

I617. Whenuapai 3 Precinct

I617.1. Precinct Description

The Whenuapai 3 Precinct applies to 5.2 hectares of land in Whenuapai. Development in the Whenuapai 3 Precinct will enable an increase in housing capacity through the efficient use of land and infrastructure.

The purpose of the precinct is for the area to be developed as a liveable, compact and accessible community with high quality residential development, while taking into account the natural environment and the proximity and operation of the Royal New Zealand Air Force (RNZAF) Base Auckland, including activities conducted from it.

Development of this precinct is directed by the zoning map, the Stormwater Management Area Flow Control – Flow 1 map, and the Whenuapai 3 Precinct Plan 1.

Whenuapai 3 Precinct Plan 1 shows the transport infrastructure requirements required to enable the development within the Precinct. Subdivision and development is restricted until the land within Whenuapai 3 Precinct is able to be:

- Connected to bulk water supply and wastewater infrastructure; and
 - Provided with transportation infrastructure listed in Table I617.6.6.1
- Transportation infrastructure upgrade thresholds are built to provide for a well-functioning urban environment.

Reverse Sensitivity Effects on Royal New Zealand Air Force (RNZAF) Base Auckland

The (RNZAF) Base Auckland is located east of the Whenuapai 3 Precinct boundary. While the physical infrastructure of the RNZAF Base Auckland is outside of the precinct boundary it contributes to the precinct's existing environment and character. The airbase is a defence facility of regional, and strategic importance. Operations at the airbase include maritime patrol, search and rescue, and transport of personnel and equipment within New Zealand and on overseas deployments.

Most of the flying activity conducted from the RNZAF Base Auckland is for training purposes and includes night flying and repetitive activity. The Precinct manages development to ensure safety risks and reverse sensitivity effects on the operation and activities of the airbase are avoided, remedied or mitigated. All subdivision, use and development within the Precinct will need to occur in a way that does not adversely affect the ongoing operation of the RNZAF Base Auckland and in a way that is consistent with the Regional Policy Statement in regard to recognising the functional and operational needs of infrastructure, and protecting it from reverse sensitivity effects caused by incompatible subdivision, use and development.

The zoning of land within this precinct is Residential – Mixed Housing Urban zone with a Stormwater Management Area Flow 1 (SMAF1) overlay.

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

I617.2. Objectives [rcp/rp/dp]

- (1) Whenuapai 3 Precinct is developed in a comprehensive and integrated way to facilitate the development of a residential area.

Three Waters Infrastructure

- (2) Establish all the infrastructure necessary (including water supply, wastewater, and stormwater infrastructure) to service development within the Precinct in a coordinated and timely way.
- (3) Subdivision and development shall be coordinated with the provision of bulk water supply and wastewater infrastructure in a manner that avoids adverse effects on the environment.
- (4) Stormwater quality and quantity is managed to maintain the health and well-being of the receiving environment and is enhanced over time in degraded areas.
- (5) Stormwater devices avoid, as far as practicable, or otherwise minimise or mitigate adverse effects on the receiving environment, and the attraction of birds that could become a hazard to aircraft operations at the RNZAF Base Auckland.

Transport Infrastructure

- (6) Subdivision and development provides for the safe and efficient operation of the current and future transport network for all modes.
- (7) Transport infrastructure that is required to service subdivision and development within the Precinct:
 - (a) Provides for safe walking and cycling connections within the Precinct and to the Whenuapai Local Centre;
 - (b) Supports the planned upgrades to Brigham Creek Road and Māmari Road;
 - (c) Mitigates transport effects on the surrounding road network; and
 - (d) Provides connectivity to future subdivision and development of adjacent sites.
- (8) Subdivision and development does not occur in advance of the availability of operational transport infrastructure.

Activities sensitive to noise adjacent to existing and future arterial road corridors

- (9) Activities sensitive to noise adjacent to existing or proposed arterial roads are designed to protect people's health and residential amenity while they are indoors.

