Before the Board of Inquiry Waterview Connection Project

in the matter of: the Resource Management Act 1991

and

in the matter of: a Board of Inquiry appointed under s 149J of the

Resource Management Act 1991 to decide notices of requirement and resource consent applications by the NZ Transport Agency for the Waterview Connection

Project

Rebuttal evidence of **Dr Rodney Clough (Archaeology)** on behalf of the **NZ Transport Agency**

Dated: 1 February 2011

Hearing start date: 7 February 2011

REFERENCE:

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REBUTTAL EVIDENCE OF ROD CLOUGH ON BEHALF OF THE NZ TRANSPORT AGENCY

INTRODUCTION

- 1 My full name is Rodney Edward Clough. I refer the Board of Inquiry to the statement of my qualifications and experience set out in my evidence in chief (*EIC*) (dated 8 November 2010).
- I repeat the confirmation given in that statement that I have read and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court.

PURPOSE OF EVIDENCE

- The purpose of this rebuttal evidence is to respond to certain aspects of the evidence lodged by submitters. Specifically, my evidence will respond to the evidence of:
 - 3.1 Ms Marion Stuteley on behalf of Auckland Council (Submitter No. 111-11);¹
 - 3.2 Ms Wendy John on behalf of Friends of Oakley Creek (Submitter No. 179-1);
 - 3.3 Mr Peter McCurdy on behalf of Star Mills Preservation Society (Submitter No. 199-1);
 - 3.4 Mr Errol Haarhoff on behalf of Living Communities and North Western Community Association (Submitter Nos. 167 and 185-1);
 - 3.5 Ms Melean Absolum on behalf of Living Communities (Submitter No. 167-1);
 - 3.6 Mr Bill McKay on behalf of North Western Community Association (Submitter No. 185-1);
 - 3.7 Mr Robert Black on behalf of Waterview Primary School Board of Trustees and Ministry of Education (Submitters No. 175 and 176-1); and
 - 3.8 Mr Pita Turei on behalf of Te Kawerau a Maki (Submitter No. 241-1).
- 4 In addition, I will comment on relevant aspects of the section 42A Report prepared by Environmental Management Services (*EMS*) dated 7 December 2010 (*Section 42A Report*) and the Addendum Section 42A Report dated 20 December 2010 (*Addendum Report*).

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References are to the Submitters' evidence as listed on the EPA website.

INVOLVEMENT OF AUCKLAND COUNCIL HERITAGE EXPERTS IN DETAILED PLANNING

(Marion Stuteley)

- Ms Stuteley² seeks the amendment of Archaeological condition ARCH.5 to include specific reference to consultation with the Heritage Manager, Environmental Services, Auckland Council regarding:
 - 5.1 The plan that outlines the areas to be protected within the Oakley Inlet Heritage Area, and the extent and method of construction proposed;
 - 5.2 The proposed remedial/restoration work specification for the basalt walls, wheel pit and bridge abutments in the Oakley Inlet Heritage Area; and
 - 5.3 The proposed vegetation management plan for the Oakley Inlet Heritage Area.
- I support the amendments to condition ARCH.5(a), (e) and (f) proposed by Ms Stuteley, with minor amendments.
- A copy of the amended archaeological condition ARCH.5 now proposed by the NZTA is set out in **Annexure A** to my rebuttal evidence (shown in blue bold text).

INVOLVEMENT OF COMMUNITY GROUPS IN DETAILED PLANNING

(Peter McCurdy)

- Mr McCurdy³ of the Star Mills Preservation Group submits that a number of specified (and possible other) community groups should be consulted "through and beyond the consent, design and construction periods" and that this should be written into all of the conditions. In relation to heritage matters, I support the continued involvement of the relevant community groups to the extent practicable, and consider that this is already well accommodated in the proposed conditions.
- I note that proposed Social condition SO.2 provides for consultation with the "Community Liaison Group, Working Liaison Group, NZHPT, recreation users and other users representatives" in the development of the Open Space Restoration Plans, including the Waterview Reserve Restoration Plan (which covers the Oakley Inlet Heritage Area). Under proposed Public Information condition PI.6,

