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INTERPRETATION STRATEGY

Shepherds Bay, Meadowbank, NSW

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1.0 INTRODUCTION

Rappoport Heritage Consultants was approached by Robertson Marks Architects to investigate the historical heritage characteristics in the built form of Shepherds Bay. Meadowbank. Rappoport conducted a thorough site visit of the existing area including the wharf, Mangrove Swamp area and urban geography in the study area. At the conclusion of the physical examination of the study area, Rappoport met with Ian Farrelly of Robertson+Marks Architects and Deborah Sutherland of PLACE Design Group Pty Ltd. At this meeting, various ideas were discussed concerning the Interpretation of the intrinsic heritage values comprised in the study area. This report serves to clarify and systemise the key historical heritage characteristics capable of being interpreted in the proposed design for the residential housing stock.

1.1 Study Area

The study area comprises a waterfront section of the northern shore of the Parramatta River in the Meadowbank Employment Area fronting Shepherds Bay, Meadowbank It is bordered by Bowden Street to the west, Constitution Rd to the north and Church Street to the east. The study area contains a number of sites on Nancarrow Avenue, Hamilton Crescent West, Rothesay Avenue, Belmore Street, Parsonage Street, Gale Street, Well Street and Porter Street. The majority of the sites in the area are either small or medium-sized obsolete or operating commercial, industrial or warehouse premises of varying style.





Map showing the study area. (Source: Robertson + Marks Architects, Meadowbank Shepherds Bay Urban Renewal Masterplan Project Application MP09_0216) November 2010

1.2 Background to this Interpretation Strategy

This Interpretation Strategy has been prepared on behalf of the proponent of the development, Robertson Marks Architects in support of a Request to the Minister of Planning to declare the proposal a Major Project under Part 3A of the Environmental Planning & Assessment Act, 1979 (the Act). It has been prepared to fulfil one of the conditions imposed in the determination of the current development application by the owner for a large scale residential development. It is a requirement of the development application that an Interpretation Strategy is approved before the commencement of any works, and that such a strategy is implemented.

1.3 Heritage Listings

The study area contains the former Automatic Totalisators Ltd factory at 37 Nancarrow Avenue, listed as an item of local heritage significance in Schedule 5 of the Ryde Local Environment Plan 2010. This building is not listed on the National Heritage List, the Commonwealth Heritage List or the State Heritage Register, nor is it located within a heritage conservation area. In the event that the development is approved and should proceed, this factory will be demolished as part of the major residential redevelopment of the area. No other heritage listed properties are located in the study area.

1.4 Methodology

The methodology used in this Interpretation Strategy is consistent with the Heritage Interpretation Policy contained in the NSW Department of Planning Heritage Information Series, as endorsed by the Heritage Council of NSW in August 2005. It has been prepared in accordance with the principles contained in the most recent edition of the *Burra Charter* (ICOMOS Australia).

1.5 Limitations

This Interpretation Strategy relates to the area shown on the Shepherds Bay Renewal Proposal, Figure 2 in the Stage One Development Major Project Application. It is not a strategy for the entire Shepherds Bay Urban Renewal Stage 1 Masterplan. It is prepared as a strategic overview of appropriate interpretive concepts for the heritage significance of the site. While developing themes and key messages for the identified audience at the subject site, it does not specify a content development, installation strategy or a maintenance plan for the proposed interpretive media for the site.

1.6 Author and Copyright

This Interpretation Strategy was prepared by Paul Rappoport of Rappoport Pty Ltd - Heritage Consultants in conjunction with Jasper Swann, Heritage Consultant, and Patricia Cuthroy, Historian.

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2.0 HISTORY

2.1 The Story of Shepherds Bay

In November 1794 a grant of 20 acres was made to Ann Thorn (later Shepherd, following her marriage to fellow emancipist, James Shepherd). James Shepherd was given a grant of 30 acres in the Eastern Farms in 1795, the year he married Ann Thorn. The other main grant, around this time, was William Kent's August 1799 grant of 160 acres. There is no evidence to suggest that William Kent ever resided at Meadowbank. His overseers, however, are said to have planted orchards and grazed stock on the land. (See Figure 2)¹

The Shepherds settled on Ann Thorn's grant, which became known as 'Thorn's Farm'. They had four children: James, Ann, Elizabeth and Isaac. By 1802 'Thorn's Farm' had six acres of grain under cultivation and supported eleven sheep and sixteen pigs. By 1803 most of the accessible land in the area had been granted. Settlement was based along the Parramatta River and the overlooking ridges. A constable was appointed to the district in 1809 to control bushranging and other illicit activities which were flourishing in the area. Ann Shepherd died in 1806, but her husband, James and their children continued to occupy the farm, expanding the property over the ensuing years by purchasing neighbouring properties, for example James Stewart's property, 'New Farm'. (See Figure 3) As well as being an industrious farmer, Shepherd was a firm supporter of religion within the small community. At a public meeting called by the Reverend Samuel Marsden in 1812 he contributed £5 towards the purchase of a property to be used as a chapel and school.²

In 1822 James held 280 acres, by grant and purchase, including seven acres each under cultivation with wheat and maize, two acres of potatoes and ten acres used for a kitchen garden and orchard. He also ran 250 sheep, 70 cattle and 27 pigs on the property. His son Isaac held 180 acres, which he had been granted, and on which he ran 20 cattle. Ultimately the Shepherds owned an area of 1,500 acres, stretching from Parkes Street to the Parramatta River, which included both William Kent and James Bradley's original grants.³



Detail of an undated map of the Parish of Hunters Hill, County of Cumberland, showing Figure 2: Ann Thorn and William Kent's original grants. (Source: Parish Map Preservation Project.).



