

DISCHARGE PERMIT – AUTH-20181765-01

1. This resource consent must not be exercised until Discharge Permit AUTH-301043 is surrendered or has expired.
2. This resource consent must be exercised in conjunction with Land Use consent AUTH-20181765-03.
3. This consent authorises the discharge of dairy shed effluent (“agricultural effluent”) to land via an effluent disposal system consisting of a concrete stone trap and synthetically lined effluent storage pond via low rate pods and a slurry tanker, as described in the application for resource consent (APP-20181765) and all subsequent information.

Advice Note:

Routine monitoring inspections of this property may occur up to two times a year. This number does not include any other required inspections and may be combined with the inspections required for Discharge Permit AUTH-20181765-03.

4. The discharge of agricultural effluent to land shall be limited to:
 - (a) the discharge to land of agricultural effluent generated from milking up to 680 cows twice a day from 20 July to 20 June;
 - (b) the discharge to land of agricultural effluent via a low rate pod system;
 - (c) the discharge to land of agricultural effluent via a high rate slurry tanker; and
 - (d) the discharge to land of agricultural effluent to an area of 70 hectares as described in the table below and as per the plan attached as Appendix 1.

Property Address	266 O’Shannessy Road, Winton
Legal Descriptions of Discharge Area	Part Section 29 Block I Winton Hundred Part Section 30 Block I Winton Hundred Section 43 Block I Winton Hundred Section 44 Block I Winton Hundred Section 45 Block I Winton Hundred

5. Notwithstanding these conditions, this permit shall be exercised in accordance with the Collected Agricultural Effluent Management Plan. Where there is inconsistency between the Collected Agricultural Effluent Management Plan and the conditions of this consent, the conditions of this consent shall prevail.

Effluent Discharge Management

6. The discharge of agricultural effluent shall not exceed;
 - (a) for the low rate pod system, a depth of application of 25 millimetres per application, and an instantaneous rate of 100 millimetres per hour; and
 - (b) for the slurry tanker, a depth of application of 5 millimetres.
7. The minimum return period for the discharge of agricultural effluent to land shall be 28 days.

8. Nitrogen loading onto any land area as a result of the exercise of this consent must not exceed 150 kilograms of nitrogen per hectare per year.
9. The stored or discharged agricultural effluent shall not cause any:
 - (a) odour that is offensive or objectionable in the opinion of a Council Compliance Officer; or
 - (b) spray Drift;beyond the boundary of the property as per the plan attached as Appendix 1.

Soil Moisture

10. Within 6 months of the exercise of this consent, the Consent Holder must;
 - (a) have a soil moisture sensor installed in a representative area of the Pukemutu Soils as per the plan attached as Appendix 2; and
 - (b) have the soil moisture sensor calibrated by a Suitably Qualified Person.
11. Within five working days of the installation and calibration soil moisture sensor, the Consent Holder must notify the Consent Authority that the soil moisture sensor has been installed.
12. The discharge of agricultural effluent must not occur when:
 - (a) prior to the installation of the soil moisture sensor, soil moisture is at or near field capacity as identified at the Tussock Creek Soil Moisture Monitoring Site; and
 - (b) subsequent to the installation of the soil moisture sensor, soil moisture is at or near field capacity as identified by the soil moisture sensor required by Condition 10.

Agricultural Effluent Storage System Management

13. The discharge shall occur via a synthetically lined agricultural effluent storage facility of between 2,670 cubic metres and 3,261 cubic metres capacity.
14. Prior to 30 December 2029 the Consent Holder shall obtain written confirmation from a Suitably Qualified Person, in accordance with Appendix P of the proposed Southland Water and Land Plan (Decisions Version 2018) or any subsequent replacement versions, that the synthetically lined effluent storage pond meets the relevant pond drop test criteria in Appendix P.
15. The Consent Holder must inspect the leak detection chamber of the effluent storage pond not less than monthly to check for any evidence of leakage.
16. A record of the inspections required by Condition 15 must be maintained by the Consent Holder and included in the Management Plan required by this consent.
17. If the leak detection chamber inspections or the Pond Drop Test required by conditions 14 and/or 15 or any other inspection identifies that:
 - (a) the incidental discharge is not within the drop test criteria of Appendix P of the proposed Southland Water and Land Plan Decisions Version 2018 (or any subsequent replacement versions); or

- (b) there is any leakage outside of the normal operating parameters of the leak detection system; or
- (c) there are visible cracks, holes or defects that would allow effluent to leak from the facility;

the Consent Holder must notify the Consent Authority as soon as reasonably practicable of them becoming aware.

