

FINAL REPORT

Owhanake Wastewater Treatment
Plant, Waiheke Island - Designation of
Land for Reticulated Wastewater
Treatment and Disposal Purposes

Supporting Information and
Assessment of Effects on the
Environment

Prepared for



Environmental and Utility Management
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1	Introduction	1-1
2	Wastewater on Waiheke Island	2-1
2.1	Background	2-1
2.2	Owhanake Wastewater Treatment Plant	2-1
2.3	Septic Tank Maintenance	2-2
3	Description of Site	3-1
3.1	Location	3-1
3.2	Description of Site and Surrounds	3-1
4	Description of Proposed Works	4-1
5	Objectives and Necessity for Works and Designation	5-1
5.1	Objectives	5-1
5.2	Necessity for Works and Designation	5-3
5.2.1	Proposed Works	5-3
5.2.2	Designation	5-3
6	Consultation	6-1
6.1	Consent Application for Treatment Plant Upgrade	6-1
6.2	Long Term Council Community Plan Process	6-1
6.3	Hauraki Gulf Islands District Plan Review Process	6-1
7	Alternative Options Considered	7-1
7.1	Maintain Status Quo	7-1
7.2	District Plan Zoning Provisions	7-1
8	Assessment of Effects on the Environment	8-1
8.1	Positive Environmental Effects	8-1
8.2	Odour	8-1
8.3	Noise	8-1
8.4	Visual and Landscape	8-1
8.5	Traffic	8-2
8.6	Ecological Effects	8-2
8.7	Temporary Construction Effects	8-2
9	Relevant Provisions of Policy Statements and Plans	9-1
9.1	Part 2 Resource Management Act 1991	9-1
9.2	New Zealand Coastal Policy Statement	9-1
9.2.1	Hauraki Gulf Marine Park Act 2000	9-2
9.3	Auckland Regional Policy Statement	9-3
9.4	Auckland Regional Plan : Coastal	9-4

Contents

9.5	Other Regional Plans	9-4
9.6	Auckland City District Plan : Hauraki Gulf Islands	9-4
10	Information Required by the District Plan -----	10-1
11	Proposed Conditions for Designation -----	11-1
12	Conclusions -----	12-1

List of Tables, Figures & Appendices

Figures

Figure 1	Location Plan – Owhanake Wastewater Treatment Site
Figure 2	Owhanake Wastewater Treatment Plant Existing Layout
Figure 3	Photographs

Appendices

Appendix A	Notice of Requirement
Appendix B	Certificate of Title

The following document comprises supporting information and an Assessment of Effects on the Environment (AEE) in relation to the ongoing operation and maintenance, and future upgrading and expansion of Auckland City Council's Owhanake wastewater treatment plant on Waiheke Island. The document accompanies the City Council's section 168A Resource Management Act 1991 (RMA) Notice of Requirement for the designation of the existing wastewater treatment site for reticulated wastewater treatment (post septic tank) and disposal purposes. A copy of the Notice of Requirement is attached as **Appendix A**. The Notice of Requirement and supporting information has been prepared in accordance with the provisions of sections 168A and 171 RMA.

2.1 Background

The majority of dwellings and commercial premises on Waiheke Island continue to rely on individual on-site wastewater treatment and disposal systems. These systems predominantly comprise conventional septic tanks, with the effluent then being disposed of via on-site soakage fields. Some new developments have more sophisticated systems such as sand filters or aeration plants which produce better quality effluent.

The environmental sustainability of continued reliance on on-site treatment and disposal systems (particularly in terms of surface and/or ground water contamination) is dependent on the following key factors:

- Regular maintenance of septic tanks to ensure that they operate effectively.
- The ability to obtain adequate soakage. Steep terrain and soils with poor infiltration characteristics (e.g. clay) constrain the effectiveness of soakage-type systems on parts of Waiheke.
- Density of development. More intensive subdivision and development patterns tax the ability of soakage fields, with any surplus effluent being concentrated by seepage from neighbouring properties. In this regard it is noted that the majority of Waiheke's permanent population resides on smaller residential lots, predominantly near the coast and/or streams. It is in these areas that on-site wastewater disposal poses the greatest pollution and/or public health risk.
- Seasonal effects, including a significant additional population influx over the peak holiday season. This can result in overloading of septic tanks and disposal fields.

Independent on-site systems will continue to be the primary method for wastewater disposal on Waiheke Island for the short to medium-term future. However as the Island's resident population increases, and further small-lot residential development takes place, alternative approaches to wastewater treatment and disposal will need to be considered. Alternatives are likely to involve local 'cluster' wastewater collection, treatment and land application schemes rather than major-scale wastewater reticulation.

In the meantime Auckland City Council continues to monitor the environmental effects of on-site wastewater disposal systems and is actively seeking improvements to poorly-performing systems (refer discussion in Section 2.3 below, relating to bylaw provisions). Particular initiatives already undertaken by Council in response to the key factors identified above are outlined in more detail as follows.

2.2 Owhanake Wastewater Treatment Plant

In 2001 Auckland City Council constructed the Owhanake wastewater treatment plant (WWTP). The WWTP currently serves the commercial centre of Oneroa Village (where the operation of on-site systems had become unsatisfactory) and the Matiatia Wharf facility. Properties that are connected into the WWTP are required to retain a septic tank, with the liquid effluent being drawn off and piped to the WWTP for treatment and the solids being retained in the septic tank for treatment as usual (i.e. the septic tanks provide primary treatment).

The Owhanake WWTP was originally consented with a design capacity of 80 m³/day, but consent has now been obtained for a discharge of up to 250 m³/day. Part of the additional capacity sought was intended to provide for the proposed Waitemata Infrastructure Ltd development (mixed-use residential and commercial) at Matiatia. Council subsequently purchased the land on which this development was to have been undertaken and is currently holding a design competition to identify new options for developing the land (refer also Section 3.2 of this report). In particular, the new discharge permit for the WWTP states:

“The intent of the application is that the plant should serve facilities in the Oneroa commercial area, emergency connections from problematic residential properties in the area, Matiatia Wharf facilities, and from the site of Waitemata Infrastructure Ltd. Matiatia development.”

Effluent from the Owhanake WWTP is ultimately discharged into the Matiatia wetland which has its outlet at Matiatia Bay.

While Auckland City Council owns the land on which the Owhanake WWTP is situated, Metrowater (a water and wastewater utility company 100% owned by Auckland City) owns and operates the treatment plant itself.

2.3 Septic Tank Maintenance

Part 29 (Waiheke Wastewater) of Auckland City Council’s “Consolidated Bylaw” seeks to ensure that septic tanks and on-site wastewater disposal systems in use on Waiheke Island are installed and maintained in a manner to prevent the failure of the system to operate effectively. Amongst other things the Bylaw requires property owners to have their septic tanks pumped out at least once every three years. The purpose of this is to remove the build-up of settled solids from the tank which can reduce the efficiency of its operation. In the worst case, the carry over of settled solids into disposal trenches can lead to blockage and failure of the trenches with consequent leakage of the disposal system. The pump-out requirement also applies to septic tanks on properties connected to the Owhanake WWTP (refer Section 2.2 of this report). Council is monitoring compliance with the Bylaw, with a May 2007 deadline for all existing systems to be pumped out.

Septic tank sludge is currently disposed of at two commercial facilities on Waiheke – the Kerrod site at Wilma Road and the Greenacres site at Onetangi. Existing consents for sludge disposal at these sites expire in 2010 and 2013 respectively. Council also leases a back-up (or ‘emergency’) disposal site at Man-O-War Bay. This serves to minimise public health and environmental risks in the event that one of the commercial facilities becomes unavailable. To date the Man-O-War Bay site has not had to be used and the consent for this site will expire in 2009. Currently there are three licensed septic tank pump-out contractors on Waiheke.

3.1 Location

Figure 1 shows the location of the parcel of land subject to the Notice of Requirement. It is situated at Owhanake at the western end of Waiheke Island.

The parcel is legally described as Lot 37 DP 183455 (CT NA114B/605) and has an area of 7.59 hectares.

The parcel of land is registered in the ownership of Auckland City Council. A Copy of the Certificate of Title is attached in **Appendix B**.

3.2 Description of Site and Surrounds

The Owhanake wastewater treatment site adjoins the northern side of Ocean View Road and is located a relatively short distance up that road from the Matiatia Wharf complex. The land comprising the site rises in a northerly direction towards the Delamore Road ridge.

Within the site, the existing wastewater treatment plant (WWTP) is terraced into the rising slope some distance back from Ocean View Road and is not readily visible from the road because of extensive intervening native vegetation. **Figure 2** shows the existing WWTP layout. In simple terms the current treatment process involves a sand filter system, with four beds being dosed alternately. The treated effluent is subjected to UV disinfection and then discharged to a constructed wetland via a slag filter. From the constructed wetland the treated effluent passes through the natural Matiatia Wetland, finally being discharged at Matiatia Bay. Metrowater owns and operates the Owhanake WWTP.

An Auckland City Council public carpark occupies the south-western portion of the site adjoining Ocean View Road.

The Owhanake Scenic Reserve immediately adjoins the eastern boundary of the wastewater treatment site. Access to the treatment plant itself is gained from Ocean View Road via the Scenic Reserve, across an existing wetland. Otherwise the site is surrounded by large lots generally in the range of 2 – 7 hectares. The site sits within an enclosed valley system and the surrounding land is largely undeveloped, comprising a mixture of open pasture and scrub/native bush. Existing dwellings are generally confined to the surrounding ridgelines, with the WWTP being visible in distant views from some of these dwellings. (Refer photographs, **Figure 3**)

On the opposite (southern) side of Ocean View Road from the WWTP site is the former Waitemata Infrastructure Ltd property. This 8.7 hectare tract of land, which extends down to the Matiatia Wharf complex, was previously the subject of a privately initiated mixed-use residential and commercial development proposal. Auckland City Council now owns the land and is holding an international design competition to identify a preferred development concept.

It is proposed to designate the land comprising the Owhanake wastewater treatment site (Lot 37 DP 183455) in order to provide for the ongoing operation and maintenance of the existing wastewater treatment plant, and future upgrading and expansion of the treatment plant for reticulated wastewater treatment (post septic tank) and disposal purposes. The activities and works sought to be authorised by the designation are described as follows.

