

**REPORT 2** (1215/11/IM)

# Report of the Strategy and Policy Committee Meeting of Thursday 11 May 2006

Members: Mayor Prendergast, Councillors Armstrong (Chair), Ahipene-

Mercer, Cook, Foster, Gill, Goulden, McKinnon, Morrison, Pepperell, Ritchie, Ruben, Shaw, Wade-Brown and Wain.

#### THE COMMITTEE RECOMMENDS:

1. **ITEM 099/06P MARINE EDUCATION CENTRE – PART 1** (1215/52/IM) (REPORT 7)

#### THAT Council:

- 1. Agree to provide a guarantee to the Wellington Marine Conservation Trust, to the amount of \$200,000 to be used for the resource consent process (including any Environment Court appeal).
- 2. Delegate to the Chief Executive the authority to complete the guarantee with such terms and conditions as deemed appropriate.
- 2. ITEM 100/06P EARTHQUAKE –PRONE BUILDINGS POLICY REPORT BACK ON CONSULTATION (1215/52/IM) (REPORT 2)

#### THAT Council:

- 1. Adopt the draft Earthquake-Prone Buildings Policy attached as Appendix 1, subject to any amendments, pursuant to the Local Government Act 2002 and Building Act 2004.
- 3. **ITEM 101/06P DANGEROUS AND INSANITARY BUILDINGS POLICY REPORT BACK ON CONSULTATION** (1215/52/IM) (REPORT 3)

#### THAT Council:

1. Adopt the draft Dangerous and Insanitary Buildings Policy attached as Appendix 2, subject to any amendments, pursuant to the Local Government Act 2002 and Building Act 2004.

Robert Armstrong Chair

# **EARTHQUAKE-PRONE BUILDINGS POLICY**

#### **EARTHQUAKE- PRONE BUILDINGS POLICY**

#### **MAY 2006**

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#### Introduction

Wellington City is located in one of the most seismically active parts of New Zealand. Earthquakes are unpredictable events that occur infrequently and they can have significant consequences.

Earthquakes cannot be prevented, but their impacts can be mitigated. The Building Act 2004 (the 'Act') expresses the government's objective for earthquake-prone buildings to be strengthened to the appropriate seismic standards, or be demolished. It has an underlying objective to reduce the risk of injury, death or damage to other property that may result from the effects of an earthquake on buildings.

This Policy has been developed under the requirements set out in the Act. It outlines the Wellington City Council's approach to ensure earthquake-prone buildings are strengthened to the level required by the Act, or be demolished. This Policy replaces the Council's Building Safety Policy 1998.

## **Policy Objectives and Principles**

#### **POLICY OBJECTIVES**

The objective of this Policy is to discharge the Council's responsibilities and obligations under the Building Act with respect to earthquake-prone buildings.

In doing so, strengthening work undertaken to comply with the Policy will reduce the potential for injury, loss of life and damage to other property in an earthquake. It will also reduce the potential social disruption and loss of productivity that may result from an earthquake.

It is the responsibility of building owners to ensure that buildings comply with the requirements of the Act. The Council can give no assurance or guarantee that any building is not earthquake-prone at any time, until approved strengthening work has been completed.

#### **POLICY PRINCIPLES**

This Policy has been developed considering the purpose and principles of the Act which seek to ensure that:

- people who use buildings can do so safely and without endangering their health
- buildings have attributes that contribute appropriately to the health, physical independence, and well-being of the people who use them
- buildings are designed, constructed, and able to be used in ways that promote sustainable development.

## **Key Policy components**

#### ASSESSING EARTHQUAKE-PRONE BUILDINGS

Under Section 122 of the Building Act, the meaning of earthquake-prone building is

- (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."

Buildings will need to be assessed to determine whether they are earthquake-prone. As a general guidance, an earthquake prone building will have strength that is 33% or less of the seismic loading standard NZS 1170.5: 2004.

