings away across one of the busiest junctions in the city to wonder why the council could not have arranged things better. I refer to paragraph 2.8 of Mr Buckman's rebuttal to Mr Vanhagen.

As a result of the run time, the reliability, social inclusion, and the direct access to Haymarket station, the promoter's witnesses are of the professional opinion that better patronage can be achieved by using the Roseburn corridor route than by using any other option that has been considered. That brings one back to the end cost. The Roseburn corridor route will not only be cheaper to construct, it is more likely to be economically sustainable in the future.

Although it is accepted that the Roseburn corridor route will have a greater impact on the natural environment than the group 35 option, the latter will have a greater impact on the built heritage, particularly on several listed buildings around the Belford bridge. In any event the environmental impact of the Roseburn corridor route, which can and will be mitigated, is outweighed by the other benefits.

I will continue with the particular issues raised by group 35 objectors. All noise and vibration impacts can be mitigated, whether at source through the design of the scheme, or by noise barriers, or at receptors through the noise insulation scheme proposed by the promoter. I refer to Mr Mitchell's evidence.

A noise and vibration policy has been developed and is currently being revisited, after a meeting with objectors, to respond to their concerns. In addition, the promoter has agreed to lodge an amendment on the approval of and compliance with the noise and vibration policy.

Confirmation had been given to the objectors that the promoter did not require permanently to acquire the plot of land used to access the garages at Garscube Terrace. An amendment is being lodged to seek to remove from the limits of deviation the plots of land that provide access to

the garages. Those plots are required to carry out work on the St George's School bridge and thus will require to be included in the limits of land to be acquired or used. However the proposed amendment should address the objectors' concerns.

We have heard evidence about the construction of the tram. It will be no more difficult or complicated than constructing a block of flats although it will impinge on more people. I refer to Scott McIntosh's evidence at columns 1206 to 1207 of the *Official Report*. It is submitted that the health and safety concerns raised by the group 35 objectors can be mitigated by a competent and experienced contractor, who will also be obliged to comply with health and safety legislation.

The working hours reflect those on other tram construction projects and they are also included in the advice on construction noise from the City of Edinburgh Council. I refer to Scott McIntosh's evidence at columns 1207 to 1208 of the *Official Report*. If the construction hours were to be reduced, the total length of the construction period would increase. There is an example of that in Scott McIntosh's group 35 rebuttal to John Barkess. The promoter has developed a code of construction practice that will be enforced against the contractor and that includes a complaints procedure for local residents.

I refer the committee to the evidence of Dick Dapr  and Jim Harries on the issue of safety and speed, particularly on driving by line of sight, the setting of speed limits and the role of HMRI. I refer to Mr Harries's rebuttal for group 35 at columns 1418 to 1421 of the *Official Report*. Mr Harries said:

"Safety is ingrained in the whole organisation's culture ... The industry is proud of, and cautious about retaining, its safety record."—[*Official Report, Edinburgh Tram (Line One) Bill Committee, 7 November 2005; c 1420.*]

Although the promoter understands and appreciates this group's concerns, it is submitted that the benefits of using the Roseburn corridor would be lost if the group's alternative alignment were used. The development of the code of construction practice and the noise and vibration policy should give this group comfort. In addition, their concerns about the access to their garages have been addressed by the promoter by way of an amendment to the bill.

The Convener: Thank you. Mr Vanhagen, you have up to 10 minutes to make any closing remarks.

Richard Vanhagen: Over the past six months or so of the consideration stage, we in group 35 have submitted to the committee evidence not only in considerable quantity but, we believe, of considerable quality.

I remind the committee that the corridor down which the promoter wishes to run tramline 1 is known in planning terms as the Roseburn wildlife corridor and is flanked on both sides by the Coltbridge and Wester Coates conservation areas that were extended to include Garscube Terrace in 1996. As such, it is already recognised as an area of outstanding natural beauty—albeit that, in common with other areas in central city suburbs, it suffers from litter dropped by passers-by. Above all else, it is an area of exceptional peace and quiet.

Members of group 35 realise that a decision to construct a new tramline from Haymarket to Granton has been accepted in principle and, in light of Edinburgh's need for improved public transport links, we would like it to be known that that is a matter with which we do not take issue. We appreciate that wider considerations require to be taken into account, but we also consider that certain parts of the proposal, as currently promoted by TIE, are so seriously flawed as to fail to withstand scrutiny by appropriately qualified independent experts in their respective fields.

Although we recognise that the final decision is for the collective members of our new Scottish Parliament, we ask the committee please to recognise that that should not mean needlessly ruining the lives of nearby homeowners.

I start by addressing the route proposed by TIE. As members are aware, the promoter has claimed that there is no suitable on-road radial route to link Granton to the city centre, and to Haymarket railway station in particular, having dropped its emphasis on the Gyle retail park during proceedings.

Members of group 35 support members of group 33 in their opinion that tramline 1 should serve the front door of the Western general hospital and that the promoter should not be allowed simply to pay lip service to people in existing communities who feel that they should be better served by the new tramline and that it should not be allowed simply to whistle by the rear grounds of what, after all, is one of Edinburgh's two major hospitals.

If the tramline is built, but is not allowed to properly serve the needs of potential passengers to and from that large hospital, whether they originate from along its route or from outside the city, whether they are hospital day patients or visitors, whether they are permanent members of medical staff or temporary agency staff filling important vacancies, we would like committee members to ask exactly who the tramline would be built to serve and why the needs of existing communities and hospital staff alike are being treated with such disregard.

Secondly, I cite noise and vibration. We realise that should tramline 1 be run along the Roseburn

corridor as opposed to following the more passenger-friendly road-based route suggested, which would eliminate virtually all our concerns at source, we will require to rely on mitigation to minimise the impact on the Roseburn corridor as far as is practicable.

Given the wealth of expert evidence that we submitted on what can and therefore should be achieved to mitigate the impact of unreasonable levels of noise and vibration at source that was based on the evidence of our independent experts, such levels need not be an integral accompaniment to any new tramline if it is correctly specified at the outset and constructed accordingly, far less accompany a tramline proposed for Scotland's capital city.

For that reason, early in the proceedings we felt that it was essential to put the substance of our initial objections to the test of independent expert scrutiny before raising our main objections. We decided that the main issues involved were of such a specialised nature and of such importance to our future lives that we engaged the services of experts in each of the three main areas of concern to examine and assess the promoter's proposals and technical support data, our initial objections to noise and vibration and thereafter the loss of value likely to arise as a consequence.

Our reservations about the choice of route proposed by the promoter aside, these are the three main technical and financial issues of specific detailed concern: noise and vibration in joint first place with loss of property value as a consequence following closely behind in third place.

I ask the committee to consider why, to date, the promoter has chosen not to specify operational standards for noise and vibration that are commensurate with the quieter breed of tramline now up and running elsewhere in Europe and the UK. Instead, TIE is promoting standards commensurate with a tramline that is free to generate higher levels of noise and vibration. Why should that be? There is a considerable gap between the figures for noise and vibration being put forward by the promoter and the figures considered appropriate by our own independent experts—Dr Bernadette McKell and Dr Andrew Irwin—on noise and vibration respectively. Both specialists are well known and highly regarded throughout the UK. I remind the committee that Dr Irwin was chair of the British Standards Institution committee when the Government set the very standards for vibration measurement on which the current gap between the two parties is being argued. Can there be any higher authority to support the case for our figures against those of the promoter—particularly with regard to threshold levels for sleep disturbance that are now recognised by the World Health Organisation?

We consulted our independent experts on noise and vibration once more, particularly on what is and is not technically achievable, with a view to ensuring that the new tram system is as vibration free and as quiet as practicable, with noise-limitation measures built in at source and not as an expensive afterthought. Then we joined up with group 43, outwith the committee proceedings, to meet the promoter's Mr Barry Cross with Mr Steve Mitchell in attendance. Our professional experts—Dr Irwin and Dr McKell for group 35, and Mr Richard Mackenzie for group 43—attended as well. The meeting took place on the morning of 17 November 2005. At the end of the meeting, Mr Cross for TIE undertook to return to our groups with proposals for improvement to TIE's noise and vibration figures "within a week". To date, we have still not received the proposed figures for the improvements promised. Those improvements just might make living with the new tramline—if it really must run on the Roseburn corridor—more tolerable. Until amended figures for noise and vibration are received, we will remain unable to comment.