Effects on Royal New Zealand Air Force (RNZAF) Base Auckland

- (10) The effects of subdivision, use and development on the operation and activities of RNZAF Base Auckland are avoided, as far as practicable or otherwise remedied or mitigated.

I617.3. Policies [rcp/rp/dp]

- (1) Whenuapai 3 Precinct is developed in general accordance with I617.10.1 Whenuapai 3 Precinct Plan 1
- (2) Avoid subdivision and development that does not align with the timing of the provision of bulk water supply and wastewater infrastructure.

Stormwater Management

- (3) Require subdivision and development to be consistent with any approved stormwater management plan including by, in particular:
- (a) Requiring management of runoff from all impervious surfaces to minimise effects on water quality and protect the health of the receiving environment;
 - (b) Promoting a treatment train approach to achieve water quality and hydrology mitigation;
 - (c) Requiring appropriate design and location of all stormwater outfalls;
 - (d) Requiring that the timing of subdivision and development shall align with the provision of stormwater infrastructure to mitigate downstream flood effects; and
 - (e) Requiring stormwater management outcomes and devices of the site shall be planned, designed and implemented to avoid attracting birds in order to mitigate the potential for bird strike to impact safety and flight operations at the RNZAF Base Auckland.

Transport infrastructure

- (4) Require subdivision and development to provide the transport infrastructure identified on Whenuapai 3 Precinct Plan 1 and in accordance with Table I617.6.6.1 and Appendix 1.
- (5) Ensure that subdivision and development provide for future road connections to adjoining sites as shown in Whenuapai 3 Precinct Plan 1.
- (6) Avoid subdivision and development occurring in advance of the availability of operational transport infrastructure as identified on Whenuapai 3 Precinct Plan 1 and in Table I617.6.6.1 and Appendix 1.

Effects on Royal New Zealand Air Force (RNZAF) Base Auckland

- (7) Require subdivision, use and development within the Whenuapai 3 Precinct to avoid, remedy or mitigate any adverse effects, including reverse sensitivity effects and safety risks relating to bird strike, lighting, glare and reflection, on the operation and activities of RNZAF Base Auckland.
- (8) Require the design of roads and their associated lighting to be clearly differentiated from runway lights at RNZAF Base Auckland to provide for the ongoing safe operation of the airbase.

Activities sensitive to noise adjacent to existing and future arterial road corridors

- (9) Ensure that activities sensitive to noise adjacent to existing and future arterial roads are designed with acoustic attenuation measures to protect people's health and residential amenity while they are indoors.

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

I617.4. Activity table [rcp/rp/dp]

All relevant overlay, Auckland-wide and zone activity tables apply unless the activity is listed in Activity Table I617.4.1 below.

A blank in the activity status column means that the activity status in the relevant Auckland- wide or zone provision applies in addition to any standards listed.

In addition to the provisions of I617.4 Whenuapai 3 Precinct, reference should also be had to the planning maps (GIS Viewer) which shows the extent of all designations, overlays and controls applying to land within the Whenuapai 3 Precinct. These may apply additional restrictions.

Development in the precinct, including the use of temporary structures and construction equipment, may be subject to height restrictions under Designation 4311. Prior written approval from the Minister of Defence will be required for infringement of any such height restrictions. Reference should also be made to RNZAF Base Auckland Designation 4310 including the Aircraft Noise provisions of Condition 1 and associated RNZAF Base Auckland Noise maps.

Table I617.4.1 specifies the activity status of land use and subdivision activities in the Whenuapai 3 Precinct pursuant to sections 9(3) and section 11 of the Resource Management Act 1991.

