



OFFICIAL REPORT
AITHISG OIFIGEIL

Culture, Tourism, Europe and External Affairs Committee

Thursday 25 October 2018

Session 5



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CULTURE, TOURISM, EUROPE AND EXTERNAL AFFAIRS COMMITTEE
26th Meeting 2018, Session 5

CONVENER

*Joan McAlpine (South Scotland) (SNP)

DEPUTY CONVENER

*Claire Baker (Mid Scotland and Fife) (Lab)

COMMITTEE MEMBERS

*Annabelle Ewing (Cowdenbeath) (SNP)

*Kenneth Gibson (Cunninghame North) (SNP)

*Jamie Greene (West Scotland) (Con)

*Ross Greer (West Scotland) (Green)

*Stuart McMillan (Greenock and Inverclyde) (SNP)

Tavish Scott (Shetland Islands) (LD)

*Alexander Stewart (Mid Scotland and Fife) (Con)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Brian McQuade (Kier Construction Scotland)

David Page (Page\Park Architects)

David Paton (Page\Park Architects)

Sandra White (Glasgow Kelvin) (SNP)

CLERK TO THE COMMITTEE

Stephen Herbert

LOCATION

The Robert Burns Room (CR1)

Scottish Parliament

Culture, Tourism, Europe and External Affairs Committee

Thursday 25 October 2018

[The Convener opened the meeting at 09:07]

Decision on Taking Business in Private

The Convener (Joan McAlpine): Good morning and welcome to the 26th meeting in 2018 of the Culture, Tourism, Europe and External Affairs Committee. I remind committee members and the public to turn off their mobile phones. Members who are using electronic devices to access their committee papers should ensure that they are turned to silent, please.

I welcome Sandra White MSP to the committee. Do you have any relevant interests to declare?

Sandra White (Glasgow Kelvin) (SNP): My only interest to declare is that the Glasgow School of Art is in my constituency.

The Convener: Thank you. Apologies have been received from Tavish Scott MSP.

Our first item of business is a decision on taking items 3 and 4 in private. Do members agree to take those items in private?

Members indicated agreement.

Glasgow School of Art

09:08

The Convener: Our main item of business is an evidence session on the Glasgow School of Art fire. The committee's work is focused on the management and custodianship of the Mackintosh building and its collections. The committee is also examining the future of the building and the collections.

This is our second evidence session on the art school. Our next session, with Glasgow School of Art board members, will take place on 19 November.

I remind members and witnesses that our time is limited. Given the number of members wanting to ask questions, it would be extremely useful if questions and answers could be kept as succinct as possible.

I welcome our witnesses: Brian McQuade, who is the managing director of Kier Construction Scotland; and, from Page\Park Architects, David Page, who is the director, and David Paton, who is the head of design review. I thank you all for coming, and for your written evidence, which was helpful. I understand that Mr McQuade wishes to make a short opening statement.

Brian McQuade (Kier Construction Scotland): Yes—if that is okay.

The Convener: Yes. I ask that it be as short as possible.

Brian McQuade: It will be very brief.

Good morning. Thank you, convener, for the invitation to appear before the committee. I appreciate the opportunity to make brief opening remarks before we start answering questions.

On behalf of everyone at Kier Construction, I want to express how saddened we were, and are, by the fire that took hold at the Glasgow School of Art in June, and its devastating consequences.

As the committee knows, Kier Construction was appointed by the school of art to lead the construction works on the Mackintosh building back in June 2016, following the fire that occurred in May 2014. Our team was extremely proud of securing the commission, and we recognised the importance of the Mack to the students, to Glasgow, to Scotland and to the art world as a whole. For the past two years, our people have worked painstakingly and put all their efforts into the restoration work. The end was in sight—we were 10 months away from handing back the building.

Everyone at Kier, as well as the team of skilled craftspeople in the supply chain, cares deeply about what we were doing at the Mack. We were very much looking forward to completing the major restoration work; we hoped that, when it was done, it would instil a sense of pride in Glasgow and all Scotland.

Like everyone else, we await the outcome of the on-going investigation. I assure the committee that, through the proceedings, we continue to do all that we can to assist the Scottish Fire and Rescue Service and the other investigating bodies.

I hope that the committee will understand that a regulatory investigation is under way. I do not want to say anything that might interfere with or prejudice the investigation. The committee will be aware that Glasgow School of Art took out a joint-names insurance policy for damage to the renovation works and the existing structure, which covered legal liability for third-party property damage. I need to be mindful not to say anything that could compromise the insurance provisions.

Given those factors, I might not be able to answer all the questions that the committee wishes to ask. Speaking for Kier, I cannot tell you when the inquiry will end and when we will know its results. I appreciate that that is recognised, but I hope that I can assist the committee in today's session. Kier will endeavour to give the committee as much information as we can.

The Convener: Thank you very much. I understand that Mr Page wants to make a statement.

David Page (PagePark Architects): Yes—I have a short statement.

Thank you for giving us the opportunity to answer the committee's questions. Like the committee, and everyone who cares deeply about the Glasgow School of Art, we have been completely devastated by the catastrophic fire in June.

PagePark is an employee-owned company that is based in Glasgow, close to the Glasgow School of Art. We have 40 employees, and at any one time at least a third of them were involved in the work at the GSA. A number of our team, including our chair, were educated at the GSA. Our contract was an incredibly important one for us to win, and we have always been, and remain, extremely proud and humbled to have worked on one of the world's most important historic buildings.

Like every member of the committee, and people in Glasgow, throughout Scotland and beyond, we want to know what happened, and we await the outcome of the Scottish Fire and Rescue Service investigation.

We look forward to assisting you in your deliberations.

The Convener: Thank you very much.

