Environmental Protection Agency
Waterview Connection Project:
Section 42A Final Addendum Report

Prepared For:
Environmental Protection Agency
PO Box 10270, The Terrace
Wellington 6134

7 March 2011
FINAL

ENVIRONMENTAL MANAGEMENT SERVICES Limited
Executive Summary

The purpose of this final section 42A Report is to reflect on and respond to where necessary the additional specialist section 42A reports, the submitters evidence, the NZTA rebuttal evidence and the proceedings of the inquiry hearing up to and including the conclusion of the day’s hearing session on Monday 28 February 2011.

We note that:

- Many of the issues raised in our previous reports have been responded to and clarified;
- NZTA advisers have reached agreement with submitters’ advisers on a large number of matters through the process of caucusing;
- In addition, agreement has been reached with a number of submitters including Waterview Primary School, Auckland Kindergarten Association and the Ministry of Education, Unitec, Kiwi Rail and the Te Atatu Pony Club, and matters have also been progressing with Auckland Council; and
- The changes agreed between the parties have been reflected in an expanding and evolving comprehensive set of conditions and management plans.

The focus of the inquiry has narrowed in part to issues based around mitigation and this further report therefore will best assist the Board by focussing on those issues.

In relation to specific matters we have formed the following opinions:

**Northern Ventilation Building and Stack**

The structure of buildings at ground level now proposed is broadly acceptable; however, there remain issues around detailed design and the location of the ventilation stack which require further consideration.

The Outline Plan of Works (OPW) process with enhanced consultation inputs as proposed is an appropriate process to resolve these matters for both the northern and southern ventilation buildings. However, we do suggest further refinement.

Consultation in Project ‘design’ is commendable, but we think this role should be formally recorded as a requirement under section 176A(d) being “Any other matter to avoid, remedy, or mitigate any adverse effects on the environment.” In this way the Auckland Council can expect to be fully informed on all elements of the design task considered by the parties when carrying out its own assessment responsibilities under the Act.

Three options for the position of the northern ventilation stack have been tested. We consider that the location of the stack should be determined through this hearing process with only detailed design of the structure left to the OPW process.

At this point in time it is not certain that a 15 metre stack will be acceptable in air quality terms. In the event that the stack is to be 15 metres we consider that on balance it should be located within the ventilation building complex as proposed by NZTA.

However, if the structure is to be 25 metres high we consider that the extra cost of locating the stack on the eastern side of Great North Road may be justified although further design and assessment of the effects at these locations, particularly ‘Alternative Option 1’ is
required before we would be in a position to make a firmer recommendation. We consider that there is potential to make the stack a feature adjacent to the reserve that has not been fully explored.

**Southern Ventilation Building and Stack**

We agree with the assessments that support ‘Option 3’ as having the least adverse effects. We acknowledge the expected extra construction costs of this option but given the cumulative effects of the Project in this location in our opinion this extra cost is justified.

**Sector 8 Cycleway**

We do not consider that construction of this cycleway is necessary to directly mitigate adverse effects from the Project. We note that Auckland Transport and NZTA are advancing arrangements to progress this as a separate project and/or as part of the Network Integration Plan and agree with the Applicant that this element should be delivered as a separately funded project.

**Other Connectivity Mitigation**

We consider that reasonable connectivity between Waterview and Point Chevalier / Eric Armishaw Park is to be maintained and enhanced by the Project and do not consider that further bridge connections are justified.

We consider that existing connections from Waterview to Unitec provide reasonable connectivity and that future improved connectivity may be achieved through further planned development of the Unitec campus reflected in the Structure Plan presented in evidence by Unitec.

**Open Space Mitigation**

We note that full agreement has not been reached with Auckland Council on open space mitigation and that the proposed conditions provide for a financial contribution in lieu of provision of sports fields at Waterview and Alan Wood Reserve. We consider that the community should have certainty regarding the location of sports field mitigation provided as part of the Project and therefore that the conditions should not provide for two different alternatives.

On balance we consider that the provision of sports fields within those reserves as proposed by NZTA better mitigates the local effects of the Project on those communities as opposed to the wider network approach. We note however that a 'hybrid' approach may be the preferred outcome, with development at Phyllis Reserve, but this is dependent upon a decision by the Board if the matter cannot be agreed with the Council.

**Coastal Issues**

We confirm that expansion of the Motu Manawa Marine Reserve is not within the jurisdiction of this Board. We also note that the parts of Traherne Island not required for transportation purposes could be subdivided and transferred to the Department of Conservation with the intention of vesting as reserve as a condition of this Project. However, we are not convinced that there would be material benefits for the protection and management of the island by requiring this.
Cumulative Effects

We consider that, subject to the opinions expressed above, the mitigation measures are appropriate to reasonably address the effects of the Project once constructed. However, we remain of the opinion that the cumulative adverse effects on the communities of Waterview and Owairaka/New Windsor during the lengthy construction period will be more than minor, possibly significant and that further initiatives to address this are warranted.

As a result, we suggest to the Board that if approval is to be given to the Project then this be subject to the establishment of a Community Trust Fund for the Waterview and Owairaka/New Windsor communities. The purpose is to fund community representation to NZTA during the construction period and also to fund specific community development and mitigation initiatives that relate to community effects during the construction period.

Conditions

We do not accept condition DC.1 should be “subject to final design”. This position now seems to be accepted by the Applicant.

We do accept condition DC.1 incorporating the term “in general accordance” with plans etc if all other conditions have adequate certainty and enforceability, and robust connections to management plans where relevant.

The Planning Caucus of 4 March 2011 has advanced the refinement of these conditions as noted above including circumstances where “as far a practicable” still may be appropriate.

Conditions DC.6-DC.9 would benefit from further review by the Planning Caucus if the Board, or indeed the Applicant and the parties could confirm the preferred location for both ventilation facilities. This could provide a more informed basis for condition framing to guide the community input enabled under the PI series of proposed conditions. Alternatively this could occur once the Board releases its draft report.
Table of Contents

1 INTRODUCTION ................................................................................................................. 1
  1.1 REQUEST ......................................................................................................................... 1
  1.2 LIST OF REVIEWED DOCUMENTS ..................................................................................... 1
  1.3 SCOPE AND LIMITATIONS IN EMS REPORTING ............................................................ 2
  1.4 ROLE OF REPORT ............................................................................................................. 2
  1.5 FORMAT OF REPORT ......................................................................................................... 2

2 PRELIMINARY MATTERS ...................................................................................................... 2
  2.1 OPENING LEGAL SUBMISSIONS ....................................................................................... 2
  2.2 MEMORANDUM OF COUNSEL OF 6 FEBRUARY 2011 .................................................... 4
  2.3 OUTCOMES FROM EXPERT CAUCUSING ....................................................................... 6

3 KEY ISSUES .......................................................................................................................... 10
  3.1 OVERVIEW ....................................................................................................................... 10
  3.2 GENERAL MATTERS CONCERNING THE DEFINITION OF THE PROJECT ..................... 10
  3.3 CONSIDERATION OF THE WIDER TRANSPORTATION IMPROVEMENTS THAT ARE OR COULD BE CONSIDERED PART OF THE PROJECT ...................................................... 11
  3.4 LOCATION, SCALE AND DESIGN OF VENTILATION BUILDINGS AND STACKS .......... 14
  3.5 RECLAMATION AND MANAGEMENT ISSUES ASSOCIATED WITH MOTU MANAWA MARINE RESERVE AND COASTAL MARINE AREA ......................................................... 17
  3.6 PROVISION AND IMPLEMENTATION OF AN OPEN SPACE RESTORATION STRATEGY TO MITIGATE EFFECTS ........................................................................................................... 18
  3.7 MITIGATION OF SPECIFIC/SECTOR BASED EFFECTS ...................................................... 21
  3.8 PARTNERSHIP ARRANGEMENTS BEING CONSIDERED BY THE APPLICANT .......... 22
  3.9 CONDITION SETTING AND PERFORMANCE ................................................................... 23

4 CUMULATIVE EFFECTS ......................................................................................................... 28
  4.1 OVERVIEW ....................................................................................................................... 28
  4.2 DEFINING UNMITIGATED EFFECTS .................................................................................. 28
  4.3 AN APPROPRIATE RESPONSE? ....................................................................................... 30

5 CONCLUSIONS ...................................................................................................................... 32

REPORT INFORMATION

© Environmental Management Services Limited 2011. This document and its contents is the property of Environmental Management Services Limited. Any unauthorised employment or reproduction, in full or in part, is forbidden.

Status of Report | FINAL

File Location | c:\users\murray\documents\h1072_waterview_boi_final_addendum2011\final_addendum_report_7march2011.docx

Our Ref | H1072

Author(s) | Murray Kivell
            Paul Thomas

Reviewer

Revision Dates | Authorised by:
1 INTRODUCTION

1.1 REQUEST

1.1.1 On 21 January 2011 the Board of Inquiry requested Environmental Management Services Limited (EMS) prepare a final Addendum to the Section 42A (s42A) Report. Subsequently the Board requested the Addendum be provided by 7 March 2011. The Board further requested Murray Kivell attend a Planning Caucus on 4 March 2011. The Caucus outcomes are also reported on.

1.1.2 The purpose of this Final Addendum Report is to consider the following further information provided by the various parties:

- The additional independent S42A Reports prepared to further inform the Board in its consideration of air quality, noise and ground settlement effects associated with the Project;
- The Submitters’ evidence received prior to Christmas 2010;
- The Applicant’s rebuttal evidence received 7 February 2011 and supplementary rebuttal evidence including Annexures A-G dated 10 February 2011, second supplementary evidence including Annexures A-I dated 26 February 2011 both prepared by Ms Linzey, supplementary evidence by Ms Wilkening concerning construction noise dated 28 February 2011 and two supplementary statements of evidence by Mr Gavin Fisher dated 17 and 28 February 2011;
- The joint caucusing reports including any changes to the conditions proposed by the Applicant, received over the period 28 January – 11 February 2011; and
- The supplementary evidence produced during the course of the hearing.

1.1.3 We have made our best endeavours to ensure the materials referenced as reviewed in this report present our contemporary understanding of the Project albeit some elements and design details remain in a state of flux pending the outcomes of negotiations between the Applicant and submitters and technical advisers.

1.1.4 This final report also reflects upon the course of the enquiry hearing up to the conclusion (but not the formal close of) the Applicant’s case on Monday 28 February 2011. In that regard Murray Kivell has attended a significant number of the hearing days and the most relevant parts of the hearing transcripts have been scanned.