18. Within five working days of notifying the Consent Authority under condition 17, the Consent Holder shall advise the Consent Authority in writing of the steps that will be taken to ensure that the structure is made suitable for ongoing use, including:

- (a) any additional testing to be undertaken;
- (b) an outline of the proposed works to be undertaken to remediate the structure;
- (c) the timeframe for completion, which shall be no longer than 3 months;
- (d) Where the timeframe is expected to exceed 3 months;
 - i. the Consent Holder shall notify the Consent Authority that they will exceed the timeframe set out in Condition 18(c) and provide an expected date of completion;
 - ii. a Chartered Professional Engineer shall undertake an assessment of the pond and submit a report to the Consent Authority, outlining the defects in the pond and the remedial works to be undertaken, a detailed completion timeframe and the suitability of the pond for use during the remediation works;
 - iii. the Consent Holder shall submit a plan for their temporary operating procedures to the Consent Authority including what is required under Condition 18(f) and how they will manage their effluent;
 - iv. if the pond is deemed not suitable for use under Condition 18(d)(ii), the Consent Holder shall empty the pond and continue not use it, until the pond has been certified to be within the normal operating parameters of a leak detection system or the pond drop test criteria set out in Appendix P of the proposed Southland Water and Land Plan Decisions Version 2018 (or any subsequent replacement versions) and this certification has been received by the Consent Authority.
- (e) identification of whether the works will require consent for reconstruction of the structure;
- (f) the additional mitigation measures that will be employed to minimize the adverse effects of the leaking structure prior to remediation being undertaken; and
- (g) testing, certification, or inspections to be completed following the works to demonstrate that the structure is able to comply with the conditions of this consent.

System Management

19. The Consent Holder must notify the Consent Authority the identity of the Person in Charge of the agricultural effluent disposal system:

- (a) prior to the first exercise of this consent; and
- (b) no more than five working days following the appointment of any new Person in Charge.

20. The Consent Holder must install and maintain:
- (a) an operational alarm that alerts the Person in Charge to any system failure that could cause the over-application, overflow or spilling of agricultural effluent (e.g. sudden pressure drop, irrigator stoppage; and/or
 - (b) an operational automatic switch-off system that prevents any over-application or spilling of agricultural effluent pipeline.
21. Where the agricultural effluent reticulation system is installed in such a way that effluent can be siphoned when pumping ceases, the Consent Holder shall install and maintain an anti-siphon device in the agricultural effluent pipeline.
22. In the event of the failure or mismanagement of the agricultural effluent disposal system, or any other event that may result in a discharge of agricultural effluent that may have significant adverse effect on water quality, particularly in the region of the abstraction point of a registered drinking-water supply, the Consent Holder shall notify, as soon as reasonably practicable, the following:
- (a) the Consent Authority (ph 03 211 5115 or 03 211 5225 after hours); and
 - (b) the Southland District Council (ph 0800 732 732)

Exclusions

23. This consent does not authorize the discharge of:
- (a) dairy shed effluent collected during 20 June to 20 July (inclusive); or
 - (b) effluent collected from a feed pad, calving pad, wintering pad or barn; or
 - (c) effluent collected from an underpass; or
 - (d) silage leachate.
24. No discharge shall occur within:
- (a) 20 metres of any surface watercourse;
 - (b) 100 metres of any water abstraction point;
 - (c) 200 metres of any place of assembly or dwelling not on the subject property; and
 - (d) 20 metres from any property boundaries.

Where there is inconsistency between the plan attached as Appendix 1 and the conditions of this consent, the conditions of this consent shall prevail.

25. The stored or discharged agricultural effluent shall not enter any surface watercourse in any way, including:
- (a) directly;
 - (b) indirectly;
 - (c) by overland flow;
 - (d) via entrainment by stormwater or run-off; or
 - (e) via a pipe.

26. The stored or discharged agricultural effluent shall not:
- (a) form ponds or flow on the land surface; or
 - (b) cause contamination of water; including:
 - i. the formation of any conspicuous scums or foams, or floatable or suspended materials, change in colour or visual clarity; or
 - ii. rendering fresh water unsuitable for consumption by farm animals; or
 - iii. resulting in any significant adverse effects on aquatic life.

Collected Agricultural Effluent Management Plan

27. The Consent Holder shall have and maintain a Collected Agricultural Effluent Management Plan.
28. The Collected Agricultural Effluent Management Plan shall:
- (a) provide concise and clear direction to the Person in Charge and other staff on the operation of the agricultural effluent system;
 - (b) identify environmental risks of agricultural effluent discharges specific to the farm including, but not limited to, locations of drains, surface waterways, sub-surface drainage and critical source areas in the agricultural effluent disposal area;
 - (c) identify how the above environmental risks are avoided;
 - (d) describe how each component of the agricultural effluent system is maintained and have regard to the information provided in the pond storage calculations provided in the application;
 - (e) describe how agricultural effluent in storage is managed;
 - (f) describe how agricultural effluent is managed when soils are at or above field capacity and/or during adverse weather conditions; and
 - (g) describe how any stormwater diversion on the system is set up and managed.

