

# Memo

Released by the Canterbury Earthquake Recovery Authority

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| To             | Warwick Isaacs, Deputy Chief Executive, Implementation / Director, CCDU  |
| CC             | John Cumberpatch, General Manager, Operations  |
| From           | [REDACTED] Advisor, Christchurch Central Development Services  |
| Date           | 7 March 2014   |
| Security Level | In confidence  |
| Action         | <b>Decide</b> whether to carry out works on Majestic House (122-126 Manchester Street) under section 38 of the Canterbury Earthquake Recovery Act 2011 |
| Date required  | 10 March 2014  |

## Majestic House (122-126 Manchester Street)

### Purpose

1. This memo seeks a decision from you on whether or not you will exercise your delegated power to carry out or commission works to demolish Majestic House under section 38 of the Canterbury Earthquake Recovery Act 2011 (the CER Act).

### Background

2. Majestic House is located at 122-126 Manchester Street, on the north-eastern corner of the Manchester/Lichfield Streets intersection (comprised in computer freehold register CB475/114). The site is approximately 1500m<sup>2</sup>. The building is a multi-storey steel-framed masonry structure completed in 1931. It was designed as a theatre and was used for this purpose for many years, until in the 1970s it began to be used as a church.
3. Majestic House is listed as a Group 2 heritage building in the Christchurch City Council's (the Council) City Plan. It is not registered with the New Zealand Historic Places Trust (NZHPT).
4. The building was damaged in the 2010 and 2011 earthquakes and is currently subject to a notice issued under section 45 of the CER Act restricting access to the building itself and to an area around it. A full structural assessment was carried out by Structex in 2011, and in 2012 the Majestic Church Trust (MCT) and its insurers investigated the cost of the proposed temporary intervention followed by the repair and strengthening of the building. As a result of this work, MCT reached a settlement with its insurers and decided to demolish the building. This demolition was put on hold pending resolution of issues associated with adjacent buildings.
5. The property was designated for the Frame under the Christchurch Central Recovery Plan (CCRP). It has been acquired by the Crown under section 53(1) of the CER Act for the purpose of implementing the Frame.
6. You received a memo on 19 February 2014 from the CERA Engineering team reviewing the current structural condition of the building. Refer to the memo, attached at **Appendix A**, for more detailed information about the condition of the building. In summary, and in relation to the eastern half in particular, CERA engineers consider that the building will have its ultimate capacity exceeded in a less than moderate earthquake and would be likely to collapse causing injury or death to persons in or around the building or damage to property. Parts of the building have been identified as having a seismic tolerance of less than 33% NBS.<sup>1</sup>
7. The building is therefore dangerous under the CER Act, and the current exclusion zones should be maintained until the hazards have been addressed. However, it is noted that a building does not need to be dangerous for you to exercise your powers under section 38.

<sup>1</sup> These parts of the building that are less than 33% NBS include the auditorium central, office area plus west end of auditorium, and a number of the walls. However, the east-west stability of the office area was assessed by Structex as 36% NBS.

8. A Hazardous Material Survey Report for Majestic House has been prepared for CERA by Aecom. The survey identified asbestos-containing materials, synthetic mineral fibre, polychlorinated biphenyls, lead-based paint and ozone depleting substances in the building. The report also noted that some areas were inaccessible and should be assumed to contain potentially hazardous materials/asbestos until proven otherwise. In areas of the building the materials present a high risk – for example, there is asbestos in the southern entrance to the foyer on level 1 which presents a high risk of fibre release.
9. A section 38(4) notice to carry out demolition work was issued to the former owners of Majestic House in June 2013. That notice has not been acted upon. Due to the passage of time and the acquisition of the property by the Crown, it is appropriate that a new decision is made under section 38(1) on whether or not the building should be demolished. In the event that you decide to demolish the building, there is no need for a new section 38(4) notice, as the Crown owns the property.

### Context to decision-making

10. Under section 38 of the CER Act the Chief Executive has the power to carry out or commission works. In your role as Deputy Chief Executive, Implementation, you have the delegated authority to exercise this power. “Works” include, without limitation, the erection, reconstruction, placement, alteration or extension of all or any part of the building, the demolition of all or part of a building, or the removal and disposal of any building.
11. You are required to make a decision on whether to carry out works (i.e. demolition) on Majestic House under section 38 of the CER Act. In making a decision, you must do so in accordance with section 10 of the CER Act. Aspects of the Recovery Strategy for Greater Christchurch and the CCRP will also be relevant.

### CER Act considerations

12. The power to carry out works under the CER Act must be exercised in accordance with the purposes of the CER Act (as set out in section 3), and it may be exercised where you reasonably consider it necessary (section 10(1) and (2)).
13. The overarching purpose of the CER Act is to achieve the full social, economic, cultural and environmental recovery of Christchurch in a timely and expeditious manner. With regard to this decision in particular, the following purposes of the CER Act appear to be relevant:
  - 3(b) – to enable community participation in the planning of the recovery of affected communities without impeding a focused, timely, and expedited recovery;
  - 3(d) – to enable a focused, timely, and expedited recovery;
  - 3(f) – to facilitate, co-ordinate, and direct the planning and rebuilding and recovery of affected communities, including the repair and rebuilding of land, infrastructure, and other property; and
  - 3(g) – to restore the social, economic, cultural, and environmental well-being of greater Christchurch communities.
14. In determining whether or not demolition is necessary, you need to consider whether the exercise of your power is necessary to achieve a particular purpose or purposes of the CER Act at the time the power is exercised, taking into account the nature of the particular decision, its consequences and any alternative powers that may be available.

### Recovery Strategy considerations

15. You should also consider any relevant provisions of the Recovery Strategy for Greater Christchurch. With particular relevance to this decision, two of the six key components to recovery identified in the Recovery Strategy are Cultural Recovery and the Built Environment.

16. Under Cultural Recovery, the goal of the Recovery Strategy is to renew greater Christchurch's unique identity and its vitality expressed through sport, recreation, art, history, heritage and traditions. This may include:
  - a. Resuming cultural, community and sports events and activities;
  - b. Restoring historic buildings, where feasible, for the benefit of the community; and/or
  - c. Acknowledging losses and creating spaces to remember, while embracing necessary changes to the city's character and urban form.
17. Under Built Environment, the goal of the Recovery Strategy is to develop resilient, cost effective, accessible and integrated infrastructure, buildings, housing and transport networks. This may include:
  - a. Coordinating and prioritising infrastructure investment that effectively contributes to the economy and community during recovery and into the future;
  - b. Supporting innovative urban design, buildings, technology and infrastructure to redefine greater Christchurch as a safe place built for the future;
  - c. Rebuilding infrastructure and buildings in a resilient, cost-effective and energy-efficient manner; and/or
  - d. Developing a transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices.

#### *Christchurch Central Recovery Plan considerations*

18. You should consider any relevant provisions of the CCRP. The CCRP aims to re-establish a functioning market and create a recovery that is self-sustaining in the medium-to-long term. It provides a framework to guide the redevelopment of the central city, including a spatial plan (the "Blueprint") and statutory direction to amend the District Plan. It is intended to act as a plan that substantially increases the participation by residents, businesses and other tenants, investors and developers in the rebuild and revitalisation of the city centre.
19. Majestic House is located on land that is designated for the Frame and acquired by the Crown for this purpose. The site is intended for residential development within the East Frame, which is part of the wider Frame, if the building is not retained.
20. Majestic House is also affected by proposed road-widening on Manchester Street as part of the implementation of the *An Accessible City* chapter of the CCRP, providing for a boulevard environment and priority bus lanes as a major link to the future Bus Interchange.

#### **Factors to consider alongside the CER Act and other relevant documents**

21. In making your decision, you will need to consider the options that exist for the future of Majestic House.
22. In doing so, you need to consider all the factors that are relevant to the recovery principles noted above, and weigh the options against these principles on the basis of this consideration. In relation to Majestic House, the relevant factors are considered to be:
  - a. The feasibility and cost-effectiveness of the options;
  - b. The heritage value of the building;
  - c. The implications for the East Frame and the implementation of *An Accessible City*;
  - d. The implications for infrastructure and/or its timely and coordinated repair; and
  - e. Any other recovery implications arising from the options.
23. The options, and each factor, are addressed in the sections below.

**Options for the property and issues relating to feasibility**

24. It is not considered that full repair of the building is feasible, as partial demolition is required to make the building safe. Bracing will not be sufficient to remove the danger to the public and any potential workers. Engineers from Structex and CERA Operations and the Council Heritage Engineer all agree that the fly tower is damaged beyond effective/economic repair and that partial deconstruction is required to make the building safe.<sup>2</sup>
25. In theory, then, there are four broad options for the future of the building:
  - a. **Option 1** – Remove fly tower and stage and repair/restore building or part of building  
Under this option, the building could be repaired or restored in full, or a new structure could be incorporated into remaining heritage fabric. It is noted that building consents would be required for repair and make safe works.
  - b. **Option 2** – Demolish in full
  - c. **Option 3** – Dispose of the property ‘as is’
  - d. **Option 4** – Delay decision-making
26. It is considered that, at this stage, it is possible only to decide whether or not to demolish Majestic House, under Option 2, as further analysis is required if other options are considered. However, it is possible to compare these options on the basis of information that is currently available, to inform your decision on whether Majestic House should be demolished or whether it is worth investigating other options further.
27. Officials have gathered the information that is currently available on the feasibility and cost-effectiveness of Options 1 and 2. (This is not considered to be relevant for Options 3 or 4.) Refer to **Appendix B** for a table showing these details. In summary, at this stage it appears that:
  - a. Option 1 may be feasible, from the perspective of CERA Engineers. Further work is needed to confirm this. Management of hazardous materials would also need to be considered. It is probable that partial demolition and the repair of the building in full would cost more than \$20 million.<sup>3</sup>
  - b. Under Option 2, the demolition strategy has been assessed by CERA Engineers and they consider it is feasible. The estimated demolition costs are \$1.850 million.
28. It is noted that there may be heritage funding available if you are considering taking Option 1. Some examples of sources of funding have been provided by the New Zealand Historic Places Trust (NZHPT) and reviewed by the Council. This list is attached at **Appendix C**.
29. It is also noted that, in theory, it may be possible to retrieve heritage fabric from the building, should you decide to take Option 2. However, the Council Heritage team was consulted on this possibility when demolition tender documents were prepared and has decided not to seek the retrieval of any heritage fabric. Therefore, the demolition strategy does not include provision for the removal of heritage items and fabric. Council officials have recently confirmed this is still their position.
30. It is recommended that you consider the issues relating to feasibility and cost-effectiveness which are noted above when you make your decision.

<sup>2</sup> See the Council’s Heritage Building Treatment Report, 15 February 2012 – Appendix D; CERA Engineers memo, 19 February 2014 – Appendix A; and letter from ██████████ (Structex) to architects for the previous owner of the Majestic building, 9 May 2012, not attached.

<sup>3</sup> This figure has been estimated on the basis of a quote by Davis Langdon to the former building owners in February 2012, which is attached at **Appendix F**. This quote was for full repair of the building. There could potentially be other options for partial demolition/repair/rebuild of the building which may cost more or less than the Davis Langdon quote.

### Heritage value

31. Majestic House is listed as a Group 2 heritage building in the Council's City Plan. That recognition reflects heritage aims in the Canterbury Regional Council's Regional Policy Statement. The Council's Heritage Response Team provided the CERA General Manager Operations with a report on 15 February 2012, providing engineering comments and a statement on the significance of the building. The report is attached as **Appendix D**. Council officials have confirmed that they have no new comment to add to this report.
32. In summary, this document reports that:
  - a. The former Majestic Theatre is of historical and social significance for its construction in 1930 for John Fuller and Sons, theatrical producers, and for its long history of use as a movie theatre. In the 1960s, live stage shows became popular at this venue, along with appearances by pop groups including, for example, the Beatles. In 1970, the building was converted into a nightclub, and then in the late 1970s into a church.
  - b. It is also of architectural and aesthetic significance for its Art Deco/Modern style, and its design by successful local architects. It is a good example of the atmospheric style of interior decoration popular in the 1920s and 1930s. It is also significant for its technological features and the craftsmanship in its construction and decorative detailing, and the method of construction was innovative at the time. Its size, scale and location at this major intersection give the building visual landmark significance.
  - c. The building is of regional significance, as one of a number of cinemas and theatres in the central city in the first half of the twentieth century. A wide sector of the community has been entertained at the theatre and more recently a sector of the community has worshipped at the church. Its regional significance as a theatre and a building was already recognised before the earthquakes, but this significance has increased following them, as so few examples of these buildings remain in Christchurch.<sup>4</sup>
  - d. The report reiterates that the Heritage Response Team does not consider the building requires demolition and that it considers the building should be retained and repaired. It is the Team's opinion that the cost of repair and retention would be less than full demolition and a replacement building.
33. City councillors have also written to the Chief Executive of CERA to express their desire for the Majestic Theatre to be saved for its heritage and cultural value, and to note that they would support the provision of assistance for this to happen.
34. A number of groups other than the Council have expressed interest in the future of the building:
  - a. The Chief Executive of the Ministry for Culture and Heritage has also written to the Chief Executive of CERA to recommend that Majestic House is retained for its heritage and arts value.
  - b. Historic Places Canterbury also has an interest in the building. With the 'Save the Majestic' group, they made a deputation to the Council on 5 December 2013 seeking its support to restore the theatre. The deputation argued that the building is a valuable heritage building, particularly given the loss of many other heritage buildings, and that it can offer a vibrant interface between the East Frame's inner city living, the Innovation Precinct and the CPII. The deputation considered that the building has the potential to become a key focal point for community-based cultural and social activities, and that it could service smaller-scale convention needs.
  - c. Officials from NZHPT have had a limited involvement with this building as it is not registered with NZHPT. NZHPT provided CERA with an initial heritage assessment for the East Frame in November 2013. This report noted the presence of the former Majestic Theatre as an existing piece of built heritage in the East Frame area.

<sup>4</sup> The Isaac Theatre Royal is the prime example of a heritage theatre being retained and restored.

35. It is recommended that you consider the heritage value of the building, noted above, when you make your decision.

#### Implications for the implementation of *An Accessible City*

36. If Majestic House is retained this would have an effect on changes proposed for Manchester Street under the *An Accessible City* chapter of the CCRP. To create a boulevard environment along Manchester Street and provide for bus-priority measures as a major link to the future Bus Interchange, a nine-metre widening of the road corridor onto land which includes the Manchester House frontage is proposed.<sup>5</sup>
37. The *An Accessible City* project team has provided some comment on why it considers the existing proposal should be implemented, which would require the demolition of Majestic House:
- Team members note that the Manchester Boulevard project is one of the eight highest-priority projects in the First Phase delivery programme of *An Accessible City*. These road network changes are needed to support and encourage redevelopment of the city. The road will form the central public transport 'spine' connecting the north and eastern parts of the city with the Bus Interchange and other key route destinations. The Manchester Street changes will deliver a high-quality, tree-lined boulevard environment consistent with the objectives of the East Frame and the Public Realm Network Plan as well as establishing a public transport priority route connecting the Bus Interchange with the heart of the city and suburbs to the north and east.
  - Manchester Street would be established as a key public transport node, with a 'super-stop' supporting high-frequency bus connectivity to and from the East Frame, Cathedral Square and other central city destinations and the wider city. Any compromise to the capacity of the intersections along this route – and in particular the Manchester/Lichfield/High Streets junction – will directly impact the efficiency of the public transport connectivity to and from the Bus Interchange and will have implications for timetabling, reliability and connectivity of the public transport network on this side of the CBD.
38. However, should Majestic House be retained, officials have looked into the potential impacts on Manchester Street. A report is attached at **Appendix E** which was provided to the Development Director responsible for *An Accessible City*, and which considers options for dealing with the impacts of this potential decision on Manchester Street intersection design. In summary:
- Officials have developed three options to consider as possible alterations to current intersection design which would allow the building to be retained, and they assessed the potential impacts of these options.
  - One option has severe implications for safety and would require buildings on the other side of Manchester Street to be purchased and demolished. It also involves the moderate degradation of traffic performance, and has impacts on social/heritage issues, barrier-free accessibility and amenity. This option is not considered to be viable.
  - The other two options have moderate implications on traffic diversion, amenity and other issues such as safety and capacity loss. They would result in further degradation of an already sub-optimal level of service.
  - Further assessment is still required to confirm the full potential impacts on the intersection configuration and capacity, and to evaluate appropriate mitigations through detailed network modelling. If you are considering retaining Majestic House, the report recommends that you defer this decision until these assessments can be carried out and the full potential implications are more clearly understood.
39. It is recommended that you consider the implications for *An Accessible City* implementation, which are noted above, when you make your decision.

<sup>5</sup> On the Majestic House site, this requires land intruding 9 metres into the site from the Manchester Street boundary.

**Implications for the East Frame**

- 40. Majestic House is located on land designated for the Frame. The Frame defines the Core, and provides new green space and a range of local residential and some limited commercial development opportunities, reshaping central Christchurch and helping to deliver a more compact core. The East Frame, where this building is located, will have its own distinct character. This particular site is currently intended to be used for residential development, if Majestic House is demolished, thus contributing to the recovery of residential development in the central city.
- 41. The project team working on the East Frame has provided the following comments:
  - a. There may be minimal implications for the anchor project should Majestic House be retained. If the land available for residential development is reduced, this would lower the volume of residential units and may impact the associated benefits for an increased inner city population.
  - b. These impacts could perhaps be mitigated if the building was repurposed as a residential building. However, this would be subject to considerations such as the feasibility of repair, the scale of repair costs and the ability to market the residential development to the public and to investors. It is considered that this option is probably unrealistic, and would be unlikely to attract private sector involvement.
  - c. It is considered that any implications for the East Frame public realm would be minimal, as the site is outside the boundaries of the land identified for a central park.
- 42. It is recommended that you consider the implications for the East Frame noted above when you make your decision.
- 43. It is also noted that a report was provided to you in November 2012 by the General Manager, Design and Planning, CCDU which assessed buildings in the North and East Frames and their compatibility with the design intent of each of the Frames. The criteria which were considered included alignment with Blueprint objectives, heritage value, infrastructure value and architectural or cultural value. The recommendation of this report was that Majestic House should not be retained, in terms of its compatibility with the design intent of the East Frame under these criteria.

