



**TE TUPU NGĀTAHI**  
SUPPORTING GROWTH

# Pukekohe Transport Network Assessment of Effects on Historic Heritage

September 2023

## Document Status

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## Glossary of Defined Terms and Acronyms

Acronym/Term	Description
AC	Auckland Council
AEE	Assessment of Effects on the Environment report
AT	Auckland Transport
AUP:OP	Auckland Unitary Plan: Operative in Part
CHI	Cultural Heritage Inventory
FUZ	Future Urban Zone
HHMP	Historic Heritage Management Plan
HNZPT / Heritage NZ	Heritage New Zealand Pouhere Taonga
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
KiwiRail	KiwiRail Holdings Limited
NIMT	North Island Main Trunk railway track
NoR	Notice of Requirement
RMA	Resource Management Act 1991
SRS	Site Recording Scheme
Te Tupu Ngātahi	Te Tupu Ngātahi Supporting Growth Alliance
WDC	Waikato District Council
WDP	Waikato District Plan
Waka Kotahi	Waka Kotahi New Zealand Transport Agency

## Executive Summary

- There is only one recorded heritage site within the proposed designation boundary of NoR 8, R12/1208, the Bombay Flour Mill (or Pilgrim’s Mill). The mill building is probably outside the designation, but features associated with it probably extend into the designation.
- All other previously recorded heritage places in the project area are not located in proximity to the proposed designations or have been avoided through options assessment process. The two most significant sites avoided are: Pukekohe East Church, R12/741, and Te Māunu a Tūmatauenga pā, R12/1170.
- A drive by assessment noted three potentially pre-1900 villas within or very close to the designations.
- Soils are fertile and attractive for settlement by both Māori, who have occupied the area for many centuries, and Europeans, who settled the area from the 1840s. It is therefore probable that unrecorded heritage will be encountered during construction.
- It is appropriate to obtain an archaeological authority from HNZPT to construct the roads.

# 1 Introduction

## 1.1 Purpose and Scope of this Report

This archaeology and heritage assessment forms part of the suite of technical reports prepared to support the Assessment of Effects on the Environment (AEE) for nine Notices of Requirement (NoRs) being sought by Waka Kotahi NZ Transport Agency (Waka Kotahi) and Auckland Transport (AT) for the Pukekohe Transport Network under the Resource Management Act 1991 (RMA).

This report considers the actual and potential effects associated with the construction, operation and maintenance of the Pukekohe Transport Network on the existing and likely future environment as it relates to archaeology and heritage effects and recommends measures that may be implemented to avoid, remedy and/or mitigate these effects.

The key matters addressed in this report are as follows:

- Identify and describe the context of the Pukekohe Transport Network area;
- Identify and describe the actual and potential archaeology and heritage effects of each Project corridor;
- Recommend measures as appropriate to avoid, remedy or mitigate actual and potential archaeology and heritage effects (including any conditions/management plan required) for each Project corridor; and
- Present an overall conclusion of the level of actual and potential archaeology and heritage effects for each Project corridor after recommended measures are implemented.

## 1.2 Report Structure

The report is structured as follows:

- Project overview with a summary of the Pukekohe Transport Network Projects in section 2.
- Overview of the methodology used to undertake the assessment and identification of the assessment criteria and any relevant standards or guidelines in section 3;
- Identification and description of the existing and likely future archaeology and heritage environment in section 4;
- Description of the actual and potential adverse archaeology and heritage effects of construction of the Project, including recommended measures to avoid or mitigate potential adverse effects, in section 5;
- Description of the actual and potential adverse archaeology and heritage effects of operation of the Project, including recommended measures to avoid or mitigate potential operation adverse effects in section 6; and
- Overall conclusion of the level of potential adverse archaeology and heritage effects of the Project after recommended measures are implemented in section 7.

This report should be read alongside the AEE, which contains further details on the history and context of the Projects. The AEE also contains a detailed description of works to be authorised for the Pukekohe Transport Network Projects as a whole and each NoR, and likely staging and the typical construction methodologies that will be used to implement this work. These have been reviewed by the author of this report and have been considered as part of this assessment of archaeology and

heritage effects. As such, they are not repeated here, unless a description of an activity is necessary to understand the potential effects, then it has been included in this report for clarity.



## 2 Pukekohe Transport Network Overview

The Pukekohe Transport Network comprises nine NoRs through Pukekohe, Paerata and Drury. A concept design has been undertaken for the NoRs. The design will be further refined through future phases of the Project and will be undertaken within the scope of the designation conditions and future resource consent conditions. The detailed design of the Project will be undertaken prior to construction and reflected in the Outline Plan(s) which will be submitted to Council as set out in s176A of the RMA.

The Pukekohe Transport Network encompasses eight transport projects for the Pukekohe, Paerata and Drury West areas. AT has lodged six NoRs with Auckland Council and Waka Kotahi has lodged two NoRs with Auckland Council and one with Waikato District Council. The Pukekohe Transport Network includes provision for improved walking and cycling, public transport, and general traffic connections.

For the purposes of this assessment, Mill Road and Pukekohe East Road Upgrade (that includes works within Auckland Council and Waikato District Council) is referred to as one transport project, despite being submitted as two separate NoRs. The matters relevant to each jurisdictional area are addressed through this assessment.

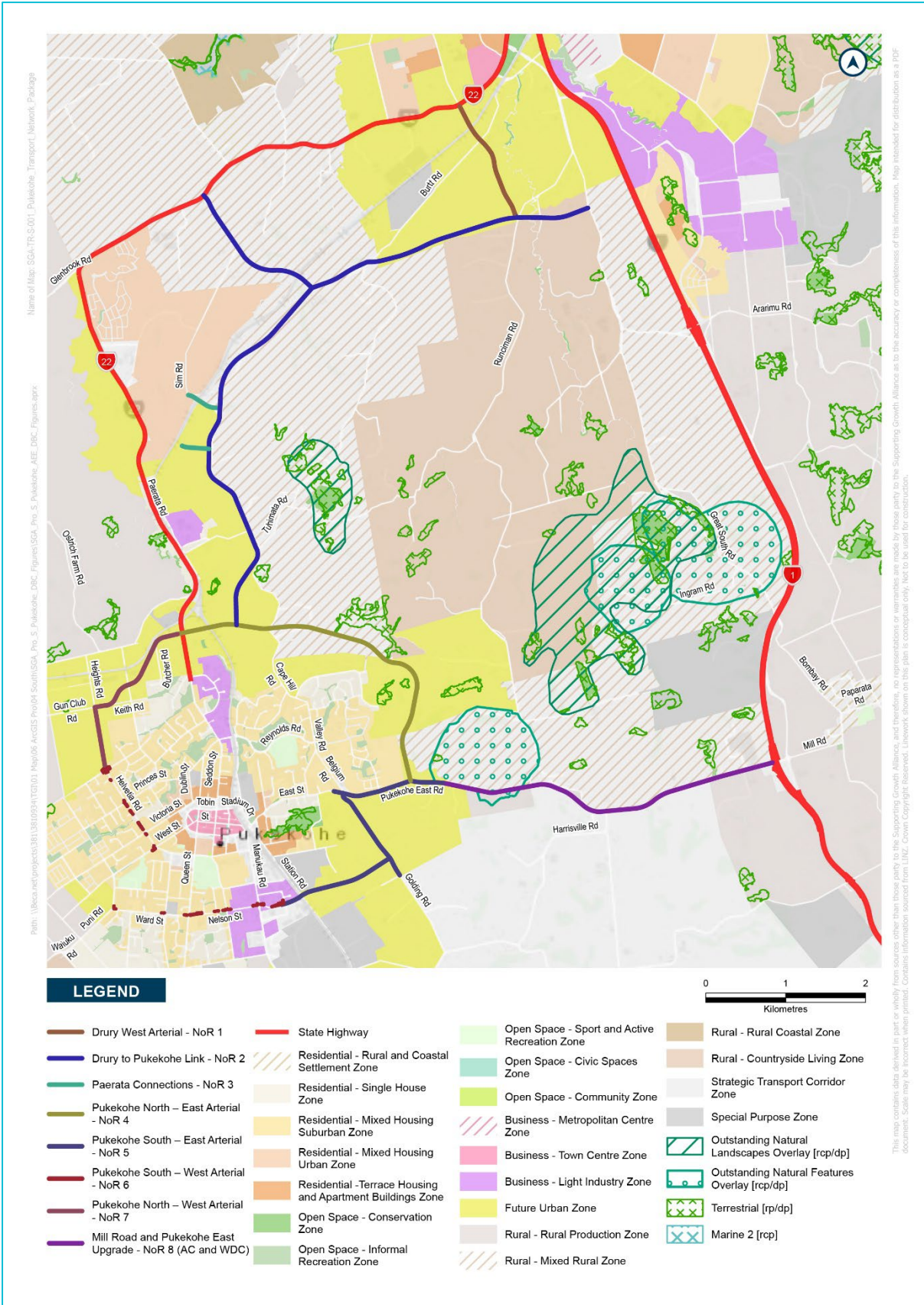


Figure 2-1: Pukekohe Transport Network

**Table 2-1: Pukekohe Package Project Summary**

NoR	Project	Requiring Authority	Description
1	<b>Drury West Arterial</b>	AT	<ul style="list-style-type: none"> <li>NoR 1 is a 1.6km new transport corridor extending south from the intersection of SH22 and Jesmond Road to the proposed Drury to Pukekohe Link (NoR 2).</li> <li>It connects Drury West Town Centre, Drury West Rail Station and provides access to the strategic transport network including SH1 and SH22. It connects with Burt Road and to Runciman Road in the south.</li> <li>This new transport corridor improves local connectivity in Drury West and the wider area to centres, employment and rail stations.</li> <li>Between SH22 and Burt Road, the proposed cross section is a four-lane arterial 30m wide. This includes two lanes for PT and walking and cycling facilities on both sides of the corridor.</li> <li>South of Burt Road a two-lane arterial with a 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on both sides of the corridor.</li> <li>Three new bridges are proposed over existing NIMT rail line, and two tributaries of the Ngakoroa Stream.</li> <li>Three new stormwater wetlands are proposed and new culverts and swales.</li> </ul>
2	<b>Drury-Pukekohe Link</b>	Waka Kotahi	<ul style="list-style-type: none"> <li>NoR 2 provides a north south strategic corridor with two general traffic lanes proposed and active transport facilities on one side of the corridor. The total length of the NoR is 10.6km.</li> <li>NoR 2 is split into the following four segments.</li> </ul>
	South Drury Connection segment		<ul style="list-style-type: none"> <li>South Drury Connection segment provides a new connection extending from Great South Road in the east at the proposed SH1 Drury South Interchange (a proposed Waka Kotahi SH1 project). The alignment is along the edge of the FUZ to Burt Road in the west.</li> <li>It provides a strategic connection improving local access in Drury West, provides resilience in the transport network supporting SH22 and SH1, provides direct connectivity to the proposed Drury South Interchange and supports the proposed strategic active modes corridor.</li> <li>A 24m wide cross section is proposed with two lanes for general traffic, with active transport facilities on one side of the corridor.</li> <li>Three new bridges are proposed over tributaries of the Ngakoroa Stream.</li> <li>Three stormwater wetlands are proposed and new culverts and swales.</li> </ul>

NoR	Project	Requiring Authority	Description
	SH22 Connection segment		<ul style="list-style-type: none"> <li>Connecting with the South Drury Connection and Drury-Paerata Link segments, this connection provides a strategic connection between State Highway 1 and State Highway 22.</li> <li>It improves access between Drury West and Paerata, provides resilience in the transport network supporting SH22 and SH1, provides direct connectivity to the proposed Drury South Interchange and supports the proposed strategic active modes corridor.</li> <li>It includes new transport corridor and a partial upgrade of Sim Road (north).</li> <li>A 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on one side of the corridor.</li> <li>Two new bridges are proposed over the Oria Creek and NIMT.</li> <li>Two stormwater wetlands are proposed and new culverts and swales.</li> </ul>
	Drury-Paerata Link segment		<ul style="list-style-type: none"> <li>Drury-Paerata Link segment is a new corridor connecting the segments of South Drury Connection, SH22 Connection and Paerata Arterial. This segment extends from an intersection with Burt Road in the north, to the Paerata Arterial segment in the south.</li> <li>It provides connectivity between Drury and Paerata providing a strategic connection between two areas of future urban development.</li> <li>A 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on one side of the corridor.</li> <li>Two bridges are proposed over tributaries of the Oira Creek.</li> <li>Three stormwater wetlands are proposed and new culverts and swales.</li> </ul>
	Paerata Arterial segment		<ul style="list-style-type: none"> <li>Paerata Arterial segment is located along the eastern edge of Paerata FUZ. It connects with Paerata Connections NoR 3 at the northern extent and to the proposed Pukekohe North East Arterial NoR 4 at its southern extent.</li> <li>It includes an upgrade of part of Sim Road (south), Tuhimata Road and a new section of transport corridor.</li> <li>It increases connectivity to Paerata FUZ, Paerata Rail Station and Pukekohe Town Centre.</li> <li>A 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on one or both sides of the corridor. No bridges are proposed.</li> <li>Six stormwater wetlands are proposed wetlands (one shared with NoR 4 and one shared with NoR 3) and new culverts.</li> </ul>

NoR	Project	Requiring Authority	Description
3	<b>Paerata Connections</b>	AT	<ul style="list-style-type: none"> <li>The Paerata Connections provide two connections from the existing Sim Road (south) proposed to be upgraded by NoR 2 to the Paerata Rail Station and Paerata Rise development.</li> <li>The connections provide the primary east-west connections for all modes in Paerata.</li> <li>NoR 3 has includes two segments: <ul style="list-style-type: none"> <li><b>Sim to Sim Connection segment</b> provides a new connection of approximately 400m between the two extents of Sim Road over the railway (NIMT).</li> <li><b>Paerata Rail Station Connection segment</b> provides a new transport corridor approximately 330m in length between the Paerata Rail Station (KiwiRail designation 6311 currently under construction) and NoR 2.</li> </ul> </li> <li>A 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on both sides of the corridor.</li> <li>One bridge is proposed over the NIMT to connect the two extents of Sim Road for the Sim to Sim Connection segment.</li> <li>One new stormwater wetland is proposed that is shared with NoR 2 and a new culvert.</li> </ul>
4	<b>Pukekohe North-East Arterial</b>	AT	<ul style="list-style-type: none"> <li>The Pukekohe North-East Arterial is an approximately 4km new transport corridor from SH22 in the northwest connecting to Pukekohe East Road in the south-east.</li> <li>It connects the strategic corridors at SH22 (at the northern extent of the Pukekohe North-West Arterial NoR 7), the Drury to Pukekohe Link NoR 2 and Pukekohe East Road proposed to be upgraded by NoR 5 and NoR 8.</li> <li>Its primary function is for general traffic, freight, an active mode links between future neighbourhoods and alleviating traffic on existing roads at Cape Hill Road and Valley Road.</li> <li>A 24m wide cross section is proposed with 2 lanes for general traffic and active transport facilities proposed on both or one side of the corridor.</li> <li>Seven bridges are proposed over the Whangapouri Creek, the NIMT, and other unnamed streams and tributaries.</li> <li>Six new stormwater wetlands are proposed and new culverts.</li> </ul>
5	<b>Pukekohe South-East Arterial</b>	AT	<ul style="list-style-type: none"> <li>The Pukekohe South-East Arterial upgrades part of Pukekohe East Road, Golding Road and provides a new connection between Golding Road (from north of Royal Doulton Drive) and across Station Road and the NIMT to the existing industrial development on Crosbie Road to Svendsen Road.</li> <li>It is a primary east-west connection to assist in redirecting general traffic and freight away from the Pukekohe town centre to provide additional resilience to the wider network.</li> </ul>

NoR	Project	Requiring Authority	Description
			<ul style="list-style-type: none"> <li>• A 24m wide cross section is proposed with two lanes for general traffic with active transport facilities on the southern side of the corridor on Pukekohe East Road and on both sides for the remainder of the corridor.</li> <li>• One bridge is proposed crossing Station Road and the NIMT.</li> <li>• Five new stormwater wetlands are proposed and new and upgraded culverts.</li> </ul>
6	<b>Pukekohe South-West Upgrade</b>	AT	<ul style="list-style-type: none"> <li>• Pukekohe South-West Upgrade involves the re-allocation of road space within the existing road corridor for a bi-directional cycle way and footpath upgrade. The proposed designation is limited to specific intersections and driveways to safely accommodate active mode facilities. The existing road reserve is to be utilised where possible retaining a 20m wide cross section with 2 lane general traffic, walking on both sides and a bi-directional cycleway on one side of the corridor.</li> <li>• No bridges or stormwater wetlands are proposed.</li> </ul>
7	<b>Pukekohe North-West Arterial</b>	AT	<ul style="list-style-type: none"> <li>• Pukekohe North-West Arterial provides a connection between Helvetia Road in the southwest and SH22 in the northeast. It upgrades part of Helvetia Road, utilises part of Keith Road (a paper road), and forms a new connection between Beatty Road and Butcher Road to SH22 – connecting to the Pukekohe North-East Arterial NoR 4.</li> <li>• It provides an alternative connection for all modes travelling north to south in west Pukekohe assisting in redirection of general traffic away from the town centre and provides additional resilience to the wider network. A 24m wide cross section is proposed with two lanes for general traffic and active transport facilities on both sides of the corridor.</li> <li>• No bridges are proposed.</li> <li>• Two new stormwater wetlands are proposed and new and upgraded culverts.</li> </ul>
8 (AC) And 8 (WD)	<b>Mill Road and Pukekohe East Road Upgrade</b>	Waka Kotahi	<ul style="list-style-type: none"> <li>• NoR 8 upgrades Mill Road (Bombay) in the east and Pukekohe East Road in the west.</li> <li>• It provides an important strategic connection between Auckland and Waikato and from SH1 to Pukekohe urban areas for traffic and freight, with a major rural active mode connection. Harrisville Road plays a significant role in distributing traffic from further south into Waikato.</li> <li>• Mill Road is proposed to be upgraded to four lanes (2.1 kms) from SH1 in the east to Harrisville Road in the west. It has a 30m wide cross section with four lanes for general traffic, with walking and cycling on the southern side.</li> <li>• Pukekohe East Road is proposed to be upgraded (3.4 kms) for active transport facilities on the southern side from Harrisville Road in the east to NoR 5 in the west.</li> <li>• One new stormwater wetland is proposed, swales and new and upgraded culverts.</li> </ul>



## 3 Assessment Methodology

### 3.1 Introduction

Assessment of archaeology and heritage during initial phases of the project was limited to sites recorded in the Auckland Council Cultural Heritage Inventory (CHI). The CHI is a non-statutory list but includes archaeological sites recorded in the New Zealand Archaeological Association Site Recording Scheme (SRS) and Historic Heritage Places scheduled in the Auckland Unitary Plan: Operative in Part (AUP:OP).

### 3.2 Statutory requirements

#### 3.2.1 Heritage New Zealand Pouhere Taonga Act 2014

All archaeological sites, whether recorded or not, are protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) and may not be destroyed, damaged or modified without an authority issued by HNZPT.

An archaeological site is defined in the HNZPTA as:

1. any place in New Zealand, including any building or structure (or part of a building or structure), that—
  1. was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
  2. provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
2. includes a site for which a declaration is made under section 43(1).

All HNZPT authorities will be applied for in the future, closer to the time of detailed design and construction and before any ground disturbance.

#### 3.2.2 Resource Management Act 1991

The RMA requires District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the wellbeing of today's communities, while safeguarding the options of future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (Section 6(f)).

Historic heritage is defined in section 2 of the RMA as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas;
- archaeological sites;
- sites of significance to Māori, including wāhi tapu; and
- surroundings associated with the natural and physical resources.

These categories are not mutually exclusive, and some archaeological sites may include above ground structures or may also be places that are of significance to Māori.

Where resource consent is required for any activity the assessment of effects is required to address cultural and historic heritage matters.

### 3.2.3 Notice of Requirement

Assessment has been undertaken to support the NoR process for the Pukekohe Transport Network. Section 171 of the RMA sets out the matters that must be considered in making a recommendation on an NoR. This includes consideration of the actual or potential effects on the environment of allowing the requirement, with particular regard to:

- Any relevant provisions of a national policy statement, the New Zealand Coastal Policy Statement, and the AUP:OP (in terms of the regional policy statement and regional/district plan provisions);
- Whether adequate consideration has been given to alternative sites, routes or methods of undertaking the work;
- Whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- Any other matter the territorial authority considers reasonably necessary.

Sections 175 and 176 of the RMA set out the legal effect of a designation, which, once confirmed, must be included in a district plan as if it is a rule, and removes the requirement for a district resource consent in terms of Section 9(3) of the RMA.<sup>[1]</sup> Essentially a designation is therefore a land use or district planning mechanism. Where a requiring authority submits a notice of requirement to designate land, an assessment of effects is required to address historic heritage as this is a district plan matter.

### 3.2.4 Auckland Unitary Plan

The AUP:OP contains a number of applicable provisions regarding historic heritage. In the AUP:OP archaeological sites are defined in accordance with the definitions outlined in the HNZPTA.

A scheduled historic heritage place can be an individual feature, or encompass multiple features and/or properties, and may include public land, land covered by water and any body of water. A historic heritage place may include cultural landscapes, buildings, structures, monuments, gardens and plantings, archaeological sites and features, traditional sites, sacred places, townscapes, streetscapes and settlements.

No scheduled sites are located within the proposed designations.

Additionally, there are heritage provisions in the following chapters of the AUP:OP will be addressed further as part of the AEE: E26 Infrastructure, F2 Coastal and E11/E12 land disturbance.

### 3.2.5 Waikato District Plan

The Waikato District Plan (WDP) provides guidance on the relevant standards to consider for parts of NoR 8 that are within the Waikato District jurisdiction.

The WDP (Franklin Section) (Operative) contains a number of applicable provisions regarding historic heritage which are considered in the following parts of the plan:



- Part 8: Cultural Heritage; and
- Part 15: Activities throughout the district: Earthworks can give rise to adverse effects on historic heritage (including, but not limited to, archaeological sites and sites of significance to Māori).

Part 2 – 16 Historic Heritage (HH) and Part 2 – 29 Earthworks (EW) chapter of the WDP (Proposed) contain a number of applicable provisions regarding historic heritage which are addressed as part of the AEE.

There are no cultural heritage items and no scheduled heritage items (SCHED1 – Historic heritage items) listed in the WDP within or adjacent to the NoR 8 Mill Road and Pukekohe East Road Upgrade proposed designation boundaries.

### 3.3 Preparation for this report

Work undertaken for this report commenced in May 2022. In summary, the preparation for this work has included:

- Input to the options assessment process used to inform the preferred transport corridor alignment;
- Reviews of and the project concept designs and Te Tupu Ngātahi GIS viewer and attendance at design review workshops;
- A review of the statutory setting of the Project and surrounding context;
- A review of background reports and other material as set out in Section 4.1;
- A review of the GIS data such as recorded archaeological and historic heritage sites, aerial photography and soils data;
- A preliminary site visit on 26 January 2023 with the Project Team;
- A specialists' workshop held on 22 March 2023 to discuss initial findings following the first site visit; and
- A more detailed site visit undertaken on 27 April 2023 and 18 May 2023 to further understand the receiving environment.

Alongside the preparation of this assessment, the author has reviewed the following documents:

- Construction Method Statement; and
- Revisions of concept design drawings.

This assessment relates to actual or potential effects on archaeology and historic heritage. Where other matters or expertise have been relied upon, these have been stated within the assessment.

## 3.4 Assessment Approach

### 3.4.1 Desktop Assessment

The following resources have been considered:

- All recorded New Zealand Archaeological Association SRS, Auckland Council's CHI, the Auckland Council Schedule of Historic Heritage Places, and the HNZPT New Zealand Heritage List / Rārangī Kōrero;
- Statutory information from the AUP:OP overlays;

- Historic maps and plans held by Land Information New Zealand, Auckland Libraries, the National Library and other online resources;
- The HNZPT digital library for records of archaeological assessments and investigations in the area;
- Retrolens.nz and for historic aerial photography;
- Land Information New Zealand (LINZ), the National Library of New Zealand's DigitalNZ website and Auckland Libraries Kura website for old drawings, photographs, maps and plans;
- Written texts on the history of the area; and
- Pukekohe Transport Network drawings and a GIS viewer with the indicative design and proposed designation boundary.

### 3.4.2 Field assessment

Field assessment has been undertaken both during project site visits and assessing specific properties. In places, the ground was probed with a 1.1 m gum spear. Where possible, the route was driven and potential pre-1900 sites inspected from the roadside, but private properties were not accessed.

No unrecorded pre-1900 sites were observed during the assessment, although three buildings were assessed as possibly pre-1900 in proximity to NoR 8, and no new sites were added to the SRS.



## 4 Background

### 4.1 Desktop Research



Figure 4-1: Location of the Pukekohe Transport Network designations showing archaeological sites recorded in the wider area.

#### 4.1.1 Landscape

The Manukau Harbour is New Zealand's second largest harbour, formed by the development of a Quaternary dune barrier (Awhitu Peninsula) that enclosed a large bay between Port Waikato and the Waitakere Ranges (Kelly 2008: 3). Pukekohe / Drury is in the Manukau Lowlands, an area of relatively flat land along the southern edge of the harbour. Several waterways, notably the Ngākōroa / Ōtūwairoa Stream (Slippery Creek) and Hingaia Stream which flow out to the Pahurehure Inlet through the Drury Creek. The harbour and waterways would have been important sources of fish and shellfish for pre-European Māori.

The soils in the proposed designations are generally well drained and fertile and would have been ideal for pre-European Māori horticulture. Unimproved pre-European soils would have been cropped for perhaps one or two years followed by medium to long fallow periods. The following descriptions are taken from DSIR (1954); they apply to the suitability of improved soils for European horticulture and agriculture:

- 2 Karanga silt loams and clay loams, which are recent, very fertile alluvial soils, though not well drained, along watercourses.
- 82 Patumahoe clay loams, immature brown granular loams derived from volcanic ash, of medium fertility.
- 82bh Kapu clay loams, which are less fertile and found on steeper slopes.
- 83 Hamilton clay loams, semi-mature brown granular loams derived from volcanic ash, of medium fertility.
- 107d Ardmore peaty loam, of medium fertility. These areas were fen wetlands prior to modern drainage.

Despite these good quality soils, pre-European Māori horticultural sites are not recorded in or near the designations, although it seems certain that the area would have been gardened. While garden soils will have been ploughed out by intensive 19th and 20th century European farming, associated site types such as kāinga and kumara storage pits will be present beneath the surface, particularly above stream banks and on higher ground.

While some wetlands were present along these waterways and near modern Pukekohe (<https://whenuaviz.landcareresearch.co.nz/>) most of the area was well drained and would have been suitable for pre-European Māori horticulture and occupation. Wetlands would have provided resources such as fish, birds and flax.

While the archaeological and heritage landscape around Pukekohe is poorly documented and researched, there is considerable potential for further field research and documentary research to expand our understanding of pre-European Māori and 19th / early 20th century settler use of the landscape. Important aspects of the landscape are its linkages to the Manukau Harbour, Tasman Sea, Manukau Lowlands and Hunua Ranges.

Note that 'landscape' here refers to the ways in which people and their environment interact and how this interaction changes through time. This is different from the visual landscape assessed in the Landscape and Visual Effects Report prepared for the Pukekohe Transport Network by Isthmus Group.

No historic trees are listed in the CHI in the designations. I have accessed the Arboriculture Report prepared for the Pukekohe Transport Network by CWCA, which sets out the trees protected in the AUP:OP. The general mitigation measures set out in that report, in particular the development of a Tree Management Plan, are appropriate to mitigate effects on the heritage values of any trees that will be affected by future works.



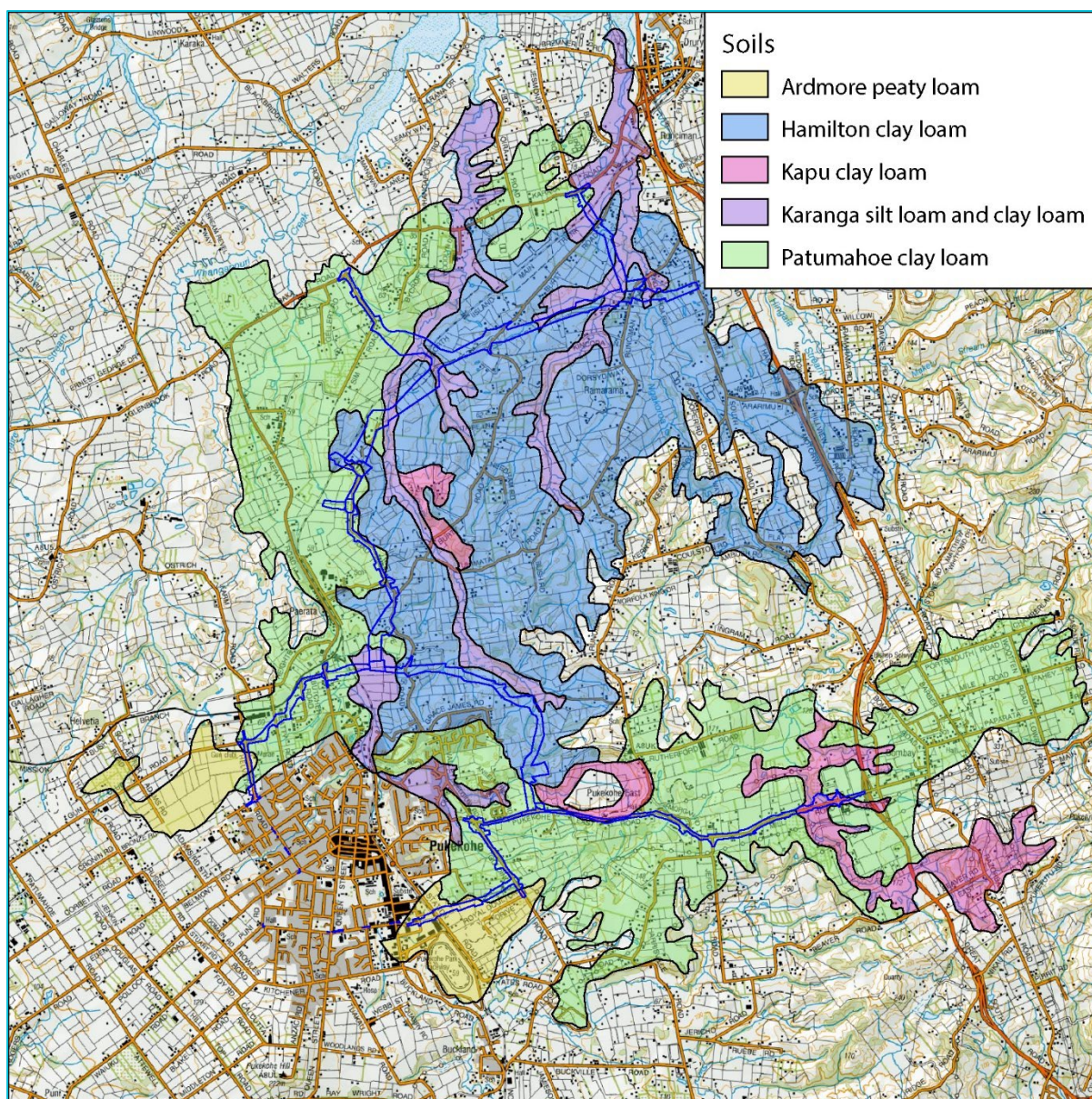


Figure 4-2: Soils recorded in the proposed designations.

#### 4.1.2 Pre-European Māori occupation

The Drury / Pukekohe area was a significant pre-European link between the Tāmaki Isthmus, the Waikato and the Hauraki Gulf. The Hingaia Stream is recognised as a wāhi tapu (Te Roopu Kaitiaki o Papakura 2010: 16). A significant pā at Maketu overlooked the Ararimu Track, the inland route to the Waikato (Clarke 1983) and the Hauraki Gulf was accessed via an overland route through to present day Clevedon (Tatton 2007).

Murdoch (1990) records that at the time of European arrival to the wider area, all those who lived in the wider area traced their whakapapa to the *Tainui* waka. He also notes that these people all associated with Te Waiohau, a confederation of several hapū and iwi in the region.

Te Māunu a Tūmatauenga pā (R12/1170) was built by Ngā Oho, Te Uri o Pou and Ngā Iwi, and commanding numerous waterways and access routes. It was a heavily fortified site with sheer cliffs

on three sides and surrounded by wetlands. The site was heavily modified in the 20th century, including installation of an airstrip. The only visible surface feature is a storage pit on an isolated spur.

Raids by musket armed Ngāpuhi from 1821–1826 devastated the area with most hapū moving south to shelter with their relatives in the Waikato. By 1835 Waikato had also obtained muskets and Te Wherowhero of Ngāti Mahuta escorted the Manukau hapū back to their lands where they remained under his protection (Morris 1965; Ballara 2003).

Drury / Pukekohe has long been regarded by Manawhenua as holding a strategic position in Tāmaki Makaurau (Te Roopu o Kaitiaki o Papakura 2010). The waterways enabled people to visit, battle and trade, and often enabled them to access areas inland faster than by foot. Several complex inter-tribal relationships developed around the harbour shoreline. The area is under-recorded in the SRS and it is possible many of the heritage sites associated with pre-European Māori land use have been damaged since the 1850s.

### 4.1.3 Cultural values

This report makes no assessment of Manawhenua cultural values, which only they can provide. Ngāti Te Ata Waiohua have prepared a Cultural Impact Assessment for the Pukekohe Transport Network, which I have accessed. This identifies terrestrial and freshwater ecosystems as essential sources of identity, mana and livelihood and explicitly links the hapū to Pukekohe through whakapapa. It makes no reference to specific places or archaeological or heritage sites within the designations that are not assessed in this report.

### 4.1.4 19th and early 20th century European occupation

The earliest Europeans to interact with the hapū of the Manukau lowlands were traders such as Captain Kent, John Cowell and Charles Marshall who set up at the Waikato Heads in 1830. Of equal importance were missionaries like Robert Maunsell and James Hamlin who set up a mission station at Moeatoa on the Waiuku River opposite the current Glenbrook steel mill (Morris 1965; Harris 2011). After the mission closed in 1839 Hamlin remained in the area and traveled widely across the Manukau lowlands (Morris 1965: 31).

Early European settlement was centered at Waiuku to take advantage of the Te Pai o Kaiwaka portage which used the Awaroa Stream to reach the Waikato River and avoid the treacherous bar at the Manukau Harbour mouth and the Tasman Sea (Hooker 1997). This was a main transport route into the interior until the construction of the Great South Road in the 1860s (earlier there had been plans to turn the portage into a canal).

Alienation of Māori from their land in the wider area began in 1842 with the Crown purchase of the Pukekohe Block, which began to be sold to settlers from 1844. Early names in the area close to the designation include General Taylor, James Burt and JS and SH Hamilton (Morris 1965: 66). Following protests by Mohi Te Ngu and Ihaka Takaanini of Te Ākitai, among others, some lands were returned but land sales and government grants continued to encroach on Māori land holdings.

Māori retained some good blocks of land and established agricultural settlements at Tuakau, Pokeno and Pautumahoe among others, that supplied produce to the growing town of Auckland, but continued alienation from the land led to the establishment of the Kingitanga, who opposed further land sales and proposed that Māori have their own king. In 1858 Te Wherowhero was crowned the first king, taking the name Pōtatau. He died in 1860 and was succeeded by his son Matutaera, who took the name Tāwhiao. Many Pākehā saw the Kingitanga as a threat to British sovereignty, while



many settlers were eager to acquire more lands. In 1861 the Crown began the construction of the Great South Road and on 12 July 1863 began the invasion of the Waikato. Māori either had to swear allegiance to the Queen or remove themselves south of the Mangatawhiri. Most did, but skirmishes continued on the Manukau lowlands. Burt's Farm was attacked on 14 September, which was essentially a Kīngitanga victory, while on the same day the Kīngitanga attacked the stockaded Pukekohe East Presbyterian Church where they were, eventually repelled (Morris 1965; O'Malley 2016).

Drury was one of the main staging posts for the war, with the construction of a stockade and a commissariat redoubt, but the Great South Road bypassed Pukekohe on its way to Pokeno. One effect of the road was to open up a more reliable transport route to the interior and the Te Pai o Kaiwaka portage was now no longer feasible. Another effect of the war was that all Māori lands on the Manukau lowlands were confiscated, and the Crown proposed granting these to veterans of the wars as well as encouraging immigration from Britain to take up the confiscated blocks. In the Franklin district from 1864 was soon settled by British and South African migrants, where they were granted 5- and 10-acre allotments along with a ¼ acre town grant in Pukekohe. The war had driven many pre-1863 settlers to the brink and the government, indebted by the costs of war, lacked the means to fully compensate them. The new settlers found it hard to get work or find the means to work their allotments, and by 1865 the country was in a deep economic depression and the settlers were struggling with many moving to Auckland or, from 1867, to the Thames goldfields. Flax mills were established in the 1860s and the influx of gold money rescued Auckland's finances. Pukekohe grew over the next decade, schools, churches and banks were built, coal began to be mined at Drury and the population began to grow. In 1875 the Drury–Mercer rail line opened, allowing Franklin to reliably send fresh farm produce to the Auckland market. Pukekohe thrived, though Waiuku, dependant on the portage, did not. In 1905 Pukekohe became a Town Board District and in 1912 Franklin County was established, with Pukekohe as its administrative centre. From the 20th century, market gardening began to become established, with the Pukekohe longkeeper onion developed in 1933 and still a staple (Morris 1965).

#### 4.1.5 Aerial photographs

The earliest run of aerial photos dates to 1942. Photos covering the proposed designations were georeferenced, generally to ± 10 m accuracy, and any houses or substantial farm buildings in or very close to the proposed designations were noted. While 1942 buildings are not protected by the HNZPTA, some of these may be pre-1900 buildings, and there is potential for other, now demolished pre-1900 buildings to have been present in the proposed designations. Buildings visible in the 1942 aerials were inspected from the road, where possible, and assessed as being modern, early 20th century or possibly pre-1900 (see Section 4.2).

#### 4.1.6 Archaeological investigations

Very few archaeological investigations have been reported in the Drury / Pukekohe area, although recent urban development in Karaka has required numerous archaeological assessments and many of these developments are being, or will be, undertaken under the HNZPT authority, but are yet to be reported.

Those archaeological assessments which have been reported include:

- 2.6 km north of NoR 1, in Drury, Simon Bickler (Bickler et al 2013) investigated the Watercare pump station construction at 103 Flannagan Road. Site R12/742, the Drury railyards, are located

here and, while the ruins of some structures remain visible above ground, no archaeological features were disturbed during construction.

- 2.5 km south of NoR 8, at Ridge Road, Bombay, Brent Druskovich (2103) undertook a limited exploratory investigation of the site of an old house, R12/930, to determine if it was pre- or post-19th century prior to the expansion of the Holcim quarry. The artefacts found and details of land ownership indicated that this was the dwelling of James Fitness from as early as 1864. There is no record of a full investigation of the site.
- Hayley Glover of CFG Heritage undertook an assessment of the Papakura to Pukekohe line for KiwiRail's electrification projects. The rail line itself dates to the 1870s but has been constantly maintained and upgraded since then and is not considered an archaeological site. This assessment did record 19th century railway stations and stone culverts as sites. The line intersects with NoRs 1, 2, 4, and 5 but none of the sites recorded by Glover will be affected by the proposed designations.
- Danielle Trilford of CFG Heritage undertook an assessment of the Drury Arterial Network in support of Notices of Requirement. The proposed Drury network articulates directly with the Pukekohe Transport Network. This was largely a desktop assessment that re-recorded known sites and recorded some new sites. While some pre-European Māori sites were recorded, the majority were associated with the 19th century European occupation of Drury township, including domestic, industrial and military sites.

While several archaeological sites are recorded in Drury, mostly associated with early coal mining and the use of the town as a British staging area in the 1863 Waikato invasion, very few are recorded in Pukekohe or the surrounding area. This is probably a result of lack of archaeological survey rather than absence of sites – the wider area would have been occupied by both pre-European Māori and 19th century European settlers.

Several sites are recorded close to the proposed designations but have been avoided during the Multi-Criteria Assessment (MCA) process (Section 4.1.7).

There is reasonable cause to suspect that previously unrecorded archaeological sites, such as pre-European kāinga or kūmara storage pits, or evidence of 19th century rural settlement, will be exposed within the designations during construction.

#### 4.1.7 Historic Heritage Sites

Two recorded heritage sites are within the proposed designation boundaries. The Bombay Flour Mill (or Pilgrim's Mill), recorded in the SRS as R12/1208, is in or adjacent to NoR 8. The mill building is probably outside the designation, but features associated with it probably extend into the designation (Section 5.2.3). The Nehru Hall is scheduled as a Category B Historic Heritage Place (# 2235) in the AUP:OP and NoR 6 at the corner of Ward Street and Puni Road extends into the scheduled extent of place, and immediately abuts the hall building. The CHI records that the hall was the first hall in New Zealand constructed by the Indian community. It opened in 1953 on 15 August (Indian Independence Day). Indian settlers, primarily market gardeners, had been present in Pukekohe since the late 19th century and increasingly after WW I. They faced institutional and social discrimination and the hall offered a safe space for the community. It was used for community and religious events, concerts, weddings and classes, including language schools. Although superseded by the larger Pukekohe Indian Association Centre next door in 1998, it remains in use. The hall was constructed of unreinforced brick veneer over wood and Pinex board (Auckland Council 2013; CHI record)



All other previously recorded heritage places in the project area are not located in proximity to the proposed designations or have been avoided through options assessment process. The two most significant sites avoided are:

- The Pukekohe East Church (recorded as R12/741 in the SRS; as item 11387 in the CHI; is scheduled as a Category B Historic Heritage Place (item 01502) in the AUP:OP; and is listed as a Category 2 Historic Place (item 483) in the HNZPT List / Rārangī Kōrero) is a highly significant archaeological and heritage place located on the northeast rim of the Pukekohe East explosion crater. The church was fortified as a stockade in 1863 and attacked by the Kīngitanga on 14 September. Between six and fourteen Māori are thought to have died and are buried in the church yard. The outline of the stockade is still clearly visible, as are musket ball holes in the exterior church walls.
- Te Māunu a Tūmatauenga pā (recorded as R12/1170 in the SRS; and as item 16762 in the CHI) built by Ngā Oho, Te Uri o Pou and Ngā Iwi, and commanding numerous waterways and access routes. It was a heavily fortified site with sheer cliffs on three sides and surrounded by wetlands. The site was heavily modified in the 20th century, including installation of an airstrip. The only visible surface feature is a storage pit on an isolated spur.

## 4.2 Field assessment

The Nehru Hall was assessed in June 2023. It was assessed from the roadside only and the building was not entered. NoR 6 is for an upgrade of walking and cycling facilities and, minor earthworks including batters, will encroach into the extent of place of the scheduled Historic Heritage Site (# 2235). The proposed designation also includes temporary use of land for construction works including laydown area. This will affect the brick gateway which is built from the same Huntly bricks as the hall and is assumed to also date to the time of its construction in 1953.



**Figure 4-3: Nehru Hall, showing the brick gateway that sits inside the NoR 6 designation.**

Based on the 1942 aerial photo assessment, where buildings that were visible in the photos were georeferenced into the project GIS, a drive-by inspection was made of all the buildings that could be seen from the road. Of these buildings, only 3 were possible pre-1900 structures, with obvious villa design elements: 1201 Paerata Road (NoR 4), 188 Mill Road (NoR 8 - AC) and 87 Pukekohe East Road (within NoR 4 and adjacent to NoR 5), although the latter was hard to see through vegetation. Others were classified as either early 20th century, where bungalow style elements were obvious, or modern, meaning post-World War II in style. These categories are not tightly defined, and it must be noted that villa design elements continued to be used well into the 20th century and a close inspection of building techniques, such as types of joinery or nails, and fittings, such as fire surround styles or window treatments, would be required to determine when they were built. Archival research into historic land ownership can also indicate when construction took place, and by who. It must also be noted that the author is not a heritage buildings expert, and this further research should be undertaken by a qualified specialist during future design and construction phases (see also Auckland Council 2013, 2018).

Where modern buildings were recorded, these generally replace the buildings that were visible in the 1942 aerial photos, but there is no way of knowing at present what these original buildings looked like or what time period they may relate to. In several instances the buildings were not observed, either because they were not visible from the road or appeared to have been replaced with packing sheds. It seems probable that the proposed designations will cover the footprints of more pre-1900 structures than those discussed here.

None of the buildings are included in the Auckland Council’s CHI or scheduled in the AUP:OP or the WDP.

**Table 4-1: Properties identified in 1942 aerial and assessed by drive-by assessment.**

Address	NoR	Outcome
584 Burt Road	1	Modern
1238 Great South Road	2	Not visible from road
301 Sim Road	2	Not accessible due to construction
375 Burt Road	2	Not visible from road
395 Sim Road	2	Modern
77 Sim Road	2	Modern
785 Runciman Road	2	Modern
325 Sim Road	3	Early 20th century
1201 Paerata Road	4	Possibly pre-1900, inside designation boundary
87 Pukekohe East Road	4	Possibly pre-1900, screened by tress, hard to see, inside designation boundary (see Auckland Council 2103)
98B Pukekohe East Road	4	Not visible from road
104 Golding Road	5	Modern
107 Golding Road	5	Early 20th century
50 Pukekohe East Road	5	Modern
8 Pukekohe East Road	5	Modern
84 Golding Road	5	Modern
107 Helvetia Road	7	Early 20th century
157 Beatty Road	7	Modern
17 Butcher Road	7	Modern
105 Mill Road	8 (AC)	Not visible from road
144 Mill Road	8 (AC)	Early 20th century
188 Mill Road	8 (AC)	Possibly pre-1900, outside (13 m south) of designation boundary
190 Pukekohe East Road	8 (AC)	Early 20th century
203 Mill Road	8 (AC)	Early 20th century
28 Mill Road	8 (WDC)	Early 20th century
80 Mill Road	8 (WDC)	Modern
87 Mill Road	8 (AC)	Modern





Figure 4-4: 1201 Paerata Road (NoR 4).



Figure 4-5: 188 Mill Road (outside of NoR 8 - AC).



## 5 Assessment of Construction Effects

### 5.1 Construction effects relating to all NoRs

There is one recorded archaeological or historic heritage sites in the footprint of the proposed designations: Nehru Hall, built in 1953, in NoR 6 and there is one pre-1900 archaeological site, Pilgrim's Mill (R12/1208) just south of the designation boundary of NoR 8, although features associated with the mill may extend into NoR 8. These are assessed separately in Section 5.2.

Although there are no recorded sites in the rest of the NoRs for the Pukekohe Transport Network, unrecorded archaeological and historic heritage sites may be present within the proposed designation boundaries, in particular near the banks of waterways such as the Ngākōroa and Oira Streams, and in locations of 19th century European settlement. Should previously unrecorded sites exist, they could be impacted by the disturbance or removal of subsurface features and deposits at the construction phase of the Project. Discovery or unrecorded sites also offers the opportunity to learn more about the history of the project area, where limited heritage sites have been recorded to date.

There are a number of buildings within or in proximity to the proposed designations that are shown on 1942 aerial imagery. Although only three were assessed as possibly pre-1900 it is reasonable to assume that there may be others that may be present or were previously present within the proposed designations. It is assumed that any of these that are extant within the designations will be removed for the construction of the transport corridors. There is potential that these could be pre-1900 and therefore protected under the HNZPTA. In addition, the HNZPTA protects the in-ground remains of pre-1900 buildings even if they have been demolished or replaced, such foundations, the foundations of out-buildings, utilities and rubbish pits. Early 20th century buildings may also have heritage values even if they are not protected as archaeological sites.

### 5.2 Construction effects – relating to specific NoRs

#### 5.2.1 NoR 4 – Pukekohe North-East Arterial

Two possible pre-1900 villas are located in the proposed designation boundary of NoR 4 at 1201 Paerata Road at 87 Pukekohe East Road. The latter is unlikely to be affected by future works through its setting will be. The date of construction of the villas have not been confirmed and detailed archival and buildings research should be undertaken at the design and construction phase of the project to outline the buildings' history.

Both villas are located in the Future Urban Zone (FUZ) and are signalled to undergo urban growth which is likely to occur around the timing of the new and upgraded roads in the area. Therefore, the historic setting of the villas is likely to undergo significant change.

Buildings within the designation boundaries will need to be removed and could be relocated and are subject to a HNZPTA if they are pre-1900.

#### 5.2.2 NoR 6 – Pukekohe South-West Upgrade

Nehru Hall is scheduled as a Category B Historic Heritage Place (# 2235) in the AUP:OP at 59 Ward Street (on the corner of Puni Road). NoR 6 extends into the scheduled extent of place, and



immediately abuts the hall building. Nehru Hall was built in 1953 and was used for community and religious events such as weddings. It is scheduled for its historical, social and physical attributes.

Most of the designation here will be used for temporary construction but earthworks, including batters, berms and sidewalks will extend into the extent of place. While there will be no direct effects on the building, there will be a contraction of the extent of place and this will have minor effects on its setting and context. This includes the location of the brick gateway, which is built from the same bricks as the hall and is assumed to date to the time of the halls' construction in 1953. This will result in the removal of the gateway,

### 5.2.3 NoR 8 – Mill Road – Pukekohe East Road Upgrade

One site is recorded just south of the proposed designation boundary, R12/1208, the Bombay Flour Mill (or Pilgrim's Mill), which dates to 1874. This was recorded from 1876 plan SO 1415 of the proposed road from Bombay to Pukekohe, the current Pukekohe East Road and Mill Road, which largely follow the proposed layout. No remains are visible on the surface.

While the site has been demolished and the structure itself appears to be just outside the proposed designation, it is possible that sub surface remains associated with the mill operation exist which could be unearthed during construction.



**Figure 5-1: Site R12/1208, the Bombay Flour Mill (arrowed), shown on SO 1415 just south of the proposed NoR 8 designation.**

One possible pre-1900 villa at 188 Mill Road is located outside of, but adjacent to, the designation boundary of NoR 8. The date of construction of the villa has not been confirmed and detailed archival and buildings research should be undertaken at the design and construction phase of the project to outline the building's history. It is possible that sub surface remains associated with pre-1900 buildings could be unearthed during construction.

## 5.3 Recommended Measures to Avoid, Remedy or Mitigate Construction Effects

### 5.3.1 NoRs 1, 2, 3, and 7

There is no heritage protected under the AUP:OP and no definitive pre-1900 heritage has been recorded. Therefore, it is recommended that further research and survey should be undertaken to support applications for HNZPTA authority before construction commences.

Damage or destruction of any previously unrecorded archaeological sites that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

The authority application will require a full assessment of effects, which can only be determined following detailed design. It is recommended that this assessment should include detailed archival research into the history of 19th century land ownership and occupation, along with detailed field survey.

In all cases, where possible consideration should be given to relocating heritage buildings rather than demolishing them.

### 5.3.2 NoR 4 – Pukekohe North-East Arterial

Two possible pre-1900 villas are located in the proposed designation boundary of NoR 4 at 1201 Paerata Road at 87 Pukekohe East Road. The latter is unlikely to be affected by future works through its setting will be. It is recommended that mitigation is proposed through a Historic Heritage Management Plan (HHMP) included as a condition on the proposed designation. This will provide for further research and survey should be undertaken before construction commences, as a precautionary measure.

Further research will also support applications for HNZPTA authority before construction commences.

Damage or destruction of any previously unrecorded archaeological sites in NoR 4 that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

The authority application will require a full assessment of effects, which can only be determined following detailed design. It is recommended that this assessment should include detailed archival research into the history of 19th century land ownership and occupation, along with detailed field survey.

In all cases, where possible consideration should be given to relocating heritage buildings rather than demolishing them.

### 5.3.3 NoR 6 – Pukekohe South-West Upgrade

It is recommended that the proposed design within the designation remains unchanged near Nehru Hall given that the alignment currently avoids most of the extent of place of the site and the whole building. The hall dates to the 20th century and is not covered by the archaeological provisions of the HNZPTA. There will be no adverse construction effects on the building as the HHMP will provide



suitable methods to avoid effects. The Noise and Vibration Management Plan should ensure that there are no adverse vibration effects on the unreinforced masonry of the hall.

The brick gateway, which is built from the same bricks as the hall and is assumed to date to the time of the halls' construction in 1953. This will result in the removal of the gateway. Appropriate mitigation is to lift the gateway intact and reinstate it on the new boundary, following best conservation practice. Otherwise, effects on the extent of place will be minor and can be mitigated through archaeological monitoring and recording of any subsurface features associated with the construction and use of the hall.

Damage or destruction of any previously unrecorded archaeological sites in NoR 6 that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application. The authority application will require a full assessment of effects, which can only be determined following detailed design. It is recommended that this assessment should include detailed archival research into the history of 19th century land ownership and occupation, along with detailed field survey.

#### **5.3.4 NoR 8 – Mill Road and Pukekohe East Road Upgrade**

It is recommended that the proposed design within the designation remains unchanged near Pilgrim's Mill (R12/1208) given that the alignment currently avoids the structure itself and the site has been demolished. Destruction or damage to any potential previously unrecorded historic heritage deposits associated with the mill, such as water races, outbuildings, etc.,

Damage or destruction of any previously unrecorded archaeological features associated with R12/1208 that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application.

Damage or destruction of any previously unrecorded archaeological sites in NoR 8 that are exposed during the works can be mitigated under the provisions of the authority, and the means of mitigation detailed in an Archaeological Management Plan prepared for the HNZPTA authority application. The authority application will require a full assessment of effects, which can only be determined following detailed design. It is recommended that this assessment should include detailed archival research into the history of 19th century land ownership and occupation, along with detailed field survey.

#### **5.3.5 Historic Heritage Management Plan (HHMP)**

It is recommended that a HHMP is prepared prior to the start of construction works for NoRs 4, 6 and 8 (AC and WDC). The HHMP should:

- Set out the methods for the identification and assessment of historic heritage within the designation to inform detailed design.
- Identify the known and potential historic heritage sites within the designation.
- Set out the HNZPTA authority requirements for any pre-1900 sites identified for an authority.
- Set out any unrecorded archaeological sites or post-1900 heritage sites within the designation.
- Set out the methods to avoid or manage effects on historic heritage.
- Set out methods to increase public awareness and interpretation signage.

## **6 Assessment of Operational Effects**

There are no operational effects to either known or unknown historic heritage deposits.

### **6.1 Recommended Measures to Avoid, Remedy or Mitigate Operational Effects**

As there are no operational effects, no mitigation is required.

## 7 Conclusion

There are two recorded heritage sites relevant to the proposed designation. The Bombay Flour, or Pilgrim's, Mill recorded as R12/1208, is adjacent to but outside the boundary of NoR 8, but associated features may extend into the designation.

Nehru Hall is scheduled as a Category B Historic Heritage Place (# 2235) in the AUP:OP at 59 Ward Street (on the corner of Puni Road). NoR 6 extends into the scheduled extent of place, and immediately abuts the hall building. Construction effects will be minor and, apart from the relocation of the brick gateway, largely limited to effects on the context of the hall.

All other previously recorded heritage places in the project area are not located in proximity to the proposed designations. Recorded heritage places have been avoided through options assessment process. The two most significant sites avoided that were avoided are:

- Pukekohe East Church, R12/741.
- Te Māunu a Tūmatauenga pā, R12/1170.

A drive by assessment noted three potentially pre-1900 villas within or very close to the designations. Additionally, the soils are fertile and attractive for settlement by both Māori, who have occupied the area for many centuries, and Europeans, who settled the area from the 1840s and it is probable that unrecorded heritage will be encountered during construction.

The appropriate form of mitigation is to obtain an archaeological authority from HNZPT to construct the roads and to provide and HHMP to manage effects on the scheduled historic heritage sites (NoR 6 and 8), and as a pre-cautionary measure on the potential effects on pre-1900 villas (NoR 4). See Table 7-1 for a summary of mitigation required.

**Table 7-1: Summary of Construction Mitigation Required**

Historic Heritage Item	Recommendation
Two possible pre-1900 villas are located in the proposed designation boundary of NoR 4 at 1021 Paerata Road and 87 Pukekohe East Road	Manage through HHMP
Nehru Hall is scheduled as a Category B Historic Heritage Place (# 2235) (NoR 6)	Manage through HHMP
R12/1208, the Bombay Flour Mill (or Pilgrim's Mill) (NoR 8)	Manage through HNZPT authority and HHMP

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