#### STANDARD OF STRENGTHENING REQUIRED

Once a building has been classified as earthquake prone, strengthening work to ensure the building is no longer earthquake prone will require a building consent. When a building consent is sought then the Council will assess whether the level of strengthening is to the minimum levels required by law and will also encourage, but cannot require, strengthening to the higher levels, particularly for buildings serving a specific post disaster function.

The benefits for the building owner of higher levels of strengthening include:

- improved levels of safety for occupants, tenants and the public
- allowance for a change of use to occur to potentially better meet owner or market demand and realise a better return
- insurance against future changes in either the legislation or structural codes which may require higher levels of strengthening to be achieved
- leverage for improved insurance
- reduced risk level of damage to the building, other properties in its proximity and lessen the impacts on business continuity.

There is also an advantage to the city in reducing the impacts for our community following an earthquake event by:

- preserving the fabric of our city, particularly heritage buildings
- lessening the economic impacts
- lessening the disruption of service.

#### PRIORITISATION TO STRENGTHEN EARTHQUAKE-PRONE BUILDINGS

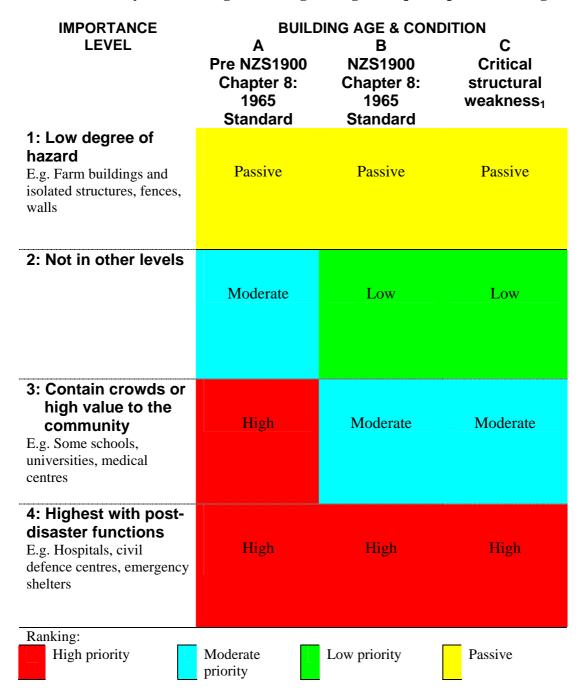
Table 1 prioritises the order in which the buildings will be assessed and, if necessary, strengthened. The prioritisation seeks to balance the public risk associated with earthquake-prone buildings, the private cost of strengthening a building and the availability of people to undertake the strengthening work.

The prioritisation in Table 1 is determined by:

Importance Level – whether a building has a post-disaster function, serves a specific community purpose and is likely to cause injury or damage to other property. The complete list of Importance Levels, which is based on NZS 1170.0:2002 as revised in 2003, is included in Attachment 1.

Building Age and Condition – the likely structural performance of a building based on the structural code to which the building was designed or strengthened.

Table 1: Priority for assessing and strengthening earthquake-prone buildings



Notes: 1. Critical structural weakness is defined as individual buildings built post 1976 (NZS 4203 structural design code) with an identified detailing deficiency that renders it earthquake prone.

#### MAXIMUM TIMEFRAME TO STRENGTHEN A BUILDING

Using the prioritisation established in Table 1, the maximum timeframes for undertaking strengthening work for a building that has been determined as earthquake-prone, are:

High priority 5 years
Moderate priority 10 years
Low priority 15 years

Passive No maximum.

Buildings with earthquake-prone building notices issued under Section 66 of the Building Act 1991 will be reissued a notice under Section 124 of the Building Act 2004 requiring strengthening. Building work must begin within two years of the notice being issued.

When an application for building consent, or a series of building consent applications, relating to a building determined to be earthquake-prone is received from 1 June 2006 with a cumulative project value greater than one-third of the building's capital value (as defined in section 2(1) of the Rating Valuations Act 1998) for local government rating purposes the building owner will be required to undertake the structural design for strengthening and either include the:

- complete strengthening work in the building consent, or
- strengthening work to the area otherwise affected by the building work, and agree with Council on a programme to complete the strengthening works within the maximum timeframe set out above.

