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## **EARTHQUAKE RISK MITIGATION – CIVIC CAMPUS / OTHER BUILDINGS- 2013/14 WORKPLAN**

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### **1. Purpose of report**

This report updates Councillors on the seismic assessment of Civic Campus and seeks agreement for the funding of the 2013/14 programme of work for the strengthening of Council owned buildings within the 2013/14 Draft Annual Plan.

### **2. Executive summary**

Considerable work has been undertaken in the Earthquake Resilience space during this year. The assessment and strengthening of Council owned buildings are part of this work programme.

This programme of work has proven to be dynamic. As we undertake assessments and more detailed investigations we are learning more about our buildings, their performance and the options available to address the findings. As such, the strengthening plans have been modified and we have had to be nimble to move to address urgent issues as they emerge.

The Town Hall is our most significant project. It has been subject to detailed investigation and on-going planning. This has required considerable time and effort, in order to ensure that this complex project is understood and to provide as high a degree of confidence as possible for this stage of the project in the proposed strengthening solution, project timing and cost estimates.

At this point, the projected cost for the strengthening of the Town Hall, against the agreed criteria, is estimated to be around \$46m.

This paper sets out how this landmark project will be completed and also recommends that a range of other smaller strengthening projects are undertaken in 2013/14.

Funding for Municipal Office Building (MOB) has been removed from the programme of work for now. Given the proposed review of Civic Square signalled in the draft Annual Plan and opportunities for implementing a modern working environment for Councillors and staff, officers are recommending that they review the options for the building and will present a Business Case to Council during 2013/14.

### 3. Recommendations

Officers recommend that the Strategy & Policy Committee:

1. *Receive the information.*

#### **CAPEX**

2. *Agree to the revised programme of earthquake risk mitigation works on Council buildings as detailed in Appendix 1.*
3. *Note that funding consideration for Municipal Office Building has been removed from funding considerations pending a business cases being presented in 2013/14 on its future use.*
4. *Agree that, given the Museums Trust intent to withdraw from the tenancy, no strengthening be carried out on Capital E and that for the duration of the Town Hall strengthening project, Capital E becomes the site office and storage for items that need to be removed from the Town Hall.*
5. *Note that the use of the Capital E space as a storage facility and site offices for the Town Hall project will save \$90-120,000 in porticom hire and offsite storage costs.*
6. *Note that the review of the future use of the Capital E footprint will be referred to the proposed Civic Square Review.*
7. *Recommend to Council, in its capacity as landowner, that it approves (subject to all necessary regulatory approvals) the deconstruction of Portico.*
8. *Agree that any Urban Design impact on Civic Square as a consequence of its removal be referred to the Civic Square review project.*

#### **OPEX**

9. *Agree to approve the revised OPEX funding requirement for 2013/14 detailed in Appendix 2 to support the Earthquake Risk mitigation programme of work.*

### 4. Background

The Council has a number of regulatory frameworks which our earthquake programme is required to comply with.

In addition to the Building Act 2004 and the Council's Earthquake Prone Building Policy, the Council has obligations under the Health & Safety in Employment Act 1992 which need to be considered in its decision making:

- As an employer, it has a duty to ensure that it has taken all practical steps to ensure the safety of employees

- As a building owner, it has a duty to ensure that people in or near its buildings are not harmed by hazards, and
- As a principal, it has a duty to ensure no harm arises to contractors, sub contractors and their staff whilst working in Council buildings.

The assessment process used to evaluate the Council buildings is as follows:

- An IEP (Initial Assessment Procedure) assessment is undertaken by a structural engineer, in the same way as pre 1976 buildings elsewhere in the City are assessed
- If an IEP result indicates the building is 40% of NBS (New Build Standard) or less, a Detail Engineering Assessment is called for, and
- If the result is EQP (Earthquake Prone), the engineer is instructed to develop design solutions that are ultimately considered for funding in accordance with the framework.

When making recommendations to strengthen the Council's earthquake prone buildings, the prioritisation framework considers:

- Whether the building is a fulltime staff workplace or only occasional
- Whether the building is open to the public
- Whether large groups of people gather on a frequent basis. (staff / public / combinations)
- Whether or not the building has had identified any areas of significant failure in an event.

