

IN THE MATTER OF Applications to the Christchurch City Council (RMA92021940 and RMA92030265), and the Canterbury Regional Council (CRC134837, CRC134839, CRC134864, CRC135060 and CRC 160434) made jointly by the Christchurch City Council and Wairewa Runanga Incorporated for consents to carry out activities associated with the artificial opening and closing of Te Roto o Wairewa/Lake Forsyth to the sea.

DECISION OF HEARINGS COMMISSIONERS
DAVID W COLLINS, BRENT COWIE AND HOANI LANGSBURY

Hearing: 9th, 10th and 11th December 2015 at the Little River Community Hall

Decision date: 22nd March 2016

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1 INTRODUCTION

1. We have been jointly appointed and empowered by both consent authorities to determine all the applications associated with the opening, and possible closing, of Te Roto o Wairewa/Lake Forsyth ("Wairewa" "the lake") to the sea. These consent authorities are the Canterbury Regional Council (CRC, often known as Environment Canterbury) and the Christchurch City Council (CCC).
2. All of us have had extensive experience with water issues in the Resource Management Act context. We were the three commissioners who two years previously heard and decided similar applications to open and close Te Waihora/Lake Ellesmere to the sea. Dr Cowie is an aquatic ecologist with very broad experience in water management. Mr Langsbury is of Ngāi Tahu descent and has had a range of freshwater kaitiaki responsibilities throughout Otago.
3. We visited the site during a break in the hearing on 10 December 2015. Dr Cowie had made a previous site visit by foot on 2 December. We drove from Birdlings Flat across the beach gravels (slowly, in a 4WD) and the causeway and then up Bossu Road, stopping at various vantage points to see the canal, the beach and the lake.
4. At this point we need to differentiate between what is known as the beach opening, which is about 200m east of Birdlings Flat, and the canal opening at the foot of the cliffs at the very east end of the beach. The canal was first consented in 2008, and has subsequently been used for the 26 openings of the lake that have taken place since that time.
5. This proposal is unusual in three respects. Firstly, after receiving a substantial number of submissions opposing the canal opening because it disrupted access by the community across the beach, Wairewa Runanga Incorporated made separate applications to construct a permanent bridge across the canal. Secondly, this proposal is unusual because there are two applicants. Thirdly, and most importantly, this proposal is unusual in that consents are sought for what are occasional but quite essential activities. Resource consents are permissive, but in this case, as discussed below, if the lake is not opened periodically there would be severe consequences for the surrounding land and the integrity of State Highway 75 to Akaroa.
6. We have had the benefit of comprehensive application documentation, two thorough s42A reports and substantial briefs of evidence from the applicants. We also had the benefit of hearing nine submitters. For these reasons we have not attempted to set out all the information and evidence in this decision; rather we have focused on the main facts, key evidence and the response to questions, and why we have imposed particular conditions of consent.

2 THE PROPOSAL

2.1 Wairewa/Lake Forsyth

7. The lake has a catchment of 111 square kilometres, most of which is steep hill country. The main tributary is the Takiritawai River, which is formed by the confluence of the

Okana and Okuti Rivers, at the head of the lake. State Highway 75 runs along the north side of the lake through the settlement of Little River. The other main settlement in the catchment is at Birdlings Flat, close to where the lake has been opened to the sea.

8. Wairewa has a long history in Ngāi Tahu tradition. It is the home of Wairewa Runanga, and an integral part of the identity of these people. It has long provided Mahinga kai, particularly tuna (eels), and today is one of only two lakes in the country where only traditional harvesting of tuna for local whanau can take place. This is undertaken using kumu (eel drains) on the lake side of where the beach opening has taken place. Out migrating adult eels are attracted to the smell of salt water near the sea, and are then taken for food by local whanau.
9. Wairewa is considered to be a wetland of international significance. The lake has highly significant wildlife values, providing habitat for a large and diverse range of aquatic birds and waterfowl. Ninety-three species, 51 of them resident, have been recorded from the lake and its environs and up to 10,000 birds can be present at one time. Key species include the nationally endangered Australasian Crested Grebe (the lake is a wintering site for up to 70% of the total NZ population), white herons, paradise shelduck, NZ shoveler, grey teal, NZ scaup and pied stilt.
10. Schedule 71 of the Ngāi Tahu Claim Settlement Act 1998 provides for a Statutory Acknowledgement for Wairewa (Lake Forsyth). Wairewa is one of the lakes referred to in the tradition of “Ngā Puna Wai Karikari o Rakaihautu” which tells how the principal lakes of Te Wai Pounamu were dug by the rangatira (chief) Rakaihautu. Rakaihautu was the captain of the canoe, Uruao, which brought the tribe, Waitaha, to New Zealand. Rakaihautu beached his canoe at Whakatū (Nelson). From Whakatū, Rakaihautu divided the new arrivals in two, with his son taking one party to explore the coastline southwards and Rakaihautu taking another southwards by an inland route. On his inland journey southward, Rakaihautu used his famous kō (a tool similar to a spade) to dig the principal lakes of Te Wai Pounamu, including Wairewa.
11. Wairewa has been used by the descendants of Rakaihautu ever since it was formed. It is famous for the tuna (eels) that it holds and which migrate out to the sea in the autumn months. Ngāi Tahu gather here annually to take the tuna.
12. Wairewa also has significant fishery values, including for tuna, brown trout, perch and, to some extent, inanga (whitebait) and patiki (flounders). Historically the people of Wairewa also fished extensively for inanga and patiki along with the major fishery for tuna.
13. The lake is shallow and windswept, and water quality has long been very poor. The Trophic Level Index for the lake varies between eutrophic and extremely hypertrophic, with the hypertrophic peaks occurring in summer when large algal and cyanobacteria blooms occur frequently.
14. Two witnesses for the applicant, Mr Wybrow and Mr Cranwell, showed us photographs of dead eels and swans taken during the last large scale *Nodularia* bloom in 2005. Mr

Wybrow said hundreds of eels, stock and dogs had died as a result of that particular toxic cyanobacteria bloom in the lake.

15. The local environment around the opening sites is strongly dominated by marine processes. The beach is directly exposed to southerly storms, and gravel is aggrading there at a rate of about 0.7m per year. Mr Langsbury asked several witnesses what the natural state of the beach was; most spoke of a dynamic and constantly changing environment; others used words like being a *“steep and powerful wave dominated structure”*, challenging, large scale and hostile. During large storms the sea can break over the beach and salt water will enter the lake.

2.2 Opening the Lake to the Sea

16. The lake has long been artificially opened to the sea at what is now known as the beach opening site, with the earliest records of the lake being opened going back to 1866. Responsibility for opening the lake eventually fell to the former Banks Peninsula District Council, and after amalgamation that responsibility now rests with the operations arm of the CCC.
17. Opening the lake, particularly at the beach opening site, is not a simple task. Birdlings Flat beach is exposed and windswept, and suffers from periodic large southerly storms. The lake cannot be opened during storm events, and it usually closes quite quickly as marine processes close the outfall. However if the lake remains open for some time tidal inflows occur, which raises the salinity of the lake. One of the advantages of the canal opening site is that because the canal is about 900m long tidal inflows are less, and the lake can easily be closed by dosing gravel into the canal.
18. The CCC generally aims to open the lake at trigger levels of 2.1m in winter and 2.3m in summer, but now does so in consultation with the community. Higher levels than this have occurred in recent times with the lake being as high as 2.83m following the March 2014 storm when 314mm of rain was recorded at one high altitude site in the catchment. This and other recent events caused flooding in Little River, but this is not necessarily linked to higher lake levels. Higher water levels in summer are seen by the applicants to have significant benefits for lake water quality.
19. The number of openings necessary each year has varied greatly. In some years no openings have been necessary, whereas the greatest number of openings recorded in one year is nine. In many years there are between two and five openings, most during the winter months of June through August, with very few records of summer openings.

2.3 The Canal Opening

20. The canal opening was authorised by temporary consents granted to Wairewa Runanga in 2008 for a term of five years. These have been allowed to continue under the provisions of s124 of the RMA. Although the consents granted only enabled the Runanga to open the lake three times during the term of the consents, the CCC has also been able to undertake openings there under an old notified use consent held by Banks Peninsula DC and extended by the CRC. All 26 openings of the lake since early 2009 have been carried out via the canal.
21. The consents granted in 2008 also allowed the construction of a sea groyne to the south side of the canal. While this is now buried by gravel, which is carried along the

beach from the south and aggrades at Birdlings Flat, the groyne still offers some protection to the mouth of the canal.

22. On behalf of the applicants Mr Reid listed what he considered the main advantages of the canal opening versus the beach opening. These were that because the lake closes sooner there is less tidal inflow and the lake does not fall to such low levels, which in turn reduces the risk of toxic algal blooms. Additionally, water flows and velocities are lower in the canal, and this in turn is believed to enhance recruitment of juvenile eels to the lake.
23. There have been significant improvements in lake water quality since the canal has been used exclusively for lake openings. We discuss this further in Section 5.2 below.
24. For many local residents the one major issue associated with the construction and operation of the canal has been an intermittent but frequent loss of access from Birdlings Flat to nearby Bossu Road via the 4WD track along the beach, sometimes for long periods. Although there has generally been a causeway across the canal, from about 2013 the CCC no longer maintained the causeway and access was often not available. This led to the formation of the submitter group Kaitorete Connection Incorporated, who organised a protest march on the beach in June 2014.
25. This loss of access, and the community reaction to that loss, resulted in the Runanga making the supplementary application for the bridge, which is intended to provide permanent access across the canal. This has been widely supported by many submitters, several of whom opposed the original applications solely because of the access issue.

2.4 The Consents Sought

26. The applicants applied for six resource consents from the CRC and the CCC to facilitate the opening of Wairewa/Lake Forsyth as follows:

Primary Consent applications to CRC

CRC134837 – a coastal permit to undertake works at the mid beach and canal opening sites.

CRC134839 – a water permit to divert and take water to enable the subsequent discharge of water into the coastal marine area (the CMA) at the opening sites of Wairewa/Lake Forsyth, and to dam water as a result of artificial closing at the opening sites.

CRC134864 – a discharge permit to discharge water from the lake into the CMA and to discharge sediment into the lake from works to open and close the lake.

CRC135050 – a land use consent to undertake works in:

- the bed of Wairewa/Lake Forsyth;
- Birdlings Flat beach at the two opening sites; and
- the groyne at the sea outlet of the canal.

The proposed works include excavation, disturbance and deposition in the lake bed and beach area, works to facilitate eel passage during migratory periods, the periodic formation of an access causeway and lake level bund in the canal, along with maintenance of the canal, the lake level control structure and the causeway.

Primary Consent Application made to CCC

RMA92023020 – land use consent applications to the CCC to undertake earthworks to open and close Wairewa/Lake Forsyth.

27. Subsequent to submissions on the above applications being received, Wairewa Runanga made separate land use applications to the CCC and CRC which were:

CRC160434 & RMA92030265 – to install, use and maintain a single lane twin span bridge to provide access over the canal at the southern end of the lake.

28. In his legal submissions for the applicant Mr Reid referred to the first five joint applications as the primary application, and the application to construct the bridge made by Wairewa Runanga as the secondary application. We will use that same terminology here.

2.5 Notification and Submissions

29. The primary applications were publicly notified separately by the two Councils in September 2013. The secondary applications were publicly notified jointly in September 2015. The details are provided in the Officers' Reports. We are satisfied that all the primary applications were notified widely and appropriately, and that any interested party had opportunity to submit if they so wished.
30. The primary application to the CCC received 10 submissions, two in support and eight in opposition. The secondary application to both the CRC and CCC to construct the bridge received 26 submissions, 20 in support, four in opposition and two neutral. By our count at least five of the submitters who opposed the primary application supported the secondary application to install, use and maintain the bridge.
31. Each of the primary applications to the CRC received 10 submissions, seven who opposed the applications, two who supported them and one party who was neutral. Again most of the submissions on the applications focused on the issue of access and the need to restore the causeway promptly at all times.

3 THE HEARING

3.1 Evidence for the Applicants

32. The case for the applicants was led by **Mr Kelvin Reid**. He provided legal submissions on behalf of both applicants: the CCC and Wairewa Runanga. He called eight witnesses.
33. In his opening submissions Mr Reid traversed several issues, including water quality consultation, the framework for our statutory assessment and comment on the officer's proposed conditions. We return to most of these matters later in this decision.

34. Mr Reid accepted that all the applications should be “bundled” and treated collectively as applications for non-complying activities. He considered that the applications could pass both the threshold tests of s104D of the RMA. We discuss this matter in Section 4.1 below.
35. **Mr Robin Wybrow** was the chairperson of Wairewa Runanga, one of 18 Papatipu Runanga forming Ngāi Tahu, from 2001-2013. He spoke of kaitiakitanga and the traditions of Ngāi Tahu and the long association of the people of Wairewa with the lake. He discussed the catchment and how it has changed, and of attempts to form a permanent outlet for the lake, all of which foundered because of a lack of resources.
36. The process leading up to the lodging of the consents for the canal, and its construction were outlined. He showed us photographs of the construction of the canal and its discharge to the sea, but was critical of some of the conditions of consent, calling for instance the restriction to opening the lake via the canal only three times “a recipe for failure”. Mr Wybrow noted the applications are principally for the public good, and he opposed onerous conditions on any consents, saying they would be counterproductive and that he “did not want to put a chain around our descendant’s necks”.
37. Mr Wybrow also spoke of the importance mahika kai, particularly tuna to the people of Wairewa. He asserted that the positive changes observed in recent times in Wairewa are unprecedented in any other lowland lake in the country. Asked if the openings had met kaitiaki, Mr Wybrow observed that while the people would like a permanent opening, the canal has improved water quality in the lake.
38. **Mr Gary Teear** is a Director of OCEL Consultants, a specialist marine engineering firm. While he had no involvement in the original consents for the canal at Wairewa, he had worked on the New Zealand Salmon beach outfall at Tent Burn south of Taumutu, where a 40 tonne outlet structure had recently been moved by wave action.
39. He believed that the canal has been well constructed, and that it has some safety benefits by keeping people away from the unstable high cliffs at the east end of the beach. The canal is “very preferable” to the beach opening as it can be much better controlled, and can be closed. The causeway over the canal does however risk being washed out in large south east swells, and so he supported the construction of a bridge over the canal.
40. Mr Teear described the sea groyne as an “*ad hoc structure*” built with rocks found nearby. Although now buried under gravel, the groyne still provided stability to the mouth of the canal, and was not a failure as a submitter, Mr Sitarz, had asserted. There had been no significant adverse effects from the groyne on the coastal environment.
41. In his view the canal opening will become more difficult in the future as the groyne becomes less effective as more gravel is carried along the beach from the west. A larger groyne or breakwater could be constructed, but this would need to be of very heavy rock and would be expensive as there is no good quarry source of such rock nearby.

42. **Dr Belinda Margetts** is a waterways ecologist with the CCC. Her evidence discussed the water quality of Wairewa/Lake Forsyth. We need not summarise that here as we discuss water quality in Section 5.2 below on the actual and potential effects of the activities for which consent is sought.
43. **Mr Graham Harrington** is an engineer employed by the CCC as a senior surface water planner. His evidence covered flood management, the use of the canal and lake level control by the canal, CCC funding for the bridge and lake openings and consultation with the community.
44. He explained that the Council's main role at Wairewa is flood management, but that now they also work closely alongside the Runanga to manage the lake. His preference is to open the lake via the canal because it offers multiple benefits, including reducing saline inflows when the lake is open, better control of minimum lake levels, improved conditions for recruitment of migratory fish and supporting the Runanga's cultural values.
45. Although the canal could be used in most instances to lower the lake during storm events, Mr Harrington was concerned that at high lake levels the canal could be scoured out by outflows following a storm event. He said that inflows to the lake in the March 2014 event peaked at about 170 cubic metres per second (m^3/s), but that only about 30 m^3/s could be carried to the sea via the canal, whereas up to about 160 m^3/s can be discharged via a beach opening. For this reason he still considered that a beach opening may be necessary on some occasions.
46. He said that the causeway would likely be retained over the coming summer months until the bridge could be built, but it was highly desirable that the bridge be built as soon as possible.
47. **Ms Jennifer Moore** is a senior landscape architect who works for the CCC. She described the combination of the steeply eroding cliffs and the large scale shingle drifts on the beach as providing a broad and dramatic landscape at Birdlings Flat. The scale of the landscape makes any man made modifications less significant. Other man made features – which include power lines and the track from Birdlings Flat across to Bossu Road and old shingle piles from the excavation of the canal – are more dominant in the landscape than the canal, which one wouldn't know was there if you weren't looking for it.
48. She considered that the design of the bridge, with its simple form, the materials used and recessive colours will be "sympathetic to this location" and will blend into the landscape. Ms Moore also said that shaping the old excavations from the canal towards the lake would make these look more natural. In answer to a question she agreed that it would be better to disturb the old excavations now, which have become vegetated, as they will re-vegetate over time.
49. **Mr Iaeen Cranwell** has been the leader of the Cultural Heritage and Identity portfolio for Wairewa Runanga for 15 years, and Team Leader of the Natural Resources portfolio for 10 years. He spoke on behalf of the Runanga. His evidence covered a range of matters, including mahinga kai, eel research, water quality and the work of the Banks Peninsula Zone Committee (some of which he cited to us).

