

Under the Resource Management Act 1991
In the matter of Notices of Requirement to enable the construction, operation and
maintenance of the City Rail Link

Between

Auckland Transport

Requiring Authority

and

Auckland Council

Consent Authority

Statement of Evidence of Bruce Mitchell Petry

Qualifications and Experience

1. My name is Bruce Mitchell Petry. I am a director of the firm Salmond Reed Architects Limited (**Salmond Reed**) and I have been in professional practice as a built heritage specialist and architect since 1992. I hold the degree of Master of Architecture (Auckland) and I am a member of the New Zealand Institute of Architects. I hold specialist certification in heritage conservation from ICCROM (Rome) in Architectural conservation, SPAB (London), built heritage conservation and WHITRAP (China), heritage impact assessment.
2. I am an associate member of the New Zealand Conservators of Cultural Materials, and a member of the executive board of the New Zealand Committee of the International Council on Monuments and Sites (ICOMOS). I contributed to the development of the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value (2010). I am founding Trustee of the Greg Bowron Trust which promotes travel for research in heritage studies.
3. I have 20 years experience as a heritage architect with working experience in both New Zealand and the United Kingdom. My particular field of expertise is in the conservation and adaptive re-use of built heritage within complex urban settings or cultural landscapes. I have undertaken specialist training in conservation method and practice in Italy, Australia, China and the UK. I am experienced in building conservation/restoration and the preparation of conservation plans and heritage studies. I have experience in the analysis, design and documentation of conservation works for a wide range of heritage buildings, as well as the design and construction of contemporary new structures in association to existing ones. I have contributed to a number of other published works, and I have delivered papers and lectures at conferences and seminars related to conservation theory and practice.
4. I have assisted several local authorities with the identification of areas of distinctive character and with the preparation of guidelines for the maintenance of existing character. I have advised a number of territorial authorities on issues related to the preservation of historic areas.

5. I have prepared, or contributed to, studies on heritage values which can be identified in urban and other settings, where these studies are intended to assist with the formation of planning policy and rules. These have included studies of historic landscapes associated with significant cultural heritage buildings, conservation plans for historic landscapes and built precincts, and contributions towards the development of master plans and area plans for defined landscapes.
6. Salmond Reed Architects specialises in the conservation/restoration of heritage buildings, sites and areas, and a major part of the work of the practice is concerned with the maintenance, restoration and adaptation of old buildings. We have prepared in excess of 120 conservation plans for important heritage buildings throughout New Zealand.
7. Salmond Reed has worked (alone, or in association with other design professionals) on many significant projects to assess complex urban and historic settings, including (in Auckland) suburban centres of Upper Symonds Street, Ellerslie, St Heliers, Parnell, Devonport and Newmarket, as well as Dunedin City and Christchurch City.
8. I have read the Code of Conduct for Expert Witnesses as contained in the Environment Court Consolidated Practice Note (2011), and I agree to comply with it as if this hearing was before the Environment Court. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Project Description

9. The City Rail Link (CRL) is a 3.4km underground passenger railway (including two tracks and three underground stations) running between Britomart Station and the North Auckland Line (NAL) in the vicinity of the existing Mount Eden Station. For ease of reference, the stations included in the CRL NoR have been temporarily named Aotea Station, Karangahape Station and Newton Station. The stations will be formally named in the future. A fuller description of the CRL is provided in the

Assessment of Environmental Effects (AEE) which supports the Notices of Requirement (NoR)¹.

Scope of Evidence

10. My evidence will address the following:
 - (a) Methodology for assessment of built heritage;
 - (b) Effects of the CRL on built heritage during construction;
 - (c) Effects of the CRL on built heritage during operation;
 - (d) Proposed mitigation;
 - (e) Response to submissions;
 - (f) Response to Planner's Report; and
 - (g) Proposed conditions.

Summary of Evidence

11. In identifying the potential risk to built heritage by CRL, the Salmond Reed Built Heritage Report (BHR) followed a standard approach of a) identification, b) analysis, c) presentation of results and mitigation, d) consultation e) summarise findings and recommendation.
12. The resultant analysis confirmed that 56 built heritage properties were found (by initial structural desktop analysis) to be affected or potentially affected by the proposed CRL construction works. Of these 56 buildings, part of 1 will have to be demolished (Albert Street toilets), 2 are likely to be demolished (Beresford Street toilets and the Griffiths Holdings Building), 1 may be demolished or at least substantially altered (Martha's Corner), 20 were identified in the Structural Engineer Report² (which supports the CRL NoR) as having potentially "*slight-moderate*" risk of structural building damage, the remainder having potentially "*slight*" risk of structural building damage.

¹ Volume 2 CRL NoR suite of documents

² Mr Craig Stevenson, Volume 3, CRL NoR suite of documents

13. The greater part of the CRL will be constructed through deep tunnelling below any built heritage as identified in the BHR³. Any effects on built heritage will be confined to the areas where surface works are planned such as extent of “cut and cover”⁴ and at the immediate locations of the stations.
14. The nature of historic places and buildings could mean that even the slightest damage may affect their heritage value. The BHR which supported the CRL NoR AEE therefore recommended a conservative approach of undertaking a pre construction survey of the buildings likely to be affected (wherever practicable) and then undertaking assessment during and post construction and remediation where required.
15. The CRL has the potential to enhance the historic environment of Auckland by providing an opportunity to encourage traditional commuter street life in Auckland’s existing historic precincts and to create multifaceted urban environments which is part of the on-going change within Auckland.