We know from the 2014 fire investigation report that the fire escalated because of the ventilation ducts in the building. I have read through the very useful timeline that PagePark submitted, so I know that you have been associated with the art school as architects for 25 years. The timeline makes it clear that, in 2008, a major piece of work, which was funded by the Heritage Lottery Fund, was done. That was the opportunity to deal with the problem with the ducts, and that issue came up in our previous evidence session. Your timeline indicates that an engineer came in to look at fire stopping in the building, so the issue was identified then. However, you say that you decided not to go down that route, because of the extent of the fire stopping that would be needed. Instead, the focus was on installing a sprinkler system, which was not completed by the time of the 2014 fire. The engineer's report suggested that the extent of the fire stopping that was needed was so great that it was not possible for it to be done. Why did you agree with that report?

09:15

David Paton (PagePark Architects): We understand the question. In 2008, as we have said, the GSA commissioned a report, out of concerns. Buro Happold's fire engineering design and risk assessment team—the FEDRA team—worked with us on that.

The engineers looked at the building closely and said that the usual risk reduction measures were not possible for three reasons: the use of the building could not be changed; the construction of the building could not be changed; and there remained the possibility of a fire. The engineers concluded that fire stopping was

“virtually impossible given the current structure and the amount of compartmentation and fire stopping which would be required”

to achieve that.

After looking at all the possible remedies and solutions, FEDRA determined that there was one conclusion: mist suppression. That was the only viable option that it identified.

The Convener: That obviously left the voids in place, which accelerated the fire.

David Paton: Yes. The intention was that the mist suppression system would deal with all those, once it went in.

The Convener: If the only fire measure was a suppression sprinkler system, why did it take from

2008 to 2014 to get it in place? Indeed, it was still not fully in place at the time of the fire.

David Page: The mist suppression system was a completely new system to put into an operational historic building. The problem with inserting such a system is that it is incredibly complicated. We wanted to conserve the building's fabric, but the work involved passing pipes through valued spaces. That was a major challenge for everyone, including the statutory authorities. Our timeline mentions that a workshop was arranged. The statutory authorities were supportive of what was essentially a pioneering installation in an historic building of incredible world importance.

The journey to get there took time because it was very complicated. Two insurers were involved—one for the building and one for the collections in it. There were 150 rooms, and each was different in size and shape, so the process took time. The money had been expended on the conservation and access project, so funding had to be raised. At the same time, a programme to install the system while the building was in operation had to be created. The art school faced a huge number of challenges with the installation.

The Convener: Funding was clearly an issue in terms of not installing the system right away.

David Page: We have found that funding is always an issue in arts and culture conservation projects.

The Convener: I want to go back to what you said about fire stopping and compartmentation, and the decision in 2008 that that was not possible. Did your view change on that after the 2014 fire?

David Paton: Absolutely, because we were then in a completely different situation. Up until then, work had been going on during summer periods, which happens at all universities. The fire suppression system was a continuous project. After the 2014 fire, we had the chance to properly consider what had happened and to put in place a comprehensive system for the building when in use.

Worked with our fire consultants, we identified five key targets. As you can imagine, those were to improve the compartmentation of the building; to install fire stopping within all the ducts and risers; to install a state-of-the-art detection system through the building; to install a mist suppression system, which had been commenced previously; and to install a smoke-extract system. Protecting this most important building involved not a single measure but a whole range of measures.

The Convener: You have listed measures such as compartmentation and fire stopping. Were they written into the tender and the contract?

David Paton: Absolutely. The documentation that the team prepared required the contractor to put all of those into installation.

The Convener: We had exactly the same situation with the sprinkler system as we had in 2014: it was not in place at the time of the fire.

David Paton: Sprinkler systems, as David Page has said, are complex. It was in installation and by the end of the contract would have been commissioned and in place.

David Page: To help the committee, it is important to distinguish between the two fires. One was a fire in use, for which five fire prevention measures were put forward. The other was a fire on a construction site, for which different processes and procedures are followed.

The Convener: There are particular risks during construction.

David Page: There are risks, which processes and procedures are put in place to mitigate.

The Convener: An average person looking at the situation would see it as extremely unfortunate that in both fires you were just about to put in a fire sprinkler system.

David Page: I cannot disagree with that.

The Convener: It is a repetition of the previous mistake.

Claire Baker (Mid Scotland and Fife) (Lab): I am interested in the role of Glasgow School of Art. The board of governors estates committee had the role of overseeing the restoration project. The evidence from Page\Park Architects states:

"At the commencement of the works, Kier Construction prepared and issued a Fire and Emergency Plan. This plan was extensively consulted upon".

From the issuing of the tenders to Kier's involvement from 2016 and the recent fire, what would you say was the extent of Glasgow School of Art's oversight of the project? Was it intimately involved in the project or was it fairly hands off, with you and Kier being responsible?

David Page: I will answer the first part of that question about involvement in the plan. Glasgow School of Art appointed both internal specialist project managers and external project managers, who acted as the interface with the board, and we were in constant dialogue day to day. As you can imagine, the project was in high visibility, so the level of the discussion was constant. It is also a conservation project. You move a few feet along a wall and there is another issue, so there is a constant dialogue that takes place. There was no way that it could take place in isolation; it took place in constant dialogue with those project manager representatives of the art school.

David Paton: I will address the other part of your question, which I think was about the consultation and involvement of the GSA in the contractor fire plan. What we required of the contractor, and what it did, was to carry out a risk assessment of the building. It is not like any other building. It is a distinct and special building with its own construction, constraints and materials, so the contractor was asked to carry out a risk assessment of that and, once it had done that, to prepare a fire safety plan. That is what the contractor did, and it then issued that plan to the team and to the client for comment. The document was revised three times in the following months, first after consultation with the GSA. That was entirely reasonable, as it was operating properties all around the building, so it entered into discussion about neighbours and escape from other buildings. The plan was revised after that discussion.

There were then further discussions with the design team and the project managers when it was revised again. It was finally revised after discussion with building control and the fire services. An on-site meeting was arranged and a walk-round of the whole building was carried out together with them. After that, there was an agreed list of changes to the fire safety plan, all of which were adopted, and the final version was issued by Kier Construction.