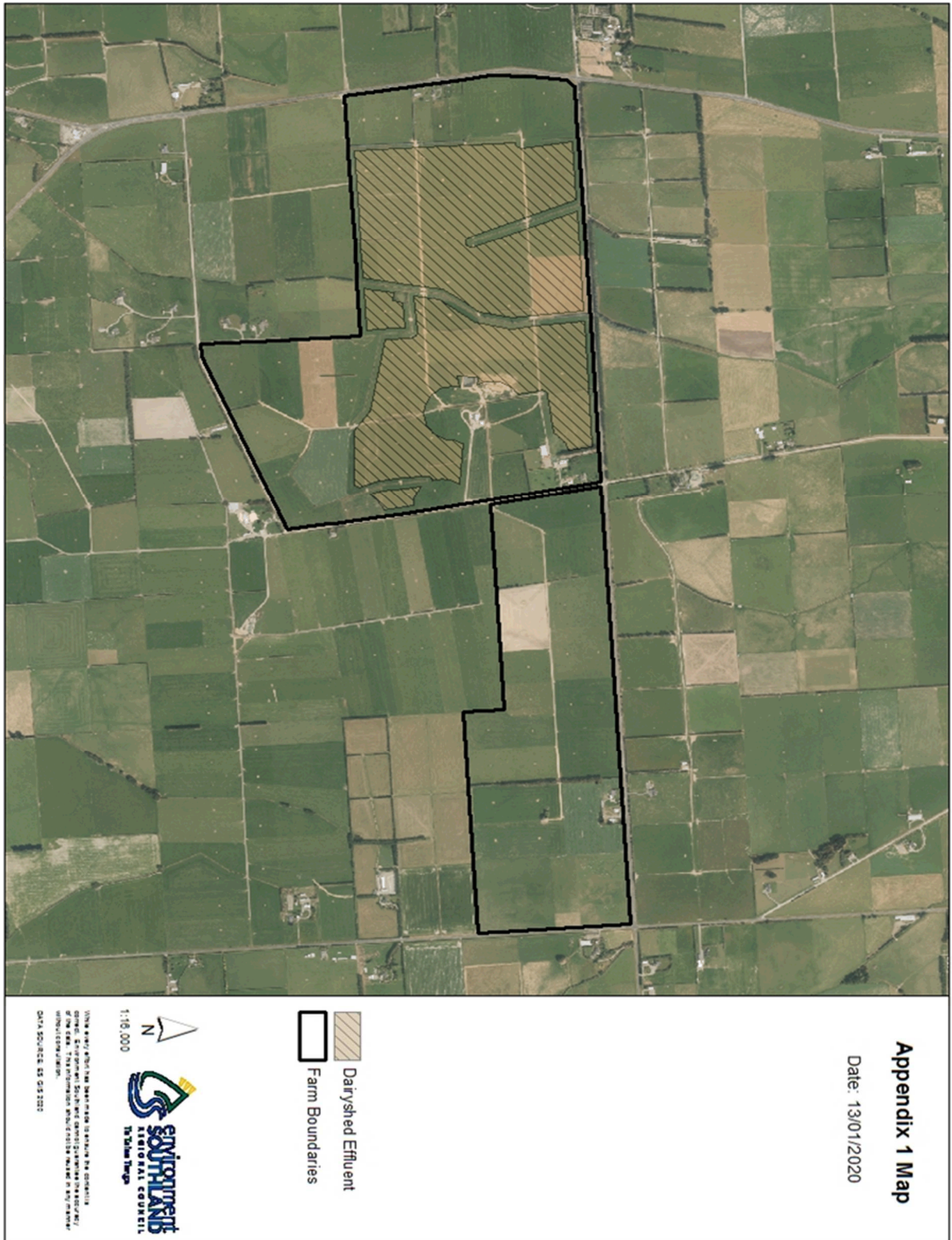
Advice Note

The Collected Agricultural Effluent Management Plans (CAEMP) may be combined with the Management Plan required by Land Use Consent AUTH-20181765-03 provided all the requirements required by Condition 27 are met.

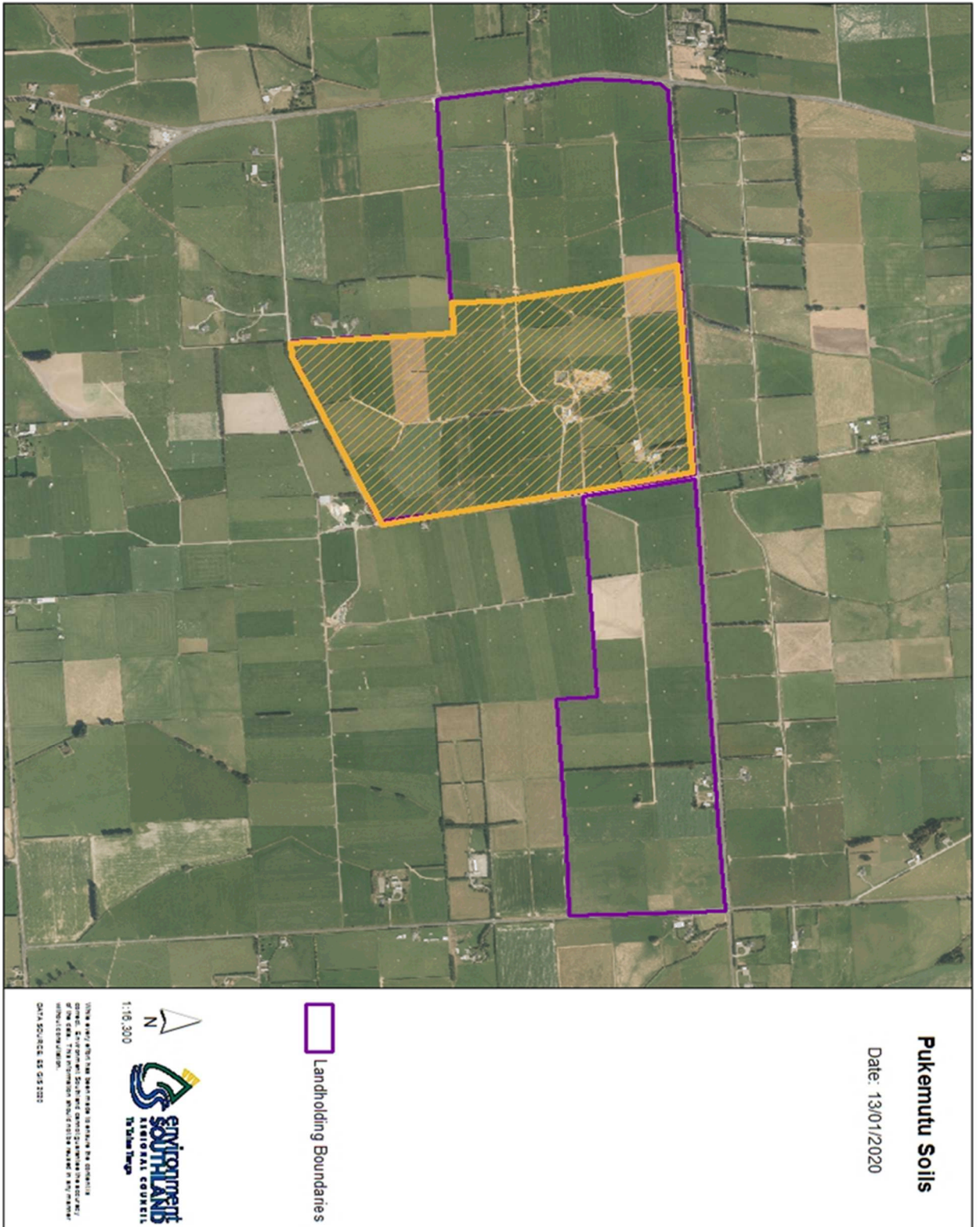
29. The Collected Agricultural Effluent Management Plan shall be reviewed at least once each milking season; and **either**
- (a) an updated version shall be provided to the Consent Authority by 31 May each year; **or**
 - (b) the Consent Holder must notify the Consent Authority in writing that no changes have been made by 31 May each year.
30. The Collected Agricultural Effluent Management Plan may be amended at any time, provided it continues to adhere to the matters listed in Condition 27 of this discharge permit and the Consent Holder provides the amended version to the Consent Authority within one month of the amendment.
31. Once the Collected Agricultural Management Plan is received as per Condition 28 or Condition 29, this version will supersede the Collected Agricultural Effluent Management Plan supplied in accordance with Condition 27.

32. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, for the purposes of:
- (a) determining whether the conditions of this permit are adequate to deal with any adverse effect on the environment, including cumulative effects, which may arise from the exercise of the permit, and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the permit;
 - (b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or the Environment Southland Regional Policy Statement;
 - (c) amending the monitoring programme to be undertaken;
 - (d) adding or adjusting compliance limits;
 - (e) ensuring the Oreti Freshwater Management Unit meets the freshwater objectives and freshwater quality limits set in an operative regional plan; and
 - (f) requiring the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment arising as a result of the exercise of this permit.

Appendix 1 – Agricultural Effluent Discharge Area



Appendix 2 – Pukemutu Soils



WATER PERMIT – AUTH-20181765-02

1. This consent must not be exercised until Water Permit AUTH-301044 is surrendered or has expired.
2. This resource consent authorises the abstraction and use of groundwater for stock drinking water and dairy shed wash down:

- (a) Bore E46/1067, located as described in the table below: and

Property Address	266 O'Shannessy Road, Winton
Legal Description	Section 43 Block I Winton HUN
Map Reference (NZTM 2000)	1241040E 4874813N

- (b) Bore E46/1089, located as described in the table below:

Property Address	266 O'Shannessy Road, Winton
Legal Description	Section 44 Block I Winton HUN
Map Reference (NZTM 2000)	1240876E 4874516N

3. The rate of abstraction shall not exceed:
 - (a) 2 litres per second; and
 - (b) 81,600 litres per day; and
 - (c) 25,172 cubic metres per year.

Advice Note

The Consent Holder must ensure that the bore that water abstraction occurs from can meet the following conditions:

The bore or well design and headwork's prevent:

- i. the infiltration of contaminants; and*
- ii. the uncontrolled discharge or leakage of water to the ground surface or between aquifers.*

Should the bore not meet the above conditions, the Consent Holder shall apply to the Consent Authority for a Resource Consent for the use and maintenance of the bore.

4. Prior to the first exercise of this consent, the Consent Holder shall install a backflow prevention device or take other appropriate measures to ensure water and/or contaminants cannot return to the water source.
5. The Consent Holder must have and maintain a water meter to record the water take, within an error accuracy range of +/-5% over the meter's nominal flow range.
6. If the Consent Holder replaces the water meter required by Condition 5, the Consent Holder must forward a copy of the installation certificate to the Consent Authority within one month of installing the new water meter.