- (i) Wastewater treatment plant processes and ancillary activities
- (ii) Laboratory, workshop and staff amenity facilities ancillary to the treatment plant
- (iii) Storage of fuels and chemical substances (e.g. methanol, chlorine) used in conjunction with treatment plant processes
- (iv) Constructed wetlands
- (v) Use, construction and maintenance of drains
- (vi) Vehicle accessways/roadways, parking and manoeuvring areas
- (vii) Signage which is ancillary to and in connection with the use of the treatment plant
- (viii) Landscaping
- (ix) All related maintenance, construction, and earthwork activities

In its consideration of the requirement to designate land for wastewater purposes at Owhanake, the Auckland City Council must have regard to ‘*whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought*’ (section 171(1)(c) RMA). This requires consideration of both the proposed work (i.e. ongoing operation and maintenance of the existing treatment plant and future upgrading and expansion for reticulated wastewater treatment and disposal) and designation as a planning technique, in terms of whether they are reasonably necessary.

5.1 Objectives

The requiring authority for the designation is Auckland City Council. The Council’s objectives for wastewater treatment and disposal on Waiheke Island have been identified through a number of plans and strategies.

The Operative Hauraki Gulf Islands Section of the District Plan (1996) states the following by way of providing an overview:

“Large scale reticulated systems are not considered desirable for reasons related to cost efficiencies, effect on development opportunities and intensification, potential impacts upon the natural environment and amenities, and to the commonly expressed desire to be autonomous on either an individual or small group basis. ” (3.2.2.8 Infrastructure and Services)

In the absence of a public reticulated sewerage system all existing and future development must be capable of satisfactorily treating and disposing of wastewater on-site, or through small scale community based schemes.

Consistent with the District Plan, the “*Waiheke Wastewater Management Plan*” (Revision No.1, April 1998) promotes the continuation of on-site wastewater treatment and disposal, subject to improved standards of operation and maintenance. Because the requirement for on-site disposal can sometimes place unacceptable constraints on land use, the management plan also makes provision for small-scale public or private communal wastewater schemes to be considered on their merits.

Consistent with requiring improved standards of operation and maintenance, the overall objective of Part 29 (Waiheke Wastewater) of Council’s “Consolidated Bylaw” is:

“ . . . to ensure that septic tanks and foulwater disposal systems in use on Waiheke Island are installed and maintained in a manner to prevent the failure of the system to operate effectively.”

Amongst other things the Bylaw requires property owners to have their septic tanks pumped out once every three years.

“*Essentially Waiheke – A Village and Rural Communities Strategy*” (2000)¹ states:

“In special circumstances, where it can be proven that on-site disposal of wastewater is not working well, a small-scale community reticulation scheme for wastewater may be established. The

¹ A community-approved framework for Waiheke’s future development.

commercial centre of Oneroa is the first area on the Island to have a wastewater reticulation system built.

.....

However, in accordance with the Waiheke Wastewater Management Plan, independent on-site systems will continue to be the primary method for effluent and wastewater disposal on Waiheke Island for the short to medium-term future, with the gradual introduction of alternative water conserving devices and effluent disposal methods as the traditional, older infrastructure needs replacing. Larger developments, such as visitor facilities, are required to have a development-based on-site effluent treatment and disposal system.” (3.1.1 Wastewater and Effluent Disposal)

Aims identified in relation to wastewater and effluent disposal in “*Essentially Waiheke*” include:

“1. An effective, well-maintained and reliable drainage infrastructure.”

In 2003-04 Council undertook a ‘Water and Sanitary Services Assessment’² for Waiheke Island, with wastewater policies subsequently being identified based on the assessment. Following public consultation, the policies finally adopted by Council resolution in August 2004 include the following:

“a) That the current policy of individual sites providing for on-site wastewater treatment and disposal continue.

b) That where it can be proven that on-site disposal is no longer sustainable the current policy of establishing small community based wastewater reticulation and treatment systems continue. These systems will be constructed and operated by Metrowater Ltd or as a private co-operative arrangement.

.....

e) Subject to available treatment and discharge consent capacity, Metrowater Ltd will give preference to reticulating properties in identified risk areas.”

Notably, following public consultation on the policies, Council introduced a further policy provision to the effect that community reticulation schemes will only be implemented if and when found to be the only satisfactory method of limiting the risks to public health to an acceptable level.

It is also relevant to note that under s.23 of the Health Act 1956 Council has a statutory duty to ‘*improve, promote and protect public health*’.

Based on all of the above, Council’s objectives can be summarised as follows:

- Avoid major-scale wastewater reticulation on Waiheke Island.
- Continue to rely on individual on-site schemes as the primary method for wastewater treatment and disposal, subject to improved standards of operation and maintenance and ongoing evaluation of their environmental sustainability.
- Provide for local community based wastewater reticulation schemes, but only where on-site disposal is found to be unsustainable in terms of adverse public health and environmental effects.

² As required by the Local Government Act 2002.

5.2 Necessity for Works and Designation

5.2.1 Proposed Works

The activities and works sought to be authorised by the designation for the Owahanake wastewater treatment plant (WWTP) are necessary to meet Auckland City Council's objectives for wastewater treatment and disposal on Waiheke Island.

The ongoing operation and maintenance, and provision for future upgrading and expansion of the Owahanake WWTP is consistent with Council's policy regarding the provision of community based reticulation schemes on Waiheke Island. This includes provision for community based schemes in cases where:

- (i) On-site disposal of wastewater is no longer sustainable (the WWTP was originally established to service the commercial centre of Oneroa Village when health authorities advised Auckland City Council that the operation of on-site systems had become unsatisfactory from a public health point of view);
- (ii) Connection into such a scheme is shown to be the most appropriate alternative option in order to avoid adverse effects on public health and the environment.

The ongoing operation and availability of a treatment plant facility at Owahanake provides certainty to the community and ensures that potential adverse effects are avoided in the event that existing systems become unsustainable or the wastewater treatment and disposal needs of some new development cannot be met wholly on-site. This is also consistent with Council's statutory duty under the Health Act to protect public health.

5.2.2 Designation

Currently the Owahanake WWTP operates by way of resource consent, including consent to upgrade the existing plant to a certain increased operating capacity (refer Section 2.2 of this report).

Otherwise future upgrading and expansion of the WWTP is governed by the land unit rules in the Hauraki Gulf Islands Section of the District Plan and would likely require resource consent. In the absence of appropriate 'underlying zone' provisions, a designation will provide certainty for ongoing operation and maintenance needs and future upgrading. The designation will be shown in the District Plan, with permitted activities and works clearly indicated to the community. Conditions attaching to the designation will identify appropriate limits within which activities can take place, taking into account environmental effects. In this regard a designation is preferable to resource consents, the existence of which are not indicated in the Plan. A designation, once confirmed, provides a permanent basis for the operation of the treatment plant without the need for resource consents under the District Plan³. Once a designation is in place future works will be subject to an Outline Plan, which gives Council the

³ A designation in the District Plan does not, however, remove the need to obtain any necessary resource consents in terms of regional plans administered by the Auckland Regional Council.

Objectives and Necessity for Works and Designation

opportunity to ensure that the conditions of the designation are complied with and any adverse environmental effects are adequately addressed.

Provision for wastewater on Waiheke Island and the ongoing operation and future development of the Owhanake WWTP has been canvassed with the community, iwi and key stakeholders through a number of consultation processes. These have included the following:

6.1 Consent Application for Treatment Plant Upgrade

An extensive consultation process was undertaken in 2002-03 when resource consent was being sought to upgrade the existing treatment plant. This included consultation with the general public, iwi, and key stakeholders.

While there was general support for the proposed upgrade, some concern was raised that expansion of the WWTP would provide a catalyst for inappropriate development on Waiheke. Specific concerns were also raised regarding adverse effects such as odour and the visual and landscape impact of the treatment plant.

6.2 Long Term Council Community Plan Process

Draft wastewater policies developed from Council's 2003-04 'Water and Sanitary Services Assessment' were subsequently included in the draft "*Focus on the Future 2004 – 2014*" (Council's draft Long Term Council Community Plan or 'LTCCP') issued for public consultation. Key feedback from the community can be summarised as follows:

- The 2000 "*Essentially Waiheke*" strategy must be treated as the 'foundation document' when identifying community outcomes, objectives and priorities in relation to wastewater management. As discussed in Section 5.1 of this report the strategy promotes continued reliance on independent on-site systems as the primary method for wastewater disposal, with provision for small-scale community reticulation schemes only as required where on-site disposal is not working well.
- All planning for future development and infrastructure must have 'sustainable development' as its objective in relation to wastewater management.
- Strong opposition to major-scale wastewater reticulation on Waiheke.
- Additional/available capacity in infrastructure such as the Owhanake WWTP should first and foremost be used to provide for the future needs of the existing local community as opposed to new development such as that proposed by Waitemata Infrastructure Ltd at Matiatia (refer Sections 2.2 and 3.2 of this report).

6.3 Hauraki Gulf Islands District Plan Review Process

In 2005 Council released an 'Issues and Options' consultation document as part of the Hauraki Gulf Islands District Plan review process. Community response in relation to wastewater management can be summarised as follows:

- The majority of respondents indicated support for the status quo, with continued reliance on individual on-site disposal systems and mandatory compliance with Council's Waiheke Wastewater Bylaw.

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- In contrast a small number of respondents identified the need for reticulation including, for example, a suggestion that complete reticulation is required between Oneroa Beach and the Village.

When considering the environmental effects of allowing the requirement, the Council must have regard to whether adequate consideration has been given to alternative sites or methods for undertaking the works if:

- (i) the requiring authority does not have an interest in the land sufficient for undertaking the works; or
- (ii) it is likely that the works will have a significant adverse effect on the environment (section 171(1)(b) RMA)

With regard to (i), Auckland City Council is the registered owner of the land comprising the Owhanake wastewater treatment plant site and therefore has sufficient interest in the land for undertaking the works. With regard to (ii), the environmental effects associated with future upgrading and expansion of the WWTP for reticulated wastewater treatment (post septic tank) and disposal purposes have the potential to be more than minor.

The following alternative options have been considered.

7.1 Maintain Status Quo

Under this option (effectively the ‘do nothing’ option) the Council would not seek to designate the Owhanake WWTP site, treatment plant activities would remain subject to both the existing resource consent for the site and ‘underlying zone’ provisions in the District Plan, and future upgrading and expansion works would not specifically be identified or provided for. This option is considered untenable because future provision for additional wastewater treatment capacity at the WWTP may well be necessary in the event that:

- Some existing on-site disposal systems fail and connection into the treatment plant is shown to be the most appropriate alternative option in order to avoid adverse effects on public health and the environment.
- The wastewater treatment and disposal needs of some new development cannot be met wholly on-site.