Brian McQuade: I agree. Regarding our interface with the school, we had the normal operating procedures with the design team and the rest of the project team—there was nothing unusual for the type of job. The school had probably gone a step beyond that, in that it had a couple of its own project managers who came to all the meetings, project reviews and project sessions that we had. We do not always see that on other projects, but on this one it had two very experienced project managers with backgrounds in heritage work, so it had taken an extra step that was certainly appreciated by us.

I will touch on the issues with the fire plan and the site safety measures. We all have a duty: there are obligations on us all, and they overlap. Under the regulations, the client has a duty, and we have a duty to put together the fire plan and the construction phase plan. The architects and other consultants have a duty to carry out checks on that as well. As the committee has heard, a lot of detailed review and assessment work was carried out before the plans were signed off and activity started.

Claire Baker: Once the fire plan that you have described had gone through the consultation phases with the various partners and had been agreed, was it a fixed document? It was not a

dynamic one. You have described the project as being complex, but that plan did not change.

My other question, which is linked to that, is whether what you have to prepare in the plan, which is a regulatory requirement, is adequate to deal with the type of project that the Mackintosh was. Am I correct in saying that the fire plan is focused on health and safety, protection of population, exits and issues of that kind, and not so much on protection of a building? Is it correct to say that it prioritises people over buildings?

Brian McQuade: That is fair to say, because the code of practice sets out that the priority is always people. For example, there are requirements to test procedures at intervals of no more than three months. Ours were tested more regularly than that, because of the kind of building that we were in. In the last test, which happened in, I think, May 2018, the building was emptied in something like four minutes. Such tests are based on the first priority, which is preserving life. The second priority is the protection of assets and the building itself. That is what the fire plan and all the measures that are put in place are geared to do.

It is not and cannot be a static document. On complex jobs such as the Mackintosh building, the nature of the construction project means that things have to change, so the plan is revisited and updated over time—for example, if we move the scaffolding or close an area. It also has to be communicated to people who are on site. As is standard practice, we have an on-site board so that people who walk into the site can see that.

Claire Baker: It is interesting that you talk about the project managers who came from the art school. After the recent fire, the impression was that Glasgow School of Art did not have any responsibility on the project. The comments that came out seemed not to recognise the extent—

David Paton: I think that is simply—

Claire Baker: This morning, you have suggested that they were intimately involved in the construction project and how it developed.

David Paton: Absolutely, in terms of the day-to-day operations and control of work on site. A distinction is made when a contractor takes possession of a site. We all have our own responsibilities, but the contractor has ultimate responsibility for securing and protecting the site.

Brian McQuade: That is correct.

David Paton: There is no debate on that. There can be only one party that has full responsibility.

09:30

The Convener: We have taken expert evidence from conservation architects who made exactly the

point that Mr McQuade has just made—that the statutory requirements of the fire plan are about getting people out and that that is a failing in the statutory requirements for historic buildings. What did you, as the architects for Glasgow School of Art, do to come in and say, “We want to enhance that fire plan to protect this incredibly precious asset, which is the Mackintosh building.”?

David Paton: There is a standard joint code of practice, to which the contractor referred earlier. That sets out the standards for work on fire prevention on construction projects and it is effectively the industry bible for the work that should be done on site to protect against fire. That was written into the tender documents and the contractor took it into account in preparing his fire emergency plan.

David Page: Incorporated in that code is a major focus on the asset, such as prevention of and permits for hot works and steel works—there is a whole series of issues incorporated in it. Life safety must come first, but the protection of that building is prescribed within that code; it is still a major priority.

The Convener: A piece of advice that we were given by the experts is that, although compartmentation is difficult to build in during the restoration works, it must be done—the money must be spent to build it in during the construction phase. Did you do that in the fire plan? Did you insist on that?

David Page: Although we identify that the contractor has responsibility for the site—there has to be a single point of contact—the project managers, the design team, our health and safety advisor and the clerk of works monitor what is happening on site throughout the project. That is the role of the design team in the works that are going on.

David Paton: Specifically, on compartmentation, the building plan is divided into three parts. At the two “third points”—if I might describe them like that—temporary fire doors were put in place throughout the height of the building, and they stayed in place throughout the works. Eventually, they would have been replaced with new fire screens, but, throughout the works, every time we went down one of the corridors we were going through fire doors.

Sandra White: I want to follow up on the risk assessment. In your proposals in 2015-16 you mentioned areas of insulation to be put into the roof. What material was used for that? Do you have the name of it?

David Paton: I cannot give you the specific manufacturer here and now, but I understand why you ask the question. In the context of Grenfell,

there has been lots of discussion in the media and within—

Sandra White: I am sorry to interrupt, but do you know what it was? Surely you must have known.

David Paton: Absolutely.

Sandra White: It will be in the contract, so can you tell the committee?

David Paton: Yes. What I can do is to explain where the insulation was used in the building. We have spent our career—well, the beginning of it—

Sandra White: I know that it was used in the roof space, but there is information pointing out that certain insulation cannot be used in certain cavities unless it is with concrete. I just want to know what insulation was put in. I suppose that we can look further at that.

David Paton: Of course. I can tell you the context afterwards, but the answer to your particular question is that it was a type of polyisocyanurate—PIR—insulation, and the manufacturer states that

“the products will not contribute to the development stages of a fire or present a smoke or toxic hazard”

if it is built in as we built it in, which was to encapsulate it.

David Page: We built it in without an air gap. There was no air gap.

David Paton: I can explain—

Sandra White: The report mentions certain types of insulation that were used, not just in Grenfell but not far from the art school, at the harbour development in my constituency. It has to be in a duct with concrete so that it is not flammable. It depends on what was used and whether it was a type of PIR insulation. I can certainly check that, and I do not want to take up the whole of the committee’s time on this, but it would be interesting to know exactly what type it was.

David Paton: I am unable to give you that information right now.

Sandra White: I think that Celotex is the one that was used in Grenfell. I do not know whether the same one was used here.

