



WINSTONE
AGGREGATES

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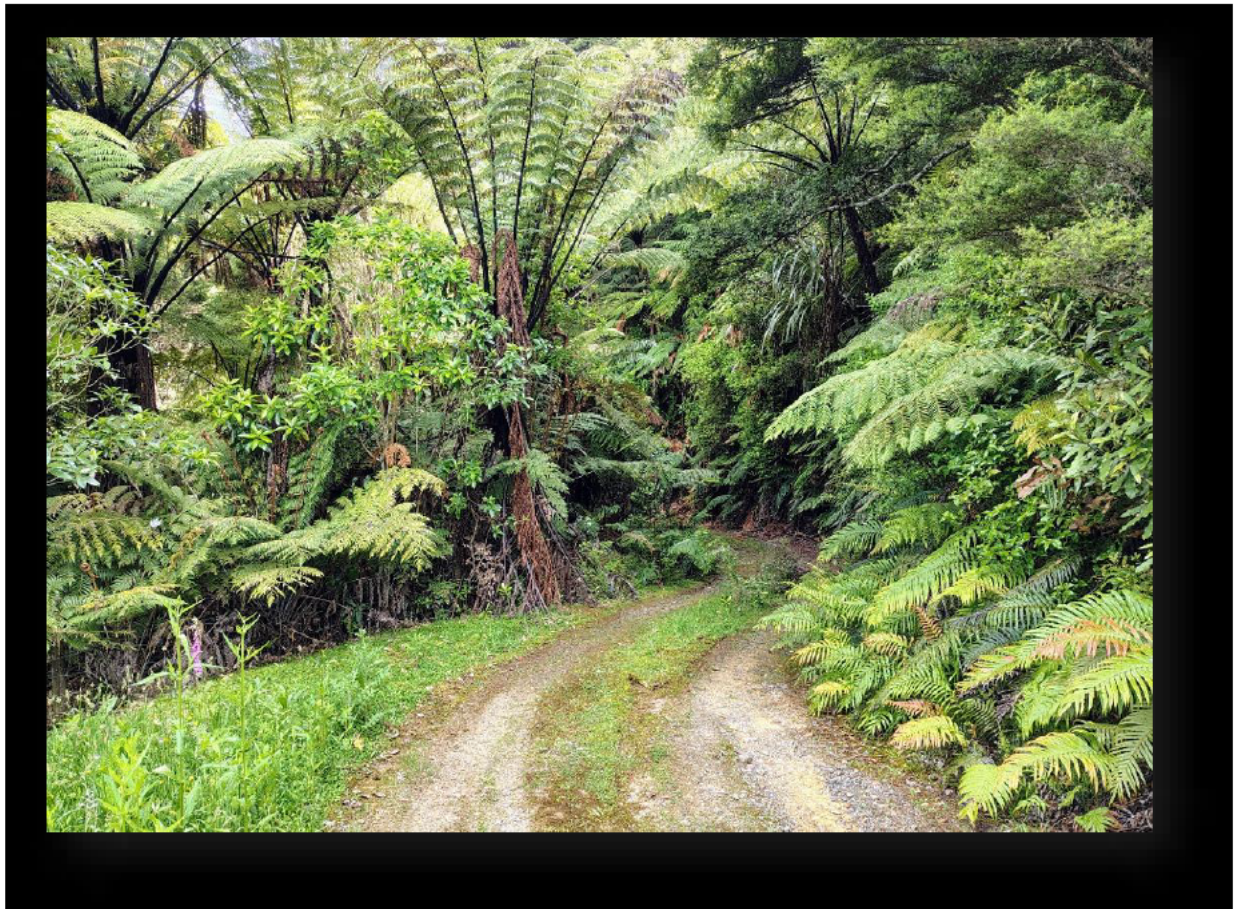
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Archaeological Assessment

PROPOSED HUNUA QUARRY DEVELOPMENT: ARCHAEOLOGICAL ASSESSMENT

Prepared for Winstone Aggregates
A Division of Fletcher Concrete and Infrastructure Ltd
February 2026



By

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Executive Summary

This archaeological assessment report provides an assessment of the effects on archaeological values from the proposed expansion of the Symonds Hill Pit at the Hunua Quarry, Auckland. This assessment has incorporated desktop research and a field survey to establish whether the proposed development is likely to impact on archaeological or other historic values and compare the values of the sites.

Currently there are no archaeological or other historic heritage sites recorded within the proposed development area or in the Winstone landholding and there is low potential of encountering unrecorded archaeological sites during the works. However, for risk management purposes, an Archaeological Authority to cover 10 years is sought under the FTAA (2024) to prevent any delays during the works in the event that subsurface archaeological remains are exposed

Report Release and Reliance

This report has been prepared by Clough & Associates on the instructions of our client, in accordance with the agreed scope of work. If it is intended to support an application under the Fast-track Approvals Act 2024, it may be relied upon by the Expert Panel and relevant administering agencies for the purposes of assessing the application.

While Clough & Associates has exercised due care in preparing this report, it does not accept liability for any use of the report beyond its intended purpose. Where information has been supplied by the Client or obtained from external sources, it has been assumed to be accurate unless otherwise stated.

1. INTRODUCTION

1. Winstone Aggregates Limited (“Winstone”), a division of Fletcher Concrete and Infrastructure Limited, has engaged Clough & Associates to assess the potential effects of the proposed expansion of Hunua Quarry at 489 Hunua Road, Hunua, Auckland.
2. Winstone is seeking approval to the project under the Fast-Track Approvals Act 2024 (FTAA). The Hunua Quarry Development is a Listed Project in Schedule 2 of the FTAA, reflecting its regional and national significance. The proposal is to expand the existing quarry to increase annual quarry production to a peak of approximately 5.4 million tonnes of aggregate, and to enable the continued extraction of aggregate for a further 50 years, with the potential to support further operations for up to 80 years (“**the Proposal**”) or also referred to as the “quarry development area”. Through this approval process, Winstone propose to update the consent conditions and quarry management plans applying to the site to incorporate the changes and enable greater operational efficiency.

The Site

3. The Hunua Quarry is in South Auckland, approximately 5 kilometres (km) southeast of Papakura and 35 km southeast of the Auckland Central Business District (“CBD”). The Hunua Quarry has been operating on the site since the 1920s and produces greywacke rock and supplies a significant part of the Auckland region’s aggregate requirements, primarily for use in civil infrastructure such as roading and concrete. The Quarry is recognised as one of Auckland’s three most strategically important sources of aggregate. Winstones Aggregates is the owner of the proposed development land and the legal descriptions of the properties containing the proposed quarry development are: Part Allotment 70 Parish of Hunua; Allotment 38 Parish of Hunua; Lot 1 DP 60065; Lot 1 DP 105061; Lot 2 DP 115598 and Lot 1 DP 12054. The location of the site and details of the properties are shown in Figure 1.

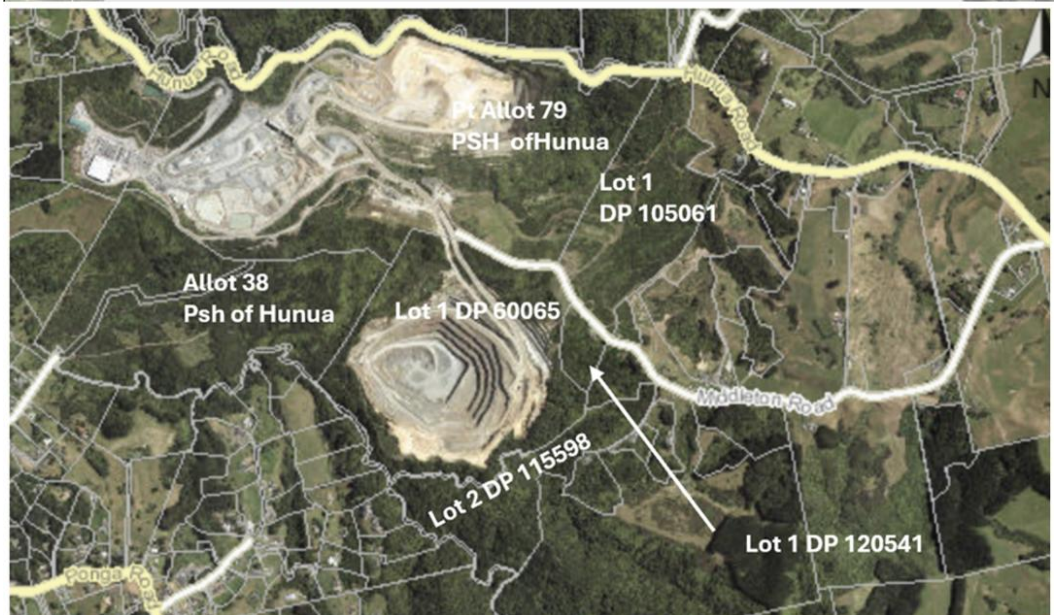
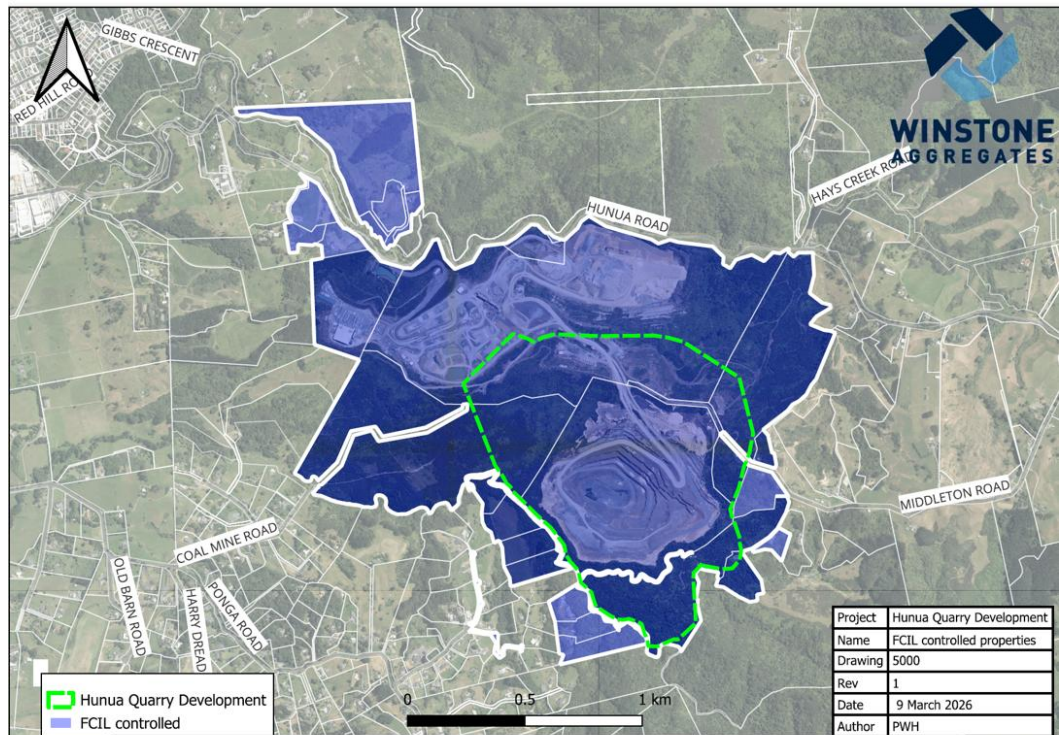


Figure 1. Upper plan showing overview of the proposed quarry development area outlined in red, the consented Symonds Hill Pit outlined in orange and Winstone property holdings outlined in yellow with property legal descriptions in lower inset (source: Winstone Aggregates)

4. Currently, material is extracted from the Symonds Hill Pit and processed on-site, with material with no value (referred to as overburden) being disposed of on-site in the overburden disposal area (the previous Hunua Pit) shown in Figure 2.

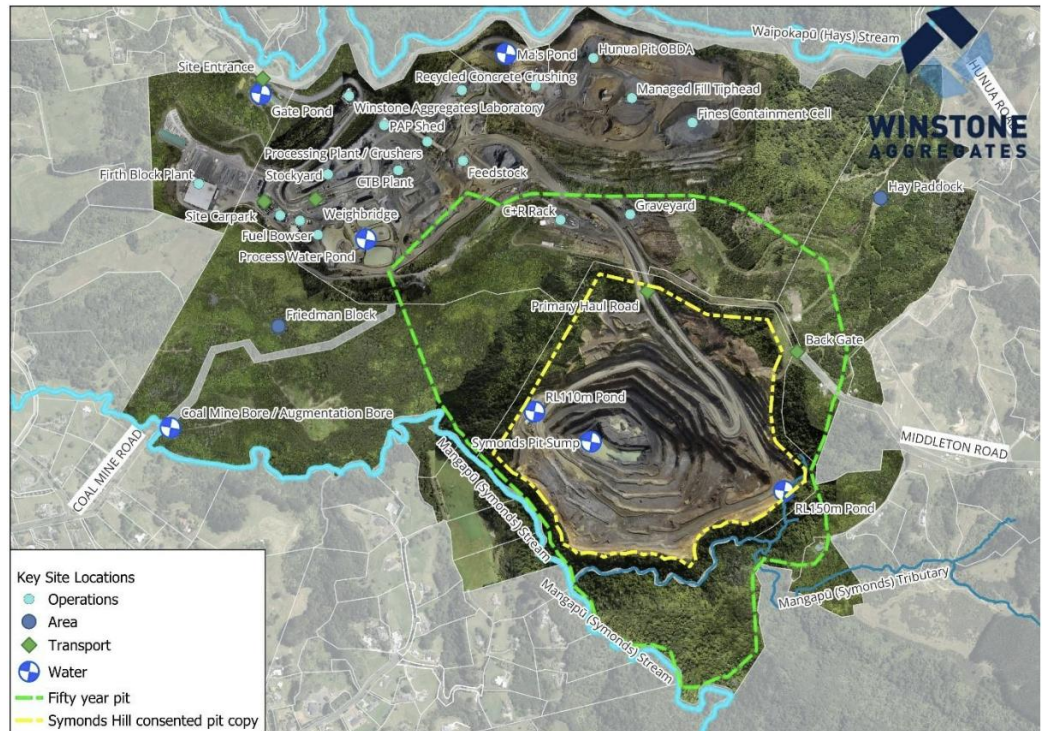


Figure 2. Current quarry usage (source: PDP)

5. To extend the site’s operational life, Winstone proposes a 50ha expansion and to deepen the existing Symonds Hill Pit to access additional high quality greywacke resource. Initial investigations confirm that the site contains a substantial greywacke resource, sufficient to meet projected demand for up to 80 years, based on current rates of extraction and known site constraints. The project is proposed to be undertaken in 8 stages, as shown in Figure 3.

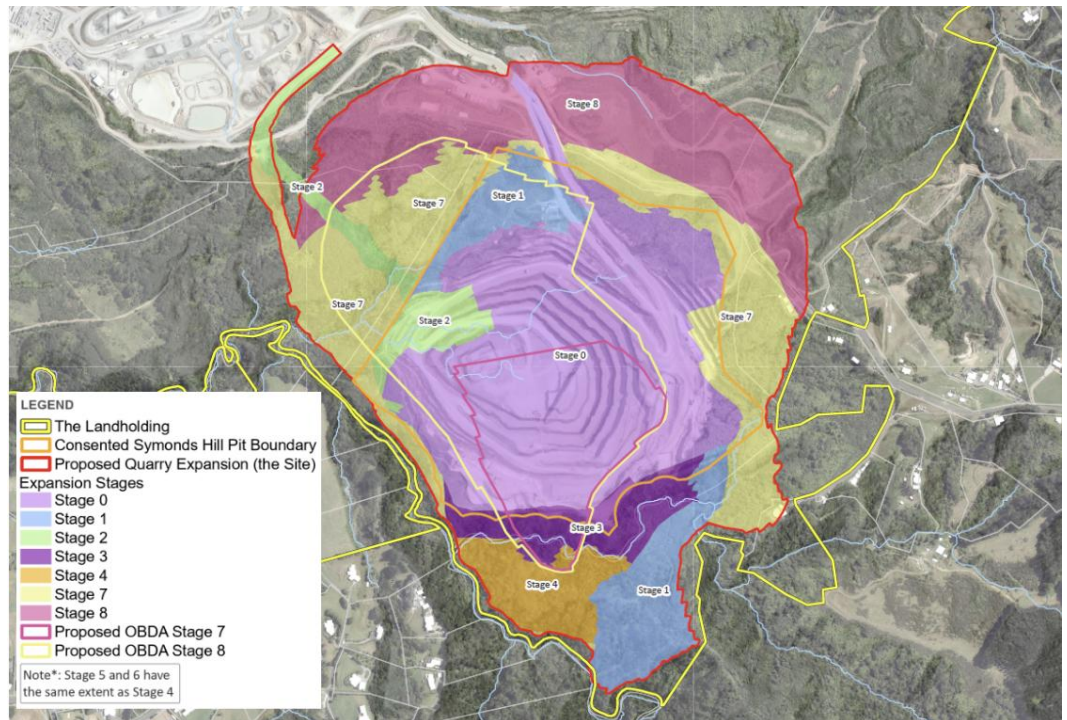


Figure 3. Proposed quarry development stages (source: Tonkin & Taylor)

6. Under the provisions of the Auckland Unitary Plan (Operative in Part) the existing quarry is zoned Special Purpose – Quarry Zone (SPQZ) but the proposed pit extent will extend the quarry into the adjoining Rural – Mixed Rural Zone. The quarry development area is also subject to the following overlays:
 - Quarry Buffer Area (Chapter D27)
 - Outstanding Natural Landscape (ONL) (Area 60 Ponga Road),
 - Significant Ecological Areas (SEA) (SEA_T_5323 and SEA_T_7032),
 - High Use Stream Management Area (HUSMA) and
 - Natural Stream Management Area (NSMA).
7. The site is also subject to the Council’s Proposed Plan Change 120 Housing Intensification and Resilience (PC 120). This proposed plan change includes provisions to better manage development for natural hazards across the

region. In the case of the Hunua Quarry, the site and wider area is identified as flood plains. These provisions have immediate legal effect.

Purpose of report

8. This archaeological assessment was commissioned by Winstone Aggregates to determine if the proposed expansion of the quarry is likely to impact on archaeological or other historic heritage values. This report has been prepared as part of the Substantive Application for approvals under the Resource Management Act 1991 and Heritage New Zealand Pouhere Taonga Act 2014
9. Both approvals are sought as part of the Hunua Quarry Developments schedule 2 listed Project under the Fast-track Approvals Act 2024.

Basis of assessment

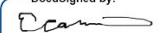
10. Our assessment is based on desktop studies including searches of the New Zealand Archaeological Association's (NZAA) site record database (ArchSite), the Auckland Council Tūtangi Ora (historic heritage information) database, the AUP (OP) Schedules and the Heritage New Zealand Pouhere Taonga (Heritage NZ) New Zealand Heritage List/Rārangi Kōrero to determine whether any archaeological or other historic heritage sites have been recorded on or in the immediate vicinity of the Hunua Quarry (proposed site). As well, literature and archaeological reports relevant to the area were consulted (see Bibliography). Early survey plans were checked for information relating to past use of the land exchange properties and aerial photographs were checked to identify past land use in the area.
11. A visit to the Site was made on 21 November 2025 followed by a survey of the southern area in the vicinity of the Mangapū/ Symonds Stream, which was carried out on 25 November 2025, although for safety reasons some areas could not be entered due to the steep slopes and heavy vegetation. Particular attention was paid to the area around the Symonds Stream and its tributary for evidence of Māori or early European settlement remains. Photographs were taken to record the topography and features of interest within the properties and their surrounds.
12. Consultation has been undertaken with Heritage New Zealand and details are provided in Appendix B.

Author and code of conduct statement

The main author of this report is Ellen Cameron. I am a co-director of Clough & Associates. Clough & Associates is a heritage consultancy specialising in archaeological and historic heritage assessment and management. I hold a Master of Science Degree in Environmental Archaeology and Palaeoeconomy from the University of Sheffield which I completed in 1991. I am also a member of the New Zealand Archaeological Association (NZAA).

I have 27 years of professional experience in the heritage consultancy field. My experience includes archaeological research, survey, excavation, analysis and report preparation, initially in Asia and have worked full time in New Zealand carrying out assessments of effects for development and infrastructure projects since 2014. I have attached my CV in Appendix A.

I confirm that, in my capacity as the main author of this report, I have read and abide by the Environment Court of New Zealand's Code of Conduct for Expert Witnesses Practice Note 2023.

DocuSigned by:

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Ellen Cameron
February 2026

This report is co-authored by Tom Clough- Macready. I am an Archaeologist at Clough & Associates. Clough & Associates is a heritage consultancy specialising in archaeological and historic heritage assessment and management. I hold a Master of Archaeological Practice degree from the University of Otago which I completed in 2025. I am also a member of the New Zealand Archaeological Association (NZAA).

I have 10 years of professional experience in the heritage consultancy field. My experience includes directing field surveys, and monitoring excavations, and report writing and I have worked full time in New Zealand on numerous developments projects. I have attached my CV in Appendix A.

I confirm that, in my capacity as the co-author of this report, I have read and abide by the Environment Court of New Zealand's Code of Conduct for Expert Witnesses Practice Note 2023.

Tom Clough- Macready



February 2026

13. The report has been reviewed by Sarah Macready. I am a co-director of Clough & Associates. Clough & Associates is a heritage consultancy specialising in archaeological and historic heritage assessment and management. I hold a Master of Arts degree in Archaeology from the University of London which I completed in 1977. I am a member of the New Zealand Archaeological Association (NZAA).
14. I have worked full time in the heritage consultancy field since 2007, prior to which I worked as an archaeologist and heritage specialist for the Department of Conservation for 18 years and for two years before for the NZ Historic Places Trust (now Heritage New Zealand). My experience includes historical research, archaeological assessment, project management, conservation and management planning and, in particular, I have been responsible for peer reviewing and editing the company's archaeological reports. My CV is included in Appendix A.
15. This report has been prepared and reviewed in accordance with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2023. Other than where it is stated that reliance is placed on the advice of another person, the author(s) confirm that the issues addressed in this report are within their area of expertise. The author(s) have not omitted consideration of any material facts known to them that might alter or detract from the opinions expressed

Project Description

16. The Hunua Quarry development seeks to expand and deepen the existing Symonds Hill Pit enabling sustainable extraction of additional greywacke resource, and the continuation of quarrying within Winstone's existing site for up to 80 years. The proposed development initially focuses on the southern and northwestern ends of the quarry complex. The new extraction footprint will initially expand the existing Symonds Hill Pit to the south and east, followed by areas to the north and west. These development works will occur entirely within Winstone-owned land and integrate with existing quarry infrastructure.
17. The quarry will utilise the existing access from Hunua Road, although a right turning lane is proposed to improve the safe operation of the access for turning trucks and other road users. This also reflects the increase in truck volumes accessing the Site as production on the Site increases.
18. The proposed Symonds Hill Pit expansion will cover an area of approximately 108 hectares, with a maximum depth of approximately– (minus) 50 metres RL, and enabling quarrying beyond that in later years to access further resource.. Quarry development will use benches ranging from 10m – 15m in height and 9 – 20m in width. The resource comprises Waipapa Group greywacke, with an estimated total volume exceeding 225 million tonnes. Over the life of the quarry, anticipated to be around 80 years, approximately 24 million m3 of overburden will be removed, supporting a peak production rate of 5.4 million tonnes per annum.

19. This expansion will necessitate the realignment of a tributary of Mangapū Stream to allow for the pit expansion. This will include clearance of indigenous and exotic vegetation, overburden stripping and earthworks, stream realignment, followed by revegetation within the new stream corridor. Ecological offset planting will also occur within other parts of the landholding, and this will also achieve landscape mitigation and compensation for the removal of an area of the ONL. Additional ecological offset – planting and compensation works will also be undertaken in locations beyond the site.
20. The proposal will also utilise the current site access, along with the existing processing facilities, staff facilities and bores.
21. In summary, the key aspects of the proposed quarry development include:
- Diversion and reclamation of approximately 941m length of a tributary to Mangapū Stream to enable the expansion of the extraction footprint. This includes construction of a temporary 7m wide bridge to enable access for construction of the stream realignment channel.
 - Draining and modification of up to 21 identified natural inland wetlands.
 - Providing additional overburden capacity within the Site (from Stage 7), primarily by backfilling the Symonds Hill Pit.
 - Construction of new sediment retention ponds, haul road, drainage networks, and Mangapū Stream Tributary diversion integrated with the existing quarry systems.
 - Increasing average daily traffic movements during both the AM and PM peak hours when the quarry is operating at peak capacity:
 - AM peak hour – 161 truck movements corresponding to approximately 80 entry and 80 exit truck movements; and
 - PM peak hour – 135 truck movements corresponding to approximately 68 entry and 68 exit truck movements.
 - Removal of 48.61ha of indigenous vegetation, associated with the stripping of overburden including within an SEA and ONL.
 - Constructing the western haul road, including two culverts, to provide a more efficient connection between the pit and the processing yard as part Stage 2. The haul road will then be removed during Stage 7 and a new haul road constructed.
 - Amending the consented groundwater takes and discharges to Mangapū Stream.
 - Providing for some in-pit crushing to enable a greater volume, and more efficient, processing of aggregate.

- Providing for the placement of a greater volume of overburden within the Site.
 - Implementing progressive rehabilitation (where practicable), ecological offsetting, landscape mitigation, compensation and stream enhancement measures throughout quarry development. The expansion necessitating the Mangapū Stream Tributary diversion is the first stage of the project, and the ecological offsetting needed for this will occur in the early phases.
22. Enable quarry development below RL-50m as part of the long-term development of the Symonds Hill Pit, recognising that this deeper resource would only be accessed once the earlier stages of the pit have been quarried. The final Life of Quarry Strategy will be confirmed prior to any excavation below RL-50m and will detail further investigations necessary to ensure that adverse environmental effects associated with later-stage extraction and/or rehabilitation are appropriately identified, assessed, and managed (including obtaining any regional consents required).
23. Winstone is seeking resource consent under the FTAA for both district and regional activities to enable the development of the Symonds Hill Pit. The land use consents (earthworks, vegetation clearance and the disposal of overburden) are being sought in perpetuity (unlimited duration), and a 35-year duration on all water take and use and all discharge permits. Winstone are also seeking a Wildlife Act Authority, an Archaeological Authority and a Complex Freshwater Fisheries Activity Authority.

Description of works and scope of Archaeological Authority

24. The proposed Quarry Development is located within Winstone- owned land and will use the existing processing, stockpiling, and dispatch facilities located in the main operations area. No new external access or public infrastructure is required. The project is designed to develop the Symonds Hill Pit to access additional greywacke resources which will include the following:
- deepen and expand the pit to an ultimate floor elevation of approximately – 50m RL;
 - realign an approximately 500m length of a tributary to Mangapū/ Symonds Stream to enable the safe expansion of the extraction footprint while achieving ecological and hydrological improvements;
 - Construct new sediment retention ponds, a southern a haul road, drainage networks, and stream tributary diversion;
 - Removal of vegetation and topsoil stripping for removal of overburden and associated offsets.
 - Construct the western haul road to provide a more efficient connection between the pit and the processing yard.

- Provide for the placement of a greater volume of overburden within the site
25. To enable the long-term planning of mineral extraction activities and to ensure the certainty of aggregate supply to the Auckland market, Winstone seeks to apply for an Authority under the Heritage New Zealand Pouhere Taonga Act 2014 to cover earthworks and vegetation clearance for a 10 year duration to cover the first three stages of the development (with the 10 year duration allowing for any delays in the works in these stages) with the option for including the remaining stages in future.

Staging and Programme

26. The Symonds Hill Pit development is presently anticipated to occur in eight indicative stages (Appendix C) to allow continuous production while progressively implementing environmental mitigation, to enable operational flexibility and the need to respond to market conditions, the staging and programme may not be followed sequentially.
27. The stages are indicative only and provide for the development of the existing pit to a depth of (at least) RL-50. As the Life of Quarry Strategy identifies, development below RL-50 or beyond the 35-50-year horizon relies on a range of factors that will need to be the subject of further investigation alongside the renewal/obtaining the various regional consents required. Those investigations are provided for through the draft conditions of consent, to enable extraction over the full 80-year period and within the proposed extent of the quarry pit shown.
28. Table 1 below identifies each stage, an overview of the activities to be undertaken and whether these are part of the enabling works or 'business as usual' quarrying activity. The time required to achieve each stage is also set out, although this is approximate and no requirements or conditions are proposed to be based upon such timeframes. Earthwork volumes, vegetation clearance and offsetting/compensation requirements will be linked to the stages set out below. The conditions are also proposed to be based on the stages, with each consent (land use including vegetation clearance and the disposal overburden, water takes and discharges etc.) containing two sets of conditions: one comprehensive set of conditions that relate to enabling works (that will fall away once these works are complete) and one set of conditions that relate to quarrying.

Table 1. Indicative stages with descriptions of the works and approximate duration with stages to be included under an Archaeological Authority shaded grey.

Stage	Activity	Nature of the works	Approximate duration (years)
1	Tributary realignment including the construction of a temporary bridge.	Enabling works	4
	Stripping campaign to the northwest (NW), -, occurs concurrently with the tributary realignment. Provided for under existing consents.	Extraction and processing	1-4
2	Stream diversion completed – the temporary bridge will be removed.	Enabling works	1
	NW cut down to 105RL. Provided for under existing consents.	Extraction and processing	
	Construct the western haul road.	Enabling works	
3	Incremental stripping campaigns: south from current pit crest towards stream diversion down to 120RL	Extraction and processing	1
4	Incremental stripping campaigns: southwest of the stream diversion and adjacent to the southern site boundary	Extraction and processing	43-73
5	Incremental stripping campaigns: southern boundary towards the current pit	Extraction and processing	
6	Incremental stripping campaigns: in an anticlockwise direction, extending the pit to the south and northwest and deepening the pit	Extraction and processing	
7	Realign the western haul road, so that it runs, for a short distance, along the southeast extent of the pit. This will enable the pit to extend to the northwest.	Enabling works	
	Incremental stripping campaigns: in an anticlockwise direction, extending the pit to the southwest and northwest and deepening the pit	Extraction and processing	
8	Incremental stripping campaigns: in an anticlockwise direction, extending the pit to the northwest and north.	Extraction and processing	

2. HISTORICAL BACKGROUND

Māori Settlement

29. Tainui iwi and hapū groups whose ancestry can be traced to the arrival of the Tainui waka in the 14th century occupied the general Hunua area (Barton 2001: 7). The area was densely forested, providing valuable natural resources. A network of river and stream systems provided transport routes to many parts of the forest from both the east and west coasts. Most pre-European activity occurred on the fringes of the Hunua Ranges due to the rugged terrain of the interior and the belief by some Māori that parts of the central portion were tapu (ibid.). The forest was used as a food source, owing to its plentiful bird life; a timber source for waka; and a place of refuge in times of unrest. Early habitation occurred mainly around the lower eastern slopes of the Ranges towards the east coast; along the southern edge, which provided important portage links between the Hauraki Gulf and the Waikato River; and in the north around the estuary of the Wairoa River (ibid.). Permanent settlement in Hunua was not attempted at this time, but seasonal camps for bird hunting and food gathering were common in the forest (ibid.).

European Settlement

30. Early traders, missionaries and explorers began to appear on the coasts either side of the Hunua area from the 1830s, but little activity was recorded in Hunua itself. It was not until the 1850s, when European settlement pushed south from Auckland, that contact was made with the area. The first official European involvement with Hunua occurred on 30 March 1854 with the sale of the Hunua Block, which later became known as Hunua Parish. The New Zealand Wars in the 1860s disrupted settlement in the area and even after the cessation of hostilities settlement in Hunua was sluggish, partially a result of the rugged terrain, poor soils and difficult access (Barton 2001).
31. The allotments containing the proposed development works were granted to European settlers in the mid-19th century. Archival research was carried out to identify ownership of the allotments as well as activities that may have taken place within the Project area, and the results are provided below.
32. The proposed quarry development is located in four of the original allotments granted by the Crown in the 1850s. Allotment 38 Parish of Hunua has not been subdivided and is still intact. The northernmost part of the proposed quarry development is situated in the eastern and central part of the original Allotment 79 (and has the legal description Pt Allotment 79 PSH of Hunua). The original Allotment 41 contains Lot 1 DP 60065, Lot 2 DP 115598 and Lot 1 DP 120541 and also the existing Symonds Hill Pit. Lot 1 DP 105061 is located in the westernmost part of what was originally Allotment 179. The locations of the properties in relation to the original allotments is shown in Figure 7.

Land Ownership History of Allotment 38 Parish of Hunua

33. Allotment 38 Parish of Hunua contained an area of 107 acres 2 roods 0 perches (equivalent to 43 ha) and was bounded to the north by Allotment 79, to the east by Allotment 41, to the south by Mangapū/ Symonds Stream, and to the west by Allotment 81 (Figure 4). The Crown Grant to Allotment 38 was purchased on 13 October 1858 by William Campbell of Hunua, settler (6G/729, Archives NZ). Campbell took out a mortgage to John Boyle Bennett for the sum of £100 on 30 August 1861 (12D/154, Archives NZ). Campbell was unable to repay the mortgage and interest costs, and on 20 December 1873 Bennett conveyed the land to William Thorne Buckland of Auckland, gentleman, for the sum of £100 (27D/259, Archives NZ).
34. Following Buckland's death, the Trustees of his estate conveyed the property (along with other properties) to Thomas Cossey and Frederick Cossey, both of Hunua Road, farmers on 27 June 1876 for the total sum of £281.5.0 (31D/279, Archives NZ). On 19 October 1880 the Cosseys conveyed Allotment 38 to James Bentley of Hunua Road, farmer for the sum of £100 (32M/530, Archives NZ). In 1885 Bentley removed from Auckland to Canterbury, leasing Allotment 38 for a term of eight years to Robert Charles Greenwood of Auckland, auctioneer, and Pierce Lanigan of Ngunguru, timber merchant. Greenwood and Lanigan were to utilise the land for the extraction of coal, limestone, fireclay, minerals or any other metals that may be present for the annual rent of £5; royalties of an additional 4p per ton of marketable coal brought to the surface payable quarterly; yearly rent of £2 per acre of surface occupied by lessees; ten acres were to be provided free of rent for "the purpose of erecting and placing thereon plant machinery buildings and other materials which the Lessee may deem required and necessary". The Lessees were granted liberty to manufacture bricks and other items for use in the colliery or to be removed from the property. Liberty was also granted for Lessees to "construct repair and maintain any roads and tramways over and through the said lands and at all times during the continuance of the said term to use the said roads and tramways either with or without steam engines tramcars horses carts carriages or other vehicles"; "to make construct and maintain dams and watercourses and bridges in through over and upon the said lands"; to make and construct reservoirs excepting the deprivation of water to others; to remove any standing timber on land required for the erection, maintenance and repair of building, dams and tramways required with the proviso that any timber cut for other purposes was to be compensated to the owner (H2/935, Archives NZ).

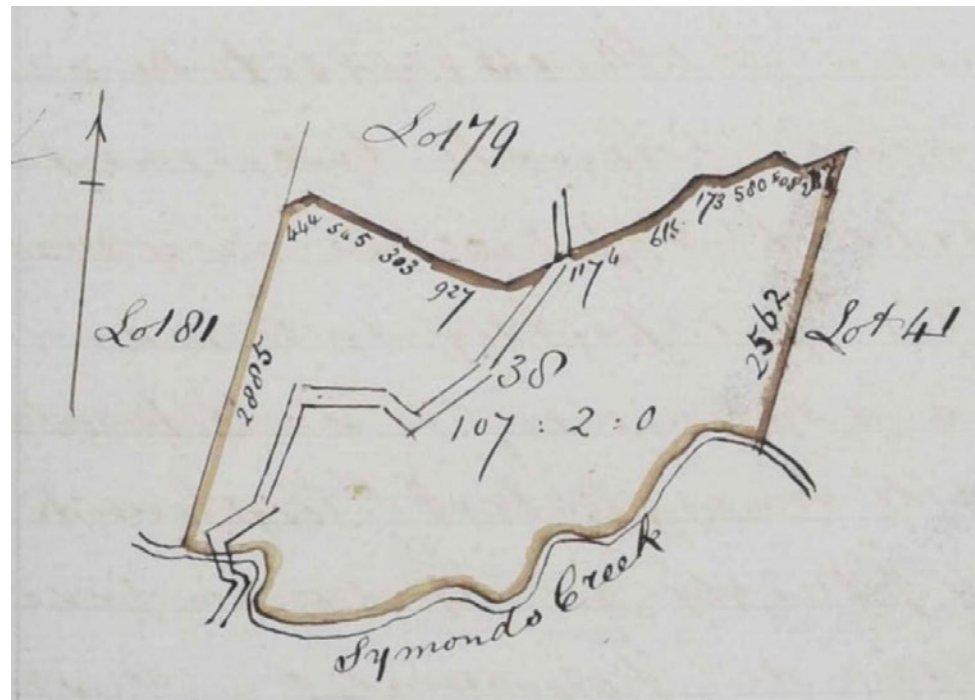


Figure 4. Plan showing boundaries of Allotment 38 as drawn on the Deed of Mortgages (12D/154, Archives NZ)

Land Ownership History Allotment 41 Parish of Hunua

35. Allotment 41 Parish of Hunua containing 320 acres was bounded to the north by a road, to the east by Allotments 214 and 187, to the south by Mangapū/ Symonds Stream and to the west by Allotment 38, and to the northwest by Allotment 81 (Figure 5).
36. The Crown Grant to Allotment 41 was purchased by William Clare on 5 April 1860 (6G/632, Archives NZ). Clare took out a mortgage of £226.16.0 on 19 April 1860 to Henry Bradley (6M/747, Archives NZ) but was unable to repay the loan. On 4 December 1862 by the order of the Supreme Court the property was auctioned and purchased by Bradley for the sum of £190 (14D/446, Archives NZ).
37. On 26 January 1884 Bradley and William Culpan (as mortgage holder) conveyed the property to William Aitken of Auckland, land agent for the sum of £600 (R8/262, Archives NZ). Aitken immediately onsold the land to Robert Charles Greenwood, auctioneer and Pierce Lanigan, timber merchant for the sum of £650 (R8/262, Archives NZ). Greenwood's finances later fell into bankruptcy with Lanigan purchasing the remainder of his estate from the Official Assignee (noted in Deed 111068 R32/128, Archives NZ). On 12 April 1889 with Lanigan facing bankruptcy, Allotment 41 (along with other properties) was conveyed with the assistance of the Official Assignee to Frank Jagger of Auckland, timber merchant (R32/128, Archives NZ). This sale, however, appears to have been superseded by a later conveyance under power of sale by a mortgage holder of R. C. Greenwood, whereby the land was conveyed to William Aitken on 3 February 1896 (R54/158, Archives NZ).

38. On 13 June 1902 an Agreement for the conveyance of Allotment 41 was signed between the Trustees of Aitken's Estate and James Bentley and James Bentley the younger (nephew) for the sum of £416, with a deposit made with the remainder to be paid at a later date (R71/468, Archives NZ). It would appear that the remaining payment was not completed, and the property was subsequently conveyed to a Mr McCorquindale on 7 October 1908 (R156/160, Archives NZ). On 21 June 1912 McCorquindale sold to a Mr McCallum (R207/155, Archives NZ). Certificate of Title NA569/150 was issued on 31 October 1933 (DI9A/198, Archives NZ).

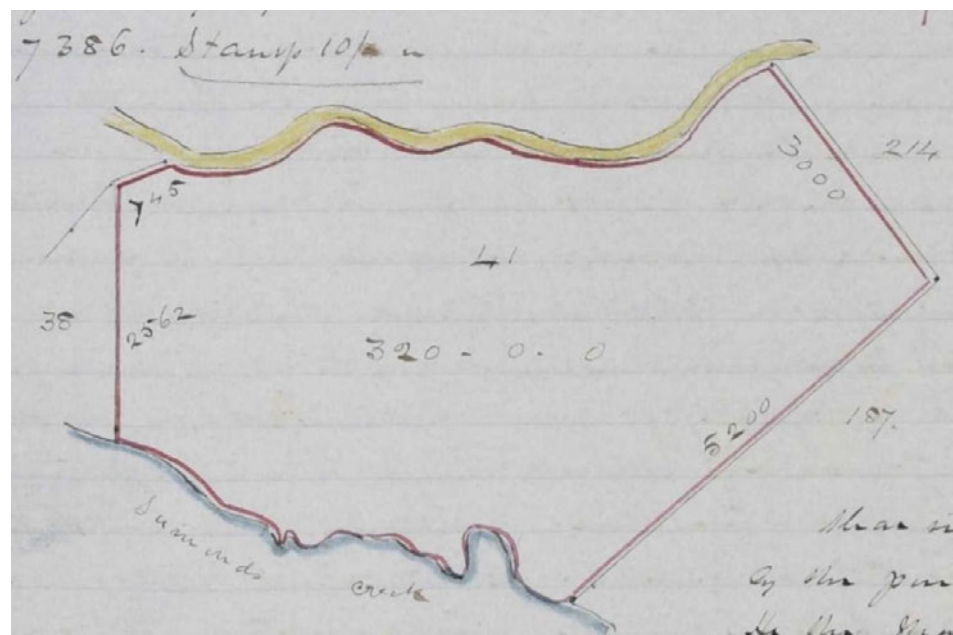


Figure 5. Boundaries of Allotment 41 as drawn on the Deed of Conveyance (R8/262, Archives NZ)

Land Ownership History of Allotment 79 Parish of Hunua

39. Allotment 79 Parish of Hunua contained 275 acres, bounded on the north by Hay's Creek, to the south by Allotments 38 and 41, to the east by Allotment 179, and to the west by Allotment 81 (Figure 6). The Crown Grant to Allotment 79 was purchased by John Logan Campbell of Auckland, esquire on 7 July 1857 (1G/2879, Archives NZ). Campbell was a well-known historical figure in Auckland, involved in medicine, business, and politics. He is unlikely to have had much, if any, direct involvement with the land at Hunua. Campbell sold the land on 17 February 1877 to James Baird Hay of Woodstock, Papakura for the sum of £210 (21M/685, Archives NZ, (Figure 14). James Hay served in the 3rd Battalion during the New Zealand Wars, rising to Lieutenant (*New Zealander*, 30 July 1863:2) and much later as Captain of the Drury Light Horse Volunteers (*Daily Southern Cross*, 17 June 1871:2). Hay had farmed in the Papakura District for 20 years before opening an agency business in the city (*Hawke's Bay Tribune*, 10 May 1922:4). He had taken

out a number of mortgages over the property, and following default the property was sold by public auction to John Blair Whyte for the sum of £4000, however through agreements made with mortgage holders the property was subsequently conveyed to John Richmond of Auckland, solicitor (R2/758, Archives NZ). Following Richmond's death, his executors conveyed the property to Thomas William Coulthard, Frank Coulthard and Joseph Coulthard of Papakura, timber merchants on 19 January 1891 (R39/198, Archives NZ). The Coulthard brothers operated a mill believed to have been situated further west on Hays Creek near the intersection with Ōpaheke Road. The mill was destroyed by fire in 1901 (*New Zealand Herald*, 13 March 1901:5). It was likely at this stage that the land was cleared of any remaining standing timber. A number of mortgages were subsequently taken out over the land in the following 15 years (DI 7A/358, Archives NZ) and the Equity of Redemption was later conveyed to only one of the Coulthard brothers on 23 December 1910 (R188/291, Archives NZ). That same day Coulthard conveyed the property to Bates and another person (R187/157, Archives NZ).

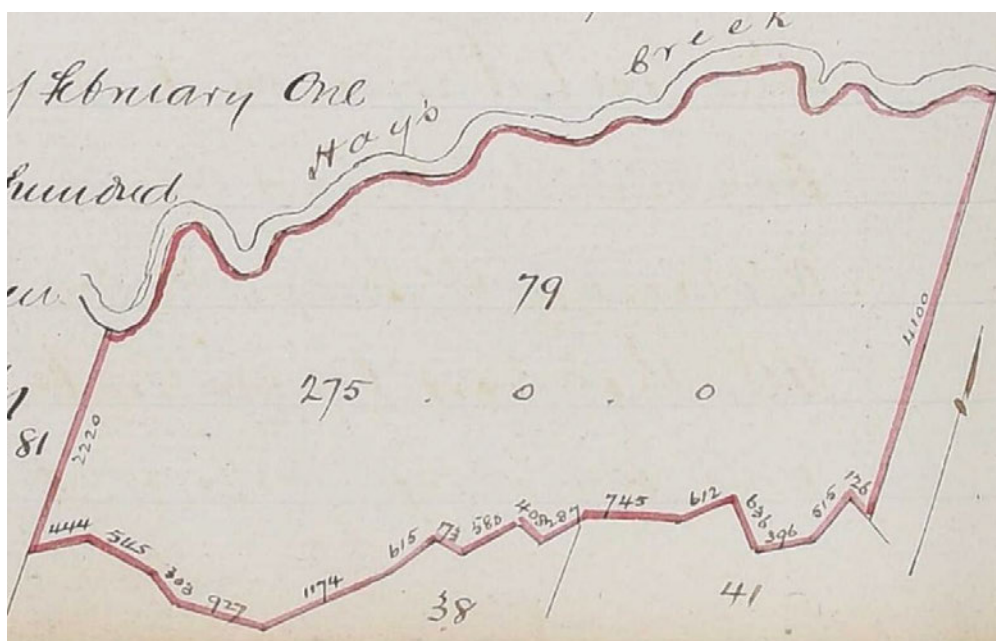


Figure 6. Boundaries of Allotment 79 as drawn on the Deed of Conveyance to James Hay, 17 February 1877 (21M/685, Archives NZ)

Land Ownership History of Allotment 179 Parish of Hunua

40. As only a small portion of Allotment 179 will be affected by the proposed quarry development, a full written description is not provided; however, the ownership details are provided in Table 2. The table shows that land for a road through the allotment was conveyed to the Crown in 1901. The 19th century information shows that the allotment was in the hands of absentee landowners.

Table 2. Land Ownership details of Allotment 179 Parish of Hunua

Instrument	Date Recorded	Where Recorded
Crown Grant	4 April 1859	6G/564
Conveyance	6 March 1863	13D/599
Conveyance	1 August 1884	R9/661
Conveyance 9a 0r 32p for road	15 February 1901	R76/167
Conveyance	1 July 1904	R104/111
Conveyance	18 November 1925	R479/548
Conveyance part for road	2 August 1926	R583/8
Certificate of Title issued	14 January 1935	NA578/172

Information from Land Ownership History

41. In general, early ownership history appears to have been problematic with the owners of both Allotment 38 and Allotment 41 unable to pay their mortgages and with Allotment 79 granted to John Logan Campbell, who would likely not have had much direct involvement with the property. Campbell sold the land to James Hay of Papakura in 1877. Hay was also unable to pay the mortgage of the property, which was sold at public auction. Allotment 179 was also in the hands of absentee owners for the duration of the 19th century after it was granted in 1859.
42. Evidence of later uses of the allotments was also able to be gathered from the archival research. Allotment 38 was leased from 1880 with activities for the extraction of coal, limestone, fireclay, minerals or any other metals that may be present permitted as part of the lease. There is no indication that these activities ever took place or if they did in which part of the allotment they occurred. It is noted that there is indication of a road/track on the plan of Allotment 38 to the west of the proposed development, and it is possible that this is the location of the described 19th century activities. No specific activities were able to be identified in Allotment 41, however, ownership of this allotment included timber merchants as did Allotment 79. Allotment 79 was sold in 1891 to the Coulthard brothers of Papakura, who were timber merchants, and who also operated a mill situated on Hay's Creek further to the west of the allotment.

Historical Settlement

43. Based on the historical research, no evidence of permanent settlement by European settlers has been noted on the properties containing the proposed quarry development area. It is noted that the three main properties had

ownership associated with timber merchants from the 1880s and it is likely that timber extraction was the main use of the properties during the 19th century.

3. HISTORICAL SURVEY

Information from Early Maps and Plans

44. Early maps and plans were also reviewed to provide additional information on the land ownership and uses of the properties containing the proposed quarry development. The mid-19th century plan in Figure 7 shows the original allotments with the owners' names annotated as has been noted in the previous section. The plan shows a road or track running along the southern boundary of Allotments 79 and 179 and also being the northern boundary of Allotments 38 and 41, although no information on whether the road was formed was able to be established.
45. The 1899 plan in Figure 8 shows roading in the area from that time. The plan shows a road reserve along Hay's Creek to the north of Allotment 79 with the description of the area annotated as "Very Steep" and "Forest". It also has the owner of Allotment 79 annotated as "Coulthard."
46. A later plan from 1941 (Figure 9), also shows part of Allotment 79 along with the western part of Allotment 179 (which is also in the proposed quarry development area) with the description of the vegetation as "Ti Tree and Native Bush" around Hunua Road and with "Gorse and Blackberry" with the terrain described as "Hilly Country" and "Very Steep Face" annotated along the southern boundary of Allotment 79. The plan also shows the alignment of Middleton Road with it described as a "Clay Road – Recently Regraded".
47. The 1968 plan in Figure 10 shows the southern part of the quarry development area with the current Symonds Hill Pit in Lot 1 on the plan which is described as "Steep Country in Gorse and Bush" in the north and "Very Steep Country in Bush" in the south, including the land containing the tributary that will be affected by the proposed works. The plan also has the annotation "Winstone Limited" as owners of the part of Lot 79 to the north of Middleton Road. It is also noted that Lot 1 DP 120541 (which is located on the eastern side of the quarry development area) was subdivided in 1986 from AK DP 60065, which was earlier subdivided from Allotment 41.
48. The plans reviewed show an area of steep hilly country which was forested in the 19th century with some evidence of clearance during the late 19th and 20th century. It is noted that Allotment 38 is only shown on the mid-19th century plan in Figure 15. This is because the allotment has not been subdivided.



Figure 7. Detail from AK SO 43 plan dating from the 1850s/60s with the allotments containing the proposed quarry development area outlined in black with modern lots overlain and archaeological site R12/663 (discussed in section 4) indicated by blue star (source: Quickmap)

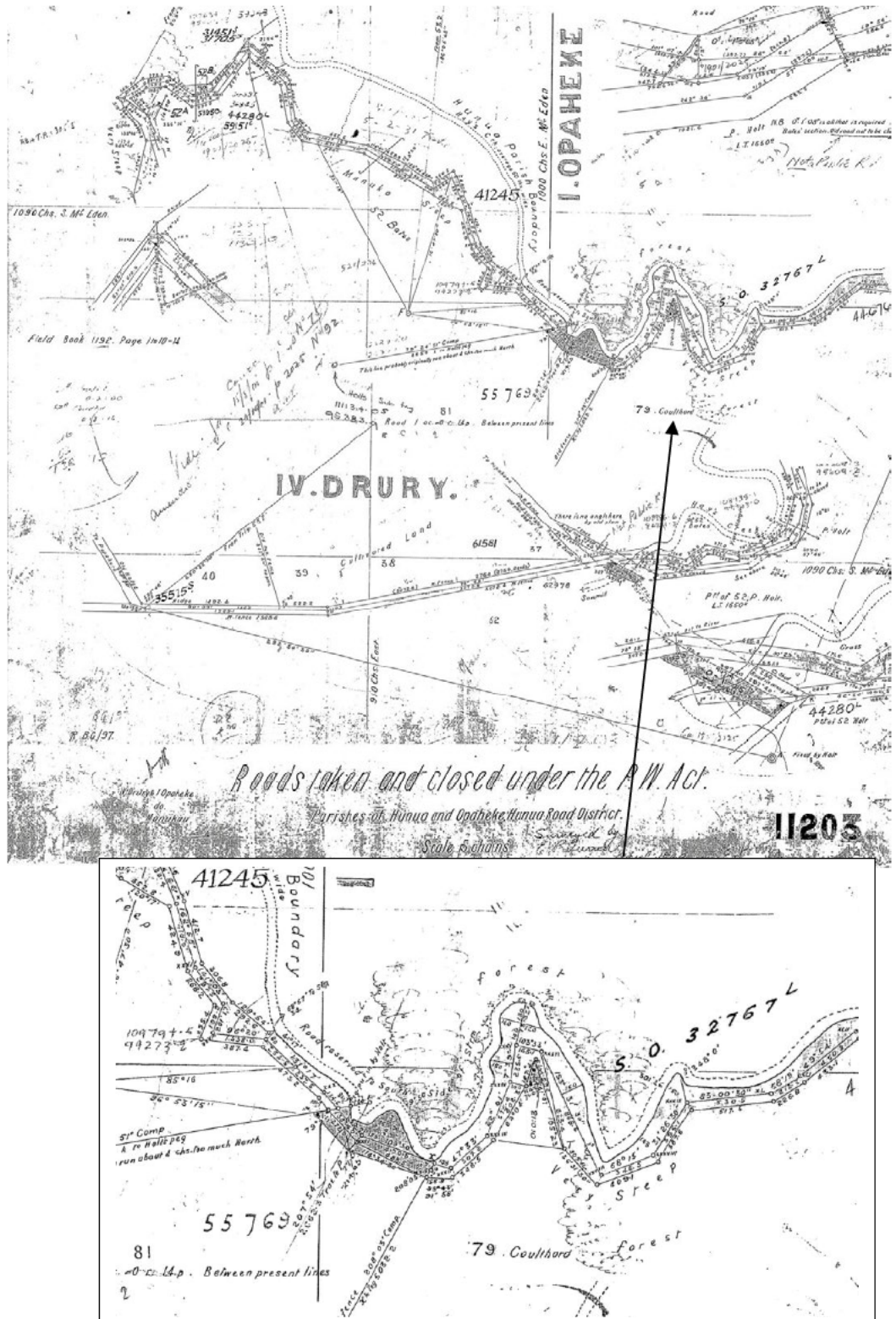


Figure 8. AK SO 11203 plan dated 1899 for land to be taken and closed for roads with the northern part of Allotment 79 showing the name “Coulthard” and described as “Very Steep” and “Forest” (source” Quickmap)

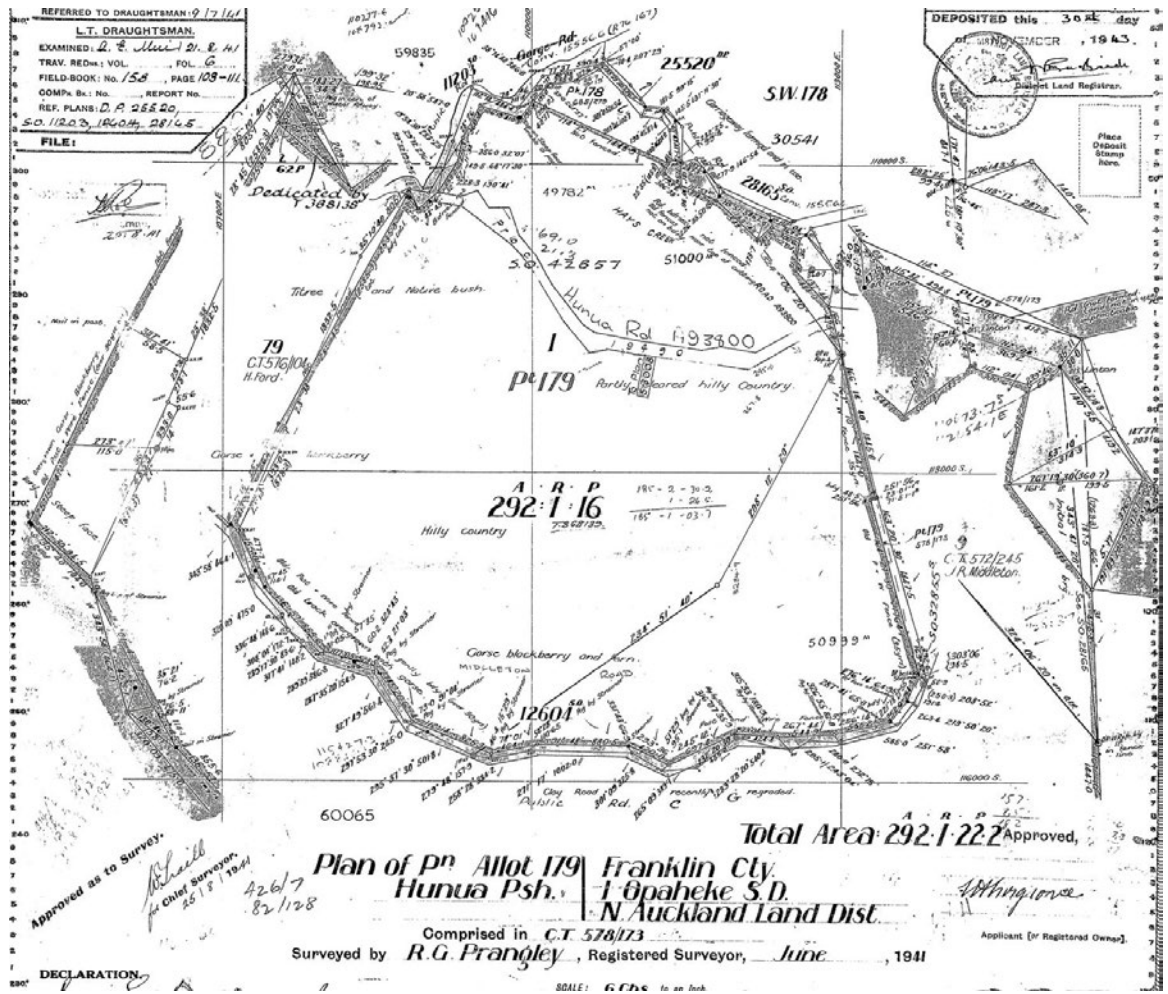


Figure 9. AK DP 30502 plan dated 1941 with the northeastern part of Allotment 79 described as “Ti Tree and Native Bush” and “Gorse and Blackberry” with “Very Steep Face” annotated along the southern boundary of Allotment 79 and with Middleton Road described as “Clay Road – recently Regraded” (source: Quickmap)

Information from Aerial Photographs

49. Aerial photographs from the 1940s to recent years were also reviewed. The aerials dated from the 1940s, 1950s and 1970s (in Figure 11 – Figure 13 respectively) show the proposed quarry development area as tree covered with tracks visible most likely from timber extraction and early quarrying activities. There is also a cleared area in the southern part of the proposed development area, which is visible in all of the aerial photographs and also in the later aerial photographs dated from the 1990s and 2000-2005 (Figure 14 and Figure 15).
50. The later aerials show the area of the Symonds Hill Pit cleared of vegetation (1990s aerial) and with what appear to be quarrying activities in the 2000-2005 aerial photograph. It is also noted that the most recent aerial photograph reviewed dated 2024-2025 (not shown - but accessed on Auckland Council GeoMaps) showed the cleared area in the south mostly grown over with vegetation. It is also noted that no buildings or structures were identified in the cleared area in the south in any of the aerial photographs.
51. The review of the aerial photographs shows that the area of the proposed quarry development consisted of steep hilly country with varying degrees of vegetation present; however, there is no evidence of clearance for agriculture. Instead, it is considered that parts of the area likely underwent works for timber extraction and early small-scale quarrying activities.



Figure 11. Aerial photograph dated 1940s with the area included in the proposed quarry development in the yellow circle. The cleared area in the south is indicated by the white arrow with limited quarrying activities to the north bordering Hunua Road visible (source: Auckland Council GeoMaps)

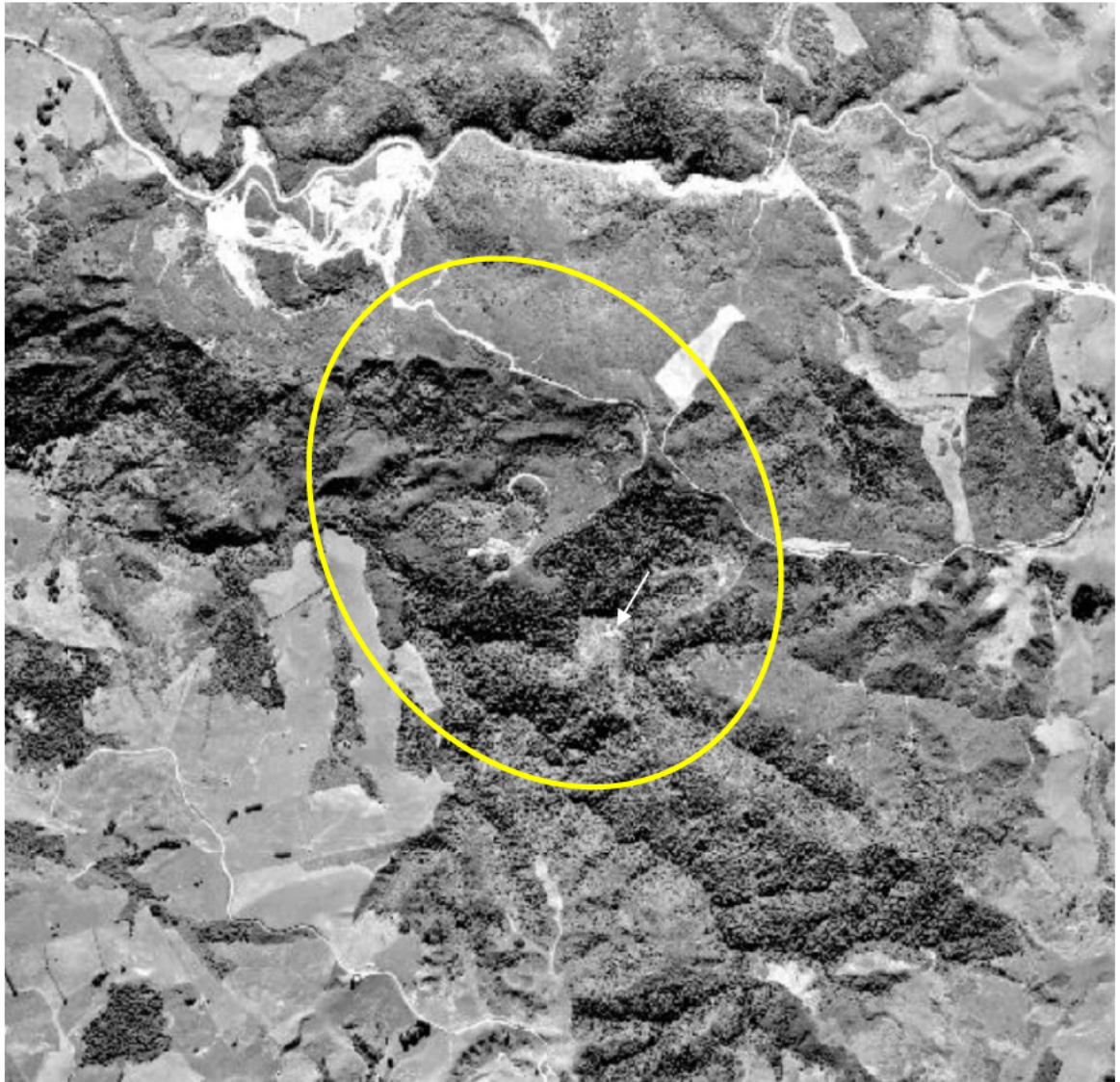


Figure 12. Aerial photograph dated 1950s with the area included in the proposed quarry development in the yellow circle. The cleared area in the south is indicated by the white arrow with the expanded quarrying activities to the north bordering Hunua Road visible (source: Auckland Council GeoMaps)

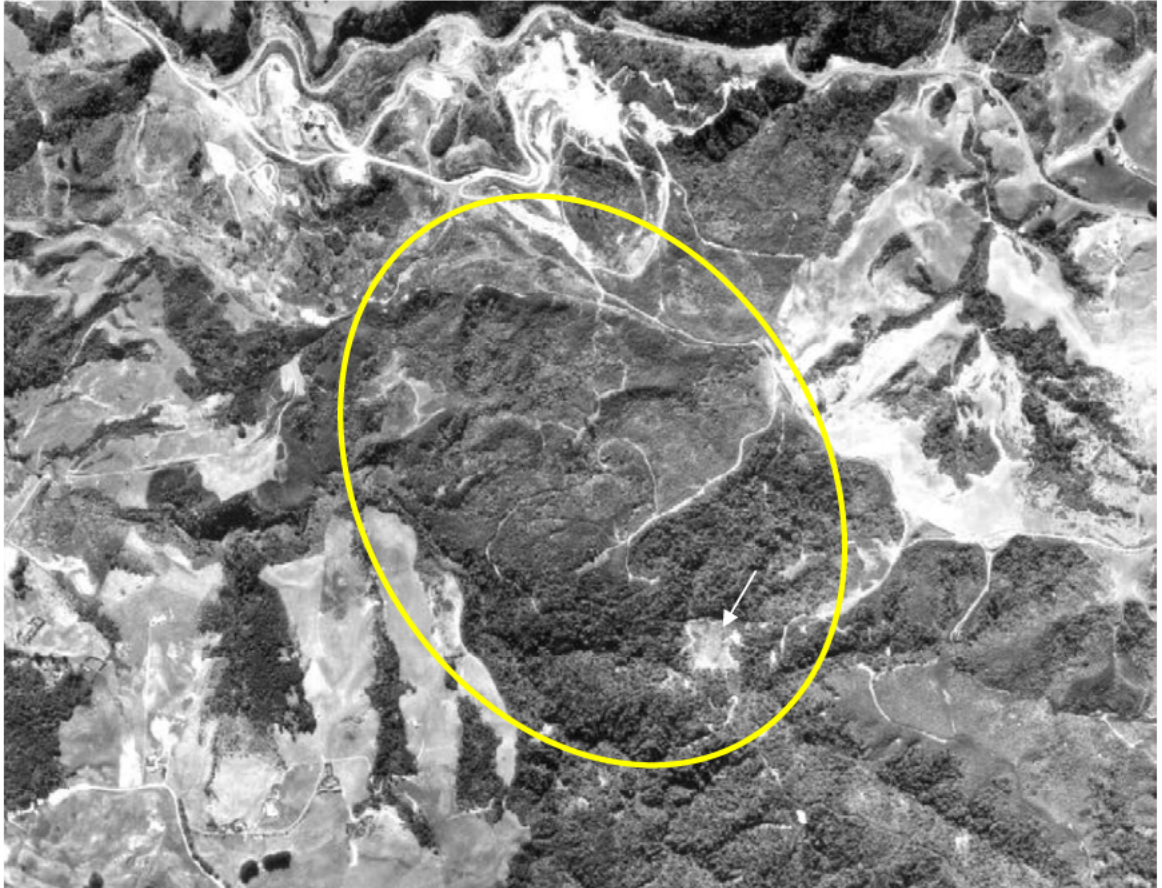


Figure 13. Aerial photograph dated 1970s with the area included in the proposed quarry development in the yellow circle. The cleared area in the south is indicated by the white arrow with the expanded quarrying activities to the north bordering Hunua Road visible (source: Auckland Council GeoMaps)



Figure 14. Aerial photograph dated 1990s with the area included in the proposed quarry development in the yellow circle and the area containing the Symonds Hill Pit cleared and with the cleared area in the south indicated by white arrow and with expanded quarrying activities to the north bordering Hunua Road visible (source: Auckland Council GeoMaps)



Figure 15. Aerial photograph from 2000-2005 with the area included in the quarry development in the yellow circle and with the Symonds Hill Pit in operation. The cleared area in the south is indicated by the white arrow, with the expanded quarrying activities to the north bordering Hunua Road visible (source: Auckland Council GeoMaps)

4. ARCHAEOLOGICAL BACKGROUND

Recorded Archaeological Sites

52. There are no recorded archaeological sites in the proposed quarry development area. One archaeological site has been recorded in proximity to the existing quarry property c. 750m to the northwest of the proposed quarry development and located on a neighbouring property and separated from it by existing quarry infrastructure. The location of the site is shown on the aerial plan in Figure 16 below and on the overlay showing historical allotments on Figure 7 above.
53. This is site **R12/663**, which is recorded as a pā site and described as being located on a north/south aligned ridge spur with features identified including a ditch and scarp defence and at least one pit and terrace. It was recorded in May 1998 as being located under bush and mostly in good condition apart from a section of bulldozed fence line along the ridge. Site visits in 2002 failed to identify any of the features described earlier, and it was noted that it would require further assessment to determine the nature of the site. The site is also recorded as HI:13625 on the Auckland Council Tūtangi Ora database.
54. There are 10 additional recorded archaeological sites in the general area outside of the development site, and these are described below to provide background information on the archaeological landscape of the broader Hunua area. The locations of these sites are also shown in Figure 16, and a brief description of all the archaeological sites is provided in Table 3.
55. There are two sites recorded to the northeast at a distance of c. 1600m. The first site is **R12/661** which is recorded as a terrace on a knoll measuring 3m by 1.5m and facing directly north. The second site is **R12/662** which is recorded as terraces with a curved platform below and one shallow pit. The sites are included in the Tūtangi Ora database as HI-13553 and HI-13554, respectively.
56. There are three sites located to the southwest. The first of these is **R12/334** which is recorded as a possible pā at a distance of c. 1100m from the development area. It is described as not containing any obvious features and the site record form notes that it may not be archaeological in nature. It is also recorded as HI-2572 on the Tūtangi Ora database. **R12/749** is recorded as a possible early European temporary dwelling of the Cossey family, although no evidence of any archaeological remains was identified during archaeological monitoring during development works in 2020 (Cameron and Clough 2020). It is located at a distance of c. 1200m from the development area and is also recorded as HI-14106 on the Tūtangi Ora database. The third site is **R12/673**, which is recorded as a European stone working area that is believed to have been in use for the production of basalt blocks in the early 1900s. It is located c. 1950 m from the development area. It is also included on the Tūtangi Ora database as HI-13626.

57. The five remaining sites are located to the north and northwest of the proposed quarry development area. **R12/165** is located c. 1800m to the north and is recorded as pits/ terraces. It was originally recorded in 1961. Later site visits determined that it was probably part of site **R12/4** (Pukekiwiriki Pā) which is also located c.1800m from the development area, but further to the west than R12/165. R12/4 is also scheduled in Schedule 14.1 Historic Heritage Schedule AUP (OP) ID:652 Category B and included as HI-2556 on the Tūtangi Ora database, with R12/165 included as HI-9620.
58. **R12/166** is located c.1900m to the northwest of the development area and is recorded as a midden / oven. It was recorded in the 1960s but was not able to be relocated in later site visits and is considered destroyed. It is also recorded as HI-8829 on the Tūtangi Ora database. **R12/1124** is recorded as the location of a 19th century cottage (Rose Brae farm) that was destroyed by fire in 2005. It is also recorded as HI:37 on the Tūtangi Ora database. It is located c. 1900m to the northwest of the development area. **R12/65** is recorded as pits and terraces and is located c. 1850m to the northwest of the development area. The site borders Hays Stream and consists of at least two pits and five terraces. It is scheduled in Schedule 14.1, AUP (OP) ID: 653 (Category B) and is also recorded on the Tūtangi Ora database as HI-2854.
59. Although no sites will be affected by the proposed works, in any area where archaeological sites have been recorded in the general vicinity it is possible that unrecorded subsurface remains may be exposed during development. It is considered unlikely that sites are located in the proposed quarry development area, as the area is situated on steep hillsides that were covered in bush in the past. However, the presence of Mangapū/ Symonds Stream in the south does indicate the possibility that sites, such as shell midden may be present, as such sites are often located in proximity to waterways.
60. It is also noted that an archaeological assessment was undertaken for the development of the Symonds Hill Pit in 2006 by Clough & Associates (Farley et al 2006). The assessment included a survey, and no evidence of archaeological remains was identified. The findings of that assessment were that the probability of subsurface archaeological remains being encountered during the works was low and that the works should proceed under accidental discovery protocols. It is also noted that no accidental discoveries have been reported up to the present time.

Other Historic Heritage Sites

61. There are no historic heritage sites included in the Auckland Council Tūtangi Ora database within the quarry development area. Apart from the archaeological sites described above, five other historic heritage sites within 2000m of the proposed quarry development area are included in the Tūtangi Ora database. The closest of these, at c. 800m to the southwest, is HI-674, a dwelling located at 630 Ponga Road and sighted from an aerial photograph. HI-4550 is recorded as a natural feature (Rubbly Rock

at Hunua Gorge) and is located at c. 1000m to the north. HI-4545 is recorded as an agricultural feature (Fairmont Estate) and is located c. 1530m to the west. HI-5033 (Ponga Hall) and HI-5036 (Ponga tennis courts) are located c. 1900m to the south. The locations of the sites are shown in Figure 17 and a brief description is provided in Table 3.

62. There are no scheduled places (included in Schedule 10 – Notable Trees Schedule; Schedule 12 - Sites and Places of Significance to Mana Whenua Schedule; and Schedule 14.1 - Schedule of Historic Heritage within or in proximity to the proposed quarry development area. Finally, there are no places included on the Heritage New Zealand List/ Rārangi Kōrero within or in proximity to the proposed quarry development area.

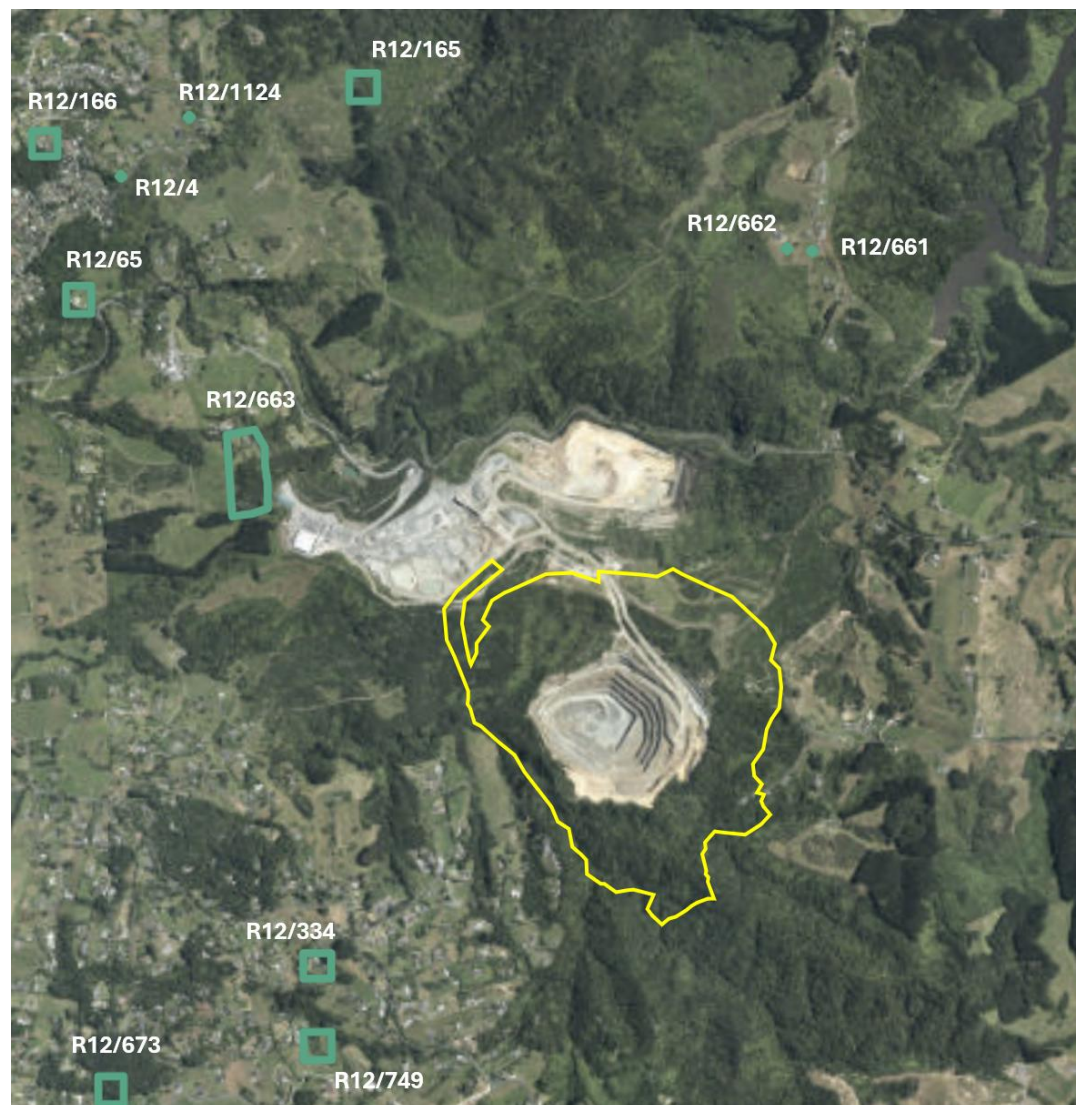


Figure 16. Plan showing the archaeological sites within c. 2000m of the proposed development area outlined in yellow (source: NZAA ArchSite Database)

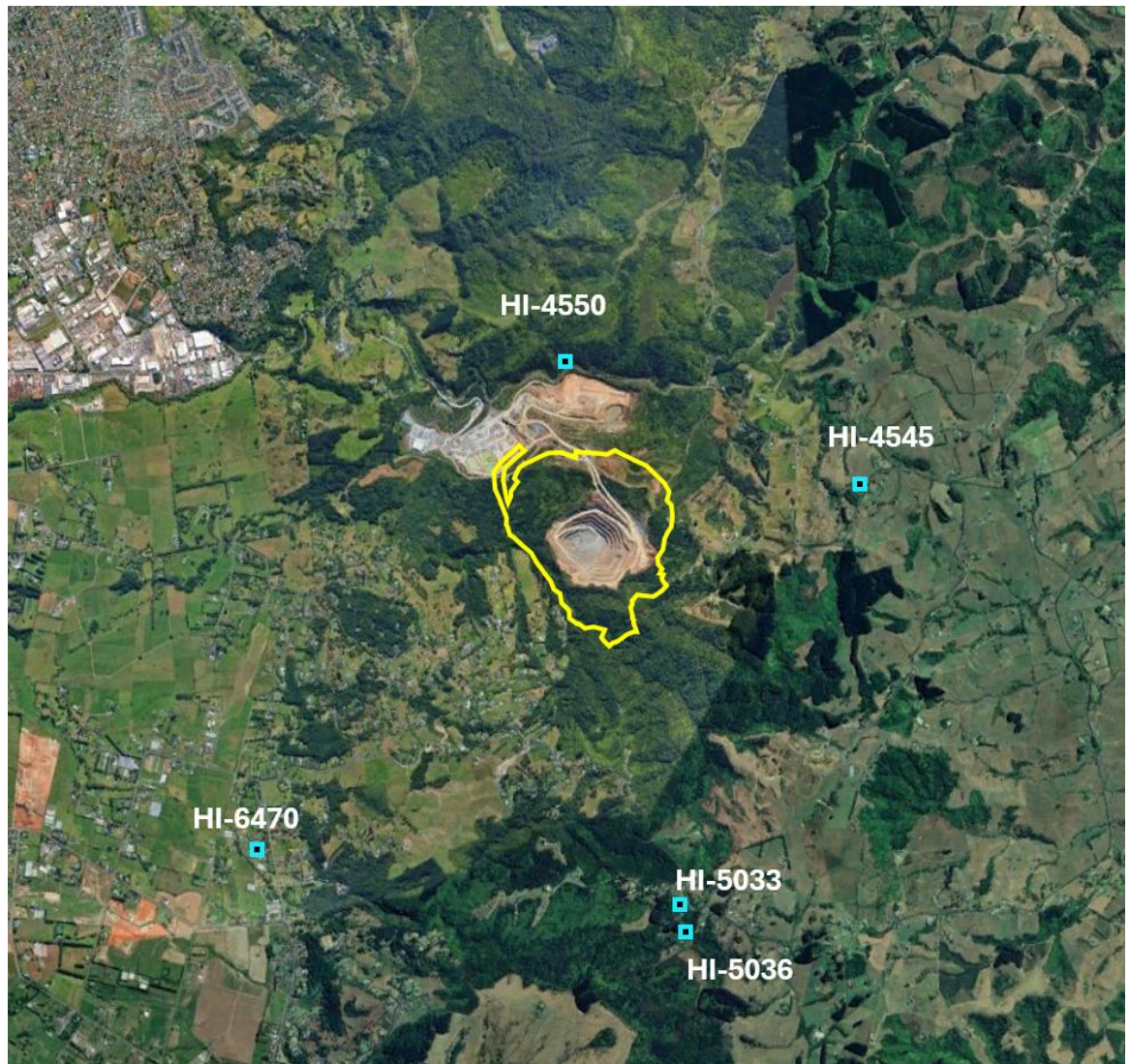


Figure 17. Map showing the location of the historic heritage sites included on the Tūtangi Ora database (excluding archaeological sites) with the proposed development area outlined in yellow (source: Auckland Council GeoMaps)

Table 3. Brief description of the recorded archaeological and other historic heritage sites in the general area (within c. 2000m) of the proposed development

Tūtangi Ora Ref	NZAA Ref	AUP (OP) ID	Site Type	Description	NZTM Easting	NZTM Northing
HI:2556	R12/4	00652 Cat B	Pā	Pukekiwiriki Pā with platform, defensive ditch and rectangular pit.	1776147	5895663
HI:2844	R12/65	00653 Cat B	Pits/ Terraces	At least two pits and three to five terraces along a knoll. Stone mounds visible.	1775934	5895150
HI:9620	R12/165	n/a	Pits	Two or three pits, probably related to Pukekiwiriki Pā.	1777013	5985942
HI:8829	R12/166	n/a	Midden	Recorded in the 1960s-70s. Very little information – presumed destroyed.	1775813	5895740
HI:2572	R12/334	n/a	Pā	Features noted included unusual ditches- probably not an archaeological site.	1776819	5892641
HI:13553	R12/661	n/a	Pits/ Terraces	Terrace c. 3x 1.5m facing north on mid part of knoll at 894 Hunua Road	1778748	5985368
HI:13554	R12/662	n/a	Pits/ Terraces	Flattened area on a slope with two terraces and a shallow pit at 894 Hunua Road	1778653	5985378
HI:13625	R12/663	n/a	Pā	Situated on a north south ridge spur with terrace on west side and long ditch.	1776815	5894441
HI:13626	R12/673	n/a	Quarry	European stone working area from the early 1900s.	1776040	5892180
HI:14106	R12/749	n/a	Garden Plant	Reported location of a European cottage – no evidence of occupation found.		
HI:37	R12/1124	n/a	Historic Domestic	Rose Brae Farm - 19th century cottage at 185 Settlement Road Papakura- destroyed by fire in 2005.	1776408	5895885
HI-674	n/a	n/a	Dwelling	House located on aerial photograph	1777209	5892600
HI-4545	n/a	n/a	Agricultural	Fairmont Estate	1779786	5893902
HI-4550	n/a	n/a	Natural Feature	Rubbly Rock at Hunua Gorge	1778015	5894736
HI-5033	n/a	n/a	Civic	Ponga Hall	1778531	5891201
HI-5036	n/a	n/a	Recreational	Ponga Tennis Courts	1778552	5891162

5. PHYSICAL ENVIRONMENT

Geology and Geomorphology

Topography, Vegetation and Landuse

63. The proposed quarry development area is situated on a topography of ridges and steep gullies (as shown in the aerial plan with contours in Figure 18). The southern boundary is bordered by the Mangapū/ Symonds Stream, and the proposed quarry development area contains a tributary of the stream that will be directly affected by the works. The proposed quarry development area also contains the existing Symonds Hill Pit which is located in the central part of the development area.



Figure 18. Aerial photographs with contours with the proposed quarry development area outlined in yellow (source: Auckland Council GeoMaps)

6. FIELD ASSESSMENT

Field Survey Results

64. A field survey of the southern area was carried out to determine if any evidence of archaeological remains could be identified. This area was surveyed as it was determined to have some archaeological potential, based on the presence of waterways and that there were some areas that appeared to be on fairly level ground and a cleared area that was identified during desk-based research. The properties visited are shown on the map in Figure 19 and the results are presented below.
65. A survey of this area was carried out on 25 November 2025 by Tom Clough -Macready. The land was densely forested with many steep slopes and a few cut tracks which limited access and also visibility. The area surveyed was mostly within Lot 2 DP 115598 but a small section of Lot 1 DP 60065 north of the Mangapū/ Symonds stream tributary was also included (Figure 19). During the survey several of the main paths on fairly level ground were able to be traversed, however, the southwestern parts of the survey area were extremely steep and could not be accessed safely. It is noted that these steep slopes would be unlikely to contain archaeological sites based on the unsuitable terrain.
66. Figure 20 shows the locations of the test pits that were undertaken. Probing and test pitting did not reveal anything other than clean soils (with photographs in Figure 21 – Figure 24). No notable features were identified. Twentieth century features, including a redwood tree, two bridges, a pole with an iron cable, and numerous post and wire fences were observed (Figure 25 – Figure 36).
67. No evidence of any archaeological remains or features was identified during the survey.

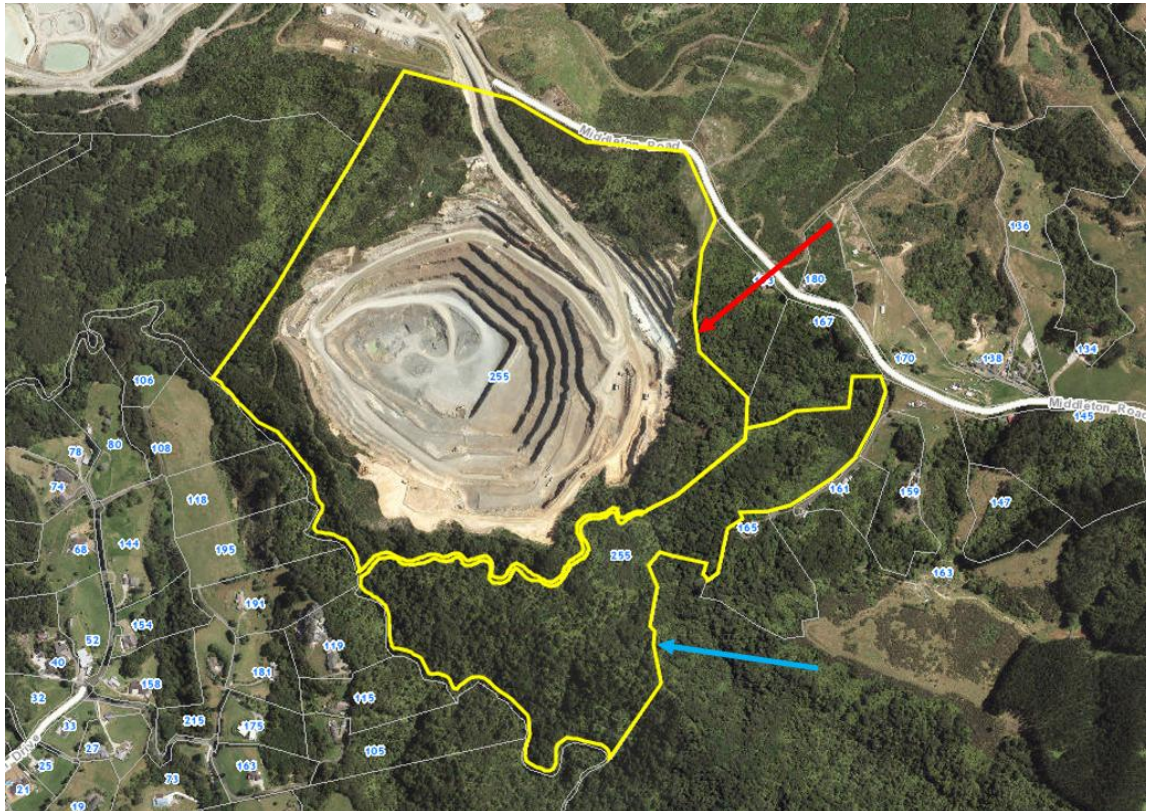


Figure 19. Aerial plan showing the properties included in the survey for this assessment- Lot 2 DP 115598 indicated by blue arrow and the southeastern part of Lot 1 DP 60065 indicated by red arrow (source: Auckland Council GeoMaps)



Figure 20. Aerial plan showing the locations of the test pits (yellow diamonds) and photographs taken during the survey (white circles)



Figure 21. Photograph showing the detail of test pit 1



Figure 22. Photograph showing the detail of test pit 2



Figure 23. Photograph showing the detail of test pit 3



Figure 24. Photograph showing the detail of test pit 4



Figure 25. Photograph 1 looking west down dirt track

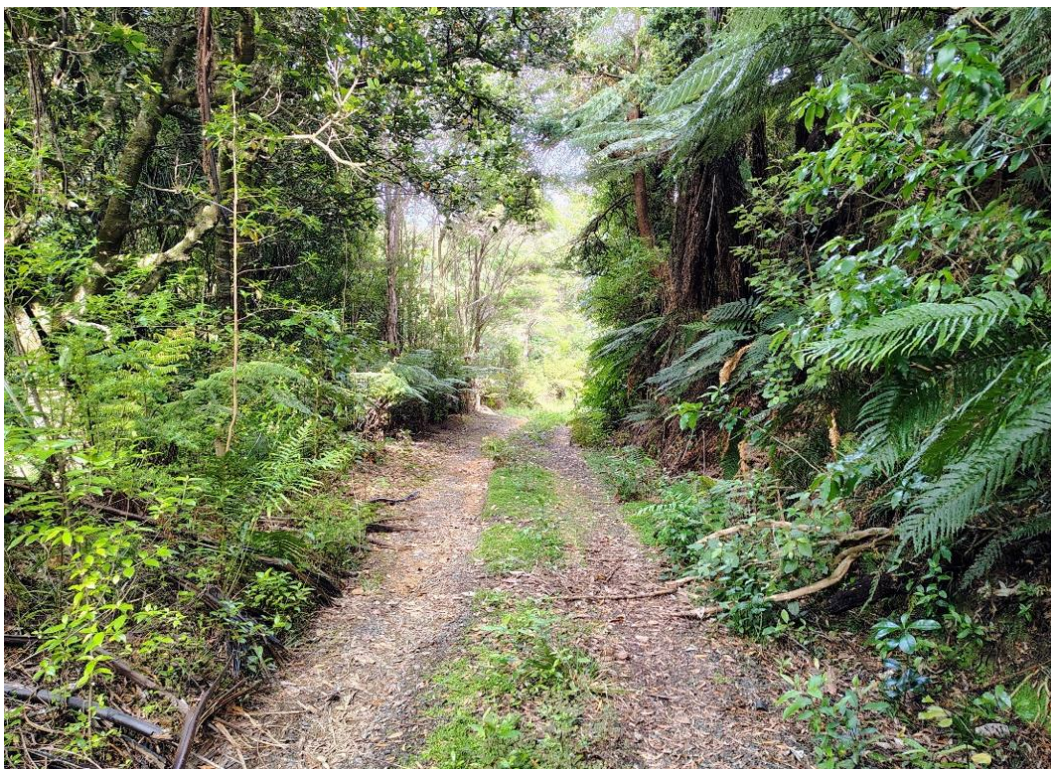


Figure 26. Photograph 2 looking west down dirt track

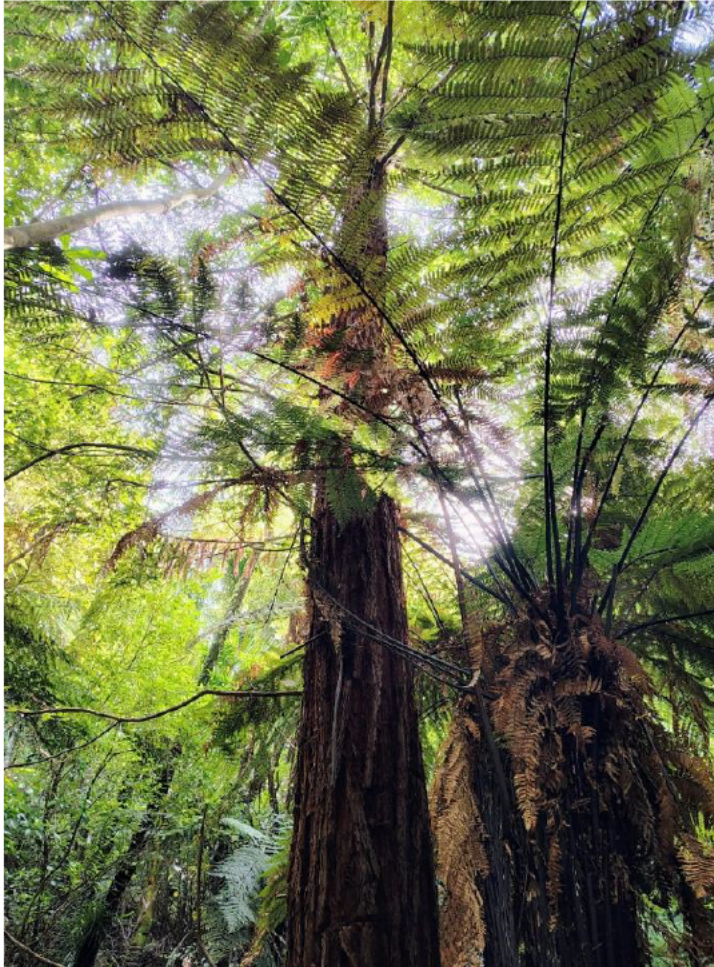


Figure 27. Photograph 3 looking north towards a non-native redwood tree located in the northeast corner of the area of cleared land



Figure 28. Photograph 4 looking south with a concrete bridge indicated by arrow



Figure 29. Photograph 5 looking northeast down a path with a wooden and iron beam bridge



Figure 30. Photograph 6 looking south showing pole and metal cable



Figure 31 2. Photograph 7 showing a section of the tributary, looking northeast



Figure 32. Photograph 7 showing a section of the tributary, looking southwest



Figure 33. Photograph 9 standing south of the stream and facing south with post and wire fence visible



Figure 34. Photograph 10 looking northwest from the southern boundary of the survey area



Figure 35. Photograph 11 looking west showing rapids along the tributary



Figure 36. Photograph 12 looking southeast from the western corner of the survey area

7. DISCUSSION AND CONCLUSIONS

Summary of Results

- 68. There are no recorded archaeological sites in the proposed quarry development area, and no additional sites were recorded during the field survey for this assessment.
- 69. Based on the desktop research for this assessment and the field survey results, the likelihood of unrecorded archaeological sites associated with early European settlement (pre-1900) is considered unlikely, based on the steep terrain, difficult access, and forested nature of the area.
- 70. Also, the presence of unrecorded archaeological sites associated with Māori occupation and settlement is considered low. It is noted, however, that with the Mangapū/ Symonds Stream and tributary in the southern part of the development area, the presence of isolated archaeological sites such as shell midden cannot be completely excluded, as these are often found in proximity to waterways.

Māori Cultural Values

- 71. This is an assessment of effects on archaeological values and does not include an assessment of effects on Māori cultural values. Such assessments should only be made by tangata whenua. Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites. The historical association of the general area with tangata whenua is evident from the recorded sites, traditional histories and known Māori place names referenced above.
- 72. It is understood that ongoing liaison and engagement with Ngāti Te Ata, Ngāti Tamaoho and Te Ākitai Waiohua is being undertaken and will continue throughout the remainder of the project. Cultural Values Assessments will also be undertaken by each iwi.

Survey Limitations

- 73. It should be noted that archaeological survey techniques (based on visual inspection and minor sub-surface testing) cannot necessarily identify all sub-surface archaeological features or detect wāhi tapu and other sites of traditional significance to Māori, especially where these have no physical remains.
- 74. As parts of the survey area were covered by thick vegetation and parts are situated on steep, hilly terrain, these areas could not be safely accessed at the time of the survey.

Archaeological Value and Significance

75. The archaeological value of sites relates mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history using archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity, and condition of sites are the main factors in their ability to provide information through archaeological investigation. For example, generally pā are more complex sites and have higher information potential than small midden (unless of early date). Archaeological value also includes contextual (heritage landscape) value. Archaeological sites may also have other historic heritage values including historical, architectural, technological, cultural, aesthetic, scientific, social, spiritual, traditional and amenity values.
76. There are no known archaeological values in the proposed quarry development area as none have been previously recorded, and no archaeological sites were identified during the field survey for this assessment.

Effects of the Proposal

77. There are no recorded archaeological sites within or in close proximity to the proposed quarry development. However, in any area where archaeological sites have been recorded in the general vicinity, it is possible that unrecorded subsurface remains may be exposed during development. If so, it is considered unlikely that any complex sites are located in the proposed quarry development area, as the area is situated on steep hillsides that were covered in bush in the past.
78. The presence of the Mangapū/Symonds Stream in the south does indicate the possibility that isolated sites, such as shell midden, may be present, as such sites are often located in proximity to waterways.
79. A description of the works for eight stages is provided below.

Stage 1 to Stage 3 (years 1 to 4 (Indicative))

80. Stage 1 works will require the realignment of a tributary of the Mangapū/Symonds Stream and the excavation works for the new channel alignment are expected to be completed in Stage 2. The cut area for these works is shown in Figure 37 with detail of the works in Figure 38. The works will also include the construction of a temporary bridge. The bridge will have a carriageway width of 6 to 6.5 m and a length of 10-12m to provide a single lane for 100 tonne trucks. The bridge will be constructed on simple concrete pads or with shallow foundations set above the stream banks with detail of the temporary bridge is shown in Figure 39,
81. The works in Stage 1 will also include the construction of the southern access road with works to cover a 500m long and 10m wide area and with excavation depths of 15-20m. The plans for the southern access road is also shown in Figure 37 and Figure 38.

82. Overburden stripping in the northwest part of the development area bordering the existing Symonds Hill Pit will take place in Stage 2 and will require the removal of all vegetation and soil down to rock. The Stage 2 works will also include the construction of the western haul road. The works required for the haul road will consist of vegetation removal, and the installation of culverts in the three main catchments. The construction will require extensive earthworks including cutworks to depths of 24m. The earthworks plan is shown in Figure 40.
83. Overburden stripping will also take place from the southern boundary of the Symonds Hill Pit southwards in Stage 3. The Stage 3 works will include the area containing the existing tributary of the Mangapū Stream (also shown in Figure 37). The overburden stripping will be undertaken by excavator and drilling. This will require vegetation clearance and topsoil stripping and removal of soil down to rock.

Later Stages

84. Stages 4 through 8 will consist for the most part of incremental stripping campaigns as shown in the plans in Appendix C. These works will be undertaken by 100t excavators and comprise vegetation clearance, topsoil stripping and removal of the soil down to rock. The aggregate will then be extracted creating a series of benches as per standard quarrying practice: requiring drill and blast to then dig and cart the product to the processing facility.
85. The only other activity associated with these stages is the realignment of the Western Haul Road in Stage 7. The haul road constructed during Stage 2 will be removed during Stage 7 and a new haul road constructed which will result in the removal of another tributary. The construction methodology will be similar to that set out above.

Management of Potential Effects

86. As no recorded archaeological sites will be affected, an Archaeological Authority is not a legal requirement for the proposed development.
87. However, as the possibility that unrecorded archaeological sites may be exposed cannot be completely excluded, an Authority to cover the proposed works is being sought by Winstone Aggregates as a precaution for risk management purposes for Stages 1-3. It is suggested that the conditions include archaeological monitoring of vegetation removal and preliminary earthworks in the vicinity of the waterways in the southern part of the quarry development area, and procedures for recording any archaeological evidence that may be encountered before it is modified or destroyed. This approach has the advantage of allowing any archaeology uncovered during the development of the site to be dealt with immediately, avoiding delays that would otherwise occur if an Authority was not applied for in advance of preliminary earthworks.
88. An archaeological management plan has been prepared and will contain guidelines for the archaeological monitoring to be undertaken as part of this project to ensure that any archaeological remains (if discovered) will be dealt

with appropriately and avoid, remedy or mitigate any adverse residual effects from accidental discoveries.

89. The plan in Figure 41 shows the area where archaeological monitoring is recommended during the preliminary works for stream realignment, access road construction and overburden stripping in Stages 1 - 3.

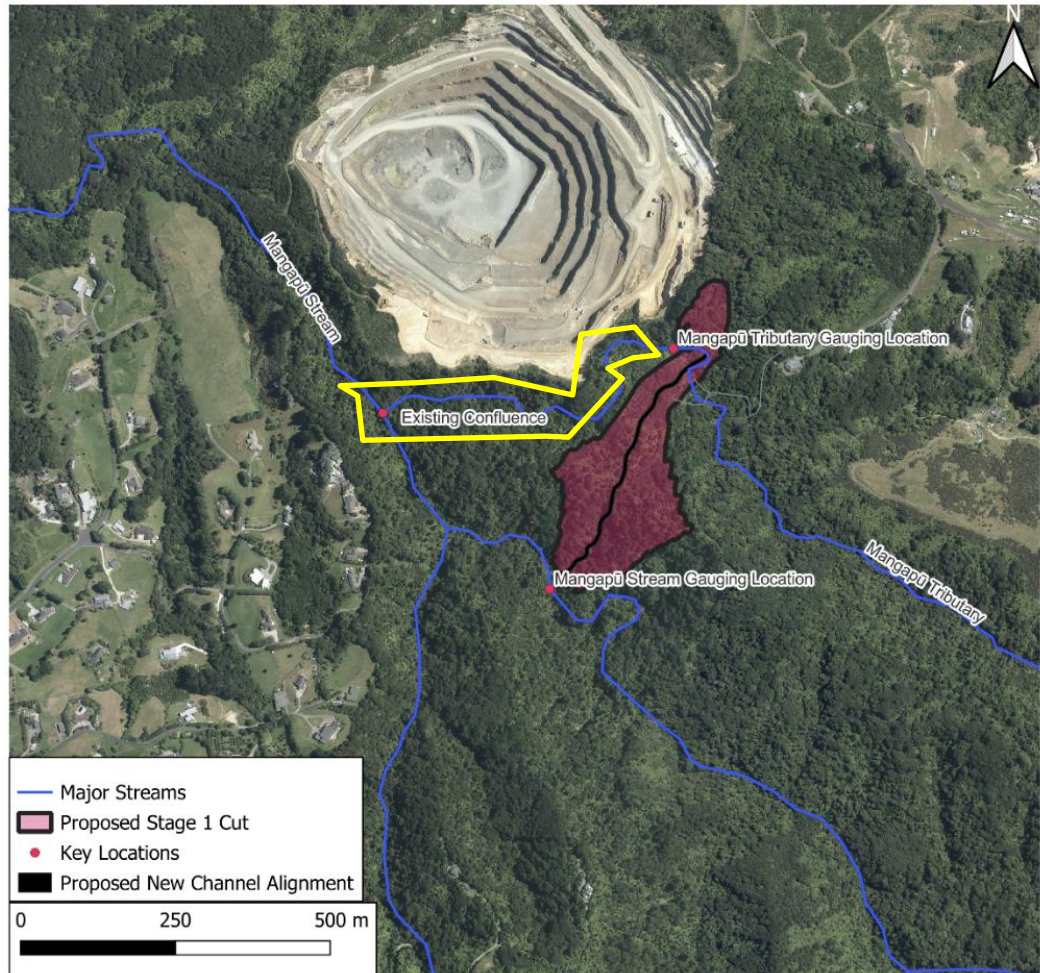


Figure 37. Aerial plan showing the proposed Stage 1 cut area for the new channel alignment shaded red and existing tributary to be removed in Stage 3 outlined in yellow (source: PDP)

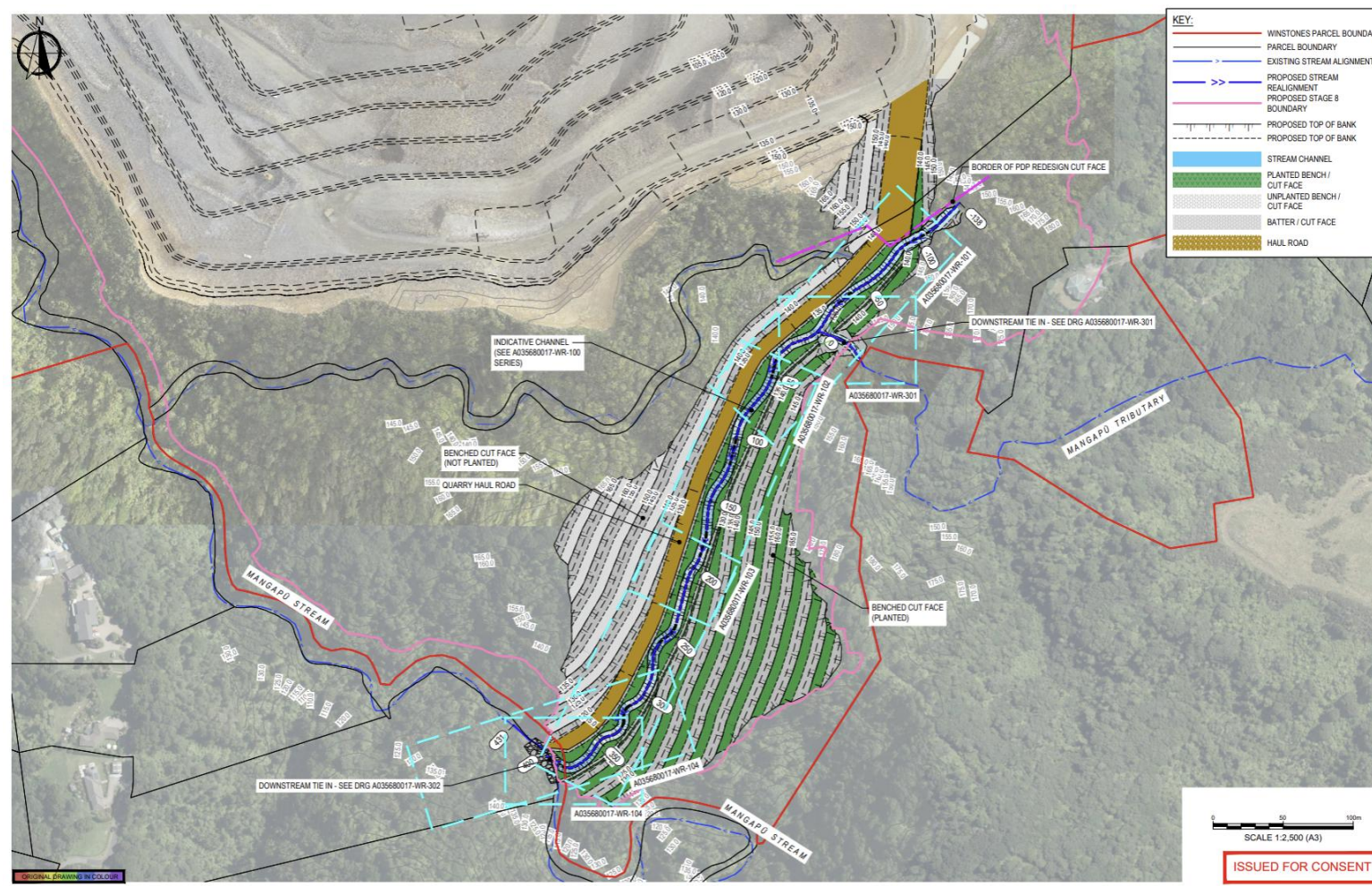


Figure 38. Plan showing the detailed works for Stage 1 (source: PDP)

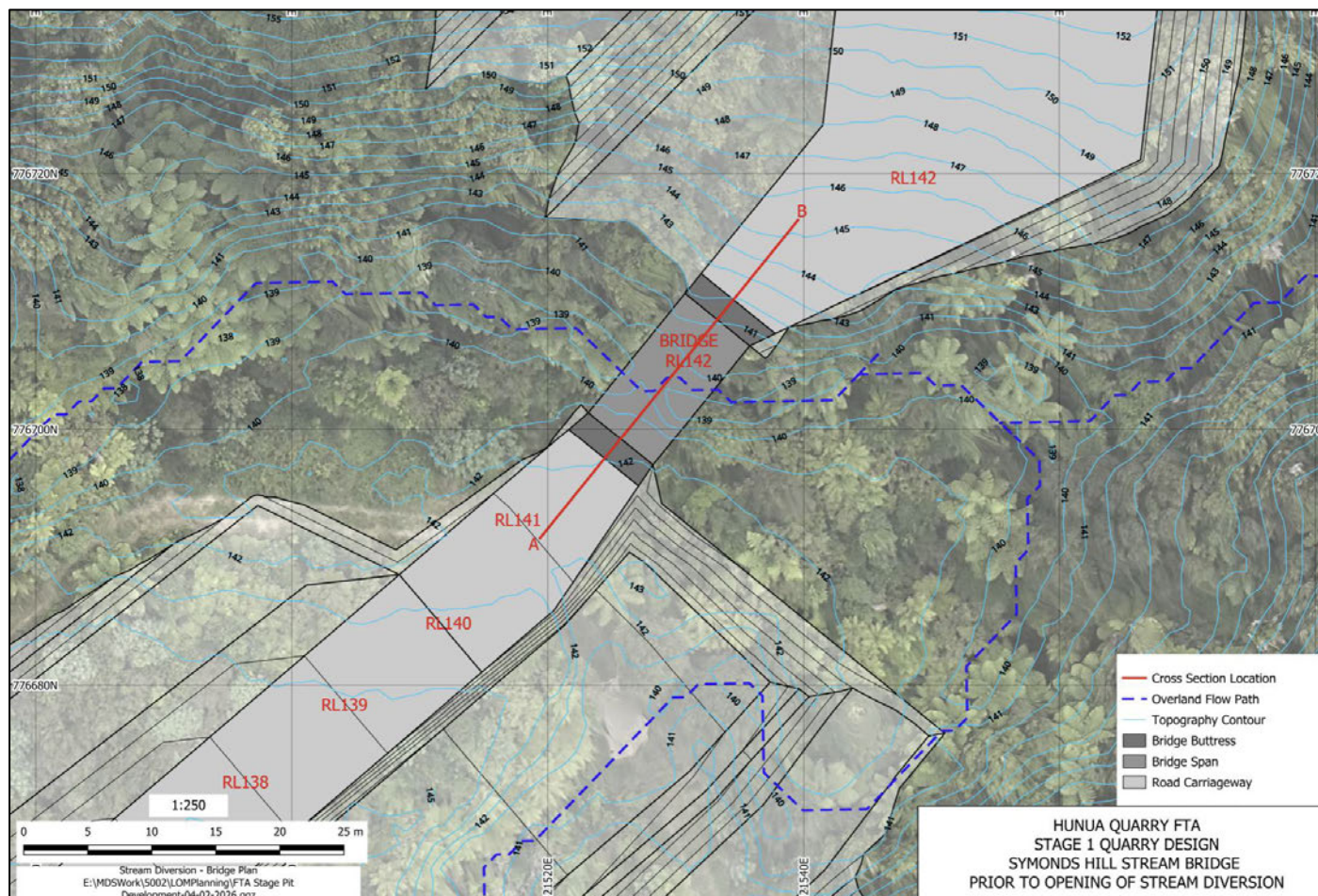


Figure 39. Plan showing the proposed temporary bridge in Stage 1 (source: Winstones)

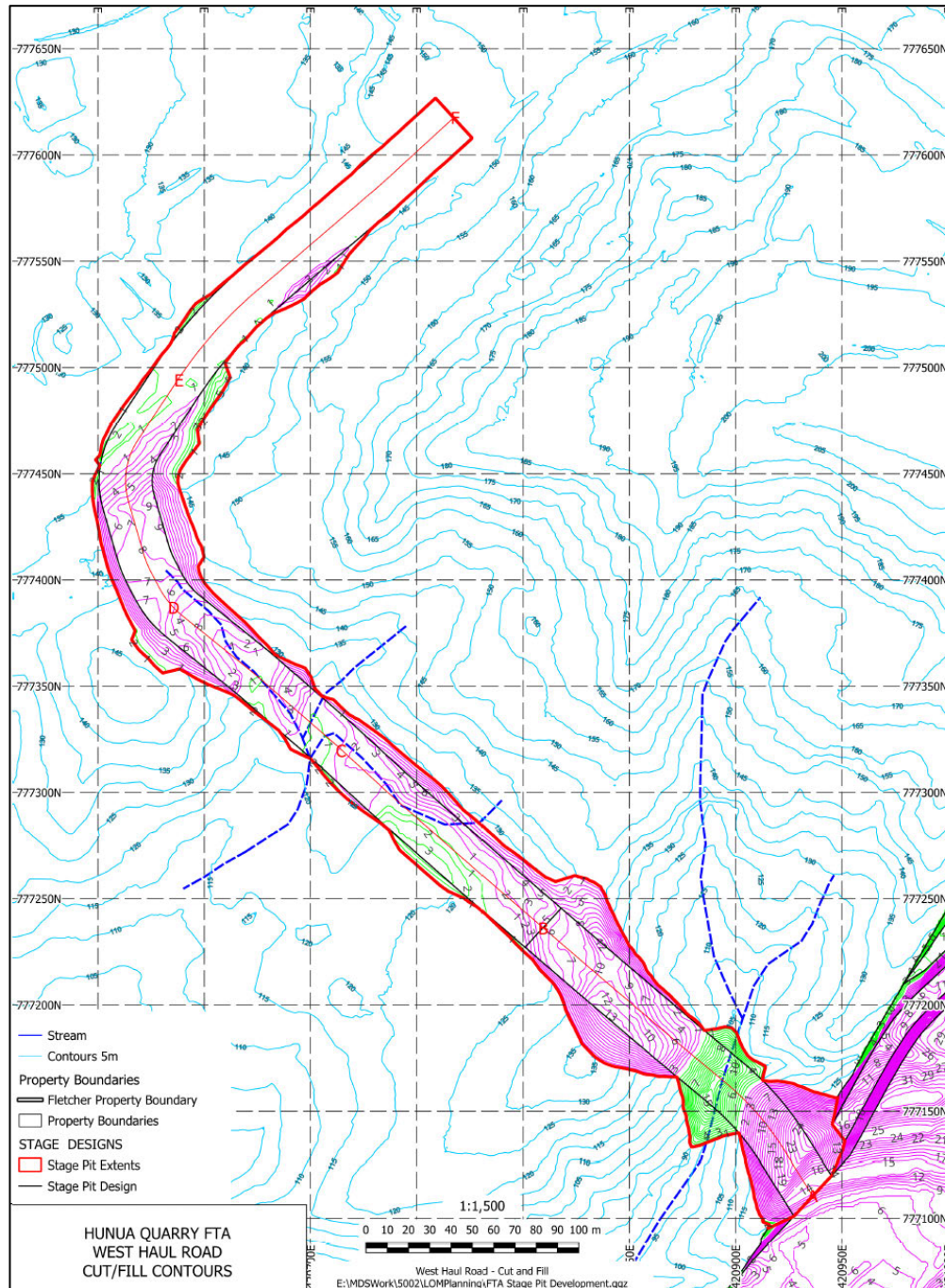


Figure 40. Cut/ Fill plan of the western access road with cut areas (pink) and fill areas (green) (source: Winstone Aggregates)

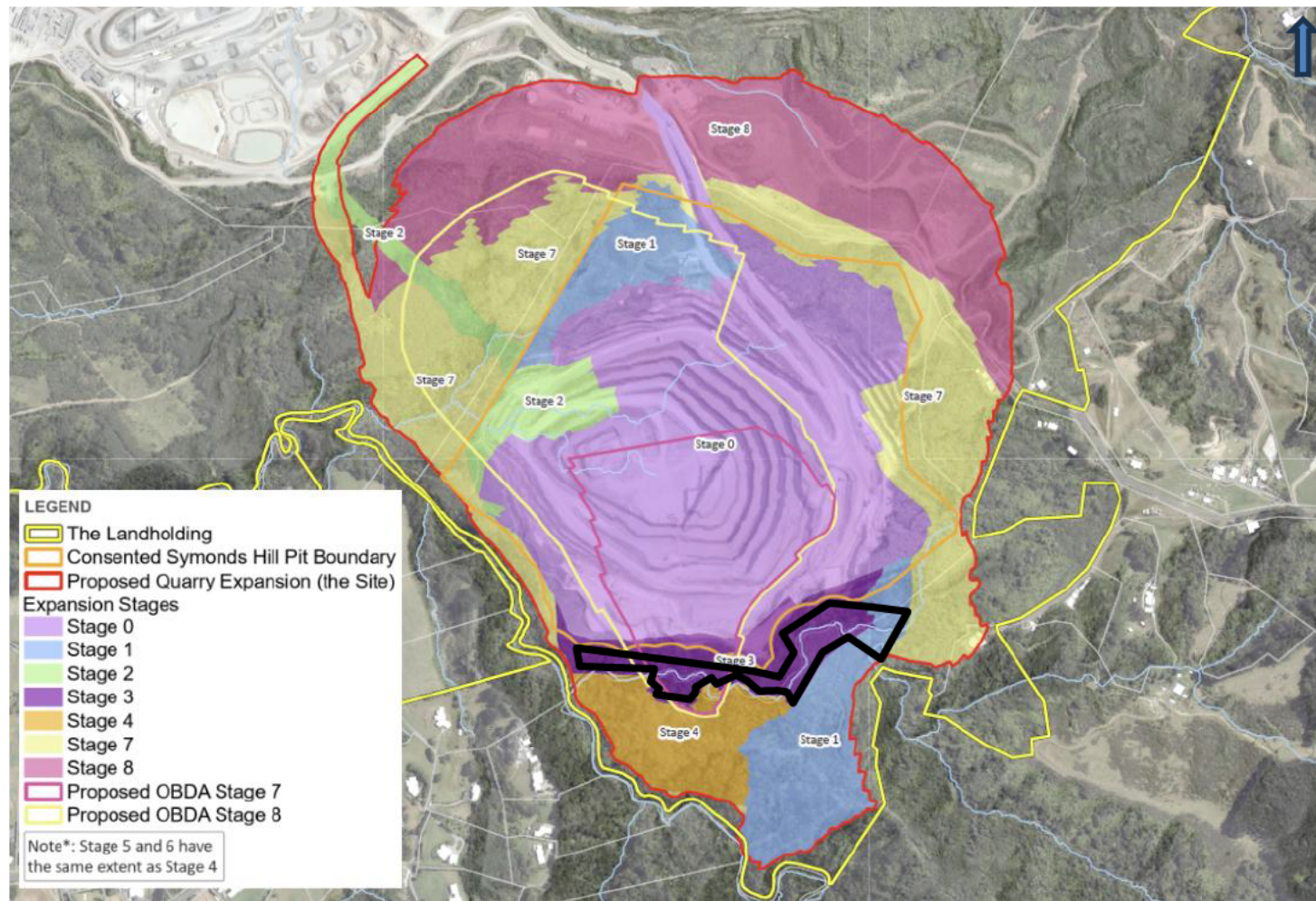


Figure 41. Staging plan showing the areas where archaeological monitoring should be undertaken for vegetation clearance and preliminary earthworks outlined in black with overall proposed development area outlined in red (source: Winstone

Fast-Track Approvals Act 2024 Requirements

90. Under the Act in Section 42 (1), an authorised person for a listed project or a referred project may lodge an application for Archaeological Authority with the EPA. Under section 42(3)(a) the applicant must be eligible to apply for any corresponding approval under a specified Act. A substantive application may also seek: under Section 42(4)(a) a resource consent that would otherwise be applied for under the Resource Management Act 1991.
91. Clause 4(1) of Schedule 8, of the FTAA states that the Panel, when considering an application for an archaeological authority, must take into account the following matters:
- (a): The purpose of the FTAA; and
 - (b) The matters set out in s 59(1)(a) of the HNZPT Act; and
 - (c) The matters set out in section 47(1)(a)(ii) and 5 of the HNZPT Act; and
 - (d) a relevant statement of the general policy confirmed or adopted under the HNZPT Act.
92. The greatest weight must be given to the purpose of the FTAA in that consideration.
93. Clause 9 of Schedule 8 of the FTAA states that an authority granted under the FTAA-
- (a) Has the same force and effect as it were granted under section 48 of the HNZPT Act; and
 - (b) For the purposes of the HNZPT Act, must be treated as if it were an authority granted under that Act.
94. This report has acknowledged the considerations that the Panel will take into account as set out in clause 4 of Schedule 8 of the FTAA as follows;
- a. Pursuant to s59(1)(a), regard must be had to any matter the panel considers appropriate, including:
- i. the historical and cultural heritage value of the archaeological site and any other factors justifying the protection of the site:
 - ii. the purpose and principles of the Heritage New Zealand Pouhere Taonga Act 2014
 - iii. the extent to which protection of the archaeological site prevents or restricts the existing or reasonable future use of the site for any lawful purpose:
 - iv. the interests of any person directly affected by the decision of Heritage New Zealand Pouhere Taonga:
 - v. a statutory acknowledgement that relates to the archaeological site or sites concerned:
 - vi. the relationship of Māori and their culture and traditions with their

ancestral lands, water, sites, wāhi tūpuna, wāhi tapu, and other taonga.

95. Section 47 (1) (a) (ii) states that in the case of an application for an authority made under section 44 (b), that will or may destroy a recorded site, where the effects of the proposed activity on a site or sites are, or are likely to be, no more than minor, the application should be assessed in accordance with subsection (5).
96. Although no known sites will be affected and it is unlikely that any undetected sites are present, the potential for archaeological remains cannot be completely excluded, so an Authority to cover works in Stages 1-3 is being sought by Winstone under the FTAA for risk management purposes pursuant to s44.
97. An archaeological Authority granted under the FTAA has the same force and effect as an Authority granted under the Heritage New Zealand Pouhere Taonga Act 2014 and for purposes of the HNZPTA, must be treated as if it were an authority under that Act (Schedule 7 Section 12A (a) and (b)).
98. This assessment has established that no known archaeological sites have been identified in the development area, however, as an authority will be sought for risk management purposes, this assessment meets the relevant requirements for information that must be provided with an application for authority in Section 46 of the HNZPTA as stated in Section 47 (1(a)(i). As no recorded sites are affected, points relevant to effects on recorded sites are not addressed.

Table 4. Fast Track requirements cross referenced with assessment report

Fast Track Requirement	Report Cross Reference
<p>Clause 2 of Schedule 8 Information required in application for archaeological authority (to include information required under section 46 of the HNZPTA)</p> <p>1) For the purposes of section 43(3)(i), an application for an archaeological authority must include the following information:</p> <p>(a) a legal description of the land or, if one is not available, a description that is sufficient to identify the land to which the application relates; and</p> <p>(b) the name of the owner of the relevant land, if the applicant is not the owner of the land; and</p> <p>(c) proof of consent, if the owner has consented to the proposed activity; and</p> <p>(d) confirmation that the application complies with section 46(2)(a),(b) and (d)</p> <p>(e) a description of each archaeological site to which the application relates and the location of each site; and</p> <p>(f) a description of the activity for which the authority is sought; and</p> <p>(g) a description of how the proposed activity will modify or destroy each archaeological site; and</p> <p>(h) except in the case of an approval described in section 44(b) of the HNZPT Act, an assessment of—</p> <p>(i) the archaeological, Māori, and other relevant values of the archaeological site in the detail that is appropriate to the scale and significance of the proposed activity and the proposed modification or destruction of the archaeological site; and</p> <p>(ii) the effect of the proposed activity on those values;</p>	<p>Paragraph 3 and Figure 1</p> <p>Paragraph 3</p> <p>n/a</p> <p>n/a</p> <p>n/a – no sites identified.</p> <p>Paragraphs 65-70 for Stages 1 -3</p> <p>n/a – no sites identified.</p> <p>n/a – no sites identified.</p> <p>n/a- no sites identified</p>
<p>Clause 4(1) of Schedule 8, of the FTAA states that the Panel, when considering an application for an archaeological authority, must take into account the following matters, and giving the greatest weight to:</p> <p>(a) The purpose of the FTAA</p> <p>(b) The matters set out in section 59(1)(a) and (5) of the HNZPT Act; and</p> <p>(c) The matters set out in section 47(1)(a)(ii) and 5 of the HNZPT Act; and</p> <p>(d) A relevant statement of the general policy confirmed or adopted under the HNZPT Act.</p>	<p>n/a</p> <p>n/a</p> <p>Paragraph 108</p> <p>Paragraph 93</p>

Resource Management Act 1991 Requirements

99. Section 6 of the RMA recognises as matters of national importance: ‘the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga’ (S6(e)); and ‘the protection of historic heritage from inappropriate subdivision, use, and development’ (S6(f)).
100. All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when ‘managing the use, development and protection of natural and physical resources’. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (section 17), including historic heritage.
101. Historic heritage is defined (Section 2) as:
 ‘those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv) historic; (v) scientific; (vi) technological’. Historic heritage includes: ‘(i) historic sites, structures, places, and areas; (ii) archaeological sites; (iii) sites of significance to Māori, including wahi tapu; (iv) surroundings associated with the natural and physical resources’.
102. Regional, district and local plans contain sections that help to identify, protect and manage archaeological and other heritage sites. The plans are prepared under the provisions of the Resource Management Act 1991 (RMA). The Auckland Council Auckland Unitary Plan (Operative in Part) is relevant to the proposed activity. There are no scheduled historic heritage sites located within the proposed quarry development area.
103. This assessment has established that the proposed activity will have no effect on any known archaeological remains and has little potential to affect unrecorded subsurface remains. However, as an Archaeological Authority will be applied for to cover Stages 1-3, it is recommended that archaeological monitoring is carried out in the area shown in Figure 41. It is also recommended that an advice note regarding the provisions of the HNZPTA is included.
104. Based on the findings of this assessment, complex archaeological sites are not expected and any adverse effects on unidentified archaeological sites are considered likely to be minor and can be appropriately mitigated under the archaeological provisions of the HNZPTA.
105. As the authority application will not cover Stages 4-8, a general condition relating to accidental discovery of archaeological remains could be included as a condition of the land use consent for those activities, requiring that if any archaeological remains are exposed during development in these stages, the accidental discovery rule (E12.6.1) set out in the AUP (OP) must be complied with. Under the Accidental Discovery Rule works must cease within 20m of the discovery and the

Council, Heritage NZ, Mana Whenua and (in the case of human remains) NZ Police must be informed. The Rule would no longer apply in respect to archaeological sites if an Authority from Heritage NZ was in place, as that Authority would take preference.

Heritage New Zealand Pouhere Taonga Act 2014 Requirements

106. In addition to any requirements under the RMA, the HNZPTA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority modify an archaeological site has been issued by Heritage NZ (Section 42).
107. An archaeological site is defined by the HNZPTA Section 6 as follows:
‘archaeological site means, subject to section 42(3), –
- (a) any place in New Zealand, including any building or structure (or part of a building or structure) that –
 - (i) 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
 - (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
 - (b) includes a site for which a declaration is made under section 43(1)’
108. Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished.
109. Under Section 43(1) a place post-dating 1900 (including the site of a wreck that occurred after 1900) that could provide ‘significant evidence relating to the historical and cultural heritage of New Zealand’ can be declared by Heritage NZ to be an archaeological site.
110. Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a recorded archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Māori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapū and are subject to the recommendations of the Māori Heritage Council of Heritage NZ. In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.
111. The Archaeology Statement in the General Policy Statement produced under the HNZPTA seeks to strengthen the management of Aotearoa New Zealand’s archaeological heritage through protection of cultural heritage places that have archaeological values and compliance with the archaeological authority process, providing information recovered from

sites and delivering professional leadership in archaeological practice working with hapū, iwi, and communities where appropriate. Although no recorded sites are present in the development area, this assessment addresses the possibility of modification of an archaeological site through the application for an authority for risk management purposes. It therefore aligns with the Archaeology Statement in the General policy Statement.

112. No archaeological sites have been recorded in the proposed quarry development area, and it is considered unlikely that any significant sites are present within that area. If any archaeological sites are encountered during the works, the effects can be managed in accordance with an Authority issued under the FTAA (through Winstone’s substantive fast track application) and the HNZPTA. Accordingly, regard has been had to the matters specified in s59(1)9a), all of which are consistent with the quarry development.

Conclusions

113. No previously recorded archaeological sites are located in the proposed quarry development area, and no unrecorded archaeological sites were identified during the survey for this assessment. However, with the Mangapū/ Symonds Stream and tributary in the southern part of the development area, the presence of isolated archaeological sites such as shell midden cannot be completely excluded, as such sites are often found in proximity to waterways. If any sites are discovered during the proposed quarry works, they are unlikely to be complex or extensive and any effects on archaeological values are likely to be no more than minor.
114. Winstone is seeking an Archaeological Authority, for risk management purposes as part of the Fast Track one stop shop of approvals for the proposed quarry development to cover works for Stages 1-3, as the presence of unrecorded subsurface remains particularly in the vicinity of waterways cannot be completely excluded. This approach has the advantage of allowing any archaeology uncovered during the development to be dealt with immediately, avoiding delays that would otherwise occur if an Authority was not applied for in advance of preliminary works.
115. The application is therefore consistent with the purpose of the FTAA which is to provide a streamlined decision-making process to facilitate the delivery of infrastructure and development projects with significant regional or national benefits. The Act covers the approval for an Archaeological Authority under the Heritage New Zealand Pouhere Taonga Act 2014.

8. RECOMMENDATIONS

116. There are no major constraints on the proposed quarry development on archaeological grounds as no known sites will be affected, and the possibility that archaeological remains may be present can be appropriately mitigated through the provisions of the HNZPTA. Therefore, it is considered that the project can proceed if the following recommendations are adopted by Winstone:
117. As the possibility of exposing subsurface remains cannot be completely excluded, particularly in the vicinity of waterways, an Authority is recommended to be sought for risk management purposes for Stages 1-3, to minimise delays if archaeological remains are identified once works are underway.
118. Once an Authority is obtained vegetation clearance and preliminary earthworks in the areas shown on Figure 41, should be monitored by an archaeologist, in accordance with the Archaeological Management Plan accompanying this application, in case any archaeological remains are present. In other areas, vegetation clearance and earthworks can occur without archaeological supervision.
119. As the authority application will not cover Stages 4-8, these works can either be covered under the Accidental Discovery rule (E12.6.1) of the AUP (OP) or an Authority can be applied for to cover the later stages prior to the commencement of works for these stages. A condition of consent requiring compliance with the Rule (in the absence of an Authority) is recommended to address this.

9. BIBLIOGRAPHY

- Barton, I. 2001. *Hunua. The Place and Its People: A View from 2000*. Ian Barton, Papakura.
- Cameron E. and R. Clough, 2020. 493 Drury Hills Road Residential Development, Drury, Auckland: Archaeological Monitoring Report in Accordance with heritage New Zealand Pouhere Taonga Authority No. 2016/1191. Clough & Associates report prepared for Drury heights Ltd.
- Farley, G. and Z. Burnett. 2009. Proposed Residential Subdivision, 23 Lockwood Road, Hunua (Lots 1-26 of lot 4 & 5 DP 138958 and Lot 1 DP 120523): Archaeological Assessment. Clough & associates Report prepared for K. Frost and K. Matheson.
- Farley, G., S. Bickler and R. Clough. 2006. Symonds Hill Pit Development at Hunua Quarry, Papakura, Auckland: Archaeological Assessment. Clough & Associates report prepared for Winstone Aggregates.
- Heritage NZ. 2019. Writing Archaeological Assessments. Archaeological Guidelines Series No. 2.

Internet sources

- New Zealand Archaeological Association ArchSite Database, accessed at <http://www.archsite.org.nz>.
- New Zealand Heritage List, accessed at <http://www.historic.org.nz>.

APPENDIX A: CVs



Ellen Cameron: Archaeology and Historic Heritage

Qualifications & Training

- BA, Sociology and Anthropology, Carleton University, Ottawa, Canada 1987
- MSc, Environmental Archaeology and Palaeoeconomy, University of Sheffield, UK, 1991

Management experience

- Project Management – Archaeological aspects of large infrastructural projects
- Consultation with Key Stakeholders (HNZ, Council, iwi)

Technical Skills

- s45 approved
- Knowledge of statutory processes relating to archaeology

Years' experience

- Co-Director at Clough & Associates 2022- present
- Senior Archaeologist at Clough & Associates 2014-2021
- Co-Director at Archaeological Assessments Hong Kong 2004- present
- Senior Archaeologist at Archaeological Assessments Hong Kong 1999-2004

Downtown Carpark Redevelopment (2022 - present)

Project archaeologist; management of archaeological team working in concert with engineers and construction teams, development of strategies for investigation and recording of archaeological deposits, preparation of archaeological reports.

Relevance: A private development project, Clough & Associates is providing archaeological input into meeting all consenting and Heritage NZ authority requirements for the project. Demonstrates the ability to work with large multi-company teams, relevant stakeholders and statutory authorities.

Drury East Stages 4-7 Fast Track (2024 ongoing)

Project Archaeologist from AEE through to implementation of both Consent and NZHPT (Heritage NZ) authority conditions. Work involved initial historic research; survey and identification of archaeological constraints; consultation with NZHPT (Heritage NZ); working with and consultation with iwi.

Relevance: A private development project. Recognised ability to manage archaeological aspects of large scale master planned residential projects, consult and work with relevant stakeholders and statutory authorities. Completion of reporting requirements (Consent and HNZ) within the statutory timeframes and to the required standard. Close working relationship with relevant iwi groups.

Leys Library Redevelopment (2024 ongoing)

Project Archaeologist from AEE through to implementation of both Consent and NZHPT (Heritage NZ) authority conditions. Work involved initial historic research; survey and identification of archaeological constraints; consultation with NZHPT (Heritage NZ).

Relevance: An Auckland Council project to conserve and revitalise the

Professional Background

As a Senior Archaeologist at Clough & Associates, Ellen has been part of the team since 2014 carrying out numerous resource consent assessments, archaeological survey and mitigation investigations. She has over 20 years' experience of archaeological fieldwork, including survey and excavation work covering wide geographic areas and time periods. Ellen is an approved s45 archaeologist under the NZHPTA.

Ellen has experience in archaeological project management and AEEs for infrastructure and other projects (road, rail, wastewater, pathways etc.) that involve a project team approach. Recently Ellen has been involved in a number of projects under the new Fast Track Approvals Act.

Of specific relevance is Ellen's experience with infrastructure projects, involving input through the consenting and post consenting phases of these projects and ensuring that Heritage NZ requirements were fulfilled to a high standard. This has included projects such as .

Specific relevant experience and responsibilities:

Low Emissions Ferry Project (AT) (2022-present)

Project Archaeologist for a multi staged development for landside infrastructure at ferry terminals in Auckland CBD, Hobsonville and Half Moon Bay. Works from AEE through to archaeological mitigation works. Work has involved initial historic research; identification of heritage constraints; preparation of AEE; preparation of applications for Authorities to modify archaeological sites; and will include preparation of research strategies and investigation reports.

Relevance: A major project for Auckland Transport to support sustainable development. Ability to manage archaeological aspects of infrastructural projects, consult and work with relevant stakeholders and statutory authorities.

historic site dating to the early 20th century. Close liaison with built heritage experts and engineers. The historical research included the archaeological and historic heritage values of the sites and Heritage NZ requirements for the project. Demonstrates ability to work with other disciplines to determine the best outcome for archaeological and historic heritage values of the redevelopment.

Emily Place Improvements (2024-2025)

Project archaeologist through both the concept stage and the detailed design stage. The project required a complex integrated approach for assessment of archaeological, historic heritage, built heritage and cultural values. The archaeological scope included the European background of the project area along with Māori occupation of the area which included a pā site.

Relevance: An Auckland Council Project that required close consultation with multiple disciplines from the early concept stage to ensure the effects to archaeology and historic heritage values were identified

Peacock Street Undergrounding (2025)

Project archaeologist for archaeological assessment and archaeological monitoring to identify if archaeological values would be affected by the proposed works. The preparation of an archaeological management plan and monitoring strategy and preparation of the archaeological report.

Relevance: A Vector project, Clough & Associates has provided archaeological input into meeting all consenting and Heritage NZ authority requirements for the project. Demonstrates the ability to work with client and contractor teams, relevant stakeholders and statutory authorities.



Thomas Clough-Macready: Archaeologist

Qualifications & Training

- Master of Archaeological Practice (MArchP), University of Otago 2025
- Bachelor of Computer and Information Sciences (BCIS), AUT 2014

Certifications

- Site Safe First Aid and Construction Safety
- Construct Safe

Technical Skills

- Archaeological field survey and site monitoring
- Excavation and recording techniques
- Midden and artefact analysis
- Drone survey and GIS mapping
- Digital field recording system design and use (tablet-based)
- Archaeological reporting for resource consents and HNZ authority conditions
- Health and Safety Management System (Totika standard) implementation

Years' experience

- Archaeologist at Clough & Associates 2017-
- Archaeologist at CFG Heritage 2022-2024

Professional Background

Contract archaeologist with eight years' experience at Clough & Associates, conducting archaeological assessments, surveys, investigations, and excavations across New Zealand. Skilled in excavation techniques, midden and artefact analysis, digital field recording, GIS mapping, and drone surveys. Experienced in coordinating fieldwork, directing teams on-site, and managing IT systems, including designing tablet-based recording systems and overseeing company software migrations. Also updated the Health and Safety Management System to Totika standard.

Specific relevant experience and responsibilities:

In 2025, I conducted numerous archaeological surveys across the Auckland region. This included work for Auckland International Airport Ltd.'s Northern Runway and the 43 Montgomerie Road development, surveys for Auckland Council at Coyle Park Playground Renewal and Hall Street Reserve Toilet Block Removal, and infrastructure assessments in the Auckland CBD for NZTA and Vector, including the new Wellesley Street Shared Path and upgrades along Swanson Street and Bradnor Lane.

I have also previously completed surveys for subdivisions, solar farms, and mining operations including Taharoa Ironsands and Oceana Gold.

Survey and Assessment Projects

2025

- OceanaGold Willows Farm Works (Oct);
- Wellesley Street Shared Path Assessment (Oct);
- 2 Shortt Avenue (Aug);
- Swanson Street and Bradnor Lane Assessment (Aug);
- Hall St Reserve Toilet Block Removal Assessment (Aug);
- AIAL 43 Montgomerie Rd Assessment (Aug);
- 176 Waitākere Road Subdivision (May);
- AIAL Northern Runway Survey (Apr);
- Coyle Park Playground Renewal Assessment (Feb);
- Clark Rd Development (Jan)

2024

- Kaipara Solar Farms Stage 2 (Oct)
- 52 North Rd Clevedon (Apr)
- Orongo Bay Bach (Mar); Te Arai North Stages 3 & 4 (Feb)

2023

- Kaipara Solar Farms Stage 1 (Nov);
- Waiwera 159 Weranui Rd (Sep)
- Paewhenua Island Lot 5 (May)
- Mangonui SH10 (Apr); Ocean Beach Bach (Feb)

2022

- Te Arai South (Nov);
- Te Arai Links Worker Accommodation (Mar)
- Māngere 35 Walmsley Rd (Mar)

2021

- Southwest Flat Bush Primary Murphys Rd (Dec)
- 14 & 14A Scott Rd Hobsonville (Aug)
- Wai o Taiki Seawall Glendowie (Jun)
- P6 Energy Solar Farm Maungatapere (May)

2020

- 38 Walter St Hauraki (Dec)
- Tāmaki Drive Seawall Replacement (Oct)
- Orongo Bay House (Jun)

2019

- 52 North Rd Clevedon (Dec)
- 23 Cheviot St Mangawhai (Jun)
- Te Arai North Stages 3 & 4 (Jun)



Sarah Macready

Qualifications & Training

- MA (Archaeology), University of London
- BA (Archaeology), University of London

Professional Affiliations

- Member of NZ Archaeological Association
- Member of Heritage New Zealand Pouhere Taonga
- Chairperson, Mansion House Foundation

Technical Skills

- Project Management
- Knowledge of statutory processes relating to archaeology
- Research and editing
- Broad archaeological skills

Years' experience

- Co-Director of Clough & Associates Ltd 2010-
- Editor/Project Manager/Archaeologist at Clough & Associates Ltd 2007-
- Historic Resources Technical Support, Dept of Conservation 1989-2007
- Archaeologist at NZ Historic Places Trust 1987-1989
- Research assistant, archaeologist, editor in UK (various) 1978-1986

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author of final archaeological reports to Heritage NZ and Council (Stage 2).

Auckland Downtown Infrastructure Development Programme (2018-2022)

Auckland Transport project involving significant upgrades to services along Quay Street (and surrounds) and seismic strengthening of historic seawall.

Role: Clough & Associates project manager, involving preparation of a series of archaeological assessments for different stages of work, archaeological management plans, input into consent and HNZPTA Authority applications, management of monitoring programme, editing and completion of Authority reports to Heritage NZ standards.

Queen Street Wastewater Diversion Project (2022-)

Watercare Services project to upgrade the wastewater network in Queen Street, Mayoral Drive and surrounding streets.

Role: Clough & Associates project manager, involving preparation of a series of archaeological assessments for different stages of work, archaeological management plans, input into consent and HNZPTA Authority applications.

Whangārei to Te Hana SHI Improvements (2019-2020)

Role: Co-author of archaeological/historic heritage assessment for NZ Transport Agency/Waka Kotahi's Whangārei to Te Hana SHI improvements (S. Macready and C. Judge, *Whangārei to Te Hana SHI Improvements: Preliminary Historic Heritage Assessment*, February 2020, Clough & Associates report).

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Professional Background

Sarah joined Clough & Associates in 2007 and has been a Director since 2010. She has carried out a range of work including archaeological assessment, project management, conservation and management planning, historical research and, in particular, has been responsible for peer reviewing and editing the company's archaeological assessment, investigation and other reports. Previously, in the Department of Conservation, she was responsible for overseeing the Auckland Conservancy's historic heritage programme. Prior to that she worked as a field archaeologist and editor for the NZ Historic Places Trust.

Sarah has experience in archaeological project management and AEEs for infrastructure projects (road, rail, waste/stormwater, etc) that involve a project team approach. Her input has involved assessment and preparation of AEE reports, archaeological management plans, archaeological project management during the construction phase, and archaeological reporting to meet consent and authority requirements. Relevant infrastructure projects have included the Auckland City Rail Link, Auckland Downtown Infrastructure Development Programme, Queen Street Wastewater Diversion Project, Whangārei to Te Hana SHI Improvements, Waterview Connection, Pūhoi to Warkworth Road of National Significance, and SH16 Improvements.

Specific relevant experience and responsibilities:

Auckland City Rail Link (2015-2024)

Auckland Transport project delivered by City Rail Link Ltd.

Role: Preparation of archaeological assessments (co-author); preparation of archaeological management plans for Heritage NZ Authorities for Stage 1 (Britomart to Wyndham Street) and Stage 2 (Wyndham Street to Mt Eden); preparation of Delivery Work Plans to meet consent requirements (Stage 2). Clough & Associates project manager for Stage 2 including archaeological monitoring phase; co-

Waterview Connection Project and SH16 Upgrade (2010-2017)

Role: Co-author of AEE report: *R. Clough, S. Macready and S. Bickler, Western Ring Route – Waterview Connection. Assessment of Archaeological Effects*, July 2010, Clough & Associates report to NZ Transport Agency/Waka Kotahi. Review, edit and finalise all subsequent assessments, management plans and Authority reports for Waterview Connection, SH16 upgrade, and other associated works.

Pūhoi to Warkworth Road of National Significance (2010-2023)

Waka Kotahi/NZ Transport Agency project delivered by the Northern Express Group.

Role: Review, edit and finalise all documentation from the assessment phase through to project completion (preliminary options assessment, AEE report, evidence, archaeological management plans and final archaeological investigation and monitoring report). Note that significant archaeological discoveries were made during the project and the final report has been published in the Clough & Associates Monograph series – available to download from www.clough.co.nz.

SH16 Improvements, Brigham Creek to Waimauku (2018-2022)

Role: Clough & Associates project manager for the consenting stage, involving preparation of archaeological assessment and AEE reports to the NZ Transport Agency.

APPENDIX B: CONSULTATION WITH HERITAGE NEW ZEALAND

Preliminary meeting with Heritage New Zealand to discuss project on 8 December 2025

Minutes





BM250767		Mahitahi	
8 December 2025		1:00 – 2:00pm	Teams
Meeting purpose		Initial Introduction of the Hunua Quarry Development Substantive Application	
Meeting called by		Pherne Tancock	
Attendees	Greg Walter	Heritage New Zealand Pouhere Taonga (Heritage NZ)	
	Tharon Bloomfield		
	Craig Reidy		
	Pherne Tancock	Harbour Chambers	
	Ellen Cameron	Clough and Associates	
	Nick Pollard	Boffa Miskell	
Apologies		Mary Kienholz	NZHPT
Distribute to all above, plus:		Phil Hefernan	Winstone Aggregates
<p>Information shared on 5 December 2025:</p> <ul style="list-style-type: none"> • 'Project Mahitahi Project Description for consultation purposes_20251205' with attachments including: <ul style="list-style-type: none"> - Stage project plans entitled: <ul style="list-style-type: none"> 'Hunua Quarry FTA Stage 0 Quarry Design' 'Hunua Quarry FTA Stage 1 Quarry Design' 'Hunua Quarry FTA Stage 2 Quarry Design' 'Hunua Quarry FTA Stage 3 Quarry Design' 'Hunua Quarry FTA Stage 4 Quarry Design' 'Hunua Quarry FTA Stage 5 Quarry Design' 'Hunua Quarry FTA Stage 6 Quarry Design' 'Hunua Quarry FTA Stage 7 Quarry Design' 'Hunua Quarry FTA Stage 8 Quarry Design' (digitally created on 18 November 2025) - Appendix B – Auckland Unitary Plan (Operative In Part) – Preliminary Planning Assessment - Appendix C – Other Approvals 			
Minutes			
Item Number	Item Description		Owner

agenda (continued)


1.	<p>Introductions Project description and proposal summarised from the information shared.</p> <p>Ellen confirmed that a archaeological authority would be sought on a precautionary basis given the current understanding and low risks associated with the site in terms of archaeology. Annual reporting would be provided as the project progresses. Current approach would be to seek an authority for duration of the consented works e.g.: 35-years.</p> <p>Discussion</p> <ul style="list-style-type: none"> ➤ Confirmation that annual reporting would be appropriate. ➤ Greg noted longest authority durations and preferred e.g.: 5 maybe 10-years. Noted that the discretion rests with FTAA panel . ➤ Expectation that the same level of information would be provided with a 'risk management authority.' 	Nick / Ellen and Pherne
2.	<p>Pherne outlined details on lodgement date of 6 March 2026 and information exchange in the meantime e.g.: draft reports in February.</p> <p>Discussion</p> <ul style="list-style-type: none"> ➤ NZHPT welcomed the opportunity to provide further comment prior to lodging the substantive application. ➤ Request made that the substantive application groups the archaeology authority application along with consultation summary including cultural reporting in combined pdf form. ➤ Lessons learnt from other applications including Drury Quarry Expansion (Sutton Block) <p>Actions</p> <ul style="list-style-type: none"> ➤ Ellen to prepare an early draft of Risk Management Authority to share with NZHPT team. 	Pherne
		Ellen


Additional notes:






[REDACTED]
Thu 3/19/2026 10:56 AM

To: Greg Walter; Liat Oz
Cc: Pherne Tancock

 Hunua Quarry Development ...
631 KB

 Hunua Quarry Development ...
16 MB

 Show all 3 attachments (17 MB)
  Save All Attachments

Kia ora Greg,


I am just writing to check if you have any comments on the assessment report, AMP and Conditions for the above cited project, as the submission for the application will be coming up shortly and we are trying to ensure we have completed the consultation requirements.


Please do not hesitate to contact me if you have any queries regarding any of the documents, which are attached for ease of reference.

Nga mihi

Ellen

RE: Hunua Quarry Fast Track report for consultation review




[REDACTED]
Tue 2/24/2026 8:45 AM

To: You
Cc: Greg Walter; Liat Oz; Craig Reidy; +4 others

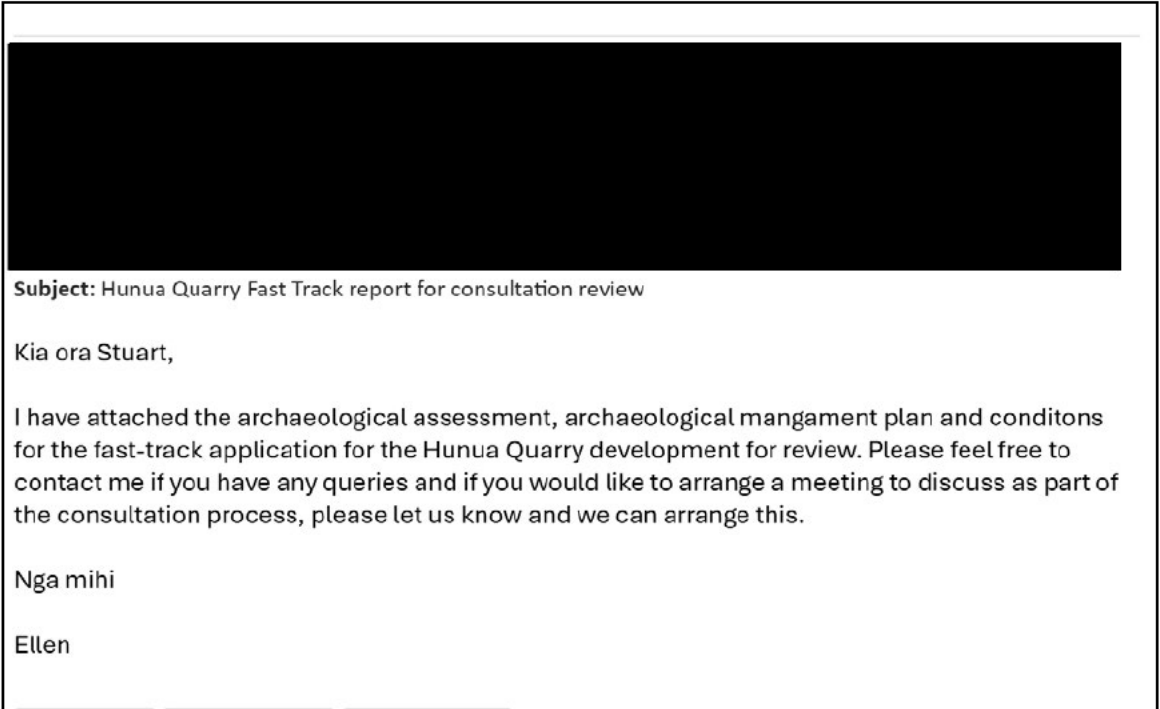
Thanks Ellen,
Greg or Liat will review and get back to you with any questions,

Cheers,
Stuart

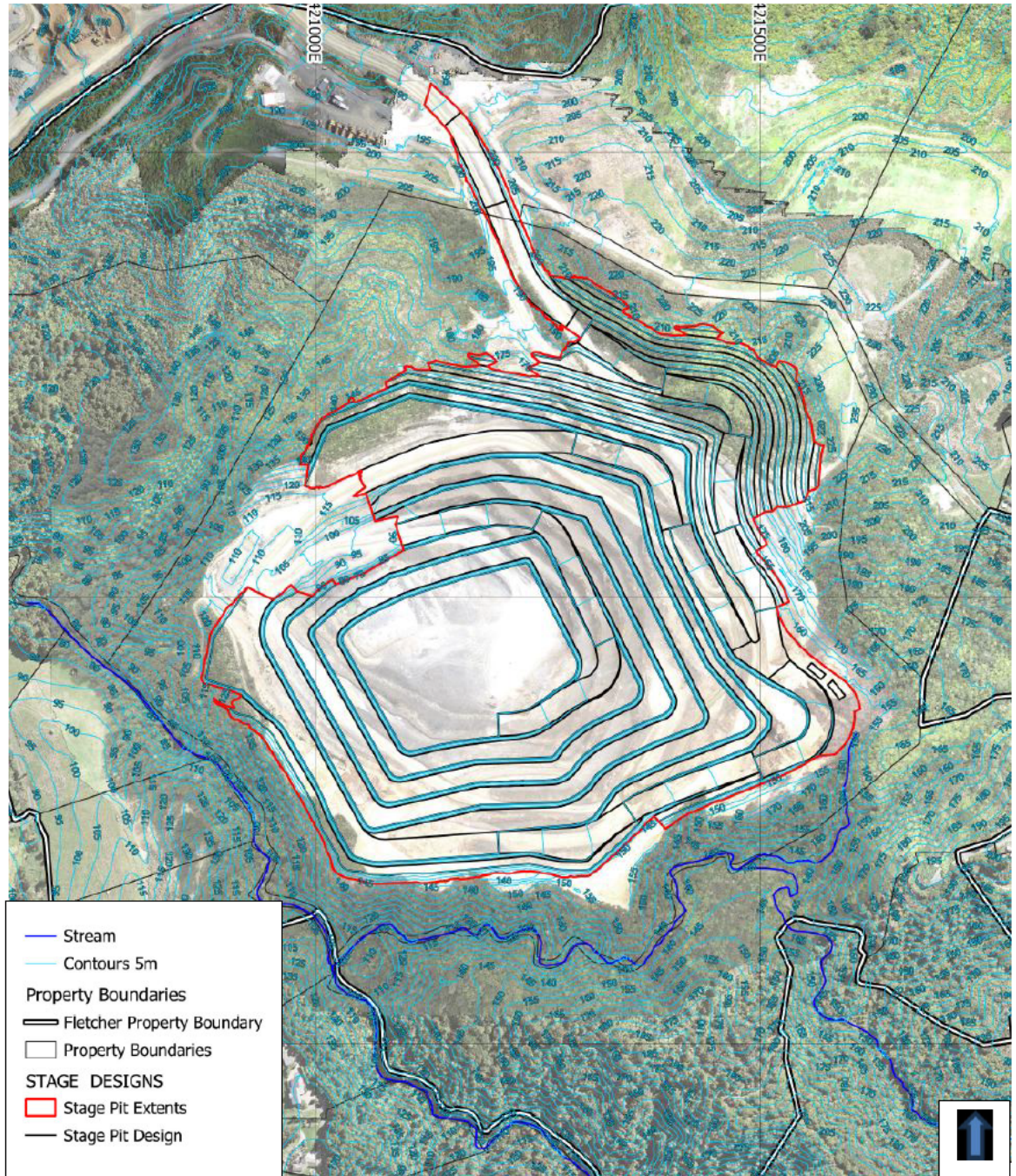
Stuart Bracey | Kaiwhakamāhere | Heritage Planner | Northern Region | Heritage New Zealand Pouhere Taonga |
 L10 SAP Tower 151 Queen Street Auckland CBD | Private Box 105 291 Auckland City 1143 | mobile 027 684 0833 | visit www.heritage.org.nz and learn more about NZ's heritage places.

Tairangahia a tua whakarere; Tatakihia nga reanga o amuri ake nei – Honouring the past; Inspiring the future

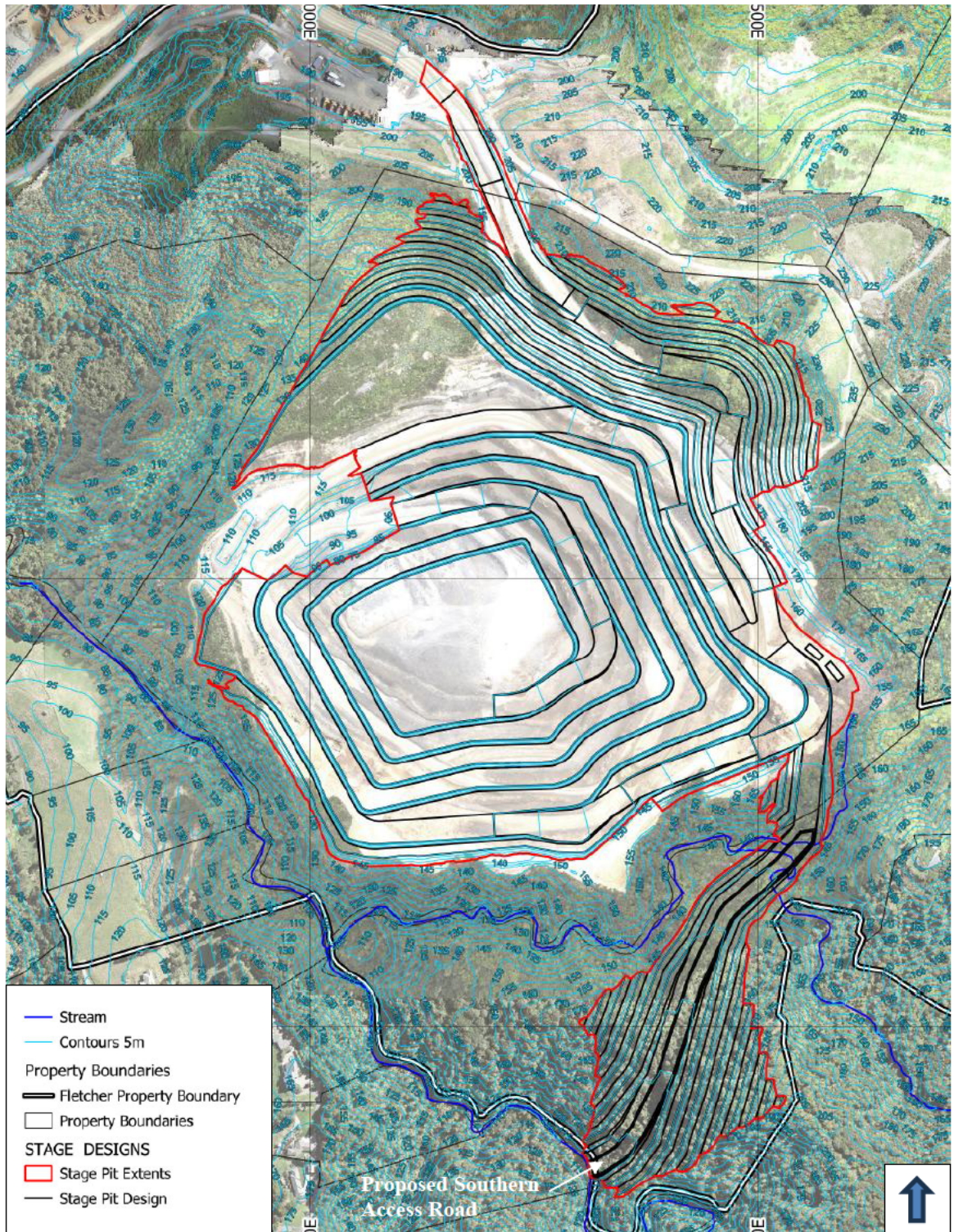
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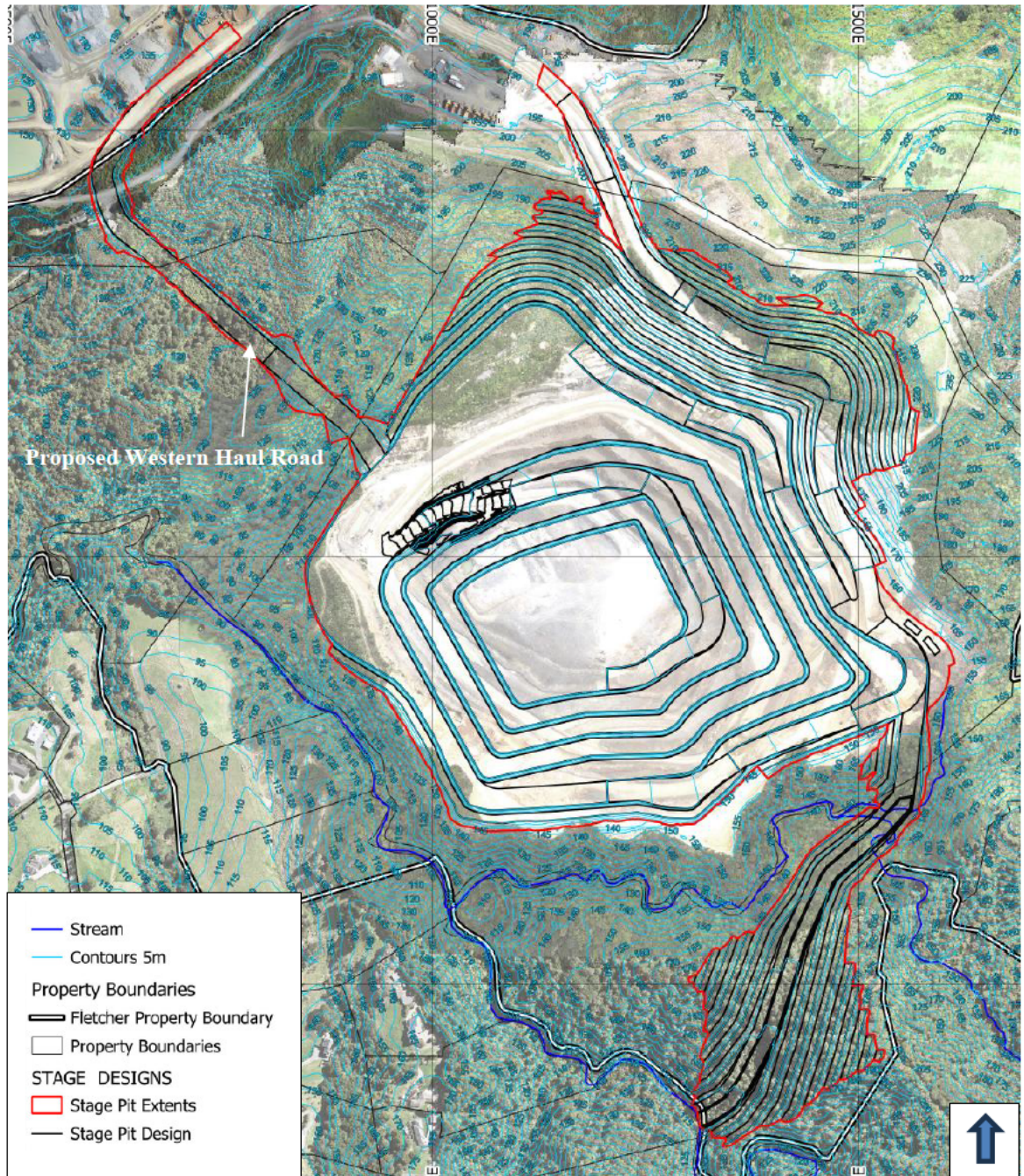
APPENDIX C: DETAILED STAGING PLANS



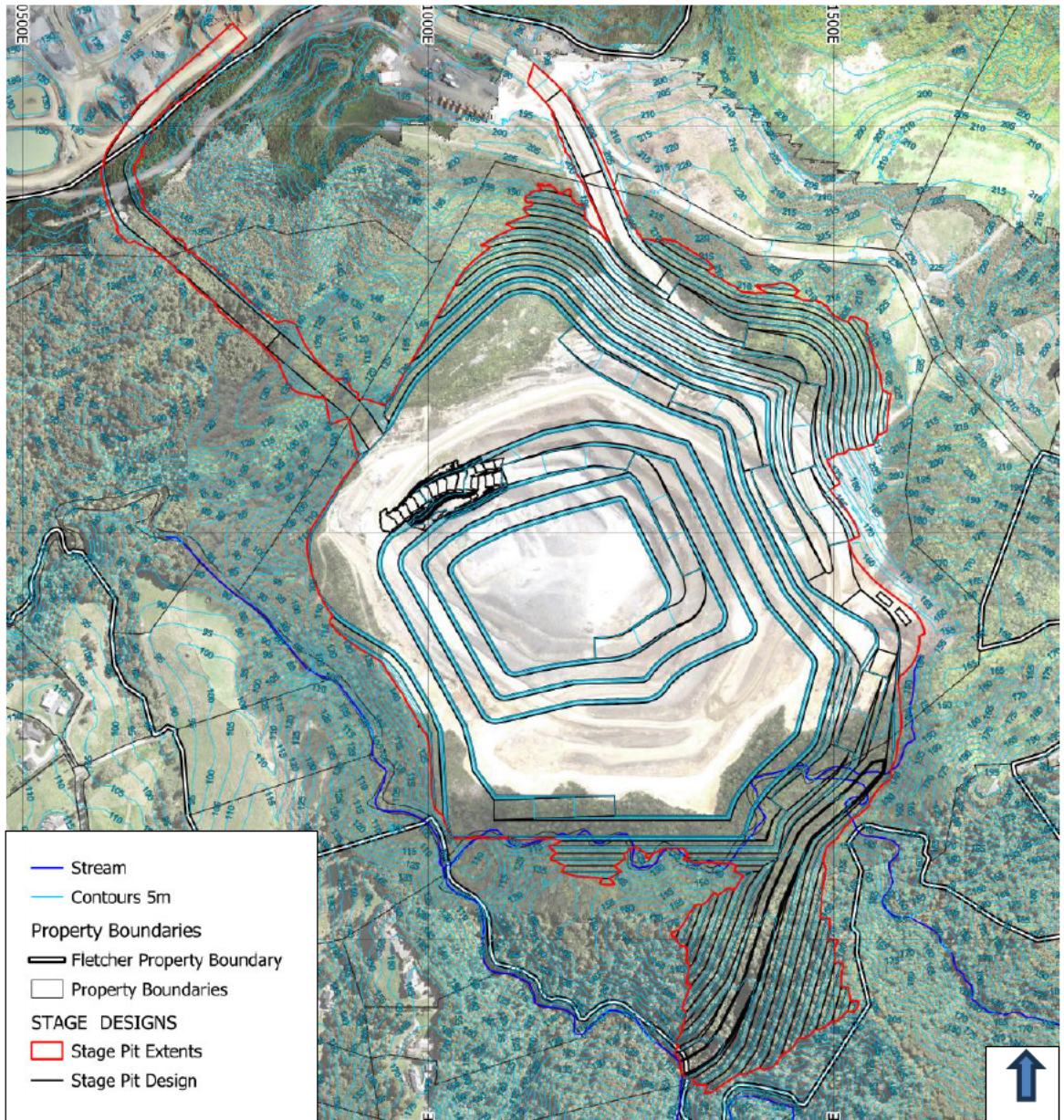
Plan to show the proposed development works area for Stage 0 outlined in red (source: Winstone Aggregates)



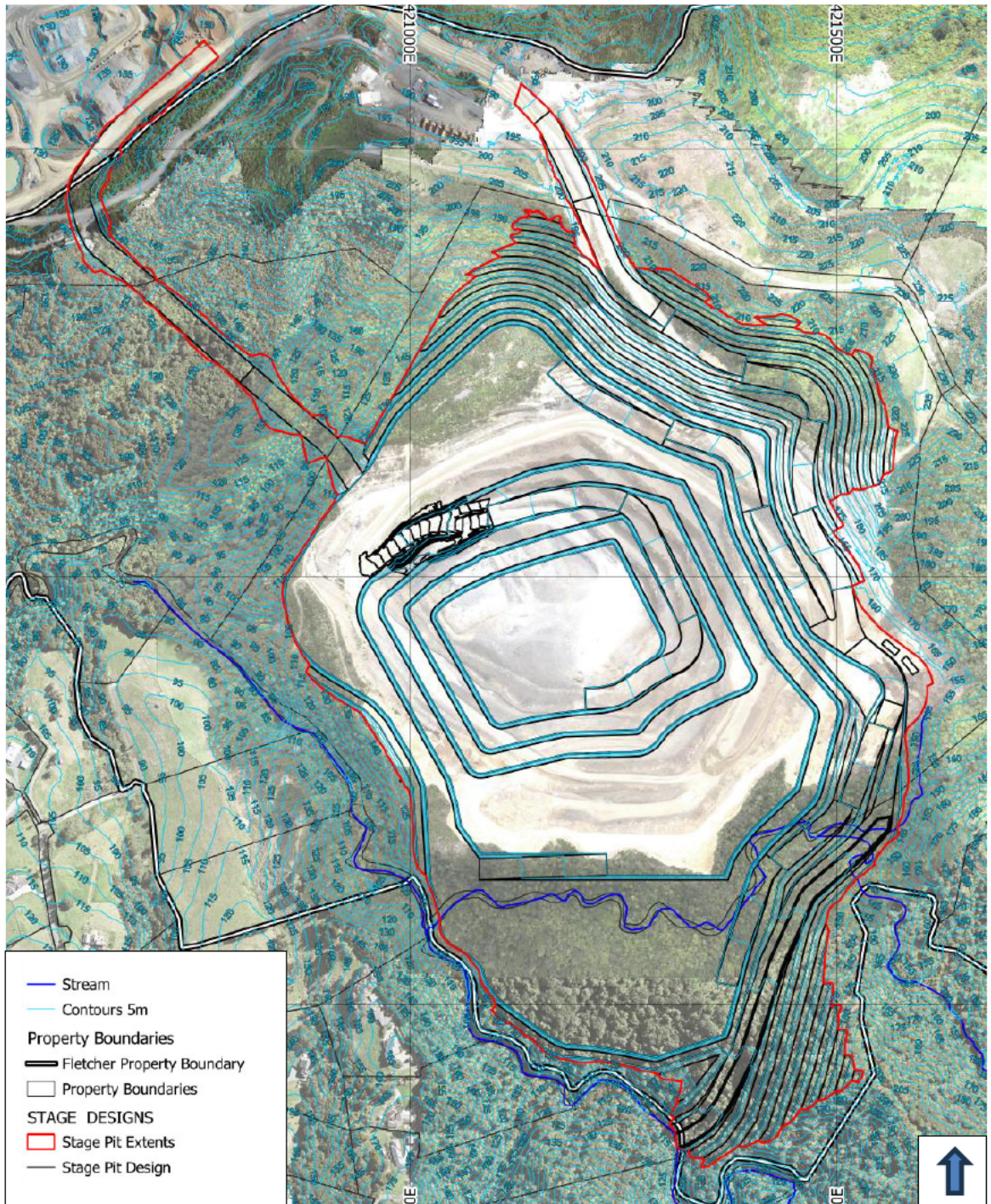
Plan to show the proposed development works area for Stage 1 outlined in red with location of the proposed access road and stream realignment in the southern area indicated (source: Winstone Aggregates) [Winstone to confirm these are final designs]



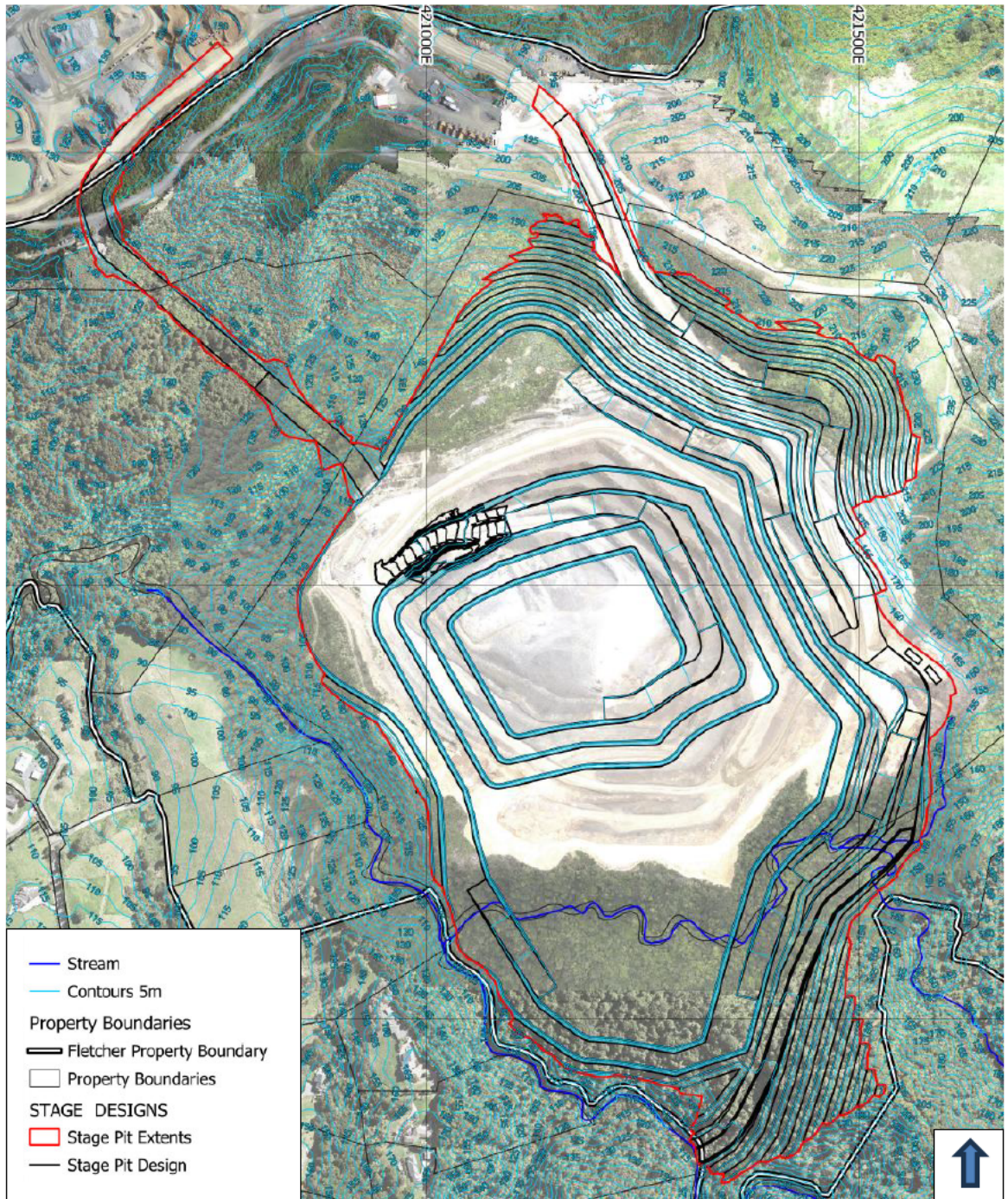
Plan to show the proposed development works area for Stage 2 outlined in red with proposed northwestern access road indicated (source: Winstone Aggregates)



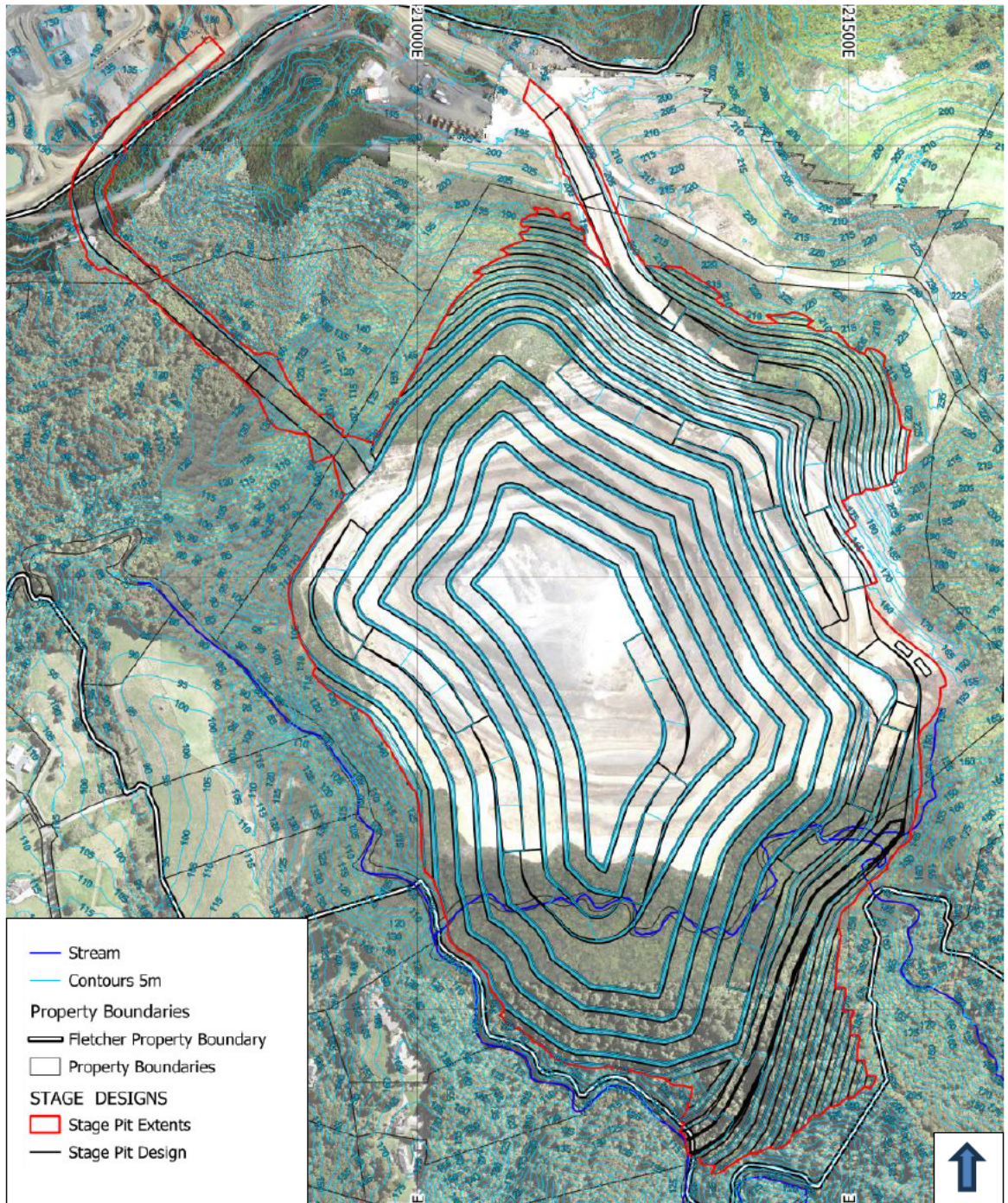
Plan to show the proposed development works area for Stage 3 outlined in red (source: Winstone Aggregates)



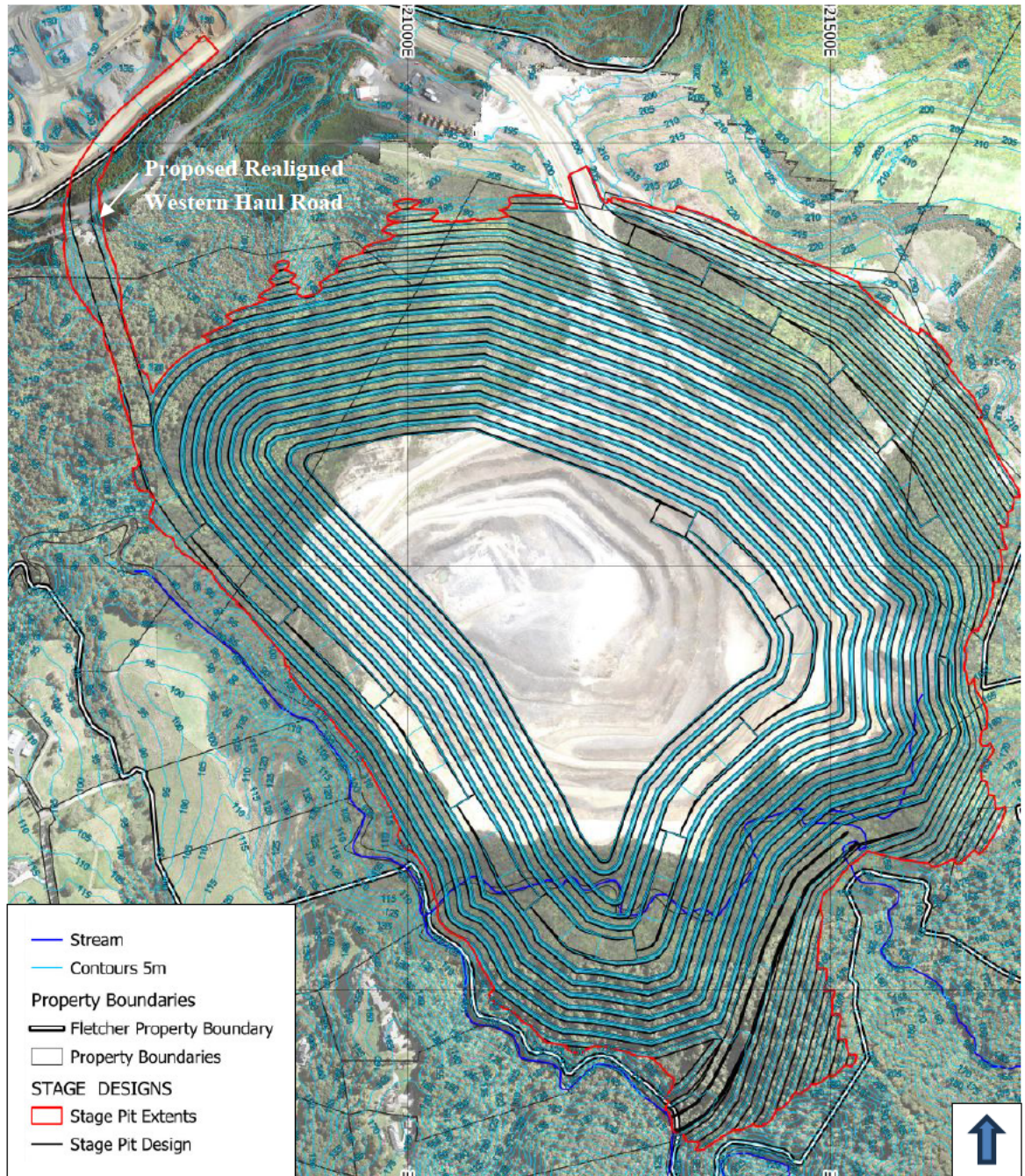
Plan to show the proposed development works area for Stage 4 outlined in red (source: Winstone Aggregates)



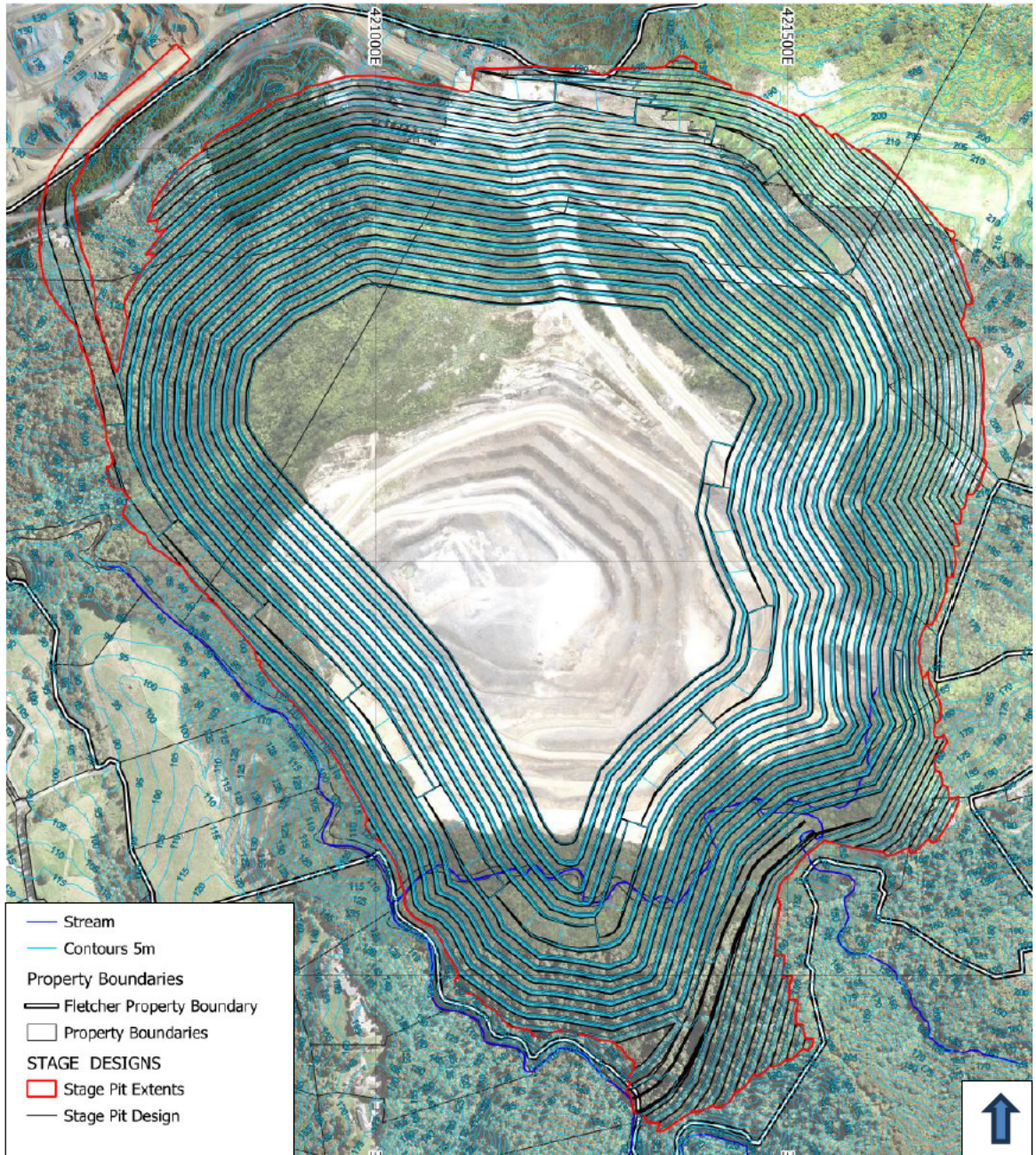
Plan to show the proposed development works area for Stage 5 outlined in red (source: Winstone Aggregates)



Plan to show the proposed development works area for Stage 6 outlined in red (source: Winstone Aggregates)



Plan to show the proposed development works area for Stage 7 outlined in red (source: Winstone Aggregates)



Plan to show the proposed development works area for Stage 8 outlined in red (source: Winstone Aggregates)