**Implications for infrastructure**

- 44. According to advisors in the Construction Management Office (CMO) and Operations, the danger presented by Majestic House is impeding the opening of roads to support recovery. A section of Lichfield Street, a major route out of the central city, is currently closed due to the need for an exclusion area around the building.
- 45. In terms of infrastructure repair, there are wastewater, roading, stormwater and water repairs programmed for May 2014. It would not be easy for these repairs to be undertaken if the current section 45 notice is still in force.
- 46. If Majestic House is demolished and the hazard removed, this will enable Lichfield Street to reopen and infrastructure repairs to be carried out. If the building is retained, you may need to consider carrying out make safe works as soon as possible to reduce the impacts of the building in the short term, and until the building can be repaired or rebuilt.
- 47. It is recommended that you consider the infrastructure implications noted above when you make your decision.

**Other issues relevant to recovery**

*Retention may aid social and cultural recovery within Christchurch*

- 48. There is potential for Majestic House, if retained and restored, to aid social and cultural recovery. It is understood that a number of organisations have expressed interest in the building, including community arts

groups and the performing arts sector, heritage groups, the Christchurch Polytechnic Institute of Technology and the Christchurch School of Music. There is a shortage in cultural or community facilities in the central city and the retention of the building could aid recovery and fill identified performance arts venue gaps<sup>6</sup> if a cost-effective solution could be found.

49. However, due to the uncertainty around the future of the building, proposals have not been costed or interest confirmed. Further work and more certainty would be required to confirm any potential options.

*Short-to-medium term impact of the building on surrounding businesses and commercial recovery*

50. Officials from the CMO note that, due to the continued presence of Majestic House and the restricted access area around it, there are implications for commercial recovery in the area. It is difficult to access the immediate area due to impacts on the traffic network, and businesses in the area may be struggling as a result. If the building is retained, and the hazard not dealt with quickly, this may have an impact on commercial recovery in the short-to-medium term.
51. Whatever your decision, if the hazard is dealt with quickly and the building is either repaired or replaced, commercial recovery may be promoted in the area in the long term.
52. It is recommended that you consider the recovery implications noted above when you make your decision.

**Considerations for decision-making**

53. This is considered to be a significant and urgent decision because of the impact of the decision on other work programmes contributing to recovery, and due to public interest in the building. The consequences are significant, with the potential for:
- a. the irretrievable loss of a heritage building; and/or
  - b. the recovery of Christchurch to be impacted.
54. Based on all the factors outlined above, we have considered the key pros and cons presented by each option, as laid out in the table below. This list is not exhaustive and you may consider there are other benefits or disadvantages which are not listed.

| The options and their consequences  |   |  |
|---|---|--|
| Options   | Pros  | Cons   |
| <p><b>Option 1 –</b><br/>Remove fly tower/stage and repair/restore building</p> | <ul style="list-style-type: none"> <li>• Heritage building retained</li> <li>• Potential to consider a range of uses for the building e.g. performing arts, residential, commercial etc. which could support recovery or add value in the area</li> </ul> | <ul style="list-style-type: none"> <li>• The cost of full repair is likely to be over \$20 million<sup>7</sup> – main source of funding unidentified (note heritage funding may be available for some of these costs)</li> <li>• Impacts on <i>An Accessible City</i> implementation</li> <li>• Uncertainty around method – further work required</li> <li>• Uncertainty around outcome; subsequently, potential for issues around timeliness</li> </ul> |

<sup>6</sup> The Ministry for Culture and Heritage has recently produced a venue stocktake for Christchurch which identifies that there is no existing mid-size contemporary music venue, nor is there provision for one to be built. Also, the provision of community and/or physical theatre venues is uncertain.

<sup>7</sup> As noted previously, the cost of works to retain the building that do not involve a complete restoration of the building as it was are unknown.



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|  |  | <ul style="list-style-type: none"> <li>• Impacts on traffic network and infrastructure repair programme (unless early make safe works)</li> <li>• Impacts on East Frame development (though minimal)</li> <li>• Impacts on commercial recovery in the short-to-medium term (unless early make safe works)</li> <li>• Uncertainty around market appetite to use, operate or maintain building</li> </ul>                |
| <b>Option 2 – Demolish in full</b>                 | <ul style="list-style-type: none"> <li>• Certainty and cost-effectiveness (\$1.850 million)</li> <li>• Enables <i>An Accessible City</i> implementation</li> <li>• Enables East Frame residential development to go ahead on this site</li> <li>• Enables Lichfield Street to reopen and infrastructure repair programme to go ahead, with positive impacts for commercial recovery in the area</li> </ul> | <ul style="list-style-type: none"> <li>• Irretrievable loss of a heritage building, which may impact the community</li> </ul>  |
| <b>Option 3 – Disposal of the property “as is”</b> | <ul style="list-style-type: none"> <li>• May enable privately-funded development supporting recovery in the area</li> <li>• May enable heritage retention (but uncertain)</li> </ul>   | <ul style="list-style-type: none"> <li>• Uncertainty around market appetite, outcome and timeliness</li> <li>• Purpose of acquisition was that land was required for the Frame</li> <li>• Impacts on <i>An Accessible City</i> implementation</li> <li>• Potential impacts on East Frame development</li> <li>• Less ability for the Crown to facilitate, coordinate and direct the rebuilding of this area</li> </ul> |
| <b>Option 4 – Delay decision-making</b>            | <ul style="list-style-type: none"> <li>• Enables a better understanding of full potential impacts of decision-making e.g. on <i>An Accessible City</i> implementation</li> <li>• Enables more time for repair strategy to be assessed for feasibility and any additional funding sources</li> <li>• Enables more time to obtain clarity on any interest in repairing and using the building</li> </ul>     | <ul style="list-style-type: none"> <li>• Continued uncertainty and timeliness issues</li> <li>• Impacts on traffic network and infrastructure repair programme</li> <li>• Impacts on commercial recovery in the area</li> <li>• May delay implementation of East Frame and <i>An Accessible City</i></li> </ul>  |

55. In considering the issues above, officials have considered the relationship of these benefits and disadvantages to the statutory tests described at paragraphs 10-20:

*CER Act*

- a. In terms of the overarching purposes of the CER Act, both Options 1 and 2 could contribute to achieving 'the full social, economic, cultural and environmental recovery of Christchurch'. However, at this stage Option 2 is the only option likely to provide certainty in a 'timely and expedited manner'.
- b. Both Options 1 and 2 could potentially meet s3(f) and s3(g) of the CER Act. There is, however, more certainty of outcome and timeliness under Option 2, and of all the options it best meets s3(d).
- c. Options 3 and 4 are not considered to meet the purposes of the CER Act due to the uncertainty of outcome and timeliness.
- d. Neither Options 1 or 2 would enable community participation in the planning of the recovery of affected communities, as per s3(b), as normal Resource Management Act 1991 processes would not need to be followed if the Crown undertakes demolition or repair works under the CER Act. Option 3 may enable community participation through a resource consent process for any repairs, but this is uncertain.

*Recovery Strategy*

- e. Option 1 would best meet the Cultural Recovery goals in the Recovery Strategy, in terms of the restoration of historic buildings and the renewing of Christchurch's unique identity. However, within the goals there is recognition that this may not always be feasible, and you may consider on the basis of the information currently available that retention can reasonably be considered unfeasible.
- f. If the building were used for cultural activities, Option 1 may also align with the goal of resuming cultural, community and sports events and activities. (Option 3 may also meet these goals, but this is uncertain.)
- g. Option 2 would meet the Cultural Recovery goal to embrace necessary changes to the city's character and urban form, if it is considered that the demolition of Majestic House is a necessary step.
- h. Option 2 would best meet the Built Environment goals in the Recovery Strategy, in relation to its benefits for the transport system, and the rebuild of infrastructure and buildings in a resilient, cost-effective and energy-efficient manner. (Options 1 and 3 may also allow for the latter, but this is uncertain.) Option 2 would also allow for innovative urban design, buildings, etc., in the East Frame.

*Christchurch Central Recovery Plan*

- i. Option 2 is the best option in terms of delivery of the CCRP. Under Options 1 and 3, it is possible that the building might be restored or re-developed in accordance with some of the objectives of the CCRP, but these options would impact on the delivery of *An Accessible City*, and potentially also the East Frame (but to a lesser degree).

56. Based on the analysis above, Options 1 and 2 could both be considered to meet the purposes of recovery, but in different ways. Of the available options, Option 2 best provides for a focused, timely, and expedited recovery. It is recommended that you consider the merits of each option in making your decision.

57. If you decide not to demolish Majestic House under section 38 of the CER Act, it is recommended that you indicate your preferred alternative for consideration, and that officials develop advice on next steps for investigating the options. For example, if you are considering retaining the building, further work would be required to look into options for the future form and use of the building, any funding options, and any immediate steps required to mitigate impacts on infrastructure and/or the delivery of the CCRP. If, however, you are considering disposing of the property, further advice will be required on the exercise of the power to dispose of property under section 53 of the CER Act, including discussion of the application of section 10.

58. If you decide to demolish Majestic House under section 38 of the CER Act, it is recommended that officials draft a letter for you to send to the Council, informing it of your decision and the reasons for your decision.
59. It is noted that the reasons for your decision will need to be recorded. It is recommended that you discuss these reasons with officials after making your decision, so a document can be prepared.

### Recommendations

60. It is recommended that you:
- 1 **note** that you are required to make a decision whether to carry out works (i.e. demolition) on Majestic House under section 38 of the Canterbury Earthquake Recovery Act 2011 (the CER Act);
  - 2 **note** that the power to carry out works under the CER Act:
    - 2.1 must be exercised in accordance with the purposes of the CER Act (as set out in section 3); and
    - 2.2 may be exercised where you reasonably consider it necessary (section 10(1) and (2));
  - 3 **note** that you should also consider your decision against the Recovery Strategy for Greater Christchurch and the Christchurch Central Recovery Plan (CCRP);
  - 4 **note** that in making your decision you will need to consider the options that exist for the future of Majestic House, and to consider all the relevant factors when weighing up the available options;
  - 5 **note** that the relevant factors you need to consider include:
    - 5.1 the feasibility and cost-effectiveness of the options;
    - 5.2 the heritage value of the building;
    - 5.3 the implications for the East Frame and the implementation of *An Accessible City*;
    - 5.4 the implications for infrastructure and/or its timely and coordinated repair; and
    - 5.5 any other recovery implications arising from the options;
  - 6 **note** that there are considered to be several broad options for the future of Majestic House:
    - 6.1 *Option 1* – Remove fly tower and stage and repair/restore the building or part of the building;
    - 6.2 *Option 2* – Demolish in full
    - 6.3 *Option 3* – Disposal of the property 'as is'
    - 6.4 *Option 4* – Delay decision-making
  - 7 **note** that at this point in time the key decision relates to Option 2 (demolition), as further advice will be required on other options for dealing with the property;

- 8 **determine** <sup>Had 3</sup> whether Majestic House should be demolished under section 38 of the CER Act at this point in time; YES/NO
- 9 **note** that the reasons for your decision will need to be recorded, and that it is recommended that after you make your decision you discuss these reasons with officials so a document can be prepared;
- 10 **indicate** in the box below, if you decide Majestic House should not be demolished, what your preferred option of the options listed at recommendation 6 would be for further investigation; and ~~YES/NO~~
- 11 **direct** officials, if you decide Majestic House should be demolished, to prepare correspondence for you to inform the Council of your decision. YES/NO

**Approval**

| FROM  |
|---|
|   |
| <b>Advisor, Christchurch Central Development Services</b> |
| Date: <u>7</u> / <u>3</u> / 2014                          |

| NOTED / APPROVED / NOT-APPROVED   |
|---|
| <br>Warwick Isaacs<br>Deputy Chief Executive – Implementation /<br>Director – Christchurch Central Development Unit |
| Date: <u>12</u> / <u>3</u> / 2014   |

Appendices:

- Appendix A CERA memo, 19 February 2014, "122-126 Manchester Street – Majestic House – SB 231"
- Appendix B Majestic House: Feasibility and cost-effectiveness of Options 1 and 2
- Appendix C Potential funding sources for owners of heritage buildings
- Appendix D Council memorandum, 15 February 2012, "Heritage Building Treatment Report"
- Appendix E CERA memo, 18 February 2014, "Majestic Theatre – Impact on Intersection Design if Retained"
- Appendix F Davis Langdon quote for repair of Majestic House

*If you decide not to demolish Majestic House at this point in time – indicate your preferred alternative of the options listed at recommendation 6:*

*On this basis, officials will prepare further advice for your consideration.*

|                 |  |
|-----------------|--|
| <b>To</b>       | Warwick Isaacs, Director CCDU;<br>John Cumberpatch, General Manager Operations |
| <b>From</b>     | [REDACTED] Structural Engineer, Operations                                     |
| <b>Reviewed</b> | [REDACTED] Team Leader, Engineers, Operations                                  |
| <b>Date</b>     | 19 February 2014   |

### 122-126 Manchester Street – Majestic House - SB 231

#### Purpose

The purpose of this memo is to review the background and clarify CERA Operations' position with respect of Majestic House at 122 Manchester Street.

CCDU has recently acquired the site and building from the Majestic Church Trust as a part of the land procurement for the Eastern Frame.

The building is located on the north east corner of the intersection of Manchester and Lichfield Streets. Originally known as the Majestic Theatre it was design in the Art Deco style by S & A Lutterall Architects and completed in 1931. A stage and fly tower was included to accommodate live performances. In the mid 1970's it was acquired by the City New Life Centre and is now known as Majestic House.

Majestic House is classified as a Group 2 building on the CCC Heritage list of protected properties (Volume 3: Part 10 Heritage and Amenities: Appendix 1). The building is not listed on the New Zealand Historic Places Trust Register.

#### Documents Considered

The following documents were reviewed. They are listed in chronological order and include a brief note of the content:

1. Structex Metro Ltd [REDACTED]; "Majestic Church, Structural Assessment & Strengthening Report" – dated 19 December 2011; describes the building and damage and gives the assessed capacity of critical elements. Assesses parts of the building as earthquake prone, reports significant/extensive damage and partially collapsed roof. Schemes to strengthen outlined which include demolition of stage and fly tower and provision of temporary bracing to remove immediate hazard to adjoining properties.
2. CERA Significant Buildings Unit [REDACTED], memo dated 07 February 2012 "122 Manchester Street, Majestic House." Concludes building has low resistance to collapse, significantly damaged, is an unacceptably high risk to people and property and is therefore dangerous. Recommends issue of section 38 notice.
3. Christchurch City Council Heritage Response Team [REDACTED] – "Heritage Building Engineering Advice – 122 Manchester Street" dated 10 February 2012; Agrees with Structex report to partially demolish east end of the building up to and

- including the proscenium wall- Does not consider full demolition is required. Recommends stabilisation of remainder to make safe to enable permanent repairs and rebuild. Provides a temporary propping scheme using containers to stabilise line of proscenium wall following demolition of fly tower and stage area.
4. Christchurch City Council Heritage Response Team; Memorandum: "Heritage Building Treatment Report, 122 - 126 Manchester Street", dated 15 February 2012; Statement of Significance & Heritage Assessment. Does not consider demolition is required – should be retained and repaired & believe cost of repair less than full demolition and replacement.
  5. CERA letter dated 16 February 2012 "Demolition of your building at 122 Manchester Street – Manchester House" giving notice under section 38(4) of CER Act;
  6. CERA letter to Duncan Cotterill, dated 23 April 2012, advising that CERA will consider a make safe proposal for Majestic House;
  7. Structex letter dated 9 May 2012; "Majestic Building"; outlining a preliminary assessment of work required to stabilise.
  8. David Smith Architects (DSA) record of Majestic Church Trust (MCT) meeting with CERA on 17 May 2012. Discussion on Structex proposal to temporarily stabilise the building.
  9. Structex letter dated 22 May 2012; Majestic Building; - outlines a revised scheme to temporarily stabilise the building;
  10. Email exchange between CERA and Structex from 28 May 2012 to 5 June 2012; - Queries and responses arising from Structex revised proposal.
  11. CERA Memo dated 06 June 2012 "122-126 Manchester Street – Majestic Building – SB 231 – Temporary Stabilising Works – Concludes proposed work will satisfy the requirements of the section 38 notice subject to approval of the detailed design and construction documentation.
  12. CERA letter dated 13 June 2012 "Make Safe of your building at 122 Manchester Street – Majestic House" – acceptance of proposed temporary strengthening scheme in principle as addressing the section 38 notice.
  13. MCT [REDACTED] email dated 24 July 2012 advising that MCT have signed off settlement with ACS (insurers of Majestic House) and that MCT will now be demolishing the building and not making safe.
  14. DSA covering letter dated 21 September 2012 and Frews Contracting "Method Statement for Demolition of Majestic House"
  15. CERA Significant Building – Demolition Methodology Review #1 Dated 02/11/12. Method relies on removal of adjacent building at 128 Manchester Street. Many outstanding issues.
  16. DSA letter 14 November 2012 "Majestic House – 122 Manchester Street – Demolition to Make Safe" advising MCT will work with CERA and CCDU towards demolition of building.
  17. CERA memo dated 23 May 2013, "122 Manchester Street's Effect on Cordon Reduction of Lichfield Street." Considers options and recommends reconsideration of urgent demolition of Majestic House and placing CERA S45 Yellow restriction on the building.
  18. CERA letter dated 14 June 2013, "Demolition of your building at 122 Manchester Street", giving notice under section 38(4) of CER Act that building needs to be demolished.

