
REPORT 1
1215/52/IM

DRAFT EARTHQUAKE-PRONE BUILDINGS POLICY

1. Purpose of Report

This report presents the Statement of Proposal and the Summary of Information to make the Earthquake-Prone Buildings Policy. The information is for the Committee's consideration and referral to the Council to initiate the special consultative procedure.

2. Executive Summary

The Building Act 2004 requires Council to adopt an earthquake-prone buildings policy to ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential for injury, loss of life or damage to other property in the event of a moderate earthquake. This policy will have to be in place by 30 May 2006 and be reviewed every five years.

Wellington City is located in one of the most seismically active parts of New Zealand and accordingly the draft Policy proposes a largely active approach to ensure buildings are appropriately strengthened, or if appropriate, demolished.

The draft Policy sets out

- the priorities for assessing and strengthening earthquake-prone buildings, which is based on their 'importance level' (for example, whether they serve a post-disaster function) and the building's age and condition
- the maximum timeframes required to undertake the upgrading work
- that owners of earthquake-prone listed heritage buildings must provide a management plan outlining how upgrading work will preserve the building's heritage fabric
- the procedure Council will undertake to determine the earthquake-prone status of buildings.

It is recommended that, following a review of Council files, Council undertake an Initial Evaluation Process using appropriately qualified engineers to identify potential earthquake-prone buildings. Planned for implementation over a three-year period, the estimated cost of the Initial Evaluation Process is \$1,000,000.

In addition, a new heritage incentive fund of \$350,000 a year is being proposed as part of the Council's 2006/07 Long Term Council Community Plan (subject to the new initiatives process) for a range of heritage-related projects, including those that are required as a result of the adoption of the proposed Policy.

3. Recommendations

It is recommended that the Committee:

1. *Receive the information.*
2. *Note that the Building Act 2004 requires Council to adopt a policy on earthquake-prone buildings by 30 May 2006.*
3. *Agree to the draft Earthquake-Prone Buildings Policy, attached at Appendix 1 to this report.*
4. *Recommend that Council initiate the special consultative procedure on the Earthquake-Prone Buildings Policy, as required under the Local Government Act 2002 and the Building Act 2004.*
5. *Recommend that Council approve the Summary of Information and the Statement of Proposal, attached at Appendices 2 and 3 of this report.*
6. *Approve the consultation plan attached as Appendix 5 to this report.*
7. *Note that funding of \$1,000,000 to determine the status of earthquake-prone buildings and for administrative support will be sought over a three year period, beginning through the 2006/07 Long Term Council Community Plan (subject to the new initiatives process).*
8. *Note that following consultation and amendment if appropriate, Council will be asked to adopt the policy in April/May 2006.*

4. Background

Section 131 of the Building Act 2004 (the 'Act') states that:

Territorial authority must adopt policy on dangerous, earthquake-prone and insanitary buildings

- (2) The policy must state –
- (a) the approach that the territorial authority will take in performing its functions under this part; and
 - (b) the territorial authority's priorities in performing those functions; and
 - (c) how the policy will apply to heritage buildings

Section 122 defines the **meaning of earthquake-prone buildings**:

- (1) A building is earthquake-prone for the purposes of this Act if, having regard to its condition and to the ground on which it is built, and because of its construction, the building -
 - (a) will have its ultimate capacity exceeded in a moderate earthquake (as defined in the regulations); and

- (b) would be likely to collapse causing –
 - (i) injury or death to persons in the building or to persons on any other property; or
 - (ii) damage to any other property.
- (2) Subsection (1) does not apply to a building that is used wholly or mainly for residential purposes unless the building –
 - (a) comprises 2 or more storeys; and
 - (b) contains 3 or more household units.

Moderate earthquake has the same meaning as section 7 in the Building Regulations 2005 where –

‘...moderate earthquake means, in relation to a building, an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as the earthquake shaking (determined by normal measures of acceleration, velocity, and displacement) that would be used to design a new building at that site.’

The Building Act also details the powers available to Council in respect of earthquake-prone buildings.

Key sections of the Act are attached at Appendix 4. The proposed policy (Appendix 1), Summary of Information (Appendix 2) and the Statement of Proposal (Appendix 3) meet the purposes and principles of the Act. The proposed Policy will replace the Building Safety Policy 1998 which has been used to enable Council to fulfil its statutory obligations under the Building Act 1991 regarding buildings that are suspected or confirmed to be earthquake-prone.

5. Discussion

5.1 Draft Earthquake-Prone Buildings Policy

Earthquakes are unpredictable events that occur infrequently and they can have significant consequences. Wellington City is located in one of the most seismically active parts of New Zealand and accordingly the draft Policy proposes a largely active approach to ensure buildings are appropriately strengthened or demolished, and in doing so, reduce the potential for injury, loss of life and damage to other property in the event of a moderate earthquake.

The Policy sets out the key policy components and the general approach Council will use to establish the earthquake-prone status of buildings as outlined below.