M. Stuteley (Submitter No. 111-11) paragraphs 3.2 and 4.5.

P. McCurdy (Submitter No. 199-1) paragraphs 2.6, 2.14.

- the Community Liaison Group will have the opportunity to review and comment on the Oakley Inlet Heritage Plan.
- Local heritage groups (such as the Star Mills Preservation Group and the Friends of Oakley Creek) would be part of the Community Liaison Group provided for in proposed Public Information condition PI.5. These groups would therefore be involved in developing detailed plans for the protection, restoration and vegetation management of the Oakley Inlet Heritage Area.
- 11 Their involvement in the detailed planning could also be ensured through Auckland Council's Heritage Manager. He/she will be specifically consulted under the amendments to Archaeological condition ARCH.5 proposed by Ms Stuteley.
- 12 I do not therefore consider that any further amendments to the proposed conditions are required.

PEDESTRIAN BRIDGE OVER OAKLEY INLET

(Wendy John, Peter McCurdy)

- 13 Ms John has withdrawn the Friends of Oakley Creek's earlier support for the proposed pedestrian bridge⁴ over Oakley Creek due to concerns about the potential for degradation of the Waterview Inlet heritage site from increased human activity in the area, and argues that it should be removed from the relevant plans. Mr McCurdy⁵ also expresses concerns about potential risks if access to the heritage sites is made too easy.
- I strongly disagree that the proposed bridge would impact negatively on the heritage values of the Oakley Inlet Heritage Area, as the purpose of the bridge is to restore the historical connection between the separate parts of the Oakley Inlet Heritage Area on the northern and southern banks, as well as to improve public access to and appreciation of the historic site.
- In general, I consider that the best protection for heritage sites is achieved through identifying their values to the public, in combination with improving their amenity value and caring for them through appropriate maintenance regimes. At present, there is very little public awareness of the existence and significance of this heritage site, and it is in a deteriorating condition. I note that both sides of Oakley Inlet would be accessible to the public with or without the bridge, and consider that a bridge connection would (in addition to providing additional amenity and recreational

W. John (Submitter No. 179-1) paragraph 14.1.

P. McCurdy (Submitter No. 199-1) paragraph 2.13.

- opportunities), improve the ability of local residents to contribute to surveillance and protection of the site.⁶
- 16 Provided the area is well maintained and interpreted to the public, I do not consider the risk of degradation through public access to be high. Most features of the heritage area are fairly robust (e.g. the basalt walls, low earthen walls, pits and quarry remains), and appropriately sited boardwalks can be provided, where necessary, to protect more fragile elements, such as midden.
- 17 In conclusion, I consider that the restoration of this historical connection between the north and south banks of the inlet is a key element of the mitigation of Project effects on historic heritage values, and will provide a positive outcome both for heritage and for the public. Consequently, I remain in support of the inclusion of Archaeological Condition ARCH.6, as attached to my EIC.⁷

PROTECTION OF OAKLEY INLET HERITAGE AREA FROM CONSTRUCTION EFFECTS

(Peter McCurdy)

18 Mr McCurdy⁸ states in his evidence that Archaeological condition ARCH.5 (as amended in Annexure D to my EIC) requires further amendment to ensure the protection of the Oakley Inlet Heritage Area. He notes:

As it stands, the design of protection of archaeological sites is to occur **after** details of construction methodology and access have been determined. Some areas, notably that part of R11/2191 within 15 Cowley Street need to be off limits to construction prior to the access and methodology design.

- I note that the ramp placement has been designed specifically to avoid or minimise impacts on the defined extent of the Oakley Inlet Heritage Area. I would expect access to be largely confined to the areas west of Ramp 2 and east of Ramp 3, and the site within 15 Cowley Street to be completely avoided.
- However, I acknowledge Mr McCurdy's concern with the wording of Archaeological condition ARCH.5, and suggest that it is amended as shown in **Annexure A** to my rebuttal evidence (the amendments to ARCH.5(a) proposed by Ms Stuteley referred to above are also included). The new wording resulting from Mr McCurdy's evidence is shown in bold below:

The CPTED (Crime Prevention Through Environmental Design) aspects are addressed in the rebuttal evidence of Mr David Little.