## Building Description

The building is about 26m wide (north/south) by 58m long. It has been considered as the following three interconnected parts;

1. The office or foyer comprises four floors plus partial mezzanine over a partial basement and occupies the western third of the site with frontages on Manchester and Lichfield Streets. The height is typically about 20m. The main structural steel frames are concrete encased, the suspended floors and roof level are RC slabs spanning between beams in both directions. A number of internal URM infill panels are provided. There are three stair wells plus the main stair case to the circle, all of which have 6 inch thick RC walls. The RC walls and the URM infill panels provide the majority of the lateral resistance. The roof is clad with profiled steel on timber framing over the reinforced concrete roof slab.
2. The Auditorium is connected to the full height steel frame shared with the offices to the west and the steel framed proscenium wall to the east, shared with the fly tower & stage. The internal "shared" frames typically have URM infill panels. The overall height of the auditorium is about 20m. The profile steel roofing sheeting is supported by sarking over timber framing between roof trusses which span between concrete encased structural steel columns to the north and south walls. The ornate plaster ceiling, a feature of the building, is supported from the bottom chords of the roof trusses. Ceiling access is provided within the depth of the roof trusses. The circle, an upper level of tiered seating, covers about 50% of the Auditorium foot print. It is constructed with timber framing between a grid of heavy structural steel members supported by the external north and south walls, the office/auditorium wall and two internal columns. The external panels between the concrete encased steel frames to the (north & south) walls typically have a 200mm reinforced concrete outer skin with a cavity and an interior skin of URM. The connection between the skins across the cavity is not known.
3. The Stage and Fly Tower is about 11m long by the full width of the building with a ridge height of about 23m. There is a basement below the stage. The proscenium wall separates the auditorium from the stage/fly tower. The 220mm thick URM infill panels to the concrete encased steel frame to the proscenium wall are typical of the internal wall construction. The exterior walls are 200mm thick reinforced concrete infill panels between the concrete encased structural steel beams and columns.

## Assessment

Structex had undertaken a survey and seismic assessment of the building during late 2009 and early 2010.

Structex assessed the building as an IL3 structure which is appropriate for an auditorium with the capacity for more than 300 people to congregate. However, during any strengthening and retrofit operation the hazard should be assessed against IL2 criteria for a consistent comparison with other structures being strengthened. The hazard associated with the use of Lichfield and Manchester Streets would also normally be assessed against IL2 criteria. The values in brackets relate to the assessment as an IL2 structure (x1.3).

The quantitative assessment by Structex (Doc # 1) was based on an equivalent static analysis in the pre-earthquake condition and identified the following elements as having a seismic withstand of less than 33%NBS:

- |  |            |        |
|--|------------|--------|
| 1. Global Transverse (north/south) direction               |            |        |
| a) Auditorium central (18%)                                | Deflection | 14%NBS |
| b) Office Area plus west end (50%) of Auditorium (22%)     | Shear      | 17%NBS |
| 2. Elements  |            |        |
| a) Face load - east wall of stage & fly tower (28%)        |            | 22%NBS |
| b) Face load - 220 mm thick URM walls to office area (41%) |            | 32%NBS |
| c) Face load - 220 mm thick URM to proscenium wall (18%)   |            | 14%NBS |

The auditorium external (north & south) walls have an outer 200mm thick reinforced infill panels between the concrete encased steel members with an inner skin of URM. The connection/tie across the cavity between the skins is not known. The URM skin was identified as a potential hazard.

### Observed Damage

The following damage is noted in the Structex reports and the CERA memo:

1. Cracking to URM and concrete internal walls and reinforced concrete external walls and frames
2. Cracking and spalling of lathe and plaster ceiling to auditorium and gallery (circle) soffit
3. A significant bow to the east in east wall to rear of stage and fly tower and the proscenium wall, measured at 191mm from the base of the wall, November 2011.
4. Partial collapse of auditorium roof adjacent to proscenium wall due to timber roof framing parting from the bowed proscenium wall.
5. The partially collapsed roof supported an internal gutter that drained the eastern half of the auditorium roof. The internal gutter is now discharging into the auditorium and has caused substantial damage to the decorative plaster to the ceiling and proscenium arch, the stage and the floor coverings to the auditorium. Much of the plaster in the vicinity of the proscenium wall has now gone.
6. Out of plane displacement across a horizontal construction joint to RC wall to stair well in the office area due to the Dec 2001 event.



## Discussion

Considering the assessed critical behaviour and elements in combination with the observed damage gives a good indication of the associated hazards and risk.

The global stability of the fly tower, stage and auditorium is a significant issue. The assessment identified the absence of a dependable diaphragm to the auditorium and fly tower roofs as a concern. The bow to the eastern and proscenium walls confirms the lack of an effective diaphragm at the level of the fly tower roof. In recognition of this, the capacity of the east wall was assessed assuming no east west lateral support at roof level. In the current condition the east west global stability of the fly tower, stage area and proscenium wall is in question and is probably reliant on second order large displacement effects to maintain stability under less than moderate seismic loadings. The fly tower has a low assessed lateral east west capacity and significant associated damage. It is therefore dangerous. The exclusion zone to the east of the building should be maintained until the hazard is removed. Access to the stage and fly tower area should be prohibited.

The parting of the connection of the auditorium roof from the proscenium wall has compromised the majority of the benefit from the secondary diaphragm effects provided by the auditorium roof cladding, timber sarking and the ceiling. In combination with the prospect of the out of plane failure of proscenium wall this leaves the auditorium, particularly the north and south walls, vulnerable to out of plane loading. The assessment indicates that the out of plane deflection of the walls controls rather than strength. The observed associated damage is limited which suggests that the predicted deflections may not have been experienced. At best the longer natural period associated with a flexible system would result in relatively low seismic loading and the secondary diaphragm action at roof and circle levels and will tend to redistribute north south lateral load to the foyer. The north and south walls of the Auditorium have a low assessed capacity in the north south direction particularly if the proscenium wall is compromised by the east west response of the fly tower. The risk of collapse of the north and south walls during a less than moderate event is unacceptably high. The walls are therefore dangerous and the exclusion zone to the north and south of the building should be maintained until the hazard is mitigated.

The potential out of plane failure of the URM infill panels to the proscenium wall is a significant local hazard as is the potential loss of plaster from the auditorium ceiling and the circle soffit. Either could be initiated by a less than moderate seismic event. The out of plane failure of the inner URM skin to the north & south walls is recognised as a potential hazard but has not been quantified as the connection between the skins across the cavity is not known. Access to the auditorium and stage/fly tower areas should be limited in duration and confined to the stalls area under the circle.

The damage to the office area is limited to minor or moderate cracking of the URM infill, reinforced concrete walls and concrete encasement. The apparent lack of significant damage in this area is not consistent with the low seismic withstands from the assessment. The temporary works are required to ensure the north south stability of the office area prior to and during the retrofit of that area but access should be acceptable to install the temporary works as outlined in the Structex proposal.

The east west stability of the office area is assessed by Structex as 36%NBS (or 47% for IL2) and is controlled by shear capacity. The exclusion zone to the Manchester Street frontage reflects the reduced hazard.

Structex considered the use of external props to stabilise the east wall and fly tower. The scheme was not recommended as a medium to long term solution as it encroached on the neighbouring land and it was considered impractical and dangerous to repair the bow to the proscenium and east walls.

Structex, the CCC Heritage Building Engineering Advisor and CERA agreed that the demolition of the east end of the building up to and possibly including the proscenium wall is required as well as significant temporary works to stabilise the structure to allow access for repair and strengthening and to reduce the hazard to adjoining streets to an acceptable level.

The Majestic Church Trust and their insurers investigated the cost of the proposed temporary intervention followed by the repair and strengthening of the building. MCT advised on 24 July 2012 that they had reached a settlement with their insurers and would now be demolishing the building and not making it safe. The demolition was tendered by MCT. The contractor selected has been frustrated by the possibility of damage to the adjoining compromised buildings at 128 Manchester Street and 14 Bedford Row. The demolition of Majestic House was put on hold pending resolution of the issues associated with the adjacent buildings.

The opening of Lichfield Street to traffic was considered by CERA Operations in May 2013 as part of the cordon reduction exercise. This required re-routing of traffic over private land or the full demolition of Majestic House. An urgent full demolition was recommended and a new section 38 notice was approved on 14 June 2013. The previous section 38 notice, dated 16 February 2012, was cancelled on 16 September 2013.

CCDU have acquired the property as part of the Eastern Frame. Under instruction from CCDU CERA Operations have called, received and evaluated tenders for the full demolition of Majestic House and the adjacent structures on Bedford Row and 128 Manchester Street. We understand that some adjustment to the scope of work may be required to accommodate recent developments.

## Options

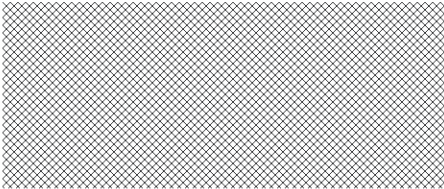
In its present condition the building, and the eastern half in particular, poses a significant risk to people in and around the structure during a less than significant seismic event. It is therefore dangerous. The current exclusion zones should be maintained until the hazards have been addressed.

The agreed minimum requirement is for the partial demolition of the fly tower and stage area in conjunction with significant bracing of the remaining structure to reduce the hazard/risk to an acceptable level. This would allow access to the building for repair and strengthening and the opening of Lichfield Street to the public. An estimate of cost was prepared for the Majestic Church Trust but has not been provided. The option should be evaluated and the costs, heritage benefit, final use/ownership, funding and program identified. The first step

would be to confirm the temporary and permanent works required. This option would take time to develop and implement. The demolition of the building at 14 Bedford Row would need to be completed prior to the start of the make safe works for Majestic House. Consideration should be given to coordination with the demolition of 128 Manchester Street.

The alternative is the full demolition of Majestic House and the adjoining buildings. Tenders have been received and evaluated.

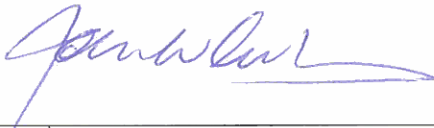
End



Structural Engineer – Operations

Reviewed by 

Team Leader, Engineers - Operations

|   |                            |
|---|----------------------------|
| NOTED / APPROVED / NOT APPROVED   |                            |
|  |                            |
| Name  | John Cumberpatch           |
| Title   | General Manager Operations |
| Date  | 19/2/14                    |

|                                 |                |
|---------------------------------|----------------|
| NOTED / APPROVED / NOT APPROVED |                |
|                                 |                |
| Name                            | Warwick Isaacs |
| Title                           | Director CCDU  |
| Date                            |                |

Memo: "122-126 Manchester Street – Majestic House - SB 231"

19 February 2014

Released by the Canterbury Earthquake Recovery Authority

| Option  | Feasibility   | Estimated costs   |
|---|---|---|
| 1 -<br>Remove fly tower and stage and repair building | CERA Engineers consider this may be feasible, but that more work is needed to confirm this. It is understood that the Majestic Church Trust/Structex developed a permanent strengthening/rebuild scheme, but this was not provided to or reviewed by CERA Engineers. To evaluate the permanent option they would need to identify the end use, determine the associated requirements, and develop a suitable scheme.<br><br>Management of hazardous materials would also need to be considered. | \$18.150 million* for full repair<br><br>(Quoted by Davis Langdon for Majestic Church Trust, 24 February 2012 – see full quote at Appendix F) |
| 2 -<br>Demolition                                     | CERA Engineers have assessed the demolition strategy and consider it is feasible and could safely be implemented.   | \$1.850 million**   |

\* The estimated cost for Option 1 excludes:

- An estimated \$0.155 million required to manage hazardous materials.
- Any escalations since the costs were quoted in February 2012 – these are estimated to be 6% of the quoted costs.
- Any cost associated with adapting the building to a different use, if this is considered.
- Any cost variations dependent on the expected level of repair – these could be significant, as, for example, the interior heritage features have suffered extensive damage due to weathering since the major earthquake events, and would be expensive to replicate or repair.
- Building consent costs associated with repair or make safe works.

It is therefore likely that the restoration of the building would cost more than \$20 million.

It is also noted that costs involved in operating and maintaining the facility are unknown, and the market appetite to take this on is unknown.

\*\* The estimated cost for Option 2 excludes:

- Any costs required to build new facilities or infrastructure on the land, e.g. implementing An Accessible City and the East Frame residential project. (It is noted that the intention is for the land to be sold to the private sector to be developed as part of the East Frame Residential Precinct, and these costs would fall to the private sector. Under this option, the Crown would make some recoveries from the sale of land.)

Released by the Canterbury Earthquake Recovery Authority

## Appendix C

**Potential funding sources for owners of heritage buildings**

Brief guide only for the Canterbury/West Coast region. Contact the New Zealand Historic Places Trust (NZHPT – to be renamed Heritage New Zealand after April 2014).


Please discuss early your specific situation with the NZHPT staff.

1. If for example the building is in the ownership of a trust with charitable status or a church, and there is evidence of community use then the owner is likely to be eligible for funding assistance from **Lotteries Environment and Heritage**. Currently if there is an association with WWI commemorations, applications are encouraged. Normally the NZHPT needs to be consulted early about these applications and a letter of support is provided with appropriate applications. See: <http://www.communitymatters.govt.nz/Funding-and-grants---Lottery-grants---Lottery-Environment-and-Heritage> for scope of eligible works and application forms. Most projects will require a conservation plan or report as a first step which Lotteries can fund up to 100% of.
2. If the building has a Category 1 registration with the NZHPT, owners are eligible for funding assistance from the NZHPT administered **National Heritage Preservation Incentive Fund**. The purpose of the fund is to provide financial incentives to encourage the conservation of nationally significant heritage places in private ownership, as opposed to those in the ownership of the public sector and agencies eligible for funding from the Lottery Grants Board. Priority is given to heritage places of national significance where conservation work is planned and could be improved through extra funding. The annual appropriation approved by Parliament for this fund is \$563,000 (GST inclusive) spread nationally. (The NZHPT under this arrangement is therefore unable to fund Category 2 registered buildings). See; [http://www.historic.org.nz/protectingourheritage/fundingprotection.aspx?sc\\_lang=en](http://www.historic.org.nz/protectingourheritage/fundingprotection.aspx?sc_lang=en)
3. If the building is listed in the Christchurch City Council Plan as a protected heritage building, the owner may be eligible for funding assistance from the Council's Heritage Incentive Grant (HIG) fund. Funding is apportioned based on the eligible scope of works and the level of listing in the Plan (Groups 1 to 4). Owners of listed heritage items can apply for grants of up to 50 per cent towards the following conservation-related works:
  - Conservation of exterior and interior heritage fabric (including earthquake repairs)
  - Seismic strengthening, fire and access upgrades to meet Building Code requirements
  - Professional fees e.g., architects, engineers & quantity surveyors
  - Reimbursement of non-notified Council resource consent fees. See; <http://www.ccc.govt.nz/cityleisure/arts/culture/christchurchheritage/heritagegrantsatwork/index.aspx>
4. The Canterbury Earthquake Heritage Building Fund (CEHBF) is a likely limited term fund set up to provide assistance to owners of heritage buildings to repair damage caused by the Canterbury earthquake of 4 September 2010, Christchurch earthquake of 22 February 2011, and aftershocks. Funding will be targeted at the gap between insurance cover, and the actual cost of repairs and associated works including conservation works, structural upgrading and Building Code compliance works. The Fund consists of contributions from territorial authorities, the New Zealand Historic Places Trust, and donations. Any funds received will be matched by the government who have set aside up to \$10 million. See; <http://www.ccc.govt.nz/homeliving/civildefence/chcheearthquake/heritage.aspx>
5. The territorial Councils within the Canterbury/West Coast area may be able to offer owners limited minor incentives for works to heritage buildings listed in their District Plans. This assistance could be related to repairs and maintenance for example or relief from consenting fees. Any assistance would need to be discussed with the relevant council on a case by case basis.

## Appendix C

6. Other potential funding sources include community trusts specific to the regions that may consider applications from the cultural heritage sector. Any applicant would need to demonstrate significant community benefit. Enquiries would need to be directed on a case by case basis to the community funder.

Note: It may be possible for an owner to achieve funding from more than one funder for complementary aspects of a project (ie partnership funding).

 23/01/2014

**MEMORANDUM:  
HERITAGE BUILDING TREATMENT REPORT**

**To:** CERA General Manager Operations  
**From:** Heritage Response Team  
**Date:** 15 February 2012  
**Heritage Team Representatives:** [REDACTED]  
**Heritage Response Team Engineer:** [REDACTED]

**Zone:** Red Zone  
**Address of Building:** 122 - 126 Manchester Street  
**Heritage group:** Group 2  
**NZHPT registration:** N/A  
**Name of building and description:** Former Majestic Theatre  
**Building owner name & contact details:** Majestic Church

**Recommendation:**

- Do not agree that the building requires full demolition
- Recommend stabilisation to make the building safe to enable permanent repairs.

**Engineering Comments:**
Description of Damage 22 February and 13 June 2011

Building was green placarded after 22 February 2011 with the note that it appeared to have performed well.

The building was yellow placarded on 1 July 2011 with a requirement for structural repairs to be undertaken before the building was reoccupied

Engineering Advice – Owner's engineer – Structex, 19 December 2011

Recommends partial demolition of the building, the east end up to and including the proscenium arch, which should be rebuilt, with the remainder of the building being strengthened.

**Engineering Peer Review**

**Engineer:** [REDACTED] 10 February 2012

Agrees with the engineering report by Structex and includes a proposal for installing temporary support to the walls and roof along with a plywood wall to protect the interior of the building. Does not consider that the building requires full demolition.

**Owners Views: (If Known)**

The owner seems to have been convinced that repairing the structure will be too difficult and costly. We are not sure what their views would be were it suggested to them that this might not be the case.

**Statement of Significance:**

The former Majestic Theatre is of historical and social significance for its construction in 1930 for John Fuller and Sons, theatrical producers, and for its long history of use as a movie theatre. Three shops fronting Manchester Street were part of the original building, and offices and a billiards hall were located on the upper floors. The Theatre was opened by the Mayor J.K.Archer on 1 March 1930. At this time sound and colour pictures had been introduced, and cinema interiors were decorated in an "atmospheric" style, decorated in exotic decor - in this case Hispano-Moorish - and with an elaborate ceiling designed to evoke the night sky with lights and decoration. The style originated in America in the 1920s, and was popular internationally during the Depression as it offered a welcome escape from everyday life into the fantasy of the building and the entertainments held there. In 1946, the building was sold to the Kerridge-Odeon chain. Originally designed as a performing theatre, the advent of sound films during its construction meant the theatre back stage area was not completed.

