

RESOURCE CONSENT CONDITIONS

The following activities are authorised by these consents:

- a) *Under section 9(2) of the Resource Management Act 1991 and **Rule 1C of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for land disturbing activities (including earthworks within the Riparian Management Zone of a river or stream and earthworks within the Coastal Margin setbacks);*
- b) *Under section 9(2) of the Resource Management Act 1991 and **Rule 2C of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for land disturbing activities by way of vegetation clearance (including vegetation clearance within the Riparian Management Zone of a river or stream during earthworks activities);*
- c) *Under sections 15(1)(a) and 15(1)(b) of the Resource Management Act 1991 and **Rule 37 of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for the temporary discharge of (sediment) contaminated water to water and to land (in circumstances where contaminants may enter water) during construction activities;*
- d) *Under sections 14(2) and 14(3) of the Resource Management Act 1991 and **Rule 43 of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for the temporary take of water during construction activities;*
- e) *Under sections 14(2) and 14(3) of the Resource Management Act 1991 and **Rule 48 of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for the permanent diversion of water from the Kaituna River into Ongatoro / Maketū Estuary and to the Lower Kaituna Wildlife Management Reserve;*
- f) *Under sections 13(1) and 13(2) of the Resource Management Act 1991 and **Rule 71 of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for the placement of structures on, and the disturbance of, the bed of the Kaituna;*
- g) *Under section 9(2) of the Resource Management Act 1991 and **Rule 85 of the Bay of Plenty Regional Water and Land Plan** as a Discretionary Activity – for the modification of the Ongatoro / Maketū Estuary the Lower Kaituna Wildlife Management Reserve Wetlands and the Kaituna River Wetlands SSL-33 and SSCMA-33 through permanent changes in water flow and temporary discharges of sediment during construction activities;*
- h) *Under sections 15(2) and 15(2A) of the Resource Management Act 1991 and **Rule 19(z) of the Bay of Plenty Regional Air Plan** as a Discretionary Activity – for the temporary discharge of dust during construction activities;*
- i) *Under section 12(3) of the Resource Management Act 1991 and **Rule 9.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – to temporarily discharge sediment contaminated water into the Coastal Marine Area during construction activities;*
- j) *Under section 12(3) of the Resource Management Act 1991 and **Rule 10.2.4(d) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – to temporarily take coastal water from within the Ongatoro/Maketū Estuary at a rate greater than 15 cubic metres per day during construction activities;*
- k) *Under section 12(3) of the Resource Management Act 1991 and **Rule 10.2.4(e) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – to temporarily dam coastal water during construction activities;*

- l) Under sections 12(3) and 14(2) of the Resource Management Act 1991 and **Rule 10.2.4(g) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – to divert coastal water from the Kaituna River into the Ongatoro/Maketū Estuary;
- m) Under section 12(3) of the Resource Management Act 1991 and **Rule 10.2.4(g) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – to temporarily divert coastal water during construction activities;
- n) Under sections 12(1) and 12(3) of the Resource Management Act 1991 and **Rule 12.2.4(a) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – for the occupation of the Coastal Marine Area;
- o) Under sections 12(1) and 12(3) of the Resource Management Act 1991 and **Rule 13.2.4(h) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity - for structures within the Coastal Management Zone;
- p) Under sections 12(1) and 12(3) of the Resource Management Act 1991 and **Rule 14.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity - for the disturbance of, removal of material from, and the deposition of material on, the foreshore and seabed;
- q) Under sections 12(1) and 12(3) of the Resource Management Act 1991 and **Rule 14.2.4(e) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – for construction activities associated with a Discretionary Activity;
- r) Under sections 12(1) and 12(3) of the Resource Management Act 1991 and **Rule 14.2.4(j) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – for the removal, damage, modification and destruction of indigenous vegetation in the foreshore and seabed; and
- s) Under sections 12(1) and 12(3) of the Resource Management Act 1991 and **Rule 15.2.4(b) of the Bay of Plenty Regional Coastal Environment Plan** as a Discretionary Activity – for a reclamation within the Coastal Management Zone.

subject to the following conditions:

1. **Purpose**

1.1 To authorise and set conditions for:

- (a) The construction of a new channel from the Kaituna River to Fords Cut and the widening of Ford's Cut including associated erosion protection works;
- (b) The diversion of water from the Kaituna River into the Ongatoro/Maketu Estuary;
- (c) The reclamation of land to create a salinity block;
- (d) The installation and operation of an additional culvert to the Lower Kaituna Wildlife Management Reserve;
- (e) The diversion of water from the Kaituna River into the Lower Kaituna Wildlife Management Reserve;

- (f) The provision of public and commercial boat and parking facilities adjoining and within the Coastal Marine Area;
- (g) Works associated with the creation of wetlands and estuary enhancement;
- (h) Sediment mobilisation in the lower Kaituna River, being the Coastal Marine Area;
- (i) The temporary discharge of contaminants and taking, damming and diverting of water, associated with construction activities.

2. Location

The activity site is the lower reaches of the Kaituna River and surrounds, the Ongatoro/Maketu Estuary, Papahikahawai Island and Maketu Spit and adjacent land, as generally shown on BOPRC Plan Numbers RC67958/1 and RC67958/10.

3. Map References

Name of Area	Approximate NZTM map reference (midpoint)
Fords Cut	1,901,072 E 5,815,885 N
Salinity block	1,900,744 5,816,167
Boat ramp	1,900,691 5,815,801
Causeways – mid point	1,901,473 5,816,108 and 1,901,952 5,816,198
Lower Kaituna Wildlife Management Reserve	1,897,485 5,816,541

4. Legal description

The legal descriptions of the proposed activity site are:

Stopped Road SO 55944

Pts Sec 5 SO 55943 & SO 55944 Soil Cons and River Control

Pt Sec 5 Blk V Te Tumu SD, Sec 1 SO 55944

Tumu Kaituna 11A1 Block

Pt Sec 6 Blk VI Te Tumu DC (SO 46938)

Pt Sec 1 Blk VI Te Tumu SD (SO 38964)

Lot 2 DPS 12129, Lot 3 DPS 12129 and Pt Sec 1 Blk VI Te Tumu SD

Lot 1 DPS 12129

Pt Sec 2 Blk VI Te Tumu SD (SO 46938)

Papahikahawai No 2 Block

Sec 7 Blk VI Te Tumu SD (SO 46938)

Section 10 SO 52144

River Bed

Legal Road

Coastal marine area

5. Plans

The works shall be undertaken in accordance with the following Construction Plans prepared by Opus International Consultants Limited and WaterLine Engineering Consultants Limited and referenced as Drawing Number 2/1542/115/6235:

- '*Proposed Construction Works*', referenced as Sheet Number 2, Revision 3 and dated 3 December 2014 [BOPRC Plan Number RC67958/1];
- '*Proposed Ford Road Re-Alignment Plan and Longsection*', referenced as Sheet Number 3, Revision 3 and dated 3 December 2014 [BOPRC Plan Number RC67958/2];
- '*Proposed Ford Road Re-Alignment Plan – Cross Sections – Sheet 2 of 4*', referenced as Sheet Number 8, Revision 2 and dated 3 December 2014 [BOPRC Plan Number RC67958/3];
- '*Proposed Ford Road Re-Alignment Plan – Cross Sections – Sheet 3 of 4*', referenced as Sheet Number 9, Revision 2 and dated 3 December 2014 [BOPRC Plan Number RC67958/4];
- '*Proposed Culvert Installations – Plan and Longsection and Typical Section*', referenced as Sheet Number 14, Revision 2 and dated 3 December 2014 [BOPRC Plan Number RC67958/5];
- '*Fords Loop Channel – Plan and Section A-A*', referenced as Sheet Number 15, Revision 4 and dated 20 May 2015 [BOPRC Plan Number RC67958/6];
- '*Proposed Channel and Existing Ford's Cut Channel Remedial Works – Plan and Sections* ', referenced as Sheet Number 16, Revision 3 and dated 3 December 2014 [BOPRC Plan Number RC67958/7];
- '*Proposed Channel and Existing Ford's Cut - Cross Sections – Sheet 1 of 2*', referenced as Sheet Number 17, Revision 1 and dated 27 June 2014 [BOPRC Plan Number RC67958/8];
- '*Proposed Channel and Existing Ford's Cut - Cross Sections – Sheet 2 of 2*', referenced as Sheet Number 18, Revision 1 and dated 27 June 2014 [BOPRC Plan Number RC67958/9];
- '*Land Use Plan*', referenced as Sheet Number 19, Revision 2 and dated 3 December 2014 [BOPRC Plan Number RC67958/10]; and
- '*Papahikahawai Island Remediation Plan*', referenced as Sheet Number 20, Revision 2 and dated 27 June 2014 [BOPRC Plan Number RC67958/11].

- 5A The Environmental Monitoring required under Conditions 30 through to 35 inclusive shall be undertaken in accordance with the Environmental Monitoring Programme and any update under Condition 28.2 [BOPRC Plan Number RC67958/12].

6. Definitions

The following terms within these conditions shall have the following definitions:

"*District Council*" means the Western Bay District Council's Chief Executive Officer or their nominee.

"*Commissioning*" unless otherwise clearly identified through the resource consent condition wording, means that the culverts are deemed to be fully commissioned at

Stage 2, being when all culverts and their gates are fully operational without any short-term controls on flow rates.

“*Consent Holder*” means the Bay of Plenty Regional Council’s Environmental Delivery Group or their nominee.

“*Diversion control structure*” means the diversion culverts at Ford’s Cut as shown on BOPRC Plan Number 67958/2.

“*Regional Council*” means the Bay of Plenty Regional Council’s Chief Executive Officer or their nominee.

“*Project*” means the Kaituna River Re-Diversion and Ongatoro/Maketu Estuary Enhancement Project and associated activities.

“*Re-diversion channel*” means the new channel to be constructed to enable the diversion of water from the Kaituna River to the diversion control structure as shown on BOPRC Plan Number 67958/7.

“*Works*” means the construction works required to give effect to the Project.

“*Tangata Whenua*” for the purpose of this resource consent, as a minimum, includes the following parties: Ngati Rangiwewehi, Ngati Whakaue ki Maketū, Tapuika, Waitaha, Ngati Makino, Ngati Pikiāo and Ngati Tunohopu.

6A. Management Plans

- 6A.1 The Consent Holder shall prepare, implement, and comply with all management plans required under this consent at all times in accordance with the relevant conditions of consent.
- 6A.2 No works or activities shall be undertaken until the relevant management plans have been finalised and/or approved in accordance with the relevant conditions of consent.

Refer to Advice Note 5 for an outline of the pre-operational management plans and meetings and their due timeframes.

