

**UNDER** 

THE COMMISSIONS OF INQUIRY ACT 1908

IN THE MATTER OF

ROYAL COMMISSION OF INQUIRY INTO BUILDING FAILURE CAUSED BY CANTERBURY EARTHQUAKES

KOMIHANA A TE KARAUNA HEI TIROTIRO I NGĀ WHARE I HORO I NGĀ RŪWHENUA O WAITAHA

SUBMISSIONS ON THE PROCESS OF AND AUTHORITY FOR BUILDING ASSESSMENT AFTER EARTHQUAKES (STICKERING/PLACARDING) (ISSUE 3(e)) AND RELATED ISSUES

DATE OF HEARING: WEEK BEGINNING 6 AUGUST 2012

#### 1. Introduction

- 1.1. These submissions are made by the Christchurch City Council (the Council) on the process of and authority for building assessment after earthquakes (stickering / placarding).
- 1.2. This matter relates in part to Issue 3(e) of the Commission's Notice of Issues. Issue 3(e) states as follows:

"The legal and best practice requirements for the assessment of and for remedial work carried out on buildings after any earthquake, having regard to lessons from the Canterbury earthquakes."

- 1.3. There are 5 reports which the Commission has published in relation to this topic:
  - A Council report requested by the Commission on the post September building assessment processes both during the response phase and during the recovery phase.
  - Two Ministry of Civil Defence and Emergency Management reports:
    - The first one presents background information about the key principles and approach to civil defence emergency management in New Zealand (and focuses on the 22 February Earthquake).
    - The second is an unfinished "Independent Review" of the civil defence response to the September Earthquake by Westlake Consulting and Kestral Group (the Westlake Report). (There are also comments from the Canterbury Civil Defence Emergency Management Group made in respect of this report (and from the Health Board) that are also on the Commission's website.)
  - A report from the New Zealand Society of Earthquake Engineering on Building Safety Evaluation (the NZSEE Report). This report covers the effectiveness of the assessment of buildings following the September and December 2010 earthquakes, and the legal and best practice

requirements for the assessment of buildings after any earthquake, having regard to the lessons learned from the Canterbury earthquakes.

- A report prepared for the Council by SISIRC Consulting Limited and McNulty Engineering Management Limited (the SISIRC Report). This report (still in draft) was prepared for Council's Inspections and Enforcement Unit as a post September earthquake debrief and handover from the Building Evaluation Transition team to the Inspections and Enforcement Unit. The report was never finalised due to the 22 February earthquake. The Council stated to the Commission when it provided the draft report: that it "does not necessarily represent the Council's view of its building evaluation processes following the 4 September earthquake or the legislation relating to these processes".
- 1.4. As well as commenting on these reports, these submissions discuss recommendations for the future in relation to the processes for building assessment after earthquakes. It also includes recommendations on other changes that should be considered on related aspects of the emergency management response.

# 2. Discussion of, and submissions on, the other reports published by the Commission on the building assessment processes

Ministry of Civil Defence and Emergency Management reports

- 2.1. The Council does not have any issue with the key principles in the Ministry's post 22 February report, although it notes at section 2.3 of the report there is an incorrect reference to the Local Government Act 1974. It should be the Local Government Act 2002.
- 2.2. There are parts of the other Ministry report that the Council wishes to briefly address. The Westlake Report is an unfinished "Independent Review" of the response to the September earthquake. Like the SISIRC Report, this report was also overtaken by the February Earthquake and the Ministry has no intention of progressing the report any further.

- 2.3. The Council suggests that the Commission should have little regard to this report. No Council staff were interviewed for the report, only the Mayor and it covers a broad range of matters across all 3 councils. The building safety evaluation (BSE) processes are just a small part of the report. Even the covering letter from the Ministry itself notes that some of the commentary and recommendations are likely to be inaccurate.
- 2.4. The Canterbury Civil Defence Emergency Management Group (the Group) made comments on the Westlake report and the Council supports those comments. The Group also considers there are errors of fact and unsupported conclusions in the Westlake report.
- 2.5. There are 5 points in the Westlake Report that appear to be related to the BSE processes. The Council wishes to highlight the incorrect nature of some of the comments, and in doing so, also agrees with the Group's comments on these points.
- 2.6. The Westlake Report states that BSEs were largely carried out by personnel from outside the region, who also organised the process. The Council agrees with the comments made by the Group, that the establishment of the BSE processes came from within the Council with external assistance. This approach is also supported by comments in the NZSEE Report. (See ENG.NZSEE.0001.16: "The writer, operating as the USAR Engineering Team Leader, was able to assist Christchurch City Council to plan and set up a co-ordinated Rapid Building Safety Assessment process....".(our emphasis))
- 2.7. The Westlake Report says there was no system in place to use building owner's engineer's reports. The Council agrees with the Group, which notes that after the first few days a process was put in place to consider building owner reports. The Council also wishes the Commission to note that at times there was a failure by some building owners and their engineers to liaise with the Council, and this was not just an issue related to Council processes.