#### **DEMOLITION OF EARTHQUAKE-PRONE BUILDINGS**

Once a building is classified as earthquake-prone, the building owner may choose to strengthen it, or if appropriate, demolish all or part of the building. A demolition proposal may require a resource consent to be obtained from the Council.

#### **CHANGE OF USE**

The Building Act 2004 provisions regarding change of use are separate from the Act's provisions relating to earthquake-prone buildings.

When a change of use for a building occurs, then an upgrade of the structure of the building is required "as nearly as is reasonably practicable" with the Building Code. At this level of upgrade, a building will no longer be earthquake-prone.

The change of use provisions includes the establishment of a household unit where there was none before, and wherever there is a change in the classified use as defined in Schedule 2 of the Building (Specified systems, change of use, and earthquake-prone buildings) Regulations 2005.

#### **HERITAGE BUILDINGS**

A heritage building includes all buildings listed as a heritage building in the Wellington City District Plan and/or those registered by the New Zealand Historic Places Trust as detailed in Attachment 3.

The Building Act requires that Council *must* ensure all earthquake-prone buildings are strengthened to at least meet the minimum prescribed standard (or be demolished) to reduce the potential of injury, loss of life or damage to other property in the event of a moderate earthquake. This Policy's approach to heritage buildings is to reduce the impact of any strengthening work required on the heritage fabric of the building so 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 by the owner as part of any building consent application for strengthening work
- demolition is not encouraged.

In addition, a new heritage incentive fund of \$250,000 in year one and \$350,000 a year thereafter is proposed as part of the Council's 2006/07 Long Term Council Community Plan for a range of heritage-related projects, including those that are required as a result of the adoption of the proposed Policy.

#### **INFRASTRUCTURE**

The management of Council's infrastructure, including roads, tunnels and water reservoirs, is also relevant to this Policy. Currently, Asset Management Plans set out how Council will meet its obligations under the Civil Defence and Emergency Management Act 2002, which places a duty on a local authority to plan and provide for civil defence emergency management within its district. It must also ensure that it is able to function, even at a reduced level, after an emergency such as an earthquake.

In addition, all works carried on infrastructure comply with the risk analysis, best practice and relevant standards as set out in the Asset Management Plan.

Other network utility operators are similarly covered by asset management plans which include provision for upgrading.

#### **IDENTIFICATION OF EARTHQUAKE-PRONE BUILDINGS**

The following sets out the procedure Council will use to establish the earthquake-prone status of all buildings.

#### Step 1. Desk top review

A desk top review of Council files will be undertaken by Council to assess which buildings could be earthquake-prone. Buildings that will *not* require further assessment include those:

- designed or strengthened to the 1976 NZS 4203 and subsequent codes, unless they have a critical structural weakness
- isolated structures unlikely to collapse causing injury, death or damage to other property (refer Section 122 (1)(b) of the Building Act 2004)
- used wholly or mainly for residential purposes, unless the building comprises 2 or more storeys and contains 3 or more household units (refer Section 122(2) of the Building Act 2004)
- Council and other network utility operator infrastructure covered by an Asset Management Plan.

From the information gathered in this review, a database of potentially earthquake prone buildings will be established.

#### Step 2. Initial evaluation process

The Council will use the Initial Evaluation Process (IEP) set out in the New Zealand Society for Earthquake Engineering *Recommendations for the Assessment and Improvement of the Structural Performance of Buildings in an Earthquake* to determine the structural performance score of potentially earthquake prone buildings in relation to NZS 1170.5: 2004. Buildings with a score of less than 34 are considered to fall within the definition of an earthquake-prone building.

Buildings classified as High Priority after Step 1 above will be evaluated first, followed by those classified as Moderate and then Low Priority.

Council will, at its own cost, use appropriately qualified engineers, to undertake the evaluations proposed over a three year period.