50. Wairewa has provided mahinga kai for tangata whenua for centuries. This has principally been tuna (eels), but has also included inanga, patiki (flounder), lamprey and moulting shelduck. Mr Cranwell showed photos of old and current tuna harvesting practices.
51. Mr Cranwell expressed concern about the results of work carried out by Dr Jellyman of NIWA in the lake. In 1975 a wide range of shortfin eel size classes were present in Wairewa; however when this work was repeated in 1995 there was a disturbing absence of fish of less than 500mm. This indicates there had been little recent recruitment of glass eels into the lake in the years leading up to 1995. This work is soon to be repeated, with the hope that more young eels will be present in Wairewa.
52. **Mr Wayne Alexander** is a building contractor with considerable experience in aquatic environments, including Wairewa. His evidence focused on the construction of the canal and associated matters, including the proposed bridge.
53. The longest the canal has been opened was 37 days during the winter of 2013. He opposed any requirement to fill in the canal when any consents granted expire. He considered that glass eels could enter the lake via the canal.¹
54. **Ms Kelly Hansen** is a senior recreation planner with the CCC. Her evidence outlined the recreational amenity at and near Birdlings Flat. Activities undertaken include walking, surf casting, fishing for trout and perch, whitebaiting, collecting rocks from the beach and mountain biking across the causeway and up Bossu Road.
55. Foot, vehicle and bike access across the canal is an important component of the local recreational experience. In answer to questions she supported the construction of the bridge, provided it is in sympathy with the setting and is built to 4WD access standards only, saying that the CCC would resist any moves to improve access to 2WD standard.
56. **Ms Sandra McIntyre** provided planning evidence for the applicants. We need not summarise any of that here as we discuss her evidence quite extensively elsewhere in this decision.
57. Asked what monitoring would be sufficient she said that while it was appropriate for the applicants to report on matters relating to the consent, such as the timing of openings, any other monitoring needs to be targeted to the effects of the activities. She acknowledged it was difficult to put bounds around this.
58. Ms McIntyre considered that it was preferable to protect the rare vegetation on the canal tailings rather than level them off. She thought that the bridge application should be bundled as non-complying with the others, as the bridge is necessary to mitigate the adverse effects of the canal on public access.

¹ Any significant recruitment of glass eels and juvenile flounder to Wairewa would require the lake be open to the sea during spring. Historically that has not often been the case.

3.2 The Submitters

59. Eight submitters presented to the hearing. We also thoroughly read all the submissions made on both the primary and secondary applications.
60. **Ms Kate Whyte** first appeared for **Kaitorete Connection Incorporated** (KCI), which was formed in November 2013 with objectives that include protecting the connection between the gravels of Kaitorete Spit and the western end of Bossu Road. KCI has 36 members and it organised a rally at the site on 29 June 2014, which about 130 people attended.
61. Access across the beach has been used since about the mid 1800s, and is highly valued by the community to provide access for local residents for a wide variety of reasons. Once the CCC stopped maintaining the causeway over the canal access across the spit has been progressively reduced, with 143 days without access in 2014 and 147 days in 2015, with the longest period without access being well over two months.
62. KCI strongly support the proposed bridge over the canal as it will redress the access issue, and asked that it be provided for and properly maintained and insured.²
63. **Brian Hutchison** is a local farmer who owns properties on Kaitorete Spit, where he now lives, and Magnet Bay on the south side of Banks Peninsula. By far the quickest route for he or his stock to move between the two properties is across the east end of the spit and up Bossu Road. It can take at least 40 minutes longer for him to get from one property to the other via the Okuti Valley route.
64. He said the groyne had failed and the canal should be filled in. The CCC has used excuses to avoid fixing the causeway. He wanted permanent access however, and although critical of the design of the bridge, said in response to a question that it would meet his needs provided it remains in good condition and is not undercut.
65. **Ms Maria Bartlett** lives at Birdlings Flat, works for Te Runanga o Ngāi Tahu and is an elected member of the Akaroa Wairewa Community Board. All this she said gave her a unique perspective on the consent applications we are considering here. She provided some comprehensive comments on the proposed conditions of consent.
66. Once the CCC stopped maintaining the causeway, Wairewa Runanga took over its reconstruction and maintenance, and have also led the application for the proposed new bridge across the canal. Ms Bartlett said both these initiatives have been “hugely appreciated” by the local community and recreational users alike.
67. The canal is preferable to the beach opening for several reasons, including improved water quality and fish passage, and better flood control. In her words “it is certainly not a perfect mechanism, but seems better than the old alternative.”

² It is beyond our scope to require the bridge be insured; this may not be possible in any case given the hostile environment it will be placed in.

68. Much of Ms Bartlett's submission related to the causeway or bund, and she presented a comprehensive evaluation as why she thought this should be able to continue, at least as a back-up option to the proposed bridge over the canal (which she supported).
69. Although we intimated to Ms Bartlett that we did not consider the applications before us would allow the causeway to be re-instated and/or used in the future, this was not correct. Mr Just, the reporting officer for the CRC said the applications did include re-instatement and use of the causeway, and Ms Taylor reporting for the CCC said the land use of moving gravel into a bund or causeway would be a permitted activity on the site.
70. **Ms Rima Herber** lives in the farmhouse at the very east end of Kaitorete Spit with her partner Mr **John Stroh**. They both appeared at the hearing. Ms Herber supported the application to construct the bridge, and considered the earthworks (from the excavation of the canal) should be re-contoured and allowed to re-vegetate, but with the caveat that the bridge should still be screened from the car park.
71. Mr Stroh's position was that he wanted the canal closed and the beach re-instated, but if that did not happen he considered a robustly constructed and properly maintained bridge to be the next best option as access was of paramount importance.
72. **Mr Bruce Solomon** was another member of KCI and he strongly supported continued access across the beach. He was not sure if a bridge was the best option, but said he could always tell if a causeway was present, particularly in the weekend.
73. **Ms Kate Whyte** re-appeared as an individual. She and her partner manage a property on the Peninsula near the top of Bossu Road, and access across the spit is critical to them. She strongly supported the application for the bridge and was complementary about the work the Runanga had done over the years. She thought a management plan was needed for Wairewa, although this may not be the place to do so, and she thought more work should be done on the marine ecology of nearby bays on the west side of the peninsula.³
74. **Mr Ken Sitarz** gave a very comprehensive submission well illustrated with many photographs in which he opposed the applications to continue the use of the canal and the construction of the bridge (although he reluctantly supported this if the canal were to remain). The canal and the groyne had failed in his view. He favoured instead a permanent opening, as he said had been successful at Tent Burn to the south (although this structure has recently been washed out).
75. Mr Sitarz cited expert opinion, particularly from Professors Kirk and Soons, both formerly of Canterbury University that the canal and groyne were doomed to failure. He agreed with them, noting also that the causeway had been washed out by high seas and then not re-instated because of safety concerns.

³ Ms Whyte also provided comments on conditions in relation to the applicants' right of reply. We took no account of those comments as the applicant must be allowed the final word on such matters.

3.3 The Reporting Officers

76. **Mr William Field**, a landscape architect with Boffa Miskell, reported on the applications to the CCC. He noted that the general location is classified as being of high natural character in the Replacement District Plan, so mitigation is important. The canal is not visible from the car park, which is about 175m away. He considered that while the landscape effects of the canal are significant from nearby, but would be no more than minor from the perception of most visitors to Birdlings Flat as they will not see it. The natural character of the beach has been modified over time, such as by power poles and farms.
77. He thought that although the bridge is a “*utilitarian structure*”, it was acceptable in the wider landscape context, as it would blend reasonably well into the landscape. He considered that the old excavations for the bridge should be re-contoured to be more in context with the rest of the landscape.
78. **Ms Emma Taylor** was the principal reporting officer for the CCC. We thank her for a comprehensive report and evaluation.
79. Ms Taylor reiterated her conclusion that the effects of the applications are no more than minor. She thought access was the most important feature of the applications to the CCC, and understood that that the bridge should be completed this summer. Asked if the causeway was still provided for, she said this was excluded when the secondary application for the bridge was made, but noted that it may well be permitted under volume based rules for earthworks in the District Plan. Both Ms Taylor and Mr Just emphasised how important signage was to prevent people trying to drive along the beach in vehicles not up to the challenge of doing so.
80. **Mr David Just** was the principal reporting officer for the CRC, and we also thank him for a comprehensive report and evaluation. He still held the view that the overall effects of the applications are positive, particularly for flood mitigation, but that the effects of the activities are more than minor – such as effects on access, natural character of the coastal environment and coastal water quality. He reinforced this by noting that recent case law applying to consents allowed to continue under s124 of the Act was that the starting point for consideration of the applications was that the canal did not exist.
81. He considered that the land use consent application CRC135030 did allow scope for the causeway to remain, and that the best option would be for the causeway to be retained while the bridge was being built.
82. We had some discussion with Mr Just about the lake management plan that he had recommended as a condition of CRC134849. His response was that he would take our concerns on board and come back with amended recommendations.

3.4 The Applicants’ Right of Reply

83. Mr Reid gave his initial oral reply, but reserved the right to make additional comments in writing. He said at the hearing that from the CCC viewpoint the causeway is “*off the table*”, although it could provide a temporary solution that could be made safe while the bridge is being built. He said that requiring the bridge to be insured was beyond our

jurisdiction, but that the applicants would look at this, and there would be clear commitment to maintenance in any case.

84. He recalled Mr Harrington, Mr Alexander and Mr Cranwell who largely reiterated points that they had already made. Mr Alexander believed that if the canal became inoperable in the future it would not be necessary to fill it in, as one would just have to remove the storm berms near the coast and *“let nature do its thing”*. Mr Cranwell emphasised that the people of Wairewa have been there for over 30 generations, and that their aim is to improve the lake for future generations and provide tuna to help feed them.
85. At the conclusion of the hearing we asked the CRC and CCC reporting officers to provide revised sets of recommended consent conditions, reflecting the additional information provided and discussions during the hearing. Those revised conditions were then circulated to submitters for comment, and provided to the applicants' counsel, Mr Reid.
86. We believe this has been a useful process and Mr Reid's written reply, received on the 2nd of March, adopts large parts of this further analysis.
87. In accordance with Mr Reid's oral closing submissions the applicants also investigated whether the causeway could be made safe as an interim access solution until the bridge is constructed. Their right of reply included a letter from Mr Teear, who concluded the causeway could be made safe by a variety of options, of which the “fuse” option with a wider causeway was seen as the most practical and economic. This would minimise the risk of a washout by hydrostatic head. They proposed a new condition that the access causeway be constructed within one month of the commencement of the consents we have granted. We have included conditions that allow for the construction and maintenance of the temporary causeway as proposed by the applicants.
88. No time was proffered for the re-instatement of the causeway after an opening, but this would be done as soon as practicable. The applicants also offered a condition to take all practical steps to complete the construction of the bridge by 31 March 2017, as the date originally proposed of 30 June 2016 was no longer practical due to the time taken to investigate options for making the temporary causeway safe.
89. We comment on other conditions of consent in Section 8 of this decision.

4 STATUTORY ASSESSMENT FRAMEWORK

4.1 Status of the Activities

90. Mr Reid, counsel for the applicants and the applicants' planner, Ms McIntyre, considered that as several of the applications are for non-complying activities, then the applications should be “bundled” and all treated as non-complying. Both the reporting officers came to the same conclusion.
91. We agree with that approach as it is consistent with case law under the RMA. While we did consider not bundling the bridge application with the others, we accept Ms

McIntyre's view that the bridge is essential to mitigate the effects of the canal on public access, and so is part of the same consents package.

92. This means that in order for the consents to be granted the applications must pass one of the "gateway" tests of s104D of the RMA, which states in part:

(1) *a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either—*

(a) *the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or*

(b) *the application is for an activity that will not be contrary to the objectives and policies of—*

(i) *the relevant plan, if there is a plan but no proposed plan in respect of the activity; or*

(ii) *the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or*

(iii) *both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.*

93. The case law regarding sub-section (b) above is that "not contrary to" means that a proposal is not "repugnant to" objectives and policies. It is also important to note that those objectives and policies in plans need to be read collectively rather than individually. In other words, the objectives and policies are not a series of hurdles each of which has to be cleared.

94. Although Mr Reid considered that the applications to each of the consent authorities met both threshold tests under s104D, we are not persuaded that the consents sought from the CRC can meet the first "gateway test" for non-complying activities. We agree with Mr Just that some adverse effects will be much more than minor, particularly given that as the temporary consent for the canal has expired it has to be treated as no longer existing. We do however agree with both Ms McIntyre and Mr Just that the applications to the CRC are not contrary to the Objectives and Policies of the several relevant regional plans, and so pass this s104D test.

95. We are satisfied that any adverse effects of granting the applications made to the CCC will be no more than minor so these applications also pass the "threshold test" for non-complying activities. In then making an overall assessment, we are in no doubt that permanent access between Birdlings Flat and Bossu Road via a bridge will be very beneficial for the community.

4.2 Part 2 of the Act

96. In making our decisions on the applications, we also need to consider the other matters under s104 of the Act. These are all subject to Part 2 of the Act, and include actual and potential effects, any relevant National Policy Statements, the Regional Policy Statement, Regional and District Plans and any other relevant matter.

97. There are several relevant Part 2 (sections 5-8 of the Act) matters in this case. The purpose of the RMA is set out in section 5. It is broadly enabling, (managing and

protecting resources to enable people and communities to meet their needs) but this is subject to provisos about sustaining the capacity of resources to provide benefits into the future, and avoiding or mitigating adverse effects of activities. The natural resources of Wairewa/Lake Forsyth – particularly the cultural, wildlife and fishery values - are highly significant, and this, along with the flood risk posed, requires that the lake is carefully managed and artificially opened. The one major adverse effect of the canal on public access along the beach can be mitigated by the construction of the proposed bridge

98. Section 6 in Part 2 of the Act sets out several “matters of national importance” which we are to “recognise and provide for”. Relevantly here these include section 6(a) *“The preservation of the natural character of the coastal environment...and the protection of them from inappropriate subdivision, use and development.”*, section 6(c) *“The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.”*, section 6(d) *“The maintenance and enhancement of public access to and along the coastal marine area..”*, section 6(e) *“The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.”* and section 6(g) *“The protection of protected customary rights.”*
99. The natural character of the coastal environment, although still broadly imposing, has been modified between Birdlings Flat and the beach and canal opening sites. Power lines run to Bossu Road, there are car parks and a 4WD access track, and the excavations for the canal (but not the canal itself) can be seen from those car parks. In our view none of this existing use and development is “inappropriate”, but instead provides essential infrastructure in the local environment.
100. The exception to this is the piles of material excavated to form the canal, which we consider “inappropriate” in what is largely still an unmodified environment. In the land use consent granted by the CCC we have required that this material is recontoured to be more in character with the rest of the environment (but not to the extent that the bridge becomes exposed to view from the car parks). We see this as outweighing retaining the vegetation that has established there, as we have no doubt these plants will re-establish following disturbance.
101. Wairewa has significant wildlife habitat values and is a taonga to the people of the Wairewa Runanga. The consents we have granted will enable the lake to be better managed, is very likely to have ongoing benefits for lake water quality, and will enable the customary rights of local whanau to take tuna from the lake to continue and perhaps be enhanced via better recruitment of glass eels during spring.
102. Public access along the coastal marine area will be restored permanently once the bridge is completed, provided of course that it is fully maintained.
103. Section 7, also part of Part 2 of the Act also includes several relevant matters, which in the case of section 7 we have to *“have particular regard to.”* These are section 7(a) *“Kaitiakitanga”*, section 7(aa) *“The ethic of stewardship”*, section 7(b) *“The efficient use and development of natural and physical resources”*, section 7(c) *“The maintenance and enhancement of amenity values”*, section 7(d) *“The intrinsic values of ecosystems”*, and section 7(g) *“The finite characteristics of natural and physical resources.”* We discuss these matters in assessing the actual and potential effects of the proposal under several headings below.