7. The water meter must be installed in a straight length of pipe, before any diversion of water occurs. The straight length of pipe shall be part of the pump outlet plumbing, easily accessible, have no fittings and obstructions in it. There shall be a straight length of pipe on either side of the water meter, on the upstream side there shall be a distance that is 10 times the diameter of the pipe and on the downstream side there shall be a distance of 5 times the diameter of the pipe.
8. The Consent Holder shall ensure the full operation of the water meters at all times during the exercise of this consent. All malfunctions of the water meter during the exercise of this consent shall be reported to the Consent Authority within five working days of observation and appropriate repairs shall be performed within five working days. Once the malfunction has been remedied, a Water Measuring Device Verification Form completed with photographic evidence must be submitted to the Consent Authority within five working days of the completion of repairs.
9. The Consent Holder shall:
 - (a) if a mechanical insert water meter is installed, have it verified for accuracy each and every year from the first exercise of this consent; or
 - (b) if an electromagnetic or ultrasonic flow meter is installed, have it verified for accuracy every five years from the first exercise of this consent.
10. Each verification must be undertaken by a Consent Authority approved operator and a Water Measuring Device Verification Form shall be completed and supplied to the Consent Authority with receipts of service.
11. These water meter verifications must be supplied within five working days of the verification, and at any time upon request.
12. The Consent Holder must maintain a record of the total volume of water abstracted each month and provide this record to the Consent Authority by 31 May each year and at any other time on request.
13. Prior to the exercise of this consent, the Consent Holder shall notify the Consent Authority of the person who is in charge of the operation this consent. If the person in charge changes during the term of this consent, the Consent Holder shall notify the Consent Authority of the new operator no later than five working days after that person takes responsibility.
14. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, or on receiving monitoring results, for the purposes of:
 - (a) adjusting the consented rate or volume of water under Condition 3, should monitoring under Condition 12 or future changes in water use indicate that the consented rate or volume is not able to be fully utilised;
 - (b) determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage;

- (c) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, National Policy Statement, Water Conservation Order, relevant plans and/or any relevant Regional Policy Statement; or
- (d) adjusting or altering the method of water take data recording and transmission.

LAND USE CONSENT – AUTH-20181765-03

1. This consent must not be exercised until Discharge Permit AUTH-301043 is surrendered or has expired.
2. This consent must be exercised in conjunction with Discharge Permit AUTH-20181765-01.
3. Except as modified by conditions of resource consent, the activities authorised by this resource consent shall be carried out in accordance with the application for resource consent (APP 20181765), and all subsequent information provided during the application and the Farm Environmental Management Plan required by this consent.
4. For the avoidance of doubt, in the event that any inconsistency between the conditions of resource consent and the information and plans submitted as part of the application, the conditions of resource consent shall prevail.

Advice Note:

Routine monitoring inspections of this property may occur up to two times a year. This number does not include any other required inspections and may be combined with the inspections required for Discharge Permit AUTH-20181765-01.

5. The use of land for farming shall occur on the landholding at 266 O’Shannessy Road, Winton, as shown on the plan attached as Appendix 1, and consisting of:
 - (a) A block of land referred to as the “Existing Platform”; and

Legal Descriptions	Part Section 29 Block I Winton Hundred Part Section 30 Block I Winton Hundred Section 43 Block I Winton Hundred Section 44 Block I Winton Hundred Section 45 Block I Winton Hundred Section 54 Block I Winton Hundred Lot 1 DP 449518
Map Reference (NZTM 2000)	1240897E 4874621N
Property Address	266 O’Shannessy Road, Winton

- (b) A block of land referred to as the “East Block”:

Legal Descriptions	Lot 2 DP 449518
Map Reference (NZTM 2000)	1242743E 4874818N
Property Address	266 O’Shannessy Road, Winton

6. The farming activities shall be limited as follows:
 - (a) a maximum milking herd of no more than 680 cows;
 - (b) no more than 7 hectares of bailage/pasture wintering; and
 - (c) no more than 252 milking age cows wintered on the landholding as described in condition 5 in June and July (inclusive).

Exclusions

7. There shall be no intensive winter grazing of stock on the landholding as described in Condition 5.

Advice Note

Intensive winter grazing is defined as Grazing of stock between May and September (inclusive) on forage crops (including brassica, beet and root vegetable crops), excluding pasture and cereal crops.

8. The Consent Holder shall graze all young stock off the landholding as described in Condition 5.

Advice Note

Young stock are defined as stock aged from 4 months old up to 2 years old.

9. The East Block must not:
 - (a) be subject to intensive winter grazing or winter grazing in June and July (inclusive);
 - (b) be grazed by livestock in the months of May to August (inclusive); or
 - (c) have supplement fed on the block.

Nutrient Management

10. The Consent Holder shall implement a soil testing regime to determine the soil fertility status over the landholding and fertiliser recommendations developed in line with the soil testing results.
11. The Consent Holder shall maintain a record of their soil testing regime, soil testing results and fertiliser recommendations and provide this record to the Consent Authority upon request.
12. The Consent Holder shall:
 - (a) manage the application of fertiliser in accordance with:
 - i." The Code of Practice for Nutrient Management (With Emphasis of Fertiliser Use) Fertiliser Association, 2013, ISBN 978-0-47328345-2"; or
 - ii. any subsequent updates.
 - (b) not apply fertiliser:
 - i. to land during the period 1 June–31 July inclusive;
 - ii. within 10 m of a surface water body (where there is no riparian strip/margin);
 - iii. within 10 m of any wetland boundary;
 - iv. within 10 m of any significant indigenous biodiversity site;
 - v. within 20 m of any bore;
 - vi. when soil moisture capacity is exceeded; and
 - vii. directly to land within a riparian strip/margin.
13. The Consent Holder shall ensure that Olsen P levels in the soils are maintained within the range of 30–32.