## **5. 2013-22 Workplan**

### **5.1 Civic Campus Review.**

Over the last two years officers have undertaken structural assessments of all buildings in Civic Campus.

The following is a summary of their findings and their placement within the work programme for the future.

#### ***Wellington Town Hall***

Following the initial investigations, funding was approved in the 2012/2022 LTP based on the initial costing for base isolation. This was assessed to be the most appropriate strengthening solution for this building to meet the following criteria:

- Protection of life as building use as an event space
- Town Hall is a listed heritage building in District Plan & NZ Historic Places Trust (HPT) Category 1. It has high cultural and heritage value to the City

- Possible venue for post event recovery management and initial rebuilding of the city
- The protection of the main hall's acoustics – rated amongst the top ten in the world.

The scope of the project was defined at the time as being an earthquake strengthening project and as such would not involve a refurbishment or redesign of the building spaces as was undertaken in the early 1990s.

The Town Hall is located on land reclaimed from Wellington Harbour during the late 1880s. The main limiting factor of the seismic performance of building is the existing piles on which it sits. These piles are unreinforced, founded at various depths, have very limited structural integrity and are over 100 years old.

Officers have been progressing the design for the base isolation solution. In doing so, the more detailed investigation has delivered more comprehensive data on the ground conditions, lateral spread information and piling methodology.

The cost estimates have been revised to reflect the new information and the resultant design solution. In September 2012, with the benefit of the information from the detailed investigation, a full review of all assumptions and design methodologies was initiated to ensure that the best strengthening solution is progressed for the building. This review re-evaluated the above criteria and investigated other strengthening options to ensure the solution delivered was the best value strengthening solution for the building in current use. As an estimated 50% of the construction costs lie in the piling, foundations and base isolators it was important to review these elements and the project team looked in detail at options for bored pile foundations compared to a raft slab option.

The chart below, details the options for strengthening levels that have been reviewed:

<b>Option</b>	<b>NBS %</b>	<b>Estimate at Nov 2012</b>	<b>Impact of strengthening on existing spaces</b>	<b>Impact on building post major seismic event</b>
1	67	31.47m	Some impact as need to strengthen all walls, floors and roof elements which would impact on Heritage elements in the building, impact acoustics and give rise to Resource Consent implications.	Unlikely building could be reused, demolition required.
2	80	40.42m	Increased impact with thicker concrete overlays on walls and floors which would further impact on Heritage elements in the building, impact acoustics and give rise to Resource Consent implications.	Unlikely building could be reused, demolition required.

3	100	45.6m	Major impact with a large amount of strengthening required throughout the building. Impact on Heritage elements, significant impact on Acoustics and Resource Consent would be required.	Building survival. Potential for some structural damage and moderate repairable non-structural damage.  Downtime expected to be weeks rather than months.
4 – with base isolation	140	40.8m	Minor impact on the building above the isolation plane.	Building survival, minor repairs, re-plaster etc. Reoccupation within 1 week possible, depending on surrounding environment.

The base isolation solution isolates the building from its foundations requiring a reduction in the amount of strengthening work above the isolation plane. By reducing the amount of work above the isolation plane, costs are reduced. Removing the base-isolation and to go to a 67% NBS, 80% NBS or 100% NBS option would require considerable additional work to stiffen the whole building as well as trigger additional Resource Consent requirements due to the impact on heritage elements and increasing impacts on the acoustics of the auditorium.

Reviewing the relative costs for the strengthening options indicates that the base-isolation option (which is estimated to deliver 140%NBS) is likely to be around \$5 million less than the 100% option and slightly more than the 80% option.

The base isolation option is about \$9 million more than the 67% option. At 67% NBS we would significantly improve the life safety performance of the building however after a major event the building would be unlikely to be able to be reused and would require demolition. The 67% strengthening option would impact on heritage elements and acoustics. These would likely have resource consent implications.

It should be noted that 67% NBS achieves both the New Zealand Society of Earthquake Engineer's and the Council's recommended minimum building strengthening threshold.