104. Our decision to grant the applications is consistent with s8 of the Act, which requires we take into account the principles of the Treaty of Waitangi, in particular the principle of active protection of resources of high value to tangata whenua. That is the case for the traditional tuna fishery of Wairewa.

4.3 Section 107 of the RMA

105. Section 107 places constraints on the granting of any discharge permits. In essence consent can only be granted if an application meets all of a set of criteria under s107(1), or alternatively, that one of the three “exemption criteria” in s107(2) apply.
106. The discharge permit application cannot be granted under s107(1). In particular, the discharge will give rise to the production of suspended materials and have a conspicuous effect on the colour and clarity of the receiving environment, which in this case are the coastal waters off Birdlings Flat and the southern bays of Bank’s Peninsula.
107. Case law does not support the applications being granted as an “exceptional circumstance” under s107(2)(a). Rather that case law focuses on short term consents being granted until specific problems with a discharge can be resolved (e.g. Gisborne sewage discharge; *Poakau Trust v Gisborne DC*, A162/03), or that future improvements in technology will reduce effects so that s107(1) considerations can be met (e.g. *Tasman Pulp and Paper Mill; Marr v Bay of Plenty RC*, NZEnvC 347 (2010) 16 ELRNZ 197). It also seems contradictory that an activity that is carried out about 2-5 times per year on average is an “exceptional circumstance”.
108. We do think however that the discharge permit application can be granted under s107(2)(b), as the discharge is “of a temporary nature”. The discharge occurs only until the lake closes. In this context we also note that the main adverse effects under s107(1), and particularly those relating to conspicuous effects on colour and clarity of the receiving waters, are also only temporary. If the lake remains open for several weeks or more, tidal inflows and outflows are largely of more clear salt water, and the discharge plume so evident when the lake is first opened can no longer be seen.
109. We also note here that s105 of the Act requires that for any discharge permit we must have regard to several matters relating to the sensitivity of the receiving environment and whether alternatives exist. We have done so, and as discussed above we find any effects on the receiving coastal environment to be temporary, and largely associated with discoloration. There is no alternative receiving environment for the discharge other than open coastal waters.

5 ACTUAL AND POTENTIAL EFFECTS

110. The actual and potential effects of granting the applications can be considered under eight headings. These are the same as those listed by Ms McIntyre in her evidence.

5.1 Effects on Cultural and Historic Values and Customary Rights

111. In the context of Wairewa much of the tikanga associated with the lake and the people was to manage and facilitate the practices associated with the provision of mahinga kai, particularly tuna, for their whanau.

112. Allowing the lake to continue to be opened to the sea will help maintain that tikanga. The eel population in the lake is reliant on recruitment of glass eels to the lake during spring. The canal opening gives a better opportunity for recruitment because of much lower water velocities in the outlet to the sea. This will necessitate some spring openings – an uncommon occurrence over recent decades – to enable recruitment.
113. It is also very likely that the canal opening has led to a marked improvement in water quality in the lake, which will in turn have benefits for fish and wildlife populations in or on the lake.
114. The lake has long been opened to the sea at the beach opening site, and the canal opening has been operational since 2009. Although the beach and surrounding area may have contained significant cultural sites, the long history of disturbance has very likely ensured these no longer remain. We have none the less included conditions of consent imposing accidental discovery protocols on the land use consents.

5.2 Effects on Water Quality in the Lake

115. Water quality in Wairewa/Lake Forsyth was discussed by Dr Margetts in her evidence and by Dr Meredith of the CRC in his s42A report attached to Mr Just's report.
116. Up until quite recently water quality in the lake has been very poor, with very high levels of nutrients, high levels of algae in suspension and frequent blooms of toxic cyanobacteria. Kills of bird and fish – including of tuna – have occurred on occasions.
117. However from 2009, since when the canal became the sole means of opening the lake to the sea, there have been some quite remarkable improvements in the water quality of the lake. The conductivity and salinity of the water in the lake have both reduced – salinity to about a quarter of what it was pre-canal. This can clearly be attributed to less tidal inflow occurring via the much longer canal outlet during lake openings.
118. There have also been some slight improvements in the Trophic Level Index⁴ since 2009. Importantly, there have been flowerings of *Myriophyllum*, a native macrophyte that grows from the bed of the lake in 2014 and 2015, anecdotally for the first time in many years. Macrophytes are seen as an indicator of improved water quality, and can have benefits such as: providing shade and habitat for fish and invertebrates, trapping sediment and nutrients and providing a food source for aquatic wildlife. They are seen as indicative of a healthier environment in the lake because they require good light penetration and a stable lake level.
119. While blooms of *Nodularia* have also decreased in frequency, there are still blooms occurring of species of cyanobacteria such as *Anabaena*, although not to the frequency and intensity that blooms have occurred historically. However water quality in the lake remains generally unsuitable for any form of contact recreation.

⁴ Which is a composite index that uses nitrogen,, phosphorous and chlorophyll a concentrations in the water column to determine trophic status

120. Most of the witnesses called by the applicant from Wairewa Runanga also commented very favourably on the improvement in water quality and re-establishment of *Myriophyllum* in the lake.
121. While it is certain that reduced salinity and conductivity in Wairewa can be attributed to the canal being used exclusively for openings since early 2009, it is not possible to link the other improvements in water quality to the use of the canal. However the trends being seen are very encouraging, and as Dr Margetts said the canal opening is certainly not having any adverse effects on water quality. In this same context Mr Just told us that Dr Meredith had advised him that he would not expect that any land use changes in the catchment could yet be the cause of the improved water quality in the lake.
122. A concern raised by Mr Just was that fuelling of the vehicles used to open the lake could be spilt with possible adverse effects on water quality. Ms McIntyre said this would take place at the car park, which is some distance from the lake, or on land near the canal when the bridge is being constructed. We consider that the risks of any adverse effect is small and any such effects would be minor, provided any re-fuelling is carried out with appropriate caution.

5.3 Effects on Water Quality and Habitats in the Coastal Marine Area

123. When the lake is first opened to the sea there is often a visible plume of discolored water stretching as far as the southern bays of Banks Peninsula. This plume becomes less visible once the lake is opened for a few days or more as tidal inflows and outflows begin to dominate.
124. While this is an adverse visible effect, it is temporary and is effectively no different from the plumes visible offshore when Canterbury alpine rivers, such as the Rakaia and Waimakariri, are in high flow. The effect would occur regardless – and for a much longer period - if the lake was left to open “naturally”.
125. Studies by NIWA cited in the AEE also show that the temporary discharge plume is not having any adverse effects on marine species or marine ecology. Similarly, studies carried out for the 2008 consents showed any *Nodularia* contamination of the discharge would die off rapidly in the marine environment.

5.4 Effects on Habitats and Indigenous Vegetation

126. Fluctuating lake levels can have both positive and negative effects on the significant wildlife values of the lake. The species of wading birds and water fowl present have different and often conflicting habitat requirements for nesting, brooding and feeding. These habitats have however established in an environment of periodic lake openings, with associated fluctuations in water levels, over a very long period. With the lake now being managed to try and retain generally higher water levels in summer, this will also offer improved conditions for some birds, with less risk for instance of the lake margins, which can be very important for feeding or roosting, drying out excessively.
127. We think it very unlikely that there will be any significant nesting habitat on the eastern end of Kaitorete Spit, due its frequent disturbance by both vehicles crossing to and from Bossu Road, and other recreational users. Unless construction of the bridge commences during the September to December bird nesting period we do not

consider it necessary to undertake any survey of nesting birds prior to any works being undertaken.

5.5 Effects on Landscape and Natural Character

128. We have already commented on both the high landscape and natural character of the beach between Birdlings Flat and the western edge of Banks Peninsula. We would describe the landscape as dramatic and dynamic, and dominated by marine processes on the beach and old volcanic activity on the peninsula. We have noted that the landscape is modified, including by the Birdlings Flat settlement, Bossu Road, car parks, and power lines and access tracks crossing the beach.
129. We have to begin this evaluation on the basis that the canal is not there. Its construction and operation could have had significant effects on landscape and natural character. It is arguable, but largely academic, that there have already been significant effects on the natural character of the coastal environment from the construction and operation of the canal. Whether that be the case or not, the canal exists and is part of the current landscape.
130. Notwithstanding this, the canal appears to have had significant benefits for water quality in the lake, and because it can be much better controlled, is now very much the preferred opening site. We also note that most casual visitors to Birdlings Flat beach would not know the canal exists, as it cannot be seen from either of the car parks at the beach on the south side of the settlement. Rather they will just see the dramatic beach environment against the edge of the peninsula. We consider too that it is advantageous for casual visitors not to see the canal, and certainly not see the proposed bridge, as that would tempt them to cross the beach in vehicles not suited to doing so.
131. Both Ms Moore for the applicants and Mr Field, a reporting officer for the CCC, considered that the proposed bridge over the canal could be built in a way, including the use of a mesh side and recessive colours, so it would blend into the landscape. On the basis of the simulations we saw, we agree with them. We also agree with Mr Field that the old excavations from the canal should be re-shaped so their form is more sympathetic with the rest of the dramatic landscape one sees from Birdlings Flat and the nearby beach.

5.6 Effects on Recreational Activities and Public Access

132. Since the CCC stopped maintaining the causeway, the presence of the canal has often had a significant adverse effect on public access from Birdlings Flat to Bossu Road. This has particularly been the case during winter months, and we were surprised to hear how often (over 140 days per annum) access has not been available across the causeway in the last 2-3 years.
133. This loss of access – which is clearly very important to the local community – resulted in Wairewa Runanga making the application for the construction and operation of the bridge over the canal. This attracted much support. For instance the original land use consent application to the CCC received 10 submissions, eight of which opposed the application, primarily because of the loss of access along the beach to Bossu Road. The application for the bridge received 26 submissions, 20 of which supported the

application and only four of which opposed it. This support often came from people who had opposed the primary applications.

134. Public access across the canal should be much enhanced, but cannot be guaranteed into the future. The bridge is in a high energy environment, and it or its abutments could well be washed out sometime in the future. There would be no obligation for the CCC or the Runanga to repair the bridge, although both stated that they would do so.
135. Once built however the bridge should largely ensure there are no adverse effects from the canal on recreational activities or public access, provided the bridge is maintained in good repair.
136. Construction of the bridge will lead to some additional noise being generated in the local environment. We do not consider this to be much of an issue, given that sea running on to the beach and windy conditions both result in considerable background noise. We have however imposed a condition limiting construction hours to the working week, as use of the area will be highest on weekends and holidays.
137. It would not be appropriate to place any limits on the times at which the lake can be opened as there may be occasions when this needs to be done urgently.

5.7 Effects on the Coastal Confined Aquifer

138. According to Mr Just the coastal confined aquifer is several metres below sea level and should not be impacted by the canal or the bridge. Even if the aquifer were to be breached, we have no concern about this, as any flow in the aquifer will be seawards in any case.

5.8 Effects on Natural Hazards

139. Artificially opening the lake to the sea is an essential activity to prevent flooding of land around the margins of the lake, including State Highway 75, which is the only major road link between Christchurch and the bays in and around Akaroa Harbour. We were also advised that opening the lake will have little impact on coastal processes and coastal erosion.

5.9 Conclusion about Effects on the Environment

140. We conclude that although opening the lake causes some adverse effects on the environment, such on the natural character of the coastal environment, the positive effects of granting the applications much outweigh any adverse effects. The only significant adverse effect is the loss of access along the beach, and this will be overcome by the construction and maintenance of the proposed bridge over the canal, and the ongoing provision of a causeway until the bridge can be completed.

6 OBJECTIVES AND POLICIES IN THE REGIONAL AND DISTRICT PLANS

141. In their documentation supporting the application, the applicants evaluated all the national, regional and district policies and planning instruments relevant to the present

applications. This included relevant Iwi Management Plans. The officers also systematically evaluated these, with appropriate updates, in their s42A reports.

142. It is not necessary to repeat part of all or that evaluation in this decision. For our purposes the key finding is that, read collectively, all the relevant planning instruments are not contrary to the applications being granted as ones for non-complying activities under section 104D of the Act (see Section 4.1 above).

7 PRINCIPAL ISSUES AND FINDINGS OF FACT

7.1 Need for the Consents to be Granted

143. Given the alternatives, we did not consider declining the applications to be a viable option. The first alternative – letting the lake open “naturally”, would be unacceptable to any party. It would lead to serious flooding and inundation of large low-lying areas around and well beyond the margins of the lake, including parts of SH75. The second alternative – to rely on the emergency powers of a local authority under s330 of the Act - would effectively be nonsense. As the activity needs to be ongoing, consents would need to be sought under s330A in any case.
144. We do not accept Mr Sitarz’s view that a permanent opening could be a viable option. Historically this was tried at Te Waihora in the early part of the 20th century, but it failed. We are similarly convinced that in an environment so dominated by coastal storms and marine processes, any “permanent opening” of Wairewa would soon succumb to a combination of high seas and coastal accretion, and would be an expensive failure. It puzzled us how Mr Sitarz could say the canal and groyne had failed, and yet assert a “permanent opening” would not. We also note that having the lake closed most of the time has benefits for water quality and biota by keeping the lake at higher levels.
145. We could have just granted the application for the opening at the beach site which was used exclusively up to 2009. To have done so would ignore four things. First, the canal opening location has resulted in a lowering of the salinity of the lake, and there is strong circumstantial evidence that it has also had other significant benefits for lake water quality. Second, the canal opening offers better opportunities for fish recruitment, particularly of juvenile eels. Third, the canal can be readily closed to the sea. Finally, the canal is much less costly and safer to open than the beach, and has the preferred opening site since 2009.
146. We agree with witnesses such as Mr Harrington that it is essential that the option of opening the lake at the beach site be retained, as this may be necessary in an emergency situation.
147. In his submission Mr Sitarz provided extensive correspondence from coastal experts to the effect that the canal and groyne would fail in the hostile environment at Birdlings Flat. To date this has not been the case, although the long term prognosis for the canal may not be good.
148. A resource consent permits an activity to occur, but is no guarantee that the activity will succeed. Certainly there can be no assurance that the canal will remain viable over the 35 year term of consent. The beach is accreting at the distal end of the canal

at the rate of about 0.7 metres per year, and has indeed already covered the remnants of the old groyne with gravel. We agree with Mr Sitarz that the groyne is in a very “hostile environment”. For these reasons it may well get progressively more difficult to maintain the groyne, and to open the canal to the sea, during the term of the consent. Further interventions will certainly be necessary, and these are provided for by Conditions 7 of coastal permit CRC 134837 and 8 of Land Use Consent CRC 160434. Whether they work or not remains to be seen.

7.2 Is Public Access a Right?

149. The local community was in no doubt that access along the beach from Birdlings Flat was a “right” that they held. We are not sure about this, although we do note that access to and along the coastal marine area (which as Mr Just noted is at Mean High Water Springs and is something of a “moveable feast”) on the beach is provided for as a matter of national importance. We are not clear if the beach track and proposed bridge/causeway are in the coastal marine area.
150. All this is a moot point now that the application to construct a bridge over the canal has been made, and we have granted this application. In the meantime the applicants have offered to provide a causeway, which we have provided for as it was part of the application suite to the CRC and appears to be a permitted activity under the District Plan.

7.3 Is an “Exit Strategy” Necessary?

151. We have previously expressed reservations that the canal will not be able to continue to operate for the 35 year term of the consents granted. As the coast continues to accrete off Birdlings Flat, the canal will become increasingly difficult to keep operational as episodic storm events deposit gravel near its outlet. This is already evident from the groyne becoming inundated by gravel in only about six years.
152. If the canal is no longer able to be used, we consider that it should be infilled. While we accept Mr Alexander’s view that the sea will do its thing in the lower reaches of the canal, we don’t believe that marine processes will fill in all 900m of excavated canal. Any water remaining in the canal would become stagnant, algal infested, potentially malodourous and an eyesore. Accordingly we have required as a condition of consent that should the canal opening not be used for a period exceeding 24 months, then the canal must then be entirely filled in and the landscape restored to what it was before the canal existed (with the exception of the sea groyne, which will be inundated by gravel in any case and only any visible remains will need to be removed).