Helenie, probably in the late 19th century when it was the residence of Mr Barton. (Source: Progress: An Illustrated Journal and Magazine devoted to the record of facts concerning the growth, progress and history of Australasia, Vol. I, No. 2, p. 29.)

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Figure 3:

¹ Weir and Phillips, op. cit., p. 4; G. Blaxell, The River: Sydney Cove to Parramatta, Eastwood, 2004, p. 160.

² P. Smyth, "The Shepherd family of 'Addington'", in J. Dawson (ed.), From bush to suburbia: pioneers of Ryde, Vol. 1, Ryde, 1992, p. 64

³ C.J. Baxter (ed.), General muster and land and stock muster of New South Wales 1822, Sydney, 1988; S. Harris, 'Far-sighted Shepherd who led well', Northern District Times, 25 August, 1993, p. 55; Weir and Phillips, op.cit., p. 4; Hannibal Macarthur, cited in Levy, op.cit., p. 40; Blaxell, op.cit., p. 160; Smyth, op.cit., p. 64; 'History of Ryde', City of Ryde (www.ryde.nsw.gov.au/ryde/heritage/history_ryde.htm), accessed 21.7.2010.

Until the mid-nineteenth century Ryde was an isolated area. The first road (Kissing Point Road from Parramatta) was not built until 1813. Four years later passage via the Great North Road across the Parramatta River was achieved. In 1832 the Bedlam Point punt was established to transport horse-drawn vehicles across the river. Agitation had begun for the operation of a public punt across the Parramatta River as early as at least 1826. Suggestions on crossing sites along the river near Kissing Point and today's Ryde Bridge were made but were rejected in favour of the Bedlam Point crossing. The river was narrower at this point and the land was not privately owned as other foreshore sites were. By the mid 1840s there were numerous complaints about the disrepair of the punt, the neglected state of the wharf and the unpredictability of the puntman. In 1856 Isaac Shepherd chaired a local meeting calling on the government to build a bridge from Bedlam Point to Abbotsford to replace the ferry. It was proposed that the Field of Mars Common should be sold to finance it. The punt declined in use after the 1860s, eventually being discontinued when the bridges at Gladesville and Iron Cove were opened in 1884.⁴

It was the river that remained the most important means of transport and communication and the means by which produce was conveyed to the markets at Sydney. Fruit, in particular, thrived in the area. It was claimed in 1828 that James Shepherd was one of four or five people to whom the colony was indebted for their 'extensive culture of oranges'.⁵ James Shepherd reportedly shipped '12,000 dozen oranges' to the markets during the season of 1830. Other industries similarly flourished. Hop growing and brewing commenced in the early years of the nineteenth century. Boat building was carried out on the shores of the Parramatta River and at Charity Creek (Meadowbank). Fishing and oyster gathering took place along the river banks. Local dairies supplied milk and butter. Stock raising and grazing were carried out on the larger properties in the area.⁶ In 1835 Ann's youngest son, Isaac acquired part of William Kent's grant. He had married Ann Paine in 1832 and they were to have ten children together, of whom only four survived. In the late 1830s or early 1840s Isaac Shepherd built a two storey Georgian style sandstone villa, which he named Helenie, on a part of Kent's former grant. The first residents were Robert Gore and his family. Isaac lived in the Ryde district all his life and made a significant contribution to the area. For example he donated the land on which a watch-house was built in 1837. This building, on the corner of Belmore Street and Victoria Road, still functions as an operational police station. Isaac was also a member of the New South Wales Legislative Assembly from 1860 to 1864. In June 1862, in that capacity, he moved that a select committee be appointed to inquire into various matters relating to the Field of Mars and Eastern Farms common as well as to the issue of bridging the Parramatta River and Iron Cove Bay. It was decided that bridges were, at that stage, too expensive to build but some progress was made on solving the problems of the commons.⁷

For a few years, in the 1850s, Helenie was rented by Henry Parkes. Following Parkes' tenancy Isaac Shepherd resided there until his death in 1877. The property was then passed to Thomas Kendall Bowden, a son-in-law of Shepherds.⁸

Rowing was a significant pastime on the Parramatta River from the middle of the nineteenth century. By the 1850s the annual Anniversary Regatta, held on 26 January on the Parramatta River, was a major event in Sydney's sporting calendar. From the 1850s regular regattas were held on the Parramatta River, making the river and its surrounding districts the venue for major rowing events. In the 1860s the river was the venue for major inter-colonial rowing races and from 1871 it became a venue for inter-varsity races. A championship rowing course was defined on the river, beginning at Charity Point, near Isaac Shepherd's house, Helenie, and finishing at a group of three rocks called The Brothers at Henley. The real heyday of the river as a sporting venue, however, began in 1877, when the first contest to be held in Australia for the title of Champion Sculler of the World was held there. The Illustrated Sydney News estimated that between 60,000 and 70,000 people witnessed the race. In August 1884 a Dapto sculler, Bill Beach challenged the then world champion, Canadian Edward Hanlan. The contest was witnessed by about 100,000 spectators including the passengers of over 60 steamers and at least 500 small boats. When Beach was victorious the cheers from the Gladesville side of the river were echoed from the Abbotsford side. Oarsmen like Beach became the objects of extravagant hero worship.⁹