- 2.8. The Westlake Report suggests there was no planned system to manage volunteers, whereas the Group states there was a system but there was an issue with the scale of the emergency. The Council notes that in relation to the use of volunteer engineers in a future event, if a pre-disaster training and registration system was used, then the management of volunteers would be even more effective. (This suggestion is made in the NZSEE Report at ENG.NZSEE.0001.8 and is supported by the Council later in these submissions).
- 2.9. The Westlake Report comments on the delayed response to issues outside the CBD, whereas the Group considers it was appropriate for Civil Defence to make decisions based on priority. The Council agrees that it was appropriate for the assessment of commercial buildings in the CBD to have a higher priority than other buildings, as generally these buildings posed the greatest risk to the public. However, it also notes, as outlined in its report at ENG.CCC.0002F.12, that buildings on arterial routes were checked. Other buildings were also checked, including when complaints were made by members of the public.
- 2.10. In relation to the BSE process undertaken outside the CBD, level 1 assessments started on the arterial routes on the 6 September, and there were also a large number of residential assessments completed before the end of the state of emergency.
- 2.11. The Westlake Report states that detailed engineering evaluation of buildings is required and are the owner's responsibility "but may be required by the TA". This is incorrect as there is no general legislative ability for the Council to require a building owner to provide such reports. By way of contrast, the Canterbury Earthquake Recovery Authority (CERA) has the power under section 51 of the Canterbury Earthquake Recovery Act 2011 to request that owners provide detailed engineering evaluations of buildings before they are reoccupied.
- 2.12. The Westlake report also says at page 0004.92 that "one opinion is that the [original Building Recovery Office at the Council] could have been more effective if set up under ECan as a regional resource". However, the BRO was

- initially established to provide assistance with building related matters. As this is not an ECan function it is unclear how Ecan could have advised on this.
- 2.13. In addition to the above, there are some incorrect statements in the report concerning the contents of the NZSEE Building Safety Evaluation Guidelines 2009 and the Canterbury Earthquake (Building Act) Order 2010 which the Council wishes to comment on.
- 2.14. The Westlake report states that the Building Safety Evaluation Guidelines 2009 address all types of building and infrastructure, including roads, bridges, water supplies and power supplies. However, the 2009 Guidelines state that services such as drainage, water supply and roading are not included within the scope of the document. In addition, the safety evaluation procedures for dams and bridges are specifically excluded from the scope of the Guidelines.
- 2.15. The report also states that calculations are made when a Level 2 assessment is carried out. However, the Guidelines state that calculations are not envisaged for a Level 2 assessment.
- 2.16. The Westlake report states that the Canterbury Earthquake (Building Act) Order 2010 extended the validity period for red and yellow placards to 16 September 2011 and as a result, "a rapid evaluation lasting a few minutes established the safety status of a building for over twelve months, without the need for further inspection". However, while the expiry date of the Order in Council was 16 September 2011, the continued effect of the red and yellow placards was only extended for 60 days. The placards had to be replaced with Building Act notices before enforcement action could be taken after the 60 day period. Engineering assessments were required from the owners' engineers before the status of any buildings that had received a Building Act notice could be changed.

#### NZSEE Report

2.17. In relation to the NZSEE Report on Building Safety Evaluation, Council largely agree with the comments and conclusions/ recommendations in the report.

- 2.18. Using the numbers from the summary observations section of the NZSEE Report (ENG.NZSEE.0001.43), the Council makes the following comments and submissions:
  - Points 1-4: The Council agrees that the focus of the rapid BSE process is
    on immediate public safety, not the provision of an engineering
    assessment service for owners owners must be responsible themselves
    for detailed engineering evaluations of buildings.
  - Points 5-6, and 27.5: These paragraphs describe the California emergency management process, including the fact that there are pretrained and registered building evaluators with identity/authorisation cards ready to respond (with regular retraining required). The NZSEE Report recommends that this process should be used in New Zealand so there are "appropriate numbers of trained and warranted building professionals".

The Council agrees with this suggestion, and returns to this in greater detail below.

- Points 7-10, 13, 27.1 and 28: The Council agrees that there should be a
  clear and specific legal mandate for BSE processes during and post a
  state of emergency. The NZSEE Report recommends that the Building
  Act 2004 be amended; however, the Council suggests that a number of
  Acts may need to be amended, not just the Building Act, or it may even be
  appropriate for specific new legislation to be enacted.
- Point 11: The liability of volunteers is a matter that the Council also discusses in greater detail below. The point made by the NZSEE is that volunteers have no protection unless a state of emergency is declared and this matters needs to be addressed. The Council agrees.
- Point 17: The Council agrees that the first 3 issues (relating to the deployment of teams with sufficiently experienced personnel, lack of integration between owners engineers and Council processes, and a clear approach to changing the placards) were addressed in the February Earthquake, and that clarity is needed around the assessment and

placarding of residential properties. The Council makes further detailed submissions on this and other issues related to the placards below.