7. Notification and pre-construction meetings

- 7.1A The Consent Holder shall not proceed with any works authorised under these consents until it has been demonstrated to the Regional Council and the District Council that all the land required for the Project has been acquired or property access granted.
- 7.1 The Regional Council shall be notified in writing of the intention to commence works at least two months prior to the start of any construction activities on site.
- 7.2 Prior to commencement of works the Consent Holder or their agent shall arrange and conduct a pre-construction site meeting between itself, the Regional Council and the primary contractor. At a minimum, the following shall be covered at the meeting:
- (a) Scheduling and staging of the works;
 - (b) Responsibilities of all relevant parties;
 - (c) Contact details for all relevant parties;
 - (d) Expectations regarding communication between all relevant parties;

- (e) Procedures for implementing any amendments to the management plans submitted;
 - (f) Site inspection;
 - (g) Confirmation that all relevant parties have copies of this resource consent conditions document and its attachments, as well as the Construction Environmental Management Plan; and
 - (h) All associated erosion and sediment control plans and methodology.
- 7.3 A meeting shall also be held prior to commencement of works with the directly affected landowners, as well as RD & SF Waterhouse Partnership, Coastguard Maketū, Te Tumu Landowners Group, Vernon Wills, the Chairman of the Papahikahawai Trust, the Manager – Rivers and Drainage, and Tangata Whenua representatives to discuss:
- (a) Scheduling and staging of the works;
 - (b) Contact details for all parties;
 - (c) Cultural monitoring of construction activities; and
 - (d) Expectations regarding communication between all parties.
- 7.4 All operational personnel involved with the works shall be made aware of, and have access to, all resource consent documents, conditions and schedules applicable to the construction of the Project.
- 7.5 The Regional Council shall be notified in writing of the intention to commission the diversion control structure, in accordance with the Commissioning Plan required under condition 22 of this resource consent, at least 5 working days prior to Stage 1 commissioning occurring.
- 7.6 The Consent Holder shall keep minutes of the meetings required by conditions 7.2 and 7.3 of this resource consent. The minutes shall record:
- (a) The names of those who attended the meeting;
 - (b) Main topics of discussion; and
 - (c) Any agreed outcomes (including an agreed Cultural Monitoring Protocol).

The Consent Holder shall forward copies of these minutes to the Regional Council prior to the commencement of works authorised by this resource consent.

8A. Tangata Whenua Involvement Plan

- 8A.1 Prior to commencing any works authorised under this consent, the Consent Holder shall prepare and submit to the Regional Council and District Council a Tangata Whenua Involvement Plan. The Plan shall be developed in consultation with Tangata Whenua.

The objective of the Plan is to provide, to the extent reasonable and practicable, for the involvement of Tangata Whenua, including each group individually, at all stages of the Project and its implementation.

- 8A.2 The purpose of the Plan is to identify the process and extent of involvement by Tangata Whenua in:
- (a) Developing the detail of the restoration activities for the Project;
 - (b) The delivery of the restoration activities; and
 - (c) Monitoring the effectiveness of the restoration activities.
- 8A.3 As a minimum the Plan shall detail:
- (a) How and when Tangata Whenua will be involved with planning and implementation of:
 - (i) wetland restoration;
 - (ii) monitoring in the estuary and the river; and
 - (iii) any other matter identified through the development of the Plan;
 - (b) A cultural research and monitoring process for kaimoana;
 - (c) Opportunities for providing improved tuna and inanga fish passage and habitat;
 - (d) How local cultural knowledge may be incorporated in monitoring of the effects of the Project;
 - (e) Mechanisms for enabling local employment and providing education opportunities for Tangata Whenua, including making material and knowledge available for educational use;
 - (f) The means for measuring the effectiveness of the initiatives undertaken as part of the Project, as well as the Project overall, on mauri and local cultural knowledge; and
 - (g) A process for Tangata Whenua to have input into and provide feedback on the annual report prepared under Condition 29 prior to its lodgement with the Regional Council.
- 8A.4 The Tangata Whenua Involvement Plan may consist of several sub-plans developed with the different Tangata Whenua groups, to recognise the unique and diverse interests and values of different Tangata Whenua groups, and to take into account the recommendations of the Cultural Impact Assessments prepared by the different groups.
- 8A.5 The Tangata Whenua Involvement Plan, including any of its sub-plans, may be amended from time to time in consultation with Tangata Whenua. A copy of the amended plan shall be provided to the Regional Council.
- 8. Accidental Discovery**
- 8.1 A Cultural Monitor shall be employed by the Consent Holder to monitor, as necessary, and report any discoveries during earthworks. The role and presence of the Cultural Monitor shall be in accordance with an agreed Cultural Monitoring Protocol following the meeting required by condition 7.3 of this resource consent.
- 8.2 Prior to construction commencing the Consent Holder shall provide training to those working on the Project on the accidental discovery protocols.

- 8.3 In the event of any archaeological site or material being uncovered or reasonably suspected to have been uncovered during the exercise of this resource consent, activities in the vicinity of the discovery shall cease and the Consent Holder shall notify the Regional Council as soon as possible.
- 8.4 If any koiwi (human remains) are uncovered, or reasonably suspected to have been uncovered during the exercise of this resource consent, the Consent Holder or their representative shall:
- (a) Notify Heritage New Zealand's Pouhere Taonga Regional Archaeologist, the New Zealand Police and the Regional Council; and
 - (b) Undertake no further work until actions have been agreed by all parties listed in condition 8.4(a) and confirmation has been provided in writing from the Regional Council that works may re-commence.
- 8.5 In the event of an accidental discovery, the Consent Holder shall notify Te Rūnanga o Ngati Whakaeue ki Maketu, Tapuika Iwi Authority, Te Maru o Ngati Rangiwewehi, Waitaha Raupatu Trust, Ngāti Pīkiao, Ngāti Tūnohopū and Ngati Makino Heritage Trust, and shall ensure, as far as practicable, that procedures are undertaken in accordance with:
- (a) The Ngati Rangiwewehi koiwi and accidental discovery protocol;
 - (b) The Waitaha Raupatu Trust, Ngati Makino Heritage Trust, Komiti o Ngati Pīkiao (Ki Maketu), Ngati Tunohopu Accidental Discovery Protocols; and
 - (c) The Te Taonga Tūturu Act - immediate notification of Tapuika representatives in the event that a site or objects of significance are discovered during works.

Note: *This condition is in addition to any agreements that are in place between the Consent Holder and Tangata Whenua or Heritage New Zealand Pouhere Taonga.*

9. **Complaints**

- 9.1 The Consent Holder shall, upon receipt of any complaint in relation to construction, promptly:
- (a) investigate the complaint;
 - (b) where appropriate remedy or mitigate the cause of the complaint; and
 - (c) inform the Regional Council as soon as practicable, but no later than 48 hours of receiving the complaint, of the details of the complaint and the action taken.
- 9.2 The Consent Holder shall keep and maintain a complaint register for all aspects of operations in relation to the works. The complaints register shall include:
- (a) the date, time and type of complaint,
 - (b) the cause of the complaint, and
 - (c) the action taken by the Consent Holder in response to the complaint and steps to prevent a reoccurrence.
- 9.3 The complaints register shall be made available to the Regional Council at all times on request.

10. **Hazardous Substances and Spill Contingency**

- 10.1 As part of construction activities there shall be no storage of fuel or lubricants, refuelling, maintenance or lubrication of vehicles or machinery within 20 metres of the Kaituna River, Ford's Cut, Ongatoro/Maketu Estuary, open excavations, exposed groundwater or any other waterway.
- 10.2 During construction the Consent Holder shall maintain on site at all times, measures to prevent spills of hazardous substances entering land or water. These measures shall include but not be limited to:
- (a) The equipment, systems and procedures to be used to minimise the risk of spills or leaks of hazardous substances;
 - (b) The spill management and containment equipment to be maintained at all times on site, and its location;
 - (c) Procedures for containing, managing, cleaning and disposing of any spill or leak, or contaminated material to be removed from the site as a result of a spill or leak;
 - (d) Procedures to notify and report to the Consent Holder and the Regional Council within 24 hours of a spill or leak occurring, including a maintained schedule of emergency contact names and numbers;
 - (e) An inspection schedule for all storage containers, refuelling areas, machinery and plant; and
 - (f) Procedures to be followed to identify causes of spills or leaks.
- 10.3 In the event of a spill of hazardous substances on the site, the Consent Holder shall record and provide to the Regional Council within 24 hours of the spill:
- (a) The date, time and volume of the spill;
 - (b) The substance spilt;
 - (c) Measures taken to contain and absorb the spilt substance;
 - (d) The cause of the spill; and
 - (e) The measures taken since to prevent a repeat of the incident.
- 10.4 Prior to any plant or machinery entering or working within 20 metres of any water body, the Consent Holder or their representative shall:
- (a) Inspect the machinery or plant for any residual hazardous substances or leaks; and
 - (b) Clean and/or repair machinery or plant as necessary to prevent hazardous substance contamination of waterways.

11. **Construction Environmental Management Plan**

- 11.1 At least 30 working days prior to site establishment works commencing, the Consent Holder shall submit to the Regional Council, for certification, a Construction Environmental Management Plan ('CEMP'), including its subsets (refer conditions 13 and 14 below), outlining the construction activities and all practices and procedures to

be adopted in the construction of the Project. Regional Council's certification shall be limited to that the CEMP:

- (a) Complies with conditions 11.4, 11.5, 13.2, 13.3, 14.3 and 14.4 of this resource consent;
- (b) Adopts the best practicable option(s); and
- (c) Contains provisions that are enforceable.

11.2 The CEMP shall be verified by independent appropriately experienced and qualified practitioner(s) and confirm that:

- (a) the CEMP adopts the mitigation measures identified in the application documentation and / or otherwise required under the conditions of the consent; and
- (b) the implementation of the CEMP will appropriately mitigate the anticipated adverse effects of the works.

11.3 Works shall not commence until the CEMP described in condition 11.2 has been certified in writing by the Regional Council.

11.4 The objectives of the CEMP shall be:

- (a) To ensure that construction activities achieve compliance with the applicable resource consent conditions;
- (b) To minimise the environmental nuisance effects of the works;
- (c) To ensure that disturbance is limited to that necessary to undertake the works;
- (d) To minimise the release of sediment during disturbance to the bed of any waterway;
- (e) To limit the disturbance of the beds and margins of the coastal marine area and waterways to the extent necessary to undertake the works, and to avoid or mitigate adverse effects on the quality and passage of coastal and surface water and aquatic habitat;
- (f) To ensure that disturbance does not cause flooding or erosion; and
- (g) To minimise, as far as practicable, the disturbance of existing wetland areas and avian habitat within the Project site.

