



# **HOUSE OF ASSEMBLY**

## **PUBLIC WORKS COMMITTEE**

### **CROSS ROAD AND FULLARTON ROAD INTERSECTION UPGRADE**

Old Parliament House Chamber, Old Parliament House , Adelaide

Thursday, 10 December 2020 at 9:55am

BY AUTHORITY OF THE HOUSE OF ASSEMBLY



**WITNESSES**

DULUK, SAM, Member of Parliament..... 1

MANIFOLD, MATTHEW, Managing Director, Mammoth Movers..... 1

RANDER, MICHAEL, Project Manager,  
Department for Infrastructure and Transport ..... 1

WHELAN, JON, Executive Director, Transport Project Delivery,  
Department for Infrastructure and Transport ..... 1



## MEMBERS:

Mr D.R. Cregan MP (Presiding Member)  
Hon. A. Koutsantonis MP  
Mr S.P. Murray MP  
Mr J.K. Szakacs MP  
Mr T.J. Whetstone MP

## WITNESSES:

WHELAN, JON, Executive Director, Transport Project Delivery, Department for Infrastructure and Transport

RANDER, MICHAEL, Project Manager, Department for Infrastructure and Transport

DULUK, SAM, Member of Parliament

MANIFOLD, MATTHEW, Managing Director, Mammoth Movers

1 The PRESIDING MEMBER: I open the inquiry into the Cross Road and Fullarton Road intersection upgrade and note that our witnesses are continuing. As our witnesses are aware, the Public Works Committee is a standing committee of the Parliament of South Australia and its powers and functions are set out in the Parliamentary Committees Act. You would have received a document that sets out your obligations to the committee; have you received it?

Mr WHELAN: Yes.

2 The PRESIDING MEMBER: Do you understand your obligations?

Mr WHELAN: Yes.

3 The PRESIDING MEMBER: Please proceed.

Mr WHELAN: Thanks again, committee, and I will make a presentation here this morning on the Cross Road and Fullarton Road Intersection Upgrade. Cross Road and Fullarton Road are located approximately five kilometres south-east of Adelaide's CBD, adjacent to the University of Adelaide's Waite campus, Urrbrae High School and the suburbs of Urrbrae and Kingswood. Cross Road does form part of the Outer Ring Route; it is a major traffic and freight route. Fullarton Road forms part of the inner ring route and is a major traffic route. Both Cross and Fullarton roads have a high frequency of public transport.

The intersection is currently at capacity and experiencing travel time delays in peak periods. An average of about 52,500 vehicles a day pass through this intersection, and during the period between 2015 and 2019 there were 35 recorded crashes at this location. The project will improve travel time savings, safety for all road users and give more reliability to the network, giving additional through lanes and also right-turn lanes. The existing layout, at the top of the screen is Fullarton Road into the city; the bottom, going up to the Hills. The Gatehouse is on the right bottom corner. It is very narrow, only the single left-turn lane coming from Cross Road into Fullarton Road heading south.

The proposed treatment is a bit difficult to see there, but additional through lanes on Fullarton Road and actually providing back now the two right-turn lanes going from Cross Road into Fullarton Road. They currently operate only as a filter and are banned in peak hours of traffic. A dual left-turn lane from Cross Road going south into Fullarton Road and widening the intersection is providing more capacity and more lanes. A few other minor changes provide some shifting to the bus stops and a better access in there at the Waite University grounds.

Early works are expected to commence in the second quarter of next year; main works are expected to commence in the third quarter of 2021. The upgraded intersection is expected to be open to traffic in the fourth quarter, with the project completion expected late in 2022.

What I would like to bring to the committee's attention is that in order to deliver this project there were a lot of competing needs, and particular concern was around the Urrbrae Gatehouse. With all the conditions we took into account, property acquisition impacts, unfortunately the Gatehouse is not feasible to be retained. The widening of Cross Road and the inclusion of the dual left turns, also allowing for additional lanes through the intersection, directly impact the gatehouse. We did get a lot of work done through our heritage consultants. We looked at three options:

- demolishing the Gatehouse: we acknowledge that will remove its cultural heritage value;
- deconstructing the Gatehouse and rebuilding it in a new location: this will remove all its cultural heritage value; and
- relocating the Gatehouse as a whole building: this will also decrease its heritage value due to the loss of its setting and its historic context. Relocation would also have some direct and significant impacts there to some regulated and scientific trees within the Waite Arboretum.

Those were some of the issues that we were taking into consideration. In addition, we did look to widen on the northern side of Cross Road. That would have meant that we would have taken an additional 18 peoples' homes—in effect, it was also about seven partial acquisitions and also the potential likelihood of the demolition of the high school gymnasium.

Through our FMG Engineering consultant, we looked at a high feasibility assessment of moving the gatehouse. In their report, which is on the department's website, it talks about the significant risk of compromising the structural integrity of the building, even with extensive mitigations in place, and with that there will be no guarantee of success. It requires a substantial amount of engineering controls and is likely to result in additional cracking and issues to the existing inside of the building—ceiling and plaster—and result in impacts to a number of significant trees within the Waite Arboretum. The government has committed \$2 million to SA Heritage and the community to invest in other opportunities of state heritage assets in the immediate area.

Here are some photos we would love to show to the committee. You will see that inside the building it is actually quite dilapidated. A lot of the ceilings have had to be propped, and there is a lot of degradation of the plaster. It's a bit hard to see, but there's some cracking on the outside of the building as well.

In May 2020, Mammoth Movers provided the department with a quotation to relocate the gatehouse. The quotation did include a significant number of exclusions, which would be a cost to the taxpayer and to the department. I have listed some of those exclusions there; they are not exhaustive. There was a lot of work that had to be done prior to Mammoth Movers coming in. Mammoth Movers did not make any offer to bear all risks of the move in their quotation. In fact, it would appear as if their licence for moving, whilst appropriate to move the building, would not give them the licence to undertake any repairs or actually do the earthworks associated with this move.

It would be normal circumstances for the department to engage a single head contractor to undertake projects of this nature. Most likely, it would have to be a contractor with a building licence who could undertake all that preparatory work and post work. The estimated work of the exclusions is in excess of \$3 million.

What I am showing in the photos is an extract from the Mammoth Movers methodology, which shows a yellow area that we have to excavate around the existing gatehouse—so roughly 15 metres from the edge of the building. As you could appreciate with the machinery, to be able to do some of that excavation you would have to go slightly outside that area. In addition to that, on the right-hand side of that slide, which is again an extract from the methodology of Mammoth Movers, it shows some other areas that would be required for laydown, stockpiling, etc. This would have an impact to the existing vegetation of the Waite Arboretum.

4 Mr MURRAY: Sorry, Jon, can you go back to that slide. Am I to take it that option A and option B indicate a proposed relocation of the gatehouse?

Mr WHELAN: Correct.

5 Mr MURRAY: Who chose those sites? Was it Mammoth Movers, or were they given some indication as to what would be an acceptable site?

Mr WHELAN: My understanding is that the design and planning team met on site with Mammoth Movers. There was an open discussion around the alignment to take the building, although we did rely on the expertise of Mammoth Movers in that case. The actual location of the final spot of the building was done in consultation with Heritage SA. We took their advice on where it could be located so that it still had some heritage context.

The actual final location of the building was done with Planning, while the actual location directions, or the move directions, that were taken were done in consultation, using Mammoth Movers' expertise in this case. Those other areas, which talk about option A and option B for laydown areas and stockpiling of the site, come direct from the Mammoth Movers methodology report.

6 Mr MURRAY: Do you know if there was any consideration given to moving the gatehouse across Fullarton Road to the vacant spot immediately in front of the high school?

Mr WHELAN: I'm not aware of that, but my understanding from Heritage SA is it needs to be in a context that still reflects the location of the corner to represent the gatehouse opportunely where it originally was.

7 Mr MURRAY: Just to be clear, for what it's worth, if anything, what I'm referring to is the opposite side of the road. It's the same corner, which was part of the Waite area. It has no significant trees and has a substantial amount of flat space with very little in it.

Mr WHELAN: That wasn't the advice we received from Heritage SA, to look at that location.

8 Mr MURRAY: I appreciate that being the case.

Mr WHELAN: The other thing that would be important for the committee to note is that back in the early 1960s, whilst it wasn't called the department then, there was some road widening done. It took away the gates themselves and the wall. In the heritage report, it did say that we had actually taken away a fair portion of its heritage value at that time in the early 1960s, before my time.

9 Mr WHETSTONE: If you are looking at option A and option B, let's say there was consideration given to moving the building. What works would have to be put in place, such as tree removal of any of those older trees? Obviously, to move a building of that size, do you have to detach any of the building as it currently stands?

Mr WHELAN: Yes, you would. If I go a little bit further, could I go back to that question, member for Chaffey? If I go on a bit, some of the next few slides have a little more detail in there. We have taken a snapshot of the vegetation. The labels on there are where they labelled the trees and species as well. As you can see, if you look to the reflection of the previous slide and that slide, there would be an impact to vegetation.