• Point 20: The NZSEE Report states there was confusion regarding the amendments to the definition of dangerous building made through the Canterbury Earthquake (Building Act) Order 2010 (and subsequently the 2011 Order in Council). The Council agrees that there was confusion, and this is demonstrated by the writer of the NZSEE Report. The report states that the amendments meant that all earthquake-prone buildings were dangerous and vice versa, implying that the new class of dangerous buildings in section 121(1)(c) became defined as earthquake-prone buildings. However, that is incorrect as there was no change to the definition of an earthquake-prone building.

The Council worked with the Department of Building and Housing in relation to what was needed in an Order in Council amending the Building Act. From the Council's point of view, it considered an amendment to the Act was needed to allow the Council to take action, if necessary, in relation to buildings that might suffer damage in ongoing aftershocks. The need for such a provision was considered particularly important for buildings that could not otherwise be classified as earthquake-prone (for example ordinary residential buildings), or dangerous under the ordinary provisions of the Building Act 2004 (as the definition excluded earthquakes from being the cause of the danger). However, the clause, as ultimately drafted and enacted, had wider consequences for all buildings than the original purpose proposed by the Council.

This amendment to the definition of dangerous building does not appear in the Building Amendment Act 2012 or in the Building Act Amendment Bill no 4, so any confusion will not continue once the Canterbury Earthquake (Building Act) Order 2011 expires. However, there is clearly a need to address this matter in any transitional legislation for future post earthquake situations.

- Point 21: The Council agrees there should be a legal ability to require owners of green stickered buildings to obtain detailed engineering evaluations. This matter is also discussed in further detail below.
- Points 23-24: The Council disagrees that "significant" problems were encountered by it in respect of building safety evaluations following the Boxing Day Earthquake. There were some issues that arose, for example the liability protection of volunteer engineers, and the recognition that, as no state of emergency was declared, the notices that needed to be used for damaged buildings following their evaluation were Building Act notices rather than civil defence placards. However, these are not issues the Council would describe as significant.

The Council was already having difficulties persuading some owners to obtain detailed engineering evaluations and/or to carry out repairs on their buildings as a result of the September Earthquake. It is not correct for the NZSEE Report to suggest there was a lack of urgency on the Council's behalf after the Boxing Day earthquake.

There were media releases issued by the Council that urged building owners to take action (see page ENG.CCC.0002F.34 in the CCC report). In addition, the work of the specialist Building Recovery Office (BRO) team set up by the Council to seek resolution in respect of earthquake damaged buildings continued. For example, see ENG.CCC.0002F.26, where the Council report notes that: "....early in January 2011 the BRO wrote to the owners of all buildings that had current Building Act notices. The building owners were advised that the BRO would be reassessing all buildings with current notices to determine what further action was required....".

Points 29, 33, 34 and 35: The Council agrees that the placard system
and processes, and what the placards convey to the public, needs review.
 Further comment by the Council on this issue is set out below.

• Other matters: At page 28 of the NZSEE Report (ENG.NZSEE.0001.28), there is a discussion about the post February Earthquake response and the report suggests that there is a need for a warranted Council officer for every BSE carried out. However, it is not clear whether this would be required under the Civil Defence Emergency Management Act 2002 ("CDEMA"). While a state of emergency exists, a BSE is not a Building Act process and the authorisation to carry out such evaluations comes from the civil defence controller. Further depending on the scale of the emergency, this may not be a "local authority" role.

This is another issue that demonstrates there are a number of matters that need to be clarified through a specific legal mandate providing for the BSE process.

# SISIRC Report

- 2.19. The project brief for this report required that it review the Building Evaluation Transition Team's (BETT) operation, processes, documents, and lessons learnt, as well as the remaining matters that needed to be addressed by the Council team that was taking over from BETT. (The team that took over was the BRO team.)
- 2.20. The BETT team was set up by the Council on 20 September 2010 and existed until the end of November 2010. The purpose of the BETT was to preserve public safety and to facilitate a return to normal operations following the earthquake by continuing to identify unsafe buildings, reviewing and updating information held in the Council's property files as engineering reports were received and/or additional damage was noted following any aftershocks, and reviewing cordon placement.
- 2.21. One of the authors of the SISIRC Report had been the team leader of the BETT (working as a contractor to the Council). The SISIRC Report was signed off by its authors on 19 January 2011, but had not been approved as a final report for release by the Inspections and Enforcement Unit Manager of the Council before the February Earthquake.