Background and role

16. Salmond Reed Architects was engaged directly by Auckland Transport. It has worked closely with the Principal Advisor (PA) led by Aurecon NZ Ltd which comprises the principal partners of Aurecon NZ Ltd, Mott MacDonald, Jasmx and Grimshaw. The PA reports directly to Auckland Transport’s Infrastructure Delivery work-stream which is responsible for delivery of the CRL project. The PA is also supporting the Notice of Requirement (NoR) and Property work-streams.
17. My role in the CRL project team has included preparation of the assessment of the potential impacts of the project on built heritage values⁵. I undertook this assessment with my colleagues Mark Canata, Richard Bollard and Katherine O’Shaughnessy which was developed

³ Built Heritage Assessment, Volume 3, CRL NoR suite of documents

⁴ Between Britomart and Aotea Station and where the CRL connects to the North Auckland Rail Line

⁵ Salmond Reed Architects, City Rail Link Project: Built heritage Technical Exert Report, prepared for Auckland Transport, August 2012. Appendix 4 in the Assessment of Environmental Effects

from a previous report by Clough & Associates⁶. Our role in the project was threefold:

- (a) to identify the historic areas, places (buildings and structures) in the project study area – both existing and potential;
 - (b) to identify the potential impacts that construction and operation of the CRL might have on those areas and places by working with the structural, noise and vibration technical experts to determine and assess the effect of settlement, noise and ground borne vibration on buildings both adjacent and within the NoR footprint; and
 - (c) to provide methods as to how these impacts might be avoided, remedied, or mitigated.
18. This assessment formed the basis for the BHR that implemented a methodology for identifying relevant heritage properties⁷, assessing the potential impacts of the CRL on them and identified mitigation measures.
19. The identification of specific mitigation measures for individual buildings is addressed in the proposed Construction Environmental Management Plan (CEMP) and also the requirement to undertake building condition surveys (where practicable) on any of those buildings I have identified as part of the BHR that may potentially be affected by vibration. Proposed draft conditions for the CRL NoR include the requirement to prepare, implement and monitor the CEMP and to undertake building condition surveys and remediation.
20. It was agreed with the Auckland Council Heritage Unit that the study area would include 100 metres either side of the indicative centre-line

⁶ Richard Bollard has a degree in Architecture and planning from University of Auckland, Katherine O'Shaughnessy had a Masters degree in Architecture from the University of Auckland, and Mark Canata has a Masters degree in Architecture from Leeds Metropolitan University R. Clough, S. Macready and S. Bickler, Draft CBD Rail Link Study: Phase 1 Heritage Assessment of Route Options, prepared for KiwiRail and the then Auckland Regional Transport Authority, December 2009.

⁷ Sec 6 & 7, Salmond Reed Architects, City Rail Link Project: Built Heritage Technical Expert Report, prepared for Auckland Transport, August 2012, also as defined in the HPA and ICCMOS NZ Charter.

of the proposed route. I consider that this represents a conservative area of analysis that captures all places that might potentially be affected by the CRL project (Appendix E, BHR).

21. The BHR has relied on the project information available to the date of the 2012 Concept Design Report⁸, the expert assessments on Noise and Vibration⁹, Archaeology¹⁰ and the Structural Engineering Report¹¹. This report is limited to a desktop research of other available information and visual analysis of Built Heritage assets along the proposed route during several site visits with the project team, Auckland Council (AC) Heritage, NZ Historic Places Trust (HPT) and to investigate specific issues.
22. The BHR has identified Built Heritage in the proximity of the CRL as well as other unrecognised properties that are considered to be of Built Heritage value and that may also, in the not too distant future, be considered Built Heritage (ref. BHR, Appendices C and D). The identification of the latter was based on accepted criteria for identifying the significance of buildings defined in the ICOMOS NZ Charter.

Methodology

23. The BHR is the result of successive levels of refinement to identify potential effects to Built Heritage as a result of the construction and operations associated with the CRL. These levels of refinement are: a) broad based historical analysis of the study area to identify Built Heritage, b) site visits, c) identifying and prioritising significant Built Heritage that would potentially be affected, d) analysis of the specific risk to these buildings/structures with the assistance of project engineering advice, e) consultation with AC & HPT.
24. Following this analysis, apart from the limited circumstances in which direct interference is required, settlement was considered the greatest risk to historic heritage so further detailed assessments were made by Mr Stevenson to confirm his structural assessment advice.