1.2 LIST OF REVIEWED DOCUMENTS

1.2.1 The reports reviewed include:

- Four additional S42A Specialist Reports covering air quality (two reports) prepared by Emission Impossible Ltd, noise and vibration prepared by Malcolm Hunt Associates, and groundwater and settlement prepared by Earthtech Consulting Ltd;
- Seventy-one statements of evidence prepared by submitters as recorded on the EPA website;
1.3 SCOPE AND LIMITATIONS IN EMS REPORTING

1.3.1 We note that there has been an extensive process of caucusing which has narrowed the technical issues in dispute. We emphasize that our opinions are based on a synthesis of all the evidence that we have considered and is evaluative in nature.

1.3.2 We focus on understanding and considering environmental effects on an integrated basis, and the appropriateness of the conditions proposed from a general RMA perspective.

1.4 ROLE OF REPORT

1.4.1 This report (as part of a series of three independent s42A reports) is to assist the Board of Inquiry with its own examination of the issues by raising questions, providing comment, providing opinion where appropriate that confirms or changes our previous understandings on issues or details about the Project, and alerts the Board to new concerns arising from the submitter evidence, the rebuttal evidence and the caucusing exercises completed.

1.4.2 In particular, we have had regard to the cumulative effects on the Project in the context of the statutory framework required for the designation and resource consent decisions.

1.5 FORMAT OF REPORT

1.5.1 The report responds to these matters as follows:

- Chapter 2: Preliminary Matters;
- Chapter 3: Key Issues Assessment
- Chapter 4: Cumulative Effects; and
- Chapter 5: Conclusions
2 PRELIMINARY MATTERS

2.0.1 There are three matters which warrant a response, in part to ‘tie up loose ends’ and to ensure clarity around the residual key issues; they relate to:

- Matters raised in opening legal submissions, dated 7 February 2011;
- Responses to Memorandum of Legal Counsel, dated 6 February 2011; and
- Outcomes from Expert Caucusing.

2.1 OPENING LEGAL SUBMISSIONS

2.1.1 The opening legal submissions inform and summarise in a useful way the current elements of the Project including the elements subject to design refinement and mitigation refinement, and the intended third party agreements for the Project. Reference is made to the EMS Section 42A Report (7 December 2010) and Addendum (20 December 2010) and for the most part the responses provided by the Applicant are accepted based on our more current understanding of the Project details.

2.1.2 Two matters warrant further comment:

Reasonably necessary to achieve objectives - section 171(1)(c); Paragraph 222:

2.1.3 Reference is made to our assessment that caselaw interpreting the “necessity” test to require the consideration of ‘the best’ reasonable option for achieving those objectives. We did not say this at our paragraph 8.7 which is addressing the requirements of section 171(1)(b) as opposed to (c) and is quoted below:

‘8.7 Mindful of recent caselaw on this matter we note that the assessment has been comprehensive crossing several territorial boundaries and presents evidence that the Project is appropriate while it is not necessary to show that it is the “best”. We do note however that there is no specific Options Report that records or references supporting assessments or presents a single evaluation framework for the options assessments. Notwithstanding this, in our opinion the assessments that are summarised demonstrate that adequate consideration has been given to alternative sites and routes.’

2.1.4 We do not think that this differs from the position put by NZTA Counsel and witnesses.

2.1.5 The comment perhaps refers to our consideration of the requirements of section 171(d) in section 12 of the report where we state:

‘12.7 Necessity’ also brings into question alternatives which have also been considered in our Chapter 8. However, this is a different test which does imply a test of showing that it is the best reasonable option for those objectives. An extensive process of route and design testing and consultation has led to this work being proposed. We repeat our earlier qualification that the Applicant should provide fuller documentation to satisfy the Board on this matter. Further, while the documentation
incorporates extensive measures to mitigate the effects of the Project there are some areas that require further scrutiny.

12.8 Subject to these qualifications we are satisfied that there is no difficulty in meeting this test in general terms.”

2.1.6 On reflection, we should perhaps have placed greater emphasis on the word ‘reasonable’ rather than ‘best.’ The only case that we are aware of that assists with this is Takamore Trustees v Kapiti Coast DC [2003] 3 NZLR 496 where it was stated at paragraph 100 – 104 “this section requires an analysis of the nature of the project to see if there is anything about the particular work or project which means that it would be unreasonable to use an alternative site route or method.” This case was cited in the NZTA Memorandum of Counsel at footnote 10.

Conditions and Management Plans; Paragraphs 244-255:

2.1.7 In our Section 42A Report at section 14 we provided general comment on the proposed conditions and the supporting management plan approach. We did not question the overall merit of such an approach; to the contrary, in paragraph 14.2.6 it is stated:

“We agree that the use of Management Plans is an important planning technique for the successful implementation of large infrastructure projects...and this has generally been the practice since the Act was implemented.”

2.1.8 We did raise an expectation that the Applicant should demonstrate to the Board’s satisfaction that the consent conditioning and management plan process does incorporate objectives and performance outcomes and or standards that are measurable wherever possible, so the certification role and the scope of discretion held by the Auckland Council is as clear as possible. This is in the interests both of the Applicant and the Council, and was a matter the Councils also raised in their submissions. Furthermore, this gives transparency to the decision making processes for a community who is an ‘observer’ to these compliance processes. The reason for this is that it is in these communities’ environments where adverse effects of the Project will be received.

2.1.9 We were not dismissive of the Applicant’s endeavours to date, but were mindful that if effects mitigation is to be successful then the further design of the Project must be able to achieve the stated outcomes within the “environmental envelope” (or within the ‘edge effects’ that Mr Foster refers to in his rebuttal evidence).

2.1.10 We note that Board member Dunlop has specifically requested a review of management plans in relation to certainty of performance levels (Memorandum 17 February 2011) and this has been responded to by way of further supplementary evidence from Ms Linzey (1 March 2011). This in turn has been the subject of further caucusing and we discuss the issues remaining in this area in our section 3.9.

2.1.11 The other matters covered in opening legal submissions for which there are no further concerns (adopting the sub headings provided in legal submissions) are:

Separate Approvals Required

2.1.12 The Applicant has outlined their rationale for the timing of other statutory approvals in paragraphs 44-58. No outstanding issues remain.
Approval from requiring authorities with overlapping designations

2.1.13 Paragraphs 59-67 adequately inform on these matters. There are no remaining concerns.

Additional Consents Required

2.1.14 Paragraph 69 informs of the additional consents now required. There are no remaining concerns.

Subsequent Alteration to Designation – Reclaimed Land

2.1.15 The consenting process is now understood through the summary provided. There are no remaining concerns.

Outline Plan of Works

2.1.16 The reliance on the Outline Plan of Works (OPW) process for the final design of the northern and southern ventilation buildings and stacks is accepted as an appropriate process for confirming the detailed design of “these high profile elements of the Project” now that design criteria have been provided within the body of the proposed conditions along with a proactive role for the communities of interest (through the three Community Liaison Groups proposed) to contribute to these ‘detail’ matters. We discuss this particular aspect of the process further in section 3.9 Condition Setting and Performance.

2.1.17 However in our opinion the building form, location and height of the stacks should be resolved through this process and not through the OPW. If this is accepted some fine tuning of DC.8 criteria may be required.

2.1.18 We note that open space restoration plans are to be subject to specific approval (OS.1) and that otherwise we are comfortable with DC.6 which seeks to exempt the need for outline plans to be considered under section 176A for all other aspects of the Project.

Trial Embankment

2.1.19 The rebuttal evidence is accepted that the trial embankment can be undertaken within the envelope of the consents lodged with the application.

Concrete Batching Plant

2.1.20 The legal submissions and rebuttal evidence confirm that a new condition is proposed (CNV.9) to require the concrete batching plant to be enclosed and based on the expert caucusing this adequately addresses the concerns raised.

2.2 MEMORANDUM OF COUNSEL OF 6 FEBRUARY 2011

2.2.1 A range of technical matters were listed for clarification in a Board memorandum of 28 January 2011. A substantial number related to queries or points for clarification from the EMS s42A Report. Legal counsel has provided, as requested, “a concise response by way of a single document...with an indication of where more detailed responses may be found.”
2.2.2 Our equally brief response to the issues addressed by the Applicant (recorded as “A – Z” in the Memorandum of Counsel) is outlined in the following table.

2.2.3 Where there is general agreement or an agreed understanding of the matter or process this is simply recorded as “Acceptance”. Brief comment may then follow. Topics highlighted/shaded (including the paragraph number) are cross referenced to a section of our report where the matter is further discussed as part of a concluding discussion of the key issues.

<table>
<thead>
<tr>
<th>Issue Reference</th>
<th>Issue Summary Only</th>
<th>Acceptance and or further comment or explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S177 RMA approvals</td>
<td>Acceptance</td>
</tr>
<tr>
<td>B</td>
<td>Drawings of pedestrian and cycleway network, bus lanes etc for whole Project (‘PT and Active Mode Transport Routes’)</td>
<td>Acceptance. Informs on extent of network improvements concerning walking, cycling and bus movements.</td>
</tr>
<tr>
<td>C</td>
<td>Analysis of alternatives</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>D</td>
<td>Need for Board to provide a recommendation to Minister of Conservation</td>
<td>Acceptance of legal advice offered. Matter for Board to confirm.</td>
</tr>
<tr>
<td>E</td>
<td>Need for a Cultural Assessment report</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>F</td>
<td>Timing for securing NZHPT approvals</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>G</td>
<td>Partnership with Auckland Council over reserve and open space restoration</td>
<td>We consider that the NZTA / AC differences on open space provision need to be resolved through this decision making process.</td>
</tr>
<tr>
<td>H</td>
<td>Road Stopping requirements</td>
<td>Acceptance with reliance on legal advice provided. Matter for the Board to confirm.</td>
</tr>
<tr>
<td>I</td>
<td>Twelve Matters</td>
<td>Acceptance where further information required clarifying matters.</td>
</tr>
<tr>
<td>J</td>
<td>Seventeen matters</td>
<td>Acceptance; Paragraphs 70-72: Provision of at grade cycleway connection on Sector 8; Paragraphs 84-85: Feasibility of enhancing north-south pedestrian cycleway connectivity between Waterview-Pt, Chevalier; Paragraphs 86-87: Evaluate the opportunity to upgrade Carrington Road/Sutherland Road crossing and improvements to St. Lukes Road interchange; Paragraphs 88-90: Assess the merits of northbound bus lane; Paragraphs 91-92: Assess merits of Great North Road western shared pedestrian and cycle route Refer section 3: Key issue 3.3</td>
</tr>
<tr>
<td>K</td>
<td>Merits of local connections at GNI</td>
<td>Refer section 3.3.14</td>
</tr>
<tr>
<td>L</td>
<td>Merits of undergrounding ventilation buildings</td>
<td>Refer section 3.4:</td>
</tr>
<tr>
<td>M</td>
<td>Trial embankment</td>
<td>Acceptance</td>
</tr>
<tr>
<td>N</td>
<td>Refer G above</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Eight matters</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>P</td>
<td>Missing reference materials concerning noise and vibration</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>Q</td>
<td>Missing reference materials concerning building envelopes</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>R</td>
<td>Four matters</td>
<td>Acceptance with reliance on rebuttal evidence cited.</td>
</tr>
<tr>
<td>S – Z, AA</td>
<td>Non-EMS related s42A topics</td>
<td>Reliance on specialist s42A advice and expert caucusing reports.</td>
</tr>
</tbody>
</table>
2.3 OUTCOMES FROM EXPERT CAUCUSING

2.3.1 The suite of fifteen expert caucusing reports provided under the direction of the Board inform on many specialist technical issues and performance matters relating to the designation and consenting matters. A large number of the differences between experts have been resolved through amendment to the conditions. Determination of the appropriate air quality conditions would seem to be the main matter still subject to differences between the experts.