Key Policy Components

The Key Policy Components are as follows:

<i>Policy Issue</i>	<i>Policy Requirement</i>
Assessment criteria to determine whether buildings are earthquake-prone	Standards New Zealand NZS 1170.5:2005 will be used as a guide to assess whether a building is earthquake-prone.

Priority for assessing and strengthening earthquake-prone buildings	Priority matrix based on: Importance Level (based on NZS1170.0:2002) – whether a building has a post-disaster function, serves a specific community purpose or is likely to cause injury or damage to other property in an earthquake and Building Age and Condition – the likely structural performance of a building based on the structural code to which the building was designed or strengthened.
Maximum timeframe to strengthen earthquake-prone buildings	High priority 5 years Moderate priority 10 years Low priority 15 years Passive No maximum
Heritage Buildings	A management plan outlining how strengthening will preserve the heritage fabric of earthquake-prone listed heritage buildings is to be provided. Proposals to alter or demolish a heritage building will require a resource consent.

Identification of Earthquake-Prone Buildings

To establish the earthquake-prone status of buildings, Council will:

Step 1: Undertake an initial desktop review of Council’s files to assess which buildings could be earthquake-prone.

Step 2: For buildings identified as potentially earthquake-prone after Step 1, carry out an initial evaluation of performance in an earthquake using the New Zealand Society of Earthquake Engineering Initial Evaluation Process in relation to NZS 1170.5:2005.

Step 3: For buildings considered to fall within the definition as earthquake-prone after Step 2, allow building owners to provide further information about matters that may affect the strength of the building or a detailed assessment of the structure.

Step 4: After considering any further information provided, if a building is considered earthquake-prone, advise building owners of the need to strengthen the building and issue a notice under the Building Act to begin the work

In the event that strengthening work has not been undertaken in accordance with the notice, consider employing enforcement options.

Should an owner *dispute the classification of their building as earthquake prone*, application for a ‘Determination’ may be made to the Chief Executive of the Department of Building and Housing. As set out in the Building Act 2004, the determination of the Chief Executive is binding on the Council.

The Council will consider individual submissions from owners *requesting a longer timeframe* to complete the strengthening work through a hearing process. This may be appropriate in special circumstances where the building owner is unable to comply with the requirement to strengthen the building within the timeframes set out.

5.2 Impact of the draft Policy on Wellington City

5.2.1 Scope of the earthquake-prone building problem

The Building Act 2004 meaning of an earthquake-prone building excludes those used wholly or mainly for residential purposes, unless it comprises two or more storeys and contains three or more household units. This means that of Wellington City's 53,770 properties, 7,360 will have to be assessed using the desktop review to determine whether they are potentially earthquake-prone. The desktop review is currently underway and it is estimated that approximately 4,500 buildings will need to be assessed using the Initial Evaluation Process.

5.2.2 Heritage buildings

The proposed Policy's approach to heritage buildings is to reduce the impact of any strengthening work required on the heritage fabric of the building. Section 3.6 of the Statement of Proposal outlines that Council can either adopt an approach that treats heritage buildings the same as all others (this could result in a greater degree of proposed demolition to heritage buildings) or proactively seek to protect heritage buildings (to provide greater opportunities for their preservation).

Officers recommend that a proactive policy apply, balanced against the fact that public risk also needs to be minimised. Therefore, the draft Policy sets out that for earthquake-prone heritage buildings:

- strengthening is required so that it is no longer earthquake-prone
- the maximum timeframes will apply, just as it does to all buildings
- a management plan outlining how strengthening will preserve the heritage fabric of buildings is to be provided
- demolition is not encouraged.

In addition, a new heritage incentive fund of \$350,000 a year is being proposed as part of the Council's 2006/07 Long Term Council Community Plan (subject to the new initiatives process). The fund will be available for a range of heritage-related projects, in accordance with the Built Heritage Policy, and *not* specifically for earthquake-strengthening related work. Building owners will be able to apply for funding for obtaining detailed assessments, completing management plans and a small amount may be available for any required strengthening work. However, the fund is not sufficient to make a significant impact on all earthquake-strengthening related work on heritage buildings expected throughout the city.

Council could fund all detailed assessments of heritage buildings, as it did under the Building Safety Policy 1998. However, that applied to a relatively small number of

buildings and had an estimated cost of approximately \$750,000. Officers do not recommend the significant costs inherent in this approach.

5.3 Financial implications for Council

5.3.1 Policy Implementation

The draft Policy outlines the procedure Council will follow to establish the earthquake-prone status of buildings, and this is summarised in section 5.1 above. It will involve Council undertaking a desktop review of its files (Step 1) and buildings identified as being potentially earthquake-prone will then be subject to the Initial Evaluation Process (Step 2). Building owners who have buildings deemed earthquake-prone, may then choose to undertake their own detailed assessment and provide this to Council (Step 3).