⁸ Appendix 13, Volume 3 CRL NoR suite of documents

⁹ Appendix 2, Volume 3 CRL NoR suite of documents

¹⁰ Appendix 3, Volume 3 CRL NoR suite of documents

¹¹ Appendix 10, Volume 3 CRL NoR suite of documents

25. The assessment of potential effects on Built Heritage involved:
- (a) The bringing together of diverse pieces of information¹², including a separate assessment of effects on archaeological values undertaken by Clough & Associates¹³;
 - (b) Several route inspections with photographs taken of the built environment along the proposed 200m route boundary (100m each side of the track);
 - (c) As a first stage identification of all historic places recognised by AC and the HPT within the agreed 100m boundary of the route. Given that a twenty year lapse period is being sought for the CRL designation, I also assessed what other elements may also be considered Built Heritage in the not too distant future and these were defined as “potential heritage items”. Consideration was also given to potential historic places and character buildings that provide notable streetscape value or urban context. A standard, commonly accepted criteria for identifying the significance of historic places was used¹⁴;
 - (d) On-going review and understanding of the work undertaken by Mr Stevenson (structural analysis), Mr Whitlock (vibration) and Mr News (construction) all of whom are presenting evidence;
 - (e) Detailed property archival research where site specific assessments had been made against work prepared by Engineer Technical Expert Report and Acoustic Technical Expert Report and these effects summarised¹⁵; and
 - (f) The first stage of the assessment resulted in the identification of approximately 300 buildings that could possibly be affected by the CRL project. In consultation with AC and HPT, the refinement of this research focused the study corridor to 100m either side of the indicative centreline of the CRL route and in

¹² i.e. Independent heritage assessments, Auckland Council heritage schedules such as the CHI, the District Plan (Central Area and Isthmus Sections), and the HPT Register.

¹³ Appendix 3 Volume 3 CRL NoR suite of documents

¹⁴ Refer also BHR Sec. 6.2.2 - 6.2.7

¹⁵ Mr Stevenson’s evidence paragraphs 26 to 29

doing so reduced the number of potentially affected buildings to 254.

Effects of the CRL on built heritage during construction

26. A desktop structural assessment was prepared by Mr Stevenson as part of the Structural Engineering Technical Expert Report based on the potential subsidence and vibration contours. A building damage classification was agreed (Burland & Mair et al) which identified a risk category of 'Aesthetic damage' brought about by Negligible, Very Slight or Slight effects of Settlement due to the construction of the CRL (ref Table 7.2.1 of the Structural Engineer Technical Expert Report). This is summarised in Mr Stevenson's evidence paragraphs 16 to 31. I consider this level of damage is acceptable as it is considered to be within the general parameter of traditional building movement. 'Serviceability Damage'¹⁶, although repairable was considered to be unacceptable for places considered to have built heritage value.
27. In these categories it is important to assess in detail what buildings fall into these risk categories and their condition, as well as more accurately accounting for the local soil conditions, the building configuration, construction type and condition and any structural stiffness¹⁷. More detailed assessment of the vulnerability of individual properties will be required, especially for those that are already seen as being at 'Slight-Moderate' risk of damage, which would trigger the requirement for Condition Surveys, monitoring ground treatment and other measures. Currently 20 properties have been identified in this category with the majority located within the Upper Symonds Street Historic Area.
28. The BHR also identified potential effects to other specific Built Heritage associated with CRL operations. These include:
- (a) Former Central Post Office (CPO) (91) (Type A);
 - (b) Albert Street Wall (Bluestone Wall) and Historic Toilets (08) (Type A);

¹⁶ Mr Stevenson's evidence paragraph 13

¹⁷ Refer Sec. 7.3 Built Heritage Report

- (c) Martha's Corner Buildings (142) (Type C);
 - (d) The Griffiths Holdings Building (153) (Type C); and
 - (e) The former Beresford Street Toilets (236) (Type C).
29. The stated priority of the CRL is the adaptive re-use of these buildings and if this is possible the effect of the CRL may be positive. In two cases, the Albert Street Toilets and former Beresford Street Toilets, it is unlikely that adaptive reuse will be a viable option. It is proposed and discussed in paragraphs 73 to 77, and 102 to 103 of my evidence that these two heritage structures are to be demolished.
30. In terms of the main construction site along Nikau Street there is only one identified Built Heritage place within this areaa (#295). It is not clear at this stage what the potential effects will be for this building but I am confident that the mitigation framework proposed is appropriate to cover any potential effects raised in submissions and outlined in the BHR.
31. More detailed consideration has been given to the areas around the stations. The CDR shows that the Aotea Station tunnel alignment represents the greatest effect on Built Heritage along the route with direct or potential effects on the Albert Street Bluestone Wall and Toilets, and the buildings known as Martha's Conner and Griffiths Holdings Building. Surrounding Built Heritage may also be affected by settlement due to construction works.

Effects of the CRL on built heritage during operation

32. The expected effects on built heritage values by vibration are very minimal but it is recommended that monitoring be undertaken as part of the CRL operational requirements.