If I go to the next slide, on the right-hand side you will see there is a blue line and a red line. They were the two directions that we worked on collaboratively with Mammoth Movers, as I am advised by our planners. They were the two routes we could take to relocate the building. What we have tried to do, and it is very difficult because we need to get the exact areas, is look at the impacts to vegetation on there. As you will see on the slide, up to 15 of what we dictate as either heritage or of scientific significance would be affected, then there are also some numbers around the 50s and 60s of other vegetation that would be impacted.

If I keep going to the University of Adelaide, this was a direct extract from Swanbury Penglase, the heritage architect. The Urrbrae gatehouse has been vacant since about 2010 when it was last used as a residence. The university has since struggled to find an appropriate use for the building given its small floor area and remoteness from the remainder of campus activities and services. Notwithstanding this, the university has made considerable investment over the past five years to conserve the structure, noting that—I did show you the photos—the inside is quite dilapidated.

The university representative indicated that an option to relocate the building to a location nearby does not improve their ability to find a new use and expressed a preference for the whole demolition of the gatehouse over relocation. The structure does not have integrated footings, and there are no movement control joints. Soil compaction and vibration from road use has been found to have contributed to structural movement observed in the building. Road noise also affects the use of the building.

So it is understood from officials from the University of Adelaide when they had meetings with our planners, Jacobs, that they did not at that time object to the demolition of the gatehouse. If I then go back to the member for Chaffey's questions, would you like to ask those again, or have I covered it?

10 Mr WHETSTONE: We understand that a significant number of trees would have to be moved. I don't know whether this is a question for you or for Mammoth Movers: would you have to construct a pathway to move a building of that size?

Mr WHELAN: Correct. That was one of the exclusions in the issues Mammoth Movers provided to us. I can take the committee through some of the exclusions. It was exactly that, member for Chaffey: to undertake any preparatory works excavating around the building; preparatory works of the road surface or surface that that building had to be transported on; and they had to do the foundation on which the new building would go. As I said earlier in my evidence, we have estimated those costs to be in excess of \$3 million.

Again, as I said, we would normally engage a head contractor. As I said, my understanding and the advice we have received is that whilst Mammoth Movers have the licences to move the building, they do not have the licence to do all the preparatory work or the repairs, which would mean we would need to engage somebody to be over the top of those and be a subcontractor, and with that risk profile there is likely to be additional costs on that for a head contractor to take those risks.

11 Mr WHETSTONE: Would the preparation works for the house be undertaken by your department or Mammoth Movers? Have they given you an inclusive quote on relocating the building but not the preparatory works?

Mr WHELAN: They have only given a quote to move the building. For all other works they have provided—and I am happy to give the committee an exhaustive list—everything other than picking the building up and moving it to its final location would be at the cost of the state. There is an extensive amount of conditions including, like you said, preparing the road; decommissioning services; any damage to existing service would be at the state's cost; all the excavation around the building would be at the state's cost; and preparing a foundation for the building to go on would be at the state's cost.

Also, removing the vegetation; getting permits or the allowance to get machinery from interstate or overseas (and the COVID); any demolition to the existing structure itself like there are some bits in there that have to be removed; there's removing obstacles around the buildings; terminate—provide written clearance to allow them to access the property; remove all rubbish; install all compliance site amenities, toilets and crib rooms; and then undertake all the necessary repairs, and in there they took no risk on the existing structural damage to the building itself.

12 Mr WHETSTONE: So the taxpayer forks out for any structural damage. Preparatory work would be things like chimneys, wet areas, that type of thing?

Mr WHELAN: Yes, and there are some exclusions in there. Maybe some of these questions are best answered by Mammoth Movers, but there are a lot of issues where chimneys have to be removed and there would be no wet areas. There are a lot of issues around the risk of stuff happening inside the building on the shift. FMG noted a lot of salt damp in the building, and that would have to be repaired, and it was noted that would have to be repaired before it would be moved. That would have to be undertaken by the state.

13 Mr WHETSTONE: Is there any asbestos in the building?

Mr WHELAN: I haven't checked the asbestos register but, to my best knowledge, I don't know if there is. But I don't think there is; it should have been on an asbestos register. If we find asbestos on a site, my experience is that there could be asbestos within the immediate area. As we



do on a lot our projects where there is excavation, we find asbestos and it has to be dealt with appropriately.

14 Mr MURRAY: A couple of quick questions: you were quoted as providing an estimate to another committee meeting of \$900,000 plus or minus. Just to be clear, was that simply for the move?

Mr WHELAN: In the Budget and Finance Committee on Monday, I was asked a question about the quote cost. In that hearing, I said it was around about \$900,000 plus or minus 10 per cent. It is \$894,000 plus or minus 10 per cent, and that does not include any of the exclusions that I mentioned earlier, so it is purely pick up, move and position.

15 Mr MURRAY: Pick up and deliver cost. On page 7 of the proposal before us, we have an all-up cost of \$61 million of which \$41.41 million relates to land acquisition costs. You have a variety of homes on the northern part of Fullarton Road, including the large place we can see there on the top left-hand side which you would compulsorily acquire and, I think from memory, seven or eight other properties.

I am interested to know what those other properties are, but before we go there, am I right to assume that there is a value provided by the state to the university for the gatehouse? My presumption is you are going to compulsorily acquire the land and/or the property of the gatehouse itself and compensate the university for that. If the answer to that is yes, how much are we as a state effectively playing for the building and the land?

Mr WHELAN: There had to be a change by parliament of an act to actually undertake that acquisition, as you are likely to be aware. That part of that process—whilst we have had discussions with the university about the land and they have been aware for a considerable period of time, as early as 2019, that we will be looking at land in the immediate area—we would then have to negotiate, as we do with normal land acquisition around those bids. So I do not have that information; I would be happy to take that on notice.

16 Mr MURRAY: Is it fair to assume that there will be a value ascribed in the \$41 million to that land and/or building? We are presuming you are not getting it for nothing.

Mr WHELAN: It is likely that it would be taken into effect in the purchase and compensation of the land, yes, but it's not my area, so I would have to take that on notice and ask our property people to provide that to the committee.

17 Mr MURRAY: Do we know what the other properties are as yet, on the north-western corner of that slide?

Mr RANDER: Essentially, we have the Urrbrae Agricultural High School where we will take some land from the south, but, then moving to the north, there is a full acquisition of the plot on the corner, the large white house. There is a partial acquisition of the vacant land next to that white house there, as we have worked with that owner.

18 The Hon. A. KOUTSANTONIS: A full acquisition?

Mr RANDER: A full acquisition as we impact the dwelling of the house itself. We have to take that property because once we take that—

19 Mr MURRAY: That's 499 Fullarton Road, from memory.

Mr RANDER: Correct.

20 Mr MURRAY: So you are going to take land to the west of that—

Mr RANDER: Yes.

21 Mr MURRAY: —and also to the north of it?

Mr RANDER: That's right, yes. Unfortunately, the way the design is and what we need for the design, we have to take the land and impact that dwelling, so we need the full acquisition there, whereas the next property along where it's vacant—and we are working with the property owner on that one—we can take a partial and provide them back the land balance. Then, moving on, there are three townhouses that are impacted. Again, because dwellings are impacted, those are full

acquisitions. Then, just to the south of Euston Avenue, there are a number of units that are impacted and we will also acquire those, and then just to the north of Euston Avenue, there are another two properties that will be for full acquisition.

22 Mr MURRAY: How many properties, just to be clear, with this proposition, are you acquiring, including the gatehouse?

Mr WHELAN: From my notes, there are 14 properties affected: nine fulls, and five or so partials.

23 Mr MURRAY: Do the nine fulls include the gatehouse or is that a separate consideration?

Mr RANDER: That's a partial acquisition on the university land.

24 Mr MURRAY: That's one of the partials?

Mr RANDER: Yes.

25 Mr MURRAY: And the land shaved off from the high school is a partial as well?

Mr RANDER: It's a partial acquisition, also.

26 Mr MURRAY: The alternative, in the event that the gatehouse is retained, 18 properties are, as I understand it, immediately to the north of the gatehouse; is that right?

Mr RANDER: Correct.

Mr WHELAN: I think it's important that there would have been 18 additional full acquisitions of properties—people's homes—seven partial acquisitions and the likely demolition of the high school gymnasium, the way the geometry of the road is, to get it back. I think the other important thing is there was some quite significant vegetation, which is why we went in this area rather than taking any more vegetation in and around these locations.

Mr RANDER: Correct. This design does attempt to minimise the impacts on the vegetation and the Arboretum by widening on the western side of Fullarton Road and also making use of the somewhat vacant land that is the school land where we can have the opportunity to essentially impact that and fix it up.

27 Mr MURRAY: While you have the cursor there, how much of the south-western corner are you taking in practice? That is essentially now a series of shrubs and flat, vacant land—

Mr RANDER: That's right—

28 Mr MURRAY: No trees at all.

Mr RANDER: Yes; we have pushed the design as far as we can in that direction.

29 Mr MURRAY: To my country-educated eye, it looks like an ideal place to drop a gatehouse on.

Mr RANDER: There are basketball courts and tennis courts there as well.

