Decision on an application to change/cancel conditions of a resource consent under section 127 of the Resource Management Act 1991

Discretionary activity under section 127(3)

Application number:	DIS60051710-A
Original consent numbers:	Discharge Consent No. 41864 (DIS60267715, File number 16704), as varied by REG-62117 (DIS60051710, File number 16704) (DIS60051710)
Applicant:	Matakana Country Park Limited
Site address:	1151 and 1153 Leigh Road, 15 Takatu Road, 25, 27, 29, 31, 51 and 53 Omaha Flats Road, Omaha Flats (previously known as 1151 Leigh Road prior to subdivision)
Legal description:	1151 Leigh Road LOT 2 DP 519220, 1/9 SH LOT 10 DP 519220 1153 Leigh Road LOT 1 DP 519220, 1/9 SH LOT 10 DP 519220 15 Takatu Road LOT 5 DP 519220, 1/9 SH LOT 10 DP 519220 25 Omaha Flats Road LOT 6 DP 519220, 1/9 SH LOT 10 DP 519220 27 Omaha Flats Road LOT 7 DP 519220, 1/9 SH LOT 10 DP 519220 29 Omaha Flats Road LOT 8 DP 519220, 1/9 SH LOT 10 DP 519220 31 Omaha Flats Road LOT 3 DP 519220, 1/9 SH LOT 10 DP 519220 51 Omaha Flats Road LOT 4 DP 519220, 1/9 SH LOT 10 DP 519220 53 Omaha Flats Road LOT 9 DP 519220, 1/9 SH LOT 10 DP 519220

Proposal:

To vary conditions to enable a new proposed Early Childhood Education Centre to utilise the existing wastewater system.

Note: For the avoidance of doubt, any reference in this decision to 'vary' or 'variation application' shall be taken to mean an application to change or cancel consent conditions under s127 of the RMA.

This discretionary activity under s127 of the Resource Management Act 1991 (RMA) is for changes to conditions of consent DIS60051710 (REG-62117) involving the following amendments (with strikethrough for deletion, underline for insertions):

Discharge consent (s15) – Discharge Consent DIS60051710 (REG-62117)

Changes to condition 1

The construction, installation and management of the wastewater treatment and land disposal system shall be undertaken in accordance with the conditions of this permit and in accordance with the following plans, specifications and any further information later submitted as part of this application and DIS60051710- A:

Forms:	Application form A and 818
Reports:	Ormiston Associates Ltd (June 2013). On-site Wastewater Treatment and Land Disposal Assessment for Matakana Country Park 1151 Leigh Road, Matakana. Ref: 3598
	Ormiston Associates Ltd (March 2014). Wastewater Discharge Consent No.41864 - Application for Variation to Consent. Matakana Museum Limited 1151 Leigh Road, Matakana. Ref: 3598
	Ormiston Associates Ltd (16 December 2021), On-site Wastewater Review and Management for Proposed Childcare Centre. Ref: 3598.
Plans:	Ormiston Associates Ltd (March 2014) Matakana Country Park, 1151 Leigh Road, Matakana, Site Plan Wastewater (Devised Land Disposal Locations). Ref: 3598-1A.
Correspondence:	Letter from Ormiston Associates Ltd (5 August 2013)- Re: Discharge Consent Application No 41964 for a replacement on-site wastewater discharge consent, Matakana Museum Ltd, 1151 Leigh Road, Matakana.
	Letter from Ormiston Associates Ltd dated 1/9/2020 (received 13/9/2022)- Request for Additional Information.

The most recent version of each design detail in the above documents shall constitute part of this permit. Minor variations shall be approved in writing by the ~~Team Leader Wastewater and Rural, NRSI~~ Council prior to such works taking place.

New condition 7a)

The consent holder must actively manage land use activities and the related wastewater generated on the sites, to ensure that the maximum discharge to land associated with this consent (and using the wastewater system hereby consented) does not exceed 12.5m^3/ day. This may require limiting services provided by activities, hours or days of operation, or capacity of specific activities.

Upon request, the consent holder must provide details to the Council, of how the land use activities over the sites are managed, including how peak wastewater generation periods from activities are managed to ensure they do not overlap and result in discharges to land in excess of 12.5m^3/ day.

Changes to condition 8

The key components of the wastewater treatment systems shall be consistent with that described in the application and shall comprise at least the following minimum components, dimensions and standards:

a) Wastewater Treatment Plant consisting of:
- (1x) 4,500 litre septic tank with effluent outlet filter, pump and alarm serving the information kiosk
- (1x) 6,000 litre dual chamber grease trap serving the cafe/restaurant
- (1x) 23,000 litre septic tank with outlet filter, pump and alarm serving the cafe/restaurant
- (1x) 6,000 litre septic tank with effluent outlet filter, pump and alarm serving the Manager's residence
- (1x) 6,000 litre septic tank with effluent outlet filter, pump and alarm serving the toilet block
- (1x) 5,000 litre septic tank with effluent outlet filter, pump and alarm serving the 1 bedroom apartment and farm building
- (1x) 27,000 litre buffer tank for storage of peak flows with triple float control pump and timer assembly to restrict flow further through the system to 12,500litres/day
- (1x) 23,000 litre recirculation tank with effluent outlet filter, pump and alarm
- (1x) AX100 Advantex recirculating textile filter
- (1x) 23,000 litre treated effluent tank with pump and alarm
- (1x) Effluent discharge flow meter(+/- 5% accuracy)
- (1x) 6,000 litre septic tank serving the accommodation facility

(1x) 9,000 litre septic tank serving the accommodation facility with effluent outlet filter, pump and alarm facility

(1x) Water usage flow meter (+/- 5% accuracy) monitoring the accommodation facility

(1x) 12,500 litre septic tank serving the childcare facility with effluent outlet filter, pump and alarm facility

(1x) Water usage flow meter (+/- 5% accuracy) monitoring the childcare facility.

b) Land treatment system consisting of:

(1x) 3,150m^2 pressure compensating drip irrigation (PCDI) primary disposal area (divided into two equal areas. Area 1 will be 1575m^2 and Area 2 will be 1575m^2). The peak hydraulic loading rate will be 4mm/day.

(1x) 3,150m^2 reserve effluent disposal area (100%). The peak hydraulic loading rate is 4mm/day.