Proposed Mitigation

33. The recommended approach of a 'mitigation hierarchy' associated with impacts is reflected in the proposed conditions and comprises a cascading series of actions of avoidance, reduction or compensation:
- (a) Impacts will be avoided or reduced at the source, where possible, by designing the Project so that the impact is avoided in the first place;
 - (b) Mitigation measures will be included in the project to reduce the adverse impact where it has not been practicable to avoid or reduce that impact at source; and
 - (c) For those adverse impacts that still remain after the application of the above measures, additional measures should be taken to avoid the potential impact or, if not practicable, to remedy or compensate for it by some other means.
34. Mitigation measures that address the potential effects on Built Heritage will need to be considered on a building-by-building or site-by-site basis. The definition of these measures will be able to be finalised in successive refinements as the detail design and construction methods become clearer, as detailed information on the properties becomes available and once the construction methods are finalised.
35. Any proposal to significantly alter or demolish Built Heritage will need to be justified and follow exploration of all feasible alternative options available, including their retention, adaptive re-use, integration or partial retention in the new station design.

Response to submissions

36. I have read submissions lodged to the NOR relevant to my experience that raise concerns in respect to effects to Built Heritage. Concern has been raised in 14 submissions. In this section of my evidence I will address these submissions.
37. A number of the submissions raised similar issues so in order to avoid repetition I have identified common themes across the submissions. I

will respond to these themes and any specific submission as appropriate.

Summary of Key Issues raised in Submissions

38. Common themes across submissions:
- (a) Concern with possible damage of buildings along the route, due to vibration and settlement caused by construction activities;
 - (b) Some concern with the loss of heritage buildings where removal is possible due to above ground station works; and
 - (c) Concern with the design of new station buildings which will be placed in the context of a surviving streetscape of historic buildings.

Submission 219 (Auckland Methodist Central Parish – Pitt St Trust)

39. This submission expresses concern as to the potential effects of the CRL works and operations on its property holdings of Built Heritage on the corner of Pitt St and Karangahape Road¹⁸. The submitter fully supports the protection provisions as notified with the Built Heritage Report and requests on-going consultation.
40. I agree with the matters raised by the submitter. The concerns are addressed by the BHR submitted in support of the AEE, which identified the submitter's properties as (# 80,323 & 47 – Sec 7.6.1.3). AT proposes to address the effects on heritage through conditions and the CEMP. As this submitter's buildings are considered and identified to have Built Heritage value the buildings will (if practicable and necessary) be subject to a pre-construction building condition survey, on-going monitoring and remediation if required. In terms of consultation we have met with the submitter to further discuss their concerns and outline the actions AT intends to take in order to mitigate any effects on their buildings.

¹⁸ Pitt St Methodist Church, Wesley Bi Centennial Hall & Pitt St Buildings

Submission 72 (NZ Historic Places Trust, Pouhere Taonga)

41. This submission identifies five places (that include a building or buildings) about which they feel documentation as to retention or effects on heritage values is unclear. The submitter has expressed preference for these places to be “retained where possible”. They include:
- (a) Albert Street Bluestone Wall & Toilet;
 - (b) Buildings near the NW corner of Victoria and Albert Streets (Martha’s Corner) and the SE corner of Albert and Wellesley Streets (Griffiths Holdings Building);
 - (c) Buildings in Beresford Street (toilets) and Mercury Lane (old Hallensteins Building);
 - (d) Buildings in Newton Road, Dundonald, Symonds Streets and New North Road; and
 - (e) Building in Flower Street.
42. This submitter also wishes more precise conditions to be included around the use and retention of identified historic places covering the following areas:
- (a) “A better indication of the use to which these assets are to be put, a commitment to their retention or adaptive re-use where possible.”;
 - (b) “More stringent assessment of less destructive alternatives” where it appears that demolition or substantial alteration of historic buildings is likely;
 - (c) A commitment to the preparation of conservation plans for places where adaptive re-use or significant modifications are proposed; and
 - (d) Requiring on-going consultation with NZHPT in the preparation of additional assessment and conservation plans of identified built heritage.

43. The submitter specifically identifies potential risks to the CPO by proposed tunnelling works and has identified its approval role under the heritage covenant for this building. I note that this building is outside the NoR.
44. It should be noted that of the buildings registered by HPT only one will be substantially affected: the Albert Street Bluestone Wall & Toilet. Conservative assessments of other buildings of heritage merit / character resulted in 54 buildings being identified as being affected or potentially affected as noted above. Draft conditions propose that where practicable all of these that could potentially be affected will have a building condition survey undertaken. Conditions also address the consideration of adaptive reuse and further consultation with HPT.

Submission 67 (Allan Matson, Auckland)

45. This submission “generally supports the NoR but encourages greater thought be given to making the most of opportunities provided by existing heritage fabric.”
46. This submission appears to support the Built Heritage Assessment and its approach but seeks the exclusion of buildings identified as built heritage from the Designation footprint (these were noted as #14, 15, 16 and 395 at the intersection of Albert St and Victoria St West). Noted as BHR reference numbers 163 and 142.
47. It is my understanding that granting the relief sought is not possible because the land is required for CRL functional reasons and this is covered in Mr John Fellow’s evidence.

