

Hereweka Harbour Cone Block Conservation Plan: Historic Evidence

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This account is formatted to match Dr Angela Middleton's 2008 report, "Harbour Cone Project Archaeological Assessment for the Dunedin City Council", and quotes relevant portions of that report for each site in smaller type, while her quotes from Leslie's memoirs (Leslie n.d.a, n.d.b.) are in italics. Moira Jackson helped Middleton with surveying and compiled a table of title data not included in her report, and which I have reference to.

History

A brief overview

The Otago Peninsula has a long human history, and a number of archaeological finds underline how important the area was to the prehistoric Maori inhabitants of Otago. Major moa hunting sites exist at Papanui Inlet, Little Papanui (lower level) and Harwood (Anderson 1983: 7; Hamel 2001: 19). Occupation of the outer Peninsula was unbroken into the historic period, and early European visitors to the Otago Peninsula observed villages of about 40-50 houses in the 1820s. The first European to record observations of the Otago Peninsula was James Cook in February 1770, though the first European visitors were probably sealers (Hamel 2001: 103). The first permanent European settlement was the whaler's base at Wellers Rock in 1831.

European activity in the Hereweka/Harbour Cone area began in the mid-19th century when most of the Otago Peninsula was purchased from Kai Tahu. The area around Harbour Cone was subdivided into various-sized land titles in 1863, the boundaries of which can still be seen in places where there are surviving stone walls. The Hereweka Harbour Cone Block (328 ha) *per se* is of special significance to New Zealand, because it preserves a rare, relict, early agricultural, historic landscape. The remains of nineteenth-century farmsteads and stone field walls are set within a modern, lightly-farmed landscape (Middleton 2008), with shrubby gullies and wide views over Otago Harbour (Fig.1). It centres on the prominent hill known as Hereweka to Maori and renamed Harbour Cone by the early settlers.

The name Hereweka literally translates “catch weka”, and gives a clue to the lack of physical traces of Maori sites. It was covered with heavy podocarp forest in which wekas could thrive in peace from Maori dogs. Kai Tahu emphasised this by attaching a legend of the chief Tarewai to the area. In a skirmish with Kati Mamoe people, Tarewai was captured and his patu stolen. Once they had hold of Tarewai, they began to cut him open but he broke free, and dashed into hiding on Hereweka. He used weka fat to heal his wounds, and terrorised any Kati Mamoe who came past. When recovered, Tarewai managed to steal back his patu, and run to the shelter of his pa at Pukekura (Anderson

1998:54).

European settlers developed small dairy farms from the 1860s onward. It is rare to see such a relict landscape that has not been compromised by modern developments. The landscape is particularly important in terms of the earliest dairy farming in New Zealand, because of its association with the development of dairy co-operatives nationally and the influence of William Larnach locally. The first cheese co-operative in New Zealand, Mathieson's at Springfield, began nearby in 1871, and was taken over by two of the Hereweka Harbour Cone Block farmers and a neighbour.

Walter Riddell, Robert Roger and Alexander Stewart bought out Mathieson and established the Pioneer Butter Co of Otago Peninsula (Papers Past, ODT 9/9/1890:7). Under Riddell's management, this company grew into the Taieri & Peninsula Milk Supply Company Co. Ltd., one of the largest butter manufacturers in the Southern Hemisphere. It moved in 1890 to King St in Dunedin, and Riddell was its manager for another 30 years. On the Block itself, there is the site of another short-lived dairy cooperative at Leslie Senior's farmstead. Mathieson's cheese cooperative was doubtless the inspiration for Leslie to set up a factory at his farmstead in 1877. When he was burnt out by bush fire in 1881, he lost heart and did not rebuild (Knight 1978: 60).

William Larnach was instrumental in developing the dairy industry in East Otago by importing stud dairy stock in the 1870s particularly Ayreshires and Alderneys, leasing land to local farmers, and building the Larnach Model farm (Sneddon 1997). Some of the original farmstead buildings on the Hereweka Harbour Cone Block are still standing, and the names of the families who built them can be readily identified from a map based on an 1890s survey (Fig.2). Some of the farmsteads and historic stone walls, dotted around the property, are alongside walking routes, and easy to visit. Many of the stone walls mark old legal boundary lines (Fig.3).

Lime was extracted from the property and crushed for use on farms and as mortar for Dunedin's many stone buildings. The oldest of the three Sandymount lime kilns lies on the property, having been built by Walter Riddell for James Macdonald.

In the 1880s, the Hereweka block carried a dozen or more small dairy farms. Around 1900 and over the next 30 years, they were bought up by two local families (the Nyhons and the Stewarts), for conversion to sheep farms. After William Larnach's death, his leased blocks were sold to local families. Three old farmsteads (Roger's owned by the Stewarts and Arnott's and Larnach's Model farmstead owned by the Nyhons) were converted to sheep yards and shearing sheds. The Stewarts added the old sections originally held by the Riddells, Rogers and Ellis families to their farm in Stewarts Creek, and the Nyhons gradually bought up the rest of the Block (Fig.3). In 1980, the land was amalgamated into one sheep farm, worked by a corporate group, the Akapatiki A Block Properties Inc. from only Roger's. Even sheep farming is barely viable today, and "in particular, dairying is no longer seen as an appropriate use for such erosion prone land" (West 2017:287). In 2008, Dunedin City bought the Hereweka Block for public use and recreation. It is leased to a local sheep farmer, who maintains a short pasture and uses the Block for raising store lambs. The Block is managed by the Hereweka/Harbour Cone Management Trust, guided by a management plan (Dunedin City Council 2012) and funded mostly from grants.

Relevant political problems of the time

Settlement of the Harbour Cone property began in 1863 (Fig.4), well before Highcliff Road was pushed through in 1868 - 1870. What were the land prices the settlers had to pay to obtain viable farms? It could be between ten shillings and a pound per acre (West 2017: 162, 188). This was a highly political question.

" In 1844 the Otago Block (of 144,600 acres) was sold to the Otago Association. The Otago settlement was a joint venture between the New Zealand Company and the Lay Association of the Free Church of Scotland. The intention was to establish a Wakefield class settlement, where the community would have two main classes, a land-owning capitalist class, and a wage-earning working class" (Petchey 2017:11). This was all very well in an urban setting like Dunedin with reasonably dense settlement. Away from the town a different philosophy prevailed. It was thought that there should be "a sturdy, economically and socially independent citizenry of family farmers efficiently

improving their properties” (West 2017:199). They should be sufficiently concentrated, according the Wakefield, to share the infrastructure of civilization (Schrader 2016: 40), not just of trade but also churches, schools and meeting halls. To be concentrated was to be civilised. It also made more money for the Company’s investors, a point fully acknowledged by its Directors (Schrader 2016:34).

The early surveyors, who laid out the land, were Tuckett in the 1840s and Kettle, Thomson, Gillies and others in mid 1800s. Some of them were employed by the joint venture of church and company, who managed the process of immigration, and some by the later Otago Provincial Council. All must have been instructed to lay out strips of residential sections round the water’s edge, of both the Harbour and the Inlets, and roughly 50 acre farms on the hills behind.

This is why subdivision of the Otago Peninsula was into such small sections. The scourge of this system at first were land speculators (West 2017:197), and efforts were made at various times to add conditions, such as that the purchaser of a crown grant must demonstrate substantial investment over subsequent years. The critical years for the Harbour Cone farms were 1863 to 1872, by which time all but the 26 eastern acres (taken up later by Leslie Junior and Christie) had been acquired (Fig.3). Larnach did not appear until late in this period of settlement (1872).

Out of the 14 separate farmsteads on the property, only Riddell, Rutherford and Larnach for his initial 100 acres (Sneddon 1997:72) were able to buy through taking up the crown grant. On the titles of all the rest, the name of the family known to have settled, built a farmstead and sent children to Sandymount school, is shown as the second or even third holder of the title. (Larnach eventually took up 1000 acres but mostly south and west of the Castle, leased sections down Smiths Creek and held his own two farm sections within the Block all his life. He did not profiteer from rising land prices.) The Seatons, who sold to Allan in 1913, were probably his wife’s family. But the rest of the first names, such as Lockie, Hughes, Taylor, Young, Wallace, Miller, Forbes and Gillies, where not part of the Block’s history.

Debate within the Otago Provincial Council in the 1850s had centred around a sufficient price to prevent labourers from buying more than 10-acre sections, with additional conditions of expenditure in the subsequent four years to prevent speculators monopolising large tracts of land without occupying them (McLintock 1949:394). It is worth noting that Captain Cargill had been associated with the development of philosophies about colonies and class settlements within British politics since before he left Britain. Edward Gibbon Wakefield had written an influential book on the subject (Wakefield 1849), containing a long appendix reprinting a letter written by Capt William Cargill and three others to Mr. Hawes, Under-Secretary of State for the Colonies. The content of the letter was about setting up of the provincial governments, but it is interesting here as indication of the thinking of Captain Cargill, the man who was essentially in charge of Otago as Superintendent till 1859.

It was not only that land must be sold for a “sufficient” price but also wages were not allowed to rise too far. Wage control was partly by making sure sufficient numbers of labourers reached the colonies to prevent competition for their services. While it was freely acknowledged that capital was useless without labour, the common man would only drink too much if too well paid. “In some of the newest, and therefore smallest colonies, we have witnessed at times such a redundancy of capital in proportion to labour, that wages rose to an enormous pitch; the labourers got nearly all, or all, the capital of their employers, and spent a good deal of it in drinking stuff called port wine and champagne. It was not unusual at Adelaide in South Australia, and Port Philip in Australia Felix, for half a dozen common labourers to leave their work, go to a public house, and order a case of wine for their present drinking. I have known the same thing happen at Wellington in New Zealand. In these newest colonies, desert spots are pointed out where a public house once stood, and where now nothing remains but a hillock of broken glass, the debris of bottles of porter, ale, and wine imported from England, and sold to these common labourers at the rate of 2s. per bottle for the ale and porter, and 5s., 6s., and 7s. for the wine” (Wakefield 1849: 28). Neither did Wakefield see it as a good idea to educate the children of the labourers - they just became discontented and turned to revolution. Fortunately the New Zealand Company had been wound up in 1849. Local histories for the last half of the nineteenth century

usually have little to say about the policies of the New Zealand Company, whose business dealings were not well supported by the British Colonial Office.

The community

The title histories of 16 Harbour Cone farmsteads suggest a very stable community throughout the first decades of settlement - 1870 to 1910. The name associated with the development of each property in the 1870s is generally the one marked on the 1901 Neill map (Fig.2). The other sites that were important to the community as a whole were the post office, the school, the church and the industrial structures, such as the creameries, lime kilns, quarries and roads. Of these, only the Sandymount post office, the first of three lime kilns and their quarries, a lime crushing plant and several benched tracks are within the boundaries of the property. The history of the other sites which affected the community will be discussed, but their fabric is not our concern.

In 1863, the Survey Office produced a map of land available for purchase around Harbour Cone (Block II Otago Peninsula SD, SO1327, Fig. 3). “A small area at the south is located in Block 3. The two roads shown on this 1863 survey plan do not include Highcliff Road, but were surveyed in without real consideration of the topography they passed through and were subsequently closed and transferred by the Peninsula Roads Board to surrounding land owners, with a series of survey plans illustrating this process” (Middleton 2008:5).

The first settler to take up a section was Walter Riddell (Land Deeds) in 1864. He chose the Crown Grant of Sec 4, Block III, 77 acres (Fig.2). This included Peggy’s Hill, the highest point in the vicinity. He probably had an eye for getting the timber out along the ridge line to Dunedin, for like all the sections, his was heavily forested. He was 27 and newly married. The next settler was elderly Captain William Leslie who chose 98 acres of steep land on the south side of Harbour Cone and running down across the head of Smith’s Creek. The following year (1866), there was more enthusiasm for sections, with the arrival of John Pemberton, James Rutherford and Robert Rogers, the latter taking up 116 acres, the largest in the neighborhood and next door to Riddell’s. In 1872, Larnach bought three sections along the ridge from Riddell’s, and cut off the top third for his Castle and grounds, turning the lower two thirds, down

in Scotts Valley (later known as Smiths Creek), into his Model Dairy Farm. He bought three more sections below them again, but must have thought the farm unit oversized in comparison to his neighbours, and so leased them. Thomas Scott and the Bates brothers took up the lease of them in 1875, but did not establish farmsteads on them (Middleton 2008). In 1882, a newspaper article claimed Larnach had 300-400 acres “stumped and cleared”, and a byre for 30 head of cattle (Otago Witness 13 May 1882, p.26), which fits other accounts that he owned about 1000 acres in total.

The building of Highcliff Road (I44/430, I44/828) was a slow process. It had not been started by the time that Walter and Wilhelmena Riddell and child wanted to move on to their land. Riddell kept a diary off and on from March 1865 to July 1871 (McNab Collection, Dunedin Public Library). He records that in March 1865 it took him ten days to carry all his goods to his fern tree house from the end of the dray track where the carter had left them. At the end of December 1867, Riddell set up the frame of Pukehiki Church, suggesting Highcliff Road had reached at least to the junction with Camp Road. Scrivener agrees in her report on the road (Scrivener 2017:26). In 1869, a deed (80/55) shows a track into Arnott’s farmstead, which would only have been there if Highcliff Rd had been formed. In 1870, Peter Thomson, a nature writer with a regular column in the Otago Witness, described leaving the ferry at Portobello, climbing Harbour Cone and visiting James Macdonald at his lime kiln at Stewarts Creek. He walked most of the time on “a fine road” through dense bush (Papers Past, OW 9/4/1870:8). During the 1870s, the numerous sidlings where built up with stone revetments (I44/430, I44/437, I44/828). By 1878, the road was even “well macadamised” all the way to Portobello (West 2017: 195). It is most likely therefore that it was in 1868-1869 that Highcliff Road was formed across the Block.

The roads’ boards were THE local authority in the area. The Portobello board covered the coastal settlements and the Peninsula body Sandymount, Highcliff, Tomahawk and Andersons Bay (West 2017:192). They dealt with everything, including dog tax and straying stock, and membership was a prestigious position. Larnach was very concerned in March 1881 when some of the farmers who leased his land did not pay their rates, though it was part of the conditions of their lease. In the end he offered to pay them himself, since the roads were

so important to himself (Larnach letter books, March 16 1881). The meetings of the two bodies must have provided a political forum for the community.

Unlike settlers closer to Dunedin, the settlers around Harbour Cone had to burn most of their bush, and could not easily sell it for firewood, given the distance from town and the lack of roading at first (Hamel 2011:10). William Dickson ran a sawmill in the head of Hoopers Inlet for a short time (Smith 2015:41), but the timber was mostly pit sawn for each house as it was required, judging by Riddell's diary. He cut 12,000 feet of timber for Mathieson and when he cut for Irvine he pitched his tent at the pit. He built at least four houses for neighbours during 1866 (Riddell 1865, 1866). Those who had a little capital contracted out their bush clearance to those who had not. Robert Roger in 1879 could pay someone else to pit saw 10 to 12 thousand feet of boards (see below). A Mr. Fraser employed Riddell off and on most of the winter of 1865.

Forest clearance was vital but it was easier at the time to handle cows than sheep, since cows are browsers as much as grazers and can live off the bush to some extent. Riddell was able to buy a cow for £12 in November 1864, only 8 months after moving on to his land. By mid February he sold Mercer, a merchant in town, some butter and eggs, though he was short of grass grazing, since on 24 March 1866 he paid Fleming £2 8s for grazing.

As the forest was cleared, farmsteads with their poorly insulated cottages became exposed to the weather, especially on the ridges. Nearly every farmer on the Otago Peninsula responded by planting macrocarpas around their farmsteads, and they have become the most conspicuous trees in the cultural landscape. This species, occurring naturally in only two small stunted stands on Monterey Peninsula, California (Johnson 1973:96), would not have been known to the British settlers. It is still a mystery why it and the associated *Pinus radiata* became so popular in New Zealand forestry generally. Introduced in the 1860s, macrocarpa seedlings would have been present in nurseries in the early 1870s when Larnach was hurriedly replacing the forest around the Castle by planting 40 metre wide shelter belts in his usual lavish style. As well as natives, he included species from Britain and Australia (as expected), but also three species from California and Oregon - Douglas fir,

Monterey pine and Monterey cypress (Barker 2006:23). The locals must have followed Larnach's lead, and the sturdy seedlings of the pine and even more so of the cypress were great survivors.

Modern dairy farmers in Otago use only milking sheds and do not house their cows overnight. Colonial dairy farmers had been accustomed to keeping their cows under cover at night in Britain. Keeping them in a byre allowed the farmer to give them supplementary feed by just dropping it from a loft overhead into mangers, as well as concentrating some of their dung in one place. The dung could be collected in a cart to manure gardens and potato patches. Also a warm cow gives more milk. With the advent of tractors, cows are fed supplements out on the paddock and spread their dung themselves. Also colonial cows may have been less hardy at first, coming from stock used to a byre. Under the byre system, there was a stall for each cow and so the archaeologist can estimate the size of herd from the number of stalls.

As the farmers developed their herds, they were too far from town to deliver milk daily, but they could make butter from the cream and feed the skim to pigs. Riddell built a sty and bought a pig in his first year (Riddell: 10/3/1866). They could also preserve the milk by making cheese. When Captain William Leslie set up his factory in September 1877, he built a timber shed, 14 x 24 feet, and invited those farmers within a mile and a quarter with sufficient capital to buy shares and form a dairy co-operative. They included William Leslie Snr, William Leslie Jnr, William Rodgers, William Hunter, James Rutherford, William Allan, Thomas Scott, Robert Dick, Robert Forbes, John Draper, Edmund Ward (who was to be trained to be the cheesemaker), George Bates, but not John Nyhon (Smith 2017: 65). Nyhon was allowed to supply milk, however, and gradually bought his way in. (Was it because he was Irish and Catholic?) John McGregor of the Highcliff cheese factory was asked to train Ward in making cheddar cheese out of 110 to 150 gallons of milk per day. In 1878, they had sold to Messrs Esther and Low about two and a half tons of cheese (Smith 2017: 65). After the factory was burnt out by the bush fire of 1881, each of these families had to make butter and sell it themselves, until Sandymount creamery was built in 1893 (Smith:72), and the Taieri & Peninsula Milk Supply Co. Ltd. under Riddell exported their butter to the other side of the world.