David Paton: We can give you that information. It is important to distinguish the uses of insulation at Grenfell because everything becomes inflated in media discussion. Grenfell was a concrete tower that was having an overcladding applied to it, so a composite panel was being applied. Behind that panel was insulation, and behind that was an air gap. As we understand it, fire started within the

building, got into that air gap and was able to travel up by igniting.

What we have at the Glasgow School of Art is completely different. It is more akin to the insulation that you might expect to have in your house. We have an existing envelope, which is stone, and then internal linings. Normally, we look to add insulation to external walls. Here we could not add any to external walls. The internal fabric was of such quality that we could not disturb it. Where we were able to add insulation to approximately 50 per cent of the roof was on the flat areas, where we were replacing the asphalt build-up, and the asphalt build-up system that we used included some insulation. However, as I said, that was encapsulated so, according to the manufacturer, it would not cause a risk.

Sandra White: Am I correct in saying that when you did the fire safety assessment and the site was handed over to the contractor, it was not deemed to be a risk that you were putting that type of insulation into the building?

David Paton: That is correct.

Annabelle Ewing (Cowdenbeath) (SNP): Going back to the issue of who was in charge of the site, after fire number 2, Glasgow School of Art reportedly said:

"At the time of the fire the Mackintosh Building was not part of the GSA's operational estate and was in the management and control of Kier Construction Scotland Limited."

Perhaps Mr McQuade could tell the committee what he thinks that statement means, because we find it a wee bit perplexing.

Brian McQuade: Glasgow School of Art would probably have to explain what it meant, since it wrote the statement. What we took from it, as the building contractor, was that we were in possession of the site, which is completely standard practice in any building contract. It was a traditional contract that has been used for many types of projects similar to the Mackintosh project. Our having possession of the site was absolutely how we understood that. The art school said that the building was not part of its operational estate, but it was still the owner of the project and the building, and it still had duties under the regulations as client, just as we did as principal contractor and as Page\Park did as principal designer. We were in possession of the site. That is what we took from the school's statement.

Annabelle Ewing: Do you have anything to add, Mr Paton?

David Paton: I think that all that was meant was that it was not an operating school at that point. It was a construction site.

Annabelle Ewing: You take that statement to mean that the building was not functioning as part of the day-to-day life of the educational establishment, rather than anything about issues of ownership or the art school having a beneficial interest in ensuring that things that happened in its property were proceeding in a reasonable way. If that is the position, as beneficial owner, which the art school continued to be, I would like to ask about the fact that representatives of the school attended regular meetings. Could we have a bit more information about that? Was there a generic name for those meetings? Who attended them? How regularly were the meetings held and were minutes taken of each meeting?

David Paton: I am happy to explain that. Once a contractor starts on site, there is a rigorous process of reporting on and monitoring the work that goes on. On a complex job such as this, there are many and varied meetings. The principal one is a monthly progress meeting, at which the client—by which I mean its project manager representatives—and the external project managers, the whole design team and the contractor are present. The contractor prepares a report and presents it to the meeting, and then there is a set agenda to go through.

Annabelle Ewing: Were minutes of those meetings taken?

David Paton: Minutes are always taken—they are absolutely crucial.

Annabelle Ewing: Are those minutes now in the public domain?

David Paton: I do not know whether they are in the public domain, but they are available.

Annabelle Ewing: Do you recall when the last meeting before fire number 2 was?

David Paton: I cannot give you the date, but—

Annabelle Ewing: Again, that information should be available.

David Paton: Absolutely. I was going to say that that is just one of the types of meetings that are held. On a weekly basis, there were technical meetings—

Annabelle Ewing: Did the GSA attend, through its project manager or assistant project manager, or through Gardiner & Theobald?

David Paton: Both of them would be at those meetings. There were many technical meetings, services meetings and a whole host of specific trades meetings, at which we might talk about, say, stonework, windows or fire suppression. They were very intensive meetings, and they were minuted.

Annabelle Ewing: Okay. If the phraseology about the building not being part of the “operational estate” was intended to have another meaning on the part of others, as far as the reality of the situation was concerned, it seems that the GSA, through its various representatives, was actively participating even on a weekly basis.

David Page: It was on a daily basis.

Annabelle Ewing: So, on a daily basis, the GSA was participating in all aspects of the operational nature of the construction.

David Page: It was the art school’s special building. It was not going to just hand it over and say, “Come back later and show it to us.”

Brian McQuade: I agree with David Page that it was a daily basis. In fact, until a few months ago, the project managers from Glasgow School of Art had an office on site. Because things were moving about, they moved to a building not far from the site. There were often daily meetings with our technical team, because there would be things that had to happen daily on the site. Then there would be regular sessions with the subcontractors, because those had to happen to allow us to progress. Then we had regular weekly and monthly meetings that were all programmed and scheduled. The reason for those was so that we had information to progress things and so that decisions could be taken.

Annabelle Ewing: I note from the submissions that there was another set of players. There was the GSA and its project team, Gardiner & Theobald and Kier and the subcontractors reporting to it. However, there was another set of people who were directly appointed—it appears by GSA—and who were specialist conservators and craftsmen. How did what they were doing fit into the process? Who had oversight of what they were doing on site?

David Paton: There were very few of them on site.

Annabelle Ewing: But for those who were on site, how did what they were doing fit into the daily, weekly and monthly process?

Brian McQuade: As David Paton said, there were very few on site. A lot of items were being manufactured or refurbished off site.

Annabelle Ewing: There were a few on site. Who was in charge of their oversight?

Brian McQuade: Orders were placed directly with those people, although to my knowledge, that was done only for very minor things—not many major things were done directly. However, when those people were on site, there was a requirement for them to go through our processes and procedures as the principal contractor. Those

people could not come on site unless we had agreed that they could do so. They had to go through a rigorous process to do anything on site. First, they had to be inducted. Then they had to go through point-of-work risk assessments and method statements, all of which had to be submitted and signed off, principally by us, although we took technical advice from others. However, there were not many instances of direct contractors being on site.

Annabelle Ewing: That is another piece of information that we had not been aware of. That is helpful.