Table I617.4.1 Activity table

Activity		Activity status
Use and Development		
(A1)	Activities listed as permitted or restricted discretionary activities in Table H5.4.1 Activity Table in the Residential – Mixed Housing Urban Zone	

(A2)	Use and development that does not comply with Standard I617.6.1 Wastewater Infrastructure and/or I617.6.6 Transport Infrastructure requirements	NC
(A3)	Development that does not comply with Standard I617.6.7 Road Design, I617.6.8 Vehicle Access Restriction, and / or I617.6.9 Activities sensitive to noise within 50m of an existing or future arterial road	RD
Subdivision		
(A4)	Subdivision listed in Chapter E38 Subdivision	
(A5)	Subdivision that does not comply with Standard I617.6.1 Wastewater Infrastructure and/or I617.6.6 Transport Infrastructure requirements	NC
(A6)	Subdivision that does not comply with Standard I617.6.7 Road Design, I617.6.8 Vehicle Access Restriction, and / or I617.6.9 Activities sensitive to noise within 50m of an existing or future arterial road	RD

I617.5. Notification

- (1) Any application for resource consent for an activity listed in Activity Table I617.4.1 above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (2) When deciding who is an affected person in relation to any activity for the purpose of section 95E of the Resource Management Act 1991, the Council will give specific consideration to:
 - (a) those persons listed in Rule C1.13(4); and
 - (b) The New Zealand Defence Force in relation to any proposal that does not comply with:
 - (i) I617.6.2(3) Dry detention basins or stormwater ponds;
 - (ii) I617.6.2(4) Bird strike;
 - (iii) I617.6.3 Lighting;
 - (iv) I617.6.4 Temporary activities and construction; or
 - (v) I617.6.5 Noise.

I617.6. Standards

All relevant overlay, Auckland-wide and zone standards apply to the activities listed in Activity Table I617.4.1 unless otherwise specified below. All activities listed in Activity Table I617.4.1 must also comply with Standards I617.6 and with I617.9 Special Information Requirements.

Where there is any conflict or difference between standards in this Precinct and the Auckland-wide and zone standards, the standards in this Precinct will apply.

Unless captured in Activity Table I617.4.1 above, any infringement of standards will be a restricted discretionary activity pursuant to Clause C1.9(2).

I617.6.1. Water and Wastewater Infrastructure

Purpose:

- To ensure bulk water supply and wastewater infrastructure with sufficient capacity is available to support development within the Precinct.
- (1) Bulk water supply and wastewater infrastructure required for water and wastewater servicing of all development within the Precinct must be completed and commissioned:
- (a) In the case of subdivision, prior to release of Resource Management Act 1991 section 224 certificate for any residential lots; and
 - (b) In the case of land use only, prior to the construction of any dwelling(s) or residential activities.

I617.6.2. Stormwater Infrastructure

Purpose:

- To ensure that there is sufficient stormwater infrastructure capacity in place at the time of development and that flooding risks within the precinct and further downstream are not exacerbated by development within the Precinct.
- (1) Stormwater infrastructure:
- (a) Discharge of stormwater runoff from subdivision and development cannot occur until the necessary stormwater infrastructure is in place or until appropriate mitigation exists to mitigate downstream flood effects.
- (2) Water quality
- (a) Stormwater runoff from all impervious areas other than roofs and pervious pavers must be either:
 - (i) treated at-source by a stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' or 'Stormwater treatment Devices Design Guideline Manual (TP10)'; or
 - (ii) treated by a communal stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' that is designed and authorised to accommodate and treat stormwater from the site.

- (b) Roofs must be constructed of inert building materials. and directed to with runoff directed to a tank sized for the minimum of 5mm retention volume for non-potable reuse within the property.

(3) Dry detention based on stormwater ponds

- (a) In the event that dry detention basin or stormwater ponds are proposed, these shall be designed by a suitable qualified and experienced person to:
 - (i) Minimise bird settling or roosting (including planting with species unlikely to be attractive to large and/or flocking bird species); and
 - (ii) Full drain down within 48 hours of a 2 per cent Annual Exceedance Probability (AEP) storm event; and
 - (iii) Have side slopes at least as steep as 1 vertical to 4 horizontal (1:4) except for:
 - 1. Any side slope treated rock armouring; or
 - 2. Any area required for vehicle access, provided that such vehicle access has a gradient of at least 1 vertical to 8 horizontal (1:8).

(4) Bird strike

- (a) Roofs must have a minimum gradient of 15 degrees to minimise the potential for birds to nest or roost; or
- (b) If roof gradients are less than 15 degrees, netting and/or spikes are required to discourage bird roosting on the roof of the structure.