A third generation of the Leslie family, born in 1888, recalled that one of his earliest memories was of his mother handing up a basket of butter to his father on horseback. Since this farmstead had only a bridle track out to the road, his father may have been meeting a cart there or he may have been riding right into town. The cream would have been set in bowls in a dairy building built of stone if possible, and then churned to butter. (Riddell in his first career as a carpenter made churns for some of his neighbours.) Home dairies were less important after 1893 when the Sandymount Creamery was built.

Besides cream, butter and cheese, the settlers could sell other produce. Samuel Gill had a license as waterman to carry goods and passengers for 20 years from 1865. As well as dairy products, he carried “eggs, fruit, poultry, pork, veal, and vegetables” to Port Chalmers (West 2017: 193). Walter Riddell was selling ryegrass seed as early as 1866 - 41 bushels at 7 shillings a bushel. (A bushel was 25.6 kg or 60 pounds.) He had to buy the bushel sacks at 1 shilling and 3 pence a sack (Riddell 1866: March). As well as watermen, there were ferry services to take people and goods to and fro to the northern side of the Harbour.

The post office was relatively late in arriving - 1 January 1876 (Startup 1977: 169). It was in or attached to Walter Riddell’s house, not to his fern tree house, but his second house built in 1870 (see below). The post office was shifted briefly to Pukihiki in 1899 to 1904, and then back to Riddell’s, where there was a post office till 2nd April 1952 (Startup 1977: 169).

The house that Riddell built in 1870 had six or eight rooms (Smith 2015:66), the most substantial in the district. In 1871 he could provide one room for a school of 25 pupils and a second room for the teacher, Mr Walker, to live in, even though he had by then three small children. It was a plain square house with garret bedrooms, judging by an early photo (Smith 2015: 183). The arrangement was only temporary until the first school was built along Sandymount Road in 1872, but this proved too exposed. A two-roomed building replaced it in 1884. There were 108 pupils in 1887 and one or two assistant teachers, mostly women. The numbers declined steadily — 60-70 in the early 1900s, 20-30 in the 1920s — until the school closed with 10 in 1949

(Smith 2015: 184).

The school rolls provide valuable information about the growth of each family, and its actual presence in the community. Three Pemberton children attending school from 1871 to 1883 and Neill's surveyors finding Pembertons at home when they made their map indicates an occupied farmstead. Land titles by comparison can be misleading because leases are not recorded.

The school house itself, like the creamery and the other lime kilns, were just over the boundary from the HHCT property. This will be problem throughout the writing of this plan. Structures which had significant impact on the lives of people who lived on the HHCT property are not all on the property. These include the Sandymount Creamery, the upper and middle lime kiln, and marginally the gold mine in Battery Creek, of which Robert Dick and William Christie were early shareholders (Smith 2015:52). These will be dealt with briefly, so that it will be apparent when they provided a source of income.

There was a house down beside the second lime kiln (I44/84) which was shifted up to the junction of Sandymount and Highcliff Roads for a Riddell grandson to live in. Another house at the Sandymount Creamery I44/72) was shifted down Ridge Road by the Morris family (Robert Morris: pers.comm.), probably both by steam traction engine. This shows the value put on built houses and how readily they were shifted in the early twentieth century.

The bush fire that started at mid day Friday, 14th October 1881, had a calamitous effect on the houses, byres, fences, pastures and gardens of the settlers in Scotts Valley (a.k.a. Smiths Creek). Fortunately rain fell the following day. Three houses were burnt to the ground - two old ones belonging to Robert Riddell on the site later used for a lime crushing plant (I44/447) and "a well-furnished hut belonging to a Swede named George Halgren" (Papers Past OW 22/10/1881, p.22). Several houses were damaged but saved, including Sandymount School, Nyhon's, Mrs Bates', and Captain Leslie's. Byres and stables were probably the buildings that suffered most, and included Robert Roger's stable, Arnott's and Scott's byres, Capt Leslie's byre and sheds and a blacksmith's shop and his byre. (It is not clear whether the blacksmith was William Allan or Edmund Ward.) Fences, especially ones

made of logs and heavy wooden post-and-rails, were very vulnerable to fire (Knight 1978:110).

Limestone at Harbour Cone and the three lime kilns

The limestone which outcrops on the HHCT property belongs to a formation called the Dowling Bay Limestone, laid down during the mid Miocene. It is of poorer quality and more variable than Milburn limestone, 69 -91% calcium carbonate compared to mostly 95% at Milburn (Bishop and Turnbull 1996: 41). It outcrops in a thin curved strip down in Stewarts Creek and up to Sandymount Road. It is estimated that 20,000 cubic yards have been quarried from it in the past (Wood 1969: 16).

The first lime in Otago was made by burning shells from a shell bank in the Harbour, but such was the demand that advertisements appeared frequently in the early editions of the Otago Witness between 3rd May 1851 and 3rd April 1852. They read much as follows: -

“GREY SEA-STONE LIME - Builders, Farmers and others are invited to inspect the LIME turned out from a Kiln erected by the Subscribers on Captain Blackie’s Sections, which, from its hydraulic properties, is a strong Cement, and must prove an excellent Manure. It is far superior to “Shell Lime” for all sorts of Masonry, Plastering, and external Painting. Wholesale prices for Cash on delivery in quantities not less than 22 Bushels, or one cubic yard; - Sixpence per Bushel at the Kiln, and Ninepence per Bushel at the Store. Retail Prices: - Ninepence per Bushel at the Kiln, and One Shilling per Bushel at the Store. JAMES MACANDREW, & CO. (PapersPast, OW , 3 May 1851, p.5). This limestone was being quarried out of the more calcareous parts of the Caversham Sandstone (Wood 1969:16).

Macandrew had only arrived in Otago in January 1851 and was already a dominant figure in local commerce (McLintock 1949:324). Captain Blackie’s quarry and kiln was at Forbury, and Macandrew opened another quarry down Stone St “from which there is easy access for carts in all weathers to all the suburban districts” (Otago Witness 1/5/1852, p.2). Up to 1857, Captain Blackie (who was perhaps kept on by Macandrew as manager) advertised - “Superior lime can be had in any quantity at the Caversham Lime Works, at 1s.3d. per bushel at the kiln. W. BLACKIE. “ (OW 22/8/1857, p.4). In the following

years, lime advertisements were all for lime from places like Pelichet Bay (ground shells) and Fairfield.

Obviously there was a good demand, sufficient to bear the cost of transport from Sandymount. Riddell notes in his diary as early as April 1865 that he worked with McDonald for two days, helping him test his lime (Riddell : 22/4/1865). James McDonald was 29 when he came from Scotland and with Riddell's help built his first kiln down in Stewarts Creek within HHCT Block boundaries.

In 1870, Peter Thomson wrote in his regular newspaper column (Papers Past OW 9/4/1870:8) of a visit to one or other of McDonald's kilns. It is described as being on the side of a picturesque gully. "The lime crops out from the side of a bluff or spur coming down from the high ground to the south, and the bed is of considerable thickness.... The kiln was charged and the men were busy at work breaking out stone from the quarry. This has to be done by blasting in the usual way, and then the stone is broken small enough by hammers, so as to assist the process of calcining. The enterprising proprietor, Mr McDonald, was present, and he obligingly showed all the operations, and explained the action of the kiln, which has some peculiarities about it. The kiln is about 30 feet in height, and seven feet in diameter at the upper end, built of limestone, but lined throughout with fire brick. It answers its purpose thoroughly, being able to turn out 150 bags a day, or even double that if necessary. There is a peculiar arrangement of shoots at the bottom the kiln, by which the draft is very easily regulated, and the stone can be drawn from any part of it, may that be necessary. Instead of the mouth of the kiln being exposed to the air it is covered in by a substantial house, which serves as a store for the lime, and also preserves it from the weather" (Smith 2015: 48).

After the Main Trunk railway was built, McDonald opened a kiln at Milburn in 1876, but developed his business on the Peninsula as well, building more kilns at Sandymount. He had built the second much more elaborate kiln half way up the hill in the head of Stewarts Creek by 1872, the mason this time being William Dick. This kiln and the third one is not within the boundary of the property.

The following advertisement appeared repeatedly in the Otago Daily Times

during November 1878:— “ PENINSULA LIME KILNS To let for a term of years, the above valuable Industry, so long and profitably worked by Mr James Macdonald, Lime Merchant, whose lease thereof has nearly expired. Particulars to be obtained from the Proprietor up to 1st December, 1878, WALTER RIDDELL, Sandymount” (Papers Past ODT 9/11/78 :1).

Judging by the way this is expressed, Riddell owned the kilns. In 1889 McDonald went bankrupt, and was bought out by The Milburn Lime and Cement Company, who operated the Sandymount quarries and kilns off and on until 1939 (Smith 2015: 46ff).

All three kilns have long been recorded as archaeological sites (I44/83, I44/84, I44/85) and Middleton (2008: 10) gives a short account of them. The history of a lime crushing plant (I44/ 447), whose foundations are on the property opposite Walter Riddell’s house, is obscure. Middleton states that “ A photograph of the building is shown in Knight (1978: 92). In an article written for the *Otago Daily Times* in 1974, Knight notes that Walter Riddell’s son, John, owned the lime crushing plant. John Riddell carted stone from the quarry above Sandymount Road to be crushed in the nearby plant opposite his father’s house. From there (sic) the lime was carted weekly to the cement works at Pelichet Bay” (Middleton 2008: 19). Supplying firewood for the lime kilns would have been a source of cash to the local farmers clearing bush (Knight 1978: 84, 97), as was the Sandymount Creamery).

The limestone crushing factory was demolished about 1974. It can be seen still standing on the brow of the hill, with Walter Riddell’s buildings behind it, in an ODT photograph (Middleton 2008: 19). (Her reference should be Knight 1978.) John Riddell was born in 1869, which would have made him 64 in 1933, the date given for a photograph of the Sandymount lime truck (Smith 2015:49).

The site recorded nearby as a tramway (I44/81) is a benched track below Highcliff Road, leading from a quarry to the youngest of the lime kilns, neither of them on the Hereweka Block.

The families

Larnach as a neighbour

Larnach's life is well documented (Reed 1951, Knight 1981, Sneddon 1997), especially in his roles as owner of a grand house, as a banker, business man and politician. His importance in the development of dairy farming in Otago and as a pastoral lessee are less well known. Gosling (2009) , who carried out a building's analysis of the farmstead, even describes farming as a "sideline, a hobby" for Larnach, such is the popular perception of the man (Gosling 2009:60). In fact, when his son sold up the farmland around the Castle (OT124/48), it amounted to 843 acres (nearly 350 ha), visible on the modern cadastral map as Lots 1 to 15, lining the south side of Castlewood Rd and spreading north to the Bacon St track.

The land, on the Hereweka Block that Larnach bought in 1872, comprises old sections 21, 1 of 44, 1 of 46, 48, 50 , and 53,54, 56 Block II, Portobello S D - the latter three making up his home farm and the rest leased out. This may have been a deliberate so that his model farm of 82 acres was similar in size to those it was intended to assist and instruct.

As early as December 1843, the first Agricultural and Pastoral Society held its show day in Auckland (<https://nzhistory.govt.nz/first-auckland-a-p-show>). A. & P. Societies spread throughout New Zealand in the 1860s and Larnach was the first president of the Otago branch, formed in 1876. He showed his stock regularly and was often asked to be a cattle judge at shows throughout the South Island (Snedden 1997: 85). From 1871 onward, he was involved with the pastoral lease of 61,000 acres of Moa Flat (south of Ettrick, Central Otago), with its knowledgeable station manager, John Kitchings (Sneddon 1997:64). The syndicate that Larnach was part of eventually had control of 500,000 acres in Central Otago and could afford to import stud stock of a wide range of animals (Sneddon 1997:67). For his own domain on the Peninsula, he imported particularly good riding and carriage horses, as well as draught horses and boys' ponies. He bred Ayreshire cows which suited the conditions on the Peninsula. His Alderney bulls were in demand, and commanded high prices throughout New Zealand.

The community around Harbour Cone differed from all others on the Otago

Peninsula, because of the employment of lavish numbers of domestic staff and farm hands by William Larnach. His staff at the Castle included a butler, a personal nurse/ maid/valet for each of the 9 members of the family, 4 cooks in the kitchen, 2 maids cleaning and managing the kerosene lamps and 5 women in the laundry (Sneddon 1997:91). There must also have been others cleaning and dusting and lighting fires and carrying wood and coal. (Each piece of coal was wrapped in paper so as not to soil the ladies' fingers.) This adds up to 20-25 able-bodied people. The garden, both sets of stables, the farmstead, dairy and stud farm could have employed as many again. Local people were employed, and there are no obvious servant's quarters at the Castle. The supposition can be made that, for most of period from 1870 to 1898, up to 50 adults from the surrounding farmsteads that were within walking distance, earned part or whole of their living from working at the Castle. The only live-in farm workers and the farm manager were likely to have been housed in the entrance way building and on the upper terrace of the farmstead (Gosling 2009: fig.3.1, Middleton 2008: figs 16, 19).

Larnach, as the lessee of half a million acres around Moa Flat, was effectively part of the another subculture, that of the run holders of inland Canterbury, Otago and Southland. These formed a culture of a type which the anthropologist Levi-Strauss claimed was a House Society, in which the basic attributes were an ideal of continuity among a group of unrelated families, in which some form of valued property is passed down (land, buildings, a name, titles, reputation), but especially in Larnach's case it was the Big House (Hamel 1998:482). With most of the other run holders the Big House was on their pastoral run, as at Cottesbrooke, Earnsclough, Teviot Station, Galloway or Lauder, all built around 1860-1875 (Thornton 1986). Moa Flat run conspicuously has only the manager's house actually sited on it, a fairly modest villa near Kelso (Hamel 1989). The Big House of the very large Moa Flat run, built on the early profits, was in fact Larnach's Castle on the Otago Peninsula.

Larnach was very aware of his role as a leader in the community. He may have imported marble baths to cobblestones, chandeliers to plate window glass, but he employed David Arnott (Middleton 2008: 22) and the four Dick brothers as stone masons, Robert Roger as carpenter, and Riddell as foreman and carpenter to build the castle (Sneddon 1997:80). This meant they developed in

their various trades. Riddell, for instance, was clearly a skilled carpenter. He built the hanging staircase in the Castle (Sneddon 1997: 83), and went on to build one for Salisbury, another Lawson house on the Taieri plain owned by Donald Reid (Margaret Gibbs: pers.com).

Larnach's diffusion of capital through wages to farmhands, masons, carpenters and blacksmiths, and of the semen of stud stock (intentionally and unintentionally) must have left their mark on the local community. Larnach's letters are also a valuable source of information about the establishment of pasture, which settlers' diaries confirm. After felling and burning the bush, turnips, potatoes and oats were sown for three years, before English grasses were put down as permanent pasture (Snedden 1997:85). Larnach, with his stud stock, had a particularly high incentive to fence and cultivate, and as well as building stone walls he is known to have been one of the first to use wire. "His detailed letters placing orders for the posts and wire meticulously stipulate the number of wires and the measurements between them" (Snedden 1997: 85). Stone field walls were a source of pride and cleared the fields of rocks, but they were expensive. In the 1870s, Richard Irving spent 50 pounds an acre picking rocks out of his Broad Bay farm (West 2017: 200). The stone walls around Harbour Cone are well documented (Higham 1986). More than any other feature, the fences changed the ecology and created the pattern of the landscape. They allowed the farmer to determine where animals could and could not feed.

Although some of Otago's run holders managed to create a dynasty of three or four generations, such as the Prestons at Longlands and the Bell family at Shag Valley, Larnach did not. He died intestate, with his family in disarray. Though he did not achieve the continuity that Levi-Strauss saw as an attribute of the House Society, he was charismatic in his time. His obituary in the Sydney Evening News, 31 October 1898 said there was "no more considerate employer in New Zealand. Endowed with a great spirit of enterprise, for many years he gave employment to a large number of people in various undertakings, even after retiring from business pursuits and settling down on his beautiful estate.....By all classes he was greatly esteemed..." (Sneddon 1997:240).

Larnach's Model Dairy farm : I44/412, I44/413.

Larnach's concept and realisation of a Model Farmstead involved only simple wooden buildings, which could be quickly constructed to house animals, crops, carts and farmhands. In them the local farm manager could demonstrate how to house and manage cows, how to run a dairy and work horse teams. The basic layout would have been well-known to Larnach from his upbringing on his father's farm in New South Wales and the example of John Jones' farmstead at Matanaka built in the 1840s. Webb (2009) and Gosling (2009) in their investigations of Hereweka farmsteads compared them to United Kingdom, Canadian and Australian ones around this period, but found farmsteads as a cluster of buildings were rarely recorded. Thornton's record of New Zealand historic farm buildings is useful for individual types of buildings but not the farmsteads as whole (Thornton 1986). Four large buildings creating a sheltered farm yard, such as Larnach's, was hardly suitable for the small local farms. He was probably well-aware of this, but as with his Castle he wanted to make a statement, building a farmyard in which a six-horse team and dray could be turned with ease.

The first farm buildings (built by Walter Riddell) were placed on top of the ridge near the present Castle gates (Williams and Williams n.d.:14) before the Castle was built. This was such an undesirable entrance to his grand house that Larnach had three massive terraces (30 x 7 m, 24 x 16 m, 12.8 x 2 m) dug out on the steep hillside to the north of the Castle, and shifted his original cottage and the farm buildings (I44/412) out of sight down slope (Gosling 2009:32). It is not clear from the records when these massive terraces were built and the buildings shifted. The original cottage, that the Larnach family lived in while the Castle was being built, became the farm manager's house. It shows up in historic photographs at the north end of a long building on the upper terrace of the farmstead site (Gosling 2009: 3.21).

I44/413 Larnach's farm road

This road or possible farm track runs from Larnach's farm buildings around a flat contour to Roger's farm and Highcliff Road. The Neill map identifies a fifth structure that once stood on a point of this road about 100 metres from the farm complex, named only as "steading" in Knight's plan (figure 20) (Middleton 2008:15).

This farm road, 800 m long, cuts a 4 kilometre loop off the distance by road

between Larnach's Farmstead and Highcliff Road at Roger's driveway.

I44/410 Stone boundary wall

This impressive drystone wall complex marks the northern boundary of the Harbour Cone purchase. It is identified in Higham (1986: 118, 255, 256) as wall numbers 21A - 21C.