⁴ P. Smyth, 'Bedlam Ferry', in K. Shaw (ed.), Historic Guide: A guide to some significant heritage sites in the City of Ryde, Ryde, 2002, pp. 18, 20; P. Smyth, 'Field of Mars Common', in Shaw, op. cit., p. 38. ⁵ See review of P. Cunningham, Two Years in New South Wales,..., Australian Quarterly Journal of Theology, Literature and Science, No. 11, April 1828, p. 146.

⁶ Levy, *op.cit.*, p. 42; Weir and Phillips, *op.cit.*, p. 6.

⁷ G.V.F. Mann, 'Historical notes to accompany sketches of old residences, December 1931', p. 84; Harris, op.cit., p. 55.

⁸ Weir and Phillips, op.cit., p. 6; Blaxell, op.cit., pp. 161, 162; Phippen, op.cit.; Harris, op.cit., p. 55.

⁹ M. Farlow and A. Phippen, 'Gladesville', Dictionary of Sydney

In the 1850s local landowners increasingly realised that sustainable long term investment in the area and improved property values depended on the availability of convenient transport routes. The Bedlam punt, as we have seen, was notoriously unreliable and the existing steamship service inadequate for people who wished to travel to the city on a daily basis. As a result of this movement, a road (later Ryde Road) was built to link Ryde and Tarban Creek (Gladesville) to a wharf at Onion Point (Hunters Hill). A locally capitalised steamship company (later the Parramatta River Steamship Company) was established to provide frequent river passage.¹⁰

In the Oddfellows Hall on 2 January 1870 a petition, containing the names of 201 householders, was prepared, arguing for local government to be granted to the area. Ryde and its adjoining suburbs were proclaimed a municipality in November 1870 and the first elections were held in February 1871. Isaac Shepherd played a significant role in the incorporation of Ryde Council and was an alderman in 1873. For the first years of the new Ryde Municipality the most important issues were roads and rates. The first Council Chambers were in the Old Wesleyan Chapel in Church Street, from 1870 to 1879. The Council's office changed premises often until a new building was erected in 1922. The Council then remained in that building in Blaxland Road until the present Civic Centre was built in 1964.¹¹

The 1870s witnessed slow development in and around the township of Ryde itself, as old families began to subdivide their estates. The Shepherds were among them. In 1881 Michael Nancarrow purchased 9 ½ acres in the area, between the current Constitution Road and the Parramatta River and the current Meadowbank Railway and Ryde (vehicle) bridges. The land was part of the original 30 acre grant which had been made to James Bradley in 1792 and was later acquired by the Shepherds. It included a sandstone cottage which had been built by convicts, under overseer Edward Drinkwater, in 1811. The house consisted of two bedrooms, as well as a dining room and parlour, surrounded by a wide flagged verandah on three sides and set in gardens and a citrus grove. In 1889 extensive additions were made to the house which became known as 'Riverview'. The 'estate' also had its own swimming baths (in the river), boat shed, wharf and stables. He also eventually owned several shops and other properties in the area.¹²

Michael Nancarrow was originally from Cornwall, England. He migrated to New Zealand, with his brother, James and his family, in 1856. In the 1860s, while working as a farrier he married Margaret Patterson, a recent Scottish migrant. The Nancarrows moved to Australia, and Ryde, in 1876, the New Zealand government having commissioned Michael Nancarrow to purchase crops of oranges and grapes in Australia for export to New Zealand.¹³

At Riverview Nancarrow planted and very successfully grew grapes – Gross Coleman, Centennial, Flame Tokay, Lady's Finger and Sherry as well as black and white muscatels – for tale use, not wine making. He received innumerable prizes from shows for his grapes which were generally never sent to market, but rather sold directly to the 'best retail shops in Sydney, or to the fashionable clubs'.¹⁴ The Department of Agriculture also regularly sent him new varieties to test. He also bred and showed champion Collie dogs and King Charles Spaniels, importing pedigreed animals from Scotland. He also bred pedigreed poultry, particularly Silver Grey Dorkings, Silver Spangled Hamburghs, Golden Pencilled Hamburghs and Wine Dots, from strains imported from England. Nancarrow won many prizes at shows in both Sydney and Melbourne for his poultry. Riverview became a show piece to which visitors travelled by road and river steamer at the weekends. Nancarrow also had an extensive collection of pictures, from which the trustees of the Art Gallery of New South Wales occasionally borrowed for exhibitions.¹⁵ The impetus to growth in the 1880s was the general improvements in communication between the district and the rest of Sydney. This was due to the opening of the first Gladesville bridge in 1881, providing improved access to vehicles, passengers and mail, and of the Strathfield-Hornsby railway line in 1886 which had freight stations at Ryde (now West Ryde), Dundas (now Eastwood) and Field of Mars (now Epping). The railway crossed the Parramatta River at the Helenie Estate, near Kissing Point. The first station on the Ryde side was named Ten Mile but this was changed to Meadowbank in 1889. The railway had its most immediate impact at Meadowbank and

