



New Zealand
Heritage Properties Ltd
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Serving the Community: St Patrick's Church Complex

**Final Report for Archaeological Investigations
at Site No. I44/539 – I44/542
Under Archaeological Authority No. 2013/61**

Report Prepared for St Patrick's Development Committee
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05/06/2018

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Project Details

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Reviewed By	Dr Hayden Cawte
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Report Submitted To	St Patricks Parish, Heritage New Zealand, Toitu Museum

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Abbreviations

Abbreviation	Definition
MNBC	Minimum number of butchery cuts
MNI	Minimum number of individuals
MNV	Minimum number of vessels
NISP	Number of identified specimens
NZAA	New Zealand Archaeological Association
NZHP	New Zealand Heritage Properties Ltd.
HNZPT	Heritage New Zealand Pouhere Taonga

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1 Introduction

New Zealand Heritage Properties Ltd (NZHP) was commissioned by OCTA on behalf of the St Patrick's Development Committee to undertake archaeological investigations at St Patrick's Basilica and surrounding complex (32 MacAndrew Road) in fulfilment of Archaeological Authority No. 2013/61. In 2016, project management was taken over directly by the church. This work follows on from the archaeological assessment conducted by NZHP, which determined that archaeological sites are present on the property (McPherson & Cawte, 2011). The property at 32 MacAndrew Road comprises of four archaeological sites within the church/school complex. These include I44/539 (the presbytery), I44/540 (St Patrick's Basilica), I44/541 (the new St Patrick's school) and I44/542 (the old St Patrick's school).

The property is situated at 32 MacAndrew Road, Dunedin and is legally described as Lot 2 DP 302974, 11751, Otago Registry (Figure 1-1). The St. Patrick's site also includes property numbers 28 and 42 MacAndrew Road. St Patrick's Basilica is registered with the HNZ as a Category II historic place. The site is located within a mixed use area of South Dunedin, surrounded by commercial, community and residential premises.



Figure 1-1 The location of St Patrick's Basilica, 32 MacAndrew Road, Dunedin (site complex outlined in red).

Due to the extent and nature of the works, progress has been staggered over five years from 2012 until 2017 as each portion of the site was upgraded. A total of three stages of work were undertaken which encompassed seven excavation areas (Figure 1-2). The **first stage** of works related to the new St Patrick's school building and was completed in 2012 (Excavation Area 1). This included:

- The construction of a rear egress to the northwest aspect of the structure;
- A new front entrance to the northeast aspect of the structure;
- Brick repointing and installation of new windows.

The **second stage** of works related to the presbytery was also completed in 2012-2013. This included:

- Demolition of the presbytery structure (Excavation Area 2);
- Establishing a new, landscaped greenspace in its place (Excavation Area 3).

The results of the archaeological excavations and analysis of these two stages have been reported in an interim report by NZHP in February 2013 (McPherson, et al., 2013). This interim report provided a summary of works undertaken but does not include in-depth artefact analysis and interpretation or building archaeological results and interpretation. These are included as part of this report.

The **third** and final stage of works is related to the basilica and was undertaken between 2015 and 2017. These works included:

- The removal of the 1960s front portico entrance to the basilica and service trenching (southeast aspect) (Excavation Area 4);
- The uplifting and reinstatement of a new floor within the basilica structure (Excavation Area 5);
- A new rear entrance on the northern aspect of the basilica and service trenching (Excavation Area 6);
- The construction of a new egress on the northwest aspect of the basilica (Excavation Area 7).
- Re-asphalting the carpark area.

This report summarises the findings of the archaeological investigations conducted over the four year period and is written in fulfilment of Condition 13 of Archaeological Authority No. 2013/61. The archaeological monitoring for this project highlighted the difficult ground conditions encountered by those building and occupying the low lying areas of South Dunedin.

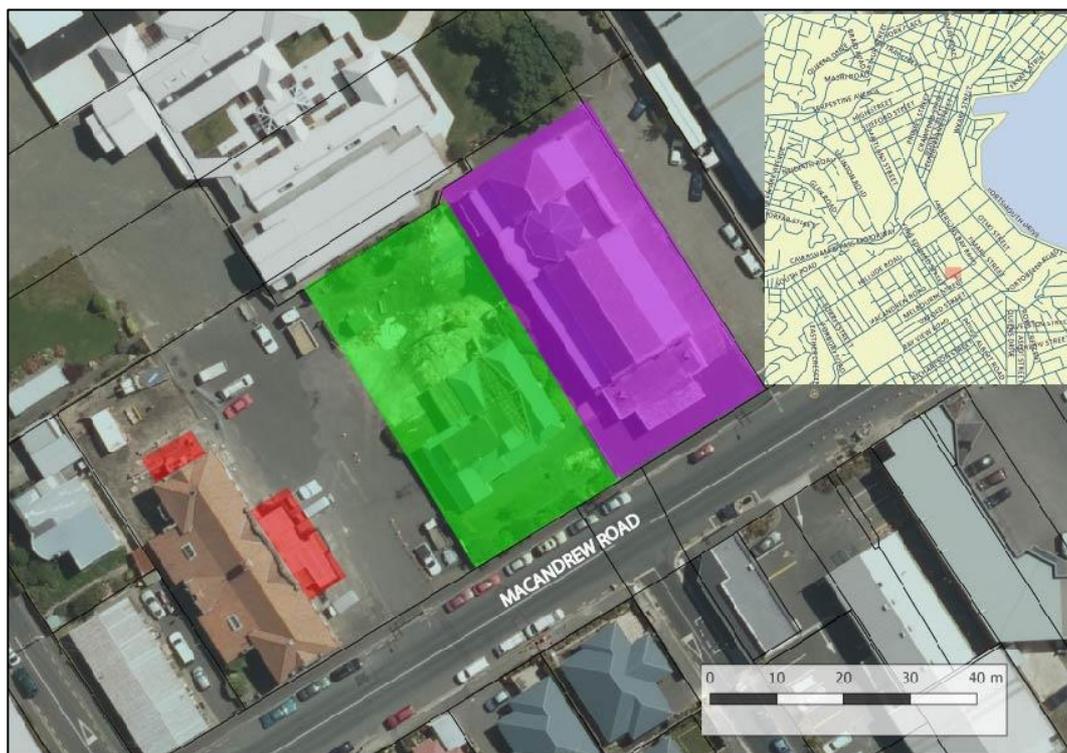


Figure 1-2 The three areas monitored during the redevelopment; stages 1, 2 and 3. Red: school excavations (EA1), green: presbytery demolition and site clearance (EA2 and EA3), purple: basilica excavations (EA4, EA5, EA6 and EA7).

At the time of writing, this is the only religious complex in South Dunedin to be redeveloped in entirety with archaeological inquiry. As such, St Patrick's provided a unique opportunity for NZHP to investigate and interpret both, a site of continued single use and, large scale development in South Dunedin starting in the nineteenth century.

NZHP used this opportunity to explore three main leads:

- Did the low-lying nature of the property, with a high water table, affect the development and archaeological sites since its inception in the nineteenth century through to modern day?
- What kind of archaeology would be found as a result of the site being a large public space utilised by one entity continuously for multiple uses; religious, education and administration and accommodation?
- Can the architect of the presbytery be attributed from the building archaeology?

1.1 Project Background

The purpose of the Church's upgrade programme at 32 MacAndrew Road, Dunedin was to revitalise the site for better community use in response to planned closures of parishes across the City. Over the last couple of years, the Catholic Diocese of Dunedin has closed three parishes; St Bridgette's (South Dunedin), St Bernadette's (Waverly) and St Alphonsus (Waverly). As a result, St Patricks Basilica was designated as the main configuration for these parishes and central location for Catholic support services.

1.2 Physical Environment and Setting¹

Central Dunedin is situated at the head of an inlet that is now known as Otago Harbour and suburbs of the city extend along the coast and harbour to the northeast, to the Taieri Basin to the west, and along the flats and coastal ranges to the south. The geographical setting is important for understanding the archaeology of the region. The landscape played a significant role in determining how the city was settled, and Dunedin's residents considerably altered the natural environment. The following sections provide a general overview of the geomorphology of central Dunedin and consider changes that have occurred to the landscape over time and the current built environment.

1.2.1 Geomorphology

The geomorphology of the area immediately surrounding Dunedin can be characterised by several distinctive landforms, including the Otago Harbour, the Dunedin Volcano, the Taieri Plains, and the Coastal Ranges (Figure 1-3 and Figure 1-4). The central city lies within an area of relatively low relief and is bounded by a ridge that runs southwest to northeast. When Dunedin was initially settled, there was little flat land within the central city, with the current flat land along the harbour being the result of an extensive reclamation programme.

The hills are dissected by numerous gullies and valleys with rivers, streams, and creeks, with the prominent watercourses within the city including the Water of Leith and the Kaikorai Stream. There were also several streams draining the low-lying area of the south Dunedin flats, including Caversham, Glen or Mornington, Corstorphine or Sidey's Creeks (Otago Witness, 1877).

Most of the residential areas of the city are hilly, including areas within the Dunedin Volcano and Coastal Ranges. Less than a tenth of the urban area is flat to gently sloping (*i.e.*, less than 8°), which primarily consists of Quaternary valley fill or coastal sediments (Glassey, Barrell, Forsyth, & Macleod, 2003). Both the topography and the drainage systems have played an integral part in how the land was utilised.

¹ Relevant sections taken from (Mee, 1978)



Figure 1-3 Photograph of Dunedin with St Kilda in the foreground looking north towards the city and surrounding hills (Glassey et al., 2003).



Figure 1-4 The site and plan of Dunedin, 1846-1847 (Forrest, 1964).

1.2.2 Landscape Transformations – Dredging, Reclamation, and Major Earthworks of South Dunedin

Since the initial settlement of Dunedin, the landscape has been significantly transformed. Dredging and land reclamation are the two most obvious changes to Dunedin's physiography; however, there was also significant re-shaping of the topographic features within the city, including the lowering of Bell Hill. Less visible, but equally significant, work has been done to improve the drainage of the low-lying areas throughout Dunedin, particularly in the central city and south Dunedin flat, which lies to the south of the central city and includes the suburbs of South Dunedin, Tainui, St Kilda, Forbury, St Clair, and Kensington.

Much of the flat land in the central city and south Dunedin flat were swampy and considerable work was required to drain these areas in order to make them habitable. From the time the South Dunedin Flat was occupied, drainage was a point of consternation for its residents. While this landform is one of the few flat areas within Dunedin, its settlement was problematic due to the high water table, which is between 0.3 and 0.7m below the modern surface (Rekker, 2012). Additionally, there were numerous streams draining this low-lying area (Caversham, Glen or Mornington, Corstorphine or Sidey's Creeks).

In order to cope with the swampy conditions and high water level in the South Dunedin Flat, considerable earthworks were undertaken. Installing drainage throughout the flat was challenging due to the low elevation and gentle gradient (Otago Witness, 1877). Drainage channels were an initial means of dealing with the swampy land, and channels were dug by the borough as well as by individuals around their properties (Stedman, 1966). These measures were not successful due to the fact that the land was so low in comparison to the high tide level

(Stedman, 1966). Embankments were built and land reclamation occurred along Anderson's Bay Road and tram and light rail tracks were laid on the higher ground of the flats (Rekker, 2012). Sand was quarried from the dunes and was used in the reclamation of the wetland (Rekker, 2012). Landfills established in the dunes during the twentieth century also represent in-filling of this low-lying area (including Kettle Park); although, this practice declined from the 1960s (Rekker, 2012). The area between Andersons Bay Road and Portsmouth Drive was reclaimed in the 1960s (Rekker, 2012).

1.2.3 Built Environment

The rejuvenation of 32 MacAndrew Road into a more useable space for public gatherings and parishioners alike has been ongoing since late 2012. The complex is comprised of three main components, the Category II listed St Patrick's Basilica, the second St Patrick's school building and the pre-1900 presbytery between the two. Redevelopment has focused on the land and buildings within the confines of the church grounds identified as that bound by MacAndrew Road to the south, the brick walls to the north, the corrugated iron fence to the east (at right of the basilica) and the boundary fence to the west behind the new school building.

As of September 2012 when the project began, the existing built features at the St Patrick's site included three buildings associated directly with the church; the St Patrick's Basilica (1898), the new St Patrick's school building (1916), and the presbytery (circa 1890s – 1970s) (Figure 1-6 to Figure 1-12). The site also included modern utilitarian garaging and several post-1900 outhouses. In Figure 1-5, the footprint of the original St Patrick's school-chapel demolished in 1986 is visible.



Figure 1-5 Aerial photograph of St. Patrick's Basilica (outlined in blue), new school building (outlined in green), and presbytery and associated buildings (outlined in red) at 28, 32 and 42 MacAndrew Road (Dunedin City Council Webmaps). The footprint of the old school building is indicated by the purple arrow.



Figure 1-6 Front entrance to St Patrick's Basilica September 2012 (southeast aspect).



Figure 1-7 St Patrick's school building September 2012.



Figure 1-8 Front view of the presbytery September 2012 (southeast aspect).



Figure 1-9 Rear view of the presbytery September 2012.



Figure 1-10 Outhouse associated with the presbytery September 2012.



Figure 1-11 Second outhouse associated with the presbytery September 2012.



Figure 1-12 Modern garaging and asphalt car park September 2012.

1.3 Historical Background²

Dunedin was founded as a joint venture between the New Zealand Company and the Lay Association of the Free Church of Scotland (Table 1-1). The town was to be the nucleus of the Otago settlement, a planned colony built primarily for protestant Scottish settlers. The town name of Dunedin, the Gaelic name for Edinburgh, had already been settled upon when the land on which the town would be established was decided by Frederick Tuckett, a New Zealand Company surveyor, in 1844. Sealers and whalers were said to have used the harbour possibly as early as 1817. The current corner of Princes and Water Streets is believed to be the place where early Maori had landed their canoes when entering into Otago, and it continued to be used as a landing place by the early European settlers (McDonald, 1965; Reed, 1956).

In 1848, the first 344 settlers arrived on the John Wickliffe and the Philip Laing (McDonald, 1965). Contemporary accounts suggest that life was hard. There was little in the way of building materials, and the first houses were made of scrub timber, grass thatch, and mud coated walls (Forrest, 1964). Rain and swampy conditions were a constant issue. By the 1850s, the worst of the early trials were over, and Dunedin had established itself into a working frontier village. The Otago Provincial Council was established in 1853, and Dunedin became self-governing (Reed, 1956).

Gold was discovered in Central Otago in late 1861. Dunedin, with its established port, became the *entrepôt* for the thousands who flocked to the goldfields, and the character of the town began to transform. A sleepy colonial village became a “bustling, rowdy raffish” place (McDonald, 1965), and Dunedin was regarded as a city by 1865 (Clark, 1961). (Cropper, Shaw, Moyle, Davies, & Cawte, 2014)

² Relevant sections adapted from (Mee, 1978) and (Cropper et al., 2014).

Table 1-1 Key dates in Dunedin's history.

Date	Event
1846 - 1847	Survey of Dunedin
1848	First settlers arrive
1853	Otago Provincial Council established
1858	Bell Hill cutting begins
1861	Gold Rush begins
1864	Gold discovered on the West Coast, miners begin to leave
1865	Establishment of the Corporation of the City of Dunedin
1873	Julius Vogel elected Premier of New Zealand
1876	Otago Provincial Council disestablished
1880	Beginning of New Zealand's 'Long Depression'
1882	First frozen meat shipment leaves Port Chalmers
1886	Roslyn Woollen Mills opens
1889 – 1890	South Seas Exhibition
1898	Industrial Exhibition

Adding to this was unpleasant impact of thousands of bodies on a town that was not equipped to support them. Land became cluttered with tents and shanties before any appropriate arrangements could be made for the effective disposal of refuse and human excrement. Buildings were cheek-by-jowl and fires were exceedingly common (Ledgerwood, 2008; McLintock, 1949).

Negative aspects of the rush were counterbalanced, to a degree, by the tremendous economic growth that accompanied them. As the people poured into the goldfields, the wealth poured out to Dunedin. Many businesses were established in order to serve the needs of the newly moneyed miners. Storekeepers, hoteliers, theatre owners, landlords and others, were made rich. By the late 1860s Dunedin was the largest and wealthiest city in New Zealand and its appearance began to change again. New money allowed grand buildings of stone and brick to be erected when the ramshackle wooden buildings constructed during the initial rush were inevitably destroyed by fire (Clark, 1961; Watt, 1972).

As the golden frenzy of the 1860s passed, the prosperity of the town was maintained into the 1870s through rising wheat and wool prices along with the public spending and immigration policies instituted by Premier Julius Vogel. The population of Otago roughly doubled between 1871 and 1875, with almost 18,000 people arriving in the province. Industrialisation began in earnest, and by 1875 Dunedin was the foremost commercial centre in New Zealand (McDonald, 1965; Watt, 1972).

Dunedin's commercial dominance was to continue throughout the latter half of the 1870s until the end of the 1880s. Industry continued to develop, even with the onset of economic depression throughout New Zealand in the 1880s. Frozen meat shipments began to leave Port Chalmers in 1882, worsted began to be produced in the Roslyn Woollen Mills in 1886, and cement and steel began to be produced in the city in 1889 (Clark, 1961).

Against this scene, the social character of the city was to change significantly. By the 1880s there was to be no more rapid population fluctuation as had occurred in the preceding decades, and the heavy hand of Victorian morals settled upon the city (Watt, 1972). Accompanying this social shift was the development of an urban underclass in the latter quarter of the nineteenth century with several slums recorded around Dunedin towards the end of the century (Clark, 1961).

By the end of the 1880s, Dunedin had arguably reached the pinnacle of its prestige and dominance within the country. The opening up of North Island land following the New Zealand Wars resulted in a northward drift as people migrated to the newly available pastures. Though the city continued to develop (better roads and sewerage systems are key examples), prospects did not look good as the twentieth century dawned. In the words of Clark (Clark, 1961): "While other centres raced ahead in the new century, Dunedin seems to have moved into a quiet backwater."

1.3.1 South Dunedin

Lasting European presence in the southern suburbs began in 1849 when William Henry Valpy and his family arrived in Dunedin from India aboard the *Ajax*. Valpy established a 120 acre farm (called the Forbury) at St Clair. The farm was centred at the base of the hills on what is now Norfolk Street (Figure 1-13). At his own cost, Valpy had a road built from Dunedin to his farm and formed tracks from the farm to the beach. Valpy named the valley north of his farm Caversham, after his wife's birthplace (Newton, 2003; Olssen, 1995).

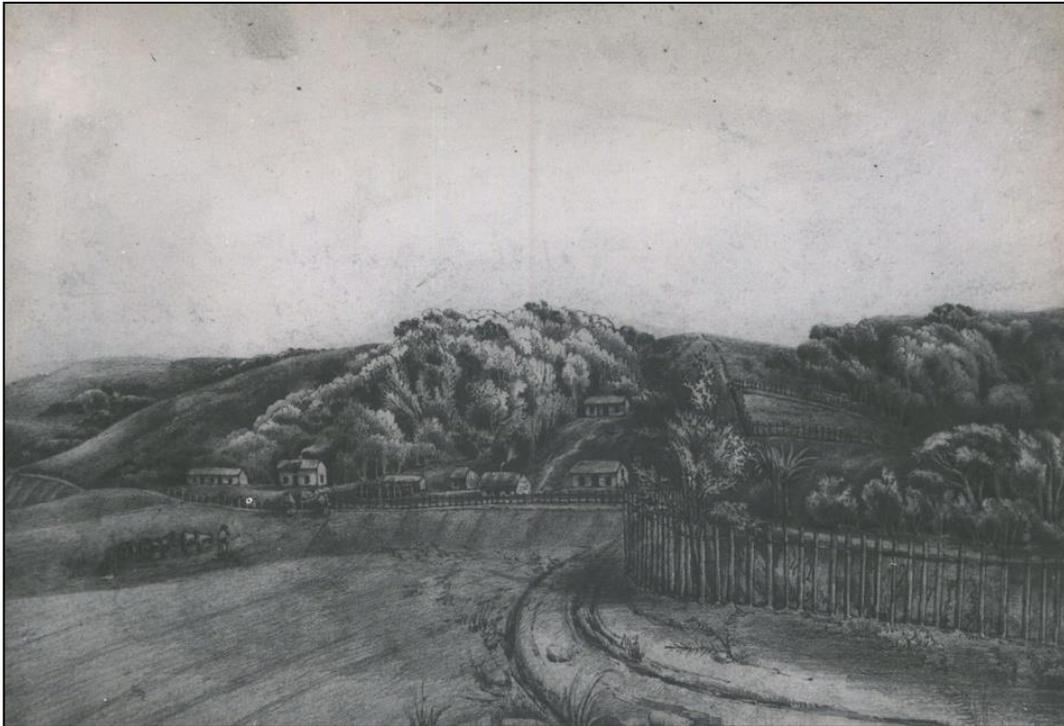


Figure 1-13 1857 sketch of the Forbury Farm buildings (Anon., 1857).

Others soon followed Valpy to the south Dunedin flats, including Captain Blackie, who sold lime from the Caversham Vale as early as 1851 (Otago Witness, 1851), but the area remained sparsely populated throughout the 1850s. Settlement was concentrated on the dry land at the foot of the hills overlooking the swampy plains that would become St Kilda and South Dunedin. The flats themselves remained largely undeveloped. Poor drainage on the flats made for an unreliable crop yield, and to be economical viable, farms had to be large until work could be undertaken to drain the swampy land (Stedman, 1966).

Development of the region began along the main routes, with Caversham being the first area to see subdivision and development in the 1860s. The Main South Road passing through to Green Island became a major thoroughfare for those on their way to the gold fields, and a number of hotels appeared in the Caversham area to service miners on their way to the gold fields (Figure 1-14) (Rutherford, 1978). Caversham was to remain the most populous part of the southern suburbs for the remainder of the nineteenth century. In 1865, the Otago Provincial Council established the Caversham Road Board whose domain stretched across the south Dunedin flats (McDonald, 1965).

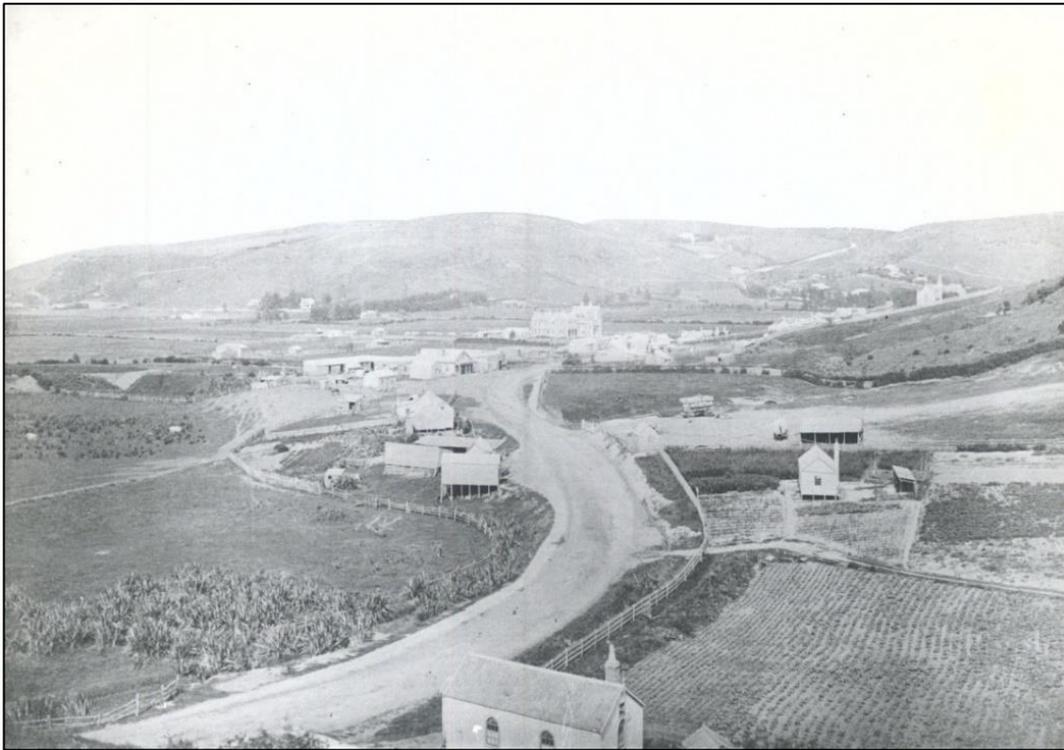


Figure 1-14 The nascent Caversham township looking east down Main South Road, 1867 (Anonymous, n.d.).

Further south, St Clair would remain a small isolated rural settlement throughout the 1860s and 1870s. It could take up to a day on muddy roads to reach the beach from Dunedin town. Farms and gardens were the dominant features of the landscape, with a number of market gardeners and nurserymen establishing themselves in the area towards the end of the 1860s. Notable among the horticulturalists were the Chinese market-gardeners who established operations around the Tonga Park area. A Chinese community remained in the suburb through into the twentieth century (Newton, 2003).

During the 1870s and 1880s St Clair began to be viewed as a recreational destination rather than a rural satellite. St Clair was the place for a promenade along the beach where one could indulge on some 'healthy ozone.' The most significant of these were the salt water baths; established in 1884 (Newton, 2003). Residential development in the suburb continued gradually over the 1880s and into the twentieth century, transforming the area from farmland into a semi-urban borough (and later suburb).

St Kilda also remained sparsely populated throughout the 1860s and early 1870s. The area was surveyed and put up for sale in 1862, but there was little interest due to the fact that most land was swampy and undrained, and there was no direct route to Dunedin. Instead, much of the land was to remain as grazing pastures for cattle. The only major development during the earliest period of the suburbs history was the founding of Forbury Park Race Course. This track began to be laid out in 1869 and the first race was held there in 1871 (Aitken, 1975; Newton, 2003). St Kilda slowly developed as a suburb from the 1880s through to 1900. The horse drawn tram line was opened in 1881, gas piping was supplied from Caversham from 1885, and various roads and drainage ditches were formed (starting in the 1880s with Richardson Street, Moreau Street, Freyberg Street, Grove Street, Tedder Street, Eskvale, and New Street).

Despite these early ventures, the bulk of industrial development would not occur until the construction of the rail line along Main South Road in 1874. Once the rail line was constructed, the affordable and easily accessible land on the flats attracted Dunedin's industrialists who began to develop the area for manufacturing. South Dunedin began to develop an industrial complex along the rail line that ran along the suburbs northern boundary. These industries included a rope and twine factory, a box factory, a fruit cannery, a furniture workshop, and a number of other small establishments (Clark, 1961). The rail workshops (Figure 1-15), which

had moved from Port Chalmers in 1874, were an important regional supplier of rail products and a large employer in the area, though the pollution from the workshops along with that of the nearby gasworks mired the air and dirtied the nearby houses clumped in the shadow of these industries (Clark, 1961).

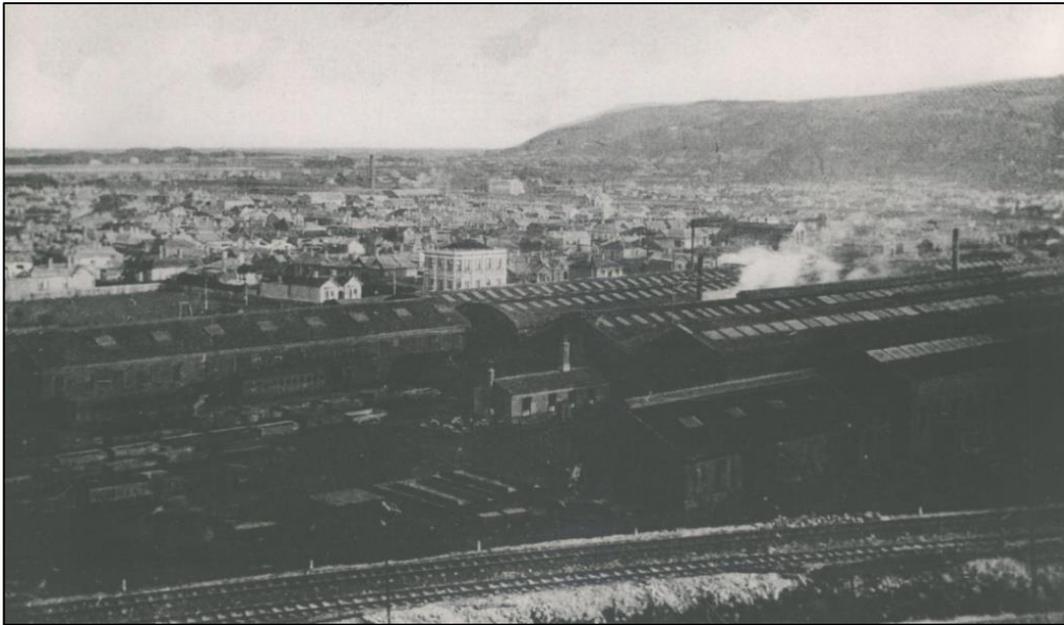


Figure 1-15 Looking south and west towards rail workshops and the flats in South Dunedin (Anon., n.d.-a).

Several settlement clusters began to develop as a result of this rapid population increase, each with its own commercial centre and character. Between 1874 and 1875, the South Dunedin flats were divided into three boroughs: Caversham, St Kilda, and South Dunedin. The boroughs incorporated several established townships. For example, Caversham included the townships of Kensington and St Clair within its jurisdiction, and Musselburgh was part of the St Kilda Borough. The boroughs set out improving transportation lines in their jurisdictions. In 1877, all three borough councils accepted tenders for horse-drawn trams that were completed in the early 1880s (McDonald, 1965). The trams ran from the Oval to a junction at Cargill's Corner; one line continued down Hillside road to Caversham and the other branched south to St Kilda beach along King Edward Street (Figure 1-16). Shortly after a line was established from Forbury Corner to St Clair (Olssen, 1995). This augmented a train service to Forbury Race Course, which was established in 1876 by the private Ocean Beach Railway Company (Aitken, 1975). The line left the government track near the gasworks and ran along the harbour foreshore to Musselburgh where it turned to Forbury Park. A second branch was opened to Andersons Bay in 1877; however, the patronage of this service was low, suggesting that the St Kilda area remained sparsely populated. This is supported by the low population of St Kilda in comparison with the boroughs of Caversham and South Dunedin. By the 1880 a passenger service was only conducted on race days (McDonald, 1965).

By 1901, large parts of the flats remained unoccupied. Market gardens still existed between clusters of development as they had done from the 1860s onwards (Figure 1-17) (Stedman, 1966). Drainage remained an issue, and though a reticulated water system had been established at great cost throughout the Caversham Borough by 1900, cesspits and night-soil collectors were utilised in the suburb as late as the 1930s (Olssen, 1995).



Figure 1-16 Looking south across Kensington and South Dunedin *circa* 1880s. Cargill's Corners can be seen on the extreme left (Burton Brothers, 1880).

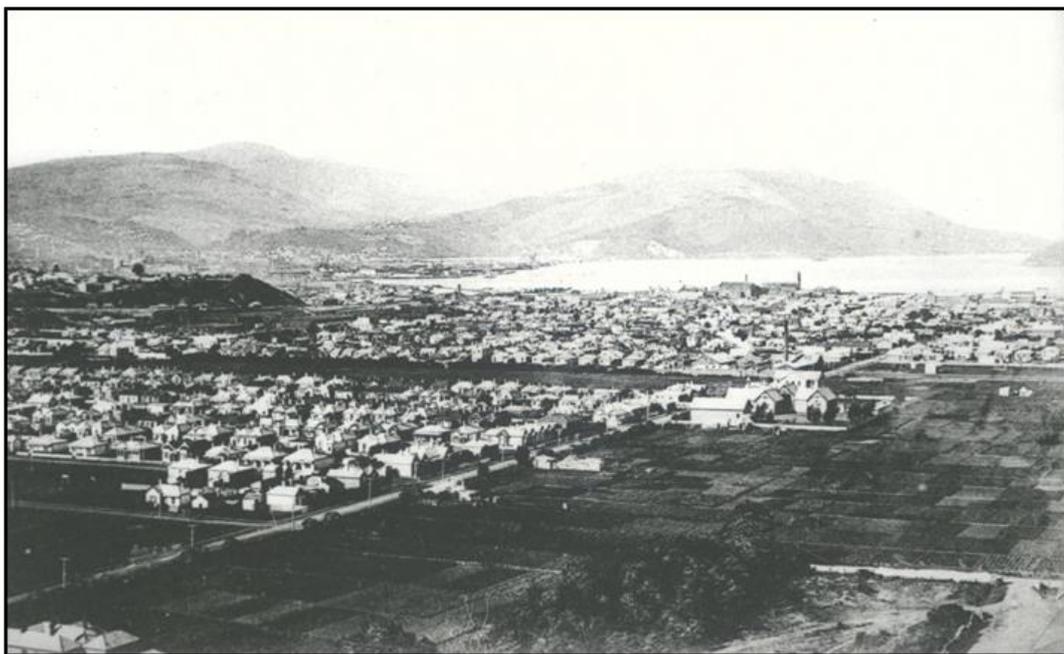


Figure 1-17 Looking north across the flats, *circa* 1905. Note that large areas are still under cultivation. The silhouette of the gasworks smoke stack can be seen in the background against the harbour (Anon., n.d.-b).