30 Mr MURRAY: Yes, exactly.

Mr RANDER: There are a number of things that would have to—

31 Mr MURRAY: An ideal place to drop a gatehouse on.

Mr WHELAN: As I mentioned earlier, the other issue we would have is that road noise affects the use of that building but also the vibration from heavy vehicle traffic affects that building, so moving it too close to the road has that risk as well.

32 The Hon. A. KOUTSANTONIS: I hate to do this, Mr Whelan, but I am going to have to. Did you say to the committee earlier that the destruction of the original gatehouses that were on there lower the heritage value of the building?

Mr WHELAN: When we had done some work in the early 1960s, whatever the department was called then removed the gates themselves—

33 The Hon. A. KOUTSANTONIS: And that lowered the heritage value. Did you also say to the committee that moving it to a different site would lower the heritage value of the building?

Mr WHELAN: I will go to that slide. They were the three scenarios we looked at. Demolishing the gatehouse removes all of its cultural heritage value. Deconstructing the gatehouse and rebuilding it in a new location will remove all cultural heritage value. Relocating the gatehouse as a whole building will decrease the heritage value.

34 The Hon. A. KOUTSANTONIS: So the department has gone for the demolish option rather than the minimal option.

Mr WHELAN: Balancing everything into account and taking into consideration the evidence I have given to the committee that we had a quote purely for moving it and the substantial amount of exclusions and the high risk from what was done in the FMG report is—if I take just the exclusions is valued over \$3 million. The risk of this building being moved and not being successful—of additional costs—was taken as too great a risk, which is why the government has made a commitment for \$2 million to spend on other heritage values in the immediate area which are currently being used, whereas the gatehouse hasn't been used for 10 years and is quite dilapidated inside.

Then there is a whole range of issues where the university has said it is unlikely they would find a use for it. So balancing all those challenges up, whilst it is devastating to ever affect any heritage—and I think it is important for the committee to note that we will need to go through the state commission assessment development panel and all those sorts of things—the department's recommendation to government for this project is to demolish the gatehouse.

35 The Hon. A. KOUTSANTONIS: I want to ask a question about process? When did the department decide it was not feasible to move this building?

Mr WHELAN: It's only relatively recently. I'm in the delivery side. There is a planning area of the department that does a lot of that investigative work. Michael and I have handed this project over in the last few months from some further work there. We went down a path of looking at relocating. We wouldn't have gone to the effort of doing a whole heap of investigative work, but I would say it would only be within the last three months or so that—

36 The Hon. A. KOUTSANTONIS: Three months?

Mr WHELAN: Only since I've got the project and then looked at all of that risk profile and done some further work, then it is taking us to that. We didn't make any recommendation to government until only in recent weeks.

37 The Hon. A. KOUTSANTONIS: So the department internally looked at this for the last three months, and in the last few weeks you have come to the conclusion that it is not possible to save this building, and you tell government. I heard your counterpart, Mr Rander, say that you couldn't move the building to the tennis courts because there were tennis courts on the school site and a gymnasium; is that right?

Mr RANDER: No, I was merely pointing out the fact that on that site there were tennis courts and basketball courts.

38 The Hon. A. KOUTSANTONIS: And the department wants to keep those available for the school?

Mr RANDER: As Jon said earlier, it's my understanding that Heritage SA suggested that it was placed on that side of the road and it was not looked at on the other side of the road.

39 The Hon. A. KOUTSANTONIS: But the department's intention is to try to maintain the school infrastructure as is?

Mr RANDER: We would have to maintain the school infrastructure in consultation with the Department for Education as to what they need on those grounds.

40 The Hon. A. KOUTSANTONIS: Regarding the legislation that was passed in the house, the former minister obviously gave a number of reasons. Are you aware of all those reasons that the minister gave to the parliament?

41 The PRESIDING MEMBER: The witness isn't required to speak for the minister, but he can provide evidence as to the department's processes.

42 The Hon. A. KOUTSANTONIS: It seems to me that every time the opposition asks a question you are very quick to interrupt.

43 The PRESIDING MEMBER: No, that's not correct. You have just asked 15 questions without interruption.

44 The Hon. A. KOUTSANTONIS: I have asked two.

45 The PRESIDING MEMBER: Ask a question that is permissible and you will be allowed to ask it.

46 The Hon. A. KOUTSANTONIS: I am asking. Are you aware of what the parliament was told about what would happen with the construction of this intersection?

Mr RANDER: No, I'm not aware.

47 The Hon. A. KOUTSANTONIS: Was the department aware of what the minister told the parliament would occur when this intersection was upgraded?

Mr WHELAN: That's not a question we can answer. That information that goes to change that act comes from a different area within the department. We are happy to take that on notice, but I think what Michael was trying to say is that—and I put the slide up there—my understanding is that the advice from Heritage SA was that this was the most preferred location to move the building and we have abided by that Heritage SA advice.

Notwithstanding the location, what I have tried to point out to the committee is that in relocating the building, whether it be there or whether it be in the high school grounds—and you would assume the price is very similar—all the pre-work and post-work is in excess of \$3 million. The risk of that being not successful is also a greater risk. Weighing all those things up and taking them into account, the department's recommendation to government, whilst it's terrible that we have to make that recommendation for this project, was to demolish the building.

48 The Hon. A. KOUTSANTONIS: What's the original intention of this intersection upgrade? Is this a corridor strategy for the north-south corridor or is it simply an improvement to the intersection?

Mr WHELAN: Both the state and federal governments announced an Urban Congestion Fund. Michael and I are delivering the Urban Congestion Fund: eight intersections and two grade separations. Those announcements were done. We are doing a corridor study for Cross Road. A separate part of the department will be doing that. These intersections spread across the state are about urban congestion for road users at those locations.

49 The Hon. A. KOUTSANTONIS: So it is possible you are going to come back to this intersection again at a later date and do more augmentation to it?

Mr WHELAN: As I said, the department had its hands on this intersection in the early 1960s. We are back here in 2020-21. I would love to have a crystal ball.

50 The Hon. A. KOUTSANTONIS: From what I understand of the north-south corridor and the freight implications, ultimately you have to connect the Princes Highway to the north-south corridor. From what I have heard the local member say, ultimately Cross Road is being considered as part of the department's strategy.

The reason I give you this preamble is that I'm wondering whether there will be a grade separation at a later date that could have avoided the demolition of this building altogether. I'm just speculating. I'm not an engineer and, Jon, I trust your expertise. I'm not questioning the expertise of the department, but I'm just wondering, if we are back here in five or 10 years' time grade separating this intersection because it's the connector between the Princes Highway and the north-south corridor, whether we will be kicking ourselves for demolishing this building unnecessarily.

Mr WHELAN: I suppose I would point out to the committee and the member for West Torrens—and thank you for your confidence in me—that we actually widened Cross Road many, many years ago. I have to put my hand up that I was involved in quite a few sections of widening

back then in the late eighties and nineties. We do have a whole range of projects and corridors that, as development happens, we do have to upgrade infrastructure, and roads are important for that.

I don't want to speculate on what could come from a planning study, but even if we went to build a grade sep at this location, the experience I have around that is that you need to keep traffic moving. So you generally buy a whole range of property to keep the traffic moving, as we did with T2T. The issue we have with that is that we are back in the very same, if not a similar, location where we would have to acquire a lot more land and build the infrastructure, whether it be an overpass, underpass or maybe even a tunnel. I don't know, but it's likely that we would have impacted there regardless of a solution.

51 The Hon. A. KOUTSANTONIS: I suppose your evidence is that, regardless of any future plans, this intersection cannot exist with an upgrade and this heritage building can't coexist anymore. It's just impossible.

Mr WHELAN: Correct.

52 The Hon. A. KOUTSANTONIS: I have to say that is where I am a bit perplexed about this project. The total cost is \$61 million?

Mr WHELAN: So \$61 million is our approved budget. If you notice, in our papers it sits at around \$65 million. As we do with projects of high-level estimates, we still have to do a bit of work on that.

53 The Hon. A. KOUTSANTONIS: The discount rate you have applied for the cost-benefit ratio of this project is 4 per cent.

Mr WHELAN: Yes.

54 The Hon. A. KOUTSANTONIS: We have just had Education previously, who told us there was a new Treasurer's Instruction that the discount rates to be applied on options are 0.3, 1.5 and 2.6, varying on the level of the BCR and the periods. Can you explain to the committee why your department, in giving us a submission on the discount rate applying to projects they manage in Education, have a lower discount rate, but a discount rate applied to this intersection is higher?

Mr WHELAN: I would have to take that question on notice.

55 The Hon. A. KOUTSANTONIS: Wouldn't it perhaps show that if a discount rate were lower there would be a lot more room to spend the \$3 million that you are talking about that could potentially save this building?

56 The PRESIDING MEMBER: That, too, calls for speculation. The earlier question has been taken on notice.

57 The Hon. A. KOUTSANTONIS: What you are telling us is that, of the \$61 million budget, the \$3 million contingency that you would have to put in place to safely move this building is excessive.