7.2 District Plan Zoning Provisions

The Council could seek to introduce more appropriate ‘underlying zone’ provisions that recognise the present and anticipated future needs of the Owhanake WWTP. For the reasons already discussed in Section 5.2.2 of this report, however, such an approach does not provide a sufficient degree of certainty and resource consent would likely still be required for particular activities and works.

In this section the actual and potential environmental effects of the activities and works sought to be authorised by the designation are assessed.

8.1 Positive Environmental Effects

The ongoing operation and availability of a treatment plant facility at Owhanake provides certainty to the community and ensures that potential adverse effects on public health and the environment are avoided in the event that existing on-site treatment and disposal systems become unsustainable or the wastewater treatment and disposal needs of some new development cannot be met wholly on-site.

8.2 Odour

Odour effects associated with upgrading the Owhanake WWTP to a certain increased operating capacity have already been addressed through the resource consent application process and the existing air discharge permit (ARC Reference No. 27505) imposes conditions for the avoidance, remedy and mitigation of odour effects. These conditions must be complied with irrespective of the proposed designation for the treatment plant site. Further expansion beyond the currently consented capacity would require a new air discharge permit.

Any new activities on the site with the potential to generate significant adverse odour effects need to be appropriately designed (including enclosure where practicable), operated and maintained in order to minimise odour. A Concept Development Plan will be required to demonstrate how the layout of new facilities can avoid or mitigate adverse odour effects (refer Section 11 of this report).

Designation of the entire WWTP site will also create an internal odour buffer, particularly in relation to any future development of the former Waitemata Infrastructure Ltd property to the south.

8.3 Noise

The Owhanake WWTP is situated in a quiet rural environment with low background noise levels. The introduction of new facilities has the potential to generate additional noise from the operation of pumps, blowers and the like. However, with acoustic design and insulation it is considered that appropriate noise limits can be complied with (refer proposed noise conditions in Section 11 of this report).

8.4 Visual and Landscape

Any additional buildings, structures or facilities on the WWTP site have the potential to create adverse visual and landscape effects. The site is overlooked by dwellings on surrounding ridgelines and new buildings and facilities will need to be appropriately visually integrated with the surrounding landscape (refer photographs, **Figure 3**). This includes the need to address the design and external appearance of buildings and structures (including the type and colour of cladding materials to be used) and appropriate screen planting (refer proposed landscape condition in Section 11 of this report). A number of treatment plant components will be buried below ground as far as practicable.

8.5 Traffic

Future upgrading and expansion of the Owhanake WWTP will not generate significant additional traffic on Ocean View Road or other parts of the local road network. The ongoing operation and maintenance of the treatment plant does not require a high number of vehicle movements to and from the site.

Because of the size and internal layout of the site, there will be no adverse effects on Ocean View Road associated with the parking and manoeuvring of vehicles accessing the treatment plant (e.g. no parking spill-over or reverse manoeuvring onto the road required).

8.6 Ecological Effects

The discharge of treated effluent from the Owhanake WWTP into the Matiatia wetland and Matiatia Bay is controlled by an existing discharge permit (ARC Reference No. 27473), with a discharge limit of 250 m³/day. If this limit were to be exceeded then the ecological effects of any increase would need to be considered by way of a new resource consent application to the ARC, irrespective of the proposed designation for the treatment plant site.

8.7 Temporary Construction Effects

Works required for upgrading and expanding the Owhanake WWTP have the potential to cause temporary adverse effects during the construction period. A Construction Management Plan will be required to be prepared prior to works commencing, and this will outline suitable control measures to minimise these effects.

Subject to Part 2 of the RMA, in its consideration of the requirement the Council must also have regard to relevant provisions of the New Zealand Coastal Policy Statement, Auckland Regional Policy Statement, Auckland Regional Plan: Coastal, Auckland Regional Plan: Sediment Control, Proposed Auckland Regional Plan: Air, Land and Water, and the Operative Auckland City District Plan (Hauraki Gulf Islands Section) (section 171(1)(a) RMA). The relevant provisions of these documents are addressed as follows.

9.1 Part 2 Resource Management Act 1991

The purpose and principles of the RMA are contained in Part 2 of the Act. The activities and works sought to be authorised by the designation are assessed against the relevant provisions of Part 2 as follows:

- The ability to dispose of wastewater is a basic component of community infrastructure and is consistent with enabling people and communities to provide for their social, economic and cultural wellbeing and for their health and safety. [s.5(2) RMA]
- Appropriate conditions attaching to the designation will ensure that any adverse environmental effects associated with ongoing operation and maintenance, and future upgrading and expansion of the Owhanake wastewater treatment plant (WWTP) are avoided, remedied, or mitigated. This will safeguard the life-supporting capacity of resources (e.g. water, ecosystems). It will also recognise matters of national importance relating to the coastal environment, and other matters relating to the intrinsic values of ecosystems and the quality of the environment. [s.5(2)(b) & (c), s.6(a), and s.7(d) & (f) RMA]
- Appropriate conditions and the establishment of protocols with iwi will ensure that historic heritage and cultural values are not diminished. [s.6(e) & (f), and s.7(a) & (aa) RMA]
- The activities and works sought to be authorised have the general support of iwi and are not contrary to the principles of the Treaty of Waitangi. [s.8 RMA]

9.2 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement 1994 (NZCPS) sets out national policies to achieve the purpose of the RMA in relation to the coastal environment. Treated effluent from the Owhanake WWTP passes into the Matiatia wetland and then into Matiatia Bay and therefore impacts on the coastal environment.

Chapter 1 of the NZCPS contains policies relating to the preservation of the natural character of the coastal environment, and these include:

- Protecting the integrity, functioning, and resilience of the coastal environment in terms of:
 - (a) the dynamic processes and features arising from the natural movement of sediments, water and air;
 - (b) natural movement of biota;
 - (c) natural substrate composition;

-
- (d) natural water and air quality;
 - (e) natural bio diversity, productivity and biotic patterns; and
 - (f) intrinsic values of ecosystems. (Policy 1.1.4)

The discharge of treated effluent into the Matiatia wetland and Matiatia Bay is controlled by an existing discharge permit. If the currently consented discharge limit (250 m³/day) were to be exceeded as a result of future expansion of the WWTP then the ecological effects of any increase would need to be considered by way of a new resource consent application to the ARC, irrespective of the proposed designation for the treatment plant site.

In addition, it is considered that the activities and works sought to be authorised by the designation will have a positive effect in terms of the integrity, functioning, and resilience of Waiheke's coastal environment because they address the potential failure of existing on-site treatment and disposal systems and the inability of some new forms of development to provide for their wastewater treatment and disposal needs wholly on-site – with the potential for consequent adverse effects on water quality in estuaries and coastal waters.

9.2.1 Hauraki Gulf Marine Park Act 2000

The provisions of sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000 must be treated as a New Zealand coastal policy statement in respect of the coastal environment of the Hauraki Gulf. Under section 7 of the Act,

“The interrelationship between the Hauraki Gulf, its islands, and catchments and the ability of that interrelationship to sustain the life-supporting capacity of the environment of the Hauraki Gulf and its islands . . .”

are matters of national significance. Land comprising the Owhanake WWTP falls within the ‘catchment’ of the Hauraki Gulf, as defined in the Act.

The life-supporting capacity of the environment of the Gulf includes the capacity:

“to provide for . . . the social, economic, recreational, and cultural well-being of people and communities” [s.7(2)(a)(ii)]

“to use the resources of the Gulf by the people and communities of the Gulf and New Zealand for economic activities and recreation” [s.7(2)(b)]

*“to maintain the soil, air, **water**, and **ecosystems** of the Gulf”* (emphasis added) [s.7(2)(c)]

In recognition of the national significance of the Hauraki Gulf, section 8 of the Act sets out the objectives for the management of the Gulf and its catchments. Notably, these include the following:

“(a) The protection and, where appropriate, the enhancement of the life-supporting capacity of the environment of the Hauraki Gulf . . . and catchments” (which by virtue of the definition above includes opportunities for recreational activities and maintaining water and ecosystems)

Protecting coastal water quality (including for recreational activities) from inadequate or failing on-site wastewater disposal systems is therefore an important part of sustaining the ‘life-supporting capacity’ of

the environment of the Hauraki Gulf. The activities and works sought to be authorised by the designation are entirely consistent with the objectives for managing the Gulf and its catchments.

9.3 Auckland Regional Policy Statement

Chapter 2 of the Auckland Regional Policy Statement (ARPS) provides an overview of the strategic resource management issues in the Auckland Region and outlines a strategic direction for addressing these issues. The importance of infrastructure is recognised in terms of providing for the community's social and economic wellbeing. Strategic Policies include:

“Provision is to be made to enable the safe and efficient operation of existing regional infrastructure which is necessary for the social, and economic wellbeing of the region's people, and for the development of regional infrastructure . . . in a manner which is consistent with this strategic direction and which avoids, remedies or mitigates any adverse effects of those activities on the environment.” (Policy 2.5.2-6)

Other key issues identified in Chapter 2 include the importance of the region's coastal environment (and its sensitivity to the effects of land use and development in associated catchments) and natural and cultural heritage. Better provision for wastewater treatment and disposal, including avoiding the adverse effects of failing on-site disposal systems, is entirely consistent with the above policy direction.

Later chapters of the ARPS address the issues identified in Chapter 2 in more detail. Of particular relevance are the provisions of Chapter 7 : Coastal Environment, Chapter 8 : Water Quality, and Chapter 10 : Air Quality.

For example, Chapter 8 identifies issues associated with wastewater reticulation and disposal and amongst other things states:

“. . . Provided that septic tank based systems are properly designed, installed and maintained, they are considered to be an environmentally sound method of effluent disposal. Localised problems do however occur at various times in rural and coastal communities as a result of cumulative impact. These are commonly due to a combination of poor soil types, higher densities of septic tank use, insufficient land for ground disposal and poor maintenance practices. There is a need for proactive management of septic tanks by TAs.” (Issue 8.2.1)

The associated objective and policies identify the need to maintain and enhance coastal water quality and avoid the discharge of raw or treated sewage to water bodies or coastal waters unless this option better meets the purpose of the RMA than any other disposal method (including disposal onto land) and is the 'best practicable option'. In this regard the discharge of treated effluent from the Owahanake WWTP into the Matiatia wetland system and ultimately the harbour has previously been identified as the most practicable option that best meets the purpose of the RMA. It is certainly considered a preferable option to raw sewage potentially entering coastal waters as a result of inadequate or failing on-site disposal systems. Otherwise relevant provisions of the ARPS further reinforce the need to adequately address environmental effects associated with the ongoing operation and development of the Owahanake WWTP.

