BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Plan Change 26 to the Operative Waipā District Plan

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STATEMENT OF EVIDENCE OF TONY SHANE COUTTS

Dated: 24 March 2023

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1. INTRODUCTION

1.1 My full name is Tony Shane Coutts. I am the Principal Engineer for growth with Waipā District Council ("Council"). I have been working in the field of engineering since 2012.

1.2 I hold the qualification of New Zealand Diploma of Civil Engineering and I am a member of Engineering New Zealand (MENGNZ).

1.3 My experience spans over the three waters and transportation disciplines of engineering, predominantly within the land development sector/subdivision sector working in all facets of the engineering components attributed to the sector such as:

(a) Technical modelling and detailed design works on large urban subdivisions;

(b) Construction admin and on-site auditing of works for compliance with designs (both in private and public sectors);

(c) Engineering assessment commentary and advisory roles for consents related to public and private plan changes, subdivisions and land uses; and

(d) Management of the Council's Development Contributions Policy, to ensure the right infrastructure we put in the ground is paid for by the appropriate user at the appropriate time.

1.4 My role with regards to Council's Intensification Planning Instrument (IPI, Proposed Plan Change 26 – "PC26") has been to coordinate and review the technical reports related to Three Waters and Transportation infrastructure and the effects the proposed Medium Density Residential Standard ("MDRS") have on our infrastructure versus our existing growth strategies and to outline the risks.

2. CODE OF CONDUCT

2.1 I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

3. SCOPE OF EVIDENCE

3.1 My evidence provides the following:

(a) A description of Council's approach to the provision of infrastructure;

(b) An overview of the existing infrastructure within Waipā District and the existing constraints;

(c) Commentary on the reporting prepared by the relevant consultants that lead to the Infrastructure Constraint Qualifying Matter Overlay ("Infrastructure Overlay") in PC26; and

(d) Response to submissions which address the infrastructure overlay from Council's perspective.

4. COUNCILS APPROACH TO INFRASTRUCTURE

4.1 Infrastructure capacity is necessary in order to properly service urban development. Like all councils, Council is required to provide sufficient infrastructure to service current households and reasonably expected future growth.

4.2 Waipā's growth is based on the Waikato Future Proof sub-regional growth projections ("Future Proof") which takes into account the Waipā District, Hamilton City, the Waikato District, and most recently the Matamata-Piako District. The Future Proof entity applies common base assumptions across the Waikato sub-region of these councils, which results in consistent projections across the sub-region.

4.3 The Council then adopts these growth projections from Future Proof within the development of our own strategy, currently known as the Waipā 2050 Growth Strategy. Following the review of the Future Proof Strategy in 2022, the Council has again utilised the latest outcomes of Future Proof in developing scenarios for our new spatial plan for Waipā, known as "Ahu Ake". These strategies have had continuous engagement with our communities to inform the growth they wish to see, and allows us to tailor development and guide business cases to achieve these community visions.

4.4 Generally speaking, Council adopts the Future Proof growth projections (through the Waipā 2050 Growth Strategy). These are then translated into household growth based on Household Equivalent Units ("HEUs"), with an assumed number of occupants per household, and assumed dwellings per hectare within our growth cells of 12 – 15 to comply with the projections which also aligns with the Council's adopted design guidelines; "Regional Infrastructure Technical Specifications ("RITS"). This provides a baseline for Council to:

(a) Translate population projected growth into HEUs;

(b) Calculate the increased demand on infrastructure from the HEUs;

(c) Assess existing capacity and new capacity needed;

(d) Calculate funding required to provide for increased capacity; and

(e) Include the funding in the Council's three yearly Long Term Plan reviews, with annual adjustments as needed.

4.5 This is what Council calls "planned growth", i.e. Council can forecast, make some reasonable assumptions, plan, design, and budget for expected growth. It also provides a measure of uplifting other growth cells, if development capacity in existing growth cells looks to be nearing capacity.

4.6 In contrast, the Government's requirement for the Waipā District to roll out an Intensification Planning Instrument ("IPI") creates considerable uncertainty, and results in Council responding, retrospectively, to "unplanned" growth. Like all other Councils required to implement an IPI, this has created significant challenges for infrastructure planning for Council, not least of which is:

(a) What will be the outcome from PC26?

(b) What will be a reasonable level of uptake of the new intensification?

(c) What are the implications on the local networks where growth was not planned for above standard infill?

(d) What additional demand might this cause, not only to capacity but potentially changes to the HEU assumptions?

(e) How does Council fund the infrastructure upgrades to accommodate the statutory increase in supply?

4.7 I will leave the matters of demand and uptake to other experts. The purpose of my evidence is to provide details of the Waipā District's current infrastructure capacity and constraints, which have led to the identification of the Infrastructure Overlay as a qualifying matter in PC26.

4.8 In my opinion, the way in which the MDRS has been imposed speaks to the disconnect between the Local Government Act 2002 ("LGA") and the Resource Management Act 1991 ("RMA") in respect of planning and funding infrastructure to service growth. The LGA sets in place fixed timeframes that require special consultative procedures with the community to respond to growth, which then in turn, Council and Council staff rely on to enable development.

5. ANALYSIS OF EXISTING CAPACITY

5.1 In this section of my evidence, I describe the current infrastructure provision in Waipā District, including relevant resource consents held by the Council. A summary table of the Council's resource consents is contained at pages 174 to 175 of the Section 32 Report for PC26.

Wastewater – existing network and constraints

5.2 Wastewater infrastructure capacity is limited by the following three factors:

(a) Local and receiving network capacity (pipes, pumps stations, manholes connections to properties);

(b) Processing capacity (treatment plant capacity); and

(c) Discharge limits (resource consent condition limits on discharge volumes from the treatment plants).

5.3 Network capacity varies drastically area to area, and is based on factors such as:

(a) Localised receiving catchment;

(b) The size and material of the pipe conveying catchment,

(c) The grade and undulation at which it is laid;

(d) The condition of the pipe and manholes; and

(e) Pump capacity for efficient cycling in the pump stations.

5.4 Cambridge wastewater is treated by the Wastewater Treatment Plant – Cambridge[1], which treated approximately 2.09 million cubic meters of waste in the 2021/2022 year, prior to discharging treated water to the Waikato River. A copy of the consent is attached as Appendix 1 to my evidence. Council's current consent (which expires in 2026) has the following condition related to treatment amounts:

> The rate of discharge of treated effluent to the rapid infiltration beds shall not exceed an average daily flow of:
> i) 6,000 cubic metres per day (2.19 million a year) from commencement of the consent until 31 December 2023; and;
> ii) 7,000 cubic metres per day (2.56 million a year) from 1 January 2024 for the remaining duration of the consent.

5.5 Council has recently lodged an application for a new discharge permit to the river, which has a myriad of new requirements that the treated wastewater must meet prior to discharging to the Waikato River. The application is currently in the notification stage, with the submission period to end on 17 April. These additional requirements are applied on a subregional level and following engagement with relevant partners including Mana Whenua and other councils to ensure Te Ture Whaimana o Te Awa o Waikato—the Vision and Strategy for the Waikato River ("Te Ture Whaimana") and the healthy river initiative is upheld.

5.6 Significant upgrades are required to the wastewater treatment facility in order to meet these new standards. The conditions of the resource consent will provide that there can be no increase in the existing consent parameters for discharge until such time as the upgrades are installed. I set out below an excerpt from the proposed conditions, which would become condition "3":

[1] Waipā District Council GIS Asset ID reference: 20120926094258.

> 3. The consent holder shall notify Waikato Regional Council when the new Wastewater Treatment Plant is fully commissioned and is operational with no parts of the previous Wastewater Treatment Plant scheme in use. Confirmation of full commissioning shall occur as soon as practicable and in no event later than 31 December 2026.

5.7 The required upgrades to the Cambridge wastewater treatment plant are expected to cost in excess of $100 million to meet the new compliance standards, but they also provide new discharge limits as shown below in the proposed conditions:

> 10. Following the provisions of Condition 0 being met, the maximum discharge volume to the discharge structure shall not exceed:
>
> a. an average flow of 8,250 cubic metres or a maximum of 24,800 cubic metres of treated wastewater per 24-hour period for "Stage 1" of the new WWTP operation until such point as the "Stage 2" capacity upgrade is fully commissioned and operational (following which subsection b applies).
> b. an average flow of 11,300 cubic metres or a maximum of 33,000 cubic metres of treated wastewater per 24-hour period following the completion and full commissioning of the Stage 2 capacity upgrade of the new WWTP.
>
> *Advice note: this condition refers to 'Stage 1' of the new WWTP being the initial new WWTP configuration. The "Stage 2 upgrade" refers to the capacity increase required within the duration of the consent to meet forecast population growth. Whilst it is anticipated that this Stage 2 upgrade shall occur at approximately 2035, the upgrade timing of Stage 2 will be informed by realised population growth.*

5.8 The above limits are only a volumetric quantum, but the performance standards for the discharge are far more prescriptive as set out below:

Parameter	**Minimum performance standards for discharges to water**
Total Nitrogen	Less than 4.0 milligrams per litre (as annual means)
Total Phosphorus	Less than 1.0 milligrams per litre (as annual means)
Escherichia coli (E.Coli)	Less than 14 cfu per 100 millilitres (as a 95th percentile)
	Noting that the future consents for any water based discharges will likely include specific daily limits on nutrient mass loadings (in units of kg/ day rather than concentration limits in mg/l) for both summer and winter flow conditions

5.9 The minimum treated wastewater quality standards which will apply are very high and are based on current best practice and delivering "best for river" outcomes which include having a river that is swimmable and safe to gather food from.

5.10 In order to give effect to Te Ture Whaimana, alongside these quantitative minimum performance standards, the mauri of the water and land will need to be protected from adverse effects resulting from any part of the future upgrades. The treated wastewater quality standards will apply from 2031 or when the existing discharge resource consent for each wastewater treatment plant expire. We are aiming for completion by 2026.

5.11 Achieving these targets may need to be staged within resource consents to provide sufficient time to upgrade and transition existing plants to meet these minimum standards.

5.12 Te Awamutu and Kihikihi wastewater is treated by the Wastewater Treatment Plant – Te Awamutu[2], which treated approximately 2.42 million cubic meters of waste in the 2021/2022 year. The treated wastewater discharges to the Mangapiko stream, which flows to the Waipā river. A copy of the consent is attached as Appendix 2 to my evidence. Council's current discharge consent (which expires in 2043) has the following condition related to treatment amounts:

> The maximum discharge volume shall not exceed 21,000 cubic metres of treated wastewater per day (7.67 million a year).

5.13 The expectation is that any future upgrades to the Te Awamutu plant will be required to comply with the same criteria as the new Cambridge resource consent and any upgrade will also need to ensure the new performance standards can be met.

[2] Waipā District Council GIS Asset ID reference: 20120927092208.

Wastewater – effects of the MDRS

5.14 The network modelling that has been undertaken by WSP Ltd for existing Council infrastructure identifies zones where the surcharging of Council lines is likely to occur in Council's network. The modelling took into consideration infrastructure projects necessary to enable our planned growth that aligned with Waipā 2050.

5.15 Surcharging of the lines refers to the overspill of waste from the network that is at capacity. These surcharges occur prominently at the manholes, but can occur within private properties' connections points. Given the surcharging occurs in the wet weather events, the waste would convey into Council's primary and overland flow stormwater paths and then their corresponding discharge points, which will affect our ability to comply with our comprehensive regional discharge consents. Recent wet weather across the country is a prime example of this, with national hazard warnings of flood water likely containing waste making it unsafe for human contact.

5.16 Local upgrades will only go so far in ensuring capacity demands are met for a wider community and larger strategic trunk mains lines feeding into Council's treatment plants will be needed to avoid local surcharges.

5.17 Taking into account the constraining factors, the existing and planned capacity (as set out in Council's Long Term Plan) is as follows:

Table 1: Waipā District Urban Wastewater Capacity

	Existing residential Network being serviced* (HEU per day)	**Processing Capacity (HEU per day)**	**Discharge limits (HEU per day)**	**Overall current planned residential capacity limit (HEU per day)**	**PC 26 enabled (HEU per day)**	**What does the MDRS enable**** (HEU per day)**
Cambridge	7923	13140**	13,793***	15,670	19,790	39,761
Te Awamutu and Kihikihi	6629	15,245	48,275	13,093	15,653	35,585

*** HEU Capacity stated is at the current rateable properties. It does not take into account wet weather flows infiltration, nor peaking factors and is purely an average daily flow. Local constraint issues separate from this point amongst the network are outlined within the WSP Ltd report and evidence. The Hydraulic Grade Lines (HGLs) demonstrated in the report, do go into more detail with regards to the other factors that need to be considered. [3]**

**** 19,424 HEU capacity with regards to the councils new consent proposal lodged versus the Design basis for upgrade staging.**

*****25977 HEU ADF processing capacity in new consent proposal.**

******In pre 2035 growth cells and existing townships.**

5.18 As described in the table above, the level of development enabled by the MDRS far exceeds the current discharge limits in Cambridge. The level of development enabled by PC26 (as a result of the Infrastructure Overlay) can be accommodated by the planned upgrades, with any development above that level the subject of an infrastructure capacity assessment.

Water Supply – existing network and constraints

5.19 Water infrastructure capacity is limited by the following three factors:

(a) Network capacity;

(i) Main, material, sizes and condition (pressure ratings on materials limits overall pressure allowances);

[3] Reference to WSP report.

(ii) Resiliency of network (is it double end fed with rider or dual principal mains on the adjacent side);

(iii) Fitting requirements (valve chambers, fixings/seating of valves, thrust blocks etc.); and

(iv) Booster pump operation efficiencies.

(b) Treatment plant and reservoir capacity; and

(c) Water take limits (resource consent condition limits on water takes).

5.20 Water for Cambridge is supplied by the Karapiro water treatment facility, which also supplies Te Awamutu. This facility takes water directly from the Waikato River, near the Karapiro dam (upstream side). These sources supplied 4.03 million cubic meters of drinking water in 2021/2022 year to residential, commercial and industrial activities. Council's current water take consents (which expires in 2049) has the following condition related to water take amounts:

> May – July 33,500 cubic metres per day
> August – April 41,000 cubic metres per day
>
> Net take must not exceed 20,500m3 at Karāpiro intake. Pukerimu intake also supplies Te Awamutu.

5.21 Te Awamutu and Kihikihi are supplied water by various reservoirs, most notably the Te Tahi (at present), Pukerimu (in the future as the system links to water taken from Karapiro), and Kihikihi independent reservoirs. These combined sources supplied 3.02 million cubic meters of drinking water in the 2021/2022 year to residential, commercial and industrial activities. Council's current water take consents (which expire in 2049 (Te Awamutu) and 2050 (Kihikihi)) have the following conditions related to water take amounts:

The Pukerimu intake (part of the Cambridge Comprehensive Water Consent) also supplies Te Awamutu/Kihikihi. See water consent for Cambridge listed above.

Maximum volume taken in any 24 hour period:
Te Tahi Upper Intake
i) 19,000 cubic metres until 31/12/2030
ii) 2,420 cubic metres – 31/12/2030 and beyond
Te Tahi Lower Intake
i) 3,700 cubic metres until 31/12/2030
ii) 1,866 cubic metres - 31/12/2030 and beyond

Kihikihi only: Maximum net take volume in any 24 hour period
i) 1,800 cubic metres from the Church Street bore
ii) 2,200 cubic metres from the Hall Street bore

Water – effects of the MDRS

5.22 The network modelling that has been undertaken by WSP Ltd shows the potential effects of development enabled by the MDRS on the water infrastructure. Unplanned pressure on the water supply infrastructure can have significant negative effects on both the environment and the local population's health and wellbeing. The Infrastructure Overlay will allow for assessment of water conservation efforts to reduce demand. Without the Infrastructure Overlay, the increased demand for water may lead to shortages, as the existing water supply infrastructure may not be able to cope with the increased demand. This could result in rationing of water, longer wait times for water, and even outright water shortages in some areas.

5.23 Taking into account the constraining factors, the existing and planned capacity (as set out in Council's Long Term Plan) is as follows:

Table 2: Waipā District Urban Water Capacity

	Existing residential Network being serviced* (HEU per day)	**Water take limits (HEU per day)**	**Overall planned residential capacity limit (HEU per day)**	**PC 26 enabled (HEU per day)**	**What does the MDRS enable** (HEU)**
Cambridge	7,923 HEUs	59,888	14,900	19,790	39,761
Te Awamutu and Kihikihi	7,167 HEUs	24,688	13,356	15,653	35,585

*** HEU capacities are for average day flow only, and in initial modelling outlined areas that could not be serviced based on commercial, industrial and residential flows. The capacity stated is purely an average daily flow, and doesn't take into account peaking factors.**

**** In pre 2035 growth cells and existing townships.**

5.24 From the tables above, it is noted that Council would have sufficient water take limits, but a network that is insufficient to convey such limits.

5.25 Although we have take limits, there is no guarantee that there will be supply available. Supply is dependent on seasonal rainfall or independent takes potentially draining aquifers which are all external factors that fluctuate the actual amount available. If the supply doesn't meet the demands, water restrictions would become more frequent, and in extreme cases, town evacuation if our reservoirs fell below firefighting reservoir capacity limits. The MDRS if fully enabled, would make this risk a higher category, and could also potentially impact power generation.

Stormwater – existing network and constraints

5.26 Stormwater infrastructure capacity is limited by the following factors:

(a) Primary network capacities:

(i) 50% - 10% annual exceedance probability ("AEP") ranges (i.e. 2 year - 10 year event periods) – pipes, manholes and catch pits;

(ii) 2% AEP (i.e. 50 year event) – overland flow paths; and

(iii) 1% AEP (i.e. 100 year event) – wetlands, attenuation/soakage basins, swales and other low lying undulation areas.

(b) Ground soakage conditions, taking into considerations such as;

(i) water table levels; and

(ii) percolation results are factored in both private and public solutions.

(c) Discharge limits (resource consent condition limits on point source discharges to a pre-development level for both treatment and volumetric designs).

5.27 Design solutions over and above the event criteria specified above the 1% AEP are not designed for (such a 1 in 250 year event), they are also not defined within the maps generated by Te Miro Water. This is due to design manuals we adhere to, and to do so over and above these events would be cost prohibitive given the frequency they occur.

5.28 All designs and limits incorporate climate change by adhering to Representative Concentration Pathway ("RCP") scenario 6.0, which has been set out by Ministry for Environment ("MfE"). All RCP scenarios increase the intensity of the stormwater figures, measured in millimetres per hour (mm/hr), and RCP6.0 is considered a conservative scenario to design against.

5.29 Cambridge, Te Awamutu and Kihikihi stormwater networks discharge via various outlets to associated rivers and tributaries and are managed via individual discharge consents feeding into Councils comprehensive municipal stormwater discharge consent ("CSDC"). Copies of the

Council's current CSDC are attached in Appendix 3. Council lodged a new long-term consent application with Waikato Regional Council in July 2022, that helps set up strategic management of the stormwater network to ensure Council is compliant with all the resource consents that feed into the wider consent. We expect the standards of the new comprehensive consents to be far and above the current limits and expectations. This is due to a range of factors, including the need to respond to climate change. Council will also need to enforce these standards to a higher degree at both a consent level and operational level. This occurs through the Operative Waipā District Plan ("District Plan") as well as the Stormwater Bylaw (Waipā Stormwater Bylaw 2019) which outlines requirements for both new and existing developments.

5.30 For greenfield developments, such as our growth cells, the management of stormwater is more controlled given the input from regional council and the need to either prove whether a discharge consent is or is not required. If areas are going to be intensified, they can be managed by standard consent provisions and design. The same cannot be said for brownfield development, where the ability to provide storage, treat runoff and upgrade existing infrastructure to current standards becomes a lot harder to manage by the available land and locked in topography of adjacent properties. This, coupled with reliance on onsite private storage and soakage devices over which Council has no direct control in respect of their ongoing maintenance, creates risk for both downstream and upstream properties.

5.31 There are currently no projects within Council's Long Term Plan for stormwater, and all funding for stormwater is limited to renewals given on site requirements to manage stormwater to a pre-development level prior to releasing to Council's systems is currently in effect. Any site that breaches the District Plan requirements is peer reviewed through the internal engineering teams to ensure the increase in surface area and potential blockages of flow paths are managed accordingly. While this

works within Council's current stormwater provisions, with the MDRS standards Council's ability to manage this aspect is significantly reduced.

Stormwater – effects of MDRS

5.32 The effects of the unplanned and permitted intensification without the proper infrastructure assessments, minimises Council's ability to manage displacements, obstructions to flow paths as well as the contaminants and outfall structure velocities to rivers and streams they belong to.

5.33 Increases in velocities create scouring and erosion build up within the rivers and streams by increasing their total discharge and increasing the amount of soil and clay colloids within the water ways. They also make them unsafe for humans to utilise for recreation (i.e. swimming). The increased volume and velocity of runoff can also cause flooding and damage to infrastructure along the river, including bridges and buildings.

Transportation

5.34 Unlike three waters which are "closed systems" (from inflow to outflow), roading is an "open system", with many points of inflow and outflow across the urban areas.

5.35 Roading infrastructure capacity is limited by the following two factors:

(a) Network capacity (road design and intersection treatments); and

(b) Permeability (the number of entry and exit points through the urban areas).