#### **Step 3. Advisement of IEP Outcome**

As the IEP evaluations are completed, the Council will write to owners of buildings with an IEP score of less than 34 advising that their building is potentially earthquake prone. The letter will also note any heritage listing and the consequent need for a Management Plan to preserve the heritage fabric of the building. Owners will then have six months to consider this advice and provide any additional information about factors that may affect the strength of the building or a detailed assessment of the structure. Relevant information could include:

- construction materials and detailing
- regularity of the building in both plan and elevation
- the type of soil the building is founded on.

Council will use appropriately qualified engineers to review this information. Where the Council is satisfied that the building is not earthquake prone, the recorded status of the building will be changed and the owner will be advised of the Council's decision.

#### Step 4. Issue notice to strengthen building

Where, after consideration of any further information provided in Stage 3 above, the Council is satisfied that the building is earthquake prone it will advise the owner of the classification and issue a written notice under Section 124 of the Building Act 2004 requiring a building consent to be obtained and the structural strengthening work to be undertaken. As required by the Building Act, a copy of this notice for any building registered under the Historic Places Act 1993 will be forwarded to the NZ Historic Places Trust.

#### Step 5. Dispute of earthquake-prone classification of building

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.

**Step 6.** Request by building owner for extension in timeframe to complete work The Council may consider individual submissions from owners through a hearing process requesting a longer timeframe (than set out in section 3.4) to complete the strengthening work. This may be appropriate in special circumstances where the building owner is unable to comply with the requirement to strengthen the building within the maximum Policy timeframes.

The hearing process will take the purpose and the relevant principles of the Building Act into consideration. It will consider the appeal of the building owner against the Council's requirement to reduce the risk to the public in the event of an earthquake. Specific matters that may be considered are set out in Attachment 2. The hearings will be established by Council and administrative costs to the building owner may apply.

Should the building owner be permitted to have a longer timeframe to strengthen the building, the Council may take action to ensure the public is aware of the earthquake-prone status of the building and the risk associated with occupying the building. This may include placing a notice on the building or putting up a hoarding or fence around the building. Any notice will be reissued to reflect amended agreed timeframes.

#### Step 7. Updates

As building consents for structural strengthening are received and the strengthening work completed, the database will be updated to reflect the status of the building as *not* earthquake prone.

#### **Step 8. Enforcement action**

If structural upgrading work has not been undertaken in accordance with the notice issued at Step 4, the Council will consider enforcement actions under the Building Act.

# **Availability of Earthquake-Prone Building Information**

The database of potentially earthquake prone buildings is publicly available upon request and includes information that is already provided in Land Information Memoranda. The database will provide a summary of the data and also the current status of the building as potentially earthquake prone or earthquake prone. It will note whether this information is pending an outcome of an assessment to determine its correct status.

The information will continue to be included in property reports and Land Information Memoranda.

# Importance Levels for Building types – New Zealand Structures

**STRUCTURES** 

AMDT No. 2 NOV 2003

### TABLE 3.2 IMPORTANCE LEVELS FOR BUILDING TYPES – NEW ZEALAND

Importance level	Comment	Examples
1	Structures presenting a low degree of hazard to life and other property	Structures with a total floor area of <30 m <sup>2</sup>
		Farm buildings, isolated structures, towers in rural situations
		Fences, masts, walls, in-ground swimming pools
2	Normal structures and structures not in other importance levels	Buildings not included in Importance Level 1, 3 or 4
		Single family dwellings
		Car parking buildings
3	Structures that as a whole may contain people in crowds or contents of high value to the community or pose risks to people in crowds	Buildings and facilities as follows:
		(a) Where more than 300 people can congregate in one area
		(b) Day care facilities with a capacity greater than 150
		(c) Primary school or secondary school facilities with a capacity greater than 250
		(d) Colleges or adult education facilities with a capacity greater than 500
		(e) Health care facilities with a capacity of 50 or more resident patients but not having surgery or emergency treatment facilities
		(f) Airport terminals, principal railway stations with a capacity greater than 250
		(g) Correctional institutions
		(h) Multi-occupancy residential, commercial (including shops), industrial, office and retailing buildings designed to accommodate more than 5000 people and with a gross area greater than 10 000 m <sup>2</sup>
		(i) Public assembly buildings, theatres and cinemas of greater than 100m <sup>2</sup>
		Emergency medical and other emergency facilities not designated as post-disaster
		Power-generating facilities, water treatment facilities and other public utilities not designated as post-disaster
		Buildings and facilities not designated as post-disaster containing hazardous materials capable of causing hazardous conditions that do not extend beyond the property boundaries