(www.dictionaryofsydney.org/entry/gladesville), accessed 21.7.2010; Phippen, *op.cit.*; Phippen, 'Tennyson Point', Dictionary of Sydney (www.dictionaryofsydney.org/entry/tennyson_point), accessed 21.7.2010. ¹⁰ Weir and Phillips, *op.cit.*, p. 6; Jonathan Falk Planning Consultants Pty Ltd in association with Rodney Jensen and associates, *Ryde Heritage Study: Heritage Inventory: Final Report*, Bondi Junction,1988, p. 19. ¹¹ 'Local government in Ryde', City of Ryde (www.ryde.nsw.gov.au/council/history.htm), accessed 21.7.2010; A Phippen, 'Ryde', Dictionary of Sydney (www.dictionaryofsydney.org/entry/ryde), accessed 21.7.2010; Blaxell, *op.cit.*, p. 162. ¹² C. Rapp, 'Michael Nancarrow of Ryde', in Dawson, *op.cit.*, p. 52.

¹³ loc.cit.

¹⁴ 'A famous vigneron', Cumberland Argus and Fruitgrowers Advocate, 10 March, 1906.

¹⁵ Rapp, *op.cit.*, pp. 52, 53; 'The Grape Crop: light yield in the Ryde district', *Sydney Morning Herald*, 10 March, 1906; see, for example, *Cumberland Argus and Fruitgrowers Advocate*, 24 April, 1897; 'A visit to Mr Nancarrow's: a prolific vineyard', *Cumberland Argus and Fruitgrowers Advocate*, Supplement to 17 March, 1900.

West Ryde, where the owners of the large Meadowbank Estate carried out their first subdivision on the western side of the railway line in 1883, in anticipation of the railway, and a later subdivision closer to the line in 1888. The railway and resulting Meadowbank subdivision brought a new class of residents to this part of the Ryde municipality – professional gentlemen who commuted to the city.¹⁶

On the east side of the railway line, the Helenie estate was exposed to noise from the trains and it was sold by Shepherd's heirs. Most of the estate was purchased by Mellor Brothers, a South Australian firm, which established the Meadowbank Manufacturing Company in 1890 to manufacture stump-jump implements, strippers, windmills, pumps, horse-rakes, wheat separators, ploughs, harrows, scarifiers, shares and other agricultural and general implements. The firm later produced tramcars and railway rolling stock. The land was cleared, a railway siding built and a tram road made to the wharf. The house, Helenie, was occupied for many years by the manager of the Meadowbank Manufacturing Works, Mr Barton. This industry resulted in a growing number of houses occupied by company employees. The Meadowbank Manufacturing Company closed in 1930 and the site was purchased by Ryde Council in 1937. In 1945-46 the old industrial site was converted to the Meadowbank College of Technical and Further Education.¹⁷

A small portion, about five acres, of the Helenie Estate was purchased by another agricultural implement manufacturer, Rhodes and Company. They were agents for Simon's flour milling machinery. The five acres was surveyed and divided into both factory sites and residential allotments. The allotments had 150 foot frontages and varied in depth from 150 to 250 feet. By 1895 the Meadowbank works was considered to be 'one of the brightest and busiest little centres of industrial interest in the neighbourhood of Sydney'. Both of these manufacturers were attracted to the area by the practicality of access to both rail and river transport.¹⁸

While real estate activity slowed during the depression of the 1890s, development proceeded in other directions. Essential urban infrastructure was built including the laying of water mains, from 1892 and gas mains, from 1893. During this period of early subdivision and growth, some of the site remained in the hands of the Shepherd family. In 1898 a certificate of title for 28 acres, 3 roods and 28 perches of the land was issued to Robert Osmond Shepherd. This land was conveyed to Ryde draftsman, James Johnson Shuttleworth on 15 August, 1912.¹⁹

The other part of the site, 'Riverview', owned by the Nancarrows, was subdivided into 25 lots in 1912, being put up for sale in both 1912 and again in 1913.²⁰ The prospectus of the sale read as follows: One of the most historic and most beautiful [estates] in Australia, situated at Ryde fronting Parramatta River is for sale on Saturday, October 19. We refer to the old property adjoining the Ryde Steamers' Wharf, now for years occupied by Mr Nancarrow. Every foot of this estate is historic, and in the subdivision decided on, the new holders will have something of special value. ... Since the famous old stone house and grounds came into the possession of Mr Nancarrow, nearly twenty years ago, the place has been turned into a wonder spot. Here is Nancarrow's famous vineyard, where the owner has year in year out grown grapes that have been a marvel, defeating all competition no matter whence coming. All these trellised vines are subdivided into different allotments, forming a priceless possession. Here, Mr Nancarrow reared his famous prize fowls, his famous dogs and his famous trotters – the whole demonstrating that the grand old homestead could not have fallen into worthier hands. The estate adjoins the wharf, and has the railway station at its back – enabling residents to reach the city in 20 minutes by tram; or quickly by steamer on the most charming trip to be found in any part of Australia. There are only 25 allotments in the subdivision, and doubtless there will be eager competition for them owing to their historic character, their beautiful situation and value, and the fact of the vast demand for residential areas in this unique old spot on the famous Parramatta River.²¹

¹⁶ Weir and Phillips, op.cit., p. 7; Phippen, 'Ryde'; Phippen, 'Meadowbank'.