Nutrient Modelling

14. The Consent Holder must ensure that nitrogen and phosphorus losses to water from farming activities undertaken on the landholding as described in Condition 5, are maintained at, or below the baseline contaminant loss rates of:
 - (a) 47 kg/ha/yr nitrogen; and
 - (b) 0.9 kg/ha/yr phosphorus.

as estimated by the four year rolling average loss rates using OVERSEERFM® version 2.9.2.2, undertaken in accordance with the generally accepted best practice modelling including the applicable Best Practice Data Input Standards/OverseerFM User Guide. The four year rolling average is defined as the average of the most recent four consecutive years' results starting from 1 July 2020.

Advice Note

The baseline loss rate for nitrogen and phosphorus is the discharge below the root zone as modelled with OVERSEERFM® version 2.9.2.2, the farm system inputs described in the application, and in accordance with the OVERSEER® Best Practice Input Standards as of 8 May 2019. The baseline loss rate for nitrogen and phosphorus is also the discharge modelled by a subsequent version of OVERSEER® in accordance with Condition 14.

The determination of whether the contaminant loss rates have been met will be made using the contaminant loss from the most recent year, modelling using the latest version of OverseerFM.

15. Each and every year for the duration of this consent, using the current version of OverseerFM and in accordance with the generally accepted best practice modelling and the current Best Practice Data Input Standards, the Consent Holder must model:
 - (a) the three-year rolling average of nitrogen and phosphorus loss rates;
 - (b) the nitrogen and phosphorus loss rates for the previous year from 1 July to 30 June inclusive;
 - (c) the predicted nitrogen and phosphorus loss rates for the upcoming year from 1 July to 30 June inclusive; and
 - (d) re-model the baseline contaminant loss rates under Condition 14 in the current version of Overseer.
16. The remodelled baseline contaminant loss rates, modelled in accordance with Condition 15(d) shall supersede replace the baseline contaminant loss rates under Condition 14.
17. A report must be provided to the Consent Authority by 30 September each year summarising the results of Overseer nitrogen and phosphorus loss modelling required by Condition 15. The report must include:
 - (a) a review of the Overseer input data to ensure that the annual nutrient budget reflects the farming system;
 - (b) an explanation of any differences between that nutrient budget and the annual nutrient budget of all previous years of farming undertaken under this consent;
 - (c) a comparison of the nitrogen and phosphorus losses in that budget with the baseline contaminant loss rate in Condition 14; and

- (d) the names and summaries of the relevant qualifications and experience of the person(s) who prepared and (if relevant) reviewed the nutrient budget.
18. If in any given year, the nitrogen or phosphorus loss rate as modelled in accordance with Condition 17 exceeds the baseline loss rate set under Condition 14, the Consent Holder must, by 30 November of that year, prepare a report for the Consent Authority that must include:
- (a) any reasons or causes of the exceedance;
 - (b) the measures that will be taken to ensure that nutrient losses are reduced to ensure compliance with the baseline contaminant loss rates.
 - (c) a detailed description of the measures to be taken; and
 - (d) for any mitigations proposed, a detailed mitigation plan (taking into account contaminant loss pathways) that identifies:
 - i. the mitigations to be undertaken;
 - ii. the physical works required to complete the mitigations;
 - iii. the proposed implementation timeframes for each mitigation;
 - iv. the operation of the mitigation; and
 - v. the mitigations' potential effectiveness.
19. The measures and mitigations identified in the report required by Condition 18 must be:
- (a) incorporated into the Farm Environmental Management Plan required by Condition 29; and
 - (b) undertaken within the timeframes specified in the report required by Condition 18.
20. Upon completion of the mitigation measures as per Condition 19, the Consent Holder must:
- (a) submit to the Consent Authority, photographs (date and time stamped) of the completed works; and
 - (b) supply the Consent Authority the GPS coordinates of the location of the mitigation measure.
21. All Overseer Modelling required by this consent must be undertaken by a person who is a Certified Nutrient Management Advisor (CNMA) under the Nutrient Management Advisor Certification Programme (NMACP).
22. The Consent Holder may use an alternative model that has been demonstrated to be equivalent to Overseer provided:
- (a) the evidence to demonstrate equivalence is provided to the Consent Authority at least six months prior to submitting the relevant annual report as required by Condition 17; and
 - (b) the use of the alternative model is approved by the Chief Executive of the Consent Authority.

Mitigation Measures

23. The Consent Holder must undertake maintenance of the existing and new dairy lanes and culvert crossings, as required, to ensure they are contoured to minimise run-off of nutrients or effluent and ensure that any run-off occurs onto vegetated areas where it will not enter any surface water body.

24. In addition to Condition 23, where practicable, the Consent Holder should ensure the run-off of dairy effluent from dairy lanes and culvert crossings is prevented.
25. The Consent Holder must not construct any new dairy lanes within 10 meters of a surface waterbody.
26. The Consent Holder shall:
 - (a) fence all surface waterbodies to ensure stock exclusion; and
 - (b) have and maintain riparian strips along surface waterbodies.

Records and Reporting

27. The Consent Holder must have and maintain a record of the following practices undertaken each year between 1 July and 30 June:
 - (a) fertiliser application, including rates;
 - (b) types of crops and total area of cropping, including winter feed/forage crops;
 - (c) cultivation methods;
 - (d) stock units with references to type, age and breed;
 - (e) effluent application areas;
 - (f) all other inputs to the OVERSEER® nutrient budgeting model.
28. The records required by Condition 27 shall be supplied to the Consent Authority upon request.