⁷ This is also shown in Annexure A to my rebuttal evidence.

⁸ P. McCurdy (Submitter No. 199-1) paragraph 2.12.

(a) In determining the details of construction methodology and site access, NZTA will ensure that there is no impact on sites R11/2202, R11/2203 and the main features of site R11/2191 (the basalt walls, boiler, building foundations and platforms). When the details have been determined, a plan will be prepared in consultation with the Project archaeologist that outlines the areas of archaeological value to be fenced off and protected from any adverse effects during the construction process. The Heritage Manager, Environmental Services, Auckland Council shall be consulted in the drafting of the plan and shall certify that the extent and method of fencing will protect the areas of archaeological value prior to commencement of construction works within the area. This plan will be added to the Archaeological Constraints layer in the GIS layers included as an Appendix of the ASMP in the CEMP.

ADDITIONAL HERITAGE ITEMS

(Wendy John, Robert Black)

- Two additional heritage items have been identified in the evidence of Ms John and Mr Black. Ms John identifies natural basalt columns lining Oakley Creek in Sector 9. Ms John explains that these columns were the result of blasting to divert the creek in the 1930s. She submits that these columns are an important heritage feature and their removal should be avoided, or if affected by the proposed stream realignment, should be recreated in the new stream alignment.⁹
- I have visited this area again and note that the columnar basalt is exposed in eight locations along the stream, often in a broken condition. While these features may be of some geological interest as the columnar structure of the old lava flow has been exposed by blasting, I do not consider them to be particularly significant from a historical perspective as they are a by-product of a relatively recent stream realignment exercise. I understand that some of these will be unaffected. (For a more detailed discussion refer to the rebuttal evidence of Mr Tim Fisher). I would also note that these exposures are common along Oakley Creek and visible on a much larger scale in the quarry walls within the Oakley Inlet Heritage Area, and that much of this will be preserved. Therefore I do not consider it necessary to recreate the examples that are to be removed, especially as better examples will remain in situ elsewhere.
- Mr Robert Black¹¹ identifies a stone wall in the grounds of Waterview School built by the Returned Servicemen prior to the opening of the school in 1950, and submits that the wall should be protected. I

⁹ W. John (Submitter No. 179-1) paragraph 11.10 – 11.11.

¹⁰ Annexure D to Rebuttal Evidence of Tim Fisher.

R. Black (Submitter No. 175) paragraph 28 and point 15 (Relief Sought).

consider this item to be of local heritage significance, but I understand that it will not be affected by the Project.

EFFECTS ON SITES IN OAKLEY ESPLANADE RESERVE

(Wendy John)

- 24 Ms John's evidence¹² expresses concern about the potential for effects on 'unregistered heritage features' in the form of old 'dray' or 'farm' roads along Oakley Creek near Construction Yard 7. She considers that these areas should be identified and Construction Yard 7 should be altered to minimise a negative impact on these features.
- These features are in fact recorded as part of a possible mill site (R11/2205), most of which is located on the eastern bank of the Oakley Creek. Those features recorded on the western bank are located just outside the footprint of Construction Yard 7, and would therefore not be affected by the Project.
- In addition, under proposed Archaeological condition ARCH.2(d), any ground disturbance works in Construction Yard 7 will be monitored by the Project Archaeologist in case any further remains are exposed. This would provide the opportunity for protection or, if that is not possible, recording of such features in accordance with the process set out in proposed Archaeological condition ARCH.3, and any relevant conditions of an Authority issued by the New Zealand Historic Places Trust (NZHPT) under the Historic Places Act 1993 (HPA).

FURTHER SURVEY AND HERITAGE ASSESSMENT

(Bill McKay)

27 Mr McKay¹³ states in his evidence that the historical and archaeological areas along Oakley Creek and in particular, Maori sites and the Star Mill, need further assessment and design. I do not consider that there is any need for further assessment, as the archaeological survey and assessment have been thorough and comprehensive. This is recognised in Ms Stuteley's evidence on behalf of Auckland Council:

The applicant has undertaken a thorough assessment of the heritage matters for the proposed works on State Highways 20 and 16.¹⁴

W. John (Submitter No. 179-1) paragraphs 14.2-14.5.

¹³ B. McKay (Submitter No. 185-1) paragraph 6.18.