2.3.2 The main outcomes of those sessions are summarised below followed by reference to our further assessment of the matter where appropriate (highlighted/shaded), and/or where the matter has been resolved with reference to the ‘Compiled Proposed Conditions 10 February 2011.’

2.3.3 This is a ‘work in progress’ and we expect that the Applicant will present a more detailed and authoritative record to the Board as part of Right of Reply, should circumstances warrant this.

<table>
<thead>
<tr>
<th>Caucusing Report (numbered for our convenience)</th>
<th>Agreed Outcomes</th>
<th>Outstanding Issues Arising (Summary)</th>
<th>Further discussion/Conditions (based on 10 February 2011 version)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Air Quality</td>
<td>For any large project health effects are unavoidable.</td>
<td>Measures to handle uncertainties, post-project compliance and extent of monitoring.</td>
<td>Still subject to expert caucusing</td>
</tr>
<tr>
<td></td>
<td>Unlikely that air filtration will provide significant benefits.</td>
<td>Extent of emissions offset.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall effects minor.</td>
<td>Separation distances between residential locations and roadway.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Air quality criteria relating to operation of tunnel fans.</td>
<td></td>
</tr>
<tr>
<td>2 Avifauna</td>
<td>Outstanding issues resolved. Agreement on conditions.</td>
<td></td>
<td>A.5</td>
</tr>
<tr>
<td>3 Coastal process</td>
<td>Outstanding issues resolved. Agreement on conditions except for one matter.</td>
<td>Merits of a replacement culvert at Rosebank</td>
<td>Applicant should confirm position</td>
</tr>
<tr>
<td>4 Freshwater ecology</td>
<td>Outstanding issues resolved. Agreement on conditions.</td>
<td></td>
<td>G.12 F.5 F.3 STW.20A</td>
</tr>
<tr>
<td>5 Groundwater and ground settlement</td>
<td>Suite of conditions relating to groundwater agreed.</td>
<td>Effects of groundwater modelling Avondale Heights.</td>
<td>G.1-G.14 S.1-S.17 and Annexures</td>
</tr>
<tr>
<td></td>
<td>Suite of ground settlement conditions agreed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Herpetofauna</td>
<td>Outstanding issues resolved. Agreement on conditions.</td>
<td></td>
<td>H.1 part (d)</td>
</tr>
<tr>
<td>7 Land and groundwater contamination</td>
<td>Outstanding issues resolved. Agreement on conditions.</td>
<td></td>
<td>G.7</td>
</tr>
<tr>
<td>8 Landscape and visual design</td>
<td>Agreement on conditions for design elements/criteria for northern ventilation building and stack.</td>
<td>Northern ventilation stack profile and location.</td>
<td>LV.1(e) Lv.2(a) LV.7 LV.9 SO.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Southern ventilation</td>
<td></td>
</tr>
<tr>
<td>Section 42A Final Addendum Report</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agreement on conditions for design elements/criteria for southern ventilation building and stack.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agreement on condition for noise wall mitigation.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Condition providing for mitigation planting Construction Yard 1 and 2, and maintenance period.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Building and stack profile and location.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(Location preference linked to scale and design of stacks.)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(Links to open space caucusing topic below)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9 Marine ecology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Several issues resolved. Agreement of related conditions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition given to Marine Reserve under the RMA. Mitigation to offset permanent habitat loss resulting from stormwater contamination.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10 Noise</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding issues resolved. Agreement on conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion of rail designation in ‘open space’ calculations. Full north-south cycleway, SH20/16 to mitigate open space effects. Waterview-Eric Armishaw bridge to mitigate for open space loss. Oakley/Unitec Bridge to mitigate social effects, construction disruption and new severance effects. The adverse effects mitigated by the proposed Phyllis Reserve bridge. The adverse effects mitigated by the proposed Soljak bridge. The adverse effects mitigated by the proposed Olympus bridge. Valonia Street site suitability for sports fields. Open space provision at Alan Wood Reserve (with link to landscape and visual design caucusing topic above).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11 Open Space</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Rail land for ‘landscape’ uses. Agreement of design standards for shared or pedestrian connections and route refinements to record on UDL Plans and Integrated transport Plans. Agreement on condition for Methuen Road access to Alan Wood reserve (rather than Hendon bridge extension). Divergent community views concerning the need for sports fields and open space suggest alternative process to consider issues and memorandum of understanding being developed. Condition to provide for fields elsewhere or provide financial contribution. Issues resolved around Howlett reserve, Saxon Reserve, Waterview Glades and the exclusion of remnant open space from open space restoration area calculations. Agreement that there is no impact of Western Springs carpark.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion of rail designation in ‘open space’ calculations. Full north-south cycleway, SH20/16 to mitigate open space effects. Waterview-Eric Armishaw bridge to mitigate for open space loss. Oakley/Unitec Bridge to mitigate social effects, construction disruption and new severance effects. The adverse effects mitigated by the proposed Phyllis Reserve bridge. The adverse effects mitigated by the proposed Soljak bridge. The adverse effects mitigated by the proposed Olympus bridge. Valonia Street site suitability for sports fields. Open space provision at Alan Wood Reserve (with link to landscape and visual design caucusing topic above).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL MANAGEMENT SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social/Planning</td>
<td>Environmental Management Services</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Issues resolved in relation to Unitec and HNZC, and communications protocols with community. Agreement of related conditions including: - Community Liaison Group functions; - Outline Plan of Works processes for ventilation buildings</td>
<td>Open space impacts of alternative locations for northern ventilation stacks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Epidemiological study to address public health concerns (air quality, noise). SIA to identify and address community concerns. Additional conditions to provide further mitigation works in Waterview. Costs associated with alternative locations of ventilation buildings. Community severance effects not fully addressed by way of additional open space. Property value impacts not acknowledged.</td>
<td>New SO.condition CNV.2 SO.7 PI.1 PI.2 PI.3 PI.5 SO.7 OPW</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Agreement on conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Agreement with Mr McKenzie on reasoning for northern portal location. Agreement with Mr Ian Clark on condition including Great North Bus Lane works in Network Integration Plan. Agreement with Mr Ian Clark on performance of St. Lukes interchange can be achieved through other collaborative arrangements Agreement on bus shoulder lanes on SH16 but not on SH20. Project does not create an adverse transport effect that requires Sector 8 cycle link as mitigation. (Appropriate route has not been determined.) ‘Eric Armishaw bridge’ pedestrian/cycle link over SH16 unlikely to be appropriate mitigation. SH16 design “pinch point” addressed. Te Atatu Cycleway design to minimise cyclist delay condition tied to an outcome in the Network Integration</td>
<td>Overall need for, or desirability of local ramp connections to SH20 due to adverse effect on accessibility to Waterview, Point Chevalier and Carrington communities. Safety and operational performance of both local on and off-ramps. Overall the Project creates an adverse effect which needs to be mitigated. Adverse transport effect that requires a Sector 8 cycle link as mitigation. Adverse effect on pedestrian/cycle link between Waterview and Point Chevalier.</td>
<td>OT.1 TT.1.-TT.11</td>
</tr>
<tr>
<td>Plan.</td>
<td>Temporary traffic effect management through site specific traffic management plans and a Traffic Management Governance Group.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Vegetation</td>
<td>Agreed revisions recorded to consent conditions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comprehensive weed and animal pest management in perpetuity on Traherne Island.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appropriate process to provide legal protection of Traherne Island.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognise Friends of Oakley Creek as a key stakeholder.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Means to achieve integrated restoration plan for Oakley Creek that integrates Project and community restoration work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Means to achieve restoration plan for Waterview Glades that recognise the goals of the Friends of Oakley Creek.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.3.4 The majority of these matters are now addressed in Chapter 3 Key Issues.
3 KEY ISSUES

3.1 OVERVIEW

3.1.1 The format for our assessment follows from the strategic topic headings outlined in Chapter 3.1.6 of our previous Addendum Report (dated 20 December 2010). For convenience we have cross referenced in brackets below to the ten “Key Issues” recorded in Opening Legal Submissions for the Applicant (7 February 2011), at paragraph 108; namely:

1. General Matters concerning the definition of the Project;
   [108.1 Project benefits and economic assessment]

2. Consideration of the wider transportation improvements that are or could be considered part of the Project;
   [108.2 Waterview/SH20 connection]
   [108.5 Pedestrian / cycleways]

3. Location, scale and design of ventilation buildings and stacks;
   [108.4 Ventilation buildings and stacks]
   [108.7 Health effects]

4. Reclamation and Management Issues associated with Motu Manawa Marine Reserve and Coastal Marine Area;
   [108.6 Coastal and Marine]

5. Provision and implementation of an Open Space Restoration Strategy to mitigate effects;
   [108.3 Open space]

6. Mitigation of Specific/Sector based effects;
   [108.8 Construction effects]
   [108.10 Specific submitter issues]

7. Partnership Arrangements being considered by the Applicant; and

   [108.9 Community input and information]

3.1.2 We discuss each of these matters below.

3.2 GENERAL MATTERS CONCERNING THE DEFINITION OF THE PROJECT

3.2.1 Having considered all the information available to this point we are satisfied that our concerns previously expressed in relation to the definition of the Project have been addressed.
3.2.2 We note that the form, location and profile (including full or partial burial) of the ventilation buildings and stacks remain a contentious issue which we discuss further below.

3.2.3 We consider that the Outline Plan of Works (OPW) process is an acceptable one for resolving detailed design of these buildings and structures; however we consider that the location and bulk of buildings and stacks should be resolved through this decision making process. In all locations considered to date the ventilation stacks can be established within the designation for the Project.

