Heritage + Seismic Upgrading
NZ Local Government Heritage Planners Forum
Policy Workshop

Minutes

Friday 11 February 10 am to 4 pm
Our City, Library
Cnr Worcester Boulevard and Oxford Terrace, Christchurch

Each Local Government has 18 months from November 2004 to establish a working policy on treatment of seismic upgrades as part of the introduction of the new *Building Act 2004*.

Objectives:

- To provide a forum for local government heritage planners to discuss key issues and collaborate on policy development for heritage + seismic upgrading requirements.
- To contribute input towards promoting opportunities of developing a consistent national approach to policy requirements for heritage + seismic upgrading for Local Government.

2005 NEW ZEALAND
YEAR OF THE
BUILT ENVIRONMENT

Attendees:
Katharine Wheeler, WCC; Pamela Gare ICC; Barabara Fill WCC; Judith Burney WCC; Stephen Rainbow WCC: Robert Tongue DCC; Robert Wright Timaru DC; Andrew Hammond Timaru DC; Brent Donaldson Waimate DC; Brent Nahkies ACC; Murray Miller CCC; Amanda Ross CCC; Neil Carrie CCC; Miriam Stacy CCC; John MacKenzie Ashburton DC

Apologies:
Cheryl Yates Ashburton DC

John Buchan, Christchurch City Council Building Control Manager
Local Government Building perspective
Overview of the heritage + seismic requirements as they relate to policy on seismic standards for heritage structures

Summary

- From 30 November 2004, each Local Government has 18 months to write and consult on a new policy for the implementation of the Building Act 2004 (BA).
- This new BA seismic upgrading requirements will apply to all buildings constructed before 1976 and will include not only un-reinforced masonry buildings but may include timber structures and household units as well, where comprise 2 or more storeys and 3 or more household units.
- Change of use provisions currently s46; carried forward into new Act as new s67. s112(2) – alterations to new buildings. Guidelines from the Society of Earthquake Engineers are used by CCC – want to write these into Building Code and name as a guiding document.
- S115 change of use (a) conversion of buildings to units/apartments has requirements for compliance with all respects 'reasonably practicable'. What does this mean in terms of seismic

strengthening? Includes compliance with insulation and noise ratings between units. This will mean that units will need to be built to a higher standard when converting an existing building.
- s47 not carried forward into new Act. This clause provided some flexibility for the application of the BA to heritage buildings.
- Minimum level of earthquake prone will be increased from 1/10th to 1/3rd in the new code – so there will be a significant change to existing code level for seismic upgrading requirements.
- s122 provides a definition of 'earthquake prone'.
- There are some exemptions from earthquake requirements.
- CCC currently takes a passive approach to earthquake strengthening unless there is an obviously dangerous situation as per S66 requirements. S46 requires a report on structural strength for a change in use – then CCC generally requires as near as reasonably practical compliance.

Issues arising
- Whether Local Government should decide to take a passive approach or active approach to earthquake strengthening? There is seen to be value in developing a commonality of approach across local government and to take this to the politicians.
- Heritage + change in use and exemptions to these upgrading requirements. There is a danger that if dispensations are granted for heritage buildings that this is creating a whole class of heritage buildings that are sub-standard to current BA requirements. This has implications for safety, insurances, desirability for tenants, future owners and occupants and the long term conservation of heritage buildings.
- New upgrading requirements under new BA, has the potential to unleash a backlash against heritage which may lead to applications to demolish/destroy heritage buildings. How does local government cope/avoid/manage this?
- Need for triple bottom line (social, environmental and economic) awareness, understanding and assessments of heritage + sustainable management and the need/requirement for seismic upgrading.
- The NZ loading codes include NZ earthquake zones which detail requirements for particular cities and locations across NZ.
- Guidelines from the Society of Earthquake Engineers are used by CCC – want to write these into Building Code and name as a guiding document.