Mr WHELAN: I will go back a little bit. In our current approved budget at \$61 million, we have an estimate at \$65 million. We had a price of around \$900,000 plus or minus 10 per cent. I then said that based on all those exclusions there would be an additional in excess of \$3 million with that. At the moment, we have an approved budget and we have an estimate exceeding that approved budget. I will have to go through a range of processes even to get that money.

58 The Hon. A. KOUTSANTONIS: Can you explain to me why the department is using two different discount rates on the same day in this committee?

Mr WHELAN: I would have to take that on notice, but I assume road transport may be different from that sort of infrastructure in Education. We run it through a national scheme, so I will take that on notice and provide that to the committee.

59 The Hon. A. KOUTSANTONIS: Can I ask you another question. Is there an appendix in the report that shows a contingency within the project build that you have in place, overruns and—

Mr WHELAN: With all our projects, we allow a contingency. At the moment, based on that, within our project and contract management we sit at about 1.4 per cent of the estimated

cost. Then we also have a construction contingency, which is 3.7 per cent. As with all our projects, those sorts of contingencies have a relatively consistent approach applied and are such a high-level estimate. Experience will show that these sorts of urban projects can put a lot of pressure onto projects, particularly when you don't know what you are excavating and those sorts of things—geotechnical—

60 The Hon. A. KOUTSANTONIS: What is 5 per cent of \$65 million?

Mr WHELAN: Based on what I have, we are sitting on a contingency of around \$3 million; however, we would need that contingency regardless of whether we moved the building or not. Even to that, I would prefer that to be higher than that for a project of this nature.

61 The Hon. A. KOUTSANTONIS: Because you are a good engineer. I completely understand why—

62 Mr MURRAY: He's not going to make it easy for you.

63 The Hon. A. KOUTSANTONIS: Yes, I know, and I don't like doing this to Jon because I think he's an excellent public servant. But I just also say that at your current discount rate of 7 you get a BCR of nearly 4 per cent. The BCR that you have used is higher than the department has for other projects. I put to you that if you put the discount rate at what the department is using for your other projects, it would make economic and heritage sense to move this building and build the intersection.

I accept what you are saying. The opposition supports the upgrade of this intersection, but it seems to me that it is not beyond our imagination, and an engineer of your skill and quality and expertise who has done this state immense benefit for our economy, to upgrade this intersection and save this building. If you say that you can't, the opposition will have to take you on your word because you have a reputation that deserves to be honoured. I just lay that out.

Mr WHELAN: Thank you, member for West Torrens.

64 Mr MURRAY: Can I go back to the slide that had the red squares, the one that showed the tree loss.

Mr WHELAN: That just shows the path that a vehicle moving the property could take.

65 Mr MURRAY: I am stuck on this; as I said, just bear in mind my rural education. On the photo in question, immediately below the minus sign at the top left-hand side, you can see a fairly clear green open space. This is directly across Fullarton Road. Again, I understand that there would still be a requirement for SA Heritage to come on board and say, 'Yes, that's an acceptable place to put it.' There would still be a necessity to prepare the site. There would still be a risk of the thing getting halfway across the road and disintegrating into an embarrassing pile of rubble.

There would be a whole series of preconditions but, simply in terms of looking at the open space there and, for comparative purposes, the size of the buildings in question, it appears to me there is sufficient space to make the move and, I understand, to drop the building in that open spot there. For the record, is it safe for me to assume there would be no tree loss of the sort that you describe?

Mr WHELAN: I think I will go to this slide. Based on the information we received, we would have to do a range of clearing around the existing building. When you look at that yellow slide and then you look at this slide, there will be some impact to vegetation in that sense. If you then look to having the laydown areas or stockpiling of topsoil, there is going to be increased impact. I don't know what the vegetation is in this area here or what impacts there would be and what trajectory you would take that building out of there. That would be something that you would most likely have to ask Mammoth.

66 Mr MURRAY: From what I understand, with this slide, you have described what appears to me, at least, with the red squares there, to be movement.

Mr WHELAN: The reason we selected that was there is actually an existing roadway in under there. It's in very poor form and has a lot of tree roots that are pushing up the pavement

now. We looked at that. We also looked at the straight trajectory. I am not sure which way you would take a building out anywhere else.

67 Mr MURRAY: What I am keen to understand or have clarity on is that what we are being told with this slide is that with the existing university roadway (in red) there would be a total of 46 impacts versus a direct route (shown in blue) of 60. I am presuming that what you are describing there is a loss of trees in the arboretum area as a consequence of moving the gatehouse in a south-easterly direction, as shown there.

Mr WHELAN: Correct, yes—and some of those ones to prepare the building before it gets moved.

68 Mr MURRAY: Yes, I understand that but, just to be very clear, if the building were not moved in a south-easterly direction from its present location, as indicated on that slide, but instead were to be moved directly to the west, is it reasonable to assume that the tree loss you describe in that slide, with the help of that diagram, would not eventuate at all or, if there were some tree loss, it would be constrained to the preparation around the existing site?

Mr WHELAN: It's possible. I don't know what vegetation—you have to remember that there's a whole heap of important pines that sit along this roadway edge here.

69 Mr MURRAY: I understand this is very simplistic but what I want to have the record show is that the tree loss being described here is a situation where the gatehouse is moved in a south-easterly direction.

Mr WHELAN: It could be likely but I would have to do a lot more work on that.

70 Mr MURRAY: But is that what you are describing with this slide?

Mr WHELAN: Yes. I'm describing with this slide purely the two paths that were discussed collaboratively onsite of where you could take this building.

71 Mr MURRAY: Yes, which is in a south-easterly direction.

Mr WHELAN: Correct.

72 Mr MURRAY: Which would result in a loss of either 46 or 60 trees, depending on whether you went in a sideways fashion or direct, per the blue, so that the tree loss presupposes a relocation point for the gatehouse.

Mr WHELAN: Correct.

73 Mr MURRAY: Which, as I said, in a simplistic sense, were it to be directly across the road, would mean that those trees would not be lost as a consequence.

Mr WHELAN: Possibly not that extent of numbers, but I don't know what these numbers of trees are here. They are still quite important.

74 Mr MURRAY: A light-hearted question for you, shades of *The Castle* movie: what did you do with those gates? Did you put them up the back?

Mr WHELAN: I don't know.

75 The PRESIDING MEMBER: I think that was well before Mr Whelan's time. I call the member for Waite. Member for Waite, thank you for your attendance and your assistance to the committee. We know that you are a committed advocate for heritage preservation in your community and we appreciate your evidence today. Please proceed.

Mr DULUK: Thank you for those remarks, Chair, and I thank the committee's indulgence in having me. I note we are running over time so I will keep my comments relatively brief. Chair, as you are probably aware, last Sunday the community of Waite had a very big rally on the corner of Fullarton Road and Cross Road organised with very short notice. The sentiment of that community meeting was one of dismay as to why the government would want to demolish a 130-year-old state heritage-listed building when at the same time the government's own report from FMG said the moving of that building was feasible.

I put it to the committee that the building can be moved, and also from Mr Whelan's evidence this morning that there is sufficient budget, with the \$3 million contingency fund being available to be used and, not just that, but if you add also the extra \$2 million that the government has set aside to protect other heritage assets around the state. I'm not sure how they are going to have any firm commitment to the community that the \$2 million spent on protecting other heritage will be worth anything when the government right now is proposing to demolish a heritage-listed building.

I think it has become evident from an engineering capacity that this gatehouse can be moved. I would like the department to go back and work with operators, if possible and I know—Mammoth Movers and Mr Manifold, who I believe are presenting evidence to this committee after me—that it is feasible to do this project.

As I alluded to in my earlier remarks on the other treatments within the Mitcham Hills corridor, I also think it's very important that the government or the department look at fixing the traffic issue at the Claremont and Kitchener intersection with Fullarton Road, because the crash statistics prove that it is a dangerous intersection. It's probably 300 metres from the Fullarton Road/Cross Road intersection and it really feeds into it. I fail to see why we're going to spend \$61 million to upgrade one intersection but leave a horror intersection 300 metres down the road which is used by exactly the same traffic flow from the community, schools and the like. It is essentially the southern end of the Urrbrae campuses.

Community members have asked me to present to the committee today to see if there's an alternative to the demolition of the gatehouse, whether the slip lane can be east of the gatehouse—so coming in before it—so that essentially the gatehouse is left as an island where it is, for traffic movement. Perhaps that's something the department can provide an answer to from an engineering point of view. We have seen the community speak on this. I think it's so important that government and departments do listen to the community.

The university I know have recently come out and expressed their wish to see the gatehouse stay and not be demolished as part of this acquisition. I think there was correspondence from the university to the minister to that effect last week. Obviously, the National Trust have put their view forward, as have the Mitcham Historical Society, Protect Our Heritage Alliance, the friends' groups that surround the arboretum and the gatehouse.