¹⁷ Weir and Phillips, op.cit., p. 8; Phippen, 'Meadowbank'; Cumberland Argus and Fruitgrowers Advocate, 4 January, 1902, p. 4.

¹⁸ Phippen, 'Meadowbank'; Sydney Mail, 3 September, 1892, p. 518.

¹⁹ Jonathan Falk Planning Consultants Pty Ltd in association with Rodney Jensen and Associates, op.cit., p. 19; Weir and Phillips, op.cit., p. 8.

²⁰ Rapp, *op.cit.*, p. 53.

²¹ Sale of historic property at Ryde [c. 1912].





Figure 4: Advertisement for the sale of Nancarrow's Estate, by Richardson and Wrench Ltd, in October 1912. Figure 5:

Advertisement for the sale of Nancarrow's Estate, by Richardson and Wrench, in November 1913.

Shuttleworth's land was also subsequently subdivided, with individual allotments being sold from 1916. These allotments were subject to a covenant which specified that only one dwelling was to be built on each allotment. A minimum value of £600 per dwelling was mandated, as was the type of construction materials.²² Shuttleworth subdivided his land at the beginning of a period of expansion in Ryde. By 1917 Meadowbank, being the first railway station 'over the river', was attracting both city businessmen and working men who found employment in the industries located along the rail line from Strathfield to Rhodes. The growth of the suburb by this time had been sufficient to allow for the establishment of its own public school. Various works were carried out by the Council throughout the twentieth century. The Ryde Bridge across the Parramatta River was commenced in 1933 and opened in 1935. The bridge was a success for the Council financially and paid for itself, through the collecting of tolls, within thirteen years of its opening, when the bridge was handed over to the Department of Main Roads.²³

Parts of the subject site underwent a number of transfers during the interwar and World War II periods. The site was part of 7 acres, 3 roods and 18 ³/₄ perches conveyed to Abraham Gaha, a gentleman of St Leonards, on 9 November, 1927. Gaha did not own the land for long. It was conveyed to Nance Cameron Wallace, wife of Leslie Wallace, a Sydney conveyancer, on 9 February, 1928. The land was transferred to the Council of the City of Ryde by the Public Trustee on 13 March, 1940. During this period the site would appear to have been one of the small farms or orchards that continued to be found in Ryde. When purchased by Ryde Council in 1940 local histories indicate that the site was known as 'Parson's Orangery'.²⁴

Ryde Council subdivided the land and continued to sell individual allotments from 1942 onwards. The residue of the land, comprising 5 acres and 35 perches, was bought by Automatic Totalisators Limited on 15 November, 1945. Throughout the 1950s Ryde continued to become more urbanised. Ryde gained city status in 1992, which also marked the bicentenary of the first land grants at Ryde. Over recent decades, as the area has become less industrialised, the residential component has increased. Medium density housing developments are taking advantage of the Parramatta River foreshore.²⁵

²² Jonathan Falk Planning Consultants Pty Ltd in association with Rodney Jensen and Associates, op.cit., p. 19; Weir and Phillips, op.cit., p. 8.

²³ 'Local government in Ryde', City of Ryde (www.ryde.nsw.gov.au/council/history.htm), accessed 21.7.2010.

²⁴ Weir and Phillips, op.cit., p. 9; Levy, op.cit., p. 84.

²⁵ Weir and Phillips, op.cit., p. 9; 'Local government in Ryde', City of Ryde

37 Nancarrow Avenue, Meadowbank

The Automatic Totalisators Limited factory was constructed on the site of an old orchard in 1946-47 to a design by the architectural practice of Herbert Dennis and Odling. It was purpose built to accommodate the manufacture and development of automatic totalisators, the sophisticated mechanical counting machines invented by engineer, George Alfred Julius between 1908 and 1912.²⁶ George Alfred Julius was born on 29 April, 1873 at Norwich, England. His father was mechanically minded and encouraged George to spend many hours in his workshop. George was educated at Melbourne Church of England Grammar School and at Canterbury University College, Christchurch, New Zealand. He graduated with a Bachelor of Science degree, in mechanical engineering, in 1896. Between 1896 and 1907 he was employed as an assistant engineer by the Western Australian railways. In 1906-07 he published three important works on the physical characteristics and economic uses of Australian hardwoods. In 1907 he moved to Sydney as consulting engineer to Allen, Taylor and Company Limited, timber merchants, at a salary of £550 and with the right of private practice.²⁷



In 1908 Julius established an engineering firm in Sydney which was located in the Equitable Building, 350 George Street. His first commission was to investigate defective electrical and mechanical installations made by the Sydney Light and Power Scheme. He quickly developed a strong client base and the volume of work necessitated a move, within a year, to larger office facilities at Norwich Chambers, 58 Hunter Street. By this time his practice also included an assistant engineer, two draftsmen and a secretary. By 1913 the firm was again forced to find more spacious accommodation, moving to Culwulla Chambers, Castlereagh Street. In 1914 Julius accepted an engineer, William Poole, as a partner and the firm became known as Julius and Poole. Poole was mainly associated with the firm's civil and mining engineering activities.²⁸

