



LAND. PEOPLE. WATER.

**Preliminary Site Investigation (PSI) –  
Hamilton Airport Northern Precinct**

For Titanium Park Limited

July 2020

## REPORT INFORMATION AND QUALITY CONTROL

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## EXECUTIVE SUMMARY

4Sight Consulting Ltd (4Sight) has been engaged by Titanium Park Ltd ('the Client') to undertake a Preliminary Site Investigation (PSI) at 188 Narrows Road, Hamilton (herein referred to as 'the Site') to support the proposed subdivision and commercial/industrial development of the Hamilton Airport Northern Precinct.

The objective of the PSI is to determine whether an activity or industry listed on the Ministry for the Environment (MfE) Hazardous Activities and Industries List (HAIL) is being, has been, or is likely to have been conducted at the Site, and to assess potential implications for the proposed subdivision, change of land use and soil disturbance under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) (MfE,2011), and the Waikato Regional Plan (WRP).

This investigation included reviewing the Site's history and conducting field observations. The key findings are:

- Between the early 1940s (earliest aerial imagery) to 2019 the majority of the Site was in use as an operational dairy farm, with associated dwellings and structures present onsite. Since 2019 the Site has been in use as an operational maize farm, with grass planted as a cover crop in the offseason;
- From at least the early 1940s to approximately 1971, a small horticultural block (orchard) was operational near the central dwelling, as was a small section of horticultural cropping in the northwest of the Site;
- An area of disturbance was identified in historic aerial photographs from the early 1950s until the early 1990s in the southern paddock of the Site. The Site walkover identified buried plastic and tyres in this location as well as stressed vegetation (grass) indicating the potential for a farm dump/burial pit in that location;
- A storage pit for silage has been present in the south of the Site since the early 1990s and currently contains a large number of tyres. Tyres were also stored from the early 2010s to at least 2015 in the southwestern section of the Site at the location of another former silage storage location;
- There has been numerous changes/removals to the buildings/layout across the Site since the 1940s, including the main residential dwelling being replaced twice;
- Three buildings (cottage, stone workshop and former dwelling garage) were identified as having exterior paint in deteriorated condition;
- A large number of fence posts are stored near the centre of the Site in the location of a former dwelling;
- A large pile of greenwaste with some miscellaneous farm rubbish (tyres, plastic and metal piping and empty drums) is located the paddock north of this;
- Based on the above identified activities the following HAIL activities have been potentially identified at the Site:
  - A10: Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds associated with the former orchard and cropping area; and
  - I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment associated with the potential farm dump, stockpiling of large numbers of tyres, treated fence posts, deterioration of lead based paints that could impact soil, and the potential presence of asbestos in current buildings and in soil in the vicinity of historic structures.

Therefore, based on the findings of this PSI, the following recommendations are made:

- Due to the presence of HAIL activities, the proposed subdivision and commercial redevelopment at the Site will be subject to the provisions of the NESCS;
- The potential risk to human health cannot be determined, and therefore a full assessment against the provisions of the NESCS and WRP is unable to be provided without further investigation;
- To support consent applications, further investigation through targeted soil sampling will be required to assess the following areas of potential concern:
  - Former horticultural area (orchard);
  - Former horticultural area (cropping);
  - Current and former and tyre storage areas;
  - Fence post storage area;

- Farm dumps/burial pits;
  - Lead paint associated with the cottage, stone workshop and former dwelling and garage; and
  - Asbestos in soils at former structure locations.
- Preparation of a targeted Detailed Site Investigation (DSI) report will be necessary to present the results of soil investigations, to identify human health and environmental risk (if any); and
  - Due to the age of a number of Site structures identified in aerial photographs being pre-2000, and evidence from the Site visit, there is the potential for these structures to have been constructed with ACM. Therefore, prior to the demolition of any of the structures, it is recommended that a thorough inspection of the structures be completed by a suitable qualified asbestos surveyor.

This investigation and associated reporting has been carried out and reviewed by a SEQP in accordance with the requirements of the NESCS.

## 1 INTRODUCTION

4Sight Consulting Ltd (4Sight) has been engaged by Titanium Park Ltd ('the Client') to undertake a Preliminary Site Investigation (PSI) at 188 Narrows Road, Hamilton (herein referred to as 'the Site') to support the proposed subdivision and commercial/residential development of the Hamilton Airport Northern Precinct.

The objective of the PSI is to determine whether an activity or industry listed on the Ministry for the Environment (MfE) Hazardous Activities and Industries List (HAIL) is being, has been, or is likely to have been conducted at the Site, and to assess potential implications for the proposed subdivision, change of land use and soil disturbance under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) (MfE,2011), and the Waikato Regional Plan (WRP).

Consideration of the NESCS is required for the activities of subdivision, change of land use and soil disturbance on pieces of land that have been subject to any activities or industries listed on the Ministry for the Environment (MfE) Hazardous Activities and Industries List (HAIL).

Land covered in the NESCS is defined in regulation 5(7) as:

*A piece of land that is described by one of the following:*

- a. *An activity or industry described in the HAIL is being undertaken on it:*
- b. *An activity or industry described in the HAIL has been undertaken on it:*
- c. *It is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it.*

This PSI report has been prepared in general accordance with Ministry for Environment (MfE) Contaminated Land Management Guidelines No.1 Reporting on Contaminated Sites in New Zealand (2011) (CLMG No. 1).

### 1.1 Scope of Works

The scope of this PSI has included the following:

- A review of selected publicly available information for the Site, including council files and historical aerial photographs, and an owner interview to determine whether or not any activities or industries on the HAIL are, have been, or might have been undertaken on the Site;
- Site inspection to visually assess the presence of any activities or industries listed on the HAIL or evidence of potential contamination; and
- An overall assessment of the applicability of the NESCS and WRP.

## 2 SITE DETAILS

The Site is located in Rukuhia, southeast of Hamilton and details of the Site are provided in Table 1. The location of the Site is shown in Figure 1. The Waipa District Council (WDC) District Plan illustrates the western and northern portion of the Site is currently zoned as Rural and the eastern and southern portion of the Site is currently zoned as Airport Business Zone. The Site is also subject to various zone overlays and boundaries pertaining to the nearby airport.

Table 1. Address and Site Information

Site Address	Legal Description	Area
188 Narrows Road, Rukuhia	LOT 1 DP 306726 and LOT 5 DP 307815 BLKS VI VII HAMILTON SD	102.749300 Ha

## 2.1 Landuse – Current and Proposed

The Site is a former dairy farm currently in pasture, and utilised for maize production. A number of associated dairy farm related infrastructure and buildings are still present at the Site. The Site is part of the Hamilton Airport precinct owned and operated by Waikato Regional Airport Ltd (WRAL). It is proposed that the Site will be developed for commercial/industrial purposes as part of the Titanium Business Park, with various amenities. Proposed development plans can be found in Appendix A.

## 2.2 Environmental Features

### 2.2.1 Geology

The Institute of Geological and Nuclear Sciences (GNS) 1:250,000 online geological map shows the regional geology consists of Late Pleistocene river deposits containing cross-bedded pumice sand, silt and gravel with interbedded peat. A localised area of Early Pleistocene - Middle Pleistocene river and igneous deposits containing alluvium dominated by primary and reworked, non-welded ignimbrite is present in the east of the Site.

### 2.2.2 Topography

Topography data accessed through the Waikato Regional Council (WRC) Contours map identifies the Site as being approximately 50 m above sea level, gently sloping east to west. The Site also contains two elevated areas, in the east and southeast of the Site which are raised to approximately 60 metres above sea level.

### 2.2.3 Hydrology

The closest surface water body is the Nukuhau Stream located some 130 m west of the Site, which eventually discharges into the Waikato River at a point approximately 1,920 m northwest off the Site.

### 2.2.4 Hydrogeology

A search of the WRC groundwater map indicated five groundwater bores onsite, one of which having an associated Water Take Consent (as detailed in Table 2). There are an additional 15 groundwater bores present within 500 m of the Site.

Table 2. Nearby Groundwater Bores and Water Take Consents

Bore No.	Consent Ref.	Consent Type	Status	Address	Distance & Direction from Site	Bore Details	Bore Use
70_323	-	-	-	Onsite	Onsite (northeast)	Depth: 36.5 m Screen depth: - Diameter: 100 mm Standing Water Level:	-
70_546	-	-	-	Onsite	Onsite (northeast)	Depth: 42.70 m Screen depth: 27.43 m Diameter: 100 mm Standing Water Level: -	-
70_473	-	-	-	Onsite	Onsite (west)	Depth: 14.00 m Screen depth: 11.20 m	-

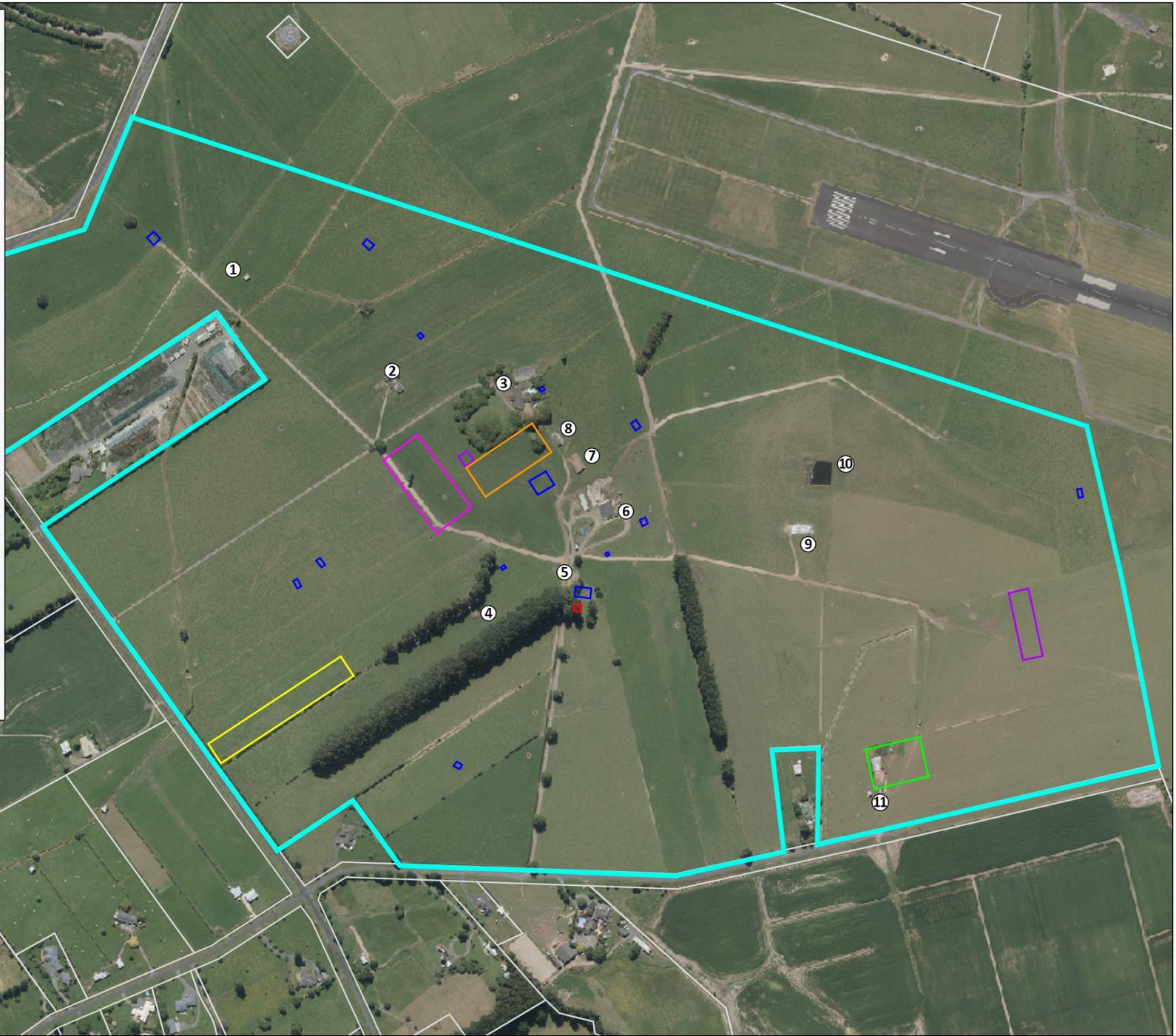
						Diameter: 100 mm Standing Water Level: -	
72_7262	AUTH133419.01.01	Ground water take	Current	Onsite	Onsite (centre)	Depth: 100 m Screen depth: - Diameter: 100 mm Standing Water Level: -	Agricultural farming - dairy
72_9723	-	-	-	Onsite	Onsite (centre)	Depth: 60 m Screen depth: - Diameter: 100 mm Standing Water Level: -	-