Of course, in all of this we have to talk about that the land that we are talking about—not only at the Waite but at Urrbrae high school as well—is all land that was gifted as Peter Waite's legacy. It is one of the biggest single bequests to the people of South Australia, and the government, members of parliament and I as the member for Waite, especially, have a duty to ensure that Peter Waite's legacy lives on not just for us today but well into the future.

That bequest is now over 100 years old. What it has become is quite a phenomenal gift to the people of South Australia, through the Waite Research Institute, through the fantastic education that we have at Urrbrae and the totality of the arboretum and its collection of over 100 trees, most of them over 100 years old. They come as a totality, and to touch one point of it destroys the totality of the arboretum in terms of its historic trees.

So I would just urge DIT to work with all engineers possible, who are prepared to have a go at protecting this site, to see what can be achieved. I think we've established that there is a budget for it, and I would be very intrigued to listen to Mr Manifold's presentation to the committee to ensure that we can get a good outcome. Mr Chair, if I can just leave you with the comments of a constituent from Meadows who contacted me this morning. She wrote this morning. Her name is Sue MacArthur.

Thanks Sam, for hopefully saving the Waite gatehouse from demolition. It brought me joy when I worked at the Waite Institute decades ago and it's continued to give me joy for its beauty, with its architecture whenever I see it. It's a treasure to our state and being heritage-listed I think the government should appreciate and support you and your supporters.

I certainly agree with Sue on that last comment. I think there is strong sentiment from all around the community that this gatehouse be preserved for decades to come. Thank you, Mr Chair.

76 The Hon. A. KOUTSANTONIS: May I ask the member a question?



77 The PRESIDING MEMBER: Yes.

78 The Hon. A. KOUTSANTONIS: Mr Duluk, how do you think your constituents will react if they learn that there is a \$2 million fund for improving other heritage in the area, \$3 million in contingency in the project and an unknown cost of the purchase of the property, which could all be used to move and relocate this property but the minister has decided to demolish this building anyway?

Mr DULUK: Thank you, member for West Torrens. As I alluded to in my opening remarks, I think the community would be most disappointed—and not just mine, but I think all across South Australia—to know that there is (1) engineering capacity to save the gatehouse; (2) there's funds and contingency for it; and (3), as I said, I think there will be very little trust in the government if there is a \$2 million heritage fund when they go to demolish another heritage building because that fund is essentially worthless. I think that will be very much the sentiment of the community, if this goes ahead.

79 The PRESIDING MEMBER: Before I call Mr Matthew Manifold, I acknowledge correspondence from the member for Waite and also from the member for Boothby. I refer to my earlier comments in relation to the advocacy from the member for Waite. In relation to the correspondence from the member for Boothby, I acknowledge her commitment to heritage preservation, her outstanding community advocacy and her request that the matter be further considered. I call Mr Matthew Manifold.

Thank you for your attendance here today. The Public Works Committee is a standing committee of the Parliament of South Australia and its powers and functions are set out in the Parliamentary Committees Act 1991. Sections 28 and 31 of the Parliamentary Committees Act identify the privileges, immunities and powers of the committee and the protection afforded to witnesses. I understand you will have been provided with a document that sets out your obligations to the committee. Have you received it?

Mr MANIFOLD: Yes, I have.

80 The PRESIDING MEMBER: Do you understand your obligations?

Mr MANIFOLD: Sure.

81 The PRESIDING MEMBER: Thank you, Mr Manifold. Do you have an opening statement?

Mr MANIFOLD: Only to say thank you for welcoming me here and for giving me the opportunity, members of the committee and Mr Chairman. I would like to use this opportunity to show you that this is (1) possible and (2) that, with further consultation between us and the department, I believe we can come to a resolution which will not only save trees but, also, I believe that the cost that's been indicated of \$3 million for additional works should be tested a little bit further because I do not believe that that's a genuine cost.

82 The PRESIDING MEMBER: Mr Manifold, I understand that you are seeking to table to the committee Mammoth Movers' response to concerns raised in the FMG report; is that correct?

Mr MANIFOLD: Yes, that's just in an attempt to address some of the concerns that I have read in the media of both the department and the minister. That's our response to the FMG report, which is an independent engineering report that was done on the relocation. That's just a direct clause-by-clause response to the issues that were identified in an effort to try to support the department to understand that this is a real option and not fairyland.

83 The PRESIDING MEMBER: Thank you. I will direct that that document be provided to members and consideration be given to it being received. Are there questions from members?

84 Mr MURRAY: I have a question: you mentioned the FMG report, which is on the department's website—and we can all peruse that—in particular, the photos of the poor state of the building interior.

Mr MANIFOLD: Yes.

85 Mr MURRAY: Have you had the same opportunity to assess in some depth the state of the building?

Mr MANIFOLD: Yes, I have been to the site. I have also been inside the building. I have seen the state of the building. As well as that, together with the department we have done some exploratory work looking at the condition and size of the existing foundations which enabled us to provide a more accurate cost for the relocation.

86 Mr MURRAY: To be very clear, you have had the opportunity to properly and fully peruse this site and the state of the building and make a considered decision, all things being equal, about the feasibility of moving the building?

Mr MANIFOLD: I am 100 cent confident in the feasibility of the building relocation—no problems with that. The only caveat I would say is that in terms of the location that was identified to us for where this building should go, that was put to us by the department. We did a walk around the site, looked at options of where we could move it and, together, we decided on the route that was shown in red on the department's presentation.

However, the importance of specific trees or individual trees was not stressed to me. If I have an opportunity to demonstrate, the technology is very flexible in terms of manoeuvrability and, if there are specific trees that are a problem, I'm quite sure we can work around it and look at alternative routes, or what have you, to significantly reduce the number of trees impacted.

87 Mr MURRAY: The proposition put to you was to move the gatehouse in a south/south-east direction, as shown on the slide which you would have witnessed previously?

Mr MANIFOLD: Correct.

88 Mr MURRAY: Either direct (shown in blue) or in a staggered manner (shown in red), with the building presumably being rotated around trees?

Mr MANIFOLD: I was engaged to look at getting it from A to B, and I—

89 Mr MURRAY: Just to be clear, the B was?

Mr MANIFOLD: That location, yes. That was demonstrated, yes. However, for example, as you mentioned before, sir, there are alternative ways to get the building to that location. For example, we could move it down the road. We could move it down Fullarton Road, and then cut in there. As I mentioned, at the time it wasn't stressed that particular trees were critical to be saved. If I have an opportunity during my presentation, I can talk through some of those particular trees that may be able to help you understand the flexibility that we've got.

90 The PRESIDING MEMBER: Mr Manifold, I understand that there is a presentation. Would you like to step us through it?

Mr MANIFOLD: Sure. Thank you for the opportunity. In the interest of time, I have passed out the presentation to you in full. I won't harbour on particular slides, because your time is precious, but basically what I would like to do is give you a quick run-down of four particular items. Firstly, I will just give you a bit of a background on the structural moving industry to give you comfort that it's a real thing, give you a brief identification of some example moves, then give you a high-level overview of the methodology we would utilise to relocate the building and, finally, in an attempt to address some of your questions, talk about our response to some of the department and minister's concerns that I've seen in the media.

Quickly, the structural moving industry in America is well established. The modern industry has been around for more than 100 years. There's a body called the International Association of Structural Movers, which has close to 400 members. All of these guys move buildings for a living.

I will flick through these. These are just some examples of buildings that are at the turn of the last century. Again, they are masonry buildings, so you can see they have been doing it for a long time. This slide just gives you some examples of the breadth of what can be done with our technology. These moves are all in America, but it's utilising the same technology that we have here in South Australia.

We can move anything. Here we have a large museum that was in a flood zone. We have here the Gem Theatre, which was one of the largest moves ever done on dollies, or rubber tyres, and then you can move tall and thin things like this lighthouse, which was saved because it was about to fall into the ocean due to erosion.

These are some examples of significant masonry moves that have happened more recently. I am not going to go through them in detail, but I will just identify that a number of these are of the same sort of heritage as the Waite gatehouse. Many of these were listed and were relocated to save them.

I have worked with all the people who have moved all of these buildings, with the exception of this one on the top right-hand side. Unfortunately, that guy died before I got a chance to learn some of his secrets. But I went over to America. I have 18 years of experience in this, and I learnt it in America before bringing it back to Australia.

These are just some of the jobs that I personally have worked on; it is a selection of them. The one in the middle is the Hornsby signal box, which was the first move done on hydraulic dollies in Australia in 2007. That was also a listed building. We did that move, and that was our first move in Australia.

Moving on into the process, basically there are four elements to the process. We do the preliminary work, which is pre-contract work, where we go to the site, as we have, and we identify any risks. We do calculations that enable us to determine the weight of the building, etc. If the contract goes ahead, it's broken into three parts: the site preparation work, which has been discussed a little bit here already, including the raising of the building, then the transportation and, finally, finalising, putting the building down on a new foundation.

With respect to the gatehouse, we were approached by the department last year to look at this. We were technically approached by the heritage architect on their behalf. We were told that they wanted to relocate or look at relocating the original part of the building, which is here in yellow, as well as the first extension at the rear of the building, which is, let's call it, the same nature—it's a stone extension.