Figure 6: Sir George Alfred Julius (Source: CSIRO, www.csiro.au/resources/CSIROChairmen.html, accessed 22.7.2010)

The outbreak of World War I slowed the progress of the firm which by that time had a staff of six and it was not until 1922 that it began to expand once again. A new partner, Alexander James Gibson joined the firm in January 1922 and from that date the business became known as Julius Poole and Gibson. Gibson had had an association with both George Julius and William Poole before joining the firm as a partner. In 1921 he had been approached by the Municipal Council of Rockhampton, Queensland, to investigate the unsatisfactory water supply to that city and to recommend a suitable scheme. This led Gibson to collaborate with Julius and Poole and soon afterwards the formal partnership was formed.²⁹

Julius remained the senior partner of Julius, Poole and Gibson until his death in 1946. The firm's clients included the Commonwealth and State governments. His extraordinary intellect was brought to bear on many engineering problems and he found the frequent laudatory references to himself as the inventor of the automatic totalisator for racecourse betting an amusing commentary on the public lack of appreciation of his other services to the community. Julius was president of the Engineering Association of New South Wales for three terms between 1910 and 1913 and of the Electrical Association of Australia in 1917-18. A founder of the Institution of Engineers,

(www.ryde.nsw.gov.au/council/history.htm), accessed 21.7.2010; Phippen, 'Meadowbank'.

²⁶ New South Wales State Heritage Inventory on-line database (www.heritage.nsw.gov.au), accessed 21.7.2010.

²⁷ W.H. Myers, 'Julius, Sir George Alfred (1873-1946), Oxford Dictionary of National Biography, Oxford, 2004-2010; A. Corbett, 'Julius, Sir George Alfred (1873-1946), Australian Dictionary of Biography, Vol. 9, Melbourne, 1983, pp. 528-529.
²⁸ 'Julius Poole and Gibson Pty Ltd engineering archive, 1887 – 1991', Objects from the collection of the Powerhouse Museum, Sydney, Australia (www.powerhousemuseum.com/collection/database), accessed 21.7.2010.
²⁹ loc.cit.

Australia, in 1919, he was on the preliminary committee, a council member between 1919 and 1940 and fifth president in 1925. He received the Institution's Peter Nicol memorial medal in 1927. Julius fostered the formation of the Australian Commonwealth Engineering Standards Association in 1922. He was chairman of the Standards Association of Australia between 1929 and 1939 and president of the Australian National Research Council between 1932 and 1937.³⁰

In addition to his consulting practice, Julius sacrificed much in time, money and energy in supporting the development of the Australian Commonwealth. Julius served on a committee to inquire into electricity supplies in 1925, reported on a water conservation scheme for the northwest of the State in 1937 and the break of gauge in the railways in 1939. In 1926 the Prime Minister, S.M. Bruce sought his advice on the bill to establish the Council for Scientific and Industrial Research and appointed Julius chairman, a position he held until 1945. Julius quickly appreciated that the most pressing problems facing the Council related to primary production, particularly food supplies, wool and timber, and the investigation of diseases affecting them. With David Rivett, the chief executive officer and Professor Arnold Richardson, he helped to fight prickly pear, to investigate diseases affecting sheep, dairy cattle and food supplies, and set up a division of forest products. Rapid practical results were achieved, especially in the control of animal disease so that, before a decade had passed, the Council readily obtained from the Commonwealth government greatly increased capital sums and annual monetary grants which enabled the activities of the Council to be put on a substantial and permanent footing. These grants were voluntarily increased by financial support from farmers and graziers. In 1927 he was a member of the Commonwealth Board of Trade. He was knighted in 1929.³¹

In the 1930s he realised the need for more research work in secondary industry. In 1936 Julius was appointed chairman of the Commonwealth Committee on Secondary Industries Testing and Research. Under his leadership the Committee recommended the establishment of the National Standards Laboratory, a technical information service and research into aero and automobile engines. An industrial chemical laboratory was built in Melbourne, a national standards laboratory in Sydney and Julius gave his personal attention to the details of an aeronautical research laboratory which came into service by the outbreak of the war. During World War II he also served on the Central Inventions Board, the Australian Council for Aeronautics (as chairman) and the Army Inventions Directorate.³²

After taking out a patent on his invention in 1913, Julius formed the company Automatic Totalisators Limited to make and market the product. His original totalisator, or 'etote' as it became known, was a machine that counted wagered money and added, divided and integrated to provide a continual computation of racecourse odds. The first device was installed at Ellerslie Racecourse, Auckland, New Zealand. He continually improved the keyboard machine that printed tickets and recorded issues. The first machines, produced in 1913, were completely mechanical. Further developments led to the introduction of electrical power. By 1920 Julius' equipment had been installed at seven racetracks in Australia and New Zealand. All the equipment for these machines was manufactured at Julius' home in Darling Point or in a nearby back yard.³³

³¹ loc.cit.