This was later completed as demand for international theatre attractions in New Zealand increased. In the 1960s, live stage shows became popular at the Majestic Theatre, with 'Startime Spectacular' running for some time, and also appearances by pop groups from Great Britain, including The Beatles (their final concert in New Zealand), The Kinks, The Dave Clark Five and Manfred Mann. The Majestic Theatre closed on 28th August 1970, and was converted into a nightclub, named Moby Dick's Nite Spot. In 1976, the building was again badly damaged by a fire, and the nightclub was closed. It was purchased by the Christchurch Revival Fellowship, who restored the building in 1978 as the City New Life Centre. Until the earthquakes of 2011 the building housed the Majestic Church.

The former Majestic Theatre is of cultural and spiritual significance for its long history of use associated with a popular form of entertainment for the Christchurch community, and for its more recent use as a church. The former theatre is of cultural significance because it is held in esteem by the Christchurch theatre and cinema communities and features strongly in the collective memories of Christchurch residents who attended entertainments there. The conversion of the Theatre for spiritual worship in the late 1970s illustrates a social change, with less demand for cinemas beyond Cathedral Square in the central city at this time. As a place of Christian worship, the building is of spiritual significance to that church community

The former Majestic Theatre is of architectural and aesthetic significance for its design in the Art Deco/ Moderne style, by successful local architects the Luttrell Brothers. The building is four storied with an auditorium and backstage area. A vertical emphasis is created on the facade with the recession of spandrels back from the plane of the piers. Detailing is restrained with stylised motifs used for pier capitals, vents, and arches. Leaded toplights are located above the original verandah. The building's plan and construction is said to have been patterned on the same basic design as the St James Theatre in Auckland.

The former Majestic Theatre is of technological and craftsmanship significance for its construction and decorative detailing. Construction is of reinforced concrete with a corrugated iron roof, and steel window frames. It has a large complete steel frame, and was the first building in the city to be built in this way with huge steel girders and steel ribs transmitting the load. Messrs T. Andrews and Son and Mr J. Forward were the plasterers for the building, which is highly detailed and displays a high degree of skill for the period. A large circular motif is located in the centre of the ceiling, and heavy plaster cornices sit between the walls and ceiling. The main entrance was of blue pearl granite and the vestibule is floored with terrazzo. At the time the main entrance was the largest piece of granite work to have been carried out in Christchurch.

The size, scale and location at the major intersection of Manchester, Lichfield and High Streets gives the building visual landmark significance.

The former Majestic Theatre is of regional significance. It has significance to the region as one of a number of cinemas and theatres in the central city in the first half of the 20th century. A wide sector of the Canterbury community has attended entertainments at the theatre and more recently a sector of the Christchurch community has attended spiritual worship there. Its significance as a theatre has further increased following the Canterbury earthquakes as so few examples of these buildings remain in Christchurch – notably the Isaac Theatre Royal on Gloucester Street and potentially part of the Odeon on Tuam Street. The building is a good example of the atmospheric style of interior decoration popular in the 1920s and 30s - unlike most other theatre buildings in the City, the Majestic interior has retained a high level of intactness, and craftsmanship skill is evident in the wealth of Hispano-Moorish decoration in plaster and other materials. It is of architectural and aesthetic significance to the region for the involvement of local architects the Luttrell Brothers and Allan Manson in its design and construction, and for its design merit. The former theatre is technically significant for the region for its method of steel construction which was innovative at the time, and it makes an important contribution to the inner city streetscape as a prominent landmark – particularly following the loss of so many other buildings in this area of the city.

#### Heritage Assessment:

It is our understanding that although the building is badly damaged – more particularly the area from the proscenium arch eastwards - this can be partially deconstructed and then the remaining structure stabilised. Such stabilisation can be achieved by containers on the north and south sides of the building with a steel truss and ply to protect the interior of the building (see report by [redacted]). Suggestions for permanent repairs have already been detailed by Structex in their report.



The building was already listed as being of regional importance before the Canterbury earthquakes and given the loss of other important heritage buildings within the central city and more especially other theatre and cinema buildings, this building's significance to the region has grown. It is the most intact, remaining theatre building that Christchurch now has as well as now being a prominent landmark as the only remaining heritage building – in fact the only remaining building – on the junction of Manchester, Lichfield and High Streets. It has also become a focal point at this area of the city and links to some of the few remaining heritage items in the central city – namely the buildings in southern High Street and the building at 209 Tuam Street.

The heritage team reiterates that they do not consider that the building requires demolition and that it should be retained and repaired, particularly as it is our opinion that the cost of repair and retention would be less than full demolition and a replacement building.

#### **Heritage, Demolition/ Partial Demolition and Make Safe/ Make Safe Conditions:**

Prior to commencing any work on site, the owner or any authorised agent of the owner must contact the Christchurch City Council Heritage Response Team ([heritage@ccc.govt.nz](mailto:heritage@ccc.govt.nz) or 027 820 3703) to confirm the following:

##### **1. Photographic Record**

A photographic record of the building shall be taken both prior to, during and after the works.

##### **2. Heritage Salvage**

To identify and agree any heritage salvage requirements and ownership.

##### **3. Methodology**

To agree a methodology for the demolition/ partial demolition and make safe/make safe works and a temporary protection plan.

##### **4. Foundation Stones/ Time Capsules**

The deconstruction of character and heritage buildings should take careful regard at low building level for the potential for the discovery and retrieval of time capsules and foundation stones. Foundation stones are generally inscribed with the date or details of the laying of the stone. Foundation stones in some cases may be unmarked. Foundation stones are likely to be located at the corners of the principal façade or on the side of the principal entry. In some cases buildings may have plaques on them noting the laying of a foundation stone or opening of the building or of a particular event. All stones or plaques must be removed with care and time capsules if evident should be removed by a heritage conservator.

##### **5. New Zealand Historic Places Trust**

All demolition/ partial deconstruction, earthworks and foundation removal of pre-1900 buildings and buildings within the four avenues will require an archaeological authority under the Historic Places Act. Prior to commencing work on site the owner or any authorised agent of the owner must contact the New Zealand Historic Places Trust Regional Archaeologist on **027 688 9741**.

#### **Advice Notes:**

- **Urban Christchurch City Council Urban Design Panel** - When the site is re-developed at some point in the future, the nature of the development means that it will need to be referred to the Urban Design Panel for consideration and feedback. The Panel has an advisory role to the Council and provides free pre-application advice and input on urban design matters in relation to the resource consent process. Early consultation with Council staff about this process before the design if the building is finalised is advised. For further information please view [www.ccc.govt.nz/urbandesign](http://www.ccc.govt.nz/urbandesign).

# Memo

Released by the Canterbury Earthquake Recovery Authority

|                       |   |
|-----------------------|---|
| <b>To</b>             | [Redacted] Development Director – Anchor Projects |
| <b>CC</b>             |   |
| <b>From</b>           | [Redacted]  |
| <b>Date</b>           | 18 February 2014                                  |
| <b>Security Level</b> | [Commercial in confidence]                        |
| <b>Action</b>         | For recommendation to CCDU Leadership Team        |
| <b>Date required</b>  | N/A   |

## MAJESTIC THEATRE – Impact on Intersection Design if Building Retained

### PURPOSE

This technical note describes three options for the potential retention of the Majestic Theatre together with an assessment of impacts on infrastructure and traffic operations in light of current network and land use master planning as completed to date. It does not consider the feasibility or otherwise of repairing the structure of the building itself, nor does it address the viability, or otherwise, of laying underground services through the corridor – many of which are expected to be aligned within the recently acquired 9m widening on the eastern side of the road.

### CONTEXT

The Majestic Theatre site is located on the north-eastern corner of the Manchester Street / Lichfield Street / High Street six-way intersection. This is a particularly complex intersection due to its configuration with High Street crossing diagonally through it, and is further complicated by the planned extension of the tram-line into both High Street and Lichfield Street to the east and south-east.

The Majestic Theatre building is a multi-storey masonry structure which has been a landmark in the Christchurch CBD. The building has been seriously damaged, and is currently unoccupied.

Current planning for the Manchester Street corridor is to create a “boulevard” environment and provide for bus-priority measures as a major link to the future Bus Interchange. This requires a 9m widening of the road corridor to the east and into the land acquired for the establishment of the East Frame – which includes the Majestic Theatre frontage. The corridor widening is to accommodate all-day dedicated bus lanes and a super stop, along with the establishment of a boulevard environment with treed verges, median islands or strips.

### BASE-CASE CONCEPT DESIGN

In 2013, conceptual intersections designs were prepared for a large number of critical intersections around the central city to meet the needs of the network amendments required by the An Accessible City programme. The resulting concept layout for the Manchester / Lichfield / High intersection is shown at Attachment 1. A key feature of the design is the priority right-turn movement from Manchester St (north) into Lichfield St (west) and parallel left-turn priority from Lichfield into Manchester. These are critical movements to accommodate the large number of buses on routes to and from the future Bus Interchange.

This initial work anticipated the removal of the Majestic Theatre to accommodate the required lanes and safety features. The design work was based on initial known traffic signal operational requirements and on spatial constraints. The general arrangement of the intersections has been included in the updated strategic network modelling of the central city. The six-leg intersection is complex, with delay to traffic arising from the necessary provision of bus-priority, pedestrian and tram movements in the layout and signals-phasing. A complete

quantitative and geometric review of the initial intersection layout concepts is to be reviewed as part of the work to be undertaken by specialist consultants in due course.

The base-case design assumes central running bus lanes separated from the general traffic and parking lanes by planted median islands (i.e. to enable the boulevard treatment). The critical feature of the design along the Majestic Theatre frontage is the use of the corridor widening to accommodate a wide splitter island to enable a free left turn movement and a pedestrian safety / refuge island for the northern and eastern approaches. The eastern Lichfield Street approach and High Street are intended to be semi-pedestrianized areas with limited general traffic access for the block to and from the Manchester Street corridor and west.

More recent design coordination has shown that, due to underground services constraints, an alternative single-median cross-section may be required. The following commentary on intersection layout options, should it be decided to retain the Majestic Theatre, is equally consistent with the original two median island layout and alternative single median cross-section profiles for Manchester Street at the subject intersection. For this reason, only the original two median island scenario has been shown, in the attached plans, for simplicity.

### OPTION 1 – REALIGN BASE-CASE DESIGN

Option 1 would require a 9m land-acquisition on the western side of Manchester Street and demolition of a “repairable” building north of High Street, to enable the translation of the base-case design 9m to the west and retain the originally intended intersection lane-configurations and resultant traffic capacity as shown in the attached sketch (refer Attachment 2). The ‘to scale’ hand sketch has not been formally drafted as the negative impacts of this option are considered to make it unviable.

| Advantages  | Disadvantages  |
|---|--|
| Majestic Theatre building retained  | Major property acquisition impacts on western side of Manchester Street including the need to acquire and demolish a repairable building (159 /161 Manchester) on the northern corner of High Street and Manchester Street, and acquisition of land from the south-west corner of the intersection.  |
| No loss of approach or intersection capacity compared to base-case is anticipated, however this intersection is extremely complex and it will be challenging in detailed design to ensure that sufficient capacity can be generated to accommodate the required movements and prevent this intersection becoming a pinch point for both the corridor and the operation of the new Bus Interchange on the upstream approach. Modelling of the intersection may reveal the need for an additional southbound through lane to lift overall intersection capacity (noting that a fourth phase is required beyond that shown in concept to allow for through traffic from the southern approach, which will reduce green time allocation to the other phases within the global cycle time) | Very poor geometry with the north-south through movements being directly opposed. A severe (2 lane-widths) lateral shift across the intersection is required for all traffic on Manchester St. The alignment would result in the potential misdirection of drivers and drivers being blinded by direct alignment of headlight beams. Intersections with curving alignments typically experience higher than normal crash rates. This is made worse by the inclusion of a left-turn lane on the southern approach, required for bus access to Lichfield St and the Bus Interchange. The severe north-south lateral shift and geometry could be eased by acquiring additional land from the currently vacant site on the western side of Manchester St. south of the intersection. This configuration is expected to fail safety audit – and it is therefore discounted. |
| There is the potential for a small pocket park or public space in the transition zone between boundary alignments, immediately north of the Majestic Theatre site.  | Reduction in public space in the High Street road reserve on the north-west corner of the intersection, including the demolition and rebuilding of the raised stone planter and relocation of the protected kinetic sculpture.   |
|   | Potentially increased complexity and cost in underground service alterations and alignments  |

|  |  |
|--|--|
|  | due to the need for additional chambers, thrust blocks and the like to transition straight duct runs through reverse curves of Manchester Street.  |
|  | Vision impaired pedestrians would need to be guided past the step in the property line, which should be achievable through hardscape design. There will however be some (albeit potentially minor) degradation of the city-wide strategy to provide a clear path adjacent to building faces for the visually impaired. |

Overall impact assessment: **Severe** implications for degradation of safety and property conditions, and moderate degradation of traffic performance, social / heritage, barrier-free and amenity impacts.

**OPTION 2 – COMBINED SOUTH-BOUND LEFT-TURN**

In Option 2 the southbound left-turn from Manchester Street into Lichfield Street would be combined with the through movement. This could be achieved by positioning the lateral shift in lane-alignment and the termination point for the median island(s) further north as shown in the attached sketch (refer Attachment 3).

| Advantages  | Disadvantages  |
|---|--|
| Majestic Theatre retained and no additional property impacts  | Reduced intersection capacity due to omission of free left turn lane from Manchester into Lichfield St. Southbound through traffic will be impeded by left turning traffic being stopped at the intersection while the pedestrian crossing of the eastern approach runs in a parallel phase. This loss of capacity will extend queues back towards and possibly through the Cashel Street intersection sooner than otherwise anticipated (i.e. reduced design life for both intersections and corridor general traffic capacity). Given the likely relatively small volume of traffic wishing to access the eastern part of Lichfield Street, and availability of alternative routes (i.e. Barbados Street), this capacity effect may be relatively minor. |
| Improved alignment for north-south traffic movements with lateral movement through the intersection minimised.              | It is likely that the additional delay at the Lichfield intersection would result in increased traffic through the East Frame via Cashel Street. While the amount of traffic taking this alternative route is expected to be relatively low, it will impact on amenity within the residential area. This effect can be mitigated to some extent through signal coordination.   |
| Less adverse impact of the step in frontage building line for the visually impaired and services when compared to Option 1. | Vision impaired pedestrians would need to be guided past the step in the property line, which should be achievable through hardscape design. There will however be some (albeit potentially minor) degradation of the city-wide strategy to provide a clear path adjacent to building faces for the visually impaired.   |

Overall impact assessment: Further **Moderate** degradation of an already poor level of service (traffic diversion, capacity loss, safety, services, amenity)

### OPTION 3 – BAN SOUTH-BOUND LEFT-TURN

The third option is similar to Option 2 but would involve the banning of the left-turn from Manchester Street into Lichfield Street entirely as shown in the attached sketch (refer Attachment 4).

| Advantages  | Disadvantages  |
|---|--|
| <p>As for Option 2 plus:</p> <p>Less adverse impact of the step in frontage building line for the visually impaired and services when compared to Option 1.</p> <p>Improved northern approach and overall intersection capacity and operation compared to Options 1 and 2, as a result of unimpeded through traffic movements. This six-way intersection is complex (provides for general traffic, dedicated bus movements, trams, pedestrians, cyclists) and simplification of movements such as turn-bans may be identified through detailed design to achieve suitable levels of service for all users, even for the base-case scenario.</p> | <p>Vision impaired pedestrians would need to be guided past the step in the property line, which should be achievable through hardscape design. There will however be some (albeit potentially minor) degradation of the city-wide strategy to provide a clear path adjacent to building faces for the visually impaired.</p> <p>The left-turn ban into Lichfield Street will result in some diversion of traffic, either before the intersection through the East Frame via Cashel Street (and then Barbados Street), or after the intersection via Tuam Street (and then by either Poplar Street or Madras Street). As a result there will be a relatively minor loss in capacity at one, or both, of those intersections with Manchester Street due to the increased left-turn traffic demand. Turning movements typically have lower saturation flows (i.e. un-delayed maximum capacity) than through movements due to the reduced entry-speed required to negotiate the turn. This effect can be mitigated through signal coordination.</p> |
| <p>Improved pedestrian connectivity and safety across the eastern approach due to the reduction in the number of conflicting movements.</p>   | <p>The legibility of the network will be reduced somewhat and additional travel-distances for traffic accessing the section of Lichfield Street between Manchester Street and Madras Street.</p>   |

Overall impact assessment: **Moderate** implications for further degradation of an already poor level of service (traffic diversion, network legibility reduction, small dispersed capacity loss, amenity)

### CONCLUSIONS

In the absence of detailed network modelling (still under development) of the implications on the network of retaining the Majestic Theatre, and therefore based solely on the relative geometric configuration outcomes of the various options, when compared with the base-case design, it is considered that:

1. In comparative traffic network capacity terms, a decision to retain the Majestic Theatre could be accommodated through either the banning of the left-turn movement from Manchester Street (north) into Lichfield Street, or combining this turn movement into the south-bound through lane.
2. The impacts on the capacity of the intersection are expected to be moderate, with further degradation to an already poor level of service provided by the base-case configuration, while effects of traffic dispersion and diversion at a network level are likely to be relatively minor.
3. The option of realignment of the intersection layout by acquiring additional land on the western side of Manchester Street, in order to create a 2-lane-width lateral shift through the intersection, in order to retain the nominal intersection capacity achieved in the base-case design, is considered to have unacceptably severe adverse safety, cost, timeframe and property impacts, and is not recommended.

However, the assumption that the left-turn slip lane and island can be removed is not conclusive as any space created by the removal of the Majestic Theatre building at the intersection may yet be needed to allow for additional southbound stand up lanes as a means to overcome the accommodation of a fourth traffic signal phase. It is not possible to assess this further in the absence of more comprehensive network and intersection modelling.