Submission 4 (RH & PJ Hansen on behalf of a family trust)

48. This submitter has expressed concern about the potential effects of CRL construction works and operations on their property holdings - namely an identified historic building on the corner of Pitt St and Beresford Sq. They seek to be fully protected against any adverse consequences for them, their property or their tenants. I agree with the matters raised by the submitters. Their concerns will be addressed through further consultation which will be undertaken with all property owners within this area in accordance with the conditions in the NOR.

The building is identified in Appendix A of the BHA (#230) and will (if practicable) be subject to pre and post construction surveys and if necessary mitigation action will be undertaken.

Submission 68 (The Karangahape Road Business Association)

49. This submission supports the CRL but expresses concern over the potential effects CRL construction works and operations will have on properties and particularly those identified as Built Heritage specifically affected or which may not have been assessed or may have been left off the list in Appendix A of the Built Heritage Assessment.
50. The submission questions whether owners should strengthen their building before or after the CRL works. This is outside my area of expertise, but it is my understanding that the CRL works are unlikely to affect (or require) strengthening proposals.
51. The buildings/places specifically noted as being of concern as having the potential to suffer ‘moderate damage’ include:

The former Mercury Theatre (BHD 57)

Pitt Street Buildings - Leo O'Malley (BHD 47)

Naval & Family Hotel (BHD 49)

Hallensteins Building (BHD 50)

Norman Ng Building (BHD 51)

Pitt St Methodist Church & Hall (BHD 80)

Former St John's Ambulance Station (BHD 76)

Former Pitt St Fire Station (BHD 12)

Pitt Street Fire Station (BHD 77) (status requested)

Wembley Building, 59 Pitt St (BHD 231) (status requested)

Hope Town Alpha (BHD 13)

The Dentists Chambers 65 Pitt St (BHD 230)

Former Men's Toilets, Beresford St (BHD 236)

52. These buildings are all identified in Appendix A of the BHA and will (if practicable) be subject to pre and post construction surveys and if necessary mitigation action will be undertaken.
53. The submitter questions the absence from Appendix A of, Hope Town Alpha (# 13) and former Men's Toilets, Beresford St (# 236). It is my understanding the vibration and settlement is not expected to affect Hopetown Alpha. I have discussed the former Beresford toilets elsewhere in my evidence. The method of assessment of settlement is covered in Mr Stevenson's evidence. It is my understanding that all buildings/structures immediately adjacent or within the settlement contours will be monitored.
54. There appears to be no confusion between the Build Heritage & Archaeological Expert Reports regarding the location of the "former Wesleyan Chapel, Hope Town Alpha and current Fire Station". None are currently expected to be affected by the CRL works and it is correct that the former Wesleyan Chapel is not being affected by the Karanghape Rd Station.

Submission 97 (The Roman Catholic Bishop of the Diocese of Auckland)

55. This submission covers 2 sites 1) St Patrick's which is adjacent to and 2) St Benedict's which is within the NoR corridor Site. The key components of each site include:

St Patrick's Site:

St Patrick's Square, Cathedral of St Patrick & St Joseph

2 St Patrick's Square, (30 Hobson St) Liston House

43 Wyndham St, Presbytery for the cathedral

St Benedict's Site:

1A & 1B St Benedict's St, St Benedict's Church & Presbytery

2 St Benedict's St, Mixed use – Catholic, commercial and parking activities

3 St Benedict's St, House

56. The submitter is concerned that the construction of the CRL will have adverse effects on:

The use of the land and above buildings;

The structural integrity and heritage fabric of the buildings on these sites; and

The further development of parts of the above sites, particularly the land at 2 & 3 St Benedict's St where redevelopment is a distinct possibility.

57. This latter concern is not a heritage concern. The CRL is unlikely to affect the heritage value of these places. These areas not one of the 56 places identified as having the potential to be affected but this is an engineering matter that is addressed by Mr Stevenson (para. 61-65).

Submission 87 (St Patrick's Cathedral, Auckland) – also refer Sub 151

58. This submission notes that the Auckland Catholic Cathedral falls within the 200m elected study area but is not identified. Our base map and initial scoping included the Cathedral. The map referred to only shows Built Heritage that has been identified as being potentially directly affected. The effects on this building have been considered and findings indicate that the heritage significance of the Cathedral building will not be affected by the CRL works or operations.

Submission 65 (St Benedicts Parish, Newton) – also refer Sub 151

59. This submission states neutral support for the CRL but expresses concern over the potential effects on their property, an identified historic building (St Benedicts Church complex) in St Benedicts St. The submission notes that “the Parish welcomes the opportunity to enter into discussion with Auckland Transport in the interest of ensuring the above concerns are appropriately addressed.”
60. I agree with the matters raised by the submitter. Further consultation is intended, and any activities that may affect this property will (where

practicable) be carefully managed in accordance with the NOR conditions as already outlined in my evidence.

Submission 100 (Mr Tony Mills & Mrs Kaye Mills)

61. This submission generally supports the CRL but expresses concern over the potential effects CRL construction works and operations will have on their property, an identified Building Heritage item, (CAC Building) at 26 Normanby Rd (ref. 315). The submitters would like their concerns satisfied before providing their full support.
62. I agree with the matters raised by the submitters. Further consultation is intended, any activities that may affect this property will (where practicable) be carefully managed in accordance with the NOR conditions as already outlined in my evidence.