5.36 Both urban centres have high permeability and the roading network (roading hierarchy, intersections, and spatial layout) has been designed to accommodate the expected growth as forecast by Future Proof, the Waipā 2050 Growth Strategy and Council's urban mobility planning for multimodal traffic generation encouragement. Upgrades are planned at

critical intersections to cater for growth cells, infill subdivisions and existing traffic generation.

5.37 Cambridge does have network fixed constraints, these being the two Waikato River bridges (at Victoria Street and Shakespeare Street) which are currently two-lane bridges. In the current modelling undertaken at Council's planned growth infrastructure scenarios, these bridges perform at, or near, capacity without specific upgrades. With the MDRS applied, the bridges deteriorate to unacceptable levels of service for both efficiency and safety. This also applies to other streets as listed below:

(a) Cambridge Road (Between Hanlin Road and Hamilton Road);

(b) Cambridge Road/Pope Terrace (Between Kaipaki Road and Victoria Street);

(c) Tirau Road and Shakespeare Road, and

(d) Kaipaki Road.

5.38 Upgrades to the two bridges identified in paragraph 5.37 above, such as an additional lane added to both, will likely be necessary to alleviate the network pressure of the above intersections during peak traffic times.

5.39 The addition of a third bridge may also help alleviate the strain on the network in the areas listed, but without a location secured, staff are unable to quantify the effects such a bridge would have on the network, nor the cost implications of such an asset.

5.40 While Te Awamutu does not have the same fixed constraints that Cambridge has, the main access routes into and out of Te Awamutu/Kihikihi are expected to deteriorate to unacceptable levels of service for both safety and efficiency than previously planned. The specific areas to which this applies are as follows:

(a) State Highway 3 to the north and south of Te Awamutu;

(b) Paterangi Road and Alexandra Street to the west and Central Te Awamutu;

(c) Cambridge Road;

(d) St Leger Street and Brill Road; and

(e) Whitmore Street in Kihikihi.

5.41 Some of these upgrades would include additional traffic lanes, western arterial road diversions or intersection upgrades where necessary. Given the roads listed include assets not owned by Council, there is no guarantee that the upgrades required would be undertaken in an appropriate time frame.

5.42 Due to the high permeability, the road network capacity constraints would result in changes to driver behaviours (mode shift) and travel patterns (fastest route) if congestion builds up due to intensification. This is likely to require larger infrastructure upgrades at key locations than previously anticipated. While increased congestion would overload parts of the road network and cause frustration, the effects of unplanned intensification are of less significance than three waters which has “hard limits” (as water discharge, water take consent conditions and potential surging of local networks), but also means council cannot effectively meet plan to meet level of service requirements for both efficiency and safety.

6. PLAN CHANGE 26

6.1 The Council’s PC26 proposes to use an Infrastructure Overlay to enable assessment of the potential effects of development of more than two dwellings on the water and wastewater networks. The rule is not intended to limit development, but to enable the Council to review an Infrastructure Capacity Assessment to ensure that there is sufficient

capacity in the network and, if not, to require works or a financial contribution to address any shortfall.

6.2 I also support the inclusion of the River / Gully Proximity Qualifying Matter Overlay from an infrastructure perspective, as it will act as the final buffer and ecological corridor to allow contaminants some bioretention from the cumulative effects of intensification, but also help for intensification to occur in the right location. It also helps with safeguarding access to the river for recreation, repairs and maintenance.

6.3 In response to submissions, the Section 42A Report has proposed amendments to the rule and assessment criteria for the Infrastructure Overlay to ensure that this assessment is restricted to effects on infrastructure. In addition, a definition of "Infrastructure Capacity Assessment" has been proposed to clarify the purpose and extent of the assessment.

6.4 I see the assessment as a way for the developers to innovate and provide solutions to known constraints whilst encouraging them to really think about the impact a development may have on infrastructure. We do want to see intensification and are more than willing to work in a collaborative way, but cannot rely on the minimum provisions to safeguard our obligations in managing growth that are currently dictated by specific legislation such as the Building Act 2004, which don't meet the stringent criteria councils are now held accountable to.

6.5 The assessments would need to review what provisions are proposed in order to mitigate the effects on infrastructure, and the consents would need to include conditions to ensure compliance.

7. RESPONSE TO SUBMISSIONS

7.1 I have reviewed the submissions that have been lodged on PC26 relating to Council's infrastructure and provide my response to submissions below.

Application of the Infrastructure Overlays to greenfields land

7.2 TA Projects Limited (Submitter number 50.1) has requested that the Infrastructure Overlay be removed from greenfields Medium Density Residential Zoned land, as infrastructure matters can be resolved at the time of subdivision.

7.3 I do not support removal of the Infrastructure Overlay in greenfields areas, i.e. growth cells. The medium density residential standards enable a density which is above that provided for in the Waipā 2050 Growth Strategy. Retaining the Infrastructure Overlay allows Council to review the density and its relevant effects above pre-planned density. Financial contributions will only be used when it's deemed necessary. Development contributions and agreements will remain the first mechanism to recover costs.

Requiring an infrastructure capacity assessment everywhere

7.4 Waikato Tainui (submitter number 49.15) considers that an infrastructure assessment should be required regardless of whether or not the site is within a constraint overlay where it is proposed to establish more than two dwellings on the site. This will better implement and achieve Te Ture Whaimana.

7.5 I agree that an infrastructure assessment should be provided for all applications to exceed two dwellings on a site. This is proposed to be achieved by the Infrastructure Overlay which applies across the Medium Density Residential Zone in Cambridge and Te Awamutu/Kihikihi. Assessments are necessary to ensure other requirements of the RMA are

still upheld, e.g. section 106 natural hazards: reviewing soakage characteristics to apply consent notices. When developments are aligned with the current growth strategy, the effects are considered minor (subject to conditions) given the mechanisms the council already has in place for planned growth.

Alternative methods to the infrastructure overlay

7.6 Cogswell Surveys Limited (Submitter number 53.1) considers that a preference would be for the overall infrastructure capacity to be modelled and for this spare capacity to be able to be utilised while the upgrades are occurring in the areas which require it (no limit on the number of lots or dwellings per underlying title developed).

7.7 Kāinga Ora (Submitter number 79.36) has submitted that the implications of the stormwater infrastructure qualifying matter have not been sufficiently assessed or justified in accordance with sections 77J and 77L of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (the "Amendment Act") and its purpose. Alternative methods would be more efficient and effective, balancing the need to ensure that new and redeveloped sites appropriately manage stormwater-related effects, while not incurring the costs of a resource consent process (where compliance can be achieved) for up to three dwellings per site.

7.8 I do not support providing for three dwellings as a permitted activity. Infrastructure has been modelled for both water and wastewater as well as modelling on where run off is likely to fall in higher events. The spare capacity identified in the local networks cannot be looked at in isolation and be uplifted given downstream and upstream effects it may have, hence the infrastructure overlays.

7.9 The building coverage rule provides us a means to ensure that stormwater is appropriately assessed, which would not be achieved through the permitted activity rules of the MDRS.

Process for progressive uplift of the overlays

7.10 Waka Kotahi (Submitter number 63.6) states that given the extent of the introduced infrastructure constraint and stormwater constraint overlays, it is recommended that a programme (including process/timeline) is established in parallel to PC26, which sets out when the Council expects to uplift parts of the overlay due to infrastructure upgrades.

7.11 Any programme for review of the Infrastructure Overlay would need to align with the Council's programme for infrastructure upgrades in its Long Term Plan under the Local Government Act 2002. As development enabled by the MDRS is unplanned and spread across the catchments, it is not possible to identify in advance where upgrades are needed to service development or how those upgrades will be funded. However, if infrastructure is upgraded in the future (for example as part of the development of a growth cell) it may be possible to amend the Infrastructure Overlay to reflect the increased capacity in that location.

Commercial feasibility rather than plan-enabled capacity

7.12 Several submitters have suggested that Council's infrastructure modelling and planning should be based on commercially feasible levels of development rather than plan-enabled capacity.

7.13 While I agree with this in part, there is a need to balance commercial feasibility, which is incredibly volatile regarding location and timing against plan-enabled capacity in infrastructure modelling and planning. We must also ensure that we protect the streams and waterways where it's needed most. In the last six years, we have seen a 20% year-on-year rise in consent (building and resource) across the district. We have

worked closely with developers to ensure we have forward-funded infrastructure to ensure this growth occurs sustainably and meets the requirements of our consents now and in the future. The Infrastructure Overlay allows us to continue to have this balanced approach, primarily focusing on protecting the community and the environment.

8. CONCLUSION

8.1 Council currently operates on planned capacity in respect of infrastructure to ensure the effects of our growth allow us to comply with our limits, and not be at the detriment of the current urban extent. PPC26 introduces additional, unplanned and uncertain demand on existing capacity resulting in a more reactive response to growth than anticipated.

8.2 Three waters have “hard” capacity limits under regional consents while roading capacity generally has “soft” limits in that there is route choice in the event of increased traffic and increased congestion. However, the 2-bridge system in Cambridge is considered a “hard” constraint in terms of vehicle flow and bridge capacity. It is also noted that Council will have hard targets to meet in response to climate change compromised by unplanned growth.

8.3 The Infrastructure Overlays extent takes into consideration the properties of which effect each component of three waters infrastructure, mentioned above, to inform the overlays extent, backed by modelling data that interprets demand through relevant scenarios.

8.4 Overall, the impacts of unplanned growth resulting from the introduction of the MDRS will create significant challenges for Council who will have to pivot in a timely way to respond, fund, and accommodate additional demand arising from PPC26. I am therefore supportive of Council’s approach to the Infrastructure Overlay on the basis of implementing the

Te Ture Whaimana qualifying matter. This not only avoids adverse effects on the waters referred to in Te Ture Whaimana, but in a practical sense, allows Council to better respond to unplanned growth.

Tony Coutts

Dated 24 March 2023

Appendix 1: Cambridge Wastewater Treatment Plant Discharge Permit

RESOURCE CONSENT CERTIFICATE

Private Bag 3038
Waikato Mail Centre
Hamilton 3240, NZ

waikatoregion.govt.nz
0800 800 401

Resource Consent: AUTH141113.01.01

File Number: 60 14 74A

Pursuant to the Resource Management Act 1991, the Waikato Regional Council hereby grants consent to:

Waipa District Council
Private Bag 2402
Te Awamutu 3840

(hereinafter referred to as the Consent Holder)

Consent Type: Discharge Permit

Consent Subtype: Land – sewage

Activity authorised: Discharge treated wastewater from the Cambridge Wastewater Treatment Plant to land (rapid infiltration beds) in the vicinity of the Waikato River;

Location: Thirlwall Lane, Cambridge

Consent Duration: This consent will commence on 1 December 2020 and expire on 1 December 2026.

Subject to the conditions overleaf:

CONDITIONS

Definitions

Term	Definition
Certified (or Certification)	In relation to a Management Plan or Monitoring Plan: means that the Council has certified that the Management Plan or Monitoring Plan contains all information specified in the relevant condition(s) and that the Management Plan or Monitoring Plan meets all the requirements set out in the applicable condition(s) of the resource consent.
Council or Waikato RC, or the consent authority	Waikato Regional Council.
Year, yearly, annual, annually, annum	Shall be the period of the consent holder's monitoring and compliance year, which shall be 01 July of one year to 30 June inclusive of the following year.
Wastewater or treated wastewater	Any wastewater discharge to the RIBs is assumed to be treated wastewater, and any reference to either term is deemed to mean treated wastewater.
Significant odour	Odour that is offensive or objectionable at or beyond the boundary of the WWTP in the opinion of a WRC enforcement officer.

General

1. The treatment system shall be upgraded and operated in general accordance with the document titled "Waipā District Council (Waipā DC), Cambridge Wastewater Treatment Plant - Short Term Consent - Resource Consent Application" (prepared for Waipā DC by GHD, dated September 2019) as recorded in the Waikato Regional Council document management system as 15196626 and the "Update Letter" dated 15 September 2020, as recorded in the Waikato Regional Council document management system as 17319357.

Kaitiaki Group

2. The consent holder shall invite the following parties to participate in the Kaitiaki Group and continue to engage with those parties who choose to be participants in the Kaitiaki Group:

   i) Representatives from Waipā DC including elected members and/or staff advisors;

   ii) Local Iwi/Hapū representatives including:

      (a) Waikato Tainui;

      (b) Ngāti Korokī Kahukura;

      (c) Ngāti Hauā; and

      (d) Ngāti Raukawa.

   iii) Waikato Regional Council (Waikato RC).

3. The consent holder shall continue to work with the Kaitiaki Group established as part of the development of options and required consenting for the Cambridge WWTP. The purpose of this group is to:

   i) Provide advice to the consent holder on the options being considered for the long-term consent, including methods to achieve 'cultural purification' of the discharge such as wetlands and / or other land contact.

ii) Discuss any monitoring outcomes obtained as part of the exercising of this consent, and how the long-term option will address any adverse effects identified.

iii) Inform and advise the consent holder and Waikato RC of the effects of the treated wastewater discharge authorised under this consent on iwi values.

iv) To discuss any other relevant matters relating to the discharge that may be desired by the Kaitiaki Group.

v) Be provided the opportunity for feedback to Waikato RC in relation to any requests for a timeframe extension pursuant to Condition 33.

4. The consent holder shall request that the Kaitiaki Group:

i) Review the general performance of the WWTP and the treated wastewater discharge including any significant changes to the operation of the WWTP;

ii) Review the results of monitoring and the associated assessment of monitoring information carried out in accordance with the conditions of this consent;

iii) Receive and comment on the Annual Compliance Monitoring Report and Receiving Environment Monitoring Report;

iv) Provide advice and recommendations into the development of the Receiving Environment Monitoring Plan, condition 25, in particular mātauranga Māori monitoring;

v) Make suggestions to the consent holder as to any physical measures and initiatives further needed to address actual or potential effects of the WWTP discharge as part of the adaptive management process detailed in condition 31;

vi) Make suggestions as to any additional investigations the consent holder might undertake in respect of actual or potential effects;

vii) Review any correspondence/documentation provided by Waikato RC in relation to a review required under Condition 50 of this consent; and

viii) Consider any other issues of concern to the Kaitiaki Group relating to the WWTP.

5. The consent holder shall invite the members of the Kaitiaki Group to meet on a regular basis, being within 3 months after commencement of this consent, and 6-monthly thereafter; or as required by the Kaitiaki Group.

Community Liaison Group

6. Within three months of the commencement of this consent, the consent holder shall adopt its best endeavours to facilitate the establishment a Community Liaison Group (CLG) for the purpose of:

a) Providing a line of communication between the consent holder and stakeholders for the duration of this consent; and

b) Facilitating discussion between the consent holder and the CLG in relation to the effects of the activities authorised by this consent, compliance with resource consents, and to provide advice to the consent holder on the options being considered for the long-term consent.

c) the opportunity to provide feedback to Waikato RC in relation to any requests for a timeframe extension pursuant to condition 33.

The CLG will be provided with the same information as stipulated in condition 4 of this consent.

As a minimum the consent holder will invite the following parties to participate in the CLG:

- Waikato Regional Council
- Auckland/Waikato Fish and Game

- Cambridge Community Board
- Local Iwi/Hapu representatives as identified in condition 2(ii) above
- Any other stakeholders the consent holder deems appropriate.

***Advice Note**: The Community Liaison Group is not a decision-making group, but a forum for the dissemination of information from the consent holder and provides the opportunity to comment on consent compliance and provide recommendations for changes to operations, monitoring and adaptive management.*

***Advice Note**: The Community Liaison Group is considered "established" when the consent holder has collated contact details for all members and the Group has been provided with a plan of how the consultation process will be facilitated. The Community Liaison Group will set its own procedures and determine the need for and frequency of the meetings.*

Operations

7. The consent holder shall prepare an Operations Manual (OM) for the upgraded WWTP, as part of this short-term consent. The OM shall be prepared by a suitably qualified and experienced person and shall detail how the treatment system is to be operated and maintained to ensure compliance with the conditions of this consent. As a minimum, the OM shall include the following matters:

   a) A description of the WWTP including as-built plans for the wastewater treatment facilities;

   b) A description of the sequence, timing and methods of construction of upgrades to the WWTP;

   c) A description and schedule of the routine inspection, monitoring and maintenance procedures to be undertaken to ensure effective plant operation;

   d) A schedule of monitoring to be carried out to ensure effective plant operation and compliance with consent conditions including frequency of desludging of the various treatment units and maintenance, and a sampling plan including map location;

   e) A schedule of the treatment plant critical aspects and the detailed response and contingency plans to address anticipated variations from normal plant operation;

   f) Avian botulism management procedures as detailed in condition 9;

   g) Procedures for recording routine maintenance and all repairs that are undertaken;

   h) An Overflow Management and Response Plan as per condition 8;

   i) Chain of command, responsibility and notification protocols to the relevant officer of the consent holder for any discharge events/incidents and any non-compliances with the conditions of this consent. The consent holder shall be responsible for ensuring this contact information is kept up to date; and

   j) Procedures for improving and/or reviewing the OM.

8. The OM shall also include an Overflow Management and Response Plan, detailing potential overflow sources, scenarios, methods for addressing and responding to such events including a notification processes to Waikato Regional Council, the Kaitiaki Group and Community Liaison Group.

9. The consent holder shall prepare an Avian Management Plan as part of the operations of the Cambridge WWTP. The Avian Management Plan shall take into account any feedback provided by Auckland/Waikato Fish and Game. The objective of the Avian Management Plan shall be to provide a framework to be adopted to remedy or mitigate any adverse effects associated with an outbreak of avian botulism at the Cambridge WWTP. The Avian Management Plan shall include (as a minimum)

the monitoring methods and response actions that will be adopted in the event of an outbreak of avian botulism at the Cambridge WWTP site.

10. The OM including Overflow Management and Response Plan (condition 8) and Avian Management Plan (condition 9) shall be lodged with Waikato RC for certification within three months of the consent being granted. The OM shall also be reviewed, and updated as a result, by the consent holder every two years and as required as a result of any changes in plant operation or management. An electronic copy of the management plan shall be provided to the Waikato RC within 10 working days of a request to do so.

11. Prior to, or at the same time as the OM is lodged with Waikato RC for certification, the consent holder shall provide the Kaitiaki Group and the Community Liaison Group (as referred to in Conditions 2 and 6) a copy of the OM for their information and comment.

12. Until the OM required by Condition 7 is prepared and provided to the Waikato RC for certification, the consent holder shall operate the WWTP and discharge in accordance with the OM approved in accordance with Condition 10 of the previous consent (consent number 960698).

13. Any erosion control works that become necessary as a result of the exercise of this consent shall be undertaken as directed, at the expense of the consent holder to the satisfaction of the Waikato RC.

    Advice note*: this condition is not withstanding any requirements for resource consent for erosion and sediment control works.*

14. The consent holder shall construct and place a sign(s) in the vicinity of the discharge to the river from the rapid infiltration beds, in such a way that it is conspicuous to river users, advertising of the presence of the wastewater treatment plant and warning against the use of the location for swimming.

    Advice note*: for clarification condition 14 does not necessarily mean the sign needs to be directly adjacent to the rapid infiltration beds. The sign(s) could be upstream and downstream if this is more practicable.*

15. The treatment plant shall be managed and operated by an appropriately trained operator.

16. The consent holder shall ensure contractors undertaking work at the WWTP site are made aware of the conditions of this resource consent, where it is relevant to the works being undertaken.

Discharge quantity

17. The rate of discharge of treated effluent to the rapid infiltration beds shall not exceed an average daily flow of:

    i) 6,000 cubic metres per day from commencement of the consent until 31 December 2023; and;

    ii) 7,000 cubic metres per day from 1 January 2024 for the remaining duration of the consent.

    and a maximum of 10,000 cubic metres per day.

    Advice Note*: Average daily flow will be determined over a 14-day period.*

18. The consent holder shall maintain records of:

    a) continuous flow rate of treated wastewater entering the rapid infiltration beds; and
    b) the total daily WWTP inflow volume; and
    c) the total daily treated wastewater discharge volume, as measured at entry to the rapid infiltration beds.

Discharge quality

19. The consent holder shall ensure that the quality of the discharge to the rapid infiltration beds shall comply with the following limits:

    i) The five-day biochemical oxygen demand ($cBOD_5$) shall not exceed a median value of 20 grams per cubic metre and the 90th percentile shall not exceed 50 grams per cubic metre.

    ii) The concentration of suspended solids shall not exceed a median value 20 grams per cubic metre and the 90th percentile shall not exceed 50 grams per cubic metre.

    iii) The *E. coli* levels shall not exceed a median value of 126 Colony Forming Units (CFU) units per 100 millilitres.

    iv) The load of Total Phosphorus in the discharge shall not exceed a median value of 15 kg/day and a 90th percentile value of 30 kg/day.

    v) The load of Total Nitrogen in the discharge shall not exceed a median value of:

        (a) 330 kg/day median value up to 31 December 2023; and

        (b) 385 kg/day median value from 1 January 2024 and for the remaining duration of the consent.

    vi) Notwithstanding the stated limits, the consent holder shall make all reasonable and practical efforts to ensure that final effluent quality is maximised within the capabilities of the current treatment system.