Higham states that this the work of a professional waller, likely employed by Larnach, attributed to the Camp estate. The wall 21A formed the boundary of Larnach's land with that of his neighbour, Thomas McLennan, until Larnach purchased McLennan's farm in 1883, making it likely to have been built between the date of the Crown Grant, 1860, and the 1883 purchase. Walls 21B and 21C are also built along boundaries prior to Larnach's 1880s land purchases. Wall 21C lies outside the boundary of the Harbour Cone area.

I44/411 Stone wall above Camp Road

This wall lines the upper side of Camp Road. It is easily seen at the no-exit end of the road, but has not been surveyed for more than about 100 metres from this point, so its extent is not known. It is likely to be associated with Larnach's Castle (Middleton 2008:15).

Walter Riddell's life and farmstead: I44/414,

Walter Riddell was a man of two careers. His first was as a bushman and carpenter in the 1860s and 1870s, when he is the most visible of all the small farmers in the archival records, both because he left a diary and because he built for Larnach. In his second career (1884 - 1914), he was an entrepreneur, who established and made a success of the Taieri and Peninsula Milk Supply Company, exporting frozen butter to Britain.

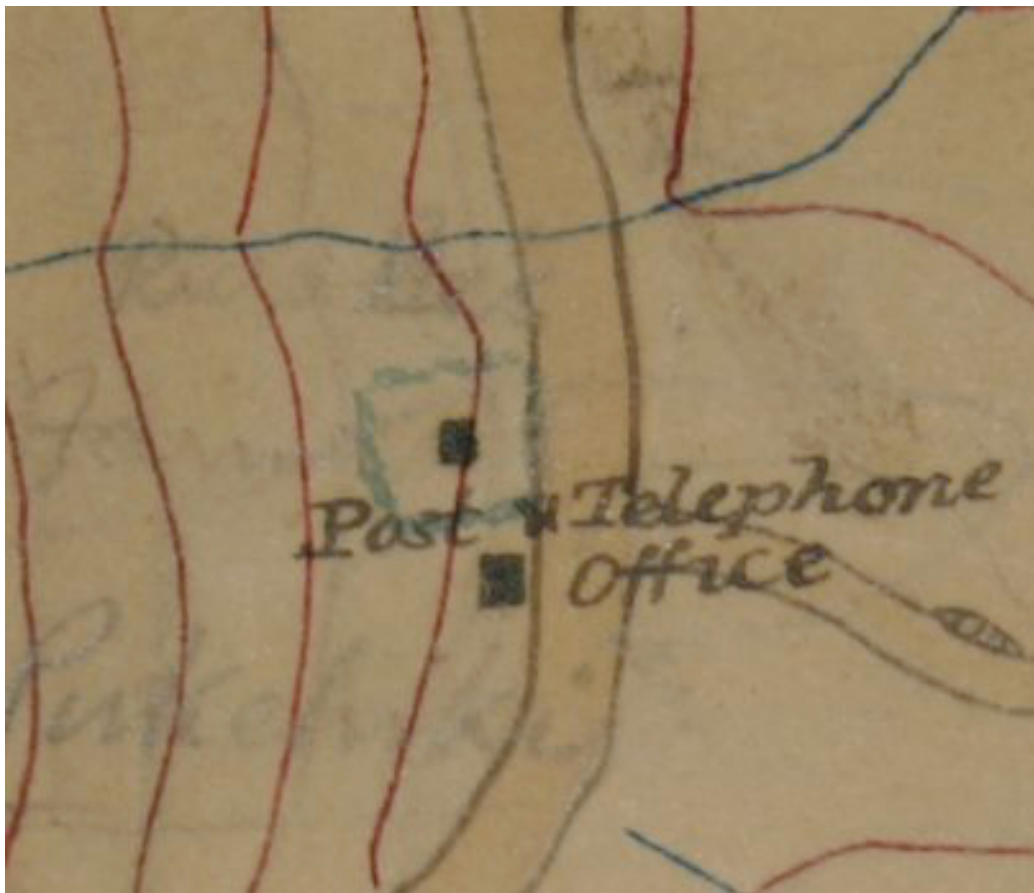
Riddell began a life of felling timber and milking cows by taking up Sections 4 & 5, Block III, Portobello S D, of 77 acres (31.2 ha) in 1864, two years after arriving in Dunedin. Middleton concentrates on Riddell's early life, ignoring his life as an entrepreneur. Under the description of Riddell's house and barn she comments:—

“ I44/ 414 Post Office; Walter Riddell's house and barn

While William Leslie (n.d.-b) has given the site of Walter Riddell's house and the Sandymount post office the number 2 on the map that accompanies his memoir, this account makes no actual mention of Riddell's house.

Walter Riddell was a carpenter who formed a central figure in the Sandymount community.

He built the Pukehiki Church and manse, both completed in 1868, and after early years of hard work and economic uncertainty Riddell spent ten years employed as foreman of works, managing the construction of William Larnach's "castle" (Riddell n.d.a; Snedden 1997). The site of his second (and third) house along with the ruins of a large barn and cow byre or stable can be found on Highcliff Road opposite the signpost to Sandymount Road.



Riddell purchased a block of land on the slopes of Peggy's Hill in 1864, becoming one of the first settlers in the district. His diaries from 1865 to 1871 describe his early years felling the bush that once covered Harbour Cone, struggling to make a living. He was a hard worker, complaining after a New Year's Eve party at Mathieson's Springfield farm in 1868 about "dancing and making a fool of ourselves, wasted a good day". In February of the same year Riddell (n.d.) complained again "I'm 20 hours a day on my feet ...". Riddell built his first home, a punga whare, in 1864, on the upper slopes of Peggy's Hill, but in April 1870 decided to relocate their house to the bottom of the hill.

Riddell's diary notes his family's first night in their new house on June 25th 1871. but this

six-roomed structure only survived for ten years. It was destroyed in the bush fire of 1881 (Knight 1979: 62) *. His third house, presumably built on more or less the same site, was a larger two-storied structure, reflecting perhaps Riddell's growing prosperity. From 1892 Riddell was the manager of the Taieri and Peninsula Milk Company factory (I44/72). It is not clear whether Riddell managed the Taieri and Peninsula factory at Sandymount located just across the road from his house (figure 10), or whether this was the central Dunedin factory.

The detail from Neill's 1901 map does not note Riddell's name, while the later 1921 map has this spelt "Riddle". However from the layout of the two buildings, along with the archaeological evidence, Riddell's homestead is the building at the top with the blue (likely stone) enclosure drawn around it, and the barn / cow byre the slightly larger structure below it. This is also in keeping with the photograph illustrated in Knight (1979: 89) which shows Riddell's two storied house to the north and the large barn / byre beside that to the south.

According to the 1920 Neill map (figure 12), the Sandymount Post Office was located next door to Riddell's house. It opened on 1 January 1876 and operated from that location until 15 December 1898, when this office closed and the Sandymount name was transferred to the Pukehiki Office from 14 January 1899 until 16 August 1904. It was then moved back to the original location near Riddell's. The Sandymount Post Office finally closed 2 April 1952 (Startup 1993: 213). **

In Neill's illustration (above), the post office location appears to be marked with an "X" right beside the road. Knight has noted on the building that can be seen in front of the barn / byre on p. 89. As Knight has pointed out, school was also held in Walter Riddell's house for a period of about two years from 1871. Riddell and others petitioned the government for a school in 1869, but until the Sandymount School (I44/446) was built he turned a room in his own house into a schoolroom and used another to accommodate a teacher. Riddell noted in his diary in April 1867 that the new (Highcliff) road was to go through his property.

The barn / byre was a two storied stone and wooden structure, with the upper floor still standing today (figure 22). The lower floor still has its brick cobbled floor intact, with a central drain and bails along either side and the small lean to built for the post office on the eastern wall is still standing (figures 23 and 25). What is likely to be the concrete foundations of Riddell's house can be seen to the north of the barn, along with a stone wall at the west and other evidence of a domestic structure, such as a cast iron coal range and chimney remains. The likely garden area at the north of the house site is a clear space edged with overgrown hedging (figure 24) (Middleton 2008: 17-19).

*Riddell did not lose his own house in the fire, but two houses across Highcliff Road belonging to the family were burnt down.

** This account implies a post office building but letters were handed in at the back door of the house, according to local memory (Morris: pers.comm.).

Middleton did not explore Riddell's personal and business life, nor his second career. He had been born in Dumfriesshire, Scotland, in 1837, educated in the parish school (The Cyclopedia of New Zealand 1905:301), married at 25 to Wilhelmina Brown Glendining, and came to New Zealand in the ship Grasmere with at least his wife, his brother and father in the same year, 1862. He bought his 77 acres at Sandymount in 1864, well beyond the road end which would not reach him till late in the 1860s. In 1865 he records: "Oct 7. Went to Dunedin and got Mrs McQueray to come out and stop with us for a month for £4. Oct 20 William Glendining born. Went for Mrs Ingles. Paid her £1" (Riddell Oct, 1865). Presumably Mrs McQueray helped look after the family, and Mrs Ingles was the midwife. Riddell had to fetch milk from the end of Highcliff Rd and did not get a cow until late 1865, when it promptly calved a heifer. (Peggy's Hill was named after one of his cows, who died up there.) He regularly records paying the Dunedin storekeeper Mercer £5-6 every three or four weeks, but once he had his cow he could barter with Mercer - 4 pounds of butter (6/6d) and a dozen eggs (2/3d) in February 1866.

In his eyes the first produce off the farm was some barley seed, which his father cut for him on 17/2/1866. On 24/2/1866 he recorded thrashing ryegrass for Fraser, helped by George Baylis and Peter McIntyre, and presumably thrashed some of his own barley as well. He says he had 60 bushels of seed, unspecified whether barley or grass seed, and had to go to Dunedin to buy sacks at 15 shillings per dozen. A bushel was a measure by volume of dry goods, amounting to 8 gallons, no matter the weight. A bushel of barley was 48 pounds (21.6 kg), so Riddell could have had one and a quarter tonnes of it to keep dry and sell, with no road to his farm.

Riddell had a complex relationship with his neighbours, and to judge by his diary entries made more money from them than he paid them. He was paid £2 13s by Seaton for a jetty (15/6/1865), presumably in Seaton Bay. He cut and sawed 10,000 feet of timber for Mathieson (presumably John Mathieson at Springfield) for at least £23 (27/10/1865 to 29/1/1866), but in February 1866 he cut timber for McMichie for only £2 and his food for a week. He was also paid £2 by Fraser for something unspecified, which totaled £29 in six months. He records paying out, over this 6 months, only £6 8s to people other than Mercers, including 7s/6d to W.Allan for mending his mattock (14/2/1871). Over the same time, his brother Will paid him £21 in small amounts, possibly

for Will's fare to New Zealand.

Riddell seems to have worked and employed labour mostly for cash, and rarely exchanged work for work, or possibly only made a record when it was major, as on 5/8/1865 when he measured one of his own boundary lines through the bush and helped Gavin Fleming do his. Seven months later, however, he paid Fleming £2 8s for grazing, presumably for his newly-bought cow and calf. In winter of 1866, he "started in earnest the clearing. It is a dour job" (Riddell: 21/7/1866). On 9/3/1867, he felled bush for C. Weir to clear a debt.

On the 30th April 1870, he wrote in his diary "Started to build my house" (the second house) and on 2nd July "Came down bag and baggage on Monday 27th June and had a daughter born on Monday night." His fern tree house had been somewhere not located so far, high on Peggy's Hill. (In June 1867, it was appointed as one of four polling places on the Peninsula for voting on the Goldfields Provincial Management Bill, part of the argument between the Provincial Councils and Government over separation (McLintock 1949: 572). In April 1868, he still had only 3 cows, though in July he bought 2 more red cows. Like most of his neighbours, he had built a byre for his cows where they were housed overnight as well as milked (Riddell: 26/9/1866). He does not mention fencing or the building of stone field walls, and his sort of early fencing may have been wooden railings, visible in an old photograph of his farmstead (Knight 1978 :89e). In the caption of this old photograph, Knight notes there are eight people visible in the original (Knight 1978: 11, 89). Those visible in the published version are mostly children watching the cameraman, some of Walter's eleven. The barn/byre shown is large, and is two storied for its full length. The byre foundations today measure 12 metres long, and the whole complex about 30 metres (Webb 2009: fig. 11). By comparison, Larnach's byre is 18 metres and the Roger's byre 12 metres. Riddell was treasurer of the Peninsula Agricultural Society in 1882 (Knight 1978:66), and so he would have been a man of substance even by then.

Besides holding the Sandymount School in his own home for its first two years, (1871 -1872), he supplied 11 of its pupils, including Jane, James, John, William and Wilhelmina (1871-79), followed by Andrewina and Jessie, who started school in 1880 and 1881 respectively (Seaton n.d. :13). Their father served on the school committee around 1881 (Smith 2015: 44), along with

neighbours as far north as Rutherford, but notably not the Leslies or William Allan's, whose children must have gone to Portobello. Others must have also had large families, since the Sandymount School role reached 108 in 1887.

One son, James, went sheep farming at Allans Beach and sent his children to Hoopers Inlet School where he served on the committee in 1900 (Smith 2015: 71, 181). Another son, John, was the Sandymount post master for four years from 1895 and, in 1905, he is listed as farmer and agent for the Victoria Insurance Co. at Sandymount (Stones Directory 1905). He also owned the lime crushing plant opposite his father's house (see above) and probably took over the family farm. He died in January 1945, aged 76.

At the height of the Sandymount school role in the 1910-1919 period, Ivy, Ruby and young Walter Riddell represented the family. (The farm was named Ivybank.) In the 1940-49 period, Joan, Myra and Stuart Riddell registered on the school role, may have been fourth generation of Riddells in the area. Since the post office attached to the Riddell house did not close until 1952, these Riddell children may have been living in their great-grand father's house.

None of this show the importance of Walter Riddell in the 1890s and 1900s to the Peninsula and to the dairy industry nationally. Riddell had been involved with the local cheese making from its start. He had been a shareholder with John Mathieson and six other local farmers in the country's first co-operative dairy factory at Springfield in 1871 (Smith 2015: 65). In the early 1880s, he and Robert Roger and Alexander Stewart set up the Pioneer Butter Company, buying out the cheese cooperative at Springfield (Papers Past ODT 9/1/1890, p.7). This became the Taieri and Peninsula Milk Supply Company, a co-operative of dairy farmers supplying Dunedin city with milk and exporting butter to Britain. By 1895 according to its directors' annual report to shareholders, the Company was handling butter made from 1,116,963 gallons of milk (nearly 5 million litres) (Papers Past: Evening Star 24/10/95, p.2).

By 1905, the directors could state in their entry for the Cyclopedia of New Zealand Otago & Southland Provincial Districts (see Appendix B) that turn over had increased from £5,494 in 1885 to £194,658 15s. 1d. in 1902. Note that they thought it worth mentioning also that their manager, Walter Riddell had "conducted experiments with samples of butter, specially packed so as to

carry all the way to London and back without deterioration” and that “The system of purchasing milk by the value of butter fats contained—the skim milk being returned—was introduced by him in 1893” (Cyclopedia of New Zealand 1905:301).

On the Company’s 50th anniversary, they issued a modest publication of their history and achievements (a full acre of buildings on Gt King St), and described Riddell as “one of the most familiar figures in the history of the Company” (Taieri & Peninsula Milk Supply Company Co. Ltd. 1934:9). Though he had been retired for 20 years, he was remembered as travelling tirelessly in his smart “turn out” (horse and trap?) between the “58 creameries in every corner of the province” (Taieri & Peninsula Milk Supply Company Co. Ltd. 1934:5).

Riddell retired in 1914, aged 77, and died in 1922. His work in developing a market for butter in Britain, was a factor in extending the economic life of the small steep dairy farms on the Otago Peninsula, probably by a generation. How did Riddell achieve so much? A symbol of the reasons why might be the benched track (I44/413) that runs from Larnach’s Farmstead to Highcliff Road at Roger’s, only a short distance from Riddell’s, and provided a short-cut to Larnach Castle. Working as his foreman to build Larnach his grand new home, Riddell could have had another business relationship with Larnach. He already had three sets of skills, that of dairy farmer under pioneer conditions, carpentry skills that ranged from simple building to complex joinery, and project management as foreman on the Castle. The obvious place for him to pick up the accounting skills and overseas contacts needed to run an export company was from Larnach. He was also lucky to live at the right time when frozen shipping became available to trade between New Zealand and Britain.

Robert Roger (also spelt Rodger) Farmstead: I44/413, I44/415

This is the only farmstead on the Block which is still in use, having a modern wool shed and yards, the centre of present farm operations. The large house was rented out by the land owners prior to Dunedin City tenure, and though dilapidated it still has its roof.

“ I44/415 Roger’s Farm



Continuing along the road to Harbour Cone [from Pukehiki] one comes to the house on the left (4) where the “top Rogers” lived now occupied by Stewarts (Leslie n.d. 2).

Roger’s farm lies to the north-east of Highcliff Road on a knoll below and east of Larnach’s farm buildings (I44/412; figure 28). The road recorded as I44/413 leads from these buildings to Roger’s farm and the Highcliff Road. William Leslie (n.d.) described this house as the “top Rogers”, to differentiate this farmstead from the “bottom Rogers” further down Highcliff Road towards Portobello (this farmstead is also identified on Neill’s map). The two buildings shown in Neill’s illustration (above) are likely to be those that still stand today, an old wooden farmhouse and a barn structure. The site is now dominated by a much larger new farm building (the only structure of its kind visible in this archaeological landscape) ” (Middleton 2008: 20).

Middleton gives no further detail of the farmstead and only a distant photograph, though the wooden house, a stone ruin and a nineteenth-century barn on the property makes this the most intact farmstead on the Hereweka Block. An original, small, nineteenth century cottage appears to have been the original dwelling, which has been added to, so that the present house from

the outside looks like an early twentieth century villa.

Robert Roger came to New Zealand in 1858 with his wife, Isabella, and his son, Alexander (aged 13) (Appendix A), and bought 116 acres (48 ha) in 1866 (old sections 56,57,58. Block 11, Portobello S D). His sections ran up on to the high ridge between Peggys Hill and Larnach Castle and steeply down into the heads of both Smiths and Stewarts Creeks. When he bought his land there was no road and he may have been influenced by Riddell, who had bought the sections next to him two years before.