For the additional \$9 million for base isolation, Council is able to minimise the impact of strengthening works on the heritage values and protect the Town Hall's acoustics. The building will also have the capacity to withstand significantly larger earthquakes and survive the expected major Wellington seismic event with only the need for relatively minor repair. The Fletcher Construction Company has recently been engaged and has provided construction advice in this review and is now assisting in the preparation of a construction management documents including noise and vibration management plans, a traffic management plan and site logistics.

To enable access to the Civic Square side of the auditorium the Town Hall organ will need to be removed. The organ was opened on 1st March 1906 and is known internationally for its artistic merit and heritage significance. It should be noted that the Lottery Grants Board Heritage Fund has granted us \$847,900

as a contribution to the removal, refurbishment and the reinstatement of the Town Hall Organ as part of the strengthening work. We have two years in which to uplift this funding. They have also indicated a willingness to accept a further application for funding based on heritage protection once the project is formally costed and a construction contract entered into.

The current programme is for the contract works to commence on site mid December 2013, the works to take a period of 32 months and planned to be completed in July 2016.

### *Financial Analysis*

In summary, the following chart represents:

- the project full cost of the project
- the projected funding required to complete the project against current funding
- a resultant shortfall of \$11.021m.

	Actual Costs			Projected Costs				Total
	Pre LTP spend	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	
<b>Full Project Cost</b>	368,322	907,234	1,377,616	\$ 9,643,441	\$ 16,765,719	\$ 15,419,990	\$ 1,673,257	<b>\$ 46,155,579</b>
<b>LTP Funding</b>				\$ 15,255,277	\$ 12,982,654	\$ 4,242,918	0	\$ 32,480,849
<b>Variance to Complete Project</b>				<b>-\$ 5,611,836</b>	<b>\$ 3,783,065</b>	<b>\$ 11,177,072</b>	<b>\$ 1,673,257</b>	<b>\$ 11,021,558</b>

Officers recommend that the projected project cost for base isolation be accepted, noting the reduction in CAPEX spending in the 2013/14 year and the increase in project cost overall.

It should also be noted that the above cost estimates will remain subject to variance until a final contract is finalised. All sub trades that will support this project are still to be tendered once final design is completed. Industry advice is that there is growing pressure on resources reflecting the Wellington market construction activity and also the Christchurch rebuild. This is being reflected in the pricing being received by other projects.

### ***Office of the Mayor***

Planning is under way to relocate the office of the Mayor to Level 4 of MOB in advance of the closure of the Town Hall for strengthening.

### ***Municipal Office Building (MOB)***

This building is not earthquake prone following remedial work completed in early 2011 and has been assessed at 40-45% NBS.

Officers are investigating opportunities for Council to implement more modern ways of working in terms of office configuration for both Councillors and staff

with the real potential of freeing up a significant amount of floor space in the Civic Campus.

As such this might mean that MOB (or other campus buildings) may not be required to support Council's administrative functions. This could provide commercial opportunity for Council and allow these buildings to be considered for lease or sale in the future.

Further funding for MOB strengthening has been removed from our funding calculations at this time noting that officers will present a business case during 2013/14 that outlines future uses for this building.

### ***Civic Administration Building (CAB)***

Following a detailed seismic assessment, CAB was declared earthquake prone at 25% NBS due to:

1. The physical connections of Portico with the Library and CAB buildings.
2. The lack of gap between the structures to accommodate any displacement that might occur in an earthquake event
3. The need to tie the end columns of the CAB building to the floor plates.

Mitigation for 1 and 2 above will be addressed within the recommendations below for Portico. Item 3 has been developed a specific project which has been tendered and evaluation of responses is in progress with an expected project start of late June 2013.

### ***Portico***

An extensive investigation has been undertaken to find the best outcome for Portico. Two options have been considered:

- a. Strengthening.** This option was considered at a cost of \$375,000 but engineering investigations indicated that with strengthening completed, the combined maximum strength of CAB/Portico could only reach 37-40% NBS with building displacement ability limiting any higher outcome for the combined structure in the future. This is well below our preferred position for Council buildings of 67% of NBS.
- b. Deconstruction.** This option identified that deconstruction of Portico would remove the building displacement limitation on the performance of the combined CAB/Portico structure. The strength of CAB would achieve 40% NBS (no longer earthquake prone) after completion of column strengthening and removal of Portico and with further strengthening work, CAB could achieve <80% NBS.