## RECOMMENDATIONS

1. That the layout of the intersection be considered further through appropriate traffic modelling, ideally in conjunction with the network micro-simulation analysis currently being undertaken as part of the Bus Interchange project; and that
2. Any decision on whether the Majestic Theatre should be retained be deferred until the full potential impacts on the intersection configuration and capacity is known and appropriate mitigation measures can be evaluated through detailed network modelling.

## ACRONYM GLOSSARY

|                   |   |
|-------------------|---|
| SIDRA:            | SIDRA is a lane-by-lane traffic micro-analysis programme which analyses the performance of individual intersections, using input assumptions provided by observation, application of interpolated historical growth or by strategic forecasting in other platforms, such as CAST. The most recent version of the platform allows a small number of intersections to be analysed together to better recognise interactions between junctions;  |
| CAST:             | CAST (Christchurch Assignment & Simulation Traffic model) is city wide model using the SATURN platform. It forecasts traffic distribution and performance of the network iteratively, based on mode choice, origin / destination and imposed delay as a proxy for route choice selection;   |
| Micro-Simulation: | is a statistically based traffic modelling approach which considers the movement of individual vehicles on a local network, subject to behaviour (e.g. a bus will dwell at a bus stop for a mean of 30sec and standard deviation of 10sec, or traffic must stop for a red light at signals) and logic (e.g. two cars can't occupy the same space at once) rules or constraints. Inputs are derived from observation and forecasting using other platforms, such as CAST. Micro-simulation recognises the interaction of elements in a local network in detail and as a whole, and can be used to identify resulting journey reassignment between available routes. Traffic generation is introduced to the modelled network randomly, with the model run a number of times with random number seeds to obtain statistically reliable results. Common platforms include PARAMICS and VISSIM, with the former being most commonly used in Christchurch. Numerical and visualisation (video) results are produced. |

ATTACHMENT 2

Option 1 - Double lane shift west

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MANCHESTER

CASHEL ST

Repairable building demolished & land acquired

Left-turn in only

HIGH ST

Undamaged stone plaster demolished & relocated, loss of public space.

Kinetic sculpture to be relocated

New building under construction

LICHFIELD ST

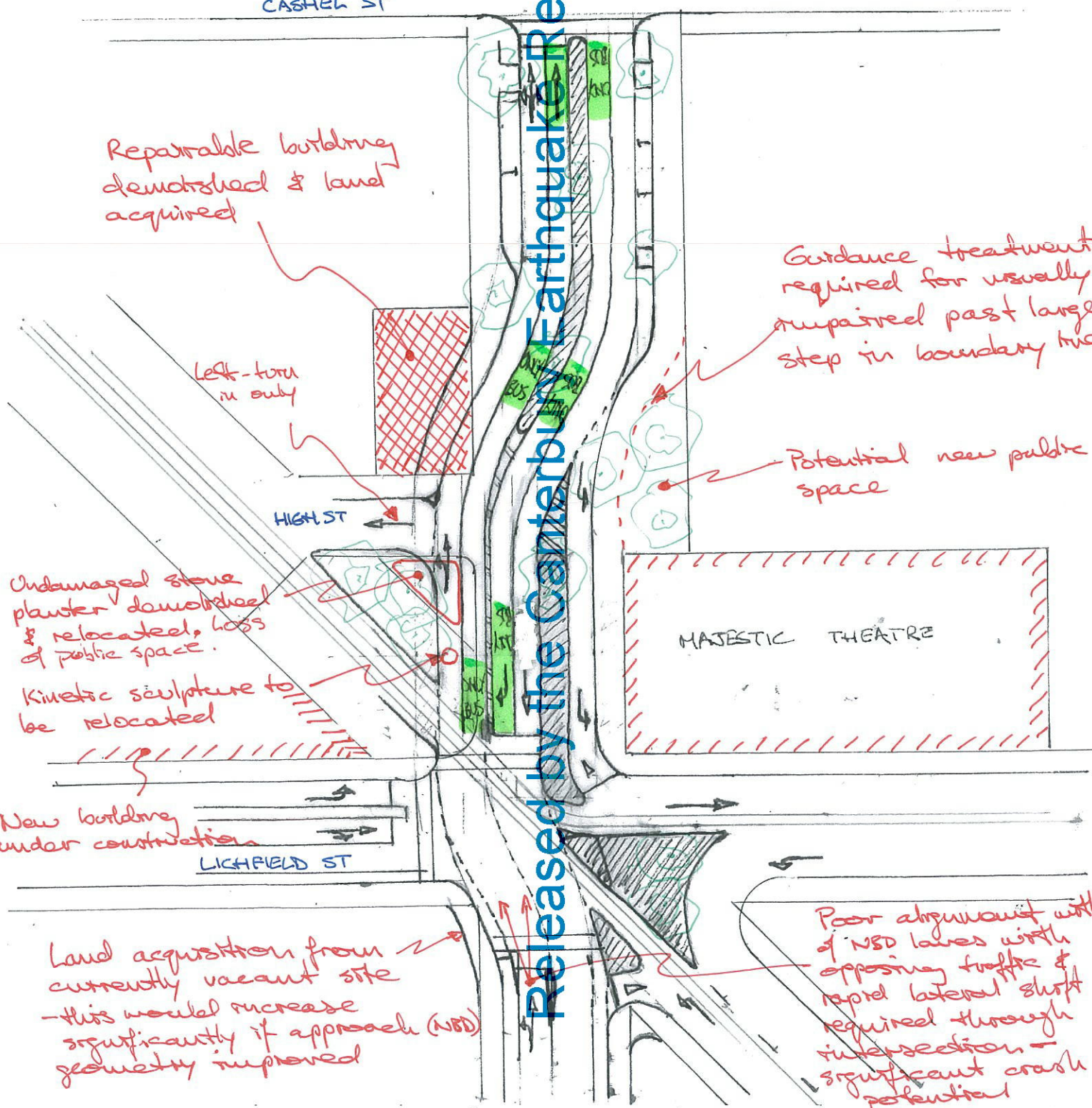
Land acquisition from currently vacant site - this would increase significantly if approach (NSD) geometry improved

Guidance treatment required for visually impaired past large step in boundary line

Potential new public space

MAJESTIC THEATRE

Poor alignment with of NSD lanes with opposing traffic & rapid lateral shift required through intersection - significant crash potential












24 February 2012

Majestic Church Trust  
C/- David A Smith Architects Ltd  
PO Box 470  
CHRISTCHURCH 8140

Attention: 

Dear 

**Majestic House Earthquake Remedial Works**

We have measured approximate quantities from the Preliminary Design documentation for the above project based on the following:-

- David Smith Architects Majestic House Existing Plans A1.1 to A1.13 dated 20 January 2012
- David Smith Architects Majestic House Reinstatement Plans A2.1 to A2.7 dated 20 January 2012
- David Smith Architects Majestic House Forestage Upgrade Plans dated 20 July 2004
- David Smith Architects Majestic House Reinstatement Specification received 20 January 2012
- Structex Majestic Church Structural and Strengthening Report dated 19 December 2011
- Structex Majestic Church Damage Assessment dated 21 December 2011
- Structex Majestic Church 33% Strengthening Plans dated 21 December 2011
- Structex Majestic Church 67% Strengthening Plans dated 21 December 2011
- Structex Majestic Church Stabilizing Works Drawings S1.02, S1.07 and S1.12 dated 21 February 2012
- Majestic House Site Visit 2 February 2012

**Repair**

Our preliminary assessment of likely Repair cost is \$18,150,000 (Eighteen million one hundred and fifty thousand dollars) broken down as follows and as attached:-

|  |                     |
|--|---------------------|
| Zone A Repair Works 33% Strengthening    | 3,780,000           |
| Extra Value for 67% Strengthening        | 371,000             |
| Zone B Repair Works 33% Strengthening    | 4,660,000           |
| Extra Value for 67% Strengthening        | 259,000             |
| Zone C Replacement Works incl Demolition | 3,988,000           |
| Zone D Replacement Works incl Demolition | 125,000             |
| Temporary Works                          | <u>694,000</u>      |
|  | 13,878,000          |
| Resource and Building Consent            | <u>87,000</u>       |
|  | 13,965,000          |
| Contingency (15%)                        | <u>2,095,000</u>    |
|  | 16,060,000          |
| Professional Fees (13%)                  | <u>2,090,000</u>    |
|  | <u>\$18,150,000</u> |

Exclusions

- 1) Land Remediation
- 2) Work Completed to Date
- 3) Signage, Furniture and Equipment
- 4) Legal and Financing Costs
- 5) Development Levies
- 6) Insurances
- 7) Inflation Provision beyond the Date of this Estimate
- 8) GST

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**Replacement**

We have calculated gross floor areas from the Preliminary Concept drawings dated 20 January 2012, and our 'High Level' assessment of likely Replacement cost (based on square metre rates analysed from similar type projects) is \$23,660,000 (Twenty three million six hundred and sixty thousand dollars) broken down as follows:-

|                                |       |                |         |                     |
|--------------------------------|-------|----------------|---------|---------------------|
| Demolition                     |       | Sum            |         | 750,000             |
| Zone A Building Works          | 2,753 | m <sup>2</sup> | @ 2,500 | 6,883,000           |
| Zone B Building Works          | 1,003 | m <sup>2</sup> | @ 7,000 | 7,021,000           |
| Zone C Building Works          | 799   | m <sup>2</sup> | @ 4,800 | 3,835,000           |
| Zone D Building Works          | 28    | m <sup>2</sup> | @ 4,300 | <u>120,000</u>      |
|                                |       |                |         | 18,609,000          |
| Resource and Building Consent  |       |                |         | <u>91,000</u>       |
|                                |       |                |         | 18,700,000          |
| Construction Contingency (10%) |       |                |         | <u>1,870,000</u>    |
|                                |       |                |         | 20,570,000          |
| Professional Fees (15%)        |       |                |         | <u>3,090,000</u>    |
|                                |       |                |         | <u>\$23,660,000</u> |

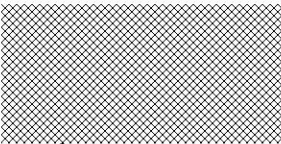
Exclusions

- 1) Land Remediation
- 2) Work Completed to Date
- 3) Signage, Furniture and Equipment
- 4) Legal and Financing Costs
- 5) Development Levies
- 6) Insurances
- 7) Inflation Provision beyond the Date of this Estimate
- 8) GST

This estimate is based on the information provided to date and assumptions made on site during site visit, assume competitive tendering and take account of current market conditions.

Should you wish to discuss any aspect of the above, please contact the undersigned.

Yours sincerely



Cost Manager



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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Estimate Summary



| No. | Description              | Quantity | Unit | Rate     | Amount        | Notes |
|-----|--------------------------|----------|------|----------|---------------|-------|
| 1   | ZONE A REPAIR WORKS      | 2,752    | m2   | 1,508.46 | 4,151,283.99  |       |
| 2   | ZONE B REPAIR WORKS      | 1,003    | m2   | 4,904.92 | 4,919,637.13  |       |
| 3   | ZONE C REPLACEMENT WORKS | 799      | m2   | 4,990.93 | 3,987,754.85  |       |
| 4   | ZONE D REPLACEMENT WORKS | 28       | m2   | 4,476.78 | 125,349.84    |       |
| 5   | TEMPORARY WORKS          |          |      |          | 694,244.08    |       |
|     | Estimate Total           |          |      |          | 13,878,269.89 |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS



| No.                      | Description                         | Quantity | Unit | Rate     | Amount              | Notes |
|--------------------------|-------------------------------------|----------|------|----------|---------------------|-------|
| ZONE A REPAIR WORKS      |                                     |          |      |          |                     |       |
| 1                        | 33% STRENGTHENING                   | 2,753    | m2   | 1,373.17 | 3,780,344.19        |       |
| 2                        | EXTRA VALUE FOR 67% STRENGTHENING   | 2,753    | m2   | 134.74   | 370,939.80          |       |
|                          | Estimate Total                      |          |      |          | <u>4,151,283.99</u> |       |
| ZONE B REPAIR WORKS      |                                     |          |      |          |                     |       |
| 1                        | 33% STRENGTHENING                   | 1,003    | m2   | 4,646.48 | 4,660,415.21        |       |
| 2                        | EXTRA VALUE FOR 67% STRENGTHENING   | 1,003    | m2   | 258.45   | 259,221.92          |       |
|                          | Estimate Total                      |          |      |          | <u>4,919,637.13</u> |       |
| ZONE C REPLACEMENT WORKS |                                     |          |      |          |                     |       |
| 1                        | REPLACEMENT WORKS                   | 799      | m2   | 4,990.93 | 3,987,754.85        |       |
|                          | Estimate Total                      |          |      |          | <u>3,987,754.85</u> |       |
| ZONE D REPLACEMENT WORKS |                                     |          |      |          |                     |       |
| 1                        | REPLACEMENT WORKS                   | 28       | m2   | 4,476.78 | 125,349.84          |       |
|                          | Estimate Total                      |          |      |          | <u>125,349.84</u>   |       |
| TEMPORARY WORKS          |                                     |          |      |          |                     |       |
| 1                        | ESTABLISHMENT                       |          |      |          | 436,676.00          |       |
| 2                        | DISESTABLISHMENT                    |          |      |          | 100,000.00          |       |
| 3                        | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 5.00     | 26,833.80           |       |
|                          | Carry Forward                       |          |      |          | <u>563,509.80</u>   |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: TEMPORARY WORKS



| No. | Description                 | Quantity | Unit | Rate  | Amount            | Notes |
|-----|-----------------------------|----------|------|-------|-------------------|-------|
|     | Brought Forward             |          |      |       | 563,509.80        |       |
| 4   | PRELIMINARY & GENERAL (12%) |          |      | 12.00 | 67,621.18         |       |
| 5   | MARGIN (10%)                |          |      | 10.00 | 63,113.10         |       |
|     | Estimate Total              |          |      |       | <u>694,244.08</u> |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING



| No. | Description                            | Quantity | Unit | Rate | Amount       | Notes |
|-----|--|----------|------|------|--------------|-------|
|     | 33% STRENGTHENING                      |          |      |      |              |       |
| 1   | SITE PREPARATION                       |          |      |      | 414,750.00   |       |
| 2   | SUBSTRUCTURE                           |          |      |      | 57,800.00    |       |
| 3   | FRAME                                  |          |      |      | 184,664.00   |       |
| 4   | UPPER FLOORS                           |          |      |      | 120,000.00   |       |
| 5   | ROOF                                   |          |      |      | 12,280.00    |       |
| 6   | EXTERIOR WALLS AND EXTERIOR FINISH     |          |      |      | 529,340.00   |       |
| 7   | WINDOWS AND EXTERIOR DOORS             |          |      |      | 60,000.00    |       |
| 8   | INTERIOR WALLS                         |          |      |      | 461,300.00   |       |
| 9   | INTERIOR DOORS                         |          |      |      | 20,000.00    |       |
| 10  | FLOOR FINISHES                         |          |      |      | 155,820.00   |       |
| 11  | WALL FINISHES                          |          |      |      | 220,575.00   |       |
| 12  | CEILING FINISHES                       |          |      |      | 88,520.00    |       |
| 13  | FITTINGS AND FIXTURES                  |          |      |      | 35,000.00    |       |
| 14  | SANITARY PLUMBING                      |          |      |      | 26,000.00    |       |
| 15  | HEATING AND VENTILATION SERVICES       |          |      |      | 70,000.00    |       |
| 16  | FIRE SERVICES                          |          |      |      | 41,295.00    |       |
| 17  | ELECTRICAL SERVICES                    |          |      |      | 10,000.00    |       |
| 18  | VERTICAL AND HORIZONTAL TRANSPORTATION |          |      |      | 270,000.00   |       |
|     | Carry Forward                          |          |      |      | 2,777,344.00 |       |