Providing that equivalent components, dimensions and standards may be used that achieve similar or better performance standards if such is approved in writing by the Council ~~Team Leader Rural and Wastewater Consents, NRSI~~.

New condition 8a)

Water usage meters must be installed to continuously monitor water usage for each of the accommodation and early childcare facilities. These must be installed prior to each activity commencing and maintained thereafter.

The water usage meters must be read, and the meter reading recorded weekly on the same day of each week for the duration of the consent when the site is occupied. The readings must be provided to the Council upon request, and at no less than 3 monthly intervals.

Decision

I have read the application, supporting documents, and the report and recommendations on the application for variation. I am satisfied that I have sufficient information to consider the matters required by the RMA and make a decision under delegated authority on the application.

Acting under delegated authority, under sections 127, 104, 104B, 105, 107 and Part 2 of the RMA, the application for variation to conditions of a resource consent is **GRANTED**.

Reasons

The reasons for this decision are:

1. The proposal is appropriately considered under s127 as the changes will not result in a fundamentally different activity or materially different effects.

2. In accordance with an assessment under s104(1)(a)-(ab) and s127(3) of the RMA, the actual and potential effects from the variation will be acceptable as:

    a. The application relates to the proposed establishment of an ECE on the site (with the land use and consent notice aspects assessed under separate applications). It is proposed to utilise capacity within the existing wastewater system to service this new ECE. There are no changes proposed to the existing central wastewater system, and the new activity will discharge to this via a new septic tank.

    b. Council's Wastewater Specialist has reviewed the application and has not raised any fundamental technical concerns or environmental effects.

    c. Subject to compliance with conditions, the overall wastewater discharges can be appropriately managed.

    d. With reference to s104(1)(ab), there are no specific offsetting or environmental compensation measures proposed or agreed to by the applicant to ensure positive effects on the environment.

3. In accordance with an assessment under s104(1)(b) and s127(3) of the RMA, the variation is consistent with the relevant statutory documents. In particular:

    National Policy Statement for Freshwater Management 2020 (NPS(FW))

    The NPS(FW) seeks to ensure that natural and physical resources are managed in a way that prioritises the health and well-being of water bodies and freshwater ecosystems, the health needs of people and the ability of people and communities to provide for their social, economic and cultural well-being, now and in the future.

    The proposed changes and conditions ensure that the overall wastewater discharges will be appropriately managed. The application confirms that the wastewater discharges will continue to be within the consented limit. Potential adverse effects on waterbodies and receiving environment will be suitably managed. Overall, the application is consistent with the relevant objectives and policies of the NPS(FW).

    AUP(OP) – E1 Water quality and integrated management

    Subject to compliance with conditions, the application will create no adverse effects related water quality or quantity when compared to the consented situation (E1.2(1), E1.3(2), E2.2(1)). The wastewater discharges will be suitably managed and will have no new/increased adverse effects on freshwater or coastal water quality (E1.2(3) and E1.3(4)). There will also be no adverse impacts on public health and safety (E1.2(3) and E1.3(5)). The proposed wastewater management is considered appropriate (E1.3(17), E1.3(23), and E1.3(24)).

    Overall, the proposed changes are consistent with the objectives and policies of Chapter E1 of the AUP(OP).

4. In accordance with an assessment under s104(1)(c) and s127(3) of the RMA, the following other matters are considered appropriate no other matters are considered relevant.

5. In the context of this variation application, where the objectives and policies of the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects and there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything to the evaluative exercise.

6. Overall, the proposal is consistent with the objectives and policies of the AUP(OP) and NPS(FW) and any effects created in this regard will be acceptable.

Conditions

Under sections 108 and 108AA of the RMA, this variation is subject to the following additional conditions and amendments to existing conditions:

Changes to condition 1

The construction, installation and management of the wastewater treatment and land disposal system shall be undertaken in accordance with the conditions of this permit and in accordance with the following plans, specifications and any further information later submitted as part of this application and DIS60051710- A:

Forms:	Application form A and 818
Reports:	Ormiston Associates Ltd (June 2013). On-site Wastewater Treatment and Land Disposal Assessment for Matakana Country Park 1151 Leigh Road, Matakana. Ref: 3598
	Ormiston Associates Ltd (March 2014). Wastewater Discharge Consent No.41864 - Application for Variation to Consent. Matakana Museum Limited 1151 Leigh Road, Matakana. Ref: 3598
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Correspondence:	Letter from Ormiston Associates Ltd (5 August 2013)- Re: Discharge Consent Application No 41964 for a replacement on-site wastewater discharge consent, Matakana Museum Ltd, 1151 Leigh Road, Matakana.

Letter from Ormiston Associates Ltd dated 1/9/2020
(received 13/9/2022)- Request for Additional Information.

The most recent version of each design detail in the above documents shall constitute part of this permit. Minor variations shall be approved in writing by the ~~Team Leader Wastewater and Rural, NRSI~~ Council prior to such works taking place.

New condition 7a)

The consent holder must actively manage land use activities and the related wastewater generated on the sites, to ensure that the maximum discharge to land associated with this consent (and using the wastewater system hereby consented) does not exceed 12.5m^3/ day. This may require limiting services provided by activities, hours or days of operation, or capacity of specific activities.

Upon request, the consent holder must provide details to the Council, of how the land use activities over the sites are managed, including how peak wastewater generation periods from activities are managed to ensure they do not overlap and result in discharges to land in excess of 12.5m^3/ day.