The back part of it, which is a more modern extension, is in pretty poor shape and was to be demolished. Our quote to the department was on the basis of this drawing. We could move the whole thing if requested, but that was the basis of our quote. We then undertook all our preliminaries; everything in green here has been undertaken. There are a few items that are still outstanding, but they are things that would be picked up as part of the actual roadwork as well.

Route-bearing capacity is an interesting one, because there was a discussion here about building a new road. We indicated that if it were to be moved in winter, in wet weather, we don't know what the soil is like and therefore there may be a requirement to put in a road. Saying that, there is an alternative option we can supply, and that is to lay steel plate and run over it.

I have worked on many projects where loaders have been sinking to their axles, but we have run a 600-tonne building over steel plates. What I'm trying to say is that I would welcome the opportunity to talk to the department about some of these additional works to identify which ones, or alternative ways to overcome them.

In the interests of time I won't spend too much time on this, but these are just some examples of buildings. This Jeremiah building was moved. It was in bad structural condition prior to the relocation; you can see here, that's one of the walls on that building there. That building was built by slaves; it had no mortar between the bricks, it was just mud. You could put a knife into the mortar and it would disappear, the whole blade, and it had significant water issues, because they had lost the downpipes. You can see—not very well—that there is cracking going down this wall.

I will keep moving, in the interests of time. This is where we've got to thus far. We have provided project costs, and to do that we did a number of preliminary engineering calculations to determine the weight of the building, as I said, lay out the steel, and look at where we are going to locate our dollies and our jacks to move the building. In parallel we left it to the department to look at the approval process.

Assuming the building was to be relocated, that the contract was to go ahead, the process from there starts with site preparation. We would look to get all the services cut to the building. In this case, the Hornsby job, it was within a rail corridor so it had millions of services. A preliminary Dial Before You Dig has been undertaken on the Waite gatehouse, and I've also seen a report of where they have done some site investigations. There aren't substantial services in the vicinity, but even if there are they are going to have to be relocated for the road anyway, because this is sitting on the road footprint.

91 Mr MURRAY: It's pre-internet.

Mr MANIFOLD: It's work that has to be done. That's the same picture that Mr Whelan showed. This is where it would be valuable to talk about what is required with the department. We haven't had any discussions with or approach by the department subsequent to our report in terms of can we do this or can we do that to modify things.

Our proposal, at this stage, is that we need 15 metres to dig underneath the building, and you will see why in the next slide. Basically, what that requires is a tapering down from 15 metres out to expose the footings, and then we would dig underneath the building with our equipment.

Traditionally, we would have access all around the building but, given there is a road here, what we were suggesting is that we excavate or have access from the rear and from the south, the intent being that, whilst there are trees there, if the road is going through here those trees will have to go anyway, so we identified that as a logical approach. If these are particularly important trees or if they are intended to stay, we could work around that.

Again, here we identified that we would need 15 metres on the side to dig out underneath this part of the building. Again, you can see some trees here basically on the border; if these are significant or a problem if they were to be in the way, I'm sure we can work around it, especially acknowledging that this part of the building here is to be demolished under what we were asked to do.

Moving back to the process—and I will keep this short and sweet because I don't want to bore you—essentially, once we have excavated or have access to the footings, we knock those footings out, we dig underneath and we prop underneath the building including all the internal walls. We then bring in our steel support system, which is main steel and then cross steel going along to pick up the building every 1.2 metres, and then we put in some needle beams which are these shorter beams to pick up walls going parallel to the cross steel.

Of particular importance then is that we drive wedges in between the wall and the steel and we pre-stress the steel so that all the elastic bending is taken out of the steel so that when we jack the building with this unified jacking system, the whole building goes up as one, so the building doesn't see any stress when it has been raised. We then bring in our dollies which, again, are hydraulic. They have 100 tonne ram in them. They get connected by hydraulic hoses together so that, essentially, the building floats on oil.

As we move along the route, any undulation—for example, the tree roots or what have you—can get picked up and overcome, because the dollies share the oil between them, so even though they are going over different heights, etc., the plane is always maintained, so no stress ever goes into the building itself. Once we've got it to the new location, we do the reverse. We take the dollies out, we put it back on cribbing and raise it. This is a new footing that was put in place, we then use block work, build up between the steel beams and then, once that's all in, we lower it down and then we can grout off here and take the load of the weight of the building in between the beams, then drop the steel out, then we can pull that steel out.

Once that's done and dusted, we fill in these windows, as we call them, and then we come back or, in the case of this project, we suggested that just a normal local contractor—it doesn't have to be specialised—comes back and then pushes the dirt back up to return the building to the grade that was there originally. This building here is on a crawl space now. It has a slab foundation underneath ground and about 1.2 metres of block work, so it's on a crawl space very similar to what the building currently is, because it has wooden floors, and you would never know that building was moved.

Moving on to the concerns raised by the department or the minister, what I heard in the media were concerns about the pre-works and an additional cost associated with that. Most of those pre-works have to be done anyway for the project. For example, disconnection of services: you are going to have to do that if you are going to demolish the building. Removal of those trees to the south: you are going to have to do that if you are going to put a road through that. Demolition of the rear of the building: if you are going to demolish the whole building, that part needs to be demolished as well.

So the additional items are as discussed, the tapering of the ramp down to give us the access, which is just basic earthmoving and can be done with an articulated loader, say an IT38 or something similar, which is readily available locally. Again, if that's an issue for the department, we can do that work. Then removal of obstacles en route: there are maybe a couple of trees but there is nothing in the way because it's only going about 150 metres.

Regarding post works, yes, there are costs. Again, we suggested that that work be done by others on the basis that it will be cheaper because we would basically subcontract this work anyway. A normal builder would be able to pour the slab. We suggested we do the design of the slab so that it's done correctly. We can overview and ensure that this is all done correctly and manage it.

The block work to underpin the building: with some projects we undertake that work, bring in a subcontractor, but again we thought it would be a cheaper option for the government if that was managed by others. The renovation work: how long is a piece of string? If the government, department or university wants to fully renovate this, possibly the reason they are having problems with people utilising the building is that internally it needs a new fit-out. You saw some of the photos from the department—it needs some work, it needs replastering, etc. If the rear part of the building is demolished, that removes the kitchens and toilets, so you would need to add something back there, depending on the use.

Then there are little things like landscaping, etc., which I assumed would be done by others and not by us. That is why I was saying that I would welcome the opportunity to sit down with the department and understand the full scope. If the department wants Mammoth to take on more of the scope, we can do that, but we did an interface list of break our scope and scope by others, and we thought it was a logical split based on this project. Again, we can do anything in terms of taking on more scope or not if that wants to be discussed.

92 The PRESIDING MEMBER: Mr Manifold, I understand that part C is formed up in a document that we have received. That being the case, I am keen to turn to questions from members.

Mr MANIFOLD: I am basically at the end of my presentation. I was just going to report the comments against the FMG report you have, and I have suggested that that can be looked at later. I have a short two-minute video of the Hornsby move, if the committee wants to see it. Would you like me to do that?

93 The PRESIDING MEMBER: Please, thank you.

*[Video shown]*

Mr MANIFOLD: This gives you an idea of the flexibility of the equipment. That is just steering the building, so we have the flexibility to steer it and crab it to rotate it to do what needs to be done. In this case, we had to rotate the building to get on to the foundation, as you can see there. Do members have any questions?

94 Mr WHETSTONE: What was the cost to move the Hornsby?

Mr MANIFOLD: The final cost ended up being \$1.2 million in 2007.

95 Mr WHETSTONE: How far was that moved?

Mr MANIFOLD: About the same distance, about 150 metres, but it was in a rail corridor.

96 Mr WHETSTONE: You have outlined what won't be included in your quote. What is included?

Mr MANIFOLD: What we have included is the specialist work. What we have excluded is work that can be done by others. But I would like to make clear that in terms of preparatory work, for example, we will do everything to prepare the building for the relocation. I would like to correct a misunderstanding: for example, the chimneys won't be pulled down; the chimneys will stay as they are. If they require some support, we are responsible for that; however, I don't believe that is required, based on the nature of the construction.

97 Mr WHETSTONE: I am still looking for some clarification on what works you will specifically do because you have a number of pages of works up there that the department will have to do at significant cost, I would suggest. I'm still not clear what you are going to do, other than dig around the building, jack it up and put it on supports.

Mr MANIFOLD: Yes.

98 Mr WHETSTONE: You were talking about using steel plates. Is that part of your quote?

Mr MANIFOLD: No, that's excluded but, to be honest, that's a small cost, if that's required. I don't even think it will be required, depending on when it gets moved. The chances are that we can just move it over the native ground, so I didn't put that in as a cost. If it gets moved in the drier months, it can just drive over where it currently is.

99 Mr WHETSTONE: We don't know that, do we because we don't know what the compaction of the ground is like? What's the weight of the gatehouse?

Mr MANIFOLD: It's 380 tonnes, indicatively.