9.4 Auckland Regional Plan : Coastal

While the rules in the Auckland Regional Plan : Coastal (ARPC) only relate to the coastal marine area (i.e. that part of the coastal environment below Mean High Water Springs - MHWS), the plan identifies significant issues and sets objectives and policies for the coastal environment as a whole. This reflects the need for integrated management of resources across the coastal interface. As previously stated, the Owhanake WWTP impacts on the coastal environment through the discharge of treated effluent.

Matiatia Bay is identified as a Mooring Area and General Management Area in the ARPC (Map Series 1, Sheet 41).

In terms of the identification of issues, the ARPC recognises that wastewater discharges can have adverse effects on coastal water quality. As already discussed in Sections 9.2 and 9.3 of this report, discharge into the Matiatia wetland system and ultimately Matiatia Bay has been identified as the most practicable option and the currently consented discharge limit cannot be exceeded as a result of future development of the WWTP without a new resource consent application to the ARC - irrespective of the proposed designation for the treatment plant site. Again, treated effluent from the WWTP is considered a preferable option to raw sewage potentially entering coastal waters as a result of inadequate or failing on-site disposal systems.

9.5 Other Regional Plans

Notwithstanding the proposed designation, the provisions of the Operative Auckland Regional Plan : Sediment Control and the Proposed Auckland Regional Plan : Air, Land and Water ('ALW Plan') will also apply to ongoing operation and future upgrading and expansion of the Owhanake WWTP.

The Sediment Control plan addresses sediment discharge associated with activities such as earthworks and vegetation removal, with its primary objective being to maintain and enhance water quality (including coastal water). Amongst other things the ALW Plan addresses the management of water resources (including diversion and discharge of stormwater and discharge of contaminants) and discharges to air.

9.6 Auckland City District Plan : Hauraki Gulf Islands

The Operative Hauraki Gulf Islands Section of the District Plan ('Gulf Islands Plan') includes a resource management overview which identifies key issues and outlines a strategy for responding to these issues. With regard to wastewater this has already been discussed in Section 5.1 of this report.

The Owhanake WWTP is located in Land Unit 22 (Western Landscape). The resource management strategy for Land Unit 22 is to secure the continuation of the predominantly open rural landscape character, in recognition of the important visual and cultural role the land unit plays in terms of an appreciation of Waiheke Island. This recognises that Matiatia is the major gateway to Waiheke.

Policies for the land unit include the need to control the location and design of buildings in order to maintain and enhance rural landscape qualities, and the retention of native bush. Appropriate conditions attaching to the designation for the WWTP (e.g. requirement for Concept Development and Landscape

Relevant Provisions of Policy Statements and Plans

SECTION 9

Management Plans) will ensure that visual and other environmental effects associated with future development of the site are controlled.

Section 2.4.1, Designations, in the Hauraki Gulf Islands Section of the District Plan states that Council will require the information set out in Part 6D of the plan to be included in any notice of requirement. The relevant matters in Part 6D are addressed as follows:

- *A description of the activity and its location.*
Refer Sections 2, 3 and 4 of this report.
- *A description of the existing characteristics of the site and locality.*
Refer Sections 3 and 8 of this report.
- *An assessment of any actual or potential effects that the activity may have on the environment, and the ways in which any adverse effects may be mitigated.*
Refer Sections 8 and 9 of this report.
- *A statement specifying the extent to which the applicant has established whether or not the proposal will have a adverse impact on the relationship of the Maori, and their culture, with their ancestral lands, water, sites, waahi tapu and other taonga or any other archaeological, cultural or historic feature.*
Refer Section 6 of this report.
- *Certificates of title for the site subject of the application.*
Refer Appendix B of this report.

Part A: Description

Subject to the conditions set out in Part B the land to which this designation applies may be used for reticulated wastewater treatment (post septic tank) and disposal purposes, including the following activities and works:

- (i) Wastewater treatment plant processes and ancillary activities
- (ii) Laboratory, workshop and staff amenity facilities ancillary to the treatment plant
- (iii) Storage of fuels and chemical substances (e.g. methanol, chlorine) used in conjunction with treatment plant processes
- (iv) Constructed wetlands
- (v) Use, construction and maintenance of drains
- (vi) Vehicle accessways/roadways, parking and manoeuvring areas
- (vii) Signage which is ancillary to and in connection with the use of the treatment plant
- (viii) Landscaping
- (ix) All related maintenance, construction, and earthwork activities

Part B: Conditions attaching to the designation**1.0 General Conditions**

1.1 The scope and extent of the activities and works authorised by the designation will be generally in accordance with the Notice of Requirement and accompanying information, subject to final design and any modifications required to comply with the conditions set out below.

2.0 Concept Development Plan

2.1 The Requiring Authority shall prepare a Concept Development Plan for the Owhanake wastewater treatment plant showing the layout of works and facilities authorised by the designation. In determining the layout for new facilities the Requiring Authority shall, in addition to considering operational requirements, take the following matters into account:

- The avoidance or mitigation of adverse noise and odour effects associated with treatment plant operations (refer also Condition 4.1 and Advice Note 3);
- The landscape and visual impact of buildings and structures (refer also Condition 3.1);
- Existing indigenous vegetation on the site.

The Concept Development Plan shall be submitted to the Team Leader – Hauraki Gulf Islands, Auckland City Environments for approval prior to the construction of any new facilities.

3.0 Landscape and Visual Impact Management Conditions

3.1 Prior to the construction of any new buildings, structures or facilities in accordance with an approved Concept Development Plan, the Requiring Authority shall prepare a Landscape Management Plan. This plan shall demonstrate how, as far as is practicable, and in accordance

with this condition, the wastewater treatment plant facilities are to be appropriately visually integrated with the surrounding landscape, including:

- (a) The design and external appearance of buildings and structures, including the type and colour of roofing and cladding materials to be used. The exterior of buildings shall be finished in colours and/or materials that are sympathetic to the natural landscape of the site;
- (b) Proposed landscape treatment, including details of plant species proposed to be used. Where practicable locally sourced native species shall be used;
- (c) The dimensions, graphic content and colouring of proposed signage. All signs shall comply with the provisions of the relevant Auckland City Bylaw (Part 27 - Signs).

The Landscape Management Plan shall be submitted to the Team Leader – Hauraki Gulf Islands, Auckland City Environments for approval prior to commencement of construction, with the approved landscape treatment subsequently being implemented no later than the first planting season immediately following completion of construction.

In preparing and approving the Landscape Management Plan, the Requiring Authority and Team Leader – Hauraki Gulf Islands, Auckland City Environments, respectively, shall consider the extent to which measures for addressing landscape and visual effects are reasonably necessary, taking into account the extent to which any dwellings or other potentially sensitive land uses have established after the requirement for designation for the Owhanake wastewater treatment plant was publicly notified.

4.0 Noise

4.1 Operational Noise

- (a) New facilities at the wastewater treatment plant shall be so designed and the use of the buildings and site shall be so conducted, that the following noise levels are not exceeded:
 - (i) The L_{eq} noise level shall not exceed the following limits:

Day/Time	Noise Level (L_{eq})
Monday to Saturday 0700 – 2200 hrs and Sunday 0900 – 1800 hrs	55 dBA
All other times including public holidays (night time)	45 dBA

- (ii) The maximum noise level (L_{max}) at “night” time shall be the background noise level (L_{95}) plus 30 dBA; or 75 dBA, whichever is the lower.
- (b) All noise measurements shall be made at 20m from any building where people may reside overnight on a permanent or temporary basis (on another site from the noise source) or at the legal boundary, when this is closer to the dwelling. This may be referred to as the notional boundary.
- (c) Noise shall be measured in accordance with NZS 6801:1999 (Acoustics – Measurement of Environmental Sound).

- (d) The noise measured shall be assessed in accordance with NZS 6802:1999 (Acoustics – Assessment of Environmental Noise) except that the averaging of noise measured will be in accordance with the following:

Averaging

A noise nuisance does not generally arise from a single isolated infringement. The amount by which limits are exceeded may vary between repeat infringements. Averaging of measured L_{eq} values for separate time intervals to derive a single figure for comparison with any limit, will be subject to the following constraints:

- (i) Averaging of measured L_{eq} levels for comparison with any applicable noise limit, if employed, will only be performed on LR levels derived in accordance with Appendix A of NZS 6802:1999 and will only relate to time intervals during which the sound of interest is present. Measured L_{eq} levels will not be averaged if comparison is to be made with night-time limits where sleep disturbance will be of concern.
- (ii) The averaged value of the descriptor e.g. L_{eq} will not exceed the relevant limit, and in any case the limit will not be exceeded by more than 5dB for any single time interval. L_{eq} values will be averaged on an energy basis, i.e. the logarithmic mean will be determined.

4.2 Noise from Construction Work and Earthworks (refer also Condition 9.2)

- (a) Noise resulting from earthworks or construction work (construction work is defined in NZS 6803:1999) shall not exceed the following levels:
 - (i) When affecting all settlement areas and land units, with the exception of the transport area of the Matiatia land unit:

Time of the Week	Time Period	Duration of the Work			
		Typical Duration Work (dBA) ¹		Short-Term Duration Work (dBA) ²	
		L_{eq}	L_{max}	L_{eq}	L_{max}
Monday to Friday	0730 – 1800 hrs	75	90	80	95
Saturday	0800 – 1600 hrs	75	90	80	95

- 1. ‘Typical Duration Work’ means construction work at any one location for more than 14 calendar days
- 2. ‘Short-Term Duration Work’ means construction work at any one location for up to 14 calendar days

- (ii) When affecting the transport area of the Matiatia land unit:

Time Period	Duration of the Work	
	Typical Duration Work ¹	Short-Term Duration Work ²
	L_{eq} (dBA)	L_{eq} (dBA)
0730 – 1800 hrs	75	80

- 1. ‘Typical Duration Work’ means construction work at any one location for more than 14 calendar days
- 2. ‘Short-Term Duration Work’ means construction work at any one location for up to 14 calendar days

-
- (b) Measurements should be made outside occupied buildings affected by the construction noise. Measurements should be made approximately 1 metre from the wall most exposed to the sound under investigation, and 1.2 metres to 1.5 metres above the relevant floor level. No adjustment to measured sound levels is to be made for the reflected sound from the wall. The measured levels should be compared directly with the noise limits without any adjustments for special audible characteristics. The measured level must be adjusted for any significant background L_{eq} level in the area using the procedure set out in Appendix A of NZS 6803:1999.
 - (c) Where circumstances require measurements inside buildings (e.g. when noise is travelling through common building elements such as a common wall) all windows and other means of ventilation must be closed or turned off and the upper limits of the noise measured will not exceed the levels stated in the tables in Condition 4.2(a)(i) or (ii) above minus 20 dBA.
 - (d) Noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979) Sound Level Meters, Type 1.