7.4 Term of the Consents

153. We see no good reason not to grant the consents for the terms sought of 35 years, although as already noted this no assurance that these consents will all be able to be exercised for this term. This term is granted because the effects of the activities for which consent is granted should not change significantly over time, and because the lake will continue to need to be opened to the sea.

8 CONDITIONS OF CONSENT

154. As discussed above, we have no doubt that the consents should be granted so our focus has been on explaining our reasoning and considering appropriate conditions. We have been assisted in the latter with suggested sets of conditions provided by the reporting officers and Mr Reid in his right of reply.
155. In their right of reply the applicants offered to prepare management plans to be approved by the consent authorities to deal with a range of landscape matters, including ensuring the groyne has a natural appearance and site rehabilitation measures, including those to mitigate the effects of the current canal and gravel banks. We are satisfied that this approach is generally appropriate in this case as it is difficult to write a set of prescriptive conditions of consent to cover such matters, particularly given the term of the consents granted. We have however imposed a prescriptive condition on the CCC consents requiring that tailings associated with the consented works be visually consistent with the characteristic beach and foreshore profiles.
156. As we have already noted the applicants also proposed to construct and maintain the causeway until the bridge is completed, which they said be by 31 March 2017. We are comfortable with that. However the applicants also proposed to re-instate the causeway if it has been removed for a lake opening “as soon as practicable”. Such a condition is not enforceable, so we have required the causeway be restored within 15 working days unless this is not practical. This gives a measurable expectation of the maximum time it should take to re-instate the causeway.
157. The canal opening may not be able to operate for the term of consent. If this opening has not been used for at least two years we have required that any visible part of the groyne be removed, and any part of the canal that has not be infilled by the sea be infilled by the consent holders. We do not want to see stagnant water sitting in the canal for a long period if it falls into disrepair.
158. At the hearing we had indicated that the monitoring and reporting requirements suggested by Mr Just were too onerous, and impinged on what are properly regional council functions under s35 of the RMA. The applicants suggested only limited monitoring, but we have also required them to at least collate the last year’s water quality data and report on that, and also report on long term trends in water quality. This will enable both the applicants and the regional council to see clearly if the trend to improved water quality is continuing.
159. Mr Just also suggested a prescriptive condition monitoring the size and extent of the plume from the discharge, and how this should occur. The applicant thought such monitoring was not necessary as they could not manage the size and extent of the plume when the lake was opened. While we accept that, we do consider that for a 35 year term of consent at least some monitoring of the plume, and how it may affect water quality (and potentially biota) along the foot of the Oashore Cliffs to the immediate north east, should be carried out. Accordingly we have required the applicant make a photographic record of the visual extent of the discharge plume on at least five occasions during the first 10 years of the exercise of consent. The condition is not onerous – it requires photographs to be taken at least every 15 minutes for six

hours for each event monitored. This could be done from the cliffs, or using drone technology.

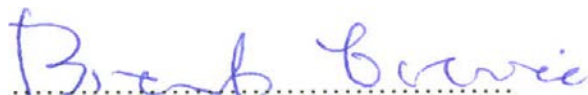
160. We accept the applicant's position that the bridge may not be able to be insured, but we have required that it be maintained in good repair as long as the canal opening remains in place.
161. We are satisfied that the hours of work initially recommended by the CCC – which are 0730h to 1800 h but with no work on weekends or public holidays – are satisfactory in the local environment. As already noted use of the area will be highest on weekends and public holidays, so we have not allowed work on the bridge during those times.
162. We have added a clause to the volunteered condition dealing with the accidental discovery of koiwi tangata (human bones) and taonga (artifacts in this context) requiring that the protocol set out is to be explained in writing to every driver of earthmoving machinery working on the site.
163. As is normal practice for consents permitting activities with potential for unforeseen adverse effects on the environment, we have included conditions giving the consent authorities power to review the conditions on the consent each year in the light of experience.

DECISION

164. For the reasons discussed above, all the consents are granted, pursuant to sections 104, 104B and 104D of the Resource Management Act, subject to the attached conditions.



David W. Collins (chairperson)



Brent Cowie



Hoani Langsbury

Hearings Commissioners

22nd March 2016

TE ROTO o WAIREWA / LAKE FORSYTH CONSENT CONDITIONS - CCC

RMA92021940 - CCC Land Use Consent - to undertake earthworks to open and close Wairewa/Lake Forsyth.

1. The development shall proceed in accordance with the plans and information submitted with and subsequent to the lodgement of the application. The Approved Consent Documentation has been entered into Council records as RMA92021940 (199 pages).
2. Works to open and close the Lake to the coastal marine area, and for facilitating the migration of tuna shall only be undertaken at the following locations:
 - a. within the area marked as 'Beach Opening', at or about map reference NZTM 2000 1576740 mE, 5147330 mN;
 - b. within and adjacent to the area marked as 'Canal', located between map references:
 - i. NZTM 2000 1576763 mE, 5147567 mN; and
 - ii. NZTM 2000 1577433 mE, 5147140 mN;on plan RMA92021940, attached to and forming part of this consent.
3. The Groyne shall:
 - a. only be at the location marked as 'Groyne Structure' on plan RMA92021940, extending seaward from at or about map reference NZTM 2000 1577411 mE, 5147217 mN.;
 - b. only be extended seaward to the extent required to maintain a level of up to 0.5 metres above the highest beach profile, to accommodate any beach aggradation; and
 - c. be consistent with the provisions of the landscape management plan referred to in Condition 15 at all times.
4. The consent holder shall:
 - a. undertake both:
 - i. a visual inspection, including photographs; and
 - ii. unless the Groyne is entirely buried beneath beach gravels as a result of beach aggradation, a survey of the slope and toe of the Groyne;annually, to ensure that it is in a sound and safe structural condition;

- b. identify any alterations, or extensions, or maintenance undertaken to maintain the groyne in good working order; and
 - c. provide the results of the inspection and survey, and any alterations, extensions or maintenance undertaken in accordance with clause 7(b), to the Christchurch City Council Attention: Compliance and Investigation Team via email to resourceconsentmonitoring@ccc.govt.nz, no later than one month after completion of the survey or works.
5. In the event that the visual inspection or survey of the Groyne undertaken in accordance with Condition 4 of this consent identifies damage to the Groyne, the consent holder shall:

EITHER

- a. arrange for repair of the groyne structure to ensure that it is in sound and safe structural condition;

OR

- b. if the Groyne is damaged beyond repair, then the consent holder shall remove the structure and remove any parts of the structure not covered by gravel;

AND

advise the Christchurch City Council Attention: Compliance and Investigation Team via email to resourceconsentmonitoring@ccc.govt.nz of the repairs undertaken in accordance with Condition 5(a), or removal in accordance with Condition 5(b), of the groyne structure no later than one month after completion of the works.

- 6. Noise generated by the works shall comply with the requirements of NZS6803:1999 Acoustic - Construction Noise (see Table 3, page 11 of the standard).
- 7. Within 1 month of the date of commencement of this consent, the consent holder shall install a temporary gravel causeway across the canal safe for use by pedestrians, bicycles, stock and light four wheel drive vehicles.
- 8. Use of the causeway required by Condition 7 above shall not commence until the consent holder has submitted a certificate signed by a suitably qualified and experienced engineer to the Christchurch City Council Attention: Head of Resource Consents via email to resourceconsentapplications@ccc.govt.nz. This certificate shall attest that the design and construction of the temporary gravel causeway is safe for use by pedestrians, bicycles, stock and light four wheel drive vehicles crossing the canal.
- 9. If the temporary access causeway is removed for a lake opening authorised under this consent, or washed out by the sea, the causeway will be reinstated within 15 working days of the lake closing to the sea, or if this is not practicable, as soon as possible thereafter. Certification of the reinstated causeway is required under Condition 8 above.

10. The temporary access causeway shall be removed by the consent holder when construction of the bridge authorised under RMA92030265 is completed.
11. From 31 March 2017, all practicable measures shall be taken to ensure that while this consent is exercised, safe access across the Canal shall be provided by way of a bridge installed and maintained in accordance with RMA92030265.
12. Prior to the temporary gravel causeway required by condition 7 being operational, the consent holder shall erect and maintain a site notice
 - a. That is clearly visible to the public
 - b. At the following locations within 50m of the temporary gravel causeway:
 - i. on the Birdlings Flat side of the causeway
 - ii. on the Bossu Road side of the causeway
 - c. advising that the construction of the causeway is safe only for use by pedestrians, bicycles, stock and light four wheel drive vehicles crossing the canal.
13. Within two weeks of this consent commencing the consent holder shall erect and maintain a site notice:
 - a. that is clearly visible to the public;
 - b. at the following locations:
 - i. at the Birdlings Flat carpark, located at the beach end of Poranui Beach Road; and
 - ii. at the beach end of Bossu Road adjacent to the location of works; advising the public of the works and respective locations thereof that are undertaken in terms of this permit;
 - c. advising of the risk of vehicular stranding to persons crossing between Birdlings Flat and Bossu Road;
 - d. advising of any hazards to be avoided that may present a risk to public safety, including but not limited to operation of machinery, construction and maintenance of structures.
14. The consent holder shall:
 - a. entirely fill in the canal;
 - b. remove any part of the Groyne which has not been covered by gravel; and

and as far as practicable restore the site to a state consistent with the natural character of the surroundings in the following circumstances:
 - c. if the canal has not been used to open the lake for a period of 24 months or more; and

- d. where the consent is due to expire:
 - i. three months before the expiry of the consent; or
 - ii. at a date agreed in writing between the Consent Holder and the Consent Authority where there is an application to continue the activity.

Landscape Conditions

15. Works shall be in accordance with a landscape management plan approved by the Christchurch City Council Head of Resource Consents (or their nominee). This plan shall be prepared by the consent holder and be submitted to Council via email to resourceconsentapplications@ccc.govt.nz for approval at least 21 days prior to the first commencement of any activities under this consent, and must address the following matters:
- a. Groyne and riprap for erosion protection using local stones and boulders or otherwise visually consistent materials;
 - b. Means to ensure the groyne structure and areas beyond the canal retain a natural appearance;
 - c. Site rehabilitation measures:
 - i. to mitigate the landscape effects associated with the existing canal and gravel banks, but taking into account any relevant engineering requirements; and
 - ii. following any earthworks associated with the canal to maintain a natural appearance of the ground inland of the beach which is unaffected by current sea waves;
 - iii. to encourage the re-establishment of natural vegetation.
 - d. Measures to mitigate the landscape impact of bridge construction, including use of materials and site rehabilitation following construction.
16. Notwithstanding Condition 15 above any tailings associated with the consented works shall be placed in such a way to be visually consistent with the characteristic beach and foreshore profiles.

Advice Note: *The purpose of this condition is to ensure that any areas subject to disturbance by the proposed works remain visually consistent with the surrounding coastal environment.*

17. Any modification of the groyne shall occur within a physical envelope that matches changes in the beach through accretion and that does not exceed 0.5 metres above the highest beach profile.

Ecological Conditions

18. For the purposes of this consent works that are unscheduled are those associated with Lake opening events due to:

- a. the Lake level exceeding 2.7 mamsl as measured at the Canterbury Regional Council staff gauge adjacent to State Highway 75 (SH75) located at NZTM 2000 1578798 mE, 5150311 mN;
 - b. in the event that a significant weather event is forecast to result in a lake level exceedance of 2.7 mamsl.
- 19. Prior to any works authorised by this consent (other than unscheduled works as defined in condition 18 or works within and adjacent to the area marked as 'Canal', located between map references NZTM 2000 1577411 mE, 5147217 mN and NZTM 2000 1577433 mE, 5147140 mN on plan RMA92021940) being carried out between the period commencing the fourth week of August and ending at the start of the second week in January, the consent holder shall ensure that:
 - a. a suitably qualified person inspects the proposed area of works, no earlier than eight days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix RMA92021940, attached to and forming part of this consent;
 - b. the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Christchurch City Council Attention: Compliance and Investigation Team via email to resourceconsentmonitoring@ccc.govt.nz;
 - c. the name and qualifications of the person carrying out the inspection are provided to the Christchurch City Council with the report;
 - d. any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and
 - e. where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with Conditions 19(a) to 19(d) of this condition.
- 20. With the exception of unscheduled works defined in condition 18, vehicles and/or machinery shall not operate within 100 metres of birds listed in Appendix RMA92021940 which are nesting or rearing their young, as identified by the inspection undertaken in accordance with condition 19.
- 21. Where unscheduled works are to occur, the works shall not, as far as practicable, disturb birds listed in Appendix RMA92021940 which are nesting or rearing their young as identified by the inspection undertaken in accordance with condition 19.
- 22. Prior to the first exercise of this consent, the consent holder shall ensure that:
 - a. a suitably qualified person inspects the area of proposed works, including any areas that will be the subject of disturbance or deposition of material following the completion of works, and records the location and extent of any leafless pohuehue (*Muehlenbeckia ephedroides*) plants;

- b. if the works proposed will result in the damage, destruction or clearance of any leafless pohuehue plants:
 - i. the suitably qualified person has recommended what measures can be undertaken to mitigate the effect on any leafless pohuehue; and
 - ii. consultation is undertaken with the Department of Conservation (DOC) to determine any additional measures recommended; and
 - iii. all reasonable endeavours that are to be taken, to implement recommendations from the suitably qualified person and the Department of Conservation in accordance with i. and ii., are identified.
- c. At least 10 days prior to the commencement of any works, a report is provided to the Christchurch City Council Attention: Compliance and Investigation Team via email to resourceconsentmonitoring@ccc.govt.nz, identifying:
 - i. the results of the survey undertaken in accordance with clause a. above; and
 - ii. the recommendations from clauses b. i. and ii;
 - iii. the reasonable endeavours identified in clause b. iii that are to be implemented;
 - iv. the name and qualifications of the suitably qualified person.

Notification

- 23. The Christchurch City Council Attention: Compliance and Investigation Team, shall be notified via email to resourceconsentmonitoring@ccc.govt.nz:
 - a. at least two working days prior to the commencement of works that are scheduled in terms of this permit;
 - b. as soon as practicable, but no later than 48 hours following the commencement of works that are unscheduled;
 - c. where works are to recommence after having been discontinued for a period of more than eight days.
- 24. The notice specified in condition 23 shall include:
 - a. the proposed start dates of the period of works; and
 - b. where consent is to be exercised by a person other than the consent holder, the name, address and contact telephone number of the person(s) that will exercise the consent;
 - c. Notwithstanding Conditions 24(a) and 24(b) above, where works are unscheduled and prior notice is not able to be given, the date at which works started, and have, or are expected to be completed.

Accidental Discovery

25. In the event of any discovery of archaeological material:

- a. the consent holder shall immediately:
 - i. cease earthmoving operations in the affected area and mark off the affected area; and
 - ii. advise the Christchurch City Council Attention: Compliance and Investigation Team, of the disturbance via email to resourceconsentmonitoring@ccc.govt.nz; and
 - iii. Advise the Heritage New Zealand Pouhere Taonga of the disturbance;
- b. If the archaeological material is determined to be Koiwi Tangata (human bones) or taonga (treasured artefacts) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the office of the Te Rūnanga o Wairewa of the discovery;
- c. If the archaeological material is determined to be Koiwi Tangata (human bones) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the New Zealand Police of the disturbance;
- d. Work may recommence if the Heritage New Zealand Pouhere Taonga (following consultation with rūnanga if the site is of Māori origin) provides a statement in writing to the Christchurch City Council Attention: Compliance and Investigation Team that appropriate action has been undertaken in relation to the archaeological material discovered. The Christchurch City Council shall advise the consent holder on written receipt from the Heritage New Zealand Pouhere Taonga that work can recommence.

Advice Note: Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc, may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period.

It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of the Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.

Review

26. The Christchurch City Council may, once per year, on any of the last five working days of November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.