- 2.22. The Council agrees with much of the SISIRC Report, although the tone and wording used in some parts of the report are not considered to be appropriate for this type of report. While the report was for the purpose of providing a critique of past events to learn from, the way some matters are expressed do not provide constructive criticism. Revision of those parts of the report would have been sought by the Inspections and Enforcement Manager before the report was finalised. In addition, there are also some parts of the report that are not factually or legally correct. Legal corrections and some factual inaccuracies are addressed in these submissions. Other factual inaccuracies will be dealt with in evidence.
- 2.23. In addition, the addendum/Section 9 "Aftershocks and Afterthoughts" was not part of the project brief, and was included by the report writers after the Boxing Day earthquake on their own accord. This was not information that was related to the BETT operations. The Inspections and Enforcement Manager may also have sought the deletion of that section from the final report.
- 2.24. Turning to the recommendations in section 4 of the report. These are all appropriate matters for Council to consider for future emergency planning and the recovery phase response, as well as dealing with actions needed in respect of the current buildings being dealt with by the team.
- 2.25. Section 7 of the report discusses building evaluation management processes and procedures. The description of the process used to develop the CPEng certification form (used to update the status of a building) refers to "extensive debate" on the revisions and "agreement [was] eventually met".
- 2.26. There were revisions of the document but it was something that evolved over a few weeks by a team of people. A representative of the DBH was also involved in the collaborative effort, but is not mentioned in the report.
- 2.27. These criticisms seem unfair given the necessity to urgently come up with a new detailed procedure without any guidance from documents or past experience.

- 2.28. There are incorrect references in the SISIRC Report (see section 7.1.2 (last paragraph) and section 7.4 (last paragraph)) regarding the CPEng certification form as implying "that work will be undertaken on the building to meet s112 of the act [the Building Act 2004] by 4 September 2013". The reference in the report should be that strengthening, as provided for in the Council's Earthquake-prone Building Policy, was required by 4 September 2013 in cases where interim securing work to an earthquake-prone building was to be completed initially.
- 2.29. The correct wording from the certification form, referring to the Policy rather than section 112, is set out in section 8.5.3 of the SISIRC Report (see Option 1). However, section 8.5.3 makes an incorrect statement, to the effect that the 2013 deadline is unenforceable. The Council would enforce strengthening of an earthquake-prone building, if no work other than the interim securing had been done by the deadline, by issuing a section 124 notice.
- 2.30. Section 7.1.3 of the report mentions the additions to the definition of dangerous building by the Canterbury Earthquake (Building Act) Order 2010. The same incorrect view is expressed in the SISIRC Report as in the NZSEE report. This issue is discussed above, in relation to point 20 of the NZSEE report.
- 2.31. The Council generally agrees with comments in the SISIRC Report on cordons, information management, and administration although the example that is provided of a "failure" regarding information management was an unusual occurrence, rather than the norm. There were things that worked well in the recovery phase, but these things are not commented on in the report to the same extent as the things that did not work as well.
- 2.32. The Council also agrees with comments made in the report about the placards not being well understood by the public. This is an issue that has also been raised in hearings before the Commission. However, the Council considers that other comments regarding communications being buried in the Council website, and other similar comments, are unfair. The

Council refers the Commission to pages ENG.CCC.0002F.17 to 20, and appendices 8 to 13 of Council's report on the post September building assessment processes during the response phase and the recovery phase. Again, the example given in the SISIRC report of a photo album being thrown at an officer was a one off and was not a normal day to day occurrence.

- 2.33. In section 8 of the report the "lessons learnt" are discussed. The Council agrees the BETT was an evolving process, and comments that are made about the team being under-resourced may be correct, but it is important to highlight the limited ability for Council to provide additional resources for every Council team that was working in the post-earthquake response phase. There were numerous issues, particularly related to infrastructure failures resulting from the earthquake, that the Council had to deal with and for which resources were needed. Building evaluation was only one of those issues.
- 2.34. Section 8.4 of the SISIRC Report sets out what the report writers believe are the consequences of not immediately transferring from the CDEMA provisions to using "business as usual" provisions of the Building Act 2004. However, the Council had good reasons for not transferring immediately to "normal" dangerous building processes under the Building Act 2004 after the state of emergency ended. The Building Act Order in Council extended the life of the civil defence placards so there was no need to act immediately. This indicates that central government recognised the limited resources and large task ahead of the Council. It is also illustrative of the need for a statutory transitional regime to "business as usual".
- 2.35. The dangerous building notice process was also not considered to be appropriate for most residential buildings, given the EQC involvement with those properties (as discussed at section 6.6 of the SISIRC Report).
- 2.36. The fact that civil defence placards expired before all yellow stickered commercial buildings had been assessed was not ideal, but it is not clear that applying the usual Building Act processes, as suggested in the SISIRC report, would have worked either. What is needed in future is the

imposition of a requirement on, and greater acceptance by, owners to take responsibility for their damaged buildings, and any cordons that might be needed for their buildings.

