

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**

**STATEMENT OF EVIDENCE OF STEPHEN JAMES MCCARTHY IN RELATION TO
753-759 COLOMBO STREET**

DATE OF HEARING: 29 FEBRUARY 2012

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 753-759 Colombo 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 753-759 Colombo 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 753-759 Colombo Street following the Boxing Day aftershock.
- (d) Whether 753-759 Colombo 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 received a green placard (**BUI.COL753.0011.35**).
7. It appears that a further Level 1 rapid assessment was carried out, as there is another rapid assessment form for the building dated "7th" (**BUI.COL.753.0011.36**). This assessment resulted in the building maintaining a green placard.
8. It appears that the building owner commissioned a Lewis Bradford report, dated 8 October 2010, which notes that a brief walk through was carried out on 8 September 2010. I understand that this report was not on the Council's files and was not commissioned by the Council.
9. There is no record of any rapid assessment being carried out on the building following the Boxing Day earthquake. The assessment process following the Boxing Day earthquake is detailed at page 31-32 of the Council's "Report into Building Safety Evaluation Processes in the Central Business District Following the 4 September Earthquake 2010". Not all CBD buildings were assessed after the Boxing Day earthquake, but building owners were advised to get their own assessments.
10. The Council has no other records of further inspections being carried out on the building following 7 September 2010.

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

11. The building comprised four addresses that were subject to different strengthening works. I understand that:
- (a) 753 Colombo Street had been earthquake strengthened in 1994 with the installation of two concrete frames and an overlay diaphragm on the first floor and steel members to strengthen the walls. The walls and roof were also tied to the structure with steel members and chemset bolts.
 - (b) 755 Colombo Street had been earthquake strengthened in 1994 on the ground floor by the installation of two concrete frames.
 - (c) Earthquake strengthening works for 759 Colombo Street had initially begun in 1999. However the building suffered a fire during construction. A new project to repair the fire damage and complete the strengthening was consented by the Council. The strengthening work consisted of the construction of two concrete frames, a new plyco pynefloor timber first floor diaphragm with steel angle ties around the walls and steel bracing at the roof ceiling level. The angle ties and steel bracing were fixed to the brick walls with chemset anchors. A Conservation Covenant, dated 22 February 2002 was entered into as a result of a grant to assist with the cost of the earthquake strengthening to 759 Colombo Street in 1999/2000.
12. The strengthening work to 753, 755 and 759 Colombo Street was undertaken prior to the introduction of the Council's Earthquake Prone Building Policy 2006.
13. 757 Colombo Street does not appear to have been strengthened.
14. The Building (Specified systems, change the use and earthquake prone buildings) Regulations 2005 commenced on 31 March 2005 and raised the required strength level for buildings. Given the increased earthquake prone trigger level in the 2005 Regulations, it is probable that all the buildings would have been regarded as earthquake prone for the purposes of the Earthquake Prone Buildings Policy, and section 122 of the Building Act 2004. However,

there are no assessments on the Council's file as to whether or not the buildings in fact met 33% of current Code requirements.

- 15.** After the commencement of the Earthquake Prone Building Policy 2006, if a building consent application for a significant alteration had been received the strength of the building structure would have been assessed and the application would have been dealt with in accordance with the Policy (see in particular section 1.7). However, I understand that no applications for building consents for significant alterations had been made after the introduction of the Earthquake Prone Building Policy 2006 and so the requirement to consider strengthening in terms of that Policy had not been triggered.

DATED *13th Day of* January 2012



Stephen James McCarthy