Released by the Canterbury Earthquake Recovery Authority



Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING



| No. | Description                         | Quantity | Unit | Rate  | Amount              | Notes |
|-----|-------------------------------------|----------|------|-------|---------------------|-------|
|     | Brought Forward                     |          |      |       | 2,777,344.00        |       |
| 19  | SPECIAL SERVICES                    |          |      |       | 110,000.00          |       |
| 20  | DRAINAGE                            |          |      |       | 10,000.00           |       |
| 21  | SUNDRIES                            |          |      |       | 25,000.00           |       |
| 22  | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 5.00  | 146,117.20          |       |
| 23  | PRELIMINARY & GENERAL (12%)         |          |      | 12.00 | 368,215.34          |       |
| 24  | MARGIN (10%)                        |          |      | 10.00 | 343,667.65          |       |
|     | Estimate Total                      |          |      |       | <u>3,780,344.19</u> |       |
|     | EXTRA VALUE FOR 67% STRENGTHENING   |          |      |       |                     |       |
| 25  | SITE PREPARATION                    |          |      |       | 47,300.00           |       |
| 26  | FRAME                               |          |      |       | 80,400.00           |       |
| 27  | INTERIOR WALLS                      |          |      |       | 148,050.00          |       |
| 28  | SANITARY PLUMBING                   |          |      |       | 11,000.00           |       |
| 29  | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 5.00  | 14,337.50           |       |
| 30  | PRELIMINARIES & GENERAL (12%)       |          |      | 12.00 | 36,130.50           |       |
| 31  | MARGIN (10%)                        |          |      | 10.00 | 33,721.80           |       |
|     | Estimate Total                      |          |      |       | <u>370,939.80</u>   |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING



| No. | Description                        | Quantity | Unit | Rate | Amount       | Notes |
|-----|------------------------------------|----------|------|------|--------------|-------|
|     | 33% STRENGTHENING                  |          |      |      |              |       |
| 32  | SITE PREPARATION                   |          |      |      | 616,600.00   |       |
| 33  | SUBSTRUCTURE                       |          |      |      | 45,250.00    |       |
| 34  | FRAME                              |          |      |      | 617,556.00   |       |
| 35  | UPPER FLOORS                       |          |      |      | 275,000.00   |       |
| 36  | ROOF                               |          |      |      | 77,650.00    |       |
| 37  | EXTERIOR WALLS AND EXTERIOR FINISH |          |      |      | 638,630.00   |       |
| 38  | WINDOWS AND EXTERIOR DOORS         |          |      |      | 3,000.00     |       |
| 39  | STAIRS AND BALUSTRADES             |          |      |      | 20,000.00    |       |
| 40  | INTERIOR WALLS                     |          |      |      | 652,600.00   |       |
| 41  | INTERIOR DOORS                     |          |      |      | 4,800.00     |       |
| 42  | FLOOR FINISHES                     |          |      |      | 68,110.00    |       |
| 43  | WALL FINISHES                      |          |      |      | 20,000.00    |       |
| 44  | CEILING FINISHES                   |          |      |      | 292,450.00   |       |
| 45  | FITTINGS AND FIXTURES              |          |      |      | 100,000.00   |       |
| 46  | HEATING AND VENTILATION SERVICES   |          |      |      | 30,000.00    |       |
| 47  | FIRE SERVICES                      |          |      |      | 11,025.00    |       |
| 48  | ELECTRICAL SERVICES                |          |      |      | 40,000.00    |       |
| 49  | SPECIAL SERVICES                   |          |      |      | 80,000.00    |       |
|     | Carry Forward                      |          |      |      | 3,592,671.00 |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING



| No. | Description                         | Quantity | Unit | Rate  | Amount       | Notes |
|-----|-------------------------------------|----------|------|-------|--------------|-------|
|     | Brought Forward                     |          |      |       | 3,592,671.00 |       |
| 50  | SUNDRIES                            |          |      |       | 10,000.00    |       |
| 51  | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 5.00  | 180,133.55   |       |
| 52  | PRELIMINARIES & GENERAL (12%)       |          |      | 12.00 | 453,936.55   |       |
| 53  | MARGIN (10%)                        |          |      | 10.00 | 423,674.11   |       |
|     | Estimate Total                      |          |      |       | 4,660,415.21 |       |
|     | EXTRA VALUE FOR 67% STRENGTHENING   |          |      |       |              |       |
| 54  | FRAME                               |          |      |       | 131,288.00   |       |
| 55  | INTERIOR WALLS                      |          |      |       | 69,100.00    |       |
| 56  | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 5.00  | 10,019.40    |       |
| 57  | PRELIMINARIES & GENERAL (12%)       |          |      | 12.00 | 25,248.89    |       |
| 58  | MARGIN (10%)                        |          |      | 10.00 | 23,565.63    |       |
|     | Estimate Total                      |          |      |       | 259,221.92   |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS



| No. | Description                            | Quantity | Unit | Rate | Amount       | Notes |
|-----|--|----------|------|------|--------------|-------|
|     | REPLACEMENT WORKS                      |          |      |      |              |       |
| 59  | SITE PREPARATION                       |          |      |      | 100,000.00   |       |
| 60  | SUBSTRUCTURE                           |          |      |      | 474,000.00   |       |
| 61  | FRAME                                  |          |      |      | 456,000.00   |       |
| 62  | UPPER FLOORS                           |          |      |      | 207,940.00   |       |
| 63  | ROOF                                   |          |      |      | 103,910.00   |       |
| 64  | EXTERIOR WALLS AND EXTERIOR FINISH     |          |      |      | 658,500.00   |       |
| 65  | WINDOWS AND EXTERIOR DOORS             |          |      |      | 14,400.00    |       |
| 66  | STAIRS AND BALUSTRADES                 |          |      |      | 20,000.00    |       |
| 67  | INTERIOR WALLS                         |          |      |      | 34,320.00    |       |
| 68  | INTERIOR DOORS                         |          |      |      | 8,800.00     |       |
| 69  | FLOOR FINISHES                         |          |      |      | 30,100.00    |       |
| 70  | CEILING FINISHES                       |          |      |      | 40,475.00    |       |
| 71  | FITTINGS AND FIXTURES                  |          |      |      | 220,000.00   |       |
| 72  | SANITARY PLUMBING                      |          |      |      | 11,000.00    |       |
| 73  | HEATING AND VENTILATION SERVICES       |          |      |      | 238,900.00   |       |
| 74  | FIRE SERVICES                          |          |      |      | 55,930.00    |       |
| 75  | ELECTRICAL SERVICES                    |          |      |      | 200,800.00   |       |
| 76  | VERTICAL AND HORIZONTAL TRANSPORTATION |          |      |      | 70,000.00    |       |
|     | Carry Forward                          |          |      |      | 2,945,075.00 |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS



| No. | Description                         | Quantity | Unit | Rate  | Amount              | Notes |
|-----|-------------------------------------|----------|------|-------|---------------------|-------|
|     | Brought Forward                     |          |      |       | 2,945,075.00        |       |
| 77  | SPECIAL SERVICES                    |          |      |       | 39,975.00           |       |
| 78  | DRAINAGE                            |          |      |       | 10,000.00           |       |
| 79  | SUNDRIES                            |          |      |       | 2,000.00            |       |
| 80  | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 8.00  | 239,764.00          |       |
| 81  | PRELIMINARIES & GENERAL (12%)       |          |      | 12.00 | 388,417.68          |       |
| 82  | MARGIN (10%)                        |          |      | 10.00 | 362,523.17          |       |
|     | Estimate Total                      |          |      |       | <u>3,987,754.85</u> |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE D REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS



| No. | Description                         | Quantity | Unit | Rate  | Amount     | Notes |
|-----|-------------------------------------|----------|------|-------|------------|-------|
|     | REPLACEMENT WORKS                   |          |      |       |            |       |
| 83  | SITE PREPARATION                    |          |      |       | 3,000.00   |       |
| 84  | SUBSTRUCTURE                        |          |      |       | 8,280.00   |       |
| 85  | ROOF                                |          |      |       | 7,430.00   |       |
| 86  | EXTERIOR WALLS AND EXTERIOR FINISH  |          |      |       | 18,900.00  |       |
| 87  | WINDOWS AND EXTERIOR DOORS          |          |      |       | 1,200.00   |       |
| 88  | INTERIOR WALLS                      |          |      |       | 8,820.00   |       |
| 89  | INTERIOR DOORS                      |          |      |       | 2,000.00   |       |
| 90  | FLOOR FINISHES                      |          |      |       | 2,160.00   |       |
| 91  | CEILING FINISHES                    |          |      |       | 1,800.00   |       |
| 92  | SANITARY PLUMBING                   |          |      |       | 12,000.00  |       |
| 93  | HEATING AND VENTILATION SERVICES    |          |      |       | 1,000.00   |       |
| 94  | FIRE SERVICES                       |          |      |       | 1,960.00   |       |
| 95  | ELECTRICAL SERVICES                 |          |      |       | 5,300.00   |       |
| 96  | DRAINAGE                            |          |      |       | 10,000.00  |       |
| 97  | EXTERNAL WORKS                      |          |      |       | 11,550.00  |       |
| 98  | SUNDRIES                            |          |      |       | 1,500.00   |       |
| 99  | DESIGN DEVELOPMENT CONTINGENCY (5%) |          |      | 5.00  | 4,845.00   |       |
| 100 | PRELIMINARIES & GENERAL (12%)       |          |      | 12.00 | 12,209.40  |       |
|     | Carry Forward                       |          |      |       | 113,954.40 |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE D REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS



| No. | Description     | Quantity | Unit | Rate  | Amount            | Notes |
|-----|-----------------|----------|------|-------|-------------------|-------|
|     | Brought Forward |          |      |       | 113,954.40        |       |
| 101 | MARGIN (10%)    |          |      | 10.00 | 11,395.44         |       |
|     | Estimate Total  |          |      |       | <u>125,349.84</u> |       |

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| No. | Description   | Quantity | Unit | Rate     | Amount     | Notes |
|-----|---|----------|------|----------|------------|-------|
|     | <b>ESTABLISHMENT</b>  |          |      |          |            |       |
|     | <b>Substructure</b>   |          |      |          |            |       |
| 102 | 1200 x 600 reinforced concrete foundation beams including formwork, excavation and disposal | 46       | m    | 1,500.00 | 69,000.00  |       |
| 103 | 1200 dia post holes 1800 long   | 10       | No   | 3,000.00 | 30,000.00  |       |
| 104 | Allowance for site establishment  |          | Sum  |          | 20,000.00  |       |
|     | <b>Bracing Works</b>  |          |      |          |            |       |
| 105 | 250 x 6 SHS bracing to walls  | 7,200    | kg   | 12.00    | 86,400.00  |       |
| 106 | 200 x 5 SHS to walls at roof level and level 3  | 957      | kg   | 12.00    | 11,484.00  |       |
| 107 | 230 PFC to walls at roof level and level 3  | 596      | kg   | 12.00    | 7,152.00   |       |
| 108 | Miscellaneous plates and cleats   | 924      | kg   | 12.00    | 11,088.00  |       |
| 109 | M24 grade 4.6 bolts fixing to walls   |          | Sum  |          | 5,000.00   |       |
| 110 | Allowance for cut through gallery floor and panels  |          | Sum  |          | 10,000.00  |       |
|     | <b>Temporary Walls</b>  |          |      |          |            |       |
| 111 | Dimond 0.55 topspan corrugated steel cladding on DHS 250/18 girts @1400 crs                 | 594      | m2   | 100.00   | 59,400.00  |       |
| 112 | Bracing channels to wall  |          | Sum  |          | 10,000.00  |       |
| 113 | 530 UB 82 mullions to wall  | 3,280    | kg   | 12.00    | 39,360.00  |       |
| 114 | Miscellaneous plates and cleats   | 330      | kg   | 12.00    | 3,960.00   |       |
| 115 | 150 x 5 SHS roof struts to end wall   | 486      | kg   | 12.00    | 5,832.00   |       |
|     | <b>Carry Forward</b>  |          |      |          | 368,676.00 |       |

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| No. | Description  | Quantity | Unit | Rate   | Amount     | Notes |
|-----|--|----------|------|--------|------------|-------|
|     | Brought Forward  |          |      |        | 368,676.00 |       |
| 116 | 200 insitu reinforced concrete skin wall to east wall<br>(ground level to level 2) | 170      | m2   | 400.00 | 68,000.00  |       |
|     | Estimate Total   |          |      |        | 436,676.00 |       |
|     | DISESTABLISHMENT   |          |      |        |            |       |
| 117 | Sectionally remove temporary works during construction                             |          | Sum  |        | 100,000.00 |       |
|     | Estimate Total   |          |      |        | 100,000.00 |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: SITE PREPARATION



| No. | Description  | Quantity | Unit | Rate   | Amount            | Notes |
|-----|--|----------|------|--------|-------------------|-------|
|     | <b>SITE PREPARATION</b>  |          |      |        |                   |       |
| 118 | Remove joinery along North wall and store ready for reinstate  |          | Sum  |        | 10,000.00         |       |
| 119 | Disconnect sanitary plumbing services and store ready for reinstate (North)  |          | Sum  |        | 20,000.00         |       |
| 120 | Remove boiler and store ready for reinstate  |          | Sum  |        | 25,000.00         |       |
| 121 | Remove flue and dispose off site   |          | Sum  |        | 10,000.00         |       |
| 122 | Temporary bracing to each floor during construction  |          | Sum  |        | 100,000.00        |       |
| 123 | Demolish and remove North exterior wall including allowance for protection and complexities of neighbouring structures |          | Sum  |        | 200,000.00        |       |
| 124 | Remove internal block walls  | 118      | m2   | 100.00 | 11,800.00         |       |
| 125 | Carefully remove damaged terrazzo flooring and dispose off site (50%)  |          | Sum  |        | 20,000.00         |       |
| 126 | Remove all floor coverings for structural inspection   | 1,795    | m2   | 10.00  | 17,950.00         |       |
|     | <b>Estimate Total</b>  |          |      |        | <u>414,750.00</u> |       |
|     | <b>SUBSTRUCTURE</b>  |          |      |        |                   |       |
| 127 | 250 reinforced concrete basement wall tie to existing foundation beams   | 41       | m2   | 800.00 | 32,800.00         |       |
| 128 | Basement waterproofing   |          | Sum  |        | 25,000.00         |       |
|     | <b>Estimate Total</b>  |          |      |        | <u>57,800.00</u>  |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: FRAME



| No. | Description  | Quantity | Unit | Rate     | Amount     | Notes |
|-----|--|----------|------|----------|------------|-------|
|     | <b>FRAME</b>   |          |      |          |            |       |
| 129 | 900 x 500 reinforced insitu concrete columns (West wall)   | 17       | m    | 1,000.00 | 17,000.00  |       |
| 130 | 900 x 500 reinforced insitu concrete beams (West wall)   | 16       | m    | 1,000.00 | 16,000.00  |       |
| 131 | 900 x 600 reinforced insitu concrete columns (North wall)  | 62       | m    | 1,000.00 | 62,000.00  |       |
| 132 | Reinforced concrete cross over beams (North wall)  | 105      | m    | 600.00   | 63,000.00  |       |
| 133 | Steel tie beams to walls, primed (third floor and roof level)                                    | 2,020    | kg   | 12.00    | 24,240.00  |       |
| 134 | Miscellaneous plates and cleats  | 202      | kg   | 12.00    | 2,424.00   |       |
|     | Estimate Total   |          |      |          | 184,664.00 |       |
|     | <b>UPPER FLOORS</b>  |          |      |          |            |       |
| 135 | Epoxy injections to concrete floor slab cracks (say 400m)  |          | Sum  |          | 120,000.00 |       |
|     | Estimate Total   |          |      |          | 120,000.00 |       |
|     | <b>ROOF</b>  |          |      |          |            |       |
| 136 | Repair damage to roofing   | 614      | m2   | 20.00    | 12,280.00  |       |
|     | Estimate Total   |          |      |          | 12,280.00  |       |
|     | <b>EXTERIOR WALLS AND EXTERIOR FINISH</b>  |          |      |          |            |       |
| 137 | Paint on plaster render system both sides of 200 reinforced precast concrete panels (North wall) | 441      | m2   | 500.00   | 220,500.00 |       |
| 138 | Reinstate connections to existing walls and roof including new flashings                         |          | Sum  |          | 50,000.00  |       |
|     | Carry Forward  |          |      |          | 270,500.00 |       |

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 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: EXTERIOR WALLS AND EXTERIOR FINISH



| No. | Description   | Quantity | Unit | Rate   | Amount     | Notes |
|-----|---|----------|------|--------|------------|-------|
|     | <b>Brought Forward</b>  |          |      |        | 270,500.00 |       |
| 139 | Repair concrete window frames including sectional remove concrete for inspection, replace reinforcing steel and epoxy injection (West wall)   |          | Sum  |        | 50,000.00  |       |
| 140 | Epoxy injection to cracks in concrete walls and parapet (say 300m)  |          | Sum  |        | 100,000.00 |       |
| 141 | Prepare, repaint and replaster existing exterior walls (South and West walls)   | 907      | m2   | 120.00 | 108,840.00 |       |
|     | <b>Estimate Total</b>   |          |      |        | 529,340.00 |       |
|     | <b>WINDOWS AND EXTERIOR DOORS</b>   |          |      |        |            |       |
| 142 | Replace damaged window glazing system (PROVISIONAL)   | 50       | No   | 600.00 | 30,000.00  |       |
| 143 | Ease and make good windows and doors  |          | Sum  |        | 30,000.00  |       |
|     | <b>Estimate Total</b>   |          |      |        | 60,000.00  |       |
|     | <b>INTERIOR WALLS</b>   |          |      |        |            |       |
| 144 | Paint on plaster on both sides of 190 reinforced concrete block walls   | 118      | m2   | 350.00 | 41,300.00  |       |
| 145 | Epoxy injections to small cracks in concrete walls and frames including making good (say 300m)  |          | Sum  |        | 100,000.00 |       |
| 146 | Repair large cracks in walls including where floors have started to separate, break out and remove section of the wall, H12 reinforcing, drilling, epoxy grout (Stairwells and perimeter walls) |          | Sum  |        | 300,000.00 |       |
|     | <b>Carry Forward</b>  |          |      |        | 441,300.00 |       |

Project: Majestic House Earthquake Remedial Works  
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 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: INTERIOR WALLS



| No. | Description   | Quantity | Unit | Rate   | Amount     | Notes |
|-----|---|----------|------|--------|------------|-------|
|     | Brought Forward   |          |      |        | 441,300.00 |       |
| 147 | Tie stairwell to surrounding walls including drilling, reinforcing and epoxy grout (Stair No 1)                   |          | Sum  |        | 20,000.00  |       |
|     | Estimate Total  |          |      |        | 461,300.00 |       |
|     | INTERIOR DOORS  |          |      |        |            |       |
| 148 | Make good and ease doors  |          | Sum  |        | 20,000.00  |       |
|     | Estimate Total  |          |      |        | 20,000.00  |       |
|     | FLOOR FINISHES  |          |      |        |            |       |
| 149 | Terrazzo tiles laid on mortar bed to match existing including brass inserts to joints at ground level (say 150m2) |          | Sum  |        | 75,000.00  |       |
| 150 | Clean and reinstate floor coverings (50%)   | 898      | m2   | 20.00  | 17,960.00  |       |
| 151 | Replace carpet and vinyl floor covering   | 898      | m2   | 70.00  | 62,860.00  |       |
|     | Estimate Total  |          |      |        | 155,820.00 |       |
|     | WALL FINISHES   |          |      |        |            |       |
| 152 | Prepare and repaint existing walls (70%)  | 3,549    | m2   | 35.00  | 124,215.00 |       |
| 153 | Prepare, repaint and replaster perimeter walls  | 803      | m2   | 120.00 | 96,360.00  |       |
|     | Estimate Total  |          |      |        | 220,575.00 |       |
|     | CEILING FINISHES  |          |      |        |            |       |
| 154 | Make good and paint ceilings (35%)  | 963      | m2   | 40.00  | 38,520.00  |       |
|     | Carry Forward   |          |      |        | 38,520.00  |       |