Grant Wilkinson, Director Holmes Consulting Group, Structural and Civil Engineers
Institute of Seismic Engineers perspective
Overview of heritage buildings and seismic upgrading requirements and a few case studies

Summary
- Earthquakes are a natural event. If we do nothing, it is likely that an unstrengthened heritage buildings will be destroyed or severely damaged by the forces of the earthquake.
- The responsibility for managing heritage buildings rests with the current generation so that we can hand them onto future generations.
- There is an inherent tension in retaining conservation values of heritage items. Apart from the cost upgrading may threaten or damage the heritage values that are cherished and that we are trying to conserve.
- The benefits of upgrading will be the survival of the heritage building which is the most important outcome.
- $ spent on upgrading is a 'grudge purchase'.
- An opportunity arising from the new BA requirements is that increased strengthening will take heritage buildings further out into the future and ensure the survival of these buildings.
- There are many different options and opinions about seismic upgrading – similarly a number of different assumptions about heritage buildings are likely to be made by engineers.

- A decision by building owners and regulators to do the least amount of upgrading required to meet current BA requirements has implications. Minimal upgrading provides only a minimum amount of 'structural insurance' against an earthquake.
- Upgrading to meet S66 requirements for a 10% code strengthening, may in reality translate to an actual 25% increase in strengthening and code requirements.
- The tools and methods that the seismic engineers use are 'blunt' and therefore uncertain to a degree in determining strengthening requirements. This has improved with the use of 3D modelling which is non-linear, as it can illustrate the time history of the building and its likely failure under load.
- Cracking does not equal complete building failure – often buildings may crack but not fail completely under load. Earthquake vibrations and the likely damage caused by movement will be time dependent.
- Materials testing shows the default minimum values published for a range of different materials. Preliminary seismic upgrading designs are generally based on the minimum material value and soil conditions. Further onsite testing of materials may show that the material values are more or less than indicated in tables. Therefore the design can be modified and may be less intrusive which is good for heritage buildings.
- In USA, San Francisco, the motivation for seismic upgrading often comes from commercial drivers including insurance costs, business financing and other liabilities. In USA they assess overall seismic risks against no. of people and occupancy levels for buildings. The health authorities also drive this need to upgrade.
- Loading code NZS 4203:1992 also take into account soil conditions . There is a Return period for earthquake design; 33% of code anticipates a return period of < 22 years and 18% G; 67% anticipates a return period of <120 years and 36% G; 100% or full code compliance anticipates a return period of <450 years and 54% G.
- This code assumes elastic/brittle failures. Must also look at ductility/toughness of the materials and construction and the difference in behaviour of bricks or concrete slabs. (Where toughness relates the compatibility of materials with the construction method.)
- An increase in strength can give an exponential increase in earthquake resistance.
- 'Assessment and Improvement of the Structural Performance of Buildings in Earthquakes, Recommendations of NZSEE Study Group on Earthquake Risk Buildings', prepared for the Building Industry Authority, Draft September 2002.
- Strengthening methods include plywood overlay diaphragms give 33% strengthening, also floor tension rods and corner plates are effective in heritage buildings. This method was used at the Old Registry Building at the Arts Centre in Christchurch. Base isolation used for the Parliament Buildings in Wellington.
- Fire following earthquakes – need shut off values for gas etc to stop further damage.
- Construction standard for newer buildings from 1940s to 1960s? – significant change in seismic design loading only came in 1976 – anything prior to this will be well down on this standard. So big difference in risk pre/post 1976 construction.
- Public buildings designed by the Ministry of Works were built to conservative design standards eg university buildings and are likely to have inherent strength in their design.
- Likely that private sector will not have resources to upgrade. Owners will need to factor in the cost of upgrading as part of the capital cost for the building – significant educational role for owners is required – through the property industry and Property Council?
- Need proactive local government seminars for building owners on seismic upgrading.
- Need to decide if want proactive/reactive stance on offering engineering advice.
- Will probably need to prioritise where to focus first – will need to consider and rank significant risk versus lower risk structures.
- LIM/PIM – include notification of need for seismic upgrading of these. Need for due diligence on buildings and due diligence reports for the building buyers.
- Unlike the USA, in Christchurch and NZ generally insurance risk is not the driver for upgrading. So where is the incentive for owners to upgrade?