I submit that, to address the considerable gap meaningfully, amendments should be made to the bill. The peace and tranquillity of the Roseburn corridor has been shown little respect by the promoter, whose plans show only grudging concern for people whose quality of life will be affected from the crack of dawn to the wee small hours, day after day, for want of a relatively tiny investment in mitigation. If you are going to make the deliberate choice of steel-wheeled vehicles on steel track, rather than, for example, trolley buses, an environmental price has to be paid in terms of noise and vibration. The price must be paid either through mitigation by the promoter or through reduced quality of life for the householders along the Roseburn corridor. Part of the remit for the committee might be to ask who should pay the price. Society has an ever-changing, ever-improving set of standards and one standard today is that the polluter pays.

Standards are rising. A progressive Government would embrace the WHO guidelines on community noise in order to build quality into a system that might last for decades. It would not reject them as guidance somehow intended for someone else, somehow too good for a flagship project, somehow too good for the capital of Scotland.

We have presented evidence to the committee from some of the strongest experts in the fields of noise and vibration. Those experts have studied and discussed the proposals for tramline 1 in detail and they have drawn on their wide experience and on trends within their industry. Their expert opinion has been presented to the committee in written and oral evidence. They have boiled down everything that they have seen and

heard and the result is two simple proposals to amend the bill—one for noise and one for vibration.

I come now to the numbers in those amendments. Expert opinion is that the night-time average should not exceed 45dB within any one hour; the daytime average should not exceed 55dB; and the peak noise should never exceed 60dB. For vibration, expert opinion is that the night-time maximum peak particle velocity should not exceed 0.3mms^{-1} ; the daytime figure should not exceed 0.6mms^{-1} ; and the vibration dose value should not exceed $0.2\text{ms}^{-1.75}$. Those figures are drawn from BS6472, BS8233 and WHO guidelines for community noise.

We have had partial sight of a revised noise and vibration policy in recent days. As expected, it falls well short of the expert opinion captured in our noise and vibration amendments. The noise and vibration policy still studiously avoids best practice from available standards and guidance; it still aims to set the bar as low as the promoter might get away with; and it still shows little true concern for the residents of the Roseburn corridor.

15:15

For all those reasons, our amendments state statutory limits on noise and vibration pollution. If the bill is passed, those limits should be included in it. No matter the cost or complexity of the various means to control noise and vibration pollution, slowing down the trams on the Roseburn corridor is probably one of the simplest.

We believe that our amendments should be inserted into the bill in their entirety, to ensure that what is finally commissioned is a realistically quiet tramline in accordance with the case outlined during earlier sessions of oral evidence taking.

In general terms, our position is simply that of asking that, in the final analysis, our houses are not subjected to greater levels of vibration and noise than would be the case for a new housing scheme that was being built near an existing tramway or other type of light railway. Our independent specialists advise that that is achievable. They also advise that, to be effective, the measures should be built in at source and at outset and not applied as an afterthought.

The Convener: Mr Vanhagen, would you come to a close now? You have run over time.

Richard Vanhagen: Do you want me to stop now?

The Convener: You may have a closing sentence.

Richard Vanhagen: The experts also advise that any measures must continue throughout the life of the tramline.

The Convener: That concludes oral evidence taking on group 35. I thank group 35 witnesses.

15:16

Meeting suspended.

15:19

On resuming—

The Convener: I invite Iain Gaul to take the oath or to make a solemn affirmation. I remind Anne McCamley and Kristina Woolnough that they remain under oath.

IAIN GAUL *took the oath.*

The Convener: The first witness was to be Anne McCamley, on the issue of the siting of Roseburn station, for group 43. However, as we agreed earlier today, Mr Gaul may adopt Anne McCamley's evidence on the issue. As Mr Gaul does not have a questioner, he may make brief opening and closing remarks. Mr Gaul, do you confirm that you are adopting the evidence in Anne McCamley's name?

Iain Gaul: Yes.

The Convener: I invite you to make your opening remarks.

Iain Gaul: I have prepared a statement in reply to the report that was received from TIE. It takes into account both the siting of Roseburn station and the construction and submitted plans. May I read the statement?

The Convener: If this is new evidence, it should have been included with the rebuttal statements. You have to make an opening statement, so that it is on the record. We have a process for written evidence that has been outlined several times. If the statement is not contained in your written evidence, you are in some difficulty.

Let me go back to what I said originally. Submitting the evidence is probably not the best approach. You have been invited to make an opening statement, so why not do so?

Iain Gaul: Okay. I thank the promoter for the report that we received, but we are disappointed with the content and the timing of receipt of the report, which we were given last Thursday.

I refer to chapter 3 of the report. The point that we made previously was that the promoter's original proposals do not make use of the large area of unused land to the rear of our houses in Wester Coates Terrace. We propose an alternative design, which is referred to in the report as 1A. The promoter states that there are a number of difficulties in implementing that design, which are summarised in table 8.1 on page 15. It

is claimed that the first three items of our design do not meet the following requirements: they are not technically feasible; they are not DDA compliant; and they do not provide acceptable access. We accept that that is correct with reference to our previous drawing. However, we want the committee to examine the revised drawing that was submitted today. Members will see that, in the very limited time that has been available to us, we have addressed some, if not all, of the issues of concern. Was the drawing handed out to members?

The Convener: Yes.

Iain Gaul: Changes have been made to the length of the platform and the radii of the curves. The ramped access has been lengthened to provide DDA-compliant access. It should be noted that the maintenance access road—if such access is required at this location—is on land outwith the lines of deviation but owned by the council. In table 8.1 on page 15, the promoter states that there are a number of benefits to our design, as compared with the promoter's design. In particular, it should be noted that all designs except ours will have a negative impact on existing vegetation.

Chapter 4 of the report gives information on the petrol station, which we accept. I do not want to dwell on the issue, as it appears that that land is not required.

Chapters 5 to 7 of the report investigate positioning the stop on the south side of the A8. The findings are again summarised in table 8.1 on page 15. The report concludes that that location is a possibility but that there are additional technical problems that would result in an increase in costs. Presumably, those costs cannot be estimated fully until detailed design work is carried out. We note that the promoter considers that there will be a greater impact on the adjacent residential properties. We put forward the opinion that there will be a lesser impact, but we concede that it will be on a greater number of properties.

In conclusion, the promoter has examined the possibility of the stop being positioned to the south of the A8, and it has been proved that that is technically feasible. We are disappointed that, to a large degree, the promoter has discounted our proposals for a realignment of the track to utilise fully the unused land to the rear of our properties. Please note the advantages that are stated below the drawing that has been submitted today. I wish to read them out in order to put them on the record.

The Convener: A process was put in place. I am enabling you to put a lot of your evidence on the record. We will certainly consider the map as reference material. However, earlier I made the point that we will not consider anything below the map as evidence.

Iain Gaul: Even though we received the report only last Thursday?

The Convener: The committee will take what you have submitted as information, but it is not evidence. We are interested in what people have to say about the location of stops; I am sure that the promoter is, too. However, it is not a matter for the bill. I am trying to be as flexible as possible with you.

Iain Gaul: It is just that a number of questions that were asked the last time were not answered. TIE's document answers them, but I have not had a chance to ask any further questions.

The Convener: I understand that. However, whenever you make a response, the promoter will want to question it, which will take us into a long period of questions and counter-questions. You may rest assured that the committee will base its conclusion on all the evidence that has been presented.

Iain Gaul: Okay. I have indicated the advantages that are listed underneath the drawing. I will finish by offering our revised proposals for consideration. Where there is a will to get this sorted, there is a way.

The Convener: Thank you very much, Mr Gaul.

Mr Thomson, you may question the witness.