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 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: CEILING FINISHES



| No. | Description  | Quantity | Unit | Rate     | Amount    | Notes |
|-----|--|----------|------|----------|-----------|-------|
|     | Brought Forward  |          |      |          | 38,520.00 |       |
| 155 | Repair and reinstate plaster cornices and fretworks, and replace where necessary |          | Sum  |          | 50,000.00 |       |
|     | Estimate Total   |          |      |          | 88,520.00 |       |
|     | FITTINGS AND FIXTURES  |          |      |          |           |       |
| 156 | Clean and reinstate joinery fittings   |          | Sum  |          | 10,000.00 |       |
| 157 | Replace damaged joinery fittings   |          | Sum  |          | 20,000.00 |       |
| 158 | Allow to clean and inspect commercial kitchen joinery and replace where required |          | Sum  |          | 5,000.00  |       |
|     | Estimate Total   |          |      |          | 35,000.00 |       |
|     | SANITARY PLUMBING  |          |      |          |           |       |
| 159 | Water supply and backflow prevention   |          | Sum  |          | 15,000.00 |       |
| 160 | Reinstate toilet pan and cistern complete with water and waste services          | 9        | No   | 1,000.00 | 9,000.00  |       |
| 161 | Reinstate wash hand basin complete with water and waste services                 | 2        | No   | 1,000.00 | 2,000.00  |       |
|     | Estimate Total   |          |      |          | 26,000.00 |       |
|     | HEATING AND VENTILATION SERVICES   |          |      |          |           |       |
| 162 | Allow to inspect heating and ventilation system and repair where required        |          | Sum  |          | 40,000.00 |       |
| 163 | Reinstate boiler and flue  |          | Sum  |          | 30,000.00 |       |
|     | Carry Forward  |          |      |          | 70,000.00 |       |

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 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: HEATING AND VENTILATION SERVICES



| No. | Description   | Quantity | Unit | Rate       | Amount     | Notes |
|-----|---|----------|------|------------|------------|-------|
|     | Brought Forward   |          |      |            | 70,000.00  |       |
|     | Estimate Total  |          |      |            | 70,000.00  |       |
|     | FIRE SERVICES   |          |      |            |            |       |
| 164 | Allow to inspect sprinkler system and repair where required | 2,753    | m2   | 15.00      | 41,295.00  |       |
|     | Estimate Total  |          |      |            | 41,295.00  |       |
|     | ELECTRICAL SERVICES   |          |      |            |            |       |
| 165 | Remove and replace damaged light fittings                   |          | Sum  |            | 10,000.00  |       |
|     | Estimate Total  |          |      |            | 10,000.00  |       |
|     | VERTICAL AND HORIZONTAL TRANSPORTATION                      |          |      |            |            |       |
| 166 | Remove existing lift and lift shaft                         |          | Sum  |            | 20,000.00  |       |
| 167 | Allowance for new lift serving six floors (including shaft) | 1        | No   | 250,000.00 | 250,000.00 |       |
|     | Estimate Total  |          |      |            | 270,000.00 |       |
|     | SPECIAL SERVICES  |          |      |            |            |       |
| 168 | Allow to inspect security system                            |          | Sum  |            | 10,000.00  |       |
| 169 | Accessibility and emergency lighting compliance             |          | Sum  |            | 100,000.00 |       |
|     | Estimate Total  |          |      |            | 110,000.00 |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: DRAINAGE



| No. | Description   | Quantity | Unit | Rate | Amount           | Notes |
|-----|---|----------|------|------|------------------|-------|
|     | DRAINAGE  |          |      |      |                  |       |
| 170 | Allow to inspect sewer and stormwater service and repair where required |          | Sum  |      | 10,000.00        |       |
|     | Estimate Total  |          |      |      | <u>10,000.00</u> |       |
|     | SUNDRIES  |          |      |      |                  |       |
| 171 | Inspect and repair entry and street canopy                              |          | Sum  |      | 25,000.00        |       |
| 172 | FURNITURE AND EQUIPMENT (EXCLUDED)                                      |          |      |      |                  |       |
|     | Estimate Total  |          |      |      | <u>25,000.00</u> |       |

Released by the Canterbury Earthquake Recovery Authority



Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: EXTRA VALUE FOR 67% STRENGTHENING  
 Sub Element: SITE PREPARATION



| No. | Description  | Quantity | Unit | Rate     | Amount     | Notes |
|-----|--|----------|------|----------|------------|-------|
|     | <b>SITE PREPARATION</b>  |          |      |          |            |       |
| 173 | Extra over for remove internal block walls   | 423      | m2   | 100.00   | 42,300.00  |       |
| 174 | Extra over for disconnect sanitary plumbing services and store ready for reinstate     |          | Sum  |          | 5,000.00   |       |
|     | Estimate Total   |          |      |          | 47,300.00  |       |
|     | <b>FRAME</b>   |          |      |          |            |       |
| 175 | 1250 x 650 reinforced insitu concrete columns (West wall)                              | 20       | m    | 1,800.00 | 36,000.00  |       |
| 176 | 1250 x 650 reinforced insitu concrete beams (West wall)                                | 10       | m    | 1,800.00 | 18,000.00  |       |
| 177 | Extra value for 1250 x 650 columns in lieu of 900 x 500 columns                        | 17       | m    | 800.00   | 13,600.00  |       |
| 178 | Extra value for 1250 x 650 beams in lieu of 900 x 500 beams                            | 16       | m    | 800.00   | 12,800.00  |       |
|     | Estimate Total   |          |      |          | 80,400.00  |       |
|     | <b>INTERIOR WALLS</b>  |          |      |          |            |       |
| 179 | Paint on plaster system both sides of 190 reinforced concrete block walls              | 423      | m2   | 350.00   | 148,050.00 |       |
|     | Estimate Total   |          |      |          | 148,050.00 |       |
|     | <b>SANITARY PLUMBING</b>   |          |      |          |            |       |
| 180 | Extra over for reinstate toilet pan and cistern complete with water and waste services | 8        | No   | 1,000.00 | 8,000.00   |       |
|     | Carry Forward  |          |      |          | 8,000.00   |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE A REPAIR WORKS  
 Element: EXTRA VALUE FOR 67% STRENGTHENING  
 Sub Element: SANITARY PLUMBING



| No. | Description   | Quantity | Unit | Rate     | Amount    | Notes |
|-----|---|----------|------|----------|-----------|-------|
|     | Brought Forward   |          |      |          | 8,000.00  |       |
| 181 | Extra over for reinstate wash hand basin complete with water and waste services | 3        | No   | 1,000.00 | 3,000.00  |       |
|     | Estimate Total  |          |      |          | 11,000.00 |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: SITE PREPARATION



| No. | Description   | Quantity | Unit | Rate   | Amount     | Notes |
|-----|---|----------|------|--------|------------|-------|
|     | SITE PREPARATION  |          |      |        |            |       |
| 182 | Remove proscenium wall and dispose off site   |          | Sum  |        | 50,000.00  |       |
| 183 | Remove fitout and store ready for reuse   |          | Sum  |        | 25,000.00  |       |
| 184 | Remove floor covering and dispose off site  |          | Sum  |        | 10,000.00  |       |
| 185 | Remove stage and dispose off site   |          | Sum  |        | 20,000.00  |       |
| 186 | Remove balcony seating and dispose off site   |          | Sum  |        | 10,000.00  |       |
| 187 | Temporary bracing auditorium structures during repair   |          | Sum  |        | 250,000.00 |       |
| 188 | Remove stairs S5 and S6, and store ready for reinstate  |          | Sum  |        | 5,000.00   |       |
| 189 | Demolish and remove North exterior walls including allowance for protection and complexities of neighbouring structures |          | Sum  |        | 100,000.00 |       |
| 190 | Remove internal block works and brick infill, and dispose off site  | 816      | m2   | 100.00 | 81,600.00  |       |
| 191 | Carefully remove plaster cornices and fretworks, and store ready for reinstate where possible                           |          | Sum  |        | 10,000.00  |       |
| 192 | Remove suspended plywood ceiling panels and store ready for reuse   |          | Sum  |        | 25,000.00  |       |
| 193 | Remove damaged plaster ceilings and battens, and dispose off site   |          | Sum  |        | 30,000.00  |       |
|     | Estimate Total  |          |      |        | 616,600.00 |       |

Released by the Canterbury Earthquake Recovery Authority

Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: SUBSTRUCTURE



| No. | Description  | Quantity | Unit | Rate     | Amount     | Notes |
|-----|--|----------|------|----------|------------|-------|
|     | <b>SUBSTRUCTURE</b>  |          |      |          |            |       |
| 194 | Repair and reinstate T&G timber flooring on 100 battens @ 400 crs (ground floor) | 505      | m2   | 50.00    | 25,250.00  |       |
| 195 | Repair basement wall and floor slab  |          | Sum  |          | 20,000.00  |       |
|     | Estimate Total   |          |      |          | 45,250.00  |       |
|     | <b>FRAME</b>   |          |      |          |            |       |
| 196 | 900 x 600 reinforced insitu concrete columns                                     | 259      | m    | 1,000.00 | 259,000.00 |       |
| 197 | Reinforced insitu concrete cross over beams                                      | 197      | m    | 1,000.00 | 197,000.00 |       |
| 198 | Steel tie beams to walls, primed   | 1,771    | kg   | 12.00    | 21,252.00  |       |
| 199 | Miscellaneous plates and cleats  | 177      | kg   | 12.00    | 2,124.00   |       |
| 200 | Proscenium wall structural steel frames  |          | Sum  |          | 75,000.00  |       |
|     | Roof bracing to existing roof  |          |      |          |            |       |
| 201 | 125 x 5 SHS strut to existing roof   | 3,203    | kg   | 12.00    | 38,436.00  |       |
| 202 | 120x 12 flat bracing   | 1,583    | kg   | 12.00    | 18,996.00  |       |
| 203 | Extra over for miscellaneous plates and cleats                                   | 479      | kg   | 12.00    | 5,748.00   |       |
|     | Estimate Total   |          |      |          | 617,556.00 |       |
|     | <b>UPPER FLOORS</b>  |          |      |          |            |       |
| 204 | Structure strengthening to existing mezzanine floor                              |          | Sum  |          | 75,000.00  |       |
|     | Carry Forward  |          |      |          | 75,000.00  |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: UPPER FLOORS



| No. | Description   | Quantity | Unit | Rate   | Amount     | Notes |
|-----|---|----------|------|--------|------------|-------|
|     | Brought Forward   |          |      |        | 75,000.00  |       |
| 205 | Reconstruct forestage area and baptismal house including steps and retractable floor sections   |          | Sum  |        | 200,000.00 |       |
|     | Estimate Total  |          |      |        | 275,000.00 |       |
|     | ROOF  |          |      |        |            |       |
| 206 | Repair and reinstate roof framing and roof lining including new flashings to external walls   | 734      | m2   | 100.00 | 73,400.00  |       |
| 207 | Two layer torch-on membrane on plywood sarking on 150 roof framing to form internal gutter  | 17       | m2   | 250.00 | 4,250.00   |       |
|     | Estimate Total  |          |      |        | 77,650.00  |       |
|     | EXTERIOR WALLS AND EXTERIOR FINISH  |          |      |        |            |       |
| 208 | Paint on plaster render system on 200 reinforced precast concrete panels and paint on plaster system on 190 reinforced concrete block walls internally (North wall) | 559      | m2   | 770.00 | 430,430.00 |       |
| 209 | Reinstate connections to existing walls and roof including new flashings  |          | Sum  |        | 50,000.00  |       |
| 210 | Epoxy injections to small cracks in concrete walls including making good (say 150m)   |          | Sum  |        | 50,000.00  |       |
| 211 | Repair large cracks in concrete walls including break out and remove section of the wall, H12 reinforcing, drilling, epoxy grout (say 50m)                          |          | Sum  |        | 50,000.00  |       |
| 212 | Prepare, repaint and replaster existing exterior walls (South wall)   | 485      | m2   | 120.00 | 58,200.00  |       |
|     | Carry Forward   |          |      |        | 638,630.00 |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: EXTERIOR WALLS AND EXTERIOR FINISH



| No. | Description   | Quantity | Unit | Rate   | Amount     | Notes |
|-----|---|----------|------|--------|------------|-------|
|     | Brought Forward   |          |      |        | 638,630.00 |       |
|     | Estimate Total  |          |      |        | 638,630.00 |       |
|     | WINDOWS AND EXTERIOR DOORS  |          |      |        |            |       |
| 213 | Make good and ease windows and doors  | 10       | No   | 300.00 | 3,000.00   |       |
|     | Estimate Total  |          |      |        | 3,000.00   |       |
|     | STAIRS AND BALUSTRADES  |          |      |        |            |       |
| 214 | Reinstate stair No. 5 and 6 including new connections to walls  |          | Sum  |        | 20,000.00  |       |
|     | Estimate Total  |          |      |        | 20,000.00  |       |
|     | INTERIOR WALLS  |          |      |        |            |       |
| 215 | Paint on plaster system on 190 reinforced block wall against existing (southern & western wall)   | 665      | m2   | 300.00 | 199,500.00 |       |
| 216 | Paint on plaster system on 200 insitu concrete wall against existing (western wall)   | 170      | m2   | 430.00 | 73,100.00  |       |
| 217 | Repair large cracks in concrete walls including break out and remove section of the wall, H12 reinforcing, drilling, epoxy grout (say 50m)            |          | Sum  |        | 30,000.00  |       |
| 218 | Reinstate plaster mouldings and fretworks, replace where necessary  |          | Sum  |        | 100,000.00 |       |
| 219 | Reconstruct proscenium wall including plaster linings, plaster cornices, mouldings, fretwork and pressed zinc sheet moulding panel to proscenium arch |          | Sum  |        | 250,000.00 |       |
|     | Carry Forward   |          |      |        | 652,600.00 |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: INTERIOR WALLS



| No. | Description  | Quantity | Unit | Rate   | Amount     | Notes |
|-----|--|----------|------|--------|------------|-------|
|     | Brought Forward  |          |      |        | 652,600.00 |       |
|     | Estimate Total   |          |      |        | 652,600.00 |       |
|     | INTERIOR DOORS   |          |      |        |            |       |
| 220 | Make good and ease doors   | 6        | No   | 800.00 | 4,800.00   |       |
|     | Estimate Total   |          |      |        | 4,800.00   |       |
|     | FLOOR FINISHES   |          |      |        |            |       |
| 221 | Broadloom carpet (ground floor)  | 505      | m2   | 70.00  | 35,350.00  |       |
| 222 | Broadloom carpet curved (balcony floor)  | 364      | m2   | 90.00  | 32,760.00  |       |
|     | Estimate Total   |          |      |        | 68,110.00  |       |
|     | WALL FINISHES  |          |      |        |            |       |
| 223 | Prepare, repaint and replaster to existing walls including making good           |          | Sum  |        | 20,000.00  |       |
|     | Estimate Total   |          |      |        | 20,000.00  |       |
|     | CEILING FINISHES   |          |      |        |            |       |
| 224 | Paint on plaster on lath to ceilings (50%)                                       |          | Sum  |        | 75,000.00  |       |
| 225 | Paint to existing ceilings   | 389      | m2   | 50.00  | 19,450.00  |       |
| 226 | Repair and reinstate plaster cornices and fretworks, and replace where necessary |          | Sum  |        | 150,000.00 |       |
| 227 | Suspended veneered plywood acoustic panels on timber and steel frames (30%)      | 120      | m2   | 400.00 | 48,000.00  |       |
|     | Carry Forward  |          |      |        | 292,450.00 |       |

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 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: CEILING FINISHES



| No. | Description  | Quantity | Unit | Rate  | Amount     | Notes |
|-----|--|----------|------|-------|------------|-------|
|     | Brought Forward  |          |      |       | 292,450.00 |       |
|     | Estimate Total   |          |      |       | 292,450.00 |       |
|     | FITTINGS AND FIXTURES  |          |      |       |            |       |
| 228 | Balcony seating  |          | Sum  |       | 100,000.00 |       |
|     | Estimate Total   |          |      |       | 100,000.00 |       |
|     | HEATING AND VENTILATION SERVICES   |          |      |       |            |       |
| 229 | Integrated heating and ventilation system to forestage and baptismal house |          | Sum  |       | 30,000.00  |       |
|     | Estimate Total   |          |      |       | 30,000.00  |       |
|     | FIRE SERVICES  |          |      |       |            |       |
| 230 | Allow to inspect sprinkler system  | 735      | m2   | 15.00 | 11,025.00  |       |
|     | Estimate Total   |          |      |       | 11,025.00  |       |
|     | ELECTRICAL SERVICES  |          |      |       |            |       |
| 231 | Electric control for baptismal house                                       |          | Sum  |       | 20,000.00  |       |
| 232 | Reinstate lighting system for auditorium function                          |          | Sum  |       | 20,000.00  |       |
|     | Estimate Total   |          |      |       | 40,000.00  |       |
|     | SPECIAL SERVICES   |          |      |       |            |       |
| 233 | Accessibility and emergency lighting compliance                            |          | Sum  |       | 50,000.00  |       |
|     | Carry Forward  |          |      |       | 50,000.00  |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: 33% STRENGTHENING  
 Sub Element: SPECIAL SERVICES



| No. | Description                                | Quantity | Unit | Rate | Amount    | Notes |
|-----|--|----------|------|------|-----------|-------|
|     | Brought Forward                            |          |      |      | 50,000.00 |       |
| 234 | Allow to inspect security system           |          | Sum  |      | 5,000.00  |       |
| 235 | Reinstate audio / visual requirements      |          | Sum  |      | 25,000.00 |       |
|     | Estimate Total                             |          |      |      | 80,000.00 |       |
|     | SUNDRIES                                   |          |      |      |           |       |
| 236 | Inspect and repair entry and street canopy |          | Sum  |      | 10,000.00 |       |
| 237 | FURNITURE AND EQUIPMENT (EXCLUDED)         |          |      |      |           |       |
|     | Estimate Total                             |          |      |      | 10,000.00 |       |