The full cost of this project is estimated at \$814,628.

Officers therefore recommend that deconstruction of Portico takes place (subject to all regulatory requirements) on the basis that:

1. Its removal allows an improved building performance of CAB to be increased to 80% NBS with further strengthening work
2. With Portico in place the maximum strength ever obtainable from CAB and Portico is in the 37- 40% range
3. Any urban design impact from its deconstruction will be referred to the Civic Square review project to consider.

### ***Central Library and Carpark***

This building has had a detailed seismic assessment completed and at 60% NBS is not earthquake prone. There are however several areas of vulnerability that need to be addressed in the future. These are the:

- Central steel staircase
- Staircase from Civic Square to Clarks café
- Securing of precast floor panels.
- Portico connection.

A provision was included in the LTP work plan for this work in 2015/16. Officers now recommend that this be extended to 2016/17 to coincide with the extensive renewal works scheduled for the central escalators in the building.

### ***City Art Gallery***

The new addition to the Art Gallery was added in 2009/10 and was constructed to 100% NBS. At the same time, the original building was strengthened to 67% NBS. This complex is accordingly not earthquake prone.

### ***Capital E.***

This building has recently been assessed as part of our ongoing programme as earthquake prone with a building strength in the range of 20-25% at Importance Level (IL3) as determined by the building use.

Our engineers have indicated in their report that the building has a number of structural defects, namely the risk of failure of:

1. Precast floor seatings on exterior beam interconnections
2. Staircases, due to insufficient movement allowances and the support structure of the staircases itself, and
3. Some window lintels, due to insufficient support structures.

Our engineers have submitted mitigation solutions for these issues that would remove the potential failure points and for strengthening of the structure.



Quantity Surveyors have been engaged to evaluate the proposed solutions and provide a cost estimate for the work. This is summarised in the following table and excludes professional and compliance fees:

<b>Option</b>	<b>Scope</b>	<b>Estimate</b>	<b>Notes</b>
1	Initial Failure areas	\$ 870,000	Building still EQP
2	34% NBS	\$2,730,000	No longer EQP
3	45% NBS	\$2,995,000	Not EQP
4	67% NBS	\$3,745,000	Not EQP

The Wellington Museums Trust has advocated for some time that this building does not meet their needs, has a history of water ingress and the HVAC performance is less than satisfactory for the current use. A cost estimate they obtained in January 2011 identified the cost of this work to be \$3.231m.

The Trust has stated that since this building has been declared EQP, the children's market has been hesitant to enter the building and accordingly the Capital E business has declined significantly.

The Trust board has advised Council recently that they understand the affordability issues that this assessment now raises and has given Council formal notice of its intent to negotiate a withdrawal from the rental agreement of this building.

The board has also indicated that a Strategic Review of the Capital E business will conclude in July and this will inform the nature of the business going forward and accordingly the type of premises required.

The Museums Trust is paid a grant which is then paid to the Council for the rental of the footprint that is the base for Capital E. Officers therefore recommend that:

1. Given that the Wellington Museums Trust intends to withdraw from the tenancy, that no strengthening be carried out at all and that for the duration of the Town Hall strengthening project, Capital E becomes the site office and storage for items that need to be removed from the Town Hall.
2. The future use of the Capital E space to be included in the Civic Square review project.
3. It is noted that the use of the Capital E footprint as a storage facility and site offices for the Town Hall project, will save \$90-120,000 in porticom hire and offsite storage costs.

The impact of these recommendations on the City to Sea bridge is that its importance level would reduce to Importance Level (IL2), its seismic

performance would be revised to 26- 33% of NBS and would therefore still be earthquake prone.

## **5.2 Other Buildings**

### ***Band Rotunda***

The upper floor of this building operates as a restaurant under a lease agreement to the Council until 2021. Due to deterioration of the floor slab it is only safe for uniformly distributed loads consistent with restaurant loadings.

This structural deterioration of the floor slab has rendered the building earthquake prone and this has had a direct impact on the usability of the downstairs community space. Seepage from the ceiling/floor slab which has absorbed water over time will likely continue until the slab is repaired/replaced.

Investigations into the most appropriate solution are being carried out in conjunction with the tenant.

The work proposed will remediate the floor slab with minimal other impact on occupants and will remove the structure from EQP status.