Appendix 92021940 - List of Bird Species

For the purposes of this consent, the bird species referred to in Condition 19 comprises the following:

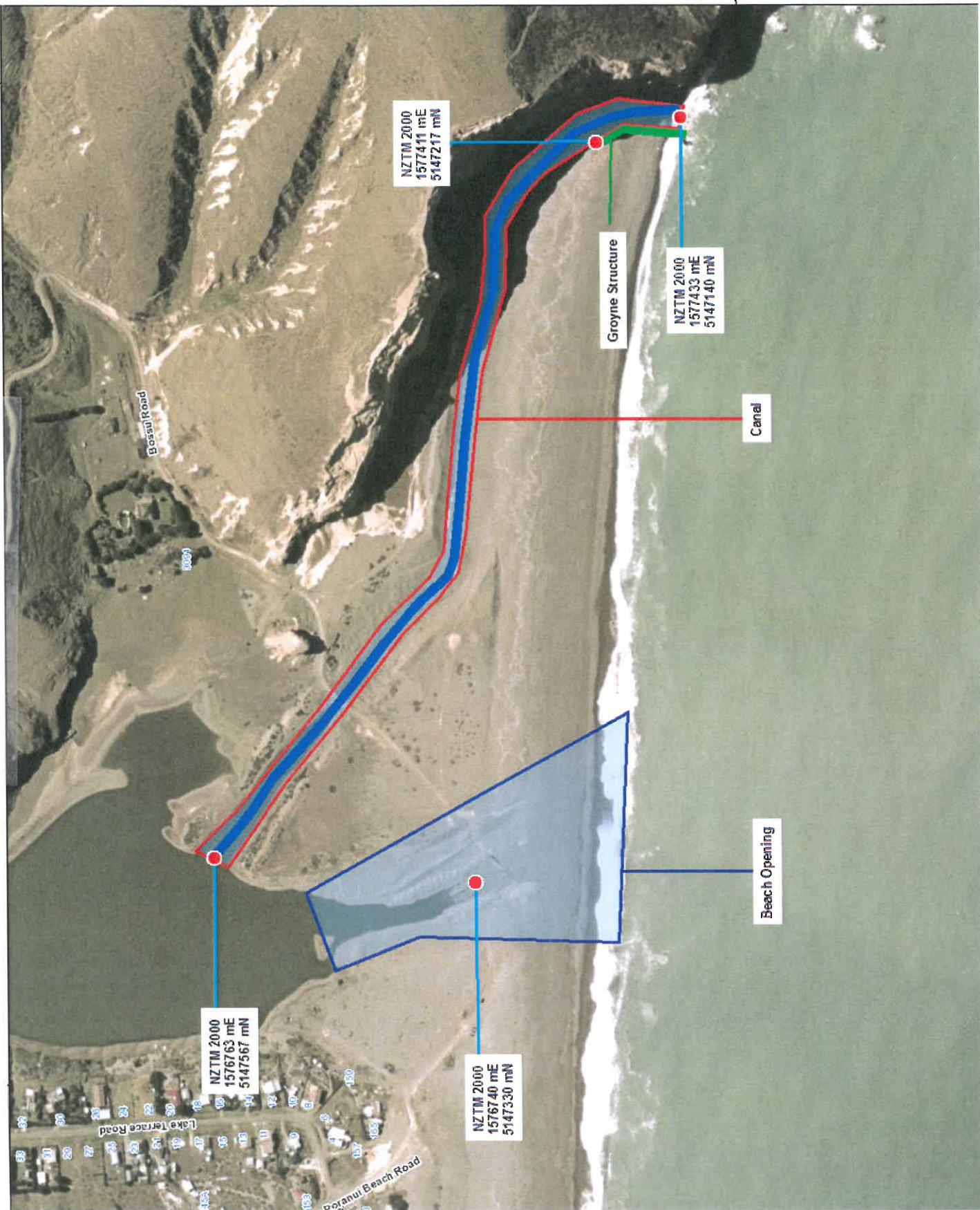
South Island Pied oystercatcher
Wrybill
Banded dotterel
Black-fronted dotterel
Black-billed gull
Red-billed gull
Caspian tern
White-fronted tern
Black-fronted tern
White-winged Black tern

Plan RMA92021940



- Population center and locality labels
- Hydrographic feature labels
- Parks, forests, and reserves labels
- Address point labels
- Road labels

- Red: Band_1
- Green: Band_2
- Blue: Band_3



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LINZ, Environment Canterbury
Environment Canterbury 2016

RMA92030265 - CCC Land Use Consent - to install, use and maintain a single lane twin span bridge to provide access over the canal at the southern end of the lake.

1. The development shall proceed in accordance with the plans and information submitted with and subsequent to the lodgement of the application. The Approved Consent Documentation has been entered into Council records as RMA92030265 (83 pages).
2. The consent holder shall submit the final set of proposed plans of the bridge to Christchurch City Council Attention: Head of Resource Consents at least 20 working days prior to the commencement of construction. These plans shall be submitted via email to resourceconsentapplications@ccc.govt.nz. These plans shall be substantially in accordance with the plans submitted and forming part of the Approved Consent Document. The purpose of this condition is to ensure that bridge design remains within the scope of that considered by this consent and is visually appropriate for the coastal setting. This plan(s) are to be certified by the Head of Resource Consents (or their nominee) as meeting the requirements of this condition prior to any works being commenced.
3. The bridge shall only be installed:
 - a. on land parcel of legal description Pt Res 890 3186 DP 9008BLK VIII Akaroa SD;
 - b. at or about map reference NZTM 2000 1576907 mE, 5147450 mN, marked as 'Bridge Location' on plan RMA92030265, attached to and forming part of this consent.

Advice note: Landowner Authorisation: In addition to this consent, the consent holder is required to obtain permission from the Department of Conservation in order to secure access to, undertake works in, and place structures on, the land that is the subject of this consent.

4. The bridge shall:
 - a. be approximately 32 metres in total length and 4.2 metres in total width;
 - b. have a single central concrete pier;
 - c. have pre-cast concrete abutments;
 - d. have rip-rap adjacent to the abutments and pier to prevent erosion and scour; and
 - e. have a soffit at an elevation that is between 3.95 metres and 4.05m above mean sea level.
5. The excavation of land including the riparian margin of the Lake shall be limited to that necessary to:
 - a. install the bridge structure;
 - b. form bridge approaches;

- c. borrow material to form the temporary gravel construction platform;
 - d. borrow material to form the temporary access causeway that is authorised by RMA92021940; and
 - e. maintain the bridge.
6. The temporary gravel construction platform shall be formed from deposited material with a volume not greater than approximately 1,000 cubic metres, and shall be removed following the construction of the bridge.
 7. The consent holder shall take all practicable steps to complete the construction of the bridge by 31 March 2017.
 8. At least 21 days prior to the commencement of bridge construction works and for the duration of the construction period, the consent holder shall erect a site notice that is clearly visible to the public, advising of construction works:
 - a. at the Birdlings Flat carpark, located at the beach end of Poranui Beach Road; and
 - b. at the beach end of Bossu Road adjacent to the location of works.
 9. Activities undertaken to construct the bridge (with the exception of construction and removal of the temporary access causeway) shall be undertaken:
 - a. during the period
 - i. commencing 1 September and ending on 31 October;
 - b. between the hours of 1800 and 0730; and
 - c. not on public holidays and weekends.
 10. Noise generated by the works shall comply with the requirements of NZS6803:1999 Acoustic - Construction Noise (see Table 3, page 11 of the standard).
 11. Any compacted road surface formed to assist the construction of the bridge shall be removed 20 working days following the bridge being operational.
 12. Following completion of works to construct the bridge:
 - a. all disturbed areas shall be stabilised to minimise loss of sediment; and
 - b. all surplus material shall either be removed from the site or spread out in a way that is consistent with the profile of the surrounding land; and
 - c. the site shall be left in a safe and tidy condition.
 13. The bridge shall be maintained in a safe condition for access across the bed of the Lake.
 14. The consent holder shall ensure:

- a. the bridge is inspected annually by a chartered professional engineer;
- b. any maintenance work recommended from the annual inspections is completed as soon as practicable.

Landscape Conditions

15. Works shall be in accordance with a landscape management plan approved by the Christchurch City Council Head of Resource Consents (or their nominee). This plan shall be prepared by the consent holder and be submitted to Council via email to resourceconsentapplications@ccc.govt.nz for approval at least 21 days prior to the first commencement of any activities under this consent, and must address the following matters:
- a. Groyne and riprap for erosion protection using local stones and boulders or otherwise visually consistent materials;
 - b. Means to ensure the groyne structure and areas beyond the canal retain a natural appearance;
 - c. Site rehabilitation measures:
 - i. to mitigate the landscape effects associated with the existing canal and gravel banks, but taking into account any relevant engineering requirements; and
 - ii. following any earthworks associated with the canal to maintain a natural appearance of the ground inland of the beach which is unaffected by current sea waves;
 - iii. to encourage the re-establishment of natural vegetation.
 - d. Measures to mitigate the landscape impact of bridge construction, including use of materials and site rehabilitation following construction.
16. Notwithstanding Condition 15 above any tailings associated with the consented works shall be placed in such a way to be visually consistent with the characteristic beach and foreshore profiles.

Advice Note: *The purpose of this condition is to ensure that any areas subject to disturbance by the proposed works remain visually consistent with the surrounding coastal environment.*

Ecological Conditions

17. Prior to any bridge construction works authorised by this consent being carried out between the period commencing the fourth week of August and ending at the start of the second week in January, the consent holder shall ensure that:
- a. a suitably qualified person inspects the proposed area of works, no earlier than eight days prior to any works being carried out, and locates any bird

breeding sites of birds listed in Appendix RMA92030265, attached to and forming part of this consent;

- b. the person carrying out the inspection prepares a written report that:
 - i. identifies all the located bird breeding or nesting sites; and
 - ii. if necessary, recommends reasonable mitigation measures to minimise the effects of the works on any bird nesting sites located in accordance with i above;
- c. The person carrying out the inspection provides copies of the report referred to in b above to the consent holder and the Christchurch City Council, Attention: Compliance and Investigation Team via email to resourceconsentmonitoring@ccc.govt.nz;
- d. the name and qualifications of the person carrying out the inspection are provided to the Christchurch City Council with the report;
- e. any person carrying out bridge construction works authorised by this consent are informed of any bird breeding or nesting sites located and any recommended mitigation measures; and
- f. where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with clauses 17(a) to 17(d) of this condition.

Notification

- 18. The Christchurch City Council, Attention: Compliance and Investigation Team, shall be notified via email to resourceconsentmonitoring@ccc.govt.nz at least two working days prior to the commencement of works to construct the bridge authorised by this consent, including:
 - a. the proposed start and end dates of the period of work; and
 - b. where consent is to be exercised by a person other than the consent holder, the name, address and contact telephone number of the person(s) that will exercise the consent.

Accidental Discovery

- 19. In the event of any discovery of archaeological material:
 - a. the consent holder shall immediately:
 - i. cease earthmoving operations in the affected area and mark off the affected area; and
 - ii. advise the Christchurch City Council, Attention: Compliance and Investigation Team via email to resourceconsentmonitoring@ccc.govt.nz of the disturbance; and

- iii. Advise the Heritage New Zealand Pouhere Taonga of the disturbance;
- b. If the archaeological material is determined to be Koiwi Tangata (human bones) or taonga (treasured artefacts) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the office of the Te Rūnanga o Wairewa of the discovery;
- c. If the archaeological material is determined to be Koiwi Tangata (human bones) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the New Zealand Police of the disturbance;
- d. Work may recommence if the Heritage New Zealand Pouhere Taonga (following consultation with rūnanga if the site is of Māori origin) provides a statement in writing to the Christchurch City Council Attention: Compliance and Investigation Team that appropriate action has been undertaken in relation to the archaeological material discovered. The Christchurch City Council shall advise the consent holder on written receipt from the Heritage New Zealand Pouhere Taonga that work can recommence.

Advice Note: *Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc, may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period.*

It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of the Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.

Review

- 20. The Christchurch City Council may, once per year, on any of the last five working days of November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.

Appendix 920230265 - List of bird species

For the purposes of this consent, the bird species referred to in Condition 22 comprises the following:

South Island Pied oystercatcher
Wrybill
Banded dotterel
Black-fronted dotterel
Black-billed gull
Red-billed gull
Caspian tern
White-fronted tern
Black-fronted tern
White-winged Black tern

Plan RMA920230265



- Population center and locality labels
- Hydrographic feature labels
- Parks, forests, and reserves labels
- Address point labels
- Road labels

- Red: Band_1
- Green: Band_2
- Blue: Band_3



Disclaimer:
Information has been derived from various sources, including Environment Canterbury Regional Council's databases. Boundary information is derived from the Environment Canterbury Regional Council's databases. The user should independently verify the accuracy of any information before taking any action in reliance upon it.

Scale: 1:1,800 @A3

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Conditions of Environment Canterbury

CRC134847 – Coastal Permit

To disturb and deposit material on the foreshore and seabed and to occupy the coastal marine area

1. The activities authorised by this consent shall only be:

- a. works for the disturbance and deposition of material within, and the removal of natural material from, the coastal marine area, for the purposes of opening or closing Lake Forsyth / Wairewa ('the Lake') to the coastal marine area, and lowering the beach barrier for facilitating the migration of tuna (eel);
- b. works for the disturbance, deposition, alteration, extension, and removal of a groyne structure within the coastal marine area;
- c. the occupation of the coastal marine area by a groyne structure constructed, altered, or extended under clause 1(b).
- d. the temporary occupation of, and the emission of noise from, the coastal marine area associated with the works in clauses 1(a) and 1(b).

2. Works for the purposes of:

- a. opening or closing the Lake specified in condition 1(a). shall only occur within the areas on plan CRC134847, attached to and forming part of this consent, marked as:
 - i. 'Beach Opening', at or about map reference NZTM 2000 1576740 mE, 5147330 mN; and
 - ii. 'Canal Opening', at or about map reference NZTM 2000 1577431 mE, 5147173 mN;
- b. maintaining the groyne structure ('the Groyne') specified in condition 1(b) shall only occur at the location marked as 'Groyne Structure' on plan CRC134847, extending seaward from at or about map reference NZTM 2000 1577411 mE, 5147217 mN.

3. The works specified in condition 1(a) and 1(b) shall be limited to those required to:

- a. create or enlarge an outlet, or close an outlet to enable or reduce:
 - i. the taking, diversion, damming authorised by consent CRC134849;
 - ii. the discharge of water from opening the Lake authorised by consent CRC134864;
- b. prevent seawater entering the Lake;
- c. reduce the level of material on the foreshore and seabed in order to facilitate:
 - i. future opening of the Lake;
 - ii. migration of tuna (eel): and

- d. maintain, alter, extend or remove, the groyne structure as provided for by conditions 5 – 8 below.
- 4. Works shall be in accordance with a landscape management plan approved by Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance. This plan shall be prepared by the consent holder and submitted for approval at least 21 days prior to the first commencement of any activities under this consent, and must address the following matters:
 - a. Groyne and riprap for erosion protection using local stones and boulders or otherwise visually consistent materials;
 - b. Means to ensure the groyne structure and areas beyond the canal retain a natural appearance;
 - c. Site rehabilitation measures:
 - i. to mitigate the landscape effects associated with the existing canal and gravel banks, but taking into account any relevant engineering requirements; and
 - ii. following any earthworks associated with the canal to maintain a natural appearance of the ground inland of the beach which is unaffected by current sea waves;
 - iii. to encourage the re-establishment of natural vegetation.
 - d. Measures to mitigate the landscape impact of bridge construction, including use of materials and site rehabilitation and any necessary re-contouring following construction.
- 5. The Groyne shall:
 - a. only be at the location marked as 'Groyne Structure' on plan CRC134847, extending seaward from at or about map reference NZTM 2000 1577411 mE, 5147217 mN.;
 - b. only be extended seaward to the extent required to maintain a level of up to 0.5 metres above the highest beach profile, to accommodate any beach aggradation; and
 - c. be consistent with the provisions of the landscape management plan referred to in Condition 4 above at all times.
- 6. The consent holder shall:
 - a. undertake both:
 - i. a visual inspection, including photographs; and
 - ii. unless the Groyne is entirely buried beneath beach gravels as a result of beach aggradation, a survey of the slope and toe of the Groyne;annually, to ensure that it is in a sound and safe structural condition;
 - b. identify any alterations, or extensions, or maintenance undertaken to maintain the groyne in good working order; and

- c. provide the results of the inspection and survey, and any alterations, extensions or maintenance undertaken in accordance with clause 6(b), to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, no later than one month after completion of the survey or works.
- 7. In the event that the visual inspection or survey of the Groyne undertaken in accordance with Condition 6. of this consent identifies damage to the Groyne, the consent holder shall:

EITHER

- a. arrange for repair of the groyne structure to ensure that it is in sound and safe structural condition;

OR

- b. if the Groyne is damaged beyond repair, then the consent holder shall remove any part of the structure not covered by gravel;

AND

- c. advise the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, of the repairs undertaken in accordance with clause a., or removal in accordance with clause 7(b), of the groyne structure no later than one month after completion of the works.
- 8. The consent holder shall remove any part of the Groyne that is visible above the level of the surrounding beach gravels, and as far as practicable restore the site to a state consistent with the natural character of the surroundings in the following circumstances:
 - a. if the groyne is no longer necessary for the activities authorised under consent CRC134864, unless in the preceding 24 months the Canal Opening has been used discharge water to the coastal marine area under CRC134864; and
 - b. where the consent is due to expire:
 - i. three months before the expiry of this consent; or
 - ii. at a date agreed in writing between the Consent Holder and the Consent Authority where there is an application to continue the activity.
- 9. All practicable steps shall be undertaken to minimise adverse effects on property, wildlife, biodiversity values, aquatic ecosystems, vegetation, cultural and amenity values.
- 10. Prior to commencing works, the consent holder shall provide a copy of this consent to all persons undertaking activities authorised by this consent, and explain to those persons how to comply with the consent conditions.
- 11. To prevent the spread of pest species, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures and that machinery shall be free of plants and plant seeds prior to use at the site of works.