1.3.2 History of the St Patrick's Complex³

The St. Patrick's complex was located within the South Dunedin Borough. South Dunedin along with neighbouring Boroughs of Caversham and St Kilda occupied an area referred to as 'the flat' (Mee, 1978, 1994; Olssen, 1995). In 1904, all three boroughs merged with the Dunedin City.

³ Taken from (Mee, 1978)

Dunedin had its first Catholic church in July 1862, in the central city on Upper Tennyson Street, dedicated to St Joseph. In 1869, Bishop Moran (in office 1869-1895) was the first appointed bishop of the newly created Dunedin diocese and soon looked to other sites within Dunedin for another Catholic church. In May 1873 Moran bought an acre of land for £200 in MacAndrew Road, South Dunedin where he envisioned a future church and school to provide for Catholics in the South Dunedin. It was under his directive that a building programme for the church began at the current St Patrick's site (Mee, 1978).

In 1876 the Borough of South Dunedin was given municipal status, and the suburb developed as a residential and commercial area. On June 11, 1876 a public meeting was held at Ocean View Hotel where Moran discussed with local Catholic community what type of building would best serve them in the South Dunedin area. Catholics were excited about having a local church, priest and religious teacher and unanimously voted for a chapel-school and a committee was set up to finance it (Mee, 1978).

The first structure on the site (removed 1986), was the wooden St. Patrick's chapel-school designed by Francis Petre (1847-1918) and built in 1878. During its early days, the parish priest commuted from offsite private lodgings until a wooden presbytery was built by Father Vereker using the materials from the City Hotel in town. Similarly, from 1882, the Dominican Sisters commuted daily to the chapel-school from St Dominic's Priory to teach and manage the school. They continued to teach there until 1896 when they were replaced by the Sisters of Mercy (Glen, 1996; Mee, 1978).

As South Dunedin grew, so did the Catholic population. During the planning for the first school-church, Bishop Moran already had Petre lined up to build another church building on the site, the St. Patrick's Basilica (Mee, 1994).

Francis Petre was an architect of the great Roman Catholic basilicas around the South Island. His work was highly significant in New Zealand European derived architectural history and he is considered one of the most important architects associated with the Catholic Church in New Zealand. All of his buildings were built under his supervision and included many large scale Catholic churches and several private residences (McCoy, 1988; Mee, 1994). For several decades (between 1870 and 1910) he was known as the architectural 'go-to' man within the Catholic Church (pers. com Catholic Diocese of Dunedin Archivist).

In 1892, after several years of furious fundraising, Bishop Moran blessed the foundation stone of the St. Patrick's Basilica. The new church was designed to accommodate 1000 worshippers in the South Dunedin area and opened partially finished in 1894 due to financial restrictions. As money came to hand, work continued on the interior and it the basilica was reopened in 1898 (Mee, 1994).

In 1896, Bishop Verdon (in office 1896-1918) replaced Bishop Moran and was consecrated at St Joseph's on 3 March. He announced his arrangements for the Sisters of Mercy to come to South Dunedin from New South Wales later that year. The Sisters of Mercy, founded in 1827 in Ireland, were widely diffused throughout English speaking world. They devoted their lives to the sick and distressed in addition to caring for orphans. They took over teaching at the chapel-school from the Dominican Sisters and worked closely with the South Dunedin community establishing the St. Vincent de Paul's orphanage (1898), St Philomena's high school (1897), and the later boarding school Moreau College (1976). Bishop Verdon gave them the since removed wooden presbytery to use as their convent until a new convent was built across the road in 1902. They taught at St Patrick's until the 1960s when lay teachers replaced the sisters (Glen, 1996; Mee, 1978). During Bishop Verdon's appointment, he also organized the building of a new brick presbytery on the St. Patrick's site adjacent the basilica.

In 1913 the roll at the school had increased to 329 and Bishop Verdon started to plan for a new church building next to the original wooden chapel-school. After another couple years of fundraising within the community, the new St. Patrick's school building, designed by Mandeno, was opened in 1917 (Mee, 1978). Mandeno (1879-1973) was part of another important architectural firm in Dunedin, Mandeno and Fraser. They designed several

important buildings between 1915 and 1940 that include the Dunedin Town Hall, King Edward Technology Centre and the Dunedin Central Fire Station.

In 1960 the basilica was deemed complete when a front porch was added to the southeast elevation to MacAndrew Road. It was not the original design by Petre but a more simple structure designed by E.J. McCoy (see Figure 1-6). The site continued to be expanded with the establishment of St. Philomena's College, and other associated school buildings on the block (Figure 1-18). Since the image from the Otago Daily Times (ODT) in 1976 (Figure 1-19), most of these structures have been demolished including the original wooden chapel-school in 1986.

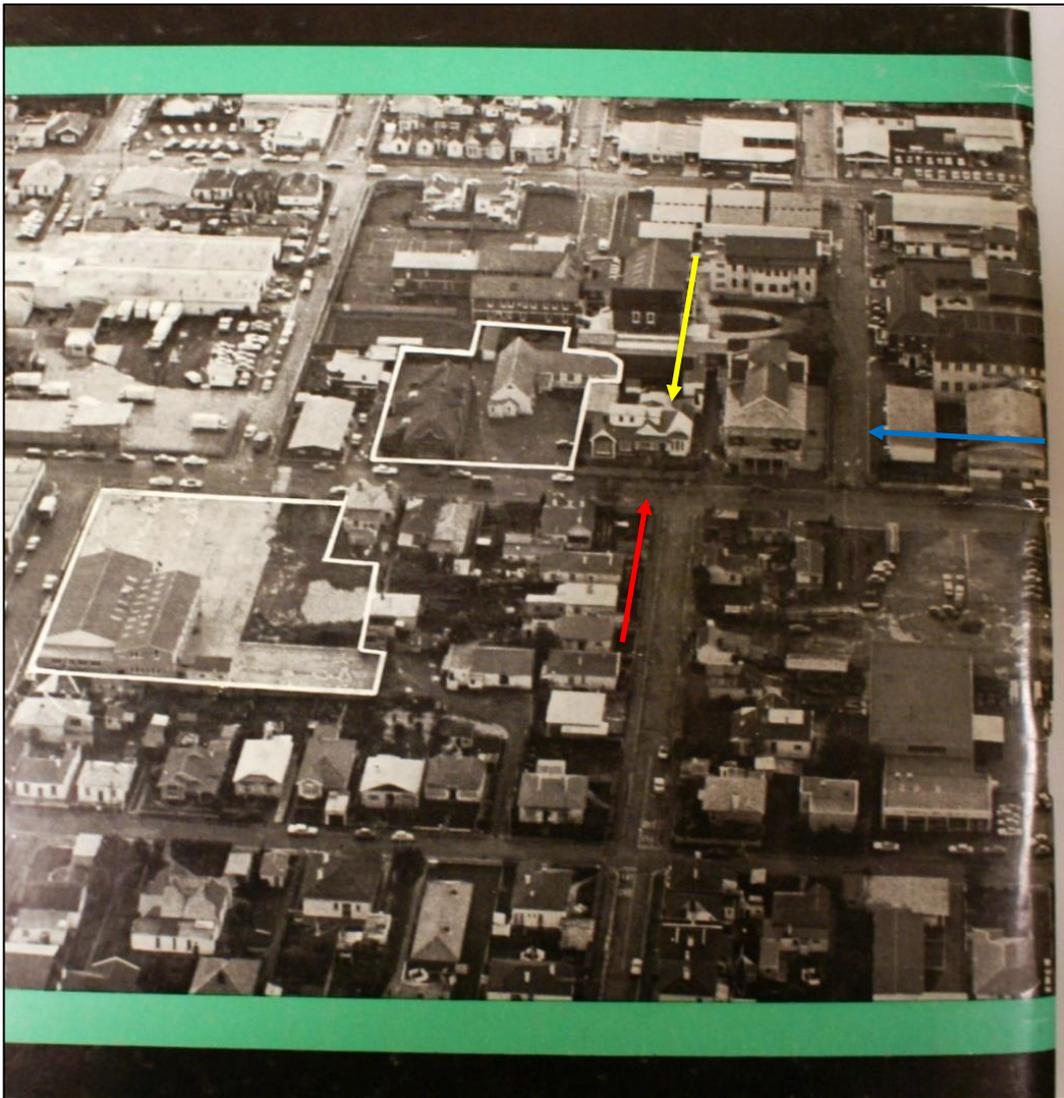


Figure 1-18 Aerial view of the site in 1978. Outlined in white are the old St Patrick's chapel-school and the new brick St Patrick's school. The red arrow points to the current presbytery on the site, the yellow arrows point to the two wooden out house structures behind it and the blue arrow points at the basilica. Note the road to the right of the basilica that is no longer there (Mee, 1994).

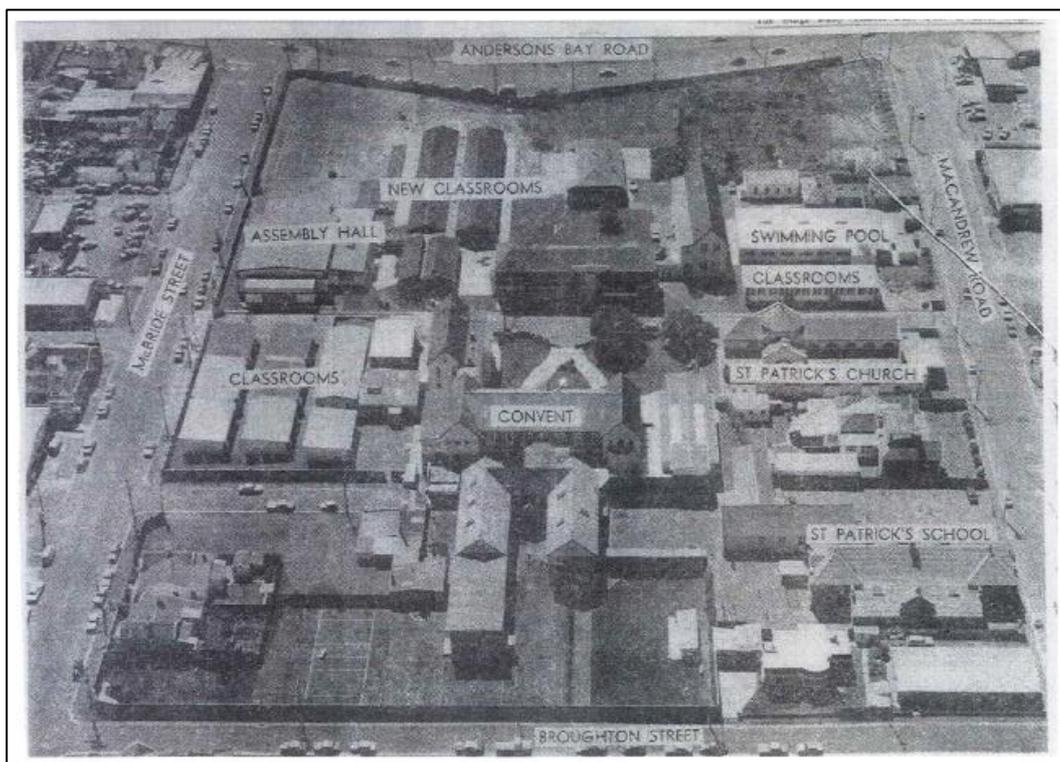


Figure 1-19 St Patrick's complex in 1976 (*Otago Daily Times*, 1976).

Table 1-2 Key dates of events that have occurred at the St. Patrick complex.

Year	Event
1862	First Catholic Church in Dunedin, St Joseph's
1869	Appointment of Moran as the first Bishop of Dunedin
1878	First chapel-school built in South Dunedin, Petre
c1884	First wooden presbytery erected on site by Father Vereker
1892	Foundation stone blessed of St Patrick's Basilica
1894	St Patrick's Basilica opened
1896	Verdon appointed as the new bishop taking over from Moran
c.1896-1910	Second brick presbytery erected on the site
1897	Sisters of Mercy arrive from Australia
1898	Reopening of St. Patrick's Basilica after further interior work
1901	New convent for the Sisters of Mercy built
c1900-1910	Sisters of Mercy have original wooden presbytery demolished
1917	New St. Patrick's school opened, Mandeno
1920-50s	Further work on the basilica, stain glass windows installed, interior alterations
1960	Porch added to southeast elevation to MacAndrew road. E.J. McCoy
1986	Original wooden chapel-school demolished

St Patrick's Chapel-School (Removed)

The wooden St Patrick's chapel-school, designed by Frances Petre was opened free of debt on Sunday 18 August 1878, by Bishop Moran after local fundraising (Figure 1-20). An exert from the New Zealand Tablet said,

The Bishop said "he congratulated the residents in South Dunedin on the happy result of their labours in erecting the sacred building now dedicated which would serve a two-fold purpose- that of a church and of a school. " (New Zealand Tablet, 1878)

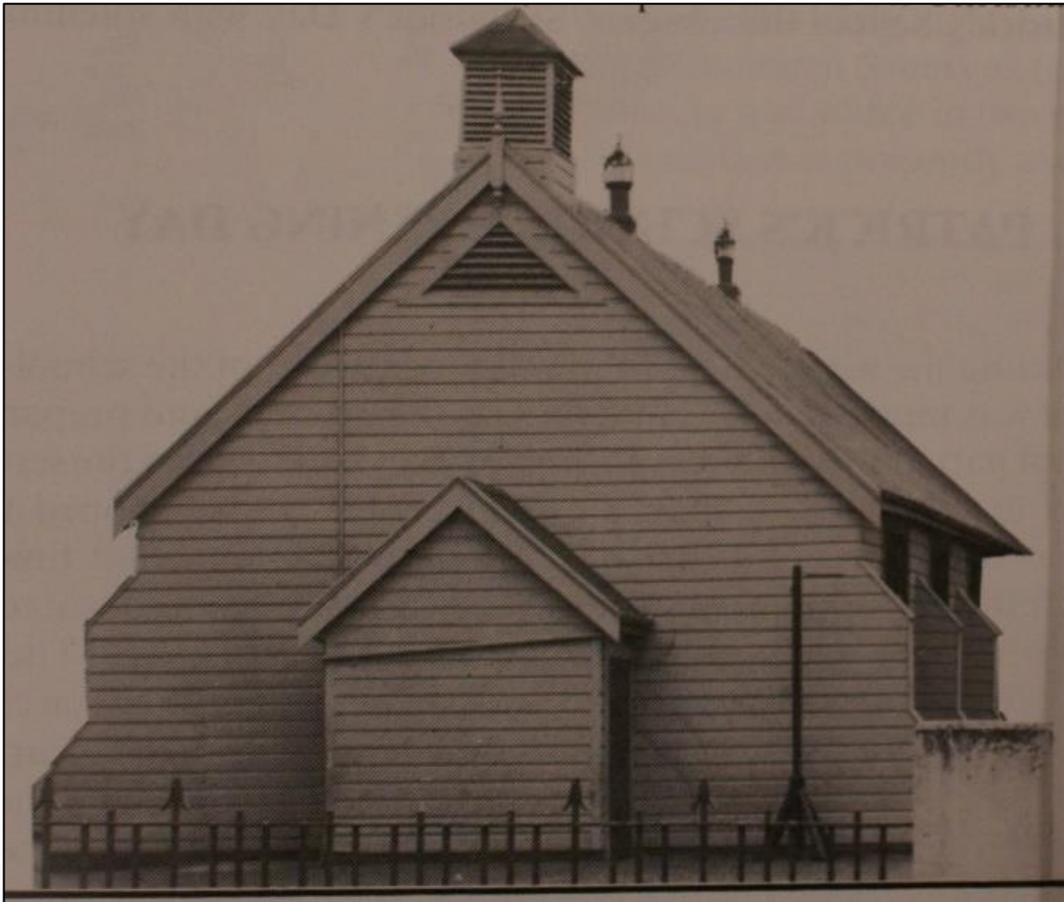


Figure 1-20 First wooden chapel-school designed by Petre and erected on the St Patricks site late 1870s. Looking at the south elevation (Mee, 1978).

The chapel-school was a simple long room with an altar at the far end. It was humble in design and made no claim to architectural grandeur unlike many other buildings designed by Petre. It had no stained glass or marble. Father Nicolas B Moloney was consecrated as the first priest at St Patrick's school and parish (Mee, 1978). The first lay teacher at St Patrick's was Miss Katherine Hefferman from Melbourne who started on August 26 1878 teaching 60 children of various ages. During this time the school contained only the most basic amenities (Mee, 1978).

As the population expanded in South Dunedin, so did the school role each term. The Dominican Sisters arrived September 4th 1882 to help teach at the school and began at the start of the 3rd term. Miss Hefferman remained at the school during their settling-in stage. In the 1880s a wing to the right of the original chapel-school building was added in two successive sections (Figure 1-21 and Figure 1-22).



Figure 1-21 Wooden chapel-school showing the addition made in the 1880s. Photo circa 1880s (Mee, 1978)

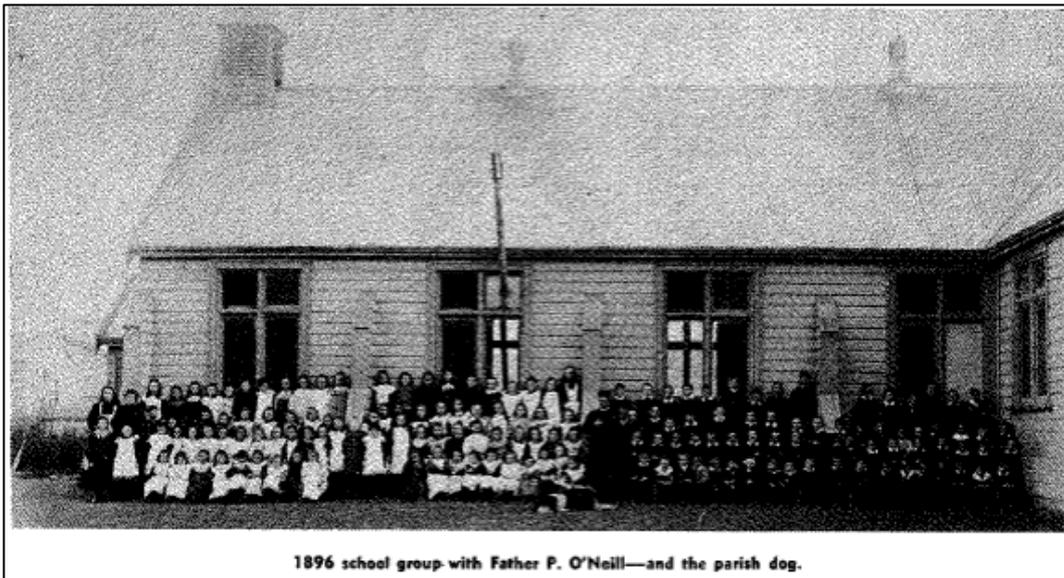


Figure 1-22 Photograph of the wooden chapel-school after its additions from another angle (Mee, 1978).

Despite the new extension, the chapel-school soon became too small for mass and by the late 1880s plans were already underway for a new church on the site to accommodate the increasing Catholic community in South Dunedin. The new, but unfinished St Patrick's Basilica was opened in October 1894. Shortly after in 1896 the Dominican Sisters left and the school was taken over by the Sisters of Mercy (Mee, 1994; Shaw, 1997).

The chapel-school was re-opened in February 1897 under the direction of Sisters of Mercy Mother M. Kostka and Sister M. Philomena. They continued to teach in the chapel-school from 1897-1916. Father Coffey was also appointed, taking over Father O'Neill. It was not long before he realised that the debt for the chapel-school renovations and extensions had not been paid for and a fundraising concert was held on 22 September 1899 (Mee, 1994; Shaw, 1997).

The wooden chapel-school continued to be used after the new St. Patrick's school, designed by Mandeno, was opened in 1917. The infants remained in the building while children in the standard moved to the new building.

The building was finally demolished in 1986 (Mee, 1978). This now archaeological site (I44/542) is capped by an expanse of asphalt. Interestingly the outline/footprint of this structure can still be seen making identification of the site relatively easy (see Figure 1-5).

St Patrick's Basilica

The St Patrick's Basilica, a Category II historic building was designed by Frances Petre (Figure 1-23 and Figure 1-24). The building has a distinct Renaissance design and is a large roofed building used for public purposes. The building is built on concrete foundations faced with Port Chalmers bluestone with plastered brick walls and a slate roof. The building inside is richly decorated in a Classical style with moulded plaster work, religious sculptures and Wunderlien ceiling of prefabricated mass-produced zinc panels. According to architect E.J. McCoy, it was significant because it was Petre's first departure from gothic (Mee, 1994).

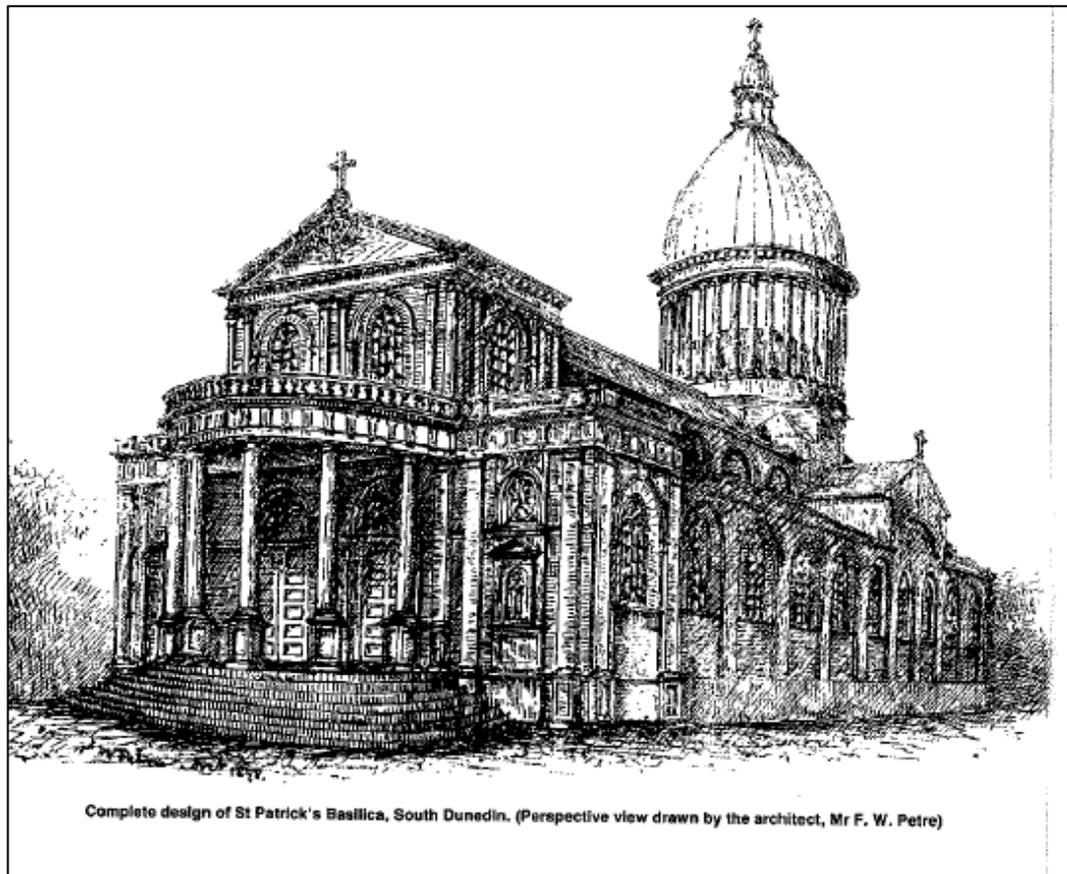


Figure 1-23 Drawing of the complete and original design Petre intended for the basilica (Mee, 1994).



Figure 1-24 The two remaining plans of Petre's Basilica design (Petre, 1892).

The basilica was considered a popular architectural design in the second half of nineteenth century because it stressed the catholic connections to Rome. St Patrick's Basilica was built at the same time as St Patrick's Basilica in Oamaru. D.W. Woods of Dunedin won the tender for the construction of the whole building except the central dome and the colonnaded porch and signed a contract in February 1892 (Mee, 1994; Shaw, 1997).

Bishop Moran first announced his intention for the basilica at the opening of the chapel-school on Sunday 18 August 1878 and Petre had presented the Bishop with a plan for this future church in 1890 for a Gothic-style church. Petre's designs were approved towards the end of 1891 that did not include the original gothic style first proposed. When completed, the 150ft x 50ft basilica with a height of 45ft to the ceiling was to provide accommodation for 1000 people. The commanding feature was to be the central dome that would be finished in decorated glass work, causing tinted light to fill the upper part of the nave and sanctuary, and the semi-circular colonnaded porch in stone. The general style was to be Roman with the whole of the interior confined to the Corinthian order and the external front and portico exclusively in a more severe Ionic order (New Zealand Tablet, 1898).

Moran was an enthusiastic promoter of a building programme for the church in Dunedin. The basilica was a result of the community efforts in raising money to create a place of worship that expressed the importance of the church in South Dunedin. Several fairs and carnivals were held in Garrison Hall by the community to raise funds prior to the building of the basilica. One such event included the very successful "All Nations Fair" held at the Garrison Hall on 28 November 1892 advertised in the *Otago Daily Times*.

On 17 March 1892 the foundation stone of the basilica was blessed by Moran and accompanied by a procession of the congregation. By this date some £1500 had been collected for the project, with an estimated total cost of £5000. In the cavity beneath the stone were place copies of *The New Zealand Tablet*, the *Otago Daily Times*, the *Globe*, and the *Evening Star*, along with parchment containing details in Latin of the occasion (Mee, 1994).

Funds were tight for construction so more fundraising events were organized. Building began with the erection of the walls and placing the roof in position. Its foundations were costly and built on a floating concrete pad

because of the swampy site and soft ground. Pleas were made for funds in 1893/94 to help make the building weather proof. By the end of 1894, the red brick building with a slate roof had sufficiently progressed to announce the opening date planned for Sunday 7 October 1894. Fittings and furnishing of the basilica were taken from the old church until funds could buy new ones (Mee, 1994).

The partially built basilica was opened in 1894 and served as the centre of the Catholic community in South Dunedin from that point. The opening event was large with a large procession from old church to the new, with the congregation, the Christian Brothers, pupils from St Patrick's School, pupils from the Brothers' and Sisters' schools in Rattray Street and other well-wishers. The occasion was presided over by Bishop John Grimes because Moran was unable to attend due to illness (Mee, 1994).

Work continued on the church interior as more money came to hand from more fundraising events held in the community. Bishop Verdon succeeded Moran after his death and met with parishioners to complete the unfinished church and liquidate debt to continue progress. He organized the successful Shakespearean Carnival fundraiser in November 1896 (Mee, 1994).

As work continued, Petre's certificate for work shows frequent alterations and additions to the original basilica structure. Alterations to the original design included the switching of timber panelling on the original plan to Wunderlich zinc panels. This was a cheaper way of achieving ornamentation; however Petre identified its use as the first of its kind in the South Island (Glen, 1996).

Many tenders were advertised in the ODT for work required on the basilica. The pressed zinc panels were produced by Wunderlich and Co. in Sydney and the ceiling panels were installed by contractor James Small. Ferry and Washer, a plastering firm, was engaged in plastering the outside and inside red brick walls and Barningham and Co. was engaged to the metal work, including the 14 large cast iron ventilators on the side walls (Mee, 1994). The work was very extensive and eventually required the basilica to be closed and the old chapel-school was used again for services. On 29 December 1897 the ODT reported that work had reached the stage that an

Idea of the architectural beauties of the edifice when finished can be gained. The ceiling above the sanctuary and in the transepts and nave is now up, and is of a highly elaborate and artistic design.

On 26 June 1898 St Patrick's Basilica was formally reopened, with the ODT enthusiastically describing the celebrations and the building.

The completed portion of the church now comprises the whole of the nave, aisles, transepts, and sanctuary, the work of constructing the centre dome and the front (the latter including the baptistery, atrium, organ loft and portico) remaining yet to be accomplished. The sanctuary measures 25ft by 20ft, the nun's chapel 12ft by 20ft, the sacristy 12ft by 20ft, the lobby 24ft by 6ft, and the transepts together 50ft by 25 ft. The nave and the two aisles represent in all a floor space of 61 ft. by 50ft with a ceiling height to the nave of 43ft and to the aisles of 20ft. The walls of the sanctuary, which are 40ft high, are finished in two stages of which the lower is marked by a Corinthian entablature of architraved, friezed and corniced with decorative modillions and carried on fluted Corinthian pilasters, all finished in cement and plaster of Paris, while the upper stage has lighter pilasters carrying a moulded ceiling cornice and the intermediate spaces finished in moulded panels, the whole being executed in plaster of Paris. The arch into the upper transept is 20ft wide and 40ft high with well-moulded impost and moulded and decorated archivolt carried on fluted Corinthian pilasters....

On each side of the nave five arches pass through into the aisles with correspondingly shallow arches along the walls. On the face of the nave piers are Corinthians-capped pilasters with moulded bases, consisting of full die, cornice and base, and the arches are finished with moulded impost, archivolt, keystone, and moulded paneled soffits. The entablature above the nave arch consists of moulded architrave frieze and moulded cornice with decorated modillions and dentils, and above this the

clerestory consists of five arches, containing the windows, with moulded spandrels and finished with the ceiling cornice.
(Otago Daily Times, 1898)

In 1901 there were further appeals for donors to adorn the walls with artistic Stations of the Cross. Bishop Verdon placed an order with a Paris firm for Stations mounted in oak frames, with figures in terracotta and painted background scenery. These arrived in February 1902 and other statuary was commissioned and added to the basilica after this date. In 1924 Father Delaney arranged for putting in the 14 stained glass windows. These windows depict the Mysteries of the Rosary, and were made by a firm in Munich. He also commissioned a distinguished Italian artist to do the large oil painting which is the feature and focal point of the basilica. In the 1950s further alterations were made to the basilica (Mee, 1978).

The basilica was finally deemed complete after a new porch was built in 1960 which varied from the semi-circular colonnaded porch envisaged in Petre's original plan. Instead architects E.J. McCoy and the builders Simpson Brothers created a utilitarian structure built from concrete block which still remains (Mee, 1978).

The Presbyteries

First Presbytery (Removed)

The old wooden presbytery, also known as the first 'Convent of Mercy' was built sometime during the 1880s (Figure 1-25). It was reconstructed from material from the original City Hotel at the corner of Princes Street and Moray Place when the hotel was rebuilt in the 1880s (Mee, 1978).

It was constructed during Father Vereker's tenure and was occupied by him as the first presbytery and parish for priests from 1884. Up until this point, the Bishop and Father resided off site and commuted daily to the St. Patrick's site. In 1887 the presbytery was handed over to the Sisters of Mercy for use as their convent until a new convent was built on the opposite side of the road in 1902. The sisters continued to use the building as an adjunct to St. Vincent's Orphanage until they had it demolished to provide for a greater open space.

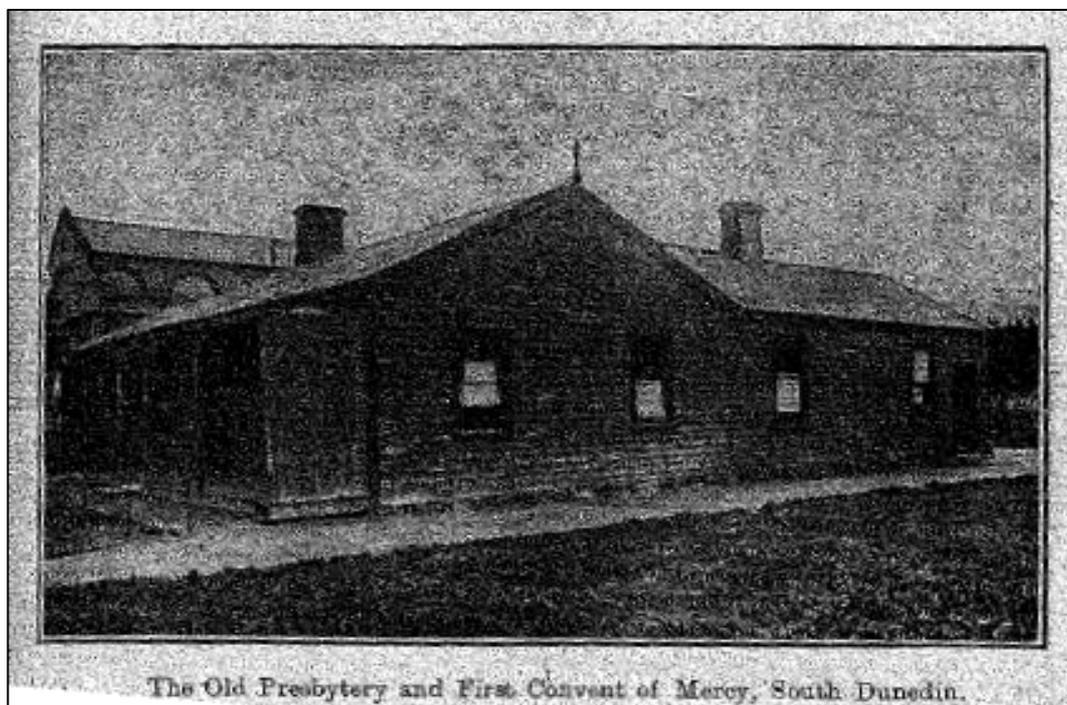


Figure 1-25 The original wooden presbytery erected on site by Father Vereker. The St Patrick's Basilica can be seen in the background in the top left-hand corner (New Zealand Tablet, 1926).