I617.6.3. Lighting

Purpose:

- To manage reverse sensitivity effects on the RNZAF Base Auckland
 - To avoid or minimise lighting issues for aircraft descending to land at the RNZAF Base Auckland.
- (1) Any subdivision and development must avoid effects of lighting on the safe and efficient operation of RNZAF Base Auckland, to the extent that lighting:
 - (a) Avoids simulating approach and departure path runway lighting;
 - (b) Ensures that clear visibility of approach and departure path runway lighting is maintained; and
 - (c) Avoids glare or light spill that could affect aircraft operations.
 - (2) The reflectivity (specular reflectance) of any new building shall not exceed 20% of white light or shall not otherwise cause glare that results in safety issues for the RNZAF Base Auckland.

- (3) No person may illuminate or display the following outdoor lighting between 11:00pm and 6:30am:
- (a) searchlights; or
 - (b) outside illumination of any structure or feature by floodlight that shines above the horizontal plane.

I617.6.4. Temporary activities and construction

Purpose:

- to avoid safety and operation risk effects on the RNZAF Base Auckland.
- (1) Any application for subdivision and development that requires the use of a temporary structure or construction equipment being erected must inform the RNZAF Base Auckland of:
- (a) The nature of the works;
 - (b) The structure or construction equipment being erected; and
 - (c) Duration of the works.

I617.6.5. Noise

Purpose:

- To ensure that potential reverse sensitivity effects of noise from the adjacent RNZAF Base Auckland on residential amenity are appropriately addressed and provided for within the Precinct.
- (1) A reverse sensitivity covenant shall be included on each title issued within the precinct. This covenant shall be registered with the deposit of the subdivision plan, in a form acceptable to RNZAF Base Auckland under which the registered proprietor will covenant to waive all rights of complaint, submission, appeal or objection it may have under the Resource Management Act 1991 and successive legislation or otherwise in respect of any noise associated with the RNZAF Base Auckland.

I617.6.6. Transport Infrastructure requirements

Purpose:

- To mitigate the adverse effects of traffic generation on the surrounding road network.
 - To achieve the integration of land use and transport.
- (1) Any Subdivision and development, which involves residential activity as defined by Table J1.3.5 Residential of Chapter J of the Auckland Unitary Plan, must comply with the standards in Table I617.6.6.1.

Table I617.6.6.1 Transport infrastructure upgrade thresholds

Trigger	Column 1 Threshold – Subdivision or development enabled by transport infrastructure in Column 2	Column 2 Transport infrastructure upgrade required to enable subdivision or development in Column 1
(T1)	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Brigham Creek Road.	- Upgrade of the Brigham Creek Road to an urban arterial road standard (as provided on Appendix 1) including footpath, berms and separated cycle facilities the full length the precinct frontage; and - A new or upgraded intersection between Brigham Creek Road and the new local road accessing the Whenuapai 3 Precinct (as shown on Whenuapai 3 Precinct Plan 1) and - Safe active mode (as shown on Whenuapai 3 Precinct Plan 1) Brigham Creek.
(T2)	Subdivision or development that enables up to 120 dwellings that has frontage to or is accessed by Māmari Road.	- Upgrade of the Māmari Road Whenuapai 3 Precinct frontage to an urban local road standard including footpath and berms.; and - Provision of safe and accessible pedestrian connection along Māmari Road between the Whenuapai 3 Precinct and the Brigham Creek Road / Totara Road /Māmari Road intersection as identified on Precinct Plan 1.
(T3)	Subdivision or development that exceeds the threshold under (T1) or (T2) above by enabling a cumulative total of more than 120 dwellings within the Precinct.	- Upgrades required in T1 and T2; and - Provision of a local road connection between Māmari Road and Brigham Creek Road through the Precinct.

