HERITAGE COUNCIL OF WESTERN AUSTRALIA

REGISTER OF HERITAGE PLACES
Supporting Information

PLEASE NOTE: This Assessment Documentation is intended to provide sufficient information to consider the place for inclusion in the State Register. It is not intended to provide a complete record of the history of the place or its physical presentation.

10. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

Cultural heritage significance means aesthetic, historic, scientific, social or spiritual value for individuals or groups within Western Australia.

In determining cultural heritage significance, the Heritage Council has had regard to the factors in the section 38 of the *Heritage Act 2018*. It is considered that the place warrants inclusion in the State Register against the following factors relevant to cultural heritage significance:

10(A) Importance in demonstrating the evolution or pattern of Western Australia's history;

As the predominant source of Ford Motor Company of Australia cars and tractors sold in Western Australia, *Ford Motor Co Factory (fmr)* demonstrates international investment in the development of local manufacturing, in the context of rising demand for motor cars and tractors in the Western Australian market. The building's design was consistent with Ford factories around Australia and internationally, while deliberately prioritising the use of local materials such as jarrah and State Saw Mills karri, on the recommendation of Western Australian architects Oldham, Boas and Ednie-Brown (historic value).

Ford Motor Co Factory (fmr) demonstrates the development of the microbrewery industry in Western Australia. *Ford Motor Co Factory (fmr)* was operated as a microbrewery for one of the most successful small traditional brewing companies in Australia, Matilda Bay Brewing Company, and demonstrates their success in challenging the State's dominant brewers and changing the existing practices of manufacture and retailing of beer in the 1980s (historic value).

Ford Motor Co Factory (fmr) is associated with post war migration as it was a workplace for new migrants in the post war period. It also reflects Federal Government practices during World War II and in the post war period as it was reportedly requisitioned as a factory for the manufacture of military equipment (historic value).

Ford Motor Co Factory (fmr) demonstrates the development of North Fremantle during the 20th century. The mix of industrial and residential uses in close proximity is characteristic of the area (historic value).

A largely intact former major vehicle assembly plant, *Ford Motor Co Factory (fmr)* is a remnant of an industrial phase which is no longer economically viable in Western Australia (historic value).

10(B) Importance in demonstrating rare, uncommon or endangered aspects of Western Australia's heritage;

Ford Motor Co Factory (fmr) reflects standard Ford Motor Company plants nationally and internationally but is rare in Western Australia for its demonstration of international developments in architectural design of large-scale manufacturing plants, notably the large expanses of steel-framed windows (aesthetic and rarity value).

Ford Motor Co Factory (fmr) is rare as an example of a former purpose-built motor car assembly plant. The only other instance of a purpose-built car assembly plant (General Motors Holden in Mosman Park) is no longer extant. Despite the later use of the site as a brewery, and partial demolition of the factory space, the fundamental structure and design intent of the place remains (aesthetic and historic value).

Due to its successful adaptive reuse, which required little alteration to the building's structure, *Ford Motor Co Factory (fmr)* is rare as an example of two key business activities, vehicle manufacture and craft brewery, which were successful during their respective periods of operation at the site (historic and rarity value).

10(D) Its importance in demonstrating the characteristics of a broader class of places;

Ford Motor Co Factory (fmr) is representative of the Inter-War Functionalist style as applied to an industrial building. Its façade presents a classical balance between the horizontal banding and vertical brick pilasters of the factory frontage and the horizontal elements of the administration wing, and demonstrates extensive use of glass enabling high levels of light and ventilation (aesthetic value).

The place is representative of an industrial workplace that was designed to be simple in structure to enable the conversion of internal spaces depending on need. The site has been the venue of a vehicle assembly plant and was converted to a brewery with little alteration to the structure of the building, which has been replicated during the twentieth century growth of microbreweries and boutique pub breweries (historic value).

10(E) Any strong or special meaning it may have for any group or community because of social, cultural or spiritual associations;

Ford Motor Co Factory (fmr) is valued for its contribution to the Fremantle community and the wider community's sense of place as a landmark, as evidenced by its inclusion on several heritage lists, including the City of Fremantle's Heritage List and Local Heritage Survey; National Trust of WA; Art Deco Significant Building survey; and the Survey of 20th century buildings (social value).

The place is valued for its close association with the many people who worked there, some of whom were migrants establishing themselves in a new country and

others contributing to the establishment of new endeavours in Western Australia (social value).

