IN THE MATTER OF of the Resource Management Act 1991

AND

IN THE MATTER OF of Resource Consents and Notices of Requirement for the Central Interceptor main project works under the Auckland Council District Plan (Auckland City Isthmus and Manukau Sections), the Auckland Council Regional Plans: Air, Land and Water; Sediment Control; and Coastal, and the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

STATEMENT OF EVIDENCE IN REPLY OF DAVID CHARLES SLAVEN ON BEHALF OF WATERCARE SERVICES LIMITED

1. INTRODUCTION

- My name is David Charles Slaven. My position, qualifications and experience are set out in my primary statement of evidence, dated 12 July 2013.
- 1.2 The purpose of this reply evidence is to provide additional information and clarification to the Commissioners on the migratory shore birds utilising Kiwi Esplanade reserve as a high tide roost. This matter has been raised as an issue in the evidence presented by the Mangere Bridge Residents and Ratepayers Association ("**MBRRA**") and by Bronwen Turner, including through evidence by the Miranda Naturalists' Trust and Mr Kitching.

2. SHORE BIRDS AT KIWI ESPLANADE

Primary Evidence

2.1 I have addressed the matter of construction effects on migratory shore birds at Kiwi Esplanade reserve in my primary evidence. Refer specifically to paragraphs 5.17 - 5.18 of my primary evidence where I identify the reserve as a significant high tide roost for NZ pied oystercatcher. I further assess the effects of construction at this site on these shore birds in paragraphs 6.11 - 6.12 of my primary evidence, and I identify appropriate mitigation measures in paragraph 7.9.

Comment on submitters' concerns

- 2.2 The migratory shore birds mentioned in the evidence of the submitters include godwits, knots, wrybill, and NZ pied oystercatcher. In the first instance it is important to recognise that none of these species breed in the North Island of New Zealand, with godwit and knot breeding in the Arctic while the other two species are national migrants which all breed in the South Island. Hence, construction at Kiwi Esplanade reserve will not affect any migratory shore bird nesting and breeding activities. The sole issue is in relation to potential disturbance effects at this high tide roost.
- 2.3 In this context, it has been my observation that the only migratory shore birds that utilise this part of Kiwi Esplanade reserve are predominantly NZ pied oystercatcher. This has been confirmed in the evidence of Mr Kitching who made an aside to this effect (specifically using the word "exclusively"), and then again when the representative of the Miranda Naturalists' Trust was reading paragraph 3.3 of their evidence and noted as an aside that the main species using the site was NZ pied oystercatcher. In my observations while other shore birds also utilise Kiwi Esplanade reserve, generally no other *migratory shore birds* do. As such, the potential effects on migratory shore birds at Kiwi Esplanade reserve are predominantly restricted to that single species (i.e. NZ pied oystercatcher). I therefore focused my review of potential effects on the NZ pied oystercatcher rather than the knots and godwits referred to in the MBRRA evidence. Generally, knots and godwits do not frequent Kiwi Esplanade reserve, being found elsewhere in the harbour at many of the other high tide roosts (e.g. Pollock Spit, Clarks shellbanks, Wiroa Island and Awhitu Beach). All of the major high tide roosts for migratory shore birds located within the Manukau Harbour are shown in Appendix D of this reply evidence.
- 2.4 MBRRA also raised concerns that "there is not an abundance of habitat for them nearby".¹ I do not agree with this statement. There are a number of other large and suitable bird roosting areas in the immediate vicinity of the Kiwi Esplanade site for example the adjacent Ambury Park, Puketutu Island, and the several artificial roosts created by Watercare when the

1

MBRRA evidence at paragraph 6.8.3, page 30.

oxidation ponds were decommissioned (refer to the enlargement in **Appendix D**). This is confirmed in **Appendix E** of this evidence, which is an email from a Council ornithologist (Mr Tim Lovegrove) to Watercare on this very matter.

- 2.5 In relation to disturbance effects, it was recognised in my primary evidence that noise and movement associated with construction activities at the Kiwi Esplanade site would be a potential issue. Given this, an earlier proposed location ("Kiwi Esplanade West Site") for the Central Interceptor works at Kiwi Esplanade reserve was abandoned as a result of (amongst other factors) potential disturbance effects on shore birds at that specific location. That earlier location (the Kiwi Esplanade West Site) was on the western-most end of the reserve, abutting the coastal edge there. This site is shown in Appendix K of Ms Petersen's primary statement of evidence. While the Kiwi Esplanade West Site was well away from the main high tide roost, which is located on the large open fields to the east of the car park access road, it was in proximity to a smaller roost on the western-end of the reserve.
- 2.6 Watercare then developed an alternative proposal with the aim of locating the construction site and associated permanent works in the areas of existing disturbance within the Kiwi Esplanade reserve, being the car park, its access road, toilet block and yacht club building. This is the site which was included in the application documents and set out in the Hearing Drawing Set on pages 125 and 126. In this way, disturbance associated with construction will be masked to a greater degree by these existing activities. In addition, the site is within an existing grove of pohutukawa and, as a number of submitters correctly observed, this is not used for roosting purposes due to the cover it provides for predators. I therefore conclude that the proposed Kiwi Esplanade site is in a better location overall when considering impacts on shore birds, and reduces the potential effects on these birds compared to the earlier Kiwi Esplanade West Site.
- 2.7 In my opinion, the proposed location is sufficiently distant to the roosting sites here to not cause disturbance to roosting shore birds. I base this opinion on the fact that NZ pied oystercatcher (and many other shore bird species) are known to habituate to certain disturbances that are not directly life threatening. Two obvious examples of this are red billed gull and black backed gull, both of which are highly tolerant of noise and disturbance (the latter frequenting operational landfills as feeding grounds). As another

example, I earlier undertook a literature review in relation to disturbance effects on NZ dotterel (for an unrelated project), and concluded that this shore bird species is well capable of becoming habituated to high levels of noise and movement (with one documented example showing it to be nesting in the middle of the Sulphur Point reclamation while it was being constructed, amidst very large pieces of operational earthmoving equipment). This is shown in **Photograph 1** below.