As well as joining Riddell in establishing the dairy cooperative, Robert Roger worked actively for the district, serving on the local committees from the North East Harbour Road Board (Vauxhall to Hoopers Inlet) to the local school. The Rogers contributed to Sandymount School as parents of 10 children: Isabella, James and Robert (started school between 1871-79), and are probably Alexander's children. Other Roger children on the school roll were Matilda (1880), Willie (1882), Mary (1885), George (1887), Alexander and John (1888,) and Mary (1893). John, listed on the school role in 1888, had been born in 1880 to a Robert and Mary Ann Roger (BDM), and was probably a third generation of Rogers (Seaton n.d.:13).

Like Riddell, in the 1870s, Robert Roger too was employed by Larnach as a carpenter (Sneddon 1997:81). The benched track (I44/413), running mostly on his land to Larnach's farmstead, may have been built by him for quick access, but may have been built by Larnach to give him a short cut north to Portobello.

On 20th and 22/10/1879, Roger advertised in the Otago Daily Times that he wanted "Pit Sawyers to cut from 10 to 12 thousand feet of boards and scantlings. For particulars apply to Robert Roger, near Sandy School, Peninsula" (Papers Past, ODT 22/10/1879, Page 1). If he built his barn during the summer of 1880, he was lucky not to lose it in the bush fire of October 1881, when he did lose his stables (see above). In 1882 at the Otago A & P Show at Forbury, attended by 4000 people, he won 3rd prize for 2lbs of fresh butter without salt (Papers Past ODT 24/11/1882:1). It sounds as if the fire had a good effect on his land. In an August 1903 listing of the Dunedin Weekly Live Stock and Produce sales, he received 11 shillings and sixpence each for

two porkers (half grown yearling pigs) (Paper Past, ODT 27/8/1903, p.9). It was usual for small dairy farmers to raise a few pigs on the skim milk which was returned to them by the creamery. This may account for the stone ruin in one corner of the site, distant from the house.

Robert Roger is listed in 1882 as a freeholder of 166 acres, Roger was involved with the Pioneer Cheese factory and the dairy cooperative, the Taieri and Peninsula Milk Supply Company. He became a director on the board of the latter in Oct 1895, when he and A. McFarlane were elected to two vacancies of the board of directors at the 11th AGM of the shareholders (Papers Past ODT 13/8/1905, Page 10). He shows up in the New Zealand list of Freeholders (Government Property Tax Dept. 1884) as owning 117 acres in 1882. His land was valued for tax purposes at £1100 or £9.48 per acre (Government Property Tax Dept: 1884). This is the rental value and was typically set at one twentieth of the capital value.

He was still a company director when he died suddenly in 1905 from a stroke or heart attack while driving to Dunedin with his neighbour's son, John Riddell (Papers Past. ODT, 26/6/1905. p.6). The family presumably remained on the farm, since when his widow died in 1926 (82 years old) and son Robert in 1935 (65 years), their address was given as Sandymount (ODT 22/6/1926.p.8 & 7/10/35, p.8). Robert junior had become a postman. Alexander and William leased Secs 47 and 31 briefly from William Leslie who had gone to live in the Catlins (Ahuriri Flat). (In 1914, Leslie sold these sections to James Joseph Nyhon (Otago Land Titles CT 170/39).)

In the middle of the 20th century, the Stewarts next door bought the Roger farm and moved up from Stewarts Creek to live in the house at Roger's farmstead. This is the only house on the Block which was lived in until the 21st century, leased out finally by the Maori corporation, Akapatiki A Block.

Robert Stewart's farmstead: I44/416, I44/417

In the mid 1860s, Robert Stewart (1866) joined Riddell and Roger, buying up 71 acres (28.7 ha) for £63 in the head of the creek which became named after him. His acres were sections 37 and 38, Block II, Otago Peninsula S D (Otago Land Deeds, 166/359). An outcrop of limestone runs diagonally from deep in the gully up the ridge along which Sandymount Road would eventually be formed. This was the first

outcrop that James Macdonald worked the year before in 1865, and where he got Walter Riddell to help him to build the first kiln (see above). The notable thing was that Robert Stewart built deep in the gully, possibly because he thought that the presence of the lime outcrop and kiln indicated that Sandymount Road would be formed down his gully out to Hoopers Inlet. There is a well-benched track to his house (I44/417), known locally as Stewarts Road.

I44/416 Stewart's farm

Look down in the gully to Stewart's old home (6) and Stewart's creek running down to Hooper's Inlet. (From here you can see the lime kilns) (Leslie nda) .

“Stewart's house is still standing, but in a ruinous state. Much of the garden planting such as hedgerows is still evident (figures 29, 30). A stand of large old macrocarpas marks the site. Neill's illustration shows two buildings, the house itself and what was likely to have been a cowshed behind it. The concrete floor is still in place along with some machinery .

The Otago Peninsula Museum and Historical Society at Portobello has a file of information on the Stewart family, who eventually moved from this farmstead to Portobello (Middleton 2008: 20-21).

The file on the Stewart family in the Otago Peninsula Museum does not relate to Robert Stewart but to a William Stewart (Otago Peninsula Museum and Historical Archives). There is also a third Stewart family in the district, descended from Alexander Stewart.

The school rolls from 1871 to 1929 contain a stream of Stewart children, but some may have belonged to Alexander Stewart who is likely to have farmed nearby, since he was chairman of the Pioneer Butter Company set up with Walter Riddell and Robert Roger. Margaret Stewart is the first to appear on the Sandymount school roll of 1871-79, followed by James (1881), John (1882), Jessie (1883), Robert (1886), Minnie (1887), Isabella (1888), Duncan (1890), Annie and William (1891), another James (1892), Christina (1894), Jane (1895), Annie and Maud (1891), Elizabeth (1900- 1909 rolls), Evelyn, Marjorie, Morton, Ivy, Ronald, Thelma, William and William-James (1920-29) (Seaton n.d.:13). There must be at least two and even three generations in this list.



Robert Stewart is listed in 1882 as freeholder of 71 acres, valued at £800 (Government Property Tax Dept. :1886), indicating that the family had not yet started buying up other farms. According to cemetery records, Robert died in 1913 of cardiac disease and pleurisy (Appendix A). By 1935, William Stewart held Sections 37, 38 and 39, the latter having belonged to Stephen Ellis in the 1800s. He passed these on to his son Ronald in 1956.

Ronald was the descendent who moved up to live in the Roger's house when his family began to buy up the neighbouring dairy farms and converting to sheep (Brendon Cross: pers.comm.). It may have been Ronald who converted the Roger's cottage in to the present villa. The sheep dip recorded by Webb (2009) at the old house site show that this was also a centre of sheep farming in the twentieth century.

Pemberton/Grainger farmstead : I44/419

John Pemberton took up title in 1866, the same year as Stewart and Roger,

further north along the ridge from them. He died only seven years later of tuberculosis, aged 43, leaving a widow and four young children. He took up only one section of 37 acres (old section 40), not realising that four years later the road to Portobello would run the length of his farm. It is no wonder that in the 1890s, Neill (1901) records two buildings on the other side of the road from the presumed farmstead in the macrocarpa stand (see map below under Ellis farmstead).

“ I44/419 Pemberton’s farm

The next house on the right (8) was that of Greg Grainger who ran a three horse bus in the 1890s to Dunedin, bringing back bread and meat.

The Neill illustration identifies two structures at this location. While Neill gives the site the name of Pemberton, its original owner, Leslie notes that this as the home of its later occupant, Greg Grainger (see Appendix 1 for title details). This house was located in the next stand of macrocarpas beyond the Ellis house. The site appears to have been recently bulldozed or cleared. While the macrocarpas remain, the new pasture suggests ground clearance and earthworks. Some features within the macrocarpas point to the likely location of the house (Figure 32). The Pemberton / Grainger house is likely to be the one visible on the ridge in a small stand of trees in the background of the photograph of the Leslie / Arnott house (Figure 6)” (Middleton 2008: 22) .

Note that there are two houses in the background of the Leslie/Arnott photo (Fig. 5), and the one at the left against the trees is likely to be Pemberton’s. In 1870, 8 October, Riddell made a churn for John Pemberton, and received a pig and 11 shillings in part payment. In 1871, he bought a bull for £5 from him, though he couldn’t bring it home, having nowhere to keep it (Riddell: 4/2/1871). These two entries suggest that in just five years, Pemberton had built up good stock. This was before Larnach had imported stud animals into the district.

Pemberton children are recorded in the Sandymount school role as Joseph and Richard in the 1871-79 period, and Jane in 1883 (Seaton nd: 13), and it is unlikely there was more than one generation of Pembertons, before the Graingers moved in (see William Leslie’s comment above).

The Grainger children appear in the school rolls of the 1900-1909 period, Edward, Ivy and Thomas (Seaton nd:14). William Leslie remembers one of them as running a three-horse bus and a bread and meat delivery, but Edward

Grainger was a also dairy farmer, judging by the weekly market reports from 1892-1923 reporting him selling cows, heifers, pigs and bulls (see Appendix A). The Grainger land, Sec 42, shows up in land titles as owned by the Nyhons in 1935 (Deed 268/195).

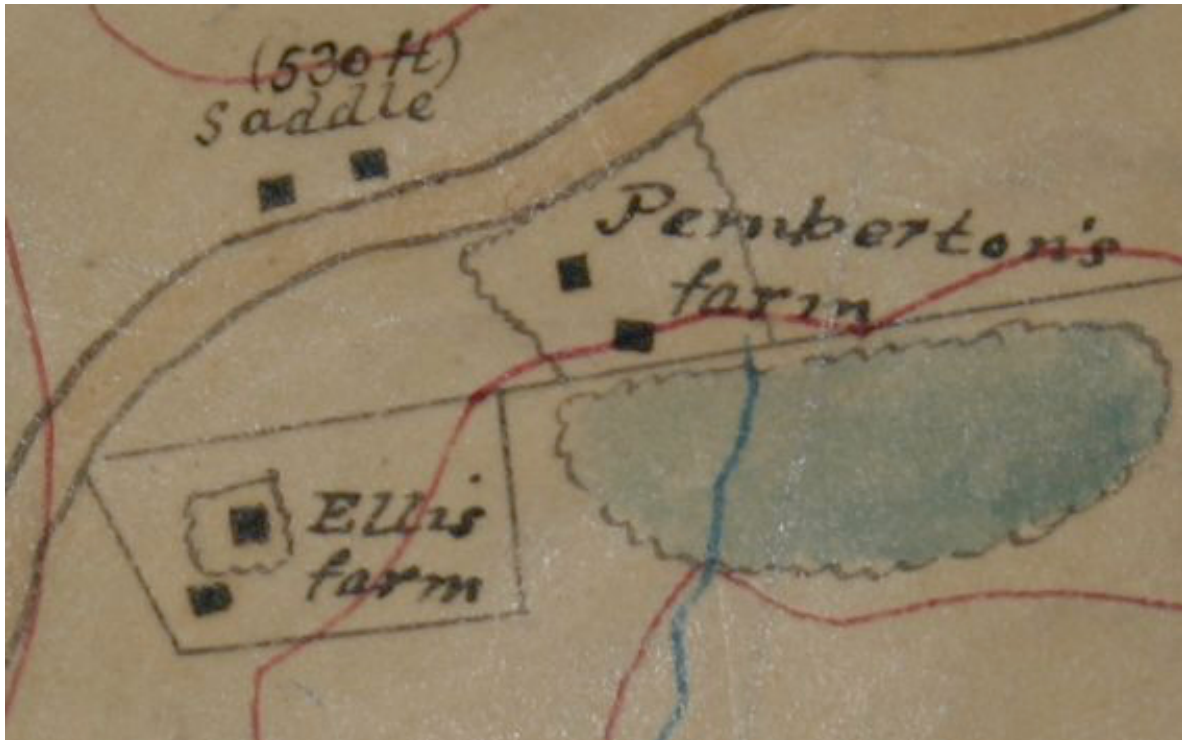
Ellis farmstead : I44/418

Though only 38 acres (old section 39), Stephen Ellis's section did have a corner crossing the ridge, which provided a good house site.

“ In the macrocarpa trees below the road fence there lived a Mr Ellis (7) who moved his hay in the rain and died of pneumonia after it.”

The Ellis house was located in a stand of macrocarpas on the right of Highcliff Road. The macrocarpas are now very overgrown. A walk through the site did not reveal any specific evidence of the structures Neill has illustrated. Any features relating to these may be hidden in the overgrown vegetation” (Middleton 2008: 21).

Stephen Ellis could have brought different farming methods to the district, as unlike his Scottish neighbours he was an Englishman from Matching, Essex. He appears in the Portobello Cemetery records as dying in 1906 at the age of 73, as well as son, Stephen, died 1897 aged 19. His wife Catherine died in 1922, aged 77. His house appears in the background of a 1913 photograph (Middleton 2008:fig. 6) as a long white house at back right. Their children appear in the Sandymount school rolls in order as Lottie and Mary 1871-79, Charlotte 1880 and Janet 1881. Stephen, who should have started school in 1883 - 5 at age 8, does not appear until 1890 when he would have been 10, as does the second son, James, in 1891 (Seaton n.d. :13).



The Ellis family seem to have been close to the Rutherfords to the east of them. The youngest Ellis daughter was named Janet Drew Ellis, Janet Drew being the maiden name of James Rutherford's wife. The youngest Ellis son was James Rutherford Ellis, and reciprocally the second Rutherford son was named Stephen Ellis Rutherford (Ellis: ancestry.comm , Appendix A).

David Arnott's farmstead: I44/102, I44/420, I44/421, I44/440.

David Arnott bought only 14 acres, the upper end of section 42 for £150 in 1869 (Land Transfer Deed 57/774), and still held it in 1882 when the list of freeholders was compiled (Government Property Tax Dept. 1884). In the 1890s, when Neill's surveyors called they failed to label the trees and buildings on the site that is obvious on landscape today, though they clearly mark William Hunter's house. Arnott had lost his stable, byre and some fencing in the bush fire of 1881. Being insured for £50 would have helped him rebuild the three buildings shown on Neill's map (Middleton 2008: Fig.12).



“ I44/420 Arnott’s House

Arnott’s house (9) (Davy Arnott who married Ida McCartney was a son) was across the road from Grainger’s among the macrocarpa trees. (The Nyhons farmed much of the land here and were the only people to run sheep). To Arnott’s house came the boy William Leslie at 2 a.m. on July 13th 1900 to fetch Mrs Arnott as a midwife for his mother. His brother Andrew was born at 4 a.m. (3.5 lbs) later 6 ft 6ins and a policeman. The other twin did not survive. Mrs Leslie never had a doctor for a confinement. The nearest doctor was at Port Chalmers.

According to Hardwicke Knight (1978), David Arnott (senior) was Larnach’s stonemason. His name appears beside Hunter’s on MISC1 – 2 (Figure 21) on section 42, neighbouring Larnach’s land, and his signature is last in the list on the same plan.

Neill’s map is slightly confusing at this point. The Arnott house is the unlabelled structure at the left, with a stand of vegetation drawn around it. Hunter’s house is discussed below. Today, the site of Arnott’s house sits within a complex of archaeological features. The principal means of identifying the site is the stand of large old pine / or macrocarpa trees seen from Highcliff Road in the valley below Larnach’s farm buildings, with an old formed track

leading to this from Highcliff Road (I44/421). The ruins of the house itself can be found inside the stand of trees, now mostly just the stone foundations and chimney remains. Later stock or sheep yards have been fenced around this area, incorporating part of an old iron bedstead as fencing (Figure 35). Other parts of the site complex include:

- ï The concrete floor of what may have been a cowshed or similar below the house
- ï Stone revetting around earth banks and below the concrete floor
- ï Old fence posts lying along part of an old track or road, drilled for fencing wire (Figure 38)
- ï A stone wall at the rear of the stand of pine trees, identified in Higham (1986: 248) as stone wall # 5 (Figure 37).

Neill's illustration shows two other structures within the vicinity of the Arnott house, on the saddle beside Highcliff Road *. There are no apparent archaeological features at the saddle beside the road. William Leslie remembered "an old house and a newer one" at the Arnott site. The two sites discussed below are part of the complex of features at Arnott's.

I44/102 Historic fence line (Arnott's)

Hardwicke Knight recorded this stone wall as an archaeological site in 1974. It begins about 50 metres north of the Arnott house site and runs in an east – west direction (Figure 36). The stone wall is not continuous as wire fencing has been used at some time for part of it. The western (longest) extent is identified in Higham (1986: 111, 146) as stone wall # 4, while wall number 4A is located some distance away below Highcliff Road. It formed a boundary between sections 42 and 1 of 44.

I44/421 Arnott's road

A formed road or track runs from Highcliff Road to the site of Arnott's house (Figure 34). It continues behind the stand of macrocarpas across the pasture to the west and a second fork of the road runs down from the macrocarpas across the concrete floor of a likely farm building towards the fence line I44/102. The line of the road running west has several old fence posts drilled to run wire through them (Figure 38). These old fence posts are artefacts of nineteenth century farming and should not be destroyed. A similar post marks the start of the track from Highcliff Road.

I44/440 Stone wall

This discontinuous stone wall is a boundary feature, parts of which Higham (1986: 110) has recorded as wall number 3B. It runs between sections 40 and 42, Block II.(Middleton 2008:22).

*The two buildings marked on the saddle (Neill: n.d.) are in Pembertons section.

David Arnott was born 1837 Linlithgow, Scotland, and came to New Zealand in 1860 and married Elizabeth about 1864 (Appendix A). They lived at first at Taieri Beach and had nine children between 1865 and 1887 (Otago Peninsula Museum and Historical Society archives). Euphemia, James and Richard appear in the Sandymount school rolls in the 1871 to 1879 period, Catherine (1884), Elizabeth (1886), David (1889), (Seaton n.d. :13) , which tallies with 1869, the date David Arnott took up his 14 acres. David and his wife seem to have had four other children (Appendix A), which do not appear in the school roll.

Some of the children in the school roll are listed by date of birth in the Museum archives, for instance son David born 1881 is listed as starting school in 1889, Alexander born 1883 appears in 1891, Margaret born 1887 appears 1895, when they all would have been 8 years old.

Riddell records building Arnott a house in 1870 in only two and half days, indicating it was probably a fern tree cottage. Arnott is listed as “farmer”, in the 1882 list of freeholders on land worth £250 rental value (Government Property Tax Dept. 1884). In the map of 1863 (SO1327), David Arnott’s access is marked as only an impractical paper road. He must have formed a benched track on the contour out to Highcliff Rd some time before 1869 (I44/142), as a track is clearly marked on William Hunter’s Deed 30/55, 17/12/1869, a track which is still visible today. This track runs for most of its length across Pemberton’s section 40, and meets Highcliff Road opposite Pemberton’s trees. Presumably there was some private agreement which never reached the modern cadastral maps.