2.37. In relation to the addendum/section 9 of the SISIRC report, covering the Boxing Day earthquake, the Council submits that both the Council report and the NZSEE report provide a more balanced picture of the events than the SISIRC report. The Council will call evidence in relation to the Boxing Day earthquake and this part of the SISIRC Report.

# 3. Council comments on Building Safety Evaluation/Rapid Assessment Processes during state of emergency

#### Placards

- 3.1. The Council generally agrees with the NZSEE Report comments in relation to the placards. The process for changing a placard during the state of emergency, where a level 1 and 2 assessment has been carried out, clearly needs to be revised. (Although as the NZSEE Report comments, this process was changed in the February earthquake.)
- 3.2. Some level 1 forms completed for buildings assessed as "green" were ticked as requiring further assessment, but then no further inspection was carried out. This situation might be more appropriately dealt with by using a "yellow" placard on such properties. However, the wording on the forms is not clear and needs revision.
- 3.3. A view has also been expressed that in an earthquake event no URM building (less than a certain strength) should be given a green placard; that these types of building should be treated more cautiously. If such a provision was to be required, that would also require legislative amendment, wording changes for the placards, and in the instructions given to those evaluating buildings.
- 3.4. Consideration must also be given to the messages the placards are giving to building owners and the general public. There was a general perception

that green meant safe, rather than the fact it simply meant a building had been inspected and no obvious problems identified.

- 3.5. In the media, at least, there was confusion about what the placards meant, despite the numerous media releases issued by the Council. There appeared to be little understanding that owners still had an obligation to check their buildings, even if their building had a green sticker. Although some owners in the hearings before the Royal Commission appear to have been more knowledgeable, the wording on and colour of placards is something that would benefit from a review, and revisions made. This could occur as part of the NZSEE process of reviewing its guidelines.
- 3.6. Some of the things that could be considered in a placards review include how to address the fading of the placards over time, whether different colours or large letters could be used to replace the red, yellow and green colours on placards, as well as making the wording more clear as to what the different placards mean. Another specific matter that could be relevant to a placards review is whether there should be a separate placard to use when a building has been closed only because of the risk posed by an adjacent building.
- 3.7. Consideration could also be given to whether the placard system can link to the building star rating system (possibly the proposed "Quake Star" system) which the Council suggested at paragraph 3.4 of its additional submission on the legal requirements for earthquake prone buildings and related matters. If such a system was in place prior to an event, then when a state of emergency is declared, it would make identification of buildings and their pre-existing strength more clear and the placards could be applied to buildings more quickly and effectively.
- 3.8. Accompanying this review, there should also be better public education about what to do in an earthquake. Pre-prepared information could also be used as soon as a state of emergency is declared to advise the public about any building evaluations and processes, as well as what will be required of building owners.

Is a BSE process needed for residential buildings?

- 3.9. The Council submits that a process for checking and evaluating residential buildings (not including large apartment buildings, which should be treated as commercial buildings) should be established, but in a modified form from the BSE process for commercial buildings. For example, a building inspector rather than an engineer could normally check a residential building, with the ability to call in an engineer for unusual situations. The process could also provide for red and yellow placards only (which is what was used by Civil Defence in the February earthquake).
- 3.10. Although most residential building owners will be insured and it can be expected that their insurers and/or EQC will carry some responsibility for checking buildings, during a state of emergency the Council considers it is important that not only the state of buildings is checked but also the health and welfare of building occupants. A modified and simplified process would be able to address the reduced risk presented by a residential building, that could be completed quickly, as well as providing a very important "welfare" check.
- 3.11. It would also be of benefit if the various welfare and insurance agencies shared information with the Council about the state of residential buildings. This would serve two purposes. It would:
  - 3.11.1. alert the Council to any dangerous or insanitary situations of which it is not yet aware (for example, this may have assisted in the situation that arose at 389/391 Worcester Street (Wick's Fish Supply)); and
  - 3.11.2. maximise the efficient use of resources and avoid multiple visits and/or assessments of a building.

Liability and warranting of engineers and other volunteers

3.12. This is another issue that needs to be investigated and a solution reached. Although section 110 of the CDEMA suggests that engineers and other volunteers involved in building safety evaluation and other emergency response activities will be covered in respect of their liability for anything done by them during a state of emergency, the extent of this protection is not entirely clear. The section refers widely to "any loss or damage that is due directly or indirectly to a state of emergency", and "so long as the act or omission occurred in the exercise or performance of his or her functions, duties, or powers under this Act". Since there is no clear mandate in the CDEMA for the BSE process the liability protection for those carrying out this role could be challenged by other parties.