Changes to condition 8

The key components of the wastewater treatment systems shall be consistent with that described in the application and shall comprise at least the following minimum components, dimensions and standards:

a) Wastewater Treatment Plant consisting of:
   - (1x) 4,500 litre septic tank with effluent outlet filter, pump and alarm serving the information kiosk
   - (1x) 6,000 litre dual chamber grease trap serving the cafe/restaurant
   - (1x) 23,000 litre septic tank with outlet filter, pump and alarm serving the cafe/restaurant
   - (1x) 6,000 litre septic tank with effluent outlet filter, pump and alarm serving the Manager's residence
   - (1x) 6,000 litre septic tank with effluent outlet filter, pump and alarm serving the toilet block
   - (1x) 5,000 litre septic tank with effluent outlet filter, pump and alarm serving the 1 bedroom apartment and farm building
   - (1x) 27,000 litre buffer tank for storage of peak flows with triple float control pump and timer assembly to restrict flow further through the system to 12,500litres/day
   - (1x) 23,000 litre recirculation tank with effluent outlet filter, pump and alarm
   - (1x) AX100 Advantex recirculating textile filter
   - (1x) 23,000 litre treated effluent tank with pump and alarm

(1x) Effluent discharge flow meter(+/- 5% accuracy)

(1x) 6,000 litre septic tank serving the accommodation facility

(1x) 9,000 litre septic tank serving the accommodation facility with effluent outlet filter, pump and alarm facility

(1x) Water usage flow meter (+/- 5% accuracy) monitoring the accommodation facility

(1x) 12,500 litre septic tank serving the childcare facility with effluent outlet filter, pump and alarm facility

(1x) Water usage flow meter (+/- 5% accuracy) monitoring the childcare facility.

b) Land treatment system consisting of:

(1x) 3,150m^2 pressure compensating drip irrigation (PCDI) primary disposal area (divided into two equal areas. Area 1 will be 1575m^2 and Area 2 will be 1575m^2). The peak hydraulic loading rate will be 4mm/day.

(1x) 3,150m^2 reserve effluent disposal area (100%). The peak hydraulic loading rate is 4mm/day.

Providing that equivalent components, dimensions and standards may be used that achieve similar or better performance standards if such is approved in writing by the Council ~~Team Leader Rural and Wastewater Consents, NRSI~~.

New condition 8a)

Water usage meters must be installed to continuously monitor water usage for each of the accommodation and early childcare facilities. These must be installed prior to each activity commencing and maintained thereafter.

The water usage meters must be read, and the meter reading recorded weekly on the same day of each week for the duration of the consent when the site is occupied. The readings must be provided to the Council upon request, and at no less than 3 monthly intervals.

Advice notes

1. *A copy of the consolidated set of conditions of consent as amended is included as attachment 1 to this section 127 decision.*

2. *The consent holder is reminded that the decision on this section 127 application does not affect the lapse period for the resource consent.*

3. *This decision is to be read in conjunction with any other relevant approved resource consent(s) and does not negate the consent holder's requirement to continue to comply with the conditions of any previously granted resource consent(s) that have been implemented.*

Delegated decision maker:

Name: Chelsea Gosden

Title: Team Leader, Resource Consents

Signed: 

Date: 24 August 2023

Attachment 1: Consolidated conditions of consent as amended

Activity in accordance with plans

1. The construction, installation and management of the wastewater treatment and land disposal system shall be undertaken in accordance with the conditions of this permit and in accordance with the following plans, specifications and any further information later submitted as part of this application and DIS60051710- A:

Forms:	Application form A and 818
Reports:	Ormiston Associates Ltd (June 2013). On-site Wastewater Treatment and Land Disposal Assessment for Matakana Country Park 1151 Leigh Road, Matakana. Ref: 3598
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	Letter from Ormiston Associates Ltd dated 1/9/2020 (received 13/9/2022)- Request for Additional Information.

The most recent version of each design detail in the above documents shall constitute part of this permit. Minor variations shall be approved in writing by the Council prior to such works taking place.

All charges paid

2. This consent (or any part thereof) shall not commence until such time as the following charges, which are owing at the time the Council's decision is notified, have been paid in full:

   (a) All fixed charges relating to the receiving, processing and granting of this resource consent under section 36(1) of the Resource Management Act 1991 (RMA); and

(b) All additional charges imposed under section 36(3) of the RMA to enable the Council to recover its actual and reasonable costs in respect of this application, which are beyond challenge.

3. The consent holder shall pay any subsequent further charges imposed under section 36 of the RMA relating to the receiving, processing and granting of this resource consent within 20 days of receipt of notification of a requirement to pay the same, provided that, in the case of any additional charges under section 36(3) of the RMA that are subject to challenge, the consent holder shall pay such amount as is determined by that process to be due and owing, within 20 days of receipt of the relevant decision.

4. Access to the relevant parts of the property shall be maintained and be available at all reasonable times to enable the servants or agents of the AC to carry out inspections, surveys, investigations, tests, measurements or take samples.

Term of consent / duration.

5. Under section 125 of the RMA, this consent lapses five years' after the date it is granted unless:

(a) The consent is given effect to; or

(b) The Council extends the period after which the consent lapses

6. This consent shall expire on 31 December 2028 unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act 1991.

Authorised Discharge Quantity

7. The maximum discharge volume from the wastewater treatment systems to land shall not exceed 12.5m^3/day.

7a. The consent holder must actively manage land use activities and the related wastewater generated on the sites, to ensure that the maximum discharge to land associated with this consent (and using the wastewater system hereby consented) does not exceed 12.5m^3/ day. This may require limiting services provided by activities, hours or days of operation, or capacity of specific activities.

Upon request, the consent holder must provide details to the Council, of how the land use activities over the sites are managed, including how peak wastewater generation periods from activities are managed to ensure they do not overlap and result in discharges to land in excess of 12.5m^3/ day.

Works

8. The key components of the wastewater treatment systems shall be consistent with that described in the application and shall comprise at least the following minimum components, dimensions and standards:

a) Wastewater Treatment Plant consisting of:

(1x) 4,500 litre septic tank with effluent outlet filter, pump and alarm serving the information kiosk

(1x) 6,000 litre dual chamber grease trap serving the cafe/restaurant

(1x) 23,000 litre septic tank with outlet filter, pump and alarm serving the cafe/restaurant

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b) Land treatment system consisting of:

(1x) 3,150m^2 pressure compensating drip irrigation (PCDI) primary disposal area (divided into two equal areas. Area 1 will be 1575m^2 and Area 2 will be 1575m^2). The peak hydraulic loading rate will be 4mm/day.

(1x) 3,150m^2 reserve effluent disposal area (100%). The peak hydraulic loading rate is 4mm/day.

Providing that equivalent components, dimensions and standards may be used that achieve similar or better performance standards if such is approved in writing by the Council.

8a. Water usage meters must be installed to continuously monitor water usage for each of the accommodation and childcare facilities. These must be installed prior to each activity commencing and maintained thereafter.

The water usage meters must be read, and the meter reading recorded weekly on the same day of each week for the duration of the consent when the site is occupied. The readings must be provided to the Council upon request, and at no less than 3 monthly intervals.