Submission 93 (L & C Holdings Ltd.)

63. This submission relates to the former Hallenstein Brothers Building, 246-254 Karangahape Road (BHR #50). The submitter is concerned with the structural effects the CRL work around the Karangahape Rd Station will have on their identified historic place along with disruption to tenants due to construction works. These are very similar to the issues raised by many other submitters and my response is the same as set out above.

Response to Planner's Report

64. I have read the parts of the Planner's Report on the NOR that are relevant to my experience and raise concerns in respect to effects on Built Heritage. Issues have been raised about several aspects of heritage management. In this section of my evidence I will address these.

Martha's Corner

65. The NoR is proposing the potential demolition of Martha's Corner (#142) and part of the adjacent building (#163) as a worst case scenario. From my investigations, and taking into account its values, I consider demolition of these buildings is not an unacceptable outcome from a heritage perspective, if there is no other realistic option.

66. The Planner's Report does not support the demolition of Martha's Corner and changes to conditions are recommended to prioritise adaptive reuse in the first instance. I agree with this approach and a condition prioritising the adaptive re-use of the building at Martha's corner is proposed.
67. When considering this issue it is important to appreciate that at this stage of the project we are focusing on corridor protection, potential effects, and project feasibility along the proposed route. Mr Fellowes outlines the likely project requirements at this location. Until we receive more detailed station design and construction methodologies we cannot be more specific about what is to occur here. Setting an appropriate condition around the process to establish the best outcome for the building, within the design constraints of the project, is therefore the best approach at this stage.
68. It is stated in the Planners report that an appropriate level of adaptive re-use would include retention of the street façade, in three dimensions, where it turns the corner. It is further suggested that floor levels in any new building should align with the original floor levels of the building. Where possible, fabric behind the façade should be retained as well.
69. The Planner's Report notes the outcome for the building may involve adaptive re-use as part of station works, or that it may be demolished. They suggest that a full heritage assessment is needed and that if demolition is to be the outcome, then Council expects the design of a new station to be of sufficient quality to support the Civic Theatre and the Smith and Caughey's building by responding to this historic setting.
70. Making a commitment to a specific outcome is problematic and likely to be counter-productive at this early stage. The current station entrance design in this location indicates that demolition is likely to be required and should therefore at least be contemplated by conditions. However best practise is that demolition of historic heritage should be a last resort. There are significant challenges to adaptive reuse of the building, and because of the building design and internal layout, the extent of re-use requested by AC is also likely to be overly optimistic.
71. Auckland Transport intends to work on the station entrance design in this location further to ascertain the extent to which (if at all) the

building can be retained and adaptively reused. If demolition is required I agree any redevelopment will need to be sensitive to the site and context.

72. I recommend, and AT agrees, that a condition framework should be set up requiring demolition be a last resort, that adaptive re-use be properly considered, and that if the building is to be demolished any replacement respects the heritage values of the site and its context.

Albert Street Bluestone Wall

73. Excavations for the two tunnels will occur between the Albert Street Bluestone Wall and the western side of the Street.
74. Due to its location to the eastern side of Albert Street, the Bluestone wall can be retained and protected during construction. The best method for retaining and protecting the wall will rely on more detailed tunnel design and input from the construction company at the time detailed design is undertaken. In the meantime more destructive investigation could be undertaken to find out more information regarding the wall's condition and construction and to set in place a process by which the best method to retain and protect the wall during construction is realised. The results of this investigation and process would be a set of conservation methods that ensure the best outcome for the wall.

Former Beresford Street Toilets

75. The report identifies that the Karangahape Road Business Association (submission 68) has noted the absence of the former Beresford Street Toilets from Appendix A of the Built Heritage report, and has requested clarification of the status of that building.
76. This structure is very likely to be demolished as part of the Karangahape Road Station. It is discussed in the BHR (ref Sec. 7.6.1.3) but is missing from Appendix A. This was an oversight on my part.
77. It is my understanding that there is no practicable way to retain this structure and that it will be documented and removed. Under the

mitigation strategy outlined in the BHR acknowledgement of the former toilets will be appropriately undertaken and opportunities to reuse any heritage fabric will be identified.

Building condition surveys

78. The Planners Report also recommends that draft condition (22) be amended to specify that Building Condition Surveys to be undertaken under draft condition (41) need to include pre- and post-construction monitoring of those buildings and structures. I agree and this is in accordance with the mitigation offered by AT and is covered by Mr Stevenson in his evidence (para. 44).
79. It is also noted that for the sake of clarity the condition would benefit from the inclusion of a direct reference to Appendix A to the Built Heritage report, being the list of built heritage buildings and structures that have been identified for Building Condition Surveys. It is also noted that draft condition (22)(e) needs to be amended to state that damage to built heritage buildings and structures will be repaired by AT.
80. I agree with these recommendations and they have been included in updated conditions.
81. Auckland Council's Heritage Unit has noted the need for the preparation and implementation of a Historic Heritage Management Plan that should be prepared in consultation with Council. I am not sure what the practical use of this will be but consider that the mitigation strategy outlined by the BHR and the proposed consent conditions cover this work satisfactorily.