The cost of this work is assessed as \$731,500.

### ***Thistle Hall***

The proposed solution for this building involves installing steel interior portal frames and aims to achieve as close to 67% NBS as possible. The frames will provide maximum strength with the least impact on (exterior) heritage values.

A building consent application for this work has been lodged. Discussions with the committee are ongoing with a view to temporarily closing the hall and gallery activities during construction.

The full cost of this project is assessed at \$1,080,000.

### ***Tawa Library***

Following detailed investigation of the structure by engineers it has been identified that the building contains a higher level of performance than initially thought. The revised strengthening solution involves a combination of steel portal frames and cross bracing and aims to achieve as close to 67% NBS as possible. The frames will provide maximum strength with the least impact on usable floor space.

A building consent application for this work has been lodged. Discussions with the library with a view to temporarily closing part of the library during construction are ongoing. It should be noted that the robust investigation of the building has reduced the strengthening cost by \$400,000.

The full cost of this project is revised to \$51,450.

### ***TSB Bank Arena***

An engineering report from Aurecon was obtained by Wellington Waterfront Ltd (WWL) during 2012 for this building as part of the Shed 6 development.

Given the age of building and its style of construction it was appropriate to peer review these findings before committing any funding to any strengthening solutions that might be required.

Beca were engaged to undertake this review. Their initial report has found that the seismic performance of TSB was higher than the levels reported by Aurecon. Further work is underway to finalise the final agreed performance level.

Officers consider that no provision needs to be made for any further strengthening work for this building.

### ***Brooklyn Library***

As part of our ongoing assessment of Council owned buildings, this building was assessed and found to be EQP at 25% of NBS. The assessment found weakness around the perimeter of the structure with insufficient support across the downstairs window openings and lintels.

The building would withstand a moderate earthquake and occupants should be able to exit safely. However, planning is underway to strengthen the building to above earthquake prone status.

Three strengthening options have been examined by Officers.

- a) To achieve 35-40% of NBS. The work for this solution is unobtrusive and involves partially infilling the downstairs window openings, replacing window frames and upgrading fire safety services.
- b) This option builds on option (a) with the addition of 3 x 1.4m structural walls inside the library and the replacement of some gib linings in the housing units upstairs. At the completion of this work the structural performance of the building would achieve 67% of NBS. There will be some impact on the functionality of the library as a consequence of this work.
- c) This option builds further on Option (b) by the addition of one further structural wall inside the library and the replacement of gib board lining in the housing units with gib brace line. Once completed the structural performance of the building would be 100% of NBS. There will be an increased impact on the functionality of this work on the operation of the library.

In recent community meetings, Councillors have been at pains to reassure the residents of the longevity of the library.

Officers recommend that option (a) is implemented. This allows interim work to be undertaken, the earthquake prone rating to be removed and the concerns of the community to be settled. The ultimate strengthening level can be reviewed in future years.

This option has been assessed at a cost of \$132,000.

### ***Clarrie Gibbons Building***

This work has previously been deferred for three years and officers believe that it is appropriate to now undertake this work given its high profile location and the high level of pedestrian traffic in the vicinity.

The proposed strengthening solution for this heritage building is relatively simple and affects the interior only. The work involves improving the wall and ceiling bracing system and ensuring the connections between the walls, floor and ceiling are capable of transferring forces.

The cost of this project is assessed as \$72,450.

Officers recommend that this work be funded in the 2013/14 year to eliminate this risk.

### ***Opera House***

Provisions were made in 2012-13 for a detailed engineering assessment of the building and geotech investigation of the site to provide information for an engineering solution. Due to the pressure on professional resources during the year, this investigative work will continue in 2013/14 with \$100,000 carried over from 2012/13 to complete this.

This investigative work will allow officers to be well informed and be able to progress an appropriate strengthening solution to recommend for funding in future years.

### ***Truby King House***

This building has been assessed as earthquake prone due to having a large brick chimney and supporting wall in the building. This building is on a heritage listed estate that is maintained by a trust for community benefit.

As it is open to the public 365 days of the year, officers believe it is important to promptly mitigate the risk to the public and those who work on the site.