- 3.13. It is suggested that the Royal Commission should consider whether such volunteers are sufficiently covered for liability by the CDEMA. If there is not sufficient protection, then there is a risk that volunteers may not come forward in future emergencies. This is also a point of concern in an event that is not declared as a state of emergency, but is one for which a BSE process is still required.
- 3.14. If the CDEMA liability exclusion is considered to be sufficient (or is to be improved upon) then a solution is needed where there is no state of emergency declared, but engineers/other volunteers provide assistance. This was the situation with the Boxing Day earthquake, when there were a number of volunteers<sup>1</sup>. The Council submits that liability protection for such volunteers should be no different when they respond to an emergency whether or not a formal declaration of a state of emergency is made.
- 3.15. The Council also agrees with the NZSEE that it would be useful to have an official identification system for engineers. The question is whether this should be an official warrant under existing legislation. If so, a decision is then needed as to which body should provide the warrant the Council or the civil defence controller?
- 3.16. The Council prefers the NZSEE suggestion, and recommends that a system be put in place for the training/re-training, registration and "warranting" of engineers (who are given a nationally registered

<sup>&</sup>lt;sup>1</sup> The June and December 2011 events were also situations when there was no state of emergency declared. However volunteers were not used to the same extent as on Boxing Day.

identification card) prior to any emergency. This would then apply throughout New Zealand without a need for individual councils (and or a civil defence controller at a local level) to do anything other than check a volunteer's identification card.

3.17. The benefits of such a system include ready capability, and a more consistent approach to building assessment. However, there could be confusion if the term "warranted" is used in respect of engineers accredited through such a system, as there are also warranted officers of Council who would be active in any state of emergency. The Council suggests that any system provide that engineers be "authorised" (instead of warranted) and that the authorisation be done by a national body such as the Ministry of Civil Defence and Emergency Management or the Department of Building and Housing. That body can then provide the engineers with nationally recognised identity/authorisation cards.

### Identification of buildings

- 3.18. There was also an issue that arose for the Council, that has come to light as a result of the Royal Commission's investigations, with different placards being issued for the same building where a building had several street addresses. There were also issues in respect of the correct identification of buildings in cases where there were a number of buildings on one lot, or where the street addresses were different to the addresses in Council's records.
- 3.19. This issue has arisen in part because Councils records (as opposed to the Terra view/Landonline records) have the parcel boundaries shown for a piece of land but not the individual buildings or tenancies that exist on a title, or every street entrance for a property.
- 3.20. This may also be an issue for other Councils and it may require a change to legislation so that all councils use the same recording system, rather than individual councils taking steps to amend their systems. However, it is more of an issue with commercial buildings/CBD buildings rather than residential buildings. A suggestion has also been made that local

authorities include "building shapes" in their records. This would assist in dealing with identification issues and could also be used to link to rapid assessment forms.

4. Submissions on issues related to building assessment and other matters related to emergency management response

## Transition from State of Emergency to Business as Usual

4.1. There are a large number of transitional issues that should be considered in relation to whether there is a need for future changes to legislation. Many of the issues were dealt with after September by Orders in Council, and after February, through the CER Act as well as Orders in Council. One issue relates to whether or not the Council should be recording the details of the rapid assessment placards in a Land Information Memorandum (LIM).

#### Rapid assessment placards details and LIMs

- 4.2. The Council's current practice is to record the fact that a red or yellow placard was issued in respect of a building in a LIM. It considers it was (and is) required to include this information under section 44A of the Local Government Official Information and Meetings Act 1987 because the civil defence placards were deemed to be Building Act notices. Even if it was not mandatory information to be included in a LIM, a Council still has a discretion to include any other information in a LIM that it considers relevant to the land.
- 4.3. However, the Regulations Review Committee that was reviewing the Canterbury Earthquake (Local Government Official Information and Meetings Act) Order 2010 that amended the LIM provisions, challenged the Council's practice.
- 4.4. There is a spread of opinions within the Council as to whether or not this information should be required to be provided in a LIM if the provisions of the Local Government Official Information and Meetings Act 1987 are

- amended in the future, but it was agreed that whichever approach is finally decided on, there needs to be a consistent approach to the issue.
- 4.5. There are clearly competing views about whether the information should be provided. It is only a snapshot in time of the building, but it allows a prospective purchaser to follow up with the owner regarding what happened following the notice, particularly if other records on a Council file do not show building repairs as having been done (where a rapid assessment shows the building was damaged).
- 4.6. However, the Regulations Review Committee had fears around the accuracy of the assessments and the potential for an assessment to reduce the value of a property. This is a matter that should be clarified one way or the other for Councils.