- What about a NZIE seismic upgrading plaque? This would also help make building users more aware – raise public awareness about this risk issue so that they know to ask – Is this building strengthened? And to what level?
- Could issue a building 'warrant of fitness' for seismic strengthening.
- Important to create 'an awareness of choice'. Retirement homes are good for setting standards for fire and safety upgrades. Need for groups of employees to be aware and to demand that the buildings that they are occupying are made safe.
- The NZ trigger for strengthening is 'deemed to be' provisions if the building falls below a level of strength. Trigger levels are 'change in use' and the need for upgrading.
- Need for consultation with key stakeholders eg HPT, Tenants Council, insurance council.
- Staged implementation – reassessment required for buildings and time allowance for upgrading.
- There is the potential for public good element in this if Local Government/Central Government identify seismic risks and provide incentives/grants to upgrade. Likely that the pressure on government will increase dramatically to provide $ for this.
- It is likely that the Building Act will change again in the future and strengthening requirements will increase again – so how do we cope with continually shifting goal posts? May need rolling every 10 to 15 year assessment of risks and state fund for strengthening.
- Current apathy in NZ?? As there hasn't been a big quake here since 1931 in Napier and 1942 in Wellington.

Current Local Government position on heritage + seismic upgrades – 2 perspectives

Barbara Fill Wellington City Council, Heritage Planners perspective #1

Building Safety Policy 1998

- Heritage buildings that were either suspected or confirmed as earthquake prone under the Building Act 1991 required the same minimum level of building safety as non-heritage buildings however financial assistance was provided for owners of listed heritage buildings to assist them to strengthen them.
- In 1998 70 heritage buildings and 65 streetscape buildings required strengthening
- Since 1998 approximately $2.5 million in grants to owners of heritage buildings for: feasibility studies, drawings and construction work
- In June 2004 the remaining 22 listed buildings were served with s66 notices

Effects of Policy

- While Wellington City have been tough on owners in terms of their requirement to strengthen under section 66 they accepted comparatively low levels of strengthening
- Up until 2000 a level of strengthening that equated to two-thirds of Chapter 8 (1965) was required. From 2000 this was increased to 100% of Chapter 8 (1965)
- *This level of strengthening roughly corresponds to approx. 20% of the current code used to measure new building performance and is inadequate to protect the building in the event of a severe earthquake*
- For example of 58 strengthened heritage buildings
  - 18 or 31%, have been strengthened to two thirds of the 1965 code
  - A further 36 or 62% have been strengthened to full 1965 code
  - Thus 93% have been strengthened to comparatively low levels falling below the proposed threshold
- *These low levels of strengthening kept the costs comparatively low which lessened the economic impact on building owners and the CBD in general **however** what do we do with these 'strengthened' buildings if they are defined as earthquake prone buildings under the new act.*

Heritage Matters and the Building Act 2004

- (2) In achieving the purpose of this Act, a person to whom this section applies must take into account the following principles that are relevant to the performance of functions or duties imposed, or the exercise of powers conferred, on that person by this Act:
- (d) the importance of recognising any special traditional and cultural aspects of the intended use of a building:
- (l) the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value:
- *How will these matters be weighted against the general purpose of the Act*

Key Issues
- What effect will strengthening or restrengthening have on the heritage values of buildings?
- How many buildings converted to apartments will be affected?
- Will we be prepared to accept different levels of public safety to achieve a better heritage outcome?
- Who should pay for the strengthening work – owners, ratepayers, government?
- What will be the effect on property owners including buildings with multiple owners
- What will be the affect on insurance premiums? Should government have a role in this?
- Are current District Plan rules adequate to cope with a demolition boom?

Actions
- Form a working party to meet with the Insurance Industry and Property Council
- Develop national policy framework for seismic standards/guidelines
- Develop best practice guidelines for practitioners for both interpreting the policy and for carrying out the work

Neil Carrie Christchurch City Council, Heritage Planners perspective #2
- Need to balance the cost and the method of upgrading for heritage buildings so as the ensure that the heritage fabric is protected as much as possible with minimal intrusion. Also need to consider the degree of significance of the building in relation to appropriate levels of upgrading and cost implications.
- The level of strengthening above earthquake prone levels can usually be achieved through straight forward engineering methods to secure which will not necessarily entail a significantly increased cost even with increased code standards for EQI buildings.
- Need to consider change in use considerations as well.
- Need to consider alternative levels of strengthening for heritage buildings in relation to its significance. 2/3 of code strengthening requirements is generally an acceptable standard for heritage buildings.
- Where the heritage values are very high will need to/is preferable to upgrade to meet full code compliance.
- Structural engineers tend to use standard approaches that may not be appropriate. The former government buildings, now the Heritage Hotel on Cathedral Square in Christchurch used shear cores for strengthening in a limited areas to reduce the need for a large number of intrusive shear walls- this was a very intrusive method.
- The cost of upgrading for major projects is a big expense. CCC has focused on providing discretionary grants for seismic strengthening for heritage buildings. The Cathedrals have been paid for by CCC out of this fund. CCC has focussed heritage expenditure on providing a large no. of smaller grants for seismic upgrading of buildings.