Malcolm Thomson: I have what I hope is a simple question. Is the promoter's proposed compromise alignment more acceptable to your group than the alignment in the bill?

Iain Gaul: It is marginally more acceptable. It is 4m further to the west.

Malcolm Thomson: Is it enough to make changing the alignment worth while? Do you regard the change to be so minimal that the promoter should not bother making it, or does it go some way towards addressing your concerns?

Iain Gaul: It goes some way towards addressing our concerns.

Malcolm Thomson: Thank you very much.

The Convener: As committee members have no questions, I ask Mr Gaul whether he wishes to make any closing remarks.

Iain Gaul: No, thank you.

The Convener: On that basis, I thank you for giving evidence.

Ms McCamley, for group 43, will address her rebuttal witness statements on the issues of property prices and the Roseburn railway corridor as a public park. As she does not have a questioner, I invite her to make some opening remarks.

Anne McCamley: I do not have a great deal to say, because I think that by and large everything has been said before. However, as I have been given some time, I will say something.

On property prices, the promoter's witness Mr McIntosh is not a surveyor with expert knowledge of the Edinburgh property market. He has provided information on properties in other locations where trams have been introduced. However, as most of us in the room are aware, Edinburgh has a very particular property market and it might have been more sensible to have received details from someone with experience of property prices in the city.

As for the house price increases referred to in the promoter's witness statement, they are to be seen only in areas with low house prices that the trams have helped to regenerate. That is not the issue in the Roseburn corridor, which is an established residential area. Again, we have anecdotal evidence that suggests that the threat of the tramline along the corridor has made it difficult to market properties in the area and has been detrimental to sales. That is as much as I want to say on that matter.

I do not know whether we want to go into the issue of the Roseburn corridor as a linear park.

The Convener: We do.

Anne McCamley: Right.

As the committee has had the advantage of walking the path with various members of interested groups, I do not know that I need to say a great deal about the matter. I hope that you visited it on a lovely sunny day when the path was at its best, the badgers were out and the bullfinches were flying around. I do not expect that you did, but one can only hope.

You have already been advised of the number of people who use the path daily and of the footfall surveys that Ms Woolnough and her group carried out. The path is used for all traditional recreational purposes. It is quiet and peaceful; people push prams or cycle along it; children play in it; and dogs are walked along it. It is a safe green lung for those of us who live in the inner city part of north-west Edinburgh.

As I said, the corridor is home to badgers, bats and bullfinches. However, it is also very much used by our very little citizens—children from the nurseries and children who still have stabilisers on their bikes. On the corridor, children can learn how to skateboard and rollerblade in safety. The path is well used for recreational purposes and my group feels that it would be a tragedy if that did not remain.

The Convener: Thank you, Ms McCamley.

Mr Thomson, you may question the witness.

Malcolm Thomson: I have no questions.

The Convener: As committee members have no questions, I ask Ms McCamley whether she wishes to make any closing remarks.

Anne McCamley: No, thank you.

15:30

The Convener: Excellent. As there are no further questions for Ms McCamley, I thank her for giving evidence.

I invite Iain Gaul to address his rebuttal witness statement in respect of the issue of construction and submitted plans for group 43. Mr Gaul may make opening remarks.

Iain Gaul: I have nothing to say on the matter.

The Convener: Do you want to ask any questions, Mr Thomson?

Malcolm Thomson: I would like to ask about one matter, if I may. Mr Gaul, do you accept the proposition that the inevitable consequence of working hours being shortened would be an extension of the working period and a rise in costs?

Iain Gaul: That matter was discussed earlier. That might not be the case if the number of operatives were increased, but the general answer to your question is yes.

Malcolm Thomson: If I may paraphrase slightly what Mr Gallie said, the two-men-in-a-hole theory does not work if the hole is not big enough for two men.

Phil Gallie: Sorry, folks.

Malcolm Thomson: The proposition is that there may be an optimum workforce that can be deployed at one time.

Iain Gaul: I am sure that there is an optimum number of people for maximising efficiency.

Malcolm Thomson: Do you accept the general proposition that it would be likely that costs, if not the time that is taken, would increase if working hours are reduced?

Iain Gaul: Costs will certainly increase if contract times are increased.

Malcolm Thomson: Thank you very much.

The Convener: Do committee members—except for Phil Gallie—have any questions? I do not mean that. I can see what has been said giving rise to a series of jokes about how many men it takes to dig a hole in Edinburgh.

Rob Gibson: What is the answer to that question?

The Convener: Ask women to dig the hole instead. I had to get that in.

Mr Gaul, do you want to make any closing remarks?

Iain Gaul: I have no further remarks to make, thank you.

The Convener: I thank you for giving evidence.

That concludes oral evidence taking in relation to group 43. We now move to closing statements for that group. I have agreed that the promoter and each group will be given 10 minutes to present their closing statements. Up to five of those 10 minutes should relate to the alternative route; the remaining five minutes should be used to address any other issues that have arisen in written or oral evidence. Mr Thomson has up to 10 minutes to make closing remarks on the evidence relating to group 43.

Malcolm Thomson: The group 43 objectors have objected to the use of the Roseburn corridor, but they have not proposed any alternative route. I have already referred to considerations to do with the route selection process in relation to group 33 and do not propose to repeat those considerations.

I want to move on to the reasons for preferring the Roseburn corridor. First, I will deal with costs. In the professional opinion of the promoter's witnesses, using the corridor on the section of the route from the Holiday Inn at Craighleith to Roseburn is likely to be cheaper than the other options that have been appraised that avoid, to varying degrees, impacting on Wester Coates Terrace. The costs reflect many other things than the substantially greater length of the section of the route in question. For example, there are very few utilities under the Roseburn corridor and construction costs will therefore be less there than they would be for any on-road alternative. Moreover, a quicker run time can be achieved because the corridor is off-road and separated from vehicular traffic. On reliability, the service will be, for the same reasons, less liable to delay, more predictable and more likely to tempt people out of their cars.

The route meets the council's aspirations to improve social inclusion. What can be achieved is inevitably a balancing exercise, but the Roseburn corridor route will provide better access to Haymarket station and from there to employment centres that would otherwise be out of reach.

On modal interchange, the Roseburn corridor option will provide easy and convenient access to Scotland's third-busiest railway station. It is likely that any other option would require Haymarket Terrace—which is one of the busiest roads in the city—to be used in order to create a similar interchange. The promoter considered the associated problems—in particular, a stop location—in work package 1.

In terms of run time, reliability, social inclusion and direct access to Haymarket station, in the professional opinion of the promoter's witnesses, it is likely that better patronage can be achieved by using the Roseburn corridor than by using any of the other options that were considered. That brings us back to the end cost of the project. The Roseburn corridor route is not only cheaper to construct but more likely to be economically sustainable in the future.

Although it is accepted that the Roseburn corridor route has an ecological impact, the impact can and will be mitigated and the cost of the mitigation has been established and included in the estimate of expense that was submitted to the committee. I refer to Ms Raymond's evidence at column 868 of the *Official Report*.

I turn to issues that are particular to group 43, the first of which relates to the European convention on human rights. It is the promoter's evidence that there is no interference with article 8 rights. I refer to Steve Mitchell's rebuttals of both Richard Mackenzie and Odell Milne. Even if there was an infringement of human rights, it is the promoter's evidence that the interference would be justified; it would be necessary in the national interest and the route is necessary to the scheme. Both parties agree that that is a decision of the Parliament. I refer to Mr Walker's evidence at column 1438 of the *Official Report*. I also submit that the Parliament could not reasonably conclude at this stage that passing the bill would be in breach of section 29 of the Scotland Act 1998.

All noise and vibration impacts can be mitigated, whether at source through the design of the scheme, by noise barrier, or at receptors through the noise insulation scheme that has been proposed by the promoter. A noise and vibration policy has been developed and is currently being revisited, following a meeting with objectors, to respond to their concerns. In addition, the promoter has agreed to bring forward an amendment in relation to the approval of, and compliance with, the noise and vibration policy.