³² loc.cit.

³⁰ Corbett, op.cit., pp. 528-529; Myers, op.cit.

³³ 'Julius Poole and Gibson Pty Ltd engineering archive, 1887 – 1991', Objects from the collection of the Powerhouse Museum, Sydney, Australia (www.powerhousemuseum.com/collection/database), accessed 21.7.2010; Weir and Phillips, op.cit., p. 12.





Figure 7: George Alfred Julius' working model of the automatic totalisator, built between 1908 and 1912 (Source: L. Barrett and M. Connell, 'An unlikely history of Australian computing: The reign of the Totalisator', *The Rutherford Journal*, Vol. 2, 2006-2007, www.rutherfordjournal.org/article020105.html, accessed 22.7.2010)

Figure 8:

Automatic Totalisators Limited factory, Meadowbank, September 1951 (Source: Government Printing Office, State Library of New South Wales, acms.sl.nsw.gov.au/item/itemDetailPaged.aspx?itemID=224353, accessed 22.7.2010)

The newly formed company continued to keep pace with changes in the racing world. When the win and place pools replaced the old single tote system in 1922, the first totalisator equipment for win and place betting was installed in Perth. Over the following ten years the Company installed equipment at 27 racecourses in India, Sri Lanka, Malaysia, Singapore, France, New Zealand and Canada. During the Great Depression work on the totalisator helped Julius Poole and Gibson remain viable. World War II, however, put an end to totalisator manufacture and installation for almost ten years. During the war years the Company went into production for the Department of Defence. In the immediate post war period new machines were invented including the J8 ticket machine, new mechanical analogue computers, adders, odd relay units and indicators. The first mobile tote was manufactured in 1948.³⁴

In 1946 Automatic Totalisators Limited (later ATL), by then a prominent Australian company, made an application to Ryde Council to construct a factory on the site they owned at 37 Nancarrow Avenue, Meadowbank. The work was valued at £48,900. The proposed work was described as a modern two-storey factory building constructed of brick work with a corrugated fibre cement saw tooth type roof and brick parapet all round.³⁵ Following the end of World War II all building activity continued to be tightly controlled by the authorities. The building was apparently held up by the council's Building Control Department, the Company applying to council in January 1946 to proceed with the levelling work and opening up of the ground for foundations...on the understanding that the plans and specifications have yet to be approved by Council.³⁶

³⁴ *loc.cit.*; Corbett, *op.cit.*, pp. 528-529; New South Wales State Heritage Inventory on-line database (www.heritage.nsw.gov.au), accessed 21.7.2010.

³⁵ Minutes of Ordinary Meeting of Council held on 9.1.1946, No. 7419 (30), quoted in Weir and Phillips, *op.cit.*, p. 10.

³⁶ loc.cit.

The building was constructed at the very beginning of a period of unprecedented growth in Ryde. New industries were attracted to Meadowbank. Other industrial undertakings established in Ryde during the period from 1940 to the early 1960s included Lars Halvorsens Sons Pty Ltd (1941), Plesseys (Aust.) Ltd (formerly T.E.I.) (1946), C.E. Property Pty Ltd (1950), Hoover (Aust.) Pty Ltd (1954), Consolidated Neon Ltd (1955), H.H. Peatson Pty Ltd (1956), National Can Pty Ltd (1956) and the Vincent Chemical Co. Pty Ltd (1961).³⁷

The Automatic Totalisators Limited factory, when built, comprised three main sections. The first was a stores and amenities block containing, on the ground floor, a bulk store for the storage of raw materials, [a] heat treatment room, maintenance and [a] garage. On the first floor was an amenities section approached by double interlocking stairways to provide up and down traffic at change of shifts. A cafeteria [was] provided and the dining room [opened] on to a sun deck overlooking the Parramatta River. (It was argued, at the time, that the 'incorporation of in-plant feeding' as part of the Amenities section was 'sound practice'. Such facilities were seen to bring about noticeable drops in employee fatigue and in 'tardiness at and around meal times'. The provision of a cafeteria was believed to be an incentive in drawing skilled personnel to 'out-of-town' plants.)³⁸ [It was envisaged that the] land between the factory and the river [be] developed as a sports area for the use of the employees. From the bulk store raw material [was] fed across a covered roadway along a wide corridor dividing factory and office sections and thence through the appropriate control rooms and factory stores to the different sections of the factory.

The second was an administrative office block situated in the front of the factory and [containing] on the ground floor sales, production, costing, drafting and estimating offices and on the first floor the executive offices, board room, reference library and lecture room, staff amenities and an open sun deck which [provided] space for future expansion. The corridor dividing the factory and office sections [provided] direct communication between any of the above offices and any section of the factory, each department having direct access to [the] corridor. At the same time it [provided] effective sound insulation between the offices and factory.