Note: Table I617.6.6.1 will be considered to be complied with if

- (a) the identified upgrades are constructed and operational prior to the lodgement of a resource consent application OR
- (b) form part of the same resource consent, or a separate resource consent, which is given effect to prior to release of section 224 certificate of the Resource Management Act 1991 for any subdivision OR
- (c) in the case of a land use consent only, prior to occupation of any dwelling(s) and/or other residential activities.

I617.6.7. Road Design

Purpose:

- To ensure that any development or subdivision complies with functional and design requirements.
- (1) Any development and / or subdivision that includes the construction of new roads, or the upgrade of existing roads, must comply with I617.11.1 Appendix 1: Road Function and Design Elements Table.

I617.6.8. Vehicle Access Restriction

Purpose:

- To limit direct vehicle access to existing and future arterials in recognition of strategic function of those roads and to enhance safety for active modes.
- (1) Sites that front onto Brigham Creek Road or Māmari Road must not have direct vehicle access to those roads. The sites must be provided with access from rear lanes (access lots) or side roads at the time of subdivision.

I617.6.9. Activities sensitive to noise within 50m of an existing or future arterial road

Purpose:

- To ensure activities sensitive to noise adjacent to existing and proposed arterial roads are designed to protect people's health and residential activity while they are indoors.
- (1) Any new buildings or alterations to existing buildings containing an activity sensitive to noise within 50m of the boundary of Brigham Creek Road or Māmari Road (shown as arterial and future arterial roads on Precinct Plan 1) must be designed, constructed and maintained so that road traffic noise does not exceed 40 dB LAeq (24 hour) in all noise sensitive spaces.
- (2) If windows must be closed to achieve the design noise levels in Standard I617.6.9(1), the building must be designed, constructed and maintained with a mechanical ventilation system that meets the requirements of E25.6.10(3)(b) and (d) to (f).
- (3) A design report must be submitted by a suitably qualified and experienced person to the council demonstrating that compliance with Standard I617.6.9(1) and (2) can be achieved prior to the construction or alteration of

any building containing an activity sensitive to noise located within the areas specified in I617.6.9(1). In the design, road noise for the Auckland Transport designations W2 and W3 (Māmari Road Upgrade and Brigham Creek Road Upgrade) is based on future predicted noise levels.

For the purposes of this Standard, future predicted noise levels shall be either based on computer noise modelling undertaken by a suitably qualified and experienced person on behalf of the applicant or those levels modelled as part of the Auckland Transport NoR/designations W2 and W3 (Māmari Road Upgrade and Brigham Creek Road Upgrade).

Should noise modelling undertaken on behalf of the applicant be used for the purposes of the future predicted noise levels under this standard, modelling shall be based on an assumed posted speed limit of 50km/h, the use of an asphaltic concrete surfacing (or equivalent low-noise road surfacing) and a traffic design year of 2048.

I617.7. Assessment – controlled activities

There are no controlled activities in this precinct.

I617.8. Assessment – restricted discretionary activities

I617.8.1. Matters of discretion

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

- (1) Matters of discretion for all restricted discretionary activities (including otherwise permitted activities that infringe a permitted standard)
 - (a) Whether the infrastructure required to service any development is provided
 - (b) Whether stormwater and flooding are managed appropriately
 - (c) Whether the proposal will provide for safe and efficient functioning of the current and future transport network including considering;
 - (i) Location and design of the transport network and connections with neighbouring sites
 - (ii) Provision for active modes
 - (iii) Design and sequencing of upgrades to the existing road network
 - (iv) The integration of the proposal with the future planned upgrades to Brigham Creek Road and Māmari Road;
 - (d) The location, orientation and spill from lighting associated with development, structures, infrastructure and construction activities; and

- (e) Effects on the operation of the RNZAF Base Auckland including reverse sensitivity effects and any measures to avoid, remedy or mitigate these effects.
- (2) The extent to which any adverse effects on navigable airspace, representing a hazard to the safety or regularity of aircraft operations, are avoided or mitigated.
- (3) Non-compliance with Standard I617.6.7 - Road Design
 - (a) The design of the road and associated road reserve and whether it achieves policies I617.3(5) and (6).
 - (b) Design constraints.
- (4) For a new vehicle crossing to Brigham Creek Road or Māmari Road:
 - (a) adequacy for the site and the proposal;
 - (b) design and location of access;
 - (c) effects on pedestrian and streetscape amenity; and
 - (d) effects on the existing and future transport network.
- (5) Non-compliance with Standard I617.6.9 - Activities sensitive to noise within 50m of an existing or future arterial road.
 - (a) Effects on human health and residential amenity while people are indoors.
 - (b) Building location or design features or other alternative measures that will mitigate potential adverse health and amenity effects relating to noise.