09:45

Stuart McMillan (Greenock and Inverclyde) (SNP): To clarify, the contract was signed and Kier took ownership of the building—

Brian McQuade: We became the principal contractor when we signed the contract.

Stuart McMillan: The GSA had someone at the daily meetings. Notwithstanding what has just been discussed, can you provide further details about any formal structures that Keir and the GSA put in place, so that there could be regular rigorous analysis of what was taking place?

Brian McQuade: Do you mean reporting processes?

Stuart McMillan: Yes.

Brian McQuade: David Paton has said pretty much how the reporting process works. The activities of the various trades are collated daily so that we know where we are. They are then put into the overall programme, which is updated and reviewed at the regular meetings. There are monthly progress meetings, and we could have meetings in between if necessary, although they would not be called progress meetings. We have those regular sessions and, when they are needed, other meetings are scheduled, because we need to go through a rigorous procurement process when we procure works.

I will diverge for a moment, if the committee does not mind. Although it was a traditional contract, there were two parts to the way in which it was procured. The first part was a fixed part to allow the job to get started, and it involved a reasonably small sum in relation to the overall cost. The rest of the contract was procured on a two-stage basis, which involved taking the information from the designers and tendering that on the open market. The reason for that was to allow an open-book process, so that we could see the costs that were coming back.

Beyond that, the subcontractors that were chosen to work on the site fell into a procurement

schedule. The subcontract orders were placed in agreement with the client team, so we agreed with the architect engineer any order to be placed. We went through that process on an on-going basis.

With regard to the reporting processes, the monthly report captured all that information. There was an on-going process so that, if something was falling behind, we had a mechanism by which to go back and get information or adjust how we were doing something. There is nothing unusual about having that aspect to a contract; it is good practice, which we followed.

David Page: There is also the point about the clerk of works, who gave a report every week with images and text to describe the works on site and the procedures that were followed. The clerk of works was appointed directly to the art school to provide another layer of inspection.

Stuart McMillan: Notwithstanding what you have said, when giving evidence to the committee, Malcolm Fraser said:

"The GSA should have put in place structures around the contract that required the main contractor, Kier Construction Ltd, to look after the construction design management, health and safety, proper procurement for the contract, employment practice and other such things. Those structures are in place, but I want to talk about the adequacy of those structures".—[*Official Report, Culture, Tourism, Europe and External Affairs Committee*, 20 September 2018; c 8.]

What was missing?

Brian McQuade: I do not believe that there was anything missing. The process that was adopted involved a traditional contract and followed good practice in holding the meetings. I am afraid that I cannot answer that question properly, because I do not know what Malcolm Fraser was referring to.

David Paton: We are talking about the fire, so I go back to the process that the contractor went through and the consultation process that occurred with all the best authorities. We consulted with building control and fire services, and that process was crucial in setting the fire plan at the beginning. Thereafter, it was a question of monitoring that the fire plan was being adjusted and progressing.

Stuart McMillan: I have a question on the separate issue of the response on the evening of the fire. It has been claimed that local residents did not hear a fire alarm, and concern has been expressed about the number of staff on site. What is your response to the concerns that residents have legitimately raised?

Brian McQuade: Unfortunately, I was not there on the evening, so I cannot comment on whether I would have heard a fire alarm. However, I can say that the systems were all in place and had been tested. I cannot comment on what was heard or

not heard—that would be speculation, which I have heard on a number of things. I do not wish to be unhelpful, but the systems had been tested and were working, and I have no reason to believe that they were not working.

Stuart McMillan: When were the systems last tested before the fire?

Brian McQuade: In general, systems are tested weekly. On 14 May, which was a few weeks before the fire, a fire alarm procedure was followed—everybody was taken through the whole process and evacuated from the building.

Stuart McMillan: You said that systems are tested weekly, but 14 May was a number of weeks before the fire.

Brian McQuade: A full process in which the building was evacuated happened on that day, so it was recorded. The systems were also to be tested weekly and reported as such. Any faults are visible on the fire panels so, if anything is wrong, a team can see that. If a fault had existed, that would have been thrown up.

David Paton: The contractor's fire and emergency plan set out the procedure. A guard was on site overnight. There was 24-hour security monitoring, and a fire-watch patrol was to take place every hour, of which records were to be kept. If a fire occurred, the guard was to advise the fire service immediately, then the Kier management and then the GSA. If a fire tender arrived, the guard was to meet it in the street and tell the firefighters where the fire and the fire panel were and what the quickest route to the fire was. That is the procedure that was set out, but I cannot say what happened on the night of the fire.

Kenneth Gibson (Cunninghame North) (SNP): After the first fire, Glasgow School of Art representatives met people from Windsor castle and York minster to find out what lessons had been learned from the fires there. What was learned and how was it applied to the Mackintosh building?

David Paton: The learning that came out of those considerations produced the five measures that I mentioned. I do not want to go back over them unnecessarily, but they were to be the key protections for the building in the future. I clarify that I am talking about the completed building; once they were all in place, those five measures were to protect it.

Kenneth Gibson: The five measures were not in place at the time of the fire, which is probably why we are here now.

What role, if any, did Historic Environment Scotland play in the management and restoration of the Mackintosh site?

David Page: Historic Environment Scotland and the city's planning department have been intimately involved throughout our 25 years of involvement with and commitment to the Mack. When our involvement started, in the 1990s, the view was very much to replace as is—for example, we replaced the roofs and did not enhance the systems. However, after the FEDRA report in the 2000s, it was clear that enhanced systems were required. That was innovative—people did not put fire sprinkler systems through such buildings.

At the time, Historic Scotland was adaptable and flexible, together with the city planning department. They thought that they understood the risks, which meant that improvements needed to be looked at. In that respect, those organisations were flexible about adapting the Mackintosh building to improve it.

After the 2014 fire, the city planning department was part of the process in terms of all the detail. It had an overview of what we were doing to create a set of drawings in the form of a digital model that showed the building in immense detail.