Advice Note: You can access the most current version of these procedures from the Biosecurity New Zealand website <http://www.biosecurity.govt.nz>.

12. In the event of any discovery of archaeological material:

- a. the consent holder shall immediately:
 - i. cease earthmoving operations in the affected area and mark off the affected area; and
 - ii. advise the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, of the disturbance; and
 - iii. Advise the Heritage New Zealand Pouhere Taonga of the disturbance;
- b. If the archaeological material is determined to be Kōiwi Tangata (human bones) or taonga (treasured artefacts) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the office of the Te Rūnanga o Wairere of the discovery;
- c. If the archaeological material is determined to be Kōiwi Tangata (human bones) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the New Zealand Police of the disturbance;

Work may recommence if the Heritage New Zealand Pouhere Taonga (following consultation with rūnanga if the site is of Māori origin) provides a statement in writing to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, that appropriate action has been undertaken in relation to the archaeological material discovered. The Canterbury Regional Council shall advise the consent holder on written receipt from the Heritage New Zealand Pouhere Taonga that work can recommence.

Advice Note: Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc, may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/kōiwi may date to any historic period.

It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of the Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.

13. Any refuelling at the site of works shall be subject to the following:

- a. There shall be no refuelling within 20 metres of water.
- b. The pump shall be attended at all times during refuelling;
- c. Refuelling shall only be undertaken using:

- i. an up to 500 litre double skinned tank with an electric pump contained inside the tank's outer skin; and
 - ii. a double skinned hose line with a transparent outer skin and an auto shut off nozzle;
- d. A "spill mat" capable of absorbing oil and petroleum products, and of a minimum size of 1.5 metres by 1.5 metres, shall be positioned under the fill point in order to intercept any spill from the nozzle.
- e. The "spill mat" detailed in clause 13(d) shall be replaced following the absorbance of spills with a cumulative volume of 10 litres or more or if otherwise damaged to such a state that it can no longer adequately intercept and absorb any spills.
- f. A spill kit, that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, shall be kept on site at all times.
- g. A written spill response plan ("the plan") shall be developed and communicated to all persons undertaking activities authorised by this consent and a copy kept on site at all times. The plan shall detail the methods and processes to be used by the consent holder to clean up a spill and shall include, but not be limited to:
 - i. emergency contact information for the Canterbury Regional Council Pollution Hotline;
 - ii. emergency contact information for a waste management service provider with appropriate qualifications and equipment for cleaning up spills of oil and petroleum products;
 - iii. instructions for operating the spill kit kept on site in accordance with clause 13(f);
 - iv. instructions for removing and disposing of contaminated material in a manner suitable to ensure no further contamination occurs.
- h. The spill response plan specified in clause 13(g) shall be provided to Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, at least eight working days prior to the first refuelling activities under this consent and upon request by Canterbury Regional Council.
- i. In the event that a leak in the inner or outer hose or tank skin is detected, the consent holder shall immediately take action to prevent any further leakage and shall remove the damaged unit from the bed until such time as the leak is repaired.
- j. In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable in accordance with the spill response plan detailed in clause g. and take measures to prevent a recurrence.
- k. In the event of a spill, the consent holder shall inform the Canterbury Regional Council, Attention: Pollution Hotline of the event:

- i. as soon as practicable, and not later than six hours following the spill, if the spill is within 20 metres of water and/or is of 10 litres or more; or
 - ii. as soon as practicable, and not later than 24 hours following the spill, if the spill is greater than 20 metres from water and is of less than 10 litres;
- I. When informing the Canterbury Regional Council of any spill, as specified in clause 13(k), the Consent Holder shall provide the following information:
 - i. the date, time, location and estimated volume of the spill;
 - ii. the cause of the spill;
 - iii. the type of contaminant(s) spilt;
 - iv. clean up procedures undertaken;
 - v. details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - vi. an assessment of any potential effects of the spill; and
 - vii. measures to be undertaken to prevent a recurrence.

Plan CRC134847



Population
center and
locality labels

Hydrographic
feature labels

Parks, forests,
and reserves
labels

Address point
labels

Road labels

 Red: Band_1

 Green: Band_2

 Blue: Band_3

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0 0.045 0.09 0.135 0.18
Kilometres

Scale: 1:3,300 @A3

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Environment Canterbury 2015

Map Created by Environment Canterbury on 14/11/2015 7:17:35 p.m.



CRC134849 – Water Permit

To take and divert water from, and dam, Lake Forsyth / Wairewa

1. Water may only be taken and diverted from Lake Forsyth / Wairewa ('the Lake') as a result of opening the Lake ('Lake Opening') at the locations marked on plan CRC134849, attached to and forming part of this consent, as:
 - a. 'Beach Opening', at or about map reference NZTM 2000 1576740 mE, 5147330 mN;
 - b. 'Canal', between map references:
 - i. NZTM 2000 1576763 mE, 5147567 mN; and
 - ii. NZTM 2000 1577433 mE, 5147140 mN.
2. All water taken and diverted must be discharged in accordance with consent CRC134864
3. Water may only be dammed in the bed of the Lake as a result of artificial closure of the Lake (Lake Closing') from works or placement of structures authorised under consents CRC134847, CRC160434 or CRC135050, within the areas marked on plan CRC134849 as:
 - a. Beach Opening; and
 - b. Canal.
4. The exercise of this consent shall only be as a result of Lake Opening and Lake Closing for the following:
 - a. To reduce the risk of flooding in the Lake catchment, and to reduce the inundation of land surrounding the Lake, by draining the Lake ('Drainage Openings');
 - b. To aid fish recruitment or migration, or other environmental purpose, ('Cultural and Ecological Openings'); and
 - c. To allow for activities associated with the construction of the bridge authorised under CRC160434.
5. For the purposes of this consent, all levels referred to are in metres above mean sea level ('mamsl') as measured at the Canterbury Regional Council staff gauge adjacent to state highway 75 (SH75) located at NZTM 2000 1578798 mE, 5150311 mN.

Drainage openings and closings

6. Drainage Openings for the purposes of reducing flood risk may be undertaken:
 - a. when the Lake level reaches 2.7 mamsl;
 - b. where there is an extreme storm event forecast for the Banks Peninsula area that is predicted to result in the Lake level exceeding 2.7 mamsl;
 - c. either or both the Beach Opening and Canal site(s) specified in condition 1.

7. Drainage Openings for management of inundation of land surrounding the Lake:
 - a. may be undertaken as follows:
 - i. Between May to August inclusive, when the Lake level reaches 2.1 mamsl;
 - ii. Between September to April inclusive, when the Lake level reaches 2.3 mamsl;
 - b. may be undertaken at either or both the Beach Opening and Canal site(s) specified in condition 1.
8. Following any Lake Drainage Opening specified in conditions 6 or 7 above, if the Lake level falls below 0.5 mamsl, the taking and diverting of water in terms of this permit shall cease by closing the Lake as soon as practicable.

Cultural and Ecological openings and closings

9. Cultural and Ecological Openings:
 - a. may be undertaken at any time for:
 - i. aiding fish recruitment or migration;
 - ii. any other environmental, cultural or ecological purposes;
 - b. shall only be undertaken at the Canal location specified in condition 1(b).
10. Lake Closing may occur for:
 - a. Cultural and Ecological purposes at either or both the Beach Opening and Canal site(s) specified in condition 1;
 - b. Bridge construction purposes at the canal location specified in condition 1.

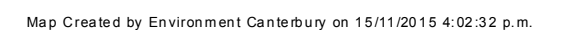
Monitoring and Reporting

11. The consent holder shall provide a report on the following to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance. annually before the end of March:
 - a. Location and timing of any artificial openings and closures carried out during the preceding 12 months;
 - b. The effect of the artificial openings and closures on lake levels;
 - c. Relevant observations, based on available data, of water quality records during the preceding 12 months, and longer term trends in water quality in the lake;
 - d. Relevant observations made during the preceding 12 months, if any, on populations or habitat conditions for fish, bird and indigenous vegetation species in the lake and beach area;
 - e. Recommendations, if any, for refinement of the lake opening regime; and
 - f. Practical recommendations to improve the cultural or ecological health of the lake.

General

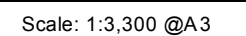
12. The Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, shall be notified of the taking, diverting, and damming, of water in terms of this permit, with the notice including the proposed start dates of the taking, diverting and damming of water:
 - a. at least two working days prior to the taking, diverting and damming for Cultural and Ecological Openings; and
 - b. as soon as practicable for Drainage Openings.
13. From 31 March 2017, all practicable measures shall be taken to ensure that while this consent is exercised, safe access across the Canal shall be provided by way of a bridge installed and maintained in accordance with CRC160434.
14. The Canterbury Regional Council may, once per year, on any of the last five working days of November, serve notice of its intention to review the conditions of this consent for the purposes of:
 - a. dealing with any adverse effect on the environment which may arise from the exercise of the consent; or
 - b. requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment, including any matter identified in the monitoring undertaken in accordance with condition 11.
15. The Canterbury Regional Council, Attention: Regional Manager, RMA Monitoring and Compliance, shall be informed immediately on first exercise of this consent by the consent holder.
16. If this consent is not exercised before 31 December 2020 it shall lapse for the purposes of section 125 of the Resource Management Act.

Plan CRC134849



 Red: Band_1
 Green: Band_2
 Blue: Band_3

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Map Created by Environment Canterbury on 15/11/2015 4:02:32 p.m.

CRC134864 – Discharge permit

To discharge water and contaminants to Lake Forsyth / Wairewa and the coastal marine area

1. The discharge in terms of this permit shall only be:
 - a. Water, sediment and other contaminants which originate from Lake Forsyth / Wairewa ('the Lake');
 - b. Sediment from earthworks authorised under consents CRC134847, CRC135050 and CRC160434.
2. The discharge of water in terms of condition 1(a) shall only be to:
 - a. The canal marked as 'Canal' and located between map references:
 - i. NZTM 2000 1576763 mE, 5147567 mN;
 - ii. NZTM 2000 1577433 mE, 5147140 mN;on plan CRC134864, attached to and forming part of this consent; and
 - b. the coastal marine area within the areas marked as:
 - i. 'Beach Opening', at or about map reference NZTM 2000 1576740 mE, 5147330 mN; and
 - ii. 'Canal Opening', at or about map reference NZTM 2000 1577431 mE, 5147173 mN;on plan CRC134864.
3. The discharge of sediment in terms of condition 1(b). shall only be to:
 - a. the Lake;
 - b. The Canal specified in condition 2(a);
 - c. The coastal marine area at the Beach Opening and Canal Opening locations specified in Condition 2.
4. All practicable measures shall be undertaken to minimise adverse effects as a result of the discharge on property, wildlife, biodiversity values, aquatic ecosystems, vegetation, cultural and amenity values.
5. During the first ten years of the exercise of this permit, the consent holder shall provide a photographic record of the extent of the plume located adjacent to the Oashore Cliffs from the discharge on at least five separate occasions. The record will, as a minimum, comprise of photographs taken of the plume at least once every 15 minutes for six hours immediately after the lake is opened.

Any such photographic record, and interpretation of the findings, along with comparisons of any previous such photography shall be. Provided in a report to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, annually before the end of March.

6. The Canterbury Regional Council may, once per year, on any of the last five working days of November, serve notice of its intention to review the conditions of this consent for the purposes of:
 - a. dealing with any adverse effect on the environment which may arise from the exercise of the consent; or
 - b. requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
7. The Canterbury Regional Council, Attention: Regional Manager, RMA Monitoring and Compliance, shall be informed immediately on first exercise of this consent by the consent holder.
8. If this consent is not exercised before 31 December 2020 it shall lapse for the purposes of section 125 of the Resource Management Act.

Plan CRC134864



- Population center and locality labels
- Hydrographic feature labels
- Parks, forests, and reserves labels
- Address point labels
- Road labels

- Red: Band_1
- Green: Band_2
- Blue: Band_3

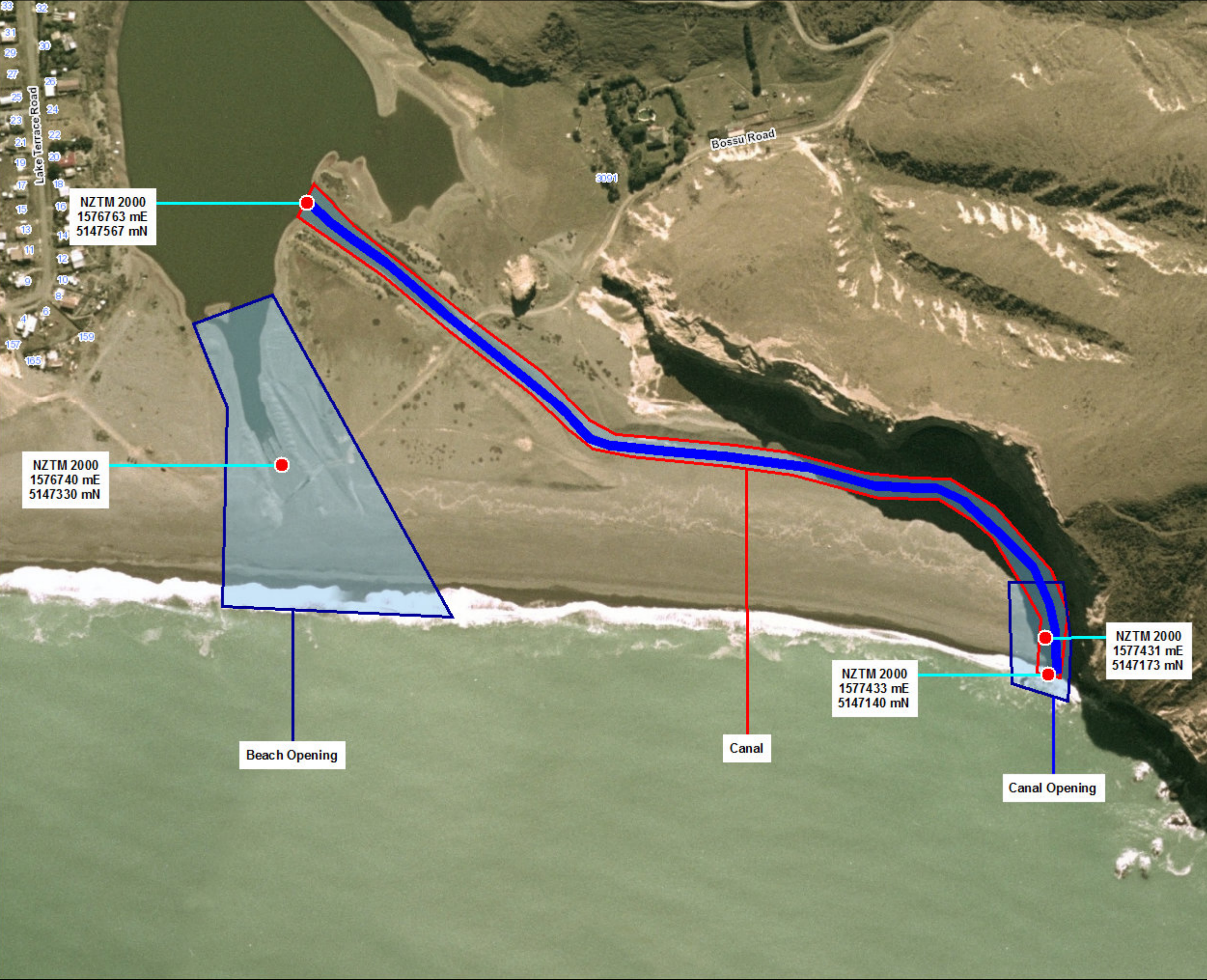
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Scale: 1:3,300 @A3

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CRC135050 – Land use permit

To use land for works and to place structures in the coastal hazard zone and the bed and margins of Lake Forsyth / Wairewa

1. The activities authorised by this consent shall only be:
 - a. works for the excavation, deposition and disturbance of material within
 - i. the Coastal Hazard Zone;
 - ii. the bed of Lake Forsyth ('the Lake');
 - iii. land adjacent to the bed of the Lake;
 - b. for the purposes of:
 - i. opening or closing Lake Forsyth / Wairewa to the coastal marine area;
 - ii. excavation and maintenance of a canal ('the Canal');
 - iii. facilitating the migration of tuna (eel);
 - iv. formation of a side channel spillway (the 'Fuse') to protect the dam structure ('the Dam');
 - c. the installation, reconstruction, maintenance, use of and removal of:
 - i. a groyne structure (the 'Groyne') located within the Coastal Hazard Zone; and
 - ii. the Dam to dam water in the Lake as authorised under consent CRC134849.
 - iii. Deposition and compaction of material to form a temporary gravel construction platform and to form a temporary access causeway.
2. Works to open and close the Lake to the coastal marine area, and for facilitating the migration of tuna shall only be undertaken at the following locations:
 - a. within the area marked as 'Beach Opening', at or about map reference NZTM 2000 1576740 mE, 5147330 mN;
 - b. within and adjacent to the area marked as 'Canal', located between map references:
 - i. NZTM 2000 1576763 mE, 5147567 mN; and
 - ii. NZTM 2000 1577433 mE, 5147140 mN;

on plan CRC135050, attached to and forming part of this consent.