5.0 Access

- 5.1 All internal access roads, vehicle manoeuvring and parking areas shall be formed, provided with an all weather surface, drained, and maintained to the satisfaction of the Council.

6.0 Earthworks

- 6.1 In respect of earthworks that (apart from this designation) would require consent only from Auckland City Council under the relevant district plan:
 - 6.1.1 Suitable erosion and sediment control measures shall be implemented during all earthworks to ensure that the discharge of silt, sediment, or water containing silt or sediment into drains, natural watercourses, wetlands, estuaries, or coastal waters is minimised as far as practicable. Regard shall be had to the Auckland City Council brochure "*Earthworks on the Hauraki Gulf Islands*" and the Auckland Regional Council's Technical Publication No. 90 "*Erosion and Sediment Control: Guidelines for Land Disturbing Activities in the Auckland Region*" (1999). Any sediment controls deemed necessary shall remain in place until all exposed surfaces have been stabilised by mulching, paving, re-established in grass or planted; and
 - 6.1.2 Any stockpiling of excavated material on the site shall be undertaken in a manner that ensures that the discharge of silt, sediment, or water containing silt or sediment into drains, natural watercourses, wetlands, estuaries, or coastal waters is minimised as far as practicable.

Note: In respect of earthworks that would require consent from the Auckland Regional Council under the Auckland Regional Plan : Sediment Control (or any successor to that plan), the Requiring Authority will be obliged to comply with the requirements of that consent.

7.0 Stormwater

7.1 Adequate provision shall be made for the protection and/or redirection of any existing stormwater overland flow paths within the site, which are affected by new development works. Peak rate of discharge to the receiving environment shall not be increased significantly as a result of any works undertaken.

8.0 Archaeological and Cultural Heritage Impact Management Conditions

8.1 Should construction work expose any archaeological remains, including human remains, the following procedures shall apply:

- Immediately it becomes apparent that an archaeological or traditional site has been exposed, all works in the affected area shall cease;
- The affected area shall be secured in a way that ensures that any artefacts or remains are untouched;
- The Requiring Authority shall as soon as practicable notify local Iwi, the New Zealand Historic Places Trust and, in the case of human remains, the Police that artefacts or remains have been exposed so that appropriate action can be taken. Works shall not recommence in the affected area until any necessary authority required by the New Zealand Historic Places Trust is obtained.

9.0 Construction Management

9.1 Prior to the construction of any new buildings, structures or facilities in accordance with an approved Concept Development Plan and Landscape Management Plan, the Requiring Authority shall prepare a Construction Management Plan. This plan shall include specific details relating to the demolition, construction and management of all works associated with the upgrading of the existing wastewater treatment plant, including:

- (a) Details of the site manager, including their contact details;
- (b) The location of a noticeboard (in accordance with the relevant Auckland City Bylaw – Part 27 Signs) on the site that clearly identifies the name, telephone number and address for service of the site manager;
- (c) Measures to be adopted to maintain the site in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and other construction activities;
- (d) Location of worker's conveniences (e.g. Portaloos);
- (e) Ingress and egress to and from the site for vehicles during the construction period (including construction machinery);
- (f) Proposed numbers and timing of truck movements throughout each day and the proposed routes to be used by trucks;
- (g) Procedures for controlling sediment runoff, dust and the removal of soil and debris from public roads or places;

The Construction Management Plan shall be submitted to the Team Leader – Hauraki Gulf Islands, Auckland City Environments for approval prior to commencement of construction. The approved plan shall be implemented and maintained throughout the entire construction period.

- 9.2 All construction works shall be restricted to the hours between 0730 – 1800 Monday to Friday and 0800 – 1600 on Saturday. No work shall occur on Sundays or Public Holidays.

Advice Notes

1. The Requiring Authority needs to obtain all other necessary consents and permits, including those under the Building Act 1991, and comply with all relevant Council Bylaws.
2. Under the Historic Places Act 1993 an authority must be obtained from the New Zealand Historic Places Trust for the modification, damage or destruction of any archaeological site.
3. It is noted that the wastewater treatment plant is subject to an air discharge permit issued by the Auckland Regional Council which requires (amongst other things) that the plant be operated and maintained so that discharges of odour will not be of a noxious, offensive or objectionable nature beyond the boundaries of the site (Lot 37 DP 183455).
4. The storage and handling of any hazardous substances used in conjunction with wastewater treatment plant operations shall be undertaken in accordance with the provisions of the Hazardous Substances and New Organisms Act 1996 and the relevant Hazardous Substances Regulations.

The activities and works sought to be authorised by designation of the Owhanake wastewater treatment plant are necessary to meet Auckland City Council's objectives for wastewater treatment and disposal on Waiheke Island. A designation will provide certainty for the ongoing operation and maintenance needs of the existing plant and make suitable provision for future wastewater treatment and disposal in the event that:

- Some existing on-site treatment and disposal systems become unsustainable,
- Some new forms of development are unable to provide for their wastewater treatment and disposal needs wholly on-site,

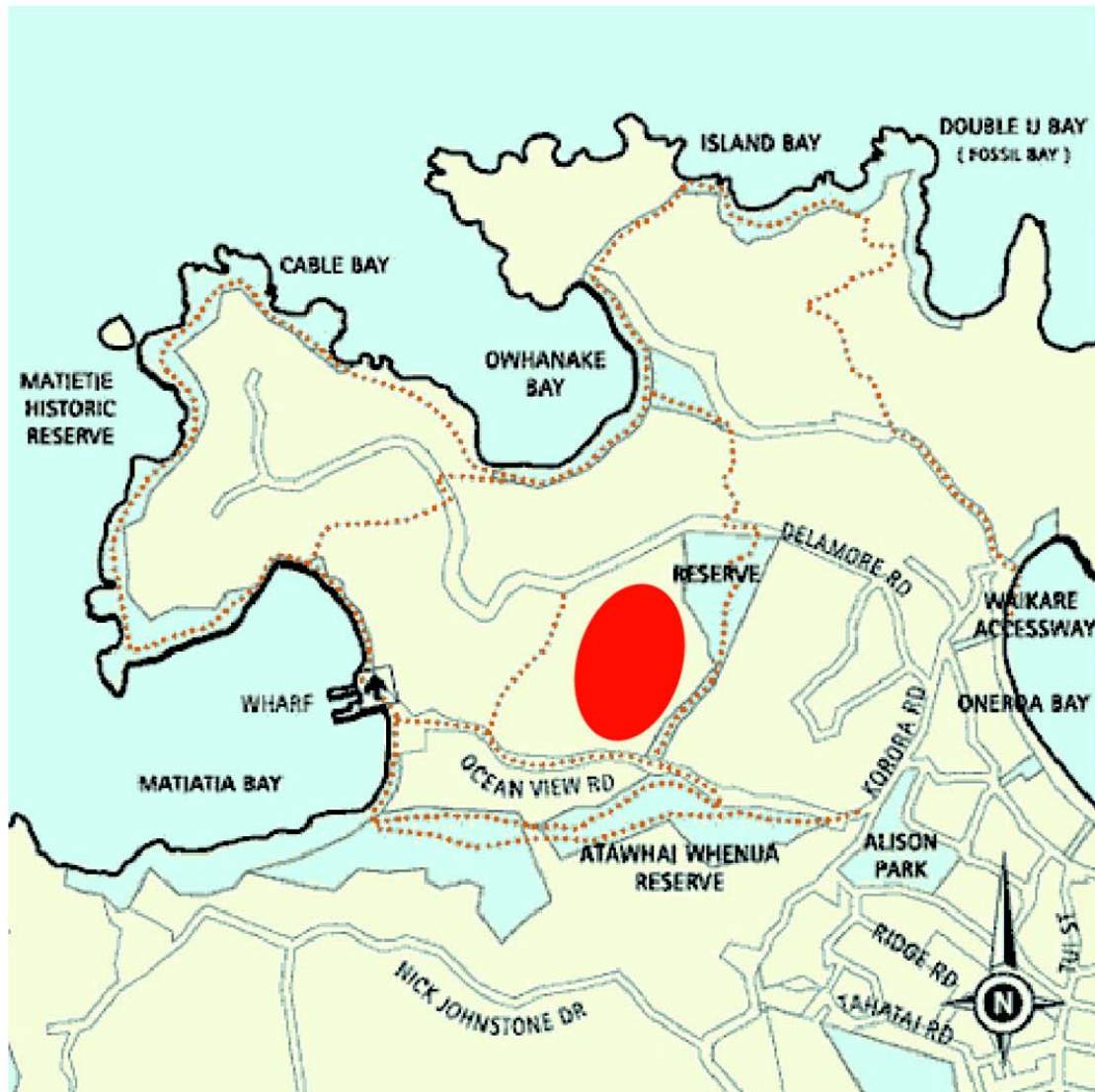
and connection into the treatment plant is shown to be the most appropriate alternative option in order to avoid adverse effects on public health and the environment (including adverse effects on coastal water quality).

This will better enable people and communities on Waiheke Island to provide for their social and economic wellbeing, and for their health and safety.

Provided that appropriate conditions are attached to the designation to address effects on the environment, the activities and works are consistent with the purpose and principles of sustainable management contained in Part 2 of the Resource Management Act 1992 (RMA). The assessment in Section 9 of this report indicates that the activities and works are also consistent with the relevant provisions of RMA policy statements and plans.