Ross Greer (West Scotland) (Green): I will tease out a little more about the fire safety plan. It might be best for Mr McQuade to answer my questions. You explained that, in the lead-up to producing the plan, there was extensive consultation, including site visits, in which every key stakeholder was involved. Was it for Kier to decide on the ultimate sign-off of the plan—on whether it was agreed and could go forward—or was collective agreement needed before the document was considered to be live?

Brian McQuade: There must be collective agreement, because each party has duties under the regulations. We cannot just say, "This is what we're doing."

Ross Greer: That is useful. Relatively shortly after the second fire, Kier issued a press statement, which appeared to have been prompted by the two statements from the school of art that seemed to distance the GSA from the site's management—that goes back to the phraseology about operational control of the estate that Annabelle Ewing brought up. Is it fair or accurate for the school of art to distance itself from the site management or project management during the process?

Brian McQuade: The school of art would have to respond to that; it is not appropriate for me to respond. We worked with the school and with the relevant team, which said that they wanted a collaborative approach, and that is very much what happened in the two years when we were involved. We issued a statement after the two statements from Glasgow School of Art, not in reaction to its statements but because, as the

committee will appreciate, there was huge interest among people who were trying to get information. We were asked for information and we felt that the simplest thing to do was to issue a factual statement. The fire strategy was in place, the systems were in place, we had agreed well in advance the steps that had to be taken and we had looked at what was appropriate for that special job.

Ross Greer: I will broaden my questions to look at the situation before both fires and at the site's future. Does a tension arise from having a functioning art school in a building that is a major public attraction? That involves wrestling with two different purposes—being a working art school, with everything that comes with that, and having substantial footfall from being a major public attraction. Does that create a tension that makes fire safety and other safety issues more challenging than they would otherwise be?

Brian McQuade: There are two sides to the question. We put all the measures in place on the construction side, but I cannot talk about the points that David Page will probably address.

David Page: The Mackintosh is the most amazing building for an artist to have an education in. Anyone who has been educated there cannot help but say that they have been incredibly stimulated by that environment. That brings with it the challenge that people want to go in to see the building.

The art school created a management system, and proposals that were developed in the four years before the second fire addressed how visits should be managed. As part of meeting the conservation and access statement, the reception area was moved to the new Reid building, which is adjacent. That is where people would gather; they would then process in an orderly fashion through the building at certain times, which would allow the school to operate at the same time.

The Convener: Do you have a supplementary question, Sandra?

Sandra White: Yes. Is that all right, convener?

The Convener: Yes, if it is very quick.

10:00

Sandra White: I will be very quick.

David Paton mentioned the 24-hour security, the hourly monitoring and so on. I do not know whether that was done by camera or by people on foot. Were all those things reported? We have heard—people here today have said it—that people did not hear the fire alarm at all. When you had your weekly or daily meetings, were things like so-and-so going around the building and the

fire alarm working reported? Would the committee be able to access those reports?

David Paton: I mentioned earlier that there were regular progress meetings, at which the contractor prepared a progress report that had been submitted beforehand. The very first point on that report dealt with fire and health and safety. He reported on those issues every month and gave a statement on how the work was going. It was uppermost in people's minds throughout—

Sandra White: I am sorry to interrupt you again. Were those meetings minuted?

David Paton: Yes, they were minuted. Every one of the minutes records that the system was working and that the system was being checked. In fact, there was only one occasion when anything else was mentioned—an alarm had gone off, but it was found to be a false alarm. Other than that, every month the system was reported as working.

Sandra White: So, we should be able to see that, on the night of the fire, the security guard went around and checked X, Y and Z. That should have been reported in the meetings.

Brian McQuade: I believe that the fire service will have that information. I caution that we would need to defer to the fire service on that.

Sandra White: I bow to the committee and the convener on whether we want that information.

The Convener: Installing a new fire alarm was part of the contract. At the time of the fire in 2018, were you operating with the new fire alarm or the old one?

Brian McQuade: We were operating with the alarm for the temporary arrangements. We were 10 months away from completing the work, so that alarm, as well as the sprinkler installation, was still part of the building process. The on-going finishing works, including plastering and ceiling work, involved a lot of pipes and wires being put into the building.

The Convener: There was a temporary fire alarm system rather than the old one or the new one.

Brian McQuade: Yes. After we carry out fire assessment and create the fire safety plan and the construction phase health and safety plan, we bring certain things to the project. The project had a temporary fire alarm system, but it was not temporary—it was a full-blown system for the period of the project works. That is a standard process.

The Convener: A number of observers have told us that the fire alarm went off regularly and that there were regular false alarms but that it did not go off at all in the last month before the fire.

Could you comment on the suggestion that the alarm might have been switched off?

Brian McQuade: I cannot comment on the alarm being switched off. There are occasions on sites when such systems will trigger, because dust can trigger the detector, for example, and those instances are recorded.

The Convener: Can you assure us that the fire alarm system was not turned off because of the false alarms?

Brian McQuade: There is a daily operational process with fire alarm systems. The panel is located just as someone goes in the door, so they are able to see whether the lights are on.

The Convener: I am asking whether you disabled the fire alarm because of the false alarms. Can you categorically assure us that you did not do that?

Brian McQuade: There are different detectors on the site, including CO₂, beam and heat detectors. When operations are being carried out, a method statement will be put in to allow such detectors to be switched off for that period. That happens.

The Convener: Did that happen at the time of the fire?

Brian McQuade: It happened at different stages. I cannot say whether the alarm was off on that particular day, but I cannot imagine that it would have been.

The Convener: So, the alarm might have been off.

Brian McQuade: I cannot imagine that it would have been, because there is an operational process—

The Convener: Surely, you must have asked your people on site. In answer to Sandra White's question, you said that you do not know much about the night of the fire. Have you asked your people whether the fire alarm was disabled on the day of the fire?

Brian McQuade: We have asked our staff that.

The Convener: What did they tell you?

Brian McQuade: They told us that it was as operational as it was every day.

The Convener: How can you check that?