Response to Council Built Heritage Specialist Report

82. I have read the Built Heritage Specialist's Report lodged to the NOR relevant to my experience that raises concerns in respect to effects on Built Heritage. In this section of my evidence I will address the points that have been raised by this report.
83. The ACBHIT strongly supports the current proposal. It considers the tunnelling methodology and proposed route option represents an approach with the least potential environmental effect on historic

heritage generally, and on built heritage in particular. Further reasons include:

- (a) The CRL supports a strong relationship to the history of establishing public transport in Auckland since the 1930's;
- (b) It is considered environmental sustainability and as such is good conservation architecture practice including the reduction of car traffic, increase of pedestrian activity and opportunities for further appreciation and understanding of Auckland City's built heritage;
- (c) Clearly, the construction of the CRL is likely to deliver major environmental sustainability for the Central Area that will more than offset any loss of heritage buildings along the route. This is clearly a benefit of the CRL which I think is valid. Key issues relating to built heritage raised by Auckland Council Built Heritage Implementation Team:
 - i. Worldwide, there is considerable experience available with regard to such systems, 184 cities have underground rail system similar to what is being proposed as part of the CRL work plan;
 - ii. Deep tunnelling is generally thought to cause negligible vibration and settlement effects, although this varies with local geology;
 - iii. Cut and cover for the construction of stations and shallow tunnels generally has greater potential for effects on above ground buildings. The engineering of foundation underpinning works and shoring works are of key importance here;
 - iv. The construction of risers and above ground facilities for stations deep underground also has the potential to effect buildings above ground; and
 - v. Local experience in tunnelling, which has previously occurred close to the tunnels of the CRL, is available for reference.

Assessment of the effects of the CRL on heritage buildings

84. The report considers that Auckland Council District Plan controls are considered adequate to manage effects on scheduled buildings.
85. Understandably, the Auckland Council Built Heritage Implementation Team (ACBHIT) assessment gives emphasis to heritage buildings that are scheduled in the District Plan over those that are not.

Description of effects

86. The ACBHIT considers the potential effects on the buildings identified in the BNR as being potentially subject to either slight or slight to moderate settlement and vibration to be as follows:
- (a) Settlement and vibration due to tunnelling may lead to cracking of building fabric:
 - (b) Cracks will then need to be filled, usually by repointed brickwork, or repairing damaged plaster;
 - (c) In rare cases there may be the need to reconstruct sections of damaged brickwork; and
 - (d) The assessment of the extent of settlement and vibration effects has been undertaken by engineers skilled in the domain, and this is appropriate.
87. They have concluded, as I have, that the CEMP will be the key management tool in mitigating these effects. They have agreed that the proposed mitigation measures are appropriate in terms of the preservation of built heritage, and have the support of the built heritage implementation team.
88. The ACBHIT is concerned about the six items of Built Heritage that are potentially more significantly affected by the works, four of which are scheduled in the District Plan as follows:

| BHR # | address | Description | Known as | nor allows for | District plan identification |
|-------|----------------------------|---|---------------------------|---|------------------------------|
| 91 | 12 Queen Street | Former CPO - Britomart Transport Centre | Central Post Office | Not covered by CRL NoR - covered under existing designation | yes |
| 8 | 76-86 Albert St | Historic Toilets, etc under roadside | Albert St Toilets | demolition | yes |
| 142 | 51-53 Victoria Street West | Martha's Corner | Martha's Corner | demolition | yes |
| 153 | 42 Wellesley Street | Griffiths Holdings Building | Griffiths Building | demolition | no |
| 236 | 2 Beresford Square | Former public toilets | Beresford Toilets | demolition | no |
| 130 | 223-227 Symonds Street | terraced shop residence | Symonds St shop/residence | partial demolition | yes |

89. ACBHITs assessment identifies that of the six items, the following two will be demolished for the CRL works:

Albert St Toilets, scheduled Cat B

Former Beresford Street Toilets, not scheduled

Three others may be subject to adaptive reuse or potential demolition. These are:

Martha's Corner and Building

Griffiths Holdings Building, within a character overlay

223-227 Symonds St, within a character overlay

90. The former Central Post Office (Scheduled Cat A) is considered a special case because the Council considers it to be covered by an existing designation and it was not included in the assessment. Putting aside the fact it is not within the ambit of present NoR, the foundations have already been constructed to accommodate the proposed works and the proposal is unlikely to further affect the heritage values of this building.