11.5 The CEMP will address, as a minimum, the following aspects of the works:

- (a) Construction sequencing generally following that prescribed in Table 3: *Construction Sequence* on pages 30 and 31 of the application document prepared by Opus International Consultants Limited entitled '*Kaituna River Re-diversion and Ongatoro/Maketu Estuary Enhancement Project – Notice of Requirements and Resource Consent Application (Boating Facilities)*' and dated December 2014, as follows:
 - (i) Site establishment;
 - (ii) Construction of inlet structure;
 - (iii) Construction of new stop bank along southern side of proposed re-diversion channel;

- (iv) Removal of existing stop bank;
- (v) Construction of new re-diversion channel;
- (vi) Construction of new moorings (including the temporary mooring for the barge operator and the temporary moorings and facilities for Coastguard Maketu and R.D. & S.F. Waterhouse Partnership in the event that the mooring facilities are provided at the salinity block in accordance with Plan RC67958/6 (Location B) and Condition 17.2);
- (vii) Construction of the salinity block;
- (viii) Improvements to Ford's Cut and Ford's Loop;
- (ix) Removal of stop banks and causeways within the estuary and construct bridge between Papahikahawai Island and Maketu Spit;
- (x) Construction of a new culvert to Lower Kaituna Wildlife Management Reserve;
- (xi) Open re-diversion channel inlet;
- (xii) Wetland creation; and
- (xiii) Refurbishment of the boat ramp and associated facilities (in accordance with the plan certified under Condition 18).

In the event that the mooring facilities are provided at the salinity block in accordance with Plan RC67958/6 (Location B) and Condition 17.2 below, the permanent mooring facilities may be constructed following the construction of the salinity block.

Where an alternative construction sequence is proposed within the CEMP, the rationale for this shall be clearly set out by the Consent Holder.

- (b) Timing of works including construction of the re-diversion channel inlet construction outside of whitebait fishing season (15th of August to the 30th November inclusive);
- (c) Working hours;
- (d) Restrictions on public access;
- (e) Means of limiting the physical extent of disturbance of flora and fauna (with particular focus on avian ecological issues) within the wetland located north of the proposed re-diversion channel;
- (f) For Coastguard Maketu, R.D. & S.F. Waterhouse Partnership and the Commercial Barge Operator within Ford's Loop, means of providing access to their existing moorings prior to the construction of the salinity block and a comparable level of access to the sea via Te Tumu;
- (g) The provision of a temporary mooring for the use of the commercial barge operator and the temporary moorings and facilities for Coastguard Maketu and R.D. & S.F. Waterhouse Partnership in the event that the mooring facilities are provided at the salinity block in accordance with Plan RC67958/6 (Location B) and Condition 17.2), to be provided prior to the construction of the salinity block; and

- (h) Timing of the closure of Ford Road for the installation of the diversion control structure outside of the period of the 20th of December to the 7th of February inclusive.
- 11.6 The following supplementary management plans shall form subsets of the verified CEMP, and must be submitted to Regional Council for certification concurrently with the CEMP:
 - (a) Erosion, Sediment & Dust Control Plan; and
 - (b) Construction Flood Management Plan.
- 11.7 In the event of any conflict between resource consent conditions and CEMP practices and procedures, the resource consent conditions shall be complied with.
- 11.8 Subject to compliance with condition 11.9 of this resource consent, the CEMP may be amended at any time.
- 11.9 Any amendments made to the certified CEMP shall be certified, verified and implemented in the manner required by conditions 11.1, 11.2 and 11.3 of this resource consent.

12. **Compliance with CEMP**

- 12.1 The Consent Holder shall implement and comply with the CEMP and the Supplementary Management Plans set out in conditions 11, 13 and 14.

***Note:** The CEMP prepared in relation to Regional Council resource consents will be the same CEMP as that prepared in relation to the designation submitted to Western Bay of Plenty District Council, but will include different supplementary plans specific to the Regional Council resource consents.*

13. **Erosion, Sediment and Dust Control Plan and Management**

- 13.1 As a sub-set and part of the CEMP required by condition 11 of this resource consent, the Consent Holder shall also provide an Earthworks, Sediment and Dust Control Plan ('ESDCP').
- 13.2 The objectives of the ESDCP shall be:
 - (a) To ensure construction activities achieve compliance with the conditions of consent for these activities;
 - (b) To ensure that the effects of erosion and sedimentation on water quality are minimised; and
 - (c) To ensure construction activities are carried out in a manner that is consistent with Bay of Plenty Regional Council's Guideline No. 2010/01 - "Erosion and Sediment Control for Land Disturbing Activities".
- 13.3 The ESDCP shall be prepared in general accordance with Bay of Plenty Regional Council Guideline No. 2010/01 - "Erosion and Sediment Control for Land Disturbing Activities" and shall clearly define the sediment, erosion and dust control measures to be implemented for each stage of the works authorised by this resource consent. The Plan shall include, but not be limited to:
 - (a) A locality map detailing as a minimum the location of roads, property boundaries, surface waterways and crossings, the direction of stormwater flows, and the erosion, sediment and dust control devices;

- (b) A site description, including land type, climate, topography, vegetation soils, and water bodies;
- (c) A detailed programme of works identifying:
 - (i) Each stage of construction;
 - (ii) Overall construction sequencing in accordance with condition 11.5(a) of this resource consent;
 - (iii) An estimate of the maximum area of bare ground (cumulative total) exposed at each stage of construction;
 - (iv) An estimate of the total length of exposed roads, trenches and tracks; and
 - (v) The volume of earthworks proposed.
- (d) Detailed drawings and specifications of all designated erosion and sediment control measures selected from the Erosion and Sediment Control Guidelines, including contingency measures, on-site catchment boundaries, measures to be taken at the temporary construction management areas, and off-site sources of runoff with supporting calculations, including all key design parameters. The measures may consist of but not be limited to the following:
 - (i) clean water diversion channels;
 - (ii) decanting earth bunds or sediment ponds;
 - (iii) on-site silt trapping devices, such as hay bales, silt fences, filter cloth barriers and rock filters;
 - (iv) soakage pits, infiltration basins and / or swales; and
 - (v) design information as is necessary to demonstrate that run-on water is controlled, “clean” and “dirty” water is separated where possible, land surface is protected from erosion, and sediment is managed.
- (e) A description of the mitigation and rehabilitation measures proposed;
- (f) A programme for managing exposed areas including progressive stabilisation and minimising exposed areas by:
 - (i) Ensuring that any earthworks and/or vegetation clearance should where practicable, be limited to the footprint of the works;
 - (ii) Staging of the construction; and
 - (iii) Providing best practice measures, vegetative or structural, to protect exposed soil from erosion;
- (g) Measures to ensure that the tracking of mud or earth onto the existing road network is reduced to the practicable minimum;
- (h) A schedule outlining the frequency and methods of inspection, monitoring and maintenance of all erosion, sediment control and dust control measures as may be necessary to achieve compliance with the conditions of the consents;
- (i) Details of any proposed monitoring to demonstrate the effectiveness of the proposed measures; and

- (j) Include emergency procedures that set out measures that will be implemented if there is a significant sediment discharge to surface water.
- 13.4 Land disturbing activities authorised by this resource consent shall not commence within any stage until the sediment and erosion control devices have been inspected by the Regional Council.
- 13.5 The Consent Holder shall carry out inspections, at a minimum frequency of weekly, of all working areas of the site in order to ensure they are well maintained and that erosion and sediment control devices remain effective.
- 13.6 Accumulated sediment shall be removed from the sediment retention devices before sediment levels reach 25 per cent of that device's volume.
- 13.7 Visual inspection shall be undertaken on a daily basis during the construction phase when earthworks are being undertaken at the inlet of the proposed channel (when works are being undertaken in this area), the estuary end of Ford's Cut, and Papahikahawai Creek to assess whether there is any visible plume as a result of the work.
- 13.8 The Consent Holder shall maintain the sediment and erosion control devices in place until the work area is stabilised to the satisfaction of the Regional Council and shall undertake any remedial works as directed to achieve compliance with these conditions.
14. **Construction Flood Management Plan**
- 14.1 As a sub-set and part of the CEMP required by condition 11 of this resource consent, the Consent Holder shall also provide a Construction Flood Management Plan ('CFMP').
- 14.2 The CFMP shall be developed in consultation with the Bay of Plenty Regional Council Rivers and Drainage Manager and the Utilities Manager of the Western Bay of Plenty District Council.
- 14.3 The objectives of the CFMP shall be to:
- (a) Avoid and if not practicable minimise, any increase in flood risk arising as a consequence of undertaking the works;
 - (b) Ensure that the Contractor takes into account and manages the potential for increased flood risk when planning and executing the works; and
 - (c) Ensure that in the event of a flood occurring at a construction site, processes and procedures are in place to manage the effects of such an event.
- 14.4 The CFMP shall, as a minimum, address the following matters:
- (a) Provision of a 24 hour emergency contact person who is able to respond to a flood warning and implement emergency control measures;
 - (b) An outline of the probability of various flood levels;
 - (c) Construction methodology and sequencing for the installation of the diversion control structure, the re-diversion channel, widening and deepening of Fords Cut and construction of the new stopbank;

- (d) Provision to restrict the length of stopbank being worked on and the number of work fronts affecting stopbanks to the minimum practicable;
 - (e) Provision of full flood protection in association with the construction of the re-diversion channel and relocation of the Titchmarsh stopbank; and
 - (f) Existing flood management procedures for the Kaituna Catchment Control Scheme as included in the Regional Council's Flood Warning Manual.
- 14.5 Flood protection systems must be fully reinstated for weekends and public holidays if the Contractor does not have staff on-site on Saturdays, Sundays or public holidays unless alternative interim measures, as approved by the Bay of Plenty Regional Council Rivers and Drainage Manager, are implemented. Within five working days of this approval, the Consent Holder shall provide a copy of this approval in writing to the Regional Council.
- 14.6 The Consent Holder shall maintain a stockpile of material and sufficient plant on site to be able to undertake immediate reinstatement of stopbank works in the event of a flood warning.
- 14.7 Along the alignment of the re-diversion channel full flood protection shall be maintained by the existing stopbank except for when the tie-ins are made at each end. The period under which the tie-ins shall be agreed with the Bay of Plenty Regional Council Natural Hazards Group prior to the works being undertaken. Within five working days of agreement being reached, the Consent Holder shall provide a copy of this agreement in writing to the Regional Council.
15. **Network Utilities**
- 15.1 At least 20 working days prior to the Consent Holder granting site possession to the contractor and site establishment works commencing, the Consent Holder shall submit to the Regional Council a Network Utility Management Plan (NUMP) prepared jointly by the Consent Holder, or its agents, and Powerco.
- 15.2 The NUMP submitted in accordance with condition 15.1 shall record if there is agreement between the parties and, if not, where and why there is disagreement and the steps taken in an attempt to resolve that disagreement. Matters of disagreement shall be resolved through independent verification by a suitably qualified and experienced practitioner at the Consent Holder's expense.
- 15.3 All construction activities of the Project are to be undertaken in accordance with the NUMP.
- 15.4 The purpose of the NUMP shall be to ensure that the enabling works, design and construction of the project adequately take account of, and include measures to address the safety, integrity, protection or, where necessary, relocation of existing electricity network utilities.
- 15.5 The NUMP shall include but need not be limited to methods and measures to:
- (a) Identify protocols for liaising with Powerco and for overseeing and approving works that impact on services.
 - (b) Accurately identify and verify the location of existing electricity network utilities,
 - (c) Identify appropriate measures for working near services or the appropriate standards if they have to be relocated.