100 Mr WHETSTONE: You are not going to drive 380 tonnes over unexplored ground.

Mr MANIFOLD: Well, yes—not unexplored, but I have walked the route and if it's dry it should accommodate that load. If I'm not comfortable with that, I would bring my steel plates in. I've got the steel plates at our yard. It's not a large cost.

101 Mr WHETSTONE: That's still another cost onto the moving of the building.

Mr MANIFOLD: Sure, but if that's the kicker on the whole project I will throw the plates in, because I am literally talking about probably \$4,000 to get them down to the site and lay them out.

102 The Hon. A. KOUTSANTONIS: That's five minutes for a DPTI official to Port Augusta.

Mr MANIFOLD: The exclusions I have put in the report are based on a logical division of the scope. I can take on that additional work, but actually, as I said, I am very happy to work with the government or an estimator, a quantity surveyor, and sit down and go through and describe in detail what needs to be done for them to have accuracy in determining the cost of those additional works. When the building gets moved, I don't know what renovations the department or the university wants to do on the building. That's not part of my scope.

103 Mr WHETSTONE: I understand.

Mr MANIFOLD: But for the move, the whole cost of the move is covered by my scope. Really, in terms of being able to do the move, the only major things that have been excluded are the excavation around to give us access to the south and to the east, as I have mentioned, then the pouring of a new slab and the block work building up and, finally, the reconnection of services to the building, assuming that you want the building to have power, etc.

104 Mr WHETSTONE: For the ground preparation and the digging around the building, does that mean you are going to have to dig up Cross Road?

Mr MANIFOLD: No. The process that I proposed there was similar to the Hornsby job, where we had an operating railway line within a metre of us, and on the other side of the building we had fibre-optic cables. We didn't dig there. In this case, what we are looking at is just excavating from the southern and the eastern side of the building. We would only need a small amount of

excavation on the northern and the western side to enable us access to the footings so that we can cut them out.

105 Mr WHETSTONE: With your relocation of the building, which is the original building, the more modern extension is the responsibility of the department. Were you to lift that building and it sustain damage, is that part of your remit—as in if a wall falls in? It looks in pretty poor shape.

Mr MANIFOLD: No worse than a lot of buildings we've had to move.

106 Mr WHETSTONE: I understand that, but if a wall fell or something was to go pear-shaped during the move, who picks up the tab?

Mr MANIFOLD: Traditionally, if the client wishes, they can get insurance to cover that. In terms of my confidence of moving this building, I'm not concerned about that happening. To be honest, if that were to happen, that's the end of my company. So I'm happy to cover that. If that were to happen, maybe the government then just pays me for the demolition that they already want to do. If I have to clear it up—

107 The Hon. A. KOUTSANTONIS: What's the risk? They're going to demolish it anyway.

Mr MANIFOLD: I mean, they're going to demolish it; that's a bit tongue in cheek. Ultimately, it is my interest to make sure this building gets moved. I can't fix existing problems with the building. When the building gets moved, the building will still have those issues that it currently has. Whether it's salt damp or whether it's a crack, it will be there. As part of our scope, we do a dilapidation study prior to it. We identify those issues. If there are any structural issues that have occurred because of our work, we will fix them. But I'm not concerned about that because ultimately, if I put any stress on that building, whether it was in really good shape or bad shape, that's the end of the building. It's masonry. It will crack. The whole process is designed not to do that.

108 Mr WHETSTONE: You have said maybe half a dozen times that you're not concerned, but if it does go bad, you're still not concerned because the taxpayer will pick up the costs.

Mr MANIFOLD: But I won't get paid, will I? My payment is to move the building from A to B. We're bantering around a cost of close to \$1 million. How do you think that's going to treat my business if suddenly the department doesn't pay me for the move because I didn't deliver my service?

109 Mr WHETSTONE: I think the department is good to pay you. It's what we get out of the costs. The \$1 million to move it is just a very small part of the componentry in moving the building. I'm hearing you say that when we move—we're not sure how it's going to be moved, in a straight line or following that line around there—that's all at added cost.

Mr MANIFOLD: Sorry, I didn't understand your question.

110 Mr WHETSTONE: If you're moving it along the road line or if you're going to move it in a straight line, that cost of getting it ready is an additional cost to the \$1 million.

Mr MANIFOLD: What costs are you talking about, sir? All I have said is we have to put some plates down, and if there's a tree in the way, ultimately I can't control the width of the building. The building is as wide as it is. If we want to go from A to B—say this is where I have to go through, the building is this wide and there's a tree there and there's a tree there—I can't physically fit through that, so that tree has to come down.

111 Mr WHETSTONE: That's common maths. I get that.

Mr MANIFOLD: I don't mean that in a derogatory way. What I'm trying to say is that, where I have been asked to price to move from A to B, there are very few obstacles, with the exception of perhaps—I would probably need to go for another walk—I think there might be one or two trees where this scenario I am trying to describe does occur. If that tree is here like this and this one is here, the reason why I wanted to show you that video is because we can rotate.

It's not like it's on the back of a truck, if you understand what I mean. It's on dollies. If this is it, we can go like that, we can go like that. We can do all sorts of nifty stuff. That's where I'm

coming at. To be blatantly honest, I'm having trouble understanding where the costs are, these extra costs. As I have said before, I would welcome sitting down with the department and going through how we have got to \$3 million of additional costs. I would like to do that. If it is \$3 million, okay, but I believe that the majority of the work is the work that our company is doing, which is for less than \$1 million.

So I'm a little bit perplexed by that, but I'm not trying to insult the department. There are obviously a lot of costs associated with this whole move. The question is: are some of these costs that we're talking about, the \$3 million, costs that are already attributed to the job anyway in terms of clearing the route for the roadway? Yes, there might be a cost for removing some trees but if those trees are already going because a road is going through there, I am not sure it's reasonable to attribute it to this relocation.

112 Mr MURRAY: Just on the member for Chaffey's question, if you go back to the Hornsby signal box move, presumably similar questions were asked given that, from what I can gather, it was your first significant project here.

Mr MANIFOLD: Yes.

113 Mr MURRAY: Somebody in the New South Wales government presumably asked you the question, 'What happens if you get it halfway to where we want it and it splits in half?' I take it that as a consequence of that you entered into a contractual arrangement with the government at that time which presumably covered that. Can you give us a brief summary of that? My presumption is that you have said, 'I won't break it,' and somebody had to pick up the tab in the event it was broken.

Mr MANIFOLD: I would have to go back to the contract. I am happy to share that contract basis with you provided I am permitted to do so by the New South Wales government.

114 Mr MURRAY: I am interested because presumably someone wore the risk. It was either the government that trusted you at your word and said, 'Okay, that's an acceptable risk for us to take,' or alternatively you have provided some sort of surety that said, 'Okay, if I break it, I'll pay for it.'

Mr MANIFOLD: The government bore the risk. What we had in place were bank guarantees because to finance that project they had to provide funding prior to us coming onto the site, because we had to bring equipment over from America because it was the first one. So we had bank guarantees guaranteeing that cash because it was government money. But in terms of the risk, I believe they probably took out insurance but the risk stayed with the government in terms of that.

115 Mr MURRAY: To be clear, essentially the government of the day assumed the risk, took you at your word as a provider of these services and, as we saw from the video, lived happily ever after.

Mr MANIFOLD: All I can say in answer to that, sir, is that of all the moves I have worked on, never have we had an issue of even cracking, so I'm comfortable. I wouldn't be here today and I wouldn't be pushing my business if I believed that it was touch and go. I am a qualified engineer, I am a father with three kids, and I am not going to be putting people underneath a building that is going to break—it's not kosher—besides obviously the liability that goes with it.

116 Mr MURRAY: As a latecomer to this, just to be clear, the route and the location—the A to B that you're describing—is that the route and the location that you saw earlier as a witness to the slide presentation; red squares and blue?

Mr MANIFOLD: Yes, the red square was what was discussed but, as I mentioned, there was no major discussion about, 'We must save these trees.' It was just, 'This looks logical.' As I said, we could have gone onto the road but then I thought to myself, 'That is going to impact all the traffic during the move.' It would shut down that road so it seemed to me like the logical approach. If we don't like that route, we can look at other routes. It is not that I can only move 150 metres and then everything goes to rubbish. There are examples of masonry buildings being moved 2,000 miles in America.



117 Mr MURRAY: To be clear, you are suggesting that you could accommodate a route which mitigates tree loss and still get the building from A to B, albeit with a few more zigs and zags than the slide we saw earlier.

Mr MANIFOLD: Yes. Where I put limitations on that would be if you gave me a route that suddenly told me I had to take the building up a hill like this but, generally, within my knowledge of that area, it is all flat anyway.

118 Mr MURRAY: In fairness to the member for Chaffey's points earlier, my presumption would be that if it has three zigs and zags in it at the moment and you have to have 50 in order to save trees then that is going to (a) impact the time taken and (b) as a result cost as well, so I would think as a businessman, you would need that caveat were you to drill down and look to not only get the thing from A to B but to do so in a manner which avoids as many trees, significant or otherwise, as possible.