9. That a wastewater flow meter shall be maintained, that continuously measures to an accuracy of plus or minus 5 percent, treated wastewater flows to the land disposal system. The meter shall be installed in accordance with the manufacturer's specifications and to the satisfaction of the Team Leader Wastewater and Rural, NRSI.

10. The driplines shall be buried to an approximate depth of 150mm or pinned to the ground surface in areas established in trees and mulched. The disposal areas are to be fenced to prevent stock access.

11. The Consent Holder shall contact the AC to organise a post construction inspection of the land disposal system by an AC officer within 30 days of works completion and discharge commencing. The Consent Holder shall provide at the post construction inspection: copies of an engineer's certificate, 'as-built' plans, management plans and maintenance contract in accordance with the conditions below.

12. The installation of the land disposal system shall be carried out under the supervision of a Chartered Professional Engineer or suitably qualified Consultant, experienced in wastewater treatment and land disposal systems.

13. The supervising Engineer/Consultant shall certify in writing to the Team Leader Wastewater and Rural, NRSI, within 30 days of work completion, and discharge commencing, that all new components of the disposal system have been designed, inspected and installed in accordance with standard engineering practice, with the approved plans and with the specifications and conditions of this permit.

14. Final "as-built" plans of the wastewater treatment and land disposal system for the works covered by this consent that show the location of each key component of the treatment and land disposal system, including the designated reserve disposal area, shall be submitted to the Team Leader Wastewater and Rural, NRSI within 30 days of work completion and discharge commencing. The final as-built plans shall be to the satisfaction of the Team Leader Wastewater and Rural, NRSI.

15. Full water reduction fixtures shall be maintained at the Matakana Country Park serviced by the treatment and land disposal system. Wastewater reduction fixtures shall include but not be limited to the following.:

    i. Dual flush (6/3 litre) toilet cisterns

    ii. Shower flow restrictors

    iii. Low water use dishwasher

    iv. Low water use washing machines

    v. Water flow restrictors to provide maximum flows of 9L/min for shower fixtures and 6L/min for basin faucets

    No extra wastewater producing fixtures including continuous flow urinals, garbage grinders, spa baths and multi-head showers shall be installed.

16. An alarm system shall be maintained to operate in the event of any pump failure and shall be located in a prominent location near the treatment plant.

17. That the Consent Holder shall inspect the septic tanks, recirculation tank, textile filter, treated wastewater tank and disposal areas on a monthly basis. That the septic tanks, recirculation tank and treated wastewater tank shall be cleaned out once the combined depth of sludge and scum occupies more than half of any of the tank volume and in any event shall be desludged in accordance with the minimum frequency specified in the Management Plan (see Condition below)

18. That the grease trap shall be inspected on a weekly basis. The grease trap shall be cleaned out once the combined depth of sludge and scum occupies more than half of any of the tank volume and in any event the tanks shall be desludged in accordance with the minimum frequency specified in the Management Plan (see Condition below).

19. That the consent holder shall install and maintain durable marker pegs at the corner of the PCDI irrigation field and the flushing point so that they are easily identifiable when maintenance is required.

20. That the Consent Holder shall install and maintain appropriate signage and fencing to discourage access to the treatment plant and land application system by unauthorised personnel.

21. Within the effluent irrigation areas, the PCDI irrigation shall be installed surface laid (or subsurface with 100mm-150mm of soil cover) and densely planted with water tolerant, high evapotranspiration species as recommended by TP58 Appendix Gora suitably qualified person.

22. That the quality of the treated effluent shall be:

Biochemical Oxygen Demand	better than 20 mg /l; and
Suspended Solids	better than 20 mg /l; and

23. That discharges of effluent to land shall not result in:

    i. surface ponding of effluent within the land disposal area; or

    ii. channelling of effluent that results in overland runoff of effluent beyond the land disposal area; or

    iii. surface seepage (breakout) of effluent beyond the land disposal area.

24. Written approval from the Tearn Leader Rural and Wastewater Consents, NRSI shall be obtained prior to the use of the reserve effluent irrigation area. The request for approval shall include:

    i. Reason that the reserve irrigation area is needed; and

    ii. Assessment of the condition of the primary effluent irrigation area and any maintenance or other mitigation measures required to allow its continued use; and

    iii. An assessment of discharge flow volumes on the site and an assessment of options to manage or reduce flows; and

    iv. Updated site plan showing the proposed layout of the irrigation lines within the allocated reserve area.

Management plan conditions

25. A Management Plan shall be submitted to the Team Leader Rural and Wastewater Consents, NRSI for written approval within 30 days of work completion. The Management Plan shall be prepared by a suitably qualified person experienced in wastewater engineering for the wastewater treatment and land disposal system and shall be in accordance with the conditions of this consent and should include, but not be limited to:

    i. A 3 monthly inspection programme designed to verify the correct functioning of all the wastewater treatment and land disposal systems; and

ii. A schedule or checklist of maintenance requirements for the grease trap, wastewater treatment plant, filters, pumps, alarms and PCDI lines; and

iii. Instructions for daily reading of the flow meter to the nearest 1 litre, when the readings are to be taken and forms to be filled in for the collection of flow meter readings.

iv. Copies of final as-built plans and. the signed maintenance agreement; and

v. Names of the appropriate contact people in the event of system malfunction including contact telephone numbers; and

vi. A contingency plan of action to be taken in the event metered flows exceed maximum permitted discharge volumes and/or pump or power failure and/or effluent breakouUsurface runoff from the treatment and land disposal system.

The Consent Holder shall comply with the requirements of the Management Plan once it has been approved.

Operation and maintenance conditions

26. The Consent Holder shall enter into, and maintain in force, a written maintenance contract with a suitably qualified person experienced in wastewater treatment system operations and maintenance for the on-going maintenance of the treatment and land disposal systems. An operative contract shall be provided to the Team Leader Rural and Wastewater Consents, NRSI upon request throughout the term of the consent

27. The wastewater treatment system, including the treatment plant and land disposal area, shall be operated and maintained in good working order at all times.

28. Access to all wastewater treatment system components, including the land disposal system and PCDI lines, shall be maintained to provide access for inspection and maintenance to occur.

29. Flushing of PCDI lines shall be conducted in a manner that does not result in discharges of flushed water off the site or into surface water.