Brian McQuade: That is part of the investigation that the fire service is doing at the moment.

Alexander Stewart (Mid Scotland and Fife) (Con): You have talked about the risk assessments, policies and procedures. You have said that everything was in place to ensure that, if

a situation occurred, there were policies for what should happen. However, it is quite apparent that that was not the case. If the policies had been fit for purpose and everything had worked accordingly and properly, there would not have been such a devastating fire. You have also talked about the individuals who were on site at the time having been given training and support mechanisms. If that is so, why did we have such a catastrophic situation, and why do the community and the school believe that there were possibly failings in the process?

Brian McQuade: I cannot comment on what the failings were; there is an investigation going on. All the appropriate processes and procedures were in place and had been operating for two years, as well as the extra steps that were taken. We are as keen as everyone else to understand what happened.

Alexander Stewart: You have indicated who had roles in and responsibilities for the oversight and management of health and safety on the site. Are you all clear that all of that was being measured and taking place?

Brian McQuade: Yes. We had all the checks in place, including the construction health and safety plan, the fire risk assessments and the fire plan, which had been updated to take account of the changes on the site.

Alexander Stewart: Do the other panelists want to comment on that?

David Paton: I have absolutely nothing to say to the contrary. That is our understanding and that is what we saw day in, day out on site.

Jamie Greene (West Scotland) (Con): I have a couple of quick questions. Could you educate me about protocol on a construction site? Who is responsible for the site at any given time? Is that an individual or an organisation, and does that change depending on the time of day and the activities that are taking place?

David Paton: From the day that the contractor takes possession right through to completion, it is 100 per cent the contractor that has sole responsibility for those measures on site.

Jamie Greene: When you say “the contractor”, do you mean the limited company that holds the contract?

Brian McQuade: In this case, it was Kier Construction.

Jamie Greene: If, at 3 o'clock in the afternoon, there are a number of organisations and people on site—contractors and self-contractors, the GSA and Kier, project managers and architects—is the contract holder still fully responsible for the site?

Brian McQuade: The principal contractor holds responsibility for the site.

Jamie Greene: Just two weeks after the fire in 2018, a statement went out that that relationship and contract had ended. Will you give us a little more detail about why that decision was made so quickly, about the circumstances around the joint statement with the GSA and about whether that was an amicable decision?

Brian McQuade: I will work in reverse. It was an amicable decision. We got to that point over the two weeks after the fire. As you will appreciate, we had just been through one of the most devastating things that we could go through and we were involved in dealing with a whole host of things including people who were devastated by what had happened, the impact on the city and the community. We met Glasgow School of Art and the design team shortly after the fire to see what steps could be taken. We also met the fire service, and we continue to do so to ensure that we give whatever information is needed for the investigation.

After a 10-day period, the view was taken that it was unlikely that we could ever fulfil the original contract, so it was better that we brought the contract to an end, which would allow the GSA to work on how to go forward. That was partly because possession of the site would have to be given to others. It seemed to us to be a sensible thing to do. It was an amicable agreement and there were no unprofessional exchanges—just exchanges to arrange the paperwork.

Jamie Greene: During our previous evidence session on the issue, there was a lot of discussion about what should happen next. I know that today's discussion is very much about taking a retrospective look at the circumstances of the fire. You have all been close to the project for a long time, so does anyone on the panel have any personal or corporate views on what should happen to the site and the school?

Brian McQuade: I will speak for Kier. We do not feel that we can have a corporate view on that, because the school and the art world need to decide what to do. We are not stepping back, but it is probably more appropriate for the school, the art world and the committee to decide how things should move forward.

David Page: It will be for others to determine what happens to the art school, but we have two questions at the back of our mind. When we started on the project, the suggestion was made to me a number of times that we did not have the skills in Scotland to do the reconstruction. The team that Kier pulled together and the subcontractors' commitment showed that we have

those skills. Something happened, but they were doing a beautiful job.

The other question is whether we have the information to rebuild the school. Post-2014, we were not sure whether we did, but we were overwhelmed with historical photographs from former members of staff, and documentation and archives were found. We even found someone who had taken a sneaky plaster cast of one of the details of the library, which we used for the reconstruction. He did not want his name to be known, because that was illegal and he was not meant to do it. As a result, we were able to find a way of building a three-dimensional digital model of all that information. That documentation means that we have the most advanced information on an existing building anywhere in the world.

If the decision was taken to reconstruct, we think that we have the necessary information, partly because we had an exchange for four years with an Erasmus school at the Nicolaus Copernicus University in Poland. Its students came to Scotland, and half their time was spent measuring all the rooms that were not damaged in the first fire. We did not have that information previously, so we needed to go back to old drawings. We now have the information to reconstruct, if that is the decision.

Annabelle Ewing: You mentioned potential reconstruction, and that brings us, in a timely fashion, to the insurance policy, which I understand was jointly in the names of the GSA and Kier. I wish to clarify something. A five-point plan that included mist suppression was mentioned earlier. How was that five-point plan reflected in any conditions in the insurance policy?

Brian McQuade: I cannot comment on the insurance policy. It is Glasgow's—

Annabelle Ewing: But the policy is jointly in the names of Kier and the GSA.

Brian McQuade: It is in joint names, but we do not make a claim on it.

Annabelle Ewing: But if the policy is in joint names, you both have to be signatories to it. I presume that somebody read the policy before Kier signed it.

Brian McQuade: Yes.

Annabelle Ewing: So how was the five-point plan that included the mist suppression condition reflected in the insurance policy? Was it reflected? Was it not reflected? Was it about to be reflected? I would have thought that it would be important to ensure that you felt confident that the insurance policy would cover a catastrophic event.

Brian McQuade: I am sorry, but I am hesitating because we are talking about two different things.

The insurance policy was for the period of construction and the mist suppression system was for the finished building.

Annabelle Ewing: During the period of construction, what kind of conditions were imposed? Notwithstanding the fact that there had already been a fire, were the conditions that were imposed the statutory minimum, or were there add-on conditions? Can you comment on that?