    ***Advice note**: For the purposes of this condition, to determine compliance with the median concentration limits no more than 12 samples in any 24 consecutive fortnightly samples shall exceed the specified limit (over the course of the monitoring year 1 July to 30 June). To determine compliance with the 90th percentile limits, no more than two samples in any twenty consecutive samples events shall exceed the specified limit (over the course of the monitoring year 1 July to 30 June).*

Wastewater sampling and monitoring

20. The consent holder shall undertake monitoring of the discharge in accordance with an approved monitoring plan, to be supplied to and certified by Waikato RC. The Monitoring Plan shall be supplied to Waikato RC for certification within 3 months of the granting of this consent. The monitoring regime detailed in the Monitoring Plan shall be undertaken for the duration of the short-term consent or a lesser time in the event that the Waikato RC agrees in writing that monitoring of a specific aspect is no longer needed.

21. The objectives of the Monitoring Plan are:

    i) to provide information to guide decisions concerning the operation and maintenance of the ponds and wetlands;

    ii) to ensure that the system is operated and maintained to maximise nutrient and contaminant removal;

    iii) to confirm compliance with the conditions of this consent, and;

    iv) to confirm the environmental effects of the discharge.

    As a minimum, the monitoring plan shall include:

    a. monitoring of the daily volume of effluent discharged to the rapid infiltration beds,
    b. monitoring at least fortnightly of the following parameters in the discharges described in a) above:
        - five- day biochemical oxygen demand
        - total suspended solids
        - Total Phosphorus
        - ammoniacal nitrogen

- Total Nitrogen
- pH
- temperature
- *E. coli*

c. monitoring of springs or agreed location on the river bank below the rapid infiltration beds;

d. Instream monitoring to identify any effects of the WWTP discharge in the Waikato River and in accordance with the Receiving Environment Monitoring Plan in Condition 25.

22. The consent holder shall notify the Waikato RC within 24 hours (where practicable) of the consent holder becoming aware of the limits specified in Conditions 19 of this resource consent being exceeded, or any accidental discharge, plant breakdown or other circumstance which is likely to result in the limits of this consent being exceeded. The consent holder shall, within 10 working days of the incident occurring, provide a written report to the Waikato RC, identifying the breach, possible causes and steps to ensure future compliance.

23. All wastewater quality analyses shall be undertaken by an International Accreditation New Zealand (IANZ) accredited or equivalent laboratory. All methods used shall be appropriate for the wastewater analyses undertaken.

24. This resource consent is granted by the Waikato RC subject to its officers or agents being permitted access to the property at all reasonable times for the purpose of carrying out inspections, surveys, tests, measurements or taking samples.

Receiving environment monitoring

25. The consent holder shall retain a suitably qualified and experienced person(s) to prepare a Receiving Environment Monitoring Plan for the purpose of characterising the environmental condition of the Waikato River. The assessment shall be undertaken utilising both mātauranga Māori and scientific methods. To this end:

i) The consent holder shall carry out a survey of the Waikato River during the low flow – high temperature months of January - April of 2021/2022 and in agreement with the Kaitiaki Group and Community Liaison Group, to assess the ecological condition of the river and evaluate the potential impact on the Waikato River from the treated wastewater discharged from the rapid infiltration beds.

ii) The consent holder shall carry out water quality sampling within the Waikato River at an appropriately determined frequency and location (in relation to the WWTP) to provide characterisation over a full year period.

iii) The Receiving Environment Monitoring Plan shall be provided to the Council at least one month before the date of the first survey for certification, identifying the proposed monitoring locations and the method and procedures for the survey, which shall include an assessment of physical characteristics, water quality, periphyton, and macroinvertebrates. The survey results, and an evaluation of the results and comparison with previous surveys, shall be submitted to the Council within six weeks of the survey results becoming available.

26. As-a minimum, the Receiving Environment Monitoring Plan shall include:

i) Mātauranga Māori assessment;

ii) Ecological monitoring of the bankside and for growths within the Waikato River;

iii) Bankside stability assessment, including determination of appropriate monitoring for stability risk management;

iv) Water quality sampling of an appropriately determined frequency and location;

v) Investigations, to identify the cause of elevated contaminants recorded in springs during May 2019, as identified in the application for this resource consent (Waikato Regional Council document number 15196626) and further confirmed through the site investigations undertaken up to September 2020 (as identified in the "Update Letter" dated 15 September 2020, Waikato Regional Council document number 17319357) and implementation of appropriate response/mitigation or remediation measures as identified;

vi) Investigations into the de-nitrification and phosphorus attenuation processes (as further confirmed through the site investigations undertaken up to September 2020 (as identified in the "Update Letter" dated 15 September 2020, Waikato Regional Council document number 17319357)) occurring within the Rapid Infiltration Beds;

vii) Monitoring of appropriate areas and parameters as long as the leak in the aerated pond liner is present; and

viii) Monitoring and response (if required), to identify the cause of the landslip that occurred near the Rapid Infiltration Bed 6 on the Waikato River bank in 2020.

Advice note: The methodology of the mātauranga Māori-based assessment shall be determined following consultation with the Kaitiaki Group.

27. The Receiving Environment Monitoring Plan shall include frequency of receiving environment monitoring of not less than:

i) Quarterly for the springs (Springs 2 and 3) or where a sediment discharge event is identified, in order to characterise peak discharge;

ii) Quarterly monitoring of the groundwater bores located at MW03 (adjacent to Spring 1), comprising both shallow and intermediate bores.

iii) Annual in-river monitoring comprising three sampling events during summer low-flow conditions (including at both upstream and downstream locations in relation to the RIBs).

iv) Where practicable and appropriate, continuous monitoring will also be undertaken.

Adaptive management

28. If the monitoring of pathogen levels in the discharge, as stipulated in Condition 19, are not met consistently within the first 12 months following the granting of this consent and this is related to the interference from suspending solids, then the consent holder shall install a tertiary filter.

***Advice note**: For the purposes of this condition, 'consistently' relates to the discharger meeting the applicable parameter of Condition 19 for 6 out of the first 12 months.*

29. Should a tertiary filter be required in accordance with Condition 28, then this shall be installed no later than 24 months after the granting of this consent.

30. The results of the monitoring undertaken pursuant to the Receiving Environment Monitoring Plan (conditions 25 and 26) shall be presented to the Kaitiaki Group and Community Liaison Group for consideration no later than July each year assessment is required (being three months after the completion of low flow monitoring required in the low flow period of January – April).

31. If adverse effects are identified through the monitoring undertaken then the following adaptive management process shall be commenced. The adaptive management process shall involve:

i) Requesting the Kaitiaki Group evaluate the results and agree actions to investigate and if necessary, remedy the identified adverse effects; and

ii) Once further monitoring or other actions on site are agreed through the Kaitiaki Group, then the consent holder shall implement those actions.

iii) If required, the Receiving Environment Monitoring Plan shall be updated to reflect those implemented actions.

iv) Any updated Receiving Environment Monitoring Plan shall be supplied to the Kaitiaki Group for comment (as per the role outlined in condition 4).

32. In the event of any dispute, disagreement or inaction arising concerning adaptive management actions triggered by condition 31, the consent holder shall request that in the first instance that the Chief Executives of the Waipā DC, Waikato RC and kaumātua or iwi appointed representatives for each iwi meet to determine a process for resolution of the dispute, disagreement or inaction and provide governance over the matter.

The decision of the governance group shall be adopted by the consent holder and implemented.

Long-term option development

33. The consent holder shall prepare and submit to Waikato RC, an application for resource consent regarding the long-term option for wastewater treatment currently undertaken at the Cambridge WWTP, by 31 December 2022. If a sub-regional option at a new location is pursued as the long-term option for Cambridge, an application for resource consent shall be prepared and submitted to Waikato RC by 31 December 2023. If the applicable time-frame cannot be met, an appropriate timeframe can be agreed in writing with the consent authority and will consider any feedback from the Kaitiaki Group and CLG. Any such extension shall be as brief as reasonably practicable. The following interim milestone shall be adhered to, as far as practicable:

i) Completion of the Detailed Business Case for the long-term options by March 2021; and

ii) Endorsement by the consent holder by 30 June 2021;

34. The long-term option for wastewater treatment currently undertaken at the Cambridge WWTP shall be in place and operational at the expiration of this resource consent or as otherwise agreed in writing with the consent authority. The long-term option shall address both nitrogen and phosphorus removal in that these nutrients need to be reduced and managed for the long-term health and improvements of the Waikato River.

Environmental enhancements

35. The consent holder shall provide a one-off fund for the Kaitiaki Group (as defined in Condition 2) to undertake environmental enhancements.

36. In addition to the environmental enhancements in Condition 35, the consent holder shall provide a fund of $50,000 per annum to go towards environmental enhancement projects in the Waikato Catchment – to be developed in collaboration with the CLG. The environmental enhancements under this condition shall be focused on projects that will lead to water quality improvements to the Waikato River catchment, upstream or within the same catchment as the Cambridge WWTP unless otherwise agreed with the CLG. This annual $50,000 environmental enhancement fund shall continue until such as time as the long-term option is operational.

37. The consent holder will develop an Environmental Enhancement Plans in collaboration with the Kaitiaki Group in relation to condition 35 and the CLG in relation to condition 36 which will detail the environment enhancement initiatives to be implemented, timeframes and, if applicable, the duration of any monitoring and maintenance under each of the initiatives pursuant to those conditions.

***Advice note**: the proposed environmental enhancements are not considered an offset mechanism. Conditions 39 to 42 below outline separate conditions in relation to investigation of nutrient offsetting.*

38. The Environmental Enhancement Plan (required by Condition 36) shall be submitted to Waikato RC within twelve months of the commencement of this consent for information and implemented.

Nutrient offsetting investigations

39. The consent holder shall undertake a nutrient offsetting programme. This will involve preparation of a conceptual model and offsetting assessment to identify potential areas in which nutrient offsetting could be undertaken, the 'offsetting mitigation memorandum'. The overarching goal of the 'offsetting mitigation memorandum' is to maximise reductions in N and P entering the Waikato River and shall be:

    i) Complete by December 2020.

    ii) Made available to Waikato Regional Council, the Kaitiaki Group and Community Liaison Group for comment and/or input.

40. Based on the findings of the 'offsetting mitigation memorandum' a proof of concept /pilot study shall be implemented, to demonstrate how nutrient offsetting may be undertaken. The proof of concept shall be implemented:

    i) Within 12 months of the completion of the offsetting mitigation memorandum;

    ii) In collaboration with Waikato Regional Council, the Kaitiaki Group and the Community Liaison Group; and

    iii) With the goal to maximise the amount of nutrients that can be removed from entering the Waikato River catchment.

41. The level of success of the proof of concept shall be reported to Waikato Regional Council, the Kaitiaki Group and the Community Liaison Group and other key stakeholders identified through the proof of concept.

42. The proof of concept shall inform the scale of any wider nutrient offsetting. Following the proof of concept, the next steps for potential nutrient offsetting shall be discussed with the Kaitiaki Group and the Community Liaison Group and other key stakeholders identified through the proof of concept stage.

43. The consent holder shall contribute $500,000 towards the implementation of those actions in conditions 39 to 42 above.

Reporting

44. The consent holder shall provide to the Waikato RC, the Kaitiaki Group (as defined in condition 2) and the Community Liaison Group (as defined in condition 6) a written report (the Annual Report) by 30 September each year addressing the following:

    i) A summary of the monitoring results required by the conditions of this resource consent for year ending 30 June;

    ii) A critical assessment of the monitoring data collected and comment on any emerging trends;

    iii) Comment on compliance with the conditions of this resource consent;

iv) Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent, and a description and summary of the efficacy of any remedial works undertaken;

v) Progress on identification of the long-term solution; and

vi) Any other issue considered relevant by the consent holder.

45. The consent holder shall forward the results of the monitoring undertaken as required by this resource consent to the Waikato Regional Council, via electronic means, within one month of receipt of the results by the consent holder. As far as practicable the consent holder shall compile a monthly report of this required data so that the results are provided to the Waikato Regional Council via one document.

46. The consent holder shall as soon as reasonably practicable, notify the operators of all registered water supplies that take water from the Waikato River, downstream of Cambridge WWTP (but no further than Hamilton City) for domestic supply and the Waikato RC of an event that may in itself, or as a consequence of an event, have a significant adverse effect on the quality of the water within the Waikato River at the abstraction points of those water supplies.

47. The consent holder shall compile a report detailing: the type and nature of the event; the actual and potential adverse effects as a result; the reasons why the event occurred, the actions taken by the consent holder in response to the event, including parties notified and when; an assessment of what measures will be adopted in the future to minimise such occurrences; and any other matter relevant to the event or the consent holder's response. The consent holder shall make copies available to Waikato RC and any other party who may request it.

Customer queries

48. The consent holder shall maintain and keep a Customer Complaints Register for all queries made about the treatment and discharge operations undertaken by the consent holder. The Register shall record:

a) The date, time and duration of any event/incident that has resulted in the query or complaint;

b) The name and address of the customer;

c) The possible cause of any event/incident;

d) The weather conditions and wind direction at the site when any event/incident allegedly occurred, if significant to the query;

e) Any corrective action undertaken by the consent holder in response to the matter.

The Register shall be made available to the Waikato RC, Kaitiaki Group and the Community Liaison Group at all reasonable times. Queries which may indicate non-compliance with the conditions of this resource consent shall be forwarded to the Waikato RC, Kaitiaki Group and the Community Liaison Group as soon as practicable, and at least within 24 hours of receipt of the complaint. A report shall be provided within five working days of the query being received.

Review and Administration

49. The Waikato RC may review the conditions of this consent under section 128 of the Resource Management Act 1991 (RMA):

i) within six months of the 2nd and 4th anniversary of the issue of this consent. For the purpose of dealing with any adverse effects on the environment arising from the exercise of this consent or

to take into account any issue arising from the monitoring and performance report, or to take into account any changes to Council policy or plans.

50. The consent holder shall request that Waikato RC extends the opportunity for iwi members of the Kaitiaki Group as defined in Condition 2, and the Community Liaison Group as per Condition 6, to undertake a review of the consent conditions as part of the process detailed in condition 49.

51. The consent holder shall pay to the Waikato RC any administrative charge fixed in accordance with section 36 of the RMA, or any charge prescribed in accordance with regulations made under section 360 of the RMA.

In terms of s116 of the Resource Management Act 1991, this consent commences on 1 December 2020.

Appendix 2: Te Awamutu Wastewater Treatment Plant Discharge Permit

Waikato
REGIONAL COUNCIL
Te Kaunihera ā Rohe o Waikato

Private Bag 3038
Waikato Mail Centre
Hamilton 3240, NZ

waikatoregion.govt.nz
0800 800 401

RESOURCE CONSENT CERTIFICATE

Resource Consent: AUTH135108.01.02

File Number: 60 55 68A

Pursuant to the Resource Management Act 1991, the Waikato Regional Council hereby grants consent to:

Waipa District Council
Private Bag 2402,
Te Awamutu, 3840

(hereinafter referred to as the Consent Holder)

Consent Type: Discharge Permits / Land Use

Consent Subtype: Water – sewage
Land – sewage
Air – odour

Activity authorised:

- To discharge treated wastewater to the Mangapiko Stream (via a rock filter) from the Te Awamutu Wastewater Treatment Plant. AUTH 135108.01.01
- To discharge treated wastewater to the Mangapiko Stream (via a rock filter) from the Te Awamutu Wastewater Treatment Plant as a contingency discharge. AUTH135108.02.01
- To discharge treated wastewater (via seepage) to land and groundwater from activities associated with the Te Awamutu Wastewater Treatment Plant. AUTH135108.03.01
- To discharge contaminants to air, including odour, from activities associated with the Te Awamutu Wastewater Treatment Plant. AUTH135108.04.01

Location: Te Awamutu Wastewater Treatment Plant, Pirongia Road, Te Awamutu

Consent Duration: This consent will commence on the date of decision notification and expire on 30 June 2043.

Explanation of the consents for the activities associated with the Te Awamutu Wastewater Treatment Plant: The consents have been bundled to avoid repetition of common elements, and to save administration costs for the Consent Holder during the term of the consent. The discharge consents have been grouped together as one consent, and the singular land use activity (for the use and maintenance of the rock filter discharge structure within the bed of Mangapiko Stream) is a separate consent (AUTH135108.05.01).

Definitions

Term	Definition
Certified (or Certification)	In relation to a Management Plan or Monitoring Plan: means that the Council has certified that the Management Plan or Monitoring Plan contains all information specified in the relevant condition(s) and that the Management Plan or Monitoring Plan meets all the requirements set out in the conditions of the resource consent.
Council or WRC	Waikato Regional Council
Year, yearly, annual, annually, annum	Shall be the period of the consent holder's monitoring and compliance year, which shall be 1 July of one year to 30 June inclusive of the following year.
Wastewater or treated wastewater	Any wastewater discharge to the Mangapiko Stream is assumed to be treated wastewater, and any reference to either term is deemed to mean treated wastewater.
Summer and winter periods	For all discharge limits and conditions, the summer period is defined as the period from 1 December to 31 May, and the winter period is the remainder of the year, being 1 June to 30 November.
Reasonable mixing zone	For the purposes of this consent, the reasonable mixing zone extends 100 metres downstream of the wastewater discharge point.
Discharge or direct discharge	Discharge or direct discharge means that treated wastewater discharged from the rock diffuser to the Mangapiko Stream, and does not include any indirect discharge to the Mangapiko Stream which may occur as a result of seepage from the treatment ponds to ground or groundwater and hence to the Mangapiko Stream.
Significant odour	Odour that is offensive or objectionable at or beyond the boundary of the wastewater treatment plant in the opinion of a WRC enforcement officer.
Contingency discharge	A contingency discharge is a flow of partially treated wastewater from the wastewater treatment plant to the Mangapiko Stream.

DISCHARGE PERMIT TO DISCHARGE CONTAMINANTS TO WATER

General Conditions

1. The activities authorised shall be designed, upgraded, operated and maintained in general accordance with the details contained within the following documents:

   (a) Te Awamutu Wastewater Scheme: Resource Consent Applications and Assessment of Effects on the Environment, MWH New Zealand, March 2015 (Doc#11224531); and

   (b) Te Awamutu Wastewater Scheme: Addendum to Resource Consent Application and Assessment of Effects on the Environment, Stantec New Zealand, November 2017 (Doc#11483820); and

   (c) Additional Supporting information provided by the applicant:

      i. WWTP Site Layout Plan (Doc#12462308);

      ii. Location of the proposed riparian planting areas (Doc#12460618);

      iii. Potential WWTP Upgrade Options, Nutrient Mass Loads and Downstream Improvement in Waikato River Water Quality, including revised Waipa DC proposed conditions by G. Hall (Stantec), May 9, 2018 (Doc#12463198);

   Where there is any inconsistency between the details contained within the above documentation and these conditions, the conditions shall prevail.

2. The consent holder shall pay to the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act.

3. The consent holder shall ensure contractors are made aware of the conditions of this resource consent.

Wastewater Treatment Plant Upgrade

4. Within 12 months of the commencement of this consent, and thereafter on an annual basis by 30 November each year the report is due, the consent holder shall report (the Upgrade Report) to the Waikato Regional Council on progress to that day and the future planning of the investigations, design, procurement procedure, construction and commissioning of the future wastewater treatment plant upgrades. The need for the Upgrade Report shall terminate once Stage 4 of the wastewater treatment plant upgrade is completed. The consent holder shall advise the Waikato Regional Council in writing as soon as practicable when Stage 4 of the wastewater treatment plant upgrade is completed.

   For the purposes of this condition, the future wastewater treatment plant upgrades (Stages 1 – 4) are described in documents set out in Condition 1 above, and are summarised in the table below.

Document (as listed in Condition 1)	**Stage no. and timing**	**Upgrades**
1(a) Table 4 - 2	Stage 1 – 2015/2018	New sludge dewatering
1(a) Table 4 - 2	Stage 2 – 2017/2018	Purpose-built peak storage pond and dewatered oxidation pond
1(b) Table 2 - 5	Stage 3 – Commissioning Late 2020	New clarifier, and new UV facility

1(a) Table 4 - 2	Stage 4 – 2030	New full BNR treatment process

Operations and Management Plan

5. The consent holder shall prepare an Operations and Management Plan (OMP) for the upgraded wastewater treatment plant. The OMP shall be prepared by a suitably qualified and experienced person and shall detail how the treatment system is to be operated and maintained to ensure compliance with the conditions of this consent. As a minimum, the OMP shall include the following matters:

    (a) A description of the wastewater treatment plant including as-built plans for the wastewater treatment facilities;

    (b) A description of the sequence, timing and methods of construction of upgrades to the wastewater treatment plant;

    (c) A description and schedule of the routine inspection, monitoring and maintenance procedures to be undertaken to ensure effective plant operation;

    (d) A schedule of monitoring to be carried out to ensure effective plant operation and compliance with consent conditions including frequency of desludging of the various treatment units and maintenance, and a sampling plan including map location;

    (e) A schedule of the treatment plant critical aspects and the detailed response and contingency plans to address anticipated variations from normal plant operation;

    (f) An Avian Botulism Management Plan including the identification of monitoring methods, actions to be undertaken should an outbreak of avian botulism occur, and communication methods with Auckland/Waikato Fish and Game;

    (g) Procedures for recording routine maintenance and all repairs that are undertaken;

    (h) Chain of command, responsibility and notification protocols to the relevant officer of the consent holder for any discharge events/incidents and any non-compliances with the conditions of this consent; and

    (i) Procedures for improving and/or reviewing the OMP.