Based on the relevant onsite information contained within Section 3.1.1 below, groundwater is likely to be present 0.85--3.55 m below ground level (m bgl). Based on the location of the Site, it is considered that shallow groundwater is used for beneficial purposes (stock watering/maize production).

- ▭ Approximate Site Boundary
- ▭ Former Structure Locations
- ▭ Farm Dumps/Burial Pits
- ▭ Former Pig Pens
- ▭ Fence Post Storage Area
- ▭ Former Horticultural Area (Orchard)
- ▭ Former Horticultural Area (Cropping)
- ▭ Former Tyre Storage Area

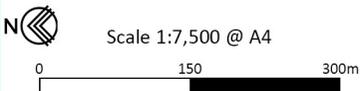
**Buildings:**

- 1 Shed
- 2 Cottage
- 3 Dwelling
- 4 Pile of Greenwaste
- 5 Garage
- 6 Milking Shed
- 7 Shed
- 8 Workshop
- 9 Silage Storage Pit
- 10 Effluent Pond
- 11 Shed



Aerial imagery sourced from Waipia District Council GIS viewer.

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AA6977 – Northern Precinct PSI

**Figure 1: Site Location Plan and Site Features**

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 24/07/2020  
Version: 1.0  
Drawn: Sam Hendrikse  
Checked: Jarrod Hall  
Approved: Aaron Graham



## 3 SITE HISTORY

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To understand the history of the Site and particularly the nature and location of any potentially contaminating activities, a review of selected publicly available information for the Site was undertaken. This included searches of:

- Existing Site reports;
- WDC Property File Snapshot;
- WRC Landuse Information Register (LUIR);
- Selected historical aerial photographs available through Google Earth and Retrolens;
- Hazardous Substances and Incidents report provided by the Environmental Protection Agency (EPA); and
- An onsite walkover and interview with the current Site manager.

### 3.1 Existing Reports

#### 3.1.1 Preliminary Geotechnical Investigation Report on Proposed Montgomerie Block Industrial Land Development at Raynes Road, Hamilton (Coffey Geotechnics Ltd, 2011).

A preliminary geotechnical investigation was undertaken by Coffey Geotechnics Ltd in November 2011 at the Site. This investigation concluded geotechnical suitability for development and involved assessment via machine boreholes, cone penetration tests, hand auger boreholes, field soakage tests and in-situ testing. No fill material was identified in this investigation. Groundwater was identified between 0.85 m and 1.2 m in the northern and western portion of the Site and at 3.55 m in the southern portion of the Site.

### 3.2 Council Records

#### 3.2.1 Property File Snapshot Review

A Property File Snapshot was obtained by 4Sight from the WDC online mapping service on 14 July 2020, and can be found in Appendix B. The Property File Snapshot contained a resource consent (RC/3604) to excavate approximately 54,000 m<sup>3</sup> of material, as well as several building consents. Details on the resource consent to excavate soil was not available in the property file. No other information pertinent to this PSI was identified within the Property File Snapshot.

#### 3.2.2 WDC HAIL Information Request

HAIL Site information was received from WDC on 15 July 2020 and can be found in Appendix C. The WDC states that the Site is not on the Selected Landuse register as having a HAIL history, with no relevant information on the property file. However, the Site is however bordered on most sides by properties that are on the register which include reference to the following HAIL activities:

- A10. Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds to the west of the Site; and
- F1. Airports including fuel storage, workshops, washdown areas, or fire practice areas to the east of the Site.

#### 3.2.3 WRC LUIR Request

A search of the LUIR, maintained by WRC, was requested and results were provided on 16 July 2020 and can be found in Appendix D. The LUIR provides a detailed register of properties known to be contaminated on the basis of chemical measurements, or potentially contaminated on the basis of past land use. The response confirmed that the Site does not appear on the LUIR.

### 3.2.4 Hazardous Substances and Incidents Report

The Environmental Protection Agency (EPA) maintained a list of reported hazardous substance incidents over the period July 2006 – December 2011. A review of the EPA register over this period, accessed 16 July 2020, identified no incidents at the Site or within a 200 m radius of the Site.

## 3.3 Aerial Photographs

Historical aerial photographs were reviewed and sourced from Retrolens and Google Earth. These are described in Table 3 and can be found in Appendix E.

Table 3. Aerial Photography Summary

Year	Reference	Observations
1943	Retrolens (black & white)	<p><b>Site:</b> The majority of the Site is in pasture and is sectioned into paddocks for grazing, a number of small structures and sheds are scattered throughout the Site that are associated with the landuse. Three dwellings are located near the centre of the Site, which include a cottage to the northeast, a central dwelling and a dwelling to the west. A small horticultural area is visible directly northwest of the central dwelling, enclosed by a vegetated windbreak (likely orchard). Another shed appears to be present west of the horticultural area, with another large shed to the south. Directly north of the horticultural area appears to be an area containing pens. An area of cropping is located to the northwest of the orchard, by the north western boundary.</p> <p><b>Offsite:</b> The area surrounding the Site is in pasture, with some associated structures and rural dwellings. A large commercial building is located east of the Site. A large area south of the Site appears to have been previously earth worked for the airport runway.</p>
1953	Retrolens (black & white)	<p><b>Site:</b> The Site largely remains unchanged, however, two sheds have been constructed south and southeast of the western dwelling. A shed to the south of the cottage has been removed, as has a shed in the north. A track/loop associated with the airport has been developed in the southwestern corner of the Site, with a small well-defined excavated pit area (potential farm dump/burial pit) in this general location.</p> <p><b>Offsite:</b> A grassed runway has been developed southeast of the Site. Approximately 50-60 small planes are now being stored near the southern Site boundary.</p>
1971	Retrolens (black & white)	<p><b>Site:</b> The horticultural (orchard) area appears to have been removed, with part of the vegetated windbreak still present. The central dwelling has been removed and replaced. Another dwelling and associated garage have been constructed to the west. Miscellaneous materials are also stored southeast of the central dwelling. The track/loop in southwest has been removed, as has the cropping in the northwest. The pens north of the horticultural area appear to have been replaced by wooden fence pens. The burial pit area is still visible, however appears to be partly filled. A small structure in the west of the Site has also been constructed.</p> <p><b>Offsite:</b> A tarmac runway has been developed southeast of the Site and an airport has been constructed. The plane graveyard near the southern boundary of the Site has also been removed.</p>

1990	Retrolens (black & white)	<p><b>Site:</b> The windbreak of the horticultural (orchard) area has now been fully removed, as has the wooden fence pens directly north. The central dwelling has been replaced again, and now contains a tennis court and swimming pool in the general vicinity. The western dwelling has been removed and a milking shed has been constructed slightly northeast of this location, a shed to the south has also been removed. Miscellaneous materials are no longer being stored southeast of the central dwelling. A small shed in the northeast has been constructed and a silage storage pit is now present in the south. Soil disturbance is evident in the general location of the farm dump/burial pit area in the south.</p> <p><b>Offsite:</b> The property directly west of the Site has now been partitioned into paddocks for cropping. A plant nursery is also present along the northern boundary of the Site.</p>
2015	Google Earth (colour)	<p><b>Site:</b> A shed to the west of the central dwelling has been replaced, and a shed to the north and south removed. Another shed has been constructed directly northeast of the milking shed, and another smaller structure to the northwest. An effluent pond has been constructed directly east of the silage storage pit. The presumed farm dump/burial pit has now also grassed over. Two large silage piles are present in an area directly south of the small building in the west of the Site. This area also contains what appears to be multiple tyres.</p> <p><b>Offsite:</b> The tarmac runway to the east of the Site has been extended and a dwelling and associated shed have been constructed near the western boundary of the Site.</p>
2017	Google Earth (colour)	<p><b>Site:</b> Silage piles still appear to be present south of the small building in the west of the Site, however no tyres are spotted.</p> <p><b>Offsite:</b> No significant change to Site surroundings.</p>

### 3.4 Site Walkover

A Site visit was undertaken by 4Sight staff on 21 July 2020. Photos of the Site visit are presented in Appendix F and the Site location and Features are presented in Figure 1. The following observations were made during the Site walkover and inspection:

- The Site is currently a rural property with the majority of land area in planted grass, and is slightly undulating;
- The Site was accessed from Narrows Road via an existing gravel track on the north western Site boundary;
- The track splits in four directions, where the north eastern arm leads to a shed constructed of wooden materials and a metal roof with a bailer stored within (feature 1);
- The neighbouring Bruntwood Nurseries is present directly west of this feature;
- The eastern arm of the track leads to a cottage (feature 2) constructed of wooden weather boards, the soffits within the patio awning addition are likely fibre cement with the potential to be asbestos containing material (ACM), these are in good condition. The paint on the outside of the cottage is flaking and in a deteriorated condition. Directly northeast of the cottage is a supply shed constructed of wood with a corrugated roof containing general household items and a lawnmower;
- The south eastern arm of the track leads to a dwelling (feature 3) surrounded by a grassed lawn and trees. The dwelling is constructed of bricks with a breezeblock base and a concrete tile roof. The soffits and under the entry awning are likely fibre cement with the potential to be asbestos containing material (ACM), these are in good condition. A concrete tennis court is located east of the dwelling, with a pool, and a wood storage shed constructed of metal to the south;