¹⁴ M. Stuteley (Submitter No. 111-11) paragraph 3.1.

LOCATION OF NORTHERN VENTILATION BUILDING

(Errol Haarhoff, Melean Absolum)

Two witnesses, Professor Haarhoff¹⁵ and Ms Absolum,¹⁶ suggest that a better location for the northern ventilation stack would be between the motorway ramps in Sector 5, although a precise location is not proposed. I note that the Oakley Inlet Heritage Area occupies a large part of the area between the motorway ramps, and it would not be appropriate to site a ventilation stack there from a heritage perspective, even if feasible from functional and engineering perspectives.

RECOGNITION OF THE CULTURAL VALUES ATTACHED TO ARCHAEOLOGICAL SITES

(Pita Turei)

- In his evidence on behalf of Te Kawerau a Maki Authority, Mr Turei¹⁷ seeks provision for iwi monitoring of archaeological and heritage sites because of the ancestral connection of Maori with these sites. I have already commented in support of Te Kawerau a Maki Authority's submission relating to archaeological monitoring and the incorporation of inbuilt design features to interpret the site (in paragraph 75 of my EIC).
- I consider that the NZTA's proposed Archaeological condition ARCH.1(d) should be amended to include more specific reference to consultation with iwi on monitoring requirements. This is now set out in **Annexure A**, and if this amendment is adopted, I consider that the monitoring issue will be adequately addressed. I note also that the conditions of any Authority issued by the NZHPT normally include a requirement that any archaeological work must be undertaken in conformity with any tikanga Maori protocols or monitoring requirements formally agreed to by the Authority holder and the relevant iwi group(s).
- I consider that the opportunity for Te Kawerau a Maki to achieve the incorporation of inbuilt design features to interpret the site is adequately addressed through proposed Open Space condition SO.2.
- 32 Mr Turei disagrees strongly "with the statement in the Archaeological report that although there is archaeological evidence, it is unlikely anything of significance will be found". 18 I would like to

¹⁵ E. Haarhoff (Submitter No. 167) paragraph 4.10.

 $^{^{\}rm 16}$ $\,$ M. Absolum (Submitter No. 167-1) paragraph 3.29.

¹⁷ P. Turei (Submitter No. 241-1) pp. 3 and 5.

¹⁸ P. Turei (Submitter No. 241-1) page 5.

clarify that my comment related to archaeological significance and not to any cultural significance that such remains might hold for tangata whenua. As stated on page 2 and in section 7.1 of my Report, my assessment did not include an assessment of Maori cultural values, which may encompass a wider range of values than those associated with archaeological sites. I have always acknowledged that remains with little archaeological significance may have higher cultural significance for Maori.

I would therefore reiterate my opinion that any unrecorded archaeology that might be exposed during development is unlikely to be of much <u>archaeological</u> significance, with the exception of any mill-related features close to Great North Road/Cowley Street, as stated in section 7.3.9 of my Report. It is unlikely that much unrecorded archaeology with the potential to provide significant information will have survived in light of the modifications to the landscape that have occurred and the detailed field surveys undertaken.

COMMENTS ON SECTION 42A REPORTS

I have reviewed the Section 42A Report and Addendum Report. In terms of matters of national importance under section 6 of the RMA (which include historic heritage in section 6(f)), the Report states as follows: ²⁰

...the extensive consideration of effects and methods adopted to avoid, remedy or mitigate along with our broad based consideration of the relevant statutory plans points generally to the Project being able to satisfy those specific matters (a)-(g)."

- I also note that no "topics for further consideration" are raised in relation to historic heritage in the concluding section 16 of the Section 42A Report or in section 3.7 of the Addendum Report.
- 36 The Section 42A Report acknowledges that recognition of the heritage and archaeological importance of the Oakley Inlet through conservation measures adopted during and post construction to retain the heritage values of the area is consistent with Part 5C of the Auckland District Plan Isthmus Section 1999.²¹
- 37 The Section 42A Report refers to submissions that there should be community inputs into the preservation and integrity of the archaeological and heritage features and sites around Oakley Creek

Assessment of Environmental Effects, Part G, Technical Report No. G.2. Western Ring Route – Waterview Connection Assessment of Archaeological Effects prepared by R. Clough, S. Macready and S. Bickler.