4	Structures with special post-disaster functions	Buildings and facilities designated as essential facilities
		Buildings and facilities with special post-disaster function
		Medical emergency or surgical facilities
		Emergency service facilities such as fire, police stations and emergency vehicles garages
		Utilities or emergency supplies or installations required as backup for buildings and facilities of Importance Level 4
		Designated emergency shelters, designated emergency centres and ancillary facilities
		Buildings and facilities containing hazardous materials capable of causing hazardous conditions that extend beyond the property boundaries
5	Special structures (outside the scope of this Standard – acceptable probability of failure to be determined by special study)	Structures that have special functions or whose failure poses catastrophic risk to a large area (e.g. 100 km²) or a large number of people (e.g. 100 000)
		Major dams, extreme hazard facilities

Source: Standards NZ, Structural design actions Part 0: General principles, AS/NZS 1170.0:2002, Table 3.2

Note: There are no importance Level 5 buildings in the Wellington City area.

#### **Hearings Process**

# Specific matters that may be considered for an extension in timeframe to complete strengthening work

- whether people who use the building can do so safely
- importance of ensuring that each building is durable for its intended use
- importance of recognising any special traditional and cultural aspects of the intended use of the building
- costs of the building (including maintenance) over its whole life
- importance of standards of building design and construction in compliance with the building code
- need to provide for the protection of other property from the risk of physical damage
- need to facilitate the preservation of buildings of significant cultural, historical, or heritage value
- importance level of the building
- building structure and strength i.e. the code that was used to design and construct the building
- special characteristics of the building e.g. heritage or historic
- whether the building has already been strengthened along with the level it was strengthened to and when the work was done
- financial implications e.g. viability
- ramifications if the building were to be demolished rather than strengthened e.g. loss of heritage for future generations
- availability of the appropriate people to do the work.

#### **Definition of Heritage Building**

- Any building listed as a historic heritage item, is part of a heritage area or identified as a cultural site of significance to tangata whenua in any district or regional plan prepared under the Resource Management Act 1991.
- Any building within any registered historic place, historic area, wahi tapu, or wahi tapu area under the Historic Places Act 1993.
- Any building that is an archaeological site within the meaning of the Historic Places Act 1993.
- Any historic building or Actively Managed Historic Place listed in a Historic Resources Strategy or Conservation Management Strategy and Conservation Management Plan prepared under the Conservation Act 1987.
- Any historic building listed in a reserve management plan prepared under the Reserves Act 1977.
- Any building within a reserve established by the Maori Land Court under the Te Turi Whenua Maori Land Act 1993 for historic and cultural purposes
- Any building of importance to tangata whenua that has listed in an iwi management plan.
- Any structures or buildings associated with a historic cemetery or memorial.
- Any building managed for heritage purposes by agencies such NZHPT, Ministry of Culture and Heritage, Department of Conservation, and local authorities
- Any building or structure that is subject to a heritage order, heritage covenant or other protective covenant.

#### POLICY FOR DANGEROUS AND INSANITARY BUILDINGS

#### 1. INTRODUCTION

This policy has been developed in response to requirements set out in the Building Act 2004 (BA04). Although Council already manages dangerous and insanitary buildings when they are detected or reported, the requirement to have a formal policy is entirely new.

This policy has tenure of five years from the time it is adopted to when it must be reviewed.

This policy has been developed using the special consultative procedure under the Local Government Act 2002 including discussion with principal Council stakeholders, principal external stakeholders, adjacent territorial authorities, the Greater Wellington Regional Council, and the public.

#### 2. POLICY OBJECTIVES

The objective of this policy is to discharge BA04 responsibilities with respect to the dangerous and insanitary buildings. The policy also includes Council's general approach, priorities and application to heritage buildings.