Monitoring and reporting conditions

30. The flow meter shall be read on the same day each week. These readings shall be recorded in a logbook and copies of these records shall be forwarded to the Team Leader Rural and Wastewater Consents, NRSI annually by 31 October.

31. Subject to the written approval of the Team Leader Rural and Wastewater Consents, NRSI, the frequency of monitoring may be decreased/ceased. The Team Leader Rural and Wastewater Consents, NRSI reserves the right to require flow meter readings to recommence at any stage.

32. Copies of all maintenance service records and sample results shall be submitted to the Team Leader Rural and Wastewater Consents, NRSI annually by 31 October.

Section 128 – review conditions

33. That the conditions of this consent may be reviewed by the Team Leader Rural and Wastewater Consents, NRSI pursuant to Section 128 of the RMA, by the giving of notice pursuant to Section 129 of the Act, in March 2015 and every March thereafter in order:

    i. To vary the size or design of the treatment system and/or size or design of the land disposal area in light of increased understanding of the system or further information, changed circumstances, or the results of monitoring; or

    ii. To alter monitoring requirements in light of previous monitoring results and/or changed environmental conditions or circumstances; or

    iii. To deal with any significant adverse effect on the environment which may arise from the exercise of the consent and which was not apparent at the time of the granting of the consent; or

    iv. To require a Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment resulting from the discharge, including measures to decrease water usage and/or discharge flow volumes; or

    v. To deal with any adverse effect on the environment arising or potentially arising from the exercise of this consent, through altering or providing specific performance standards.

Advice Notes

1. *Pursuant to Section 126 of the Resource Management Act 1991, which provides for Auckland Council to cancel a resource consent by written notice, if this resource consent has been exercised, but is not subsequently exercised for a continuous period of five years, the consent may be cancelled by the Council unless other criteria contained within Section 126 are met.*

2. *The consent holder shall obtain all other necessary consents and permits, including those under the Building Act 2004, and the Historic Places Trust Act 1993. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004. Please note that the approval of this resource consent, including consent conditions specified above, may affect a previously issued building consent for the same project, in which case a new building consent may be required. If not all resource consents have been applied for, it remains the responsibility of the consent holder to obtain any and all necessary resource consents required under the relevant requirements of the Resource Management Act 1991.*

3. *If you disagree with any of the above conditions, or disagree with the additional charges relating to the processing of the application you have a right of objection pursuant to Sections 357A or 357B of the RMA. Any objection must be made in writing to Council within 15 working days of notification of the decision.*

4. *Compliance with the consent conditions will be monitored by Council in accordance with Section 35(d) of the Resource Management Act. This will typically include site visits to verify compliance (or noncompliance) and documentation (site notes and photographs) of the activity established under the Resource Consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time.*

Resource Consent Notice of Works S

Please email this form to **monitoring@aucklandcouncil.govt.nz at least *5* days prior to work starting** on your development or post it to the address at the bottom of the page.

Site address:				
AREA (please tick the box)	**Auckland CBD☐**	**Auckland Isthmus☐**	**Hauraki Gulf Islands ☐**	**Waitakere ☐**
Manukau ☐	**Rodney ☐**	**North Shore ☐**	**Papakura ☐**	**Franklin ☐**

Resource consent number:	**Associated building consent:**
Expected start date of work:	**Expected duration of work:**

Primary contact	**Name**	**Mobile / Landline**	**Address**	**Email address**
Owner				
Project manager				
Builder				
Earthmover				
Arborist				
Other (specify)				

Signature: Owner / Project Manager (indicate which)	**Date:**

Once you have been contacted by the Monitoring Officer, all correspondence should be sent directly to them.

SAVE $$$ minimise monitoring costs!

The council will review your property for start of works every three months from the date of issue of the resource consent and charge for the time spent. You can contact your Resource Consent Monitoring Officer on 09 301 0101 or via monitoring@aucklandcouncil.govt.nz to discuss a likely timetable of works before the inspection is carried out and to avoid incurring this cost.

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Email: mail@ormiston.co.nz

3598

16th December 2021

Matakana Country Park
1151 Leigh Road
RD 5
WARKWORTH 0985.

Attention: Brendan Caghlan
Dear Brendan,

RE: ON-SITE WASTEWATER REVIEW AND MANAGEMENT FOR PROPOSED CHILDCARE CENTRE AT MATAKANAMUSEUM , 1151 LEIGH ROAD, MATAKANA.
CONSENT APPLICATION No DIS600551710

1. Introduction

As requested, we have completed a review of the existing on-site wastewater treatment and land disposal system and provide recommendations on the proposed Childcare Facility to be developed on the site. We note that in September 2020 we assessed additional wastewater production a proposed 10 Cabin Accommodation development that was allowed for in the current discharge consent (REG 62117, expires 31st December 2028).
This consent application is under s127 of the RMA.

We understand that it is now proposed to develop a Childcare centre catering for up to 99 children, 20 fulltime staff and 4 part time staff. We note that the Childcare will only operate normal weekdays and will be closed weekends and public holidays when wastewater flows from other site facilities are potentially highest.

This summary provides a assessment of daily wastewater production records, collection, buffering requirements and review of the existing treatment and land disposal. We have also made allowance for the proposed 10 x Cabin Accommodation previously reported

and included in the total design flow. Although Cabin Accommodation has been reviewed as having 100% occupancy for 100% of the time this is unlikely to ever occur. Peak occupancy is actually likely to reach 70% overall but could occur on weekdays and weekends.

An existing wastewater treatment and land disposal system is located on the site which manages all current wastewater production and it is proposed to utilise spare capacity identified within the existing system to manage the wastewater flow from the proposed Childcare and previously reviewed cabin accommodation development. Flows for the individual facilities is not monitored with just the daily discharge recorded by data logger. Plans of the proposed development are appended.

2. Existing Wastewater System

The existing wastewater system is designed to treat and discharge up to 12,500 litres per day and is allowed by discharge consent REG-62117 granted on 16th May 2014 (expires on 31st December 2028).

The existing system was designed to buffer up to 18,310 l/d and discharge to the treatment system at 12,500 l/d.