²⁰ Section 42A Report, paragraph 15.8.

²¹ Section 42A Report, paragraph 11.2.2.

inlet, and notes that conditions proposed by the NZTA and additional conditions sought by the Auckland Council "could effectively cement public involvement in the local area development planning process to a greater extent than initially proposed", and that "many of these matters would be the focus of further detailed consultation through this process". ²²

- As outlined above in paragraphs 9 to 11 of my rebuttal evidence, I consider that the proposed Public Information conditions PI.5 and PI.6 and Open Space condition SO.2 will ensure that there is sufficient ongoing input by heritage and other community groups into the preservation and management of the Oakley Inlet Heritage Area and will meet the concerns of the various submitters on this issue (as identified in the Section 42A Report).
- 39 The Section 42A Report correctly notes that a HPA Authority will also be required for the proposed works.²³ The NZTA's intention is to apply for an Authority when the Board of Inquiry has issued a decision on the NoR and resource consent applications.²⁴
- In any event, under the HPA, works that affect or are likely to affect archaeological sites cannot proceed until an Authority has been granted by the NZHPT. This is acknowledged in the proposed Advice Note (see Annexure A).

Dr Rodney Clough February 2011

²² Section 42A Report, paragraph 10.6.42.

²³ Section 42A Report, paragraph 13.2.2.

Which I note the Section 42A Report supports (see paragraph 13.2.4).

ANNEXURE A: AMENDED ARCHAEOLOGICAL CONDITIONS²⁵

ARCH.1

The NZTA shall complete, and implement through the CEMP, the Archaeological Site Management Plan (ASMP) submitted with the notice of requirement, to include, but not be limited to:

- a) Identification of the Project archaeologist, their role and responsibility on the Project;
- b) Who reports to the Project archaeologist;
- c) Specific sites requiring supervision, and measures to be undertaken to protect and manage these sites;
- d) Whether NZHPT and/or Auckland Council heritage and/or iwi supervision is required for the specific site (the latter to be determined through consultation with the relevant iwi groups); and
- e) Accidental discovery protocols in the event that unknown archaeological sites are uncovered.

ARCH.2 The NZTA shall employ at its expense a qualified archaeologist (the Project archaeologist) who shall be on site to monitor all initial earthworks, including surface stripping of the site, for all specific areas identified in the ASMP to establish whether any sub-surface archaeological features are present. This includes, but is not limited to, the following areas:

- (a) All unmodified areas in the vicinity of Rosebank Road;
- (b) All works in the vicinity of the "Oakley Inlet Heritage Area", located adjacent to the Great North Road Interchange;
- (c) Works in the vicinity of two midden sites (recorded R11/2214 and R11/2215) within Great North Road Interchange, and all previously unmodified areas near the banks of the Oakley Inlet:
- (d) Any ground disturbance works in Construction Yard 7 within Oakley Creek Reserve.

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The amendments in blue bold are those made to the November 2010 master set of conditions attached to Ms Linzey's 3rd EIC.

ARCH.3 If any archaeological sites, including human remains are exposed during site works, then the following procedures shall apply:

- (a) Immediately it becomes apparent that a possible archaeological or traditional site has been exposed, all site works in the immediate vicinity shall cease;
- (b) The site supervisor shall immediately secure the area in a way that ensures that any artefacts or remains are untouched and notify the Project archaeologist;
- (c) The Project archaeologist shall inspect the site to assess the relevance of the find, and then the Auckland Council shall be advised of the significance;
- (d) If the site is confirmed to be an archaeological site by the Project archaeologist, the site supervisor shall then notify tangata whenua, the New Zealand Historic Places Trust, and the Auckland Council that an archaeological site has been exposed so that appropriate action can be taken.

ARCH.4

In accordance with the ASMP, the following archaeological sites shall be fenced off and protected to the satisfaction of the Project archaeologist, prior to construction activities being undertaken:

- (a) Recorded sites R11/2504, R11/2505, R11/2506 and R11/2507, located on the northern boundary of the designation adjacent to the Rosebank Road peninsula.
- (b) Recorded site R11/2383 in the Oakley Creek Esplanade Reserve construction yard.