Second Presbytery (Present On Site)

During Bishop Verdon's appointment, he organised the building of a new brick presbytery on the St. Patrick's site adjacent the basilica. Only one reference to the brick presbytery has been found in the literature:

The Most Rev. Dr. Verdon has signed the contract for the building of a new Presbytery in South Dunedin. The building will be of brick and will cost £600. (New Zealand Tablet, 1896)

No further documents pertaining to the original construction of this brick presbytery structure, its financing, its construction, its use, have been located. The DCC Archives provided four sets of plans associated with building consents from 1929 to 1956. These do not include information pertaining to the construction of the outbuildings at the rear of the presbytery or the garage complex along the western side of the presbytery.

The building has been extensively modified since it was originally constructed. Architecturally, the earliest period of construction is of greater interest for its probable association with architect Francis Petre. The obvious lack of public affiliation to Petre or documents relating to its tender, fundraising, or construction might suggest this building wasn't considered to be significant, or of public importance/interest. Alternatively, it potentially could have been constructed as an "add on" cost to the construction of the basilica that was occurring, probably contemporarily, adjacent to the presbytery. Petre is known to have designed other presbyteries such as that in Milton.

The New St Patrick's School

The new St. Patrick's school, built in 1916/1917 was designed by Harry Mandeno from Mandeno and Fraser and constructed by Messrs. O'Connell and Nicolson. When it opened, this building was considered to be an "up-to-date building in all respects." (Mee, 1978)

In 1913 the role reached 329 and a meeting was held to discuss further school accommodation. Petre was present in this meeting and said that "in the old days, over 40 years ago, [the chapel-school] was considered to be large and splendid building, but it was now quite inadequate" (McPherson & Cawte, 2011). A committee was soon set up to fundraise for the new school whether it is an extension to the current building or the establishment of an entirely new structure. In the inspector report in 1914 of the school it was noted that "accommodation at this school is taxed to utmost. Arrangement being made to provide additional room." (Mee, 1978)

The committee and community, encouraged by Father Delany (Administrator of St Patrick's 1911-1949), fundraised for two years for the new school. During this time the church held two successful bazaars in June 1915 and November 1915 to cover and estimated total cost of £3000 for the building and its furnishings. By this time the role was 376 and the school inspectors again commented on the St Patrick's chapel-school inadequacy for schooling accommodation. Finally, around 1916 Bishop Verdon gave father Delany permission to go ahead and arrange plans to be drawn for another school structure. A design by Mandeno was selected as the type of building they needed.

It is to be a one-storey building, owing to treacherous nature of the foundations. It will nevertheless be a handsome addition to the architecture of Dunedin, and, as the top of the roof will be 30 ft. above the footpath, it can be readily understood that the building will present an imposing appearance., The concrete foundations are about 5 ft. high, and all well reinforced, so that if any settlement takes place the super structure should not be in any way damaged. The walls outside are to be finished in picked red brick, which will be relieved with white bands and some simple ornamentation. The gables are to be earned up in brick and relieved with lime-whitened capings. There are two entrances both on the western side; these are kept separate for the boys and girls with the teachers' room in between....The walls will be finished in granite plaster, with polished cement dadoes 5ft high to all the rooms. (Mee, 1978)

On July 2nd, 1916 the foundation stone for the new structure was laid and two more successful fundraising concerts were held later that year. The building was formally opened at the end of February 1917 with a detailed account in the New Zealand Tablet almost free of debt. The new school building contained four large classrooms, measuring 30ft x 25ft that were named after a different saint.

It accommodated boys and girls up to and including standard four at which the boys would transfer to the Christian Brother’s school and the girls would continue on at St. Patrick’s for standard five and six (Mee, 1978). Mandeno’s St Patrick’s school remained active until 1959 when a new school was built.

1.4 Previous Archaeological Investigations

Aside from the archaeological sites recorded for 32 MacAndrew Road (I44/539 to I44/542), there are an additional three archaeological sites recorded nearby (Figure 1-26).



Figure 1-26 Recorded archaeological sites near 32 MacAndrew Road, Dunedin (NZAA, 2009).

The following summaries of previous archaeological sites are taken from the entries on ArchSite:

- I44/531: Millington’s buildings c1881 by the Millington bros.
- I44/704: 8-12 McBride Street, location of early twentieth century houses and possible nineteenth century material based on historical documentation
- I44/472: Dunedin Gas Works (1863-1987)

1.5 Research Questions

The objective of the development by the St Patrick’s Development Committee is to rejuvenate the site at 32 MacAndrew Road and allow the site to be more useable as a space for public gatherings and parishioners alike. The archaeological assessment research identified a number of well-defined areas of archaeological interest covering a spectrum of functions from worship, residence, and education. The site contains a number of existing built features including the nationally significant, Category II listed St Patrick’s Basilica (1898), the former St Patrick’s school building (1916), the presbytery (1890’s – 1970’s) and its modern garaging as well as definable archaeological areas. The footprint of the original timber St Patrick’s School Chapel demolished in

1986 is visible beneath the asphalt car parking. While this asphalt is to remain largely intact thus protecting this archaeological site, it is expected that the area including, and surrounding the presbytery will yield archaeological material relating to the occupation and use of the site for over 110 years. The archaeological assessment turned up little information on the presbytery itself. The pre-1900 construction could be attributed to the architect Francis Petre and the 1929 addition mimics this original design (see McPherson & Cawte, 2011).

The overall aim of the research strategy is to develop an archaeological and contextual understanding of the history of the St Patrick's Basilica Complex and how this site compares to other nineteenth century complexes in Dunedin and Otago. With the long term ongoing occupation of same institution, are there any remnants of this site specific occupation? The unique site encompasses many different functions, it was a conduit for community interactions in South Dunedin. The site had multiple functions: education of the young (school), home for orphans, place of worship (basilica) and residence for priests and nuns. A key requirement of this strategy is to gain information on the pre-1900 and pre-1900 styled phases of the presbytery building and its occupation. Investigating the building stratigraphy will provide an understanding of the sequence of construction, modification and decoration inherent in the building's history and allow us to address the following questions;

- Can we accurately identify the dimensions of the original presbytery?
- Is the pre-1900 styled addition visible in the original building framework?
- Can we confirm the stucco was applied after the adjacent extension was constructed?
- Are there any identifiable reasons why stucco was used to cover the original structure and why the later addition was spared?
- Are there internal and obscured features that allow us to confirm Petre's involvement in the original presbytery construction?
- Is it possible to identify the architect that oversaw the construction of the later addition from building materials and obscured architectural stylings?

In terms of the archaeology and the higher level comparisons, there are two key research questions;

- How does this ecclesiastical complex relate to other nineteenth century complexes in Dunedin and Otago?
- Are there noticeable differences in the nature of the material encountered, the density of material encountered and relationship of this material to the function of education, worship and/or residence?

Very little archaeological investigation has been undertaken in South Dunedin. As South Dunedin is a densely occupied area of the city early on and, a central community zone (school and church), this development programme can help understand the stratigraphy of the site and extrapolate what other sites in the area might be like.

2 Methods

2.1 Buildings Archaeology Methodology

The investigations of pre-1900 buildings provide the opportunity to explore how New Zealanders constructed their buildings, what materials they used, how they organised their space (form and function), how they expressed themselves (style), and what changes were made over time. The degree of detail that is recorded for a structure depends on the level of record stipulated in the archaeological authority, which range from basic recording (Level IV) to comprehensive recording (Level I), depending on the degree of archaeological or historical significance of the building. NZHP follows the guidelines established by Heritage New Zealand (Heritage New Zealand, 2014) which defines the requirements of the four levels of recording:

Level I

- Comprehensive measured drawings of all elevations – internal and external –cross-sections, floor plans, roof plans, ceiling plans, mouldings and other details

- Comprehensive written records, including detailed stratigraphic recording and matrices.
- Comprehensive photography of all contextual views, elevations, spaces, fixtures and other features, incorporating the use of high or medium format photography.
- Comprehensive sampling of relevant materials.

Level II

- Extensive measured drawings, including all main elevations – internal and external –cross-sections, floor plans, roof plans and ceiling plans.
- Extensive written records, including a combination of stratigraphic matrices and annotated drawings.
- Extensive photography, including all main contextual views, elevations, spaces, fixtures and other features. It may incorporate the use of high or medium format photography.
- Extensive sampling of relevant materials.

Level III

- Measured drawings of selective elevations – internal and external – cross-sections, floor plans, roof plans and ceiling plans.
- Written records, including annotation of measured drawings.

Level IV

- Outline measured drawings or sketches.
- Written annotation on measured drawings or sketches.
- Limited photography.
- Limited sampling, if appropriate.

NZHP has developed standardised recording forms to document the external attributes, structural elements, room linings and finishes. The fieldwork included creating a photographic record (to complement the photos taken during the initial assessment), drawing detailed plan of the structure as determined by the level of recording stipulated in the authority, and investigating the exterior features, structural elements, and interior layout, finishes, and features. Sampling of the materials (e.g., wallpaper, sarking, floor boards, and skirting boards) was determined according to the level of recording.

The St Patricks presbytery was recorded to a Level III standard as per Condition 7 of Archaeological Authority 2013/61 and Condition 6 of the Archaeological Management Plan (OCTA, 2012).

2.2 Monitoring Methodology

The archaeological field work at 32 MacAndrew Road, Dunedin was conducted intermittently in three stages from October 2012 to January 2016. NZHP monitored earthworks at 32 MacAndrew Road, which were carried out by Mason Contractors (Stage 1 and 2) and Clearwater Contracting (Stage 3). Both contractors cleared site areas using mechanical excavators with flat edge and tooth bucket depending on the nature of the site works being undertaken.

- Stage 1: (8-10 October 2012) involved the monitoring of excavations for a new entrance on the extant school building.
- Stage 2: The recording of the presbytery building (December 2012) prior to and during its demolition as well as the site clearance earthworks (January 2013 - February 2014).
- Stage 3: Monitoring the lifting of the basilica floor (May 2015), removal of the front portico entrance (June 2015), excavations for the construction of a new rear entrance (July 2015) and, excavations for the construction of the new basilica rear egress (January 2016). The carpark was finally resealed at an unknown date in 2017.

NZHP has developed a comprehensive set of recording forms to aid in the systematic description of archaeological contexts. NZHP's recording system is hierarchical, with excavation areas being defined first and then contexts being ascribed to each specific area.

During archaeological monitoring, numerous excavations may be required, including (but not limited to) clearance of demolition rubble, vegetation clearance, and excavations for services, foundation trenches, and grading. Each new area of excavation or ground disturbance is designated as an excavation area, and labelled with a number. The size and depth of excavation are recorded, and the boundary of the area is mapped. The contractors responsible for the excavation, the NZHP staff member, the dates, and the reason for excavating the area is recorded.

Contexts are generally defined as either a deposit (i.e., sediment and matrix change or by the presence of archaeological material) or cut. Deposits include natural layers as well as layers of fill, floor surfaces, road surfaces and preparation layers, and pit fills. Likewise, there are numerous different types of cuts, with the most common cut types representing service trenches, pits (rubbish pits, latrines, etc.) and foundation trenches. As such, a feature may include multiple deposits and cuts. Contexts identified within the excavation area are labelled numerically; thus, context A001 is the first context in Excavation Area 1. Each context is photographed, mapped, and documented using standardised context recording form, which is based upon the *Archaeological Site Manual* prepared by the Museum of London (Museum of London Archaeology Service, 1994). All features are sectioned, and plan views and sections are drawn. Artefacts recovered from the context are bagged according to their provenance, and for large contexts sampling may be employed. The location of the context may be recorded by various methods.

2.3 Laboratory Methodology

After site works were completed, all excavated material was returned to the NZHP Laboratory in Dunedin. Due to the large area covered by the archaeological monitoring of excavations and the different areas and associated functions of the site, artefact analysis was divided by excavation area and then the different material classes.

Material was washed and sorted into major material classes; ceramic, fauna, glass, metal and miscellaneous for analysis. Each material class was analysed using both qualitative and quantitative attributes. The qualitative variables are distinctive for each material class and will be discussed below under the relevant material class methodology. The quantitative measurements included a NISP (number of identified specimens) and MNV or MNI (minimum number of vessels or individuals). The NISP accounts for each discrete fragment recovered from site. The MNV or MNI count assesses how many artefacts the NISP represents and the minimum number of artefacts that had to be present at the site to account for all fragments. It is important to note that for the most part the minimum count was calculated by feature and not from the assemblage as a whole. This means that two similar fragments that would usually be conflated as a single artefact are calculated as two artefacts if they were recovered from separate features. The effect of this is the minimum count for the site is higher. The reason for calculating the minimum number with this method is that it allows each feature to be treated individually and allows greater comparison between features, while still allowing for the entire assemblage to be discussed as a whole.

Ceramic Vessel Analysis Methodology: The ceramic analysis is undertaken using methods outlined in the Otago Archaeological Laboratory Guidelines (Smith, n.d.) and Brooks (Brooks, 2005). Eleven variables are recorded based on material type (body fabric, body colour, glaze, glaze colour and ware), decoration (type, colour and pattern) and vessel form and portion recovered. If a back mark or makers mark is present it is also recorded. The total number of artefacts represented by the assemblage is calculated according to ware type, decoration and form to determine Minimum Number of Vessels (MNV).

Glass Vessels: Glass artefacts are analysed using the Society for Historical Archaeology Bottle Guide (Lindsey, 2015) and described using the terminology outlined in Smith (Smith, 2004). This involves recording the glass colour, portion, manufacture technique, and the finish method, as well as any pontil marks or embossing that are evident. The glass is also allocated to vessel form (*i.e.*, bottle, jar, tableware *etc.*), a category based on function (*i.e.*, pharmaceutical, alcohol, ink *etc.*), and a common name based on those outlined in the bottle identification guide (*i.e.*, case gin, crown top soda, torpedo, *etc.*). A NISP and MNV are also calculated. The MNV was calculated by colour, category, and vessel. Portion is also taken into consideration. For example, if within a single feature two ring seal bottle bases and one top are recovered, then the MNV would be two. This method is also used for stoppers and bottles. If a bottle is recovered with an unmarked stopper, the stopper is not given an MNV considering that it was originally a part of a bottle.

Metal: Metal artefacts are analysed and recorded by their material type, form and measurements if the fragment is diagnostic and the dimension is complete. If the artefact cannot be identified by form, a description of its appearance is included. Multiple fragments of amorphous, sheet and strip metal are given a MNI of one per type, but other forms are given a MNI based on material and form.

Miscellaneous: Miscellaneous artefacts from the site include building materials, textiles, ceramic and glass artefacts which do not fall under the vessel heading, and other various unclassified objects. These artefacts are described and identified according to construction material, then the form of the item (*e.g.* Shoe, window glass). The MNI is calculated by material and form. When multiple fragments of construction material (such as unidentified pieces of wood or concrete samples) are encountered they are given a MNI of one for each material type.

Faunal: The faunal analysis is carried out using a reference collection collated by Faunal Solutions Ltd. The methods used to analyse the faunal material is based on standard Otago Archaeology Laboratory protocols (Grayson, 1984). The protocols involve a two-stage process. The first stage involves sorting the bones into primary anatomical units which are defined as the sided element. In the second stage these units are identified to the lowest taxonomic level. These become the basic analytical units which are used for quantification purposes.

Each bag was analysed separately and the bones were sorted into primary anatomical units and identified to the lowest taxonomic level. Where possible, epiphyseal fusion was recorded. Butchery marks and Minimum Number of Butchery Cuts (MNBC) were recorded using Watson's (Watson, 2000) methodology. Using this methodology, an approximate monetary value (high versus low) was determined for elements within the assemblage. Skeletal material was also examined for taphonomy (attrition and burning) and weathering.

Fish remains were identified using the standard 'big 5' and 'specials' methodology exercised in New Zealand fish bone analysis (Leach & Boocock, 1993). There are more fish bone elements in this assemblage that can be identified to species however this standard methodology is considered to provide a suitable picture of fish species quantities and relative abundance (Leach & Boocock, 1993).

To calculate MNI it was necessary to deal with the problem of aggregation. It is important to note the frequency of bone elements that occur more than once in the skeleton (*e.g.*, teeth) and the frequency of element fragments (*e.g.*, long bone shaft fragments). This has the potential to over-estimate the quantity of mammals in an assemblage. Skeletal elements were aged using known epiphyseal fusion dates and dental development and eruption sequences to divide animals into three age groups; foetal, juvenile and mature.

3 Constraints and Limitations

Due to the location of the site, the high water table caused some issues during excavations. Excavated holes deeper than 500 mm often flooded immediately. Holes left open overnight would fill up and require draining. During the Stage 3 excavations (Excavation Area 7) bad weather made archaeological monitoring difficult as the site flooded faster.

4 Building Archaeology Results

Condition 5 of archaeological authority 2013/61 stipulated that the presbytery building at 32 MacAndrew Road, Dunedin be recorded to a Level III standard. This recording was undertaken between 10 and 12 December 2012 by H. Cawte, S. McPherson, D. Dyer and C. Murray. The buildings archaeology identified five phases of construction and major alterations (Figure 4-1). Additional alterations that occurred between these phases are also noted below. For ease of reference each investigated room was assigned a number. This site has been recorded on ArchSite as Site I44/539.

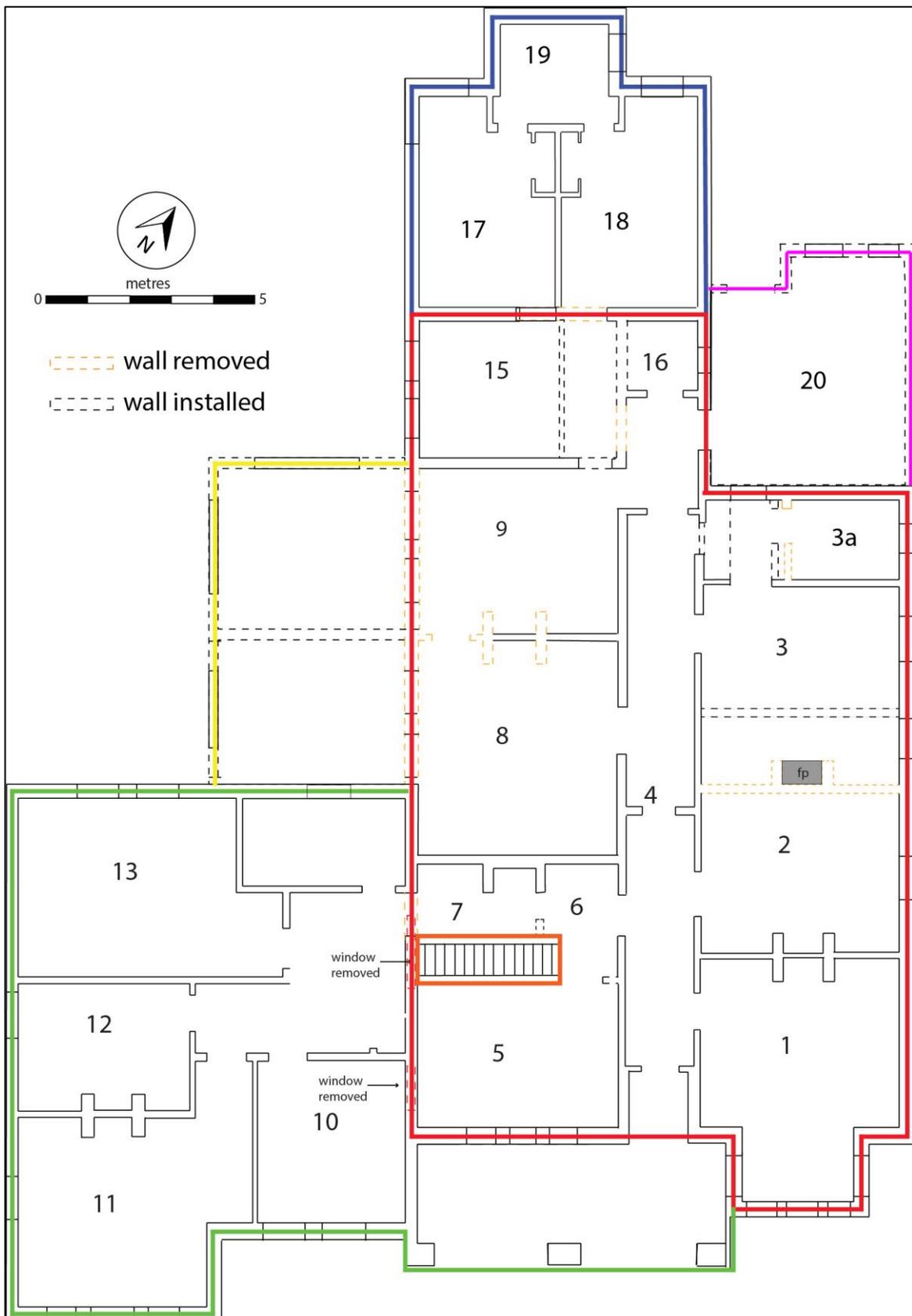


Figure 4-1 Plan of the presbytery in 2011 showing the construction phases: Phase 1 (red), Phase 2 (green), Phase 3 (blue), Phase 4 (orange) and Phase 5 (yellow), Phase 6 (purple).

Phase 1. Phase 1 includes the initial construction of the dwelling sometime in the late 1890s (Figure 4-2). The original plan of the house comprised of a two front rooms (Rooms 1 and 5), hallway (Room 4 and Room 7), two rooms off the hallway to the east (Rooms 2 and 3), one room off the hallway to the west (Room 8), a bathroom off the hallway to the west (within Room 3), a kitchen at the rear off the hallway to the west (Room 9), and a lean-to at the end of the hallway which contained the maids room (Room 15), scullery and pantry (Room 16). As seen in the 1929 addition plans (see Figure 4-4 below), the picture windows of Rooms 1 and 5 were flanked with cathedral glass.

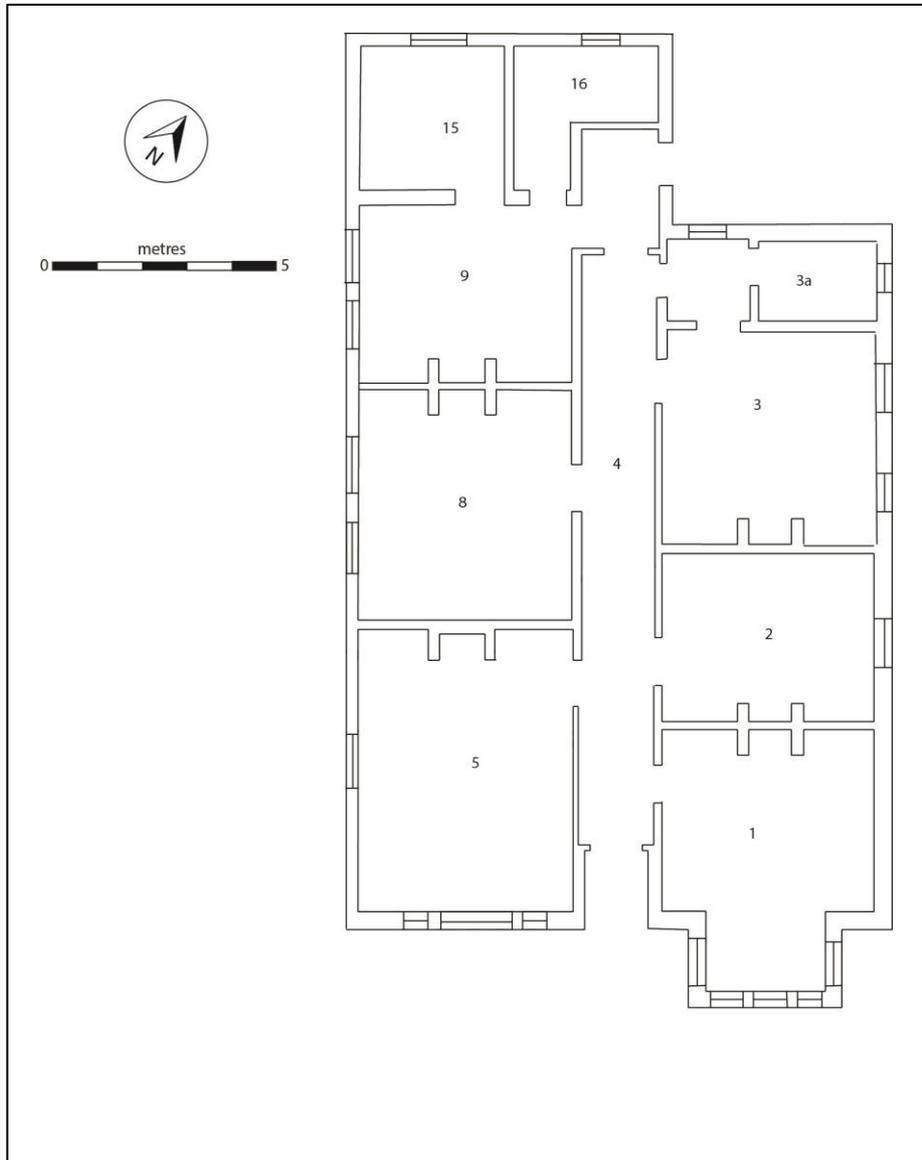


Figure 4-2 The floorplan of the presbytery during Phase 1.

Phase 2. Extensive alterations were undertaken in 1929 (DCC Property Files) (Figure 4-3). This included a new veranda, addition to the front of the structure (Figure 4-4 and Figure 4-5), an addition of five new rooms to the northwest of the existing structure and, some internal modifications to the original presbytery structure. Internal modifications relating to the new addition included a reduction in the size of Room 5 and removal of fireplace to create the hallway access into the new extension, removal of the windows on the west wall of Room 5 and the replacement of the window on the west wall of Room 8. Further internal modifications to the original structure also included a new door and frame halfway down the hallway (Room 4) and change of layout to the lean-to as follows:

- Removal of doorway into maid's room (Room 15);
- Removal of partition between Room 15 and old pantry, and installation of new partition to create smaller pantry (Room 16) at north end of the hallway (Room 4);
- Removal of the window in the south wall of the pantry (Room 16);
- New louvre on the east wall of the reduced pantry (Room 16);
- New doorway from Room 4 into Room 16.

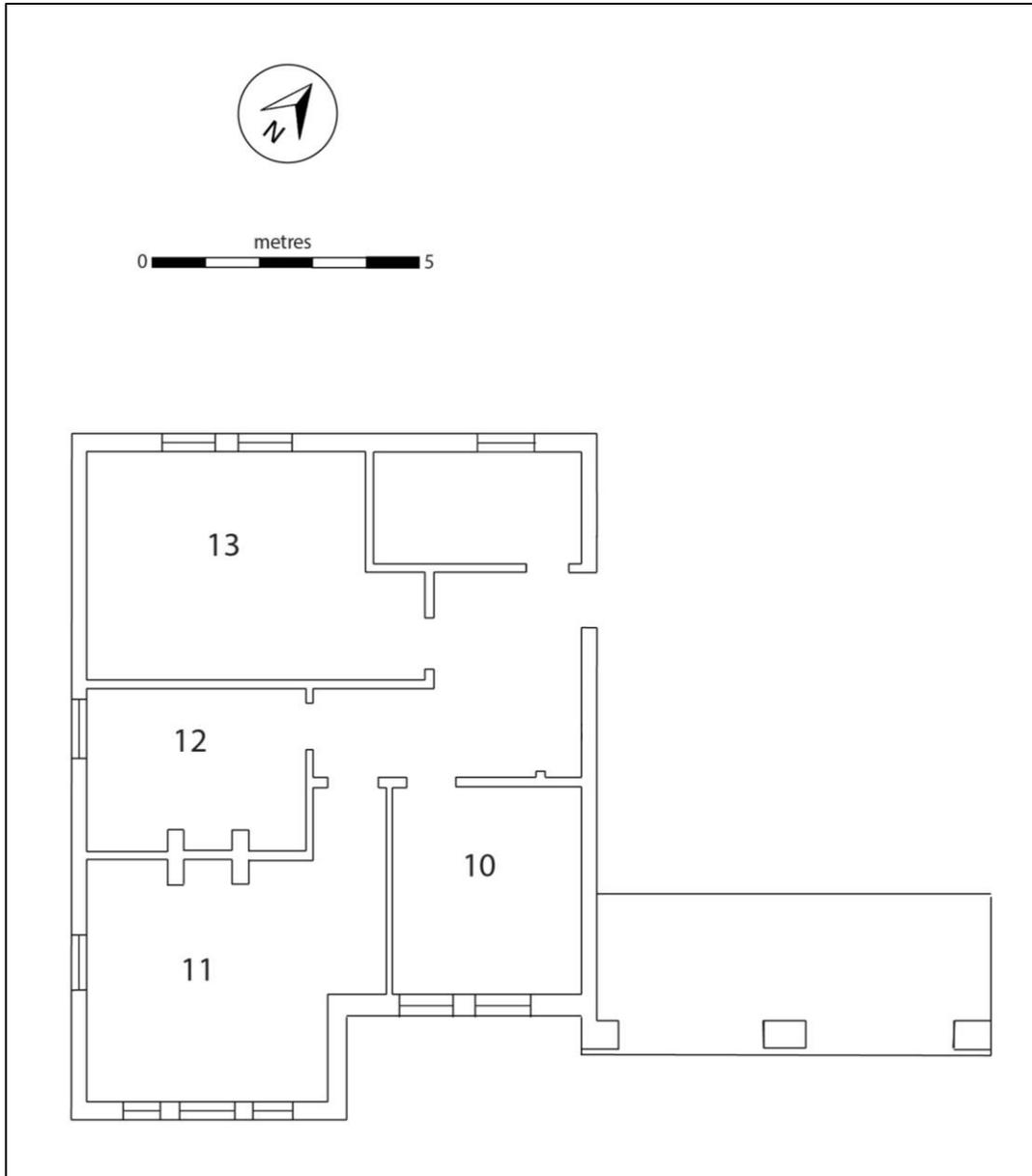


Figure 4-3 Floorplan of the Phase 2 addition. For location refer back to Figure 4-1.

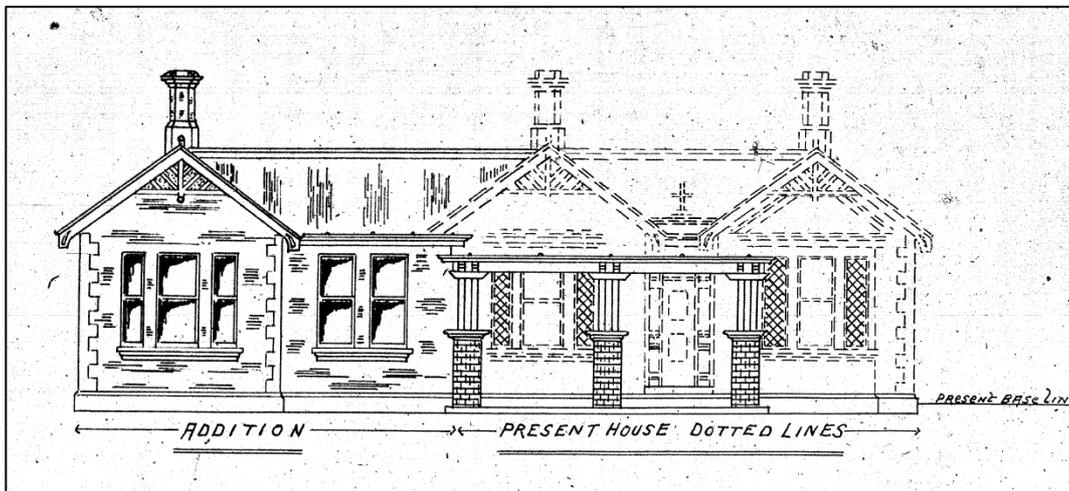


Figure 4-4 1929 Proposed addition, south elevation and original, Phase 1 design (Building Plans, DCC Archives).

