New Zealand Institute of Architects Incorporated



Date 31 October 2014

To Attention: Ann Clark

Programme Manager Royal Commission Canterbury Building System Performance Branch Level 10, 33 Bowen Street WELLINGTON 6143 ann.clark@mbie.govt.nz

From Teena Hale Pennington, Chief Executive

Re NEW ZEALAND INSTITUTE OF ARCHITECTS – FEEDBACK ON DRAFT POST DISASTER BUILDING MANAGEMENT

Dear Ann

- Thank you for the opportunity for the New Zealand Institute of Architects (NZIA) to review and comment on a series of consultation drafts on post disaster building management.
- The Institute is keen to support the Ministry of Business, Innovation and Employment's work in this area and offers the following comments below.
- We would welcome the opportunity to be involved in the MBIE Reference Group and believe that Architects offer along with other professions (e.g. engineers and building control officers) considerable expertise relevant to post disaster building management work.
- As you would be aware, the Canterbury Royal Commission identified in its recommendations the importance of architect and engineer collaboration. This post disaster building management documentation is a practical way for the professions to collaborate and provide effective responses in post disaster situations. We would welcome the opportunity to engage further on this collaboration opportunity.

General comment

The Insitute would agree that the draft documents would benefit from reduced repitition and clarity on the relationships between each of the documents. For example, it is difficult to identify how documents 02 and 08 differ from eachother. The Institute does recognise that this may be because the editing process is incomplete.

Specific comments - Document 2

Section 4.3 page 9 – it would be good to have an explanation of the USAR markings here – even if assessors have been trained in them a reminder here when they are mentioned would be helpful.

- Page 22, note 5 this prompt should be put next to section 5 on the form where a White placard might be issued as a double check prompt the form needs to have on it their statement from these notes ie "only if in both questions 9 and 10 you have only identified no or light risks and damage" (and this statement should be written clearer as it is confusing). This helps to avoid the risk of White being issued when it shouldn't be.
- Page 31. The white placard should have the information given in this section on it ie: "Even if a building has received a "CAN BE USED" placard it also means that:
 - 8.1 Electrical and mechanical equipment, water and energy supplies and sanitary facilities may not have been inspected.
 - 8.2 Secondary damage to partitions, windows, fittings and furnishing may be hazardous.
 - 8.3 Subsequent aftershocks may warrant re-inspection and a change to this assessment"
- 9 Such information is considered necessary and important as it communicates to people using the building that the services might have issues especially in relation to gas and electricity. If the White placard does not say this then people using the building will not be alerted to things which were known to the inspectors (ie which were identified in this document).
- 10 It also says here that "CAN BE USED does not mean SAFE!!" so the white placard MUST say that too, otherwise as currently drafted the White placard indicates that the building is deemed to be safe and the Institute is of the opinion that this does not reflect the criteria under which it would have been issued ie inspectors believing one thing, people using the building believing another.
- 11 If White does not mean safe how do people using a building get to know whether or not a building is safe to use? This seems to be a key question that is not answered by this process, and maybe this is not the process by which that can be answered, but people will be wanting to know whether a building is safe or not, and the White placard does not provide this information, so some thought should go into finding a way to provide it.

Specific comments - Document 3, White Placard

- The Institute is concerned about the potential disconnect between what the assessors' instructions say about the White placard and what the public is told about it (either on the placard itself or in the brochure they will be given). The assessors are told that White does not mean safe, but the public is not being told that they are being told that the building can be used with "no restrictions on use or occupancy". Potentially from the public's view this could be reasonably interpreted as it has been assessed as being safe.
- This White placard is, in the Institute's opinion, the most vital as the White placard says that the building can be used without restriction, but, for example the electrical systems will not have been inspected at all. What if the earthing system has been damaged? People using the building would have no way of knowing this was a risk if they read the White placard. The Institute would encourage the Ministry to further consider the design and content of the White placard system given these issues. If the Institute can further assist, we would be happy to do so.

Specific comments - Document 8, Consultation, Part 1

- To reduce the risk of confusion and to make it easier for the assessors, the Level 1 and level 2 assessment information could be split into separate documents.
- 15 If they are to stay in the same document then something needs to be done with the formatting to make it easier to identify at a glance whether you are reading about Level 1 or Level 2 assessments perhaps by using a colour coded line down the side of the page to indicate whether that text is level 1 or level 2. As it stands at present there is a risk that someone doing a level 2 assessment could accidentally work off the lesser level 1 criteria.
- Page 11, The description of Level 1 White placard here states "no known dangers" but the earlier text said that White does not mean safe. There seems to be conflict between these statements.
- Page 13 This says that CAN BE USED buildings should still have further more detailed evaluations done by the owners. But the white placard does not say this on it, which means that owners might not know that they are still expected to do more inspections and could quite innocently not do anything further believing their building has been assessed.
- Additionally, people using the building have no way of knowing if the further inspections have taken place. The placard could have a date on it by which time the inspection must have been done and the placard could then be updated saying that the inspection was completed.
- 19 Page 18, again conflicts regarding safety with White placard.
- The amount of information on the White placard needs to be the greatest of all the placards as these buildings are the ones which people will be using. The Red placards mean that no one will be in the buildings, so what's happening there is of less significance to people. But lots of people will be using White placarded buildings, so these really need the most attention in terms of information on them, updating etc. They need to provide information to people using the building who may want to read it before they chose to enter the building.
- Page 27 says the placard will be replaced after the engineering report, which follows on from an earlier comment that the first White placard needs to say that it will be updated following an engineering report, and therefore if the original White placard stays up and is not replaced people will know that the engineering report hasn't been done.
- A suggestion for page 35 the page could be presented better as a matrix with dates on one axis and building types on the other axis.
- Page 43. The INSARAG triage factors could be listed in this document for ease of reference. This page also refers to a team watcher, but this position does not appear to be defined or described anywhere?