- (d) Identify timing and sequencing of work associated with relocation and / or protection of electricity utility services.
- (e) Ensure that existing, relocated and / or replacement electricity network utility infrastructure can be accessed for maintenance at all reasonable times, or emergency works at all times during construction activities.
- (f) To appropriately manage the effects of dust and any other material potentially resulting from construction activities and able to cause material damage, beyond normal wear and tear to overhead electricity lines.
- (g) To ensure that no activity is undertaken during construction that would result in ground vibrations and / or ground instability likely to cause material damage to overhead electricity lines, including support structures.
- (h) To ensure the continued operation and supply of electricity infrastructure services, which may include, but not be limited to, any relocated or replacement electricity lines and cables being made operational prior to the termination of existing lines and cables.
- (i) Confirm that the works will comply with the minimum separation distances set out in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001).

16. **Design**

- 16.1 The Consent Holder shall use natural rock and soil material, where practicable.
- 16.2 All fill material shall be placed and compacted so as to minimise any erosion and / or instability.
- 16.3 The top level of the diversion control structure (the culverts at the entry of Ford's Cut) shall have a minimum height of RL 2.20 metres (Moturiki Datum).
- 16.4 The culverts on the diversion control structure shall be designed and constructed to allow practical and reliable reduction of flows from the re-diversion channel to the Ongatoro/Maketu Estuary.
- 16.5 All structures, devices, channels and erosion protection works shall be designed and constructed to an engineering standard that is suitable for their intended purpose and functions. Compliance with this condition shall be verified in writing by an independent appropriately qualified and experienced practitioner(s) prior to Stage 1 commissioning of the diversion control structure.

17. **Plans for Certification – Moorings**

- 17.1 Prior to the commencement of the works authorised by this resource consent, the Consent Holder shall submit a final plan for the proposed moorings and associated facilities for the certification of the Regional Council. This plan shall include:
 - (a) Details of the final location of the proposed moorings, being either:
 - (i) north of the 'salinity block' and adjacent to Ford Road in accordance with Plan Number RC67958/6 (Location A); or
 - (ii) at the southern or eastern edge of the embayment enclosed by Ford Island, the salinity block and Ford Road in accordance with Plan RC67958/6 (Location B);

- (b) The final orientation and design of the proposed mooring facilities;
- (c) The provision of no more than one permanent mooring for Coastguard Maketu and one for the R.D. & S.F. Waterhouse Partnership each comprising:
 - (i) A minimum length of 12.0 metres and a maximum length of 15.0 metres;
 - (ii) A maximum width of 3.0 metres; and
 - (iii) Jetties, if required, with a maximum lengths of 10.0 metres and maximum widths of 3.0 metres.
- (d) Details of the log deflector with a maximum length of 40 metres, if required; and
- (e) Car parking and security lighting and fencing as required: and
- (f) A mooring basin with a minimum 12.0 metres wide manoeuvring area and a water depth at Mean Spring Low Tide of 1 metre.
- (g) In the event that Location B is the final location (refer to Condition 17.1(a)(ii)), details of the temporary facilities which shall be provided during construction of the salinity block.

17.2 Unless otherwise agreed with Coastguard Maketu and or R.D. & S.F. Waterhouse Partnership, the Consent Holder shall provide the permanent moorings and associated facilities in accordance with the certified plan under condition 17.1 of this resource consent:

- (i) For Location A, prior to the commencement of construction of the 'salinity block' shown on BOPRC Plan Number RC67958/6; or
- (ii) For Location B, as soon as practicable following completion of the salinity block shown on BOPRC Plan Number RC67958/6.

17.3 In the event that agreement is reached between the Consent Holder and Coastguard Maketu and/or R.D. & S.F. Waterhouse Partnership that either one or both of the moorings are no longer required, the Consent Holder shall provide a copy of this agreement in writing to the Regional Council prior to the commencement of construction of the 'salinity block' shown on BOPRC Plan Number RC67958/6.

18. **Plans for Certification – Boat Ramp**

18.1 Prior to the commencement of the works authorised by this resource consent, the Consent Holder shall submit a final plan for the proposed public boat ramp and associated facilities for the certification of the Regional Council. This plan shall include:

- (a) The final location of the proposed boat ramp in general accordance with BOPRC Plan Number RC67958/2;
- (b) The final orientation, design and materials of the proposed boat ramp, log deflectors and jetty;
- (c) The provision of a public boat ramp comprising a maximum length of 28 metres in length (13 metres exposed at high tide) by nine metres in width;
- (d) The provision of a timber jetty or floating pontoon comprising a maximum length of 16 metres by 1.3 metres in width; and

- (e) The provision of a timber ramp to access the jetty or pontoon comprising a maximum length of 6.0 metres by 1.3 metres in width.

18.2 The Consent Holder shall construct the public boat ramp and associated facilities in accordance with the certified plan under Condition 18.1 of this resource consent.

19. **Papahikahawai and Maketu Spit Bridge**

19.1 Prior to the commencement of the construction of the bridge for foot and light all terrain vehicle access linking Papahikahawai Island to the Maketu Spit, the Consent Holder shall submit to the Regional Council a final plan that has been verified by suitably qualified and experienced engineering and landscape architecture practitioner(s) that:

- (a) The bridge has been designed to an acceptable engineering standard in terms of its intended use and location within the coastal environment; and
- (b) The bridge has been designed (including materials) that are appropriate in the landscape context and will not compromise the existing landscape values of the subject locality.

19.2 The bridge shall be located in general accordance with BOPRC Plan Number RC67958/11.

19.3 The bridge shall be constructed in accordance with the verified plan under condition 19.1 of this resource consent.

20. **On-going Maintenance**

20.1 The Consent Holder shall ensure that all structures and works authorised under this consent are maintained in a structurally sound condition at all times to the satisfaction of the Regional Council.

20.2 Any scour or erosion of the Coastal Marine Area at the entrance or exit points of the culverts, shall be effectively stabilised, to the satisfaction of the Regional Council.

20.3 The Consent Holder shall undertake any maintenance work on the structures and works authorised under this resource consent, as soon as reasonably practicable, if directed by, and to the satisfaction of, the Regional Council.

20.4 In the event the mooring facilities are provided under Condition 17.2, the Consent Holder shall:

- (a) ensure the water depth at Mean Spring Low Tide of the mooring basin and the Kaituna River between the basin in the area identified on BOPRC Plan Number RC67958/12 is maintained at no less than 1 metre.
- (b) assess the water depth at the request of the Maketu Coastguard or R.D. & S.F. Waterhouse Partnership through the Bay of Plenty Regional Harbour Master. If the water depth at Mean Spring Low Tide is less than 1 metre as a result of sediment deposition, then the Consent Holder shall remove the deposited sediment from the shallow areas to provide for that depth.
- (c) In the event that the log deflector is not installed, the Consent Holder is not required to maintain the area identified as red hash on BOPRC Plan Number RC67958/12.

- 20.5 All material and sediment removed from the foreshore and seabed shall be placed in a stable position, and all reasonable steps shall be taken to prevent the excavated material and sediment from entering coastal waters or other waters.
- 20.6 If the surveys required under Condition 31.4(c) demonstrate that the existing Maketu Boat Ramp is unable to be used 3 hours either side of high tide for launching and retrieving small recreational boats, the Consent Holder shall, within 6 months of the survey, apply for the necessary resource consents required to extend the boat ramp or other methods such as clearance or excavation of sand.

Note: "small recreational boats" are those boats that can reliably use the boat ramp being anything up to a 16 foot aluminium or fibreglass boat with a draft of up to 300mm with the motor up, with the caveat that they usually walk the boat from the ramp the first 60-80 metres before putting the motor down and boarding their vessel when the tide is closer to mid-level than high.

Note: The Bay of Plenty Regional Council is required to prepare Asset Management Plans. The activities authorised by these consents will result in assets that will be included in and managed under those plans.

21. Private Water Supply

- 21.1 Prior to the construction of the re-diversion channel, the Consent Holder shall relocate or replace the private stockwater main (including connections) that conveys water from the Kaituna River to Sec 5 Blk V Te Tumu SD, Kaituna Pastoral Farms Ltd as shown on BOPRC Plan Number RC67958/1.
- 21.2 No less than 10 working days prior to carrying out the works required by condition 21.1 of this resource consent, the Consent Holder shall advise the landowner of Sec 5 Blk V Te Tumu SD of the date these proposed works are to occur and the period of time that water supply will be affected.
- 21.3 Prior to diverting water into the re-diversion channel, the Consent Holder shall install a salinity monitoring device on the stock drinking water and irrigation water intakes that shuts off the existing water intake when the salinity makes the water unsuitable for use on Sec 5 Blk V Te Tumu SD, Kaituna Pastoral Farms Ltd. The Consent Holder shall also provide a 30,000 litre tank for stock drinking water for the landowner's installation for storage of water.
- 21.4 In the event that access is not granted by the landowner to undertake these mitigation works the Consent Holder is not required to provide them.

22. Commissioning Plan

- 22.1 The commissioning of the diversion control structure providing water from the Kaituna River via the re-diversion channel into Fords Cut shall be staged as follows:
- (a) Stage 1: Increase the re-diverted flow from 150,000m³ to ~400,000 m³ per mean tidal cycle; and then
 - (b) Stage 2: After a period of one year of Stage 1, subject to monitoring and necessary adjustments and/or works, Increase the re-diverted flow to ~600,000m³ per mean tidal cycle.

- 22.2 The Consent Holder shall submit to the Regional Council a detailed Commissioning Plan at least 15 working days prior to commencing Stage 1 commissioning of the diversion control structure, for their approval. The Commissioning Plan shall be verified by an independent appropriately experienced and qualified practitioner.
- 22.3 The objective of the Commissioning Plan is to manage the operation of the diversion control structure during Stage 1 such that:
- (a) There is no increase in flood risk or erosion attributable to the Project; and
 - (b) Adverse effects on water quality arising from the discharge are minimised.
- 22.4 The Plan shall address, as a minimum:
- (a) Progressive opening of the diversion control structure;
 - (b) Procedures for the management of a flood event should it occur during Stage 1;
 - (c) Water levels, erosion and ecological monitoring in accordance with the monitoring conditions; and
 - (d) Discharge quality.
- 22.5 Following Stage 1 but prior to Stage 2 commissioning of the diversion control structure, the Consent Holder shall provide a report to the Regional Council that has been verified by an independent appropriately experienced and qualified practitioner. This report shall, as a minimum:
- (a) Provide a copy of the monitoring results obtained for Stage 1;
 - (b) Provide an analysis and interpretation of monitoring results obtained for Stage 1;
 - (c) Identify and prescribe the proposed measures and responses to issues identified following an analysis of monitoring results for Stage 1; and
 - (d) Identify the means of measuring the effectiveness of proposed measures and responses under 22.5(b).
- 22.6 The Consent Holder shall not commence Stage 2 commissioning of the diversion control structure until such time as it has been demonstrated to the satisfaction of the Regional Council that issues identified within the report required by condition 22.5 of this resource consent have been effectively addressed.
- 22.7 The diversion control structure shall be commissioned in accordance with the Commissioning Plan.