6. The OMP shall be lodged with Waikato Regional Council for certification within six months of commencement of the discharge from the Stage 3 upgraded wastewater treatment plant. The OMP shall also be reviewed, and updated as a result, by the consent holder every two years and as required as a result of any changes in plant operation or management. An electronic copy of the management plan shall be provided to the Waikato Regional Council within 10 working days of a request to do so. The consent holder shall advise the Waikato Regional Council in writing as soon as practicable when a discharge from the Stage 3 upgraded wastewater treatment plant begins.

7. At the same time as the OMP is lodged with Waikato Regional Council for certification, the consent holder shall provide the Tāngata Whenua Liaison Group (as referred to in Condition 14) a copy of the OMP for their information.

8. Until the OMP required by Condition 5 is prepared and provided to the Waikato Regional Council for certification, the consent holder shall operate the wastewater treatment plant and discharge in accordance with the existing Management Plan (Doc#12453370) approved in accordance with Condition 22 of the previous consent (consent number 103373).

9. The wastewater scheme shall be operated, maintained and managed by appropriately experienced personnel in accordance with the OMP.

Reporting

10. The consent holder shall provide to the Waikato Regional Council and the Tāngata Whenua Liaison Group a written report (the Annual Report) by 30 September each year addressing the following:

    (a) A summary of the monitoring results required by the conditions of this resource consent for year ending 30 June;

    (b) A critical assessment of the monitoring data collected and comment on any emerging trends;

    (c) Comment on compliance with the conditions of this resource consent;

    (d) Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent, and a description and summary of the efficacy of any remedial works undertaken; and

    (e) Any other issue considered relevant by the consent holder.

Customer Queries

11. The consent holder shall maintain and keep a Customer Queries Register for all queries made about the treatment and discharge operations received by the consent holder. The Register shall record:

    (a) The date, time and duration of any event/incident that has resulted in the query;

    (b) The name and address of the customer;

    (c) The possible cause of any event/incident;

    (d) The weather conditions and wind direction at the site when any event/incident allegedly occurred, if significant to the query;

    (e) If applicable, a comment on whether the weather conditions were conducive to the likelihood of the wastewater treatment plant being the cause of the complaint based on the location of the complainant (e.g. whether the complainant was downwind of the wastewater treatment plant at the time).

    (f) Any corrective action undertaken by the consent holder in response to the query.

    The Register shall be made available to the Waikato Regional Council and the Tāngata Whenua Liaison Group at all reasonable times. Queries which may indicate non-compliance with the conditions of this resource consent shall be forwarded to the Waikato Regional Council and the Tāngata Whenua Liaison Group as soon as practicable, and at least within 24 hours of receipt of the complaint. A report shall be provided within five working days of the query being received.

Waipa District Council Development, Technology and Environmental/Monitoring Review Report

12. By 1 July 2024, and thereafter at six yearly intervals for the duration of this consent, the consent holder shall submit to Waikato Regional Council, the Tāngata Whenua Liaison Group and Fish & Game NZ, a Development, Technology, and Environmental/Monitoring Review Report ("DTEM Report"). The DTEM Report shall be prepared by a suitably qualified and experienced person who is independent of the consent holder. As a minimum, the DTEM Report shall:

    (a) Assess ongoing compliance with the conditions of the consent and, in particular, any reported non-compliance with consent conditions.

    (b) Include an assessment of whether the discharge is consistent with Te Ture Whaimana o te Awa o Waikato (The Vision and Strategy for the Waikato River ("Vision and Strategy")) in effect at the time.

    (c) In the event that targets and/or measures are included in the Vision and Strategy, an assessment of whether the discharge complies with those targets and measures.

    (d) Include an assessment of compliance/consistency with any relevant national or regional water quality policies, standards or guideline in effect at the time.

(e) Include an assessment of the results of the consent holder's monitoring undertaken in accordance with this resource consent, including the adequacy and scope of such monitoring.

(f) Include a summary of any major improvements made to the wastewater reticulation, treatment, or disposal system since the commencement of this consent that is likely to have an effect on the exercise of this consent.

(g) Include a summary of any actual or potential effects of the discharge, irrespective of whether those effects are permitted by the conditions of this consent.

(h) Outline any significant technological changes and advances in relation to wastewater management, treatment, disposal and beneficial re-use technologies which may be available to address any adverse effects of the discharge, particularly where those adverse effects are reduced. This particularly includes:

i. Any technological changes and advances that reduce the need for reliance on water as a transport medium for human waste or as a receiving medium for treated wastewater.

ii. Any technological changes and advances that provide for suitable and sustainable land contact that provides treatment to the wastewater.

(i) Include a summary of information (if any) relating to the use, development and success of alternative wastewater collection, treatment, disposal and discharge, and re-use techniques in New Zealand, in particular land based disposal, and their relevance and possible application to Te Awamutu's situation as part of the Te Awamutu Wastewater Scheme.

(j) Include an assessment of what is the Best Practicable Option ("BPO") to minimise the effects of the discharge.

(k) Advise whether the consent holder is utilising the BPO.

(l) Include details of any feedback received as a result of the consent holder's presentation of the DTEM Report to Waipa District Council's Service Delivery Committee (or equivalent Council Committee made up of elected Council members) meeting prior to its submission to Waikato Regional Council.

(m) Include details of any relevant feedback received from the Tāngata Whenua Liaison Group on the WWTP and how this has been incorporated into the DTEM Report.

Advice Note: Should the proposed conveyance of wastewater from the Waikeria Prison to the Te Awamutu Wastewater Treatment Plant not proceed as originally planned and as described in the following document 'Te Awamutu Wastewater Scheme: Addendum to Resource Consent Application and Assessment of Effects on the Environment, Stantec New Zealand, November 2017', the consent holder shall submit a DTEM report to the Waikato Regional Council covering matters (a) to (m) above within six months of being advised by the Department of Corrections (or another government entity) that the conveyance of wastewater will not proceed.

Advice Note:
BPO has the same meaning as in section 2 of the Resource Management Act 1991.

Review - General

13. The Waikato Regional Council may, in the six month period commencing 1 July 2021, and every three years thereafter, serve notice on the consent holder under section 128(1) of the Resource Management Act 1991 of its intention to review the conditions of this resource consent for the following purposes:

(a) To review the effectiveness of the conditions of this consent in avoiding, remedying or mitigating any adverse effects on the environment from the exercise of this consent, and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; and

(b) After the DTEM Report has been submitted to the Waikato Regional Council, to review the BPO assessment contained in the DTEM Report and respond to the consent holder's intention to adopt/not adopt a revised BPO, if any, for the treatment and discharge of treated wastewater; and

(c) To review the conditions of this resource consent if the Waikeria Prison expansion and/or Tokanui connection does not go ahead; and

(d) To respond to any concerns raised by Tāngata Whenua Liaison Group; and

(e) To review the conditions of this resource consent to ensure the exercise of this resource consent is not inconsistent with Te Ture Whaimana o te Awa o Waikato including any amendments, The Vision and Strategy for the Waikato River, and if necessary to address any such inconsistencies by way of further or amended conditions; and

(f) In the event that the Crown settles any claim under the provisions of the Treaty of Waitangi Act 1975 that may impact on the operation of this consent, to review the conditions of this consent for the purposes of assessing if any such settlement requires amendment(s) to be made so that the consent conditions are consistent with the settlement.

(g) In the event that Contaminants of Emerging Concern are identified as being present in the treated wastewater, and are known to be of potential or actual risk to the public or the stream ecology.

Advice Note:

The consent holder's staged upgrade represented the BPO when consent was granted. The BPO can change over time, as recognised by Condition 12 regarding the technology and environmental/monitoring review report.

Tāngata Whenua Liaison Group

14. Within 12 months of the commencement of this consent, the consent holder shall invite representative members of Ngā Iwi Toopu o Waipā, Waikato-Tainui, Ngāti Maniapoto and Ngāti Hikairo to establish a Tāngata Whenua Liaison Group (the Liaison Group). If established, the consent holder shall provide reasonable organisation and administrative support to facilitate the development and ongoing role of the Liaison Group, which shall:

    (a) Establish its own meeting protocols; and

    (b) Meet at least annually to exercise the functions set out within Condition 15.

15. The consent holder shall request that the Liaison Group:

    (a) Review the general performance of the WWTP and the treated wastewater discharge including any changes to the operation of the WWTP;

    (b) Review the results of monitoring and the associated assessment of monitoring information carried out in accordance with the conditions of this consent;

    (c) Receive and comment on the Annual Report, Aquatic Ecology Monitoring Report, Development, Technology, and Environmental/Monitoring Review Report and Customer Queries Register;

    (d) Make suggestions to the consent holder as to any physical measures and initiatives further needed to address actual or potential effects of the WWTP discharge;

(e) Make suggestions as to any additional investigations the consent holder might undertake in respect of actual or potential effects;

(f) Review any correspondence/documentation provided by Waikato Regional Council in relation to a review proposed under Condition 13 of this consent; and

(g) Consider any other issues of concern to the Liaison Group relating to the WWTP.

16. The consent holder shall provide minutes of each Liaison Group meeting under Condition 15 to the Waikato Regional Council and the members of the Liaison Group within four weeks of each meeting, which will include but not be limited to:

(a) A record of the discussions at the meeting;

(b) A record of any suggestions/issues provided or raised by the members of the Liaison Group including:

i. What actions are proposed by the consent holder to respond to suggestions made by the Liaison Group; and

ii. Where no actions are proposed to respond to suggestions, the reasons why not.

DISCHARGE PERMIT TO DISCHARGE CONTAMINANTS TO WATER

Discharge Quantity Limit

17. The maximum discharge volume shall not exceed 21,000 cubic metres of treated wastewater per day.

Discharge Location

18. The discharge shall be to the rock filter and then the Mangapiko Stream, located at NZTM coordinates: E1801364 N5792047.

Discharge Quality Limits

19. Up to three years from the date of commencement of this resource consent, the consent holder shall ensure that the quality of the discharge immediately after all controlled treatment processes and prior to any land contact shall comply with the following limits:

(a) The median five day carbonaceous biochemical oxygen demand concentration ($cBOD_5$) shall not exceed 10 milligrams per litre and the 90th percentile shall not exceed 20 milligrams per litre;

(b) The median suspended solids (SS) concentration shall not exceed 15 milligrams per litre and the 90th percentile shall not exceed 35 milligrams per litre;

(c) The median total ammoniacal-nitrogen (NH_4-N) concentration shall not exceed 5 milligrams per litre and the 90th percentile shall not exceed 9 milligrams per litre;

(d) The annual average total nitrogen (TN) load shall not exceed 50 kilograms per day;

(e) The annual average total phosphorus (TP) load shall not exceed 25 kilograms per day;

(f) The median Faecal coliforms concentration shall not exceed 400 cfu per 100 millilitres and the 90th percentile shall not exceed 4,000 cfu per 100 millilitres;

(g) The pH shall be within the range of 6.0 to 8.5

For the purposes of this condition, to determine compliance with the median limits no more than 12 samples in any 24 consecutive weekly samples shall exceed the specified limit. To determine compliance with the 90th percentile limits, no more than two samples in any twenty consecutive sampling events shall exceed the specified limit.

To determine compliance with annual average mass load limits, the annual average shall be calculated from consecutive weekly samples collected over the previous 12 months.

20. After three years from the date of commencement of this resource consent, the consent holder shall ensure that the quality of the discharge immediately after all controlled treatment processes and prior to any land contact shall comply with the following limits:

    (a) The median five day carbonaceous biochemical oxygen demand concentration ($cBOD_5$) shall not exceed 5 milligrams per litre and the 90th percentile shall not exceed 8 milligrams per litre;

    (b) The median suspended solids (SS) concentration shall not exceed 15 milligrams per litre and the 90th percentile shall not exceed 25 milligrams per litre;

    (c) The median total ammoniacal-nitrogen (NH_4-N) concentration shall not exceed 0.5 milligrams per litre and the 90th percentile shall not exceed 3 milligrams per litre;

    (d) The annual average total nitrogen (TN) load shall not exceed 50 kilograms per day;

    (e) The annual average total phosphorus (TP) load shall not exceed 25 kilograms per day; and

    (f) The median Escherichia coli (E. coli) concentration shall not exceed 126 MPN per 100 millilitres and the 90^{th} percentile shall not exceed 400 MPN per 100 millilitres;

    (g) The pH shall be within the range of 6.0 to 8.5.

    For the purposes of this condition, to determine compliance with the median limits no more than 12 samples in any 24 consecutive weekly samples shall exceed the specified limit. To determine compliance with the 90th percentile limits, no more than two samples in any twenty consecutive sampling events shall exceed the specified limit.

    To determine compliance with annual average mass load limits, the annual average shall be calculated from consecutive weekly samples collected over the previous 12 months.

21. After twelve years from the date of commencement of this resource consent, the consent holder shall ensure that the quality of the discharge immediately after all controlled treatment processes and prior to any land contact shall comply with the following limits:

    (a) The median five day carbonaceous biochemical oxygen demand concentration ($cBOD_5$) shall not exceed 5 milligrams per litre and the 90th percentile shall not exceed 8 milligrams per litre;

    (b) The median suspended solids (SS) concentration shall not exceed 15 milligrams per litre and the 90th percentile shall not exceed 25 milligrams per litre;

    (c) The median total ammoniacal-nitrogen (NH_4-N) concentration shall not exceed 0.5 milligrams per litre and the 90th percentile shall not exceed 3 milligrams per litre;

    (d) The annual average total nitrogen (TN) load shall not exceed 50 kilograms per day;

    (e) The average summer (December to May inclusive) total phosphorus (TP) load shall not exceed 8.0 kilograms per day;

    (f) The average winter (June to November inclusive) total phosphorus (TP) load shall not exceed 25 kilograms per day; and

    (g) The median Escherichia coli (E. coli) concentration shall not exceed 126 MPN per 100 millilitres and the 90^{th} percentile shall not exceed 400 MPN per 100 millilitres.

    (h) The pH shall be within the range of 6.0 to 8.5

    For the purposes of this condition, to determine compliance with the median limits no more than 12 samples in any 24 consecutive weekly samples shall exceed the specified limit. To determine

compliance with the 90th percentile limits, no more than two samples in any twenty consecutive sampling events shall exceed the specified limit.

To determine compliance with annual average mass load limits, the annual average shall be calculated from consecutive weekly samples collected over the previous 12 months.

To determine compliance with summer average load limits, the average load shall be calculated from samples collected on a weekly basis over the entire summer period (December to May inclusive).

To determine compliance with winter average load limits, the average load shall be calculated from samples collected on a weekly basis over the entire winter period (June to November inclusive).

22. Beyond the reasonable mixing zone, the treated wastewater discharge shall not produce the following effects:
    (a) Conspicuous oil or grease film, scums, foams or floatable or suspended materials in the Mangapiko Stream; or
    (b) Conspicuously change the turbidity of the Mangapiko Stream; or
    (c) Conspicuously change the colour of Mangapiko Stream.

    The consent holder shall carry out regular, and at a minimum monthly, inspections of the outlet discharge to ensure that the rock filter is intact, and that there are no visible scums, fats and discoloration in the Mangapiko Stream as a result of the discharge, outside of the reasonable mixing zone. Records shall be kept of these inspections, and provided monthly to the Waikato Regional Council.

Wastewater Sampling and Monitoring

23. The consent holder shall continuously monitor the flow rate of wastewater entering and leaving the wastewater treatment plant and shall record the total daily influent and discharge volumes. This data shall be made available as soon as practicable upon request from the Waikato Regional Council.

24. The treated wastewater shall be sampled at a location after the UV treatment step as defined in the OMP for monitoring the parameters as set out below. The exact location(s) and method(s) used for the sampling shall be described in the OMP to the satisfaction of Waikato Regional Council.

    Daily: wastewater volume in cubic metres

    Weekly: 5-day carbonaceous BOD, suspended solids, ammoniacal-nitrogen, total nitrogen, total phosphorus, E coli and pH.

    Monthly: Dissolved reactive phosphorus (DRP), nitrate-nitrogen, nitrite-nitrogen

25. Up to 12 months from the date of commencement of this resource consent, the consent holder shall take grab samples of the treated wastewater on a weekly basis from the sampling location(s) specified in Condition 24 for the purpose of determining compliance with Conditions 19, 20 and 21.

    After 12 months from the date of commencement of this resource consent, the consent holder shall take 24 hour flow proportioned samples of treated wastewater on a weekly basis from the sampling location(s) specified in Condition 24 for the purpose of determining compliance with Conditions 19, 20 and 21 for all parameters with the exception of E. coli. The E. coli samples shall be collected by grab sample on a weekly basis for the duration of this resource consent.

26. All wastewater quality analyses shall be undertaken by an IANZ accredited or equivalent laboratory. All methods used shall be appropriate for the wastewater analyses undertaken.

27. This resource consent is granted by the Waikato Regional Council subject to its officers or agents being permitted access to the property at all reasonable times for the purpose of carrying out inspections, surveys, tests, measurements or taking samples.

28. The consent holder shall forward the results of the monitoring undertaken as required by this resource consent to the Waikato Regional Council, via electronic means, within one month of

receipt of the results by the consent holder. As far as practicable the consent holder shall compile a monthly report of this required data so that the results are provided to the Waikato Regional Council via one document.

29. The consent holder shall notify the Waikato Regional Council within 24 hours (where practicable) of the consent holder becoming aware of the limits specified in Conditions 19, 20 and 21 of this resource consent being exceeded, or any accidental discharge, plant breakdown or other circumstance which is likely to result in the limits of this consent being exceeded. The consent holder shall, within 10 working days of the incident occurring, provide a written report to the Waikato Regional Council, identifying the breach, possible causes and steps to ensure future compliance.

30. The consent holder shall as soon as reasonably practicable, notify the Medical Officer of Health, Auckland/Waikato Fish & Game NZ, the Mangapiko Stream Care Group (if such a group is known to exist at the time), and the Waikato Regional Council of an event at the wastewater treatment plant that may in itself, or as a consequence of an event, have a significant adverse effect on the quality of the water within the Mangapiko Stream, and/or the Waipa River and Waikato River at downstream abstraction points for public water supply.

    The consent holder shall record the reasons why the situation occurred, the actions taken by the consent holder and an assessment of what measures can be adopted in the future to minimise such occurrences and provide a report to the Waikato Regional Council and the Medical Officer of Health addressing this matter within 10 working days.

Mangapiko Stream Effects Monitoring

31. Within one year of the commencement of this resource consent, the consent holder shall provide to the Waikato Regional Council a Mangapiko Stream Effects Monitoring Plan. The objective of the Effects Monitoring Plan is to provide a framework that outlines how Condition 33 will be achieved, and as a minimum shall include all the tests set out in condition 33. The plan shall be reviewed, updated and provided to the Waikato Regional Council every five years for the duration of this resource consent.

32. The consent holder shall provide a Mangapiko Stream Effects Monitoring Report to the Waikato Regional Council within three years of the commencement of this resource consent and subsequently at five yearly intervals for the duration of this resource consent. The Effects Monitoring Report shall, as a minimum, meet the following requirements:

    (a) Provide an assessment of macroinvertebrate communities, physical habitat quality, macrophytes and periphyton within the Mangapiko Stream at four sites (two upstream and two downstream of the treated wastewater discharge);

    (b) Provide a water quality assessment, at a minimum of one site upstream, and one site downstream (after complete mixing, which is generally at least 400m downstream of the treated wastewater discharge) for dissolved oxygen, total suspended solids, ammoniacal-N, nitrite-N, nitrate-N, dissolved reactive phosphorus, total phosphorus, total nitrogen, E coli, electrical conductivity and turbidity. The wastewater discharge shall also be sampled on the same day for the above parameters.

    (c) Shall be undertaken by person(s) suitably qualified in freshwater ecology and water quality;

    (d) Shall be undertaken during the same season (summer) and not within two weeks of a flood event; and

    (e) Shall report on any significant trends or observations within the Mangapiko Stream over time.

    (f) Shall include a diurnal dissolved oxygen survey at an upstream and a downstream site (after complete mixing) as a minimum. The dissolved oxygen survey shall monitor

stream dissolved oxygen concentrations continuously for at least seven consecutive days. For the purposes of this consent "continuously" means a DO measurement and record at least every 15 minutes.

The four sites referred to in (a) above are those set out in the AEE (2015), Supporting Document 4 (Ecological Survey of Mangapiko Stream, prepared by MWH), but may be located elsewhere if agreed in writing by Waikato Regional Council.

The above effects monitoring may be amended after consultation between the consent holder and Waikato Regional Council, and the written approval of the Council.

Advice Note: The consent holder shall liaise with Fonterra Limited (Te Awamutu site) to seek to align the timing of the stream surveys as closely as possible. For the avoidance of doubt, the alignment of monitoring between the two parties is a preferred outcome, not a compliance matter.

Riparian Planting

33. The consent holder shall undertake a minimum of 3 kilometres length of riparian planting within the following land alongside the Mangapiko Stream (as shown in the indicative plan included as an attachment to this consent):

    (a) Pt Allot 317 Mangapiko PSH

    (b) Lot 5 DPS 5425

    (c) Lot 1 DPS 20155

    Appendix 2 to this consent shows the location of the above riparian planting areas.

34. The riparian planting required in accordance with Condition 33 shall be:

    (a) Contained within properties owned by the consent holder;

    (b) Undertaken within five years of the commencement of this consent;

    (c) Of a width no less than three metres from the top of the stream bank;

    (d) At a density of no less than 2,500 stems per hectare;

    (e) A minimum of 80% of native plant species appropriate to the characteristics of the site and catchment (e.g. climate, size of stream, flood risk, erosion, local native flora, potential, and slope);

    (f) Maintained by the consent holder (including replacement of losses and control of pest plant species) accordingly during the term of the consent.