Figure 1
Location Plan – Owhanake Wastewater
Treatment Site

Location of Owhanake Wastewater Treatment Plant Site





Project Code: 314/272100
File Name: Designation Maps
Date Drawn: 19 July 2006
Scale: 1:2500 @ A4
Produced by Maps & Designs, Business Services, Planning Directorate

Cadastral Boundary and Aerial Photography
of Owhanake Wastewater Treatment Plant
61 Ocean View Road, Waiheke Island
Prop ID 408901



Figure 2
Owhanake Wastewater Treatment Plant
Existing Layout

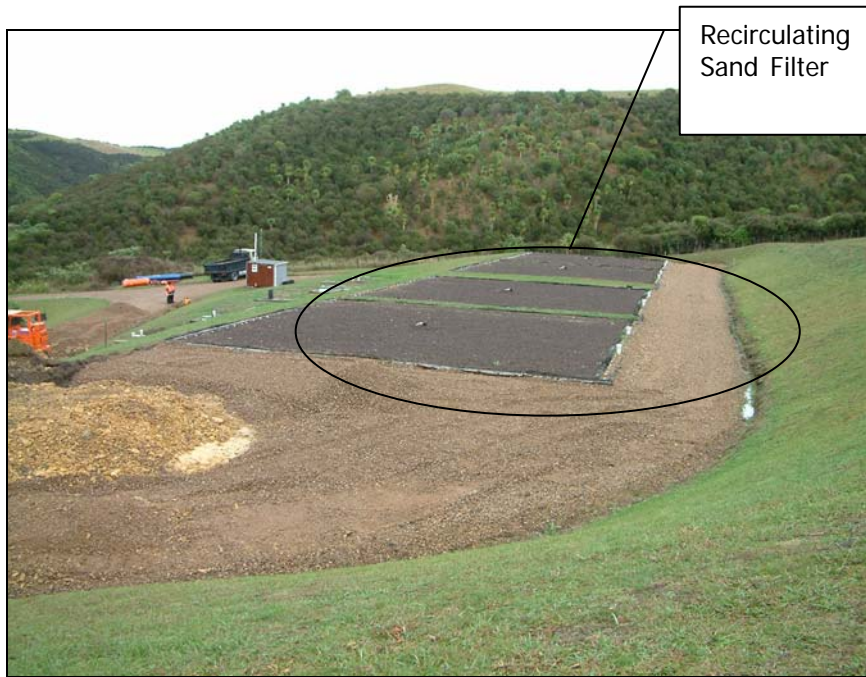
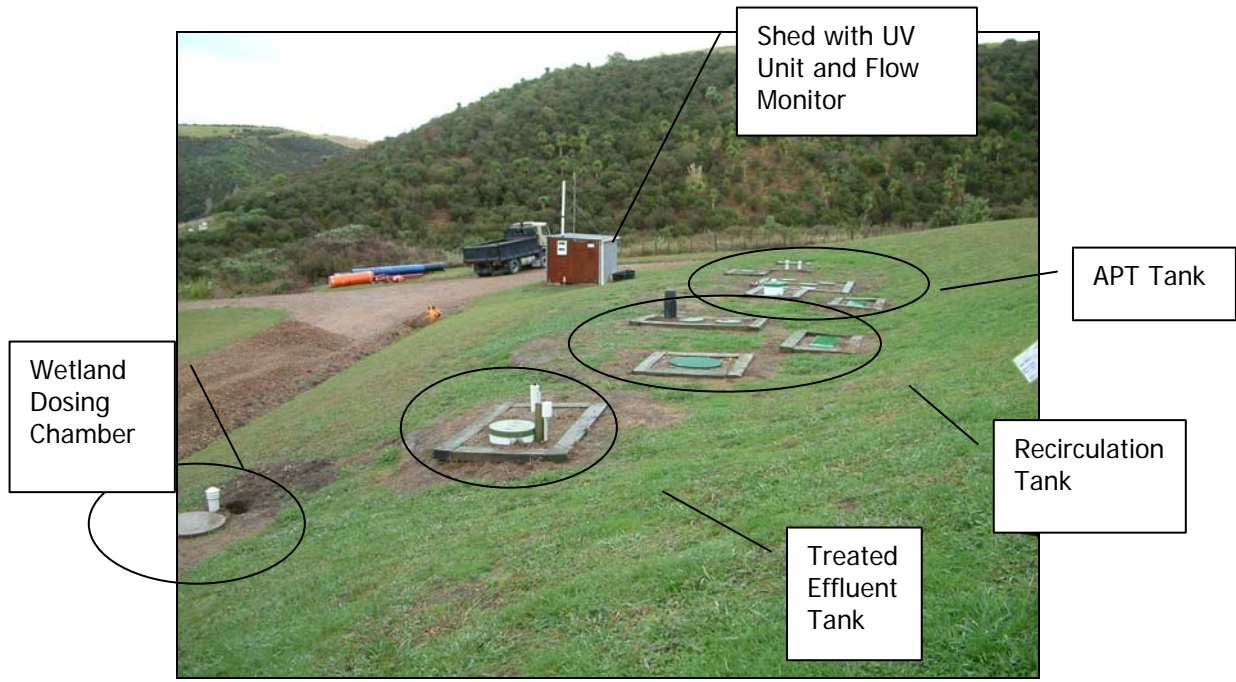


Figure 3 Photographs



Views from treatment plant site to existing dwellings on distant ridgelines



Appendix A

Notice of Requirement

Notice of requirement for a designation under section 168A of the Resource Management Act 1991

To: Auckland City Council - City Planning
Private Bag 92516
Wellesley Street
Auckland
Attn: Katherine Dorofaeff – Senior Planner – City Planning

From: Auckland City Council – Environmental and Utility Management
Private Bag 92516
Wellesley Street
Auckland
Attn: Greg Paterson – Water Manager – Environmental and Utility Management

Notice is given of a requirement for:

A designation of land for a public work – Reticulated Wastewater Treatment and Disposal Purposes.

1. The site to which the requirement applies is as follows:

61 Ocean View Road (Lot 37 DP 183455), Owhanake, Waiheke Island (refer **Attachment A** - Plan of Land to be Designated).

2. The nature of the proposed work is:

The ongoing operation and maintenance, and future upgrading and expansion of the Owhanake wastewater treatment plant for reticulated wastewater treatment (post septic tank) and disposal purposes, including the following activities and works:

- (i) Wastewater treatment plant processes and ancillary activities
- (ii) Laboratory, workshop and staff amenity facilities ancillary to the treatment plant
- (iii) Storage of fuels and chemical substances (e.g. methanol, chlorine) used in conjunction with treatment plant processes
- (iv) Constructed wetlands
- (v) Use, construction and maintenance of drains
- (vi) Vehicle accessways/roadways, parking and manoeuvring areas
- (vii) Signage which is ancillary to and in connection with the use of the treatment plant
- (viii) Landscaping

- (ix) All related maintenance, construction, and earthwork activities

3. The nature of the proposed restrictions that would apply are:

Conditions proposed for the designation are contained in **Attachment B**.

4. The effects that the public work will have on the environment, and the ways in which any adverse effects will be mitigated, are:

The effects of the proposed work are described in Section 8 of the accompanying report entitled "*Owhanake Wastewater Treatment Plant, Waiheke Island – Designation of Land for Reticulated Wastewater Treatment and Disposal Purposes : Supporting Information and Assessment of Effects on the Environment*" (report prepared for Auckland City Council – Environmental and Utility Management by URS New Zealand Limited, July 2006). The principal effects and associated means of mitigation can be summarised as:

- Positive environmental effects in terms of avoiding adverse effects on public health and the environment in the event that existing on-site wastewater treatment and disposal systems become unsustainable or the wastewater needs of some new development cannot be met wholly on-site.
- Odour – requirement that activities on the site are appropriately designed (including enclosure where practicable), operated and maintained to minimise odour. Treatment plant operations must otherwise comply with the conditions of an existing air discharge permit.
- Noise – requirement that activities on the site are designed and operated to comply with appropriate noise limits.
- Visual and Landscape – requirement that activities are, as far as practicable, visually integrated with the natural landscape of the site (including appropriate landscape treatment).
- Traffic – existing treatment plant operations and future upgrading/expansion will not generate significant additional traffic on Ocean View Road or other parts of the local road network.
- Ecological Effects – the discharge of treated effluent to the Matiatia wetland and Matiatia Bay is controlled by an existing discharge permit. If the consented discharge limit were to be exceeded then the ecological effects of any increase would need to be considered by way of a new discharge permit application.
- Temporary Construction Effects – requirement for a Construction Management Plan outlining suitable control measures to minimise temporary adverse effects during the construction period.

5. Alternative sites, routes, and methods have been considered to the following extent:

Alternatives are discussed in Section 7 of the accompanying report entitled "*Owhanake Wastewater Treatment Plant, Waiheke Island – Designation of Land for*

Reticulated Wastewater Treatment and Disposal Purposes : Supporting Information and Assessment of Effects on the Environment". The following alternatives have been considered and subsequently rejected for the reasons outlined in the accompanying report:

- Maintain status quo;
- Seek to provide for the existing wastewater treatment plant by way of 'underlying zone' provisions in the District Plan.

6. The public work and designation are reasonably necessary for achieving the objectives of the requiring authority because:

- The ongoing operation and maintenance, and provision for future upgrading and expansion of the Owhanake wastewater treatment plant is consistent with Auckland City Council's policy regarding the provision of community based reticulation schemes on Waiheke Island. This includes provision for community based schemes in cases where:
 - (i) On-site disposal of wastewater is no longer sustainable (the treatment plant was originally established to service the commercial centre of Oneroa Village when health authorities advised Auckland City Council that the operation of on-site systems had become unsatisfactory from a public health point of view);
 - (ii) Connection into such a scheme is shown to be the most appropriate alternative option in order to avoid adverse effects on public health and the environment.
- The ongoing operation and availability of a treatment plant facility at Owhanake provides certainty to the community and ensures that potential adverse effects are avoided in the event that existing systems become unsustainable or the wastewater treatment and disposal needs of some new development cannot be met wholly on-site. This is also consistent with Council's statutory duty under the Health Act to protect public health.
- In the absence of appropriate 'underlying zone' provisions, a designation will provide certainty for ongoing operation and maintenance needs and future upgrading of the treatment plant. The designation will be shown in the District Plan, with permitted activities and works clearly indicated to the community. A designation, once confirmed, provides a permanent basis for the operation of the treatment plant without the need for resource consents under the District Plan.

7. The following resource consents are needed for the proposed activity and have (or have not) been applied for:

Existing resource consents for the Owhanake wastewater treatment plant are held from the Auckland Regional Council for the discharge of contaminants into air, the discharge of treated domestic wastewater into the Upper Matiatia Wetland, and streamworks associated with outfall structures in the Matiatia Stream. This includes consent for an increased discharge of up to 250 m³/day from the treatment plant.

Further expansion beyond the currently consented capacity would require new consents from the regional council.

An existing resource consent (land use) is also held from the Auckland City Council for the construction and operation of a wastewater treatment and disposal system.