Key Issues
- An issue is that to date a major part of the discretionary funding has been going on strengthening. CCC will need to address how much funding is available/will be made available? And how much/how big an increase will be needed to make a difference given the substantial number of buildings that are likely to be affected by the change in legislation?

Continued discussion about policy issues heritage, seismic upgrading and Local Government
As part of the development of policy for implementation, list of key issues and discussion

- Working party to meet with Insurance industry and property council.
- Develop national policy framework for seismic standards/guidelines
- Develop a generic approach for all local government for best practice national guidelines for practitioners for both interpreting the policy and for carrying out of the work. Was some dissention about one common approach as was thought may be two approaches 1) cities like Wellington that are prepared to pursue high risk + $. 2) minimum standard for smaller councils + lower risk , will stick to BA change of use as a trigger.
- BA will provide guidelines.
- TA accreditation process will drive consistency for codes, quality control and the need for manuals.
- Potential liability for Councils if they have been negligent. Consider putting the liability back onto owners/users, raise awareness, this may provide some protection for the council.
- Councils will need legal advice on interpreting their responsibilities under the new BA.
- Develop public awareness and also amongst buyers/sellers of compliance requirements.
- How will building owners react? Incentives – need to be aware of creating a 'handout' mentality expectation on councils. Market driven approach may be preferable eg through tax incentives and tax refunds/claims and/or other compensations such as transferable development rights.
- Staging of upgrading – progressive upgrading of buildings – develop policies on this – Although enforcement is hard to follow through with this approach because of tenants and other circumstances. Consultation will raise public awareness.

Where to from here?
Facilitated by Stephen Rainbow Wellington City Council

1. Opportunities for engaging relevant parties, ie working party to meet with Insurance industry and property council. Advocacy M of CH and MfE Year of Built Environment contacts. Ministry of Building and Housing 'consult' re the new BA via the Structural Advisory Group to MCH John Buchan is the local government representative on this can represent our views.
2. Need to understand/find out from central government about the background to the new BA decisions and the options considered etc for the current process. This will assist in understanding the issues for local government policy development.
3. What outcomes are desired? That support the highest level of protection for heritage buildings. Quake prone buildings and different building types CBD/suburbs and heritage buildings.
4. Need to define/scope out how big is this problem? How many buildings are implicated? What are the levels of risk for these buildings? WCC has a brief and a scope for a pilot study for this (see attachments). A Value Case Study for heritage could be undertake with a contribution of $2k from each council – is there interest in pursuing this??
5. Need to prioritise actions.
6. Making the case for heritage. Need to create a positive general approach to heritage. What advantages/opportunities are there at this time to engender an attitude change that supports heritage buildings? 1. Need for awareness of new BA requirements needed first that must upgrade. 2. the positives become apparent. 3. Look for economic incentives for heritage retention eg cultural tourism. If Christchurch lost all of its heritage buildings due to an earthquake this would severely affect the tourism industry in this city. Undertake visitor surveys on heritage and tourism, also refer to relevant overseas studies and Creative NZ tourism surveys.
7. Need for a triple bottom line approach: economic, social and environmental and sustainable in considering options for seismic upgrading ie not only a financial decision or implications.
8. Data sharing amongst local government was seen as important contacts for councils are Brent Nahkies ACC; Robert Tongue DCC; Judith Burney WCC; and Miriam Stacy CCC.
9. $ costing for economic incentives.
10. Need to equip Mayors and elected members re issues for meetings with MPs on this.

11. Most important to keep networking and discussing between local government on this issue. Will report back on this meeting and all progress made at the next NZ Local Government Heritage Planners Forum which is scheduled for 27 April in Dunedin.