35. Within 12 months of the commencement of this resource consent, the consent holder shall provide to the Waikato Regional Council and Auckland/Waikato Fish and Game a Riparian Planting Management Plan. The objective of the Riparian Planting Management Plan is to provide a framework that outlines how Conditions 33 and 34 shall be achieved. The consent holder shall invite comments from Auckland/Waikato Fish and Game on the content of the Riparian Planting Management Plan prior to submitting the Plan to the Waikato Regional Council, and these comments shall be also be made available to the Waikato Regional Council.

DISCHARGE PERMIT TO DISCHARGE CONTAMINANTS TO AIR
Odour

36. Subject to Condition 37, the consent holder shall operate, manage and maintain the wastewater treatment plant in a manner that does not result in any offensive or objectionable odours that have an adverse effect at or beyond the designated boundary of the wastewater treatment plant as set out in the Waipa District Plan.

    Advice Note:

For the purpose of this consent, the Waikato Regional Council will use the guidelines for assessment (presently) in chapter 6.4 of the Waikato Regional Plan to determine whether adverse effects are occurring from the discharge of odour.

37. In the event that works are to be undertaken at the wastewater treatment plant that have potential to give rise to significant odour, or a plant breakdown occurs that has potential to give rise to significant odour for more than 24 hours, notice shall be served by the consent holder on all persons who could be adversely affected and the Waikato Regional Council, informing these parties of the timing and nature of the breakdown/works. Such notice shall be served at least ten days prior to the commencement of the works, if applicable.

Odour Management Plan

38. The consent holder shall prepare an Odour Management Plan. This Plan shall be prepared by a suitably qualified and experienced person and shall detail the methods and operational procedures adopted by the consent holder to ensure compliance with the conditions of this consent. The Odour Management Plan may form part of the OMP. As a minimum the Odour Management Plan shall address the following matters:

    (a) A description of the wastewater treatment plant facilities;

    (b) A description of routine inspection, monitoring and maintenance procedures to be undertaken to ensure effective plant operation and compliance with consent conditions;

    (c) Details of operational and maintenance procedures to minimise odour release from the treatment facilities;

    (d) Details of contingency plans and procedures to address power or equipment failure at the treatment plant;

    (e) Details of the odour complaints procedure, record keeping and response procedure.

    This Plan shall be lodged with Waikato Regional Council within six months of commencement of this consent for certification. This Plan shall also be reviewed, and updated as a result, every five years and as required as a result of any changes in plant operation or management. An electronic copy of the Odour Management Plan shall be provided to Waikato Regional Council within 10 working days of a request to do so.

    Advice Note:

    The Waikato Regional Council reserves the right to make comment on the Odour Management Plan submitted and any subsequent changes to the Plan.

39. At the same time as the Odour Management Plan is lodged with Waikato Regional Council for certification, the consent holder shall provide the Tāngata Whenua Liaison Group a copy of the Odour Management Plan for their information.

40. The consent holder shall notify the Waikato Regional Council of any event/incident, including power, mechanical or process failure, leading to a significant emission of odour from the plant, as soon as reasonably practicable (0800 800 401) and at least within 24 hours of the event/incident being brought to the attention of the consent holder, or the next working day if the event/incident occurred on the weekend or a public holiday. A written report shall be forwarded to the Waikato Regional Council within ten working days of the event/incident occurring describing the event/incident, the reasons for it occurring, its consequences (including the nature of any complaints), the measures taken to remedy or mitigate its effects, and any measures taken to prevent a recurrence of the event/incident, including any changes proposed to the Odour Management Plan.

DISCHARGE PERMIT TO DISCHARGE CONTAMINANTS TO WATER AS A CONTINGENCY DISCHARGE

41. The contingency discharge of treated wastewater shall not be used during routine maintenance, and may only occur when either the hydraulic capacity of the wastewater treatment plant has been overwhelmed by excessive influent flows caused by extreme rain events, or a consequence of a treatment plant failure. For the purposes of this consent, a contingency discharge does not include any discharge from a sewer manhole, pipeline, or any other part of the sewerage system outside of the wastewater treatment plant.

    Note: It is expected that a contingency discharge is likely to occur, statistically, less than once every ten years.

42. The maximum discharge volume shall not exceed 21,000 cubic metres of wastewater per day.

43. The consent holder shall install a high level alarm system on the peak storage pond overflow, to enable plant operators to monitor when the contingency may overflow prior to it discharging.

44. The consent holder shall, as soon as reasonably practicable, notify the Waikato Regional Council, the Medical Officer of Health (Public Health Unit), Fish & Game NZ, the Mangapiko stream care group (if such a group is known to exist at the time of the contingency discharge), and the Tangata Whenua Liaison Group (see Condition 14) of the contingency discharge.

45. In the event that a contingency discharge occurs, the consent holder shall provide a report to the Waikato Regional Council within 10 working days of the discharge occurring detailing:

    (a) The reasons why the contingency discharge was utilised;

    (b) The length of time the contingency discharged was utilised;

    (c) The quantity of discharge to the contingency system; and

    (d) Measures taken to prevent recurrence of the use of the contingency system.

DISCHARGE PERMIT TO DISCHARGE CONTAMINANTS TO LAND (SEEPAGE)

46. Seepage from the pond shall generally occur as per the application documents listed in Condition 1, and in particular the Addendum dated November 2017, Appendix D (Te Awamutu Wastewater pond assessment of discharge to land and groundwater).

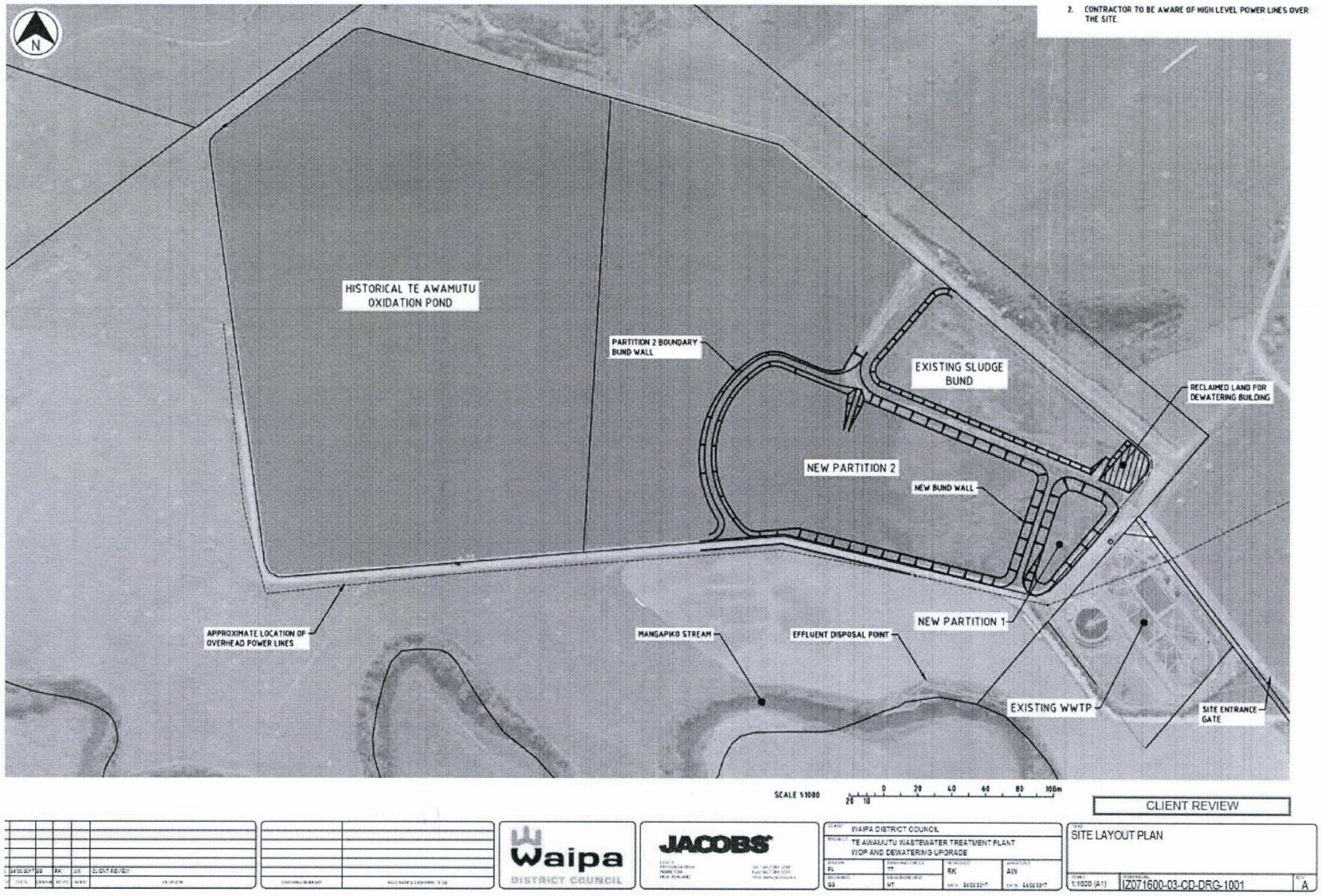
47. The consent holder shall manage and maintain the integrity of the former oxidation pond, sludge storage area and other structures that form any part of the wastewater treatment process so as to minimise the volume of seepage from such structures as far as practicable.

48. The consent holder shall inform Waikato Regional Council in writing at least 10 working days prior to the commencement of any activity within the former oxidation pond and sludge storage area which may impact on the rate of seepage.

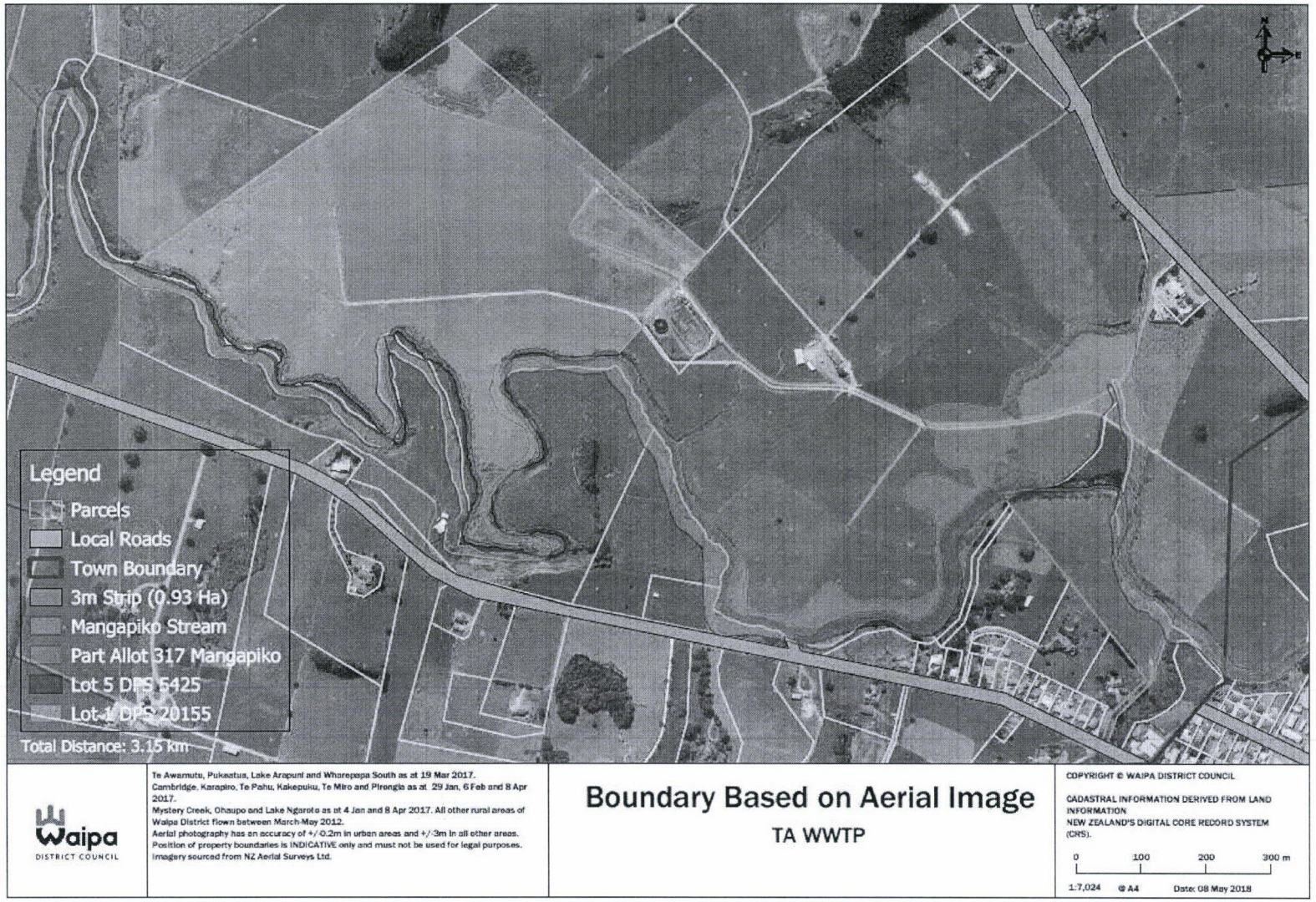
49. The contingency pond will remain empty of wastewater except when the wastewater flow has exceeded the capacity of the wastewater treatment plant, and wastewater has flowed into the contingency pond. The ponded wastewater shall be returned as soon as capacity within the treatment plant process becomes available.

Note: Appendix 1.1 of this consent shows a map of the area.

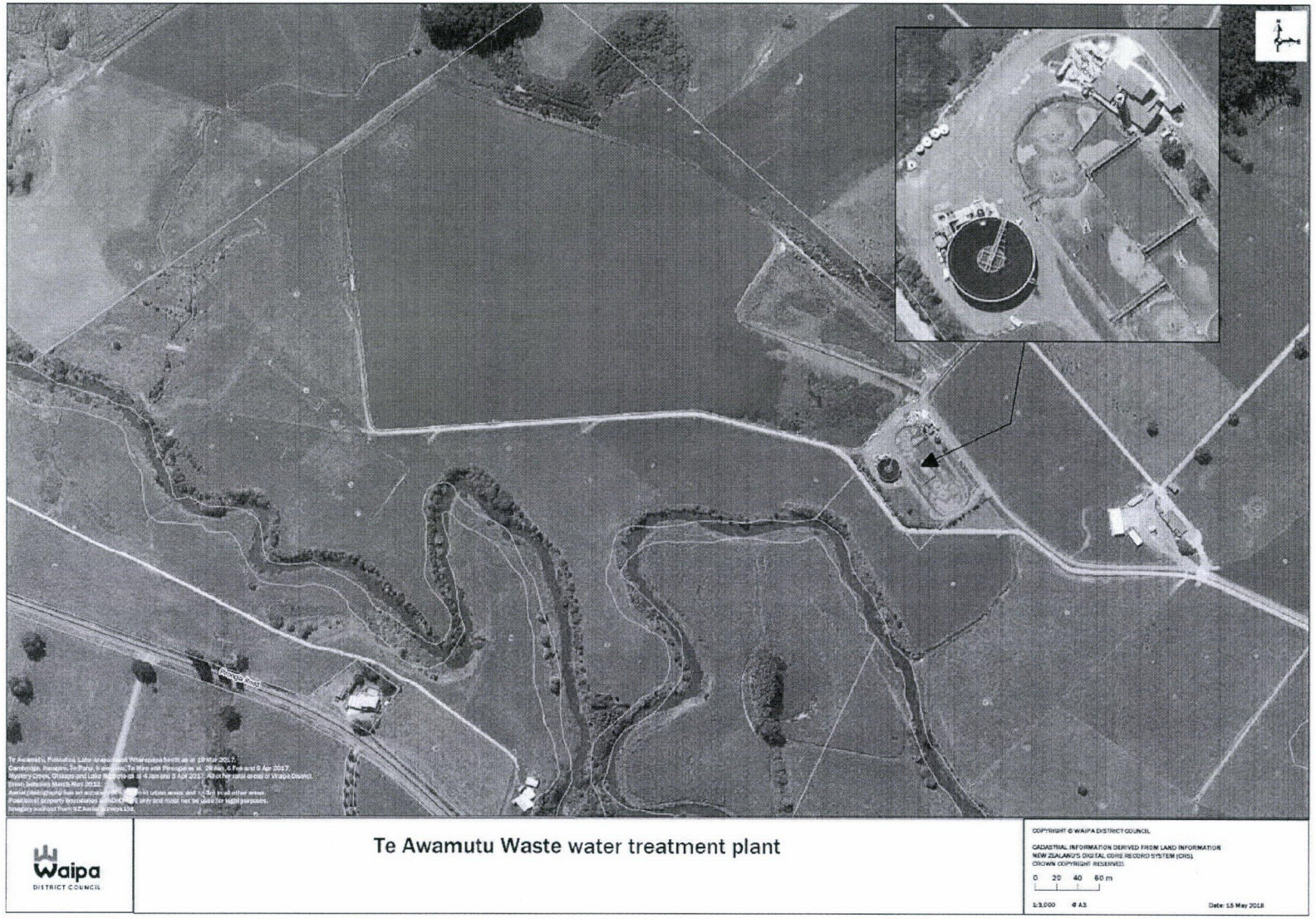
1.1.1 APPENDIX 1.1: Site Layout Plan



1.1.2 APPENDIX 1.2: Location of the riparian planting areas (refer to Doc#12501758 to zoom in for clarity)



1.1.3 APPENDIX 1.3 WWTP Effluent Sampling Location



Appendix 3: Copies of Council's current comprehensive municipal stormwater discharge consents

Resource Consent Certificate

Resource Consent Number: 105460

File Number: 60 14 79A

Pursuant to the Resource Management Act 1991, the Waikato Regional Council hereby grants consent to:

Waipa District Council
Private Bag 2402
TE AWAMUTU 2400

(hereinafter referred to as the Consent Holder)

Consents type:	Discharge permit
Consent subtype:	Discharge to water
Activity authorised:	Divert & discharge urban stormwater runoff, and associated contaminants, at multiple locations to Lake Te Ko Utu, Addison St Stream, Arnold St/Cambridge Rd Stream, Karapiro Stream, Mangaone Stream, Waikato River, Lake Karapiro & land, and use discharge structures, within the vicinity of Cambridge/Leamington and Karapiro urban areas
Location:	Cambridge/Leamington and Karapiro
Map References:	NZMS 260 S15: 280-640, T15: 335-615
Consent duration:	Granted for a period expiring on 31 October 2022

Subject to the conditions overleaf:

Cnr Paora Hapi & Titiraupenga Streets, PO Box 501, TAUPO ph +64-7-378 6539
13 Opatito Road, PAEROA fax +64-7-862 8376
HEAD OFFICE ph +64-7-856 7184
PO Box 4010, 0800 800 401
401 Grey Street, fax +64-7-856 0551
HAMILTON EAST, New Zealand

CONDITIONS

General administration

1) This consent is subject to the General Conditions listed in Schedule 1.

Specification of documentation that municipal stormwater system diversion and discharge activities are to be in accordance with

2) All stormwater diversion and discharge activities relating to the Cambridge/Leamington and Karapiro municipal stormwater systems shall be operated and maintained in general accordance with the application for this resource consent, the document titled "Waipa District Council - Cambridge and Karapiro Stormwater Catchment Management Plan" (July 2002), the letter from Waipa District Council to Environment Waikato dated 11 September 2001, titled "Stormwater Consents" and as identified in the resource consent conditions in Schedule 1, and the resource consent conditions below.

Identification and location of activities

3) Except as provided for by condition 1 of Schedule 1 – General Conditions, all stormwater diversion and discharge activities that are authorised by this consent relate to the Waipa District Council municipal stormwater system as constructed at the commencement of this resource consent, and as shown in Appendix III: Catchment Maps in the document titled "Waipa District Council - Cambridge and Karapiro Stormwater Catchment Management Plan, 2002".

Monitoring programme

4) The consent holder shall retain appropriately qualified and experienced persons to prepare a monitoring programme. The objectives of the monitoring programme are to:

- Investigate the actual and potential adverse effects of the municipal stormwater system's diversion and discharge activities on the receiving environment;
- Provide information that will be used to identify stormwater management methods to be implemented to avoid, remedy or mitigate actual or potential adverse effects on the receiving environment;

  Determine compliance with the conditions of this resource consent.

As a minimum, the monitoring programme shall include:

a) Monitoring of suspended solids, Biochemical Oxygen Demand, Total Phosphorus, Total Nitrogen, Ammonical Nitrogen, E-coli, Total Petroleum Hydrocarbons, lead, zinc and copper at the Arnold Street and the Oliver Street discharge outlets, and the main Aotearoa Industrial Park discharge outlet once developed. Such monitoring shall be undertaken during the months February, June and October, and as far as practicably possible, under the following conditions: during the first flush of a medium intensity rainfall event of at least 10 minute duration, following at least one week of dry weather. After nine series of monitoring results have been recorded (i.e. three years of monitoring), the frequency and locations of monitoring may be reduced to a minimum of one discharge outlet monitored annually, following written acknowledgement from the Waikato Regional Council, having had regard to consistency and significance of monitoring data collected.
b) Monitoring of scour and erosion effects due to stormwater diversions and discharges.
c) Monitoring for visual signs of contaminants in stormwater (conspicuous oil or grease films, scums or foams, floatable suspended materials, conspicuous change in colour or visual clarity).
d) Monitoring to identify municipal stormwater system structures that are impeding the upstream and downstream movement of fish and other aquatic fauna.
e) Monitoring to determine if municipal stormwater system catchpits are fitted with stormwater management devices that are capable of capturing and retaining the majority of gross pollutants and suspended solids, and if these are maintained in good working order.
f) Monitoring to determine appropriate street and catchpit cleaning operations and frequencies.

g) Monitoring to identify informal sewerage system connections to the municipal stormwater system, and to gauge sewage pump station overflow frequencies, and monitoring or modelling of volumes of sewage discharged to the municipal stormwater system.
h) Monitoring to determine municipal stormwater system collection points that are most at risk from non-routine contaminant discharges to the municipal stormwater system.