The draft Policy states that Council will undertake the Initial Evaluation Process (IEP) using appropriately qualified engineers. It is proposed that this be implemented at Council's cost, over three years. Appropriately qualified engineers will also review assessments provided by building owners.

With approximately 4,500 buildings needing to be assessed using the IEP, the estimated cost to Council to implement this Policy is \$1,000,000, and this funding will be sought in the Long Term Council Community Plan over a three year period, beginning in 2006/07. This is to fund the cost of commissioning the IEPs (approximately \$640,000) and to review detailed assessments provided by building owners (approximately \$220,000). It also includes \$45,000 p.a. to cover administrative support costs.

Officers have considered whether building owners could undertake and fund their own IEP. However, the Department of Building and Housing considers that a territorial authority *cannot* require an owner to undertake an assessment of a building deemed earthquake prone following the desktop review. Furthermore, the Department considers that under the Building Act, a territorial authority *cannot* charge a building owner for an assessment. Legal advice received during the development of the draft Policy has confirmed this view.

Under Section 219 of the Building Act, Council could attempt to impose a fee or charge "*for the performance of any other function or service under this Act*". However, legal advice is that such a charge would be difficult to impose and enforce. This is because some buildings will not be identified as earthquake-prone and therefore no service is provided to the building owner from Council undertaking the IEP. IEPs for buildings that are identified as being earthquake-prone provide grounds for Council to issue a notice. It is therefore not regarded as a service for which the building owner needs to pay.

It is also recommended that the Council carry out the IEPs because it ensures:

- greater consistency in the application of the IEP used to assess whether a building is earthquake-prone
- IEPs are carried out to an acceptable quality, timeframe and according to a priority schedule

- Council has sufficient confidence to issue a notice to building owners under the Building Act to carry out strengthening work.

Further work will be required at later stages once notices to strengthen buildings are issued to determine whether the work has been completed. It is not currently possible to assess the cost of this work. Administrative costs related to responding to customer queries and updating the database can be absorbed into business as usual budgets.

5.3.2 Council as building owner

The draft Policy will also have direct implications for the Council as the owner of a significant number of buildings.

It is estimated that approximately 300 Council-owned buildings will require further assessment to determine their earthquake-proneness. At this stage this will be completed as part of the process set out in the Policy. The work required and costs involved will be reported to this Committee as they are identified.

The draft Policy will also apply to Council's infrastructure such as roads, tunnels and water reservoirs. However, Council's obligations regarding earthquake-proneness are met through its Asset Management Plans which set out how Council will meet the requirements of the Civil Defence and Emergency Management Act 2002.

6. Timeline

The Building Act requires that this policy be developed using the special consultative procedure detailed in the Local Government Act 2002. A consultation plan is attached at Appendix 5.

The timeline for development of the Policy is as follows:

December 2005	Council considers the proposed policy and initiates the special consultative procedure
February 2006	Consultation period
March 2006	Strategy and Policy Committee hear oral submissions
April 2006	Strategy & Policy Committee consider report on the special consultative procedure
May 2006	Council will consider adoption of the proposed policy
May 2006	Adopted policy supplied to Department of Building and Housing.

7. Conclusion

This report presents for the committee's consideration the Statement of Proposal and the Summary of Information for a proposed policy for the management of earthquake-prone buildings. The Committee is asked to agree to the Statement of Proposal, the Summary of Information and the proposed Policy and to refer them to Council to initiate the special consultative procedure, as required under the Local Government Act 2002 and the Building Act 2004.

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Supporting Information

1) Fit with Strategic Objectives/Strategic Outcomes

This policy proposal aligns with the following Strategic Outcomes:

- (1) *More liveable*
- (9) *Safer*

2) LTCCP/Annual Plan reference and long term financial impact

Section 5.3 of this report outlines the LTCCP implications of implementing the Policy. The Policy relates to Annual Plan reference 1.4.2: Building Control and Facilitation

3) Treaty of Waitangi considerations

No specific Treaty of Waitangi considerations have been identified.

4) Decision-Making

This is not a significant decision as defined by the Wellington City Council Significance Policy.

5) Consultation

a) General Consultation

The issues associated with regulating the management of earthquake-prone buildings, the options to address them and the proposed policy have been identified, developed and considered through internal consultation with Building Consents & Licensing Services, Planning and Strategy and Treaty Relations. Consultation has also taken place with other local authorities in the region, structural engineers and the Property Council of New Zealand, Insurance Council of New Zealand.

Formal external consultation will be undertaken on the proposed policy using the special consultative procedure, as required under the Local Government Act 2002 and the Building Act 2004.

b) Consultation with Maori

Specific consultation with Maori is not proposed.

6) Legal Implications

Legal advice has been provided in the development of this report. The liability for damage to property caused by an earthquake lies with the building owner. There is also potential liability to Council if it fails to adequately administer its responsibilities for earthquake-prone buildings and property damage occurs as a result of an earthquake.

7) Consistency with existing policy

This report recommends new policy to replace the Building Safety Policy 1998.