8. The following consultation has been undertaken with parties that are likely to be affected:

Provision for wastewater on Waiheke Island (including the Owhanake wastewater treatment plant) has been canvassed with the community, iwi and key stakeholders through a number of consultation processes, including:

- The 2002-03 consent application process for upgrading of the existing treatment plant.
- Auckland City Council's Long Term Council Community Plan process. This included consultation on the draft wastewater policies developed from Council's 2003-04 'Water and Sanitary Services Assessment', using the Special Consultative Procedure under the Local Government Act 2002.
- Initial 'issues and options' consultation process for the Hauraki Gulf islands District Plan Review.

Details of this consultation are outlined in section 6 of the accompanying report entitled "*Owhanake Wastewater Treatment Plant, Waiheke Island – Designation of Land for Reticulated Wastewater Treatment and Disposal Purposes : Supporting Information and Assessment of Effects on the Environment*".

9. Requiring authority status:

Auckland City Council is a requiring authority, pursuant to section 166 of the Act.

10. Time period for designation:


Auckland City Council seeks a lapse period of 15 years for the designation in accordance with section 184A of the Act. This lapse period provides sufficient time for the future upgrading and expansion of the Owhanake wastewater treatment plant.

ATTACHMENTS

The attachments, which form part of this Notice of Requirement, are:

- Attachment A** Plan of Land to be Designated.
Attachment B Proposed Conditions.

Signed:



Michael McQuillan

Manager - Environmental and Utility Management, Auckland City Council

14.04.06

Date

Address for Service of Requiring Authority:

Auckland City Council – Environmental and Utility Management
Private Bag 92516
Wellesley Street
Auckland

Attn: Greg Paterson – Water Manager

Attachment A – Plan of Land to be Designated



AUCKLAND CITY COUNCIL
NOTICE OF REQUIREMENT FOR A DESIGNATION
UNDER SECTION 168A OF THE RESOURCE MANAGEMENT ACT 1991
OWHANAKE WASTEWATER TREATMENT PLANT

61 OCEAN VIEW ROAD, WAIHEKE ISLAND

Attachment B – Proposed Conditions

1.0 General Conditions

- 1.1 The scope and extent of the activities and works authorised by the designation will be generally in accordance with the Notice of Requirement and accompanying information, subject to final design and any modifications required to comply with the conditions set out below.

2.0 Concept Development Plan

- 2.1 The Requiring Authority shall prepare a Concept Development Plan for the Owhanake wastewater treatment plant showing the layout of works and facilities authorised by the designation. In determining the layout for new facilities the Requiring Authority shall, in addition to considering operational requirements, take the following matters into account:

- The avoidance or mitigation of adverse noise and odour effects associated with treatment plant operations (refer also Condition 4.1 and Advice Note 3);
- The landscape and visual impact of buildings and structures (refer also Condition 3.1);
- Existing indigenous vegetation on the site.

The Concept Development Plan shall be submitted to the Team Leader – Hauraki Gulf Islands, Auckland City Environments for approval prior to the construction of any new facilities.

3.0 Landscape and Visual Impact Management Conditions

- 3.1 Prior to the construction of any new buildings, structures or facilities in accordance with an approved Concept Development Plan, the Requiring Authority shall prepare a Landscape Management Plan. This plan shall demonstrate how, as far as is practicable, and in accordance with this condition, the wastewater treatment plant facilities are to be appropriately visually integrated with the surrounding landscape, including:

- (a) The design and external appearance of buildings and structures, including the type and colour of roofing and cladding materials to be used. The exterior of buildings shall be finished in colours and/or materials that are sympathetic to the natural landscape of the site;
- (b) Proposed landscape treatment, including details of plant species proposed to be used. Where practicable locally sourced native species shall be used;
- (c) The dimensions, graphic content and colouring of proposed signage. All signs shall comply with the provisions of the relevant Auckland City Bylaw (Part 27 - Signs).

The Landscape Management Plan shall be submitted to the Team Leader – Hauraki Gulf Islands, Auckland City Environments for approval prior to commencement of construction, with the approved landscape treatment subsequently being implemented

no later than the first planting season immediately following completion of construction.

In preparing and approving the Landscape Management Plan, the Requiring Authority and Team Leader – Hauraki Gulf Islands, Auckland City Environments, respectively, shall consider the extent to which measures for addressing landscape and visual effects are reasonably necessary, taking into account the extent to which any dwellings or other potentially sensitive land uses have established after the requirement for designation for the Owhanake wastewater treatment plant was publicly notified.

4.0 Noise

4.1 Operational Noise

(a) New facilities at the wastewater treatment plant shall be so designed and the use of the buildings and site shall be so conducted, that the following noise levels are not exceeded:

(i) The L_{eq} noise level shall not exceed the following limits:

Day/Time	Noise Level (L_{eq})
Monday to Saturday 0700 – 2200 hrs and Sunday 0900 – 1800 hrs	55 dBA
All other times including public holidays (night time)	45 dBA

(ii) The maximum noise level (L_{max}) at “night” time shall be the background noise level (L_{95}) plus 30 dBA; or 75 dBA, whichever is the lower.

(b) All noise measurements shall be made at 20m from any building where people may reside overnight on a permanent or temporary basis (on another site from the noise source) or at the legal boundary, when this is closer to the dwelling. This may be referred to as the notional boundary.

(c) Noise shall be measured in accordance with NZS 6801:1999 (Acoustics – Measurement of Environmental Sound).

(d) The noise measured shall be assessed in accordance with NZS 6802:1999 (Acoustics – Assessment of Environmental Noise) except that the averaging of noise measured will be in accordance with the following:

Averaging

A noise nuisance does not generally arise from a single isolated infringement. The amount by which limits are exceeded may vary between repeat infringements. Averaging of measured L_{eq} values for separate time intervals to derive a single figure for comparison with any limit, will be subject to the following constraints:

(i) Averaging of measured L_{eq} levels for comparison with any applicable noise limit, if employed, will only be performed on LR levels derived in accordance with Appendix A of NZS 6802:1999 and will only relate to time intervals during which the sound of interest is present. Measured L_{eq} levels

will not be averaged if comparison is to be made with night-time limits where sleep disturbance will be of concern.

- (ii) The averaged value of the descriptor e.g. L_{eq} will not exceed the relevant limit, and in any case the limit will not be exceeded by more than 5dB for any single time interval. L_{eq} values will be averaged on an energy basis, i.e. the logarithmic mean will be determined.

4.2 Noise from Construction Work and Earthworks (refer also Condition 9.2)

- (a) Noise resulting from earthworks or construction work (construction work is defined in NZS 6803:1999) shall not exceed the following levels:

- (i) When affecting all settlement areas and land units, with the exception of the transport area of the Matiatia land unit:

Time of the Week	Time Period	Duration of the Work			
		Typical Duration Work (dBA) ¹		Short-Term Duration Work (dBA) ²	
		L_{eq}	L_{max}	L_{eq}	L_{max}
Monday to Friday	0730 – 1800 hrs	75	90	80	95
Saturday	0800 – 1600 hrs	75	90	80	95

1. 'Typical Duration Work' means construction work at any one location for more than 14 calendar days
2. 'Short-Term Duration Work' means construction work at any one location for up to 14 calendar days

- (ii) When affecting the transport area of the Matiatia land unit:

Time Period	Duration of the Work	
	Typical Duration Work ¹	Short-Term Duration Work ²
	L_{eq} (dBA)	L_{eq} (dBA)
0730 – 1800 hrs	75	80

1. 'Typical Duration Work' means construction work at any one location for more than 14 calendar days
2. 'Short-Term Duration Work' means construction work at any one location for up to 14 calendar days

- (b) Measurements should be made outside occupied buildings affected by the construction noise. Measurements should be made approximately 1 metre from the wall most exposed to the sound under investigation, and 1.2 metres to 1.5 metres above the relevant floor level. No adjustment to measured sound levels is to be made for the reflected sound from the wall. The measured levels should be compared directly with the noise limits without any adjustments for special audible characteristics. The measured level must be adjusted for any significant background L_{eq} level in the area using the procedure set out in Appendix A of NZS 6803:1999.

- (c) Where circumstances require measurements inside buildings (e.g. when noise is travelling through common building elements such as a common wall) all windows and other means of ventilation must be closed or turned off and the upper limits of the noise measured will not exceed the levels stated in the tables in Condition 4.2(a)(i) or (ii) above minus 20 dBA.
- (d) Noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979) Sound Level Meters, Type 1.

5.0 Access

- 5.1 All internal access roads, vehicle manoeuvring and parking areas shall be formed, provided with an all weather surface, drained, and maintained to the satisfaction of the Council.

6.0 Earthworks

- 6.1 In respect of earthworks that (apart from this designation) would require consent only from Auckland City Council under the relevant district plan:

- 6.1.1 Suitable erosion and sediment control measures shall be implemented during all earthworks to ensure that the discharge of silt, sediment, or water containing silt or sediment into drains, natural watercourses, wetlands, estuaries, or coastal waters is minimised as far as practicable. Regard shall be had to the Auckland City Council brochure "*Earthworks on the Hauraki Gulf Islands*" and the Auckland Regional Council's Technical Publication No. 90 "*Erosion and Sediment Control: Guidelines for Land Disturbing Activities in the Auckland Region*" (1999). Any sediment controls deemed necessary shall remain in place until all exposed surfaces have been stabilised by mulching, paving, re-established in grass or planted; and

- 6.1.2 Any stockpiling of excavated material on the site shall be undertaken in a manner that ensures that the discharge of silt, sediment, or water containing silt or sediment into drains, natural watercourses, wetlands, estuaries, or coastal waters is minimised as far as practicable.

Note: In respect of earthworks that would require consent from the Auckland Regional Council under the Auckland Regional Plan : Sediment Control (or any successor to that plan), the Requiring Authority will be obliged to comply with the requirements of that consent.

7.0 Stormwater

- 7.1 Adequate provision shall be made for the protection and/or redirection of any existing stormwater overland flow paths within the site, which are affected by new development works. Peak rate of discharge to the receiving environment shall not be increased significantly as a result of any works undertaken.

8.0 Archaeological and Cultural Heritage Impact Management Conditions

8.1 Should construction work expose any archaeological remains, including human remains, the following procedures shall apply:

- Immediately it becomes apparent that an archaeological or traditional site has been exposed, all works in the affected area shall cease;
- The affected area shall be secured in a way that ensures that any artefacts or remains are untouched;
- The Requiring Authority shall as soon as practicable notify local Iwi, the New Zealand Historic Places Trust and, in the case of human remains, the Police that artefacts or remains have been exposed so that appropriate action can be taken. Works shall not recommence in the affected area until any necessary authority required by the New Zealand Historic Places Trust is obtained.