The general law of compensation applies to the circumstances of the bill. The Land Compensation (Scotland) Act 1963 provides for the assessment of compensation where land is acquired and the Land Compensation (Scotland) Act 1973 provides compensation in certain prescribed circumstances where no land is acquired. The law of blight applies where land is being acquired. Those enactments provide a carefully considered framework for compensation, which balances the interests of both the parties affected and the taxpayer. For example, section 6 of the 1973 act provides for betterment to be offset against a claim under the act. The current legislation reflects important decisions on matters of public policy.

There are sound practical reasons for delaying a claim under the 1973 act until one year after the first operation of the scheme.

The locations of stops are outwith the scope of the bill. However, having considered the witness statements for group 43, the promoter has suggested a compromise over the resiting of the Roseburn stop location. I refer to Mark Bain's rebuttal. The promoter's position is also set out in the report that was produced for the committee in which it confirmed its intention to slew the stop. Although the stop cannot be slewed as far as the objectors requested, it will be moved further away from their properties.

On safety and speed, I refer the committee to the evidence of both Dick Dapr  and Jim Harries, particularly in relation to driving by line of sight, the setting of speed limits and the role of HMRI. I refer to Mr Harries's rebuttal for group 43 at columns 1418 to 1421 of the *Official Report*. Mr Harries said:

"Safety is ingrained in the whole organisation's culture ... The industry is proud of, and cautious about retaining, its safety record."—[*Official Report, Edinburgh Tram (Line One) Bill Committee, 7 November 2005; c 1420.*]

On the loss of vegetation, a landscape and habitat management plan has been prepared and it will evolve as the detailed design is progressed. A badger mitigation plan has also been prepared, which will become a confidential annex to the LHMP. The promoter is consulting and working with SNH on both those documents. As a result, SNH has withdrawn its objection to the bill. The promoter has also consulted the ELBG on the badger mitigation plan and will continue to do so. The committee has heard evidence of where mitigation has been changed as a result of such consultation—I refer to Mr Coates's evidence at column 1356 of the *Official Report*. In addition, the Protection of Badgers Act 1992 will apply.

Finally, on the issues that are particular to group 43, the promoter has proposed an amendment, which can be found in the promoter's response 8 in committee paper ED1/S2/05/19/22. The LHMP will require to be approved by the planning authority prior to any works commencing. The planning authority can also take the necessary enforcement action in the event of any breaches.

The promoter's witnesses have conceded that the Roseburn corridor will be altered. However, it is the promoter's evidence that the character of the Roseburn corridor as a wildlife site can and will be retained. With regard to loss of amenity, although it is conceded that some users may not use the Roseburn corridor following the introduction of the tram, it is submitted that the corridor will still be used by a large number of people, both on the cycleway and walkway and on the tram. That is especially the case given the

commitment to ensuring that all new accesses are DDA compliant. I refer to Mr Turner's rebuttal to Ms Woolnough at paragraphs 3.6 to 3.9. Mr Harries's evidence at column 1420 of the *Official Report* about acclimatising and raising the awareness of cycleway users should also be remembered.

In conclusion, although the promoter understands and appreciates the group's concerns, the benefits of the Roseburn corridor clearly show why it is the preferred route. However, other options were considered, and I remind the committee of the work that was carried out in relation to work package 1. Although it is accepted that the use of the Roseburn corridor will have an ecological impact, it is submitted that the impacts of using that corridor can and will be satisfactorily mitigated.

The Convener: Thank you very much, Mr Thomson. I now invite Ms McCamley to make her closing remarks. You have up to 10 minutes.

Anne McCamley: In proposing the route for the tram, the promoter has failed to show that the route along the Roseburn corridor is the best route for achieving its objectives. The promoter's justifications for using the Roseburn corridor for part of the route appear to be about cost and run time.

Taking those in turn, the promoter's witness Mr Bain agreed that any route could be engineered and that crossing the Water of Leith could be achieved. High cost made using the Belford bridge or the Dean bridge unattractive. Given the environmental impacts of using the Roseburn corridor, we urge the committee to consider whether the promoter should, at the very least, have considered thoroughly an engineering solution and costed it before rejecting those routes.

The promoter's witness Mr Harper confirmed that no costings for either the Roseburn corridor route between the Holiday Inn at Craighleith and Roseburn or any alternative route for that stretch were carried out. Thus, the promoter has not proved that the Roseburn corridor is cheaper. The promoter has agreed that no costings have been carried out for work either on the Belford bridge or on the Dean bridge. No costings for the Roseburn viaduct or the listed bridge at Roseburn have been done. There has been no thorough consideration of the route through Murrayfield, which would cross the Water of Leith at Roseburn, which would perhaps require no expensive bridge works and which would reach Haymarket station directly. We urge the committee to consider whether, without the benefit of any costings, the promoter can possibly have proved that the Roseburn route is cheaper than alternative routes.

Even if the costs of work to the Belford and/or Dean bridges would be more expensive than work to bridges along the Roseburn corridor, we urge the committee to consider whether, in the absence of costings for any other aspect of the different routes, the promoter has proved that the Roseburn corridor route would be the cheapest. As no costings have been done, there is no way of ascertaining whether the engineering costs of work to a bridge over the Water of Leith might be outweighed by the other costs of using the Roseburn corridor. Evidence before the committee has shown that substantial environmental mitigation will be required, including relocating badger setts and replanting. Last but not least, there will be requirements for noise and vibration mitigation. Additionally, there is a strong possibility that compensation for loss of value of homes along the corridor will need to be paid. Without costings for all those, it is not possible to conclude that the Roseburn corridor route is the cheapest.

The run-time argument, which the promoter stressed, is essential for its business case in that people will be encouraged to use the tram only if it travels quickly from A to B. However, the promoter's witness Mr Harries indicated that the promoter cannot be sure what speed can be achieved safely in the Roseburn corridor. The promoter has indicated that choosing Crewe Road South and Groathill Road would cause possible traffic flow problems, but we have also been told that modern systems exist that could deal with those. We urge the committee to consider whether it considers that the promoter's justification on the ground of run time has been proved.

It seems that both the promoter's arguments for using the Roseburn corridor relate to cost: the economic argument about the cost of bridge works; and the argument about the run time. We urge the committee to consider whether the choice of the route purely on cost grounds can be justified. Surely the choice of route should have been justified on the grounds that it fulfils the STAG criteria and meets the council's local transport strategy and tram aspirational objectives.

15:45

We have given evidence that even if the Roseburn corridor route is the cheapest in economic terms, the choice of route is flawed, because it will not fulfil the promoter's objectives. It will not reduce the environmental impacts of travel, because, although the trams may be environmentally friendly, importing trams into the Roseburn corridor will have a significant detrimental impact on the corridor's environment. Our environmental witness, Mr Leven, who came all the way from Hong Kong to give his evidence, indicated that the best mitigation would be

avoidance—an on-road route would avoid the impacts totally. The route will not promote cycling or walking, nor will it support the local economy—our witness Mr Raynal gave evidence that the business case for the trams does not stack up—or improve safety for road and transport users. Our witnesses have given evidence that importing trams into the corridor will reduce safety for pedestrians and cyclists, especially the young and infirm.

The route will not promote social inclusion. The tram could have served some of Edinburgh's most deprived areas, but it will instead pass through an affluent area of high car ownership. It will not maximise the role of streets as the focal point for our local communities where people can meet and it will irremediably destroy the Roseburn corridor linear park, where children play and local residents walk, meet, cycle and relax. Our noise expert, Mr Mackenzie, indicated that the residents of the Roseburn corridor will suffer sleep deprivation if the Roseburn corridor route is used, but that impact would be avoided by the use of an on-road route. Our witnesses Mrs Hawkins and Mrs Brown provided evidence on the loss of the linear park and the cycleway and walkway, for residents and as an educational resource. Our witness Mrs Milne provided evidence that sleep disturbance would amount to a breach of article 8 of the ECHR, but that impact would be avoided by an on-road route. Mrs Milne also provided evidence that the Roseburn corridor route will not serve places that people want to go to. A route along Crewe Road South and through Groathill would serve the Western general hospital directly as well as colleges, schools, police headquarters and art galleries.