Note: *The diversion control structure is deemed to be fully commissioned at Stage 2, being when all culverts and their gates are fully operational without any short-term controls. This will be clearly stated in the Commissioning Plan.*

The Operations and Maintenance Manual (referred to in condition 26 below) will address the operation of the diversion control structure once fully commissioned.

23. **Lower Kaituna Wildlife Management Reserve**

- 23.1 The operation of the diversion control structure shall not reduce the water inflows into the Lower Kaituna Wildlife Management Reserve as a result of lower water levels in the Kaituna River at the intake culverts.

- 23.2 The Consent Holder shall prepare an Investigation Plan to determine the relationship between water levels in the Kaituna River, the water level in the wetland, and the flows into the wetland. The purpose of the Investigation Plan is to determine the requirements for the additional culvert required under Condition 23.3 below.

The Investigation Plan shall specify:

- (a) exact monitoring locations,
- (b) parameters to be monitored,
- (c) frequency and duration of monitoring,
- (d) the instrument type and its sophistication and power needs,
- (e) the data retrieval method and the labour resources required, and
- (f) any other requirements.

The Investigation Plan shall be prepared in conjunction with the Department of Conservation, Fish and Game and Bay of Plenty Regional Council Natural Hazards Group, and shall be informed by at least 12 months of data collection prior to the design of the additional culvert.

- 23.3 In consultation with the Department of Conservation and Fish and Game, the Consent Holder shall submit a final plan for the additional culvert to the Lower Kaituna Wildlife Management Reserve for the certification of the Regional Council. This plan and certification shall include:

- (a) The final location of the culvert, which is to be somewhere between Intakes 1 and 2 as shown on the 'Location Plan' provided with the Applicant's S92 Request on the 1st of September 2014 by way of a letter prepared by Opus entitled '*Resource Consent Application 67958 – Kaituna River Re-Diversion and Ongatoro/Maketu Estuary Enhancement- Response to Further Information Request*';
- (b) The diameter of the culvert, which is to be no less than 0.9 metres;
- (c) The provision of measures to allow fish passage;
- (d) Erosion and scour protection at the inlet and outflow points;
- (e) Maximum earthworks volume of no greater than 5,000 cubic metres;
- (f) Confirmation from an appropriately qualified and experienced practitioner(s) that the culvert and associated structures have been designed to an engineering standard that is suitable for their intended purposes and functions; and
- (g) A Monitoring Plan to demonstrate the additional culvert is providing the mitigation flow it is designed to provide. The Monitoring Plan shall identify the:
 - i) exact monitoring locations
 - ii) parameters to be monitored
 - iii) frequency and duration of monitoring
 - iv) the instrument type and its sophistication and power needs
 - v) the data retrieval method and the labour resources required, and
 - vi) any other requirements.

The Monitoring Plan shall be prepared in conjunction with the Department of Conservation and Fish and Game. As a minimum, one monitoring site shall be within the Kaituna River and one within the Lower Kaituna Wildlife Management Reserve.

23.4 The Consent Holder shall install the additional culvert to the Lower Kaituna Wildlife Management Reserve prior to commencing Stage 1 commissioning.

24. **Drainage – Kaituna Catchment Control Scheme**

24.1 Prior to the Stage 1 commissioning of the diversion control structure, the Consent Holder shall consult with the Manager of the Kaituna Catchment Control Scheme ('the Scheme') or their appointee to:

- (a) Determine the extent of any adverse effects on pastoral land attributable to the re-diversion in relation to the operation of the Scheme's drainage network as a consequence of increasing water levels in the Maketu Estuary;
- (b) Determine, by agreement, the amount of compensation to be paid by the Consent Holder to the Manager of the Scheme to mitigate the adverse effects of the re-diversion in relation to the operation of the Scheme's drainage network; and
- (c) The timing and frequency of providing the compensation.

24.2 The Consent Holder shall provide a report to the Regional Council providing details of the agreed extent of any adverse effects on pastoral land attributable to the re-diversion and the agreed amount of compensation to mitigate these effects, or if these matters have not been able to be agreed, details of the areas of agreement and disagreement.

24.3 In the event that the Consent Holder and the Manager of the Kaituna Catchment Control Scheme are unable to agree on the extent of any adverse effects on pastoral land caused to the Scheme's drainage network from the re-diversion and / or the amount of compensation to be paid in mitigation of those effects and / or the timing and frequency of payment of compensation, those matters shall be determined by a Panel of two suitably qualified independent experts appointed by the Regional Council at the Consent Holder's expense.

24.4 If shown to be necessary by the drainage investigation, compensation will be provided by the Consent Holder in the agreed manner, to be used for one or more of the following (which are not exclusive):

- (a) To provide compensation for the increased running costs at the Ford Road and Maketu (Singletons) pump stations as a result of the re-diversion;
- (b) As a contribution to the planned upgrade of the pump station and/or culverts draining into the Kaituna River from the Ford Road drain;
- (c) As a contribution to the design and construction of additional culverts draining into the Ongatoro/Maketu Estuary between Fords Cut and Maketu (Singletons) pump station;
- (d) In the event a Panel is required to determine the amount of compensation, for any other initiatives the Panel recommends be implemented.

- 24.5 The decision of the Panel prescribed within condition 24.3 of this resource consent shall be final and the Consent Holder agrees to be bound by this condition.
- 24.6 The culverts shall not be commissioned until the amount of compensation payable has been determined in accordance with this condition.
- 24.7 The Consent Holder shall pay the compensation as determined by either condition 24.1 or 24.3 of this resource consent.

25. **Drainage – Dean Pump Station**

- 25.1 Prior to the Stage 1 commissioning of the diversion control structure, the Consent Holder shall consult with the owner of number 196 Kaituna Road, Maketu (legally described as Sec 2 SO 12541) or their appointee to;
- (a) Determine the extent of any adverse effects on pastoral land attributable to the re-diversion in relation to the operation of their privately owned and operated pump station as a consequence of increasing water levels in the Maketu Estuary.
 - (b) Determine, by agreement, the amount of compensation to be paid by the Consent Holder to the landowner to mitigate the adverse effects on pastoral land (if any) of the re-diversion in relation to the operation of the land serviced by the privately owned pump station; and
 - (c) The timing and frequency of providing the compensation.
- 25.2 The Consent Holder shall provide a report to the Regional Council providing details of the agreed extent of any adverse pastoral effects attributable to the re-diversion and the agreed amount of compensation to mitigate these effects, or if these matters have not been able to be agreed, details of the areas of agreement and disagreement.
- 25.3 In the event that the Consent Holder and the landowner of number 196 Kaituna Road, Maketu (legally described as Sec 2 SO 12541) are unable to agree on the extent of any adverse pastoral effects caused by the re-diversion and / or the amount of compensation to be paid in mitigation of those effects, those matters shall be determined by a Panel of two suitably qualified independent experts appointed by the Regional Council at the Consent Holder's expense.
- 25.4 The amount of any compensation to be paid to the landowner of number 196 Kaituna Road, Maketu (legally described as Sec 2 SO 12541) shall be to provide compensation (if any) for the additional running costs of the Dean pump station as a result of the re-diversion.
- 25.5 The decision of the Panel prescribed within condition 25.3 of this resource consent shall be final.
- 25.6 The diversion control structure shall not be commissioned until the amount of compensation payable has been determined in accordance with this condition.
- 25.7 The Consent Holder shall pay the compensation as determined by either condition 25.1 or 25.3 of this Resource Consent.

Note: *It is acknowledged that improvements to the Kaituna Catchment Control Scheme as a result of the works under Condition 24 of this resource consent may mitigate the Project's effects on the need for this privately-owned pump station to operate longer during flood events and that compensation may not be required if this can be demonstrated through condition 25.1 or 25.3.*

26. Operations and Maintenance Manual

- 26.1 An Operations and Maintenance Manual ('OMM') shall be provided to the Regional Council for certification at least one month prior to Stage 1 commissioning of the diversion control structure. Regional Council's certification shall be limited to that the OMM:
- (a) Complies with conditions 26.4 and 26.5 of this resource consent;
 - (b) Adopts the best practicable option(s); and
 - (c) Contains provisions that are enforceable.
- 26.2 (a) The OMM shall be prepared, in consultation with the Bay of Plenty Regional Council Rivers and Drainage Manager and Western Bay of Plenty District Council, by a suitably qualified and experienced practitioner and shall detail how the effects of the flow regime and re-diversion are to be minimised and managed.
- (b) The OMM submitted shall record if there is agreement between the parties and, if not, where and why there is disagreement and the steps taken in an attempt to resolve that disagreement.
 - (c) Any matters of disagreement identified in 26.2(b) shall be resolved through independent verification by a suitably qualified and experienced practitioner at the Consent Holder's expense.
- 26.3 The OMM shall be verified by appropriately experienced and qualified practitioner(s), confirming that the OMM:
- (a) Meets the OMM's objectives;
 - (b) Complies with resource consent conditions; and
 - (c) The implementation of the OMM will appropriately manage the ongoing operation of the Project.
- 26.4 The objectives of the OMM shall be:
- (a) To ensure that procedures are in place to:
 - (i) Operate the re-diversion to maximise ecological outcomes; and
 - (ii) Manage the flow regime and discharges such that adverse effects attributable to the Project are minimised.
 - (b) To specify how erosion control works will be maintained.
 - (c) To specify how the diversion control structure is to be controlled to ensure the Project does not increase the flood levels in Maketu Township above those that existed prior to the Project.
- 26.5 The OMM shall, as a minimum, describe:
- (a) The Project assets;
 - (b) How provision is made to ensure that the passage of fish through the diversion control structure is unimpeded at all times that the gates are open;

- (c) The flow regime operating rules for the diversion control structure including identification of the triggers and responses to manage flood events in accordance with the conditions of this consent, including but not limited to:
 - (i) Installation of a telemetered water level recording device in the Ongatoro/Maketu Estuary near the Maketu Township;
 - (ii) Continued operation and monitoring of existing water level devices in the Kaituna River at Te Matai and the Ford Road Pump Station;
 - (iii) Monitoring of sea level;
 - (iv) A sea level prediction model that predicts sea level in the locality;
 - (v) A flood forecasting model that predicts flows in the Kaituna River and water levels at Ford Road and within the Ongatoro/Maketu Estuary; and
 - (vi) Installation and operation of devices on the culverts that allow for practical and reliable reduction of water flow into the Ongatoro/Maketu Estuary via the diversion control structure.
- (d) Roles and responsibilities;
- (e) The operating regime to maximise ecological outcomes;
- (f) Operational procedures for the culvert gates;
- (g) Procedures for the maintenance and removal of debris at the culverts;
- (h) Procedures for inspecting and maintaining erosion protection works;
- (i) Emergency management procedures; and
- (j) A process for investigating complaints.

26.6 The Consent Holder shall implement and comply with the OMM.

26.7 A copy of the OMM shall be provided to the Regional Council Rivers and Drainage Manager so the culvert operational procedures can be included in the Council's Flood Warning Manual.