The monitoring programme shall be to a standard acceptable to the Waikato Regional Council acting in a technical certification capacity, and shall be forwarded to the Waikato Regional Council within three months of the commencement of this consent. The consent holder shall review the monitoring programme on an annual basis and shall forward a copy of any updated monitoring programme to the Waikato Regional Council for approval within one month of any updates being made.

Water quality sample analyses

5) All water quality sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods For The Examination Of Water And Waste Water, 1998" 20th edition by A.P.H.A. and A.W.W.A. and W.E.F., or any other method approved in advance by the Waikato Regional Council acting in a technical certification capacity.

Stormwater management options – Cambridge North Deferred Residential Zone

6) The consent holder shall investigate potential stormwater management options for the Cambridge North Deferred Residential Zone. The consent holder shall refine potential stormwater management options in consultation with the Waikato Regional Council and New Zealand Milk Products - Hautapu. The preferred management options will be subject to the written approval of the Waikato Regional Council acting in a technical certification capacity, to confirm that they are consistent with the conditions of this consent. In the event of the management options not being consistent with the conditions of this consent, the consent holder shall apply to the Waikato Regional Council for a change to the conditions of this consent, subject to section 127 of the Resource Management Act.

Stormwater management options – Lake Te Ko Utu

7) The consent holder shall investigate and implement management options aimed at mitigating and remedying the adverse effects of stormwater on Lake Te Ko Utu. In this regard, the consent holder shall consult with the Waikato Regional Council and the Department of Conservation to ensure that preferred options are consistent with best management practices. The preferred management options will be subject to the written approval of the Waikato Regional Council acting in a technical certification capacity, to confirm that the chosen options are consistent with the conditions of this consent. The consent holder shall determine and implement the preferred management options within the first two years of this consent being granted.

Arnold Street / Cambridge Road Gully Stream – fish passage

8) The consent holder shall investigate and implement measures to enable the upstream and downstream movement of fish in the Arnold Street / Cambridge Road Gully Stream. Where fish passage devices are required, they shall be effectively designed and constructed to the satisfaction of the Waikato Regional Council acting in a technical certification capacity. All necessary measures shall be determined and implemented within the first two years of this consent being granted.

Stormwater Management Plan

9) The consent holder shall prepare a Stormwater Management Plan for Cambridge/Leamington and Karapiro, which shall be submitted to the Waikato Regional Council for approval within 12 months of the commencement of this consent. The Plan shall be developed in consultation with local tangata whenua and other interested sectors of the community. The Stormwater Management Plan shall detail the procedures, initiatives and stormwater management systems that will be implemented to operate in accordance with the conditions of this resource consent, and as a minimum shall describe the following:

a) The relationship and integration of the Stormwater Management Plan with other Waipa District Council planning instruments and regulatory systems, including existing and proposed planning & regulatory controls that will be utilised to assist the control of routine and non-routine contaminant discharges to the stormwater system;
b) Contributing catchments and the existing land uses, catchment receiving waters (including physical, chemical and biological characteristics, riparian vegetation, existing uses and values) and the municipal stormwater system characteristics (a diagram showing locations of the reticulation system, designated overland flow paths, treatment and disposal systems should be included);
c) Potential risks to stormwater quality in the Cambridge and Karapiro stormwater catchment (i.e. resulting from routine and non-routine contaminant discharges to the stormwater system);
d) Stormwater management systems and implementation methods to avoid, remedy or mitigate **routine** contaminant discharges to the municipal stormwater system;
e) Contingency measures and reporting systems to be implemented in the event of **non-routine** contaminant discharges from the municipal stormwater system;
f) Methods which will be used to manage risks to stormwater quality, streambed scouring and erosion, and adverse flooding;
g) Strategies for identifying municipal stormwater system structures that are impeding the upstream or downstream movement of fish, and system upgrades and implementation methods to address these;
h) Initiatives and implementation methods for improving the aesthetic appearance of drainage structures and stormwater detention areas;
i) Street cleaning operations;
j) Stormwater management devices (including catchpits) and methods for ensuring stormwater management devices are constructed and maintained in accordance with the Auckland Regional Council Technical Publication No 10 "Stormwater Treatment Devices – Design Guideline Manual" (ARC, 1993) or any subsequent update of this manual;
k) Management and operational procedures to avoid contaminants discharging from the municipal stormwater system as a result of the various municipal operation and maintenance activities;
l) Investigations and remediation programmes to discontinue informal sewerage system connections to the municipal stormwater system;
m) Operation and maintenance programmes to minimise the discharge of municipal sewerage system contaminants to the municipal stormwater system;
n) Methods which will be encouraged by the District Council to minimise the effects of stormwater discharges from new subdivisions;
o) Methods for ensuring consideration of Low Impact Design principals (as contained in the Auckland Regional Council Technical Publication No 124 "Low Impact Design Manual for the Auckland Region" (ARC, 2000) for proposed greenfield development sites;
p) Methods for identifying and implementing Best Practicable Options to manage the municipal stormwater system and avoiding adverse effects on aquatic ecosystems;
q) Methods for implementing stormwater management education initiatives;
r) A prioritised schedule for implementing the procedures, initiatives and stormwater management systems that are identified in the Stormwater Management Plan.

Reporting

10) The consent holder shall provide to the Waikato Regional Council a written management report by 31 October each year that this resource consent is current. As a minimum this report shall include the following:

a) A summary of the monitoring results required by condition 4 of this resource consent, and a critical analysis of the information in terms of compliance and environmental effects;
b) A comparison of data with previously collected data identifying any emerging trends;
c) Comment on compliance with Schedule 1 – General Conditions, including any reasons for non-compliance or difficulties in achieving compliance;
d) Details of any non-routine contaminant discharge incidents that have been responded to;
e) A summary of any complaints received regarding municipal stormwater diversion and discharge activities;
f) Details of community liaison initiatives and a summary of any feedback received from the community;
g) Details of any stormwater management initiatives that have been undertaken, or are proposed, to improve the environmental performance of the municipal stormwater system; (e.g. education initiatives, regulatory initiatives, implementation of Best Practicable Options);
h) Recommendations on alterations to the monitoring required by condition 4 of this resource consent;
i) Any other issues considered important by the consent holder.

Dated at Hamilton this ***15th*** *day of* ***November 2002***.

For and on behalf of the
Waikato Regional Council

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Advice Notes

1. This resource consent does not give any right of access over private or public property. Arrangements for access must be made between the consent holder and the property owner.

2. The reasonable costs incurred by the Waikato Regional Council arising from supervision and monitoring of this consent will be charged to the consent holder. This may include but not be limited to routine inspection of the site by Waikato Regional Council officers or agents, liaison with the consent holder, responding to complaints or enquiries relating to the site, and review and assessment of compliance with the conditions of consent.

3. For new municipal stormwater system diversion and discharge activities to be authorised by this consent, where these result from the upgrading of the existing municipal stormwater system, or new subdivisions developed after the granting of this consent, either:

    a) Condition 1 of the general conditions in Schedule 1 is satisfied, as confirmed in writing by the Waikato Regional Council pursuant to Condition 1; or

    b) Where the new diversion and discharge activities do not satisfy Condition 1 of the general conditions in Schedule 1, a change to conditions of this consent has been granted and it expressly authorises and allows for the new diversion and discharge activities.

4. New municipal stormwater system diversion and discharge activities may require separate resource consents, particularly during the period of their construction, to ensure that appropriate environmental effects avoidance and mitigation measures are provided for. When such activities are established and operating in accordance with their respective consent conditions, the consent holder may seek via the mechanism provided by Condition 1 in Schedule 1 of this consent, or via a change to consent as described in note 3 above, the authorisation of the new diversion and discharge activities by this consent.

5. This consent does not authorise any works in a watercourse, nor any other activity for which further consents may be required under sections 13, 14 and 15 of the RMA, or the provisions of the Waikato Regional Plan.

6. The consent holder is responsible for compliance with the conditions of this consent, except where statutory defences as stated in section 341 of the RMA apply.

Schedule 1 – General Conditions

The grant of consent no's 105460, 105461, 105462, 105463, 105464 and 105465 is subject to the following general conditions which shall apply to each consent:

New municipal stormwater system diversion or discharge activities

1) Any new municipal stormwater system diversion or discharge activity commenced after the granting of this consent shall be authorised by this consent when the consent holder is notified in writing by the Waikato Regional Council to this effect. Such notification shall be provided on receipt of information showing to the satisfaction of the Waikato Regional Council acting in a technical certification capacity, that:
   a) The new diversion or discharge is consistent with the conditions of this consent;
   b) The new diversion or discharge does not increase peak discharge rates to receiving waters above those that would occur at the time of application for this consent, unless it is demonstrated that there shall be no additional adverse effects on the environment or downstream properties as a result of such increase.

Consent holder's representative

2) The consent holder shall appoint a representative who shall be the Waikato Regional Council's principal contact person in regard to matters relating to this resource consent. The consent holder shall inform the Waikato Regional Council of the representative's name and how they can be contacted. Should that person change during the term of this resource consent, the consent holder shall within 5 working days inform an officer of the Waikato Regional Council, and shall also give written notice to the Waikato Regional Council of the new representative's name and how they can be contacted.

Administrative charges

3) The consent holder shall pay to the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act.

Stormwater Quantity & Receiving Environment

Changes in municipal stormwater system diversion and discharge activities

4) The consent holder shall not undertake any changes to the municipal stormwater system diversion and discharge activities which would increase the scale or intensity of actual or potential adverse effects of those activities on the receiving environment.

Adverse effects of erosion

5) The consent holder shall be responsible for the structural integrity and maintenance of stormwater system diversion and discharge structures, and for any erosion control works that become necessary to preserve the integrity and stability of the river/stream channels and/or to control erosion as a result of the exercise of this resource consent.

Surface water flooding

6) The consent holder shall ensure that the municipal stormwater system is maintained in such a way as to reasonably minimise the potential for adverse flooding effects to land and property resulting from the stormwater diversion and discharge activities.

Significant adverse effects on existing aquatic ecosystems

7) The consent holder shall manage the municipal stormwater system such that the stormwater diversion and discharge activities do not result in significant adverse effects on aquatic ecosystems.

Drainage structures – fish passage

8) All drainage structures (e.g. culverts, dams, weirs) that have been purposefully placed in, on, under or over the beds of receiving waters to manage or control municipal stormwater system diversion and discharge activities shall allow for the upstream and downstream movement of fish and other aquatic fauna under all flow conditions. For the purposes of condition 8, where such structures currently inhibit fish movement the Stormwater Management Plan shall identify appropriate upgrades to be carried out. All fish passage devices shall be effectively designed and constructed to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.

   Note: When considering municipal stormwater system drainage structures for the purposes of conditions 8, the consent holder shall consult with the Department of Conservation, in accordance with Part VI of the Freshwater Fisheries Regulations 1983.

New discharge structures

9) All new discharge structures and energy dissipating devices shall be designed and constructed to minimise the potential for erosion and scour to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.

Aesthetic improvements to drainage structures

10) As far as practicable, the consent holder shall maintain stormwater system drainage structures in a visually unobtrusive manner, such as via the use of screening plants.

Flooding, erosion and sedimentation effects to private land and drainage systems

11) The consent holder shall be responsible for avoiding, remedying and mitigating any flooding, erosion or sedimentation effects to private land and drainage systems where these effects are clearly attributable to the discharge. To this end the consent holder shall:
   a) Keep a record of complaints associated with the discharge of stormwater to private land;
   b) Seek to consult with any affected landowner with the intent of reaching agreement on methods or works to remedy or mitigate the adverse effects.

   Note: For the purposes of condition 11, temporary flooding effects caused by storm events in excess of the 20% AEP event, and areas that naturally pond or hold water as a consequence of the topography shall be exempt from this condition.

Stormwater Quality & Receiving Environment

General municipal operation and maintenance activities

12) All municipal operation and maintenance activities such as:
   a) Stormwater reticulation operation and maintenance activities;
   b) Water and wastewater systems operation and maintenance activities;
   c) Roading and footpath management and maintenance activities;
   d) Parks and gardens management and maintenance activities;
   e) Refuse collection activities;
   f) Building maintenance activities;
   g) Vegetation control activities;

   shall be undertaken and managed to minimise contaminants discharging from the municipal stormwater system to the receiving environment.

   Note: Separate resource consents may be required as a result of the need to undertake ancillary works associated with the activities described in conditions 5 to 12 of this Schedule. All such consents shall be obtained by the consent holder at their sole expense, prior to any ancillary works being undertaken.

Street and catchpit cleaning operations

13) The consent holder shall carry out regular street and catchpit cleaning operations to minimise the volume of stormwater contaminants from entering and discharging from the municipal stormwater system to the receiving environment. When determining appropriate street sweeping frequencies, the consent holder shall take account of the land use characteristics within respective stormwater sub-catchments, the intensity of various land use activities that are taking place, and any means other than street sweeping operations that are currently being used to control and/or treat contaminated stormwater.

Municipal stormwater system catchpits

14) All stormwater catchpit facilities, that are associated with the municipal stormwater system, shall be capable of capturing and retaining the majority of gross pollutants and suspended solids.

Stormwater management device maintenance

15) All stormwater management devices associated with the municipal stormwater system shall be maintained in good working order and shall be managed to provide optimal stormwater contaminant removal efficiency at all times. The consent holder shall carry out all stormwater management device maintenance as necessary, and in particular within one week of receipt of notice in writing from the Waikato Regional Council, acting in a technical certification capacity, to do so. Unless otherwise specified in relevant design manuals, 'optimal stormwater contaminant removal efficiency' shall be at least 75% suspended solids removal.

Informal sewerage system connections to the municipal stormwater system

16) The consent holder shall undertake investigation and remediation programmes that identify and discontinue informal sewerage system connections to the municipal stormwater system.

Formal sewerage system connections to the municipal stormwater system

17) Where formal sewerage system connections to the municipal stormwater system make up part of the municipal sewerage system design and operation, the consent holder shall undertake to minimise as far as practicable, the discharge of sewerage system contaminants to the municipal stormwater system.

Routine contaminant discharges to the municipal stormwater system

18) The consent holder shall undertake investigations to identify and address routine contaminant discharges to the municipal stormwater system from contaminated land and high risk facility sites as listed in section 3.5.12 of the Proposed Waikato Regional Plan. In circumstances where site owners are routinely discharging contaminants to the municipal stormwater system, or contaminants to land that could routinely discharge to the municipal stormwater system during rain events, the consent holder shall liaise with site owners to determine appropriate stormwater management measures that will be implemented to avoid, or if avoidance is impracticable, to remedy or mitigate these contaminant discharges.

Non-routine contaminant discharges to the municipal stormwater system

19) On becoming aware of a non-routine contaminant discharge from the municipal stormwater system, the consent holder shall seek to identify the source of the discharge and inform the Waikato Regional Council of the discharge incident. On discovering the source of non-routine contaminant discharges to the municipal stormwater system, the consent holder shall make all reasonable attempts to ensure that further contaminant discharges are prevented. The consent holder shall provide to the Waikato Regional Council information as required to support any subsequent enforcement action taken by the regional council, against the discharger. For the purposes of this consent, a non-routine contaminant discharge to the municipal stormwater system is considered to be either an accidental spillage or a deliberate contaminant discharge, of which the consent holder has limited ability to control.

Non-routine contaminants discharged from the municipal stormwater system that result in adverse effects to the receiving environment

20) In circumstances where non-routine contaminants are discharged from the municipal stormwater system that result in actual or potential adverse effects on the receiving environment, the consent holder shall assist the Waikato Regional Council, and any other emergency response agency that becomes involved, to remedy or mitigate against further actual or potential adverse effects on the receiving environment.

Connections to the municipal stormwater system

21) The consent holder shall be responsible for accepting connections to the municipal stormwater system, and, where there is a risk of routine and/or non-routine contaminant discharges to the stormwater system, for ensuring that all such connections incorporate appropriate stormwater management systems that are capable of:

a) Minimising all contaminants such that water quality conditions of this consent are complied with (specifically conditions 22 to 26), and
b) Preventing accidental releases of any hazardous substances to the stormwater system, or
c) Reducing all such hazardous substances in stormwater, prior to discharge to receiving waters, to concentrations that will not result in contamination of either water or sediments to such a degree that is likely to result in adverse effects on aquatic life or on the suitability of water for human consumption after treatment.

Floatable contaminants

22) As far as practicable, the consent holder shall manage the stormwater reticulation system to prevent the discharge of any substance that will cause the production of conspicuous oil, or grease films, scums or foams, or floatable suspended materials outside a 10 metre radius of the point of discharge.

Suspended solids

23) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of any substance that will cause a conspicuous change in the colour or visual clarity of receiving waters, or increase the concentration of suspended solids in receiving waters by more than 10 percent. For the purpose of this condition, the point of compliance is any point in the receiving water which is 50 metres downstream of the discharge outlet.

Hazardous substances

24) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of concentrations of hazardous substances that are likely to cause adverse effects on aquatic life, or the suitability of water for human consumption after treatment. Where a question arises as to whether the concentration of any particular hazardous substance breaches this condition, it shall be determined through the application of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000), and decided on the basis of its corresponding trigger value within the 95% level of protection range that is expressed in section 3.4 of these guidelines.

Micro-organisms

25) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of concentrations of micro-organisms to receiving waters that are likely to adversely affect human health.

Significant adverse effects on existing aquatic ecosystems

26) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent discharges that will cause:

a) Changes in dissolved oxygen;
b) Changes in pH;
c) Increases in deposition of bed sediments;
d) Increases in undesirable biological growths;
e) Increases in water temperature;
f) Discharges of any contaminants;

to such an extent that would result in adverse effects to receiving water aquatic ecosystems. As a minimum, the discharge shall not cause the following effects in receiving waters: dissolved oxygen levels to fall below 80% of saturation, pH to fall below 6 or exceed 9, suspended solids to smother benthic organisms, undesirable biological growths to be visible to the naked eye as plumose growths or mats, water temperature to change by more than 3°C or exceed 25°C, contaminant levels to exceed the 95% level of protection range that is expressed in section 3.4 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, 2000).

Urban Development Planning

Low Impact Design principles

27) The consent holder shall ensure that for all proposed "greenfield" site developments, consideration is given to the application of Low Impact Design principals as contained in the Auckland Regional Council Technical Publication No 124 "Low Impact Design Manual for the Auckland Region" (ARC, 2000), or any subsequent update of this manual.

Stormwater management devices

28) The consent holder shall ensure that for all proposed urban development sites ('brownfield' and 'greenfield' sites), consideration is given to the application of stormwater management devices. Where applicable, these shall be constructed and maintained in accordance with the Auckland Regional Council Technical Publication No 10 "Stormwater Treatment Devices – Design Guideline Manual" (ARC, 1993), or any subsequent update of this manual.

General Management

Best Practicable Options

29) At all times, the consent holder shall seek to implement Best Practicable Options for minimising actual and potential adverse effects on the receiving environment that result from the municipal stormwater system diversion and discharge activities, and urban development activities.

Review clause

30) The Waikato Regional Council may, within three months of the 3rd, 6th, 10th and 15th anniversaries of the commencement of this consent, serve notice on the consent holder under section 128(1) of the Resource Management Act 1991, of its intention to review the conditions of this resource consent for the following purposes:

a) To review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or

b) If necessary and appropriate, to require the holder of this resource consent to adopt the Best Practicable Option to remove or reduce adverse effects on the environment that are resulting from municipal stormwater system diversion and discharge activities; or
c) To review the adequacy of and the necessity for monitoring undertaken by the consent holder.

Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.

Provision for change to consent

31) The consent holder may apply to change or cancel any condition of this resource consent (other than a condition as to the duration of the consent) under section 127 of the Resource Management Act in the month following each anniversary of the granting of this consent.

Resource Consent Certificate

Resource Consent Number: 105461

File Number: 60 55 65A

Pursuant to the Resource Management Act 1991, the Waikato Regional Council hereby grants consent to:

Waipa District Council
Private Bag 2402
TE AWAMUTU 2400

(hereinafter referred to as the Consent Holder)

Consent type:	Discharge permit
Consent subtype:	Discharge to water
Activity authorised:	Divert and discharge urban stormwater runoff, and associated contaminants, to the Mangapiko Stream, Mangaohoi Stream, Ruapahau Stream and land, and use discharge structures, within the vicinity of Te Awamutu urban area that is reticulated by the Te Awamutu municipal stormwater system
Location:	Te Awamutu Urban Area
Map Reference:	NZMS 260 S15: 145-523
Consent duration:	Granted for a period expiring on 31 October 2022

Subject to the conditions overleaf:

Environment Waikato
REGIONAL COUNCIL

105461

CONDITIONS

General administration

1) This consent is subject to the General Conditions listed in Schedule 1.