Effect of civil defence placards after a state of emergency ends

- 4.7. Transitional provisions of a permanent nature are required in legislation to deal with the effect of civil defence placards issued for buildings after a state of emergency ends. This was addressed by the Canterbury Earthquake (Building Act) Order 2010, but it will always be an issue following any large event.
- 4.8. It would have been impossible for the Council to have carried out inspections under the Building Act dangerous building requirements in order to replace all the rapid assessment placards with Building Act notices before the end of the emergency (as the NZSEE rapid assessment guidelines contemplate). Similar provisions that were included in the Canterbury Earthquake (Building Act) Order 2010 need to be included in the Building Act, the CDEMA or some new transitional legislation.
- 4.9. New legislation should also provide that the placards continue indefinitely as a transitional notice until the owner of a building provides the Council with information that the Council can be satisfied justifies the removal of the notice or a change of the placard.

4.10. The Canterbury Earthquake (Building Act) Order 2010 provided for expiry dates of the placards and for the placards to be replaced with a Building Act notice where required. However, the Council submits that there should be no expiry date for the civil defence placards, and the onus should be on the owners of buildings to arrange for appropriate checks on, or work on their building to ensure the removal and/or change of the placard. Consideration is also needed on an appropriate process for the approval of entry to red placard/s124(1)(b) notice buildings for the purpose of the further assessment of those buildings.

Detailed engineering evaluations and engineer certified work on buildings

- 4.11. Related to the above submission is the need for a standard power in legislation, that Councils can use before or following a state of emergency ending, to require an owner to provide a detailed engineering report on a building (which could also allow a building status/placard to be changed if necessary for that building).
- 4.12. The Canterbury Earthquake Recovery Authority (CERA) has power under section 51 of the Canterbury Earthquake Recovery Act to require an owner to provide structural reports on their buildings, at the owner's cost. The Authority is exercising this power in a sensible way and allowing owners of some buildings (presumably those that on their face present less of a risk) to remain in their buildings while reports are done.
- 4.13. A similar power should be provided for in future, so a Council (or other body) can compel owners/insurers to ensure that buildings are suitable for occupation. The Council recognises, however, that the power must also be workable. There may be a need to deal with large numbers of buildings and the whole of a city could not be shut down for years until every building was checked.
- 4.14. This means there may need to be a system for Councils to apply that will prioritise risk balanced against other factors, and that may mean some buildings are investigated in more detail than other buildings. The prioritisation system must also be one that building owners will accept.

There should also be clear, enforceable penalties imposed on building owners who do not obtain a detailed engineering evaluation when required.

- 4.15. Linked to the better investigation of and prioritisation of damaged buildings, is the work to be required on a building and then certified by an engineer. The system for reviewing the status of a building and associated certification form (the "CPEng certificate") developed by the collaborative group following the September earthquake needs to be revised, and a formal procedure provided for in relation to the "sign off" of a building for occupation following an earthquake.
- 4.16. The Royal Commission has heard from witnesses questioning the CPEng certification test that was developed. This test compared the state of a building after an earthquake (or after interim work was done) with its preearthquake strength. The question arises whether there should be a damage test or a strength test, but with recognition of the fact that science will take time to progress in relation to the prediction of the size and location of aftershocks. It is, however, clear that a broader approach to this issue is required, that also takes into account the different types of building being evaluated, rather than a standard approach for all buildings.

Greater power to take action on damaged buildings

- 4.17. There is a need for additional and greater powers that would enable a Council to act quickly where no action is taken by an owner in respect of a damaged building and to recover the costs from the property owner.
- 4.18. Section 126 of the Building Act 2004 only allows a Council to do work on a building for which a section 124(1)(c) notice has issued, where the owner has defaulted, by making an application to the District Court. The Canterbury Earthquake (Building Act) Orders 2010 and 2011 provide a quicker process that the 3 Canterbury Councils could use in appropriate cases, but those powers are not applicable to other Councils, and once the Order in Council expires, will no longer be available to the 3 Councils.

- 4.19. CERA currently has clear authority to order the demolition of buildings, but if there is no CERA equivalent in a future emergency, or similar powers provided in legislation that a Council can use, then damaged buildings could remain in that state for some time.
- 4.20. There is also a lack of clarity around the application of the section 129 "immediate danger" process in the Building Act 2004. Issues about section 129 have also been raised in the Council's additional submission on the legal requirements for earthquake prone buildings and related matters.
- 4.21. Although there were amendments made by Orders in Council that meant this power could be exercised without the need for resource consents to be obtained first (in cases where they otherwise would have been required), that did not change the "test" that Councils/the Chief Executive should apply under section 129. The Chief Executive is required to reach a view on whether a building poses an "immediate" danger, as opposed to being a dangerous building in respect of which the section 124 powers can be used instead of section 129. This "test" should be made more simple for a Chief Executive to apply, particularly following a state of emergency. Consideration also needs to be given as to how to deal with heritage buildings in the context of "dangerous" and "immediately dangerous" buildings.
- 4.22. It is also not clear whether outside features of a building could be declared an immediate danger while the rest of a building is not. This matter was addressed by the Council in its previous submission.
- 4.23. Legislative powers are clearly required to address all of the issues above for future emergencies. The new (or amended) legislation should also make it clear that an owner is responsible for paying the costs of any work (repair or demolition) that a Council carries out on their behalf.