3. Works to excavate and maintain the canal and install the Fuse shall only be undertaken at the location described in condition 2(b), where the Fuse may, if deemed necessary, be installed within 150 metres of the lake end of the canal shown on plan CRC135050 as NZTM 2000 1576763 mE, 5147567 mN.
4. Works for facilitating the migration of tuna that are not associated with a Lake opening shall only consist of the reduction in the level of the land between the Lake and the coastal marine area, and shall be undertaken in a manner that avoids the potential for seawater inundation of the Lake or instability of the Dam.
5. Works shall be in accordance with a landscape management plan approved by the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance. This plan shall be prepared by the consent holder and submitted for approval at least 21 days prior to the first commencement of any activities under this consent, and must address the following matters:
 - a. Groyne and riprap for erosion protection using local stones and boulders or otherwise visually consistent materials;
 - b. Means to ensure the groyne structure and areas beyond the canal retain a natural appearance;
 - c. Site rehabilitation measures:
 - i. to mitigate the landscape effects associated with the existing canal and gravel banks, but taking into account any relevant engineering requirements; and
 - ii. following any earthworks associated with the canal to maintain a natural appearance of the ground inland of the beach which is unaffected by current sea waves;
 - iii. to encourage the re-establishment of natural vegetation.
 - d. Measures to mitigate the landscape impact of bridge construction, including use of materials and site rehabilitation following construction.

Groyne Structure

6. The Groyne shall:
 - a. only be at the location marked as 'Groyne Structure' on plan CRC135050, extending seaward from at or about map reference NZTM 2000 1577411 mE, 5147217 mN.;
 - b. only be extended seaward to the extent required to maintain a level of up to 0.5 metres above the highest beach profile, to accommodate any beach aggradation; and
 - c. be consistent with the provisions of the landscape management plan referred to in Condition 5 above at all times.
7. The consent holder shall:

- a. undertake both:
 - i. a visual inspection, including photographs; and
 - ii. unless the Groyne is entirely buried beneath beach gravels as a result of beach aggradation, a survey of the slope and toe of the Groyne;annually, to ensure that it is in a sound and safe structural condition;
 - b. identify any alterations, or extensions, or maintenance undertaken to maintain the groyne in good working order; and
 - c. provide the results of the inspection and survey, and any alterations, extensions or maintenance undertaken in accordance with clause 7(b), to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, no later than one month after completion of the survey or works.
8. In the event that the visual inspection or survey of the Groyne undertaken in accordance with Condition 7 of this consent identifies damage to the Groyne, the consent holder shall:

EITHER

- a. arrange for repair of the groyne structure to ensure that it is in sound and safe structural condition;

OR

- b. if the Groyne is damaged beyond repair, then the consent holder shall remove the structure and remove any parts of the structure not covered by gravel;

AND

advise the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, of the repairs undertaken in accordance with clause 8(a), or removal in accordance with clause 8(b), of the groyne structure no later than one month after completion of the works.

The Dam Structure

9. The Dam shall:
- a. only be installed at the location marked as 'Canal' on plan CRC135050 and described in condition 2(b);
 - b. only consist of clean material sourced from the bed and margins of the Lake;
 - c. be inspected for stability at least once per week, and following any significant weather event;
 - d. be maintained or removed in the event it becomes damaged or unstable;
 - e. be removed for the purposes of diverting and taking water from the Lake as authorised under consent CRC134849 and discharging water into the Canal and to the coastal marine area under consent CRC134864, or as otherwise necessary;

- f. only be installed or reinstated for the purposes of closing the Lake to the Canal and/or coastal marine area.

Temporary Gravel Causeway

- 10. Within 1 month of the date of commencement of this consent, the consent holder shall install a temporary gravel causeway across the canal safe for use by pedestrians, bicycles, stock and light four wheel drive vehicles.
- 11. Use of the causeway required by Condition 10 above shall not commence until the consent holder has submitted a certificate signed by a suitably qualified and experienced engineer to the Canterbury Regional Council Attn: Regional Manager, Compliance and Monitoring. This certificate shall attest that the design and construction of the temporary gravel causeway is safe for use by pedestrians, bicycles, stock and light four wheel drive vehicles crossing the canal.
- 12. If the temporary access causeway is removed for a lake opening authorised under CRC134849, or washed out by the sea, the causeway will be reinstated within 15 working days of the lake closing to the sea, or if this is not practicable as soon as possible thereafter. Certification of the reinstated causeway is required under Condition 11 above.
- 13. The temporary access causeway shall be removed by the consent holder when construction of the bridge authorised under CRC160434 is completed.
- 14. From 31 March 2017, all practicable measures shall be taken to ensure that while this consent is exercised, safe access across the Canal shall be provided by way of a bridge installed and maintained in accordance with CRC160434.
- 15. Prior to the temporary gravel causeway required by condition 10 being operational, the consent holder shall erect and maintain a site notice
 - a. That is clearly visible to the public
 - b. At the following locations within 50 metres of the temporary gravel causeway:
 - i. on the Birdlings Flat side of the causeway
 - ii. on the Bossu Road side of the causeway
 - c. advising that the construction of the causeway is safe only for use by pedestrians, bicycles, stock and light four wheel drive vehicles crossing the canal.
- 16. For the purposes of this consent works that are unscheduled are those associated with Lake opening events due to:
 - a. the Lake level exceeding 2.7 mamsl as measured at the Canterbury Regional Council staff gauge adjacent to state highway 75 (SH75) located at NZTM 2000 1578798 mE, 5150311 mN;
 - b. in the event that a significant weather event is forecast to result in a lake level exceedance of 2.7 mamsl.
- 17. The consent holder shall erect and maintain a site notice:
 - a. that is clearly visible to the public;

b. at the following locations:

- i. at the Birdlings Flat carpark, located at the beach end of Poranui Beach Road; and
 - ii. at the beach end of Bossu Road adjacent to the location of works; advising the public of the works and respective locations thereof that are undertaken in terms of this permit;
- c. advising of the risk of vehicular stranding to persons crossing between Birdlings Flat and Bossu Road;
- d. advising of any hazards to be avoided that may present a risk to public safety, including but not limited to operation of machinery, construction and maintenance of structures.

Ecological conditions

18. Prior to any works authorised by this consent (other than unscheduled works as defined in condition 16 or works within and adjacent to the area marked as 'Canal', located between map references NZTM 2000 1577411 mE, 5147217 mN and NZTM 2000 1577433 mE, 5147140 mN on plan CRC135050) being carried out between the period commencing the fourth week of August and ending at the start of the second week in January, the consent holder shall ensure that:
- a. a suitably qualified person inspects the proposed area of works, no earlier than eight days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix CRC135050, attached to and forming part of this consent;
 - b. the person carrying out the inspection prepares a written report that identifies all the located bird breeding or nesting sites and provides copies of that report to the consent holder and the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance;
 - c. the name and qualifications of the person carrying out the inspection are provided to the Canterbury Regional Council with the report;
 - d. any person carrying out works authorised by this consent are informed of any bird breeding or nesting sites located; and
 - e. where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with clauses 18(a) to 18(d) of this condition.
19. With the exception of unscheduled works defined in condition 16, vehicles and/or machinery shall not operate within 100 metres of birds listed in Appendix CRC135050 which are nesting or rearing their young, as identified by the inspection undertaken in accordance with condition 18.
20. Where unscheduled works are to occur, the works shall not, as far as practicable, disturb birds listed in Appendix CRC135050 which are nesting or rearing their young as identified by the inspection undertaken in accordance with condition 18.
21. Prior to the first exercise of this consent, the consent holder shall ensure that:

- a. a suitably qualified person inspects the area of proposed works, including any areas that will be the subject of disturbance or deposition of material following the completion of works, and records the location and extent of any leafless pohuehue (*Muehlenbeckia ephedroides*) plants;
 - b. if the works proposed will result in the damage, destruction or clearance of any leafless pohuehue plants:
 - i. the suitably qualified person has recommended what measures can be undertaken to mitigate the effect on any leafless pohuehue; and
 - ii. consultation is undertaken with the Department of Conservation (DOC) to determine any additional measures recommended; and
 - iii. all reasonable endeavours that are to be taken, to implement recommendations from the suitably qualified person and the Department of Conservation in accordance with clauses (b)(i). and (b)(ii)., are identified
 - c. at least 10 days prior to the commencement of any works, a report is provided to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, identifying:
 - i. the results of the survey undertaken in accordance with clause a. above; and
 - ii. the recommendations from clauses b.(i). and (b)(ii);
 - iii. the reasonable endeavours identified in clause b. iii that are to be implemented;
 - iv. the name and qualifications of the suitably qualified person.
22. Works at the opening site shall not cause the stranding of fish in pools or channels (excluding the canal) with the exception of works undertaken to facilitate tuna migration.
23. To prevent the spread of pest species, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures and that machinery shall be free of plants and plant seeds prior to use at the site of works.

Advice Note: You can access the most current version of these procedures from the Biosecurity New Zealand website <http://www.biosecurity.govt.nz>.

General Conditions

24. The Canterbury Regional Council, Attention: RMA Compliance and Enforcement Manager, shall be notified:
- a. at least two working days prior to the commencement of works that are scheduled in terms of this permit;
 - b. as soon as practicable, but no later than 48 hours following the commencement of works that are unscheduled;

- c. where works are to recommence after having been discontinued for a period of more than eight days.
- 25. The notice specified in condition 24 shall include:
 - a. the proposed start dates of the period of works; and
 - b. where consent is to be exercised by a person other than the consent holder, the name, address and contact telephone number of the person(s) that will exercise the consent;
 - c. Notwithstanding 19(a) and 19(b) above, where works are unscheduled and prior notice is not able to be given, the date at which works started, and have, or are expected to be completed.
- 26. All practicable steps shall be undertaken to minimise adverse effects on property, wildlife, biodiversity values, aquatic ecosystems, vegetation, cultural and amenity values.
- 27. Prior to commencing any works in terms of this permit, the consent holder shall provide a copy of this consent to all persons undertaking activities authorised by this consent, and explain to those persons how to comply with the consent conditions.
- 28. In the event of any discovery of archaeological material:
 - a. the consent holder shall immediately:
 - i. cease earthmoving operations in the affected area and mark off the affected area; and
 - ii. advise the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, of the disturbance; and
 - iii. Advise the Heritage New Zealand Pouhere Taonga of the disturbance;
 - b. If the archaeological material is determined to be Koiwi Tangata (human bones) or taonga (treasured artefacts) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the office of the Te Rūnanga o Wairewa of the discovery;
 - c. If the archaeological material is determined to be Koiwi Tangata (human bones) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the New Zealand Police of the disturbance;
 - d. Work may recommence if the Heritage New Zealand Pouhere Taonga (following consultation with rūnanga if the site is of Māori origin) provides a statement in writing to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, that appropriate action has been undertaken in relation to the archaeological material discovered. The Canterbury Regional Council shall advise the consent holder on written receipt from the Heritage New Zealand Pouhere Taonga that work can recommence.

Advice Note: Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone,

charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc, may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period.

It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of the Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.

29. All practicable measures shall be undertaken to minimise works resulting in:

- a. erosion of the land adjacent to the bed of the Lake; and
- b. the loss of sediment to the Lake.

30. Any refuelling at the site of works shall be subject to the following:

- a. There shall be no refuelling within 20 metres of water.
- b. The pump shall be attended at all times during refuelling;
- c. Refuelling shall only be undertaken using:
 - i. an up to 500 litre double skinned tank with an electric pump contained inside the tank's outer skin; and
 - ii. a double skinned hose line with a transparent outer skin and an auto shut off nozzle;
- d. A "spill mat" capable of absorbing oil and petroleum products, and of a minimum size of 1.5 metres by 1.5 metres, shall be positioned under the fill point in order to intercept any spill from the nozzle.
- e. The "spill mat" detailed in clause d. shall be replaced following the absorbance of spills with a cumulative volume of 10 litres or more or if otherwise damaged to such a state that it can no longer adequately intercept and absorb any spills.
- f. A spill kit, that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, shall be kept on site at all times.
- g. A written spill response plan ("the plan") shall be developed and communicated to all persons undertaking activities authorised by this consent and a copy kept on site at all times. The plan shall detail the methods and processes to be used by the consent holder to clean up a spill and shall include, but not be limited to:
 - i. emergency contact information for the Canterbury Regional Council Pollution Hotline;

- ii. emergency contact information for a waste management service provider with appropriate qualifications and equipment for cleaning up spills of oil and petroleum products;
 - iii. instructions for operating the spill kit kept on site in accordance with condition 30(f).;
 - iv. instructions for removing and disposing of contaminated material in a manner suitable to ensure no further contamination occurs.
- h. The spill response plan specified in condition 30(g) shall be provided to Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, at least eight working days prior to the first exercise of activities under this consent and upon request by Canterbury Regional Council.
- i. In the event that a leak in the inner or outer hose or tank skin is detected, the consent holder shall immediately take action to prevent any further leakage and shall remove the damaged unit from the bed until such time as the leak is repaired.
- j. In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable in accordance with the spill response plan detailed in Condition 30(g) and take measures to prevent a recurrence.
- k. In the event of a spill, the consent holder shall inform the Canterbury Regional Council, Attention: Pollution Hotline of the event:
 - i. as soon as practicable, and not later than six hours following the spill, if the spill is within 20 metres of water and/or is of 10 litres or more; or
 - ii. as soon as practicable, and not later than 24 hours following the spill, if the spill is greater than 20 metres from water and is of less than 10 litres;
- l. When informing the Canterbury Regional Council of any spill, as specified in condition 30(k), the Consent Holder shall provide the following information:
 - i. the date, time, location and estimated volume of the spill;
 - ii. the cause of the spill;
 - iii. the type of contaminant(s) spilt;
 - iv. clean up procedures undertaken;
 - v. details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - vi. an assessment of any potential effects of the spill; and
 - vii. measures to be undertaken to prevent a recurrence.

31. The consent holder shall:

- a. entirely fill in the canal;
- b. remove any part of the Groyne which has not been covered by gravel; and

and as far as practicable restore the site to a state consistent with the natural character of the surroundings in the following circumstances:

- c. if the canal has not been used to open the lake for a period of 24 months or more; and
 - d. where the consent is due to expire:
 - i. three months before the expiry of the consent; or
 - ii. at a date agreed in writing between the Consent Holder and the Consent Authority where there is an application to continue the activity.
32. The Canterbury Regional Council may, once per year, on any of the last five working days of November, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.
33. The Canterbury Regional Council, Attention: Regional Manager, RMA Monitoring and Compliance, shall be informed immediately on first exercise of this consent by the consent holder.
34. If this consent is not exercised before 31 December 2020 it shall lapse for the purposes of section 125 of the Resource Management Act.