Methodology

91. The ACBHIT assessment asserts that the built heritage study undertaken by Salmond Reed, does not distinguish adequately between buildings that may suffer from settlement and vibration effects, and those that will be more significantly affected by station building. Thus it is difficult to fully assess the significance of the heritage losses that will occur as a result of the proposal.
92. This is in part covered in Sec. 9.2 of the BHR. Properties were identified as being affected or potentially affected. A description of the likely extent of effects is provided at paragraph 12 above. The Council has stated that in order to rectify this situation a request for information regarding the heritage buildings that will be demolished was made in a memo dated 19 September 2012. I assume that the table I have copied from the report (see page 23) is their current understanding of the buildings that may potentially be demolished to give effect to the proposal – if so, I confirm it is correct.
93. It is important to understand that apart from the buildings that may be demolished or directly and substantially affected, pre and post construction surveys will be undertaken and damage (if any) will be rectified.
94. The ACBHIT notes that in usual resource consent processes the demolishing of a scheduled heritage building would not be supported by Council unless a detailed Heritage Impact Assessment (HIA) is undertaken.

95. The HIA would evaluate the proposed works against the relevant heritage criteria given in the current District Plan and would include:
- i. the consideration of other options that might avoid demolition;
 - ii. an accurate drawn record of the building to be demolished;
 - iii. recent and historical interior and exterior photography; and
 - iv. a history of the land the building sits on and a history of the building.
96. In the absence of additional requested information, and in order to fully and accurately assess the significance of these buildings it is said that further information is needed.
97. The Council notes that demolition of scheduled buildings is a restricted discretionary activity, and that the criteria associated with this in the district plan have not been addressed by Auckland Transport anywhere in their assessment.
98. Auckland Transport is not seeking resource consent to demolish the buildings. In the section that follows I discuss the significance of these buildings.

Outline of Effects on Buildings not scheduled in the Auckland Council Operative District Plan.

Building Heritage #236: The historic toilets, under the road at 2 Beresford St

99. These toilets underwent a major refurbishment in the 1990's. Little original fabric is reported to survive. It is my recommendation that prior to demolition the building is fully documented and a condition is placed on the NoR requiring appropriate reuse or interpretation of the structure somewhere in the new station if practicable.

Building Heritage #153: The Griffiths Holdings Building

100. The building has undergone considerable internal modification, and its original shopfronts do not survive. There are signs of structural issues. Cracking is present in brickwork and there is spalling concrete in places.

101. The heritage significance of this building is largely derived from its location on Wellesley St. It is close to some lovely interwar period buildings, such as the Civic Theatre and the Smith and Caughey's building. While it has little significance in its own right, it does make a minor contribution to a group of important buildings. The important matter to consider here is that any redevelopment should at least not detract from, and would ideally enhance the current urban setting. With appropriate urban design inputs and controls I have no doubt that the desired result will be adequately achieved.

Outline of Effects on Buildings scheduled in the Auckland Council Operative District Plan

The Men's Toilets, Albert Street, City (Durham Street intersection)

102. The Council's Built Heritage Specialist has noted that during a site visit they observed that there is little remaining of the original fabric that relates to the time when the building opened. Fixtures, fittings and the screen at the entrance are now in welded mild steel rather than wrought iron and appear to have been added recently. There are some painted decorative screens between cubicles that are original. It may be that these could be reused elsewhere in the CRL. Those observations are consistent with my own assessment.
103. The Council considered that insufficient information is available to undertake a full assessment against the district plan criteria. In the absence of this information, Council is reluctant to support the demolition of this building. Given my assessment of the condition of this item, and the practical constraints that mean there is no way to avoid demolishing the toilets, I do not agree with their reticence. I would like to make it clear that I have worked closely with the project design team and am satisfied that all attempts have been made to find a solution that avoids demolition. Unfortunately this has not been successful. As with the Beresford Square toilets, it is my recommendation that prior to demolition the building is fully documented and a condition is placed on the NoR requiring appropriate reuse or interpretation of historic materials if practicable.

Building 142: Martha's Corner

104. The Built Heritage Specialist's Report notes that demolition of this building is a restricted discretionary activity. The criteria for restricted discretion are given in clause 5.6.3.1.
105. The report writer considers that insufficient information is available to undertake a full assessment against these district plan criteria. The building is identified as significant and the built heritage implementation team does not support demolition of this building.
106. I have commented on the significance and recommended options for reuse of Marthas Corner in the section of my evidence responding to the Planners report.

Building 130: 229-231 Symonds St

107. This building is included as a character defining building in map C08-31. Demolition of character defining buildings is a restricted discretionary activity.
108. The Council considered that insufficient information is available to undertake a full assessment against the district plan criteria. They acknowledge that the street façade, and at least the front two rooms of this building, will remain so that it is likely that the criteria would be met. The agreed mitigation of any loss through detailed recording and opportunities for restorative change would be a minimum expectation. This is covered in the mitigation principles outlined in the BHR Sec 7.4-7.6.

Proposed conditions

109. Auckland Transport has proposed a set of conditions and I have been involved with their production. We have considered input from submitters including the HPT and Auckland Council Heritage Unit and made amendments to the proposed conditions where appropriate.

110. The proposed conditions are appended to the evidence of Fiona Blight. I have reviewed the draft conditions and in particular those directly related to my expertise and consider that they are appropriate to give effect to the principles and undertakings recommended in my evidence, to mitigate the effects on the Built Heritage of the CRL and to address reasonable concerns raised by submitters.

Bruce Mitchell Petry

02 July 2013