3.2.4 We note also the Auckland Council request that the Project include additional land for works associated with new open space/recreational facilities at Valonia Street reserve by way of a condition precedent to the terms of a designation. We discuss the merits of this matter further in section 3.6.14.

3.3 CONSIDERATION OF THE WIDER TRANSPORTATION IMPROVEMENTS THAT ARE OR COULD BE CONSIDERED PART OF THE PROJECT

3.3.1 There is a consistent set of propositions from submitters that the NZTA has viewed its statutory responsibilities under the RMA (and other statutes as the Land Management Transport Act) in too narrow a context when considering the effects of the Project and therefore the scope for mitigation in a wider urban context.

3.3.2 The view is that NZTA should exhibit a greater sense of social and environmental responsibility and provide as a legitimate part of the Project for an integrated transport network enabling of cycling and pedestrian movements along and across the roading corridor. Submitters also see the open space network along the corridor comprised in part by the Project. They see a major opportunity to re-dress such effects and to improve and ‘reconnect’ communities severed as a consequence of previous motorway works in the 1960’s. The term ‘historical severance’ is used.

3.3.3 We consider below the major issues arising from this.

Sector 8 Cycleway

3.3.4 At the top of the list is the desire for an off road, at grade cycle connection along the tunnelled length of the Project.

3.3.5 The Agency’s position presented in evidence and re-affirmed in rebuttal is unequivocal in relation to the provision of an at-grade cycleway connection in Sector 8:
   - The Project does not generate adverse transport effects in this regard; and
   - The works are, of their own, not required to meet the Project objectives.

3.3.6 The Agency’s statutory and policy objectives are noted in the rebuttal evidence of Mr Parker (paragraphs 16-28). Mr Parker notes in the final sentence of his paragraph 25 the NZTA position arrived at:
   “....I therefore maintain that cycle/pedestrian facilities in Sector 8 need to be provided in conjunction with Auckland Transport / Auckland Council”.

3.3.7 The rationale is based upon:
The designation for the tunnel being provided by strata designation excludes any designation at ground level; and

To form part of the Project the at-grade works would need to be designated, following the confirmation of a route, its design and the consideration of any effects associated with its implementation, and this may in turn require further statutory approvals.

3.3.8 From our review of the Project specific objectives they are couched partly in strategic terms (Objectives 1, 2 and 3 seek to achieve a strategic inter-regional link in the State highway network), and partly in more generic terms (objectives 4 and 5) when considering mobility, modal choices, public transport, cycling and walking, and future passenger transport. These latter objectives are couched in terms of “support”, “providing opportunities for...” and “by protecting opportunities for...” for example. These words and phrases are in our view enabling of further works that are secondary to and compatible with the primary focus of the Project but must be enabled within the Project footprint.

3.3.9 The term “collaboration” is used in evidence and in a number of the proposed conditions, (such as OT.1 – Integration with Local Road Network) and it is on this basis but outside the framework of the designations and alterations currently sought that Mr Parker considers the pedestrian/cycle facilities can be established in the future. This point is usefully illustrated in Mr Parker’s Rebuttal at paragraphs 44-47.

3.3.10 Mr Parker and Mr Foster both remind us of the Project’s strategic objective “...that a connection in some form between the disconnected points of SH16 and SH20 is the key requirement” (Mr Foster Rebuttal, paragraph 28) and Mr Parker’s systematic reappraisal of the Project objectives in paragraphs 5-15 of his Rebuttal reinforces this point.

3.3.11 Submitters argue that the provision of this link is justified both in terms of broader transportation policy and mitigation of broader effects on the community and on open space. Further that it will leave a significant gap in the off road cycle network that will suppress potential cycle trips.

3.3.12 The outcomes from the Final Joint Transport Experts Caucusing Report are summarised in section 2.3 above. This Report notes that the Project does not create an adverse transport effect that requires a cycle link as a mitigation measure (as part of the Sector 8 Project works) – page 6, point 3 refers.

3.3.13 We have carefully considered the evidence on this issue and have ultimately formed the opinion that there is not a rational nexus in terms of mitigating effects from the Project. While the arguments in favour of it might be strengthened if the Board determines that the network solution to sports field provision is preferred, on balance we consider that this link is better managed as a Auckland Transport and Auckland Council project and as a gap in the network we consider that this should be capable of being funded and delivered separately from the Project.

**SH20 On Ramp Waterview**

3.3.14 We note that the Board has been advised that after reviewing rebuttal evidence and caucusing Sir Harold Marshall does not wish to pursue the southbound on ramp to SH20 from Carrington Road. We have similarly considered this evidence and agree that it is not practically achievable without major consequential changes to the Project. Our understanding is that considerable additional design constraints and adverse safety impacts on the Project would need to be addressed.
St Lukes Interchange

3.3.15 Highway improvements often result in a debate as to where one project should finish and another should start. Indeed this current project results from a merging of two projects. While there are recognised deficiencies at the St Lukes Interchange the evidence is that the Project will not exacerbate those deficiencies. We have been advised that Auckland Transport and NZTA are commencing investigations into improvements to that intersection and in essence we agree that this interchange should be addressed as a separate project.

Bus Shoulders

3.3.16 We note that experts have agreed on how bus facilities should be provided. Bus shoulder lanes are provided on SH16 and in part along the SH20 connection near Waterview Interchange based on our review of the most recent plans dated 28 February 2011 (second supplementary evidence, Annexure A – Updated Integrated Transport Plans (Revision D)) by Ms Linzey.

Other Cycle and Pedestrian Connections

3.3.17 While the Project provides significantly for cycle and pedestrian facilities a number of submitters have argued that further provision is necessary. Ms Linzey has provided cost estimates for these works in her second supplementary evidence dated 26 February 2011, at paragraphs 39-44.

Waterview to Eric Armishaw Park

3.3.18 We note that some improvements have been made to the proposed at grade link from Waterview to Eric Armishaw Park and we confirm the preliminary opinion expressed in our first report and agree with the joint caucusing group that a bridge link is not appropriate or justified.

Alford Road to Unitec

3.3.19 We note that there are existing pedestrian links between Great North Road which pass across and along Oakley Creek and link to parts of the Unitec campus. These links are to be retained. We also note the point made by the Albert Eden Local Board that a higher quality and more direct link would help promote Waterview as a location for student accommodation and assist with housing demand.

3.3.20 A further factor in this is that Unitec have development aspirations for this part of their land holding and if development proceeds in accordance with their structure plan a new vehicle and pedestrian entrance will in the future be developed onto Great North Road in the vicinity of Herdman Street.

3.3.21 On balance we consider that the development of a new pedestrian access at this point is not justified in terms of effects of the Project. SH20 will be in cut and cover at this point and the existing accesses to Unitec will be retained albeit there will be some effects from the construction yards in this area in the short term.

The Soljak Place Link
3.3.22 This is a link towards the southern part of the Waterview community again eastwards from Phyllis Street Reserve across Oakley Creek to the southern part of the Unitec campus.

3.3.23 This is effectively part of the Sector 8 cycleway which would also enhance access to Phyllis Street Reserve. As stated above our opinion is that this is best addressed as a separate transportation project.

*The Olympus Park Link*

3.3.24 This is a link between Methuen Road-Olympus Park that would cross the motorway. This cross link would be enhanced should Option 3 be preferred for the location of southern ventilation buildings.

*A north-south link reliant on access through the Unitec campus to create an off-road corridor connecting the SH20/SH16 cycleways*

3.2.25 We consider this a matter of future planning for the Unitec campus and note that they have a strategic development plan for the campus that seeks to improve accessibility to and through the site. We do not consider that the designation should be subject to any specific conditions relating to access through the Unitec site.

*Kiwi Rail Designation*

3.3.26 Kiwi Rail (Submitter 164) has confirmed that there is an agreement between NZTA and Kiwi Rail to safeguard the network interests of both transport providers through the current designation and consent processes and the statutory processes that Kiwi Rail will pursue in future to achieve a rail corridor in this area.

3.3.27 While several submitters (Submitter 186 – Black, for example) seek an integrated process for the consideration of the Project and the Kiwi Rail project (the future Avondale/Southdown rail link) we recognise there are procedural challenges in ever being able to deliver these projects on a fully integrated basis. As a requiring authority Kiwi Rail is entitled under the RMA to pursue its proposal as and when necessary and in its own time.

3.3.28 Both the NZTA and Kiwi Rail are of the same opinion, and the condition proposed by Kiwi Rail (164-2, paragraph 4.4) and re-affirmed during the Planning Caucus 4 March 2011 seems appropriate.

### 3.4 LOCATION, SCALE AND DESIGN OF VENTILATION BUILDINGS AND STACKS

3.4.1 This remains one of the most contentious elements of the Project in terms of the effects short term and long term on the amenity, health and wellbeing of the communities along the corridor.

3.4.2 Noted in our Addendum Report (20 December 2010) in the Executive Summary, under the introductory words ‘... the key issues concern...’ was the following comment:

‘In relation to the location, scale and design of the ventilation buildings the “re-design” presented in the evidence-in-chief is not presented as the preferred design outcome sought for these structures by the Applicant.’
This is confusing, as if this is not the preferred option then on what basis can the Board consider the proposal to be part of the application documentation. It cannot assist in forming an opinion as to the changes to environmental effects associated with the Project, and condition framing.’

3.4.3 New proposals for both the ventilation buildings and stacks at both locations have been presented by the NZTA and more recently during the course of this inquiry there has been further evidence on alternative northern stack locations and alternative ventilation building configurations at the southern end of the Project.

3.4.5 Furthermore, at this point in the process, work is being finalised on whether required air quality standards can be achieved with a 15 metre stack as opposed to a 25 metre stack. Our understanding of the evidence suggests a 15 metre stack can operate with ‘...very minor changes to the ground level concentrations of all the contaminants assessed...’ according to the supplementary evidence (17 February 2011) of Mr G. Fisher at his paragraph 6. Condition framing now seems to remain the issue and this matter is considered in his second supplementary statement of evidence (28 February 2011). We provide no further comment in this regard.

3.4.6 A design prescription is set out in the expert caucusing report on Landscape and Visual Design in relation to the northern and southern portal buildings so that detailed design ensures their general compatibility with the adjacent residential environment and with the incorporation of large scale trees within the proposal. We are satisfied that this has been appropriately incorporated into conditions (subject to our further comments in section 3.9.12).

Northern Ventilation Building and Stack

3.4.7 Turning first to the northern ventilation buildings we consider that the bulk and scale of buildings now proposed is acceptable. Detailed architectural design through an Outline Plan process that provides for consultation is in our opinion appropriate.