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 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE B REPAIR WORKS  
 Element: EXTRA VALUE FOR 67% STRENGTHENING  
 Sub Element: FRAME



| No. | Description  | Quantity | Unit | Rate   | Amount     | Notes |
|-----|--|----------|------|--------|------------|-------|
|     | FRAME  |          |      |        |            |       |
| 238 | Upgrade connections between gallery seating and northern wall                                |          | Sum  |        | 50,000.00  |       |
| 239 | Extra over for steel tie beams to walls, primed  | 3,154    | kg   | 12.00  | 37,848.00  |       |
| 240 | Extra over for miscellaneous plates and cleats   | 315      | kg   | 12.00  | 3,780.00   |       |
|     | Roof bracing to existing roof  |          |      |        |            |       |
| 241 | Extra over for 125 x 5 SHS strut to existing roof  | 765      | kg   | 12.00  | 9,180.00   |       |
| 242 | Extra over for 150 x 16 flat bracing   | 2,240    | kg   | 12.00  | 26,880.00  |       |
| 243 | Extra over for miscellaneous plates and cleats   | 300      | kg   | 12.00  | 3,600.00   |       |
|     | Estimate Total   |          |      |        | 131,288.00 |       |
|     | INTERIOR WALLS   |          |      |        |            |       |
| 244 | Extra value for 250 insitu concrete wall in lieu of 190 reinforced block wall (western wall) | 222      | m2   | 250.00 | 55,500.00  |       |
| 245 | Extra value for 250 insitu concrete wall in lieu of 200 insitu concrete wall (western wall)  | 170      | m2   | 80.00  | 13,600.00  |       |
|     | Estimate Total   |          |      |        | 69,100.00  |       |

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 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: SITE PREPARATION



| No. | Description   | Quantity | Unit | Rate      | Amount     | Notes |
|-----|---|----------|------|-----------|------------|-------|
|     | SITE PREPARATION  |          |      |           |            |       |
| 246 | Demolish stage, fly tower and basement and dispose off site     |          | Sum  |           | 100,000.00 |       |
|     | Estimate Total  |          |      |           | 100,000.00 |       |
|     | SUBSTRUCTURE  |          |      |           |            |       |
| 247 | 250 reinforced concrete basement floor slab                     | 389      | m2   | 500.00    | 194,500.00 |       |
| 248 | 250 reinforced concrete basement wall                           | 100      | m2   | 750.00    | 75,000.00  |       |
| 249 | Enhanced foundation to basement including piling                | 389      | m2   | 500.00    | 194,500.00 |       |
| 250 | Lift pit  | 1        | No   | 10,000.00 | 10,000.00  |       |
|     | Estimate Total  |          |      |           | 474,000.00 |       |
|     | FRAME   |          |      |           |            |       |
| 251 | 900 x 600 reinforced insitu concrete columns                    | 259      | m    | 1,000.00  | 259,000.00 |       |
| 252 | Reinforced insitu concrete cross over beams                     | 197      | m    | 1,000.00  | 197,000.00 |       |
|     | Estimate Total  |          |      |           | 456,000.00 |       |
|     | UPPER FLOORS  |          |      |           |            |       |
| 253 | 200 thick reinforced insitu concrete suspended infill slab      | 387      | m2   | 270.00    | 104,490.00 |       |
| 254 | 20 particle board on 250 floor joists at 400 centres            | 23       | m2   | 150.00    | 3,450.00   |       |
| 255 | Fly tower reconstruction including access platforms and ladders |          | Sum  |           | 100,000.00 |       |
|     | Carry Forward   |          |      |           | 207,940.00 |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: UPPER FLOORS



| No. | Description  | Quantity | Unit | Rate     | Amount     | Notes |
|-----|--|----------|------|----------|------------|-------|
|     | Brought Forward  |          |      |          | 207,940.00 |       |
|     | Estimate Total   |          |      |          | 207,940.00 |       |
|     | ROOF   |          |      |          |            |       |
| 256 | Colorsteel 0.55 corrugated steel roofing on building paper on batten on plywood sarking on purlins on rafters/trusses including insulation | 376      | m2   | 260.00   | 97,760.00  |       |
| 257 | Two layer torch-on membrane on plywood sarking on 150 roof framing to form internal gutter   | 11       | m2   | 250.00   | 2,750.00   |       |
| 258 | Colorsteel downpipes   | 40       | m    | 45.00    | 1,800.00   |       |
| 259 | Rainwater head   | 2        | No   | 800.00   | 1,600.00   |       |
|     | Estimate Total   |          |      |          | 103,910.00 |       |
|     | EXTERIOR WALLS AND EXTERIOR FINISH   |          |      |          |            |       |
| 260 | Paint on plaster render system both sides of 200 reinforced precast concrete panels  | 1,157    | m2   | 500.00   | 578,500.00 |       |
| 261 | Featured plaster moulding and fretwork to match existing (South wall)  |          | Sum  |          | 80,000.00  |       |
|     | Estimate Total   |          |      |          | 658,500.00 |       |
|     | WINDOWS AND EXTERIOR DOORS   |          |      |          |            |       |
| 262 | Single glazed commercial section aluminium windows   | 6        | m2   | 400.00   | 2,400.00   |       |
| 263 | Timber framed single glazed windows including timber frame and finishes  | 4        | No   | 1,200.00 | 4,800.00   |       |
|     | Carry Forward  |          |      |          | 7,200.00   |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: WINDOWS AND EXTERIOR DOORS



| No. | Description  | Quantity | Unit | Rate      | Amount    | Notes |
|-----|--|----------|------|-----------|-----------|-------|
|     | Brought Forward  |          |      |           | 7,200.00  |       |
| 264 | Pair of exterior quality solid core fire egress doors including frame, hardware and finish | 2        | No   | 3,000.00  | 6,000.00  |       |
| 265 | Single exterior quality solid core door including frame, hardware and finish               | 1        | No   | 1,200.00  | 1,200.00  |       |
|     | Estimate Total   |          |      |           | 14,400.00 |       |
|     | STAIRS AND BALUSTRADES   |          |      |           |           |       |
| 266 | Internal timber stair and balustrading to one level  | 1        | No   | 10,000.00 | 10,000.00 |       |
| 267 | Internal timber stair including handrailing  | 1        | No   | 10,000.00 | 10,000.00 |       |
|     | Estimate Total   |          |      |           | 20,000.00 |       |
|     | INTERIOR WALLS   |          |      |           |           |       |
| 268 | Paint on 13 Gibboard both sides of 100 wall framing including skirting                     | 154      | m2   | 180.00    | 27,720.00 |       |
| 269 | Single glazed aluminium borrowed lights  | 4        | m2   | 400.00    | 1,600.00  |       |
| 270 | Lift shaft (PROVISIONAL)   |          | Sum  |           | 5,000.00  |       |
|     | Estimate Total   |          |      |           | 34,320.00 |       |
|     | INTERIOR DOORS   |          |      |           |           |       |
| 271 | Single solid core paint grade door including frame, hardware and finish                    | 7        | No   | 1,000.00  | 7,000.00  |       |
| 272 | Pair of solid core paint grade doors including frame, hardware and finish                  | 1        | No   | 1,800.00  | 1,800.00  |       |
|     | Carry Forward  |          |      |           | 8,800.00  |       |

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Project: Majestic House Earthquake Remedial Works  
 Estimate: Version A, Revision B  
 Price Date: 23/02/2012

Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: INTERIOR DOORS



| No. | Description   | Quantity | Unit | Rate  | Amount     | Notes |
|-----|---|----------|------|-------|------------|-------|
|     | Brought Forward   |          |      |       | 8,800.00   |       |
|     | Estimate Total  |          |      |       | 8,800.00   |       |
|     | FLOOR FINISHES  |          |      |       |            |       |
| 273 | Broadloom carpet (basement, storage and meeting room)   | 394      | m2   | 70.00 | 27,580.00  |       |
| 274 | Sheet vinyl with welded joints and covered edge including Hydropoxy to concrete (commercial kitchen, service counter) | 28       | m2   | 90.00 | 2,520.00   |       |
|     | Estimate Total  |          |      |       | 30,100.00  |       |
|     | CEILING FINISHES  |          |      |       |            |       |
| 275 | Paint on 13 Gibboard on metal suspension grid   | 410      | m2   | 75.00 | 30,750.00  |       |
| 276 | Paint to basement ceilings  | 389      | m2   | 25.00 | 9,725.00   |       |
|     | Estimate Total  |          |      |       | 40,475.00  |       |
|     | FITTINGS AND FIXTURES   |          |      |       |            |       |
| 277 | Theatre stage gantry system   |          | Sum  |       | 200,000.00 |       |
| 278 | Commercial kitchen joinery (Basement)   |          | Sum  |       | 20,000.00  |       |
| 279 | Kitchen appliances (EXCLUDED)   |          |      |       |            |       |
|     | Estimate Total  |          |      |       | 220,000.00 |       |
|     | SANITARY PLUMBING   |          |      |       |            |       |
| 280 | Water supply  |          | Sum  |       | 5,000.00   |       |
|     | Carry Forward   |          |      |       | 5,000.00   |       |

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Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: SANITARY PLUMBING



| No. | Description   | Quantity | Unit | Rate     | Amount     | Notes |
|-----|---|----------|------|----------|------------|-------|
|     | Brought Forward   |          |      |          | 5,000.00   |       |
| 281 | Sink insert complete with water and waste services  | 1        | No   | 2,000.00 | 2,000.00   |       |
| 282 | Hot water cylinder complete including cold water connection   | 1        | No   | 4,000.00 | 4,000.00   |       |
|     | Estimate Total  |          |      |          | 11,000.00  |       |
|     | HEATING AND VENTILATION SERVICES  |          |      |          |            |       |
| 283 | Air conditioning reticulating supply and extract (Stage)  |          | Sum  |          | 200,000.00 |       |
| 284 | Heating and ventilation system (Basement)   | 389      | m2   | 100.00   | 38,900.00  |       |
|     | Estimate Total  |          |      |          | 238,900.00 |       |
|     | FIRE SERVICES   |          |      |          |            |       |
| 285 | Automatic fire sprinkler system incorporating a manual fire alarm system and an automatic smoke/heat detection system | 799      | m2   | 70.00    | 55,930.00  |       |
|     | Estimate Total  |          |      |          | 55,930.00  |       |
|     | ELECTRICAL SERVICES   |          |      |          |            |       |
| 286 | Electrical mains supply   |          | Sum  |          | 20,000.00  |       |
| 287 | Electric power and lighting including submains and switchboards (Basement, storage and meeting room)                  | 426      | m2   | 150.00   | 63,900.00  |       |
| 288 | Electric power and lighting including submains and switchboards (stage)   | 373      | m2   | 300.00   | 111,900.00 |       |
| 289 | Internal light control for black out to exterior windows  |          | Sum  |          | 5,000.00   |       |
|     | Carry Forward   |          |      |          | 200,800.00 |       |

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Section: ZONE C REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: ELECTRICAL SERVICES



| No. | Description   | Quantity | Unit | Rate      | Amount     | Notes |
|-----|---|----------|------|-----------|------------|-------|
|     | Brought Forward   |          |      |           | 200,800.00 |       |
|     | Estimate Total  |          |      |           | 200,800.00 |       |
|     | VERTICAL AND HORIZONTAL TRANSPORTATION                      |          |      |           |            |       |
| 290 | Allowance for new lift serving two floors (excluding shaft) | 1        | No   | 70,000.00 | 70,000.00  |       |
|     | Estimate Total  |          |      |           | 70,000.00  |       |
|     | SPECIAL SERVICES  |          |      |           |            |       |
| 291 | Voice and data outlets                                      | 799      | m2   | 25.00     | 19,975.00  |       |
| 292 | Intruder security   |          | Sum  |           | 10,000.00  |       |
| 293 | Access security   |          | Sum  |           | 10,000.00  |       |
|     | Estimate Total  |          |      |           | 39,975.00  |       |
|     | DRAINAGE  |          |      |           |            |       |
| 294 | Sewer and stormwater drainage                               |          | Sum  |           | 10,000.00  |       |
|     | Estimate Total  |          |      |           | 10,000.00  |       |
|     | SUNDRIES  |          |      |           |            |       |
| 295 | Entry canopy  |          | Sum  |           | 2,000.00   |       |
|     | Estimate Total  |          |      |           | 2,000.00   |       |

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Section: ZONE D REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: SITE PREPARATION



| No. | Description   | Quantity | Unit | Rate   | Amount           | Notes |
|-----|---|----------|------|--------|------------------|-------|
|     | <b>SITE PREPARATION</b>   |          |      |        |                  |       |
| 296 | Remove toilet block and surrounding yard  |          | Sum  |        | 3,000.00         |       |
|     | Estimate Total  |          |      |        | <u>3,000.00</u>  |       |
|     | <b>SUBSTRUCTURE</b>   |          |      |        |                  |       |
| 297 | 150 reinforced concrete ground floor slab on dpc on hardfill including thickenings, excavation and disposal | 28       | m2   | 180.00 | 5,040.00         |       |
| 298 | Reinforced concrete foundation beams including formwork, excavation and disposal                            | 18       | m    | 180.00 | 3,240.00         |       |
|     | Estimate Total  |          |      |        | <u>8,280.00</u>  |       |
|     | <b>ROOF</b>   |          |      |        |                  |       |
| 299 | Two layer torch-on membrane on plywood sarking on 150 roof framing including insulation                     | 28       | m2   | 250.00 | 7,000.00         |       |
| 300 | Two layer torch-on membrane on plywood sarking on 150 roof framing to form internal gutter                  | 1        | m2   | 250.00 | 250.00           |       |
| 301 | Colorsteel downpipes  | 4        | m    | 45.00  | 180.00           |       |
|     | Estimate Total  |          |      |        | <u>7,430.00</u>  |       |
|     | <b>EXTERIOR WALLS AND EXTERIOR FINISH</b>   |          |      |        |                  |       |
| 302 | Single brick veneer on wall framing including insulation and paint on 13 Gibboard and skirting internally   | 54       | m2   | 350.00 | 18,900.00        |       |
|     | Estimate Total  |          |      |        | <u>18,900.00</u> |       |

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Section: ZONE D REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: WINDOWS AND EXTERIOR DOORS



| No. | Description   | Quantity | Unit | Rate     | Amount   | Notes |
|-----|---|----------|------|----------|----------|-------|
|     | WINDOWS AND EXTERIOR DOORS  |          |      |          |          |       |
| 303 | Single exterior quality solid core door including frame, hardware and finish  | 1        | No   | 1,200.00 | 1,200.00 |       |
|     | Estimate Total  |          |      |          | 1,200.00 |       |
|     | INTERIOR WALLS  |          |      |          |          |       |
| 304 | Paint on 13 Gibboard both sides of 100 wall framing including skirting        | 24       | m2   | 180.00   | 4,320.00 |       |
| 305 | Proprietary toilet cubicle including partition, door and all hardware         | 3        | No   | 1,500.00 | 4,500.00 |       |
|     | Estimate Total  |          |      |          | 8,820.00 |       |
|     | INTERIOR DOORS  |          |      |          |          |       |
| 306 | Single solid core paint grade door including frame, hardware and finish       | 2        | No   | 1,000.00 | 2,000.00 |       |
|     | Estimate Total  |          |      |          | 2,000.00 |       |
|     | FLOOR FINISHES  |          |      |          |          |       |
| 307 | Sheet vinyl with welded joints and coved edge including Hydropoxy to concrete | 24       | m2   | 90.00    | 2,160.00 |       |
|     | Estimate Total  |          |      |          | 2,160.00 |       |
|     | CEILING FINISHES  |          |      |          |          |       |
| 308 | Paint on 13 Gibboard on 50 ceiling battens                                    | 24       | m2   | 75.00    | 1,800.00 |       |
|     | Carry Forward   |          |      |          | 1,800.00 |       |

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Section: ZONE D REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: CEILING FINISHES



| No. | Description   | Quantity | Unit | Rate     | Amount    | Notes |
|-----|---|----------|------|----------|-----------|-------|
|     | Brought Forward   |          |      |          | 1,800.00  |       |
|     | Estimate Total  |          |      |          | 1,800.00  |       |
|     | SANITARY PLUMBING   |          |      |          |           |       |
| 309 | Toilet pan and cistern complete with water and waste services   | 3        | No   | 3,000.00 | 9,000.00  |       |
| 310 | Wash hand basin complete with water and waste services  | 2        | No   | 1,500.00 | 3,000.00  |       |
|     | Estimate Total  |          |      |          | 12,000.00 |       |
|     | HEATING AND VENTILATION SERVICES  |          |      |          |           |       |
| 311 | Bathroom ventilation  |          | Sum  |          | 1,000.00  |       |
|     | Estimate Total  |          |      |          | 1,000.00  |       |
|     | FIRE SERVICES   |          |      |          |           |       |
| 312 | Automatic fire sprinkler system incorporating a manual fire alarm system and an automatic smoke/heat detection system | 28       | m2   | 70.00    | 1,960.00  |       |
|     | Estimate Total  |          |      |          | 1,960.00  |       |
|     | ELECTRICAL SERVICES   |          |      |          |           |       |
| 313 | Electrical mains supply   |          | Sum  |          | 2,500.00  |       |
| 314 | Electric power and lighting including submains and switchboards   | 28       | m2   | 100.00   | 2,800.00  |       |
|     | Estimate Total  |          |      |          | 5,300.00  |       |

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Section: ZONE D REPLACEMENT WORKS  
 Element: REPLACEMENT WORKS  
 Sub Element: DRAINAGE



| No. | Description  | Quantity | Unit | Rate     | Amount    | Notes |
|-----|--|----------|------|----------|-----------|-------|
|     | DRAINAGE   |          |      |          |           |       |
| 315 | Sewer and stormwater drainage  |          | Sum  |          | 10,000.00 |       |
|     | Estimate Total   |          |      |          | 10,000.00 |       |
|     | EXTERNAL WORKS   |          |      |          |           |       |
| 316 | Asphalt paving including hardfill, excavation, kerbs, channels and site drainage | 77       | m2   | 150.00   | 11,550.00 |       |
|     | Estimate Total   |          |      |          | 11,550.00 |       |
|     | SUNDRIES   |          |      |          |           |       |
| 317 | Metal framed steps with handrail   | 1        | No   | 1,500.00 | 1,500.00  |       |
|     | Estimate Total   |          |      |          | 1,500.00  |       |

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