Cordons for unsafe buildings/blocks of buildings

4.24. A further related area of concern is the cordoning of unsafe buildings.

There are wide powers in the CDEMA that apply during a state of

emergency but what applies following the end of the state of emergency needs to be clarified. There should be provisions that automatically continue any cordons in place once the state of emergency ends, so there is no doubt as to the legality of any continued existence of cordons.

- 4.25. In particular, clarity is needed on the powers that can be exercised to place and/or retain cordons around larger areas (as opposed to specific buildings) after a state of emergency has ceased. This is particularly relevant to areas where there are a significant number of URM buildings. Section 124(1)(a) of the Building Act 2004 is relatively clear that individual dangerous buildings can be cordoned, but it is not clear whether the same power can be used to cordon a wider area.
- 4.26. It would also be useful for Councils, building owners, and the general public, if there was a clear standard that could be applied in relation to the cordoning of a building. If a standard was in place, although some judgement would still need to be exercised by engineers, there would be greater certainty. If a Council was required to apply a cordoning "standard" and in any situation that meant a certain area had to be closed off, there would be less pressure to reduce the cordoned area compared to where there is a discretion involved. Any such standard could also deal with how to prioritise the cordoning of buildings.
- 4.27. There also needs to be a clear power to recover the costs of providing a cordon around a building(s) from property owners whose buildings are causing the need for the cordon. Providing for a power to charge owners for cordons may encourage the owners to act more quickly in relation to their buildings.

### Technical/Information Management

4.28. The Council submits that the Royal Commission consider whether a requirement should be introduced for local authorities to retain electronic records of building files for all critical and/or high risk buildings (for example hospitals/emergency service buildings, universities, council buildings, etc). The NZSEE Guidelines suggest at page 27 that the

- location and details of critical facility buildings should be recorded and available at the operations centre.
- 4.29. The Council has scanned files and keeps electronic records for a large number of both residential and commercial buildings, but this is a continuing process, generally whenever a hard copy building file is requested. However, it is not aware whether all Councils have similar practices or not, and if this became a legal requirement, it could be quite onerous for councils to implement quickly. A generous timeframe would need to be built into any such requirement.
- 4.30. The electronic records could be shared with a national body (Ministry of Civil Defence and Emergency Management or the Department of Building and Housing) in case a local authority's records are inaccessible in an emergency event.
- 4.31. There needs to be further guidance in the NZSEE building safety evaluation Guidelines for Local authorities. The Guidelines should provide a robust rapid assessment "toolkit" that all Councils can easily apply (including document templates, data management processes and communications plans) and that are ready to immediately roll out in an emergency. The toolkit could also include a list of high hazard elements that should be identified and reviewed as part of the building evaluation process.

#### General Issues Arising During A State of Emergency

- 4.32. A submission on erecting or retaining cordons following a state of emergency was made above, but there is also an issue about cordons during the state of emergency. Clarity is needed on which body has authority for cordon management during a state of emergency. It was not always clear whether it was the Police (under their legislation) or Civil Defence under the CDEMA.
- 4.33. These submissions include a number of suggestions for cost recovery from owners in the post state of emergency environment but there should also

- be clear provision in the CDEMA to recover demolition (or emergency repair) costs from building owners/insurers.
- 4.34. There is also an issue that has come to light in Christchurch following the need to demolish the Art Gallery apartments, and their proximity to the Art Gallery which was used as the primary civil defence base. Councils should review the suitability of their civil defence buildings in light of risks posed by neighbouring buildings. It would be useful for the Commission to make recommendations that Councils take steps in this regard.

#### 5. Conclusion

- 5.1. Clear guidance is needed from Central Government on how councils handle the transitional issues that arise following a state of emergency. Responsibilities of councils, building owners and other agencies need to be clearly defined.
- 5.2. There also needs to be information and guidance on how to address issues that arise from the natural environment compared to physical/built environment. The Council has been grappling with the effect on buildings from rockfall and cliff collapse issues arising from the February earthquake. Although this is not a matter clearly before the Royal Commission, it is an issue that may well arise in other parts of New Zealand if an earthquake occurs and should be addressed by Central Government.
- 5.3. The Royal Commission can be guided in its recommendations, in relation to many of the matters discussed above, by the transitional powers that have applied in Canterbury following the earthquakes in the Orders in Council and the CERA legislation. The Council asks the Commission to give clear guidance on the legislative changes required so the necessary Bill(s) can be drafted as soon as possible.
- 5.4. Submissions have also been made on some issues that will not require legislative changes but will require that various agencies act on any recommendations of the Royal Commission. Those recommendations

should be made in the strongest terms so clear guidance is provided to territorial authorities and others involved in responding to emergencies.

Date: 30 April 2012

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