Close

Minutes prepared by:
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EARTHQUAKE PRONE BUILDINGS
Research into potentially affected buildings **December 2004**

Historically the key dates for changes in structural design parameters are;

- 1931 – legislation
- 1935 NZSS 95
- 1965 NZS 1900; Ch 8
- 1976 NZS 4203
- 1992 NSZ 4203 revised

Moderate earthquake is yet to be defined, but assuming it is around 1/3 current code:

- buildings designed from 1976 under NZS 4203 are unlikely to be earthquake prone.
- Buildings designed from 1965, under NZS 1900; Ch 8, are potentially earthquake prone, particularly reinforced concrete frame structures as there are known weaknesses with the column/beam joints.
- Buildings designed pre 1965 are likely to be earthquake prone.

Where the buildings have been subsequently structurally upgraded;

- Heritage buildings seismically upgraded were mostly designed to 100% Ch 8 which is around the likely threshold
- Other buildings seismically upgraded were mostly designed to 66% Ch 8, and are likely to be earthquake prone and require further strengthening
- Buildings originally built pre 1976 with a change of use between June 1992 and 2000 were mostly strengthened to 66% Ch 8, and are likely to be earthquake prone and require further strengthening
- Buildings with a change of use since 2000 have been strengthened to current code, as near as is reasonably practicable, and are unlikely to be earthquake prone

All buildings need to be considered for assessment, except;

- Residential buildings with only one or two household units
- Single storey residential buildings (no limit on the number of units)

Teamwork can report on the 'greater than 2 unit' consents, but this only covers recent work where the information has been captured electronically. These buildings have been designed to current code if new, and will not therefore be earthquake prone.

Proposed selection criteria

1. Public buildings (hospitals, medical centres, telephone exchanges, prison, power sub-stations, fire, police and ambulance stations etc)
2. Buildings containing significant quantities of hazardous substances
3. Community buildings (schools from preschools to tertiary, clubs, halls, churches, council owned buildings, rest homes, airport, railway station etc)
4. Other buildings in the central area (district plan)
5. Other buildings in suburban centres (district plan)
6. Commercial buildings in other areas (creches, corner dairy etc)
7. Residential multi-unit buildings (at least 3 units and more than 1 storey)
8. Industrial buildings and warehouses
9. Any other

Full alignment with the classification of buildings of NZS 4203 would be difficult because we currently do not have a register of buildings with these classified uses.

Sources of information
To identify buildings in each category

1. road atlas index, telephone books, local knowledge
2. list from HSNO officers
3. road atlas index, telephone books, local knowledge, Council property section
4. District Plan, City View
5. District Plan, City View
6. list compiled by building inspectors, report from Teamwork
7. list compiled by building inspectors, report from Teamwork
8. list compiled by building inspectors, report from Teamwork
9. all sources, local knowledge

What information do we need to collect?

Information	**Comments**
Street address	Identify building through Cityview. If information initiated from other sources need to verify that this corresponds to the address used in Council records.
Building name	Useful reference, and essential where several buildings in one complex like the hospital or schools.

Legal description	Check identification in City View, and Building Consent applications
General Building Description	Such as industrial, retail etc. Record HSNO information
If residential, how many units?	
General description of the building • Number of floors • Type of structure • Floor area	Wellington Cityscope gives good information current at June 1995
Original use	What do Council records say
Year built	
Permit/building consent identification	Teamwork listing
Structural code designed to	
WCC heritage listed?	List in district plan
Has the building been seismically strengthened?	
Has there been a change of use?	
Year subsequent structural work	
Permit/building consent identification	
Structural code designed to	
Level of strength achieved	
Has the building got outstanding CCCs for any building consents for structural work?	
Proximity to fault line	Shown on district plan
Stability hazard of land	Hazards and restrictions register
Assess need for further investigation	• Falls outside Act parameters • Likely to be earthquake prone • Potentially earthquake prone

Sources for information about the building

- Cityview is a good place to start. Generates address and legal descriptions and links to teamwork.
- Teamwork; list of building consents and old building permits. A LIM will give a good précis of building consents and hazards. Look for more recent building consents that cover structural work and see what strength and what code the structure was designed to (get one of the engineers to interpret if it's not explicit). The application forms should give you use and legal description. For older buildings without recent consents, the WoF has the use described.
- District plan; information about heritage listing and proximity to faultlines
- Cityscope; précis building description for central buildings as at 1995
- Hazards and restrictions; information about land hazards
- Old building assessment books give building dates, descriptions etc as at 197?