Photograph 1: NZ dotterel nesting in the middle of the Sulphur Point reclamation while it was being constructed

Proposed Conditions

2.8 Watercare proposes to restrict the activities that are most likely to cause the greatest levels of potential disturbance to shore birds to the period of the year when NZ pied oystercatcher would not be present at Kiwi Esplanade reserve. This relates to the trenching associated with the Link Sewer 4 works because, as shown on Hearing Drawing Set page 126, it is only those works that are on the eastern side of the access road adjacent to the main Kiwi Esplanade high tide roost. Watercare has proposed a condition that will give effect to this, restricting the trenching works associated with Link Sewer 4 to between 1 August and 30 November.

- 2.9 At the hearing some submitters talked about birds being present from August/September through to March/April. However, this does not apply to NZ pied oystercatcher which, as explained above, is the primary shore bird, and the only migratory shore bird, that roosts in this specific area. They are usually not present in the North Island between August to December. In both the version in the Hearing Set of Consent Conditions, and the Conditions proposed in the Council Pre-hearing Report, the Condition reads:
 - 2.3 The trenching of Link Sewer 4 across Kiwi Esplanade Reserve (Lot 2 DP 77585 and Lot 3 DP 77585) shall be undertaken between 1 August and 30 November in any year so as to limit potential effects on roosting shore birds.
- 2.10 This condition, in effect, limits that specific construction activity to just four months of the year when the vast majority of NZ pied oystercatchers will be in the South Island.

Other Relevant Considerations

2.11 I also consider it is relevant to re-emphasise the existing environment present at Kiwi Esplanade reserve. Existing disturbance at the proposed Kiwi Esplanade site is noted in the evidence of the MBRRA where, in paragraph 6.7.7.1, they identify the activities of a vibrant yacht club, fishermen, walkers, joggers, cyclists and bird watchers being regular occurrences at the reserve. To this I would add vehicle movements, people getting out of and into cars at the car park, and use of the ablution block. In my opinion, the fact that these regular activities do not upset the roosting NZ pied oystercatchers close by shows that they are well habituated to these regular disturbances, particularly in the area of the reserve where the toilet block and car park are located. It has been my observation that the only time the roosting flocks take to flight is when danger is obviously imminent, such as a dog being let off the leash by a thoughtless owner utilising the reserve for exercise purposes.

2.12 In this context, I note that the email attached as **Appendix E** of this evidence from the Auckland Council ornithologist explained that:

on the whole, the oystercatchers at Kiwi Esplanade are pretty tolerant of the public and fairly resilient when it comes to disturbance, and if pushed the nearby Ambury Regional Park paddocks and artificial roosts constructed during Project Manukau on the Mangere foreshore also provide alternative roosting sites.

- 2.13 I fully concur with that statement.
- 2.14 Additionally, I note that the evidence of the Miranda Naturalists Trust (paragraph 3.4) states the following:

We do not disagree with Boffa Miskell's conclusion that long term the construction phase will have little impact on roosting for shore birds.

- 2.15 In my opinion, with the proposed mitigation relating to the timing of the trenching of Link Sewer 4 being undertaken outside of the time that migratory NZ pied oystercatchers will be present at Kiwi Esplanade reserve (as required by Watercare's proposed Consent Condition 2.3), there are unlikely to be any short-term effects either.
- 2.16 In finishing, I would also point out that in the very unlikely event that the works at the proposed Kiwi Esplanade site do result in significant disturbance effects on roosting NZ pied oystercatchers, then contingency measures can be put in place. These could include noise walls and/or visual screens being erected around the construction site.

3. CONCLUSION

3.1 In conclusion, while the evidence of the submitters correctly points out that a wide variety of migratory shore birds utilise the Manukau Harbour on a significant scale, the effects of the Central Interceptor Project on high tide roosting sites for these species is restricted to one area of Kiwi Esplanade reserve, and the only such species that regularly utilise this roost is NZ pied oystercatcher. In my opinion, these birds have become habituated to present levels of disturbance here, and are likely to do so in relation to the works proposed for the construction of the Central Interceptor at this location (with existing disturbance levels helping to "mask" the new disturbances). 3.2 Hence, so long as the activities that are most likely to cause the greatest levels of potential disturbance (i.e. the Link Sewer 4 trenching, which are the only works which will take place close to the main high tide roost site (i.e. the one to the east of the access road)) are restricted to the period of the year when the NZ pied oystercatchers are not present, then adverse effects here would be no more than minor. In this context, restricting the trenching works associated with Link Sewer 4 to between 1 August and 30 November, as proposed in Watercare's Consent Condition 2.3, is consistent with the time period when the vast majority of NZ pied oystercatchers will be in the South Island.

David Charles Slaven 13 August 2013