David Junior was known to have run horse-drawn freight services to and from town, for both goods and passengers. His wife and child are shown in a photograph dated 1913 when they were living in William Leslie Senior’s house (Middleton 2008:fig.6). (This photograph, if correctly captioned, shows the difficulty of determining when a farmstead ceased to be occupied.) William Leslie junior had gone to live in the Catlins by 1913, and we might have assumed both Leslie farmsteads (I44/82 and I44/445) had been abandoned, or they both might have been rented. By the following year, Mrs. Arnott’s landlord was James Nyhon, since by 1914, Leslie had sold to James Joseph Nyhon (Otago Land Titles CT 170/39).

William (a.k.a. Wally) Hunter’s house : I44/422

In the 1870s, William Hunter bought 20 acres on the warm lower slopes of Sec 42 (Deed 57/774, 27/4/1877, National Archives) in the head of Smiths Creek. Unlike most of his neighbours, he built in stone, a house at least 12 x 8 m, and a stone wall (I44/440) runs along his boundary with Arnott's. He is listed as settler, rather than farmer, in the 1882 list of freeholders on land worth £300 rental value (Government Property Tax Dept. 1884). Since his house is named on Neill's map, he was still there around 1898. The lack of trees suggests that there was no need for shelter for animals, and yet in 1870, Riddell made a churn for him - price £1 (Riddell diary 8 October).

Since he was a bachelor, the school rolls do not provide evidence of occupation of the farmstead. Stones Directory does not list him in 1905, even though his neighbours Arnott, Grainger and Nyhon are. There is a substantial building on the site in the background of the 1913 photograph (Fig.5), but this does not guarantee occupancy.

I44/422 Ruins of Wally Hunter's house

On the left just below the road can be seen the ruins of Wally Hunter's house (11). He was an old bachelor who used to show the boy William Leslie his old shot gun.

Neill's map identifies Hunter's house to the east of the unidentified Arnott house (above). The ruins of the stone house are still quite apparent on the ground (Figure 39), along with features of a further structure on a small terrace below. Leslie noted in his handwritten manuscript (n.d.-a) that this house was of soft local stone, and had no trees around it, with little of it left standing at the time of writing. The house can be seen in the distance in the 1913 photograph of the Leslie / Arnott house at site I44/82, along with another structure on the terrace below and another series of small structures that stand on the hillside to the left (Middleton 2008: 24).

John Nyhon's farmstead : I44/428, I44/429, I44/443, I44/444

John Nyhon took up 68 acres (Sec 46) and leased 31 acres (Sec 1 of 44) from Larnach, all in 1872. His house, byre, and driveway trees are recorded as separate archaeological sites by Middleton. The traces of two stone field walls mark a track leading up to the Leslie's road (I44/433), and the other rows are on the legal boundary between Nyhon's and Leslie's sections (I44/434).

All these places [Dick's, Forbes, Ollsen's] are visible from Nyhon's (12), i.e. the site of John Nyhon's home where lived Dan, Jane and Hannah Nyhon, up the wooded drive to the right

just a little further on.

Neill's illustration shows the house at the rear of a stand of trees, the macrocarpas that remain today, although some have been recently cut down. Little evidence is visible of the site of the house, apart from a small area of stone. The rivetted water tank can be seen in some felled timber along with part of a cast iron fireplace (Figure 51). The macrocarpas surrounding the house site itself are included as part of the archaeological site; the shelter belt / hedgerow is recorded separately (below).

I44/429 Nyhon's cow byre

The ruins of Nyhon's stone cow byre (the larger building behind the house in Neill's illustration) still stand (Figure 52). This is a rectangular structure built on the saddle looking down towards Hooper's Inlet.

I44/444 Macrocarpa shelter belt / hedgerow along Highcliff Road

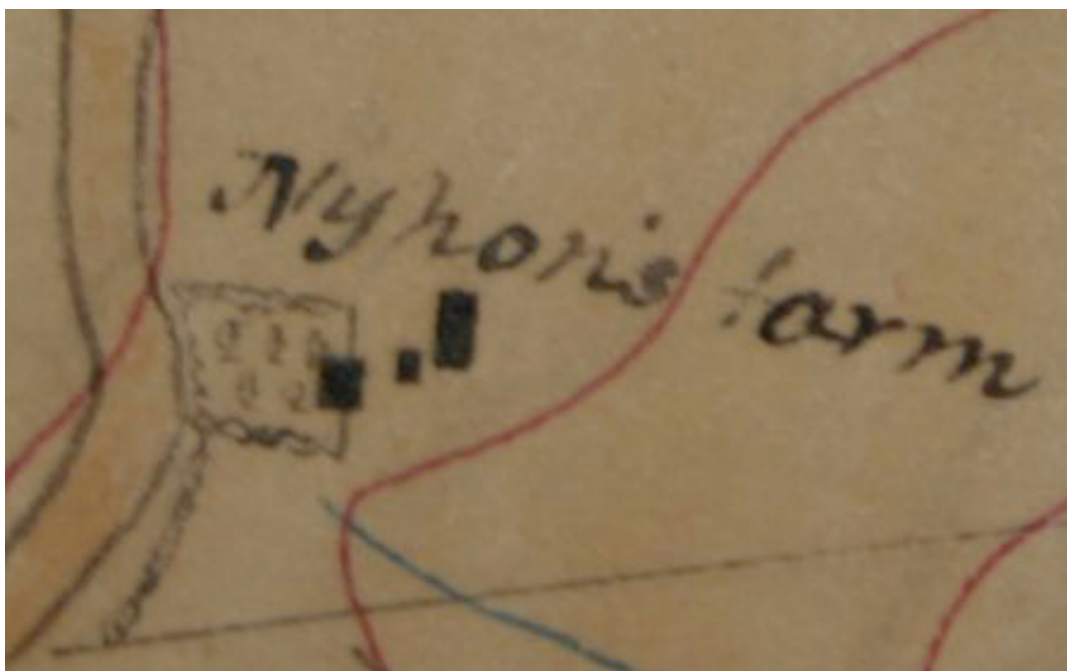
This site consists of the stand of macrocarpas along the boundary of Highcliff Road at either side of Nyhon's gateway. Neill has included some of these trees in his illustration. These stands of macrocarpas are two of many that form part of the relic landscape of Harbour Cone.

I44/433 Stone row leading to Leslie's Road

There are two rows or walls of stone leading to Leslie's road. This single row of stones runs from the gateway beside Nyhon's cowbyre (I44/429) up to Leslie's road (I44/432), identified in Higham (1986) as wall number 10 (Figure 58). It was probably built by the landowner John Nyhon.

I44/434 Stone wall leading to Leslie's Road

This is the northern of the two stone rows leading to Leslie's road (Figure 59). It is identified as wall 11 in Higham (1986: 114). Higham points out that this was the northern boundary of Nyhon's section 45, probably built between the date of his Crown Grant in 1860 and 1877, the same dates being likely for wall 10.



(Middleton 2008: 26).

When Captain Leslie set up his cooperative cheese factory in 1877, the closest farmer, John Nyhon, was not included as shareholder but had to buy his way in over the next few years (see above). It was, however, the Nyhon and Stewart families who bought out their neighbours in the early 20th century and converted the Block to sheep.

Leslie (n.d.) lists the names Dan, Jane and Hannah, possibly John's children. The Sandymount School rolls, however, list Daniel, James and John in the 1871-79 period (see Appendix A), and also Hannah and Michael (1880) and Ann-Jane (1882), six in total. In the 1900-1910 period, a new stream of Nyhons start school (Catherine, Eileen, Francis, Iris, Margaret (b.1912), John (1910 - 1919), Daniel, Kathleen, Patricia (1920 -1929), Daphne (1930- 39), presumably John's grand children (Seaton n.d.: 13). James inherited the farm and his daughter, Margaret, would become the last Nyhon to hold the sheep farm. She even built a new woolshed at Larnach's Farmstead.

In 1881, Larnach lists John Nyhon as his tenant of Sec 1 of 44 for a seven-year tenancy, rent £30 per annum (Larnach letters, 1881:107). In the bush fire of 1881, there is a report of Nyhon's house being seen on fire but saved (Papers Past, OW 22/10/1881: 22). In the 1882 Freeholders list, John Nyhon is listed as a dairy farmer with only 37 acres, which does not match the land title

evidence of his freehold section being 68 acres (Government Property Tax Dept. 1884). In 1885, there was some sort of crisis. It was reported in the Otago Witness that J.Nyhn's farm of 37 acres together with a 5-roomed house and other buildings was offered at auction but passed in (Papers Past OW 28 February 1885, p.15). In late April 1885, John Nyhn held a large clearing sale of his dry stock and of cows in full milk and about to calve (Papers Past, ODT, 30/4/1885, p.2). In the following few years, the weekly live stock sales reports for John Nyhn are mainly of non-dairy cattle, i.e. bullocks and steers, until 1890 when he died. John (jnr) took over and in 1891 he sells 24 fat lambs (Papers Past, OW 4/2/1891, p.20). In the following year he regularly sold half-bred and cross-bred ewes, often noted as "light". He needed more land apparently, and bought another 176 acres of "light bushland" at Mt Charles (Papers Past, Evening Star 26/7/1892. p.3). Neill's map places the Nyhns as in occupation at the Harbour Cone site in the late 1890s, but like modern farmers they owned scattered parcels of land.

In Stones Postal Directory of 1905, under the listing of "Pukehiki including Sandymount", the Nyhns are listed as Hannah Maria, dressmaker, and John and John Thomas, farmers. From his obituary, James spent some time in Hawkes Bay and at Hindon, near Middlemarch (see bibliographies, Appendix A), and so James may have been absent in 1905.

The Nyhns increased their sheep farm when Larnach's estate was sold at the turn of the century. Though Larnach died intestate in 1898, two years later Donald Larnach was able to sell off land, including 177 acres, Lots 2,3 and 15 (CT124/180) to James Nyhn. Larnach's land included Sec 1 of 44, that John Nyhn, the father, leased from Larnach, and the sections below in Smiths Creek, being 1 of 46, 48, 50, 21, leased to Leslie, Scott and the Bates brothers. The Larnach dairy farm comprised the lower eastern halves of sections 53, 54 and 55. So now the Nyhns had the buildings and land of the "model dairy farm, as well as the Scott and Bates brothers leased land, on the warm and lower slopes of Smiths Creek.

It was not until 1914 that James Nyhn is shown as acquiring the Leslie's land on the southern and eastern flanks of Harbour Cone itself (Sections 47 and 31, Otago Land Titles CT170/39). This is where the small ruin (Leslie's Extra, site I44/982) was found, that is not marked on Neill's 1901 map. It took even

longer for the freehold of the northern slopes of Harbour Cone (Sec 49), that the blacksmith William Allan had owned, to pass to the Nyhons. In 1935, Sec 49 held by Marian Allan widow of Waimate, passed to the Perpetual Trustees in 1938, and then to Margret Nyhon, retired teacher, in 1960 (CT 268/197). **

It was critical that the Nyhons acquired Arnott's and Pemberton's sections, since the track to Arnott's farmstead crossed Pemberton's land, and the Arnott's farmstead was important to their farming of sheep in Smiths Creek. They established a small set of yards there (Middleton 2008: Fig. 35), which had easy access to Highcliff Rd, suitable for trucking out fat lambs. By at least 1935, Pemberton's, Arnott's and Hunter's sections were held by the Nyhons and passed to Margaret Nyhon by 1956 (Deed 268/195).

James died in 1948 (aged about 73) and was survived by only his wife and one daughter, Margaret (see bibliographies, Appendix A). She studied through the Dominican and Trinity Colleges and won a medal for music theory from Trinity College. By 1951, the land deeds show that it was Margaret who inherited the group of sections from James, and farmed them with the help of a manager, Ian Wilman, who lived on Camp Road just below the Hereweka Harbour Cone Block. Electoral rolls show Margaret to be living in John St, Broad Bay, in 1957.

James Rutherford's farmstead: I44/423, I44/425, I44/426, I44/427.

James R. Rutherford took up only 21 acres in 1866 (old Section 3 of 36), mostly on a ridge extending east in to Stewarts Creek. In 1877, he is listed as one of the shareholders in Captain Leslie's cheese factory (Knight 1978:60). In 1883 he acquired title to Robert Dick's land to the north (western halves of old Sections 41 and 43), Robert Dick having died in 1876. In the 1884 list of freeholders, he is listed as settler, Sandymount, 71 acres (Government Property Tax Dept., 1884). He was one of the few settlers who built his house with the local stone (I44/426). In February 1887, a north west gale lifted the roof off "a large byre" on his property (Papers Past, OW, 11/2/1887, p.17).

"I44/426 Rutherford's Farm

Rutherford's farmstead is located some distance off Highcliff Road on a ridge, in a large

stand of macrocarpas, looking down towards the Stewart homestead and limekilns at the west and Hooper's Inlet to the south-east. The macrocarpas are planted in a square, bordered with a stone enclosure, and inside this a second wall encloses the ruins of a single remaining wall of the former house, once again built of the soft local stone (Figure 45, 46, 47). A series of stone walls can be found behind the house site, the second structure on Neill's illustration, forming part of the boundary wall at the rear (Figure 48).

The site complex includes the southern boundary wall with the complex of stone features and structures associated with it and the stand of trees "(Middleton 2008:24).

In the Sandymount school roles, in the 1871-79 period John Rutherford starts school, Stephen in 1880, Elizabeth in 1884, Jane in 1888 and Bessie in 1889. There was another son, who died at two, and David who survived to old age (1874 - 1950, Appendix A), and seems to have inherited the farm, according to Leslie (see below). James Rutherford is listed as serving on the school committee in 1883 (Smith 2015:184). David was a member of the Portobello Rifle Club, shown in an undated photograph (Smith 2015: 82). The clothing is 1900-1920, rather than 1870s.

The Rutherfords were very active as wallers, judging by the the lengths of walling and revetments on their land. Three benched tracks with many stretches of revetments are on their land or run towards their farmstead across neighbouring land.

"I44/423 Rutherford's road

An old road still formed and quite visible leads off just past a rock face on the right. It went to Davie Rutherford's, also to Dick's (13) (macrocarpa trees), Forbes (14) (further down) and Ollsen's (15) (no house now) down Battery Creek.

This road, described above by Leslie leading off Highcliff Road consists of a complex of stone features (Figure 40, 41). Today, the signpost for the walking track to Hooper's Inlet can be found about 50 metres beyond (north-east of) the old road entrance at the rock face. The road rises quite steeply from Highcliff Road before making a right-hand turn in the direction of Nyhon's farm, then curving around to the right again and leading out to Rutherford's farm (I44/426) on a gentle gradient. From Highcliff Road a steeper section of the same road leads directly up and over the hill (Figures 43, 50). This is the western fork, I44/425.

I44/425 The western fork of Rutherford's road and stone wall

This fork leads directly up and over the hill shortly after the beginning of Rutherford's road, just beyond the rock face. This western fork of the road meets up with the more gentle

gradient closer to Rutherford's house (Figures 43, 50). An impressive stone wall runs down the eastern side of this fork from the top of the hill (Figure 44), recorded in Higham (1986: 110, 144) as wall complex 3 (Figure 40).

I44/427 Road /track from Rutherford's into lower gully

This road runs from Rutherford's house into the gully below (Figure 49)." (Middleton 2008:24).

A photograph with the site record file shows this was a benched track running into the gully on the south side of the farmstead and significantly towards the farmstead of the Ellis family with whom James Rutherford seems to have had close ties (see above). The easy route out on Highcliff Road lies through Pemberton's or Nyhon's, but the steeper one through Pemberton's was chosen for the major track (I44/423).



Robert Dick's farmstead: I44/431

Though this farmstead is not marked on Neill's map, the single macrocarpa tree mentioned by Leslie (see below) is very conspicuous on the landscape, and

marks the site of a stone ruin (see below). Coming to New Zealand in 1860 (see Appendix A), Robert Dick took up at least 20 acres in 1868 (western halves of old Sections 41 and 43). The electoral rolls of 1870-71 show him owning Sections 33, 34, 35 (residential sections nearby) as well as Sections 41 and 43 (see Appendix 1). There is an old hedge and stone wall (I44/448) marking his eastern boundary with Forbe's, who lived just beyond the boundary of the Block. He may have owned 60 acres in all, split into two blocks by Forbe's land. He was one of the few who built his house of stone, but it may have been abandoned by the 1890s when Neill's surveyors did their work. (Robert Dick died in 1876.)

In the late 1800s there were only three Dick children on the Sandymount School rolls - Jane, John and Simon, 1871 to 1886 (Seaton n.d.; 13). Leslie mentions also Maggie and Bella Dick and other daughters (Leslie n.d.a.). None of these seem to be Robert Dick's children as his children were all born in Scotland (see Appendix A), since he was relatively old (59) when he took up his land. He and his family of seven children came to New Zealand about 1860, the oldest (William) losing a child on the voyage out.

It is not surprising that Robert, as a stonemason, and Willam Allan, as a blacksmith, had more capital to spare than their neighbours. In 1877 when Captain Leslie set up the Harbour Cone Cheese Factory, they were both able to lend the company £50 each for three years at 8%. Dick took over as treasurer in 1879 when Allan resigned (Knight 1978:60). Robert Dick should not be confused with William Dick, who was also a stonemason and Larnach's principal contractor for masonry (Knight 1978:83). This William was probably Robert's oldest son. The electoral rolls of 1870-71 show both Robert and William holding land outside the Hereweka Block (Appendix A), especially around Hoopers Inlet.