In assessing whether the promoter has chosen the best route, the committee might consider the following questions. First, should the tramline be on a route that serves places that people want to go to or on a route that serves mainly residential areas of high car ownership that are well served by buses? Secondly, should it be on a route that promotes social inclusion or on one that travels through affluent areas? We urge the committee to require the promoter to consider alternative routes before the bill is passed. We appreciate that doing so would involve delays, as consultation and readvertisement would need to be done, but the delays would truly be justified in the interest of ensuring that the best possible route is found for the proposed tramline. The importance of avoiding a waste of hundreds of thousands of pounds on the wrong route cannot be overestimated.

We invite the committee to accept the evidence of all the witnesses who have given evidence on behalf of group 43. For the most part, the evidence is self-explanatory. We invite the committee to accept Lord Marnoch's unchallenged evidence on

a known risk that construction work behind Wester Coates Terrace would cause structural damage to the several properties there.

In the rest of the short time that I have available, I will concentrate on the evidence of our acoustics expert, Richard Mackenzie. We realise that it is an invidious task to choose between two alleged experts, but that is nowadays becoming an increasingly common task. Where experts disagree on fundamental matters, the committee must simply decide who is the more reliable and perhaps even the more credible. In that connection, we have no hesitation in inviting the committee to accept without qualification the unaided evidence of Mr Richard Mackenzie, which we submit was given in a direct and persuasive manner and was supported in large part by Dr McKell. We remind the committee that, under cross-examination, Mr Mitchell conceded that planning advice note 56 gives no direct guidance on the matter in hand. He was also constrained to accept that, in another context, he had used BS 8233 in relation to existing buildings, whereas he had claimed in his rebuttal statement that that British standard had no application whatever and in his earlier evidence that it applied only to new buildings. We do not recall Mr Mackenzie being re-examined on either of those matters, nor was Mr Mackenzie cross-examined by Mr Thomson regarding the relevancy of that standard.

It is clear from paragraphs 50 and 52 of planning advice note 56 that no guidance can be obtained from PAN 56 for L_{Aeq} values in the Roseburn corridor. It is also clear from annex 1, note 6 and paragraph 51 of that document that the figure of 82dB has no bearing whatever on the important issue of sleep disturbance in the Roseburn corridor. Mr Mitchell having spoken to no other basis for L_{Aeq} values, it follows that noise mitigation measures should be considered whenever the predicted L_{Aeq} values exceed the existing levels by more than 3dB. More important, the figure for sleep disturbance should be that which is referred to in the note to table 5 in BS 8233 of 1999, which implements for the UK the earlier World Health Organisation guidelines.

We ask the committee to report to the Parliament that, on all the evidence, the promoter has failed to make a case for the proposed route, there being other and possibly better alternatives. In the event that the proposed route is otherwise acceptable, we invite the committee to amend the bill by inserting a provision that any station in the vicinity of Roseburn be sited either on the south side of the bridge over the A8 or as far as possible to the west, conforming to the plan lodged by Mr Gaul, which can technically be achieved.

The Convener: Could you close your comments, please? You are exceeding your time limit.

Anne McCamley: We also ask that a full ground and structural survey be carried out before any construction work on the section behind Wester Coates Terrace is embarked on. The purpose of that amendment is to ensure avoidance of damage—

The Convener: I insist that you close your comments now.

Anne McCamley: Can I just say that the noise levels in the Roseburn corridor—

The Convener: No, you cannot, Ms McCamley. I am being strict about time. In fact, I have given you more time than you were allotted.

Anne McCamley: I have one more sentence, which is important to us. We would be grateful if you would let me say it and it would take a very short time for me to read it out. It is important that we have this—

The Convener: Ms McCamley, this is not evidence; this is simply a summary. I have tried to be flexible with people. You have had more than your allotted time, and I stand by my original position. Thank you for your closing statement. That concludes oral evidence taking for group 43.

The next witness will be Tina Woolnough, who will address her rebuttal witness statement on the issue of bridges and stop locations for group 34. Ms Woolnough does not have a questioner, so I invite her to make any opening remarks now.

Kristina Woolnough: I will briefly outline the issues relating to the bridges, which we heard quite a lot about this morning. I reiterate that no structural assessments have been done. We continue to rebut the promoter's suggestion that use of the Roseburn corridor is some sort of easy and cheap option, as we do not know what that will involve for the bridges. We will not know that until the detailed design is available, by which time it will be too late to know whether it would have been cheaper to put the alignment elsewhere.

On stop locations, Gary Turner claims that there will be

“greater access to a wider group of users.”

We requested evidence of that but have received none. We therefore do not accept that assertion.

The Convener: Thank you, Ms Woolnough. Mr Thomson?

Malcolm Thomson: I have no questions, thank you.

The Convener: Do committee members have any questions?

Members: No.

The Convener: Ms Woolnough, I take it that you do not wish to make any closing remarks.

Kristina Woolnough: No, thank you.

The Convener: Okay. I ask you now to address your rebuttal witness statement on the issue of visual impacts of overhead line equipment for groups 34 and 45.

Kristina Woolnough: The overhead line equipment will be an appalling visual blight along the Roseburn corridor for the views both from and on to the corridor. The design manual does not appear to address the specific needs of the Roseburn corridor. We would like an update on the position, as it has changed since we wrote our rebuttals and the Coltbridge viaduct is now in a newly designated conservation area. We are anxious about the fact that the overhead line equipment will introduce more street clutter into a semi-rural environment and that the impact of the OLE on wildlife has not been assessed, taken into account or measured in any way.

The Convener: Thank you, Ms Woolnough. Mr Thomson?

Malcolm Thomson: I have no questions, madam.

The Convener: Do committee members have any questions?

Members: No.

The Convener: Ms Woolnough, I take it that you have no closing remarks.

Kristina Woolnough: No—nothing.

The Convener: That concludes oral evidence taking in relation to group 34. We move on to closing statements for that group. Again, I remind everyone that we have agreed that the promoter and the group will be given 10 minutes each to present their closing statements. Of that time, up to five minutes should be used to address the alternative route and the remainder should be used to address any other issue that has arisen in written or oral evidence.

Mr Thomson, you have up to 10 minutes to make your closing remarks about the evidence on group 34.

Malcolm Thomson: The group 34 objectors object to the use of the Roseburn corridor and have proposed and given evidence on an alternative route, which would use Crewe Road South, Orchard Brae, Queensferry Road, the Dean bridge, Drumsheugh Gardens and Chester Street and terminate at Palmerston Place.

I commented on the route selection process in relation to group 33. I do not intend to repeat those comments, but they apply equally in relation to group 34.

I turn to the reasons for preferring the Roseburn corridor option. In the professional opinion of the

promoter's witnesses, the Roseburn corridor route is likely to be cheaper than group 34's option, which involves the Dean bridge. That reflects not only the substantially greater length of the alternative route but many other things—for example, there are very few utilities under the Roseburn corridor and the construction costs will be smaller than those of an on-road alternative.

Because the Roseburn corridor route will be off-road and separate from vehicular traffic, a shorter run time will be achieved and road traffic will not be impeded at the Crewe Toll roundabout, as Mr Turnbull described at columns 811 to 812 of the *Official Report*. For the same reasons, the service will be less liable to delay, more predictable and more likely to tempt people out of their cars.

The Roseburn corridor route also meets the council's aspiration to increase social inclusion. What can be achieved inevitably involves a balancing exercise, but the Roseburn corridor route provides better access to Haymarket station and, from there, to employment centres that would otherwise be out of reach. The Roseburn corridor route will provide easy and convenient access to Scotland's third-busiest railway station. A tram that came only as close as Palmerston Place would not truly serve the station. To realise that, one has only to think of a visitor arriving at Haymarket station by train on a wet evening with their luggage. If they were told that the tram connection was at least two pedestrian crossings away across one of the busiest junctions in the city, they would wonder why the council did not arrange things better.