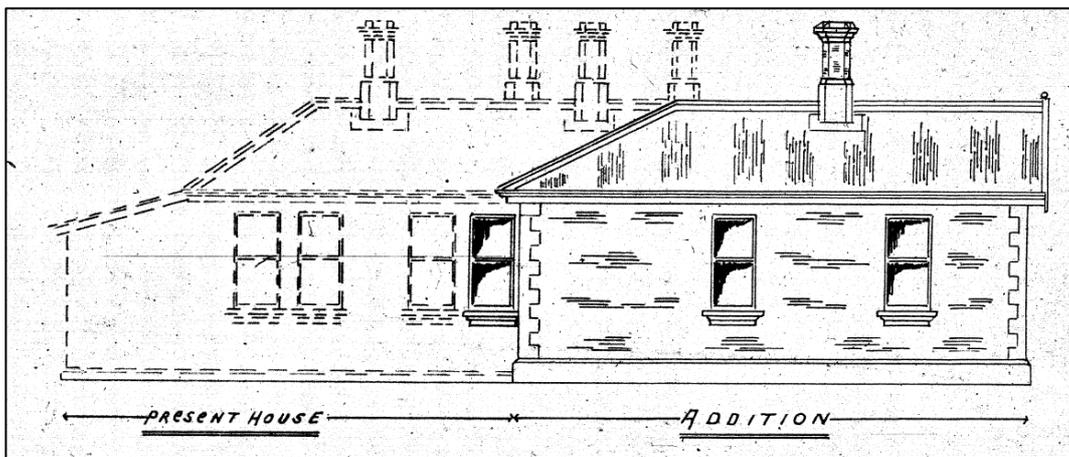


Figure 4-5 1929 Proposed addition, west elevation (Building Plans, DCC Archives).

Phase 3. In 1940 another extension was made to the rear of the presbytery off the lean-to (Figure 4-6). This included an addition of two bedrooms and a bathroom (Figure 4-7). The window along the north wall of Room 15 was removed and two new doorways created to access the new bedrooms. Two more windows were created along the west wall of Room 15.

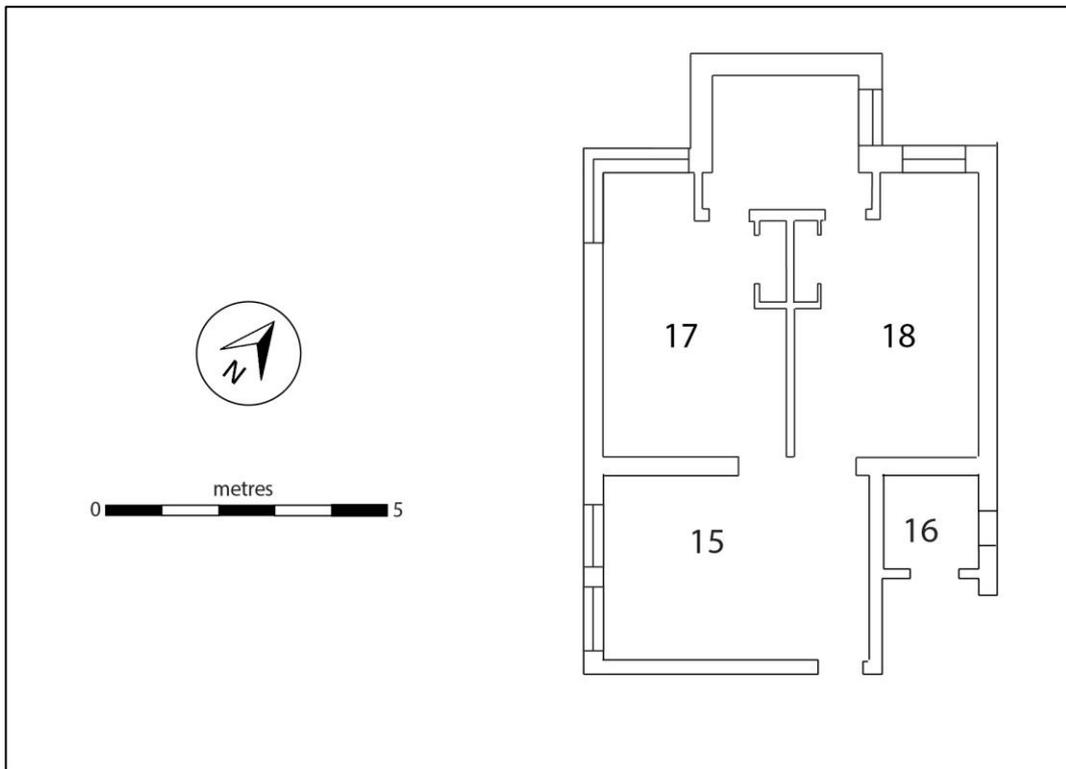


Figure 4-6 Floorplan of Phase 3 additions. For location refer back to Figure 4-1.

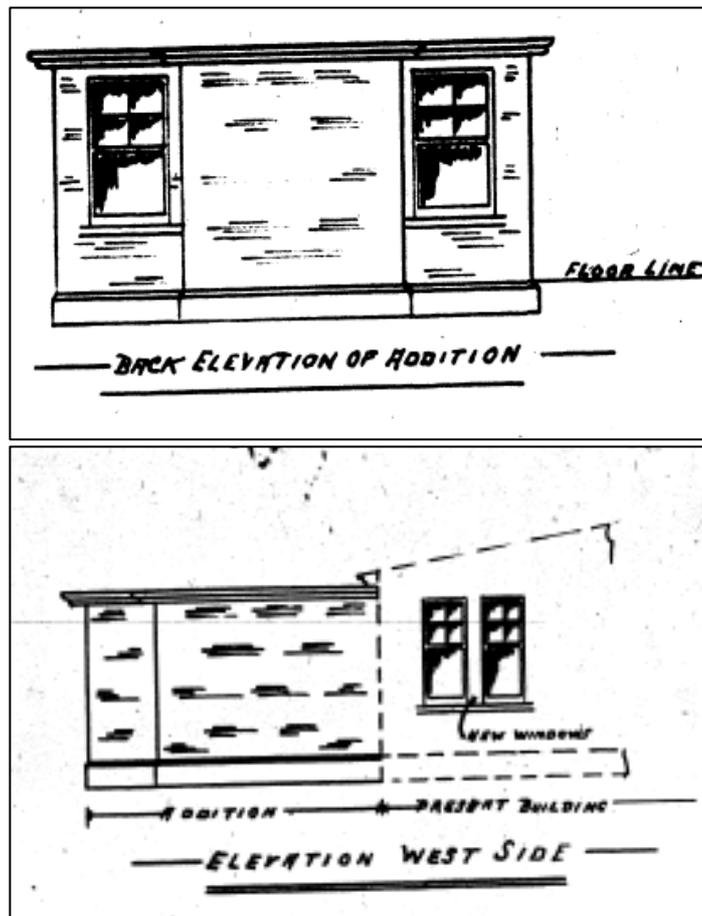


Figure 4-7 1940 Phase 3 addition. Top: west elevation (Room 17 left side and Room 18 right side). Bottom: north elevation (Building Plans, DCC Archives).

Phase 4. In 1951 a second-storey was built on top of the 1929 extension (Figure 4-8). Internal modifications to Room 6 were made to accommodate a staircase access to the new addition (Figure 4-9).

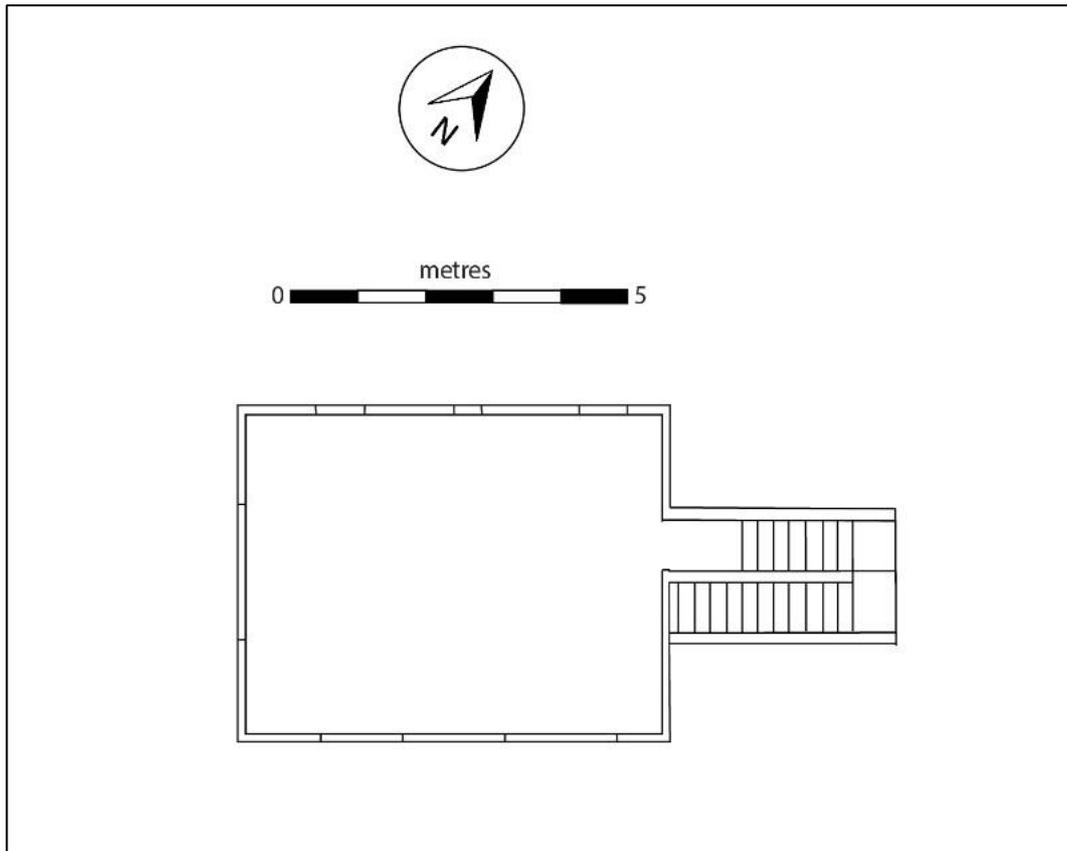


Figure 4-8 The Floor plan of the Phase 4 upstairs room.

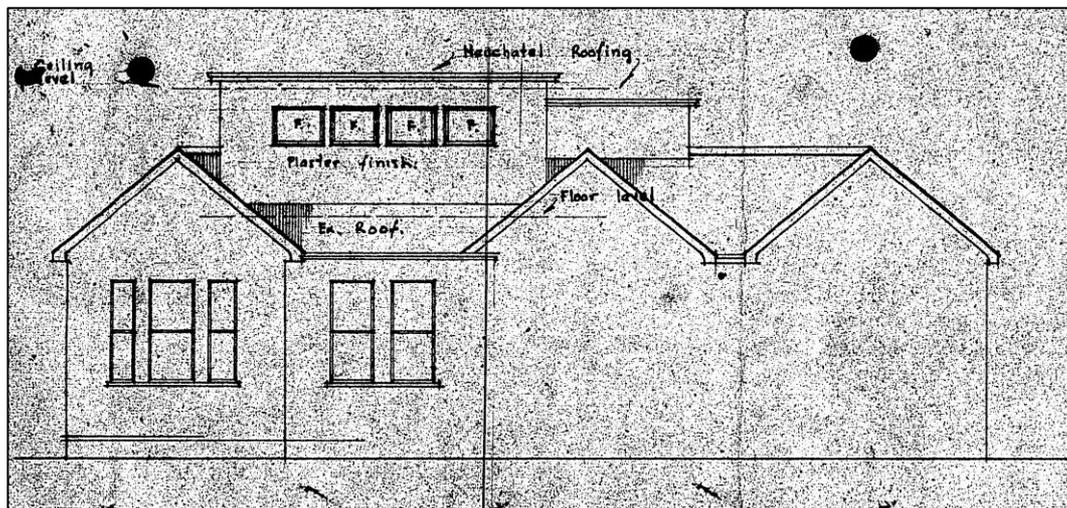


Figure 4-9 1951 Proposed addition, south elevation (Building Plans, DCC Archives).

Phase 5. Further modifications to the presbytery based on plans submitted to the DCC were undertaken in 1956 after a fire in the kitchen (Room 9) (Figure 4-10). These modifications involved the extension of Rooms 8 and 9 to the west to increase the size of the rooms (Figure 4-11 and Figure 4-12). Internal modifications included the removal of the window in Room 8 and a doorway to provide access between Rooms 8 and 9.

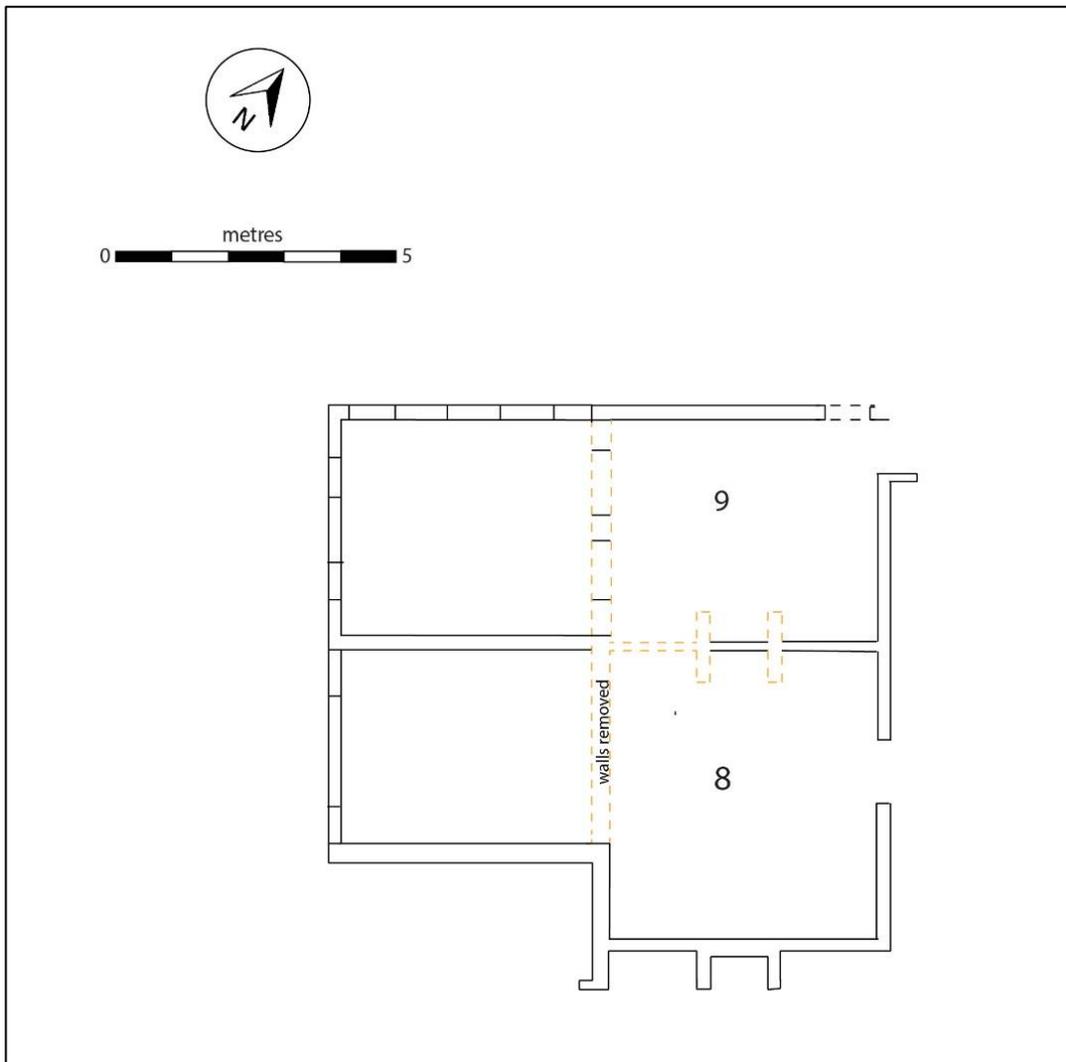


Figure 4-10 Floorplan of the Phase 5 changes to Rooms 8 and 9. For location refer back to Figure 4-1.

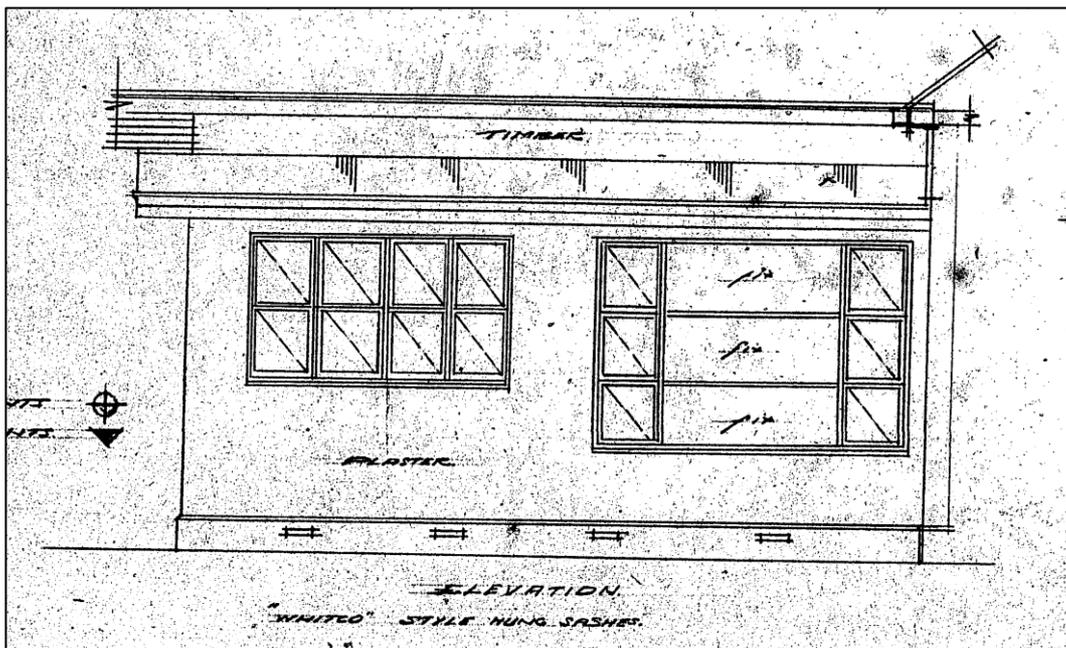


Figure 4-11 Detail from the 1956 alterations showing the proposed west elevation (Building Plans, DCC Archives).

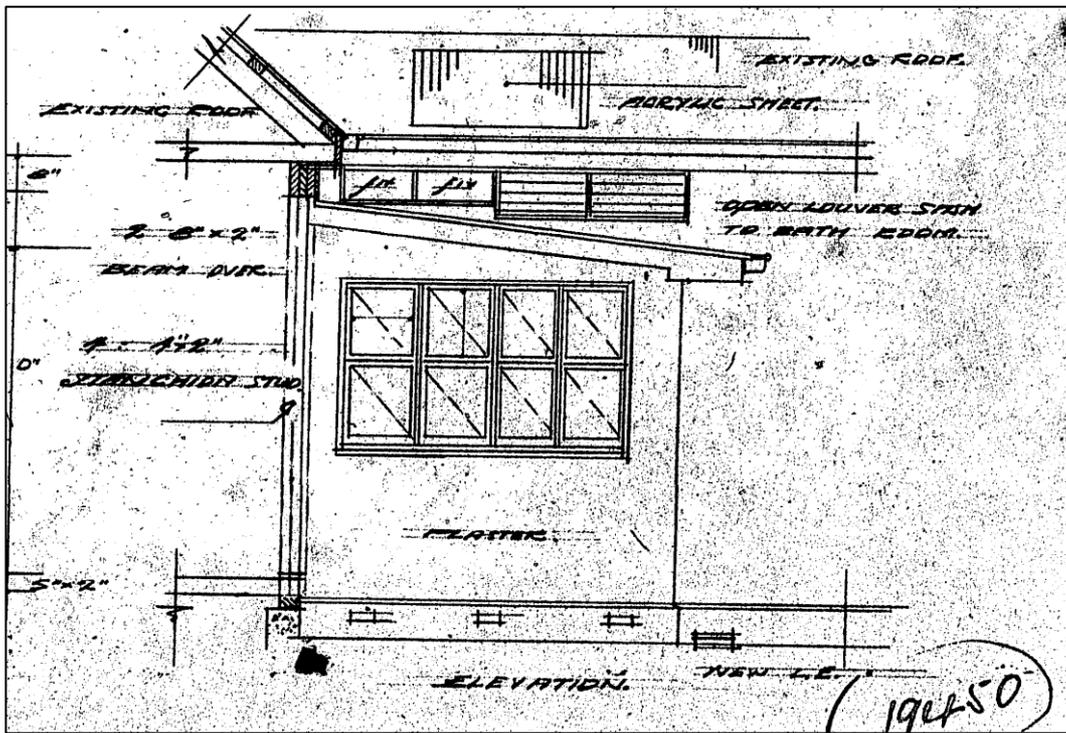


Figure 4-12 Detail from the 1956 plans showing the proposed north elevation (Building Plans, DCC Archives).

Phase 6 (undocumented building modifications)

There are several modifications to the structure post 1956 that do not have accompanying documentation. However, based on the 1976 aerial from the ODT (Figure 1-19), an addition at the rear of the presbytery along the northeast was constructed creating a new back door entrance no longer out of Room 7, change of windows in the 1956 addition and the construction of the outbuildings at the rear of the presbytery site.

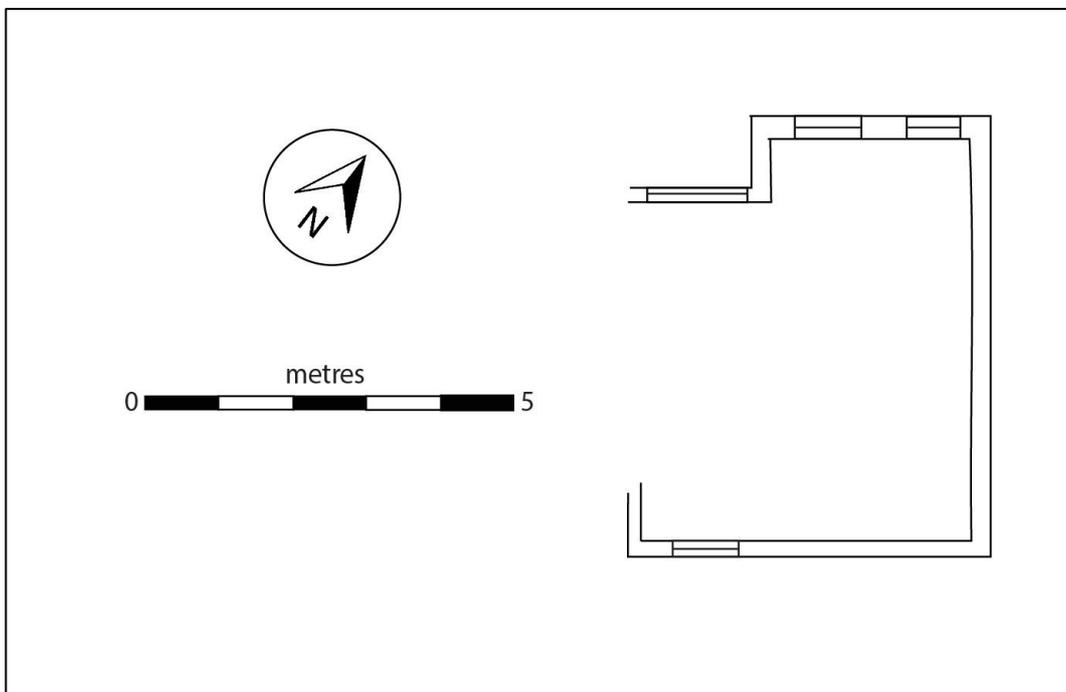


Figure 4-13 The floorplan of the Phase 6 addition. For location refer back to Figure 4-1.

The following sections describe the sitting, structure and fabric of the dwelling. General observations of the presbytery are followed by descriptions of each room in the house and the results of the buildings archaeology

sampling. The post-1900 additions to the structure were not investigated except for where they had impacted the pre-1900 structure.

4.1 Spatial Organisation

The pre-1900 building comprised most of the ground floor, while ground and first floor extensions were added over five phases throughout the twentieth century. The results that follow describe only the rooms on the ground floor relating to the Phase 1 (pre-1900) and Phase 2 (1929) sections.

4.1.1 Site Layout

The presbytery was situated between the basilica to the northeast and the carpark outside the new school building to the southwest. The presbytery was set back from the footpath and had a small fenced in front garden (Figure 4-14). Along the east side, there was a gap between the presbytery and the basilica (Figure 4-15). At the rear of the presbytery, there was a small entrance into the backyard before a cinderblock fence/wall that continued in line with the east elevation to the rear of the site until it abutted Mercy Chapel (Figure 4-16). The presbytery backyard contained two outbuildings. The western boundary was formed by a wooden fence in the front yard and a corrugated iron fence in the backyard on either side of the cinderblock garage (Figure 4-17).



Figure 4-14 Presbytery front garden. Looking west.



Figure 4-15 Area between the basilica and presbytery. Looking north.



Figure 4-16 Backyard showing entrance through the cinderblock fence and one of the outbuildings. Looking southeast.



Figure 4-17 Western boundary of the backyard showing the second outbuilding, corrugated iron fence and cinderblock garage.

4.1.2 Building Form

The original presbytery was a single bay villa with a lean-to at the north (rear) elevation. The roof was double gabled with a single bay. After the additions, the presbytery had a much more complex form. The building was oriented northwest-southeast, fronting onto MacAndrew Road. The primary access to the building was off MacAndrew Road through the south elevation (Figure 4-18), which was comprised of two distinct phases of construction. On the right was the original presbytery structure with a roughcast finish and bay window, while the 1929 extension could be seen to the left of the California bungalow style veranda, added at the same time. The 1929 southern addition mimicked the flush open gable roof with a single flush bay (see Figure 4-4). The bargeboards on the original areas of the roof had been replicated on the post-1900 bay, as had the Chicago windows found on the right-hand bay and to the left of the entrance. The front entranceway had been replaced with a modern glass door and large plain transom window.



Figure 4-18 Exterior: Left – south elevation showing part of the original presbytery structure with a modern stucco and Californian bungalow veranda on the right side. Right – south elevation showing later addition constructed of brick.

None of the original presbytery building was visible on the west or north elevations. The proximity of the garage block and timber fence meant that it was not possible to photograph the west elevation in its entirety (Figure 4-19). There were a variety of window styles recorded along this elevation, including a small fixed window with

textured glass and a sash window on the front addition (Figure 4-19, right) and modern aluminium windows on the 1950s extension to Rooms 8 and 9 and 1940s rear extension. The north elevation was dominated by the mid-twentieth century rear extensions (Figure 4-20) and the back entrance was located along this side. The original structure also had rear, secondary access on the north elevation of the lean-to, which was part of the internal structure at the time of demolition.

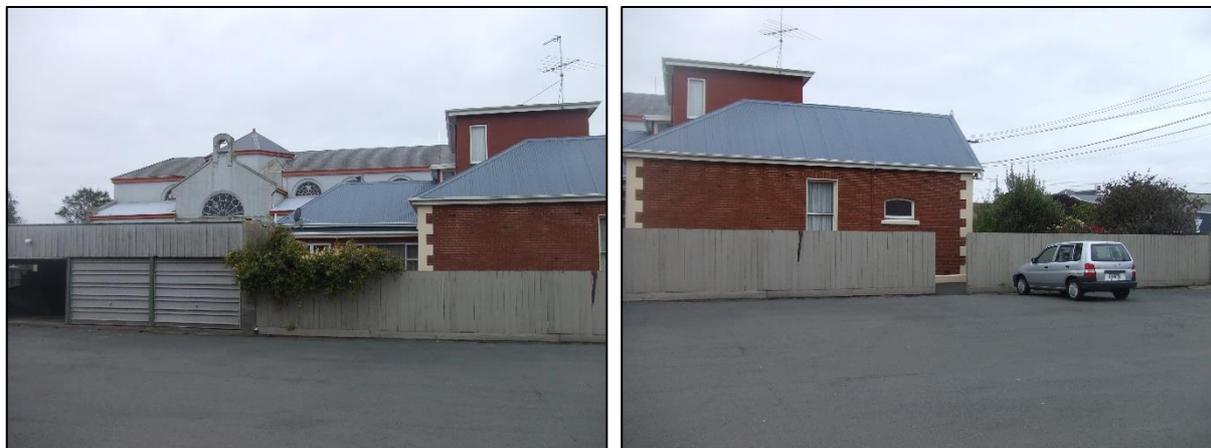


Figure 4-19 West elevation of the presbytery. Left: The 1929 brick addition can be seen in the right of the image, the 1956 extension to Rooms 8 and 9 in the centre (behind the foliage), and the 1951 extension is located behind the garage block. Right: The front addition with its fixed and sash windows.



Figure 4-20 North elevation of presbytery showing 1951 rear extension in the foreground and undocumented addition to the far left of the photo, the 1956 extension in the mid-ground and the 1929 extension in the back right, partially obscured by the garage. Right: The modern rear entranceway along the north elevation.

The east elevation was part of the original structure and had four sash windows; two in Room 2 and two in Room 3.

The pre-1900 portion of the house was constructed of brick in an English Garden Wall bond with a roughcast finish (Figure 4-22). It is believed that the roughcast was applied at the same time as the kitchen addition in 1956 which was probably undertaken as a result of the large fire that destroyed the original room. The original structure was plaster over brick (Figure 4-21). The roughcast was also used as a means of controlling moisture. The brick 1929 and 1940 additions were constructed of brick using cavity walls which created greater airflow throughout the structure and minimising the effect of the rising damp on the structure. It is likely that these portions of the structure were spared the stucco revamp as it did not need further moisture control.



Figure 4-21 Plastered brick exterior wall of the original presbytery along the west side of Room 5 from within Room 10.



Figure 4-22 Detail of stucco over a cavity wall along the west side, outside Room 8 (the kitchen).

The roof of the building was clad with corrugated iron and its structure related to the various additions. The original presbytery had a double-gable roof at the front with hipped ends at the rear and a sloping lean-to. The 1929 addition added an L-shaped pitched roof with a third gable end on the front (south) elevation. The mid-twentieth century additions each had flat roofs.

There were a variety of different window styles throughout the structure, including double-hung sash windows, fixed, casement and aluminium windows. These different window types reflected the numerous periods of modification to the structure.

Once the building archaeology was completed, the presbytery was demolished down to its footings. The footings of the original presbytery building remain in-situ and have been incorporated into the new garden area (Figure 4-23).



Figure 4-23 Presbytery founds left in-site at the end of Stage 2 works.

4.2 Structural Elements

4.2.1 Footings and Foundations

The Phase 1 foundations at 32 MacAndrew Road consisted of an unreinforced concrete ring foundation with concrete piles within the building footprint (Figure 4-24). The concrete ring foundations were 400 x 800 mm deep and were buried to a depth of 600 mm (Figure 4-25). There was a slate damp proof course between the concrete ring foundation and the brick courses. The concrete piles within the original building footprint were 250 x 350 mm and encased in timber (Figure 4-26). They were 220 mm above the ground surface and spaced 1 m apart. The bases of the four fireplaces were concrete mixed with bluestone stone and rubble, 1400 x 1200 mm and were buried to a depth of 400 mm (Figure 4-27). The bases of the fireplaces all remained in-situ until demolition despite the one in Room 3 being removed internally.

The foundations of the later phases of construction were reinforced concrete 200 mm wide and standing 300 mm above ground level (Figure 4-28). Concrete encased in wood was also used as piles under the Phase 2 (1929) addition of the building.



Figure 4-24 The Phase 1 concrete ring foundation at 32 MacAndrew Road.



Figure 4-25 Detail of the Phase 1 concrete ring foundations.



Figure 4-26 Phase 1 concrete piles within the building footprint encased in boxing.



Figure 4-27 Left: Phase 1 fireplace base in-situ. Right: Fireplace base removed.



Figure 4-28 Later phase foundations at 32 MacAndrew Road.

4.2.2 *Subfloor, External and Load-Bearing Walls, and Ceiling Framing*

The Phase 1 subfloor structure consisted of 120 x 120 mm rimu bearers that sat atop the piles and supported 150 x 50 mm rimu joists (Figure 4-29). The bearers were placed 1 m apart and the joists were 450 mm apart (Figure 4-29).



Figure 4-29 The Phase 1 floor in the northeast corner of Room 1.

The external and load bearing Phase 1 walls were single brick laid in English Garden Wall bond (Figure 4-30). The walls were covered in plaster render on the exterior and lined with lath and plaster or beaded tongue and groove match lining on the interior (Figure 4-31). Metal strapping was used in the Phase 2 exterior brick walls (Figure 4-32).



Figure 4-30 External Phase 1 wall in English Garden Wall bond.



Figure 4-31 Internal load bearing wall between Room 1 and Room 4 as seen in Room 1. Note the English Garden Wall bond.