The scope of work is to strengthen the chimney structure of the building in a similar manner to that of Colonial Cottage.

The cost of this work has been assessed as \$78,408.

Officers recommend that work be funded in the 2013/14 year to mitigate this risk to public and staff.

## ***Modern Way of Working***

Officers are investigating how we can achieve a more modern way of working to achieve improved communication and engagement across all levels of Council. A more open plan collaborative workplace will provide more flexibility, improved opportunities for councillors and officers to work together and a reduced overall space requirement. This work has just started and will determine our space requirements through an assessment of:

- Functions that need to be accommodated in the Civic campus;
- Staff and/or teams that are suitable for flexible working;
- Councillor requirements;
- An appropriate accommodation/space utilisation model and its fitout, technology, plant and furniture requirements;
- Opportunities to free up office space within the campus.

Once the above assessment has been completed, officers will analyse the financial implications/opportunities and report back to the Council with any recommendations.

## **6. Financial Summary**

### **6.1 Capex**

The projects outlined in this paper have a 2013/14 funding requirement of \$12.710m as detailed in the chart below, a reduction of \$4.749 m from the current LTP provision:

(Inflated)	2013/14	\$
<b>Current LTP Funding</b>	<b>17,460,037</b>	
Town Hall	\$	9,643,441
Band Rotunda	\$	731,500
Thistle Hall	\$	1,080,000
Mervyn Kemp(Tawa) Library	\$	51,450
Assessments( inc MFC)	\$	106,502
Clarrie Gibbons	\$	72,450
Portico	\$	814,628
Brooklyn Library	\$	132,000
Truby King House	\$	78,408
<b>Revised Funding requested</b>	<b>\$</b>	<b>12,710,379</b>
<b>Var to current LTP</b>		<b>-\$4,749,658</b>

The full CAPEX programme for 2013/23 is attached as Appendix 1.

## **6.2 Opex Funding Requirement**

The LTP OPEX provision for 2013/14 provided funds for the full decanting of MOB whilst its strengthening was carried out.

The advice to date is that once the work in the Town Hall is in the vicinity of MOB, occupants of Floors 1-3 will require to be decanted due to the impact of noise and vibration.

The New Zealand Symphony Orchestra (NZSO) occupies level 2 of MOB as a tenancy of the Council. As their contract contains no redevelopment clause, it is proposed that they will be temporarily relocated to a nearby building at an approximate cost of \$290 per sq metre, annual cost \$159,600. These details have yet to be finalised with NZSO management and with a property suitable for relocation. Note that rent will continue to be received as if they were still occupying the space.

Work to date indicates that with a reconfiguration of space under the Modern Way of working programme, all affected Council staff currently located in MOB should be able to be accommodated within the Civic Complex.

Whilst we are providing for a decant of some staff on affected floors for the full construction period of Town Hall project, we expect this to reduce as the construction methodology is finalised towards the end of this calendar year.

Our revised Opex funding requirement for the 2013/23 period is attached in Appendix two.

## **7. Climate change impacts and considerations**

No impacts expected.

## **8. Long-term plan considerations**

This programme of work is updated on annual basis given the dynamic nature of the work programme and significance of any arising strengthening work.

## **9. Conclusion**

The work to develop plans to strengthen Council owned buildings has been progressed significantly in the last twelve months.

The Town Hall project cost has increased in line with an increasing understanding of the complexity of ground conditions under the building.

The proposed review of Civic Square being signalled in the draft Annual Plan and opportunities for modern working for Councillors and staff has identified the potential for some of our administrative footprint in the Civic Campus to be reviewed. Accordingly we believe the pause in consideration of further MOB work is appropriate.