The existing wastewater system is modular and comprises grease traps and satellite septic tanks with pump discharge via a rising main to a buffer tank at the main treatment plant. The maximum design and consented daily wastewater production flow is 18,340 litres with buffered storage prior to controlled discharge to the wastewater treatment system at a maximum rate of 12,500 litres per day. The buffering volume was based on weekend peak flows and storage of wastewater flows exceeding 12,500 litres/day and discharge of the excess on following weekdays having inflows of less than 12,500 litres.

The existing wastewater treatment plant comprises the following components and capacities.

Existing Main Complex Collection and Primary Treatment

- Septic tanks (4x) having a combined total volume of 38,500 litres at the wastewater sources,
- Grease trap (1x) 6,000 litres.
- Rising main to treatment plant buffer tank.

Treatment Plant

- Buffer Tank (1x) 27,000 litres
- Recirculation Tank (1x) 23,000 litres
- Treated Effluent Tank (1x) 23,000 litres
- AX100 Recirculating Textile Filter (1x) AX100 pod)
- Water meter and data logger

Land Disposal

- Pressure compensating dripper irrigation total area 3,125m^2 (Split into 2 x 1,575m^2 areas) and loaded at up to 4mm/day.

3. Existing Wastewater Production

We have been provided with daily wastewater discharge meter readings taken between 1st December 2020 and 29th September 2021 to review wastewater flows during peak summer utilisation of the site.

The results show that the average daily flow was 7,900 litres/day and that the 12,500 litre discharge limit was exceeded on 25 occasions with a peak of 144,000 litres and discussed in Section 5.0 below. The metered daily flows do not include the cabin accommodation which has not yet been constructed.

The wastewater treatment plant includes a 27,000 litre (27m^3) buffer tank with the maximum daily discharge to the treatment stage supposed to be limited by the system control panel to 12,500 litres (12.5m^3) per day.

Based on our review of average daily wastewater flows we conclude that there is adequate spare capacity within the existing wastewater treatment and land disposal system.

3.1 Wastewater Management

The existing wastewater treatment system has been designed to collect and store the full design wastewater flow of 18,310 litres (18.3m^3/d) litres per day whilst the wastewater treatment system buffers and is supposed to discharge up to a maximum of 12,500 litres per day (12.5m^3/d) to land disposal.

The maximum daily discharge under application therefore remains at 12,500 litres/day, with any excess to be stored in the buffer tank and discharged over the following weekdays when utilisation of the facility and therefore wastewater production is lower. The buffer storage volume was originally based on the assumption of two consecutive weekends of peak flow with a "base load" flow of 5,000 litres/day occurring during the intervening weeks when buffered effluent would be discharged to the treatment plant and land disposal system.

The average daily flow (December 2020 to September 2021) including the extreme recorded flows is 7,900l/d reducing to 5,500 l/d if the erroneous flow records are removed.

The average daily flows are significantly less than the design buffer flow and that there is spare capacity within the system (see Section 5 below).

4. Proposed Development

We understand that it is proposed to construct a Childcare Centre having a maximum design 99 children per day, 20 full time and 4 part time staff. Children will be 28 infants (0yr-2yrs), 20 toddlers (2yr-3yrs) and 51 preschool 3yr to 5yr olds being up to 99 children per day.

The proposed development will include a washing machine and dishwasher. In view of the type of facility, we have assessed wastewater production on 20 litres/per child/day TP58 2004, does not provide any guidance for childcare flow allowances however TP58(2004) recommends between 12 l/p/d to 20 l/p/d for school children. We have also referred to wastewater production for an existing childcare facility which indicates the upper limit for school children recommended by TP58(2004) is appropriate. In addition we have allowed an additional 210 l/d for dishwasher and washing machine use.

.

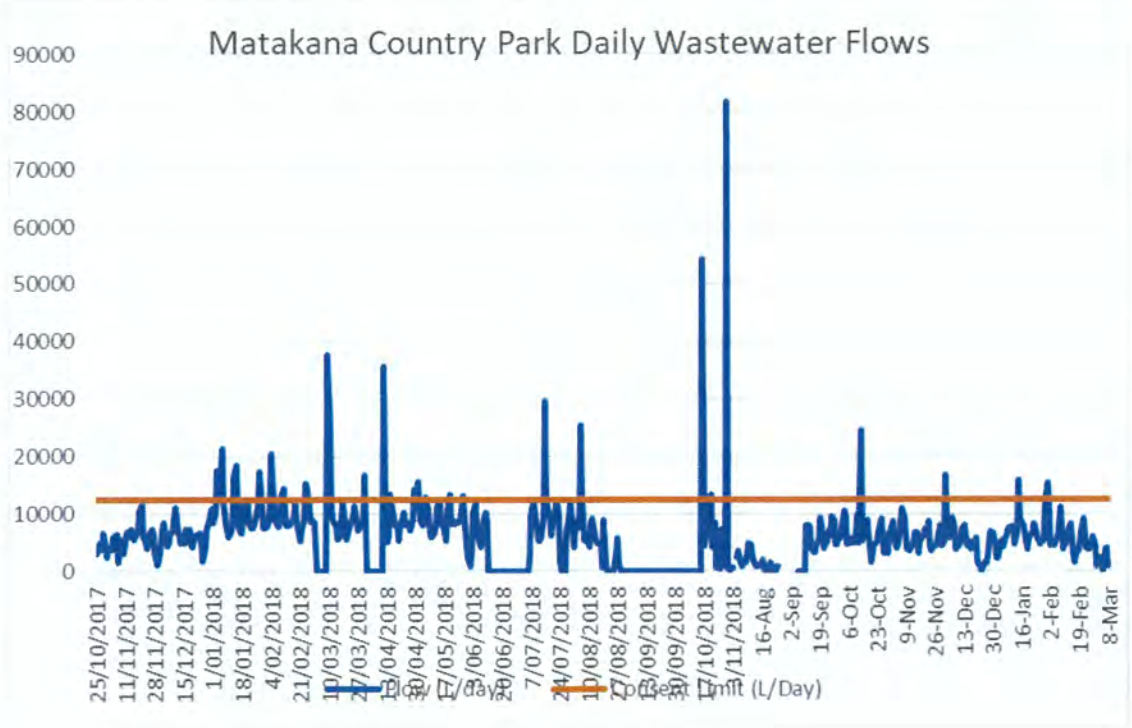
A wastewater flow assessment is as provided in Table 1 below.