“I44/431 Robert Dick's house and I44/435 Forbes' farm (outside boundary)

William Leslie (n.d.-b) only briefly mentions Robert Dick's house (above), numbered 13 on his map; but unfortunately the number seems to have been left off the map itself. Forbes at number 14 is close to this site, and can be confused with it, as the Neill map does not include Robert Dick's house, although it too notes Forbes. The site of the Forbes (now recorded as site I44/435) house lies just beyond the boundary of Harbour Cone, in a stand of macrocarpa and gum trees, some of these now recently blown over (Figure 53). On a 1942 aerial map a

structure can be seen at this location as well as the stone features still in situ at the site of Robert Dick's house. In his other handwritten manuscript (Leslie n.d.-a) states "*further up the valley with quite a quantity of trees, Robert Forbes and two daughters Maggie and Bella, I was told that there were other daughters but Diptheria caused the death of several; further up still, I think only one large macrocarpa, but no house in my day, name Dick, above that a private road leading to James Rutherford, David in my time.*" Leslie's description suggests that Dick's house may have been a ruin by the time of Neill's map, and hence not included. The site can be seen from Nyhon's cow byre and Rutherford's road. It sits on the slope below Rutherford's road, marked by a single, huge macrocarpa spreading across the site (Figures 53, 60). The base of a stone fireplace and some steps identifying the site of the house itself are surrounded by low stone walls (Figure 54). Higham (1986: 113; 250) has recorded these features as wall number 9.

A hedgerow can be found planted along the boundary dividing Robert Dick's property from Forbes' (below it). As the title research has shown (below; see also Higham 1986: 113), Forbes owned the eastern half of sections 41 and 43, Otago Peninsula Survey Block II, while Robert Dick owned the eastern (sic) parts of the two sections. Robert Dick died in 1881, but had previously granted Forbes a right of way through his land in 1874 (this likely to be the road to the goldmine, as Higham [1986: 111] had noted), and this continued after his death until "Reid and others" (perhaps Robert Dick's trustees) sold the land to Rutherford in 1883 (DI G220; Rutherford sold to Wilson in 1919). The date of Robert Dick's death explains why no house remained standing during William Leslie's childhood. If it was built of stone, this may have been removed for the construction of other buildings, leaving only the chimney base and low remains of the outer enclosure walls. Both Robert Dick (manager) and Robert Forbes (director) were involved in the gold mine, Hoopers Inlet Quartz Mining Company, Forbes also owning sections 33 and 34 on which it was located (Higham 1986: 113; Knight 1978: 63) " (Middleton 2008: 27).

Captain Leslie's farmstead : I44/82, I44/432, I44/433, I44/434, I44/436, I44/445.

In 1865, Captain William Leslie was the second settler after Walter Riddell to take up land on the Hereweka Harbour Cone Block - Section 47 (70 acres) on the south side of Harbour Cone. At some unknown date but after 1872, Leslie leased from Larnach Section 1 of 46 (28 acres) across the headwaters of Smiths Gully. The northern part of Highcliff Road was built in 1868-69, giving access to both these sections.

In 1886, an account book shows a Leslie paying £6 16s for the surveying and fencing with wire Section 31 (11.5 acres) looking out over Hoopers Inlet (Knight 1978 :60). Only a paper road bounds the eastern end of this section,

which came to be occupied by William Leslie Junior, son of Captain Leslie and father of the Leslie who wrote the historic accounts (Leslie n.d.b.). They built a benched track (I44/432) from Leslie Junior's house (I44/445) to Highcliff Road over Captain Leslie's sections, sufficient only for horse-drawn sledges but not drays (I44/432).

Like Riddell, Captain Leslie at first built a house of temporary materials. It is remembered by his grandson as wattle and daub, rather than tree fern construction (see below), but the two methods may have been very similar and may have even merged. In 1865, Captain Leslie had only one son, had lost his first wife and young children, married again (Emma), and had five children by her between 1861 and 1873, but all born in Scotland and all but one died in infancy (Appendix A). The son, also William, however, had nine children, born after 1888, the oldest of which remembered the wattle and daub house, which must have lasted at least 25 years. Judging by the dates of his childrens' births in Scotland and local Otago news, such as the newspaper report that "great exertions were made by Mr and Mrs Leslie, and Mr Leslie, jun.," to save the cheese factory during the 1881 bush fire (Papers Past, ODT 17/10/1881), suggest that he was making good use of his Master Mariner's certificate, coming and going between New Zealand and Scotland.

For all his travelling, Captain Leslie was a man of influence within the local community. As well as setting up the Harbour Cone Cheese Factory, he was a lay preacher at Pukehiki Church (Knight 1978: 60) and, in 1881, a member of the Portobello Cemetery management committee (Papers Past, OW 15/10/1881). He set up the factory on his leasehold land below Highcliff Road. Middleton does not provide a separate site record form but the factory must have been a separate building from his house, being described as a wooden building 24 x 14 feet (I44/82). Middleton (see below) does not give a complete list of shareholders or their full names. An Otago Witness account confirms that they are all local families, including George Bates (Papers Past, O.W. 25/1/1879, p.4).

"The cheese factory was not without its difficulties especially due to the steep terrain. Each farmer had different methods for getting milk to the factory. Robert Dick had special milk cans with flat sides that could be attached to a horse, William Hunter used a wheelbarrow while James Rutherford used a bullock with a sled. The first cheese maker at the Hereweka factory was Edmund Ward, who began learning the trade under supervision from the

experienced cheese maker, John L McGregor. McGregor, was the first cheese maker at the Springfield site near Pukehiki. Hannah Scott, the daughter of Thomas Scott assisted Ward in making the cheese at the factory. The cheese was sold directly to the George Street grocery store of Esther & Low, and the Otago Daily Times reported that the factory had produced 2.5 tons of cheddar cheese in 1879 valued at 6.5 pence/pound “ (Paul Pope: pers.comm., summary from Hocken Archives).

A dramatic account of the 1881 fire in the Otago Daily Times adds more about the Leslie Farmstead.

“ The Harbour Cone Company’s Cheese Factory succumbed to the flames, though great exertions were made by Mr and Mrs Leslie, and Mr Leslie, jun., to save the building. Nothing with the exception of some bacon and a saw could be got out, and the whole building became a total wreck within a few minutes’ time. Mr Leslie’s dwelling-house was twice on fire, but was put out, though in one place the weatherboards were burned through. The dairy also had a narrow escape, one of the piles being burnt completely through before it was noticed. Mr Leslie’s byre and sheds were also destroyed. The factory, in which there were three cheese presses and other machinery, was insured in the Norwich Union Company’s office for £150, but the building was valued at £50 above this sum” (Papers Past, ODT 17/10/1881).

(I44/82 Leslie’s #1 farmstead and Harbour Cone cheese factory / Arnott house.**

Across the road (16) from where the sledge track comes out in amongst trees are the two sites of Captain Leslie’s two homes – the leveled position for the wattle and daub house first of all; and then below the remains of the stone crusher the leveled area under the trees and some relics of the second house. ... Where the stone crusher ruins are visible below the fence on the left was the site of the early Harbour Cone cheese factory 1878 (18) which had a brief existence before it was burned in a bush fire. The site of William Leslie senior’s farmstead sits below Highcliff Road on a terrace with large pine trees below it. Neill’s 1901 illustration (above) shows the house sitting within an enclosure, either of stone or trees, with a second structure on the other side of the road and a line of hedgerow extending below Highcliff Road. Captain William Leslie (senior) lived on the peninsula from 1865 until 1908 (Leslie n.d.a).



The site survey showed little above ground evidence of the Leslie house, although the levelled terrace where the first wattle and daub structure was built is clear, with some stone revetting (Figure 60). A photograph (Figure 6) shows what had once been Captain Leslie's house in 1913. A woman and two small girls stand in the foreground, identified as "Mrs. D. Arnott and two daughters home at Sandymount". This caption, along with Leslie's information about the Arnott house (above) provides clues to some of the social networks in the valley, where the houses mostly had a high level of intervisibility. This Mrs. D. Arnott was the daughter in law of the Arnotts who lived in the house below the Larnach farmstead buildings. Her husband David Arnott drove the Sandymount horse bus (Figure 33) that took Peninsula residents into Dunedin three days a week and in 1924 bought a Ford car to start the first taxi service (Anon n.d.-b).

The house is a simple weatherboard structure with two chimneys. At the south, an old rivetted water tank can be seen, similar to the remains of others at several of the house sites in the area, for example at Nyhon's.

The line of the hedgerow shown in Neill's illustration can still be seen below the road, with stone edging in place. There may be other features associated with the house and / or the cheese factory that could be identified with more intensive surveying.

I44/436 Leslie's cowshed and hen house

Above the road on the right is the sledge track. Here were hen houses and a cowshed. Mr Leslie senior dug the ground with a spade and could well have built the stone wall (still there) as he did so.

I44/432 Leslie's Road

"From Nyhon's also it is easy to see the sledge track from Mr. Leslie's boyhood home round to the [Highcliff] road.

From Nyhon's cow byre a row of stones (I44/433) leads up to the sledge track that runs between Captain William Leslie's house (I44/82) on the south side of Harbour Cone and his son William's house (Leslie #2 house, I44/445) on the east side of the Cone. The track begins on a small flat across (on the upper side of) Highcliff road from the site of Leslie's #1 house, where William Leslie (grandson) noted his grandfather's cowshed and hen houses were once located (I44/436). As Leslie (n.d.b.) described it, *"part of this road at the southern end was so steep that only a sledge could be used on it. There was never a wheeled vehicle on my father's land other than a wheel barrow and in later years a bicycle"*. After the steep beginning at the southern end, the road follows a gentler gradient to the eastern side of Harbour Cone (Figures 52, 55, 56, 71). Along the way, several old totara posts still stand, drilled to run wire through them (Figure 56). The stumps of other posts can also be seen, rotted off at ground level. A stone feature was also identified (Figure 57), its function uncertain.

I44/436 Boundary wall below Harbour Cone summit

This wall forms a boundary for Section 47, William Leslie senior's land. A section of it runs along the upper slope on the south face of Harbour Cone (Figure 60), this identified in Higham (1986: 115) as wall number 12. A further stone section of the same boundary line is identified as wall number 13 (Figures 61, 71). This wall, closer to Leslie's #2 house site, has posts for a post and rail fence built into it, while wall number 12 has posts drilled for wire fencing to run above the stone. The section below Harbour Cone summit can be seen clearly from Rutherford's road, above and approximately parallel with Leslie's road (Figure 55).

I44/437 Stone revetting below Highcliff Road

A section of stone revetting supporting a bank below Highcliff Road is located just beyond the site of the Leslie house.

I44/439 Boundary line / track and stone crossing

This line can be seen clearly on the ground and has a stone wall where it crosses a small creek below the Leslie house. Figure 63 shows the southern line of the track / boundary and the creek crossing; the line extends to the north over the other side of the creek (Middleton 2008: 32).

This boundary lies between the leasehold and freehold sections held by Captain Leslie (Sections 47 and 1 of 46), and is not a continuous stone wall, only a “crop mark”.

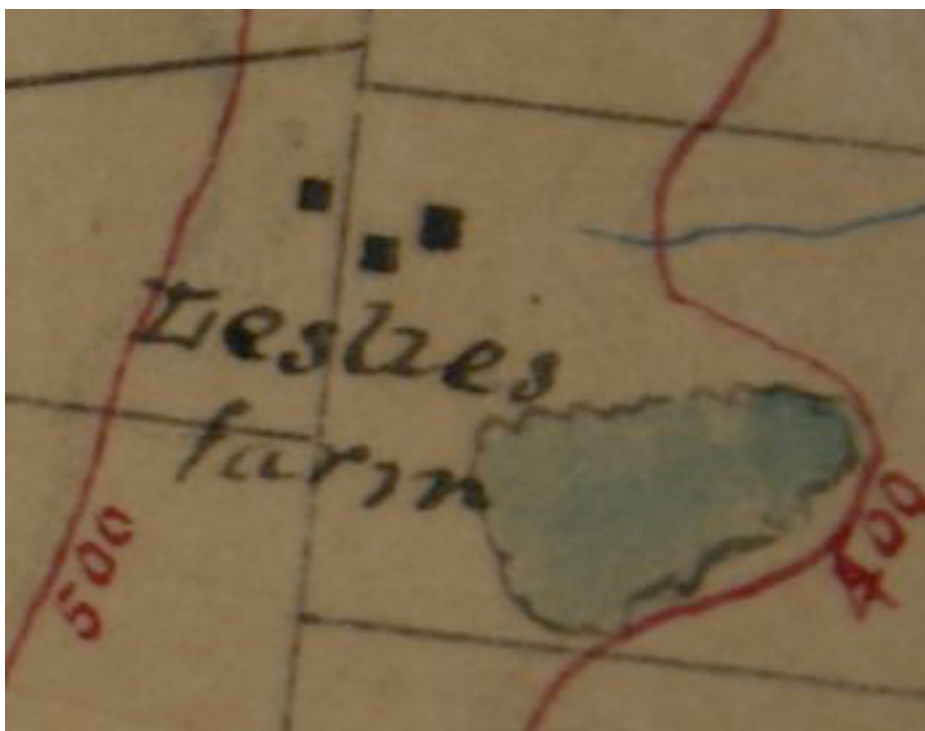
William Leslie Junior’s farmstead: I44/445

Stop at a macrocarpa hedge on left and look across to the shoulder of Harbour Cone. Here you can see the trees of Mr. Leslie’s boyhood home and the slope he walked across to go to school [at Portobello] (24). ... (This building was years later brought down from the hill and is in Portobello on the road to Hooper’s Inlet – owner Mr. W. A. Seaton). (Easily recognizable by its two chimneys. The glassed-in part must have come from the glass house on the farm where the Leslie family had five vines growing).

While William Leslie and Janet Angus were looking across the slopes of Harbor Cone from the Portobello side, the trees of this Leslie family home can also be seen from Rutherford’s road, looking out to the north-east.

Although Knight (1979: 60) states that Captain William Leslie senior’s farmhouse was at this location, his grandson William (Leslie n.d.) states that his father bought this land (consisting of 10 acres) and built a house there on his marriage. This is also clear from his description of his grandfather’s first wattle and daub house at I44/82. This second site was warm and sunny, compared with William’s grandfather’s house on the south side of Harbour Cone that never got any sun at all in winter and was very cold.

However the disadvantage of Leslie’s #2 house site was the access, the sledge track now recorded as I44/432. The house the youngest William Leslie grew up in started as two rooms, each with a double brick chimney. There was a dairy, as “*butter making was the sole means of making a living*”; next to this “*a good wash house with a built in enamelled boiler ... next to that was another room which housed a lot of odds and ends, even a chaff cutter turned by hand*” and beyond this, on the “sunny side” a glass house with grape vines. “*As the family grew, the house did too first two rooms with a gable were added to the front of the house, later the dairy was connected to the house as it was no longer needed*” after the Sandymount dairy factory opened (Leslie n.d.-a).



Archaeological evidence today consists of an area of paved flooring under one of the macrocarpa trees and other structural remains under a second large macrocarpa (Figures 71, 72, 73) (Middleton 2008:34-35).

As well as the reminiscences from the grandson quoted above in italics for many of the sites, there are many family notes in the Otago Peninsula Museum and Historical Society archives. The latter describe Captain Leslie as born 1818 in Forfar, near Dundee, Scotland, married Isabella, and arrived in New Zealand 1862, took up land in 1865, married Emma his second wife, and as a lay preacher travelled the length and breadth of the Peninsula.

The local archives confuse Captain Leslie's children and grand children by his son William Leslie Jr. (Appendix A). According to [ancestry.com](https://www.ancestry.com), Captain Leslie had ten children by two wives, but at least 8 died in infancy. William, born 1852, was the only one who made it to New Zealand, and his children who are recorded in local archives as William 1888, David 1889, Janet 1891, Isabella 1893, Thomas 1894, Agnes 1896, Minnie 1898, Andrew 1900 and James 1904 (Smith 2015:135).

William Leslie Junior lived on Harbour Cone until 1908, when he moved his family to the Catlins. It was not until 1914, though, that land titles show

William Leslie selling to James Joseph Nyhon (Otago Land Titles CT 170/39).

Leslie's Extra Farmstead site: I44/982

This site is unexpected and was missed by Middleton (2008), since it is not mentioned by Leslie in his reminiscences (Leslie n.d.b.), and is apparently a second farmstead on his grandfather's land. It was not mapped by Neill's surveyors nor has old macrocarpas. It has two chimney bases at either end of a terrace 8.5 x 8 m, and there is a second terrace above, 18 m long. The latter would be a suitable area for a byre, built at the same time as other nearby byres of the period (Larnach's byre 17m and Roger's byre 14 m long).

Not only was a second farmstead unusual, but it was also uncommon to have a grown-up son who was 19 in 1872 when Capt Leslie took up the lease on Sec 1 of 46. The simplest explanation for the farmstead is that it was built by the Leslies for the son and to provide easier ground for a byre and handling cows at milking time. (Seven years later, the 10 acre section (Sec 31) was bought for the son.)

There may be another factor involved. The site is positioned in the middle of Smiths Gully, just above and to the south of the upper boundary of the block (Secs 21, 48 and 50) leased from Larnach by Scott and the Bates brothers. It is on the nose of a spur and would have been in a handy position to drive Scott and Bate's cows up to for milking if their milk was going to the Harbour Cone cheese factory on Highcliff Road, and so may have been leased by the Leslies to Scott and Bates. It would also match the account of the fate of Scotts byre and "Mrs Bates cottage" in the 1881 bush fire (see above under The Community).

William Allan's farmstead: I44/96

In 1868, William Allan took out title to one of the steepest sections on the Block, Section 49 on the north side of Harbour Cone, comprising 45 acres. Born in Dumfriesshire, he came to New Zealand about 1862 (aged 22 years) and spent two years in the goldfields taking up dairy farming in 1864 (Obituary, see Appendix A), four years earlier than he was granted title to his land. He may have thought that black smithing would be as profitable as dairy farming. In 1871, Walter Riddell recorded in his diary that he took a mattock to Allan to be mended. A blacksmith's shop was described as being destroyed by

the 1881 bush fire but it is not clear that it was Allan's (Papers Past, OW 22/10/1881:21). Certainly he had bought a section which was well placed for that particular industry. The new Highcliff Road would provide his customers and their horses for shoeing ready access to his forge from both the north and south. Also an 1863 survey marked a bridle track (I44/442) from his section down to Broad Bay. Neill's 1901 map, however, marks a "Shoeing Forge" at 64 Seaton Rd, 2 kilometres away and not on Allan's section. Though in the mid-twentieth century, Leslie knew that Allan was a blacksmith, he does not say if the Harbour Cone forge was active after the bush fire in 1881.