26.8 Subject to compliance with condition 26.9 of this resource consent, the OMM may be amended at any time.

26.9 A copy of the amended Plan shall be provided to the Regional Council for their certification accompanied by verification from appropriately experienced and qualified practitioner(s) that the amended OMM meets the conditions of this resource consent (including the objectives under condition 26.4). Regional Council's certification shall be limited to that the amended OMM:

- (a) Complies with conditions 26.4 and 26.5 of this resource consent;
- (b) Adopts the best practicable option(s); and
- (c) Contains provisions that are enforceable.

- 26.10 During river flood events that coincide with high sea levels, the diversion control structure shall be operated in a manner that does not increase the existing flood levels in Maketu Township above those that existed prior to the Project.
- 26.11 The Consent Holder shall meet with the Utilities Manager of Western Bay of Plenty District Council at least once per year to review the operation of the OMM in relation to flood management within Maketu Township.
- 26.12 The Consent Holder shall keep minutes of the meeting required by condition 26.11 of this resource consent. The minutes shall record:
- (a) The names of those who attended the meeting;
 - (b) Main topics of discussion; and
 - (c) Any agreed outcomes.

The Consent Holder shall forward a copy of these minutes to the Regional Council within 20 working days of the meeting being held.

27. Wetland Restoration Plan, Establishment and Maintenance

- 27.1 Prior to the commencement of planting, a Wetland Restoration Plan shall be prepared and submitted to the Regional Council for certification at least two months prior to the first planting season. Regional Council's certification shall be limited to that the Wetland Plan:
- (a) Complies with conditions 27.2 and 27.4 of this resource consent;
 - (b) Adopts the best practicable option(s); and
 - (c) Contains provisions that are enforceable.
- 27.2 The Wetland Restoration Plan shall be verified by appropriately experienced and qualified practitioner(s), confirming that the Wetland Restoration Plan:
- (a) Meets the Wetland Restoration Plan objective(s); and
 - (b) Complies with the resource consent conditions.
- 27.3 The objective of the Wetland Restoration Plan is to establish as much wetland as practicable with an aim of 19 hectares or more where physical and environmental conditions allow a sustainable cover of indigenous plants to be established that is representative in terms of species composition of wetland habitat found historically in the area, taking into consideration the substantial and irreversible human-induced changes that have occurred to the landscape surrounding the Ongatoro/Maketu Estuary.
- 27.4 The Wetland Restoration Plan shall provide details of how the above objective is to be achieved, including:
- (a) A map showing the locations of the proposed work;
 - (b) Identification of the personnel or organisations that are to carry out the work;
 - (c) The timescale of activities;
 - (d) Initial monitoring of site growing conditions (especially soil salinity, soil saturation, tidal induced sediment erosion and deposition) after re-diversion and details of

the process to be followed in the event die off is observed in accordance with Condition 34.5;

- (e) Creation of a planting zone plan based on site growing conditions and species tolerances;
 - (f) A programme for trial planting of plant species especially in areas where growing conditions are likely to be challenging (for example, areas exposed to open tidal water and those with higher salinity);
 - (g) Details of mass planting once species can be matched to site conditions with high confidence of success;
 - (h) Restoration planting plan produced that details the planting zones, species mixes, plant grades, site preparation and post-planting maintenance requirements;
 - (i) Identification of opportunities for Tangata Whenua and the community to be involved in planning and implementation of wetland restoration planting;
 - (j) Monitoring plan to objectively measure plant and species performance;
 - (k) Weed and pest control for each area; and
 - (l) Any ongoing requirements to ensure the objective of the Wetland Restoration Plan is achieved.
- 27.5 The Consent Holder shall undertake all wetland works and weed and pest control in accordance with the Wetland Restoration Plan.
- 27.6 Subject to compliance with condition 27.7 of this resource consent, the Wetland Restoration Plan may be amended at any time.
- 27.7 A copy of the amended Plan shall be provided to the Regional Council for their certification accompanied by verification from appropriately experienced and qualified practitioner(s) that the amended Wetland Restoration Plan meets the conditions of this resource consent (including the objective under condition 27.3). Regional Council's certification shall be limited to that the amended Wetland Restoration Plan:
- (a) Complies with conditions 27.2 and 27.4 of this resource consent;
 - (b) Adopts the best practicable option(s); and
 - (c) Contains provisions that are enforceable.
28. **Environmental Monitoring Programme**
- 28.1 Prior to the commencement of works authorised by this resource consent, the Consent Holder shall prepare an Environmental Monitoring Programme that details the monitoring required under Conditions 30 through 35 (inclusive) and submit to the Regional Council.
- 28.2 The Environmental Monitoring Programme shall be prepared and verified by appropriately experienced and qualified practitioner(s) and:
- (a) Confirm that monitoring will be carried out by suitably experienced and qualified specialists.

- (b) Be designed and carried out using scientifically accepted methods which shall aim to obtain results with a high level of confidence.
- (c) Be designed so as to be capable of testing and verifying the performance measures listed in these resource consent conditions.
- (d) Be consistent with all conditions of this resource consent.
- (e) Include a description of the method(s) and frequency to be used for monitoring, including that undertaken for internal/management purposes.
- (f) Include a map and, if appropriate, photos of all sampling sites.
- (g) Specify the name of any laboratory and method of analysis of all samples collected.
- (h) Detail the operation and maintenance of any automatic sampling or monitoring equipment.
- (i) Identify and provide opportunities for tangata whenua and the community to be involved in developing education or research projects associated with the Project, particularly around incorporating elements of Mataauranga Maori, and in wetland restoration and ecological monitoring.

28.3 The Consent Holder shall undertake all sampling, monitoring and reporting in accordance with the verified Environmental Monitoring Programme.

29. **Reporting**

29.1 The Consent Holder shall, annually from the commencement of this resource consent and, by the 1st of August each year, provide to the Regional Council a written monitoring report that:

- (a) Covers the previous 12 month period ending on the 31st of May;
- (b) Provides a copy of the results of all monitoring for:
 - (i) The certified Wetland Restoration Plan (condition 27);
 - (ii) Water Levels and Flows (condition 30);
 - (iii) Erosion and Bed Levels (condition 31);
 - (iv) Water Quality and Shellfish (condition 32);
 - (v) Ecology (fauna) (condition 33);
 - (vi) Ecology (flora) (condition 34); and
 - (vii) Sediment and Algae (condition 35).
- (c) Provides an analysis and interpretation of those results prescribed by condition 29.1(b) of this resource consent;
- (d) Identify and prescribe the proposed measures and responses to issues identified following an analysis of monitoring results;

- (e) Identify the means of measuring the effectiveness of proposed measures and responses under 29.1(d) including any necessary amendments to the Environmental Monitoring Programme; and
 - (f) Identify instances where the Consent Holder has provided opportunities for Tangata Whenua involvement under condition 28.2(i).
- 29.2 The monitoring parameters, site locations and frequency of sampling outlined in the Environmental Monitoring Programme and any other alterations may be reviewed as part of each monitoring report.
- 29.3 As part of its annual report required under Condition 29.1 of this resource consent, the Consent Holder may apply to the Regional Council for approval to reduce the frequency of the monitoring and/or the number of sampling sites (reduced sampling programme).
- 29.4 A request under condition 29.3 of this resource consent may only be made on the basis that monitoring results are not demonstrating any significant adverse effects and there is no longer considered to be a need to monitor as a result.
- 29.5 A request under condition 29.3 of this resource consent shall be verified by a appropriately experienced and qualified practitioner(s) and form part of an amended Environmental Monitoring Plan to be submitted to the Regional Council for approval, and shall provide for the following amendments:
 - (a) Details regarding the frequency of monitoring;
 - (b) A description of the number and location of sampling sites where monitoring is to occur;
 - (c) Provision for monitoring to be increased again if results of monitoring demonstrate a reversal of the trend or otherwise unexpected monitoring results; and
 - (d) Ceasing or reintroducing the monitoring requirements for a particular parameter/contaminant.
- 29.6 The Consent Holder shall not apply to the Regional Council for approval to cease monitoring unless it has first undertaken a reduced sampling programme in accordance with Condition 29.3 above, to the satisfaction of the Regional Council.
- 29.7 Such a request shall form part of an amended Environmental Monitoring Plan under condition 29.3 and is to be submitted to the Regional Council for approval and which shall provide for the resumption of monitoring if so directed in writing by the Regional Council.
- 30. **Water Levels and Flows**
- 30.1 No less than 10 working days prior to the Stage 1 commissioning of the diversion control structure, the Consent Holder shall commence permanent water level monitoring at the following sites:
 - (a) Kaituna River at Te Matai (map reference U14: 064 734) including flow rate;
 - (b) Kaituna River in the vicinity of the Ford Road pump station (map reference 1,900,715 E, 5,815,802 N NZTM);
 - (c) Ongatoro/Maketu Estuary at Maketu township;

- (d) Fords Cut downstream of the diversion control structure. The monitoring device shall be suitable to be used for making operational decisions about the volume of water to be released into Ford's Cut; and
 - (e) Sea level data obtained from the NIWA gauge at Tauranga (Moturiki) or alternative sea level gauge suitable for the purpose.
- 30.2 Where monitoring stations do not currently exist at the sites specified in condition 30.1 of this resource consent or where existing sites cease to operate, the Consent Holder shall establish a new site(s) to ensure compliance with the water level monitoring requirements of this resource consent.
- 30.3 Data from the sites specified in condition 30.1 of this resource consent shall be used to manage the flow regime through the diversion control structure in accordance with the OMM for the Project.
- 30.4 The Consent Holder shall validate the DHI model findings for tidal inflow and outflow volumes in the lower Kaituna River.
- (a) Within 3 months of this consent being exercised, the Consent Holder shall commission a study by a suitably qualified independent person(s), with the aim of testing the validity of the DHI model findings for tidal inflow and outflow volumes in the lower Kaituna River.
 - (b) The inflow and outflow shall be measured over a tidal cycle in the reach of river shown in BOPRC Plan Number RC67958/12. Four measurements shall be undertaken – two before construction work commences but within 5 years of Stage 1 commissioning (Pre-Project) and two within 12 months after the Commissioning of the diversion control structure (Post-Project).
 - (c) The Pre-Project measurements will be taken when the river is at a "low flow" and there is no significant wave climate. For this Condition "low flow" is deemed to be 29 cumecs or less as measured at the Te Matai gauging station on the Kaituna River. "No significant wave climate" is deemed to be a mean wave height of less than 0.5m as measured at the Bay of Plenty Regional Council wave buoy 13 km off Pukehina Beach.

In the event that the conditions above do not eventuate, the measurements may be taken when the river is at or near its minimum annual flow.

