I438. Takanini Precinct

I438.1. Precinct Description

The zoning of land within this precinct is listed below. Refer to the planning maps for the location and extent of the precinct:

Sub-precinct A: Open Space - Informal Recreation Zone

Business - Light Industry Zone

Residential - Single House Zone

Residential - Mixed Housing Suburban Zone

Sub-precinct B: Business - Local Centre Zone

Sub-precinct C: Residential - Mixed Housing Suburban Zone

Residential - Mixed Housing Urban Zone

Sub-precinct D: Residential - Single House Zone.

Refer to Takanini Precinct: Precinct plan 1 for the location and extent of the Takanini Precinct and Sub-precincts. Figure 1 relates to soakage pit requirements. Takanini Precinct: Precinct plan 2 is a landscape plan for Sub-precinct A.

The Takanini Precinct applies to some 290 hectares of land. The precinct is divided into four Sub-precincts (A, B, C & D) which seek to encourage the subdivision and development of this land in a comprehensive manner to achieve a quality built and well-connected environment.

The precinct contains standards in response to known geotechnical limitations.

I438.1.1. Sub-precinct A

Takanini Precinct: Sub-precinct A applies to some 53.5 hectares of land between the Papakura Stream, Takanini School Road, Manuroa Road and Porchester Road. This land is currently undeveloped. The Sub-precinct provisions include specific standards relating to vehicle access, overland flowpaths and geotechnical constraints. Subdivision is to be in compliance with Takanini Precinct: Precinct plan 1 in order to require connections to the surrounding area.

The zones within the Sub-precinct are:

- Open Space Informal Recreation Zone
- Business Light Industry Zone
- Residential Single House Zone
- Residential Mixed Housing Suburban Zone

Subdivision and development in Sub-precinct A must comply with the landscape plan in Takanini Precinct: Precinct plan 2.

An extension to the Mahia Branch Sewer is proposed within Sub-precinct A. Its indicative location is shown on Takanini Precinct: Precinct plan 1. A Mahia Branch

Sewer Network Utility Yard applies to Sub-precinct A to protect the future alignment of the Sewer Line.

When proposing a new site or building, part or all of which will be located within the Mahia Branch Sewer Line Network Utility Yard, consultation with Watercare Services Limited is advised. Evidence of consultation with and support or comments from Watercare should be included in the subdivision or resource consent application.

I438.1.2. Sub-precinct B

Takanini Sub-precinct B applies to some 4.5 hectares of land with frontage to Porchester Road. This land is currently undeveloped. Subdivision and development should achieve a quality and well-connected environment, which will principally serve the local convenience needs of the surrounding residential area within Takanini Precinct: Sub-precinct C. The zoning is Business - Local Centre Zone

I438.1.3. Sub-precinct C

Takanini Precinct: Sub-precinct C applies to some 184 hectares of land throughout the wider precinct, and covers the largest land area of the four sub-precincts. It also contains a number of standards in response to known geotechnical limitations which have been identified through structure planning. The zoning is Residential - Mixed Housing Suburban Zone and Residential - Mixed Housing Urban Zone.

This area includes reverse sensitivity provisions relating to the New Zealand Defence Force's Papakura Military Camp, and to Transpower's site at 65 Airfield Road.

I438.1.4. Sub-precinct D

Takanini Precinct: Sub-precinct D applies to an area of land between Papakura-Clevedon and Old Wairoa Roads. Development at a low density is encouraged in this Sub-precinct to assist in maintaining the elements of amenity and open space character. The area incorporates aspects of the relevant structure plan. Sub-precinct D contains standards in response to the known geotechnical limitations in the area, and provides for a landscape buffer between development along Papakura-Clevedon Road and the adjacent rural zone. The zoning is Residential - Single House Zone.

I438.2. Objectives

- (1) Subdivision and development occurs in a coordinated way that implements Takanini Precinct: Precinct plan 1.
- (2) Subdivision and development avoids, remedies or mitigates the actual or potential adverse effects from developing on land subject to stormwater and geotechnical constraints.

I438.2.1. Sub-precinct A

- (1) Subdivision supports walking, cycling, and public transport use and takes advantage of proximity to public transport routes, neighbourhood centres and local parks.
- (2) Subdivision and development implements the landscape plan in Takanini Precinct: Precinct plan 2.

I438.2.2. Sub-precinct B

- (1) Subdivision and development occurs in a way that avoids ad hoc development.
- (2) Commercial activity development is of a scale that is appropriate to a local centre.