William Allen is recorded as holding the freehold of 300 acres at Waimate, South Canterbury, in 1882, as well as 45 acres on Otago Peninsula, which is the size of Section 49 on Harbour Cone. His obituary mentions only his forge at Waimate. Given that the Tax Dept valued his Waimate land at £3 per acre and his steep Harbour Cone land at £14 per acre, this suggests that there was no house at Waimate (Government Property Tax Dept. 1884), and that Allan lived only at Harbour Cone. The evidence for a forge though is ambiguous.

He married Marion Seaton whose family had land further north on Highcliff Road and at Waimate. There is no trace that they ever had any children (see Appendix A). In 1935, his Harbour Cone land was held by Marion Allan, widow of Waimate, and in 1938 passed to The Perpetual Trustees, who according to the land deeds, sold it in 1960 to the neighbour Margaret Nyhon.

" I44/96 Allan's Farm and Forge

Mr. William Allen was one of the earliest settlers. He came in the Philip Laing. He was important in the Portobello church at its beginning. He married one of the Seatons and moved later to Waimate. He was a blacksmith by trade.

Neill's 1901 illustration shows many of the features still evident on the ground at the site of Allan's farm, located above Highcliff Road on a bend opposite the signpost to Bacon's track (I44/442). In 1974, Hardwicke Knight recorded the site, now I44/96, as "Allan's forge 1870s". In Neill's 1901 drawing the forge is likely to be the larger structure to the right of the two smaller. The archaeological remains today consist of the ruins of two stone structures, side by side, with the remains of a brick chimney still evident in the smaller, lower rectangle (Figure 65, 66). There was also likely to have been a farm building constructed out from stone revetting, with some structural wood still in situ (Figure 68). There is no particular feature that can be identified as the remains of the forge, although the brick chimney remains are a possibility, as is a pile of stones on a small knoll above the two ruins. The site also has a

complex of stone walls (Figure 69), including wall number 18 in Higham (1986) and a formed road (I44/443) that leads over a knoll around the northern slopes of Harbour Cone (Figure 70). Along the Highcliff Road boundary the hedge planting and pathway shown in the Neill drawing can still be seen (Figure 67), partially lined with stone, while a stone row runs down the hill from the formed road, ending close to the hedgerow.



On the right above the road were the ruins of Mr. W. Allen's house (20). These are well worth visiting. The walls were two feet thick. One fireplace built into the wall is most interesting. The house was built in the '70s. When Mr. Leslie was a boy the Christies lived here and he came to play with the Christie children. Later Dan Nyhon lived here.

Knight (1978: 62) notes "Allan's house and outbuildings are of stone, some of it locally obtained from outcrops, but the house appears to be of a stone very similar to that used on Larnach Castle which is described as Harbour Cone stone". William Leslie (n.d.-a) evidently considered the Allan house built from inferior local stone, unlike the Mathieson brothers farmsteads at Highcliff and Tomahawk, built of bluestone and still in good order today.

I44/443 Allan's road

This is a formed road or track that leads around the southern edge of the ruins of the Allan

house, through a gateway opening in a stone wall, over a knoll where a large macrocarpa tree is growing (although part of this has been blown down) and on around the northern slope of Harbour Cone (Figure 70). It has not been followed to its full extent. Parts of it are lined with stone. About 100 metres beyond the macrocarpa it intersects with Higham's wall number 18" (Middleton 2008:32-34).

Thomas Scott and the Bates Brothers (George and Robert)

Smiths Gully is a warm, north-facing gully, crossed by Sections 21, 48 and 50 (102 acres), which as a farm unit reach from Bacon Street to nearly Highcliff Rd on its south-east corner. When Larnach was buying land around his future Castle in the early 1870s, he took up these three sections and leased them in 1874 to Thomas Scott and the Bates Bros for £92 per annum (Larnach 1881:107).

Thomas Scott and George Bates are both listed as shareholders in the Harbour Cone Cheese Factory, but not Robert Bates (Smith 2017:65). Thomas Scott's daughter, Hannah, worked with Edmund Ward making cheese in 1877-1881. The Factory was near the centre of Capt. Leslie's land.

A settler called Bates is reported as starting the 1881 bush fire (Papers Past, OW 22/10/1881:22), and certainly the lowest of the three sections was well placed as the origin of the fire, which swept up from Broad Bay. One newspaper report, describing the progress of the fire, commented that "A little further along the road [from Roger's byre] Arnott and Scott's byres and outbuildings were burnt.....Mr John Nyhon's and Mrs Bates' houses were also on fire but the inmates succeeded in extinguishing the flames in both cases. A well-furnished hut, belonging to a Swede named George Halgren, was also burnt to the ground; and a little further on the Harbour Cone Company's Cheese Factory succumbed to the flames (Papers Past, OW 22/10/1881:22). Arnott's and Nyhon's byres are the only ones identified in the Weir map. The order in which the buildings are described suggests that both Scott's byre and at least one house belonging to the Bates family were up near the Highcliff Road end of their property. Site I44/982 (see above), comprising traces of a cottage and byre not marked on the early map (Neill 1901), would match the account, even though they are on Leslie's section.

A Scott's Farm is marked on the 1901 Neill map above Portobello Road to the west of Camp Rd (Knight 1978:55). This house would have been 1.5 k from the Bacon St entrance to the leased block of Sections 21,48, and 50, but it is not known if it belonged to Thomas Scott.

I44/442 Bacon's bridle track

Further along on the left (just at the turn), an old road, Glen Road up from Broad Bay is visible. It was always too steep except as a sledge track.

A bridle track shown on the Neill map is now a public walking track from Highcliff Road to Broad Bay, known as the Bacon track after an earlier landowner. Higham's (1986: 117) wall number 19 can be found near the bottom of the track, curving around the base of a small hill (Figure 64) (Middleton 2008: 32) .

Bacon, the likely builder of the wall, owned this land from 1860 until 1872, when Larnach purchased it. It appears that the same family purchased the land from the Camp estate in 1900 (OT124/48).

This early track and its associated stone wall (I44/452) are anomalous. The track appears as a road reserve on the 1863 survey map (SO1327), and as mostly a ruler-drawn road but with a kink at the lower end, marking where a track on the ground passed round the first spur running uphill. This suggests a pre-1863 date for the stone boundary wall (I44/452) running round the kink. The wall, however, includes large trimmed stones as from demolition of a masonry building, as well as paddock boulders.

A title search (OT124/48 and OT124/180, National Archives) shows that the land on both sides of the kink were originally part of old Sections 21 and 1 of 13, the latter being below the Hereweka Harbour Cone Block boundary. Middleton is probably correct (see above) in assigning the name Bacon Track to an early landowner, but Bacon owned Sec 1 of 13. Larnach took up Section 21, and it was part of the Scott and Bates leasehold farmland until the Larnach Estate sold it to sheep farmer, James Nyhon, in 1900. Section 1 of 13 was sold in 1900 to David Bacon, probably a descendant of the eponymous Bacon.

Edmund Ward's Farmstead: I44/441.

Edmund Ward, a railway worker from Sheffield, arrived in Port Chalmers with his new wife, Ruth, in 1874, and is recorded as a smallholder, Harbour Cone, in 1876 (Appendix A). He bought at least 49 acres (Section 2 of 51), extending

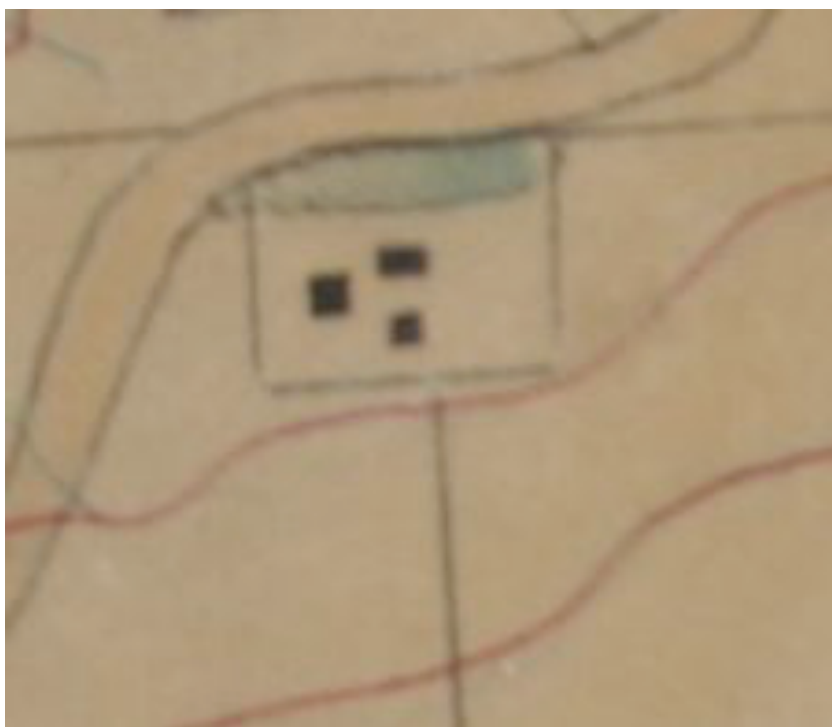
above and below Highcliff Rd on the north side of Harbour Cone. Having warm ground, it is not surprising that he had a relatively large shed and presumably herd (see below), and was appropriately employed at the Harbour Cone cheese factory 600 metres up the road (see above).

He had three daughters and five sons, one of whom was killed in the France in the First World War. All his children were born at Broad Bay (BDM), his youngest daughter in 1894, but by 1905 he is recorded in the electoral rolls as “farmer Ahuriri Flat” in the Catlins, by 1928 as “farmer Otekura” (further south in the Catlins), and was buried at Owaka (Appendix A).

“I44/441 Edmund Ward’s house

Further on, on the right had been (20) Edmund Ward’s house. He was the cheese maker at the Harbour Cone factory. Later Jim Christie lived there. There was a big cowshed.

This house site lies outside the Harbour Cone boundary but is included in this discussion as Edmund Ward, employed as the cheese maker at the Harbour Cone cheese factory, once lived there (Leslie n.d.-a, -b). The site of his house is in a stand of macrocarpas beyond Allan’s (I44/96) site, on the same side of the road. It is shown in Neill’s 1920 map, with three structures, but has no name attached. Stone features at the site are identified in Higham (1986: 108, 142) as walls number 1 and 1A. Higham gives the name of quarryman James Newton as the owner of the property, followed by Christie. This is likely to be at the same site where Knight (1979: 62) noted a stone byre and flagstone flooring north of Allan’s house (Middleton 2008:35).



A corner of Edmund Ward's land, containing the farmstead site, is now leased by the Hereweka/Harbour Cone Management Trust for \$1 from the owner, Deiter Dunkel, and is run as part of the farming operation of the DCC tenant, Brendon Cross. The house site and structures, therefore, fall under the Trust's management and should be included in this Plan. The land, 8.5 hectares adjacent to the Block, was acquired in 2019 mostly for its natural, scenic and recreation values which match those of the Block.

Related archaeological sites outside the boundaries of the Block

The Block is set in a landscape of archaeological sites of the same age and type, which are not under the management of the HHCMT. Some of these are industrial sites close to the boundary of the Block and provided employment for the Hereweka community. (Larnach Castle *per se* has been a major employer in the district, but is not an archaeological site.).

Six of these archaeological sites need to be taken into account, and their dates of operation /occupation determined. They are two lime kilns (I44/83, I44/84), Sandymount Creamery (I44/72), a goldmine in Battery Creek (I44/88, I44/543), Sandymount School site (I44/446), and also a stone wall (I44/411) on the upper side of Camp Road.

A general account of the lime industry in Otago is given above. James Macdonald built three lime kilns in quick succession in the head of Stewarts Creek, each with its own quarry, only one of which, the first (I44/183), is within the Block. The elaborate one (I44/84) halfway upslope to Highcliff Road was built between 1870-1872, the stonemason being William Dick (Smith 2015:46). Middleton does not agree (2008:12), stating that Riddell was involved in the building the second as well as the first kiln. The third kiln (I44/85) on Highcliff Road was built soon after, and at least the third, and probably the second kiln, provided some work for locals till 1939 (Smith 2015 :49); in the quarries, at the kilns and at the crusher opposite Riddell's house.

The Sandymount Creamery (I44/72) was built in 1893 and was the first of the 58 Taieri and Peninsula Milk Supply Company creameries which Walter Riddell established in East Otago. It was built on Riddell's section (Sec 8 Block III. SD) on the south side of Sandymount Road, just below its junction with Highcliff Road. Its presence changed the focus of the local dairy farms from making and selling their own home-made butter (and sometimes cheese) to selling whole milk to the one buyer, Taieri and Peninsula Milk Supply Company, who returned the whey for feeding pigs. The Creamery also bought firewood to drive the steam-powered milk separator and provided waged work for a few staff. It operated until farmers could buy their own small separators in about the 1930s, either hand driven (by a child) or electrically driven. The cream was then collected in characteristic heavy cream cans and taken into town by the Company's cream truck.

The first goldmine (I44/88, I44/543) in Battery Creek was worked by a group of local farmers on Robert Forbes land in 1870, and included Robert Dick as an early shareholder (Smith 2015:52). It was hard rock mining and there is the remains of the battery foundation near a 13 m deep shaft with some winch timbers up the creek. Besides the shaft, Hardwicke Knight recorded six drives (Knight 1978:62). It was in operation intermittently, 1870 to 1874 being the period which involved local names (Smith 2015: 51). More ore was retrieved in the 1880s, when a roller crusher was imported to use with the old battery. A century later in 1981 a large company (Circular Quay Holding Pty. Ltd) took out an exploration license with a view to open-cast mining of low grade ore.

After three years of testing and much local protest, they failed to find sufficient gold in their cores. A strange project was proposed in 1987 by Aurum Reef Resources (NZ) Ltd to reactivate the gold mine as one of four historic mines in Otago to make money from tourism (Smith 2015:55). Note that none of these projects would have local input.

A student dissertation of 2015 provides technical detail of the site, and sums it up:— “Initial sampling of mineralised rocks in the Battery Creek area returned 4.6-33.7 g/t gold. A subsequent study describes a pyrite-bearing syenite with up to 2.55-21.8 g/t gold. More recent investigations failed to find any significant mineralised rock” (Fleming 2015). This negative finding is reassuring from our point of view, since an open-cast mine would be an uncomfortable neighbour to the Block. Only three drives (adits) were found during this recent investigation.

The Sandymount School (I44/446) was initiated by Walter Riddell in 1871 in his own house. The first school per se was built in 1872, but the site was too exposed. It was only 60 metres down Sandymount Road from its junction with Highcliff Road, and is still marked by a 0.08 ha section cut of Riddell’s section and now occupied by a modern house (Smith 2015:183). In 1884 a new building was constructed in front of the school teacher’s house, 650 m down Sandymount Road from its junction with Highcliff Road, and the old school used as a community hall. The roll fell with the conversion of local farms from cows to sheep, and the school closed in 1949 (Smith 2015:184). Only the school water tank and the usual stand of big old macrocarpas remain (SRF I44/446).

The Camp Road stone wall (I44/411) is supporting the grounds of Larnach’s Castle, on the southern edge of Camp Road. It is the best candidate for the anecdote that Larnach liked to occasionally build walls himself.

Discussion

The farmsteads of Hereweka-Harbour Cone Block are set in a cultural landscape, which “is fashioned from a natural landscape by a cultural group.

Culture is the agent, the natural area is the medium, the cultural landscape is the result” (Sauer 1963:343).

In her papers on Hereweka-Harbour Cone Block, Middleton (2009, 2012) emphasizes how much physical evidence remains of its European colonial history “while the less visible, indigenous landscape associated with the story of Tarewai has persisted through Ngai Tahu oral history” (Middleton 2012:41). Middleton builds on this to point out that “ In archaeology, the use of ‘landscape’ has moved from the ‘settlement pattern paradigm’ to more inclusive approaches. A cultural landscape is a place that evokes memory and identity, often recalled through stories and imagination or read through visible archaeological features” (Middleton 2012:35) .

The Hereweka/Harbour Cone Block has been interpreted with the help of the memoirs of a third-generation member of one of the settler families, the Leslies (Middleton 2009). Born in 1888, William Leslie knew where each family lived during his childhood years around 1900 and where each track led to. His narrative builds context and gives colour to the simple descriptive material. The common problem with depending on such narratives are omissions. William does not mention the mysterious second farmstead (I44/982) on the leased section which his father may have occupied as a young man, nor did he appreciate the significance of the pit-sawn timber barn at Roger’s farmstead (I44/415). Hence these are omitted from Middleton’s 2008 report.

Though Leslie was aware of the importance of the creamery to local farmers, as a child he would not have been able to gauge the importance of Walter Riddell and his role in setting up the Taieri and Peninsula Milk Supply Company. Topographically the two districts are an unusual association, the Taieri Plain still being good dairy land today and the Otago Peninsula quickly losing its dairy farms early in the twentieth century. It suggests the importance of a charismatic individual such as Walter Riddell in the setting up of a significant enterprise.

West has made a thorough study of the change from Maori to colonial European property systems on the Otago Peninsula (West 2017). The Hereweka-Harbour Cone Block is an example of “the imposition of a cadastral landscape layer on an indigenous one, ... as private ownership was the primary step...” in the creation of the ‘improved’ landscape (Middleton 2012:40). Surveys, such as the 1863 one of the Block, are generally “presented as neutral, when in fact they are highly ideological, presenting productive units of land that have individual and exclusive property rights, often ignoring topography and ecology” (West 2009:17).

It is not surprising that the boundaries of the Hereweka-Harbour Cone Block are neither natural nor of much historic significance in themselves. They are just part the wider general grid imposed by the 1863 survey, but they do mark the two adjacent sheep farms which a modern Maori incorporation was able to buy in 1980, and which included a significant natural feature, Harbour Cone. The presence of the Cone strongly influenced public opinion when the Block came up for sale and subdivision in 2008. In order to control its future, Dunedin City Council bought the Block for its amenity, recreation, historic and ecological values, and after some discussion did not change its boundaries from those drawn by the nineteenth surveyors around 10-50 acre farms. There is, though, an internal boundary between the two adjacent mid-twentieth sheep farms which was socially significant in its day. Nearly all the settlers of the Block were from Scotland or England, but the Nyhons were Catholic Irish and the Stewarts Presbyterian Scots (Appendix A). This social division may show up in the archaeological record (Fig.3).

A Wakefield settlement?