- Northeast of the dwelling, a bare patch in the grass was observed, that consisted of approximately 4 tyres and some buried concrete;
- No evidence was found regarding the horticultural (orchard) area and potential location of pens as identified in the historic aerials;
- A pile (feature 4) of greenwaste was observed in a paddock along the south western arm of the track. The pile also contained standard materials commonly observed on farms which include plastic and metal pipes, a recycling bin, a pallet, tree stumps, tyres and a barrel which formerly contained sodium hydroxide;
- Further along the south western arm of the track, the garage associated with a former dwelling was identified (feature 5). This has a tin roof with a wooden exterior with deteriorated paint, and contained a pallet, some windows (likely from the removed dwelling) and some minor plastic materials. No potential ACM was identified on this structure;
- A large number of fence posts were being stored west of the garage, directly in contact with the ground in the location of the former dwelling. A rubbish pile in this area was identified to contain some posts, troughs, concrete rubble and some wire;
- The south western arm of the track leads to a tanker loop associated with a milking shed (feature 6). The milking shed is currently not in use and is constructed of a metal exterior, with a concrete base and concrete floor. A concrete holding yard is located east of the milking shed. Piping associated with the former operation of the milking shed is plastic, and no ACM pipes were identified;
- A shed constructed of metal with a concrete floor is located to the north of the milking shed and contains haybales. An empty concrete silage storage area and a fertiliser dispenser over a concrete base are located to the northwest of the milking shed;
- There are multiple small sheds and structures directly south of the milking shed which include: a metal pump shed, a metal shed with a water conditioning system, a shed containing a barrel of hydrogen peroxide (assumed to be for water treatment) with a concrete floor in good condition, as well as three concrete water tanks;
- Further south of the milking shed is an area with a water pump surrounded by a wooden fence. An overflow bath containing water is also located outside of the fence;
- Northeast of the milking shed is a metal shed with two sections (feature 7). The western section contains a maize harvester on a soft woodchip floor, and the eastern section contains a number of haybales on a concrete floor;
- Further northeast is an empty workshop (feature 8) constructed of stone blocks, with wood skirtings and a corrugate roof, with a solid concrete floor in good condition. Paint on the exterior of the building appears to be weathered/deteriorated. A number of water troughs are stored to the west;
- The track south of the milking shed leads to a silage storage pit (feature 9) that has been excavated into the bank. This currently contains a large amount of tyres;
- An effluent pond (feature 10) is located to the east of the silage storage pit on a hill;
- A southern end of the track ends in the southern paddocks, a potential farm dump/burial pit was identified in the middle of the southern paddock. Identified partially buried in the ground were multiple tires, some plastic and other unidentified materials. Lack of/stressed grass growth is also evident in this area;
- Near the western boundary in the southern section of the Site is a concrete shed (feature 11) that contains approximately 20 tyres. The power board on the outside of the shed contains potential ACM, the board was in good condition; and
- An area of potentially stressed grass was observed directly southeast of the shed.

### 3.5 Site Interview

A brief discussion with the Site contact Dion Merson (Hamilton Airport Property Manager) during the Site walkover identified that the Site is an operational maize farm, with the first maize crop harvested in 2019. Mr Merson also confirmed that no servicing of farm equipment was undertaken onsite and there are no fuel storage tanks onsite.

A phone call with Dave Ogilvy from the neighbouring Bruntwood Nurseries manager, stated that the nursery had been in operation for the past 37 years and a range of insecticides and fungicides were and are currently being applied in the operation via a sprayer on the back of a tractor. No broadscale spraying had taken place throughout that period.

### 3.6 Site History Summary

Based on a review of publicly available information in relation to the history of the Site, the following can be summarised:

- Between the early 1940s (earliest aerial image) to 2019 the Site was in use as an operational dairy farm, with associated dwellings and structures present onsite. Since 2019 the Site has been in use as an operational maize farm, with grass planted as a cover crop in the offseason;
- From at least the early 1940s to approximately 1971, a small horticultural block (orchard) was operational near the central dwelling, as was a small section of horticultural cropping in the northwest of the Site;
- An area of disturbance was identified in historic aerial photographs from the early 1950s until the early 1990s in the southern paddock of the Site. The Site walkover identified buried plastic and tyres in this location as well as stressed vegetation (grass) indicating the potential for a farm dump/burial pit in that location;
- A storage pit for silage has been present in the south of the Site since the early 1990s and currently contains a large number of tyres. Tyres were also stored from the early 2010s to at least 2015 in the southwestern section of the Site at the location of another former silage storage location;
- There has been numerous changes/removals to the buildings/layout to the farm, including the main residential dwelling being replaced twice, since the 1940's;
- Three buildings (cottage, stone workshop and former dwelling garage) were identified as having exterior paint in deteriorated condition;
- A large number of fence posts are stored near the centre of the Site in the location of a former dwelling;
- A large pile of greenwaste with some miscellaneous farm rubbish (tyres, plastic and metal piping and empty drums) is located the paddock north of this;

### 3.7 HAIL Assessment

Based on a review of the available information for the Site, and from the interview and Site walkover, the following activities have been identified as having potential to result in ground contamination:

- Former horticultural area (orchard);
- Former horticultural area (cropping);
- Current and former and tyre storage areas;
- Fence post storage area;
- Farm dumps/burial pits; and
- Lead paint associated with the cottage, stone workshop and former dwelling and garage; and
- Asbestos in soils at former structure locations.

Based on the above identified activities the following HAIL activities have been potentially identified at the Site:

- A10: Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds; and
- I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.

There is potential for overspray from the neighbouring Bruntwood Nurseries as insecticides and fungicides have historically and are currently applied via a sprayer on the back of a tractor. However, as no broadscale spraying had taken place, this operation is unlikely to cause levels elevated enough to be of concern for commercial use.

## 4 CONCEPTUAL SITE MODEL

A conceptual site model (CSM - Table 4) provides a detailed description of the identified potential sources, pathways and receptors, and a qualitative assessment of complete or potentially complete source-pathway-receptor (SPR) linkages. A risk is only present if there is a complete SPR linkage. The CSM detailed in Table 4 is not intended to be an exhaustive assessment of all potential SPR linkages. The CSM has been developed based on available information, any omissions are not indicative of no risk.

Table 4. Conceptual Site Model

Activity Identified	Potential Contaminants	Pathway	Receptor	Discussion	Potential HAIL References	SPR Linkage
Former horticultural area (orchard)	Heavy Metals, OCP's	Direct contact, inhalation and/or ingestion	Site users and maintenance/excavation workers	Further investigation required to adequately assess risk	<ul style="list-style-type: none"> <li>A10: Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds.</li> </ul>	<p><b>Possible:</b></p> <p>Potential for contamination based on horticultural and cropping activities as identified in the historic aerial photographs from horticultural contaminants.</p>
Former horticultural area (cropping)						
Current and former and tyre storage areas	Heavy Metals, PAHs				<ul style="list-style-type: none"> <li>I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment</li> </ul>	<p><b>Possible:</b></p> <p>Potential for contamination based on the storage of tyres identified in one current (silage storage pit) and one former location (southwestern section), resulting in possible heavy metal impact to soil.</p>

Activity Identified	Potential Contaminants	Pathway	Receptor	Discussion	Potential HAIL References	SPR Linkage
Fence post storage area	Arsenic, chromium and copper					<p><b>Possible:</b></p> <p>Fence posts are stored and are directly in contact with the ground, giving potential for contamination from chromated copper arsenate which is used to treat and preserve timber.</p>
Farm dumps/burial pits	Heavy Metals, PAHs					<p><b>Possible:</b></p> <p>Buried tyres, plastic and other unidentified materials have potential to result in contamination.</p>
Cottage, workshop and former dwelling and garage paint	Lead					<p><b>Likely:</b></p> <p>Paint identified on the exterior of the cottage and workshop has been identified to be in a deteriorated condition which has potential to impact soil around the halo of the structures.</p>

Activity Identified	Potential Contaminants	Pathway	Receptor	Discussion	Potential HAIL References	SPR Linkage
Historic structures	Asbestos	Inhalation	Maintenance/excavation workers			<p><b>Possible:</b></p> <p>It is considered possible that there will be asbestos contamination in shallow soils at locations where structures were historically present.</p>

## 5 DISCUSSION

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As the above evidence suggests that HAIL activities may have been historically undertaken on the Site, it cannot be concluded that risk to human health is highly unlikely and a full assessment under the NESCS and WRP is unable to be provided without further investigation. It is recommended that further investigation be undertaken in the following areas, specifically a soil investigation as part of a targeted Detailed Site Investigation (DSI):

- Former horticultural area (orchard);
- Former horticultural area (cropping);
- Current and former tyre storage areas;
- Fence post storage area;
- Farm dumps/burial pits; and
- Lead paint associated with the cottage, stone workshop and former dwelling and garage; and
- Asbestos in soils at former structure locations.

Potential ACM soffits were identified on the cottage patio (patio on main dwelling soffits were wood) and awning of the dwelling, and appeared to be in good condition. Preliminary observations did not identify widespread use of potential ACM products, however prior to the demolition of these buildings, a demolition survey is required which must be completed by a suitably licensed asbestos surveyor. It should be noted that any removal of asbestos containing materials from the Site will need to be undertaken by a licensed asbestos remover under an approved asbestos removal control plan in accordance with the Approved Code of Practice for the Management and Removal of Asbestos (WorkSafe New Zealand, 2016) and the Health and Safety at Work (Asbestos) Regulations (MBIE, 2016). It is also considered possible that former structures were constructed from ACM materials, which may have led to impact to soil during the demolition of these structures.

## 6 CONCLUSIONS

4Sight Consulting Ltd (4Sight) has been engaged by Titanium Park Ltd ('the Client') to undertake a Preliminary Site Investigation (PSI) at 188 Narrows Road, Hamilton (herein referred to as 'the Site') to support the proposed subdivision and commercial/industrial development of the Hamilton Airport Northern Precinct.

The objective of the PSI is to determine whether an activity or industry listed on the Ministry for the Environment (MfE) Hazardous Activities and Industries List (HAIL) is being, has been, or is likely to have been conducted at the Site, and to assess potential implications for the proposed subdivision, change of land use and soil disturbance under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) (MfE,2011), and the Waikato Regional Plan (WRP).

This investigation included reviewing the Site's history and conducting field observations. The key findings are:

- Between the early 1940s (earliest aerial imagery) to 2019 the majority of the Site was in use as an operational dairy farm, with associated dwellings and structures present onsite. Since 2019 the Site has been in use as an operational maize farm, with grass planted as a cover crop in the offseason;
- From at least the early 1940s to approximately 1971, a small horticultural block (orchard) was operational near the central dwelling, as was a small section of horticultural cropping in the northwest of the Site;
- An area of disturbance was identified in historic aerial photographs from the early 1950s until the early 1990s in the southern paddock of the Site. The Site walkover identified buried plastic and tyres in this location as well as stressed vegetation (grass) indicating the potential for a farm dump/burial pit in that location;
- A storage pit for silage has been present in the south of the Site since the early 1990s and currently contains a large number of tyres. Tyres were also stored from the early 2010s to at least 2015 in the southwestern section of the Site at the location of another former silage storage location;
- There has been numerous changes/removals to the buildings/layout across the Site since the 1940s, including the main residential dwelling being replaced twice;
- Three buildings (cottage, stone workshop and former dwelling garage) were identified as having exterior paint in deteriorated condition;
- A large number of fence posts are stored near the centre of the Site in the location of a former dwelling;
- A large pile of greenwaste with some miscellaneous farm rubbish (tyres, plastic and metal piping and empty drums) is located the paddock north of this;
- Based on the above identified activities the following HAIL activities have been potentially identified at the Site:
  - A10: Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds associated with the former orchard and cropping area; and
  - I: Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment associated with the potential farm dump, stockpiling of large numbers of tyres, treated fence posts, deterioration of lead based paints that could impact soil, and the potential presence of asbestos in current buildings and in soil in the vicinity of historic structures.

Therefore, based on the findings of this PSI, the following recommendations are made:

- Due to the presence of HAIL activities, the proposed subdivision and commercial redevelopment at the Site will be subject to the provisions of the NESCS;
- The potential risk to human health cannot be determined, and therefore a full assessment against the provisions of the NESCS and WRP is unable to be provided without further investigation;
- To support consent applications, further investigation through targeted soil sampling will be required to assess the following areas of potential concern:
  - Former horticultural area (orchard);
  - Former horticultural area (cropping);
  - Current and former and tyre storage areas;
  - Fence post storage area;
  - Farm dumps/burial pits;

- Lead paint associated with the cottage, stone workshop and former dwelling and garage; and
- Asbestos in soils at former structure locations.
- Preparation of a targeted Detailed Site Investigation (DSI) report will be necessary to present the results of soil investigations, to identify human health and environmental risk (if any); and
- Due to the age of a number of Site structures identified in aerial photographs being pre-2000, and evidence from the Site visit, there is the potential for these structures to have been constructed with ACM. Therefore, prior to the demolition of any of the structures, it is recommended that a thorough inspection of the structures be completed by a suitable qualified asbestos surveyor.

This investigation and associated reporting has been carried out and reviewed by a SEQP in accordance with the requirements of the NESCS.

## REFERENCES

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Coffey Geotechnics Ltd. (2011). *Preliminary Geotechnical Investigation Report on Proposed Montgomerie Block Industrial Land Development at Raynes Road, Hamilton*.

Environmental Protection Agency [EPA]. (2011). *Hazardous Substance Incidents Reports*. Accessed July 2020.

Geological and Nuclear Sciences [GNS]. (2017). *New Zealand Geology Web Map*. Retrieved from <http://data.gns.cri.nz/geology/>, accessed July 2020.

Ministry for the Environment, 2001. *Contaminated land management guidelines No. 1: Reporting on contaminated sites in New Zealand (revised 2011)*. Ministry for the Environment, Wellington, New Zealand.

Ministry for the Environment. 2004 (revised 2011). *Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils*. Ministry for the Environment, Wellington, New Zealand.

Ministry for the Environment. 2011. *Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011*. Ministry for the Environment, Wellington, New Zealand.

Retrolens (2020). Retrieved from <http://retrolens.nz> and licensed by LINZ CC-BY 3.0, accessed July 2020.

## LIMITATIONS

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This document does not include any assessment or consideration of potential health and safety issues under the Health and Safety at Work Act 2015. 4Sight Consulting has relied upon information provided by the Client and other third parties to prepare this document, some of which has not been fully verified by 4Sight Consulting. This document may be transmitted, reproduced or disseminated only in its entirety.

From a technical perspective, the subsurface environment at any Site may present substantial uncertainty. It is a heterogeneous, complex environment, in which small subsurface features or changes in geologic conditions can have substantial impacts on water, vapour and chemical movement. 4Sight Consulting's professional opinions are based on its professional judgement, experience, and training. This document was prepared based on information provided by others. Should additional information become available, this report should be updated accordingly.

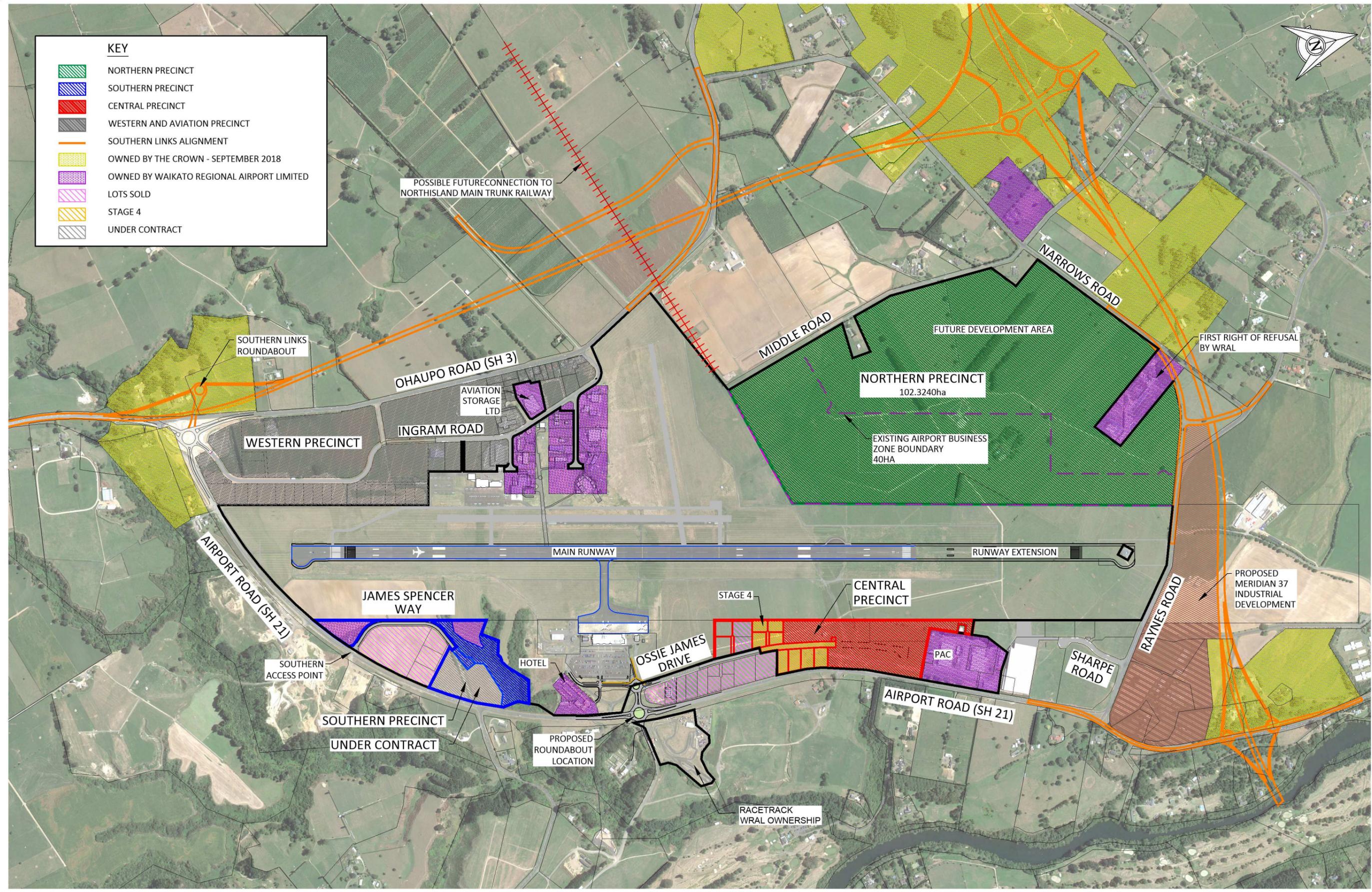
**Appendix A:**

**Proposed Development Plans**

100mm  
SCALE FOR VALIDATING SIZE OF A3 PLOT ONLY  
0  
K:\144380 Titanium Park Ltd (WRAL)\DRAWINGS\144380\_00\_0103.dwg 2/10/2019 5:11 PM bcooper  
Version 3.0 - September 2017

**KEY**

- NORTHERN PRECINCT
- SOUTHERN PRECINCT
- CENTRAL PRECINCT
- WESTERN AND AVIATION PRECINCT
- SOUTHERN LINKS ALIGNMENT
- OWNED BY THE CROWN - SEPTEMBER 2018
- OWNED BY WAIKATO REGIONAL AIRPORT LIMITED
- LOTS SOLD
- STAGE 4
- UNDER CONTRACT



Date	Issue/revision detail	By	Chk	Appr
E 03.10.2019	GENERAL UPDATES	BSC		
D 02.10.2019	GENERAL UPDATES	HW	KD	JO
C 27.09.2018	GENERAL UPDATES	HW	JO	
B 26.09.2018	GENERAL UPDATES	HW	JO	
A 15.05.2018	INITIAL ISSUE	HW	KD	-

Designed	Checked
KD	KD
Drawn	Approved
HW	-

**BLOXAM & BURNETT OLLIVER**  
 Phone +64-7-838 0144, Fax +64-7-839 0431

CLIENT  
**TITANIUM PARK LTD & WAIKATO REGIONAL AIRPORT LTD**

PROJECT  
**TITANIUM PARK**

DRAWING  
**AIRPORT ENVIRONS & SOUTHERN LINKS ALIGNMENT**

STATUS	
<b>PRELIMINARY</b>	
DATE	SCALE (ORIGINAL SIZE A3)
03.10.2019	1:12,500
DRAWING NUMBER	REVISION
144380_00_0103	E

# Integrated Masterplan Concept

## KEY

-  Hub
-  Indicative Future Road Connections to Southern Links
-  Southern Links Designation Extent
-  Landscape Buffer
-  Indicative Landscape Feature
-  Indicative Retail Area
-  Operative Airport Business Zone Extent Land area extent - approx. 41ha

*NOTE: Lot layout is indicative only and for illustrative purposes. Further development is anticipated following experts review and additional information from others.*

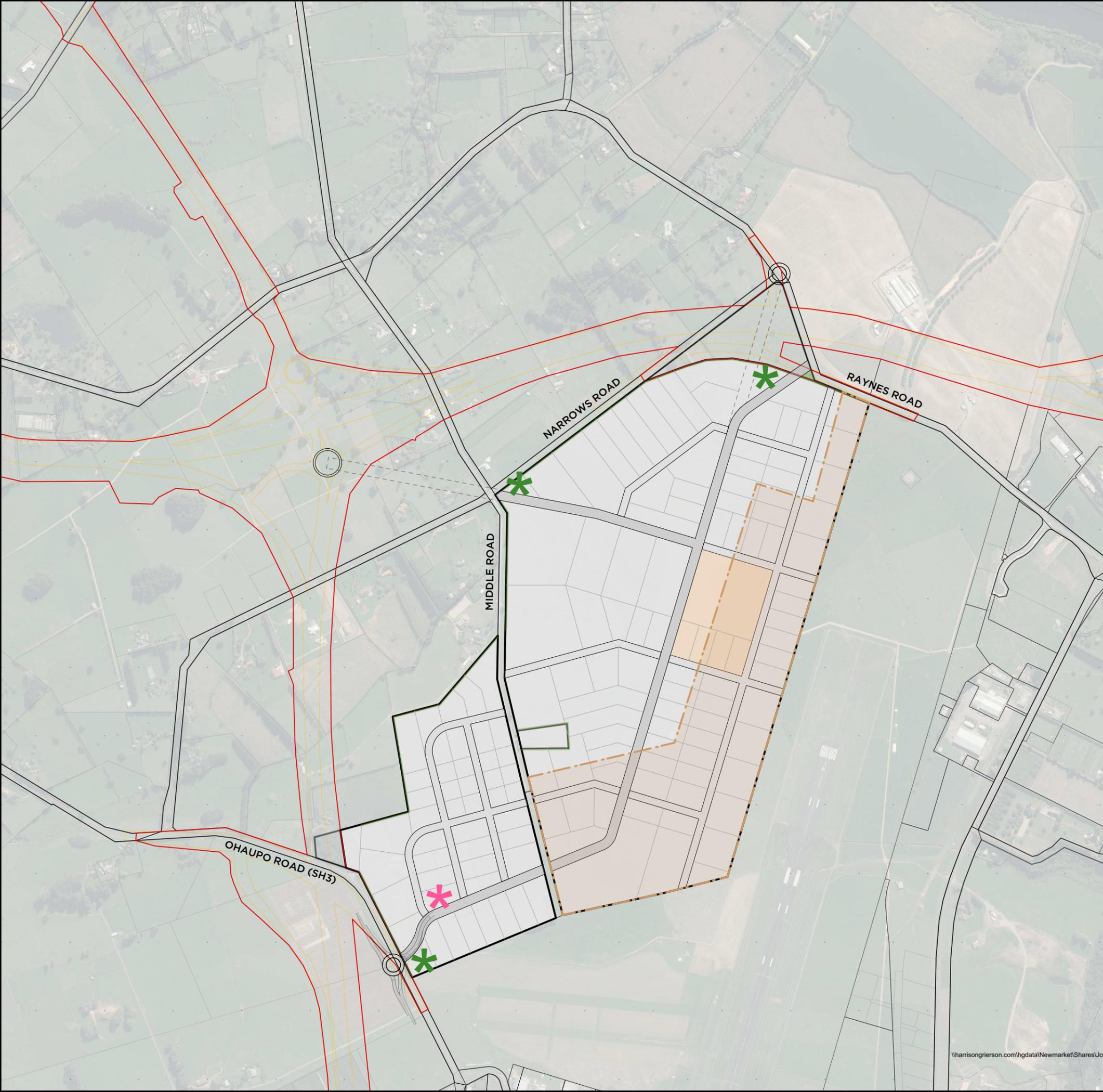
# HARRISON GRIERSON

## NORTHERN PRECINCT

Project: 1020-146639-01  
 Date: 20/04/2022  
 Dwg No: 146639-122  
 Status: for information  
 Scale: 1:10000  
 Revision: D



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**Appendix B:**

**Property File Snapshot**



# Property Snapshot Report

Tuesday, July 14, 2020

## Disclaimer

The property report is a snapshot of selected Council Application and Rating Information databases, zone and planning maps pertaining to the property, as at the date this report is generated. It is made available in good faith and its accuracy and completeness is not guaranteed.

This is NOT a Land Information Memorandum (LIM report) and should not be relied on as a full clerical search of property. If you intend to use this information for purchasing a property, then we would recommend you apply for a LIM report which is a specific search of all council databases.

<http://www.waipadc.govt.nz/our-services/Properties/LIM/Pages/default.aspx>

Please contact the Revenue Department in the first instance if you have any further questions regarding the property snapshot report during office hours: Cambridge 07 8233800 Te Awamutu 07 8720030 or [info@waipadc.govt.nz](mailto:info@waipadc.govt.nz)

## Property Information

Property Address	Legal Description	Property ID	Assessment	Titles	Area sqm
188 Narrows Road RD 2 Hamilton 3282	LOT 1 DP 306726 AND LOT 5 DP 307815 BLKS VI VII HAMILTON SD	10090	04581/170.00	30510	1027627.35

## Ward

Pirongia

## District Plan Zone

RURAL ZONE, AIRPORT BUSINESS ZONE

## LINZ Data

Parcel ID	Linz Address	Legal Description	Type	Title	Area	Survey Details	Statutory
6553091	105 MIDDLE ROAD	Lot 1 DP 306726	Freehold	30510	101.4760 HA	DP 306726, DP 307815	
6553091	188 NARROWS ROAD	Lot 1 DP 306726	Freehold	30510	101.4760 HA	DP 306726, DP 307815	
6562885		Lot 5 DP 307815	Freehold	30510	1.2733 HA	DP 307815	

## Valuation Data

Land Value	Capital Value	Note
\$6680000	\$8270000	Valuation as at 1 August 2019

## Current Year Rating Data

### Annual Rates 2019/2020

\$12002.08

## WRC Rating Information

### Note:

By law, all people who pay rates to their own local council must also pay rates to their regional council. This has been the case since 1989. These rates are invoiced annually around September by Waikato Regional Council. Please use the Find Out Your Rates web page - <http://www.waikatoregion.govt.nz/Council/Rates/Find-out-your-rates/> to find out what the rates will be for the financial year (1 July to 30 June). For further information regarding the Waikato Regional Council rates, please email <mailto:rates@waikatoregion.govt.nz> or phone 0800 800 401.

## Water Meter Information

No Water Meter on Property

## Building Consents and Compliance Information - Issued for Property since 1991

Application Number	Description	Decision	Floor Area	Date Approved	CCC Date
	Install Logaire Kronos Free Standing Fire	#CCCIssued	0.00	03/06/2008	03/06/2008
	Install Logaire Kronos Free Standing Fire	CCCIssued	0.00	14/05/2008	03/06/2008
	INSTALL SOLID FUEL HEATER & INTERNAL ALTERATIONS	#CCCIssued	0.00	23/04/2008	23/04/2008
	UREA SILO FOUNDATION & ERECT IMPLEMENT SHED	#CCCIssued	0.00	31/08/2009	31/08/2009
283	ERECT A HAYBARN	#CCCIssued	270.00	16/03/1993	
30650	ERECT A NEW COWSHED	#CCCIssued	370.00	25/07/2002	
46275	INSTALL SOLID FUEL HEATER & INTERNAL ALTERATIONS	CCCIssued	0.00	27/02/2006	23/04/2008
46786	UREA SILO FOUNDATION & ERECT IMPLEMENT SHED	CCCIssued	126.00	15/05/2006	31/08/2009

## Resource Consents

Consent Type	Consent ID	Description	Decision	Date Approved
Land Use	RC/3604	Excavate approx. 54,000m3	#Approved	11/04/2002

**Recycling Collection - Click below to go to our Recycling webpage**  
<http://www.waipadc.govt.nz/our-services/rubbish-and-recycling/Recycling>

Collection Day	Note
THURSDAY	Mixed recycling is collected every fortnight, Glass recycling will be collected every four weeks.

## Rubbish Collection

Collection Type
Property is in Rural collection area - Rubbish collection is not paid for by ratepayers and we do not operate the district rubbish collection services. For more information on private contractor collection areas <a href="http://www.waipadc.govt.nz/our-services/rubbish-and-recycling/Rubbish/Pages/default.aspx">http://www.waipadc.govt.nz/our-services/rubbish-and-recycling/Rubbish/Pages/default.aspx</a>

## District Plan Information

**Note:**

The Waipa District Plan was made operative on 14 August 2017 and has legal effect from this date. Further information on interpreting the District Planning Maps is available via the Introduction to the Planning Maps page on the Waipa District Council's website: <http://www.waipadc.govt.nz>



## Aerial Map



Te Awamutu, Pukeatua, Lake Arapuni and Wharepapa South flown on 19 Mar 2017. Cambridge, Karapiro, Te Pahu, Kakepuku, Te Miro and Pirongia as at 29 Jan, 6 Feb and 8 Apr 2017.

Mystery Creek, Ohaupo and Lake Ngaroto as at 4 Jan and 8 Apr 2017. All other rural areas of Waipa District flown between March-May 2012.

Aerial photography has an accuracy of +/-0.2m in urban areas and +/-3m in all other areas.

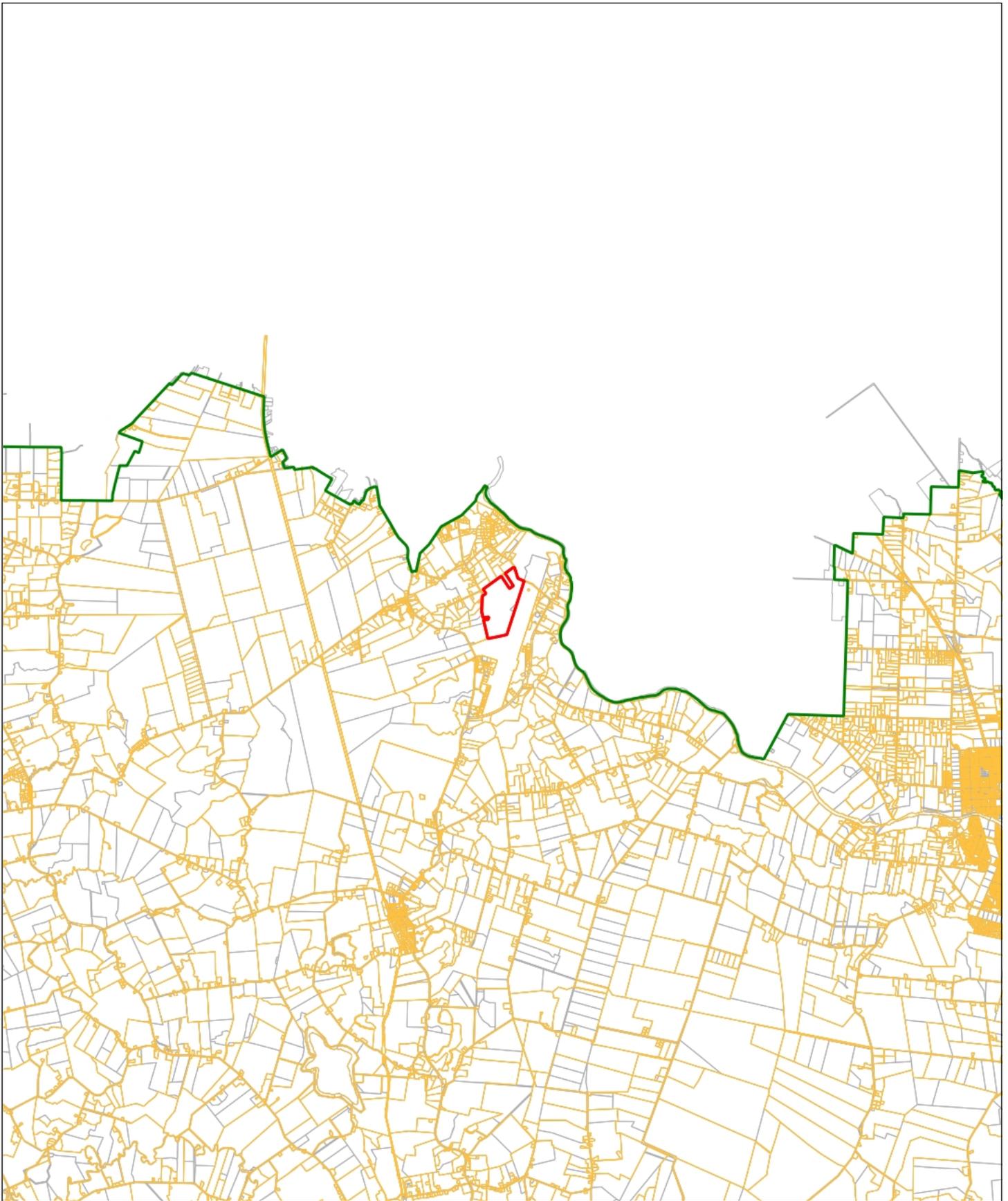
Position of property boundaries is INDICATIVE only and must not be used for legal purposes.

Imagery sourced from NZ Aerial Surveys Ltd.

Tuesday, July 14, 2020

### Disclaimer

Because of the nature of the data, accuracy varies and should be interpreted conservatively. If there is any doubt, then further research and a site investigation will always be warranted.



## Overview Map



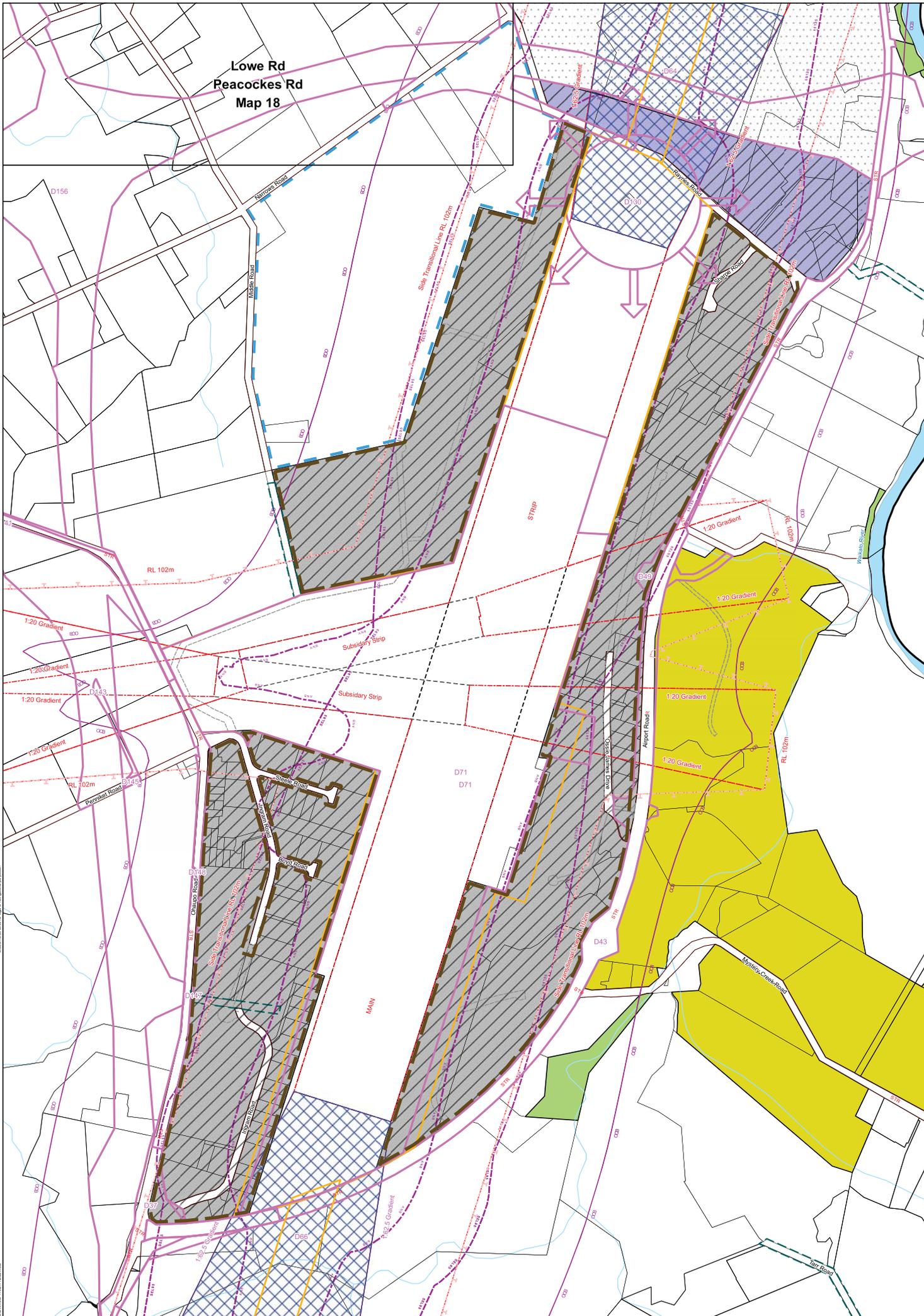
Te Awamutu, Pukeatua, Lake Arapuni and Wharepapa South flown on 19 Mar 2017. Cambridge, Karapiro, Te Pahu, Kakepuku, Te Miro and Pirongia as at 29 Jan, 6 Feb and 8 Apr 2017.  
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 Imagery sourced from NZ Aerial Surveys Ltd.

Tuesday, July 14, 2020

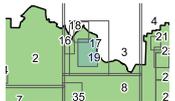
**Disclaimer**  
 Because of the nature of the data, accuracy varies and should be interpreted conservatively. If there is any doubt, then further research and a site investigation will always be warranted.



Lowe Rd  
Peacockes Rd  
Map 18



Note: This map is for information only. It is not intended to be used as a legal document. It is subject to change without notice.



# Zones Legend

## AIRPORT

	Air Noise Boundary (ANB)
	Night Noise Boundary (SEL95)
	Outer Control Boundary (OCB)
	Airport Approach Surfaces
	Conical Surface
	Horizontal Surface
	Hamilton Airport Strategic Node
	Narrows Concept Plan Area
	Runway Protection Area
	Possible Future Airport Growth Area

## DESIGNATIONS (Refer Appendix D1)

	Designation Approved
	Designation (Notice of Requirement)

## OVERLAYS

	Structure Plan Area
	Core Campus Area
	Tokanui Dairy Research Centre
	Hydro Electric Power Generation Infrastructure Area
	Boundary of the Specialised Dairy Industrial Area

## GENERAL

	District Boundary
	Other Council Boundary
	Urban Limits
	Strategic Road (Major or Minor Arterial)
	Formed Road
	Indicative Road
	Bridge
	Service Lane
	Unformed Road
	River, Lake or Stream

(Note: will appear as wave pattern over certain lakes due to them also being Reserve Zone)

## ZONES

	Airport Business Zone
	Commercial Zone
	Deferred Commercial Zone
	Hydro Power Zone
	Industrial Zone
	Deferred Industrial Zone
	Lake Karapiro Events Zone
	Large Lot Residential Zone
	Deferred Large Lot Residential Zone
	Marae Development Zone
	Mystery Creek Events Zone
	Deferred Reserve Zone
	Reserve Zone
	Residential Zone
	Deferred Residential Zone
	Cambridge North Deferred Residential Zone
	Significant Mineral Extraction Zone
	St Peters School Zone
	Rural Zone



Lowe Rd  
Peacockes Rd  
Map 18

Cultural Landscape Area - Alert  
Waikato River

Hamilton Airport Policy Areas 19. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the Waipa District Council.

# Policy Areas Legend

## ESPLANADE REQUIREMENTS

-  Access Strip
-  Esplanade Reserve
-  Esplanade Strip

## LANDSCAPE AND NATURAL AREAS

-  High Amenity Landscapes (includes adjacent water bodies)
-  Outstanding Natural Feature and Landscape
-  River and Lake Environs
-  Significant Indigenous Forest (Local)
-  Significant Natural Feature and Landscape (District)
-  Visually Sensitive Hill Country
-  Cultural Landscape Area Alert (Refer Note 4)
-  Cultural Landscape Areas
-  Significant Natural Area (Refer Appendix N5)
-  Viewshaft and State Highway 3 Scenic Corridor
-  Vista
-  Significant Tree and Bush Stand

## HERITAGE

-  Archaeological Site (Refer Appendix N3)
-  Archaeological Site - Reliability 1  
(Refer Note 3 and Appendix N3)
-  Cultural Sites (Refer Appendix N2)
-  Heritage Item (Refer Appendix N1)
-  Karapiro Hydroelectric Village Heritage Item
-  Protected Tree (Refer Appendix N4)
-  Character Cluster
-  Character Precinct
-  Character Precinct Cambridge A
-  Character Precinct Cambridge B
-  Character Streets
-  Cambridge Residential Character Area
-  Rangiaowhia Ridge Building Setback Area

## GENERAL

-  District Boundary
-  Other Council Boundary
-  Urban Limits
-  Strategic Road (Major or Minor Arterial Route)
-  Formed Road
-  Indicative Road
-  Bridge
-  Service Lane
-  Unformed Road
-  River, Lake or Stream

## OVERLAYS

-  Compact Housing Area
-  Dairy Manufacturing Site
-  Large Format Retail Area
-  Maungatautari Ecological Island Fenced Boundary
-  Pedestrian Frontage
-  Road Noise Effects Area
-  Indicative Motorway Service Centre Area
-  Scheduled Industrial Site
-  Special Amenity Area
-  Tall Building Area
-  Cambridge North Neighbourhood Centre
-  Mystery Creek Events Centre Core Area
-  Mystery Creek Events Lower Terrace Area
-  Mystery Creek Events Upper Terrace Area
-  Mystery Creek Rural Activities Overlay
-  Quarry Buffer Area
-  Mineral Extraction Area
-  Hydro Operating Easement
-  Dairy Manufacturing Noise Contour
-  Mystery Creek Noise Contour
-  Water Catchment Area (WCA)
-  Lime Processing Site

## UTILITIES

-  HV Electricity Structure
-  HV Electricity Transmission Line
-  HV Electricity Transmission Line (Underground)
-  Gas Transmission Pipeline Corridor

## NATURAL HAZARDS

-  Flood Hazard Area
- When viewing the flood hazard area around the Waipa River, the boundary of the flood hazard may appear curved.

### NOTE:

#### 1. Referenced Sites

Some sites are shown on the maps with a reference number. These are archaeological sites, cultural sites, designations (approved and notice of requirements), historic buildings/sites, protected trees or significant natural areas. The reference number will only appear on the detail map. If the site you are viewing is within an inset map, e.g. map 27 is within map 23, then the reference number will only appear on map 27 and not on map 23.

#### 2. Archaeological Sites

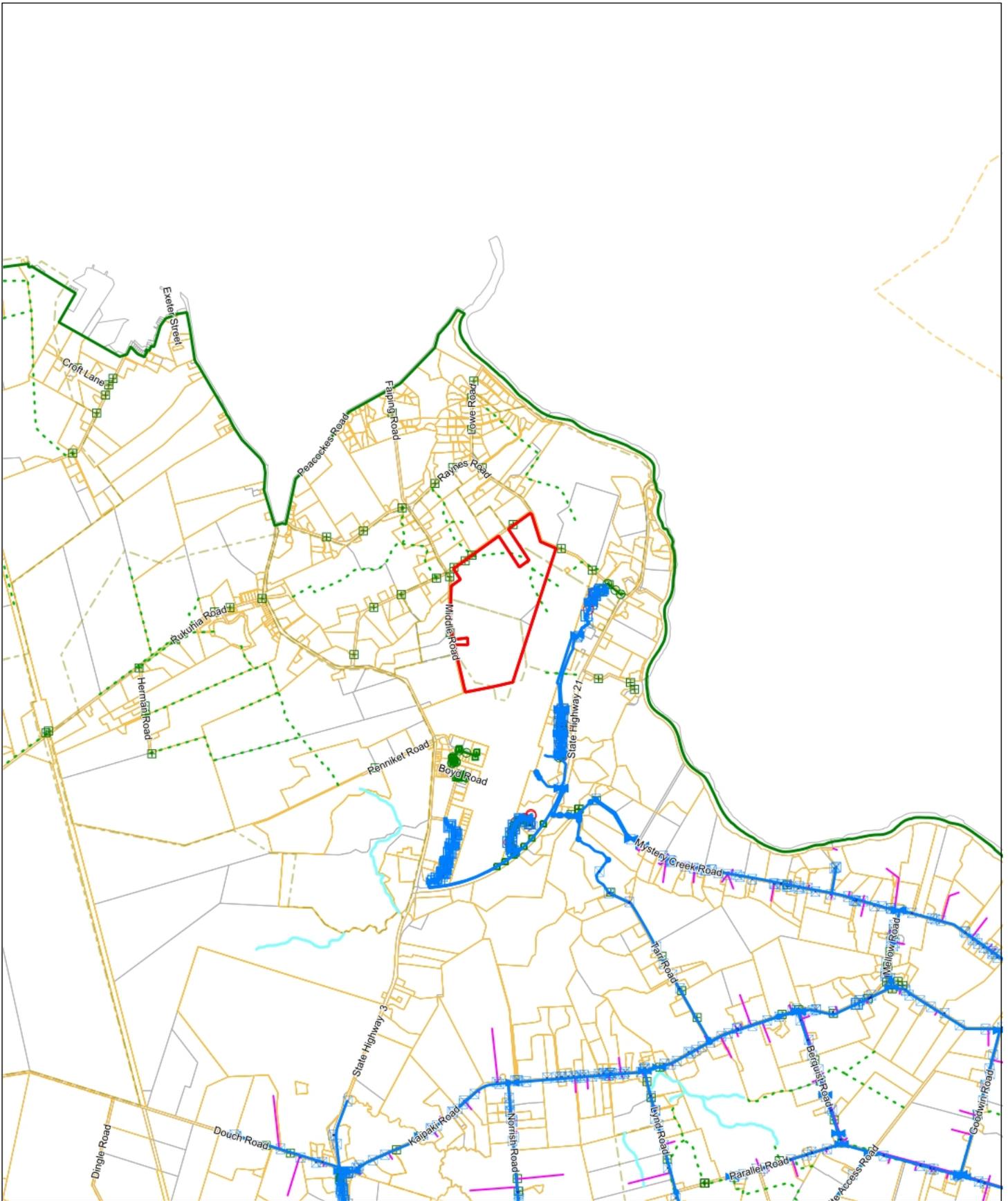
Additional archaeological sites may have been identified since the notification of this Plan. For this reason people are also referred to the NZAA Database. Consultation with Heritage New Zealand is advisable.

#### 3. Reliability 1

These sites have been field checked and documentation has been completed. These sites have a higher degree than the other sites.

#### 4. Cultural Landscape Areas

There are two types: "Cultural Landscape Area – Alert" and "Cultural Landscape Areas". The Cultural Landscape Area – Alert are identified for information purposes only, while the Cultural Landscape Areas have additional resource consent requirements for some activities. Where the Cultural Landscape Area – Alert is shown on the Planning Maps to apply to a river or stream, it includes a 50m setback on either side of the bank from the river or stream.



## Utilities Map

(Refer to Map Legend)



Tuesday, July 14, 2020

**Disclaimer**  
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Scale 1:50000

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# Essential Services Legend

## Water Supply Network

### Points

-  Meter
-  Fire Hydrant
-  Node
-  Valve

### Pipes

-  Main
-  Service
-  Abandoned Water Pipes

## Wastewater Network

### Points

-  Meter
-  Manhole
-  Node
-  Septic Tank
-  Valve
-  WasteWater Pump Station

### Pipes

-  Gravity Main
-  Rising Main
-  Service
-  Abandoned Wastewater Pipes

## Stormwater Network

### Points

-  Catchpit
-  Inlet
-  Inlet\_Outlet
-  Manhole
-  Node
-  Outlet
-  Soak Hole
-  Drainage Culvert

### Pipes

-  Gravity Main
-  Service
-  Catchpit Lead
-  Rural Drain
-  Open Drain (Urban)
-  Stream Channel
-  Abandoned Stormwater Pipes

## Drainage Area

-  Waipa District Council
-  Waikato Regional Council (Environment Waikato)

#### **Disclaimer:**

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**This is not a Land Information Memorandum (LIM report)** and should not be relied on as a full clerical search of property. If you intend to use this information for purchasing a property, then we recommend you apply for a LIM report which is a specific search of all Council databases:

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**Appendix C:**

**WDC HAIL Information Request**

## Aaron Graham

---

**From:** Karl Tutty <Karl.Tutty@waipadc.govt.nz>  
**Sent:** Wednesday, 15 July 2020 8:11 am  
**To:** Jarrod Hall  
**Subject:** 188 Narrows Road

Morning,

This site is not on the Selected Land Use register as having a HAIL history, and I can see no relevant information on the property file.

The site is however bordered on most sides by properties that are on the register.

You can see HAIL site mapping on our MapsOnline service via our website. "Environment" module and "special features" layer.

Regards

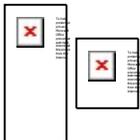
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*Karl Tutty* Manager Compliance **WAIPA DISTRICT COUNCIL**

[karl.tutty@waipadc.govt.nz](mailto:karl.tutty@waipadc.govt.nz) | [www.waipadc.govt.nz](http://www.waipadc.govt.nz)

**PH:** 07 872 0030 | **MOB:** 027 584 7072 | **FAX:** 07 872 0033

**Te Kaunihera ā Rohe o Waipa**



**Appendix D:**

**WRC LUIR Report**

**Background:** The Waikato Regional Council maintains a register of properties known to be contaminated on the basis of chemical measurements, or potentially contaminated on the basis of past land use. This register (called the Land Use Information Register) is still under development and should not be regarded as comprehensive. The 'potentially contaminated' category is gradually being compiled with reference to past or present land uses that have a greater than average chance of causing contamination, as outlined in the Ministry for the Environment's Hazardous Activities and Industries List (HAIL): <http://www.mfe.govt.nz/sites/default/files/hazards/contaminated-land/is-land-contaminated/hazardous-activities-industries-list.pdf>

**This property:**

- I can confirm that this property **does not** currently appear on the Land Use Information Register.

**District Councils:** Our records are not integrated with those of territorial authorities, so it would also be worth contacting the Waipa District Council to complete your audit of Council records if you have not already done so. In general, information about known contaminated land will be included on a property LIM produced by the territorial authority.

**Rural Land Considerations:** Examples of sites that are "more likely than not" to have soil contamination (HAIL sites) include timber treatment activities, service stations and/or petroleum storage, panel beaters, spray painters, etc. Whilst pastoral farming is not included on this list, typical farming activities of horticulture, sheep dipping, chemical storage, petroleum storage and workshops are; but are more difficult to identify and may not be as well represented on the Land Use Information Register. Therefore, individuals interested in pastoral land may be interested in completing further investigations in accordance with Ministry for the Environment Guidelines prior to land purchase and/or development.

**Additional Information:** Please note that:

- Significant use of lead-based paint on buildings can, in some cases, pose a contamination risk; the use of lead-based paint is not recorded on the Land Use Information Register.
- Buildings in deteriorated or derelict condition which contain asbestos can result in asbestos fibres in soil; the use of asbestos in building materials is not recorded on the Land Use Information Register.
- The long term, frequent use of superphosphate fertilisers can potentially result in elevated levels of cadmium in soil; the use of superphosphate fertiliser is not recorded on the Land Use Information Register.
- We are not currently resourced to fully incorporate historic aerial photographs in our region-wide assessment of HAIL activities. A significant proportion of the Crown historical aerial image archive for the Waikato region is available to view free of charge at <http://retrolens.nz/>. We recommend this resource is consulted for any HAIL assessment.
- Due to the large volume of enquiries being received, we may not be able to respond to your enquiry as quickly as previously. We are resourced to meet **20 day** response times as per LGOIMA, but endeavour to respond more quickly when workload permits. If your enquiry is urgent, please note this first in your enquiry and we will do our best to assist.

Please feel free to contact me if you have any further queries on this matter. For any new enquiries or requests for information please continue to use the [Request for Service form](#) for 'Contaminated Land/HAIL.'

Regards,

**Caitlin Holm** | SCIENTIST | Geothermal & Air, Land Ecology & Contamination, Science and Stra  
WAIKATO REGIONAL COUNCIL | Te Kaunihera ā Rohe o Waikato  
P: +6479497129  
M: +64212133330  
F: facebook.com/waikatoregion  
Private Bag 3038, Waikato Mail Centre, Hamilton, 3240

## Aaron Graham

---

**From:** Caitlin Holm <Caitlin.Holm@waikatoregion.govt.nz>  
**Sent:** Thursday, 16 July 2020 2:45 pm  
**To:** Jarrod Hall  
**Subject:** RE Land Use Information Register enquiry 188 Narrows Road, Hamilton (REQ163374)  
No SLUS

Dear Jarrod,

Thank you for your enquiry regarding information the Waikato Regional Council may hold relating to potential contamination at the property indicated below:

- **188 Narrows Road, Hamilton: LOT 1 DP 306726 LOT 5 DP 307815 (VRN 04581/170/00)**



**Appendix E:**

**Historical Aerial Photographs**

Approximate Site Boundary



Aerial imagery sourced from <https://retrolens.nz> and licensed by UNE CC-BY 3.0

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Scale 1:7,500 @ A4

0 150 300m

AA6977 – Northern Precinct PSI

Aerial Photograph of the Site Taken in 1943

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 23/07/2020

Version: 1.0

Drawn: Sam Hendrikse

Checked: Jarrod Hall

Approved: Aaron Graham

**4SIGHT**  
CONSULTING

 Approximate Site Boundary



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Scale 1:7,500 @ A4



AA6977 – Northern Precinct PSI

### Aerial Photograph of the Site Taken in 1953

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 23/07/2020

Version: 1.0

Drawn: Sam Hendrikse

Checked: Jarrod Hall

Approved: Aaron Graham



Approximate Site Boundary



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Scale 1:7,500 @ A4



AA6977 – Northern Precinct PSI

Aerial Photograph of the Site Taken in 1971

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 23/07/2020

Version: 1.0

Drawn: Sam Hendrikse

Checked: Jarrod Hall

Approved: Aaron Graham

**4SIGHT**  
CONSULTING

Approximate Site Boundary

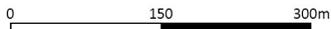


Aerial imagery sourced from <https://retrolens.nz> and licensed by LINZ CC-BY 3.0

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Scale 1:7,500 @ A4



AA6977 – Northern Precinct PSI

Aerial Photograph of the Site Taken in 1990

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 23/07/2020

Version: 1.0

Drawn: Sam Hendrikse

Checked: Jarrod Hall

Approved: Aaron Graham

**4SIGHT**  
CONSULTING

Approximate Site Boundary



Satellite Imagery sourced from Google Earth Pro. Map data © 2020 Google.

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Scale 1:7,500 @ A4



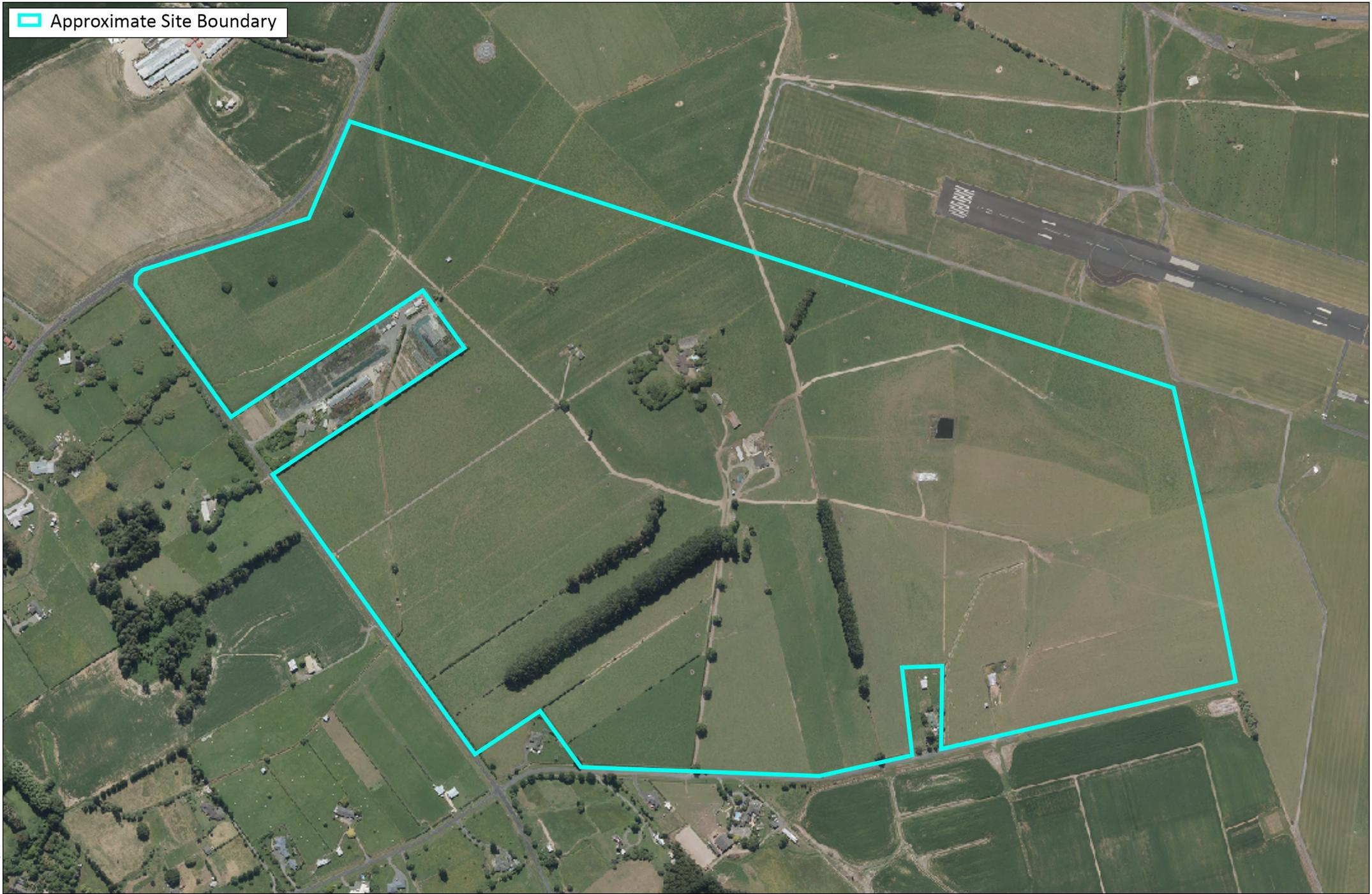
AA6977 – Northern Precinct PSI  
Aerial Photograph of the Site Taken in 2015

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 23/07/2020  
Version: 1.0  
Drawn: Sam Hendrikse  
Checked: Jarrod Hall  
Approved: Aaron Graham



Approximate Site Boundary



Aerial imagery sourced from Waipia District Council GIS viewer.

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AA6977 – Northern Precinct PSI

Aerial Photograph of the Site Taken in 2017

Figure prepared for Titanium Park Limited by 4Sight Consulting.

Date: 23/07/2020

Version: 1.0

Drawn: Sam Hendrikse

Checked: Jarrod Hall

Approved: Aaron Graham

**4SIGHT**  
CONSULTING

**Appendix F:**

**Site Photos**



Photo 1: Wooden shed (feature 1)



Photo 2: Cottage (feature 2), with paint in deteriorated condition



Photo 3: Supply shed



Photo 4: Dwelling (feature 3)



Photo 5: Farm dump/burial pit location and strained grass growth northeast of dwelling



Photo 6: Buried concrete and tyres northeast of dwelling



Photo 7: Pile of Greenwaste (feature 4)



Photo 8: Materials in pile



Photo 9: Garage (feature 5)



Photo 10: Fence post storage west of garage



Photo 11: Rubbish pile south of fence posts



Photo 12: Milking shed (feature 6)



Photo 13: Haybale storage shed north of milking shed



Photo 14: Concrete silage storage, milking shed in the distance on the right



Photo 15: Fertiliser dispenser



Photo 16: Metal pump shed to the south of the milking shed



Photo 17: Metal water conditioning shed

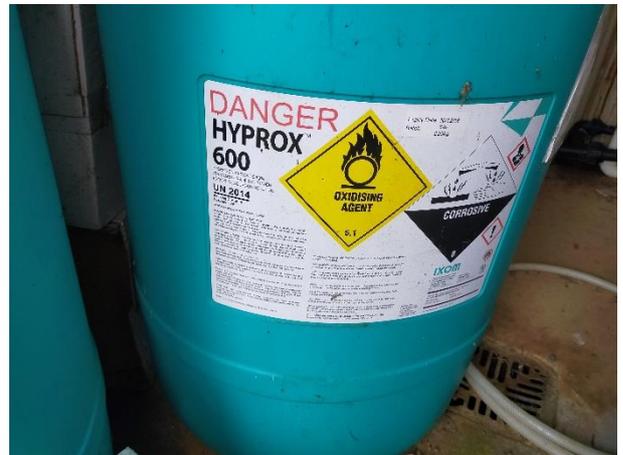


Photo 18: Hydrogen peroxide barrel on concrete ground in southern most green shed, behind milking shed



Photo 19: Water pump area and overflow bath



Photo 20: Metal shed (feature 7) containing harvester (western section)



Photo 21: Metal shed containing haybales (eastern section)



Photo 22: Water trough storage



Photo 23: Workshop (feature 8) with paint in deteriorated condition



Photo 24: Interior of workshop



Photo 25: Silage storage pit (feature 9) showing tyre storage



Photo 26: Effluent pond (feature 10)



Photo 27: Farm dump/burial pit location in the south of the Site (feature 11)



Photo 28: Plastic in the farm dump/burial pit



Photo 29: Buried tyre



Photo 30: Concrete shed (feature 11)



Photo 31: Interior of concrete shed