I438.2.3. Sub-precinct C

- (1) Subdivision supports walking, cycling, and public transport use and takes advantage of proximity to public transport routes, neighbourhood centres and local parks.
- (2) Subdivision and development occurs in a way that avoids ad hoc development.

I438.2.4. Sub-precinct D

(1) Subdivision and development is designed so that it retains elements of existing amenity values and character.

The overlay, Auckland-wide and underlying zone objectives apply in this precinct in addition to those specified above.

I438.3. Policies

- (1) Require subdivision and development to be designed to avoid, remedy or mitigate the actual or potential adverse effects from developing on land subject to stormwater and geotechnical constraints.
- (2) Require the key structural elements of Takanini Precinct: Precinct plan 1 to be incorporated into all subdivision and development.

I438.3.1. Sub-precinct A

(1) Subdivision should occur in a way that supports various transport choices and takes advantage of proximity to public transport routes, neighbourhood centres and local parks.

I438.3.2. Sub-precinct B

(1) Limit the total gross floor area of commercial activities.

I438.3.3. Sub-precinct C

 Subdivision should occur in a way that supports various transport choices and takes advantage of proximity to public transport routes, neighbourhood centres and local parks.

I438.3.1. Sub-precinct D

(1) Subdivision and development in Sub-precinct D should be designed and implemented in a manner that maintains significant elements of existing amenity values and character.

The overlay, Auckland-wide and underlying zone policies apply in this precinct in addition to those specified above.

I438.4. Activity table

The provisions in any relevant overlays, Auckland-wide provisions and the zone apply in this precinct unless otherwise specified below.

Table I438.4.1 specifies the activity status of land use, development and subdivision activities in the Takanini Precinct pursuant to sections 9(3) and 11 of the Resource Management Act 1991 or any combination of these sections where relevant.

Table I438.4.1

Activity		Activity status				
		Sub Precint A	Sub Precint B	Sub Precint D	Sub Precint E	
Use						
Vehicl	e Access					
(A1)	Any activity with vehicle access from road frontages marked as vehicle access restriction in Takanini Precinct: Precinct plan 1	RD	NA	RD	RD	
Commerce						
(A2)	Commercial activities in Sub-precinct B provided that the total gross floor area for commercial activities in the Sub- precinct will not exceed 10,000m ²	NA	RD	NA	NA	
(A3)	One supermarket up to 3500m ² gross floor area in Sub-precinct B	NA	С	NA	NA	
(A4)	One service station in Sub-precinct B	NA	С	NA	NA	
(A5)	Commercial activities that will result in the cumulative total gross floor area for Sub-precinct B exceeding 10,000m ²	NA	NC	NA	NA	
Development						
(A6)	The modification of the overland flowpaths depicted on Takanini Precinct: Precinct plan 1	RD	NA	NA	NA	
Subdiv	vision					
(A7)	Subdivision that is in compliance with Takanini Precinct: Precinct plan 1, and (in Sub-precinct A) Takanini Precinct: Precinct plan 2	RD	NA	RD	RD	
(A8)	Subdivision not in compliance with Takanini Precinct: Precinct plan 1, or (in Sub-precinct A) Takanini Precinct:	NC	NA	NC	NC	

Precinct plan 2				
-----------------	--	--	--	--

I438.5. Notification

- (1) An application for resource consent for a controlled activity listed in Table I438.4.1 Activity table above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) Any application for resource consent for an activity listed in Table H1.4.1Activity table and which is not listed in I438.5(1) will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (3) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule C1.13(4).

1438.6. Standards

The Auckland-wide and underlying zone standards apply in this Precinct in addition to the following standards. Where there is any conflict or difference between standards in this Precinct and the standards for the Auckland-wide and zones the standards in this Precinct will apply.

1438.6.1. Standards for buildings and development

All buildings and development listed as permitted or restricted discretionary in the underlying zone must comply with the following standards.

I438.6.1.1. Building height

(1) Buildings within Sub-precinct B must not exceed 12m in height.

1438.6.1.2. Papakura Military Camp Height Restriction Area

Purpose

Building height restrictions and specific upper floor design controls apply to all development within the Papakura Military Camp Height Restriction Area to the east side of Grove Road, immediately opposite the Camp (as defined on Takanini Precinct: Precinct plan 1) to ensure that any actual or potential reverse sensitivity effects, and privacy, overlooking and security effects are appropriately avoided, remedied or mitigated.