The early nineteenth-century ideals of Wakefield settlements meant that sections around Harbour Cone were small and relatively expensive, but suitable for an “independent citizenry of family farmers”, who were expected to raise children to become wage-earners for capitalist settlers (West 2017:199). The Portobello-Harbour Cone area was unusual, in that a capitalist settler, Larnach, bought up many sections to create a thousand acre estate in the midst of the smallholders, which provided both land for leasing to those lacking capital and work at the Castle for wage-earners (Sneddon 1997). Larnach must have been well aware of Wakefield’s theories, since Wakefield’s nephew was a notable visitor to the Castle (Sneddon 1997:88). The small farms, even on the steep terrain of Harbour Cone, did support a dairy industry, even to the point where a small capitalist, Captain Leslie, tried to set up a cheese factory, even if it was a co-operative. He may have been able to do this because he had another good-paying job as a Master Mariner. The fact that Larnach had introduced both good blood stock and good farmyard practices could also have been a kick-starter. Walter Riddell, however, disrupted the Wakefield pattern completely. At first he was a settler, who built himself a fern tree house and pit sawed thousands of feet of timber, but in the 1890s he changed careers and developed one the largest butter factories in the Southern Hemisphere, not as a capitalist but as the leading light of a cooperative system. It may also be significant that Riddell had a working relationship with Larnach as foreman of the construction of Larnach’s Castle in the 1870s. There were possibilities for a flow of knowledge, contacts and capital to Riddell in the late 1880s.

The Hereweka Harbour Cone Block is a typical cultural landscape of its time,

except in two respects which may have been related. As a major land- and house-holder on the western edge of the Block, Larnach both provided both leasehold land and waged work for the locals. The Sandymount Creamery was the first of 28 that Walter Riddell built, in the course of establishing in Dunedin one of the largest butter exporting firms of the century, the Taieri and Peninsula Milk Supply Company.

In Summary

The Hereweka-Harbour Cone archaeological landscape (328 ha) of small colonial dairy farms includes the ruins of 14 named farmsteads and one unnamed, as well as William Larnach's Model farmstead site. There were also a few sections used by families who lived elsewhere, but the Block as a whole is a compact 2.5 kilometres either way. Nearly all farmsteads were occupied in the last half of the nineteenth century (1865 onwards), and are associated with stone walls along cadastral boundaries, disused benched tracks, and three abandoned lime kilns, their quarries and a crushing site. Nearly every farmstead is marked on the landscape by old macrocarpa trees, so much so that the Extra Farmstead on Leslie's leased land, which has no trees, was lost sight of until recently. One site was used as the Sandymount post office, and the sites of a school and a significant creamery are nearby. About the beginning of the twentieth century, two of the families (Nyhons and Stewarts) began to amalgamate the small farms around them and convert the land to sheep farming. The population declined. The school closed in 1949 and the post office in 1952. The Block was amalgamated into one sheep farm, run from Stewart's farmstead where a modern woolshed and yards were built.

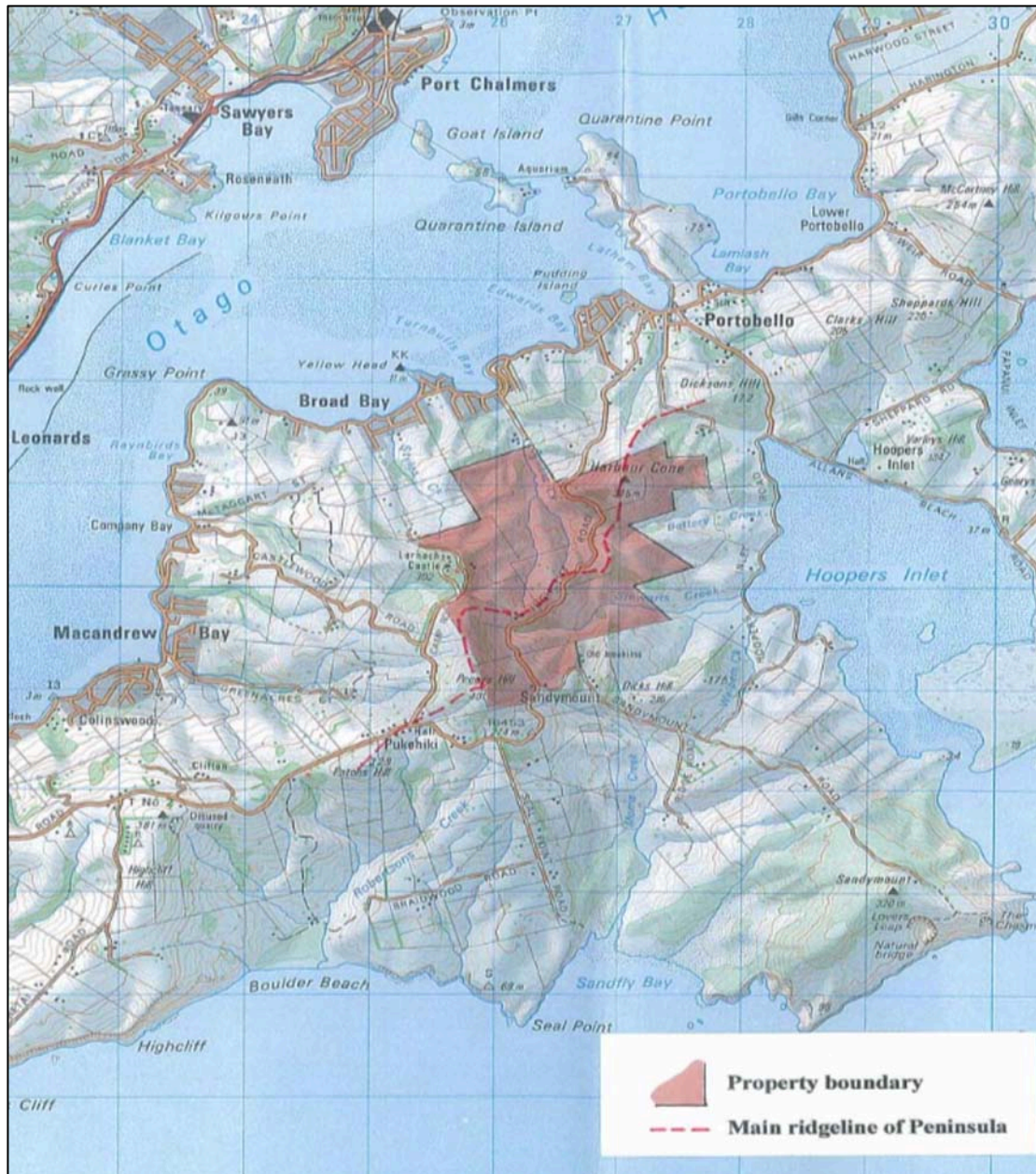


Figure 1. Location of the Hereweka/ Harbour Block on the Otago Peninsula.

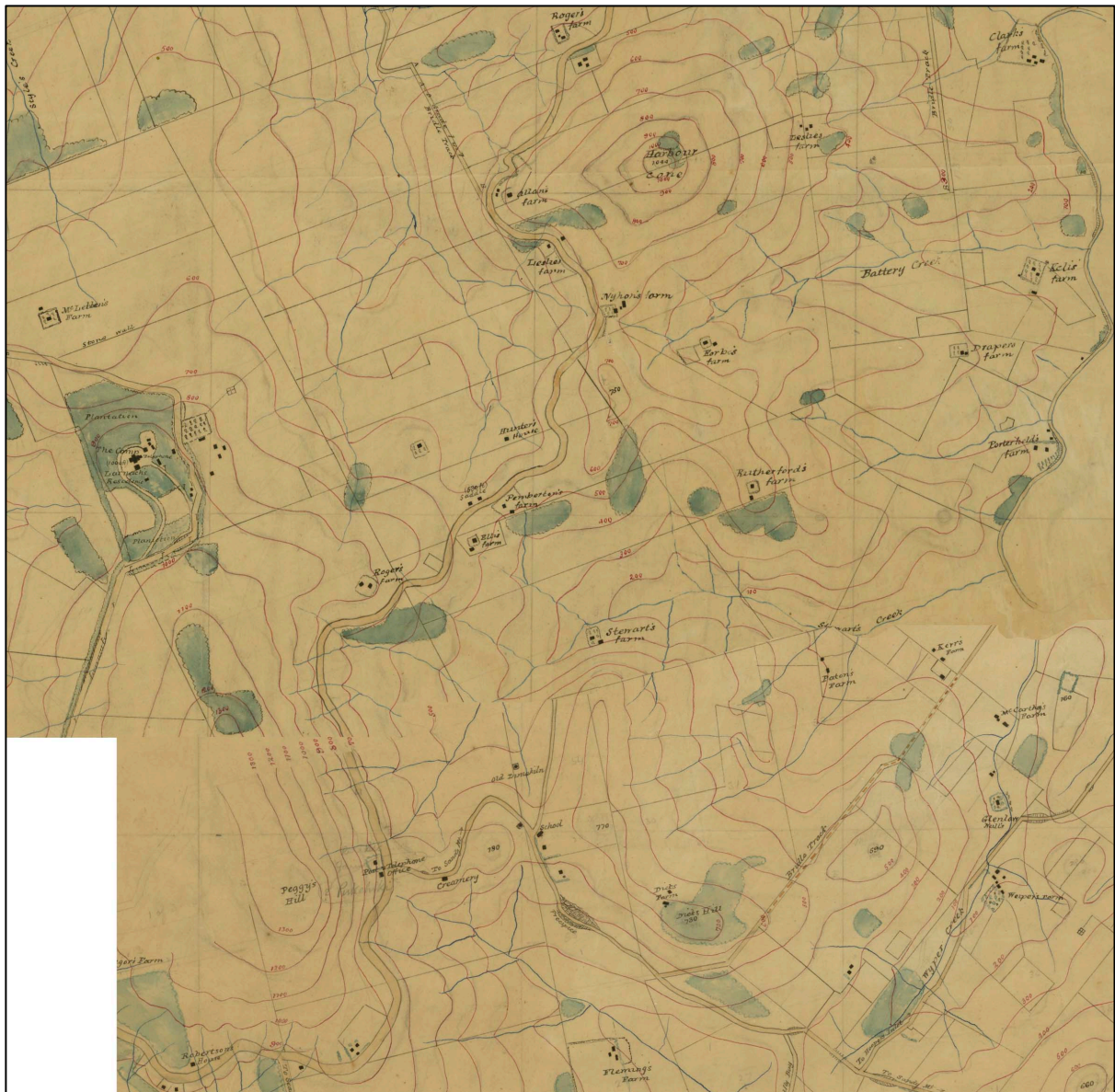


Figure 2 W.T.Neill map of Dunedin and Environs, originally drawn up as a military topographical map based on 1890s data.

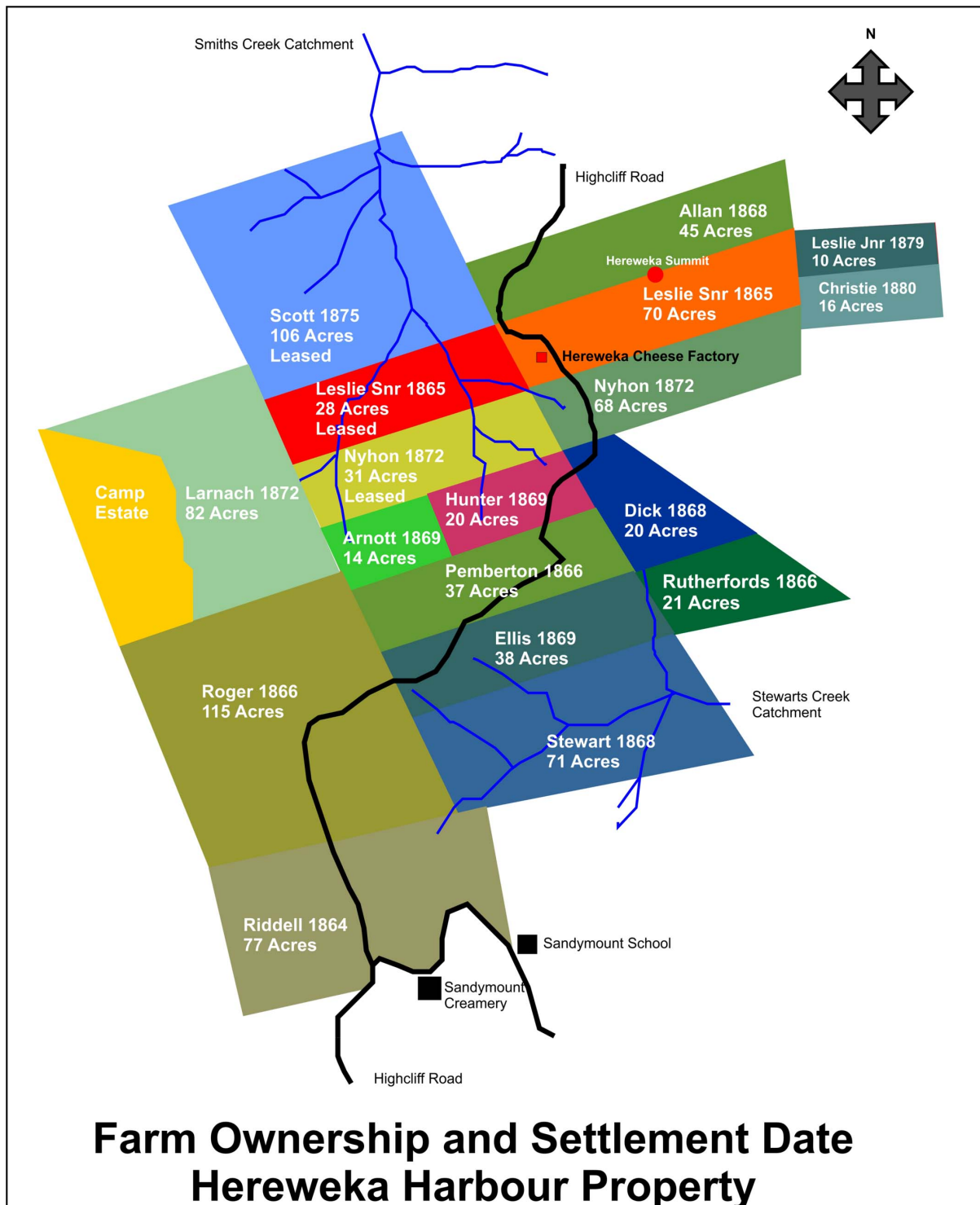


Figure 3. Farm ownership and settlement dates of Hereweka Harbour Cone properties by 1880.

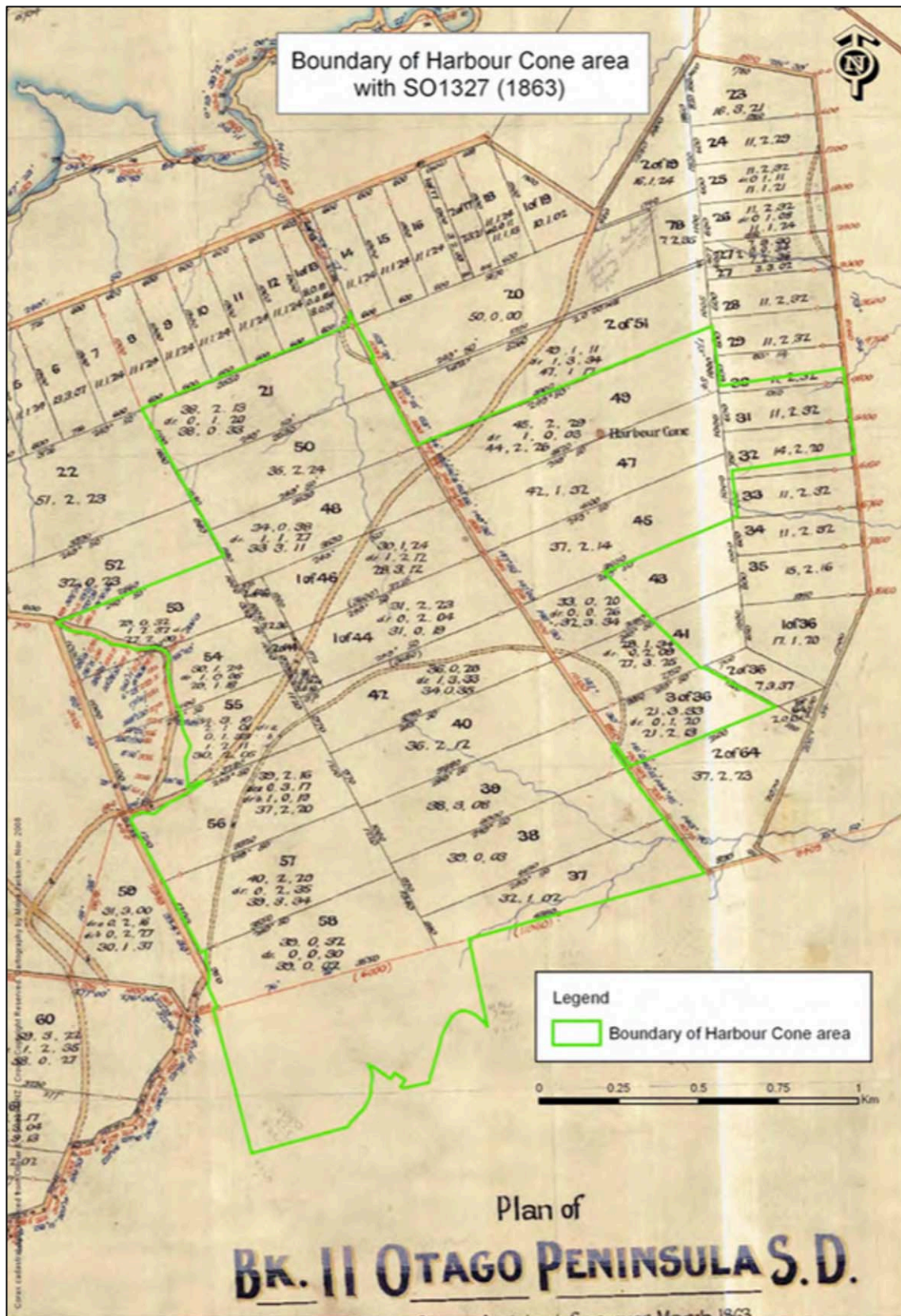


Figure 4 Survey map of 1863, showing Block II Otago Peninsula S D (SO 1327), with Hereweka Harbour Cone property outlined in green (from Middleton 2008).



Figure 5. The Leslie house in 1913 with Mrs Arnott and two children.

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