3.4.8 With regard to stack location there are important tradeoffs to be made and we consider that these turn on what weight different aspects are given in making that overall broad judgement. The issues relate to visual intrusion, community perception and dominance, compatibility with and effects on the Oakley Reserve setting, construction and maintenance cost. We note that agreement has been reached with Waterview School and the Board of Trustees and this did not result in any specific conditions relating to the northern stack as we understand it. We also note that different experts have different opinions on the merits of alternatives depending on their field of expertise.

3.4.9 Our difficulty at this stage is that there is little detail on the design and assessment of alternative ventilation stack 1 (and 2) other than cost estimate. Stephen Brown in his rebuttal evidence and cross examination confirmed that he considered that these locations have the potential to “compromise the aesthetic value, and functional integrity of that reserve.” At this point we remain unconvinced of that without further design and assessment. We consider that there is potential for a large sculptured structure to ‘fit’ more easily into a reserve backdrop rather than a residential / education environment. In considering the same matter Mr Little says in respect of open space effects “...a fairly small incursion in terms of size and so I would see it as a negative impact on open space...” and when asked of the scale of those effects used the term “minor” (at pages 554-555 of cross examination).
3.4.10 Having said this we recognise that relocation may involve investment of over an additional $20 million of public funds to achieve this (Rebuttal – Walter, paragraph 34).

3.4.11 In our opinion, on the basis of the information available to us, we consider that the matter may turn on the height of the stack. In essence, we consider that if the stack is to be 15 metres high it is more capable of being accommodated on the Applicant’s preferred site without unacceptable adverse effects and therefore the extra cost of either of the alternative locations is unlikely to be justified.

3.4.12 However, if the stack is to be 25 metres high we consider that the dominance effects may be better accommodated as a sculptural statement adjoining the reserve potentially at alternative location 1, and that relocation and its associated costs may therefore be justified.

**Southern Ventilation Building and Stack**

3.4.13 We consider that the recent efforts to explore and evaluate additional design concepts for the southern ventilation building to be very constructive. Once again we have different witnesses coming to different views as to justification for a change from that proposed in the NZTA evidence in chief of Mr Gibbs.

3.4.14 The applicant has proposed that this also be addressed by way of Outline Plan of Works. We support this in terms of detailed final architectural design but consider that it is important that the specific concept option be determined through this decision making process.

3.4.15 We generally agree with the NZTA evaluation of the additional options presented in the supplementary rebuttal evidence (10 February 2011) of Ms Linzey where a comparative assessment is made of the ‘base’ option against three alternative locations.

3.4.16 However, there appears to be one rather obvious question that has yet to be asked or answered in any of the evidence in relation to options Vent South 001 and Vent South 002 as illustrated in Annexures A to C, in the supplementary evidence (Rebuttal 34, 9 February 2011) by Ms Linzey. These options are both characterised by a long looping access road through the reserve in order to get truck access down to a level where it can be loaded with ventilation fans and other equipment. We appreciate that this likely requires a large truck(s) which needs to accommodate heavy equipment. However, the question is could this not be accommodated by the at grade access road to the required position and then a vertical truck lift down to the required level for loading? We appreciate that the lift would need to be designed to accommodate the weights involved and indeed this may not be feasible; however to date we do not think this question has been raised and may have a bearing on the relative merits of the options.

3.4.17 In considering whether the additional cost associated with Option 3 is justified we are mindful of the following:

- The Hendon Road and wider community in this location will experience the cumulative effects of SH20 construction works at ground level and the infrastructure works necessary for the tunnel and its operation ie ventilation building, portal building and stack;
There are material bulk and open space advantages to all of these new options but Option 3 has the least adverse effects based on the supplementary rebuttal evidence (dated 9 February 2011) presented by Ms Linzey and supported by the Applicant’s specialist environmental team; and

With respect to Mr Gibbs IEC Annexure A Architectural Drawings of Revised Design Option for Tunnel Buildings, these drawings indicate the ‘base’ option extending in a lineal above ground footprint with an immediate field of view from residential properties between 47-79 Hendon Street and is likely to permanently affect to a greater extent the amount of open space available for public purposes at this ‘pinch point’ in the reserve.

3.4.18 On balance we consider that a move from the base option (which we have to say we liken to a large crashed spaceship or UFO) is justified. We note that extra costs are estimated to be Option 1 $10.1 million, Option 2 $15.2 million and Option 3 $12.9. We use these costings as a guide while mindful of Board member Dormer’s proposition to Ms Linzey under cross examination that the ‘cost envelope’ may well be between $11 and 21 million. In any event this is a significant extra cost but we consider that the cumulative effects of the Project at this location likely warrant adoption of this option.

3.5 RECLAMATION AND MANAGEMENT ISSUES ASSOCIATED WITH MOTU MANAWA MARINE RESERVE AND COASTAL MARINE AREA

3.5.1 We previously drew to the Board’s attention our concerns over jurisdiction in relation to any changes sought to the Motu Manawa Marine Reserve at paragraph 3.5.4 of our Addendum where it is recorded:

‘For the Board to continue to have an interest in this issue raises jurisdictional concerns involving other statutory processes. That is not to conclude that the Board should not seek clarification from the Applicant and submitters on such non-RMA related ‘initiatives.’

3.5.2 While a specialist marine ecology s42A report was commissioned, it did not specifically recommend mitigation in terms of management of areas outside the marine reserve.

3.5.3 We are helped to some extent by the extensive range of experts who participated in caucusing marine ecology issues. However, this caucus did not reach agreement on a number of important issues including (paraphrased):

- Whether there has been sufficient recognition of the status of the marine reserve under the RMA;
- Whether mitigation proposed to offset permanent habitat loss is sufficient;
- Whether on-going contamination attributable to stormwater discharge contributes to a significant permanent degradation of habitat in the marine reserve; and
- Whether additional mitigation (including offsite) for permanent habitat loss and ongoing degradation from contaminants is required.

3.5.4 After considering the cross examination of witnesses for the Applicant on these points we have concluded that the Project does provide sufficient mitigation of its effects in the coastal marine environment to meet the statutory obligations outlined.
under the various Plans and Policy Statements required to be considered under the RMA 1991.

3.5.6 This opinion is based on Mr Burn’s rebuttal (at paragraphs 44-52), Mr Slaven’s rebuttal (paragraphs at 33-42, and Annexure D – Traherne Island Restoration Plan) and Dr De Luca (EIC, at paragraphs 58-61, and Rebuttal 16) that establishes in our opinion that sufficient level of protection is placed on Traherne Island through various planning instruments and proposed conditions. Those planning ‘protections referenced include Traherne Island being a Significant Natural Heritage Area under the Auckland RPS, an Open Space 1 (Conservation) zone under the Auckland City Plan and the site also being recorded as a Significant Ecological Area under Plan Change 88 to the Auckland Plan to already afford a strong measure of protection to that area of Traherne Island outside the designation footprint.

3.5.7 In addition there is a contemporary, collaborative management framework in place that seems to operate successfully between the three agencies of NZTA, Auckland Council and DOC - the ‘Traherne Island Natural Heritage Restoration Plan, 2009-2014’. Its purpose is “…to describe Traherne’s ecological values and identify actions required to restore and maintain these values”. The key stakeholders are also noted to include the Royal Forest and Bird Protection Society and the Pollen Island Care Group.

3.5.8 With reference to our S42A Report (7 December 2010) we previously canvassed the relevant provisions of the New Zealand Coastal Policy Statement 2010, and the relevant regional policy statements and plans and re-affirm that, in our opinion the Applicant’s proposal is generally consistent with these provisions.

3.5.10 One option not fully canvassed to date however is the ‘opportunity’ that the NZTA has through ownership/management of Traherne Island to formally establish this land as scientific reserve under the management to the Department of Conservation. This could occur through the subdivision of the island and transfer of crown responsibility.

3.5.11 We bring this to the Board’s attention while noting that the Department of Conservation is not seeking vesting as reserve and the NZTA expert evidence noted above, does not see any material ecological benefit in this course of action.

3.6 PROVISION AND IMPLEMENTATION OF AN OPEN SPACE RESTORATION STRATEGY TO MITIGATE EFFECTS

3.6.1 Our S42A Report and Addendum focused on this issue at a strategic level, with the expectation that the Applicant and the Auckland Council (AC) would reach agreement on the details of a ‘strategy’.

3.6.2 At paragraph 3.6.5 of the Addendum it is noted:

‘We presume but cannot confirm that the Open Space strategy now accords with expectations and agreements made with the Auckland Council. At this stage the detailed staging/sequencing of temporary and or permanent relocation of recreational assets and facilities still remains unclear to us. We presume that this will not be clear until submitter evidence is exchanged.’
3.6.3 This matter remains unresolved, but in our opinion needs to be resolved through this decision making process by the Board although it is not as simple as NZTA and AC reaching agreement. However, we acknowledge that the Council will take on the management and maintenance responsibility for the open space areas and as such their interest is greater than that of the general public for whom they act for. The submissions of the Living Communities and Albert Eden Local Board are testimony to the diverse opinions on the merits of the NZTA mitigation measures.

3.6.4 Mr Little in cross examination at page 518 sums up the challenge faced by the Board:

“....there are a very wide range of proposals that could provide a better outcome for the area, and we need to be really clear in terms of what are the actual mitigation requirements of the project from an open space point of view and what is the improvements to the existing open space situation that's currently seen.”

3.6.5 The term “betterment” describes the latter situation; being illustrative of opportunities to enhance the local community benefits from the Project.

3.6.6 The issue turns on the merits of ‘like for like’ – the provision of replacement open space within the neighbourhoods of directly affected communities, that is, within walking distance of residents versus the ‘network’ approach – the provision of replacement open space beyond the walking distance of the directly affected community and serving a wider district and or regional function.

3.6.7 In terms of the ‘local like for like’ replacement of open space versus ‘network provision’, on balance we prefer the NZTA proposal because the NZTA seeks to focus the mitigation within the environment of those parts of the community that are most directly affected during the construction and post construction phases of the Project. For the most part these works can be provided within the designation. The exception is the Applicant’s proposals for Saxon Reserve.

3.6.8 Also supported is the principle now embodied in the proposed conditions (OS.9 and OS.10 – Construction Works) to implement ‘replacement’ open space measures prior to construction. This is the key measure to address the potentially significant effects on open space that will occur during construction and also acknowledges in part the longer term impacts associated with operation of the construction yards in the communities of Waterview and Owairaka/New Windsor.