Specification of documentation that municipal stormwater system diversion and discharge activities are to be in accordance with

2) All stormwater diversion and discharge activities relating to the Te Awamutu municipal stormwater system shall be operated and maintained in general accordance with the application for this resource consent, the document titled "Waipa District Council – Te Awamutu Stormwater Catchment Management Plan" (July 2002), the letter from Waipa District Council to Environment Waikato dated 11 September 2001, titled "Stormwater Consents" and as identified in the general resource consent conditions in Schedule 1, and the resource consent conditions below.

Identification and location of activities

3) Except as provided for by condition 1 of Schedule 1 – General Conditions, all stormwater diversion and discharge activities that are authorised by this consent relate to the Waipa District Council municipal stormwater system as constructed at the commencement of this resource consent, and as shown in Appendix III: Catchment Maps in the document titled "Waipa District Council – Te Awamutu Stormwater Catchment Management Plan".

Monitoring programme

4) The consent holder shall retain appropriately qualified and experienced persons to prepare a monitoring programme. The objectives of the monitoring programme are to:

- Investigate the actual and potential adverse effects of the municipal stormwater system's diversion and discharge activities on the receiving environment;
- Provide information that will be used to identify stormwater management methods to be implemented to avoid, remedy or mitigate actual or potential adverse effects on the receiving environment;
- Determine compliance with the conditions of this resource consent.

As a minimum, the monitoring programme shall include:

a) Monitoring of suspended solids, Biochemical Oxygen Demand, Total Phosphorus, Total Nitrogen, Ammonical Nitrogen, E-coli, Total Petroleum Hydrocarbons, lead, zinc and copper at the Selwyn Lane and Benson Road outlets. Such monitoring shall be undertaken during the months February, June and October, and as far as practicably possible, under the following conditions: during the first flush of a medium intensity rainfall event of at least 10 minutes duration, following at least one week of dry weather. After nine series of monitoring results have been recorded (i.e. three years of monitoring), the frequency and locations of monitoring may be reduced to a minimum of one discharge outlet monitored annually, following written acknowledgement from the Waikato Regional Council, having had regard to consistency and significance of monitoring data collected.
b) Monitoring of scour and erosion effects due to stormwater diversions and discharges.
c) Monitoring for visual signs of contaminants in stormwater (conspicuous oil or grease films, scums or foams, floatable suspended materials, conspicuous change in colour or visual clarity).
d) Monitoring to identify municipal stormwater system structures that are impeding the upstream and downstream movement of fish and other aquatic fauna.
e) Monitoring to determine if municipal stormwater system catchpits are fitted with stormwater management devices that are capable of capturing and retaining the majority of gross pollutants and suspended solids, and if these are maintained in good working order.

f) Monitoring to determine appropriate street and catchpit cleaning operations and frequencies.

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g) Monitoring to identify informal sewerage system connections to the municipal stormwater system, and to gauge sewage pump station overflow frequencies, and monitoring or modelling of volumes of sewage discharged to the municipal stormwater system.
h) Monitoring to determine municipal stormwater system collection points that are most at risk from non-routine contaminant discharges to the municipal stormwater system.

The monitoring programme shall be to a standard acceptable to the Waikato Regional Council acting in a technical certification capacity, and shall be forwarded to the Waikato Regional Council within three months of the commencement of this consent. The consent holder shall review the monitoring programme on an annual basis and shall forward a copy of any updated monitoring programme to the Waikato Regional Council for approval within one month of any updates being made.

Water quality sample analyses

5) All water quality sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods For The Examination Of Water And Waste Water, 1998" 20th edition by A.P.H.A. and A.W.W.A. and W.E.F., or any other method approved in advance by the Waikato Regional Council acting in a technical certification capacity.

Stormwater Management Plan

6) The consent holder shall prepare a Stormwater Management Plan for Te Awamutu, which shall be submitted to the Waikato Regional Council for approval within 12 months of the commencement of this consent. The Plan shall be developed in consultation with local tangata whenua and other interested sectors of the community. The Stormwater Management Plan shall detail the procedures, initiatives and stormwater management systems that will be implemented to operate in accordance with the conditions of this resource consent, and as a minimum shall describe the following:

a) The relationship and integration of the Stormwater Management Plan with other Waipa District Council planning instruments and regulatory systems, including existing and proposed planning & regulatory controls that will be utilised to assist the control of routine and non-routine contaminant discharges to the stormwater system;
b) Contributing catchments and the existing land uses, catchment receiving waters (including physical, chemical and biological characteristics, riparian vegetation, existing uses and values) and the municipal stormwater system characteristics (a diagram showing locations of the reticulation system, designated overland flow paths, treatment and disposal systems should be included);
c) Potential risks to stormwater quality in the Te Awamutu stormwater catchment (i.e. resulting from routine and non-routine contaminant discharges to the stormwater system);
d) Stormwater management systems and implementation methods to avoid, remedy or mitigate **routine** contaminant discharges to the municipal stormwater system;
e) Contingency measures and reporting systems to be implemented in the event of **non-routine** contaminant discharges from the municipal stormwater system;
f) Methods which will be used to manage risks to stormwater quality, streambed scouring and erosion, and adverse flooding;
g) Strategies for identifying municipal stormwater system structures that are impeding the upstream or downstream movement of fish, and system upgrades and implementation methods to address these;
h) Initiatives and implementation methods for improving the aesthetic appearance of drainage structures and stormwater detention areas;
i) Street cleaning operations;
j) Stormwater management devices (including catchpits) and methods for ensuring stormwater management devices are constructed and maintained in accordance with the Auckland Regional Council Technical Publication No 10 "Stormwater Treatment Devices – Design Guideline Manual" (ARC, 1993) or any subsequent update of this manual;

k) Management and operational procedures to avoid contaminants discharging from the municipal stormwater system as a result of the various municipal operation and maintenance activities;
l) Investigations and remediation programmes to discontinue informal sewerage system connections to the municipal stormwater system;
m) Operation and maintenance programmes to minimise the discharge of municipal sewerage system contaminants to the municipal stormwater system;
n) Methods which will be encouraged by the District Council to minimise the effects of stormwater discharges from new subdivisions;
o) Methods for ensuring consideration of Low Impact Design principals (as contained in the Auckland Regional Council Technical Publication No 124 "Low Impact Design Manual for the Auckland Region" (ARC, 2000) for proposed greenfield development sites;
p) Methods for identifying and implementing Best Practicable Options to manage the municipal stormwater system and avoiding adverse effects on aquatic ecosystems;
q) Methods for implementing stormwater management education initiatives;
r) A prioritised schedule for implementing the procedures, initiatives and stormwater management systems that are identified in the Stormwater Management Plan.

Reporting

7) The consent holder shall provide to the Waikato Regional Council a written management report by 31 October each year that this resource consent is current. As a minimum this report shall include the following:

a) A summary of the monitoring results required by condition 4 of this resource consent, and a critical analysis of the information in terms of compliance and environmental effects;
b) A comparison of data with previously collected data identifying any emerging trends;
c) Comment on compliance with Schedule 1 – General Conditions, including any reasons for non-compliance or difficulties in achieving compliance;
d) Details of any non-routine contaminant discharge incidents that have been responded to;
e) A summary of any complaints received regarding municipal stormwater diversion and discharge activities;
f) Details of community liaison initiatives and a summary of any feedback received from the community;
g) Details of any stormwater management initiatives that have been undertaken, or are proposed, to improve the environmental performance of the municipal stormwater system; (e.g. education initiatives, regulatory initiatives, implementation of Best Practicable Options);
h) Recommendations on alterations to the monitoring required by condition 4 of this resource consent;
i) Any other issues considered important by the consent holder.

Dated at Hamilton this ***15th*** *day of* ***November 2002***

For and on behalf of the
Waikato Regional Council

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Advice Notes

1. This resource consent does not give any right of access over private or public property. Arrangements for access must be made between the consent holder and the property owner.

2. The reasonable costs incurred by the Waikato Regional Council arising from supervision and monitoring of this consent will be charged to the consent holder. This may include but not be limited to routine inspection of the site by Waikato Regional Council officers or agents, liaison with the consent holder, responding to complaints or enquiries relating to the site, and review and assessment of compliance with the conditions of consent.

3. For new municipal stormwater system diversion and discharge activities to be authorised by this consent, where these result from the upgrading of the existing municipal stormwater system, or new subdivisions developed after the granting of this consent, either:

   a) Condition 1 of the general conditions in Schedule 1 is satisfied, as confirmed in writing by the Waikato Regional Council pursuant to Condition 1; or

   b) Where the new diversion and discharge activities do not satisfy Condition 1 of the general conditions in Schedule 1, a change to conditions of this consent has been granted and it expressly authorises and allows for the new diversion and discharge activities.

4. New municipal stormwater system diversion and discharge activities may require separate resource consents, particularly during the period of their construction, to ensure that appropriate environmental effects avoidance and mitigation measures are provided for. When such activities are established and operating in accordance with their respective consent conditions, the consent holder may seek via the mechanism provided by Condition 1 in Schedule 1 of this consent, or via a change to consent as described in note 3 above, the authorisation of the new diversion and discharge activities by this consent.

5. This consent does not authorise any works in a watercourse, nor any other activity for which further consents may be required under sections 13, 14 and 15 of the RMA, or the provisions of the Waikato Regional Plan.

6. The consent holder is responsible for compliance with the conditions of this consent, except where statutory defences as stated in section 341 of the RMA apply.

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Schedule 1 – General Conditions

The grant of consent no's 105460, 105461, 105462, 105463, 105464 and 105465 is subject to the following general conditions which shall apply to each consent:

New municipal stormwater system diversion or discharge activities

1) Any new municipal stormwater system diversion or discharge activity commenced after the granting of this consent shall be authorised by this consent when the consent holder is notified in writing by the Waikato Regional Council to this effect. Such notification shall be provided on receipt of information showing to the satisfaction of the Waikato Regional Council acting in a technical certification capacity, that:
   a) The new diversion or discharge is consistent with the conditions of this consent;
   b) The new diversion or discharge does not increase peak discharge rates to receiving waters above those that would occur at the time of application for this consent, unless it is demonstrated that there shall be no additional adverse effects on the environment or downstream properties as a result of such increase.

Consent holder's representative

2) The consent holder shall appoint a representative who shall be the Waikato Regional Council's principal contact person in regard to matters relating to this resource consent. The consent holder shall inform the Waikato Regional Council of the representative's name and how they can be contacted. Should that person change during the term of this resource consent, the consent holder shall within 5 working days inform an officer of the Waikato Regional Council, and shall also give written notice to the Waikato Regional Council of the new representative's name and how they can be contacted.

Administrative charges

3) The consent holder shall pay to the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act.

Stormwater Quantity & Receiving Environment

Changes in municipal stormwater system diversion and discharge activities

4) The consent holder shall not undertake any changes to the municipal stormwater system diversion and discharge activities which would increase the scale or intensity of actual or potential adverse effects of those activities on the receiving environment.

Adverse effects of erosion

5) The consent holder shall be responsible for the structural integrity and maintenance of stormwater system diversion and discharge structures, and for any erosion control works that become necessary to preserve the integrity and stability of the river/stream channels and/or to control erosion as a result of the exercise of this resource consent.

Surface water flooding

6) The consent holder shall ensure that the municipal stormwater system is maintained in such a way as to reasonably minimise the potential for adverse flooding effects to land and property resulting from the stormwater diversion and discharge activities.

Significant adverse effects on existing aquatic ecosystems

7) The consent holder shall manage the municipal stormwater system such that the stormwater diversion and discharge activities do not result in significant adverse effects on aquatic ecosystems.

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Drainage structures – fish passage

8) All drainage structures (e.g. culverts, dams, weirs) that have been purposefully placed in, on, under or over the beds of receiving waters to manage or control municipal stormwater system diversion and discharge activities shall allow for the upstream and downstream movement of fish and other aquatic fauna under all flow conditions. For the purposes of condition 8, where such structures currently inhibit fish movement the Stormwater Management Plan shall identify appropriate upgrades to be carried out. All fish passage devices shall be effectively designed and constructed to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.

   Note: When considering municipal stormwater system drainage structures for the purposes of conditions 8, the consent holder shall consult with the Department of Conservation, in accordance with Part VI of the Freshwater Fisheries Regulations 1983.

New discharge structures

9) All new discharge structures and energy dissipating devices shall be designed and constructed to minimise the potential for erosion and scour to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.

Aesthetic improvements to drainage structures

10) As far as practicable, the consent holder shall maintain stormwater system drainage structures in a visually unobtrusive manner, such as via the use of screening plants.

Flooding, erosion and sedimentation effects to private land and drainage systems

11) The consent holder shall be responsible for avoiding, remedying and mitigating any flooding, erosion or sedimentation effects to private land and drainage systems where these effects are clearly attributable to the discharge. To this end the consent holder shall:
   a) Keep a record of complaints associated with the discharge of stormwater to private land;
   b) Seek to consult with any affected landowner with the intent of reaching agreement on methods or works to remedy or mitigate the adverse effects.

   Note: For the purposes of condition 11, temporary flooding effects caused by storm events in excess of the 20% AEP event, and areas that naturally pond or hold water as a consequence of the topography shall be exempt from this condition.

Stormwater Quality & Receiving Environment

General municipal operation and maintenance activities

12) All municipal operation and maintenance activities such as:
   a) Stormwater reticulation operation and maintenance activities;
   b) Water and wastewater systems operation and maintenance activities;
   c) Roading and footpath management and maintenance activities;
   d) Parks and gardens management and maintenance activities;
   e) Refuse collection activities;
   f) Building maintenance activities;
   g) Vegetation control activities;

   shall be undertaken and managed to minimise contaminants discharging from the municipal stormwater system to the receiving environment.

   Note: Separate resource consents may be required as a result of the need to undertake ancillary works associated with the activities described in conditions 5 to 12 of this Schedule. All such consents shall be obtained by the consent holder at their sole expense, prior to any ancillary works being undertaken.

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Street and catchpit cleaning operations

13) The consent holder shall carry out regular street and catchpit cleaning operations to minimise the volume of stormwater contaminants from entering and discharging from the municipal stormwater system to the receiving environment. When determining appropriate street sweeping frequencies, the consent holder shall take account of the land use characteristics within respective stormwater sub-catchments, the intensity of various land use activities that are taking place, and any means other than street sweeping operations that are currently being used to control and/or treat contaminated stormwater.

Municipal stormwater system catchpits

14) All stormwater catchpit facilities, that are associated with the municipal stormwater system, shall be capable of capturing and retaining the majority of gross pollutants and suspended solids.

Stormwater management device maintenance

15) All stormwater management devices associated with the municipal stormwater system shall be maintained in good working order and shall be managed to provide optimal stormwater contaminant removal efficiency at all times. The consent holder shall carry out all stormwater management device maintenance as necessary, and in particular within one week of receipt of notice in writing from the Waikato Regional Council, acting in a technical certification capacity, to do so. Unless otherwise specified in relevant design manuals, 'optimal stormwater contaminant removal efficiency' shall be at least 75% suspended solids removal.

Informal sewerage system connections to the municipal stormwater system

16) The consent holder shall undertake investigation and remediation programmes that identify and discontinue informal sewerage system connections to the municipal stormwater system.

Formal sewerage system connections to the municipal stormwater system

17) Where formal sewerage system connections to the municipal stormwater system make up part of the municipal sewerage system design and operation, the consent holder shall undertake to minimise as far as practicable, the discharge of sewerage system contaminants to the municipal stormwater system.

Routine contaminant discharges to the municipal stormwater system

18) The consent holder shall undertake investigations to identify and address routine contaminant discharges to the municipal stormwater system from contaminated land and high risk facility sites as listed in section 3.5.12 of the Proposed Waikato Regional Plan. In circumstances where site owners are routinely discharging contaminants to the municipal stormwater system, or contaminants to land that could routinely discharge to the municipal stormwater system during rain events, the consent holder shall liaise with site owners to determine appropriate stormwater management measures that will be implemented to avoid, or if avoidance is impracticable, to remedy or mitigate these contaminant discharges.

Non-routine contaminant discharges to the municipal stormwater system

19) On becoming aware of a non-routine contaminant discharge from the municipal stormwater system, the consent holder shall seek to identify the source of the discharge and inform the Waikato Regional Council of the discharge incident. On discovering the source of non-routine contaminant discharges to the municipal stormwater system, the consent holder shall make all reasonable attempts to ensure that further contaminant discharges are prevented. The consent holder shall provide to the Waikato Regional Council information as required to support any subsequent enforcement action taken by the regional council, against the discharger. For the purposes of this consent, a non-routine contaminant discharge to the municipal stormwater system is considered to be either an accidental spillage or a deliberate contaminant discharge, of which the consent holder has limited ability to control.

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Non-routine contaminants discharged from the municipal stormwater system that result in adverse effects to the receiving environment

20) In circumstances where non-routine contaminants are discharged from the municipal stormwater system that result in actual or potential adverse effects on the receiving environment, the consent holder shall assist the Waikato Regional Council, and any other emergency response agency that becomes involved, to remedy or mitigate against further actual or potential adverse effects on the receiving environment.

Connections to the municipal stormwater system

21) The consent holder shall be responsible for accepting connections to the municipal stormwater system, and, where there is a risk of routine and/or non-routine contaminant discharges to the stormwater system, for ensuring that all such connections incorporate appropriate stormwater management systems that are capable of:

a) Minimising all contaminants such that water quality conditions of this consent are complied with (specifically conditions 22 to 26), and
b) Preventing accidental releases of any hazardous substances to the stormwater system, or
c) Reducing all such hazardous substances in stormwater, prior to discharge to receiving waters, to concentrations that will not result in contamination of either water or sediments to such a degree that is likely to result in adverse effects on aquatic life or on the suitability of water for human consumption after treatment.

Floatable contaminants

22) As far as practicable, the consent holder shall manage the stormwater reticulation system to prevent the discharge of any substance that will cause the production of conspicuous oil, or grease films, scums or foams, or floatable suspended materials outside a 10 metre radius of the point of discharge.

Suspended solids

23) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of any substance that will cause a conspicuous change in the colour or visual clarity of receiving waters, or increase the concentration of suspended solids in receiving waters by more than 10 percent. For the purpose of this condition, the point of compliance is any point in the receiving water which is 50 metres downstream of the discharge outlet.

Hazardous substances

24) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of concentrations of hazardous substances that are likely to cause adverse effects on aquatic life, or the suitability of water for human consumption after treatment. Where a question arises as to whether the concentration of any particular hazardous substance breaches this condition, it shall be determined through the application of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000), and decided on the basis of its corresponding trigger value within the 95% level of protection range that is expressed in section 3.4 of these guidelines.

Micro-organisms

25) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of concentrations of micro-organisms to receiving waters that are likely to adversely affect human health.

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Significant adverse effects on existing aquatic ecosystems

26) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent discharges that will cause:

a) Changes in dissolved oxygen;
b) Changes in pH;
c) Increases in deposition of bed sediments;
d) Increases in undesirable biological growths;
e) Increases in water temperature;
f) Discharges of any contaminants;

to such an extent that would result in adverse effects to receiving water aquatic ecosystems. As a minimum, the discharge shall not cause the following effects in receiving waters: dissolved oxygen levels to fall below 80% of saturation, pH to fall below 6 or exceed 9, suspended solids to smother benthic organisms, undesirable biological growths to be visible to the naked eye as plumose growths or mats, water temperature to change by more than 3°C or exceed 25°C, contaminant levels to exceed the 95% level of protection range that is expressed in section 3.4 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, 2000).

Urban Development Planning

Low Impact Design principles

27) The consent holder shall ensure that for all proposed "greenfield" site developments, consideration is given to the application of Low Impact Design principals as contained in the Auckland Regional Council Technical Publication No 124 "Low Impact Design Manual for the Auckland Region" (ARC, 2000), or any subsequent update of this manual.

Stormwater management devices

28) The consent holder shall ensure that for all proposed urban development sites ('brownfield' and 'greenfield' sites), consideration is given to the application of stormwater management devices. Where applicable, these shall be constructed and maintained in accordance with the Auckland Regional Council Technical Publication No 10 "Stormwater Treatment Devices – Design Guideline Manual" (ARC, 1993), or any subsequent update of this manual.

General Management

Best Practicable Options

29) At all times, the consent holder shall seek to implement Best Practicable Options for minimising actual and potential adverse effects on the receiving environment that result from the municipal stormwater system diversion and discharge activities, and urban development activities.

Review clause

30) The Waikato Regional Council may, within three months of the 3rd, 6th, 10th and 15th anniversaries of the commencement of this consent, serve notice on the consent holder under section 128(1) of the Resource Management Act 1991, of its intention to review the conditions of this resource consent for the following purposes:

a) To review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource

consent and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or

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b) If necessary and appropriate, to require the holder of this resource consent to adopt the Best Practicable Option to remove or reduce adverse effects on the environment that are resulting from municipal stormwater system diversion and discharge activities; or
c) To review the adequacy of and the necessity for monitoring undertaken by the consent holder.

Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.

Provision for change to consent

31) The consent holder may apply to change or cancel any condition of this resource consent (other than a condition as to the duration of the consent) under section 127 of the Resource Management Act in the month following each anniversary of the granting of this consent.