- (1) The maximum height of buildings within the Papakura Military Camp Height Restriction Area is 9 metres.
- (2) The maximum upper-floor floor-level of any building within the Papakura Military Camp Height Restriction Area is 3.8 metres above natural ground level (the surveyed Reduced Level pre-development).

(3) Any development within the Papakura Military Camp Height Restriction Area that cannot comply with Clauses (1) and (2) above is a Noncomplying Activity.

I438.6.1.3. Specific Upper Floor Design Controls Applicable to all Buildings Falling within the Papakura Military Camp Height Restriction Area:

Purpose

Within the Papakura Military Camp Height Restriction Area, all buildings shall be designed to ensure that the number, position and size of first floor windows and doors minimise opportunities for overlooking of the Papakura Military Camp.

- (1) First floor windows that offer a sightline to the Papakura Military Camp are only permitted where they serve a bathroom, a stairwell, or where they are designed to incorporate a minimum sill height of 1.6 metres above first floor level and are obscure glazed;
- (2) There must be no first floor door openings, or external balustrade to first floor windows, that offer a sightline to Grove Road;
- (3) There must be no first floor balconies, or other external amenity areas, that offer a sightline to the Papakura Military Camp;
- (4) There must be no 'Velux-style' roof or skylight windows inserted to any roof slope that offer a sightline to Grove Road; and
- (5) Any development within the Papakura Military Camp Height Restriction Area that cannot comply with Clauses (1) to (4) above is a Non-complying Activity.

I438.6.1.4. Yards

- (1) Sub-precinct A Mahia Branch Sewer Line Network Utility Yard
 - (a) A Network Utility Yard of 10m must be provided on both sides of the proposed Mahia Branch Sewer Line shown on Takanini Precinct: Precinct plan 1.
 - (b) The yard is to be measured (in a horizontal plane at right angles) from both sides of the centre line of the proposed sewer.
 - (c) This yard control only applies prior to the construction of the proposed Mahia Branch Sewer Line, and will cease to have effect upon completion of its construction.
 - (d) Any development which is unrelated to the construction/provision of the sewer line, and which does not comply with the above yard requirement is a restricted discretionary activity.
- (2) Sub-precinct D landscape strip.

(e) Each new site adjacent to Papakura-Clevedon Road in Sub-precinct D must provide in compliance with Takanini Precinct: Precinct plan 1 a minimum of a 3m wide landscape strip planted in grass, trees and shrubs, parallel and adjacent to Papakura-Clevedon Road, or landscaping in compliance with a landscape plan approved as part of subdivision.

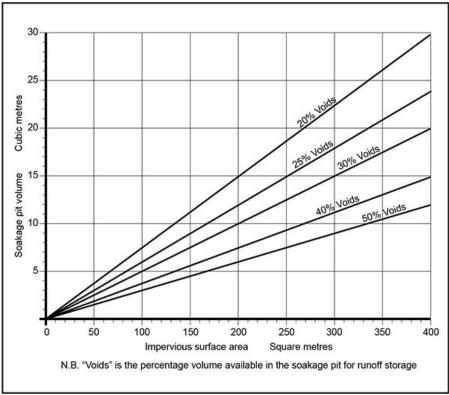
I438.6.1.5. Maximum Impervious Area

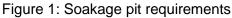
(1) The maximum impervious area within Sub-precinct B must not exceed 85 percent of the site area.

I438.6.1.6. Stormwater

- (1) Within Sub-precincts A, C and D:
 - (a) Development of all sites must provide for groundwater recharge by providing for soakage disposal of stormwater runoff from buildings and other impervious surfaces.
 - (b) A groundwater recharge pit providing temporary storage for stormwater runoff is required for all development sites underlain by the peat soil aquifer. The design of groundwater recharge pits must provide a storage volume between 1.5m below ground level and 0.5m below ground level. The groundwater recharge pits must be designed to be capable of holding the first 15mm of stormwater runoff from the impervious surface areas of any proposed development. The contributing catchment for each individual recharge pit must be limited to a maximum of 500m² to encourage an even spatial distribution of groundwater recharge across the site. The recharge pits must be kept at least 3m away from the edge of any building foundations and at least 2m away from the site boundaries.
 - (c) Overflow from the soakage system must be provided for with a piped connection to the public stormwater drainage system.
 - (d) The required volume of soakage pit in relation to the buildings and other impervious surface area for each development is shown in Figure 1: Soakage pit requirements.
- (2) Within Sub-precinct B development of all sites must provide for groundwater recharge by providing for soakage disposal of stormwater runoff from buildings and other impervious surfaces and long-term monitoring of factors critical to maintaining ground stability. Any infringement would be assessed on its ability to maintain equivalent infiltration from the site's undeveloped state.
- (3) Within Sub-precincts C and D, development of all sites within the area identified as Kirikiri Sub-precinct D and that part of Sub-precinct C bounded by Old Wairoa Road and Papakura-Clevedon Road on Takanini