**There are a range of other strengthening projects outlined in this paper that should continue to be delivered to fulfil a range of community expectations.**

**Contact Officer: *Neville Brown, Manager Earthquake Resilience***

## SUPPORTING INFORMATION

### 1) Strategic fit / Strategic outcome

*The policy supports Council's overall vision of Wellington Towards 2040: Smart Capital and its Earthquake Risk mitigation Strategy. This work contributes to a safe city given the known high level of earthquake risk.*

### 2) LTP/Annual Plan reference and long term financial impact

*The project is contained in the Council Plan # CX505 and C333. The changes indicated here will lead to a decrease in capital expenditure in the coming year.*

### 3) Treaty of Waitangi considerations

*Mana whenua have been consulted with in respect of proposed works for Town Hall Strengthening.*

### 4) Decision-making

*This is not a significant decision*

### 5) Consultation

#### a) General consultation

*Parties affected by works in buildings specified within this plan will be consulted with prior to any works being undertaken.*

#### b) Consultation with Maori

*Mana whenua have been provided with draft methodology around the ground works related to the Town Hall strengthening Plan and have provided appropriate comments and guidance.*

### 6) Legal implications

*This report meets Councils statutory obligations.*

### 7) Consistency with existing policy

*This report is consistent with Councils commitment to Earthquake Resilience for the City.*



## Glossary of Terms

**NBS** – New Build Standard, used to describe the % of structural performance of an existing building compared to a brand new building at 100%

**Porticom** – portable prefabricated buildings described in this paper as used for offices and work spaces for contractor on Town Hall Project.

**NZHPT** – New Zealand Historic Places Trust.

**Acoustics** – describes the measurement of the sound reverberation of a venue

**Bore Pile** - describes a type of pile where a drill is used to dig a pile hole, a casing is often inserted to contain the concrete, reinforcing is inserted and then the hole is then filled with concrete

**Raft** – a large platform of concrete that sits under a building often with very short piles, on which then a buildings foundations sit either directly or via base isolation unit

**Base Isolation** – a base isolator is a rubber or lead filled cylinder fastened to piles and to building foundations that allows in a seismic event for the earth to move but building moves to a lesser degree.

**Lotteries Grants Board** – a public grant facility managed by Department of Internal Affairs but funded from proceeds of Lotto. In this case our application is for a Heritage Facilities grant.

**HVAC** – a description for the Heating, Ventilation and Air Conditioning systems in a building

### Importance Levels (IL)

These levels are detailed in our Earthquake Prone Building Policy and describe the level of risk assessment for the building comparable to use.

#### 1: Low degree of hazard

e.g. Farm buildings and isolated structures, fences, walls

#### 2: Not in other levels

e.g. Hotels, offices and apartments less than 15 storeys

#### 3: Contain crowds of over 300 persons or high value to the community

E.g. Schools, universities, structures over 15 storeys, medical centres

#### 4: Highest with post disaster functions

e.g. Hospitals, civil defence centres, police, air traffic control, power, radio

## Appendix One – CAPEX programme 2013-23

Capex Programme (Inflated) <sup>1</sup>	LTP		LTP			LTP			2021/22	2022/23	Total
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21			
<b>Draft Annual Plan</b>	<b>17,460,037</b>	<b>14,010,002</b>	<b>9,797,291</b>	<b>2,894,993</b>	<b>1,299,020</b>	<b>(38,534)</b>	<b>(39,708)</b>	<b>(40,982)</b>	<b>(42,323)</b>	<b>(43,732)</b>	<b>\$45,256,065</b>
Town Hall	9,643,441	16,765,719	15,419,990	1,673,257	-	-	-	-	-	-	43,502,407
Band Rotunda	731,500	-	-	-	-	-	-	-	-	-	731,500
Thistle Hall	1,080,000	-	-	-	-	-	-	-	-	-	1,080,000
Mervyn Kemp (Tawa) Library	51,450	-	-	-	-	-	-	-	-	-	51,450
Central Library - Central Stairs	-	-	519,390	-	-	-	-	-	-	-	519,390
Other Assessments	106,502	112,547	-	-	-	-	-	-	-	-	219,049
<b>Sub Total</b>	<b>11,612,893</b>	<b>16,878,266</b>	<b>15,939,380</b>	<b>1,673,257</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>46,103,796</b>
Clarrie Gibbons	72,450	-	-	-	-	-	-	-	-	-	72,450
Portico	814,628	-	-	-	-	-	-	-	-	-	814,628
Brooklyn Library	132,000	-	-	-	-	-	-	-	-	-	132,000
Truby King House	78,408	-	-	-	-	-	-	-	-	-	78,408
<b>Final Annual Plan</b>	<b>12,710,379</b>	<b>16,878,266</b>	<b>15,939,380</b>	<b>1,673,257</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>47,201,282</b>
<b>Movement</b>	<b>(4,749,658)</b>	<b>2,868,264</b>	<b>6,142,089</b>	<b>(1,221,736)</b>	<b>(1,299,020)</b>	<b>38,534</b>	<b>39,708</b>	<b>40,982</b>	<b>42,323</b>	<b>43,732</b>	<b>1,945,217</b>