I617.8.2. Assessment criteria

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

- (1) For subdivision and development
 - (a) Whether the proposed subdivision and / or development includes the construction of transport infrastructure identified on table I617.6.6.1 Transport infrastructure upgrade thresholds;
 - (b) Whether the proposed transport infrastructure will service the precinct in a safe and efficient manner; and
 - (c) Whether the proposed subdivision enables development that would require transport infrastructure upgrades to be provided in accordance with Table I617.6.6.1.

- (2) For Stormwater management not complying with Standard I617.6.2 infrastructure upgrade thresholds:
- (a) Stormwater and Flooding
 - (i) Whether development and/or subdivision is in accordance with any approved Stormwater Management Plan and Policies E1.3(1) – (14);
 - (ii) The design and efficiency of stormwater infrastructure and devices (including communal devices) with consideration given to the likely effectiveness, whole lifecycle costs, ease of access, operation and integration with the surrounding environment;
 - (iii) Whether the proposal for development and/or subdivision provides sufficient floodplain storage, including attenuation storage, within the precinct to avoid increasing flood risk within the receiving environment; and
 - (iv) Whether there is sufficient infrastructure capacity to provide for flood conveyance and protect land and infrastructure.
 - (b) Servicing
 - (i) Whether there is sufficient capacity in the existing or proposed stormwater network to service the proposed development that is enabled by the precinct and
 - (ii) Where adequate network capacity is not available, whether adequate mitigation is proposed being consistent with an integrated stormwater management approach.
 - (c) Assessment criteria E9.8.2(1) apply.
- (3) For stormwater detention/retention ponds/wetlands not complying with the standards in I617.6.2(3), the extent to which the proposal minimises the attraction of birds that could become a hazard to aircraft operating at RNZAF Base Auckland
- (4) The effects on the operation of the RNZAF Base Auckland including potential reverse sensitivity effects and effects on aircraft safety, in relation to
- (a) Lighting;
 - (b) Temporary structure and construction; and
 - (c) Noise
- (5) For the safe and efficient operation of the current and future transport network:
- (a) Whether a safe and legible pedestrian connection is provided along Brigham Creek Road between the Precinct and Brigham Creek Road and Māmari Road intersection. If safe pedestrian connection cannot be fully provided along the southern side of Brigham Creek Road, then whether

safe crossing facilities are provided to the pedestrian and cycle network on the northern side of Brigham Creek Road;

- (b) Whether a road connection between Brigham Creek Road and Māmari Road is enabled through the design and layout of subdivision within the precinct.
 - (c) Whether the location and design of the road network and connections provided to neighbouring sites achieve an integrated network, appropriately provide for all modes, and allow for future development on neighbouring sites;
 - (d) Whether the precinct frontages along Brigham Creek Road and Mamari Road are designed and constructed to an urban standard.
 - (e) Whether a safe and legible pedestrian connection is provided along Māmari Road between the Precinct and the intersection with Brigham Creek Road.
- (6) Non-compliance with Standard I617.6.7.
- (a) Whether there are constraints or other factors present which make it impractical to comply with the required standards;
 - (b) Whether the design of the road, and associated road reserve achieves policies I617.3. (5) and (6);
 - (c) Whether the proposed design and road reserve:
 - (i) incorporates measures to achieve the required design speeds;
 - (ii) can safely accommodate required vehicle movements;
 - (iii) can appropriately accommodate all proposed infrastructure and roading elements including utilities and/or any stormwater treatment;
 - (iv) assesses the feasibility of upgrading any interim design or road reserve to the ultimate required standard.
 - (d) Whether there is an appropriate interface design treatment at property boundaries, particularly for pedestrians and cyclists.
- (7) For a new vehicle crossing to Brigham Creek Road or Māmari Road:
- (a) Whether appropriate alternative access can be provided to / from the site;
 - (b) Effects on the location and design of the access on the safe and efficient operation of the adjacent transport network having regard to:
 - (i) future widening and upgrade of Brigham Creek Road and Māmari Road and their strategic transport role as existing and future arterial roads servicing growth in the wider area;
 - (ii) visibility and safe sight distances;