The third section was the factory section laid out with broad aisles separating the machine shop, tool shop and assembly sections with control offices, tool stores, inspection department, etc., the finished product being finally fed back through the assembly store to the packing department and delivery docks situated at the entrance to the main corridor. The control office situated at the south-west corner of the building thus [had] complete control over all deliveries and despatches to and from the factory. At the south-eastern corner of the factory section [was] the metrology laboratory for testing the products at various stages under dust-free conditions provided by a plenum exhaust system at a positive pressure in the room, which also [served] as a dark room and dust-free room for the jig borer. All machines [were] individually powered from a bus-bar system, and each machine [was] provided with compressed air from a central system with a 'plug-in' connection to pipe lines adjacent to the bus-bars. Lavatories for both sexes [were] provided in mezzanine floors at either end of the factory in order to avoid the necessity of employees leaving the factory section during working hours except at rest periods.³⁹

The factory was constructed by Paynter and Dixon. Externally the buildings were designed on horizontal lines, the administrative office block, store and amenities block being cement rendered and coloured cream. The factory block was of structural steel, faced by large corrugated asbestos cement sheets, with corrugations laid horizontally in order to harmonise with the general lines of the design.⁴⁰

No information is available about one of the factory's architects, Herbert Dennis and only a little for Kenneth Odling. Odling had graduated from the University of Sydney in 1923. He later travelled and worked overseas, including in New York. Between 1939 and 1953 he was in partnership with Herbert Dennis. The only other identified works by this partnership are some houses and residential flat buildings in North Sydney and a factory in Alexandria, referred to on the Royal Australian Institute of Architects *Register of 20th Century Buildings of Significance* as 'The Furnace'.⁴¹

³⁷ Weir and Phillips, op.cit., p. 13.

³⁸ Decoration and Glass, November-December 1947, p. 20.

³⁹ 'Automatic Totalisators Limited, Nancarrow Avenue, Meadowbank, Sydney', Building and Engineering, October 24, 1947, pp. 26, 29, 30.

⁴⁰ *loc.cit*; 'Automatic Totalisators Limited', *Decoration and Glass*, November-December 1947, p. 21.

⁴¹ Decoration and Glass, October 1937; Royal Australian Institute of Architects, Register of 20th Century Buildings of Significance, 2001.

The operations of the newly completed Meadowbank factory were listed, in 1947, as follows:

- 1. Totalisator equipment, accessories and spare parts both for use in Australia and for export to all major countries in the world.
- 2. Railway head lighting and cab lighting for the various State and Commonwealth Railways in Australia.
- 3. High precision plastic moulding dies, pressed tools, die-casting dies, jigs, fixtures and gauges for the trade in Australia and also for export to New Zealand.
- 4. Tele-communication equipment for use in industry generally as well as hospitals, schools, etc.
- 5. All types of precision engineered products.⁴²





Figure 9: The Automatic Totalisators Limited factory, Meadowbank, in the 1950s (Source: L. Barrett and M. Connell, 'An unlikely history of Australian computing: the reign of the totalisator', *The Rutherford Journal*, Vol. 2, 2006-2007, www.rutherfordjournal.org/article020105.html, accessed 22.7.2010)

Figure 10:

A final check before packing and despatch of automatic turnstiles, Automatic Totalisators Limited factory, Meadowbank. (Source: Val Foreman Photography, National Archives of Australia, naa12.naa.gov.au/scripts/PhotoSearchItemDetail .asp?M=0&B=9705186&SE=1, accessed 22.7.2010)

Operations continued to expand in the USA and an associated (later subsidiary) company, Automatic Totalisators (USA) Ltd was formed to purchase equipment from the parent company and lease it to racetrack organisations in the USA. The years 1948 to 1955 were among the busiest in the Company's history. During these years it installed equipment at 99 race tracks around the world. In 1966 the Company developed the world's first computer totalisator system for the New York Racing Association. By 1970 the automatic totalisator was in use in 29 countries worldwide.⁴³

⁴² 'Automatic Totalisators Limited', *Decoration and Glass*, November-December 1947, p. 19.

⁴³ Weir and Phillips, *op.cit.*, p. 13.

By the mid 1960s the Meadowbank factory was also producing a diverse range of products including the 'feather-touch' automatic turnstile, continuous towelling cabinets, dental probe lamps and road side temperature flashing signs. At this time the Company employed around 400 people, many of whom lived within the Ryde municipality. An active social club operated. Good staff amenities, including medical services, a cafeteria and fully fitted out washrooms, were a particular feature of the factory. The company was sold to AWA in 1991, the factory was closed and the site sold shortly after.⁴⁴

2.2 The Significance of Shepherds Bay

Shepherds Bay has significance for its associations with early land grants in the late 18th century; the growing of orchard crops, fishing, oysters and dairy products for commercial sale; the effects of the railway on urban development in the late 19th and early 20th centuries; the use of the Parramatta River as a major route for the transport of people and goods; the development of new technologies and industry in the mid-20th century; and its associations with a number of prominent people during each of those periods.

2.3 HISTORICAL THEMES

2.3.1 Introduction

A framework of historical themes has been developed by the Heritage Council of New South Wales which links in with the National framework of themes developed by the Australian Heritage Commission. These themes identify the historical values that might be used to interpret heritage significance.

By presenting information about the key historical themes which have shaped the subject site in an enlightening and interesting way, weighed up from an analysis of the history of the study area, an assessment of its cultural significance, good interpretative outcomes will be achieved. The key messages which emanate from the historical themes relevant to Shepherds Bay frequently overlap and this helps us to identify the stories about the site which should be told in order to achieve such outcomes.

⁴⁴ loc.cit.

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