Precinct: Precinct plan 1, must be consistent with the recommendations of the approved Stormwater Catchment Management Plan for the area or an approved discharge consent.





I438.6.1.7. Fences

(1) Fences on the Papakura-Clevedon Road boundary must not exceed 1.8m in height.

1438.6.1.8. Landscaping and planting in Sub-precinct A

- (1) Development in Sub-precinct A must comply with the landscape plan in Takanini Precinct: Precinct plan 2.
- (2) Any development not complying with the above clause is a non-complying activity.

1438.6.2. Noise

- (1) The following controls apply to the land adjoining Transpower's Electricity Substation shown in Takanini Precinct: Precinct plan 1 as subject to environmental noise constraints:
 - (a) All buildings with habitable rooms are to be designed and constructed so that the noise level in all habitable rooms must not exceed a level of 30dBA L10 (includes 5 decibel adjustment for tonal component as

provided for in New Zealand Standard NZS6802:1991 "Assessment of Environmental Sound"), with any required ventilation system (including windows) in operation. All measures to achieve this standard are to meet the provisions of the New Zealand Building Code.

- (b) At the time of lodging a Building Consent Application with the Council, a certificate from a suitably qualified and experienced acoustic consultant is to be provided to the Council stating that, in respect of all habitable rooms, the buildings will achieve the acoustic performance specified in subclause (a) above. If that certificate states that the building will achieve the acoustic performance without any special modifications, the certificate may also state that further testing under subclause (c) below is not required.
- (c) Prior to occupation of habitable rooms, representative testing of the rooms is to be undertaken by a suitably qualified and experienced acoustic consultant to confirm that the design criterion of 30dBA L10 is being met (unless it has been certified under subclause (b) above that further testing is not required), with any required ventilation system (including windows) in operation. Noise levels from any mechanical ventilation system shall be measured at least 1m away from any diffuser.
- (d) Where the results of any testing carried out in the preceding condition demonstrates that the 30dBA L10 criterion is not achieved, remedial action must be undertaken such that the criterion is met and compliance subsequently is to be certified in compliance with subclause (c) above prior to the occupation of the building or the transfer of ownership of the building, whichever occurs first.
- (2) Any development not complying with the above clause is a non-complying activity.

I438.6.3. Subdivision Standards

The subdivision controls in the Auckland wide rules – subdivision apply in the Takanini Precinct and sub-precincts unless otherwise specified below:

- (1) Subdivision must be generally in accordance with the indicative transport network identified on Takanini Precinct: Precinct plan 1.
- (2) Sub-precinct A Mahia Branch Sewer Line Network Utility. Any part of a proposed lot (other than a lot created for a road, service lane, or reserve) that is unrelated to the construction/provision of the sewer line, and which lies partly or wholly within the Mahia Branch Sewer Line Network Utility Yard, is a restricted discretionary activity.
- (3) Sub-precinct C Road Offset Opposite Papakura Military Camp Access
 - (a) Subdivision of land within the block of Takanini Sub-precinct C bounded by Grove, Walters and Cosgrave Roads that creates any access road to Grove Road must ensure that any such access road avoids aligning with

the existing entrance (Main Gate) to the Papakura Military Camp, by being offset by a minimum of 50 metres when measured from the centreline of the existing entrance (Main Gate) to the centreline of the proposed access road.

(b) Subdivision that does not meet clause (a) above is a discretionary activity.

1438.7. Assessment – controlled activities

I438.7.1. Matters of control

The Council will reserve its control to the following matters when assessing a controlled activity resource consent application:

- (1) Activity: One supermarket up to 3500m² gross floor area;
 - (a) Traffic;
 - (b) Noise, lighting and hours of operation;
 - (c) Design of car parking, access and servicing; and
 - (d) Pedestrian access and vehicle linkages.
- (2) Activity: One service station:
 - (a) Intensity and Scale;
 - (b) Traffic;
 - (c) Noise, lighting and hours of operation; and
 - (d) Design of carparking, access and servicing.

