

**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**

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**STATEMENT OF EVIDENCE OF STEPHEN JAMES MCCARTHY IN RELATION TO 194  
HEREFORD STREET**

**DATE OF HEARING: 25 JANUARY 2012**

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## INTRODUCTION

1. My name is Stephen James McCarthy. I am the Environmental Policy and Approvals Manager of the Christchurch City Council. I have worked for the Council since 1 May 2006. During the State of Emergency following the earthquake of 4 September 2010, I was one of the Building Evaluation Managers in the Christchurch City Emergency Operations Centre.
2. I have 36 years of experience working for local government, including 16 years in building control. I have a Degree in Applied Science and a Post Graduate Diploma in Management from Massey University and a Royal Society Diploma in Environmental Health from Wellington Polytechnic.
3. I have been asked to provide evidence to the Royal Commission relating to specific aspects of the Council's involvement with 194 Hereford Street before and after the earthquake of 4 September 2010 and the Boxing Day aftershock.

## DOCUMENTS PROVIDED TO THE ROYAL COMMISSION

4. The documents relating to this building that have been provided to the Royal Commission are:
  - (a) the Building Permit/Building Consent file for 194 Hereford Street; and
  - (b) post earthquake files.

## SCOPE OF EVIDENCE

5. My evidence will address the following matters:
  - (a) The Civil Defence Emergency Management Response in relation to the building after the 4 September 2010 earthquake.
  - (b) Council involvement with the building subsequent to the lifting of the state of emergency on 16 September 2010.

- (c) The Council's response in relation to 194 Hereford Street following the Boxing Day aftershock.
- (d) Whether 194 Hereford Street was assessed as 'earthquake-prone' for the purposes of section 122 of the Building Act 2004.
- (e) The effect of any strengthening undertaken.
- (f) The application of the Council's earthquake prone policies of 2006 and 2010 to the building.

#### **EVENTS BETWEEN 4 SEPTEMBER 2010 EARTHQUAKE AND 22 FEBRUARY 2011 EARTHQUAKE**

6. On 5 September 2010, a Level 1 rapid assessment was carried out and the building was issued with a green placard (**BUI.HER194.0006.12**).
7. The inspector did not recommend that a Level 2 Assessment or detailed engineering evaluation was required. The process that was used to determine which buildings were to receive a Level 2 assessment is detailed at page 13 of the Council's "Report into Building Safety Evaluation Processes in the Central Business District Following the 4 September Earthquake 2010" (**the Council's Report**).
8. A rapid assessment was not carried out on the building following the Boxing Day earthquake. The assessment process following the Boxing Day earthquake is detailed at pages 31-32 of the Council's Report. Not all CBD buildings were assessed after Boxing Day, but building owners were advised to get their own assessments. I understand that the Council has not found any Council records to indicate that the building owner had instructed their own engineer and no independent report was received by the Council.

## **APPLICATION OF RELEVANT LEGISLATION AND THE COUNCIL'S EARTHQUAKE PRONE POLICY**

- 9.** The building would have been deemed to be earthquake prone under the definition in section 66 of the Building Act 1991, as it was constructed from unreinforced masonry.
- 10.** In February 2005, building consent (ABA10051163) was issued for earthquake strengthening work. The building consent issued in 2005 was for the first stage of a refurbishment programme. The strengthening work involved 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.
- 11.** The first stage work was completed and a code compliance certificate was issued in May 2006. However, because the 2005 Building Regulations 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.
- 12.** It was also noted in the Council's records that a "structural engineer should be engaged to assess the significance of this [the building being a possible earthquake prone building], due to changes in the 2004 Building Act, previous strengthening may no longer be enough and additional strengthening may be required".
- 13.** After the commencement of the Earthquake Prone Building Policy 2006, when a building consent application for a significant alteration was received, the strength of the building structure would be assessed and the application would be dealt with in accordance with the Policy (see in particular section 1.7).
- 14.** Two building consent applications were made in relation to further stages of the refurbishment work to the building after the Earthquake Prone Building Policy 2006 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 Building Policy 2006.

15. 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 and 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 Earthquake Prone Building Policy 2006.

DATED *13<sup>th</sup> Day of* January 2012

  
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Stephen James McCarthy