Because the Roseburn corridor route will allow shorter run times, better reliability, greater social inclusion and direct access to Haymarket station, it is likely, in the professional opinion of the promoter's witnesses, that it will achieve better patronage than any other option that has been considered. That brings us back to the end cost. The Roseburn corridor route is not only cheaper to construct but more likely to be economically sustainable.

Although it is accepted that the Roseburn corridor route will have a greater impact on the natural environment than group 34's option, the latter would have a greater impact on the built heritage—in particular, on the listed Dean bridge and substantial parts of the world heritage site that are otherwise comparatively secluded. In any event, the ecological impact on the Roseburn corridor, which can and will be mitigated, is outweighed by the benefits.

I turn to the particular issues for group 34, the first of which is mitigation of the impacts on badgers and vegetation. The environmental impact can and will be mitigated and the cost of that mitigation has been included in the estimate

of expense that has already been submitted to the committee—I refer to Ms Raymond’s evidence at column 868 of the *Official Report*.

A landscape and habitat management plan has been prepared and will evolve as the detailed design is progressed. A badger mitigation plan has also been prepared and will be a confidential annex to the LHMP. The promoter is consulting and working with SNH on both those documents and, as a result, SNH has withdrawn its objection. The promoter has also consulted the ELBG on the badger mitigation plan and will continue to do so. The committee has heard evidence that mitigation measures have been changed as a result of such consultation—I refer to Mr Coates’s evidence at column 1356 of the *Official Report*. In addition, the Protection of Badgers Act 1992 will apply.

16:00

An amendment to the bill has been proposed. I refer to the promoter’s response 8, which is to be found in committee paper ED1/S2/05/19/22. The LHMP will require to be approved by the planning authority prior to the commencement of any works. The planning authority can also take the necessary enforcement action in the event of any breaches. The promoter’s witnesses have conceded that the Roseburn corridor will be altered, but the promoter’s evidence is that the character of the Roseburn corridor as a wildlife site can be retained.

I turn to the impact on the walkway and cycleway. It is clear that the Roseburn corridor is a walkway and cycleway, not a park. There is no planning evidence to suggest otherwise. I refer to the witness statement and rebuttal of Ms Grant.

The width of the walkway and cycleway that will be provided is 3m, which is the width of the current walkway and cycleway. Given the number of users, which according to the objectors’ own figures is only 1,000 per day, there is no need to provide a wider walkway and cycleway. I refer to paragraph 3.10 of Gary Turner’s rebuttal of Ms Woolnough’s witness statement.

Although it is conceded that some categories of user may not use the Roseburn corridor following the introduction of the tram, it is submitted that it will still be used by a large number of people, both those who use the walkway and cycleway and those who travel on the tram. I refer to paragraphs 3.6 to 3.9 of Mr Turner’s rebuttal of Ms Woolnough’s statement. In particular, the commitment to ensure that all new accesses are DDA compliant should be noted. Mr Harries’s evidence on acclimatisation and awareness raising of cycleway users, which appears at column 1420 of the *Official Report*, should be remembered, too.

I turn to the issue of safety and speed, on which I refer the committee to the evidence of Dick Dapré and Jim Harries. In particular, I highlight their testimony on driving by line of sight, the setting of speed limits and the role of HMRI. I refer to Mr Harries’s rebuttal of group 34 and to columns 1418 to 1421 of the *Official Report*. Mr Harries said:

“Safety is ingrained in the whole organisation’s culture ... The industry is proud of, and cautious about retaining, its safety record.”—[*Official Report, Edinburgh Tram (Line One) Bill Committee, 7 November 2005; c 1420.*]

I also wish to deal with compensation, ECHR, construction impact and health and safety issues. However, my comments on those matters can be taken from my earlier observations. The comments that I made on compensation and ECHR in relation to group 43 and those that I made on construction impact in relation to group 35 apply equally here.

That brings me to my conclusion on group 34. Although the promoter understands and appreciates the concerns of the group 34 objectors, it is submitted that the benefits of using the Roseburn corridor would be lost if the group’s alternative alignment was chosen. It is accepted that use of the Roseburn Corridor rather than the group 34 option will have a greater ecological impact, but it is submitted that the impacts of using the Roseburn corridor can and will be mitigated satisfactorily. The early involvement of the operator and the role of HMRI should give the group 34 objectors additional comfort.

The Convener: Thank you, Mr Thomson. I invite Ms Woolnough to make any closing remarks that she may have. Ms Woolnough, you have up to 10 minutes.

Kristina Woolnough: Before the clock starts, I thank the committee very much, in particular—

The Convener: The clock has started.

Kristina Woolnough: I would still like to thank very much the private bills unit and the clerks, who have seen us through thick and thin—probably more thick than thin, I think.

Our group represents 59 objectors, one of which is a community association whose members comprise 30 per cent of the objectors to tramline 1. During the course of evidence giving and taking, we have heard no evidence to alter our view that the Roseburn corridor was chosen as the preferred alignment at the outset of the process and that route selection procedures were put together to retrofit the Roseburn corridor. Indeed, we heard evidence from the promoter about how the specification for the computer modelling was changed when the right answer was not achieved.

The bill refers to Haymarket rather than Haymarket station and we believe that the

complications of the Haymarket Terrace road junctions, which will result in longer car journeys, would be resolved by our proposed alignment. We challenge the promoter's view that tramline 1 would truly serve Waverley station. If the same wet traveller with a suitcase about whom Malcolm Thomson spoke got off the tram at St Andrew Square, they would have to hike across to Waverley station.

We believe that the route selection process was fundamentally flawed, in that it ignored the issues of social inclusion and integration, gave a lesser weighting to the tram's environmental impact than it gave to technical feasibility and presented the use of the Roseburn corridor as a *fait accompli* to the environmental consultants. We believe that that was confirmed during the evidence taking on route selection.

We also put it to the committee that the promoter is arguing for an off-road alignment on the Roseburn corridor while, at the same time—but for the opposite reasons—arguing for an on-road route at Trinity. Consistency of approach is imperative; without it, the promoter can be accused of cherry picking justifications on an ad hoc basis.

On the route selection sifting of links in work package 1, the Crewe Road South and Orchard Brae link was given a far higher score by the promoter's consultants, who thought it a more desirable route than the Roseburn corridor was. That advice appears to have been ignored. Certainly, according to the evidence that we heard from the promoter, no further or credible work appears to have been done on costing a more direct, alternative on-road route, which would have achieved our dual objective of preserving the Roseburn corridor and serving the front entrance of the Western general hospital.

We believe that the time-saving, cost and patronage benefits of our more direct, visible, shorter route would enable tramline 1 to serve the Western and obviate the need to use the Roseburn corridor. We believe strongly that only by serving the front entrance of the Western general can tramline 1 be said to be in the public interest and socially inclusive. The lack of proven public benefit is crucial to the perception of tramline 1. The insignificant, if not derisory, reduction in car use that will result from tramline 1 indicates that the alignment is wrong. It does not achieve the traffic-reducing objective that is set out in the promoter's design manual.

The environmental statement recognises the severe and detrimental impact on the Roseburn corridor—on its badger population, human amenity value, walking and cycling. We believe that the use of the corridor is contrary to national planning policy and national biodiversity guidelines. The

environmental loss will not be mitigated and there will be no meaningful reduction in car use and therefore no consequential environmental benefit.

We are also wary of the precedent that has been set for developers in allowing the use of the corridor. We are appalled that the City of Edinburgh Council can push forward a proposal that is acknowledged as having a severe and detrimental impact on a designated wildlife corridor. What message will the approval of the promoter's alignment send out? To us, that message is that serving hospitals, meeting public need, protecting the environment and reducing car use are not a priority, whereas property development on the waterfront is.

Contrary to the promoter's evidence, the loss of the Roseburn corridor will be felt citywide, rather than by just a few local residents. We are not comforted by the early involvement of Transdev Edinburgh Tram Ltd or by the setting up of Transport Edinburgh Ltd, because Transdev and Lothian Buses were not involved in the route selection process; indeed, no one apart from those with a vested interest in the waterfront was.