TABLE 1 PROPOSED CHILDCARE CENTRE WASTEWATER ASSESSMENT			
Source	**Number of People/Day**	**Flow Allowance (l/p/d)**	**Total (l/day)**
Infants (0-2yr old)	28	20	560
Toddlers (2-3 yr old)	20	20	400
Pre School (3-5yr old)	51	20	1,020
Staff	20	40	800
Staff Part time	4	40	160
Dishwasher			50
Washing Machine			160
		TOTALS	**3,150**
		DESIGN FLOW 5 DAYS PER WEEK	**3,150 litres/day**
		Design Say	**3,150 Litres/day**

The peak design flow on 5 days per week is calculated to be 3,150 l/d.

5. Flow Monitoring

The average daily discharge flow from 1/12/2020 – 28/9/2021 summer was 7,900 litres and the site is consented to treat up to 18,310 l/d and discharge up to 12,500 l/d. The average includes extreme daily flows recorded on 23 occasions of up to 144,000 l/d. The extreme flows do not corelate with rainfall and are not the result of infiltration into the system. Wastewater discharge flow data from 2017 to 2021 is graphed below with the most accurate data being September 2020 to March 2021.



GRAPH 1
Flow records from 2017 to 2021.
Most accurate data is from Sept 2020 to 8 March 2021

As seen in the highly variable flow data there were issues experienced with the data logger as indicated by periods of zero discharge and occasional extreme peaks (up to 144,000 l/d). The data logger was inspected by the maintenance provider and replaced in 2021. The new data logger also indicated extreme peaks and zero flows including times during the Covid19 lockdown when site facilities were not being utilised. The recorded flow data was clearly erroneous particularly as the water supply could not provide the volume of water that the system logged as being discharged. The maintenance provided also noted that if the indicated high flows had occurred that the treatment and disposal systems would exhibit evidence of hydraulic overloading and overflow. This was not the case and therefore the high flows are concluded to be erroneous and rejected. The maintenance provider has inspected the logger and replaced some components on the advice of the data logger supplier.

Flow monitoring shows there is spare capacity within the existing wastewater system for 3,100 l/d from the proposed Child Day Care and up to 3,900 l/d (but more likely 2,700 l/d) flow from the proposed cabins. Daily water use data for individual facilities is not

available meaning we are not able to assess each facilities flows other than by reviewing daily totals. Measured daily flows where the extremes are excluded are typically significantly less than the consented discharge design limit.

5.1 Discussion

The calculated daily peak discharge for all facilities including wastewater production from the proposed cabins and Child Day Care is theoretically more than 18.3m^3 per day. However measured daily average flows are 5,500 l/d (excludes extreme erroneous flow data) to 5,848 l/d which is significantly less than the treatment system design peak flow. Daily flows for the period December 2020 to September 2021 show the discharge of 12,500 l/d was exceeded on 23 occasions. However flows of between 20,000 l/d to 144,000 l/d, as recorded by the data logger, rather than indicating infiltration are concluded to faulty data logger readings as advised by the maintenance provider. We also note that the water supply could not provide the volume of water recorded in the extremes and that the wastewater treatment system would have been in high water level alarm mode, probably overflow and exhibit evidence for hydraulic overloading. The land disposal system area soils would also be in failure mode. The system was not in alarm mode and neither does it exhibit evidence for hydraulic overloading. Following advice from the maintenance provider and data logger suppliers the high flow records have been rejected.

Water meter readings reflect assumptions made in the original design with average flows being significantly less than the design peak on weekdays and weekends.

We conclude that wastewater flow from the proposed Childcare is additional to previously consented on site facilities but measured daily flow data indicates **there is sufficient capacity within the system for the proposed daily wastewater flow**. Proposed Cabin overnight accommodation **is within the existing wastewater discharge consent design flow** production as allowed for by the 'proposed camp ground and student accommodation facilities' described in the original discharge consent.

5.2 Proposed Childcare Wastewater Collection

All wastewater generated from the proposed Childcare in a **proposed additional min. 12,500 litre septic tank** to provide a total of min 48 hours detention time plus 24 hours emergency storage volume (3,150 l) above the high water level alarm. The new septic tank will include an effluent outlet filter and a pump to allow discharge to the existing rising main to the treatment plant.

5.3 Existing Treatment Plant (no changes required)

- Buffer Tank 27,000 litres.
- Recirculation Tank 23,000 litres.
- Treated Effluent Tank 23,000 litres.
- Recirculating Textile Filter 1 x AX100 pod.
- Water meter +/-5% accuracy.
- Automated discharge water meter data logger.
- Automated system control panel.

The existing and proposed system tank types and capacities are detailed in Table 2 below.

TABLE 2 WASTEWATER TREATMENT PLANT (Collection & Buffer Capacity 18,340 litres/day and Treatment Capacity 12,500 litres/day)	
COMPONENT	**TANK VOLUME**
Proposed Childcare Facility	
New Septic Tank **(4 x daily flow to allow for higher strength wastewater)**	**Min 12,500 litres** incl Biotube Pump vault and High water level alarm. Pump to existing Rising Main
Proposed Cabin Accommodation	
Cabin Accommodation (Tank Installed not operational) **Additional Septic Tank Required** **Rising main to treatment plant buffer tank**	1 x 6,000 litres 1 x 9,000 litres (Combined Total min 15,000 litres)
Existing Wastewater Treatment System Components	
Toilet Block Septic Tank	1 x 6,000 litres
Kiosk Septic Tank	1 x 4,500 litres
Farm Building & 1 Bedroom Apartment	1 x 5,000 litres
Restaurant/Cafe Grease Trap (dual Chamber) Septic Tank	 1 x 6,000 litres 1 x 23,000 litres
Proposed Accommodation Lodge Septic Tank	1 x 18,000 litres
RISING MAIN	
Existing Treatment Plant	
Buffer Tank Buffers flows over 12,500 l/d and discharge a maximum of 12,500 litres/day to the recirculation tank	1 x 27,000 litres
Recirculation Tank Timer dose controlled discharge to recirculating textile filter (AX100) and Recirculation Splitter Valve.	1 x 23,000 litres
Recirculating Textile Filter rtPBR (AX 100)	1 x AX100 Pod
Treated Effluent Tank Including working volume plus emergency storage, Biotube Pump vault and high water level alarm.	1 x 23,000 litres
Water Meter and Data Logger To Land Disposal System	+/- 5% accuracy
Note: 1. Tank volumes sourced from Innoflow Technologies Limited Management Plan.	