10(F)[1] Its importance in exhibiting particular aesthetic characteristics valued by any group or community;

Ford Motor Co Factory (fmr) has considerable landmark value due to its imposing physical presence on a prominent site on Stirling Highway. The original building was intentionally designed as a landmark promoting Ford Motor Company. The setback and minimal planting in the landscape accentuates the physical presence of the building. Its presence on the east side of the highway compared to the generally open landscape on the west makes these buildings particularly prominent in the streetscape. Its strong design lines are intended to attract attention and give an impression of solidity and permanence. The consistency of form with the other Ford assembly plants in Australia and in the United States promotes the philosophy of reliability and permanence of the company (aesthetic value).

Ford Motor Co Factory (fmr) is a good example of the stylistic elements of the Inter-War Functionalist style, with simple geometric shapes, asymmetrical massing and steel framed windows (aesthetic value).

Ford Motor Co Factory (fmr) has significance as an important element in the industrial landscape of North Fremantle. Specifically, it is an important element in the Stirling Highway streetscape as it demonstrates the industrial practices in North Fremantle both past and present (aesthetic value).

10(G) Any special association it may have with the life or work of a person, group or organisation of importance in Western Australia's history;

Ford Motor Co Factory (fmr) was purpose-built as an assembly plant for the Ford Motor Company of Australia, established as a subsidiary of a multi-national company. Ford was the first international automotive company to invest in Western Australia and has been a significant business and employer in the state. As a major source of tractors and cars, the company also played a prominent role in the State's shift towards motor vehicle use in agriculture and domestic life during the twentieth century (historic value).

Ford Motor Co Factory (fmr) is associated with Matilda Bay Brewing Company and its founders Phillip Sexton and Gary Gosetti. The company was one of the most successful small traditional breweries in Australia, having pioneered changes to the existing practices of manufacture, marketing and retailing of beer in Western Australia and nationally in the 1980s (historic value).

The place was designed by the prominent architectural firm Oldham Boas Ednie-Brown which was significant to the development of architectural practice in Western Australia (historic value).

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1 For consistency, all references to architectural style are taken from Apperly, R., Irving, R., Reynolds, P. *A Pictorial Guide to Identifying Australian Architecture. Styles and Terms from 1788 to the Present,* Angus and Robertson, North Ryde, 1989.
For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate,* Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

10(H) Its importance in demonstrating a high degree of creative or technical achievement;

Ford Motor Co Factory (fmr) was designed to be consistent with other existing Ford factories in Australia and globally, and demonstrates key elements of innovative designs developed by Henry Ford and influential US industrial architect Albert Kahn, which improved efficiency of the manufacturing process and the health and safety of factory workers (historic value).

Ford Motor Co Factory (fmr) is one of the earliest examples of a microbrewery in an industrial space. This form of adaptive reuse has since become commonplace in the craft brewing industry, in part due to Matilda Bay Brewing Company's success at the site (historic and aesthetic value).

11. SITE PLAN

The following plan shows all of the elements included within the place.