It is the responsibility of building owners to ensure that buildings comply with the requirements of the BA04. Council can give no assurance or guarantee that any building is safe or sanitary at any time. Council's responsibility is to ensure that when dangerous or insanitary conditions are found, that the danger is reduced or removed and that the building is prevented from remaining insanitary.

This policy applies to all buildings, even though a code compliance certificate may have been issued previously, as the current use and/or maintenance of the building can impact on the health and safety of occupants.

#### 3. POLICY PRINCIPLES

This policy has been developed considering the purpose and principles of the BA04 which seek to ensure that:

- People who use buildings can do so safely and without endangering their health
- People who use a building can escape from the building if it is on fire.

#### 4. PRIORITIES

Council will respond promptly to complaints and will inspect to assess the dangerous or insanitary status of a building. The assessment will determine if immediate or urgent action is necessary, if the building is confirmed as being dangerous or insanitary. If an immediate response is required, section 129 of the BA04 gives Council options to take action.

#### APPENDIX TWO

In general, 10 days is considered a minimum notice period for the danger to be removed or the insanitary conditions to be fixed, unless the situation requires immediate rectification.

#### 5. HERITAGE BUILDINGS

Council's Built Heritage Policy 2005 and section 6(f) of the Resource Management Act 1991 (RMA) note that building work on a heritage building must be done in a way appropriate to its heritage values. No further special measures will apply. Except in emergencies, a heritage building cannot be demolished without resource consent and demolition is not an option to remove a danger or fix insanitary conditions. The BA04 requires that any notice regarding a building listed under the Historic Places Act 1993 be copied to the Historic Places Trust.

Sections 330 and 330A of the RMA do allow for the demolition of a heritage building. This is in the case that any sudden event (for example the collapse of a building) is likely to cause loss of life, injury or serious damage to property.

#### 6. GENERAL APPLICATION

Council's general approach is outlined in the process below:

#### 1. Detect

When a complaint is received or a Council officer observes a potential dangerous or insanitary condition:

- the event is recorded on Council's databases
- records related to the building are searched if the urgency of the situation allows
- an inspection is arranged.

#### 2. Assess

An assessment of the building is undertaken using the checklist and the work instruction which is an agreed process common to Hutt City Council, Upper Hutt City Council, Porirua City Council, Kapiti Coast District Council, and Wellington City Council.

Among other things, the building is inspected to determine:

- illegal building work (possibly unauthorised change of use)
- maintenance of specified systems (for fire safety and water supply protection)
- the state of repair (structure, services, passive fire protection)
- the level of safety offered by the building compared to the "acceptable solution"

Credible scenarios are then considered and expert advice may be taken where appropriate. A decision as to whether the building is dangerous and/or insanitary is made by an authorised Council officer and options to reduce or remove the danger or fix the insanitary conditions are explored.

<sup>&</sup>lt;sup>1</sup> An acceptable solution is a document issued by the Dept. of Building and Housing as one means of compliance with the Building Code.

#### APPENDIX TWO

#### 3. Act

When a building is determined to be dangerous and/or insanitary, the building owner or their agent is contacted to discuss remedial options and actions when the urgency of the situation allows. The building owner can agree to complete the work within a specified time or otherwise the Council can issue a notice to require that work be done to reduce or remove the danger or fix the insanitary conditions.

If there is immediate danger to building users, Council can undertake work to remove the danger or fix the insanitary conditions and recover costs from the owner.

#### 4. Monitor

The building will be re-inspected to confirm that the required actions have been completed or a written notice has been complied with.

#### 5. Enforce

Where danger or insanitary conditions continue, further notices to do the remedial work will be issued. Continued failure to comply with a notice can lead to prosecution. Another option is for Council to undertake the work and recover the costs from the building owner.

#### 7. RECORD KEEPING

Information is included on Land Information Memoranda where dangerous and insanitary conditions are confirmed but not resolved. A copy of any outstanding written notice is also included along with explanatory information of the requirements of the BA04. Information is not included when dangerous or insanitary conditions have been resolved.