3.6.9 Having endorsed the ‘local like for like’ principle we find the financial ‘offer’ from the Agency recorded in Condition OS.4 – Waterview Reserve to fund a relocated sports field away from Waterview Reserve to Phyllis Reserve sensible on the basis that the field will be a permanent facility away from the construction nuisance effects were the field to remain adjacent to Construction Yard 6. A similar ‘offer’ is made with respect to provision of sports fields in Alan Wood Reserve in Condition OS.8 – Construction Works. If this approach is confirmed between the Agency and the Applicant then our understanding is that Waterview Reserve would become a passive recreation reserve.

3.6.10 However, the second supplementary evidence (dated 28 February 2011) of Ms Linzey presents plans in Annexure G to demonstrate that a revised layout of Construction Yard 6 can accommodate a permanent sports field at Waterview Reserve. The Board now is able to determine whether a permanent field is established at Waterview Reserve or a financial contribution is made to the Auckland
Council. In both circumstances a condition should not retain discretion for the Applicant or Auckland Council to further consider the matter.

3.6.11 Overall, sizable open space provision will remain in Waterview based around the coastal walkway extension around Oakley Creek mouth, the formalisation of an Oakley Creek Heritage Area and the maintenance if not the enhancement of the pedestrian/cycleway access to Eric Armishaw Reserve to the northern coastline of the Waitemata harbour and to the Point Chevalier town centre. The evidence of Mr Little and Ms Hancock affirm these points. Annexure A (Updated Integrated Transport Plans (Revision D), Sheet 9) to Ms. Linzey’s second supplementary evidence confirms this.

3.6.12 The Applicant promotes an enhanced role for Saxon Reserve as a ‘community park’ (Mr Little, cross examination, page 545) and the Board needs to be satisfied that the expanded land area necessary to achieve this role is able to be delivered through other RMA processes. We note this reserve ‘expansion’ is to offset land loss (quantity and quality) at Waterview reserve.

3.6.13 There is a diverse set of effects on the fabric of Alan Wood Reserve at the southern end of the Project corridor and we note Mr Little recognises such effects at least from an open space perspective to be significant and possibly unmitigated during construction (cross examination, page 523-524 and 543-544).

3.6.14 The AC proposal for the further development of Valonia Street reserve is beyond the designation footprint and anticipated to affect a number of private properties that otherwise are not affected by the Project. In our opinion, it is beyond the jurisdiction of the Board to give positive consideration to this alternative open space arrangement from AC. We therefore agree with the Board’s preliminary view and the Agency’s preliminary legal opinion dated 18 February 2011 that addressed the extent to which modification can be made to the designation in this regard. The appropriateness of a condition precedent in this context is therefore questionable.

3.6.15 However, if a condition should be imposed to require a financial contribution as has been suggested in the draft conditions, then it would be the responsibility of the Council to implement ‘their’ scheme including securing property owner approvals and resource consents to enable the ‘side by side’ layout of the sports fields to be achieved.

3.6.16 We note that some submitters (178 – D. Shearer, 205 – S. Hart, 236 – B. Parris and 249 – Metro Mt. Albert Sports Club Metro FC) have argued that the sports field mitigation should include a component of all weather surfaces. In the event that a financial contribution is made to AC for sports fields then this is a matter for Council to determine rather than the Board. We note that at Valonia two sports fields are to have lighting for evening use. It is not clear whether one or both of these fields would have an all weather surface. These details should be confirmed with respect to Valonia Street and Phyllis Reserves.

3.6.16 There is merit in incorporating CPTED review as a performance requirement as part of all conditions for assessment of the cycle/walkway facilities developed as part of the Project. An amendment to the OS-series conditions is therefore supported.

3.6.17 To conclude, our response to the outstanding issues recorded at paragraph 128 (paraphrased) of the Opening Legal Submissions from the Applicant are:
Phyllis Reserve should be an active hub – yes, if the Board considers the network approach is preferred over local provision, then the financial ‘offer’ option could be confirmed;

Eight properties should be purchased to improve configuration of sports fields at Valonia Street – no, for the reasons outlined above;

There are un-mitigated adverse effects on the value of passive open space at Alan Wood Reserve which requires further mitigation – yes insofar as unmitigated effects are concerned; and we discuss this further in Chapter 4;

The impacts arising throughout the construction phase of the Project are not sufficiently mitigated and further network connections are necessary as ‘offset’ mitigation – no, for the reasons outlined above.

3.7 MITIGATION OF SPECIFIC/SECTOR BASED EFFECTS

3.7.1 The assessment of the Project effects by sector is presented in summary form both in the S42A Report at Chapter 10 – Sector and Local Effects, and in the Addendum at Chapter 3.7 – Mitigation of Specific/Sector based Effects.

3.7.2 Many of these matters are now resolved. The few outstanding matters are:

Sector 2: Whau River

3.7.3 Mr Scott (111-8) for the Auckland Council suggests no detail has been provided for Construction Yard 2 and draws to the Board’s attention that a staged planting programme should be included in the relevant management plan associated with the construction rock feature/bank stabilisation (paragraphs 5.23. and 5.24). The treatments are suggested to be applicable for the landscapes of sectors 2, 3 and 4.

3.7.4 Mr Wardle (Submitter 61) raises property specific effects. The concerns are in relation to the Project’s works along their property boundary and the apparent absence of information concerning a replanting programme, the provision of sound insulation to their dwelling and measures to mitigate potential vibration and dust nuisances. We would expect the Board to be informed of consultation between the Applicant and the submitter to address these concerns during the course of the hearing.

Sector 6: SH16 to St Lukes

3.7.5 Mr Scott (111-8) for the Auckland Council suggests that the further design treatment should be required for the noise walls adjacent to residential areas near Sutherland Road, Parr Road and Novar Place (paragraph 5.28).

Sector 7: Great North Road Underpass

3.7.6 Unitec (Submitters 160-1) and Tauber (Submitter 75) raised concerns over the future viability of the Unitec accommodation complex for 170 residents, at 1510 Great North Road. Agreement has been reached with the Agency on consent conditions regarding the amenity protection for the accommodation complex and protection of access to the Unitec campus during construction works in this sector.

3.7.7 For Mr Tauber, as a representative of the property owners - the proximity of the construction and tunnelling works for the Project will potentially have wide ranging adverse effects including noise, dust, physical damage, vibration, restrictions on
access, and concerns about security. The term used is that the accommodation complex is in “the epicentre of a major construction project” (paragraph 5(a)). The Agency will no doubt advise the Board further on this matter.

3.8 PARTNERSHIP ARRANGEMENTS BEING CONSIDERED BY THE APPLICANT

3.8.1 The support of a number of strategically important stakeholders is essential for the Project being considered by the Board for its approval. An agreed programme of associated works, mitigation and monitoring are integral to the Project’s final form and function and its sustainable integration in the environment including the adequate mitigation of effects.

3.8.2 The comprehensive suite of conditions has been in response to matters raised by these key stakeholders (in addition to others) to the extent that now most matters are resolved with the exception of Auckland Council’s acceptance of the open space provisions resulting from the Project and possibly some consent related conditions.

3.8.3 These stakeholders also have responsibilities under other statutes and Acts of Parliament. We understand that the agreements reached are:

Ministry of Education, Waterview Primary School Board of Trustees and Auckland Kindergarten Association

3.8.4 This government agency, School Board and Association represent the public interests in the delivery of education services and facilities to local communities. The school’s future and future of the kindergarten have been secured during the construction period and for a 3 year period following the opening of the motorway connection (SO.4(B)). They are participants in the Education Liaison Group (SO.1) and Community Liaison Group (PI.5) as is the Auckland Kindergarten Association.

Department of Conservation

3.8.5 This government agency represents the public interest in conservation. The management of Traherne Island has been agreed within the framework of another management plan outside the direct scope of this Project. The Department is likely to be a member of the Working Liaison Group (SO.6).

Housing New Zealand Corporation

3.8.6 This Crown agency is required to give effect to government’s social objectives in relation to the provision of housing and community development. Evidence suggests that Project effects on tenants can be adequately mitigated by way of consent conditions agreed with the Applicant. The Corporation is likely to be a member of the Education Liaison Group (SO.1) and Community Liaison Group(s) (PI.5).

Kiwi Rail

3.8.7 This agency of a State Owned Enterprise is required amongst other things to maintain and improve the country’s rail network for freight and passenger services. Project effects can be adequately mitigated by way of consent conditions agreed between Kiwi Rail and the Applicant. The agency is likely to be a member of the Working Liaison Group (SO.6).
Auckland Council

3.8.8 This is the unitary authority for the management of Auckland region community and resources. Council is likely to be a member of the Working Liaison Group (SO.6) and Community Liaison Group(s) (PI.5). Council will also fulfil a statutory role in the certification of management plans and monitor performance to the suite of conditions to the designation and consents.

Unitec Institute of Technology

3.8.9 This vocation education and training facility serving the Auckland region. The Project effects can be adequately mitigated by way of consent conditions agreed between Unitec and the Applicant. The institute is likely to be a member of the Education Liaison Group (SO.1).

3.8.10 Others agencies that have submitted on and present an interest greater than general public such as Albert Eden Local Board, Living Communities, Friends of Oakley Creek, Star Mills Preservation Society and Royal Forest and Bird Protection Society are likely to be participants in the Community Liaison Groups.

3.9 CONDITION SETTING AND PERFORMANCE

3.9.1 In our Section 42A Report at section 14 we provided general comment on the proposed conditions and the supporting management plan approach. While Murray Kivell attended a Planning Caucus on 4 March the Caucusing Statement was not available at the time this section of our Report was finalised. The following therefore sets out our original concerns, but at paragraphs 3.9.13-15 is noted the key matters agreed to in our opinion from that caucus.

Overview

3.9.2 We are conscious that there has been an ongoing process of refinement and addition to the conditions proposed such that they now embrace over 100 pages of text. We share the Board’s concern that some of the specific conditions import aspects of loose compliance such as “in general accordance”, “as far as practicable” and “to the greatest extent possible”.

3.9.3 In our opinion ‘in general accordance’ can only be acceptable in DC.1 if all the topic conditions require specific compliance. Where non-compliance is anticipated on specific occasions such as construction noise the condition should link to consequential actions or processes that are triggered from that non compliance and should be documented in full in the relevant management plan.

3.9.4 If those offending conditions can be amended to address this which for the most part they have then we would accept the “in general accordance” qualification of DC.1.