Set up

A spreadsheet database will need to be set up in such a way that sorting and filtering can be done and reports generated on any selected fields.

Proposed process

1. generate lists of buildings in selection criteria order
2. Use Cityview to verify street address and legal description.
3. Look through teamwork items working back from the most recent and infilling data into spreadsheet. Any LIMs will give a good précis. WoF items can give an indication of use for buildings without recent building consents. Fire reports are a useful source of use information.
4. Cityscope book will be helpful for central buildings, but check for more recent work.
5. Where there is insufficient detail in teamwork, email archives to retrieve the information from the hard copy records.
6. Unless there is a recent LIM, check the hazards and restrictions register particularly for mention of ground conditions. Record 'none' if no information is found.
7. Check the district plan for heritage and faultline information.
8. Enter an assessment into the spreadsheet based on the information established and interpreted in line with these notes.

Project title: Identification of earthquake-prone buildings

1. The Proposal

Comment: Please provide a brief summary of the project.

This project aims to identify earthquake-prone buildings in Wellington City, as classified under section 131 of the Building Act 2004[1]. This will allow the capture of information on building structure to facilitate the development of a policy on earthquake-prone buildings, a statutory requirement of the new Building Act 2004.

2. Strategic Fit

2.1 Outcome Alignment

Comment: What outcome(s) will Council achieve by undertaking this project?

The development of an earthquake-prone building policy will allow Council to meet its statutory requirement under the Building Act 2004. It will also contribute to Council achieving its Key Achievement Area 2.7: Safeguarding Communities outcome - Wellington's natural and technological hazards are mitigated where possible and the city has adequate measures to cope with major disasters and 1.4 Compact City.

2.2. Relationship to Exisiting Activities

Council has a Building Safety Policy 1998 that identifies the earthquake-prone buildings in Wellington and aims to reduce the number to 'a level acceptable to Council'. It outlines Council's policy to alleviate the danger associated with earthquake-prone buildings and discharges the statutory obligations under the Building Act 1991. The Council takes a proactive role where it follows up on earthquake-prone buildings to seek the building owners plans for remedial work to rectify the danger associated the building.

The Building Act 2004 requires the Council to adopt an earthquake-prone building policy by June 2006 but it does not specify that the Council must assess buildings to see if they meet the earthquake standards. The Act requires the Council to state the approach it will take to perform the required functions, how it will prioritise them and how the policy will apply to heritage buildings[2].

The Building Act 2004 has 'raised the bar'. The new regulations define a moderate earthquake and imposes a more rigorous minimum earthquake standard for existing buildings than the Building Act 1991. This means that the information Council currently holds is insufficient, as while buildings meet the 1991 standard they may not meet the 2004 standard. Council needs to gather information on the buildings and the nature or the extent of the effect that the draft Earthquake-prone Buildings Policy ('the Policy') will need to address to satifisy the Community and conditions of the Act.

3. Proposal Costs

3.1 Outline of estimated project costs per year

This project will scope the level of buildings that may be affected by the changes identified in the new Building Act. An additional resource is required to complete a initial assessment by researching existing documentation

[1] Section 122, Building Act 2004.
(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 top any other property.
(2) Subsection (1) does not apply to a building that is used wholly or mainly for the purpose for residential purposes unless the building – (a) comprises two or more storeys; and (b) contains 3 or more household units.

[2] Section 131 (2), Building Act 2004.

held within the electronic system (TeamWork) and the physical filing system. It is anticipated at least 2,000 buildings in the Wellington City may be affected. Each file may be thoroughly scanned to assess whether it may be affected by a proposed change to the Earthquake Prone Buildings Bylaw.

Once identified further work may be required by specialist engineers to assess the existing building and earthquake information. Funding options for specialist engineers will be assessed once the level of Council requirements becomes clearer.

	Operating expenses $000									
Project Component	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Personnel	*50*									
Total	*50*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

	Capital expenses $000									
Project Component	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

3.2 Funding Sources

Comment: Outline options for funding the project including any opportunities to work with partners to provide it.