- (d) The Post-Project measurements shall be made when the river flow is at the same flow as the Pre-Project flow (± 2 cumecs) and during the same tidal range (± 5 cm) with wave and bar conditions as similar as reasonably practical.
- (e) The study shall calculate the ebb tide (i.e. outflow) volume and the flood tide (i.e. inflow) volume for the four measurements.
- (f) The tidal volumes shall be used to validate the DHI model findings. This will be done by comparing the two measured Post-Project ebb tide volumes with the two measured Pre-Project ebb tide volumes (with any adjustments for minor differences in river flows or tidal range) to check the percentage differences relative to those predicted by the modelling.
- (g) If any of the two Post-Project measured ebb tide volumes are found to be less than any of the two Pre-Project ebb tide volumes by 20% or more, mitigation measures shall be undertaken to ensure the actual flows are within 20% for "low flow" river conditions.

- 30.5 In addition to the water level monitoring required by condition 30.1 of this resource consent, the Monitoring Plan required by condition 23.3 (g) shall commence immediately after the installation of the additional culvert into the Lower Kaituna Wetland Management Reserve and shall be implemented for at least two years following the Commissioning of the diversion control structure.

Note: Results of the analysis carried out under condition 30.5 needs to be assessed for compliance with condition 23.1 and where a non-compliance is identified, the additional culvert will need to be altered as necessary.

31. Erosion and Bed Level Monitoring

- 31.1 Prior to the commencement of works authorised under this resource consent, the Consent Holder shall undertake transect monitoring in the vicinity of Papahikahawai Island to monitor for any erosion as a result of the re-diversion, as follows:

- (a) An initial survey of the full width of the bunds, extending 20 metres landward of the sand bund; and thereafter
- (b) Permanently marked transects be located at four sites to the west and south of the island with each transect extending from the seaward face or toe of the existing sand bund to at least 50 metres offshore to pick up changes in near shore depths over time.
- (c) The transects shall be undertaken using Real Time Kinematic Global Positioning System.
- (d) Transects shall be measured as follows:
 - (i) Annually from the commencement of construction until Stage 1 commissioning of the diversion control structure; and then
 - (ii) Twice a year for three years following Commissioning and thereafter the frequency shall be assessed as part of the reporting requirements of Condition 29.3.

- 31.2 The Consent Holder shall survey:

- (a) The two transects (Maketu Spit 1 & 2) shown in BOPRC Plan Number RC67958/12, with each survey of the transects to extend from at least mid-tide on the ocean side to at least low tide on the harbour side; and
- (b) The seaward toe of the dune or eroding bank over the "Dune Toe Monitoring Area" shown in BOPRC Plan Number RC67958/12.

- 31.3 The first survey under condition 31.2 of this resource consent shall be undertaken at least one month prior to Stage 1 commissioning and thereafter annually for a period of five years. After five years of annual surveys the frequency of the survey shall be assessed as part of the reporting requirements of Condition 29.3. The purpose of the survey is to monitor for any aggradation or erosion as a result of the re-diversion.

- 31.4 The Consent Holder shall undertake surveys at Maketu Township and Beach Road to monitor for any erosion or aggradation as a result of the diversion as follows:

- (a) A shoreline survey using Real Time Kinematic Global Positioning System in the area shown on BOPRC Plan Number RC67958/12 along the dune toe or seaward edge of the vegetation;

- (b) A minimum of six cross sections in total with two along Beach Road and four distributed around Maketu township from Park Road foreshore to the marae. Each cross section shall extend to no less than 50 metres offshore;
 - (c) Bed and channel depths within the boat ramp access channel from Maketu Boat Ramp to 100 metres seaward; and
 - (d) The survey and transects shall be measured at least one month prior to Stage 1 commissioning and thereafter annually for five years. After five years of annual surveys the frequency of the survey shall be assessed as part of the reporting requirements of Condition 29.3.
- 31.5
- (a) The Consent Holder shall undertake a Real Time Kinematic Global Positioning System survey along both banks of the Lower Kaituna River as shown on BOPRC Plan Number RC67958/12 every five years from Commissioning.
 - (b) The Consent Holder shall annually obtain the survey data from the Bay of Plenty Regional Council cross sections FEM 1-12 and 14-15 and XS KN2-4. The data shall be obtained for the purpose of establishing the rate of erosion. Where monitoring sites cease to operate, the Consent Holder shall establish a new site(s) to ensure compliance with the cross section requirements of this resource consent.
 - (c) The information collected under 31.5(a) and (b) shall be analysed every 5 years. In the event that the analysis shows a material increase in erosion has occurred, the Consent Holder shall engage a suitably qualified independent expert to assess whether the erosion is attributable to the Project. "Attributable to the Project" means any erosion that is materially greater than the rate and / or magnitude that is occurring naturally or as a result of river works undertaken prior to the exercise of this consent.
 - (d) The Consent Holder must submit the report prepared by the expert under 31.5(c) to the Regional Council for review. A copy of the report shall also be provided to the Te Tumu Landowners Group. Should the Regional Council find the conclusions reached in this report unsatisfactory, the Consent Holder shall undertake further reporting as directed.
 - (e) In the event that the final report concludes that erosion is attributable to the Project, the Consent Holder shall, within 12 months, apply to vary these conditions, under section 127 of the RMA, in order to provide appropriate mitigation and / or appropriate compensation.
- 31.6 The Consent Holder shall analyse historic photography to assess time-averaged rates of erosion that occurred prior to the Project in the following locations:
- (a) Along the estuarine margin of Papahikahawai Island; and
 - (b) Along the landward margin of the Maketu Spit in the area shown on BOPRC Plan Number RC67958/12 (see condition 31.2).
- Note:** *The purpose of the survey required by condition 31.6 is to ascertain the time-averaged rate of erosion (and, where relevant, the scale of episodic erosion events) prior to the Project to use as a basis for comparison with post-diversion monitoring.*
- 31.7 The Consent Holder shall analyse aerial photographs to identify any erosion as a result of the Project. The aerial photos used shall be those collected by Bay of Plenty Regional Council as part of their aerial photography programme, for the area that

covers Maketu Spit, Ongatoro/Maketu Estuary and the lower Kaituna River. For the purpose of clarity the Consent Holder is not required to undertake specific aerial photography in order to comply with this condition.

32. Water Quality and Shellfish

- 32.1 The Consent Holder shall use data loggers to measure dissolved oxygen, temperature and salinity in the Ongatoro/Maketū Estuary. Monitoring shall occur during the periods January to March (inclusive) with measurements made at intervals of 10 minutes (or less) for a period of at least 14 days.
- 32.2 The monitoring required by condition 32.1 shall occur at the following two locations shown in Figure 4.1, page 51 of Hamill (2014) "*Kaituna River Re-diversion Project: Ongatoro/Maketū Estuary condition and potential ecological effects*" attached to the application material:
- (a) Mid-estuary; and
 - (b) Papahikahawai Lagoon 2.
- 32.3 The monitoring required by condition 32.1 shall be carried out as follows:
- (a) Once within two years of Commissioning of the diversion control structure; and
 - (b) Once at five years after Commissioning.
- 32.4 From Stage 1 commissioning, the Consent Holder shall undertake water quality monitoring three times every year during the periods December to March (inclusive) at high tide and low tide. Samples shall be collected from Ford's Cut, the mid estuary and at Maketu boat ramp, and analysed for:
- (a) Total nitrogen;
 - (b) Nitrate-nitrite nitrogen;
 - (c) Total ammoniacal nitrogen;
 - (d) Total Phosphorus;
 - (e) Dissolved Reactive Phosphorus;
 - (f) Salinity;
 - (g) Faecal coliform bacteria; and
 - (h) Enterococci bacteria.
- 32.5 From Stage 1 commissioning, the Consent Holder shall undertake shellfish flesh and water quality sampling at low tide on three occasions every year for each of the periods December to March (inclusive) and June to August (inclusive).
- 32.6 The samples required by condition 32.5 shall be collected at three sites in the lower to mid Ongatoro/Maketū Estuary and contain a minimum of five shellfish and associated water quality samples taken from the same site, comprising a minimum of:
- (a) Two pipi; and
 - (b) Two cockle samples.

- 32.7 The shellfish and water quality samples required by conditions 32.5 and 32.6 shall be tested for Faecal Coliform and Enterococci bacteria concentrations.
- 32.8 Annually, from Stage 1 commissioning for a period of five years, the Consent Holder shall undertake a pipi survey in the lower estuary for the period December to March (inclusive) comprising a minimum of eight replicate cores along a transect parallel to the channel. All shellfish in the cores shall be identified and counted in 5.0 millimetre size classes.
- 32.9 Annually, from Stage 1 commissioning for a period of five years, the Consent Holder shall sample shellfish at three sites in the mid estuary during the period December to March (inclusive) comprising eight replicate sediment cores randomly collected over a 10 metre radius of the site location. All shellfish in the cores shall be identified and counted in 5.0 millimetre size classes.

33. **Ecology (fauna)**

- 33.1 The Consent Holder shall undertake broad scale mapping of algae distribution and species in the estuary annually from Stage 1 commissioning for a period of five years. Reporting shall generally be in the form of Figure 2.1, page 6 of Hamill (2014) "*Kaituna River Re-diversion Project: Ongatoro/Maketū Estuary condition and potential ecological effects*" of the application material.
- 33.2 The Consent Holder shall undertake a survey of benthic macrofauna at the eight sites identified on BOPRC Plan Number RC67958/12 and one site in Papahikahawai Island lagoon and one at the end of Papahikahawai Creek as follows:
- (a) Infauna shall be sampled using eight replicate sediment cores randomly collected within a 10 metre radius of the site location and macrofauna identified;
 - (b) Epifauna shall be surveyed using eight randomly placed 0.25 m² quadrats; and
 - (c) The survey shall be undertaken once within two years of Commissioning and then again at five years from Commissioning.
- 33.3 At the location of each macrofauna replicate required by condition 33.2, measurements shall also be taken of the following variables using methods consistent with those used for condition 35.3:
- (a) Algae cover and type;
 - (b) Per cent cover of mud/silt;
 - (c) Depth of mud/silt; and
 - (d) Anoxic depth (that is, depth of RPD (redox potential discontinuity)).

34. Ecology (flora)

34.1 The Consent Holder shall undertake vegetation transect monitoring to determine the effects of the re-diversion on terrestrial and wetland vegetation as follows:

	Location	Frequency
Transects 1-8	As shown on BOPRC Plan Number RC67958/12 with Transect 7 being extended to the waters edge of the new re-diversion channel	no later than 6 months after full commissioning and thereafter annually for 5 years
Transect 9	1 new transect to be established on land in the general location shown in BOPRC Plan Number RC67958/12	No less than 1 month prior to Stage 1 commissioning and then no later than 6 months after full commissioning and thereafter annually for 5 years
Transect 10 and 11	1 north-south and 1 east-west transect to be established on the land north of Fords Cut using paired plot methodology	No less than 1 month prior to Stage 1 commissioning and then within 6 months of each planting stage and then 12 monthly for 5 years

34.2 Transects should be measured using the methodology from section 3.1.5.1, on pages 18 to 20, of MacGibbon (2014) '*Kaituna River Re-diversion Project: Ongatoro/Maketū Estuary Enhancement Project – Terrestrial, Avian and Wetland Ecology*' provided as part of the application material in the locations shown on BOPRC Plan Number RC67958/12.