I438.7.2. Assessment criteria

The council will consider the relevant assessment criteria below for the controlled activities listed in I438.7.1 above:

- (1) Intensity and scale of the activity
 - (a) Whether the intensity and scale of the land use activity, in particular, the number of people involved and traffic generated by the activity, is compatible with the planned future form and character of the surrounding area.
- (2) Traffic
 - (a) Whether the expected traffic generated by the activity creates adverse effects on the surrounding transport network, particularly at peak times.

- (b) Whether adverse effects can be mitigated by upgrades to road and intersection design
- (c) Whether the potential conflict between circulating service traffic, heavy traffic movements, general traffic, pedestrians and cyclists can be managed.
- (3) Noise, lighting and hours of operation
 - (a) Whether the noise and lighting from the activity adversely affects the amenity of surrounding residential properties having regard to the location of any potentially noisy activities and any proposed measures to mitigate noise including:
 - (i) locating noisy activities away from neighbouring residential boundaries;
 - (ii) screening or other design features;
 - (iii) the proposed hours of operation; and
 - (iv) the times of goods deliveries.
- (4) Pedestrian access and vehicle linkages
 - (a) Whether the site design provides for pedestrian access and vehicle linkages between the supermarket, its car parking and the balance of the Sub-precinct.

1438.8. Assessment – restricted discretionary activities

I438.8.1. Matters of discretion

The Council will restrict its discretion to all the following matters when assessing a restricted discretionary activity resource consent application, in addition to the matters specified for the relevant restricted discretionary activities, Auckland-wide or zone provisions:

- (1) Vehicle Access Restriction:
 - (a) the matters in E25.8.1(12) Auckland-wide Transport rules
- (2) Modification of indicative flow paths:
 - (a) design, location and operation of overland flowpaths.
- (3) Subdivision in compliance with Takanini Precinct Plan 1:

(a) geotechnical.

(4) Subdivision in compliance with Takanini Precinct: Precinct plan 2 (for Subprecinct A):

(a) landscaping and planting.

- (5) In addition to the general matters set out in Rule C1.9(3) of the General Provisions and the specific matters set out for infringements in the underlying zone and Auckland-wide rules, the council will restrict its discretion to the matters below for the relevant development control infringement:
 - (a) Infringement of Building Height:
 - (i) Building scale and dominance.
 - (b) Infringement of Yards in Sub-precinct D:
 - (i) Rural character.
 - (c) Infringement of Network Utility Yard in Sub-precinct A
 - (i) Geotechnical matters;
 - (ii) Subdivision design;
 - (iii) Location of building platforms; and
 - (iv) Location of tree planting and landscaping.
 - (d) Infringement of Maximum Impervious Area:
 - (i) Extent of impervious area required to provide for groundwater recharge.
 - (e) Infringement of Stormwater:
 - (i) Geotechnical matters including groundwater recharge of underlying peat soils; and
 - (ii) Mitigation of adverse effects identified by an approved catchment management plan or discharge consent.

I438.8.2. Assessment criteria

The Council will consider the relevant assessment criteria below for restricted discretionary activities, in addition to the assessment criteria specified for the relevant restricted discretionary activities in the overlay, Auckland wide or zone provisions:

- (1) Vehicle access restriction:
 - (a) refer to the assessment criteria in E27.8.2 (11) Auckland-wide Transport.
- (2) Modification of indicative flowpaths:
 - (a) Whether the overland flowpaths are capable of adequately accommodating events up to the 1% AEP in 100-year ARI in compliance with the Catchment Management Plan.