The planning permission figures that the promoter provided will not necessarily result in construction. We urge the committee against using the waterfront development as the sole justification for agreeing to tramline 1, because of the uncertainty of the property market in the area. In order to bring public opinion and public money on side for tramline 1, the project must meet demonstrable, existing public transport needs, such as the need to access hospitals, and not simply duplicate and replicate current bus services.

We see no local or public benefit to using the Roseburn corridor. We believe that the promoter selected it simply because it is there. No assessment of the corridor's human amenity value was properly undertaken. Our view is that the promoter singularly failed to anticipate or recognise the strength of community and citywide feeling about the Roseburn corridor. We have submitted strong evidence on usage that we hope is convincing. Our overall view on route selection is that the alignment is wrong. The issue is not one of local objectors, as the promoter suggests; the issue is citywide.

I turn to other outstanding issues. Obviously, our concerns would be addressed if the promoter were to accept an alternative on-road alignment. Failing that, we seek the amendments to the bill and the mitigations that I will outline. On construction noise and vibration, we wish to ensure that the code of construction practice will be binding on contractors and that monitoring and enforcement of its provisions will be undertaken. Adequate steps to ensure the independence of the monitoring should also be put in place.

On operational noise, vibration and hours of operation, we have asked that the bill enforce stricter limits than those that are proposed on the increase above baseline noise. We wish speed restrictions to be imposed in the evenings to reduce noise further and night operation to be forbidden. The disturbance at that time, which will be greater than during daytime or evening, was not assessed as part of the promotion of the scheme. Our view is that that is an ECHR concern. We also wish there to be independent monitoring and enforcement of noise mitigation levels.

On privacy, security, vegetation and visual impact, we are concerned at the impact of loss of vegetation. We wish the commitment that has been expressed to be confirmed in documents and a process put in place for monitoring and enforcement of the maintenance of vegetation. We also heard, during cross-examination, the offer made to give a commitment to the reinstatement of vegetation. We want that commitment to be extended to monitoring and enforcement.

We remain concerned about the issue of emergency vehicle access.

On compensation and values, we would like to hold TIE to the pledge that it made at the public meeting in June 2003, which was described earlier today, that there would be no financial loss. Many people may not have objected to the tram scheme on the basis that they were told that they would be fine and that there would be no financial loss for anybody.

We agree that the existing drainage is a problem, and we hope that the matter will be properly addressed.

On environmental mitigation—this deals with the built heritage, ecosystems and the landscape and habitat management plan—we would like an independent watchdog. We would also like a finalised LHMP to be brought to local groups for approval. We would like the bridges and Coltbridge viaduct to be protected. We would like badger mitigation to be the best that it can be, with continual monitoring. Questions need to be answered about the LHMP. Whose responsibility is it? How much will it cost? Whose budget will it come from? Who will maintain it? We also want an obligation put in place that work to mitigate visual blight will be done with local residents.

We believe that there will be an irrevocable loss of human amenity for which there can be no mitigation or compensation. In our early submissions, we asked for new parkland or recreational space for our community to be made available or identified, but we have heard nothing about that from the promoter.

Overall, we would like local agreement to any new accesses, and we would like best practice in relation to DDA compliance to be followed, so that the accesses are not merely adequate. As far as I am aware, the new accesses will not all be DDA compliant, despite the promoter's claims to the contrary.

On speed and safety, we seek reassurance that the Roseburn corridor will not become a segregated railway corridor with a path bounded by concrete structures. The design manual must take on board the particular sensitivity of the Roseburn corridor. We seek a speed limit of 20mph for safety reasons, in preference to high barriers, to ensure that vulnerable people can still use the corridor. We do not dispute the seriousness with which safety is treated by the promoter; however, we are concerned about the design requirements that will lead from those safety requirements.

The Convener: Well done. Phil Gallie and I were debating whether I should give you a minute's notice. I said that I was sure that you would manage, and you surpassed my expectations. Thank you.

That concludes oral evidence taking from group 34. I propose that we take a five-minute break, on the basis that that will give Kristina Woolnough the chance to draw breath before we move on to group 45.

16:12

Meeting suspended.

16:21

On resuming—

The Convener: If Ms Woolnough is ready, she will address her rebuttal witness statement on the issue of construction impacts, for group 45.

Kristina Woolnough: We believe that there will be a permanent impact on wildlife because of construction. We wish to seek clarity on the relationship between the code of construction practice and the landscape and habitat management plan. We are concerned about whether there will be restrictions on working hours as per SNH construction guidelines when the work is taking place around badgers. We are also concerned about the impact of construction compounds on badgers and wildlife movements during construction, and about the noise impacts.

We rebut Mr McIntosh's notion, which he makes in point 5.1 of the promoter witness statement, that tramline 1 is a "major public work".

The Convener: Thank you.

Malcolm Thomson: I have no questions.

The Convener: Do committee members have questions? No, they do not.

Does Ms Woolnough have any closing remarks?

Kristina Woolnough: No.

The Convener: That concludes oral evidence taking on group 45.

We now move to closing statements for the group. I repeat that we have agreed that the promoter in each group will be given 10 minutes in total to present their closing statement. Of that 10 minutes up to five should relate to the alternative route and the remaining five should be used to address any other issue that has arisen in written or oral evidence.

Malcolm Thomson: The group 45 objectors have objected to the use of the Roseburn corridor. They have proposed and given evidence on an alternative route that goes along Crewe Road South, Queensferry Road and Queensferry Terrace, through the grounds of the Dean Gallery, across the Belford bridge and along Douglas Gardens, Palmerston Place and either Eglinton Crescent, in which case it would terminate at Coates Gardens, or Grosvenor Crescent, in which case it would terminate at Rosebery Crescent.

I have already made remarks about the route selection process in submissions in relation to group 33. Those submissions are equally applicable to the current group and I do not propose to repeat them.

The first reason for preferring the Roseburn corridor is cost. The Roseburn corridor route is likely, in the professional opinion of the promoter's witnesses, to be cheaper than the group 45 option, which involves crossing the Belford bridge. The cost reflects many factors other than the substantially greater length of the section of route in question. For example, there are very few utilities under the Roseburn corridor, there are no steep gradients to contend with and construction costs would be less than for any on-road alternative.

Because the line is separated from vehicular traffic and is off-road, a quicker run time can be achieved without impeding road traffic at the Crewe Toll roundabout in the way described by Mr Turnbull at columns 811 to 812 of the *Official Report*. For the same reasons, the service is less liable to delay, is more predictable and is more likely to tempt people out of their cars.

The route also meets the council's aspiration to increase social inclusion. The amount that can be achieved is inevitably a balancing exercise, but the Roseburn corridor route provides better access to Haymarket station and from there to employment

centres that are otherwise out of reach. Although the route proposed by group 45 would serve Haymarket station, it would not do so as conveniently as the Roseburn corridor option.

Because of the quicker run time and greater reliability, as well as the direct access to Haymarket station, it is likely, in the professional opinion of the promoter's witnesses, that better patronage can be achieved by using the Roseburn corridor than any other option that has been considered. I refer to Mr Buckman's rebuttal at paragraphs 2.9 to 2.12. That brings one back to the end cost. The promoter's route is not only cheaper to construct; it is more likely to be economically sustainable in the future.

Although it is accepted that the Roseburn corridor route has a greater impact on the natural environment than would the group 45 option, the latter would have a greater impact on the built heritage, particularly on a number of listed buildings around the Belford bridge and on substantial parts of the world heritage site that are otherwise comparatively secluded. In any event, the ecological impact on the Roseburn corridor, which can and will be mitigated, is outweighed by the other benefits.

There are particular issues relating to group 45. I will start with the mitigation of the impacts on badgers and vegetation. The environmental impact can and will be mitigated. The cost of the mitigation has been estimated and included in the estimate of expense already submitted to the committee. I refer to Ms Raymond's evidence at column 868 of the *Official Report*. A landscape and habitat management plan—the LHMP—has been prepared, and will evolve as the detailed design is progressed. A badger mitigation plan has also been prepared. It will form a confidential annex to the LHMP. The promoter is consulting and working with SNH in respect of both those documents. As a result, SNH has withdrawn its objection to the bill.