9.0 Construction Management

9.1 Prior to the construction of any new buildings, structures or facilities in accordance with an approved Concept Development Plan and Landscape Management Plan, the Requiring Authority shall prepare a Construction Management Plan. This plan shall include specific details relating to the demolition, construction and management of all works associated with the upgrading of the existing wastewater treatment plant, including:

- (a) Details of the site manager, including their contact details;
- (b) The location of a noticeboard (in accordance with the relevant Auckland City Bylaw – Part 27 Signs) on the site that clearly identifies the name, telephone number and address for service of the site manager;
- (c) Measures to be adopted to maintain the site in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and other construction activities;
- (d) Location of worker's conveniences (e.g. Portaloos);
- (e) Ingress and egress to and from the site for vehicles during the construction period (including construction machinery);
- (f) Proposed numbers and timing of truck movements throughout each day and the proposed routes to be used by trucks;
- (g) Procedures for controlling sediment runoff, dust and the removal of soil and debris from public roads or places;

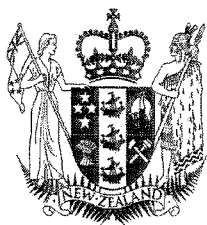
The Construction Management Plan shall be submitted to the Team Leader – Hauraki Gulf Islands, Auckland City Environments for approval prior to commencement of construction. The approved plan shall be implemented and maintained throughout the entire construction period.

9.2 All construction works shall be restricted to the hours between 0730 – 1800 Monday to Friday and 0800 – 1600 on Saturday. No work shall occur on Sundays or Public Holidays.

Advice Notes

1. The Requiring Authority needs to obtain all other necessary consents and permits, including those under the Building Act 1991, and comply with all relevant Council Bylaws.
2. Under the Historic Places Act 1993 an authority must be obtained from the New Zealand Historic Places Trust for the modification, damage or destruction of any archaeological site.
3. It is noted that the wastewater treatment plant is subject to an air discharge permit issued by the Auckland Regional Council which requires (amongst other things) that the plant be operated and maintained so that discharges of odour will not be of a noxious, offensive or objectionable nature beyond the boundaries of the site (Lot 37 DP 183455).
4. The storage and handling of any hazardous substances used in conjunction with wastewater treatment plant operations shall be undertaken in accordance with the provisions of the Hazardous Substances and New Organisms Act 1996 and the relevant Hazardous Substances Regulations.

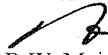
Appendix B
Certificate of Title



**COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952**



Search Copy


R.W. Muir
Registrar-General
of Land

Identifier NA114B/605
Land Registration District North Auckland
Date Issued 03 November 1997

Prior References

NA102A/644 NA7B/741

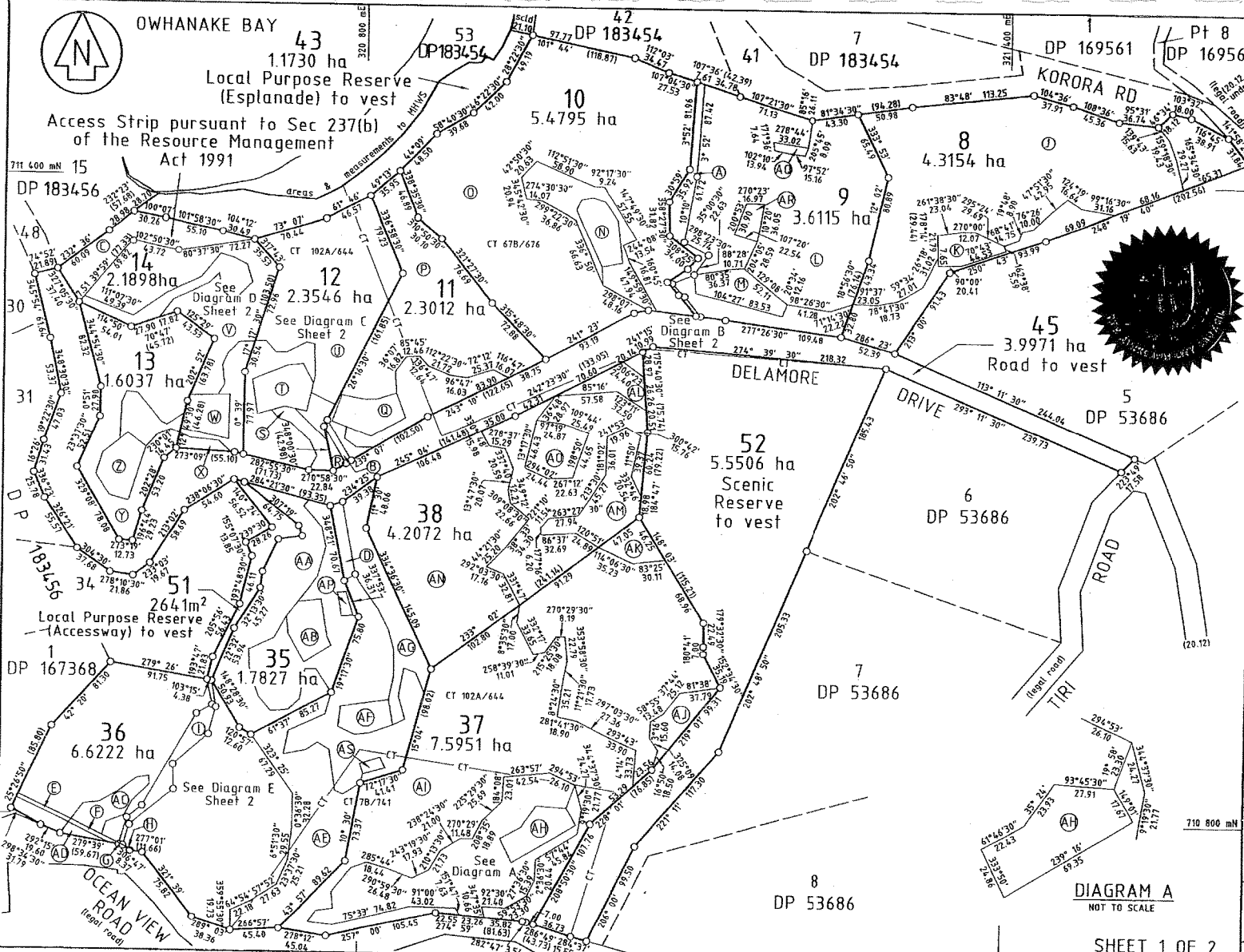
Estate Fee Simple
Area 7.5951 hectares more or less
Legal Description Lot 37 Deposited Plan 183455

Proprietors

The Auckland City Council

Interests

Appurtenant hereto are rights of way created by Transfer C074874.3 (affects part formerly in CT NA102A/644)
D211308.2 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - 3.11.1997 at 3.40 pm
Land Covenant in Transfer D211308.12 - 3.11.1997 at 3.40 pm



Approved by *Graine Bl* Director
Wesley Dreak Registered Owners

Approved pursuant to Section 223 of the Resource Management Act 1991 on the 4th day of September 1997 subject to the granting or reserving of the easements set out in the memorandum hereon. The common seal of the Auckland City Council was affixed hereon in the presence of:

M.C. D.M.W. City Secretary
Quill Team Leader Subdivision Consents

Acc Plan 2951/0095

MEMORANDUM OF EASEMENTS			
SHOWN	PURPOSE	SERVIENT TENEMENT	DOMINANT TENEMENT
(D)	RIGHT OF WAY	LOT 11 HEREON	LOT 12 HEREON
(D)		LOT 36 HEREON	LOT 35 HEREON

MEMORANDUM OF EASEMENTS IN GROSS			
SHOWN	PURPOSE	SERVIENT TENEMENT	GRANTEE
(A)	PEDESTRIAN ACCESS	LOT 9 HEREON	AUCKLAND CITY COUNCIL
(G) (L)		LOT 36 HEREON	AUCKLAND CITY COUNCIL

EXISTING EASEMENTS IN GROSS			
SHOWN	PURPOSE	CREATED BY	
(E) (P) (H)	ELECTRICITY	T.702349	

AREAS SHOWN (D) AND (L) ARE TO BE SUBJECT TO LAND COVENANTS
 THIS PLAN IS CONCURRENT WITH DP'S 183454 & 183456

NEW C/S'T ALLOCATED

LOT 8 - 114B/596	LOT 14 - 114B/602
LOT 9 - 114B/597	LOT 35 - 114B/603
LOT 10 - 114B/598	LOT 36 - 114B/604
LOT 11 - 114B/599	LOT 37 - 114B/605
LOT 12 - 114B/600	LOT 38 - 114B/606
LOT 13 - 114B/601	LOT 43 - 114B/607
	LOT 51 - 114B/608
	LOT 52 - 114B/609

MEMORANDUM OF EASEMENTS IN GROSS			
SHOWN	PURPOSE	SERVIENT TENEMENT	GRANTEE
(C)	ACCESS STRIP	LOT 14 HEREON	AUCKLAND CITY COUNCIL

Total Area 53,0477 ha
 Comprised in ALL CT 7B/741
 P.T. CT 102A/644 & BAL. CT 67B/676

I, PHILIP JOHN RHODES of AUCKLAND Registered Surveyor and holder of an annual practicing certificate for who may act as a registered surveyor pursuant to section 25 of the Survey Act 1984 hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof.
 Dated at Auckland this 17th day of September 1997 Signature: *Philip Rhodes*

Field Book p. Traverse Book 16C2 p. 42-63
 Reference Plans

Examined *[Signature]* Correct
 Approved as to Survey *W. N. Nicks* Chief Surveyor
 17/10/97

Deposited this 3rd day of November 1997
[Signature] District Land Registrar

File 5028-01 (SU-1118C)
 Received Instructions DP 183455

LAND DISTRICT NORTH AUCKLAND
 SURVEY BLK. & DIST. I WAIHEKE
 NZMS 261 SHT RECORD MAP No

LOTS 8-14, 35-38, 43, 45, 51, 52 BEING A SUBDIVISION OF PT TE HURUHI NO'S 1C & 1E, LOT 9 DP 53686, PT LOT 11 DP 53686 & PT LOT 1 DP 171587

TERRITORIAL AUTHORITY AUCKLAND CITY
 Surveyed by TSE GROUP LIMITED
 Scale 1:2500 Date APRIL 1997

SHEET 1 OF 2