Resource Consent Certificate

Environment Waikato REGIONAL COUNCIL

Doc 6-1e)

Resource Consent Number: 105462

File Number: 61 21 53A

Pursuant to the Resource Management Act 1991, the Waikato Regional Council hereby grants consent to:

Waipa District Council
Private Bag 2402
TE AWAMUTU 2400

(hereinafter referred to as the Consent Holder)

Consent type:	Discharge permit
Consent subtype:	Discharge to water
Activity authorised:	Divert and discharge urban stormwater runoff, and associated contaminants, to the Mangaohoi Stream, Puniu River and land, and use discharge structures, within the Kihikihi urban area that is reticulated by the Kihikihi municipal stormwater system
Location:	Kihikihi Urban Area
Map Reference:	NZMS 260 S15: 165-490
Consent duration:	Granted for a period expiring on 31 October 2022

Subject to the conditions overleaf:

Cnr Paora Hapi & Titiraupenga Streets,
PO Box 501, TAUPO ph +64-7-378 6539
13 Opatito Road, PAEROA ph +64-7-862 8376

HEAD OFFICE ph +64-7-856 7184
PO Box 4010, 0800 800 401
401 Grey Street, fax +64-7-856 0551
HAMILTON EAST, New Zealand www.ew.govt.nz

CONDITIONS

General administration

1) This consent is subject to the General Conditions listed in Schedule 1.

Specification of documentation that municipal stormwater system diversion and discharge activities are to be in accordance with

2) All stormwater diversion and discharge activities relating to the Kihikihi municipal stormwater system shall be operated and maintained in general accordance with the application for this resource consent, the document titled "Waipa District Council – Kihikihi Stormwater Catchment Management Plan" (July 2002), the letter from Waipa District Council to Environment Waikato dated 11 September 2001, titled "Stormwater Consents" and as identified in the general resource consent conditions in Schedule 1, and the resource consent conditions below.

Identification and location of activities

3) Except as provided for by condition 1 of Schedule 1 – General Conditions, all stormwater diversion and discharge activities that are authorised by this consent relate to the Waipa District Council municipal stormwater system as constructed at the commencement of this resource consent, and as shown in Appendix III: Catchment Maps in the document titled "Waipa District Council – Kihikihi Stormwater Catchment Management Plan".

Monitoring Programme

4) The consent holder shall retain appropriately qualified and experienced persons to prepare a monitoring programme. The objectives of the monitoring programme are to:

- Investigate the actual and potential adverse effects of the municipal stormwater system's diversion and discharge activities on the receiving environment;
- Provide information that will be used to identify stormwater management methods to be implemented to avoid, remedy or mitigate actual or potential adverse effects on the receiving environment;
- Determine compliance with the conditions of this resource consent.

As a minimum, the monitoring programme shall include:

a) Monitoring of scour and erosion effects due to stormwater diversions and discharges.
b) Monitoring for visual signs of contaminants in stormwater (conspicuous oil or grease films, scums or foams, floatable suspended materials, conspicuous change in colour or visual clarity).
c) Monitoring to identify municipal stormwater system structures that are impeding the upstream and downstream movement of fish and other aquatic fauna.
d) Monitoring to determine if municipal stormwater system catchpits are fitted with stormwater management devices that are capable of capturing and retaining the majority of gross pollutants and suspended solids, and if these are maintained in good working order
e) Monitoring to determine appropriate street and catchpit cleaning operations and frequencies.
f) Monitoring to identify informal sewerage system connections to the municipal stormwater system, and to gauge diffuse sewage contamination of stormwater. Monitoring to determine municipal stormwater system collection points that are most at risk from non-routine contaminant discharges to the municipal stormwater system.

The monitoring programme shall be to a standard acceptable to the Waikato Regional Council acting in a technical certification capacity, and shall be forwarded to the Waikato Regional Council within three months of the commencement of this consent. The consent holder shall review the monitoring programme on an annual basis and shall forward a copy of any updated monitoring programme to the Waikato Regional Council for approval within one month of any updates being made.

Stormwater Management Plan

5) The consent holder shall prepare a Stormwater Management Plan for Kihikihi, which shall be submitted to the Waikato Regional Council for approval within 12 months of the commencement of this consent. The Plan shall be developed in consultation with local tangata whenua and other interested sectors of the community. The Stormwater Management Plan shall detail the procedures, initiatives and stormwater management systems that will be implemented to operate in accordance with the conditions of this resource consent, and as a minimum shall describe the following:

a) The relationship and integration of the Stormwater Management Plan with other Waipa District Council planning instruments and regulatory systems, including existing and proposed planning & regulatory controls that will be utilised to assist the control of routine and non-routine contaminant discharges to the stormwater system;
b) Contributing catchments and the existing land uses, catchment receiving waters (including physical, chemical and biological characteristics, riparian vegetation, existing uses and values) and the municipal stormwater system characteristics (a diagram showing locations of the reticulation system, designated overland flow paths, treatment and disposal systems should be included);
c) Potential risks to stormwater quality in the Kihikihi stormwater catchment (i.e. resulting from routine and non-routine contaminant discharges to the stormwater system);
d) Stormwater management systems and implementation methods to avoid, remedy or mitigate **routine** contaminant discharges to the municipal stormwater system;
e) Contingency measures and reporting systems to be implemented in the event of **non-routine** contaminant discharges from the municipal stormwater system;
f) Methods which will be used to manage risks to stormwater quality, streambed scouring and erosion, and adverse flooding;
g) Strategies for identifying municipal stormwater system structures that are impeding the upstream or downstream movement of fish, and system upgrades and implementation methods to address these;
h) Initiatives and implementation methods for improving the aesthetic appearance of drainage structures and stormwater detention areas;
i) Street cleaning operations;
j) Stormwater management devices (including catchpits) and methods for ensuring stormwater management devices are constructed and maintained in accordance with the Auckland Regional Council Technical Publication No 10 "Stormwater Treatment Devices – Design Guideline Manual" (ARC, 1993) or any subsequent update of this manual;
k) Management and operational procedures to avoid contaminants discharging from the municipal stormwater system as a result of the various municipal operation and maintenance activities;
l) Investigations and remediation programmes to discontinue informal sewerage system connections to the municipal stormwater system, and diffuse sewage contamination of stormwater;
m) Methods which will be encouraged by the District Council to minimise the effects of stormwater discharges from new subdivisions;
n) Methods for ensuring consideration of Low Impact Design principals (as contained in the Auckland Regional Council Technical Publication No 124 "Low Impact Design Manual for the Auckland Region" (ARC, 2000) for proposed greenfield development sites;
o) Methods for identifying and implementing Best Practicable Options to manage the municipal stormwater system and avoiding adverse effects on aquatic ecosystems;
p) Methods for implementing stormwater management education initiatives;
q) A prioritised schedule for implementing the procedures, initiatives and stormwater management systems that are identified in the Stormwater Management Plan.

Reporting

6) The consent holder shall provide to the Waikato Regional Council a written management report by 31 October each year that this resource consent is current. As a minimum this report shall include the following:

   a) A summary of the monitoring results required by condition 4 of this resource consent, and a critical analysis of the information in terms of compliance and environmental effects;
   b) A comparison of data with previously collected data identifying any emerging trends;
   c) Comment on compliance with Schedule 1 – General Conditions, including any reasons for non-compliance or difficulties in achieving compliance;
   d) Details of any non-routine contaminant discharge incidents that have been responded to;
   e) A summary of any complaints received regarding municipal stormwater diversion and discharge activities;
   f) Details of community liaison initiatives and a summary of any feedback received from the community;
   g) Details of any stormwater management initiatives that have been undertaken, or are proposed, to improve the environmental performance of the municipal stormwater system; (e.g. education initiatives, regulatory initiatives, implementation of Best Practicable Options);
   h) Recommendations on alterations to the monitoring required by condition 4 of this resource consent;
   i) Any other issues considered important by the consent holder.

Dated at Hamilton this ***15th*** *day of* ***November 2002***

For and on behalf of the
Waikato Regional Council

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Advice Notes

1. This resource consent does not give any right of access over private or public property. Arrangements for access must be made between the consent holder and the property owner.

2. The reasonable costs incurred by the Waikato Regional Council arising from supervision and monitoring of this consent will be charged to the consent holder. This may include but not be limited to routine inspection of the site by Waikato Regional Council officers or agents, liaison with the consent holder, responding to complaints or enquiries relating to the site, and review and assessment of compliance with the conditions of consent.

3. For new municipal stormwater system diversion and discharge activities to be authorised by this consent, where these result from the upgrading of the existing municipal stormwater system, or new subdivisions developed after the granting of this consent, either:

   a) Condition 1 of the general conditions in Schedule 1 is satisfied, as confirmed in writing by the Waikato Regional Council pursuant to Condition 1; or

   b) Where the new diversion and discharge activities do not satisfy Condition 1 of the general conditions in Schedule 1, a change to conditions of this consent has been granted and it expressly authorises and allows for the new diversion and discharge activities.

4. New municipal stormwater system diversion and discharge activities may require separate resource consents, particularly during the period of their construction, to ensure that appropriate environmental effects avoidance and mitigation measures are provided for. When such activities are established and operating in accordance with their respective consent conditions, the consent holder may seek via the mechanism provided by Condition 1 in Schedule 1 of this consent, or via a change to consent as described in note 3 above, the authorisation of the new diversion and discharge activities by this consent.

5. This consent does not authorise any works in a watercourse, nor any other activity for which further consents may be required under sections 13, 14 and 15 of the RMA, or the provisions of the Waikato Regional Plan.

6. The consent holder is responsible for compliance with the conditions of this consent, except where statutory defences as stated in section 341 of the RMA apply.

Schedule 1 – General Conditions

The grant of consent no's 105460, 105461, 105462, 105463, 105464 and 105465 is subject to the following general conditions which shall apply to each consent:

New municipal stormwater system diversion or discharge activities

1) Any new municipal stormwater system diversion or discharge activity commenced after the granting of this consent shall be authorised by this consent when the consent holder is notified in writing by the Waikato Regional Council to this effect. Such notification shall be provided on receipt of information showing to the satisfaction of the Waikato Regional Council acting in a technical certification capacity, that:
   a) The new diversion or discharge is consistent with the conditions of this consent;
   b) The new diversion or discharge does not increase peak discharge rates to receiving waters above those that would occur at the time of application for this consent, unless it is demonstrated that there shall be no additional adverse effects on the environment or downstream properties as a result of such increase.

Consent holder's representative

2) The consent holder shall appoint a representative who shall be the Waikato Regional Council's principal contact person in regard to matters relating to this resource consent. The consent holder shall inform the Waikato Regional Council of the representative's name and how they can be contacted. Should that person change during the term of this resource consent, the consent holder shall within 5 working days inform an officer of the Waikato Regional Council, and shall also give written notice to the Waikato Regional Council of the new representative's name and how they can be contacted.

Administrative charges

3) The consent holder shall pay to the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act.

Stormwater Quantity & Receiving Environment

Changes in municipal stormwater system diversion and discharge activities

4) The consent holder shall not undertake any changes to the municipal stormwater system diversion and discharge activities which would increase the scale or intensity of actual or potential adverse effects of those activities on the receiving environment.

Adverse effects of erosion

5) The consent holder shall be responsible for the structural integrity and maintenance of stormwater system diversion and discharge structures, and for any erosion control works that become necessary to preserve the integrity and stability of the river/stream channels and/or to control erosion as a result of the exercise of this resource consent.

Surface water flooding

6) The consent holder shall ensure that the municipal stormwater system is maintained in such a way as to reasonably minimise the potential for adverse flooding effects to land and property resulting from the stormwater diversion and discharge activities.

Significant adverse effects on existing aquatic ecosystems

7) The consent holder shall manage the municipal stormwater system such that the stormwater diversion and discharge activities do not result in significant adverse effects on aquatic ecosystems.

Drainage structures – fish passage

8) All drainage structures (e.g. culverts, dams, weirs) that have been purposefully placed in, on, under or over the beds of receiving waters to manage or control municipal stormwater system diversion and discharge activities shall allow for the upstream and downstream movement of fish and other aquatic fauna under all flow conditions. For the purposes of condition 8, where such structures currently inhibit fish movement the Stormwater Management Plan shall identify appropriate upgrades to be carried out. All fish passage devices shall be effectively designed and constructed to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.

   Note: When considering municipal stormwater system drainage structures for the purposes of conditions 8, the consent holder shall consult with the Department of Conservation, in accordance with Part VI of the Freshwater Fisheries Regulations 1983.

New discharge structures

9) All new discharge structures and energy dissipating devices shall be designed and constructed to minimise the potential for erosion and scour to the satisfaction of the Waikato Regional Council acting in a technical certification capacity.

Aesthetic improvements to drainage structures

10) As far as practicable, the consent holder shall maintain stormwater system drainage structures in a visually unobtrusive manner, such as via the use of screening plants.

Flooding, erosion and sedimentation effects to private land and drainage systems

11) The consent holder shall be responsible for avoiding, remedying and mitigating any flooding, erosion or sedimentation effects to private land and drainage systems where these effects are clearly attributable to the discharge. To this end the consent holder shall:
   a) Keep a record of complaints associated with the discharge of stormwater to private land;
   b) Seek to consult with any affected landowner with the intent of reaching agreement on methods or works to remedy or mitigate the adverse effects.

   Note: For the purposes of condition 11, temporary flooding effects caused by storm events in excess of the 20% AEP event, and areas that naturally pond or hold water as a consequence of the topography shall be exempt from this condition.

Stormwater Quality & Receiving Environment

General municipal operation and maintenance activities

12) All municipal operation and maintenance activities such as:
   a) Stormwater reticulation operation and maintenance activities;
   b) Water and wastewater systems operation and maintenance activities;
   c) Roading and footpath management and maintenance activities;
   d) Parks and gardens management and maintenance activities;
   e) Refuse collection activities;
   f) Building maintenance activities;
   g) Vegetation control activities;

   shall be undertaken and managed to minimise contaminants discharging from the municipal stormwater system to the receiving environment.

   Note: Separate resource consents may be required as a result of the need to undertake ancillary works associated with the activities described in conditions 5 to 12 of this Schedule. All such consents shall be obtained by the consent holder at their sole expense, prior to any ancillary works being undertaken.

Street and catchpit cleaning operations

13) The consent holder shall carry out regular street and catchpit cleaning operations to minimise the volume of stormwater contaminants from entering and discharging from the municipal stormwater system to the receiving environment. When determining appropriate street sweeping frequencies, the consent holder shall take account of the land use characteristics within respective stormwater sub-catchments, the intensity of various land use activities that are taking place, and any means other than street sweeping operations that are currently being used to control and/or treat contaminated stormwater.

Municipal stormwater system catchpits

14) All stormwater catchpit facilities, that are associated with the municipal stormwater system, shall be capable of capturing and retaining the majority of gross pollutants and suspended solids.

Stormwater management device maintenance

15) All stormwater management devices associated with the municipal stormwater system shall be maintained in good working order and shall be managed to provide optimal stormwater contaminant removal efficiency at all times. The consent holder shall carry out all stormwater management device maintenance as necessary, and in particular within one week of receipt of notice in writing from the Waikato Regional Council, acting in a technical certification capacity, to do so. Unless otherwise specified in relevant design manuals, 'optimal stormwater contaminant removal efficiency' shall be at least 75% suspended solids removal.

Informal sewerage system connections to the municipal stormwater system

16) The consent holder shall undertake investigation and remediation programmes that identify and discontinue informal sewerage system connections to the municipal stormwater system.

Formal sewerage system connections to the municipal stormwater system

17) Where formal sewerage system connections to the municipal stormwater system make up part of the municipal sewerage system design and operation, the consent holder shall undertake to minimise as far as practicable, the discharge of sewerage system contaminants to the municipal stormwater system.

Routine contaminant discharges to the municipal stormwater system

18) The consent holder shall undertake investigations to identify and address routine contaminant discharges to the municipal stormwater system from contaminated land and high risk facility sites as listed in section 3.5.12 of the Proposed Waikato Regional Plan. In circumstances where site owners are routinely discharging contaminants to the municipal stormwater system, or contaminants to land that could routinely discharge to the municipal stormwater system during rain events, the consent holder shall liaise with site owners to determine appropriate stormwater management measures that will be implemented to avoid, or if avoidance is impracticable, to remedy or mitigate these contaminant discharges.

Non-routine contaminant discharges to the municipal stormwater system

19) On becoming aware of a non-routine contaminant discharge from the municipal stormwater system, the consent holder shall seek to identify the source of the discharge and inform the Waikato Regional Council of the discharge incident. On discovering the source of non-routine contaminant discharges to the municipal stormwater system, the consent holder shall make all reasonable attempts to ensure that further contaminant discharges are prevented. The consent holder shall provide to the Waikato Regional Council information as required to support any subsequent enforcement action taken by the regional council, against the discharger. For the purposes of this consent, a non-routine contaminant discharge to the municipal stormwater system is considered to be either an accidental spillage or a deliberate contaminant discharge, of which the consent holder has limited ability to control.

Non-routine contaminants discharged from the municipal stormwater system that result in adverse effects to the receiving environment

20) In circumstances where non-routine contaminants are discharged from the municipal stormwater system that result in actual or potential adverse effects on the receiving environment, the consent holder shall assist the Waikato Regional Council, and any other emergency response agency that becomes involved, to remedy or mitigate against further actual or potential adverse effects on the receiving environment.

Connections to the municipal stormwater system

21) The consent holder shall be responsible for accepting connections to the municipal stormwater system, and, where there is a risk of routine and/or non-routine contaminant discharges to the stormwater system, for ensuring that all such connections incorporate appropriate stormwater management systems that are capable of:

a) Minimising all contaminants such that water quality conditions of this consent are complied with (specifically conditions 22 to 26), and
b) Preventing accidental releases of any hazardous substances to the stormwater system, or
c) Reducing all such hazardous substances in stormwater, prior to discharge to receiving waters, to concentrations that will not result in contamination of either water or sediments to such a degree that is likely to result in adverse effects on aquatic life or on the suitability of water for human consumption after treatment.

Floatable contaminants

22) As far as practicable, the consent holder shall manage the stormwater reticulation system to prevent the discharge of any substance that will cause the production of conspicuous oil, or grease films, scums or foams, or floatable suspended materials outside a 10 metre radius of the point of discharge.

Suspended solids

23) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of any substance that will cause a conspicuous change in the colour or visual clarity of receiving waters, or increase the concentration of suspended solids in receiving waters by more than 10 percent. For the purpose of this condition, the point of compliance is any point in the receiving water which is 50 metres downstream of the discharge outlet.

Hazardous substances

24) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of concentrations of hazardous substances that are likely to cause adverse effects on aquatic life, or the suitability of water for human consumption after treatment. Where a question arises as to whether the concentration of any particular hazardous substance breaches this condition, it shall be determined through the application of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000), and decided on the basis of its corresponding trigger value within the 95% level of protection range that is expressed in section 3.4 of these guidelines.

Micro-organisms

25) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent the discharge of concentrations of micro-organisms to receiving waters that are likely to adversely affect human health.

Significant adverse effects on existing aquatic ecosystems

26) As far as practicable, the consent holder shall manage the municipal stormwater system to prevent discharges that will cause:

a) Changes in dissolved oxygen;
b) Changes in pH;
c) Increases in deposition of bed sediments;
d) Increases in undesirable biological growths;
e) Increases in water temperature;
f) Discharges of any contaminants;

to such an extent that would result in adverse effects to receiving water aquatic ecosystems. As a minimum, the discharge shall not cause the following effects in receiving waters: dissolved oxygen levels to fall below 80% of saturation, pH to fall below 6 or exceed 9, suspended solids to smother benthic organisms, undesirable biological growths to be visible to the naked eye as plumose growths or mats, water temperature to change by more than 3°C or exceed 25°C, contaminant levels to exceed the 95% level of protection range that is expressed in section 3.4 of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC, 2000).

Urban Development Planning

Low Impact Design principles

27) The consent holder shall ensure that for all proposed "greenfield" site developments, consideration is given to the application of Low Impact Design principals as contained in the Auckland Regional Council Technical Publication No 124 "Low Impact Design Manual for the Auckland Region" (ARC, 2000), or any subsequent update of this manual.

Stormwater management devices

28) The consent holder shall ensure that for all proposed urban development sites ('brownfield' and 'greenfield' sites), consideration is given to the application of stormwater management devices. Where applicable, these shall be constructed and maintained in accordance with the Auckland Regional Council Technical Publication No 10 "Stormwater Treatment Devices – Design Guideline Manual" (ARC, 1993), or any subsequent update of this manual.

General Management

Best Practicable Options

29) At all times, the consent holder shall seek to implement Best Practicable Options for minimising actual and potential adverse effects on the receiving environment that result from the municipal stormwater system diversion and discharge activities, and urban development activities.

Review clause

30) The Waikato Regional Council may, within three months of the 3rd, 6th, 10th and 15th anniversaries of the commencement of this consent, serve notice on the consent holder under section 128(1) of the Resource Management Act 1991, of its intention to review the conditions of this resource consent for the following purposes:

a) To review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or

b) If necessary and appropriate, to require the holder of this resource consent to adopt the Best Practicable Option to remove or reduce adverse effects on the environment that are resulting from municipal stormwater system diversion and discharge activities; or
c) To review the adequacy of and the necessity for monitoring undertaken by the consent holder.

Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.

Provision for change to consent

31) The consent holder may apply to change or cancel any condition of this resource consent (other than a condition as to the duration of the consent) under section 127 of the Resource Management Act in the month following each anniversary of the granting of this consent.