3.9.5 Having said this we remain firmly opposed to the overriding qualification of “subject to final design” in DC.1. We consider that such a qualification is neither necessary nor appropriate and undermines the integrity of the whole consenting process. Final design needs to be subject to the ‘parent condition’ not the other way round as to effectively over ride that duty.
3.9.6 We have considered the arguments put forward by Mr Parker in his rebuttal evidence and do not agree with him. We appreciate that the chosen “Competitive Alliance” will look to identify opportunities for innovation; however effects have been assessed by the NZTA and considered by all other parties on the basis of the plans put forward. These effects go much wider than just the ‘edge effects’ referred to by Mr Foster. The extensive nature of the conditions is a reflection of such effects and the need for their management to provide appropriate mitigation.

3.9.7 If changes provided through the detailed design process provide for “enhanced community outcomes” then it will be a simple process to amend the designation conditions though section 181(3) or resource consent conditions through section 127 and presumably without material delay, cost or risk.

3.9.8 The other expert caucusing reports have provided a useful vehicle for either the validation of the proposed conditions or revised sets of conditions to provide adequate mitigation of specific adverse effects. We note that in some cases points of professional difference remain and or performance standard thresholds are not agreed.

Key Enhancements

3.9.9 The key enhancements to the proposed conditions arising from these reports are highlighted in the table below based on the 11 February 2011 annotated version provided to the Board.

<table>
<thead>
<tr>
<th>Condition References</th>
<th>Condition Topic</th>
<th>Condition Details (Summary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC.7-9</td>
<td>Outline Plan of Works: Northern and southern ventilation buildings</td>
<td>Specific set of scheme plans referenced as a basis for submission of plans and design principles Section B ULDP June 2010. Includes consultation with Waterview/St Lukes and Owairaka Community Liaison Groups (PI.5 and PI.6)</td>
</tr>
<tr>
<td>CEMP.7</td>
<td>Community Liaison Person</td>
<td>Specific nominee</td>
</tr>
<tr>
<td>CEMP.14</td>
<td>Dispute Resolution Process</td>
<td>Dispute resolution internal to Project</td>
</tr>
<tr>
<td>CEMP.15</td>
<td>Electrical Infrastructure Site Development and Construction Management Plan</td>
<td>Methods and measures to maintain high voltage infrastructure</td>
</tr>
<tr>
<td>PI.2</td>
<td>Communications Plan</td>
<td>Procedures to deal with public and range of stakeholder groups</td>
</tr>
<tr>
<td>PI.4</td>
<td>Independent mediator role</td>
<td>Adoption of complaints procedure</td>
</tr>
<tr>
<td>PI.5-6</td>
<td>Community Liaison Groups</td>
<td>Make up of and frequency of meetings for three Groups. Purpose prescribed in terms of Plan reviews and monitoring</td>
</tr>
<tr>
<td>TT.11</td>
<td>Traffic Management Governance Group</td>
<td>Monitoring review role</td>
</tr>
<tr>
<td>OT.1</td>
<td>Network Integration Plan</td>
<td>Scope and detail more clearly prescribed.</td>
</tr>
<tr>
<td>CNV.1-2</td>
<td>Construction Noise and Vibration Plan</td>
<td>Scope and detail more clearly prescribed.</td>
</tr>
<tr>
<td>CNV.8-9</td>
<td>CNVP – Pile driving, and concrete batch plant operations</td>
<td>Scope and detail more clearly prescribed</td>
</tr>
<tr>
<td>ON.14</td>
<td>Noise</td>
<td>Representative measurements of ambient noise levels before and after construction</td>
</tr>
<tr>
<td>OA.4-7</td>
<td>Operational Air Quality Plan</td>
<td>Monitoring frequency set out.</td>
</tr>
<tr>
<td>Code</td>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>LV.1-9</td>
<td>Landscape and visual</td>
<td>Tunnel ventilation system performance specification.</td>
</tr>
<tr>
<td>OS.2</td>
<td>Open Space Restoration Plan</td>
<td>Role for Community Liaison Groups (also refer Condition PI.5)</td>
</tr>
<tr>
<td>OS.4</td>
<td>Waterview Reserve</td>
<td>Specific re-instatement works</td>
</tr>
<tr>
<td>OS.5</td>
<td>Alan Wood Reserve</td>
<td>Specific re-instatement works</td>
</tr>
<tr>
<td>OS.6</td>
<td>36 Cradock Street</td>
<td>Inclusion in Waterview Glades Open Space Restoration Plan</td>
</tr>
<tr>
<td>OS.8-13</td>
<td>Waterview and Alan Wood Reserve</td>
<td>Pre and post-construction works obligations</td>
</tr>
<tr>
<td>SO.1</td>
<td>Education Liaison Group</td>
<td>Composition of forum and meeting frequency</td>
</tr>
<tr>
<td>SO.4-5</td>
<td>Waterview Primary School and Kindergarten</td>
<td>Specific monitoring obligations to Ministry of Education, and possible staff funding protocol</td>
</tr>
<tr>
<td>SO.6</td>
<td>Working Liaison Group</td>
<td>Composition of forum, purpose and meeting frequency and public works coordination</td>
</tr>
<tr>
<td>V.11</td>
<td>Trial Sites</td>
<td>Trial programme for recipient sites for Mimulus repens</td>
</tr>
<tr>
<td>V.14-17</td>
<td>Oakley Inlet Heritage Area</td>
<td>Rock forest restoration programme requirement</td>
</tr>
<tr>
<td>A.5</td>
<td>Traherne Island</td>
<td>Vegetation clearance to avoid bird breeding season</td>
</tr>
<tr>
<td>A.6</td>
<td>Traherne Island and Coastal Marine Area</td>
<td>Animal pest control requirement</td>
</tr>
<tr>
<td>ARCH.1</td>
<td>Archaeological Site Management Plan</td>
<td>Role for NZHPT, Auckland Council and iwi</td>
</tr>
<tr>
<td>ARCH.5</td>
<td>Oakley Inlet Heritage Area</td>
<td>Details construction methodology and measures to protect areas of archaeological interest</td>
</tr>
<tr>
<td>ARCH.6</td>
<td>Waterview Reserve Restoration Plan</td>
<td>Further design requirements</td>
</tr>
<tr>
<td>S.1-17</td>
<td>Ground settlement</td>
<td>Scope, detail and performance reporting more clearly prescribed</td>
</tr>
<tr>
<td>G.1</td>
<td>Groundwater</td>
<td>Scope, detail and reporting more clearly prescribed</td>
</tr>
<tr>
<td>CL.9-10</td>
<td>Tunnel construction works</td>
<td>Groundwater quality and landfill gas monitoring requirements now specified</td>
</tr>
<tr>
<td>E.10</td>
<td>Discharges from coffer dams</td>
<td>Procedures specified prior to discharge to CMA</td>
</tr>
<tr>
<td>SW.10</td>
<td>Stormwater treatment standards</td>
<td>Treatment standards now part of Conditions (Table 1)</td>
</tr>
<tr>
<td>SW.15</td>
<td>Operational Stormwater Management Plan</td>
<td>Monitoring programme for tunnel water quality prescribed</td>
</tr>
<tr>
<td>SW.21</td>
<td>Stormwater treatment wetlands</td>
<td>Design performance review requirement</td>
</tr>
<tr>
<td>STW.20-21</td>
<td>Streamworks Environmental Management Plan</td>
<td>Scope more clearly prescribed</td>
</tr>
<tr>
<td>F.3</td>
<td>Freshwater monitoring programme</td>
<td>Scope, detail and reporting more clearly prescribed</td>
</tr>
<tr>
<td>C.13-16</td>
<td>Coastal</td>
<td>Scope, detail and reporting more clearly prescribed; notably Whau River side drainage channel, managed tidal channel realignments, Rosebank culvert, and intertidal beach seaward of construction areas in CMA to north of causeway.</td>
</tr>
<tr>
<td>M.11</td>
<td>Marine Ecology</td>
<td>Process for excavation of sediments from marine habitat remediation zone.</td>
</tr>
</tbody>
</table>
3.9.10 Our over-riding conclusion is evidence of the significant further refinement to the already substantial suite of conditions. In many cases this provides for conditions expressed with greater clarity around objectives, outcomes, processes or stakeholder involvement to give us confidence that the conditions themselves give better guidance to the substance and implementation of the management plans in support of those conditions.

3.9.11 Stakeholder involvement in Project ‘design’ now is codified through three crucial sets of conditions:

- DC.7-9: community involvement in the Outline Plan of Works for the final design of the northern and southern ventilation buildings and ventilation stacks;
- PI.5-6: the formation of three Community Liaison Groups and their involvement in considering the Open Space Restoration Plans, Urban Design and Landscape Plans amongst other matters (PI.6) and also where appropriate matters under DC.7-9;
- SO.1: the formation of an Education Liaison Group to manage Project effects impacting on community and educational facilities; and
- SO.6: the formation of a Working Liaison Group for the coordination of public works.

3.9.12 The extent to which these Groups established under PI.5 can raise matters and have them addressed if the Agency considers them to be ‘not relevant’ will be the challenge. Consultation in Project ‘design’ is commendable, but we think this role should be formally recorded as a requirement under section 176A(d) being “Any other matter to avoid, remedy, or mitigate any adverse effects on the environment.” in relation to the final design of both ventilation buildings and ventilation stacks. In this way the Auckland Council can expect to be fully informed on all elements of the design task considered by the parties under the OPW when carrying out its own assessment responsibilities under the Act.

Outcomes from Planning Caucus, 4 March 2011

3.9.13 The key matters addressed in relation to the updated ‘Compiled Proposed Conditions, 1 March 2011’ version from caucusing on March 4, from our point of view were:

- Agreement that the new ‘Explanation’ section was a non–statutory part/preamble of the documentation and this should be recorded as such;
- Agreement that “in general accordance” does provide sufficient flexibility and was an appropriate term in DC.1;
- Agreement that the term “subject to final design” was not an appropriate term and should be deleted from DC.1;
- Agreement that OT.1 be worded to read “The NIP shall address..” rather than “The NIP will consider and identify...”; and
- Agreement in principle that the term “as far as practicable” may be appropriate to retain in some conditions such as relating to noise and vibration (CVN), air quality (AQ) to be consistent with various specialised standards referenced within the conditions themselves, and CEMP.7, TT.1(b), TT.4 for example, where further qualification of the terms used now has been provided.
3.9.14 It was also noted that DC.6-DC.9 would benefit from further review by the Planning Caucus if the Board, or indeed the Applicant and the parties could confirm the preferred location for both ventilation facilities. This further caucusing could provide more informed condition framing to guide community input enabled under the PI series of conditions. We support this approach; alternatively this could occur once the Board releases its draft report.