34.3 In the event that access to Transects 6 and 8 cannot be gained from the landowner, there is no requirement to monitor. The Consent Holder shall notify the Regional Council in writing within 10 working days of access being denied identifying the attempts made to gain access.

34.4 The salt marsh remnants and the small *Sacocornia* patch in Papahikahawai Creek shall be monitored using photopoint monitoring. Surveys shall be carried out annually from Stage 1 commissioning for a period of five years.

34.5 The vegetation composition and spatial extent along the true left bank of the re-diversion channel shall be surveyed prior to river re-diversion and monitored 6 monthly for a period of two years following Commissioning. In the event that any die back is observed, the dead plants shall be replaced with alternative salt tolerant plants as soon as practicable.

34.6 Any observed die back and subsequent replacement planting shall be reported on under sub-clause 29.1(vi) of this resource consent.

35. Sediment and Algae

35.1 The Consent Holder shall undertake a survey of sediment and algae in the estuary as follows:

- (a) Along a minimum of three transects in the upper estuary;

- (b) Along a minimum of three transects in the mid-estuary, (including one at the downstream end of Papahikahawai Creek); and
- (c) Along a minimum of one transect in the lower estuary.

35.2 The sediment survey shall be undertaken:

- (a) Once prior to the Stage 1 commissioning of the diversion control structure;
- (b) Once within one year of the Stage 1 commissioning of the diversion control structure;
- (c) Once within two years of the Commissioning of the diversion control structure; and
- (d) Once within five years of the Commissioning of the diversion control structure.

35.3 Variables assessed during the sediment survey shall include:

- (a) Algae cover and type;
- (b) Per cent cover of mud/silt;
- (c) Depth of mud/silt; and
- (d) Anoxic depth (that is, depth of RPD (redox potential discontinuity)).

36. **Community Relationships**

36.1 No less than 20 working days prior to works commencing, the Consent Holder shall facilitate and resource a public information session for the purposes of discussing the scheduling and staging for works and expectations regarding communication between the Consent Holder and the community.

36.2 In addition to the community in general, the Consent Holder shall, as a minimum, directly invite the following parties to the public information session required by condition 36.1 of this resource consent:

- (a) Department of Conservation;
- (b) Fish & Game;
- (c) Tangata Whenua;
- (d) The Manager of the Kaituna Catchment Control Scheme;
- (e) Coastguard Maketu;
- (f) Maketu Ongatoro Wetland Society Incorporated;
- (g) Maketu Community Board;
- (h) Te Maru o Kaituna;
- (i) R.D. & S.F. Waterhouse Partnership;
- (j) Te Tumu Landowners Group;
- (k) Vernon Wills;
- (l) Maketu Taiapure Committee of Management;
- (m) Maketu Project Team;
- (n) Chairman of the Papahikahawai Trust; and

- (o) Western Bay of Plenty District Council.
- 36.3 Following the public information session required by condition 36.1 but prior to the commencement of the works authorised by this resource consent, the Consent Holder shall prepare and submit to the Regional Council and the District Council a Community Relationship Plan.
- 36.4 The objective of the Plan is to enable Tangata Whenua, the general public and stakeholders to be kept informed of the works and initiatives being undertaken and to facilitate the free flow of information between the Consent Holder and these parties.
- 36.5 As a minimum, the Community Relationship Plan shall:
- (a) Identify the frequency of communication, taking into account different phases of the Project (such as the works phase, wetland works, and monitoring and reporting phases); and
 - (b) As a minimum, make provision for Public Information Sessions as follows:
 - (p) Once every three months during the construction phase;
 - (ii) Once per year for the first five years following Stage 1 commissioning of the diversion control structure; and then
 - (iii) Once every two years for the duration of the consent.
 - (c) Identify an agreed method(s) for providing information, such as a website or other form of communication;
 - (d) Identify the nature of information to be made available, including progress updates on the project, monitoring results, summaries of reports and complaints received with respect to the Project;
 - (e) Identifying the procedures for providing feedback to the Consent Holder on the implementation of the project.
- 36.6 The Consent Holder shall directly invite, in writing, those parties prescribed in condition 36.2 to the ongoing Public Information Sessions required by condition 36.5 of this resource consent.
- 36.7 The Consent Holder shall keep minutes of the Public Information Sessions required by condition 36.5 of this resource consent. The minutes shall record:
- (a) The names of those who attended the meeting;
 - (b) Main topics of discussion; and
 - (c) Any agreed outcomes.
- The Consent Holder shall forward a copy of these minutes to the Regional Council within 20 working days of the meeting being held.
- 36.8 The Consent Holder shall resource and implement the Community Relationship Plan to the satisfaction of the Regional Council.
- 36.9 The Community Relationship Plan may be amended at any time. A copy of the amended plan shall be provided to the Regional Council.
37. **Review**

- 37.1 The Regional Council may, on the five last working days of September and/or March, serve notice of its intention to review and amend or add to the conditions of this resource consent under section 128 of the Resource Management Act 1991 for the purpose of:
- (a) Dealing with any adverse effect on the environment which may arise from the exercise of the resource consent and which it is appropriate to deal with at a later stage; or
 - (b) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
 - (c) Requiring the Consent Holder to carry out monitoring in addition to or instead of that required by the resource consent.
 - (d) Addressing any issues identified in the annual reports submitted under condition 29 of this resource consent.

Note: *In the event that resource consent conditions are amended as a result of a review, the Consent Holder may seek a consequential alteration to the associated designation conditions.*

37A. **Lapsing of Consent**

This consent will lapse (no longer be valid) 10 years after the granting of the consent unless the consent is given effect to.

38. **Term of Consent**

- 38.1 With the exception of the 'Salinity Block' and associated wetland area identified on BOPRC Plan Numbers RC67958/1 and RC67958/6, the term of the consent is 35 years.
- 38.2 The reclamation for the 'Salinity Block' and associated wetland area identified on BOPRC Plan Numbers RC67958/1 and RC67958/6 shall have an unlimited consent term in accordance with section 123(a) of the Resource Management Act 1991.

39. **Resource Management Act Charges**

- 39.1 The Consent Holder shall pay the Regional Council such administrative charges as are fixed from time to time by the Regional Council in accordance with section 36 of the RMA.

Advice notes

1. *The Consent Holder will be seeking an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014, prior to the commencement of construction. The authority may include requirements for detailed investigations and monitoring effects and are also likely to require the preparation of a Heritage Management Plan (or an Archaeological Management Plan).*
2. *Unless otherwise stated all information required under this consent shall be directed to the Manager Pollution Prevention, Bay of Plenty Regional Council, PO Box 364, Whakatane 3158, or fax 0800 884 882 or e-mail notify@boprc.govt.nz and should include reference to the consent number 67958.*
3. *The Consent Holder is advised that non-compliance with consent conditions may result in enforcement action against the Consent Holder and/or their contractor(s).*

4. *The actual and reasonable costs associated with a review of consent conditions may be charged to the Consent Holder under section 36(cb) of the Resource Management Act 1991 and in accordance with Bay of Plenty Regional Council's section 36 (Resource Management Act 1991) charging policy.*
5. *For clarity, the pre-operational documents and meetings and their due timeframes as detailed in these conditions are set out below. Note this list is not exhaustive and there may be a requirement for ongoing periodical submission of documents arising from the approved Operations and Maintenance Manual, sampling plans, or other plans or documents.*

Condition	Description	Due
<i>Prior to construction / commencement of works</i>		
7.1	<i>Regional Council to be notified in writing of the intention to commence works.</i>	<i>At least two months prior to the start of any construction activities on site.</i>
7.2	<i>Pre-construction site meeting with the Regional Council and the primary contractor.</i>	<i>Prior to commencement of works.</i>
7.3	<i>Pre-construction meeting with directly affected landowners and specified parties.</i>	<i>Prior to commencement of works.</i>
36	<i>Public Information Session</i>	<i>No less than 20 working days prior to works commencing.</i>
36.3 36.9	<i>Submit Community Relationship Plan to Regional Council and District Council.</i>	<i>Prior to commencement of works, and each time the Plan is amended.</i>
8A 8A.5	<i>Tangata Whenua Involvement Plan to be submitted to Regional Council and District Council.</i>	<i>Prior to commencement of works and each time the Plan is amended.</i>
11	<i>Submit the Construction Environmental Management Plan to the Regional Council for certification.</i>	<i>At least 30 working days prior to site establishment works commencing</i>
13	<i>Submit the Erosion, Sediment and Dust Control Plan to the Regional Council for certification.</i>	<i>At least 30 working days prior to site establishment works commencing (as it forms part of the Construction Environmental Management Plan).</i>
14	<i>Submit the Construction Flood Management Plan to the Regional Council for certification.</i>	<i>At least 30 working days prior to site establishment works commencing (as it forms part of the Construction Environmental Management Plan).</i>
15	<i>Submit the Network Utility Management Plan, prepared by the Consent Holder and Powerco.</i>	<i>At least 20 working days prior to the Consent Holder granting site possession to the contractor and site establishment works</i>

		<i>commencing.</i>
17	<i>Submit the final plan for the proposed moorings and associated facilities to the Regional Council for certification.</i>	<i>Prior to the commencement of the works.</i>
18	<i>Submit the final plan for the proposed boat ramp facility to the Regional Council for certification.</i>	<i>Prior to the commencement of the works.</i>
19	<i>Submit the final plan for the Papahikahawai and Maketu Spit Bridge to the Regional Council.</i>	<i>Prior to construction of the bridge.</i>
28	<i>Prepare an Environmental Monitoring Programme</i>	<i>Prior to the commencement of the works.</i>
<i>Prior to commissioning of Stage 1 of the diversion control structure</i>		
22	<i>Submit the Commissioning Plan to the Regional Council for approval.</i>	<i>At least 15 working days prior to commencing commissioning of Stage 1 of the diversion control structure.</i>
7.5	<i>Notify the Regional Council in writing of the intention to commission the diversion control structure.</i>	<i>At least 5 working days prior to Stage 1 commissioning.</i>
23.3	<i>Submit the final plan for the additional culvert to the Lower Kaituna Wildlife Management Reserve to the Regional Council for certification.</i>	<i>The additional culvert is required to be installed prior to commencing Stage 1 of commissioning (Condition 23.4)</i>
24 and 25	<i>Provide a report to the Regional Council on the level of drainage compensation (including Dean Pump Station)</i>	<i>Compensation is to be agreed prior to Stage 1 commissioning of the diversion control structure.</i>
26	<i>Submit the Operations and Maintenance Manual to Regional Council for certification.</i>	<i>At least one month prior to Stage 1 commissioning of the diversion control structure.</i>
<i>Other</i>		
27	<i>Submitted to Wetland Restoration Plan to Regional Council for certification.</i>	<i>At least two months prior to the first planting season.</i>
29	<i>Submit annual monitoring reports to the Regional Council.</i>	<i>By the 1st of August every year.</i>