Farm Environmental Management Plan

29. The Consent Holder shall have and maintain a Farm Environmental Management Plan (FEMP). The FEMP shall, in accordance with Appendix N (Decisions Version) of the Southland Water and Land Plan (or any updated version of the plan), to demonstrate how the following outcomes are to be achieved:
 - (a) nutrients are used efficiently and nutrient loss to water is minimised;
 - (b) contaminant losses from critical source areas are reduced;
 - (c) cultivation is undertaken in a manner that minimises the movement of sediment and phosphorus to waterways;
 - (d) intensive winter grazing occurs in a way that minimises the loss of sediment, phosphorus and microbiological contaminants to waterways; and
 - (e) agricultural effluent and other discharges are managed in a way that avoids or minimises the loss of contaminants to water. Irrigation water is applied to meet plant demands and minimises the risk of leaching and run-off.
30. The FEMP must include, but not be limited to:
 - (a) a site map showing the location of critical source areas; physiographic zones; permanent or intermittent rivers, streams, lake, drains, ponds or wetlands; where known the location and depth of any subsurface drainage systems including outlets, riparian vegetation and fences adjacent to waterways and stock access points across waterways;
 - (b) details of the implementation and maintenance of mitigation measures required by the conditions of this consent;

- (c) details of the implementation and maintenance of Good Management Practices, including adoption of changing industry good management practices. This includes where the implementation of these is to avoid, remedy or mitigate any farm specific environmental risks to water quality shown through any monitoring undertaken on the property voluntarily or as required by the conditions of this consent;
 - (d) a review of the data obtained from the monitoring undertaken in accordance with the Farm Environmental Management Plan and any changes made, or to be made, as a consequence of that monitoring.
31. The FEMP must be reviewed at least once each milking season and can be modified at any time by the Consent Holder; and either
- (a) an updated version shall be provided to the Consent Authority by 31 May each year; **or**
 - (b) the Consent Holder must notify the Consent Authority in writing that no changes have been made by 31 May each year.

Advice Note

The results from the review of the FEMP will be assessed by the Consent Authority to ensure that the FEMP will still achieve the objectives specified in the FEMP and the FEMP has been prepared in accordance with Appendix N of the Southland Water and Land Plan (Decisions Version) (or any updated version of the plan).

32. The Consent Holder must operate in accordance with the FEMP at all times. Where there is inconsistency between the FEMP and the conditions of the consent, the conditions of this consent shall prevail.

Auditing

33. The Consent Authority may require the Consent Holder to have the farming activity as authorised by this consent independently audited by a person who is a Certified Nutrient Management Advisor or Farm Environmental Plan Auditor or a Suitably Qualified Person who has demonstrated an equivalent level of expertise.

34. The audit shall:

- (a) assess the performance of the farming activity occurring on the property against:
 - i. the objectives and good management practices specified in the FEMP;
 - ii. any additional mitigation measures implemented on the property either voluntarily or as required by the conditions of this consent; and
 - iii. the baseline contaminant losses specified in Condition 14.

35. The audit must determine the level of confidence of achieving each objective set out in the FEMP. This level of confidence shall be categorised into the following:

- **High** - the objective is probably being achieved
- **Medium** - the objective is possibly being achieved
- **Low** - it is unlikely that the objective is being achieved.

36. The audit shall record the justification for each level of confidence assessment, including noting the evidence, or lack of, used to make the determination.

37. Where an objective has received a Medium or Low level of confidence, the audit shall include the actions required for the farm to meet the objective and a timeframe whereby these actions need to be undertaken.
38. Where an objective has received a Medium level of confidence (and the farm has received no Lows), the audit shall also determine whether or not the farm is on-track to achieve the objectives.
39. The audit report shall be provided to the Consent Authority within three months of the date of the Consent Authority issuing a requirement to undertake the audit.
40. The frequency of audit requirements may be annually except where, for two consecutive years, an audit report has concluded that all objectives are probably being achieved (received a high level of confidence). In that situation no further audit will be required for at least three years.
41. Where the audit identifies actions required to be undertaken for the farm to meet the objective the Consent Holder must implement these actions within the timeframes stated in the audit.
42. Upon completion of any changes made and/or mitigations implemented as required by the audit, the Consent Holder shall confirm in writing, including photographs (date and time stamped) to the Consent Authority that these actions have been completed and implemented.
43. Upon completion of all the changes made and/or mitigations implemented as identified in the audit, the Consent Holder must ensure the measures are properly maintained, continue to function and are not removed or altered for the duration of this consent (and any subsequent variation versions).

Groundwater Quality Monitoring

44. The Consent Holder must install a minimum of XX 50 millimetre diameter PVC groundwater monitoring bores located as described below:
45. The bores are to be screened to a depth of 2 metres below the static groundwater level.
46. The Consent Holder shall take representative samples of groundwater from the bores listed in Condition 44. The sampling shall be undertaken as follows:
 - (a) all samples shall be taken by a suitably qualified and experienced person using methods described in the National Environmental Monitoring Standards, Water Quality Sampling Guidelines (NEMS, 2019);
 - (b) the water temperature and dissolved oxygen concentration of the groundwater at the bore shall be measured at the time of sampling using a calibrated portable meter.
47. Samples shall be collected:
 - (a) from the exercise of this consent, monthly for the first 12 months; and then
 - (b) quarterly for the remainder of the duration of this consent, at the start of;
 - i. January;

- ii. April;
- iii. July; and
- iv. October.