3.9.15 Time did not permit the full review of the proposed conditions. However, we are now comfortable with their substance overall. We also are mindful of Auckland Council's position that they too should be satisfied with the conditions.
4 CUMULATIVE EFFECTS

4.1 OVERVIEW

4.1.1 In the Executive Summary to our Section 42A Report (7 December 2010) we presented the following assessment summary in relation to the Project:

“Our overall assessment is generally favourable towards the project; however there are areas where further evidence is necessary to fully understand effects or provide appropriate mitigation in a timely manner. An overview opinion is provided in many cases. Issues that could benefit from the further definition of options and condition setting are identified and suggestions made regarding caucusing these matters.

We consider that once fully constructed the design, mitigation and environmental compensation is for the most part appropriate. However, we consider that the effects on certain communities and individuals during the construction period will be significant despite best practice management. This includes a large part of Waterview and parts of Owairaka and New Windsor communities.

We consider that some design changes and further mitigation warrant careful consideration.”

4.1.2 Substantial progress has been made to address a range of detailed project related issues. However, we are mindful of the cumulative effects and on where the resource management benefits of the Project predominantly fall. In crude terms the benefits are largely regional and the adverse effects are local.

4.1.3 We consider that with the changes cautiously recommended in this further report and in some cases subject to further work the cumulative effects of the Project once constructed have been appropriately addressed and meets the statutory tests associated with the designation of the land corridor and the granting of resource consents.

4.2 DEFINING UNMITIGATED EFFECTS

4.2.1 We remain concerned about the cumulative effects on the communities at Waterview and Owairaka/New Windsor during the lengthy construction period. We emphasize that the extent of these cumulative effects will be different for each household depending on their circumstances and characteristics. We consider the elderly, sick or disabled, and caregivers at home during the day and needing access to key facilities to be particularly vulnerable to these cumulative effects.

4.2.2 We have not supported a number of the mitigation projects that have been promoted by submitters and have been subject to cross examination by legal counsel for Living Communities and Eden Albert Local Board. Notwithstanding this, we consider that there is a need for the Board to reflect on the extent to which further mitigation is justified for these communities during the construction period.
4.2.3 Un-mitigated effects are not easily described or quantified, but expanding upon the concerns expressed in paragraph 4.2.1 they could be an amalgam of effects described in terms of:

- The prospect 24/7 for the operation of the construction yards over a 5-7 year period and in particular the nuisance effects from those yards ‘embedded’ within the Waterview (Construction Yards 6 and 7, and potentially Construction Yards 3 and 4) and Owairaka/New Windsor communities (Construction Yards 8, 9, 10, 11 and 12);
- The intensity of construction activities where surface construction combines with tunnel and portal construction activities;
- Road and pedestrian restrictions and temporary closures that hinders local movements;
- The timing rather than the certainty of the provision of open space and the availability of specific recreational facilities such as bike parks, skate board areas etc; and
- Perceptions of reduced liveability / compounded isolation effects.

4.2.4 These can be placed alongside Ms Linzey’s summary of matters in her Rebuttal at paragraphs 10-24 where “an objective assessment of the physical effects on the environment is needed to confirm whether the fears and concerns of the community are founded on evidence.” (paragraph 11). Her issues noted (and paraphrased) cover:

- Health effects of emissions from stacks;
- Noise and disruption effects of construction on the community and on specific facilities;
- Amenity impacts associated with the form of the ventilation buildings and stacks;
- Loss of open space for local communities; and
- Loss of students from the school and kindergarten.

4.2.5 It is suggested that the adoption of more robust consent conditions will assist with the mitigation of these effects over the construction period along with “communication and engagement as an effective form of mitigation for these issues (and perception issues)...” (Paragraph 14).

4.2.6 The successful role of the Community Liaison Person (PI.1), the Community Liaison Groups (PI.5) and Education Liaison Group (SO.1) is pivotal in her opinion and indeed ours, to address these matters. However, Condition PI.5 codifies a role which focuses these groups on detailed design of the ventilation buildings (which we have suggested, should be formalised under s176A(d)), rather than the management of effects of construction which is reliant on systems and processes established in the Communications Plan (PI.2). For other processes draft conditions require the Groups simply to “review and comment on...” a range of plans and monitoring data (PI.6).

4.2.7 We acknowledge that conditions endeavour to deal with the potential effects of the Project through a variety of measures such as:

- The establishment of a Community Liaison Person (CEMP.1(a));
- The provision of a Communications Plan (PI.2);
- The timely dissemination of Project information (PI.4);
- The need to ensure “that residents enjoy reasonable freedom from noisy or intrusive construction activity in their neighbourhood” and related amenity effects (CEMP.7(d), (i) and (n));
- The exclusion of pile driving between 22.00-06.30 seven days a week (CNV.8); and
- The adoption of temporary traffic management conditions to manage local and network effects (TT series conditions).

4.2.8 However, several witnesses have concluded that despite these measures during the construction period there will be adverse effects albeit temporary, extending anywhere from 1-5 or 7 years. We therefore remain concerned about the cumulative impacts over a long period on the more vulnerable groups referred to earlier.

4.3 AN APPROPRIATE RESPONSE?

4.3.1 We consider that rather than additional physical mitigation an appropriate response is to consider a fund for specific community-led initiatives during the construction period. Essentially what we are proposing is that designation if granted, be subject to conditions that require the establishment of a Community Trust Fund for the Waterview and Owairaka/New Windsor communities.

4.3.2 The purpose of the Community Trust working in liaison with the nominated members of the Community Liaison Groups and Education Group is to fund community representation to NZTA to:

- Identify community services and programmes that can be established that assist residents with their daily lives during the construction period; and
- Fund or contribute funds to implement these projects, services and programmes that relate to community effects during the construction period that may also have longer term and potentially permanent benefits.

4.3.3 Such actions would not be the responsibility of the Agency to implement but would relate closely to detailed construction management issues and would be developed in association with the Project works where this was appropriate. Essentially the fund would be a ‘self help’ fund for the community to use at its discretion.

4.3.4 We suggest that Condition SO.6 already hints at such initiatives with the purpose of the Working Liaison Group to provide a forum through which, amongst other matters:

'“(a) Opportunities for public work development... are identified...”; and
‘(c) Opportunities for integration with other environmental projects... are identified.’

4.3.5 As far as we are aware there are few recent examples of this approach where it is specifically targeted at the construction period. Community Trusts have been proposed to compensate communities affected by projects with examples being Kate Valley Landfill, Mt Cass Windfarm and the Contact wind farm project at Waitahora. However, these have not generally been imposed on the proponent by way of conditions.

4.3.6 Only in the last example has EMS been involved. EMS but not the s42A Report authors were involved as planning advisers to Contact Energy on the Waitahora wind
farm project. From our email correspondence with Janeen Kydd-Smith, Senior Environmental Planner involved with the project it is noted:

‘During the joint Council hearing in February 2009, Contact proffered the Community Fund condition as part of its suite of suggested consent conditions. The Hearing Commissioners recognised (in their decision) that the fund would provide an economic benefit.’

And

‘The purpose of the fund is to provide funding to community or other groups with identifiable interests in the vicinity of the wind farm to promote projects of benefit to the community and local environment. Contact was not relying on the Community Fund to mitigate adverse effects associated with the Wind Farm, particularly at the Environment Court hearing stage, as Contact had made substantial amendments to its proposal to avoid or mitigate adverse effects. It was therefore offered in addition to the cost of other mitigation and enhancement proposed (e.g. fencing and revegetation of the wetland).

The matter of the Community Fund did not arise as an issue at the Environment Court hearing and the Court did not look to change the condition as Contact offered.’

4.3.7 The consent condition reads:

“The Consent Holder shall engage with the Tararua District Council (in consultation with Manawatu-Wanganui Regional Council) to establish, at the Consent Holder’s cost, a fund with the purpose of providing funding to community or other groups with identifiable interests in the vicinity of the wind farm to promote projects of benefit to the community or local environment. The Consent Holder shall contribute $250,000 to the fund as follows:

a) A payment of $150,000 shall be made on the date of commencement of construction of the wind farm; and

b) Two further payments of $50,000 shall be made on the first and second anniversaries of the date of commencement of construction of the wind farm.

The payments shall be made to an appropriate and representative entity to receive and distribute the funds on behalf of the community.”

4.3.8 The legal structure, constitution, and management framework for a Community Trust is clearly a matter the Board would need to consider if the proposition had merit.

4.3.9 We consider that the funding of this should be on an annual basis and should relate to the length of the construction period affecting each community. We are not prepared to offer a suggested annual quantum of financial assistance.

4.3.10 We appreciate that this form of mitigation has not been sought by any other party and we have not previously proposed such a condition. It is therefore important that parties are aware of this proposal and have the opportunity to respond as to its merits. We appreciate that further detail to the suite of Project conditions would be necessary in the event that the Board accept our suggestion.
CONCLUSIONS

5.1 Our overall consideration of the merits of the Project has developed from our initial statutory assessment framework presented in Section 4.4 of the Section 42A Report (7 December 2010) and is summarised under the following table, to which we have added one right-hand column.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submissions received</td>
<td>Section 171(1)</td>
<td>Section 104(1)</td>
<td>Chapter 3</td>
<td>Chapter 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chapter 5</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>Part 2 Matters: Sections 5, 6, 7, &amp; 8</td>
<td>Section 171(1)</td>
<td>Section 104(1)</td>
<td>Chapter 15</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>Effects of works on the environment</td>
<td>Section 171(1)(b)(ii)</td>
<td>Section 104(1)(a)</td>
<td>Chapter 7</td>
<td>Chapter 3</td>
</tr>
<tr>
<td>Relevant provisions of policy statements and plans</td>
<td>Section 171(1)(i)(iii) (iv)</td>
<td>Section 104(1)(i)(v)</td>
<td>Chapter 9</td>
<td>Chapter 4</td>
</tr>
<tr>
<td>Consideration of alternatives - sites, routes, methods</td>
<td>Section 171(1)(b)</td>
<td></td>
<td>Chapter 8</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>Works reasonably necessary - to achieve objectives of requiring authority</td>
<td>Section 171(1)(c)</td>
<td></td>
<td>Chapter 12</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>Any other relevant matter consent authority considers reasonably necessary to determine application</td>
<td>Section 171(d)</td>
<td>Section 104(1)(c)</td>
<td>Chapter 13</td>
<td></td>
</tr>
<tr>
<td>Matters relevant to a discharge permit or coastal permit</td>
<td></td>
<td>Section 105</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrictions on grant of discharge consents</td>
<td></td>
<td>Section 107</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.2 The Board is required now to draw on the substantial set of evidence presented to make its determination on the designations and alterations to designation, and resource consents. An overall broad judgement is required guided by the above statutory framework to promote the single purpose of the Act, that being the sustainable management of natural and physical resources.