ARCH.5 In accordance with the ASMP, the following specific measures shall be implemented in the area identified as the "Oakley Inlet Heritage Area" (including recorded sites R11/2191, R11/2202, R11/2203 and R11/2459), located adjacent the Great North Road interchange:

- (a) Once details of the construction methodology and access requirements have been determined. In determining the details of construction methodology and site access, NZTA will ensure that there is no impact on sites R11/2202, R11/2203 and the main features of site R11/2191 (the basalt walls, boiler, building foundations and platforms). When the details have been determined, a plan will be prepared in consultation with the Project archaeologist that outlines the areas of archaeological value to be fenced off and protected from any adverse effects during the construction process. The Heritage Manager, Environmental Services, Auckland Council shall be consulted in the drafting of the plan and shall certify that the extent and method of fencing will protect the areas of archaeological value prior to commencement of construction works within the area. This plan will be added to the Archaeological Constraints layer in the GIS layers included as an Appendix of the ASMP in the CEMP.
- (b) All works in the Oakley Inlet Heritage Area area shall be monitored by the Project archaeologist;
- (c) Machine access to construction works in this area shall be planned so as to minimise adverse effects on archaeological features;

- (d) During and following removal of houses north of Cowley Street and west of Great North Road in the area where the mill workers' cottages and mill race were once located, investigations shall be undertaken to establish and record any archaeological remains that may have survived;
- (e) Remedial or limited restoration works should be carried out to the basalt walls, wheel pit and bridge abutment of the mill/tannery/ quarry site (R11/2191), to a specification prepared by a heritage professional, to ensure their long term preservation. The specification shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;
- (f) A vegetation management plan shall be prepared and implemented to remove vegetation that is damaging archaeological features in this area and to protect and enhance features with appropriate vegetation cover. This plan shall form part of the Waterview Reserve Restoration Plan (refer to ARCH.6 and SO.2) and shall be prepared in consultation with the Heritage Manager, Environmental Services, Auckland Council;
- (g) A pedestrian bridge linking the northern and southern banks of the Oakley inlet shall be provided in the original location of the historical bridge to restore the historical connection between the two parts of the Oakley Inlet Heritage Area and make both parts easily accessible;
- (h) Provide interpretative signage of the Oakley Inlet Heritage Area for public information and educational purposes.

ARCH.6 The Project archaeologist shall be made part of the Waterview Reserve Restoration Plan (refer Condition SO.1) development team to provide advice on long term management of the "Oakley Inlet Heritage Area". The Waterview Reserve Restoration Plan shall include provision for, as a minimum:

- (a) A pedestrian bridge linking the northern and southern banks of the Oakley inlet shall be
 provided in the original location of the historical bridge to restore the historical
 connection between the two parts of the Oakley Inlet Heritage Area and make both parts
 easily accessible;
- (b) <u>Interpretative signage of the Oakley Inlet Heritage Area for public information and educational purposes.</u>

ARCH.7 In accordance with the ASMP, any works to the dry stone wall (recorded site R11/2213) located on the north western boundary of the Great North Road Interchange, shall be minimised <u>as far as possible and managed</u> in accordance with the following: (a) If it is necessary to demolish part of the wall, the stone shall be used to repair the remainder of the wall. Any surplus shall be offered to Auckland City Council for use in repairing other historic stone walls. Appropriate reuse of any surplus stone will be determined following consultation with the NZHPT and Auckland Council. (b) The remainder of the stone wall shall be protected from construction machinery by the use of warratahs and an adequate buffer area prior to earthworks commencing. (c) The remainder of the stone wall shall be carefully cleared of vegetation growth and repaired where necessary to a specification prepared by a heritage professional employed at the expense of the NZTA. ARCH.8 All contractors and subcontractors working on the Project shall be trained on the archaeological requirements set out in the ASMP. Advice Any archaeological sites within the area affected by the Project shall not be modified or note disturbed in any way unless written authorisation has been obtained from the NZ Historic Places Trust.