Plan CRC135050



Population
center and
locality labels

Hydrographic
feature labels

Parks, forests,
and reserves
labels

Address point
labels

Road labels

-  Red: Band_1
-  Green: Band_2
-  Blue: Band_3

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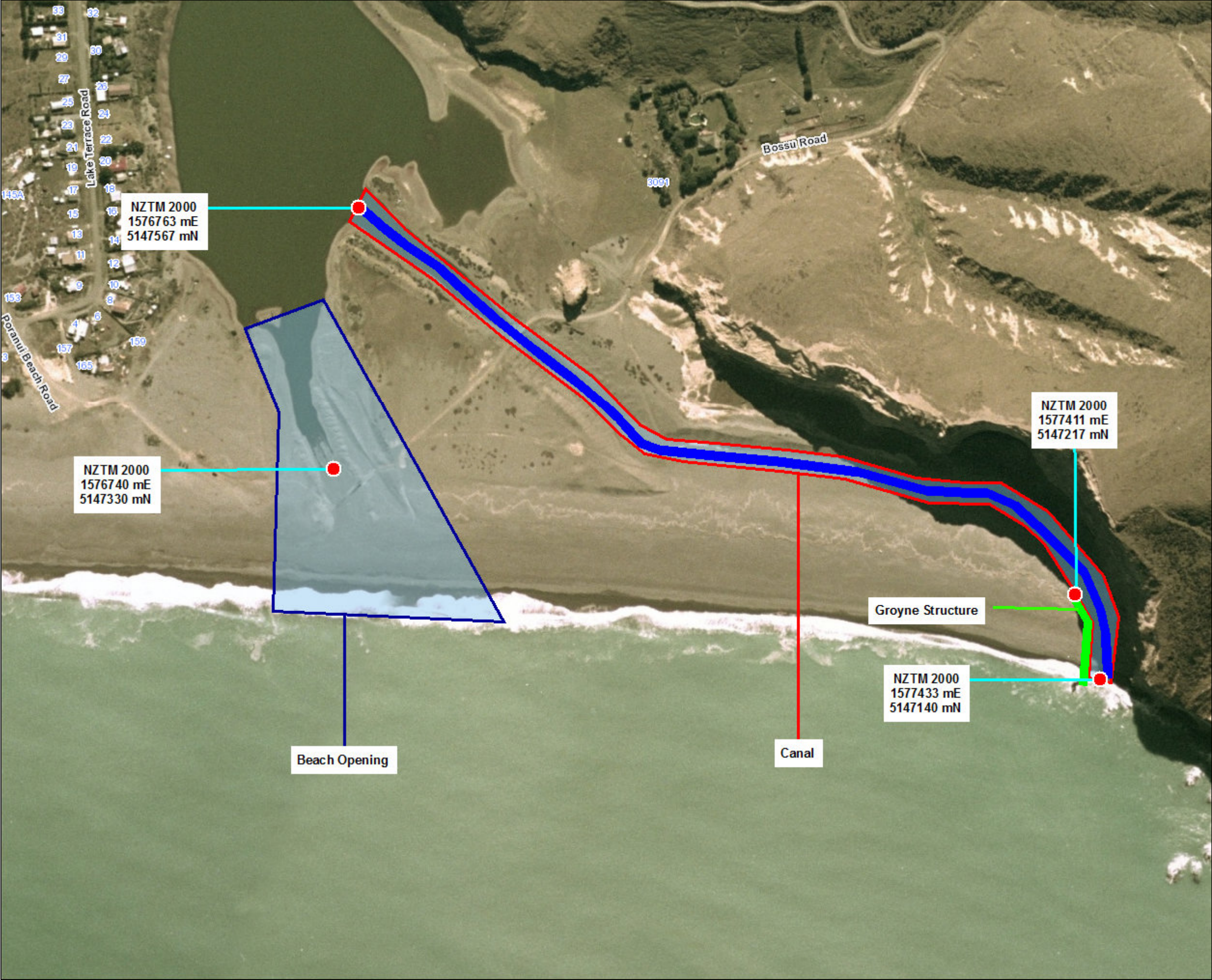
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Scale: 1:3,300 @A3

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Appendix CRC135050 - list of bird species

For the purposes of this consent, the bird species referred to in conditions 13. – 15. comprises the following:

South Island Pied oystercatcher

Wrybill

Banded dotterel

Black-fronted dotterel

Black-billed gull

Red-billed gull

Caspian tern

White-fronted tern

Black-fronted tern

White-winged Black tern

CRC160434 – Land use permit

To install, maintain and use a bridge, disturb the bed of Lake Forsyth / Wairewa, and use land for excavation.

1. This consent authorises the installation, maintenance, and use, of a bridge ('the Bridge') over Lake Forsyth / Wairewa ('the Lake') and the associated:
 - a. Excavation of land and the riparian margin of the Lake;
 - b. Disturbance and excavation of the bed;
 - c. Deposition of material in the bed;
 - d. Excavation of the riparian margin;
 - e. Erection, placement and use of structures.
2. The bridge shall only be installed:
 - a. on land parcel of legal description Pt Res 890 3186 DP 9008BLK VIII Akaroa SD;
 - b. at or about map reference NZTM 2000 1576907 mE, 5147450 mN, marked as 'Bridge Location' on plan CRC160434A, attached to and forming part of this consent.

Advice note: Landowner Authorisation.

In addition to this consent, the consent holder is required to obtain permission from the Department of Conservation in order to secure access to, undertake works in, and place structures on, the land that is the subject of this consent.

3. The bridge shall:
 - a. be approximately 32 metres in total length and 4.2 metres in total width;
 - b. have a single central concrete pier;
 - c. have pre-cast concrete abutments;
 - d. have rip-rap adjacent to the abutments and pier to prevent erosion and scour; and
 - e. have a soffit at an elevation that is not lower than 3.95 metres above mean sea level.
4. The excavation of land including the riparian margin of the Lake shall be limited to that necessary to:
 - a. install the bridge structure;
 - b. form bridge approaches;
 - c. borrow material to form the temporary gravel construction platform;
 - d. borrow material to form the temporary access causeway; and

- e. maintain the bridge.
- 5. The temporary gravel construction platform shall be formed from deposited material with a volume not greater than approximately 1,000 cubic metres, and shall be removed following the construction of the bridge.
- 6. Works shall be in accordance with a landscape management plan approved by Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance. This plan shall be prepared by the consent holder and submitted for approval at least 21 days prior to the first commencement of any activities under this consent, and must address the following matters:
 - a. Groyne and riprap for erosion protection using local stones and boulders or otherwise visually consistent materials;
 - b. Means to ensure the groyne structure and areas beyond the canal retain a natural appearance;
 - c. Site rehabilitation measures:
 - i. to mitigate the landscape effects associated with the existing canal and gravel banks, but taking into account any relevant engineering requirements; and
 - ii. following any earthworks associated with the canal to maintain a natural appearance of the ground inland of the beach which is unaffected by current sea waves;
 - iii. to encourage the re-establishment of natural vegetation.
 - d. Measures to mitigate the landscape impact of bridge construction, including use of materials and site rehabilitation following construction.
- 7. The consent holder shall take all practicable steps to complete the construction of the bridge by 31 March 2017.
- 8. Activities undertaken to construct the bridge (with the exception of construction and removal of the temporary access causeway) shall not be undertaken:
 - a. during the period
 - i. commencing 1 September and ending on 31 October;
 - b. between the hours of 1800 and 0730;
 - c. on public holidays and weekends.
- 9. At least 21 days prior to the commencement of bridge construction works and for the duration of the construction period, the consent holder shall erect a site notice that is clearly visible to the public, advising of construction works:
 - a. at the Birdlings Flat carpark, located at the beach end of Poranui Beach Road; and
 - b. at the beach end of Bossu Road adjacent to the location of works.
- 10. The Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, shall be notified at least two working days prior to the commencement of works to construct the bridge authorised by this consent, including

- a. the proposed start and end dates of the period of work; and
 - b. where consent is to be exercised by a person other than the consent holder, the name, address and contact telephone number of the person(s) that will exercise the consent.
11. Prior to commencing works, the consent holder shall provide a copy of this consent to all persons undertaking activities authorised by this consent, and explain to those persons how to comply with the consent conditions.
12. To prevent the spread of pest species, the consent holder shall ensure that activities authorised by this consent are undertaken in accordance with the Biosecurity New Zealand's hygiene procedures and that machinery shall be free of plants and plant seeds prior to use at the site of works.

Advice Note: You can access the most current version of these procedures from the Biosecurity New Zealand website <http://www.biosecurity.govt.nz>.

13. Prior to any bridge construction works authorised by this consent being carried out between the period commencing the fourth week of August and ending at the start of the second week in January, the consent holder shall ensure that:
- a. a suitably qualified person inspects the proposed area of works, no earlier than eight days prior to any works being carried out, and locates any bird breeding sites of birds listed in Appendix CRC160434, attached to and forming part of this consent;
 - b. the person carrying out the inspection prepares a written report that:
 - i. identifies all the located bird breeding or nesting sites; and
 - ii. if necessary, recommends reasonable mitigation measures to minimise the effects of the works on any bird nesting sites located in accordance with i above;
 - c. The person carrying out the inspection provides copies of the report referred to in Condition 13(b) above to the consent holder and the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance;
 - d. the name and qualifications of the person carrying out the inspection are provided to the Canterbury Regional Council with the report;
 - e. any person carrying out bridge construction works authorised by this consent are informed of any bird breeding or nesting sites located and any recommended mitigation measures; and
 - f. where work ceases for more than eight days, the site will be re-inspected for bird breeding and nesting sites in accordance with Condition 13(a) to 13(d) of this condition.
14. Prior to the first exercise of this consent, the consent holder shall ensure that:
- a. a suitably qualified person inspects the area of proposed works, including any areas that will be the subject of disturbance or deposition of material following the completion of works, and records the location and extent of any leafless pohuehue (*Muehlenbeckia ephedroides*) plants;

- b. if the works proposed will result in the damage, destruction or clearance of any leafless pohuehue plants:
 - i. the suitably qualified person has recommended what measures can be undertaken to mitigate the effect on any leafless pohuehue; and
 - ii. consultation is undertaken with the Department of Conservation (DOC) to determine any additional measures recommended; and
 - iii. all reasonable endeavours that are to be taken, to implement recommendations from the suitably qualified person and the Department of Conservation in accordance with i. and ii., are identified
- c. at least 10 days prior to the commencement of any works, a report is provided to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, identifying:
 - i. the results of the survey undertaken in accordance with clause a. above; and
 - ii. the recommendations from Condition 14(b)(i) and (b)(ii);
 - iii. the reasonable endeavours identified in Condition 14(b)(iii) that are to be implemented;
 - iv. the name and qualifications of the suitably qualified person.

15. In the event of any discovery of archaeological material:

- a. the consent holder shall immediately:
 - i. cease earthmoving operations in the affected area and mark off the affected area; and
 - ii. advise the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, of the disturbance; and
 - iii. Advise the Heritage New Zealand Pouhere Taonga of the disturbance;
- b. If the archaeological material is determined to be Kōiwi Tangata (human bones) or taonga (treasured artefacts) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the office of the Te Rūnanga o Wairere of the discovery;
- c. If the archaeological material is determined to be Kōiwi Tangata (human bones) by the Heritage New Zealand Pouhere Taonga, the consent holder shall immediately advise the New Zealand Police of the disturbance;
- d. Work may recommence if the Heritage New Zealand Pouhere Taonga (following consultation with rūnanga if the site is of Māori origin) provides a statement in writing to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, that appropriate action has been

undertaken in relation to the archaeological material discovered. The Canterbury Regional Council shall advise the consent holder on written receipt from the Heritage New Zealand Pouhere Taonga that work can recommence.

Advice Note: *Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc, may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period.*

It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of the Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.

16. All practicable measures shall be undertaken to:
 - a. prevent machinery operating in water, including the use of the temporary gravel construction platform during the construction of the bridge;
 - b. minimise works resulting in:
 - i. erosion of the land adjacent to the bed of the Lake; and
 - ii. the loss of sediment to the Lake.
17. Any refuelling at the site of works shall be subject to the following
 - a. There shall be no refuelling within 20 metres of water;
 - b. The pump shall be attended at all times during refuelling;
 - c. Refuelling shall only be undertaken using:
 - i. an up to 500 litre double skinned tank with an electric pump contained inside the tank's outer skin; and
 - ii. a double skinned hose line with a transparent outer skin and an auto shut off nozzle;
 - d. A "spill mat" capable of absorbing oil and petroleum products, and of a minimum size of 1.5 metres by 1.5 metres, shall be positioned under the fill point in order to intercept any spill from the nozzle.
 - e. The "spill mat" detailed in Condition 17(d). shall be replaced following the absorbance of spills with a cumulative volume of 10 litres or more or if otherwise damaged to such a state that it can no longer adequately intercept and absorb any spills.

- f. A spill kit, that is capable of absorbing the quantity of oil and petroleum products that may be spilt on site at any one time, shall be kept on site at all times.
- g. A written spill response plan (“the plan”) shall be developed and communicated to all persons undertaking activities authorised by this consent and a copy kept on site at all times. The plan shall detail the methods and processes to be used by the consent holder to clean up a spill and shall include, but not be limited to:
 - i. emergency contact information for the Canterbury Regional Council Pollution Hotline;
 - ii. emergency contact information for a waste management service provider with appropriate qualifications and equipment for cleaning up spills of oil and petroleum products;
 - iii. instructions for operating the spill kit kept on site in accordance with Condition 17(f);
 - iv. instructions for removing and disposing of contaminated material in a manner suitable to ensure no further contamination occurs.
- h. The spill response plan specified in clause g. shall be provided to Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, eight working days prior to the first exercise of the activities authorised by this consent and upon request by Canterbury Regional Council.
- i. In the event that a leak in the inner or outer hose or tank skin is detected, the consent holder shall immediately take action to prevent any further leakage and shall remove the damaged unit from the bed until such time as the leak is repaired.
- j. In the event of a spill of fuel or any other contaminant, the consent holder shall clean up the spill as soon as practicable in accordance with the spill response plan detailed in clause g. and take measures to prevent a recurrence.
- k. In the event of a spill, the consent holder shall inform the Canterbury Regional Council, Attention: Pollution Hotline of the event:
 - i. as soon as practicable, and not later than six hours following the spill, if the spill is within 20 metres of water and/or is of 10 litres or more; or
 - ii. as soon as practicable, and not later than 24 hours following the spill, if the spill is greater than 20 metres from water and is of less than 10 litres;
- l. When informing the Canterbury Regional Council of any spill, as specified in condition 17(k), the Consent Holder shall provide the following information:
 - i. the date, time, location and estimated volume of the spill;
 - ii. the cause of the spill;
 - iii. the type of contaminant(s) spilt;

- iv. clean up procedures undertaken;
 - v. details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - vi. an assessment of any potential effects of the spill; and
 - vii. measures to be undertaken to prevent a recurrence.
- 18. Following completion of works to construct the bridge:
 - a. all disturbed areas shall be stabilised to minimise loss of sediment; and
 - b. all surplus material shall either be removed from the site or spread out in a way that is consistent with the profile of the surrounding land; and
 - c. the site shall be left in a safe and tidy condition.
- 19. Within one month of the construction of the bridge, the consent holder shall submit as-built information to the Canterbury Regional Council: Attention Regional Manager, RMA Monitoring and Compliance, including as built drawings and specifications of the bridge.
- 20. The bridge shall be maintained in a safe condition for access across the bed of the Lake.
- 21. The consent holder shall ensure:
 - a. the bridge is inspected annually by a chartered professional engineer;
 - b. any maintenance work recommended from the annual inspections is completed as soon as practicable.
- 22. The Canterbury Regional Council may, once per year, on any of the last five working days of November, serve notice of its intention to review the conditions of this consent for the purposes of:
 - a. dealing with any adverse effect on the environment which may arise from the exercise of the consent; or
 - b. requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
- 23. The Canterbury Regional Council, Attention: Regional Manager, RMA Monitoring and Compliance, shall be informed immediately on first exercise of this consent by the consent holder.
- 24. If this consent is not exercised before 31 December 2018 it shall lapse for the purposes of section 125 of the Resource Management Act.

Plan CRC160430



Population
center and
locality labels

Hydrographic
feature labels

Parks, forests,
and reserves
labels

Address point
labels

Road labels

Red: Band_1

Green: Band_2

Blue: Band_3

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Scale: 1:1,800 @A3

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Appendix CRC160434 - List of bird species

South Island Pied oystercatcher

Wrybill

Banded dotterel

Black-fronted dotterel

Black-billed gull

Red-billed gull

Caspian tern

White-fronted tern

Black-fronted tern

White-winged Black tern