Figure 4-32 During demolition the steel strapping in the Phase 2 brick walls was visible.

The ceilings varied room to room, but the Phase 1 ceilings were all hung on 50 x 90 rimu ceiling joists spaced 450 mm apart (Figure 4-33).



Figure 4-33 Ceiling structure of Room 9 visible during demolition.

4.2.3 Roof Framing

The Phase 1 roof was a timber frame king post roof (Figure 4-34). The framing consisted of 50 x 90 mm rimu king posts, struts and rafters spaced 900 mm apart and fixed to a ridge board. There were purlins fixed to the top of the rafters. There was evidence of fire in the roof structure above Room 9 (Figure 4-35). The corrugated iron had been replaced in the latter part of the twentieth century.



Figure 4-34 The Phase 1 roof structure.



Figure 4-35 Evidence of a fire in the roof structure above Room 9.

4.2.4 *Internal Layout*

The modern layout of the presbytery included 20 rooms from five distinct phases of construction; pre-1900, 1920s, 1940s, 1950s and post-1950s. The original (Phase 1) presbytery structure was eight room single bay brick villa with a central hallway running from the main front entrance to the rear (Rooms 1 – 5, 8, 9, 15 and 16 on Figure 4-2).

The Phase 2 1929 addition was to the western side of the structure that created six new rooms. Internal modifications included the modification of Rooms 5 and 8 to create Rooms 6 and 7. Later twentieth century modifications included Phase 3 additions to the north elevation of the building (Rooms 17, 18 and 19), the Phase 4 addition of the first floor and associated staircase into Room 6, the Phase 5 extension of Rooms 8 and 9, and finally the Phase 6 addition of Room 20 to the east elevation.

4.3 **Internal Linings, Finishes, and Features**

4.3.1 *Flooring*

The floorboards were 100 x 20 mm tongue and groove fixed to the floor joists. The floorboards were generally aligned north to south (Figure 4-36).

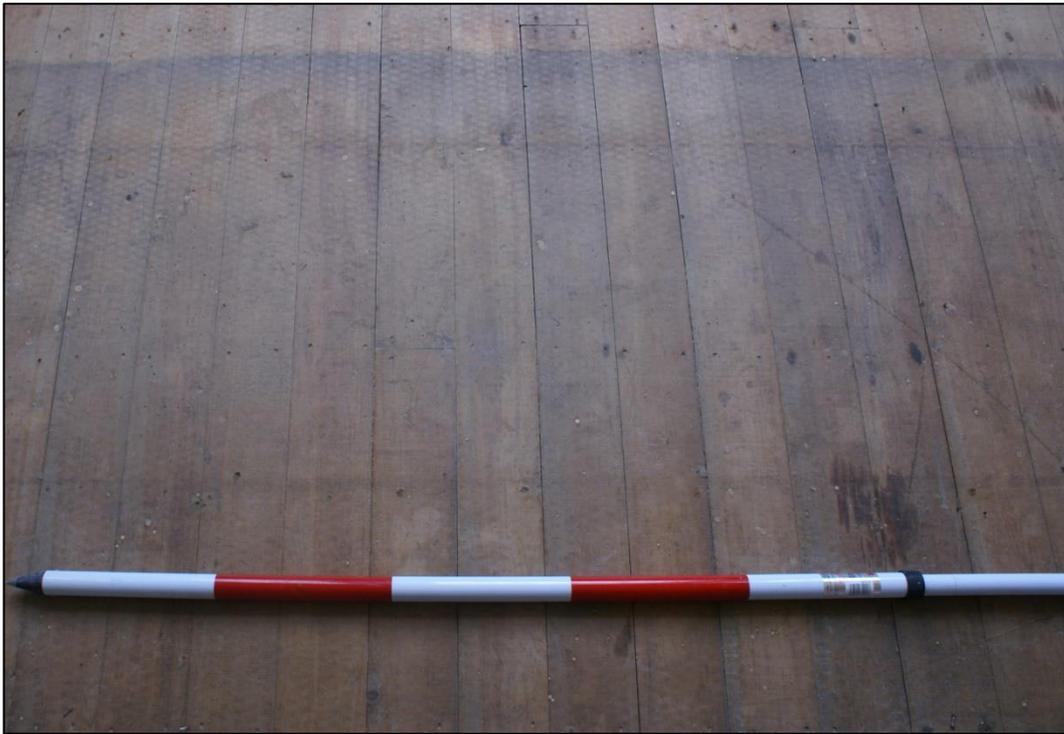


Figure 4-36 Tongue and groove floorboards in Room 1.

4.3.2 *Wall Linings*

The Phase 1 internal walls were lined with a mixture of 110 x 12 mm beaded tongue and groove match lining and lath and plaster (Figure 4-37 to Figure 4-39). In some rooms twentieth century plaster board had been fixed over the original wall linings (Figure 4-40).



Figure 4-37 Beaded tongue and groove wall lining in Room 3a, north wall.



Figure 4-38 Beaded tongue and groove match lining over brick, above false ceiling in Room 3a, north wall. Note the match lining on the original ceiling



Figure 4-39 Lath and plaster wall lining in Room 8, south wall. Note the chimney bust of Room 5 in the wall and fallen bricks from the deconstructed chimney stack in the wall cavity.



Figure 4-40 Late twentieth century plasterboard over beaded tongue and groove match lining in the Room 3 wardrobe (north wall).

4.3.3 Ceilings

The Phase 1 section of the building had 3.4 m high ceilings, although many rooms had lowered ceilings when alterations had been undertaken in the twentieth century. The Phase 1 ceilings were either board and baton or beaded tongue and groove match lining (Figure 4-41 and Figure 4-42). Ceiling roses were identified in Rooms 1 and 5.



Figure 4-41 The Phase 1 board and baton ceiling in Room 5 with ceiling rose.



Figure 4-42 The Phase 1 beaded tongue and groove match lining ceiling in Room 3a, west and north wall.

4.3.4 Joinery – Windows, Doors, Mouldings, and Other Joinery

The presbytery had a mixture of original and twentieth century joinery. Phase 1 joinery such as ornate timber architraves which are typical of villas of this period measured 107 mm wide and 25 mm thick (maximum; or 4.2-x-1 inches) and are present in Room 1, Room 4 and Room 5 (Figure 4-7, left).

Skirting samples were taken from Rooms 1, 2, 5, 10, 11, 12, 13 and 16. Original moulded skirting boards are 188 mm wide (7.4 inches), with decorative elements being restricted to the upper portion (Figure 4-7, right). These were found in Room 1 and 4. Rooms 5, 10, 11, 12, and 13 were identical and a slightly different moulding design relating to Phase 2 modifications (Figure 4-43).

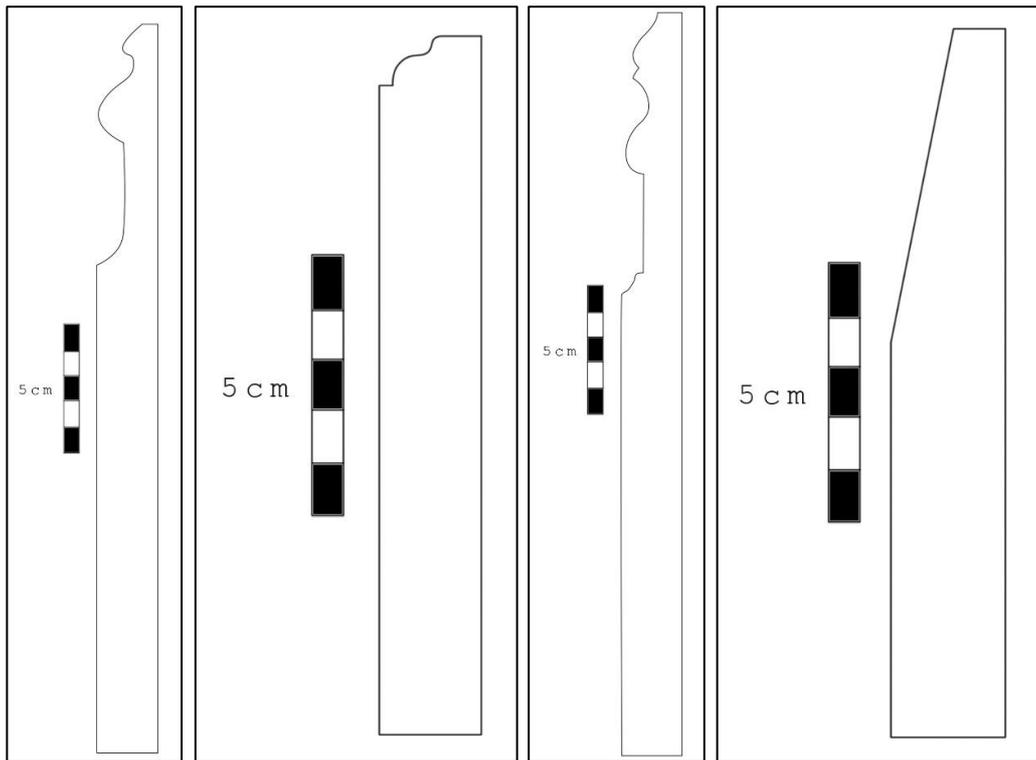


Figure 4-43 Profiles of skirting boards from (left to right): Rooms 1, 2, Rooms 5/10/11/12/13, and 16.

The cornices throughout the villa were decorative and are comprised of several applied mouldings (Figure 4-44).

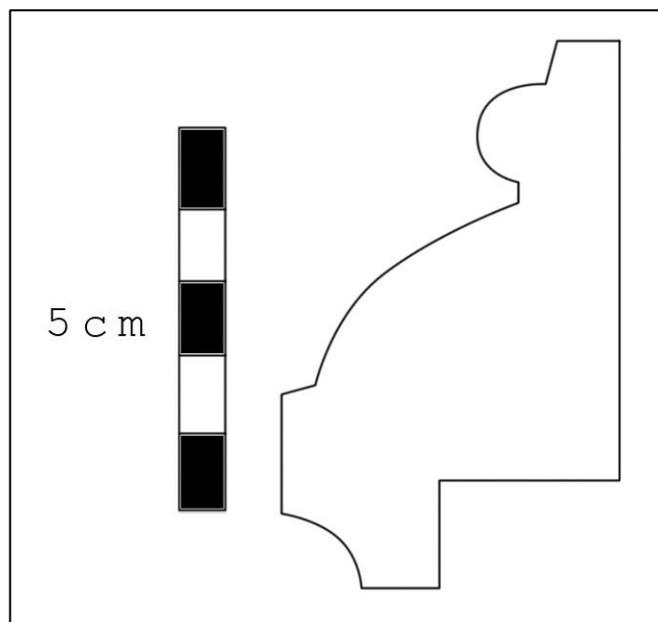


Figure 4-44 Profile of decorative moulding from Room 4 (Hallway).

The majority of doors in the Phase 1 presbytery structure were timber four-panel low lock rail doors that dated to Phase 1. It is interesting to note that all the Phase 1 doors had had their handles and locks moved (Figure 4-45).



Figure 4-45 Phase 1 timber four panel low lock rail doors with moved locks and handles. Room 1 (left) and Room 3 (right).

There were four fireplaces within the original presbytery structure;

- a double-back between Room 1 and 2
- a single fireplace on the north wall of Room 3 (deconstructed down to the base)
- a single fireplace on the north wall of Room 5 which was repurposed as a cupboard when Room 6 was created
- a double-back between Room 8 and 9 (deconstructed down to the base)

4.3.5 Room 1

Room 1 was located on the east side of the building and was accessed through a hallway (west; Room 4). It formed part of the original pre-1900 presbytery structure. The maximum dimensions of the room were 4.259 m wide and 5.106 m long (including the bay window). There were original lath and plaster wall linings and moulded joinery throughout the room, as well as five sash windows within the bay window (Figure 4-46). The bust of a fireplace was positioned in the middle of the northern wall forming a double-back with the fireplace in Room 2 (Figure 4-47).



Figure 4-46 Bay window Room 1, looking south. Note the original joinery.



Figure 4-47 North wall Room 1 showing in-situ fireplace and four-panelled door into Room 4.

The tongue and groove timber floorboards were orientated north-south and the concrete hearth of the fireplace was tiled (Figure 4-48). Differences in the finishes of the floor demonstrated that the room once had a large rug. The walls throughout the room were comprised of several layers of wallpaper over lath and plaster and English Garden Wall bond brick walls (Figure 4-49). The bust of the fireplace was also constructed of brick. The window and door architraves, skirting, and cornices were all original ornate moulded pieces. The ceiling was board and baton with a ceiling rose in the centre of the ceiling (Figure 4-50). The door was an original four panel design.



Figure 4-48 Tongue and groove floorboards orientated north-south.



Figure 4-49 West internal wall showing wall linings in Room 1.



Figure 4-50 Board and baton ceiling and ceiling rose in Room 1.

Several areas were investigated in Room 1. Table 4-1 discusses the layers documented in all test areas.

Table 4-1 Layers identified in Room 1.

Room section	Layers
Floor	<ol style="list-style-type: none"> 1. Foam-backed grey carpet 2. Floorboards – 100mm wide, 25mm thick - running east-west 3. Joist – 150mm x 50mm 4. Bearer – 100mm x 80mm 5. Concrete found – 300mm thick
Wall	<ol style="list-style-type: none"> 1. Wallpaper – painted cream 2. Wallpaper –White splotches on a beige background 3. Wallpaper –Orange/beige bark pattern 4. Wallpaper –Orange splotch pattern 5. Wallpaper –Band khaki hue colouring 6. Wallpaper – Brown hues (Figure 4-51). <div data-bbox="628 1435 1155 1785" data-label="Image"> </div> <p style="text-align: center;">Figure 4-51 Room 1 wall coverings sample.</p> <ol style="list-style-type: none"> 7. Plaster – 15mm thick 8. Lath and plaster – 25mm wide, 5mm thick, 560mm long with 10mm spacing between each 9. Studs – 25mm thick 10. Brick - 70mm x 220mm x 100mm
Ceiling	<ol style="list-style-type: none"> 1. Board and Baton 2. Moulded timber cornices 3. Ceiling rose

4.3.6 Room 2

Room 2 was located on the east side of the building and was accessed through a hallway (west; Room 4) and Room 3 (north) (Figure 4-52). It formed part of the original pre-1900 presbytery structure. The maximum dimensions of the room are 4.332 m wide and 5.320 m long and had been modified from its original size and shape. There were modern ceiling and wall linings and joinery throughout the room, with as two sash windows along the eastern wall (Figure 4-53). The bust of a fireplace was positioned in the middle of the southern wall forming a double-back with the fireplace in Room 1 (Figure 4-54).



Figure 4-52 North-west corner of Room 2 showing door through to Room 3. Note the modern joinery and door into Room3 and the dropped modern ceiling.



Figure 4-53 Sash windows in Room 2 along eastern exterior wall.



Figure 4-54 The north wall of Room 2 and double-back fireplace shared with Room 1.

The tongue and groove timber floorboards were orientated north-south and there was the concrete hearth of the fireplace along the southern wall. A second fireplace concrete base was uncovered beneath the carpet in the centre of the room (Figure 4-55). Differences in the finishes of the floor extending out from the fireplace concrete base denoted the original location of the wall dividing Rooms 2 and 3 and the location of a doorway between the two on the west side of the fireplace. Discolouration also indicated that this second fireplace would have been entirely part of Room 3 along the southern wall of the room.

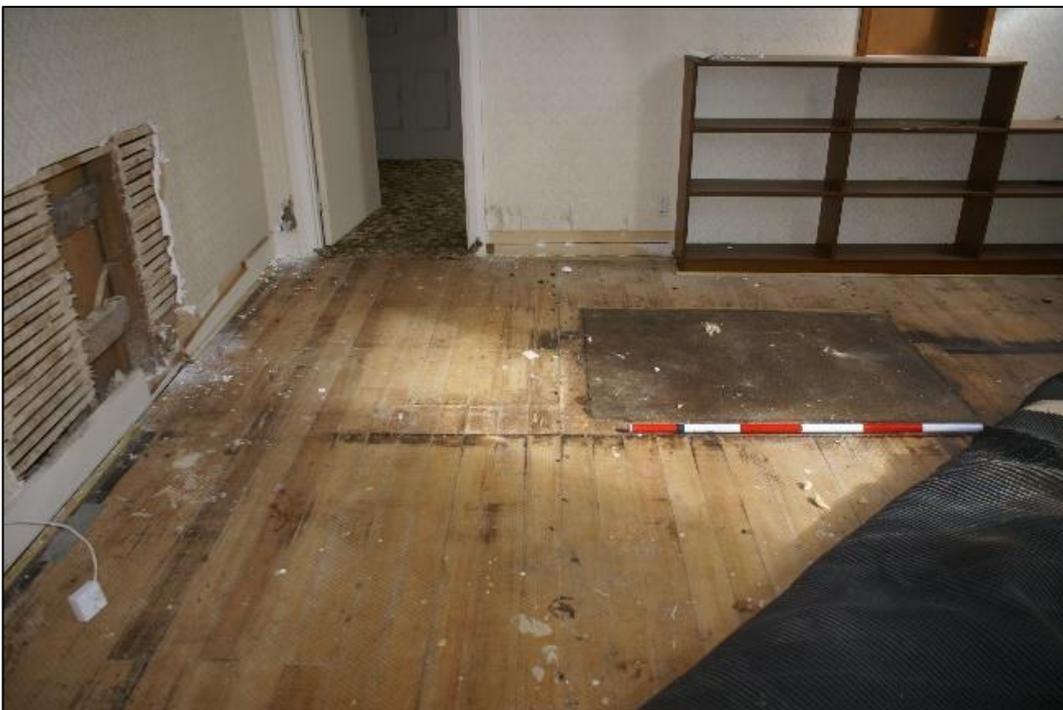


Figure 4-55 Looking north in Room 2 showing the original wall and doorway between Room 2 and 3 and the deconstructed fireplace along the original south wall of Room 3.

The wall linings throughout the room varied, depending on whether they are internal or external, original or late modifications. The west and south walls in the room were lined with wallpaper over Gib, lath and plaster and studs (Figure 4-56). Along the external (east) wall and north wall, the lath and plaster overlay an English Garden Wall bond brick wall. The window and door architraves, skirting and cornices were modern upgrades. The door into the hallway (Room 4) was an original four panel design while the door into Room 3 was modern. The ceiling was dropped and lined with plasterboard tiles (Figure 4-57).



Figure 4-56 East internal wall with Room 4 showing wall linings in Room 2.



Figure 4-57 Dropped modern plasterboard tile ceiling in Room 2.

Several areas were investigated in Room 2, and the layers encountered in each area are documented in Table 4-2.

Table 4-2 Layers identified in Room 2.

Room Section	Layer
Floor	<ol style="list-style-type: none"> 1. Foam-backed green patterned carpet 2. Floorboards – 10 cm wide, 25mm thick - running north-south 3. Remnants of fireplace in the centre of room (concrete pad 1300mm x 920mm)
Wall	<ol style="list-style-type: none"> 1. Wallpaper – White with gold floral pattern 2. Gib 3. Lath and plaster – 25mm wide, 5mm thick, 560mm long with 10mm spacing between each 4. Studs– 25mm thick 5. Brick - 70mm x 220mm x 100mm (external east wall and internal south wall)
Ceiling	<ol style="list-style-type: none"> 1. Plasterboard tiles 2. Plain modern timber cornices 3. Board and baton

4.3.7 Room 3

Room 3 was located on the east side of the building and was accessed through a hallway (west; Room 4) and Room 2 (south) (Figure 4-59). It formed part of the original pre-1900 presbytery structure. The maximum dimensions of the room were 4.418 m wide and 4.315 m long and had been modified from its original size and shape when the south wall was moved. Within the room, a small bathroom was constructed in the north-east corner and a wardrobe in the north-west corner (Room 3a) (Figure 4-59). This room formed part of the original presbytery structure. The bathroom measured 2.573 m wide and 1.641 m long and the wardrobe measured 632 mm wide and 2.260 m long. Within the bathroom there was access into the roof space through the modern dropped ceiling, lining up with the original ceiling manhole above (Figure 4-60). There were modern ceiling and wall linings and joinery throughout the room. A small portion of an original external window remained open and sat between the wardrobe and the entrance into the bathroom along the northern wall looking into an undocumented post-1956 addition to the rear of the building (Figure 4-61). The transom is a small portion of the original sash window still in-situ that has been covered up by the north wall (Figure 4-62). There was one sash window in the larger room and an aluminium retrofitted sash window in the bathroom along the eastern wall (Figure 4-63).

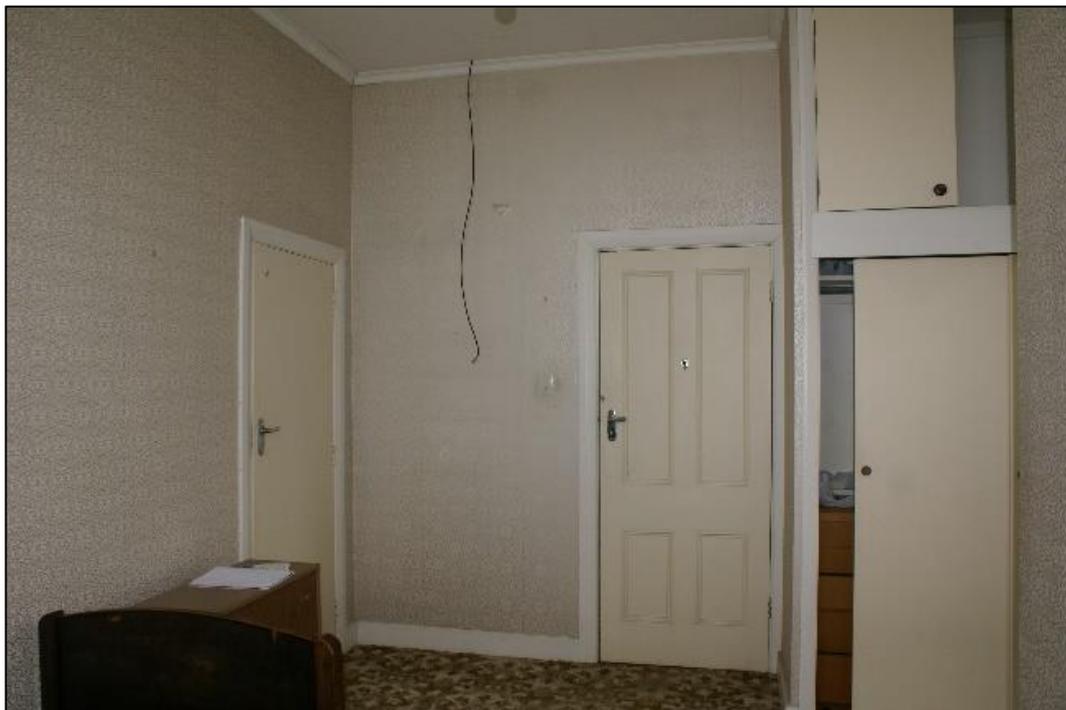


Figure 4-58 Southwest corner of Room 3 showing door through to Room 3 (modern) and Room 4 (four-panelled). Note the modern joinery.



Figure 4-59 North-east corner of Room 3 showing bathroom built within the room.



Figure 4-60 Manhole through the modern plasterboard ceiling that lines up with the original ceiling manhole into the roof cavity in Room 3a.



Figure 4-61 Transom window between the wardrobe and bathroom along the north wall of Room 3. This is a portion of the original sash window not obscured by modern wall linings



Figure 4-62 Original external north wall of the presbytery (Room 3).



Figure 4-63 Left: Retrofitted sash window in the bathroom which is now aluminium. Right: Sash window in the main portion of Room 3.

Room 3 and Room3a had tongue and groove timber floorboards orientated north-south. Differences in finishes of the floor demonstrated the original location and dimensions of Room 3a in the northeast corner of the room approximately where the bathroom currently is (Figure 4-64).



Figure 4-64 Discolouration of the flooring where a wall once was at the northern end of Room 3 dividing it with Room 3a.

The wall linings throughout the room varied, depending on whether they are internal or external, original or late modification. Within Room 3 the west, south and north internal wall (shared with Room3a) in the room were

lined with wall paper over Gib, lath and plaster and studs (Figure 4-64). Along the external (east) wall the lath and plaster overlay an English Garden Wall bond brick wall on studs. In Room 3a and in the Room 3 wardrobe (which would have been one room), the walls were lined with Gib over tongue and groove and also overlay an English Garden Wall bond brick wall (Figure 4-66 and Figure 4-67). The window and door architraves, skirting, and cornices throughout the rooms were all modern upgrades. The door into the hallway (Room 4) was an original four panel design while the door into Room 2 and bathroom was modern (Figure 4-68). Within Room 3, the original door into Room 3a is covered over with Gib in the wardrobe while the original architrave for the doorway remains present in Room 4.

The ceiling in Room 3 and bathroom was dropped and lined with plasterboard tiles. Through the manhole in the bathroom, the dimensions of the room where the bathroom is now located was clearly evident, and the Phase 1 ceiling of this room was cream painted tongue and groove beaded match lining (Figure 4-68). The original ceiling of the rest of the room was board and baton.



Figure 4-65 North internal wall with the bathroom showing the internal wall linings in Room 3.



Figure 4-66 North external wall in bathroom showing wall linings.



Figure 4-67 North-east internal/external wall within the wardrobe showing wall linings.



Figure 4-68 Ceiling space between the original and modern dropped ceiling looking east towards Room 4. The lath and plaster forms the internal north wall shared with Room 3.

Several areas were investigated in Room 3. Table 4-3 discusses the layers documented in all test areas.

Table 4-3 Layers identified in Room 3.

Room Section	Layers
Floor	<ol style="list-style-type: none"> 1. Foam-backed green patterned carpet 2. Floorboards – 10 cm wide, 25mm thick - running north-south
Wall	<ol style="list-style-type: none"> 1. Wallpaper – white with gold floral pattern (same as Room 2) 2. Wallpaper – brown floral pattern (bathroom) 3. Wallpaper – cream (wardrobe) 4. Gib 5. Lath and plaster– 25mm wide, 5mm thick, 560mm long with 10mm spacing between each 6. Cream painted vertical tongue and groove match lining (Room 3a only) 7. Dark stained vertical tongue and groove sarking (wardrobe) 8. Studs - 25mm thick 9. Brick - 70mm x 220mm x 100mm (external east and north)
Ceiling	<ol style="list-style-type: none"> 1. Plasterboard tiles 2. Plain modern timber cornices 3. Board and baton 4. Cream painted tongue and groove match lining (bathroom and wardrobe)

4.3.8 Room 4

Room 4 was the main hallway running down the centre of the structure and was part of the original pre-1900 presbytery structure. The maximum dimensions of the room are 1.5 m wide and 11.049 m long. There is a decorative moulded archway about halfway down the hallway at 5.339 m (measured from the front door, south end of the building). It is accessed by Rooms 1, 2 and 3 along the east side, Room 16 at the end of the hallway (north side) and Rooms 6, 8, 9 and 15 along the west side. The main front door formed the southern wall of the room and there was a backdoor along the east wall at the rear of the hallway. There were original wall linings and joinery throughout the room.

The carpet throughout the room was pulled back, revealing tongue and groove timber floorboards orientated north-south. The wall linings throughout the room varied before and after the doorway at the northern end of the hallway where the scullery was. In the main portion of the hallway south of the doorway (front section), the walls are lined with wallpaper over Gib, lath and plaster and studs. The lower half of the walls are lined with

wooden wainscoting (Figure 4-69). North of the rear doorway, the walls were lined with cream painted vertical tongue and groove sarking, studs and overlay an English Garden Wall bond brick wall brick as seen in Room 3a (Figure 4-70).



Figure 4-69 Looking east into Room 4 showing the wooden wainscoting.



Figure 4-70 Rear section of Room 4 showing the tongue and groove match lining.

South of the end doorway, the window and door architraves, skirting, and cornices were all original ornate moulded pieces in Room 4. North of the doorway, the door architraves, skirting, and cornices were all modern upgrades overlying vertical tongue and groove match lining.

From Room 4 into Rooms 1, 2, 3, 8 and 9, the doors were original four panels and remained in their original location. The archway into Room 6 was not original but is in the original location of the doorway into Room 5 and designed in keeping with the original presbytery interior. The original architrave around the doorway into Room 3a was still in-situ, however, it had been blocked up. The ceiling in Room 4 was board and baton.

4.3.9 Room 5, 6 and 7

Room 5 was located on the west side of the building and was accessed through a hallway (north; Room 6). It formed part of the original pre-1900 presbytery structure. Rooms 6 and 7 were once part of Room 5, however, and were created when hallway access into the 1929 addition was constructed. The maximum dimensions of the room are 4.213 m wide and 2.807 m long which had been modified from its original size and shape. There were original wall linings and joinery throughout the room, as well as three sash windows along the southern wall (Figure 4-72). A small cupboard was built into the north wall, next to the door entering the room (Figure 4-72). Inside the cupboard several artefacts were uncovered, including matches, a 1975 10cent piece, and a 1988 20cent piece

Room 6 was the hallway access from the original presbytery structure into the 1929 addition. It included a cupboard inset into the original Room 5 fireplace along the north wall, a safe also along the north wall and the staircase up to the second-storey built in 1940. Room 7 was to the immediate west of Room 6 and held the staircase that accessed the Phase 4 first floor addition.



Figure 4-71 South exterior wall of Room 5 showing the sash windows. Note the original joinery around the windows. The moulded skirting is not original but the same design shared throughout the 1929 addition which is a similar style to that seen in the original presbytery structure.



Figure 4-72 North-west corner of Room 5 showing the doorway access into Room 6 and the board and baton ceiling.



Figure 4-73 Looking east from Room 7 through Room 6 to Room 4.

The tongue and groove floorboards were orientated north-south. Differences in finishes of the floor demonstrated the original location and dimensions of Room 5 (Figure 4-74).



Figure 4-74 Discolouration of the floorboards at the west end of Room 6.

The wall linings throughout Rooms 5, 6 and 7 varied, depending on whether they are internal or external, original or late modification. The north wall of Room 6 and east wall of Room 5 were lined with wallpaper over Gib, lath and plaster and studs (Figure 4-75). Along the external south and original exterior west wall, the lath and plaster overlay an English Garden Wall bond brick wall on studs (Figure 4-76). The window architraves in Room 5 were original moulded pieces. The door and skirting moulded pieces within Room 5 were modern upgrades which were the same styles used throughout rooms constructed in the 1929 addition. The door and skirting moulded pieces within Room 6 were also modern upgrades, but of a later period.

Along the north wall of Room 6, a fireplace that was once in Room 5 had been converted into a cupboard and the chimney stack deconstructed (Figure 4-77). The brick rubble from the chimney stack deconstruction filled the wall cavity.

Along the west original exterior wall in the northwest corner of Room 5, a sash window was uncovered, 2.2 m back from the front (south) wall of the room (Figure 4-78). The window extended beyond the northern wall of the room into Room 7 and was covered up when the 1929 addition had been constructed. The window height is 2.334 m.



Figure 4-75 North internal wall of Room 6 (original north wall of Room 5) showing the wall linings of Room 5.



Figure 4-76 West (original exterior) wall in Room 5 showing wall linings.



Figure 4-77 Left: Original fireplace from Room 5 converted into a cupboard in Room 6 along the interior north wall. Right: Fireplace back from Room 8 showing the deconstructed chimney in the wall space.



Figure 4-78 Left: Covered up sash window in the north-west corner of Room 5 along the original west exterior wall. Right: Top of window arch in Room 7 above the stairway going upstairs looking east towards Room 4.

In Room 5, the ceiling was board and baton with a plain ceiling rose in the centre of the ceiling. The ceiling in Room 6 had been dropped and was lined with Gib (Figure 4-79). The door into Room 5 was a four panel design and may be the original door to the room reused when the access way changed.



Figure 4-79 Modern dropped ceiling in Room 6.

Several areas were investigated in Room 5, 6 and 7, and the layers encountered in each area are documented in Table 4-4.

Table 4-4 Layers identified in Room 5

Room Section	Layers
Floor	<ol style="list-style-type: none"> 1. Foam-backed green patterned carpet 2. Floorboards – 10 cm wide, 25mm thick - running north-south
Wall	<ol style="list-style-type: none"> 1. Wallpaper - light brown pattern 2. Wallpaper – floral, leaf and circle pattern 3. Gib 4. Lath and plaster– 25mm wide, 5mm thick, 560mm long with 10mm spacing between each 5. Studs– 25mm thick 6. Brick - 70mm x 220mm x 100mm (external west and south wall)
Ceiling	<ol style="list-style-type: none"> 1. Board and Baton 2. Moulded timber cornices 3. Ceiling rose 4. Plasterboard panel (Room 6 and Room 7) 5. Plain modern timber cornices (Room 6 and Room 7)

4.3.10 Room 8

Room 8 was located on the west side of the building and was accessed through a hallway (east; Room 4) and Room 9 (north) (Figure 4-59). It formed part of the original pre-1900 presbytery structure. In 1956 after a fire, Room 8 was extended west and the room size was increased. There were modern ceiling, wall linings and joinery throughout the room.