48. Samples shall be analysed by an IANZ accredited laboratory for:

- (a) Escherichia coli ;
- (b) Nitrate-nitrogen;
- (c) Nitrite-nitrogen;
- (d) Total Kjeldahl Nitrogen;
- (e) Total Phosphorus; and
- (f) Dissolved Reactive Phosphorous.

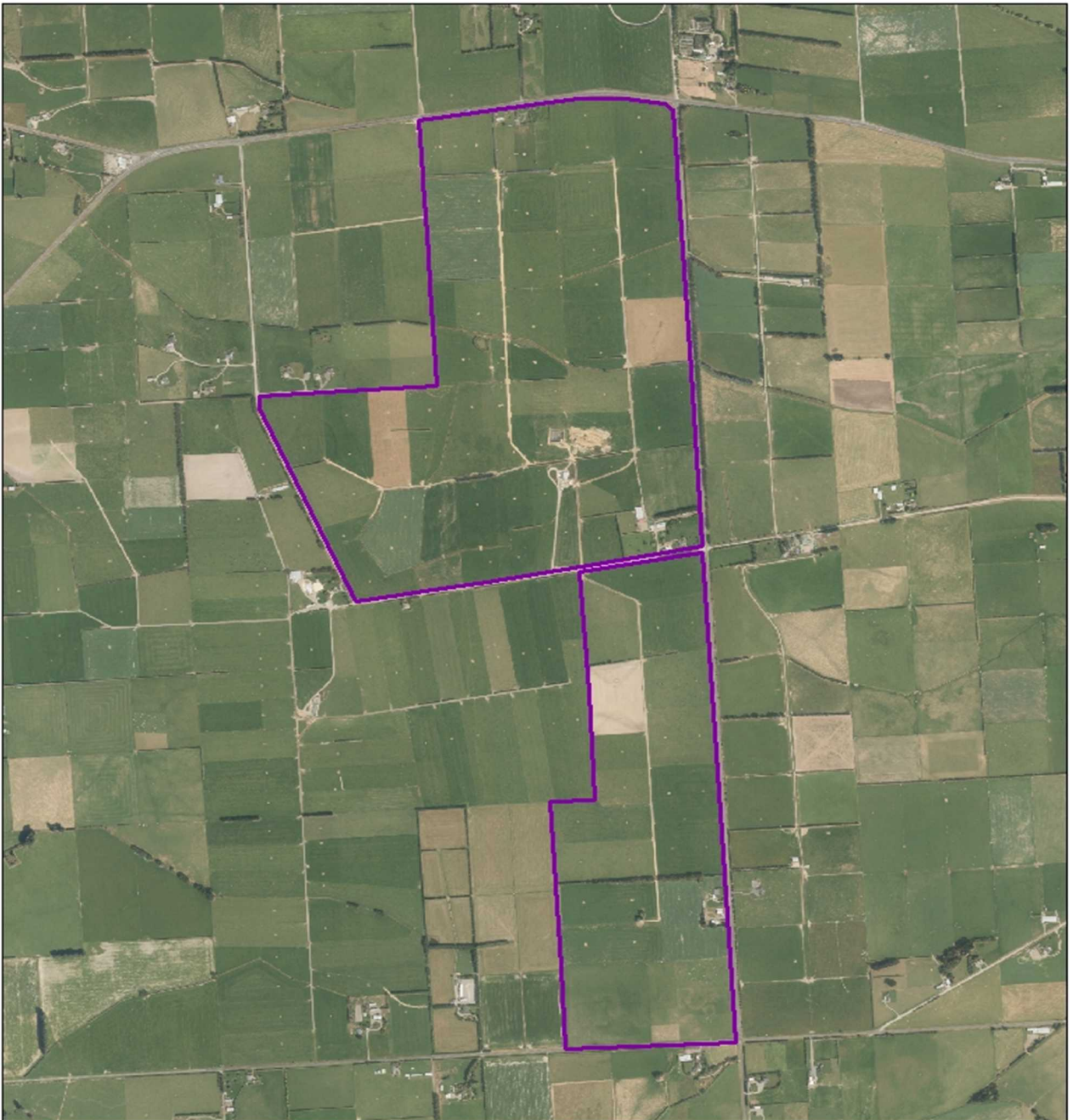
49. The results of the groundwater monitoring shall be provided to the Consent Authority, within five working days of receipt of results.

Lapse and Review

50. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, or on receiving monitoring results, for the purposes of:

- (a) determining whether the conditions of this permit are adequate to deal with any adverse effect on the environment, including cultural effects on Te Rūnanga o Ōraka Aparima and/or cumulative effects, which may arise from the exercise of the permit, and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the permit; or
- (b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or the Environment Southland Regional Policy Statement.

Appendix 1 – Landholding Boundary



Appendix 1 Map

Date: 13/01/2020



Landholding Boundaries



1:16,300



THIS MAP AND ANY INFORMATION CONTAINED THEREIN IS PROVIDED AS A SERVICE TO THE PUBLIC AND IS NOT TO BE USED FOR ANY OTHER PURPOSE. THE INFORMATION IS PROVIDED AS IS AND WITHOUT WARRANTY.

DATA SOURCE: 05 05 2020