- (iii) existing and future traffic conditions including speed, volume, type, current accident rate, and the need for safe manoeuvring;
 - (iv) proximity to and operation of intersections;
 - (v) existing active mode users, and estimated future active mode users having regard to the level of development provided for in this Plan; and
 - (vi) existing and proposed community or public infrastructure located in the adjoining road, such as bus stops, bus lanes and cycle facilities.
- (8) Non-compliance with Standard I617.6.9 Activities sensitive to noise within 50m of an existing or future arterial road
- (a) Whether activities sensitive to noise adjacent to Brigham Creek Road or Māmari Road existing and future arterial roads are designed to protect people from adverse health and amenity effects while they are indoors.
 - (b) Whether any identified building design features, or the location of the building or any other existing buildings, will mitigate any potential health and amenity effects.
 - (c) The extent to which alternative mitigation measures avoid, remedy or mitigate the effects of non-compliance with the noise standards on the health and amenity of potential building occupants.

I617.9. Special information requirements

(1) Stormwater management:

- (a) All applications for development and subdivision must include a plan demonstrating how stormwater management requirements will be met including:
 - (i) areas where stormwater management requirements are to be met on-site and where they will be met through communal infrastructure;
 - (ii) the type and location of all public stormwater network assets that are proposed to be vested in council;
 - (iii) consideration of the interface with, and cumulative effects of, stormwater infrastructure in the precinct; and
 - (iv) Bird strike risk management including design elements to reduce the attraction of birds and monitoring and corrective actions.

(2) Transport Design Report:

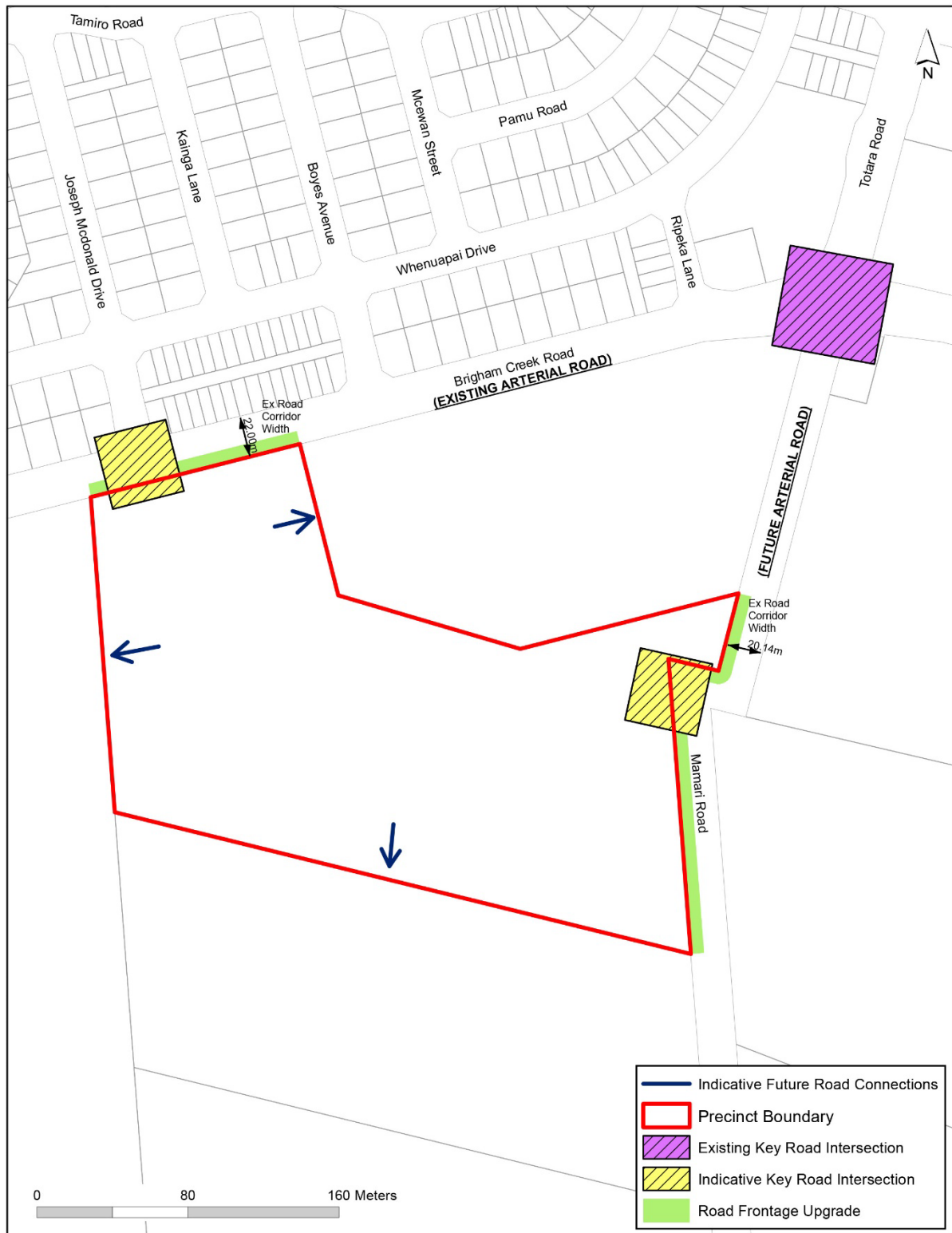
- (a) Any proposed new key road intersection or upgrading of existing key road intersections illustrated on the Precinct Plan must be supported by a Transport Design Report and Concept Plans (including forecast transport modelling and land use assumptions), prepared by a suitably qualified transport engineer confirming that the location and design of any road and

its intersection(s) supports the safe and efficient function of the existing and future (ultimate) transport network and can be accommodated within the proposed or available road reserves. This may be included within a transport assessment supporting land use or subdivision consents.

- (b) In addition, where an interim upgrade is proposed, information must be provided, detailing how the design allows for the ultimate upgrade to be efficiently delivered.

I617.10. Precinct plans

I617.10.1 Whenuapai 3 Precinct Plan 1



I617.11. Appendices

I617.11.1. Appendix 1: Road Function and Design Elements Table

Road name (refer to Precinct Plan 1)	Proposed role and function of road in precinct area	Minimum road reserve (subject to note 1)	Total number of lanes (subject to note 2)	Speed limit (design)	Access restrictions	Median	Bus provision (subject to note 3)	On street parking	Cycle provision	Pedestrian provision
Brigham Creek Road interim upgrade—precinct frontage	Arterial road	30m	4	50kph posted	Yes	Yes	Yes	Some existing	Yes - On precinct side only.	Yes - existing on north side. Yes - on precinct frontage with safe crossing point on Brigham Creek Road
Māmari Road interim upgrade - precinct frontage	Interim local road [future 30m arterial]	Variable [future 30m]	2	50kph posted	Yes	No	No	Some existing	No	Yes Both sides.
Local roads	Local	16m	2	30kph	No	No	No	Optional	No	Yes Both sides

Note 1: Typical minimum width which may need to be varied in specific locations where required to accommodate network utilities, batters, structures, stormwater treatment, intersection design, significant constraints or other localised design requirements.

Note 2: Any interim, hybrid, constrained or ultimate upgrades must be designed and constructed to include a new road pavement and be sealed to their appropriate standard in accordance with the Proposed Role and Function of the Road.

Note 3: Carriageway and intersection geometry capable of accommodating buses.