5.4 Land Disposal

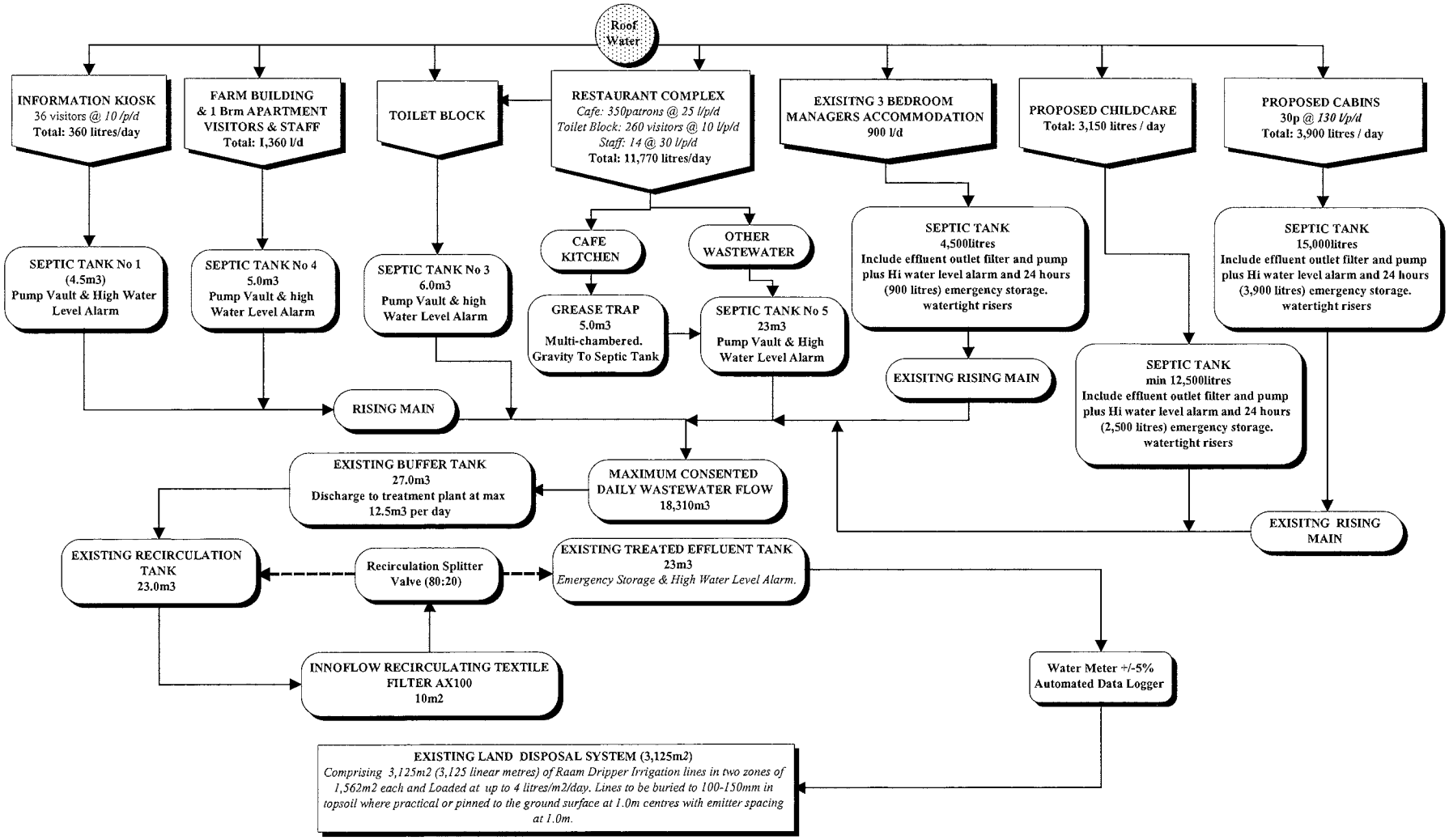
Our assessment indicates that the proposed Childcare facility does not result in an increase in wastewater production beyond what has already been allowed for in the original design and therefore it is **not** proposed to expand the existing land disposal area which comprises a total of 3,125m^2 split into two (2) equal areas of 1,575 m^2.

A generalised process flow diagram for the existing and additional components of the wastewater management system is provided below.

6. Wastewater Monitoring

We do not recommend any additional wastewater producing on-site facilities be constructed beyond those proposed. Any additional development is likely to require expansion of the wastewater treatment plant and possibly the land disposal system.
We recommend ongoing daily flow monitoring as currently required by the conditions of consent and also treated effluent sampling and analysis to monitor treated effluent standard.

WASTEWATER SYSTEM PROCESS FLOW
MATAKANA COUNTRY PARK, OMAHA FLATS ROAD, MATAKANA.



7. Assessment of Effects

We conclude that there will not be any change in effects resulting from wastewater discharge associated with the proposed childcare facility as the wastewater is all domestic type, the treated effluent standard does not change and the projected daily treated effluent discharge is within the consented limit.

8. Conclusions

1. We conclude that wastewater production from the proposed Childcare Facility and 10 proposed 1 and 2 bedroom cabin accommodation development on the site can be managed within the existing wastewater treatment plant and land disposal system. We do not recommend any further development than that proposed without expansion of at least the existing wastewater treatment plant.
2. We recommend installing an additional wastewater collection septic tank (min 12,500 litres including an effluent outlet filter, pump and high water level alarm) for the proposed Childcare Facility with pump discharge to the existing rising main.
3. We recommend daily monitoring of the water use at the childcare centre and treated effluent discharge from the main treatment system to confirm design assumptions and if flows exceed design apply for consent to increase the treatment and land disposal capacity.

9. Limitation

This report has been prepared for the sole benefit of **Matakana Country Park** as our client with respect to the brief for the presently proposed development and to be used in design by their appointed Consultants and support Resource Consent applications. It is not to be relied upon or used out of context by any other person without reference to Ormiston Associates Ltd.

The reliance by other parties on the information or opinions contained in the report shall, without prior review and agreement in writing, be at such parties sole risk.

Yours faithfully,

ORMISTON ASSOCIATES LTD.

A. W. Ormiston
Director.