Mr MANIFOLD: With respect to that, I just want the committee to understand that the actual move component of the job is the minor part. It's the one that's all spectacular, but, generally, that will happen in a day. The project itself will be over—in this case, it's got very substantial foundations, which is why our cost is a little bit higher than I would like it to be, but we have allowed for about four weeks to remove the foundations, which is unheard of, and then there is about probably six weeks from start to finish with the rest. Of that six weeks of the actual move component, one day is the move. It's not a substantial factor in the whole scheme of things. So if it takes two days, it's not going to be the end of the world.

119 Mr MURRAY: So extra zigzags are not necessarily cost prohibitive?

Mr MANIFOLD: No, it's not going to suddenly make the price double.

120 The Hon. A. KOUTSANTONIS: Did you apply in the tender process to move this building?

Mr MANIFOLD: No, we were approached by the department. Sorry, I will correct that: originally, in 2019, we were approached by the department's heritage architect on behalf, I believe, of the department, and we provided an initial report at that time about the feasibility and an indicative price at that time. Subsequent to that, earlier in the year, we were approached directly by the department—not by these gentlemen, but by the planning side of it and we did further investigations to identify the footings and gave a revised report.

121 The Hon. A. KOUTSANTONIS: After you gave that revised report, was there any other consultation with you following that final report?

Mr MANIFOLD: Yes, after that we provided one further report, which was essentially a methodology document to identify in a more longwinded way what I went through in brief here, what the process is and to identify—Mr Whelan had, for example, looking at option (a) or option 1 and 2, that was our suggestion for where we could store the soil or put our equipment, but, again, if the trees are an issue, we don't have to store our equipment on site. Sorry, I am digressing. That basically was our last report and there really hasn't been any correspondence since then.

122 The Hon. A. KOUTSANTONIS: When was that last contact you had with the department?

Mr MANIFOLD: Don't quote me on it, but I think it was about June.

123 The Hon. A. KOUTSANTONIS: June this year?

Mr MANIFOLD: Yes.

124 The Hon. A. KOUTSANTONIS: When did you find out that the building was to be demolished?

Mr MANIFOLD: I found out in the press.

125 The Hon. A. KOUTSANTONIS: Have you seen the engineering reports published by the department?

Mr MANIFOLD: Sorry, I need to correct myself there.

126 The Hon. A. KOUTSANTONIS: Sure, of course.

Mr MANIFOLD: One other point is: I did have further consultation with the department. I didn't mean to push you the wrong way.

127 The Hon. A. KOUTSANTONIS: That's okay.

Mr MANIFOLD: I was aware that they wanted to get an independent engineering report done. They suggested that and I said, 'That's fine, the only thing,' I said was, 'I'm not sure who you are going to get to do that because there aren't many people that know how to move buildings.' So I was aware this FMG report was going to occur, but I never received a copy until I found out that it was on the department website.

128 The Hon. A. KOUTSANTONIS: And you have read that report?

Mr MANIFOLD: I have and the document I gave you was my clause-by-clause response to that.

129 The Hon. A. KOUTSANTONIS: Is it your evidence to the committee that the FMG report does indeed validate what you have been telling us and you can actually safely move the building?

Mr MANIFOLD: I think it says that we can move the building. I would probably argue that some of their concerns are not as substantial as they believe or they have suggested. I don't mean to be criticising them, but I think again that's where maybe there needs to—I didn't give any advice for the preparation of the FMG report because its independent. However, I was contacted by FMG to provide advice on how to relocate a building and I said to them at that point, 'I think we are talking about the same building here and I have already provided advice. I think that's a conflict of interest for me to give you advice.'

Therefore, I said, 'I need to go back to the department.' I made the department aware that I had been contacted by FMG, and they said, 'No problems. We don't want you to engage with them,' which is fair enough, and so then they directly engaged back with them, so I had no further contact with them.

130 The Hon. A. KOUTSANTONIS: So just for my understanding, you submitted a report after being engaged by the planning or heritage agency within the department, you provided a report, there was a bit of backwards and forwards, the department then said, 'We want to get this independently checked and tested and verified.' They engage these engineers, who then go to the leading expert, which is you, to verify what they are thinking about what is involved in the move. So they come back to you. You then do the right thing in terms of probity and go to the department and say, 'I've been contacted by your independent analysis to give evidence'—

Mr MANIFOLD: Yes.

131 The Hon. A. KOUTSANTONIS: —or to give feedback or reports or whatever the terminology is, and the department have said, 'Thank you very much for letting us know. We'll deal with everything from here.'

Mr MANIFOLD: 'Please keep at arm's length.'

132 The Hon. A. KOUTSANTONIS: The report's come back, the report says, 'You can still move the building, using the methods that you have in place.' There are some disagreements between you and the engineer, but your analysis and your evidence to this committee is that it can be done safely.

Mr MANIFOLD: Yes.

133 The Hon. A. KOUTSANTONIS: Do you want to speculate about what you think the real reason is?

134 The PRESIDING MEMBER: I am not sure that we can invite speculation.

Mr MANIFOLD: I'm not sure it's helpful that I speculate.

135 The Hon. A. KOUTSANTONIS: Okay, alright.

136 The PRESIDING MEMBER: We can't invite speculation of that type, but the member might wish to rephrase the question.

137 The Hon. A. KOUTSANTONIS: Sure. I understand that you've also made some public statements about what you're prepared to offer the taxpayer to prove that this heritage building can be saved. Can you detail to the committee what those offers are? I heard you intimate then: well, the cost of demolition is, what \$15,000?

Mr MANIFOLD: I don't know. I don't demolish buildings, but, yes, let's say it is.

138 The Hon. A. KOUTSANTONIS: Well, my understanding from my friends in the business is \$15,000 to \$20,000.

139 The PRESIDING MEMBER: We have the answer, and the witness isn't able to provide an answer in relation to that. Next question.

140 The Hon. A. KOUTSANTONIS: Okay. Thank you very much. Your cost is about \$1 million to move the building?

Mr MANIFOLD: It's a little bit less.

141 The Hon. A. KOUTSANTONIS: A little bit less than a \$1 million?

Mr MANIFOLD: Yes.

142 The Hon. A. KOUTSANTONIS: Did you say to the committee that you undertake to move the building, and if it collapses, and it is unusable, you would just take the demolition costs?

Mr MANIFOLD: Ultimately the contract for my service is to deliver the building, so if I don't deliver the building, then I haven't delivered my side of the contract, and therefore I can't be paid.

143 The Hon. A. KOUTSANTONIS: Right.

Mr MANIFOLD: That's just normal contract law, I think, but I'm not a lawyer. But ultimately at that point if the building was to fall into a million pieces, I don't think you're going to see Mammoth Movers any longer, because I don't think anyone else would like to utilise us.

144 The Hon. A. KOUTSANTONIS: Right. How long would it take to move that building, from start to finish?

Mr MANIFOLD: It's probably about 10 weeks in total.

145 The Hon. A. KOUTSANTONIS: Can I ask Mr Whelan a question about that 10-week process? Mr Whelan, would that delay any works to the intersection upgrade if, in the new year, this construction company was given the contract? I know it's a hypothetical question, but I am saying: without delaying the infrastructure project, would 10 weeks be an insurmountable delay?

Mr WHELAN: I'd have to take that on notice. It just depends: I think I said we were going to do some pre-services in that bit, but depending on the timing of that, it doesn't sound like it would impact the project delivery.

146 The Hon. A. KOUTSANTONIS: I'm sorry, I was walking in and out of the committee meeting, trying to bring down the government, but I understand you've been in this business for a long time. How long have you been operating moving buildings?

Mr MANIFOLD: About 18 years.

147 The Hon. A. KOUTSANTONIS: How many people have your expertise in this state? You're it? What about in Australia?

Mr MANIFOLD: As far as I am aware. There have been other buildings that have been relocated that I'm aware of, even here in South Australia. The Marine and Harbours Building was relocated but not using this technology.

148 The Hon. A. KOUTSANTONIS: As a broader principle, are we too quick to demolish buildings in this state for major infrastructure upgrades, when we could be utilising this technology a lot more often?

Mr MANIFOLD: Well, you know how I'd like to answer that question, because I'm a South Australian bred and born, and I've only moved one other structure in South Australia, and that was a little double-leafed wall in Bordertown that had a mural on it. All my other work has been interstate. As I said earlier, I've got three kids and a wife, and I don't like being interstate. I would much rather be moving houses here.

149 The Hon. A. KOUTSANTONIS: Is that work generally government work?

Mr MANIFOLD: At the moment, the work I have done in Australia has been both developer and government-based work, but, in the broader picture, in America it's a smattering of all sorts of work. It's not just government work. Ultimately, I'm here to try to assist the government. I would like to work with the department because, ultimately, I would like to start moving buildings around South Australia, including in Adelaide, and I need to be able to get access to the roads to do that if they are going off site. I'm not trying to be provocative. I'm not trying to be political. I'm just trying to make sure everyone is aware that feasibly this can be relocated.

150 The PRESIDING MEMBER: Thank you, Mr Manifold. I appreciate your attendance.

THE WITNESSES WITHDREW