Figure 4-80 Southeast corner of Room 8 showing modern fittings. Looking east to Room 4



Figure 4-81 Looking southwest in Room 8 showing the 1956 addition in relation to the original room.



Figure 4-82 North-west corner of Room 8 showing doorway through to Room 9 and the transition from original presbytery structure and new addition due to the re-lining of the room.



Figure 4-83 Modern external west wall of Room 8.

The tongue and groove timber floorboards were orientated north-south. Beneath the floorboards, the original presbytery structure footing remained in-situ, with the wall deconstructed entirely (Figure 4-84). The wall linings throughout the room varied, depending on whether they are internal or external, original or late modification.

The east and south wall in the room were lined with wallpaper over Gib, lath and plaster and studs forming the original internal presbytery walls (Figure 4-85 and Figure 4-86). Along the original external (east) wall, the lath

and plaster overlay an English Garden Wall bond brick wall on studs. A portion of a bricked-up sash window was uncovered along this wall. The wall linings for the 1956 addition were plasterboard. The window and door architraves, skirting, floorboards and cornices were modern upgrades. The door into the hallway (Room 4) was an original four panel door while the door into Room 9 was modern. The ceiling was dropped and lined with plasterboard tiles.



Figure 4-84 Portion of original exterior west wall deconstructed and footing still present beneath the floorboards when the room was extended.



Figure 4-85 Looking southwest in Room 8 showing the remaining portion of the original exterior west wall still in-situ and interior south wall with the original wall linings. Note the bricked-up sash window partially obscured by remaining wall linings to the right of the stadia rod.



Figure 4-86 Looking east in Room 8 showing the wall linings of the interior wall it shares with Room 4.

Several areas were investigated in Room 8. Table 4-3 discusses the layers documented in all test areas.

Table 4-5 Layers identified in Room 8.

Room Section	Layers
Floor	<ol style="list-style-type: none"> 1. Foam-backed red and gold patterned carpet 2. Floorboards – 10 cm wide, 25mm thick - running north-south (post-1900)
Wall	<ol style="list-style-type: none"> 1. Wallpaper – cream 2. Gib 3. Lath and plaster– 25mm wide, 5mm thick, 560mm long with 10mm spacing between each 4. Studs - 25mm thick 5. Brick - 70mm x 220mm x 100mm (original external west wall)
Ceiling	<ol style="list-style-type: none"> 1. Plasterboard tiles 2. Decorative modern timber cornices

4.3.11 Room 9

Room 9 was located on the west side of the building and was accessed through a hallway (east; Room 4) and Room 8 (south) (Figure 4-87 to Figure 4-89). It formed part of the original pre-1900 presbytery structure. In 1956 after a fire, in conjunction with Room 8, Room 9 was also extended west and the room size was increased. There were modern ceiling, wall linings, doors and joinery throughout the room, forming a modern kitchen.



Figure 4-87 South wall Room 9 showing doorway to Room 8.



Figure 4-88 North wall Room 9 showing doorway to Room 4.



Figure 4-89 Modern 1956 west exterior wall of Room 9 looking towards the rear lean-to (Room 15) and 1951 addition.

The tongue and groove timber floorboards were orientated north-south. The wall linings were almost entirely modern with the exception of the east internal wall shared with Room 4 and a portion of the north and south walls where the original presbytery structure remained. The internal east wall is lined with Formica over Gib, lath and plaster and studs.

The window and door architraves, skirting, ceiling and cornices were all modern upgrades. The ceiling was modern Gib (Figure 4-50). Both doors were modern upgrades.

In the roof space there was evidence of the extensive fire in the kitchen which resulted in the room modifications in 1956 (Figure 4-90). There was also some charred wood and soot visible when portions of the walls were removed.



Figure 4-90 Charred trusses in the roof above Room 9.

Several areas were investigated in Room 9. Table 4-6 discusses the layers documented in all test areas.

Table 4-6 Layers identified in Room 9.

Room Section	Layers
Floor	<ol style="list-style-type: none"> 1. Linoleum 2. Floorboards – 10 cm wide, 25mm thick - running north-south (post-1900)
Wall	<ol style="list-style-type: none"> 1. Formica 2. Gib 3. Lath and plaster– 25mm wide, 5mm thick, 560mm long with 10mm spacing between each (east wall shared with Room 4) 4. Studs - 25mm thick
Ceiling	<ol style="list-style-type: none"> 1. Plasterboard tiles 2. Decorative modern timber cornices

4.3.12 Room 15

Room 15 was located at the rear of the presbytery on the north side of the building and was accessed through a hallway (east; Room 4) and two rooms forming part of the 1940 rear additions (north). It formed the rear, northwest corner of the original pre-1900 presbytery structure and was a lean-to ‘maid’s’ room. There were modern ceiling and wall linings and joinery throughout the room, as well as two sash windows along the western wall that were added in 1940 (Figure 4-91). The original window along the northern wall formed the doorway into Room 17.



Figure 4-91 The interior (left) and exterior (right) of Room 15.

The tongue and groove timber floorboards were orientated north-south. The wall linings throughout the room varied, depending on whether they are internal or external, original or late modification. The west and north walls were finished with fibrous plasterboard, studs over the English Garden Wall bond. These two walls formed the original exterior walls of the presbytery. The east wall was finished with plasterboard over modern studs where the L-shaped scullery and pantry was reduced in size; increasing the original size of Room 15. The remaining original portion of the east wall shared with Room 16 was finished with fibrous plasterboard over lath and plaster overlying studs. The south wall, shared with Room 9 was also comprised of fibrous plasterboard over modern studs. In the southeast corner of the south wall, double studs were present where the original doorway between Room 15 and Room 9 had been boarded up (Figure 4-92).



Figure 4-92 The southeast corner of Room 15 where the original doorway with Room 9 had been boarded up.

The doorway into Room 17 was created by modifying the original sash window along the north wall while the doorway into Room 18 had been created through the original presbytery exterior wall (Figure 4-93). The two sash windows along the west wall were installed in 1940 mimicking the original sash window style of the building.

The window and door architraves, skirting, and cornices throughout the room are all modern upgrades. The doors into Room 4, 17 and 18 are all modern. The ceiling in Room 16 is constructed of fibrous plasterboard and at the centre of the room starts angling downwards towards the north wall forming a typical lean-to roof design (Figure 4-94).



Figure 4-93 The north wall of Room 15 (original exterior wall) showing the space of the original sash window modified for the doorway into Room 15.



Figure 4-94 The east wall of Room 15 showing original lean-to roof.

Several areas were investigated in Room 15. Table 4-7 discusses the layers documented in all test areas.

Table 4-7 Layers identified in Room 15.

Room Section	Layers
Floor	<ol style="list-style-type: none"> 1. Foam-backed cream carpet 2. Floorboards – 10 cm wide, 25mm thick - running north-south
Wall	<ol style="list-style-type: none"> 1. Wallpaper – floral motif (cream) (see Figure 4-94) 2. Fibrous plasterboard 3. Studs 4. Brick - 70mm x 220mm x 100mm (East external wall and north original external wall)
Ceiling	<ol style="list-style-type: none"> 1. Gib-plasterboard 2. Plain modern timber cornices

4.3.13 Room 16

Room 16 was located at the rear of the presbytery on the north side of the building and was accessed through the hallway (south; Room 4) (Figure 4-95). It formed part of the original pre-1900 presbytery structure as the scullery. There are modern ceiling and wall linings and joinery throughout the room internally. The external door architrave appears to be original but sourced from elsewhere within the structure as this doorway was only formed in 1929. The walls throughout the room were lined with cement board over studs. Along the north wall (original external wall of the presbytery), the studs overlay English Garden Wall bond brick and the original sash window which had been bricked up (Figure 4-95). It extended into the northeast corner of Room 15 as the originally scullery was a larger L-shaped room reduced in size in 1929.



Figure 4-95 Looking north into Room 16 with the bricked up window visible to the left of the photo scale.

5 Description of Archaeological Work Undertaken

The following sections provide the results of archaeological investigations at 32 MacAndrew Road, Dunedin including sites I44/539 (presbytery), I44/540 (basilica) and I44/541 (new school). The results pertaining to the presbytery and new school (Stage 1 and 2) will expand upon what has previously been reported on in an interim archaeological report (McPherson, S., Taylor, A., Dyer, D., Moyle, J., Cawte, 2013). All artefacts and faunal remains recovered during the earthworks have been analysed, and they provide additional data for understanding both the archaeological features and the past lives of the people who occupied these sites.

5.1 Stage 1: New School – Sub-surface archaeology (Excavation Area 1 (EA1)) – I44/541

Stage 1 involved monitoring the foundations for two new entrances into the new St Patrick’s school building on the eastern and northern aspects and the associated service upgrades. Fieldwork was conducted between the 8th and 10th of October 2012 by Adrian Taylor and Sheryl Cawte. The earthworks in EA1 consisted of a series of trenches a maximum of 350 mm deep for drainage and footings for the new school entrances (Figure 5-1).

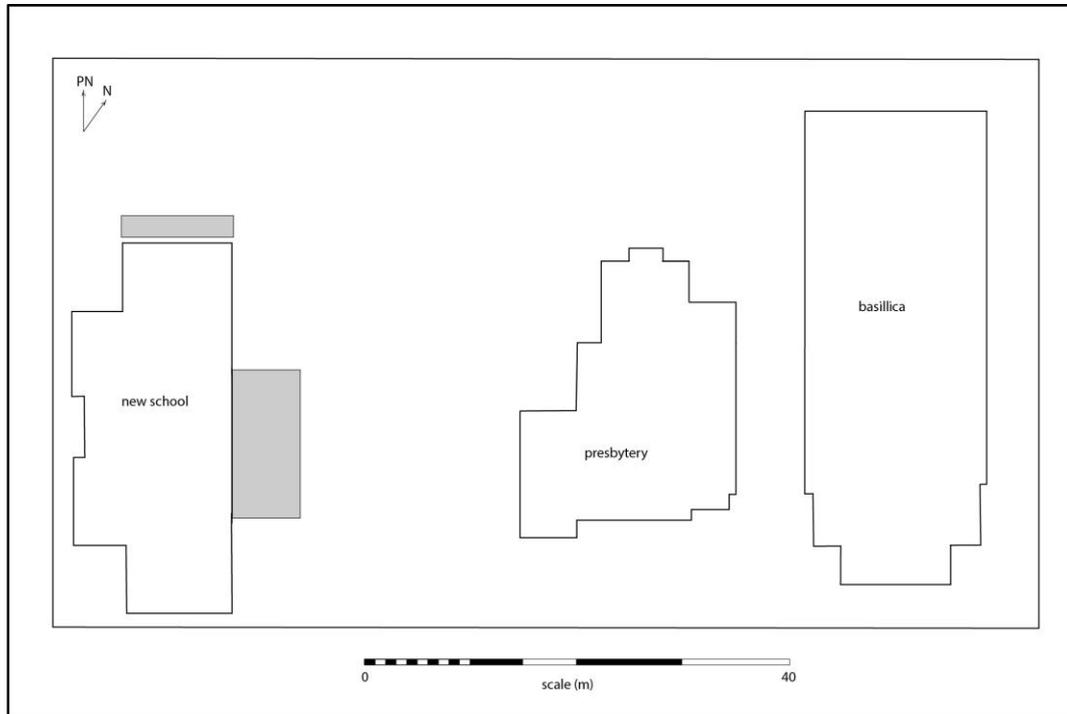


Figure 5-1 Stage 1 of excavations (in grey) at the St Patricks site.



Figure 5-2 East side of the school building prior to site works beginning.



Figure 5-3 North side of the school building prior to works starting.

5.1.1 Stratigraphy

Across EA1, the stratigraphic profile was shallow with a maximum excavation depth of 350 mm (Figure 5-4). Five distinct stratigraphic layers were identified:

- A001: modern asphalt surface (30 mm)
- A002: mid-brown top soil (20 mm)
- A003: yellow/orange/brown mixed fill layer comprised of rock, fine sediment (150 mm)
- A004: natural dark grey anaerobic layer where the water table fluctuates (150 mm)
- A005: natural light grey natural clay subsoil (depth of approximately 350 mm)

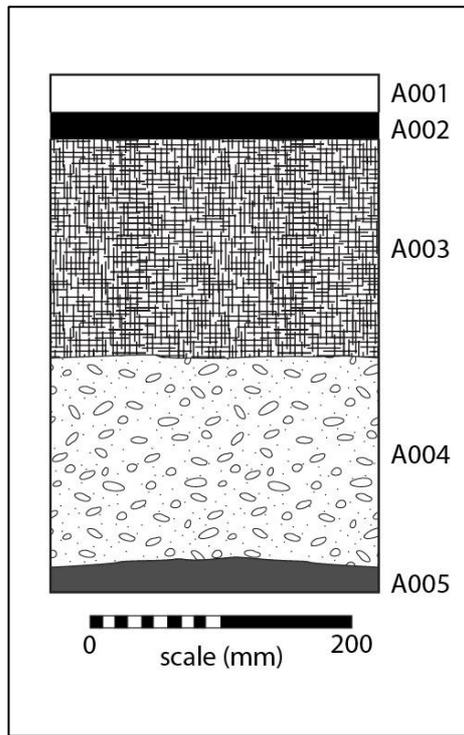


Figure 5-4 Scale drawing of the stratigraphic profile of EA1.

5.1.2 *Archaeological features and artefacts*

One feature was identified during excavation of EA1

A006 – Floor Surface

A hard-packed clay/concrete floor surface was only partially exposed during drainage trenching outside the eastern aspect of the school building. The surface was 50 mm thick and 220 mm beneath the current ground height. It was laid directly on A004, beneath A003 (Figure 5-5).



Figure 5-5 A006 beneath the A003. Left: Plan view. Right: Stratigraphic profile of EA1.

A small artefact assemblage of 121 fragments was collected during works in EA1. These were all recovered within A003 during excavations outside the northern aspect of the school building. The excavations on the eastern side of the school building yielded no artefacts (Table 5-1). As artefacts were scattered throughout A003, they are discussed as one assemblage.

Table 5-1 Summary of artefact assemblage recovered from EA1, I44/541.

Artefact Class	NISP	MNI/V
Ceramic Vessels	77	35
Glass Vessels	13	6
Metal	5	5
Other	16	13
Faunal	10	4
Total	121	63

The ceramic vessel assemblage was comprised of 77 fragments, representing 35 vessels. Four ware types were identified: bone china, whiteware, Bristol-glazed stoneware, and White Granite. By a large margin, the most numerous were whiteware, with an MNV of 30 (Table 5-2). Three Bone China vessels and single examples of White Granite and Bristol-glazed stoneware were also recovered. A variety of vessel forms were identified amongst the ceramic vessel assemblage (Table 5-2). Table and teaware such as saucers, cups, and bowls dominated the assemblage, with plates the single most numerous form. Only one other artefact form was present: the stoneware bottle.

Table 5-2 EA1 ceramics by ware type and vessel form (MNV).

Vessel Form	Bone China	Whiteware	White Granite	Bristol-glazed Stoneware	Total
Plate	-	10	-	-	10
Ashette	-	3	-	-	3
Bowl	-	3	-	-	3
Cup	1	6	-	-	7
Saucer	2	3	-	-	5
Mug	-	-	1	-	1
Jar	-	2	-	-	2
Bottle	-	-	-	1	1
Unidentified	-	3	-	-	3
Total	3	30	1	1	35

Whilst much of the tableware within the ceramic assemblage was undecorated, various decorative techniques were also observed (Figure 5-6). The range present is typical for a late nineteenth century assemblage. Most common among this assemblage these was blue under-glaze transfer printing (UGTP), closely followed by black UGTP. Collectively, the variety of different UGTP decorated ceramics make up 47% of the assemblage. Only two patterns, Asiatic Pheasant and Rouen, were able to be identified among these UGTP ceramics. These were two very common nineteenth century patterns. Additionally, one vessel was identified as having its UGTP decoration highlighted with paint. Other decorative techniques observed within the assemblage included gilding (two Bone China saucers and a cup, moulding (the Berlin Swirl motif on the White Granite mug), incising (a whiteware jar), banding (six vessels), and flow blue.

A maker's mark was present on the Bristol-glazed stoneware bottle that read "DOULTON & CO LIMITED/ LAMBETH/ 19." Doulton ran a pottery factory in Lambeth from the 1850s but was only incorporated as a limited liability company in 1899 (Tinkler, 2006), providing a *terminus post quem* (TPQ) for the ceramic vessels of 1899.



Figure 5-6 Selection of ceramic vessel sherds recovered during from EA1.

The majority of the glass fragments recovered were identified as bottle glass (Table 5-3 and Figure 5-7). Most of these fragments were too small to allow for the conclusive identification of form or function with the exception of one case gin and a schnapps bottle identified. Based on the variations in the colour of glass specimens, the assemblage represents at least five bottles. The base of a pressed glass tumbler was also recovered. No diagnostic fragments other than the tumbler base were present, and no fragments showed evidence of manufacture method, therefore no chronological conclusions can be drawn from the glass vessels.

Table 5-3 Glass by type (MNV) retrieved from EA1, I44/541.

Vessel Type	MNV
Bottle	5
Drinking Vessel	1
Grand Total	6



Figure 5-7 Glass fragments from EA1.

Five metal artefacts were recovered from EA1 (Figure 5-8). The more ambiguous specimens include a length of tin wire (bent into a loop at one end), a small metal grate in the shape of a trapezium, and a strip of tin or lead sheeting. More distinct was a piece of cast iron moulded as a raised relief quatrefoil design. Though its exact use is unknown, it appears to be some form of architectural fitting. A single wire nail was also present in the assemblage. None of these artefacts provide precise chronological information and all are structural components.



Figure 5-8 From left: Wire, quatrefoil architectural fitting, lead sheet, metal grate and wire nail.

Other artefacts recovered from EA1 were mostly structural materials (Figure 5-9). Two terracotta roof tile fragments from Marseilles tiles were found and both have the partial makers mark “GUICHARD [FRERES]/SEON [ST. HENRI, MARSEILLE].” This was a company active from 1890 till 1908 (Tasker, 1993), and Marseille tiles were only introduced to New Zealand c1901 (Tasker, 1993). These tiles relate to the new school building as it is the only structure on site with a terracotta tile roof, and also provide an overall TPQ for the

assemblage of 1917 when this building was erected. Two samples were also taken of the concrete and lime-cement ‘floor’ that was discovered during the excavations. Considering the uneven top surface of the lime-cement layer, as well as the large amount of fill that covered it, it is possible that this feature represented the discard of waste building materials or a foundation for the asphalt layers above. Five fragments of window glass, three pieces of weathered limestone, and two pieces of timber were recovered from the site. The difference in colour between the various flat glass fragments suggests that the fragments represented two windows. One of the timber pieces appeared to be rectangular in cross section. In addition to these structural components, two small (c. 50mm across) pieces of textile were collected. One of these was felt while the other was cotton, and both were black.



Figure 5-9 Timber, lime, concrete and fabric recovered from EA1.

The faunal assemblage from EA1 comprised entirely of shell with the exception of one unidentified mammal rib bone (Table 5-4). These shells represented three different species: *Austrovenus stutchburyi* (cockle), *Paphies australis* (pipi), and an unidentified species of *Saccostrea* (rock oyster). These species were exploited as food by both European settlers and the Māori populations who arrived before them. Based on the relative number of left and right shells, the shellfish specimens collectively represent a minimum number of four individuals.

Table 5-4 Faunal remains by species (NISP and MNI) retrieved from EA1, I44/541.

Species	NISP	MNI
Unidentified Mammal	1	1
<i>Austrovenus stutchburyi</i>	4	1
<i>Paphies australis</i>	4	2
<i>Saccostrea</i> Sp.	1	1
Grand Total	10	4

5.2 Stage 2 – Presbytery – Sub-surface archaeology (Excavation Area 3 (EA3)) – I44/539

Stage 2 excavations involved the building recording of the presbytery structure (EA2) and monitoring the site clearance of the presbytery post demolition for landscaping (EA3). Fieldwork was conducted by Sheryl Cawte and Danielle Dyer between the 29th of January 2013 and the 1st of February 2014. Site works involved the removal of the presbytery floorboards that had been left in-situ following the demolition of the structure, removing subsurface post-1900 building structural elements and scraping the site in preparation for landscaping. EA3 included the footprint of the presbytery and the site from MacAndrew Street (south) back to the Mercy Chapel (north) and from the path along the basilica (east) to the edge of the carpark (west) (Figure 5-10 to Figure 5-12).

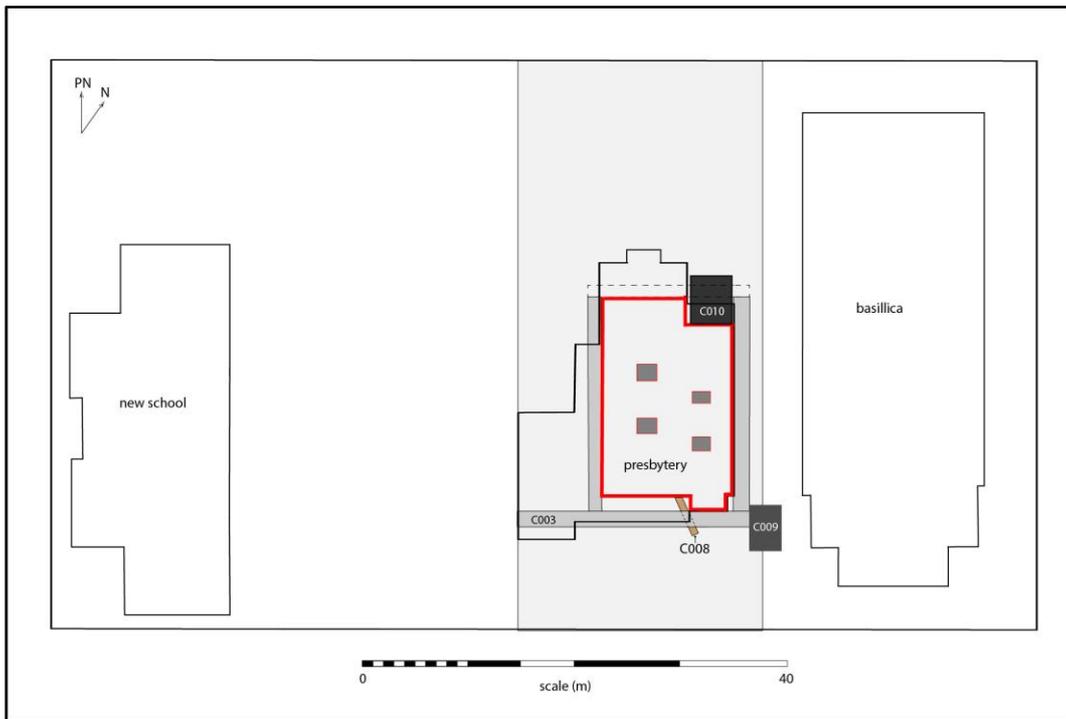


Figure 5-10 Stage 2 of excavations at St Patricks (in grey) with the Phase 1 presbytery foundations in red and fireplaces marked.



Figure 5-11 Presbytery wooden floors in-situ after the building was demolished.



Figure 5-12 Lifting the floors.

As discussed above, the external founds were constructed of a combination of concrete and large stones beneath the original presbytery structure. Piles were concrete encased in wood boxing measuring 250 mm x 350 mm. This suggests they were poured onsite. All of the original fireplace foundations remained in-situ when the floor was lifted constructed of a combination of concrete and large stones (Figure 5-15). The piles in the 1929 addition were also constructed of concrete encased in wood as was the fireplace base (Figure 5-16). The foundations and chimney bases of the 1929 addition were both deeper and larger in size than those of the original presbytery structure, seeming to account for the poor ground surface when the extension was built. The piles measured 300 mm x 250 mm with a depth of 650 mm while the fireplace bust had a double foundation and had a depth of 750 mm (Figure 5-17).



Figure 5-13 The ground beneath the lifted floor boards.



Figure 5-14 Removing a section of the footings from the presbytery addition. Looking east.



Figure 5-15 Base of the double-back fireplace between Rooms 1 and 2 constructed of a concrete and stone mix. Looking south.



Figure 5-16 Fireplace foundation in-situ within 1929 addition.



Figure 5-17 The larger foundations of the fireplace base from 1921 addition.

The foundations of the post-1929 additions were comprised of various concrete pads (Figure 5-18).



Figure 5-18 Foundation pads of the later additions.



Figure 5-19 EA3 after site clearance with original presbytery founds left in-situ. Looking southwest.

5.2.1 Stratigraphy

Across EA3, including beneath the presbytery structure, the stratigraphic profile was shallow with the water table sitting approximately 500mm below the current ground level. When the foundations, piles and fireplace bases were removed, the holes filled immediately with water (Figure 5-21). The water level within the holes varied with rising and falling of the tides.



Figure 5-20 Within the presbytery founds of the pre-1900 portion showing the high-water table after the fireplace bases had been removed and site area scraped.



Figure 5-21 Water visible when 1929 portico concrete slab was lifted at the front of the presbytery.

Seven distinct stratigraphic layers were identified:

- C001: mid-brown top soil (interior of presbytery foundations only) (identical to A002, Stage 1)
- C002: modern concrete (exterior of presbytery foundations only) (200 mm)
- C003: asphalt surface (exterior of presbytery foundations only) (20 mm)
- C004: asphalt preparation layer (exterior of presbytery foundations only) (100 mm)
- C005: yellow/orange/brown mixed fill layer comprised of rock, fine sediment (200 mm) (identical to A003, Stage 1)
- C006: natural dark grey anaerobic layer where the water table fluctuates (300 mm) (identical to A004, Stage 1)

- C007: light grey natural clay subsoil (Figure 5-22 and Figure 5-23) (depth of approximately 600mm) (identical to A005, Stage 1).

When removed, the fireplaces were clearly laid on C007.

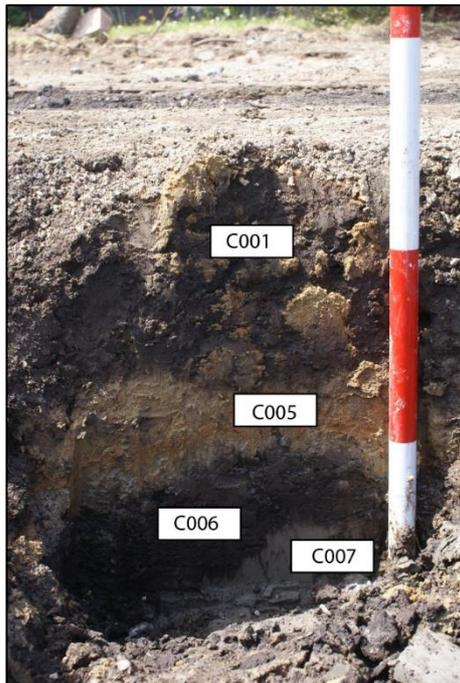


Figure 5-22 Stratigraphic profile of EA3.



Figure 5-23 Presbytery entrance showing plan view of layers C002, C003 and C005.

5.2.2 *Archaeological features and artefacts*

Excavation Area 2 (EA2)

Eleven artefacts were recovered from within the presbytery building prior to its demolition (EA2). Seven of these artefacts were recovered from the northwest area of Room 5, three were recovered from under the floor extension in Room 8, and one from the attic.

The three artefacts from Room 8 were all related to smoking and included one match box and two cigarette packets, all made of cardboard (Figure 5-24). These specimens were in good condition, and the text on them was

easily readable. One cigarette packet is branded 'CAPSTAN NAVY CUT CIGARETTES/MADE IN NEW ZEALAND BY W. D. & H. O. WILLS.' This manufacturer opened its factory in Wellington in 1919 and the Capstan brand was in existence until at least the late 1950s (W. T. Henley Electrical, 2012). The other cigarette packet was branded 'PLAYERS NAVY CUT CIGARETTES/ JOHN PLAYER AND SON/ MADE IN NEW ZEALAND/ IMPERIAL TOBACCO COMPANY OF NEW ZEALAND LTD.' This brand was one of the most widely sold in the first half of the twentieth century (Otago Daily Times, 1900b). The wax vesta matchbox was branded 'R. BELL & CO'S ROYAL WAX VESTA'S/WELLINGTON NEW ZEALAND/ESTABLISHED 1832 (LONDON).' This artefact most likely dates to the first half of the twentieth century as R. Bell wax vestas were only manufactured in New Zealand after 1894, and production ended in 1962 (Evening Star, 1918).



Figure 5-24 From left: Player's cigarette box, R. Bell & Co wax vesta matchbox and Capstan cigarettes.

The artefacts collected from Room 5 were a matchbox branded 'TIP TOP SAFETY MATCHES,' a prayer booklet containing devotional prayers for the Shrine of Our Lady at St Patricks Basilica, a picture hook (for use with a picture rail), a scrap of newsprint with Spanish printed on both sides in large characters (VI UNA NUEVA. . .//. . .EDABAD, Y LAS QUE VENDTA. . .), a New Zealand 20 cent piece from 1988, a razor blade, and a Wombles key chain. Tip Top matches were manufactured from 1947 to 1951 (Otago Daily Times, 1921), the prayer book published in 1951 and the Wombles keychain copyrighted in 1970, dating the assemblage to the mid to late twentieth century.



Figure 5-25 The artefacts recovered from Room 5.

Three other artefacts were recovered from within the presbytery. A telegraph cable reel was recovered from the attic space of the presbytery and was branded “HENLY/W. T. HENLEY’S TELEGRAPH WORKS CO LTD/51-53 HATTON GARDEN LONDON E.C.I. ENGLAND.” W. T. Henley is an electrical equipment firm that was founded around the 1830s, and is still in existence today (Majewski & Schiffer, 2001). Whilst this continuous history makes it impossible to assign an exact date to this artefact, the reference to ‘telegraph works’ suggests that it at least dates from the first half of the twentieth century.

Excavation Area 3 (EA4)

EA3 was largely sterile of archaeological features and artefactual material. This is attributed to evidence suggesting that the entire site area had been dug out and cleared prior to the erection of the presbytery and/or regularly cleared of rubbish debris.



Figure 5-26 Site plan of excavation EA3.

Three features were identified during excavations of EA3.

C003 – Asphalt Surface

During site clearance, beneath the modern 1929 portico and once the 1929 addition was demolished, an asphalt surface abutting the original presbytery structure was uncovered (Figure 5-26). The asphalt surface extended out from the front of Room 1 and continued beneath the concrete pad of the 1929 Californian bungalow portico (Figure 5-27 and Figure 5-28). The surface then formed a path along the western boundary of the presbytery structure and another towards the modern carpark area. Along the western boundary of the pre-1900 presbytery founds, the piles for the 1929 addition had cut through this path (Figure 5-28). The path measured 1550 mm wide and had been largely destroyed when the 1956 addition had been built along the western boundary. At the rear of the presbytery beneath the 1940s and 1950s concrete pads, the surface was uncovered again (Figure 5-29). The asphalt surface was 200 mm thick and was laid on top of C004 and C005.



Figure 5-27 C003 uncovered at the front of the pre-1900 presbytery which continued west beneath 1929 Californian bungalow portico concrete slab. Looking west.



Figure 5-28 Along the western side of the original presbytery structure showing the asphalt path in-situ and the 1929 addition piles cut through it (looking south towards MacAndrew Road).



Figure 5-29 Asphalt surface uncovered at rear of presbytery. Looking east towards basilica.

C008 – Drainage channel

Beneath C002 and C003 and cut into C005, a 250 mm wide drainage channel was uncovered aligned northwest to southeast.



Figure 5-30 Drainage channel beneath C005 aligned northwest to southeast. Room 1 to the right of the photo.

C009 – Brick floor surface

At the front of the presbytery at the southeast corner between the presbytery and the basilica a section of a brick-paved surface was uncovered. This feature was capped by C005. The surface was comprised of broken brick fragments and measured approximately 1.4 m wide and 3 m long (Figure 5-31). It was laid on C006 and very disturbed from later service installations occurring around it such as water pipes and storm water. It terminated at the modern concrete slab in front of the basilica, presumably continuing beneath it. When the surface was removed, several artefacts were uncovered.



Figure 5-31 C009 in-situ. Looking west.



Figure 5-32 C009 in-situ. Looking east.

C010- Drainage

At the rear of the presbytery structure beneath the concrete pad of the mid twentieth century addition was a series of sewage and storm water drains (Figure 5-33 and Figure 5-34). These were all installed post-1900 and constructed of metal and ceramic ranging in diameter from 8 inches to 22 inches.



Figure 5-33 Drainage systems at the rear of the presbytery beneath post-1900 concrete pad foundations.



Figure 5-34 Portion of drainage uncovered at rear of presbytery.

A small artefact assemblage was collected during the demolition of the presbytery and subsequent site clearance earthworks (Table 5-5). Many of the structural artefacts recovered relate to the structure itself but the demolition method did not allow for precise context allocation for this material.