The promoter has consulted ELBG in relation to the badger mitigation plan and will continue to do so. The committee has heard evidence of instances where mitigation has been changed as a result of such consultation. I refer to Mr Coates's evidence at column 1356 of the *Official Report*. In addition, the Protection of Badgers Act 1992 will apply.

An amendment to the bill has been proposed. I refer here to promoter's response 8, which is in committee paper ED1/S2/05/19/22. The LHMP will require to be approved by the planning authority prior to any works commencing. The planning authority can also take the necessary enforcement action in the event of any breaches.

The promoter's witnesses have conceded that the Roseburn corridor will be altered. However, it is the promoter's evidence that the character of the Roseburn corridor as a wildlife site can be retained. The Roseburn corridor is clearly a walkway and cycleway, and is not a park. There is no planning evidence to suggest anything different. I refer to the witness statement and rebuttal of Ms Grant. A 3m walkway and cycleway will be provided, which is the same width as the current walkway and cycleway. Given the number of users, which, from the objector's own figures, is only 1,000 per day, there is no need to provide anything wider. I refer to Gary Turner's rebuttal to Ms Woolnough at paragraph 3.10.

Although it is conceded that some categories of users might not use the Roseburn corridor following the introduction of the tram, it is submitted that it will still be used by a large number of people—using the cycleway and walkway as well as the tram itself. I refer to Mr Turner's rebuttal to Ms Woolnough at paragraphs 3.6 to 3.9. That is especially the case given the commitment to ensure that all new accesses are DDA compliant. Mr Harries's evidence at column 1420 of the *Official Report* in relation to acclimatising and raising the awareness of users of cycleways should also be remembered.

In conclusion, although the promoter understands and appreciates group 45's concerns, it is submitted that the benefits of using the Roseburn corridor would be lost if the group's alternative alignment were used. Although it is accepted that the Roseburn corridor has a greater impact on the natural environment than the group 45 option, it is submitted that the impact of using the Roseburn corridor can and will be satisfactorily mitigated.

With the two or three minutes in hand, I wish to express my agreement—for once—with both Alison Bourne and Tina Woolnough in expressing the promoter's gratitude to the members of the committee for their time and care in attending to the evidence that has been led at this stage, and to the officers and members of the private bills unit for their labours, which have enabled the smooth running of the process. Finally, I am grateful to whoever had the kindness to provide tea and biscuits on those memorable days when we had to sit after 5 o'clock.

16:30

The Convener: That was all achieved within the allotted time. I now invite Ms Woolnough to make any closing remarks she might have. Ms Woolnough, you have up to 10 minutes.

Kristina Woolnough: I have a very short closing statement. On behalf of group 45, I

reiterate our thanks to the committee and the private bills unit clerks, who have picked us up and dusted us down on many an occasion on the telephone. I offer our sincere apologies for the times when we fell apart.

Group 45 is acting on behalf of the users of the Roseburn corridor and of members of the friends of the Roseburn urban wildlife corridor association. The association works to protect and enhance the corridor for human and wildlife users. Our members now number more than 200 people.

We endorse the summing-up comments made by groups 34 and 33, and those of the other groups who have given closing statements today. Group 45 submitted a range of alternative alignments to highlight the cursory manner in which the promoter's route selection process was undertaken. We do not accept that the run-time argument is proven or persuasive. It is certainly not conclusive justification for using the Roseburn corridor. There are so many unknowns—bridges, construction, badgers—that there is no way that a case has been put that will persuade us that the Roseburn corridor should be used for the sake of run times.

We remain of the view that the Roseburn corridor was not retained for light rail in any statutory plan and that this parliamentary process is the first and only time that the public has been able to examine the proposal in a statutory context. It is unfortunate that the promoter did not maintain an up-to-date central Edinburgh local plan through which the current issues of disagreement could be examined and, perhaps, resolved.

We are also of the view that on-road alignments are more visible. As is obvious, we have advocated on-road alternatives. We believe that the evidence from the promoter's environmental consultant confirms a preference for avoiding the use of the Roseburn corridor, and we hope that our evidence taking and giving about the Roseburn corridor has made the viability of alternative on-road alignments worthy of proper and full examination. The environmental statement should have robustly examined at least one other alternative route.

The promoter has argued that the flora and fauna surveys that it undertook were adequate. We do not agree. Much more can and still needs to be done—certainly on a seasonal basis—if the project is to go ahead.

We welcome the inclusion of the landscape and habitat management plan in the bill, but we are concerned about the content of its finalised version, the costs of the mitigations within it, and the issue of maintenance and responsibility for maintenance. To that end, we would like an

independent watchdog to monitor the LHMP before, during and after implementation. We would also like the agreement of local people and representative groups to be sought before completion of the finalised version.

We heard that the Edinburgh and Lothians badger group does not think that the impact on badgers can be mitigated.

On the built heritage, we ask that the bridges that are considered to be worthy of listing by Historic Scotland are protected and that the views and vistas along the corridors, as well as its unique character, are factored into the design manual as being worthy of protection and enhancement.

On human amenity, noise and vibration, having considered the promoter's evidence, we are of the view that no meaningful mitigation is possible for the loss of human amenity on the corridor. Trams travelling every three and three-quarter minutes at speeds of up to 50mph will render the corridor extremely unattractive for amenity users. It will impact on walking and cycling, and we believe that that is contrary to national policy guidelines on the most sustainable form of travel that there is. Speed reduction might partially soften the blow, but the introduction of motorised traffic to a traffic-free linear park will, as the promoter's witnesses have conceded, despoil the ambience permanently.

We believe that 1,000-plus users per day of the Roseburn corridor is a considerable figure. Those users were counted only at certain points and it might be that a lot more people use the whole length of the corridor.

In summary, we believe that the Roseburn corridor should not be used for tramline 1. Tramline 1 will impact on the built heritage all over the city. More than three quarters of the route goes through conservation areas and the world heritage site. We have scant green public space in our area and this particular green public space is used by people from far beyond our community. We want to preserve and protect it. Again, our understanding of national guidelines and the general ethos of current political will is that community green space should be protected, preserved and enhanced. As a group, the friends of the Roseburn urban wildlife corridor association will continue to work to achieve our objective.

Overall, we believe that the impact of the tram cannot be satisfactorily mitigated and that many of the impacts cannot be mitigated at all. That is why we continue to advocate an on-road alternative alignment. Thank you.

The Convener: Thank you, Ms Woolnough. That concludes oral evidence taking on group 45.

I echo the comments made by objectors and the promoter, and offer my interim thanks—interim only because the committee has to carry on from here—to the clerking team, broadcasting, the official report and security. After all, we have been here on quite a few late evenings and that is above and beyond the call of duty. I thank everyone just now, but I hope that they will keep on with us as we continue with the rest of the bill.

Equally, I expect that the members of the committee will want to echo my comments in thanking the promoter's representatives, the promoter's witnesses, many of whom we have heard from at some length, the objectors' representatives and the objectors' witnesses.

I want to pay particular tribute to those objectors who have come from households. I recognise that the degree of complexity—let alone the volume—of the information that you have had to consider must have been particularly daunting, never mind that you have had to come before a parliamentary committee. I hope that we have not been too daunting. I am grateful because you are doing it as volunteers in your own time. We have been very impressed by the amount of work that you have done.

Someone not far from here was overheard to say that they are looking forward to spending Christmas with their family. The committee would certainly echo those comments, but do think of us when our work continues next week and into the new year.

That concludes the public part of our meeting. We now move into private to consider today's oral evidence. Members will recall that we agreed to meet in private at the end of each oral evidence-taking session to enable the committee to consider the evidence that it had heard. It will greatly assist the drafting of our report at the end of phase 1 of the consideration stage.

16:37

Meeting continued in private until 17:12.

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