- (b) Whether any modification(s) to the indicative overland flowpaths has a less than minor impact on the downstream and upstream properties in terms of increased flood risk and erosion potential.
- (c) Whether sites in the upstream and downstream catchment have the ability to continue to provide for overland flow.
- (d) Whether activities obstruct the overland flowpaths.
- (e) Whether any modification(s) to the general alignment of the overland flowpaths should be limited to within the boundaries of the properties included in the resource consent application and does not affect existing or planned flowpaths upstream or downstream of the application site.
- (3) Subdivision in compliance with Takanini Precinct: Precinct plan 1
 - (a) Geotechnical:
 - (i) Whether it can be demonstrated that the subdivision will create sites that are suitable for the development of a permitted activity or an activity for which resource consent has been obtained.
- (4) Subdivision in compliance with Takanini Precinct: Precinct plan 2 (for Subprecinct A)
 - (a) Landscaping and planting:
 - (i) Whether footpaths are provided on each side of any proposed street, connecting with wider walking and cycling networks;
 - Whether cycle lanes are provided for as part of the Papakura Walking and Cycle Network;
 - (iii) Whether appropriate street lighting is provided;
 - (iv) Whether trees and other vegetation are provided within the public realm, to assist in adding definition and amenity value to the area;
 - (v) The extent to which existing trees are incorporated into any proposed development or subdivision to either enhance the amenity of the site and/or not compromise the amenity of the surrounding area;
 - (vi) Where the interface is with the open space surrounding Papakura Stream, whether a programme for establishment of native species forming a strong connection with the stormwater basin and aiding in visual mitigation of proposed built form is provided;
 - (vii)Whether regard is had to any landscape concept plans for adjoining land.

- (5) Building scale and dominance
 - (a) Whether the height, location and design of the building allows reasonable sunlight and daylight access to:
 - (i) adjoining sites, particularly those with residential uses
 - (ii) streets and public open spaces.
 - (b) Whether the application establishes that the additional height is appropriate in the location and makes a positive contribution to the streetscape.
 - (c) Whether the building is visually dominating when viewed from the street, neighbouring sites, public open spaces and distant locations.
- (6) Rural character
 - (a) Whether the application for a development that does not comply with the yards can demonstrate that:
 - (i) The landscaping is designed to create visual interest and contribute to the amenity of the area;
 - (ii) The landscaping is integrated throughout the Sub-precinct and complements the landscaping in the adjacent mixed housing and public open space zones;
 - (iii) The species proposed take into account the long-term maintenance requirements and relationship to infrastructure; and
 - (iv) The landscaping provides for both winter sun and summer shade.
 - (b) Whether the application for a development that does not comply with the landscaping control can demonstrate, where appropriate, that the proposed planting regime will be of sufficient height, width and density, when mature, to:
 - Fully block any fence from view from Papakura Clevedon Road; and
 - (ii) Screen any other development from view from Papakura Clevedon Road.
 - (iii) The maturity of the plants when planted and their respective growth rates which will determine the length of time that the proposed planting will take to reach a sufficient height, width and density in clause (b) above.
 - (iv) Development that does not comply with the fence control will need to demonstrate that the construction timeframes for the over height

fence will allow the fence to be fully blocked by the proposed planting prior to completion.

- (7) Maximum impervious area
 - (a) Whether adequate provision has been made for groundwater recharge.
- (8) Geotechnical matters and stormwater
 - (a) Whether the specific soakage technique(s) proposed and corresponding design parameters are supported by a detailed site specific stormwater and geotechnical investigation.
 - (b) Whether the long term effects on the building foundations in close proximity to soakage areas are less than minor.
 - (c) Whether the techniques and parameters proposed in (a) above are consistent with any approved catchment management plan or discharge consent and whether the rationale for any differences is acceptable.
- (9) Network Utility Yard in Sub-precinct A
 - (a) The effect of the proposed activity on the geotechnical conditions of land within the Network Utility Yard to the extent that it compromises the ability to construct, operate or maintain the Mahia Branch Sewer Line, taking into account the potential for ground instability, settlement and altering groundwater recharge.
- (10) Subdivision design
 - (a) Whether the subdivision design, including the layout of lots and the location of roads, service lanes, and reserves recognise and provide for the construction, operation or future maintenance of the Mahia Branch Sewer Line.

Note: this will normally be implemented by easement on the title to the land through which the line passes.

- (11) Location of building platforms
 - (a) Whether the horizontal separation between the outer walls of the building, the building platforms and curtilage to the building are sufficient to enable the construction, operation or future maintenance of the Mahia Branch Sewer Line.
- (12) Location of proposed tree planting and other landscaping
 - (a) Whether the separation between the location of proposed trees or other landscaping and the proposed Mahia Branch Sewer Line is

sufficient to enable the construction, operation or future maintenance of the Sewer Line, taking into account:

- (i) the likely mature size and spread or drip line of the trees
- (ii) their potential to interfere with the proposed Sewer Line
- (iii) the appropriateness of locating trees elsewhere.