Council has the following options available to determine which buildings in Wellington City may be, or are, earthquake-prone, as defined by the Building Act 2004.

Option 1 *Council takes a proactive role and obtains an initial assessment* to determine which buildings are likely to be earthquake-prone. The onus to obtain a full assessment to confirm the status of a building, and the associated fee, could then be passed onto the building owner.

Option 2 *Building owners are required to provide the information.* They would commission a professional to assess whether their building is earthquake-prone, at their own cost, and provide a copy of the information to the Council.

Option 3 *Council takes a passive role* with building owners providing an assessment of whether their building is earthquake-prone, when they next apply to Council for a building/retrofit consent.

Option 4 *Use existing resources* to carry out desktop research to initially assess whether a building is likely to be earthquake-prone.

4. Project Outline

4.1 Options/Alternatives

Comment: Discuss the options or alternatives available to Council in relation to this initiative. And why these options have been rejected in favour of this initiative.

Option 1 has the advantage that timely information will be available about the:

- number of buildings that are likely to be classified as earthquake-prone
- location of the earthquake-prone buildings
- buildings that have been strengthened to meet the current regulations that will no longer be compliant.

This information will assist Council to develop the most appropriate policy for Wellington City. If the initial assessment suggests a building does not meet the standards in the Building Act 2004 the Council will be able to advise the building owner of the need further action and therefore minimise its liability. The Council has a specific regulatory role for earthquake-prone buildings under the Building Act 2004.

There is the possibility of a civil claim against Council following an earthquake causing property damage (the likely basis for a claim would be an allegation that the Council failed to adequately fulfil its statutory role for earthquake-prone buildings). Once the Council has knowledge of the earthquake-prone state of a building then it will need to continue with appropriate regulatory actions. The Councils exposure to liability is greater if the policy developed does not take action to address the earthquake-prone status of the building.

Option 2 is unlikey to provide timely information to help with the development of the Policy. Building owners may be reluctant to seek professional information about the earthquake-proneness of their buildings. Firm evidence about the non-compliance of a building may impact on the property value and the building owners ability to get insurance and tenants. It would also substantiate the need to incur capital expenditure to strengthen the building to make it compliant. Without information about non-compliant buildings Council will not be able to take a proactive role to get buildings strengthened to improve building safety for workers and the public.

Option 3 represents a significant change in Council's role which has been proactive, to date. It would take considerable time for Council to develop knowledge about the non-compliant buildings that fail to meet the requirements of the Building Act 2004. Lack information would prevent Council from taking action to get buildings strengthened if they are a safety risk for workers or the public. There is also a risk that Council would fail to meet its statutory requirements with this option.

Option 4 is unable to be achieved as Building Consents and Licensing Services (BCLS) doesn't have a dedicated structural engineer and there are no resources within in the budget to meet this one-off expenditure. Council uses contract structural engineers to assess consents with a structural component. It would not be feasible to include assessment of these existing buildings in conjunction with the current levels of the building consent processing.

4.2 Risks and Contingencies

There is a risk that there will be no reliable information available to facilitate the development of a robust policy, if this initiative does not proceed. Further, there may be more than 2000 buildings to be assessed which could result in a new initative bid for additional funding for 2006/07 to enable the project to be completed.

Comment: Detail the risks involved with the completion and non-completion of this initiative.

4.2 Capacity/Resource Allocation

This section is not applicable as this new initiative is not for a capital project.

Comment: For capital projects detail how this initiative can be achieved in light of the current commercial environment with regard to extensive capital works underway throughout the region. How will the current committed work programme be affected?

5. Conclusion

This new initiative aims to complete an initial assessment relating to the amount and nature of earthquake-prone buildings in Wellington City, under the Building Act 2004. This information will faciltate the development of a draft Earthquake-prone Building Policy, by June 2006 as required by the Building Act 2004.

Once indentified there may be additional costs relating to specialist engineering advice. An option may be to recover this from the building owner. Options will be reviewed once the number of affected buildings becomes clearer.

Comment: Summarise and conclude the bid and why it should be considered.

Contact Officer: *Donna Stokes, Business Planner (Financial), BCLS*

Signed & dated

Business Unit Manager Approval: *George Skimming, Director, BCLS*

Signed & dated

Unit Director Approval: