

PROPOSED DRURY EAST RESIDENTIAL PLAN CHANGE: PRELIMINARY ARCHAEOLOGICAL ASSESSMENT

Prepared for Fulton Hogan Land Development Ltd

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INTRODUCTION

Project Background

This report has been prepared to inform the proposed Drury East Residential Plan Change on behalf of Fulton Hogan Land Development Limited (FHLDT). The location and proposed zoning of the Plan Change area within the greater Auckland area are shown in Figure 1, with the detail of the properties in Figure 2 and Figure 3. The addresses and legal descriptions are provided in Table 1.

The area subject to this Plan Change is located within Drury East and has a land area of 200.2088 hectares. Drury East is contained by the Papakura urban area to the north, the Hunua foothills to the east, the Drury South Business zone to the south, and State Highway 1 to the west. Fulton Hogan has large landholdings within the Plan Change area, which is bounded by Fitzgerald Road, Drury Hills Road and Waihoehoe Road with a small area north of Waihoehoe Road. Currently, the properties are predominantly used for farming, with some rural lifestyle blocks.

The Plan Change area is currently zoned Future Urban under the Auckland Unitary Plan Operative in Part (AUP OP). Fulton Hogan are seeking to rezone the land for residential development, Mixed Housing Urban and Mixed Housing Suburban zones. The plan change provides for a small mixed use centre within the Plan Change area, as well as a range of public open spaces.

with a range of densities and a small local centre within the Plan Change area, as well as a range of public open spaces. New roading and servicing infrastructure is proposed to service the development. Once developed, it is anticipated that the Plan Change area could accommodate approximately 2800 dwellings.

Fulton Hogan (FHLDT) have engaged Clough & Associates Ltd to undertake an archaeological assessment to establish whether future development resulting from the proposed private plan change is likely to impact on archaeological values. This report has been prepared in accordance with the required assessment of effects under the Resource Management Act 1991 (RMA) and to identify any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.

Methodology

The New Zealand Archaeological Association's (NZAA) site record database (ArchSite), Auckland Council's Cultural Heritage Inventory (CHI), the Auckland Unitary Plan Operative in Part schedules (AUP OP) heritage schedules, and the Heritage New Zealand (Heritage NZ) New Zealand Heritage List/Rārangī Kōrero were searched for information on archaeological and other historic heritage sites recorded in the vicinity. Literature and archaeological reports relevant to the area were consulted (see Bibliography). Early plans held at Land Information New Zealand (LINZ) and aerial photographs were checked for information relating to past use of the properties.

Visual inspections of the accessible parts of the Plan Change area were conducted on 14 February 2019. The ground surface was examined for evidence of former occupation (in

the form of shell midden, depressions, terracing or other unusual formations within the landscape, or indications of 19th century European settlement or activity remains).

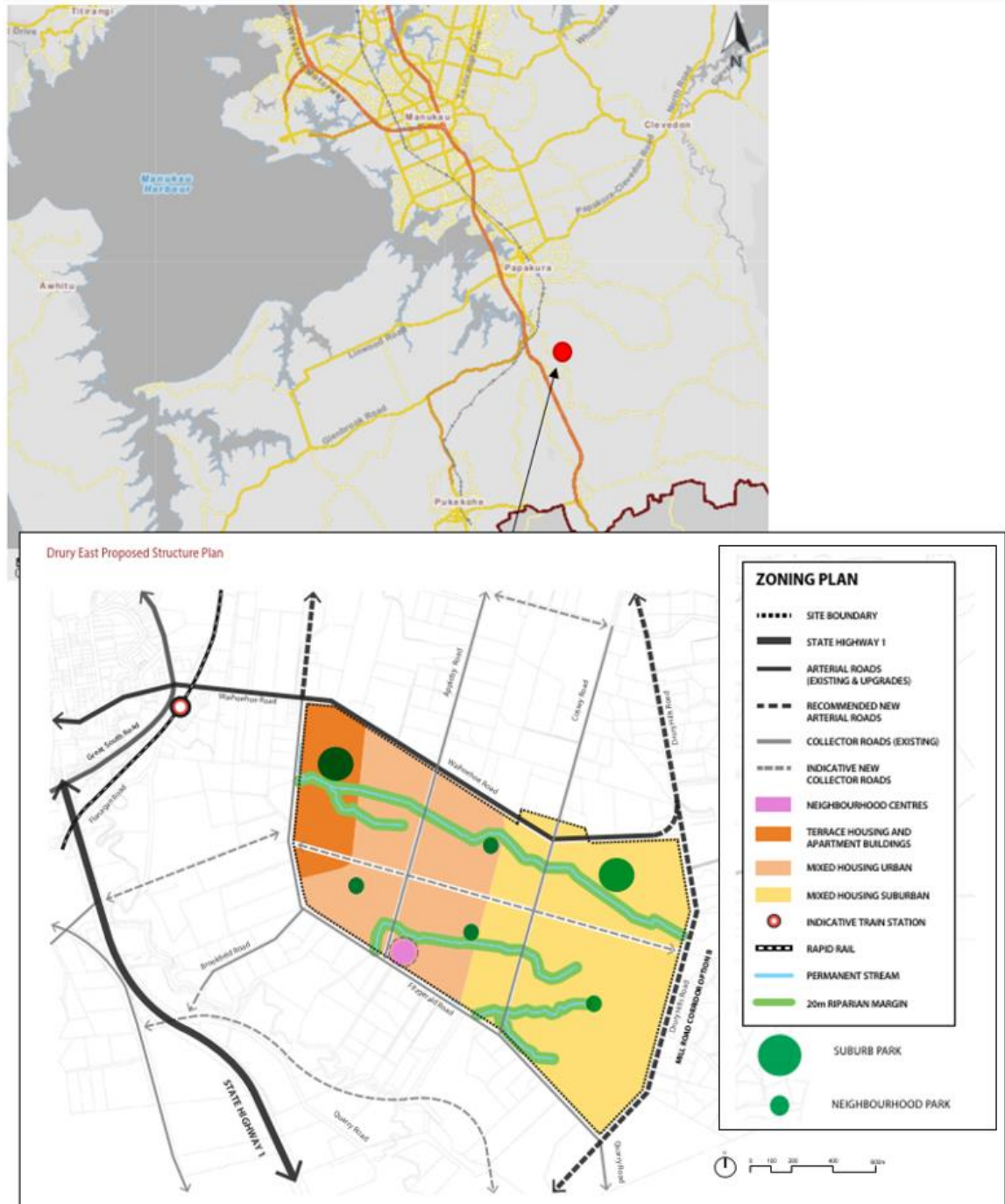


Figure 1. Location of the proposed Plan Change area in the greater Auckland Region indicated by red circle (source: Auckland Council Geomaps) with lower inset showing the Drury East Proposed Structure Plan - Plan Change area (source: Woods)

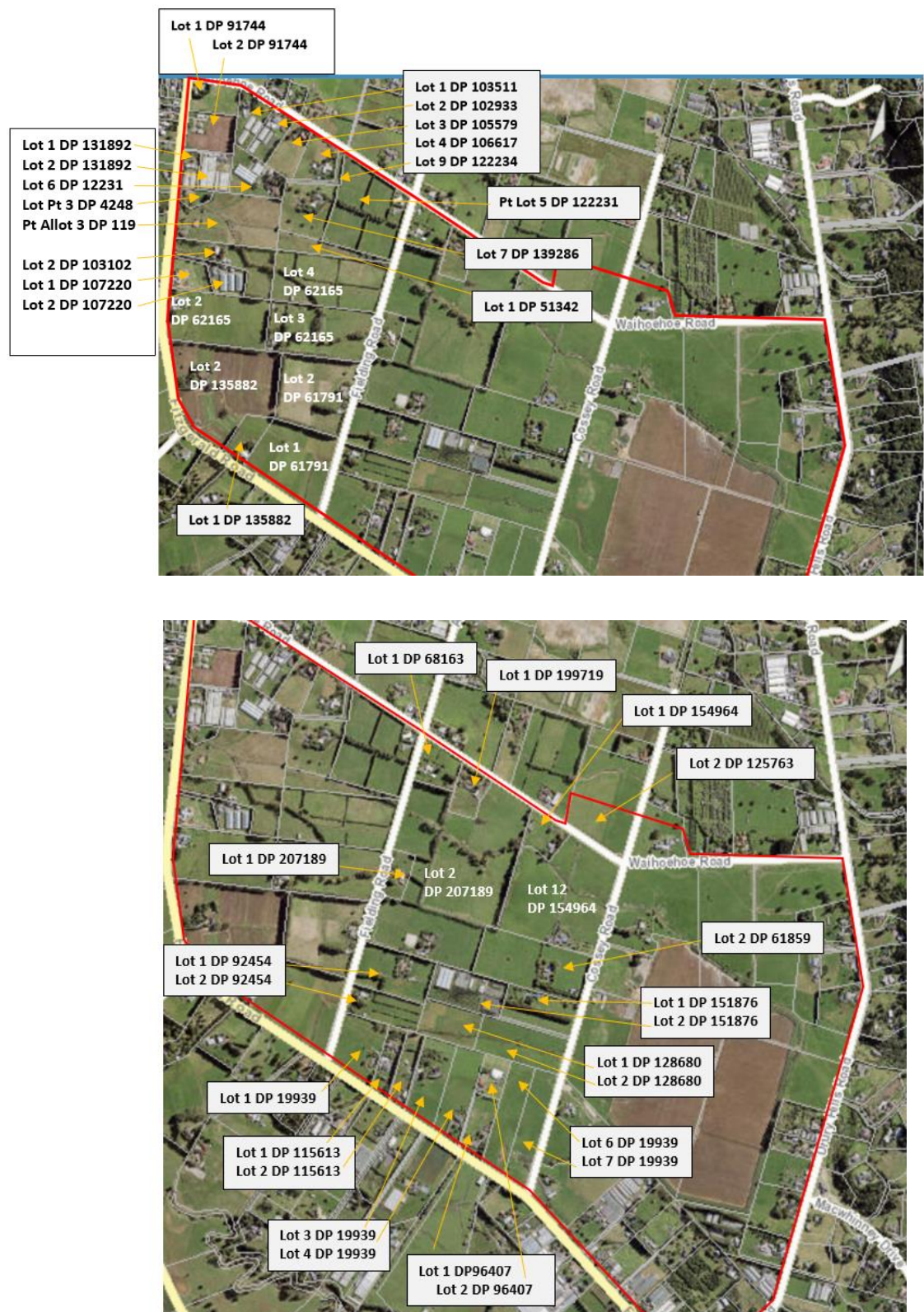


Figure 2. Upper aerial showing the properties in the western part of the Plan Change area and lower aerial showing the properties in the central part of the Plan Change area (source: Auckland Council Geomaps)

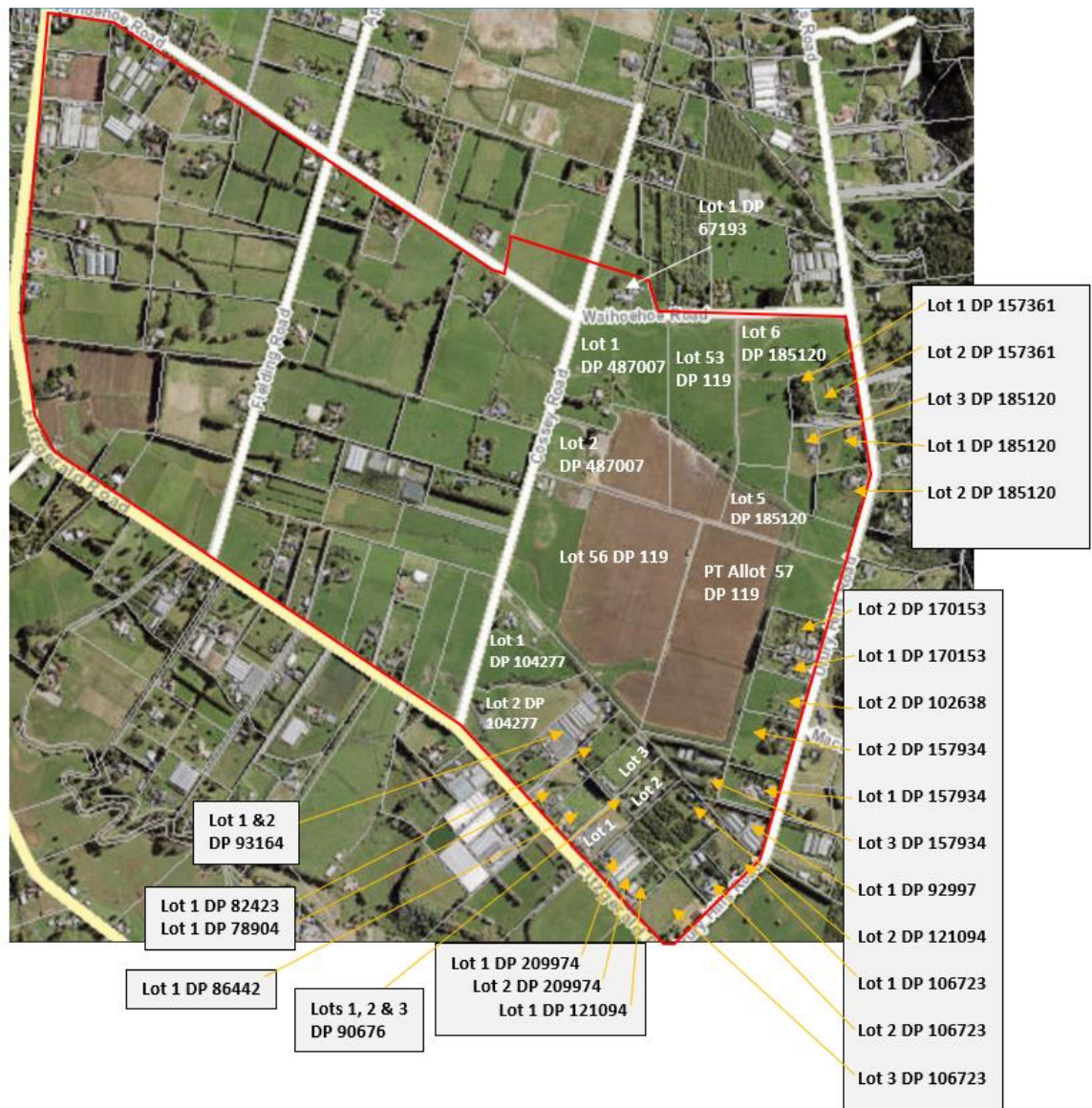


Figure 3. Aerial showing the properties in the eastern part of the Plan Change area (source: Auckland council Geomaps)

Table 1. List of properties in the Plan Change area with address, legal description and area

Address	Legal Description	Area (HA)
6 Fitzgerald Road	Lot 1 DP 91744	1.21
28 Fitzgerald Road	Lot 2 DP 91744	1.47
40 Fitzgerald Road	Lot 2 DP 131892	.96
46 Fitzgerald Road	Lot 1 DP 131892	.51
60 Fitzgerald Road	Pt Lot 3 DP4248	.38
86 Fitzgerald Road	Pt Allot 3 DP 119/ Lot 1 DP 51342	4.68
94 Fitzgerald Road	Lot 2 DP 103102	2.15
98 Fitzgerald Road	Lot 2 DP 107220	.93
110 Fitzgerald Road	Lot 1 DP 107220	.95
114 Fitzgerald Road	Lot 2 DP 62165	4.08
164 Fitzgerald Road	Lot 2 DP 135882	6.58
178 Fitzgerald Road	Lot 1 DP 135882	1.00
230 Fitzgerald Road	Lot 1 DP 61791	4.05
310 Fitzgerald Road	Lot 1 DP 19939	2.03
320 Fitzgerald Road	Lot 1 DP 115613	1.00
330 Fitzgerald Road	Lot 2 DP 115613	1.02
334 Fitzgerald Road	Lot 3 DP 19939	2.02
360 Fitzgerald Road	Lot 4 DP 19939	2.02
368 Fitzgerald Road	Lot 2 DP 96407	.85
380 Fitzgerald Road	Lot 1 DP 96407	2.02
448 Fitzgerald Road	Lot 1 DP 93164	1.21
458 Fitzgerald Road	Lot 2 DP 93164	1.06
460 Fitzgerald Road	Lot 1 DP 82423	.94
468 Fitzgerald Road	Lot 1 DP 78904	.81
478 Fitzgerald Road	Lot 1 DP 86442	1.01
486 Fitzgerald Road	Lot 3 DP 90676	1.12
490 Fitzgerald Road	Lot 2 DP 90676	.96
494 Fitzgerald Road	Lot 1 DP 90676	.92
504 Fitzgerald Road	Lot 1 DP 209974	.52
512 Fitzgerald Road	Lot 2 DP 209974	.41
524 Fitzgerald Road	Lot 2 DP 121094	2.74
534 Fitzgerald Road	Lot 1 DP 121094	.62
171 Waihoehoe Road	Lot 1 DP 103511	1.10
185 Waihoehoe Road	Lot 2 DP 102933	1.00
201 Waihoehoe Road	Lot 3 DP 105579	1.14
211 Waihoehoe Road	Lot 4 DP 106617	1.14
215 Waihoehoe Road	Lot 6 DP 122231/ ¼ Lot 9 DP 122231	1.49
233 Waihoehoe Road	Lot 7 DP 139286/ ½ Lot 9 DP 122231	1.00
251 Waihoehoe Road	Pt Lot 5 DP 122231/ ¼ Lot 9 DP 122231	4.29
319 Waihoehoe Road	Lot 1 DP 154964	1.00
383 Waihoehoe Road	Lot 2 DP 154964	7.13

Address	Legal Description	Area (HA)
412 Waihoehoe Road	Lot 1 DP 67193	1.67
9 Cossey Road	Lot 2 DP 104277	3.10
27 Cossey Road	Lot 1 DP 104277	3.10
37 Cossey Road	Lot 2 DP 487007	4.58
45 Cossey Road	Lot 1 DP 487007	4.80
Cossey Road	Lot 2 DP 128680	2.40
108 Cossey Road	Lot 2 DP 151876	2.21
112 Cossey Road	Lot 1 DP 151876	1.82
120 Cossey Road	Lot 2 DP 61859	4.04
228 Cossey Road	Lot 2 DP 125763	4.31
Cossey Road	Lot 53 DP 119	6.41
Cossey Road	Lot 56 DP 119	14.11
Cossey Road	Lot 6 DP 185120	5.40
Cossey Road	Lot 6 DP 19939	2.02
Cossey Road	Lot 7 DP 19939	2.04
Cossey Road	Lot 1 DP 128680	1.62
2 Drury Hills Road	Lot 3 DP 106723	1.65
32 Drury Hills Road	Lot 2 DP 106723	.80
50 Drury Hills Road	Lot 1 DP 106723	.80
76 Drury Hills Road	Lot 1 DP 92997	.87
80 Drury Hills Road	Lot 3 DP 157934	1.51
90 Drury Hills Road	Lot 1 DP 157934	1.04
120 Drury Hills Road	Lot 2 DP 157934	1.64
132 Drury Hills Road	Lot2 DP 102638	1.19
144 Drury Hills Road	Lot 1 DP 170153	.60
152 Drury Hills Road	Lot 2 DP 170153	1.16
220 Drury Hills Road	Lot 5 DP 185120	3.24
230 Drury Hills Road	Lot 2 DP 185120	1.32
240 Drury Hills Road	Lot 1 DP 185120	1.00
250 Drury Hills Road	Lot 3 DP 185120	1.26
270 Drury Hills Road	Lot 1 DP 157361	.72
276 Drury Hills Road	Lot 2 DP 157361	1.06
26 Fielding Road	Lot 1 DP 68163	1.17
65 Fielding Road	Lot 4 DP 62165	4.30
75 Fielding Road	Lot 3 DP 62165	3.96
96 Fielding Road	Lot 1 DP 207189	.81
108 Fielding Road	Lot 2 DP 207189	4.06
111 Fielding Road	Lot 2 DP 61791	4.06
136 Fielding Road	Lot 1 DP 92454	2.41
148 Fielding Road	Lot 2 DP 92454	1.62

HISTORICAL BACKGROUND

Maori Settlement

The Slippery Creek or Opaheke catchment area, whose waters flow into the Manukau Harbour at Opaheke has long been a strategic location and occupied by a number of tribal groups who ‘could trace their ancestry back to the earliest occupants of the land, and in particular the crew of the Tainui’ (Murdoch 1990:1). The Tainui canoe initially landed on the East Cape near Cape Runaway and subsequently travelled northwards to the eastern shores of the Hauraki Gulf. Upon arrival in the Waitemata a number of these migrants decided to settle in the district. Among them were Te Keteanataua and his son Taihaua, who settled at Taurere near the mouth of the Tamaki River, and Rakataura and Taikehu, who settled on the shores of the Manukau Harbour. These descendants of Taihaua came to occupy the coastline between Tawhitokino and Kawau Island as well as numerous islands of the Hauraki Gulf (Murdoch 1996; La Roche 1991).

The Papakura/Drury area and surrounds also provided an important access link for travellers in pre-European times (and later in the early settler and military periods). With Manukau Harbour to the west and the Hunua Ranges to the southeast, it was an area highly utilised as a connection between Tamaki Makaurau (the Auckland Isthmus) and the Waikato. As well, the Manukau Harbour shores were the entrance to the inland route to Wairoa (Clevedon) and the Hauraki Gulf. Tracks such as the Ararimu Track and another that ran through Tuimata and Tuakau had been used for generations and some also connected up with canoe landing spots, such as the one at Chalky Point which met with a track that lead to Waipapa at the head of the Pahurehure Inlet (Craig 1982:70).

Where resources were plentiful or a location was strategic, the area was protected by a fortified pa. Wetland/swamp areas in the lowlands were unlikely to have attracted settlement, but resources abundant in these areas would have been utilised (Tatton and Clough, 2003). Wetland areas may also have been utilised to hide tools, weapons and other significant items in times of threat.

The main settlement sites that have been identified in the vicinity of the Plan Change area were at Maketu Pa (located approximately 1.3km to the southeast), the settlement of Opaheke at Slippery Creek just to the northwest and at Pukekiwiriki Pa (or Red Hill), which is situated further to the north and approximately 4km east of Papakura. There was also a settlement called Te Aparangi situated near Pukekiwiriki Pa, although the exact location is not known.

European Settlement

Some of the earliest European visitors to the area were missionaries who had been travelling through the land containing present-day Papakura and Drury from 1834. It is also considered likely that explorers and traders would have visited the area in the first half of the 19th century, although they would not necessarily have been documented (Heritage Consultancy Services 2013:16). Land purchases in the area to the south of Auckland were conducted by the government from the early 1840s, although details are difficult to ascertain, as a large number of blocks were involved and many were sold prior to survey

with vague boundary descriptions and plans that often consisted of nothing more than rough sketches (Husbands & Riddell 1993: 23). The Papakura Block, the Ramarama Block and the Hunua Block were all acquired by the Crown during this period and the land was sold on to numerous investors. Settlement at Drury is not documented prior to the early 1850s, although it is thought possible that some settlement may have occurred during the 1840s. This is not, however, supported for the first half of this decade, as a journal kept by a Dr John Johnson, who travelled through the area and camped at Slippery Creek in 1846, made no note of any settlers being present in the area (Craig 1982: 57).

The earliest documented usage of land in the Drury area is from 1851 when a Depasturing license was granted to Mr. George Cole of Papakura at Tuimata (Heritage Consultancy Services 2013: 43). It would appear that Cole, who resided and farmed in Papakura, did not use the land at Tuimata and allowed the lease to lapse, as in July 1852 it was granted to Thomas Runciman as a cattle run – as stated in a notice from the Commissioner of Lands' Office July 14 1852 and published in the 8 August edition of *The New Zealander*. Thomas Runciman, his wife Isobel and their four children are considered the first permanent settlers at Drury (south of Slippery Creek). The family had come to New Zealand from Scotland in 1840 and had resided in the Bay of Islands and Whangarei before settling near Drury. The Runciman family were well known and respected locally and the area just to the south of Drury was part of the Township of Runciman; a local road was also named after the family.

Prior to the construction of the Great South Road, which was commenced in 1843, traditional tracks and waterways had been used for generations to travel between the Auckland Isthmus and the Waikato. By 1855, the Great South Road had been metalled as far as Papakura, but the section between Papakura and Drury was described as being little more than a clay track (Lennard 1986: 3). The route south from Drury utilised existing traditional Maori tracks as the Great South Road ended at Drury until 1853. It was in this year that a surveyor, Mr H. Hayr, who was returning to Auckland from the Waikato, was told he could not travel by the usual track as it was 'tapu'. To avoid the track, the party instead travelled through farmland around Pokeno Hill and then through bush all the way back to Drury (Lennard 1986:1). As it turned out, the new track taken was found to be more direct, although parts were covered in dense bush at the time. Nevertheless, the government decided that the new track was worth pursuing after noting it was situated on government acquired land or land in negotiation. As a result, the government commissioned Hayr to open a bridle track, work for which was completed in two weeks and at the cost of around £25. This track, which became known as Hayr's Line was to become the Great South Road more or less from Drury southwards into the Waikato (Lennard 1986: 2).

As mentioned earlier, the Papakura/ Drury area had traditionally acted as an access link between the Auckland Isthmus and the Waikato, and this feature was to bring the area to strategic importance during the Waikato Campaign of the New Zealand Wars. In the two years leading up to the outbreak of hostilities in 1863, improving the poor condition of the Great South Road was addressed by the government through the deployment of troops for road building. Drury was chosen as the operations headquarters for the construction project, which was to be conducted under the leadership of General Duncan Alexander Cameron, commander of the British army in New Zealand from 1861 to 1865.

Local Coal and Clay Industries

Coal seams were identified in the hills to the east of Drury in 1858. Their discovery coincided with the arrival of an Austrian scientific team which included geologist Dr Ferdinand Hochstetter, who, at the request of the Auckland government, investigated the Drury coal deposits. Hochstetter noted that the coal seam was discovered by the Rev. A.G. Purchas and that it had been opened in several places by various settlers. He went on to describe the location as being in a section of hills to the east of Drury running nearly north-south with the coal being present in gullies on the slopes. He examined coal deposits at several locations, including Mr Farmer's property, the farms of Mr Hall, Mr Falwell and Mr Pollock and at Mr Symonds' farm and Mr Campbell's farm, both at Symonds Creek.¹

The first commercial attempt at coal mining was made by the Waihoihoi Coal Mining Company, which was set up in 1859. Unfortunately, difficulties in extraction, transportation and the New Zealand Wars led to the closure of the enterprise in 1866. Before its demise, however, a horse-drawn tramway was constructed to transport the coal from the mine to Slippery Creek which opened on 1 May 1862. It is described below as reported in the 6 May edition of the *Daily Southern Cross* newspaper.

'The entire length of the line is 3 and a quarter miles. The gauge is 4 feet 8 and a half inches and the rails are of rimu, which is a timber admirably suited for this purpose. In the construction of this tramway 105,000 feet of sawn timber has been used There are about 1,000 feet in length of bridges and viaducts, which is occasioned by the swampy nature of the ground. Upwards of 3,000 yards of earth cuttings have been executed, and 10 miles of drains formed.'

Following the closure of the Waihoihoi mine in 1866, the Hon. Henry Chamberlain, who was one of the prominent landowners in the area, was keenly interested in reopening the coal mining operation. He unfortunately failed to achieve his goal, dying as a result of an accident while exploring for coal deposits on his estate in 1888. A brief excerpt from the *New Zealand Herald* on 23 April 1888 describes this event:

'The Hon. Henry Chamberlin, M.L.C., was found dead in a waterhole about four feet in depth. The deceased arrived from Auckland on the 12th instant, for the purpose of prospecting for coal on his estate, and borrowed a bucket and spade from Mrs. Brooks, who resides on part of the estate. Deceased promised to return the implements that evening, but did not return. James Cossey, a farmer, found deceased's coat and waistcoat hanging on the branch of a tree near the waterhole where deceased was discovered. Mr. Cossey came on to Drury and reported the finding of those articles to the stationmaster. Mr. Cossey returned in company with David McBurney, Joseph Flannagan, Thomas Brooks, and K. Brooks. After a little search they found the body of deceased in a waterhole near to the place where the clothes were found hanging. Deceased had dug the hole himself in company with Mr. Brooks about three weeks ago, and apparently deceased was in the act of baling out the hole to sink deeper, it is supposed deceased met his death on Thursday. No

¹ A copy of Hochstetter's report entitled "Report of a Geological Exploration of the Coal-field in the Drury and Hunua District, in the Province of Auckland (N.Z.)" was published in the 14 January 1859 edition of the *New Zealander*

marks of violence were found upon the body, which was removed to the Railway Hotel, Drury, where it now lies.’

After Chamberlain’s death it was not until the early years of the 20th century that the mining venture resumed, as described in a 1904 newspaper article which reported a visit to the mines by 16 gentlemen from Auckland with interests in a company that was being formed to reopen the mining operation at that time. The article goes on to note that the mine was situated about 2.5 miles (4 km) to the east of Drury Railway Station and mining rights for approximately 1000 acres, described as partially in bush and partially under cultivation, had been secured. Finally, it was noted that after their inspection, the party was entertained at the residence of Mrs Chamberlain, i.e. Henry Chamberlain’s widow Elizabeth (*New Zealand Herald* 18 April 1904).

The official opening of the mine and tramway took place officially in July 1905 (as reported in the *New Zealand Herald* 31 July 1905). The tramway for the new mining operation ran to the Old Drury Railway Station and replaced the 19th century horse-drawn tramway with coal trucks which were pulled along the track by a locomotive. Photographs are provided in Figure 4.

It was also noted by Hochstetter in his 1859 report of the Drury Coal fields that along with coal the area contained deposits of both fire clay and potter’s clay in great abundance and he recommended that manufacturing facilities to take advantage of these resources should also be established. In fact, the clay deposits were first exploited during the original coal mining operation (The Waihoihoi Coal Mining Company) in the late 1850s; however, operations had ceased by 1885 (Brown and Brown 2017: 28). They were started up again in 1905 under the Drury Coal Mining Company as a brickworks, although soon pottery and tiles were also being manufactured (photographs in Figure 5 and Figure 6). The brickworks were located on the flat at the foot of the hill where the mine was located. The works were sizable, with a 100 x 60 foot drying shed and two smoke stacks, one for the engine in the grinding mill and one for the first kiln, which was capable of holding up to 30,000 bricks (as stated in an *Auckland Star* article entitled ‘The Drury Pottery Works’ in the 22 November 1906 edition).

Both the coal mine and pottery works are located outside of the Plan Change area. However, parts of the route of the 19th century Waihoihoi Coal Mining Company tramway and early 20th century ‘Mineral Railway’ built by the Drury Coal Mining Company (and also used for transport of the brick and pottery products) was situated within the Plan Change area. It is thought that both the tramway and railway ran along a similar route, apart from the section of the old tramway which terminated at Slippery Creek and that of the Mineral Railway which terminated at the old Drury Train Station. Unfortunately, both the brickworks and coal mine failed to thrive. Although the exact dates of closure have not been firmly established, the company first went into liquidation around 1914 with the structures and equipment sold off in 1921. Pottery works at Drury did continue slightly longer and another company, Drury Potteries Limited was formed in 1927, but it went into liquidation in 1928 (Brassey 2017:12).

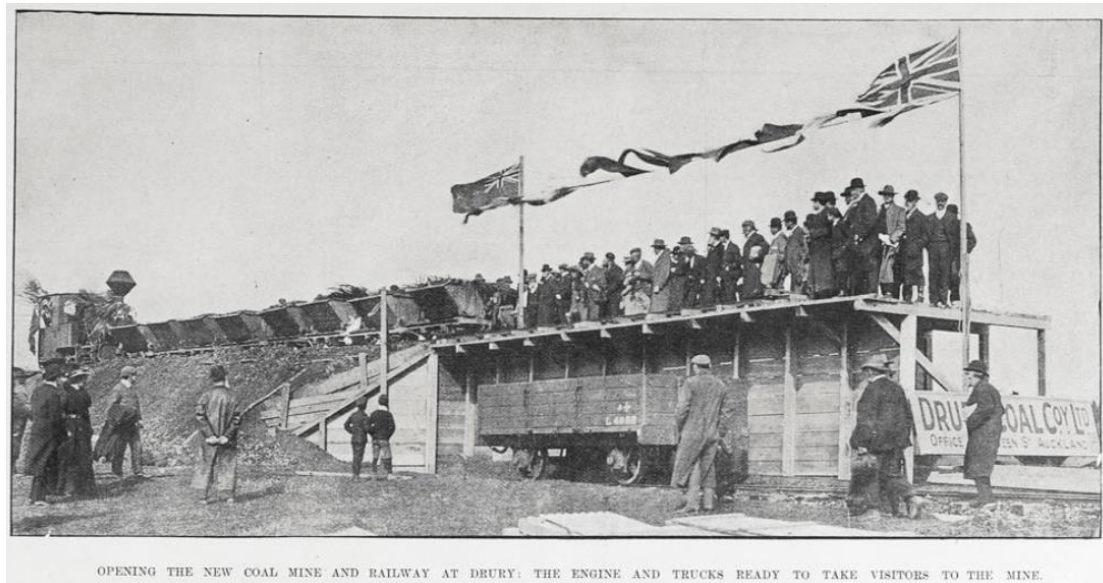


Figure 4. Upper photograph showing the opening ceremony of the Drury Coal Company in 1905 (source: Auckland Libraries Heritage Collections AWNS-19050803-11-1) and lower photograph of the old Drury Railway Station with train in foreground on the main trunk line with the Drury Coal Company private branch line to the left (source: Auckland Libraries Heritage Collections Footprints 07933)



Figure 5. Photograph of the Drury Pottery and Fireclay Works in 1906 (sourced at: http://www.aucklandmuseum.com/collection/object/am_library-photography-38545)



Figure 6. Photograph of the Drury Pottery and Fireclay works taken in 1906 (source: Auckland Libraries Heritage Collections JTD-22G-00997-1)

HISTORICAL SURVEY

Information from Early Maps and Plans

Early maps and plans were also reviewed to gather additional information on the Plan Change area. The detail from Deeds Roll 64 shown in Figure 7 and dated from the 1860s shows the land ownership in Drury at that time. As can be seen, most of the Plan Change area has the name Farmer written on it. James Farmer arrived in New Zealand around 1847 and bought land at Drury in 1853 with the land most likely used as a cattle run. He also had constructed a house there by 1858. This house which still exists and lies outside of the Plan Change Area on the western side of Fitzgerald Road was used by two notable inhabitants, namely, the reverend Thomas Norrie and his family when they first arrived in Drury in the late 1850s and later by General Duncan Cameron as his military headquarters during the construction of the Great South Road in 1861/62 (Mathews and Mathews 2019:6). It has also been noted that the house was used by settlers who had fled their farms around Drury in 1863, as noted in the 6 August edition of the *Daily Southern Cross* from that year as follows:

‘Some half a dozen families are living in Farmer’s house, which is situated about half a mile from Drury and is in a very exposed situation.’

During the New Zealand Wars period James Farmer’s Drury property was administered by his brother Robert, as James had returned to England. In 1867, James Farmer returned briefly to New Zealand and in 1870 he conveyed his Drury property to a business associate, Thomas Mackelvie, before he returned to England permanently. Mackelvie did not hold on to the property for any length of time and sold it on to Henry Chamberlain in that same year (Mathews and Mathews 2019: 7-9). Chamberlain had purchased land to the east in the Drury Hills in the 1850s and this newly purchased land added to his holdings in the area. As can be seen in the in the 1880 subdivision plan prepared for Chamberlain in Figure 8, many of the lots as shown on this plan (apart from some later subdivisions) are still present today and several of the properties’ legal descriptions still refer to that plan (i.e. DP 119).

Plans ranging from the 1920’s to recent times show that subdivision in the Plan Change area occurred gradually over time and that even up until recent times some of the old allotments from the 1880 subdivision plan (DP 119) remained un-subdivided or minimally so. In the east, plans² of the area between Drury Hills and Cossey Road show that in general subdivision occurred quite recently between the 1969 and 1997. The alignment of the old tramway at the eastern end of the Plan Change area is shown on the 1920 plan in Figure 9. This plan also shows an alignment of what is described as an ‘old iron pipeline’ just to the north of the tramway.

Two plans dating from the 1920’s show that subdivision in the central part of the Plan Change area (Lots 31, 32 and 33) occurred in 1926 in the south (Figure 10) and 1928 in the north (Figure 11). The 1926 plan shows the subdivision of Lot 33 into seven units, most of which remain intact today, apart from Lot 2 and Lot 5 that have been subdivided into two

² Relevant plans are as follows: AK DP 62564 dated 1969 (subdivision of Lot 57 DP 119); AK DP 66254 dated 1971 (subdivision in Lots 58 and 59 DP 119) and with further subdivisions shown in AK DP 82423 dated 1976 and AK DP 102638 dated 1983; AK DP 75245 dated 1974 (subdivision in Lot 61 DP 119) and AK DP 185120 dated 1997 (subdivision in Lots 50, 51 and 52 DP 119).

lots each. The 1928 plan was prepared for subdivision of Lot 31 in the north. The plan was commissioned by E. and L. L. Fielding and subdivided into three lots. The plan shows a house and cow shed in the north of lot 1 and the three lots are described as “Easy Rolling Grass Paddocks”. A newspaper article from 1929 (*Franklin Times* 6 September 1929) notes that Mr. E. Fielding set up a pedigree Jersey Stud (The Waihoehoe Stud) in 1921 at Drury and a later article from 1945 provides the date he sold off the farm, which at that time consisted of 66 pedigree animals (*New Zealand Herald* 6 July 1945). The family name is still present in the area in the form of Fielding Road. The central part of the area shown on this plan, Lot 32 remained intact in 1928 (with owner written as H. Hamilton) and it was not subdivided until 1969 (Figure 12). The area has undergone further subdivision since then into large rural lifestyle lots.

Plans³ (not shown) from the western part of the Plan Change area between Fitzgerald Road and Fielding Road for the most part shows recent subdivisions similar in date to the eastern area. The exception is a 1908 survey of the northwest corner of Lot 3 which divided Lot 3 into two parts (Figure 13). The survey was commissioned by Henry Chamberlain’s widow Elizabeth and their daughter, Eva Ellen Laing. The plan also shows the alignment of the old tramway, running just outside the southeast boundary of the lot.

Information from Early Aerials

As mentioned previously, the route of the Drury Tramway/ Mineral Railway ran through the Plan Change area. The estimated route as shown in Brown and Brown (2017) has been drawn onto the 1942 and 2017 aerial photographs in Figure 14. Details from the 1942 aerial photograph are shown in Figure 15, including the alignment of the old tramway which is still visible in the north of the seven subdivided lots shown in the 1926 plan in Figure 11. It can also be seen in Figure 15 that of the seven subdivided lots only one has a house present with the rest still covered by grassed paddocks. In fact, all of the Plan Change area, apart from an area of bush/scrub to the west of Fitzgerald Road and extending almost all the way across the central west part of the Plan Change area and a small similar section to the south bordering Fitzgerald Road had been cleared by 1942. The aerial also shows a house and shed are present as shown on the 1928 plan in the northwest corner of Allot 31.

The aerial photograph from 1988 in Figure 16 shows that the main developments in the Plan Change area up to that point in time were agricultural and/ or horticultural with the presence field crops and greenhouses visible. The most recent aerial from 2017 shows that apart from the introduction of some rural lifestyle properties, the area has not undergone any major changes up to the present time.

³ Relevant plans are as follows: AK DP 61791 dated 1969 (subdivision of Lot 6 DP 119 in the south); AK DP 917744 dated 1980 (subdivision of lot 2 DP 119); AK DP 102933 dated 1984 (subdivision of Lot 10 and Pt Lot 9 DP 119 and AK DP 135882 dated 1988 (a further subdivision of Lot 6 DP 119).

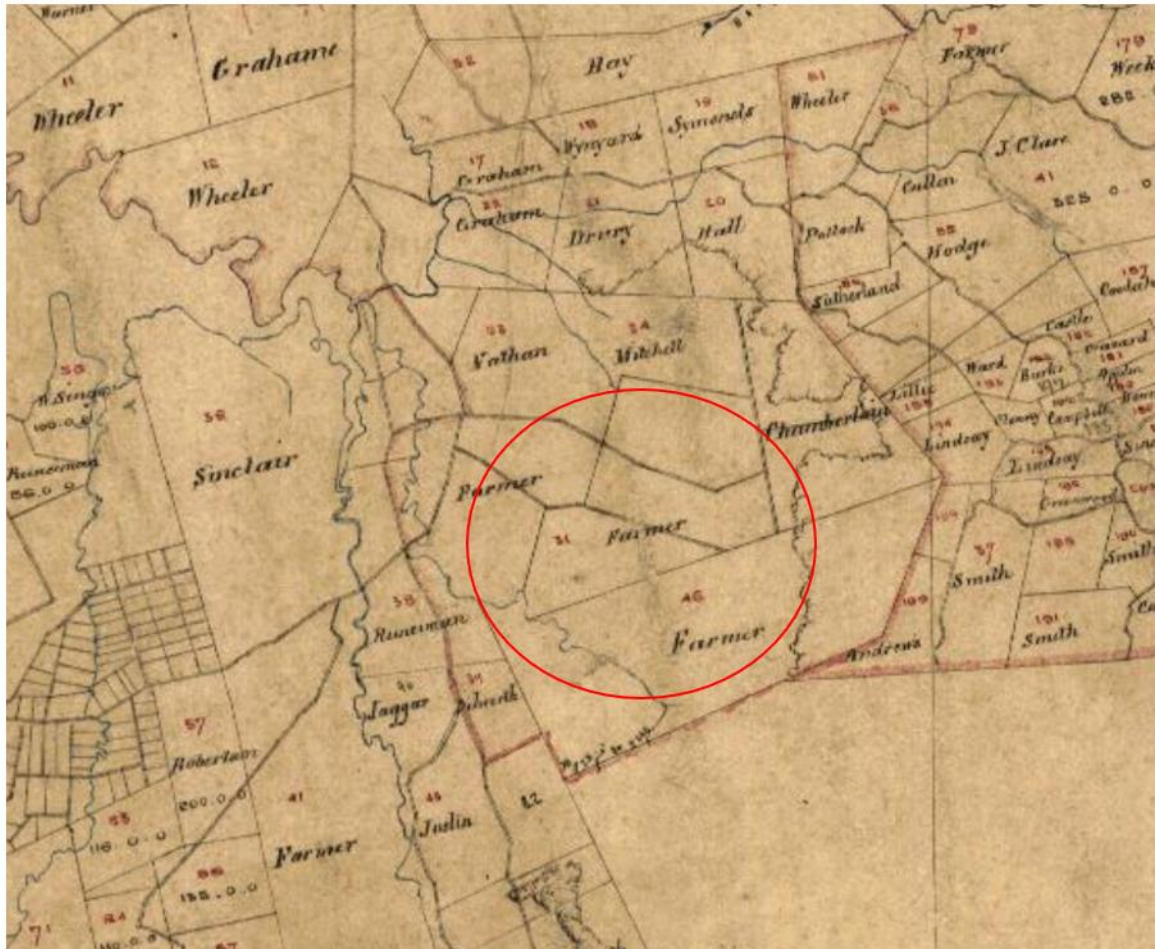


Figure 7. Detail from Deeds Roll 64 c.1860s showing the land ownership in the Drury area with general location of the Plan Change area circled in red, showing 'Farmer' as the landowner (source: Quickmap)

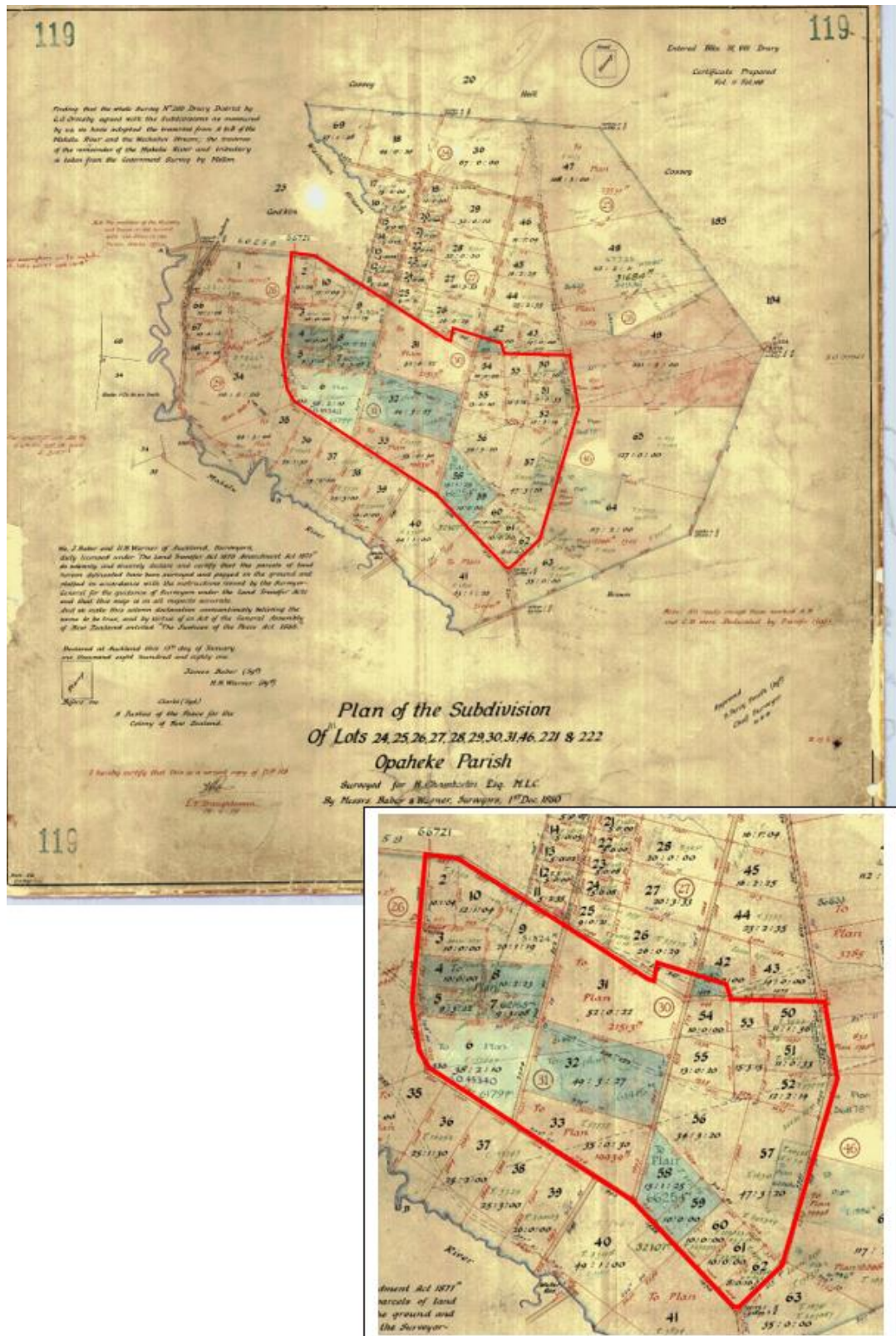


Figure 8. AKC DP 119 I subdivision plan from 1880 commissioned by Henry Chamberlain with the Plan Change area shown outlined in red (source: Quickmap)

Drury Hills Road

56878

Old Iron Pipe
Plains 19050 Blue
-DP14712

530

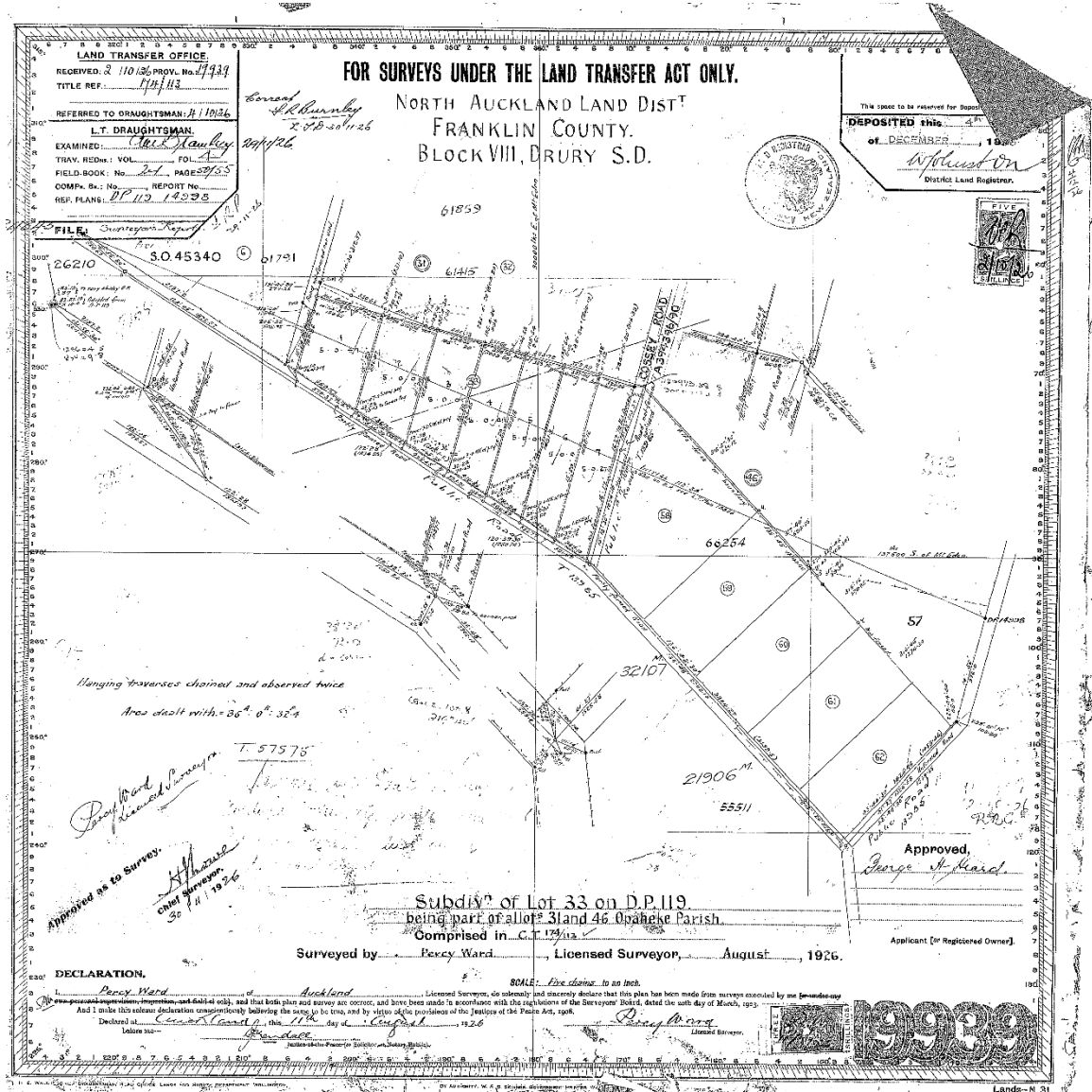
62564

Pt. 64
17017 L. 18677
5-1-262
61986

Or. Pt. 64
BLK

hanging lines have been chained and observed twice

Or. Pt. 64



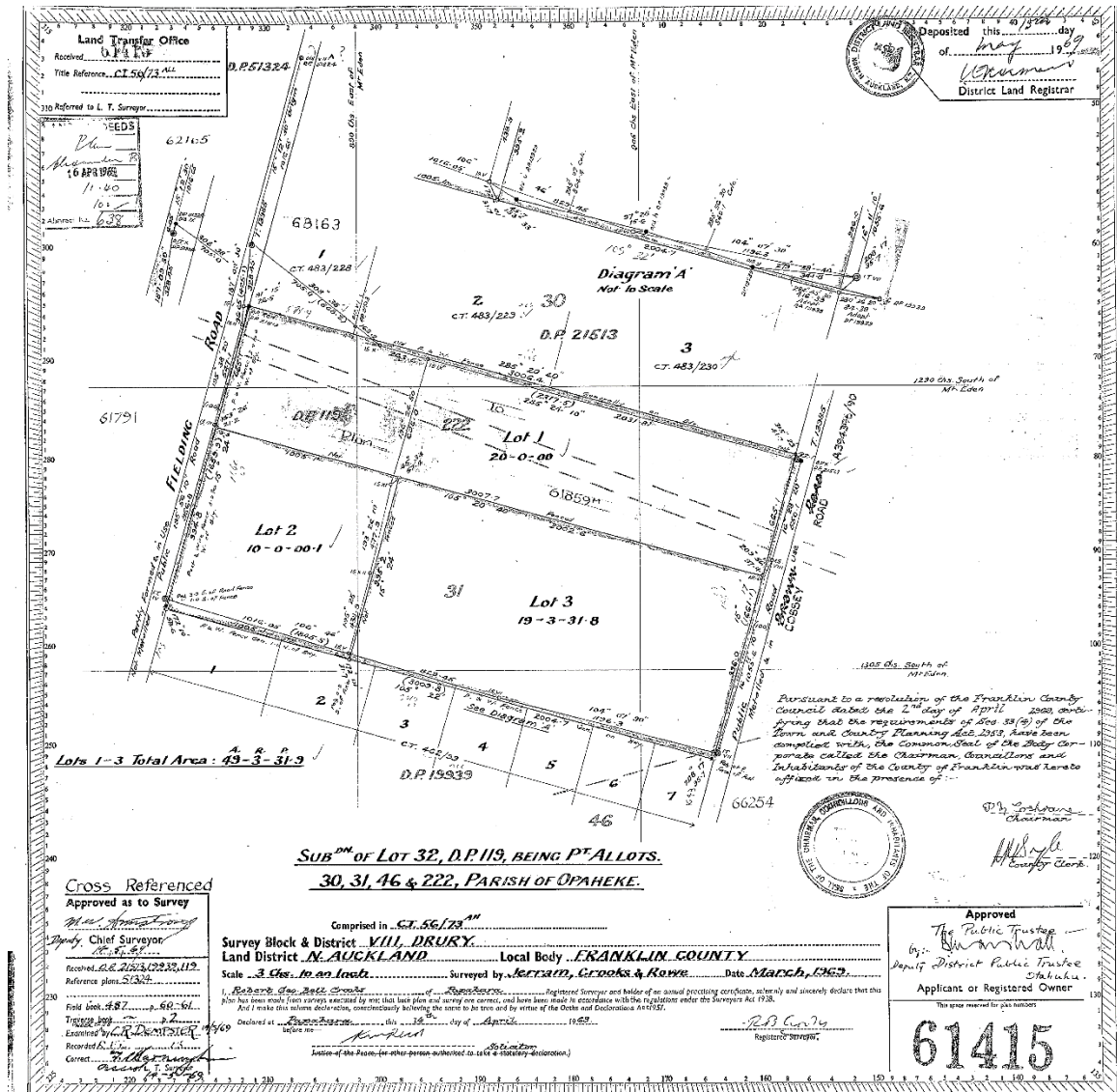
Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified , Plan may not be current as at

Figure 10. AK DP 19939 dated 1926 showing subdivision of Lot 33 (DP 119) (source: Quickmap)



Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified February 2002, Plan is probably current as at 07/03/2016

Figure 11. AKC DP 21513 dated 1928 showing the subdivision of Lot 31 (DP119) into three lots which are described as “easy rolling grass paddocks” and Lot 32 to the south with the name H. Hamilton owner written on it (source: Quickmap)



Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified February 2002, Plan is probably current as at 07/03/2016

Figure 12. AK DP 61415 dated 1969 showing subdivision of Lot 32 (DP 119) into three lots (source: Quickmap)



Figure 14. Left aerial photograph from 1942 (Crown 192 274 19) and right aerial photograph from 2017 showing the estimated route of the Drury Tramway/Mineral Railway (R12/1122) and based on the route shown in (Brown and Brown 2017) (left aerial sourced from [http:// retrolens.nz](http://retrolens.nz) and licensed by LINZ CC- BY 3.0 and right Auckland Council Geomaps)



Figure 15. Aerial photograph from 1942 (Crown 192 274 19) showing detail in top left of the house and cow shed on the Fielding property and detail in the lower right corner of Lot 33 with alignment of the old tramway indicated by white arrows (sourced from: [http://: retrolens.nz](http://retrolens.nz) and licensed by LINZ CC- BY 3.0)

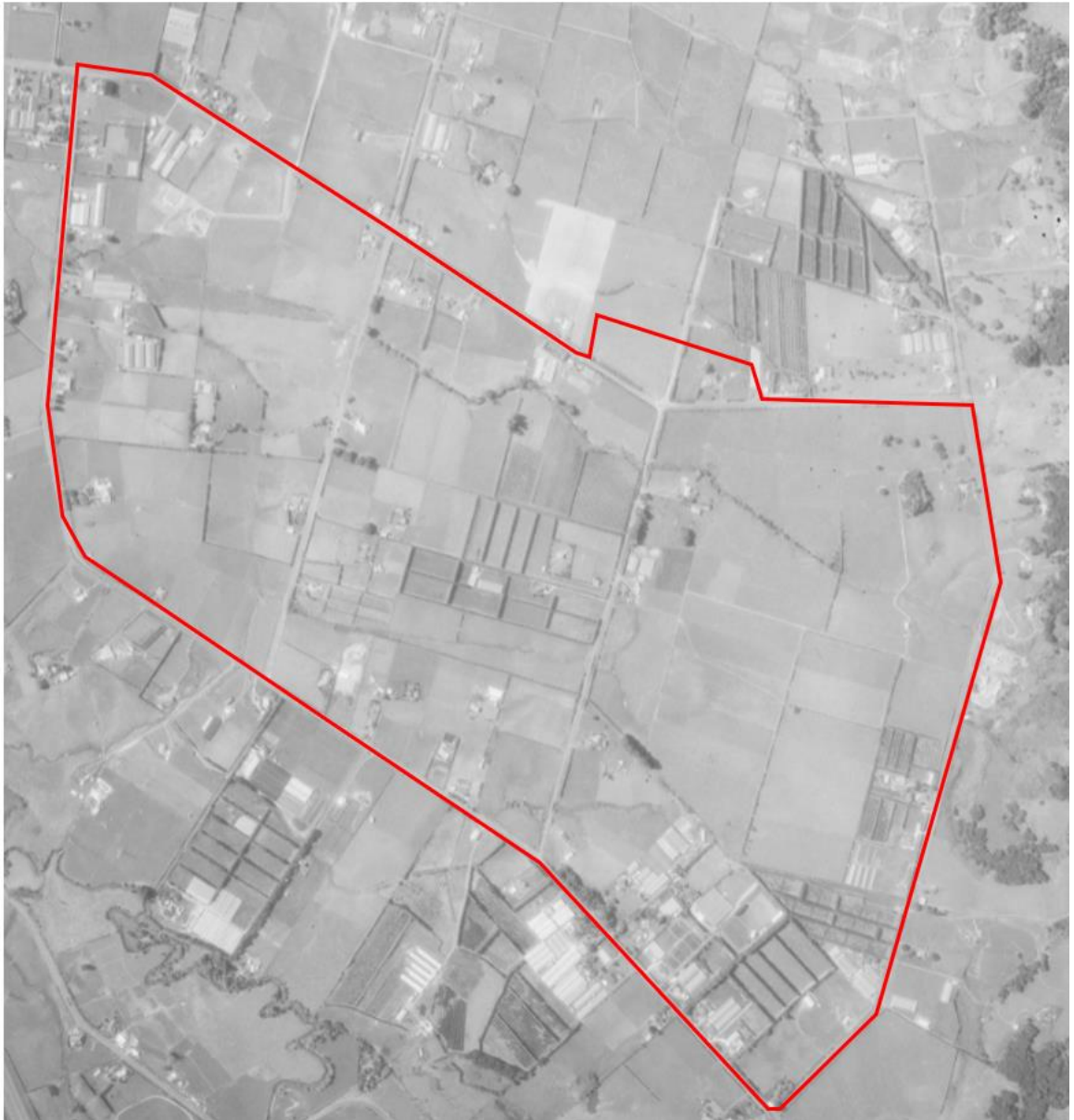


Figure 16. Aerial photograph from 1988 (Crown 8772 V 10) showing the Plan Change area (outlined in red) with some of the former grassed paddocks converted to crops and green houses in the northwest corner (sourced from: [http:// retrolens.nz](http://retrolens.nz) and licensed by LINZ CC- BY 3.0)

ARCHAEOLOGICAL BACKGROUND

Archaeological Sites

There is one recorded archaeological site in the Plan Change area, R12/1122, the Drury Tramway/Mineral Railway which was associated with the Waihoihoi Coal Mining Company in the 1850s and Drury Coal Mining Company and Pottery Works in the early 20th century (the NZAA site record is appended to this report for reference). The estimated alignment of the route is shown in Figure 14 and it can be seen to run through the central part of the Plan Change area. To the west of the Plan Change area, the 1850s tram had its terminus at Slippery Creek, whilst the early 20th century railway had its terminus at the original Drury Railway Station (also to the west of the Plan Change area). It should be noted that this station was closed down and replaced by a new station to the south in 1918. Both stations have been demolished, but the location of the 1918 station has been recorded as archaeological site R12/742.

Two sites associated with the Drury Tramway/ Mineral Railway have been recorded to the east of the Plan Change area. These are R12/1120 The Waihoihoi Coal Mine and R12/1121, the Drury Pottery and Brickworks. The coal mine site has not been investigated, but the general location has been observed from a distance. The location of the mine workings, including the tramway were identified via aerial photographs. It has also been noted that the area has been developed into lifestyle blocks and houses and associated features and infrastructure have modified parts of the site, and that other parts of the site are located in regenerating scrub (NZAA site record). The former Drury Brickworks and Pottery is located on the western side of Drury Hills Road and is outside of the Plan Change area. It appears to have been primarily situated at 87 Drury Hills Road, but also extended over 93 and 111 Drury Hills Road and into 21 Macwhinney Drive. It would appear that much of the area containing the site has been modified through residential development activities over time, although it is noted that a cottage and outbuilding associated with the pottery works are still located at 93 Drury Hills Road and a remnant of railway embankment is present at 111 Drury Hills Road (NZAA site record).

Five archaeological sites have also been recorded to the southeast of the Plan Change area. These include R12/278, a complex pa site with stone-works and burials. Another site located to the southeast of the pa and possibly associated with it, is R12/725, which consists of a pit and terrace. There is also a mine shaft located nearby, R12/722, believed to have been dug during 19th century coal explorations in the area. Two sites have also been recorded to the north of pa site, R12/278. These consist of R12/330, a shell midden, and R12/725, possible pits and terraces. A shell midden site R12/88 has also been recorded just to the north of the location of the Waihoihoi mine.

A number of archaeological sites (R12/336, R12/673, R12/675 and R12/1100) have also been recorded to the northeast of the Plan Change area in the Drury Hills and are associated with basalt quarrying and stone cutting in the early 1900s. Other sites associated with possible Maori occupation and usage have also been identified in this area and consist of middens, pits and terraces, R12/331, R12/332, R12/335, R12/337 and R12/338.

Other sites in the general area are located at Drury Township and are associated with the early settlement of Drury and the New Zealand Wars period. These include R12/1129 (St John's Church), R12/733 (the site of the original Drury Village), R12/123 (Drury Redoubt) and R12/774 (a settlers' stockade and cemetery). There are also recorded sites to the west

of the Plan Change area which include R12/1125, the Flanagan Homestead which was built by and used by the Flanagan family from the late 19th century, the Flanagan mill (R12/967) and R12/755, the house built by James Farmer in the 1850s and used as General Cameron's Headquarters' during the construction of the Great South Road in 1861-62. It is also noted that military camps were located around Drury during the early 1860s and although the exact locations have not been established,⁴ a camp associated with the house used by General Cameron was situated just to the west of the Plan Change area, although the exact location is yet to be confirmed.

Two archaeological sites have also been recorded slightly further to the west that also have relevance to the general usage of the area in the past along Slippery Creek. The first is S12/8, a pa site and also where a wharf was later built which served as the terminus of the Waihoihoi Coal Mining Company tramway in the late 1850s and early 1860s. The other is R12/756, the site of the Commissariat Redoubt, which was used as a military store during the New Zealand Wars period.

The locations of archaeological sites recorded in the vicinity of and within the Plan Change area are shown in Figure 17 with a brief description provided in Table 2.

Historic Heritage Sites

Auckland Council's CHI records a number of other historic heritage sites such as historic buildings, memorials and heritage trees (see Figure 18, with a brief description provided in Table 2).

No historic heritage sites have been recorded within or in close proximity to the Plan Change area. However, a number of sites associated with Drury Village have been recorded to the northwest and document the early European settlement and historical associations with the New Zealand Wars. There is one maritime site (CHI 319), which is the landing associated with archaeological site R12/756, the Commissariat Redoubt and also the site where the coal from the Waihoihoi Coal Mining Company was loaded onto ships for transport to Auckland. There are also three reported historic sites: CHI 15105, Drury Presbyterian Church; CHI 15110, the Farncombe Parade Shop; and CHI 15880, the Drury Post Office. As well, seven historic buildings have been recorded, namely, CHI 2548, St John's Church (also recorded as R12/1129); CHI 15879, a milepost outside the current Drury Primary School; CHI 14374, Presbyterian Church; CHI 15102, the Former Drury Cheese Factory; CHI 15109, the Drury Commercial Buildings; CHI 15107, Drury Hall; and CHI 17035, the Drury WWI Memorial. Two historic botanical sites are also included, the Runciman Oak (CHI 1870) and CHI 19131, a Phoenix Palm.

Archaeological Landscape

The Plan Change area is situated within a broader archaeological landscape reflecting both Maori occupation and usage of the area as well as early European settlement along with industrial and transportation development. The archaeological sites described above clearly

⁴ The military camps of the officers were located around General Cameron's Headquarters'. The soldiers' camps are thought to have been located near General Cameron's Headquarters and also in the vicinity of the Hingaia Stream which lies further to the west. Site R12/911 has been recorded along the Hingaia Stream, although this location has been questioned and cannot be verified at present.

show that pa sites were located to both the east and west. While the Plan Change area is for the most part low lying and would not be expected to contain complex sites such as pa, smaller sites such as shell middens as well as isolated finds could be present as the area as its streams and wetlands would have provided a rich area for resource collection for people living nearby.

The archaeological sites from the early European settlement period show the patterns of early land purchase by a mix of investors and settlers in the 1850s, which changed mainly to settlers who lived and worked their own land by the 1880s. The nature of the early landowners is also reflected in the formation of the Waihoihoi Coal Mining Company in the late 1850s. The participation of the local landowners in the exploration for coal and setting up of the company, including construction of the tramway (which at that time was a considerable achievement), reflects a background of progressive thinking and entrepreneurship.

Table 2. Archaeological sites and other historic heritage sites included within a c.1km radius of the Plan Change area

CHI No.	NZAA Ref	AUP Ref	Site Type	Description	NZTM Easting	NZTM Northing
319	-----	-----	Maritime Site	Slippery Creek Landing: location not verified.	1772820	5891934
1870	-----	2198	Historic Botanical Site	The 'Runciman Oak'	1772871	5891717
2458	R12/1129 (pending)	00707 Cat. B	Historic Structure	St John's Church constructed in the early 1860s. Structure still present.	1773341	5891899
6162	R12/88	-----	Shell midden	Scattered shell over 4 m area.	1776023	5890640
6266	R12/330	-----	Shell midden	Slumped shell midden thin scatter.	1775925	5889640
6860	R12/8	00692 Cat. B	Pa Site	Ditch and banks with shell midden identified to the south-east.	1772699	5892443
6906	R12/334	-----	Possible pa site	Not considered to be a site	1776819	5892641
8093	R12/336	00698 Cat B	Pits/ terrace /midden	Terraced area and shell midden. May relate to c. 1900 basalt quarry camp.	1776021	5891821
8094	R12/337	-----	Pit/ terrace	Large terrace with pit with flat area bordered by large boulders.	1775974	5891780
8129	R12/723	-----	Pit/ terrace	Possible pits/depressions and terrace.	1776554	5889821
8634	R12/725	-----	Pit/ terrace	Possible features associated with Maketu pa.	1777226	5889142
9284	R12/331	00694 Cat B	Pits/ midden/ possible settlement	Possible shell midden. The nature of the other features is undetermined.	1776381	5892025

CHI No.	NZAA Ref	AUP Ref	Site Type	Description	NZTM Easting	NZTM Northing
9381	R12/332	00695 Cat B	Pits/ midden terraces/ stone-working	Settlement/ gardening site (recommended to be combined with R12/338)	1776076	5891683
9382	R12/338	-----	Pits/ midden /terrace	Interpreted as a settlement and gardening site.	1776219	5891679
9443	R12/123	-----	Military (non- Maori)	Drury Redoubt: Built in the 1860s to house soldiers.	1773470	5891925
9710	R12/335	00697 Cat B	Pits/ terrace /Midden	Pit in a levelled terrace and shell midden deposits.	1776023	5891750
10180	R12/722	-----	Industrial	Mine shaft – possibly from old coal explorations.	1777125	5889242
10206	R12/278	00693 Cat B	Pa/ Burials/ stone-works	Complex habitation and burial site.	1776819	5892641
11388	R12/742	-----	Transport	Railyard and former Drury Station (1918)	1773261	5891495
12260	R12/673	-----	Stone-working/ quarry	Small stone working area associated with basalt quarrying.	1776045	5892182
12430	R12/675	-----	Basalt quarries	Part of a local basalt quarry complex in operation c. 1900.	1776165	5891705
13848	R12/749	-----	Garden/plant	Possible location of a temporary homestead of the Cossey Family. Arum lilies found in the area.	1776819	5892341
14071	R12/755	-----	Military (non- Maori)	House believed to have been used by General Cameron during the 1860s.	1773921	5891336
14072	R12/756	02173 Cat. A	Military (non- Maori)	Commissariat Redoubt: A military supply depot used during the 1860s.	1772750	5891894
14079	R12/1100	-----	Stone-working area	Stone working area associated with local basalt quarries. Deep deposits of debitage.	1775945	5891913
14081	R12/911	-----	Military (non- Maori)	Possible 65th Regiment Camp during the 1860s.	1773206	5890887
14087	R12/773	-----	Domestic	Location of old Drury Village during the 1860s.	1772169	5892169
14088	R12/774	-----	Military (non- Maori)	Settlers' Stockade and old cemetery with some early settlers' graves.	1773240	5892293
14374	-----	-----	Historic Structure	Presbyterian Church still in use.	1773012	5891700
15102	-----	-----	Historic Structure	Drury Cheese Factory, now used as workshops.	1773272	5891846
15105	-----	-----	Reported Historic Site	Second Presbyterian Church and Cemetery.	1773008	5892214
15107	-----	-----	Historic Structure	Drury Hall	1773513	5891986

CHI No.	NZAA Ref	AUP Ref	Site Type	Description	NZTM Easting	NZTM Northing
15109	-----	-----	Historic Structure	Former commercial buildings (demolished).	1773459	5891847
15110	-----	-----	Reported Historic Site	Farncombe Parade Shop (demolished).	1773415	5891987
15879	-----	-----	Historic Structure	Mile Post (not thought to be original)	1773236	5892422
15880	-----	-----	Reported Historic Site	Site of old Drury Post Office (demolished)	1773429	5891892
17035	-----	-----	Historic Structure	Drury WWI Memorial	1773530	5891965
17871	R12/967	-----	Industrial	Site of old Mill associated with the Flanagan family on the Hingaia Stream.	1773230	5890859
21945	R12/1122	-----	Industrial	The Drury Tramway/ Mineral Railway from the Drury Hills to the Old Drury Train Station.	From c. 1776376 to 1772694	5890145 5892444
19131	-----	2241	Historic Botanical Site	Four Phoenix Palms on east Street Drury.	1773409	5892356
21944	R12/1220		Mining-coal	Location of the Waihoihoi Coal Mine.	1776294	5890314
-----	R12/1221		Commercial	Drury Pottery and Brickworks location.	1775821	5890030
-----	R12/1125 (pending)	-----	Historic Structure	The Flanagan Homestead late 19 th century farm house.	1773392	5891137

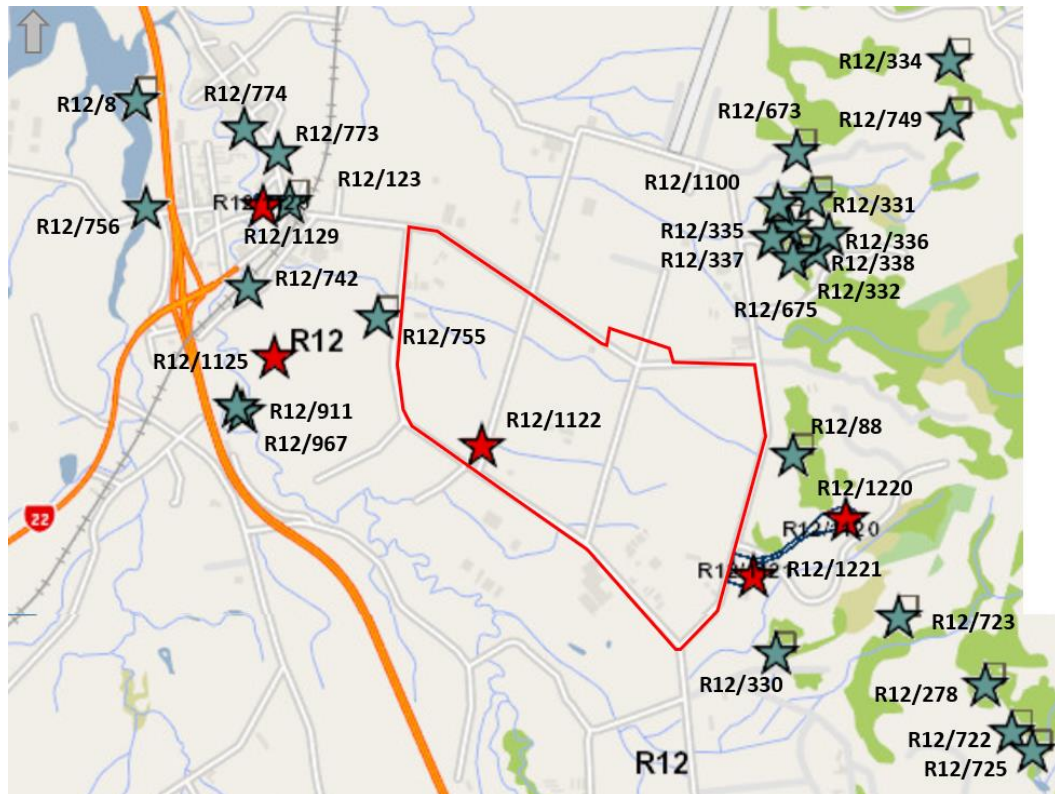


Figure 17. Map showing the Plan Change area outlined in red and the recorded archaeological sites in the general area (source: NZAA ArchSite)

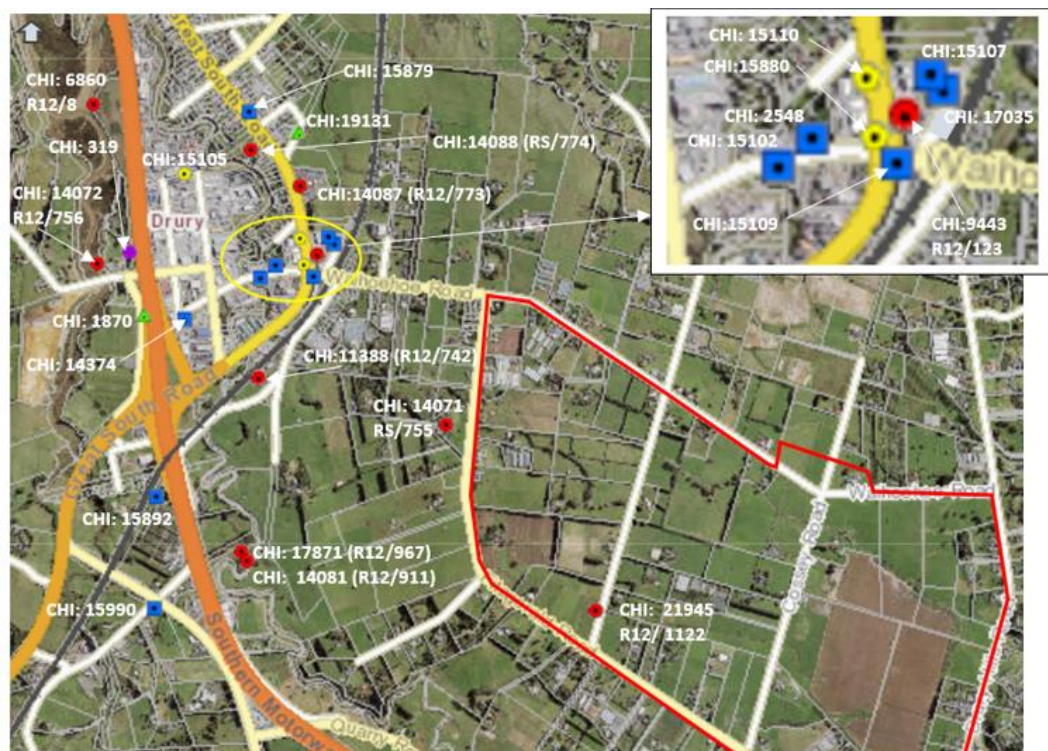


Figure 18. Aerial plan showing the historic heritage sites in the vicinity of the Plan Change area: Blue = historic structures, red = archaeological sites, green = heritage trees, purple = maritime sites, yellow = reported sites (source: Auckland Council Geomaps)

PHYSICAL ENVIRONMENT

Topography, Vegetation and Land use

The general area has an extensive stream and flood plain network which connects headwaters to the Manukau Harbour. The Plan Change area is within the Hingaia Creek catchment and is traversed by several large watercourses (Figure 19). The overall topography of the area is relatively undulating, with several low ridgelines. The highest elevations in the Plan Change area are found in the east along Drury Hills Road and range generally between 40-50m asl with a low ridgeline (at c.30m asl) running to the west through the central part. There is also a slightly raised knoll at the southwest corner of the Plan Change area near the junction of Fitzgerald and Brookfield Roads. The land use in the Plan Change area is a mixture of mostly rural/agricultural with some rural lifestyle properties.



Figure 19. Map with the Plan Change area outlined in red showing the Hingaia Stream to the west and unnamed streams running through the Plan Change area (source: Auckland Council Geomaps)

FIELD ASSESSMENT

Field Survey Results

A site visit with limited access to the Plan Change area properties was undertaken on 14 February 2019. Only two properties were able to be accessed – at 94 Fitzgerald Road and 148 Fielding Road. An aerial plan showing the locations visited is provided in Figure 20.



Figure 20. Aerial plan showing the properties visited and area estimated to contain the route of the tramway/ mineral railway that was viewed from the roadside (source: Auckland Council Geomaps)

94 Fitzgerald Road

This property is located on the eastern side of Fitzgerald Road and contains two residential structures set back from the road and accessed by a long driveway. The structures are situated on a raised knoll with slopes on the north, east and west sides with the land continuing on at a similar elevation on the property to the south. This property is located to the east of the house believed to have been General Cameron's headquarters during the New Zealand Wars period, R12/755. As a raised area in proximity to the archaeological site, it is considered possible that it may have been used by the inhabitants of the military camps. The property is also in the area estimated to have contained the Drury Tramway/ Mineral Railway (R12/1122) associated with the Waihoehoi Coal Mine and Brickworks and Pottery. However, due to house construction and landscaping, no evidence of any archaeological remains was visible on the surface. Photographs are shown in Figure 21.



Figure 21. Left photograph showing view of building and lawn at 94 Fitzgerald Road on the raised part of the property (looking west) and right photograph showing the view looking east from the edge of the raised area

148 Fielding Road

This property is located on slopes leading down to a substantial stream gully which runs along and just to the north of the southern boundary of the property. The land is currently covered by a mixture of grass and trees planted around the house and as shelterbelts on the rest of the property. It is noted that the estimated route of the Drury Tramway/Mineral Railway (R12/1122) ran just to the south of the stream and was most likely located in lots adjacent to 148 Fielding Road. The property was walked over and the neighbouring property observed from the property boundary, but no evidence of the former tramway route was able to be identified. A photograph of the property taken during the site visit is shown in Figure 22.



Figure 22. Photograph of the paddocks at the back of 148 Fielding Road with arrow indicating general area of the estimated location of the Drury Tramway/ Mineral Railway, R12/1122 (looking east)

35 Cossey Road

A stop was made at 35 Cossey Road, but the property was not entered. As it is thought that the tramway route was located to the south of this property on both sides of the road, the area was walked and visual scans made from the roadside. However, no evidence of the old tramway route was visible as the area had either been modified by road construction or was covered by crops (photographs in Figure 23 and Figure 24).

Other Locations

The remainder of the Plan Change area was observed from the roadside. Again, note was made of the areas where it is thought the tramway may have crossed what are now public roads, but no evidence was able to be identified.



Figure 23. View of the roadside where the Drury Tramway/Mineral Railway route is thought to have been located (looking south)



Figure 24. View of the stream gully near the estimated route of the Drury Tramway/ Mineral Railway with area thought to contain the route indicated by arrow (looking southeast)

DISCUSSION AND CONCLUSIONS

Summary of Results

There is one recorded archaeological site in the Plan Change area, R12/1122 the Drury Tramway/ Mineral Railway. The estimated route runs from the southeast corner through the central part and exits near the northwest corner onto Fitzgerald Road. As most of the land could not be accessed, it is not possible to determine if any evidence of the old route remains. The very limited areas that were able to be visited did not show any surface evidence of the tramway, although modern modifications would likely have obscured surface evidence and the presence of subsurface remains related to the tramway/ Mineral Railway cannot be discounted. In addition, the background research shows that the Plan Change area has potential to contain additional subsurface archaeological remains associated with the New Zealand Wars, as the north-western boundary borders an area believed to have been used as a military headquarters and camps during the early years of the 1860s.

The results of the background research and visual inspection undertaken as part of this preliminary assessment has also noted that the wider area to the east and west was utilised by Maori and, although complex archaeological sites such as pa are unlikely to be situated in the Plan Change area, there is the possibility that isolated finds or small middens could be present, especially in areas in the vicinity of the streams that run through it.

Maori Cultural Values

This is an assessment of effects on archaeological values and does not include an assessment of effects on Maori cultural values. Such assessments should only be made by the tangata whenua. Maori cultural concerns may encompass a wider range of values than those associated with archaeological sites. Consultation with iwi who have an interest in the Project Area has been undertaken and the following iwi have expressed an interest: Ngaati Whanaunga, Ngāi Tai ki Tāmaki, Ngati Te Ata, Ngati Te Ata, Ngāti Tamaoho and Waikato Tainui. A Cultural Values Assessment has been commissioned and will be prepared.

Survey Limitations

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 wahi tapu and other sites of traditional significance to Maori, especially where these have no physical remains.

It should be noted that only a small proportion of the Plan Change area was accessible for field survey.

Archaeological Value and Significance

The Auckland Unitary Plan Operative in Part (AUP OP) identifies several criteria for evaluating the significance of historic heritage places. In addition, Heritage NZ, has provided guidelines setting out criteria that are specific to archaeological sites (condition, rarity, contextual value, information potential, amenity value and cultural associations)

(Heritage NZ 2006: 9-10). R12/1122, the Drury Tramway/Mineral Railway is located within the Plan change area. It is noted that an evaluation of the Mineral Railway has been undertaken by Auckland Council, with the following conclusion and recommendation:

‘The early mining and clay-based industries undoubtedly contributed significantly to the historical development of Drury. The tramway and railway were important components of these industries. There is however little physical evidence that is discernible on the ground of the Drury industrial tramway/railway within the Drury structure plan area....

The tramline/mineral railway route likely meets the criteria for inclusion in the heritage schedule based on the historical significance criterion. However, evaluation for scheduling is not recommended because the route is almost 4 km long and passes through multiple properties. Scheduling would not, in my opinion, provide reasonable use of the land.’ (Brassey 2017: 18).

The tramway/railway is also a recorded archaeological site (R12/1122). 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 pa 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.

The archaeological values of archaeological site R12/1122 have been assessed in Table 3, based on Heritage NZ criteria that are specific to archaeological sites (condition, rarity, contextual value, information potential, amenity value and cultural associations) (Heritage NZ 2006: 9-10). This assessment is based on the information in the site record form and Brassey 2017. Overall the site has limited archaeological value in terms of the information that could be recovered through archaeological investigation. Its main value is its historical significance based on its contribution to the development of Drury’s industries in the 19th and early 20th centuries.

Table 3. Assessment of the archaeological values of site R12/1122 (Drury Tramway/ Mineral Railway) based on Heritage NZ criteria (Heritage NZ 2006: 9-10)

Value	Assessment
Condition	The condition of the site is poor, with only small sections of the embankment easily discernible on the ground (e.g. at 111 Drury Hills Road). The 1850s tramway and early 20th century railway were both dismantled and no structural remains are believed to have survived.
Rarity	A number of early tramway/railway routes have been recorded around the country associated with early extractive and manufacturing industries. However, the 1850s tramway represents one of the earliest such features in New Zealand and is relatively rare based on its construction date.

Value	Assessment
Contextual value	The tramway/railway contributes to the archaeological landscape of the Drury area.
Information potential	The site is not expected to have any structural remains, although ground features such as cuts for drainage and evidence of embankments may be present along with contemporary artefacts. The presence of any identifiable remains would add to the existing knowledge of the tramway from historical sources, but the information potential is low as archaeological investigation could provide little information additional to what is already known from historical photographs and previous research.
Amenity value	The site has little amenity value along most of its route, being located in private properties and no longer being visible on the ground. However, there is potential for interpretation of the site within Macwhinney Reserve, which is Council owned (Brassey 2017: 19)
Cultural associations	The site is associated with early European settlement and industrial activities in the Drury area.
Other	The site is of local historical significance based on its contribution to the development of Drury and its early industries. It is associated with early European settlers who promoted coal mining and also the brief period of industrial development at Drury in the mid to late 19th century and early 20th century.

Potential Effects of the Proposal

One recorded archaeological site is located within the Plan Change area, R12/1122, the Drury Tramway/ Mineral Railway. Based on the nature of the site, i.e. a linear alignment c.4km in length crossing through the central part of the Plan Change area, it is not considered practical to implement measures to completely avoid the site. As well, although it has been assessed as meeting the criteria for scheduling based on historical value in a report prepared for Auckland Council, the recommendation in that report was that it not be scheduled (Brassey 2017). This was based on its location on a large number of private properties, that there is little physical evidence remaining and the fact it is considered to have little practical/utility or scenic value. As well, an evaluation of its archaeological values based on Heritage NZ criteria (above) indicates that information from archaeological remains could add little to the knowledge of the Drury Tramway/ Mineral Railway that is not currently known solely from historical sources.

The overall level of adverse effects if the site is not avoided by future development is therefore considered to be minor and can be mitigated through the recording of any identifiable remains. Examination of current aerial photographs has not identified any clear indication of the former tramway/railway within the Plan Change area and Auckland Council has concluded that the route is not well suited to public interpretation or use as a public walkway/cycle way/bridle path (Brassey 2017: 18-19). Brassey considers that the most appropriate location for interpretation of the tramway/railway and associated industries is within the Council-owned Macwhinney Reserve (ibid.). Within the Plan Change Area, FHLD are agreeable to referencing its former presence through place names or the design or alignment of a heritage trail or walkway, if feasible. In addition, when future development is planned and the remaining parts of the Plan Change area are accessible, a

survey is recommended to determine if any remains of the Drury Tramway/Mineral Railway, R12/1122 are evident and if so to prepare appropriate mitigation measures.

It is also considered that there is some potential for additional unrecorded subsurface archaeological sites within the Plan Change area that may be exposed during future development. Archaeological remains associated with the New Zealand Wars period may be present in the north-western part of the Plan Change area as this area is in the vicinity of a house used as a military headquarters in the early 1860s and it is known that the surrounding area contained military camps, although the exact location of the camps has not been able to be determined at present. In addition, the possibility of remains relating to Maori settlement, such as camps and midden sites, cannot be excluded.

Overall, when the remaining parts of the Plan Change area are accessible, a survey should be carried out to determine if any archaeological evidence can be identified, provide a more detailed assessment of the level of effects and recommend appropriate mitigation measures.

Resource Management Act 1991 Requirements

Section 6 of the RMA recognises as matters of national importance: ‘the relationship of Maori 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)).

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 (S17), including historic heritage.

Historic heritage is defined (S2) 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 Maori, including wahi tapu; (iv) surroundings associated with the natural and physical resources’.

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 RMA. The Auckland Unitary Plan Operative in Part 2016 (AUP OP) is relevant to the proposed activity.

This assessment has established that future development as a result of the proposed Plan Change has the potential to affect R12/1122, The Drury Tramway/ Mineral Railway. This site is not scheduled on the AUP OP. It is also noted that Auckland Council has prepared a review of management options, which concluded that R12/1122 should not be scheduled. The archaeological values of the site have been assessed and found to be limited as little physical evidence of the site appears to have survived. However, further field survey and assessment should be carried out and detailed mitigation recommendations should be made, once future development plans have been prepared.

There is also potential for additional unrecorded archaeological remains to be present within the Plan Change boundaries. Based on historical research and topographical setting it is considered unlikely that any complex unrecorded archaeological sites are present

within the Plan Change area, and this potential can be appropriately managed under the AUP OP Accidental Discovery Rule and the archaeological provisions of the HNZPTA.

Under the Accidental Discovery Rule (AUP OP E12.6.1) 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.

Heritage New Zealand Pouhere Taonga Act 2014 Requirements

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 to modify an archaeological site has been issued by Heritage NZ (Section 42).

An archaeological site is defined by the HNZPTA Section 6 as follows:

‘archaeological site means, subject to section 42(3)⁵, –

(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)⁶,

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 specific 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 Maori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Maori 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.

At present, one archaeological site has been recorded within the Plan Change boundary, R12/1122 (The Drury Tramway/ Mineral Railway). It is also possible that other unrecorded sub-surface archaeological remains related to Maori occupation and early European Settlement and the New Zealand Wars may also be present, though the potential appears relatively low.

⁵ Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished.

⁶ 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.

Any modification of physical remains of site R12/1122 during future development would require an Authority issued under the HNZPTA prior to the commencement of site works. This would also apply to unrecorded archaeological sites in the Plan Change area.

Conclusions

This preliminary assessment has identified existing and potential heritage constraints in the Plan Change area in the form of one recorded archaeological site and the potential for additional unrecorded archaeological sites to be present. Although the full effects on archaeological and historic heritage values are not yet known, as only a small part of the Plan Change area has been surveyed, it is recommended that future development plans should take account of the route of R12/1122 (the Drury Tramway/ Mineral Railway) based on the estimated alignment which has been determined through historical research and review of old aerial photographs. Additional archaeological survey and assessment of the archaeological values of the Plan Change area should also be undertaken prior to the finalisation of development plans so that appropriate avoidance and mitigation measures can be developed. An authority issued by Heritage NZ would be required before any modification or destruction of site R12/1122 (as well as any unrecorded archaeological sites) occurs.

RECOMMENDATIONS

- The area containing the estimated route of the recorded archaeological site R12/1122 (Drury Tramway/Mineral Railway) should be surveyed once the properties become accessible to identify whether any surface remains are present to inform future development plans.
- Once future development plans have been determined, a detailed assessment of effects should be prepared and appropriate mitigation measures recommended, most likely in the form of archaeological monitoring and recording (preservation by record) and, if feasible, through some form of reference to the tramway/mineral railway, for example a heritage trail or recreational pathway, or the use of place names.
- As it is considered unlikely that site R12/1122 can be avoided an Authority must be applied for under Section 44(a) of the HNZPTA and granted by Heritage NZ prior to the start of any works that will affect it. (*Note that this is a legal requirement*).
- The possibility that unidentified archaeological remains may be present should be managed under the AUP OP Accidental Discovery Rule and/or the provisions of the HNZPTA.

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APPENDIX A: SITE RECORD FORMS

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p>Site Record Form</p> <p>ARCH SITE archaeological site recording scheme</p>	<p>NZAA SITE NUMBER: R12/1122</p> <p>SITE TYPE: Commercial</p> <p>SITE NAME(s): Drury tramway/mineral railway</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1774443 Northing: 5890687 Source: On Screen</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R12/1122</p>	
	
<p>Finding aids to the location of the site</p> <p>Grid ref is nominal location on tramway route, which extended over 5km from ca 1776376 5890145 to 1772694 5892444. See attached sketch</p>	
<p>Brief description</p>	
<p>Recorded features</p> <p>Tramway</p>	
<p>Other sites associated with this site</p>	

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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD HISTORY	NZAA SITE NUMBER: R12/1122
<p>Site description</p> <p>Updated 02/05/2018 (Field visit), submitted by robertbrassey , visited 23/11/2017 by Brassey, Robert Grid reference (E1774443 / N5890687)</p> <p>Horse drawn tramway originally built by Waihoihoi Coal Company to replace 1859- bullock road. Tramway opened 1862, closed ca 1864. Later upgraded to a narrow gauge steam powered mineral railway terminating at Drury station 1904-5 by Drury Coal Company (later Drury Fireclay, Brick and Potteries). Railway upgraded to wider gauge and linked by private siding to main line (1908-). Closed 1921. The route is visible on archival and contemporary aerial photographs, but only small sections are easily discernible on the ground</p> <p>Updated 02/05/2018 (Field visit), submitted by robertbrassey , visited 23/11/2017 by Brassey, Robert Grid reference (E1774443 / N5890687)</p> <p>Horse drawn tramway originally built by Waihoihoi Coal Company to replace 1859- bullock road. Tramway opened 1862, closed ca 1864. Later upgraded to a narrow gauge steam powered mineral railway terminating at Drury station 1904-5 by Drury Coal Company (later Drury Fireclay, Brick and Potteries). Railway upgraded to wider gauge and linked by private siding to main line (1908-). Closed 1921. The route is visible on archival and contemporary aerial photographs, but only small sections are easily discernible on the ground 5. Decline, closure and demolition (-1921).</p> <p>Condition of the site</p> <p>Updated 02/05/2018 (Field visit), submitted by robertbrassey , visited 23/11/2017 by Brassey, Robert</p> <p>Only small sections of the embankment are easily discernible on the ground (e.g. at 111 Drury Hills Road). There were many bridges on the original route and the remains of some of these may be present in waterlogged areas</p> <p>Updated 02/05/2018 (Field visit), submitted by robertbrassey , visited 23/11/2017 by Brassey, Robert</p> <p>Only small sections of the embankment are easily discernible on the ground (e.g. at 111 Drury Hills Road). There were many bridges on the original route and the remains of some of these may be present in waterlogged areas</p> <p>Statement of condition</p> <p>Current land use:</p> <p>Threats:</p>	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD INVENTORY	NZAA SITE NUMBER: R12/1122
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Supporting documentation held in ArchSite

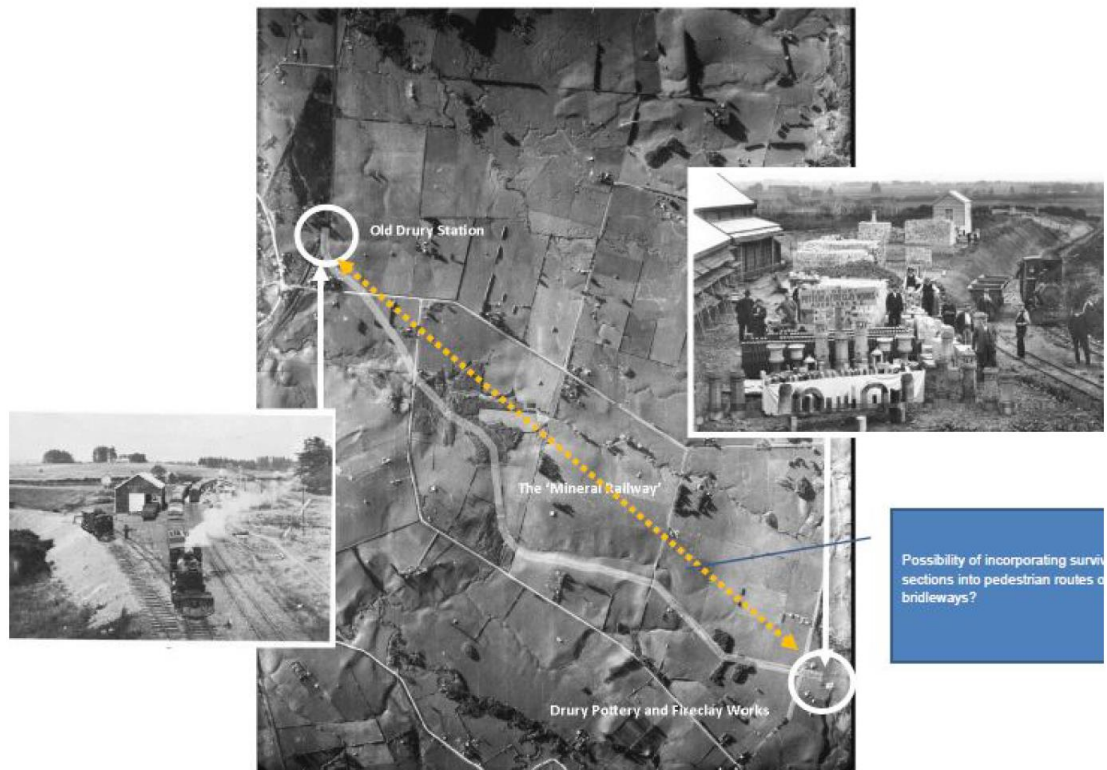
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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

Sketch plan of tramway route. Source: Plan.Heritage 2017. Historic Heritage Topic Report: Drury Structure Plan. Report to Auckland Council, August 2017.



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