Specific comments - Document 9

Page 7 – it is unclear if the diagram is only in relation to specific events, but cyber is on there so it's not just natural disasters. An issue for the Ministry to consider is should this diagram also contain other failures resultant from poor installation, specification, build quality, etc.

- The diagram on page 34 shows where information comes from to enter into a department and the structure overall, but it doesn't show where information from each unit goes to. There needs to be a liaison person working between the units. At present it looks very hierarchical with a real bottleneck with information having to go back through the EQC controller to get to the other departments. This means that the biggest crisis could get dealt with and other things get left and urgent could trump important. This may just be an issue with the way the diagram is drawn, but it is worth noting.
- The public information manager needs access to information from all departments so that the public is given broad accurate information. Too often the same small snippets of information are relayed to people over and over, but this isn't enough to allay fears or provide really useful information. If people are well informed they can chose the appropriate methods to look after themselves and keep themselves safe.
- Once the immediate crisis is over there is still a need to communicate on building status with the public some way for them to be assured that checks have happened in the building they're in and this could be a number of years after an event and in areas of the country where the event didn't happen for example the need to do structural checks of stairs all around the country. Perhaps the building WOF could record when these checks have taken place?
- There is also the possibility that a disaster situation might be when latent previously unrecognised defects might come to light (as in the concrete precast scissor stair issue in Christchurch) which needs to be managed both in terms of inspections and allaying fears in the public. This is possibly more important now because the public is more informed and more aware of the risk that buildings pose. Before Christchurch most people would have discounted the risk of major collapse as being very unlikely no one would think like that now. So there is the need to ensure the outcomes are dealt with efficiently.
- The Institute is concerned that it is possible that latent structural risks are currently being built into new buildings, for example when bracing isn't installed correctly. This issue comes back to earlier comments about latent defects in buildings being a risk that should be in the risk diagram.
- The assessors will be doing their assessments on the assumption that the buildings were built correctly and in full accordance with the regulations at the time they were built. But what if that is not the case? The building also may not have been built in full accordance with design. Or it may have been altered since in a way which has compromised its structural integrity. This assessment process needs to make sure that it does not rely on an assumption which many not reflect reality. The assessment process should have a part to it which asks the assessors if there is anything they are seeing in a building which seems unusual or not what they would expect. They need to have in their minds that their intuition needs to be on high alert for the abnormal.
- It is unclear what is considered "critical" buildings, particularly when it come to communication? Could it be, what is critical to the affected community in the first 1-2 weeks, which may be different to those that are critical in 1-2 months? Beyond the emergency phase, critical facilities should include post-emergency short-term housing, health services, work & income centres, as well as historic properties. (see AIA page on the role of architects in disasters: http://www.aia.org/about/initiatives/AIAS075272).

- 32 It is acknowledged that the a common database is needed for the information (refer to page 19 and appendix 7 on p.53). As a matter of interest, the American equivalent is called "disaster assistance training program" (http://www.aia.org/disasterresponse/). I understand that the New Zealand Registered Architect's Board has reviewed how the existing database could be modified to accommodate such information. Both NZIA and NZRAB look forward to engaging with the Ministry further on the database requirements and communication of information from the database.
- Page 37- 'Control' seems to have a lot of responsibilities. What happens if they get overloaded with one of two of these roles could the other things they are also responsible get neglected? The neglected things might then become more critical than the things which are receiving attention. Perhaps too many roles are centred on this person.
- Page 50. The BAM seems to have a lot of roles and could become overloaded. It could be useful to have someone shadowing the BAM and 2IC purely with a view to finding out information which needs to be relayed to the public again to keep the public properly informed. The BAM can then get on with their organising work and the shadow media liaison person would be as fully informed as the BAM and able to provide detailed coordinated information to the media.
- Page 70. This media briefing information does not provide as a sense of discussing ways to provide the public with the most accurate useful information. The public needs to have the real information so they can decide whether to go somewhere, do something etc. People quite often have options that they can exercise if properly informed. The Institute is of the opinion that the balance of information should be both the public and the Territorial Authority.
- Page 89 again the comment White doesn't mean it's safe.
- Page 96. The Institute would encourage the Ministry to explain here what the normal inspections process under the Building Act is people don't generally know.
- Page 100. first paragraph "it is safe to assume" is not worded well because the use of the word safe in this context is misleading. It should say "it must be assumed" or something to that effect.
- Page 106. It does not say here that the White placard does not mean safe but it says it everywhere else in these documents (except on the placard itself). As this text is for the brochure which is to be given to members of the public, so if it says "White does not mean safe" in all the internal briefing documents to inspectors, why does it not say that here in the document that will be given to the people actually using the building?

Conclusion

- The Institute is keen to assist the Ministry with this work (for example, involvement in the Reference Group; review of further documents; piloting of training).
- To support this important area of work, the Institute has formed a Resilience Working Group (RWG). These comments have been generated by this group. The RWG has representation across the country and across diverse architectural interests. I'd be happy to provide further details on the Group to the Ministry.

If we can provide any further assistance please contact me directly on thalepennington or 027 527 5273.

Yours sincerely,

Juna Hale Peng

Teena Hale Pennington

Chief Executive

Cc.

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