Capitalised Labour (Inflated) <sup>2</sup>	LTP		LTP			LTP			2021/22	2022/23	Total
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21			
<b>Draft Annual Plan</b>	<b>483,043</b>	<b>349,241</b>	<b>195,401</b>	<b>200,454</b>	<b>36,438</b>	<b>37,270</b>	<b>38,135</b>	<b>39,100</b>	<b>40,298</b>	<b>41,563</b>	<b>1,460,944</b>
<b>Final Annual Plan</b>	<b>523,170</b>	<b>467,390</b>	<b>476,519</b>	<b>488,843</b>	<b>36,438</b>	<b>37,270</b>	<b>38,135</b>	<b>39,100</b>	<b>40,298</b>	<b>41,563</b>	<b>2,188,728</b>
<b>Movement</b>	<b>40,127</b>	<b>118,150</b>	<b>281,118</b>	<b>288,388</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>727,783</b>

### Notes

1. Capex Programme is now presented excluding internal capitalised labour
2. As a result of the PMO restructure, capitalised labour has been re-assessed, with an increase in the amount to be capitalised. This is a reduction in opex and a corresponding increase in capex.

## Appendix Two– OPEX funding 2013-23

Annual OPEX (Inflated)	LTP		LTP			LTP			2021/22	2022/23	Total
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21			
<b>Draft Annual Plan</b>	<b>995,882</b>	<b>930,306</b>	<b>1,776,039</b>	<b>1,603,218</b>	-	-	-	-	-	-	<b>5,305,445</b>
NZSO -Rental accomodation 550 sq m \$290/Fitout/Relocation	358,590	159,500	229,500	88,590	-	-	-	-	-	-	836,180
Decant Cost for staff	75,000	-	-	25,000	-	-	-	-	-	-	100,000
Temporary KitchenRental /Fitout	168,000	85,000	85,000	52,000	-	-	-	-	-	-	390,000
Modern Ways working Investgtn	225,000	-	-	-	-	-	-	-	-	-	225,000
<b>Final Annual Plan</b>	<b>826,590</b>	<b>244,500</b>	<b>314,500</b>	<b>165,590</b>	-	-	-	-	-	-	<b>1,551,180</b>
<b>Increase/ (Savings)</b>	<b>(169,292)</b>	<b>(685,806)</b>	<b>(1,461,539)</b>	<b>(1,437,628)</b>	-	-	-	-	-	-	<b>(3,754,265)</b>
1. Reduction in Capital E Lease Revenue	443,410	451,391	460,259	470,014	480,213	491,298	503,270	515,686	528,545	541,847	4,885,933
2. Movement in Capitalised Labour	(40,127)	(118,150)	(281,118)	(288,388)	-	-	-	-	-	-	(727,783)
3. Interest Cost / (Saving) on Borrowing	(160,906)	(252,298)	17,527	170,229	77,158	32,129	32,225	32,342	32,474	32,688	13,570
<b>Net Increase / (Savings)</b>	<b>73,085</b>	<b>(604,862)</b>	<b>(1,264,870)</b>	<b>(1,085,773)</b>	<b>557,371</b>	<b>523,428</b>	<b>535,495</b>	<b>548,027</b>	<b>561,018</b>	<b>574,535</b>	<b>417,455</b>

### Notes

1. Museums Trust to withdraw from tenancy at Capital E, resulting in lost lease revenue. In the short term it is recommended that Capital E is not strengthened and is used as a site office /storage for Town Hall Strengthening Project and referred to the proposed Civic Square Review to determine future use.
2. As a result of the PMO restructure, capitalised labour has been re-assessed, with an increase in the amount to be capitalised. This is a reduction in opex and a corresponding increase in capex.
3. The change in the capital programme has resulted in a change in the interest costs, with a saving in the 2013/14 to 2014/15 years, overall for the 10 years a small increase.

## APPENDIX 2