Table 5-5 Summary of artefact assemblage recovered from EA3.

Artefact Class	NISP	MNI/V
Ceramic Vessels	6	3
Glass Vessels	16	8
Metal	21	9
Other	20	8
Faunal	3	2
Total	66	30

Six ceramic sherds were recovered, representing a MNV of three. This included an egg cup, bowl (both recovered from the basilica drainage ditch), and a saucer. Ware type and decoration were not recorded. Sixteen fragments of glass were collected, representing seven bottles and a vase. Only three of the glass vessels could be identified to form: a Bordeaux, a Codd bottle and a vase (Figure 5-35). The Bordeaux bottle is commonly

associated with wine but held a variety of contents and was regularly re-used in the nineteenth century. This particular example was made in a turn mould and had an applied ring seal finish. The Codd bottle was embossed with “CANNINGTON SHAW CO LTD ST HELENS,” the name of the bottle’s manufacturer, around the heel. Cannington, Shaw and Company were a large English glassmaking firm based in St Helens, Lancashire, and they operated from the 1870s until 1913 (British Antique Bottle Forum, 2013). On the base of the bottle “1900” was embossed, presumably the bottle’s date of manufacture. While much of the side embossing has been lost during the bottle’s fragmentation (only the base was recovered, and this was in nine pieces), the word “DUNEDIN” remains clearly visible, suggesting that this was a bottle manufactured for a local aerated water company. The other fragments included the neck of a blue and white swirled glass vase and five body fragments from unidentified bottles.

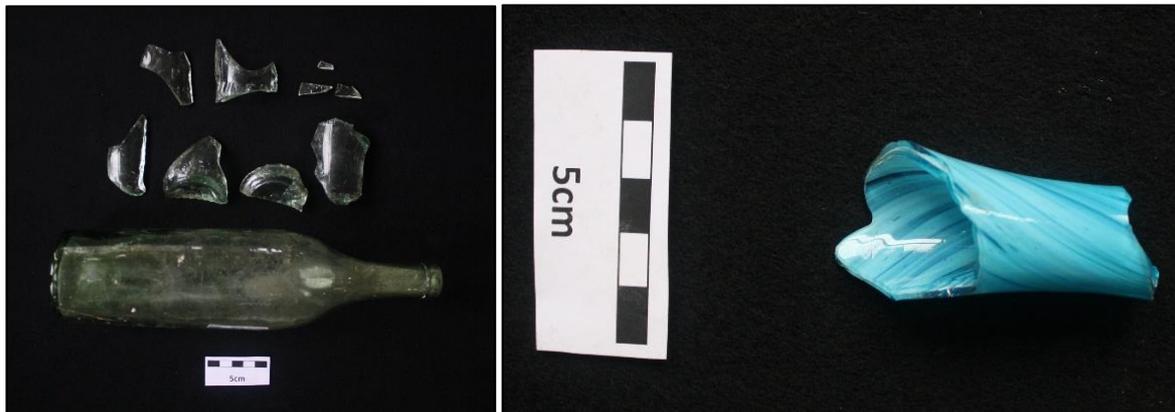


Figure 5-35 Left: Codd (top) and Bordeaux bottle. Right: Vase neck.

Nine identifiable metal artefacts were recovered from EA3, most of which relate to the presbytery structure. Five used wire nails (two with rhomboid heads, two with rose heads and one lead-headed roofing nail), a length of lead pipe (Figure 5-36) and a metal drain gully trap (Figure 5-37) would have originally been part of the presbytery building. Part of a matchbox and another unidentified rectangular container (Figure 5-37) were recovered from the fill along with five amorphous metal items.



Figure 5-36 Left: Wire nails with rhomboid heads (left), rose heads (centre) and lead roofing head (right). Right: Length of lead pipe recovered during the presbytery demolition.



Figure 5-37 Left: Metal gully trap. Right: Matchbox (left) and unidentified container.

The miscellaneous artefacts were also dominated by structural remains, including four fragments of roofing slate, three bricks and two ceramic drain fittings. The roofing slate relates to the basilica building rather than the presbytery, as the presbytery had an iron roof. One of the bricks was taken as a sample from C009 and was wire cut. The other two were found within the fill and both were moulded with frogs and maker's marks. One had "G" in the frog (Figure 5-38), attributing it to the Gore Brothers' Wingatui Brickworks in Dunedin. This brickworks was established in 1880 and was at one time the largest brickworks in New Zealand (Lindsey, 2015). The last Gore brother died in 1918 (Ellesmere Guardian, 1917) but the Wingatui brickworks continued production at least until the 1920s (Poverty Bay Herald, 1920), although it is unclear how long the "G" brand was continued. The other brick was stamped "RUN E," but this mark was unable to be attributed to a manufacturer. One of the ceramic drain components was a gully trap made of stoneware, was salt-glazed, and square in shape with bevelled corners (Figure 5-38). The other was a length of coarse earthenware pipe, with a notably small internal diameter of c. 5 cm. One end had a screw fitting. Two fragments of a hobnail shoe or boot (Figure 5-39) were also recovered. The brass hobnails were visible on the sole leather. Only three faunal specimens were present among Excavation Area 3 assemblage: a sheep rib and metatarsal, and the shell of a Turangi Cockle (*Austrovenus stutchburyi*) (Figure 5-39).



Figure 5-38 Left: Gore Brothers brick. Right: Stoneware gully trap.



Figure 5-39 Left: Hobnailed boot. Right: Faunal remains collected during the presbytery demolition.

5.3 Stage 3: Basilica – Sub-surface archaeology (Excavation Areas 4, 5, 6 and 7) - I44/540

Stage 3 comprised of four excavation areas relating to the upgrades of the basilica. These included (in chronological order):

- The removal of the 1960s front portico entrance to the basilica and service trenching (Excavation Area 4 (EA4));
- The uplifting and reinstatement of a new floor within the basilica structure (Excavation Area 5 (EA5));
- A new rear entrance on the northern aspect of the basilica and service trenching (Excavation Area 6 (EA6));
- The construction of a new egress on the northwest aspect of the basilica (Excavation Area 7 (EA7)).
- Resurfacing the carpark area.

Fieldwork was conducted by Hayden Cawte, Laura Davies, Carl Murray, Sheryl Cawte and Eva Forster-Garbutt between 22nd May 2015 and 21st of January 2016. Subsequent repaving of the carpark was undertaken in 2017. NZHP was not notified of these works.

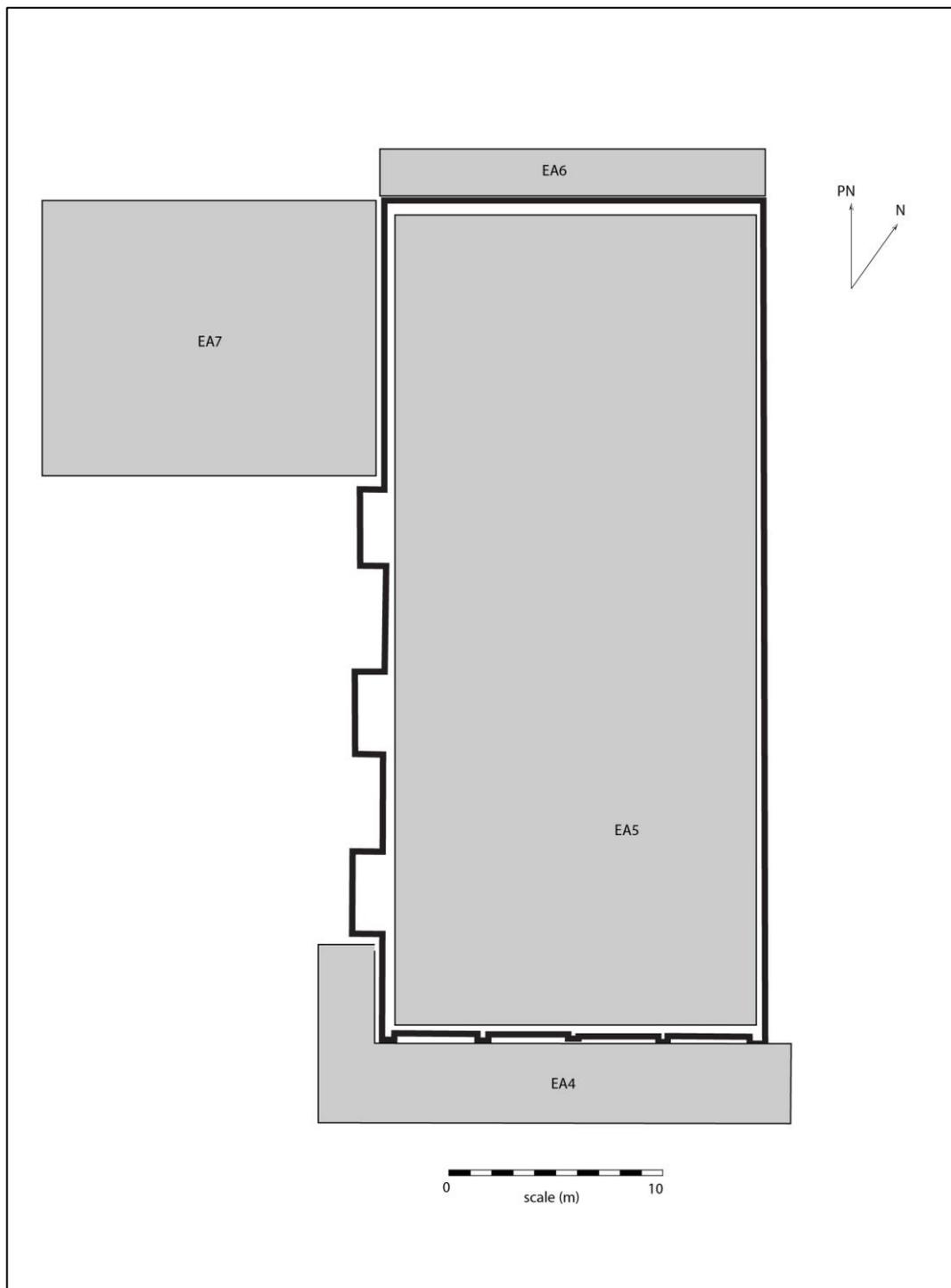


Figure 5-40 Scale plan of the Stage 3 excavations at basilica.

5.3.1 Excavation Area 4 (EA4)

Stage 3, EA4 involved monitoring the removal of the 1960s front portico and trenches for new basilica services. Both of these were undertaken without an archaeologist present and thus site damage was assessed and recorded when alerted. Recording of the site damage relating to service trenching was undertaken on the 22nd May 2015 by Hayden Cawte. All services had been trenched and partially backfilled. Upon arrival, two large, partially faced breccia stones had been excavated out during trenching from an approximate location (D004) (Figure 5-41 to Figure 5-44). The portico was removed some time in the month following without archaeological notification for monitoring.



Figure 5-41 The site when damage was recorded with the portico still in-situ. Looking northeast.



Figure 5-42 The portico in-situ.



Figure 5-43 Half-filled and completed trenches at the southwest corner of the basilica. Large faced breccia stones removed during trenching. Black tarpaulin is where contractors said they had removed them from.



Figure 5-44 Service trench partially back-filled where breccia stones were encountered. Approximate location of where C009 extended.

Excavation Area 4 (EA4) - Stratigraphy

A basic stratigraphic profile was recorded from a trench partially backfilled (Figure 5-45). Three distinct layers were identified;

- D001: asphalt (30 mm)
- D002: coarse shingle fill (250 mm)
- D003: brown mottled clay silt with some cultural material visible (>150 mm)



Figure 5-45 EA4 stratigraphic profile.

Excavation Area 4 (EA4) – Archaeological Features and Artefacts

Due to the site damage, only one feature was recorded; two large, partially faced breccia blocks (D004).

D004 – Breccia blocks

Two large breccia stones were unearthed EA4 at the southwest corner of the basilica (Figure 5-46 and Figure 5-47). The blocks were of uneven shape, measuring approximately 730 mm x 630 mm x 500 mm and 300 mm x 220 mm x 500 mm. Both were faced and dressed. Based on the size, shape and features of the two blocks, these appear to be steps. However, due to the lack of provenance it cannot be ascertained if and how these relate to the site.



Figure 5-46 One of the blocks showing shape and dressed sides.



Figure 5-47 Second block of same shape and dressed.

5.3.2 Excavation Area 5 (EA5)

Stage 3, EA5, excavations involved monitoring the uplifting and reinstatement of a new floor within the basilica structure. Fieldwork was conducted by Hayden Cawte, Laura Davies and Carl Murray between the 25th May 2015 and the 25th June 2015. Once the basilica was cleared out, uplifting of the floor began in the northeast corner, moving east to west across the room and continued back towards the front entrance (south) (Figure 5-48 to

Figure 5-54). The process involved cutting through the existing tiled and concrete floor and the original floating concrete pad beneath before scraping the ground surface in preparation for laying the new concrete pad.



Figure 5-48 Front of basilica with the front portico removed (25th June 2015).

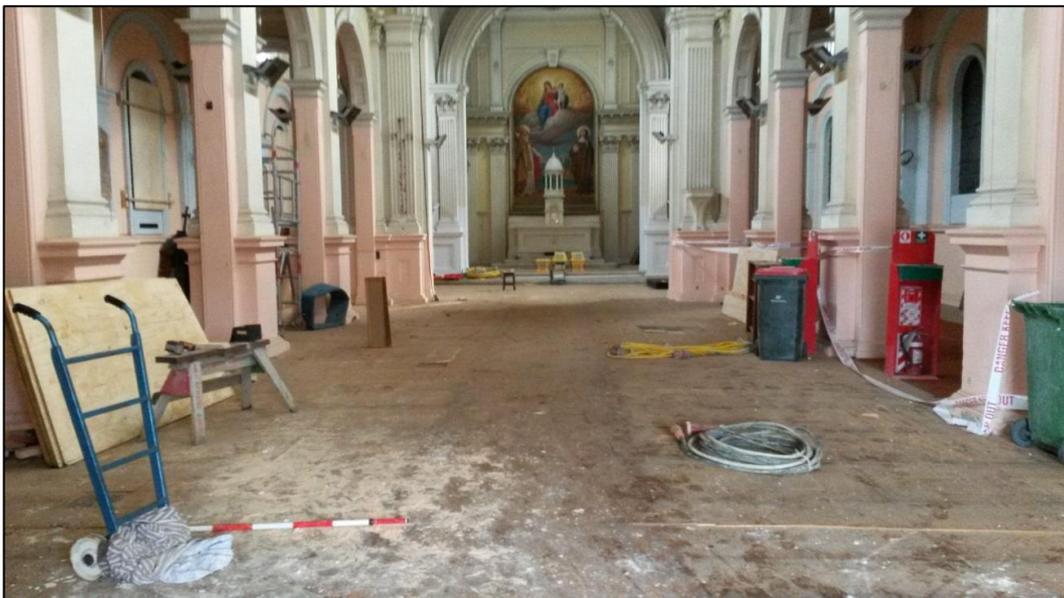


Figure 5-49 The interior of the basilica cleared, prior to the floor being cut and lifted. Looking north towards the nave.



Figure 5-50 The interior of the basilica cleared, prior to the floor being cut and lifted. Looking south towards the front entrance on MacAndrew Road.



Figure 5-51 Close up of the nave before works began.



Figure 5-52 Halfway through lifting the floor. Looking north towards the nave.



Figure 5-53 Floor scraped. Looking south towards MacAndrew Road.

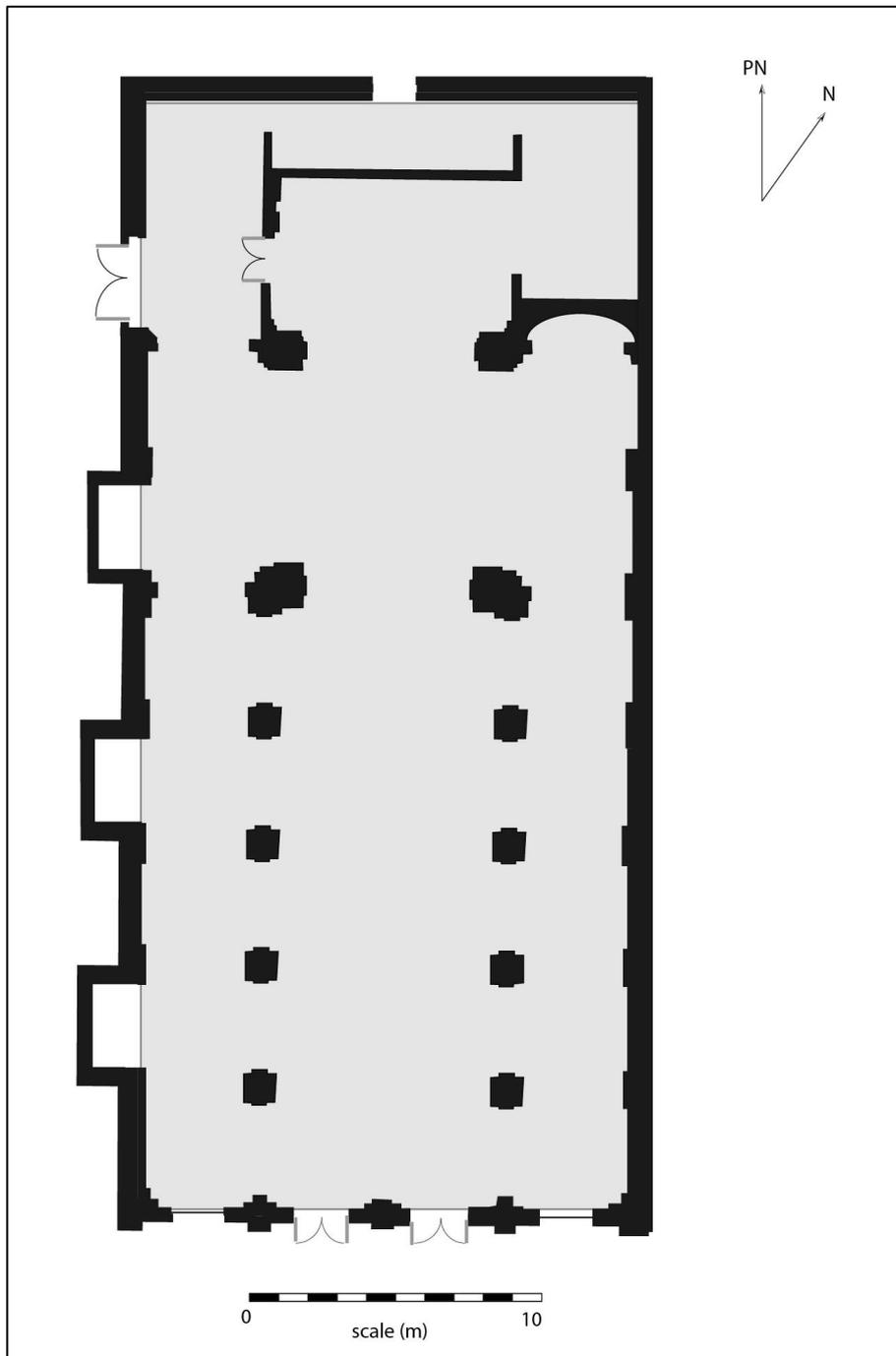


Figure 5-54 Floor plan of the St Paul's basilica. The grey shading represents the excavated area.

Excavation Area 5 (EA5) - Stratigraphy

Across EA5, the stratigraphic profile was shallow, at a maximum depth of 250 mm. Unlike excavations around the other parts of the site, the water table was not encountered when the floor was lifted. Seven distinct stratigraphic layers were identified (Figure 5-55 to Figure 5-57):

- E001: tiled surface (the nave) (5mm)
- E002: thin layer of concrete (5mm)
- E003: asphalt surface (30mm)
- E004: original 1890s floating concrete pad with bluestone inclusions (100mm)
- E005: a yellow/orange/brown mixed fill layer comprised of rock, fine sediment (identical to A003, Stage 1 and C005, Stage 2)
- E006: collection of building rubble, bricks and slate in northwest corner beneath E002 and within E005.



Figure 5-55 Plan view showing E002 to E005 at north end of basilica.



Figure 5-56 Portion of the floor lifted showing E002, E004, and E005.



Figure 5-57 E006.

Excavation Area 5 (EA5) – Archaeological Features and Artefacts

A small assemblage of fragmentary artefacts was recovered from below the floor in EA5 in the northeast corner. This included a sample of the 1890s floor surface (Figure 5-58). None of the artefacts were recovered from discrete features. The artefacts recovered were a metal bucket handle (Figure 5-58), a fragment of unmarked brick, a single body fragment from a green glass bottle, three fragments of slate tile, two thin strips of timber (Figure 5-59) and part of a larger timber beam.



Figure 5-58 Left: sample of the 1890s basilica floor. Right: metal bucket handle recovered from beneath the floor.



Figure 5-59 Left: Fragments of slate roofing tile from within E006. Right: Thin strips of timber recovered from beneath basilica floor.

5.3.3 Excavation Area 6 (EA6)

Stage 3, EA6 involved monitoring the creation of a new rear entrance to the basilica on the northern aspect and trenching for services. Fieldwork was conducted by Laura Davies on the 22nd June, 2015. Service installation included excavating a 500 mm wide and 600 mm deep trench along the rear (northern aspect) of the basilica which would connect to the storm water drains. Further ground works and the construction of the rear access was undertaken without notification for monitoring.



Figure 5-60 Concrete removed ready to excavate the service trench along the rear of the basilica. Looking east.

Excavation Area 6 (EA6) - Stratigraphy

At the rear of the basilica, the stratigraphic profile was recorded from the 500 mm wide service trench that ran along the rear of the basilica. The stratigraphic profile was shallow with the water table sitting approximately 500 mm below the current ground level. During the excavation of the trench, it filled immediately with water.

Four distinct stratigraphic layers identified:

- F001: modern concrete surface (90 mm)
- F002: concrete preparation layer (60 mm)
- F003: brown mottled clay silt with inclusions (identical to D003, EA4, Stage 3) (100mm)
- F004: light grey natural clay subsoil (identical to A005, Stage 1, C007, Stage 2 and E006, EA5, Stage 3)



Figure 5-61 Trench filling with water from the high water table as it was excavated.



Figure 5-62 Stratigraphic profile of EA6.



Figure 5-63 Rear entrance to the basilica completed. Looking west.

Excavation Area 6 (EA6) – Archaeological Features and Artefacts

No artefacts or features were identified during these excavations.

5.3.4 Excavation Area 7 (EA7)

Stage 3, EA7 involved monitoring the foundations for the new egress to the northwest aspect of the basilica (Figure 5-64). The earthworks in EA7 consisted of a series of service trenches and footing for the new structure. Fieldwork was undertaken by Sheryl Cawte and Eva Forster-Garbutt. The excavated area measured 15.3 m by 12.8 m extending west from the northwest corner of the basilica and had been previously scraped flat in 2015 at the end of Stage 2 works (Figure 5-65).



Figure 5-64 EA7 after EA3 site clearance. Looking northwest towards Mercy Chapel.

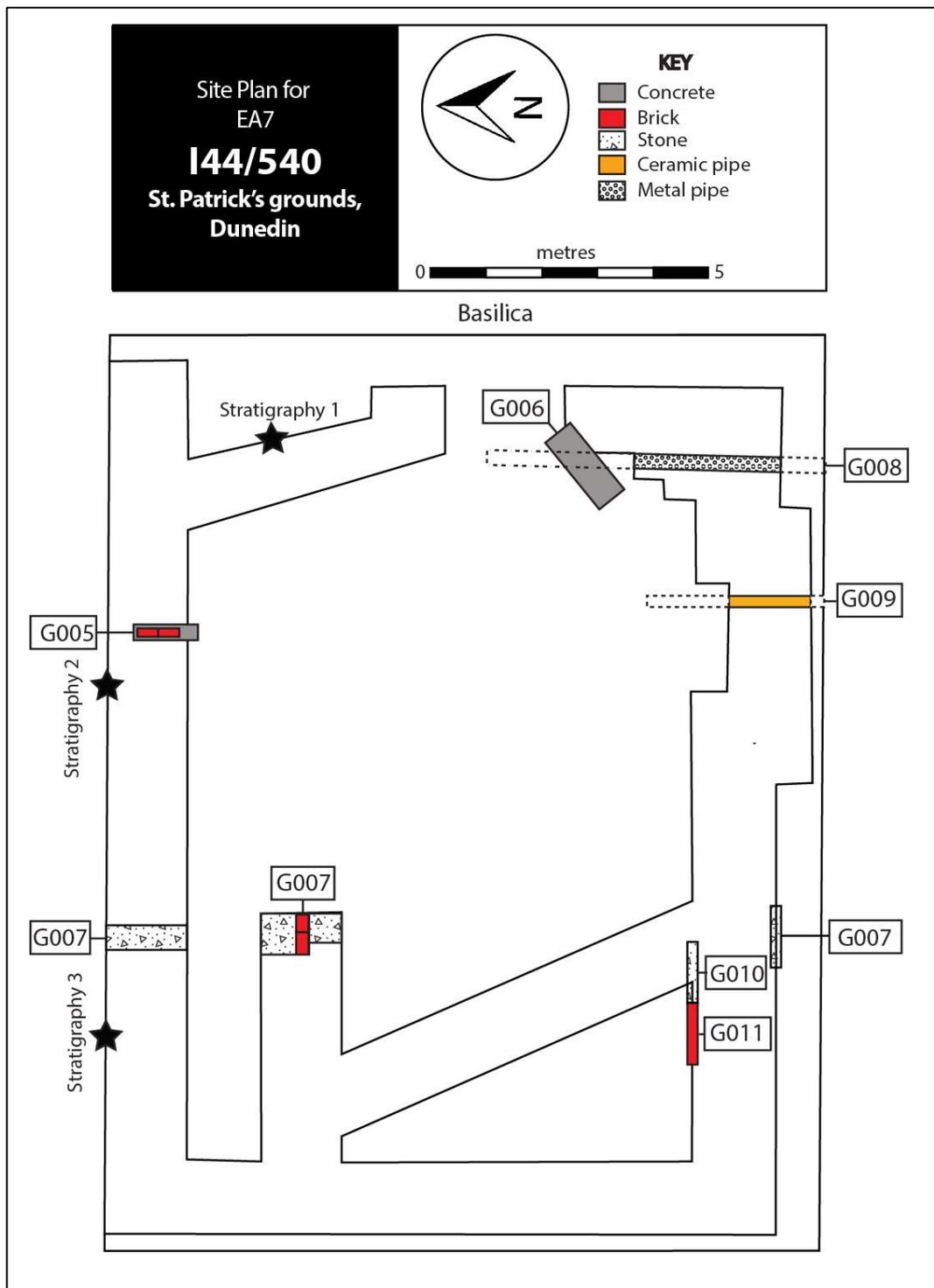


Figure 5-65 Site plan for EA7 showing locations of excavated trenches, contexts and locations where the stratigraphy has been recorded.

Excavation Area 7 (EA7) - Stratigraphy

Across EA7, three stratigraphic profiles were recorded in three locations (Figure 5-65). As seen elsewhere on the site, the stratigraphic profiles were shallow with the water table sitting approximately 500 mm below the current ground level.

Five distinct stratigraphic layers were identified, all of which had been previously recorded in EA3 (Figure 5-66):

- G001: mid-brown topsoil capping the site after clearance during Stage 2 (150 mm)
- G002: a yellow/orange/brown mixed fill layer comprised of rock, fine sediment (200 - 300 mm) (identical to A003, Stage 1, C005, Stage 2 and E005, EA5, Stage 3),
- G003: light grey natural clay subsoil (170 mm - 300 mm) (identical to A005, Stage 1, C007, Stage 2, and F004, EA6, Stage 3)
- G004: natural dark grey anaerobic layer where the water table fluctuates (200 mm – 400 mm) (identical to A004, Stage 1 and C006, Stage 2)

The stratigraphic profile varied in depth across the excavated area, getting deeper as ground works extended away from the basilica; G002 was 220 mm below the ground surface abutting the basilica and 740 mm at the western end of the scraped area. Excavations also identified that the layers within the site stratigraphy across EA7 varied in sequence. This indicated site disturbance had occurred over time, probably as a result of the various developments undertaken in the area associated with the construction and beautification in and around the presbytery, the outbuildings, the basilica and eventual clearance to establish the new green space (Figure 5-66 and Figure 5-67).

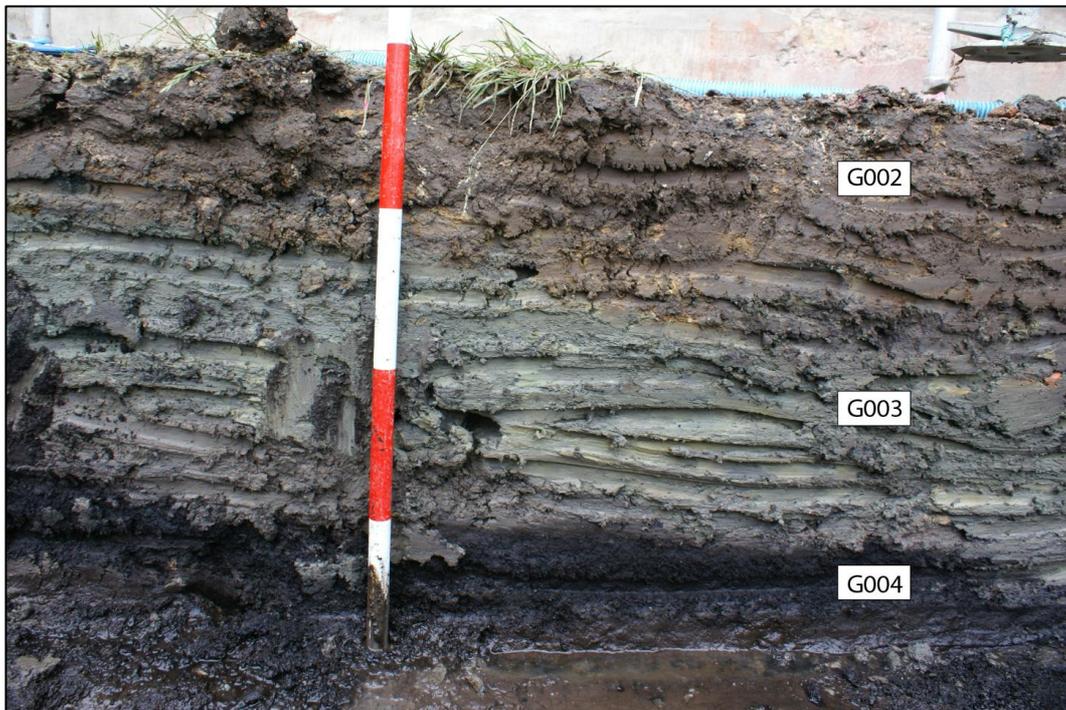


Figure 5-66 Stratigraphic Profile 1 adjacent to basilica.



Figure 5-67 Stratigraphic Profile 2 in northern baulk of EA7.



Figure 5-68 Stratigraphic Profile 3 in northern baulk of EA7.

Excavation Area 7 (EA7) – Archaeological Features and Artefacts

Eleven features were identified during the monitoring of EA7.

G005 – Brick feature

Linear brick feature on reinforced concrete encountered directly beneath G001. Orientated north to south measuring 71 mm long and 12 mm wide (Figure 5-69).



Figure 5-69 G005 looking west.

G006 – Drainage feature

Portion of a clay drainage pipe orientated northeast to southwest encased in concrete. Within G002 measuring 1300 mm long and 600 mm wide (Figure 5-70).



Figure 5-70 Drainage feature (G006).

G007 – Linear stone wall

Stone wall section measuring 500 mm wide and 250 mm thick, orientated north to south coming out of the northern baulk. Uncovered 550 mm to 600 mm below the ground surface within G002 and G004 and sitting atop of G003. The wall is comprised of irregular shaped stones that have not been cut or faced, forming an apparent structural foundation. A fragment of a torpedo bottle, ceramic and glass was found associated with the feature. The feature was intersected three times across the excavated area during trenching.



Figure 5-71 G007 stone wall comprised of irregular shaped stones.

G008 – Metal pipe (D010)

Modern service pipe beneath G001, oriented north to south.



Figure 5-72 G008.

G009 – Drainage feature

A portion of a clay drainage pipe orientated north to south encased in concrete within G002.



Figure 5-73 G009.

G010 – Stone cluster

Cluster of large, irregular shaped stones 800 mm deep and beneath G002, within G004 and atop of G003.



Figure 5-74 G010 looking north.

G011 – Brick cluster

Cluster of bricks 800 mm deep and beneath G001, within G002 and G004 and, atop of G003. To the west of G010 (Figure 5-75).



Figure 5-75 G011 and G010 looking north.

All artefacts recovered from EA7 were scattered throughout G002. As such, they have been analysed and discussed as a single assemblage.