Brian McQuade: I am afraid that I cannot comment on that, because I do not have the detail. I would need to go back and ask someone with the detail of the policy.

Annabelle Ewing: Is that a question for Page\Park? Did you have any knowledge of whether there were add-on conditions? The policy was not an average, run-of-the-mill insurance policy—it was taken out after there had already been a catastrophic fire. That begs the question of whether any add-on conditions would have been imposed in the insurance policy.

David Paton: We were not party to the insurance details, and I am not aware that there were any specific requirements that came from the insurance policy that had to be applied on site. As I said before, we were asked to go through the full risk assessment process and to prepare an appropriate fire and emergency plan. That is all that I can say. That is what was done.

10:15

Annabelle Ewing: So it remains to be seen whether the plan and the insurance policy reflected any requirements beyond the minimum statutory requirements. That needs to be clarified by somebody.

David Paton: I think that we would have known about that.

Brian McQuade: I think that the policy is there. I cannot answer on the detail of the policy today, I am afraid, as I do not have detailed knowledge of the insurance aspects. I know what the headlines are, but it would be wrong for me to comment. Representatives of Glasgow School of Art should be able to provide that information when they come to the committee.

David Paton: I referred earlier to the joint code of practice that governs fire prevention actions. The Association of British Insurers is a joint author of that document. If we work to that, we normally cover all the issues that an insurance company requires. If there were requirements over and above that, we would have known about them. That would have been an obligation that was placed on the contractor to respond to.

Brian McQuade: It is reflected in the detail of the contract at the time of signing.

Annabelle Ewing: We can ask the representatives of the GSA when they come, as Mr McQuade said.

The Convener: We have already heard that the fire safety plan that has to be put in place and the statutory regulations are not adequate for any historic building. We are asking what extra measures you put in place, given the precious nature of the building. The fire safety regulations are about evacuating people, not preserving precious assets.

Brian McQuade: The joint code of practice is the minimum standard that is used for the insurance world.

The Convener: Yes, it is the minimum standard, but we are talking about a unique cultural treasure.

David Page: What we saw on site in inspections—the oversight—became a crucial part of what we and the art school's project manager did. We were there regularly.

The Convener: With regard to what you did to protect the building, I return to my first question. We know about the ducts and how dangerous they were. Some of them would still have been in place, because the whole building was not destroyed in 2014. Did you take immediate measures to ensure that the ducts issue was dealt with at an early stage in the construction project?

David Paton: That was not done at that stage, because the ducts were to be used for the routing of all the services and, at the end of that process, they were to be fire stopped. That was part of the five-point plan.

The Convener: That is really interesting. So, during the whole construction phase, the problem that accelerated the first fire was kept in place. We know that historic buildings are very vulnerable during construction works, but you kept the ducts in place and you did not deal with the fire stopping immediately.

David Page: It still remained a conservation project, so we were unable to build new ducts or distribution systems. We had to use the circulation that was there.

The Convener: Did anyone from the art school raise that issue with you? We have already heard that the school had a project manager and that all sorts of people were supervising the project. Did anyone step in and ask the question that I am now asking about why you did not stop the fire in those ducts? Did anyone ask what could be done to ensure that the building was safe during the reconstruction?

David Paton: You must remember that, throughout the course of the works, the contractor put in a full detection system. A significant process was put in place to protect the building at that point. There were inspections and so on. At the time of the fire—

The Convener: I am sorry to interrupt, and I do not want to be rude, but we do not have very much time left. Did anyone from the art school—the client—step in at any point and say, “We need to deal with the ducts that caused the previous fire to accelerate now; we need to deal with them at an early stage”? Did anyone from the art school step in and tell you to find a way to do that? That is what I am asking.

David Paton: I do not recall that happening. They were very much part of understanding the build process. The ducts were being used for pipework and cables. At the time of the fire, all that installation was on-going. A myriad of cables and pipes were going up through those spaces, which were to be closed off in due course.

The Convener: But that still left the building at risk.

Brian McQuade: It is not unusual at the construction phase for such areas to be open.

The Convener: It may not be unusual, but it possibly resulted in the building being completely destroyed.

Brian McQuade: As part of the construction process, the ducts had to be open. We could not put in the wires and the steel pipes for the final system without their being open.

The Convener: Okay. I have a final question. In April 2018, Professor John Cole brought out a report into Kier's work on DG One, which is a leisure centre in Dumfries. Professor Cole, who is a very respected expert, was extremely critical of Kier's work on and its fire-stopping measures in that building. His report was devastating. I understand that you made a settlement, Mr McQuade, with Dumfries and Galloway Council, because of the inadequacy of your work on that building.

The matter was widely publicised not just in the specialist press but in the wider Scottish press. What did Page\Park do as a result of the publication of Professor Cole's report? Did you go back to Kier to make sure that it was installing adequate fire-stopping measures in Glasgow School of Art? Were you at all alarmed by Professor Cole's report?

David Paton: I take you back to the whole procurement process for the project. The process to select a contractor was very rigorous in the first place. It was led by the GSA and its project managers. A shortlist was drawn up, which was

followed by rigorous questioning and scoring on that. Out of that came a decision to appoint Kier, which had shown itself to be appropriate—

The Convener: We have read all about that in your written submission. As I said, the clock is ticking here. I want to know what you did in April 2018 in response to Professor Cole's devastating report about Kier, which mentioned that its fire-stopping measures were inadequate.

David Paton: I said earlier that we were on site—

The Convener: Did you do anything?

David Paton: —on a daily basis. We were monitoring and watching the work that was going on and we had no concerns.

The Convener: You did not raise Professor Cole's report. Did the art school raise Professor Cole's report?

David Paton: As far as I am concerned, that was irrelevant to the contract. We were focused on the work that we were doing and making sure that what Kier was doing on site was correct.

David Page: And all the reporting coming from the clerk of works was that that work was being done properly.

The Convener: Okay. I thank all our witnesses for coming to give evidence.

10:23

Meeting continued in private until 10:33.

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