

9 November 2011 LEX 10559

Canterbury Earthquakes Royal Commission PO Box 14053 Christchurch Mail Centre Christchurch 8544

Attn: Mark Zarifeh

Dear Mr Zarifeh

194 Hereford Street, Christchurch - Joe's Garage

I refer to your letter dated 20 September 2011 to Peter Mitchell asking for the provision of additional information in respect of 194 Hereford Street. Your letter has been referred to me for response.

Your questions are set out below, with the answers below each question number.

- 1. The Council file indicates that a Level 1 assessment was carried out on the building on 5 September 2010 with a resulting green placard. However, there does not appear to be any documentation to support this on the file.
 - (a) Please provide copies of any documentation in relation to that assessment.

A copy of the Level 1 rapid assessment form is attached.

(b) Was a Level 2 or subsequent inspection carried out? If so, please provide details. If not, please explain why not.

There is no record of a Level 2 Rapid Assessment taking place. As stated in Section 3.2 of the Council's "Report into Building Safety Evaluation Processes in the Central Business District Following the 4th September 2010 Earthquake", ("the Council's Report") not all buildings that had a Level 1 assessment also had a Level 2 assessment. Section 3.2 sets out the general process used to determine which buildings received a Level 2 assessment.

As the Level 1 Assessment resulted in a green placard, and the inspector did not recommend that a Level 2 Assessment or detailed engineering evaluation was required, a Level 2 Rapid Assessment was not carried out.

- 2. The Council's file summary shows a further inspection with a "safe" result but is unclear on the date of that inspection.
 - (a) What was the date of that inspection?

We do not have a record of a further inspection with a "safe" result which is undated. Could you please provide more information about this undated inspection, and where it is recorded on the Council file?

TRIM: 11/556491

Page 2 of 4

(b) What was the nature and result of the inspection?

As above.

(c) Was any inspection carried out after the Boxing Day earthquake? If so, please provide details. If not, please explain why not.

We understand from the Council records that no rapid assessment was carried out on the building following the Boxing Day earthquake. We refer to Section 7 of the Council's Report which outlines the response to the Boxing Day aftershocks. Not all CBD buildings were assessed after Boxing Day, but building owners were advised to get their own assessments.

- 3. The Council file shows that the Building was inspected on 11 March 2011 and indicates that it was both red and green placarded.
 - (a) Please explain this apparent anomaly.

We have been unable to locate copies of the 11 March 2011 rapid assessments. However, it appears that the second assessment (11.15am on 11 March 2011) has been entered in error. We **attach** the Worksmart entries for the two assessments which indicate that the inspector for both assessments was an "RDS" and the inspections were carried out 15 minutes apart. Given the obvious damage to the building following the 22 February earthquake, and given the inspector appears to be the same for both assessments, it is unlikely that the building would have received a green placard.

- 4. We are aware that the Building owners had instructed their own engineer following the 4 September 2010 earthquake and we have written to them to seek information in relation to this.
 - (a) Was the Council aware of the inspection/assessment following the September earthquake on behalf of the owners? If so, please provide details.

The Council's records do not indicate that the Council was advised that the owners of the building had instructed their own engineer following the 4 September 2010 earthquake. Council employees, who visited 194 Hereford Street in January to update the building owners on any developments in the area, do not recall the building owner or employees mentioning that the building owners had obtained their own engineer's report.

(b) <u>Did the Council take into account any such inspection/assessment in reaching any views in relation to the structural integrity of the building? If so, please provide details.</u>

As this building received a green placard during the state of emergency, the Council would not have referred to an external engineer's report for any reason, as the building was not part of the case management system.

The Council would only refer to inspections/assessments from the owner's engineers in relation to buildings where an engineer had provided a CPEng certificate and report in response to a section 124 Building Act notice.

Structural integrity of the Building prior to the 4 September 2010 earthquake.

(a) What was the status of the building in terms of the Council's earthquake prone policy prior to the 4 September 2010 earthquake? Was it deemed an earthquake prone building? If so, please provide details. If not, please explain why not.

Under section 66 of the Building Act 1991, the building was deemed to be earthquake prone as it was constructed from unreinforced masonry. A building consent, ABA10051163, for earthquake strengthening work was issued in February 2005. This consent was for the first stage of a refurbishment programme. As part of the consenting process the owner's Design Engineer was asked for information on the lateral force coefficient (and % of current Code requirements), and its derivation. The reply was "First floor joists have been checked to NZS4203:1992 load cases 1.2G+1.6Q and G+0.7Q. Portal Frames have been checked to NZS4203:1992 load cases 1.2G +1.6Q, G+0.7Q & G+Qu+Eu (with u =1.25 T1=1.56 sec, C=0.1904 & > 80% of current code requirements provided)". The building consents for further refurbishment work are discussed below.

The first stage work was completed and a code compliance certificate was issued in May 2006. However, because the Building (Specified systems, change the use and earthquake prone buildings) Regulations 2005 ("the Building Regulations 2005") commenced on 31 March 2005 (after the building consent had been issued) and the required strength level had been raised, the building was noted in the Council's records as a possible earthquake prone building prior to 4 September 2010.

(b) Please explain how the Council's earthquake prone policy had been applied to this building.

The Council's Earthquake Prone Policy 2006 applied from 31 May 2006. Two building consent applications were made in relation to further stages of the refurbishment work to the building after the 2006 Policy was introduced. When the applications were received an assessment would have been made to determine whether the work could be considered to be a Significant Alteration as defined by the Earthquake Prone Buildings Policy 2006. If the work was considered to be a Significant Alteration the procedures in section 1.7 of the Policy were followed. This building had been strengthened to above the Building Act 1991 levels of 10% of the Code so, under section 1.7 of the Policy, no additional strengthening was required even though the applications would have been considered to be for a Significant Alteration under the 2006 Policy.

(c) Please explain how the structural strengthening work carried out on the building in 2005/2006 impacted on the structural integrity of the building and its status in terms of the earthquake prone policy.

The building had been strengthened in 2005 by the addition of steel portal frames which also supported the new floors and roof. A new concrete ground floor had been added and the existing parapets had been tied back to the new roof with steel channels anchored into the back of them. All the perimeter walls had been tied to the timber floor diaphragms at first and second floor levels.

The building was noted as a possible earthquake prone building in terms of the Building Act 2004 and the Earthquake Prone Buildings Policy 2006 because no analysis of the building in terms of the Building Regulations 2005 had been received. It was also noted in the Council's records that a "structural engineer should be engaged to assess

Page 4 of 4

the significance of this, due to changes in the 2004 Building Act, previous strengthening may no longer be enough and additional strengthening may be required".

Yours faithfully

Chris Gilbert

Solicitor

Legal Services Manager