Fragments from 16 ceramic vessels were recovered during this stage of from EA7. All vessels able to be identified to form, were table and tea wares. This included six whiteware plates (two banded, two UGTP, on gilt and one painted), an undecorated whiteware ashette, a red UGTP whiteware bowl, an undecorated whiteware cup, a buff-bodied earthenware Rockingham teapot and a blue dyed-body ware jug. The five unidentified vessels were all hollow and included three UGTP whiteware, a moulded European and painted Japanese porcelain vessel. None of the UGTP patterns were identified, however the assemblage included floral, geometric and aesthetic patterns. Aesthetic patterns are easily recognisable due to their asymmetry and were popular at the end of the nineteenth century (Evening Post, 1922). No maker's marks were recorded on any of the fragments.



Figure 5-76 Left: aesthetic style UGTP plate. Right: dyed-body ware jug handle and red banded bowl fragment.

Twenty-nine fragments from a minimum of 13 glass vessels were recovered during the EA7 excavations. Just under half of these could be identified to form and function. One case gin, a torpedo, a salad oil, a complete machine-made cream bottle and two small complete cup-bottom mould pharmaceutical pill bottles were recorded along with seven unidentified bottles (one milk glass, two colourless machine-made vessels, one brown,

one olive, one aqua blue and one green vessel). The only embossing recorded was around the heel of the cream bottle and read "1/2 IMPERIAL PINT." The presence of machine-made, brown and milk glass vessels is characteristic of the twentieth century (Press, n.d.).



Figure 5-77 Left: machine-made cream bottle. Right: small pharmaceutical pill bottles.

A small collection of metal artefacts was recovered during the excavations. This assemblage was comprised of three nails (two wire and one cut), two horseshoes, a bucket handle, a white enamelled roasting dish, part of a stainless steel watch strap, two fragments of strip iron, two lengths of wire and a piece of metal plate. Both horseshoes were heavily worn, and one had been modified, with the addition of a bar across the back. This modification would have been to compensate for some type of conformational fault and prolong the work life of the horse. The size and thickness of the horseshoes also suggests that these were light carriage or saddle horses rather than heavy draught animals.



Figure 5-78 Left: horseshoes. Right: cut nail.



Figure 5-79 Left: enamelled roasting dish. Right: metal plate.

The miscellaneous artefacts recovered during this stage of the works were mostly comprised of structural and infrastructure items. Exterior structural components included two types of roofing tiles (slate and terracotta), four fragments of window glass, one complete and two fragmentary bricks, a fragment of asphalt and a concrete base of an unidentified item. The terracotta roof tile had “[D]UNEDI[N]” embossed on the underside and is an example of an Abbotsford roofing tile (Figure 5-80). These tiles were first produced around 1917 at the Abbotsford tiliary, Dunedin, as a local alternative to the highly popular Marseilles tiles (Cropper et al., 2014). The factory burnt down in 1920 (Cropper et al., 2014) and production briefly ceased, but by 1922 they were producing 2,000,000 tiles per annum (McPherson & Cawte, 2011). This tile relates to the new school building as it is the only structure on site with a tiled roof, while the slate relates to the basilica roof. Artefacts relating to the interior of the building were an incandescent light bulb that had been painted blue, a whiteware round doorknob and three timber framing fragments. Fragments from at least three ceramic drainpipes were recovered, all of which were described as coarse earthenware with salt glazes. None had any identifying marks. Part of a graphite pencil, the porcelain arm of a doll, a plastic toy rocket and three unidentified pieces of plastic were also collected.



Figure 5-80 Left: advertisement display for Abbotsford roofing tiles ca. 1920 (Mee, 1978). Right: fragment of Abbotsford roofing tile from St Patricks.



Figure 5-81 Left: ceramic drainpipe. Right: porcelain doll arm.

6 Interpretation

The St Patrick’s complex is located in the heart of South Dunedin, an area well known geomorphologically as low-lying and the drainage outlet for several Dunedin streams. Historically the South Dunedin Flat was swampy, requiring significant work to improve drainage prior to habitation. However, with a water table just 300 mm to 700 mm below the modern surface, drainage remained a constant point of consternation for occupants on the flat. This resulted in the flat remaining largely underdeveloped for many years after Valpy first established his farm in St Clair in the mid-1800s. It was not until the rail line was established along Main South Road in 1874 that the bulk of the industrial development would occur in South Dunedin. Despite the poor ground conditions, the rail line made the affordable and easily flat land of South Dunedin attractive to Dunedin industrialists. And

with development came population increase. Settlement clusters began as did the formation of boroughs, townships, and transportation lines from the 1870s.

The St Patrick's complex is located in the centre of 'the flat'. Prior to its inception, the Catholic Church was centred on Upper Tennyson Street, establishing its first church in July 1862; St Joseph's. Within 10 years, the MacAndrew Road land was purchased and a new church hub (church and school) was envisioned for Catholic's in South Dunedin.

St Patrick's chapel-school (demolished in 1986) was erected in 1878, establishing the St Patrick's Complex as a space for public gatherings and parishioners alike. From this point onwards, as the South Dunedin population grew, so did the Catholic population. In 1892 the foundation stone of the St Patrick's Basilica was blessed, designed to accommodate 1000 worshippers in the area. By the turn of the century, the St Patrick's Complex provided religious and educational services and accommodation while serving as the centre of the Catholic community in South Dunedin. By 1976, the block (which includes the project area) contained a school-chapel, multiple schools, the basilica, the presbytery and a convent.

The redevelopment of this site provided a unique opportunity for NZHP. Firstly, there has been very little archaeological investigation undertaken in the low lying suburbs of South Dunedin in and around 'the flat' and, none of this size. This provided an opportunity to research settlement of this area, how its geomorphology influenced the development and occupation of people in the area and, provided insight into the daily lives of those occupants. Secondly, this is the only investigation of a church complex and public space with multiple uses over a continuous period of time since its establishment in Dunedin.

St Patrick's is an ecclesiastical complex that includes four buildings; the presbytery (I44/539), the St Patrick's Basilica (I44/540), the new St Patrick's school building (I44/541) and the demolished original school building (I44/542). These structures were central to church function on the flat for close to 150 years. Over the last century, all of these structures have served multiple purposes, by the church and community alike, as development occurred and the surrounding neighbourhood grew. As such, the interpretation of this complex is divided into two components; the structures and subsurface. Through these two avenues, interpretation will explore what we now know about those who occupied the site.

6.1 The buildings of the St Patrick's Complex

The area of redevelopment focused on work relating to three buildings within the site boundary; the school, the presbytery, and basilica. Each structure had an intended purpose when constructed, actual purpose once in use and new purpose for the future generations of the Catholic Church community in South Dunedin. The choice of architects and symbolism is evident in both the school and basilica.

6.1.1 St Patrick's Basilica

St Patrick's Basilica epitomises the distinct Renaissance design of Catholic churches. Richly decorated in a Classical style with moulded plaster work, religious sculptures and Wunderlied ceiling of prefabricated mass-produced zinc panels, the basilica was designed by Frances Petre. It is of particular significance because the basilica design was Petre's first departure from a gothic style. In 1894, the partially built basilica was opened and served as the centre of the Catholic community in South Dunedin from that point onwards. While works stopped and started as money came to hand, throughout this time, there remained an enduring concept of grandeur that was being constructed. This building was to be the commanding Catholic presence in the area.

The maintenance and redevelopment of the basilica over the last five years has successfully retained the key characteristics and purpose of the original structure to ensure it remains a central congregation hub for Dunedin Catholics (Figure 6-1 to Figure 6-3).



Figure 6-1 St Patricks Basilica with the new egress in 2017. Looking east.



Figure 6-2 Front of the basilica facing MacAndrew Road in 2017.



Figure 6-3 New public greenspace in 2017 where the presbytery once was located. Looking southeast.

6.1.2 *St Patricks New School Building*

As discussed in the archaeological assessment (McPherson & Cawte, 2011), the new school building was designed by a prominent architect, Henry Mandeno, who's other works include significant Dunedin public buildings such as the Dunedin Fire Station. Upon closer examination, the aesthetic value of this building is high in its symbolism, detail, and imposing nature. The building is comprised of deliberate but subtle references to the Roman Catholic Church, papacy and classical architecture despite its function as a purpose built school building. Mandeno reflects the nature of the built environment adjacent to his new structure with subtle reflection of the Roman/classical design of the basilica in the "pedimented" façade and the dimensions of the school's steel windows and the spaces between them reflective of classical columns. The use of the orb motif reflects both elements of the classical realm as well as a prominent symbol of the papacy reflected as the Globus crucifer (orb and cross) to symbolise Christ's dominion over the universe. Finally Mandeno utilises multiple stylized Globus crucifer at points across the façade to denote the integration of church and education within the new school building.

Like the basilica which commands the eastern side of the site complex, the new school building forms a significant item in the street-scape, perfectly balancing the site with the same imposing nature of the basilica on the western side of the complex. It too architecturally displays distinctive period features with a lingering hint of the arts and crafts architectural movement as well as practical features relating to its original function as a school. As with many Catholic Churches and complexes, the classical and papal symbolism included in this structure provides distinctive aesthetics. The repurposing of this structure into the main Catholic Support Services hub has shown a rejuvenation of these architecturally significant features. While the front has been modernised with a new addition, its balance and location does not take away from the key elements of the original structure. This includes the subtle retrofitting of the windows (Figure 6-4). The incorporation of a play area at the back has also tied into one of the main demographics who have utilised this site over the decades; children (Figure 6-5).



Figure 6-4 The new entrance for the Catholic Support Services on the western aspect of the new school building. Photo taken in 2017.



Figure 6-5 The new public children's playground at the northern end of the building. Photo taken in 2017.

6.1.3 *The Presbytery*

The presbytery sat between the two main structures (the school and the basilica), in essence 'joining' them together, creating a connection between school and church. In comparison to the two buildings on either side, architecturally it was clearly more modest. There is little information in the historical record about the presbytery

such as who the architect was and its original internal and external design. Consequently, an aim of the building archaeology was to determine if it could be attributed to Francis Petre given his relationship with the Catholic Church as their architect.

Unlike the basilica and school buildings, this was a more utilitarian structure, having been constructed as a place of residence and administration rather than of worship or learning. From the outside, the presbytery would have had the appearance of a relatively well to do suburban residence. Internally and externally its form and fit out conformed to the archetypal Victorian villa. Internally, the front section of the building with its wainscoted hall and timber mouldings was a space for 'receiving guests' or a public 'front' in comparison to the rooms toward the rear of the building being private 'back' spaces and therefore less well appointed. Externally, the single bay brick villa with nine rooms including the hallway was a common late Victorian building form in New Zealand, although the use of brick rather than timber was less common due to their increased cost (Salmond, 1994).

However, there are several aspects of the structure that does suggest that this 'Victorian villa' was architecturally designed by Petre. The use of brick with concrete foundations, cathedral windows, the presence of fireplaces in six of the nine rooms and wide timber mouldings and wainscoting indicate that the building was constructed at some cost and with a certain level of display in mind. These are also key design elements of Petre's style. Petre was a vocal advocate for the use of concrete foundations when building structures as well as the need for fireplaces in every bedroom for health and hygiene (Evening Star, 1895a, 1895b; Otago Daily Times, 1896). He was also very active in designing presbytery structures for the Catholic Church both before and after the erection of St Patrick's presbytery in Otago. At least two of these structures share multiple design aesthetics identical to that used at the St Patricks presbytery; St Mary's Church presbytery in Port Chalmers and St Patrick's Church presbytery in Lawrence. Before the erection of St Patrick's presbytery, in 1883, Petre designed the Port Chalmers presbytery attached to St Mary's Church (New Zealand Tablet, 1883). Like St Patrick's presbytery, this structure was built of brick, the front was fitted with cathedral glass, each room had a fireplace and the hallway was panelled. After the erection of St Patrick's presbytery, in 1903, he also designed the Lawrence presbytery beside St Patricks Church (New Zealand Tablet, 1903). Again, this presbytery was constructed in brick with concrete foundations and all the bedrooms had fireplaces. Furthermore, like St Patricks presbytery in South Dunedin, the Lawrence presbytery's scullery was a lean-to and the central hallway and two front rooms were identical in dimensions; a 4 ft. (1.5 m) wide hallway and the two front rooms measuring 14 ft. (4.2 m) by 16 ft. (4.87 m). These correlations in presbytery design around the time of St Patrick's presbytery are also in addition to the fact that he designed both the original school-chapel building and basilica within the same South Dunedin St Patrick's complex. On the basis of these findings, the original design of the St Patrick's presbytery can be attributed to Petre.

Examination of the 1929 addition shows that it was designed to stay in keeping with the original building as far as fixtures and fittings are concerned. The doors, windows, architraves and skirting boards are almost identical to those in the original building as was the exterior design. This most likely reflects a greater cost to maintain consistency of features rather than opt for a contemporary design. However, later additions do not see this attention to detail or investment in originality. This indicates a more pragmatic approach to the building and its use/users and perhaps reflecting a less-decadent post-war era in New Zealand.

The later modifications internally and externally are practical. New entrances are broken through existing brick walls leaving jagged edges and walls and ceilings are relined, adding to existing layers. Walls and fireplaces are deconstructed down as far as necessary. The fireplace in Room 5 is re-purposed and the deconstructed chimney stack remnants remain hidden within the wall cavity. Room fit-outs are room by room as required, no longer being uniform and matching throughout the structure.

The loss of this building has been outweighed by the money and time spent in maintaining and fixing the other two structures on site. Its removal has created a new kind of public space, relevant to the modern-day community; a green space for play and personal contemplation. However, keeping the foundations in-situ allows

the site to be interpreted as it once was, understanding the balance between the church and school with the clergy as the central element (Figure 6-6).



Figure 6-6 The new green space where the presbytery once was with the original founds clearly visible within the design. Photo taken in 2017.

6.2 The land beneath the St Patricks Complex - Stratigraphy and archaeological features

The underlying soil conditions have been a factor in construction throughout both the nineteenth and twentieth century. Documentary sources detailed costly endeavours faced by the church when constructing on the swampy site conditions. Therefore, a major component of the archaeological inquiry into St Patrick's was to archaeologically examine the discernible impact the ground conditions had on occupation at the site and extrapolate about greater South Dunedin.

6.2.1 Stratigraphy

Excavations across the site illustrated a shallow stratigraphic profile with a high water table 500 mm below the current ground level. This aligned with the documentary evidence recorded about 'the flat' (see Section 1.2). Investigation beneath the presbytery structure (EA3) and from the service trench along the rear of the basilica in EA6 showed that construction had been undertaken directly on the clay subsoil. The cultural layer (A003, C005, E005 and G002) remained shallow and almost completely barren of artefacts and features. This is a stark contrast to the archaeological stratigraphy recorded within central Dunedin city sites such as Wall Street Mall and Farmers Trading Company (see Petchey, 2004, 2009).

Generally speaking, the stratigraphy across the entire site was as follows:

- a) Top soil / modern ground level,
- b) Cultural layer,
- c) Water logged clay subsoil.

Where artefacts and features did occur, these were always present within a single cultural layer, sitting on top of the water logged clay subsoil.

6.2.2 Archaeological Features and Artefacts

Despite continuous occupation for over 150 years and a reasonably large area of redevelopment, a total of 12 features were identified (Table 6-1). The features can be separated into three categories; surface layer, structural, and services (e.g. drainage).

Table 6-1 Features identified during subsurface excavations of the St Patricks complex.

Excavation Area	Number of Features	Feature	Feature Classification
1	1	A005: Hard packed clay/concrete floor	Surface layer
3	3	C003: Asphalt surface C008: Drainage channel C009: Brick floor surface	Surface layer Services Surface layer
4	1	D004: Two large breccia blocks	Structural
7	7	G005: Brick feature G006: Drainage feature G007: Stone wall G008: Metal pipe G009: Drainage feature G010: Stone cluster G011: Brick cluster	Structural Services Structural Services Services Structural Structural

Surface layers and related artefacts

Three surface layers were identified during archaeological excavations; A005, C003 and C009. Little can be ascertained about the surface layer identified during EA1. It could relate to the post-1900 school building or be an earlier surface associated with the demolished earlier school building. The artefactual assemblage recovered from EA1 was small but typical for a later nineteenth century site. The ceramic assemblage provided a *terminus post quem* (TPQ) of 1899, dating it to occupation pre-school building, however, building related structural artefacts do occur and relate to the construction of the school building.

Of the 12 features, C003 and C009 surface layers are likely to be the only pre-1900 features identified during excavations; C003, the asphalt surface surrounding the original presbytery structure and, C009, the brick floor surface. C003 was truncated by the foundations of the 1929 presbytery addition, and is likely to have been laid around the presbytery when it was constructed. However, knowing that developments across the site often stopped and started as money became available, a precise date is difficult to determine other than it being pre-1929. C009 is likely to be a portion of an earlier walking surface between the basilica and the adjacent area, probably pre-presbytery as it sat beneath C003. There were several artefacts retrieved in and around the surface and one brick sample was taken. None of the artefacts or, the manufacture method of the bricks (wire-cut), could be definitively dated to pre-1900. Artefacts recovered elsewhere across EA3 were unable to provide a TPQ.

Structural

Structural features were identified in EA4 and EA7. The two large breccia blocks are difficult to interpret with the lack of contextual information. The opportunity to uncover related artefacts in-situ also limits potential interpretation. Based on the size and shape of the blocks, the stone type they are comprised of and, their relative location, these are likely to be related to the basilica. They may have formed a part of the structure that was ultimately not constructed such as a front entrance flight of stairs.

The building related features (G005, G007, G010 and G011) in EA7 reflect the presence of at least one structure. Prior to works beginning there were two outhouses in the backyard of the presbytery (see Figure 1-10 and Figure 1-11). The wooden one along the western boundary of the backyard is outside the excavated area. The second outbuilding does sit within footprint of EA7 however it was constructed of wood and completely removed from the site during Stage 2. Therefore these features suggest an earlier structure or structures in the backyard area. From the minimal archaeological material uncovered in EA7, G007 suggests a structure constructed with stone foundations, and G005 and G011 indicate something constructed of brick that was demolished and materials buried on site. Whether these features represent one or multiple structures, it is not

known. Either way, this evidence suggests the presence of an earlier structure in this space, not documented in the historical record or on early architectural plans.

The artefact assemblage associated with these features was small and included domestic ceramics with popular late nineteenth century patterns, as well as glass fragments characteristic of both nineteenth and twentieth century manufacture. Miscellaneous artefacts included those of structural and infrastructural nature such as roofing tiles, lightbulb, plastic and doorknob, all of twentieth century origin. The assemblage also included the only evidence of school and children related artefacts; a graphite pencil and porcelain dolls arm. The scatter of these artefacts across the area in undefined features makes interpretation difficult. The area has clearly been disturbed and these items could relate to any part of the occupation of the area.

Services

While the service features uncovered across the site in EA3 and EA7 did not have any dateable artefactual material associated with them, their construction style (ceramic and metal) suggests post-1900. Earlier, pre-1900 drainage methods throughout Dunedin tended to be wooden drainage channels. Being post-1900, no further discussion is required.

6.2.3 Comparison and Interpretation

It is well documented that the southern suburbs situated within ‘the flat’ were never considered desirable for occupation. It was swampy, low-lying and required significant draining before people wanted to settle there (Wood, 2005). Furthermore tidal backflow provided additional headaches of overflowing drainage systems (Wood, 2005). Therefore digging holes for household rubbish and human waste was inevitably going to create a cesspool of contamination and subsequent health issues such as typhoid; issues that would have been seen as very undesirable for the church, its parishioners and the children taught there. Surface deposition appears to have been avoided given the lack of these features types within the complex.

The lack of cultural material in particular is likely to be the result of three key elements; the low-lying geomorphology of the area creating poor ground conditions, regular site clearance as redevelopment and construction occurred and, deposition offsite. Firstly, unlike the hilly nature of central Dunedin where archaeological deposits are found up to 3 m beneath the current ground surface, the low-lying nature of the area would have resulted in less natural accumulation of soil over time. Secondly, buildings constructed on poor ground surface require good foundations on solid ground. This was observed at St Patrick’s with presbytery and basilica foundations cutting into the natural clay subsoil and their large, wide foundations. Lastly, regular site clearance would have reduced the build-up of sedimentation across the site, kept the public and private spaces tidy and attractive and, also reduced known health risks to occupants in the area. All of these attributes would also result in limited archaeological features and artefacts remaining on site from the site inhabitants.

The issues of the low lying nature of the area and the high water table are also evidence in the building archaeology of the presbytery. The presbytery was built close to the ground, and it appears that the original Phase 1 section has had issues with weather tightness. The application of stucco to this section and not the 1929 Phase 2 addition shows that there has been an attempt to stop water ingress. It could be that they have assumed moisture was entering the building from the outside and that the stucco was an attempt to remedy this. We know that the 1929 section was constructed with a cavity wall section which has increased airflow and created a barrier for moisture egress. Given this addition was constructed before the application of stucco on the original suggests that the addition didn’t present the same issues of rising damp or it too would have been stuccoed. Alternatively the application of stucco may have been considered a stylistic improvement however, in not applying it to the addition suggests it was in response to other factors. This is interpreted here as being moisture control. The loss of ‘balance’ and symmetry to the building as a consequence was probably the key factor, at least subconsciously, to the downgrading of the other additions and ultimate demise of the structure. It went from a symbolical, balanced handsome building to a mismatch of styling.

Until recently, there have been limited opportunities to analyse and interpret religious sites in Dunedin. In 2016 NZHP investigated several town Lots in Mosgiel as part of the construction of the new Countdown grocery store (Cropper, Watson, Woods, & Cawte, 2018). Of the 12 historic properties excavated, three were directly related to nineteenth century occupation of the site by St Mary's Catholic Church and school (Lot 4 and 21, I44/581 and Lot 22, I44/584). A further five (Lots 5, 6, 7, 20, and 23) were acquired and incorporated into the school complex during the twentieth century. The research undertaken in Mosgiel provides good comparison to St Patrick's and insight into a similar multipurpose Catholic Church site within Dunedin.

St Mary's Catholic Church in Mosgiel is archaeological site I44/581. On this site, the church was constructed in 1887. Like St Patrick's, the Catholic Church played an integral role in the history of the project area and came to own many the properties, with the complex expanding to include St Mary's School, housing for the Sisters of Mercy who taught at St Mary's School in a small cottage at the rear of the church (I44/584) and St Mary's Hall (Cropper et al., 2018).

Like St Patrick's, the structures in Mosgiel served varying purposes over time, encompassing a place of worship, education and accommodation. The church building was eventually demolished in 1995 and incorporated into the grounds of St Mary's Hall and St Mary's School which served as a space for both school classrooms and worship. The cottage used as accommodation for the sisters, was eventually incorporated into the school and used for classrooms before being demolished at an unknown date. The small dwelling utilised as accommodation for the sisters from 1902, like the presbytery at St Patrick's, also saw multiple expansions with additions made to the north, south, and west of the structure (Cropper et al., 2018). However, a closer analysis of the sites features and artefacts illustrates a different archaeological setting.

Unlike St Patrick's, numerous latrines and rubbish pits were identified during the 2016 archaeological monitoring amongst other features. On the church site, the barrel latrines included twentieth century artefacts and were capped by lime plaster, likely utilised by the children attending classes in the church. In comparison, its presbytery had many more latrines of varying shapes and sizes that were established both pre- and post-1900, concentrated in a particular area of the site. Analysis of the St Mary's Church and school suggests the occupants utilised discrete areas for their latrines over a long period of time and shifted only slightly when required. At least four contained artefacts relating to the early phases of the school occupation and many were deliberately infilled with rubbish once it ceased use. Interpretation of the latrines across these sites showed clear differences between latrine clusters; those closest to the building being discrete and those slightly further away merging together to form a series of linear trenches. Both groups contained apparently contemporaneous material, included children's artefacts and those with religious motifs that connected them to St Mary's Convent. The pattern of features also suggested that the latrines near the house were likely routinely emptied with secondary deposits of night soil buried behind the house in pits that eventually merged together and formed trenches. The sites also included numerous rubbish pits containing artefacts relating to the school and building rubble relating to phases of alterations (Cropper et al., 2018).

When comparing St Mary's to St Patrick's, there is a glaring difference between the two sites; one has rubbish pits, latrines and other features expected from a site occupied continuously for over a century, and the other has almost none. Despite the size of the St Patrick's complex and continuous occupation for over a century, no features were interpreted as latrines, rubbish pits or secondary deposits of night soil. This almost certainly relates to the geomorphology of the site and the obvious issues that would be caused by such deposits.

Latrines and rubbish pits are two common and generally information rich features identified at most historical sites. Hamel (2002) and Butcher and Smith (Butcher & Smith, 2010) use the term latrine to encompass a variety of in-ground sewage disposal features encountered in New Zealand colonial sites, including 'long-drop' pit toilets (lined or unlined deep narrow pits, but not extending to the water table), cesspits (pits wider than they are deep, lined or unlined), and earth closets (shallow pits lined with a barrel or can). There were two options once a latrine was full: (1) the pit could be filled, a new pit would be dug, and the outhouse would be shifted. The other

option was to empty the pit and this was either done by the occupant or contractors could be hired to do the 'dirty work'. The resultant night soil could be buried on the property (i.e., a secondary deposit of night soil), or where collection was available, it could be set out in a pan on the footpath, and the night man would collect it for a fee (Cropper et al., 2018).

In 1873, the Dunedin City Council passed a bylaw stating that all privies, cesspools and house drains must be kept in working order, use a closet pan with earth or ashes, with the city providing the service for the periodic collection of night soil (along with other refuse, such as dung, ashes, filth, refuse, or rubbish) to be overseen by the Inspector of Nuisances (Otago Daily Times, 1873a, 1873b). The following year, the council urged householders to adopt the earth closet, and they even had an example set up at the City Council Chambers for householders to view and were attempting to get a good price by ordering them in volume (Otago Daily Times, 1874).

In 1875, there was a report in the ODT that discussed the question of sewage removal, specifically that matters were immediately required to abate nuisances (Otago Daily Times, 1875). At this time, night soil was only being removed once a week or fortnight depending on the capacity of the closet and in many cases one closet was being used for almost two dozen households. The Medical Officer of Health suggested rendering the use of cesspools illegal to stop people using them as a cheaper option than employing a night soil collector. In 1877, a bylaw was created in the Borough of South Dunedin stating that, "no person shall empty any privy or load carry remove or deposit any night-soil offal filth rubbish or other offensive matter within the Borough of South Dunedin save between the hours of 11 o'clock p.m. and six o'clock a.m. of any day. No person shall deposit any night-soil offal filth rubbish or the contents of any privy within the Borough of South Dunedin at any place save and except at "the Borough Manure Depot" [located on Andersons Bay Road]" (Otago Daily Times, 1877). Five years later, the South Dunedin Borough Council made a provision for removing night soil and by 1889 had implemented a sanitary rate upon all rateable properties within the borough (Otago Daily Times, 1882, 1889b). In 1889, the Borough of South Dunedin asked for tenders and granted a three year contract to J Ellis and Co. to remove night soil from the borough (Otago Daily Times, 1889b, 1889a). Requests for tenders continue every four to five years into the twentieth century (Evening Star, 1892, 1897; Otago Daily Times, 1900a). This management of sanitary waste proved successful. By the turn of the century, waste from 'the flat' was not discharged into the harbour like Dunedin City, no water closets were connected with the drains, primarily storm water flowed through the drainage system and an efficient and managed night soil collection was in place to an appointed depot (Evening Star, 1898, 1899). Therefore the absence of rubbish pits and latrines at St Patricks, and presumably other sites in the South Dunedin 'flat', are a result of these bylaws providing an efficient waste disposal system most likely as a consequence of the geomorphology.

The limited number of artefacts recovered from the Mosgiel sites (Cropper et al., 2018) is comparable to St Patricks. Interpretation suggests that the low abundance of artefacts in these features can be attributed to the different refuse disposal needs of a church as opposed to a residential or commercial site. In this case, artefact analysis indicates the occupants of the St Mary's Church were disposing of their rubbish off-site. The choice of off-site rubbish disposal likely reflects a desire to keep the church grounds clean and tidy, as would be appropriate for a place of worship. A likely scenario also for St Patrick's, where the artefact assemblage was small and fragmentary. Unfortunately, at St Patrick's, the lack of artefacts means the artefact analysis is unable to provide further information about the activities taking place at the church other than what is in the historical record.

Much of the assemblage relates to the past and present buildings on site. Of particular interest are the two types of terracotta roofing tiles encountered, both of which must relate to the new school building erected in 1916/1917 as it is the only building with a terracotta tiled roof. Two popular imported Marseilles tiles were recovered as well as a local version made at the Abbotsford tilery in Dunedin. Both were in popular use around the same period (early twentieth century) but the imported Marseilles would have been significantly more expensive. The presence of both suggests that the church may have resorted to cheaper building materials part

way through the construction of the school building, or alternatively replaced the original Marseilles tiles with cheaper Abbotsford versions when the roof required repair. A Gore Brothers brick recovered during the site clearance after the presbytery demolition provides another link to local manufacturers: the brothers ran the Wingatui brickworks just two miles from the Abbotsford tiler.

Only one artefact could be confidently linked to the presence of children at the site (the porcelain doll's arm), but several items recovered from within the presbytery building prior to its demolition have strong links to the religious facet of the site. A prayer book and paper with religious writing would have been used by worshippers, although both seem to date to the second half of the twentieth century. The household artefacts such as the ceramic and glass vessels and faunal remains may relate to the domestic occupation of the site by various priests, teachers and nuns throughout the late nineteenth and twentieth centuries, however without discrete deposits the interpretations able to be formed with this material are limited.

In terms of the higher level archaeology, while the lack of such features is contradictory to our initial thoughts for quantity, based on other and similar ecclesiastical excavations such as St Mary's and St Peter's Vicarage (Petchey, 2007), these excavations have provided key data about sites on 'the flat'. The nature of the ground chosen for occupation is key to the amount of archaeology potentially remaining in-situ. In this case, sites in South Dunedin are likely to be artefact and feature poor, no matter the type of site or length of time the site was occupied.

7 Conclusions

In 2012 the Catholic Church of Dunedin began the rejuvenation and redevelopment of the St Patrick's Church Complex to better serve its modern day congregation and community. The work was staged over several years and encompassed four archaeological sites; I44/539 (the presbytery), I44/540 (St Patrick's Basilica), I44/541 (the new St Patrick's school) and I44/542 (the old St Patrick's school). For NZHP, the project provided the inaugural opportunity to research early occupation in South Dunedin's 'the flat' where no other site has been previously investigated. It was also the first opportunity to research a continuously occupied church and community site by a single entity for over 100 years.

A major component of the archaeological inquiry into St Patrick's was to examine the discernible impact the geomorphology of the area had to the site and what kind of archaeological material would be uncovered and/or remain present. Over the course of the five years, archaeological excavations indicated that, despite intense occupation in the area for many decades, there are very little subsurface remains. This appears to be a direct result of the poor, low lying ground conditions and high water table. These attributes did not allow for the use of rubbish pits and latrines on-site without leading to health hazards and unsightly grounds which would not have been desirable for a site providing for children and the local community. Consequently, the site appears to have been regularly cleared as occupation, redevelopment and construction occurred. This would have minimised health risks and any unsightly visuals while keeping site build up to a minimum. Furthermore, the low lying nature of the area in comparison to the hillier central Dunedin would have also minimised and/or eliminated any additional natural ground accumulation over time. This, in conjunction with a good night soil collection program in the borough, demonstrates that while the church was dependant on the community for funds throughout its occupation at St Patrick's, it must have always prioritised the health and well-being of its parishioners as well as its public façade as a model citizen of the South Dunedin Borough.

In regards to the presbytery structure, despite its clear lack of grandeur in comparison to the school and basilica buildings flanking it to the east and west, its location and purpose as part of the complex remained well thought out and considered. With a more practical and utilitarian purpose, arguably it did not necessarily require the same splendour as the school and basilica which were designed solely for the purpose of public attention and attendance. However, the presbytery's location within the centre of the site housing those who governed the complex, in essence subtly 'joined' the main purposes of St Patrick's together, education and worship. Upon investigation, the presbytery does however display its own architectural character setting it apart from common

residences of the time. The structure was initially well made, typical in Victorian design aesthetic and layout with money spent on an efficient, practical and comfortable building. Its form to the public appears to have remained important at least subsequent to the 1929 additions with the external and internal design elements remaining in keeping with the original structure. Its construction of brick with concrete foundations, cathedral windows, presence of fireplaces in almost every room and wide timber mouldings and wainscoting all suggest architectural design by Petre. Additionally, these are all features known to have been shared with other presbyteries he designed for the church during the late nineteenth and early twentieth century when the St Patrick's presbytery was constructed. Being the key Catholic architect of the time who also designed the St Patrick's basilica and original school-chapel, the St Patrick presbytery can therefore be attributed to Petre.

In conclusion, the recent rejuvenation and improvements made to the St Patrick's Complex have successfully maintained and improved upon the key aspects of this hub for improved community use in modern day South Dunedin while still maintaining its original purpose and key iconography that is distinctively Francis Petre.

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