I438.9. Special information requirements

Within Sub-precinct A, an application for subdivision must be accompanied by:

- (1) A site specific geotechnical investigation report, prepared by a suitably qualified and experienced geotechnical engineer, confirming that the land will be suitable for development. The report must:
 - (a) Make recommendations for future site development in respect of the following matters:
 - (i) consolidation settlement
 - (ii) differential settlement
 - (iii) foundation bearing pressure
 - (iv) maintaining groundwater equilibrium
 - (v) service lines.
 - (vi) recommend appropriate specific structural and civil engineering design measures to be undertaken. These measures shall make provision for site specific geotechnical and groundwater recharge requirements, for example foundation design and pre-loading, if required.
- (2) Include a site specific groundwater recharge system design prepared by a suitably qualified stormwater engineer.
- (3) A landscape concept plan for streets and public open space.

Within Sub-precinct A, an application for infringement of the stormwater development control must be accompanied by:

(4) A site specific stormwater and geotechnical investigation report, prepared by a suitably qualified and experienced engineer, which identifies the proposed soakage technique(s) and corresponding design parameters.

Within Sub-precinct B an application for development must be accompanied by:

- (5) A geotechnical investigation report, prepared by a suitably qualified and experienced geotechnical engineer, which is specific to the proposal and site and that:
 - (a) demonstrates the land is suitable for the proposed development

- (b) identifies how long-term stability will be monitored-
- (c) identifies groundwater recharge requirements.
- Within Sub-precinct B, an application for subdivision must be accompanied by:
 - (6) A geotechnical report, prepared by a suitably qualified and experienced geotechnical engineer, confirming that the subdivided sites will be suitable for development. The geotechnical report must make recommendations for future site development and monitoring in respect of the following matters:
 - (a) Consolidation settlement, including long-term monitoring of factors critical to maintaining ground stability
 - (b) Differential settlement
 - (c) Foundation bearing pressure
 - (7) A geotechnical investigation report, prepared by a suitably qualified and experienced geotechnical engineer, which is specific to the proposal and site and that:
 - (a) Demonstrates the land is suitable for the proposed development
 - (b) Identifies how long-term stability will be monitored.
 - (c) identifies groundwater recharge requirements.

Within Sub-precinct C, an application for subdivision must be accompanied by:

- (8) A site specific geotechnical investigation report, prepared by a suitably qualified and experienced geotechnical engineer, confirming that the land will be suitable for development. The geotechnical investigation report must:
 - (a) Make recommendations for future site development in respect of the following matters:
 - (i) Consolidation settlement
 - (ii) Differential settlement
 - (iii) Foundation bearing pressure
 - (iv) Maintaining groundwater equilibrium
 - (v) Service lines.
 - (vi) Recommend appropriate specific structural and civil engineering design measures to be undertaken.

These measures shall make provision for site specific geotechnical and groundwater recharge requirements, for example foundation design and preloading, if required.

(9) Include a site specific groundwater recharge system design prepared by a suitably qualified stormwater engineer.

Within Sub-precinct C, an application for infringement of the stormwater development control must be accompanied by:

(10) A site specific stormwater and geotechnical investigation report, prepared by a suitably qualified engineer, which identifies the proposed soakage technique(s) and corresponding design parameters.

Within Sub-precinct C, where subdivision proposes new access roads in the block bounded by Grove, Walters and Cosgrave Roads to Grove Road, or involve the vesting of land for the widening and upgrade of Grove Road

(11) Evidence of consultation with New Zealand Defence Force is to be provided

Within Sub-precinct D, an application for subdivision must be accompanied by:

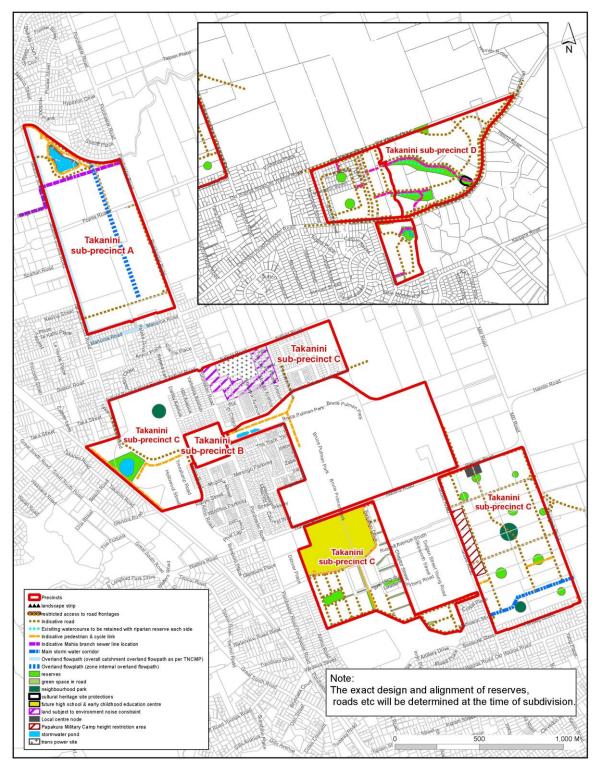
- (12) A site specific geotechnical investigation report, prepared by a suitably qualified geotechnical engineer, confirming that the land will be suitable for development. The geotechnical investigation report must:
 - (a) Make recommendations for future site development in respect of the following matters:
 - (i) Consolidation settlement
 - (ii) Differential settlement
 - (iii) Foundation bearing pressure
 - (iv) Maintaining groundwater equilibrium
 - (v) Service lines.
 - (vi) Recommend appropriate specific structural and civil engineering design measures to be undertaken. These measures must make provision for site specific geotechnical and groundwater recharge requirements, for example foundation design and pre-loading, if required.
- (13) A site specific groundwater recharge system design prepared by a suitably qualified stormwater engineer.

Within Sub-precinct D, and that part of Sub-precinct C bounded by Old Wairoa Road and Papakura-Clevedon Road, an application for subdivision must be accompanied by:

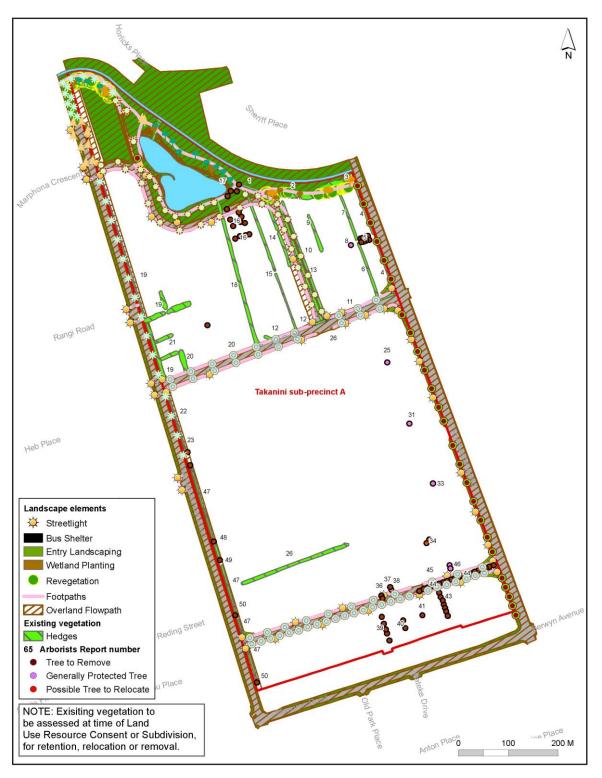
- (14) A landscape plan that:
 - (a) Identifies the location of new vegetation and any existing vegetation to be retained, provides details about the species, height, width and density at maturity, growth rates, compatibility with site conditions and maturity on planting.

- (b) Identifies the location of new fences and any existing fences to be retained, including details about the construction materials, form and height of fences.
- (c) Sets out planting and fence construction timeframes and how they relate to each other.
- (d) Identifies the significant elements of existing amenity values and character and demonstrate how these are to be maintained and integrated with any new landscaping.
- (e) The landscape plan must also identify appropriate types and locations, and timing of planting and fence construction to:
 - (i) ensure a consistent landscaping theme along the length of Papakura Clevedon Road;
 - (ii) create a planted landscape buffer between the combined sub-precincts, Papakura Clevedon Road, and the adjacent rural zone as a transition between urban and rural development;
 - (iii) maintain significant elements of existing amenity values and character; and
 - (iv) ensure that any over height fences are fully blocked from view from Papakura Clevedon Road by proposed planting prior to the completion of the fencing.

I438.10. Precinct plans



I438.10.1. Takanini Precinct: Precinct plan 1



I438.10.2. Takanini Precinct: Precinct plan 2