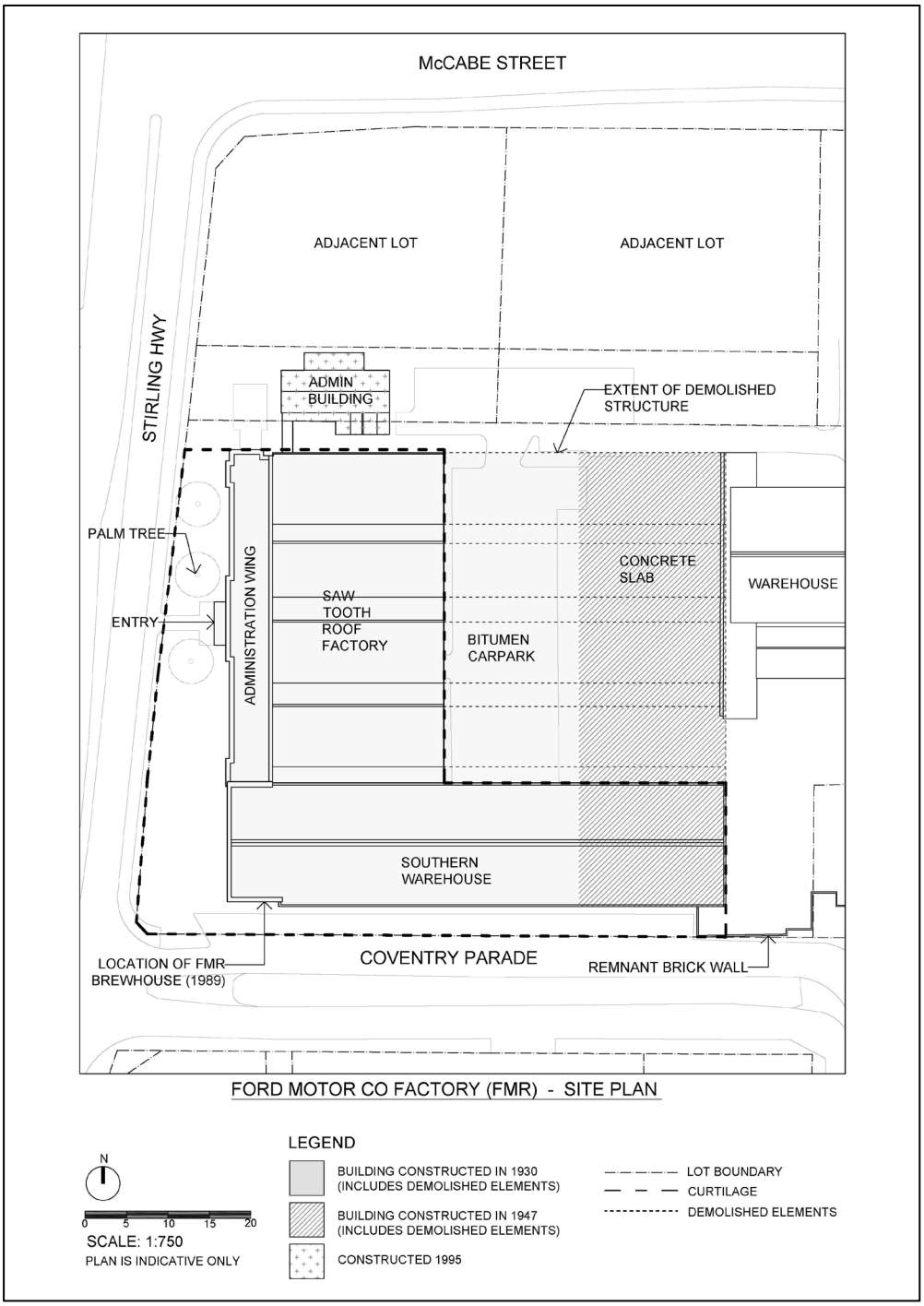

Figure 1. Ford Motor Co Factory (fmr) Site plan.

12. SUPPORTING EVIDENCE

The documentation for this place is based on the heritage assessment completed by Hocking Planning & Architecture and Prue Griffin, historian, in November 2007, with additions by Gemma Dewar and Prue Griffin of Hocking Heritage + Architecture in October 2023, with amendments and/or additions by the Heritage Council and the Department.

12. 1 DOCUMENTARY EVIDENCE

Ford Motor Co Factory (fmr) comprises the remnant of an industrial complex consisting of a single storey brick and iron office wing attached to a steel and timber framed and saw tooth roofed open factory space clad with corrugated iron and glass, and a large double height factory space (1930; factory spaces extended 1947; saw tooth factory partially demolished in 2011 to current extent demonstrated by curtilage boundary). Local architects, Oldham Boas Ednie-Brown, designed the original buildings in 1930 in the Inter-War Functionalist style for the Ford Motor Company Australia, with a design consistent with the company's interstate plants and influenced by American architect Albert Kahn, who had designed factories for Ford Motor Company in the United States. The place underwent major additions and modifications in 1989 to accommodate a brewery.

Heritage Council of Western Australia Theme (s)

This analysis is based the Thematic History of Western Australia[1] (WA Thematic).

The following thematic histories are relevant to the history of the place:

Economy – Rural Occupations

- 1918 Ford begins importing tractors to Australia; tractors gradually replace horses on farms over next four decades.

Economy – Manufacturing & Secondary Industry

- 1837 Brewery begins production in Perth (Albion); supports culture of widespread alcohol consumption throughout colonial period.
- 1925 Ford opens first large-scale motor vehicle assembly plant for WA (also tractors). Premade parts imported and assembled locally to avoid import tariff on completed cars; followed 1926 by General Motors. By 1929 at least eight small assembly plants also operating (some predate Ford).
- 1939-1945 Manufacturing channelled into war effort, including implementing local production of items no longer available for import due to war conditions. Women increasingly employed in manufacturing, especially metalwork, machining, and munitions.
- 1945 Swan Brewery takes over its last major competitor, becomes 2nd largest employer in WA, with monopoly control of WA beer production.

[1] 'A Thematic History of Western Australia' (incl. Framework Spreadsheet & Narratives). Prepared for the Heritage Council of WA by Clare Menck, Historian, June 2018.

- 1950s — 1950s increases in local manufacturing especially employing many migrant workers. Industrial output doubles in post-WWII decade but WA remains least industrialised of all Australian states throughout this decade.
- 1964 — Manufacturing accounts for 46% of WA production, an all-time peak (subsequent mining boom reduces manufacturing as proportion of economy).

Infrastructure – Development of Settlements and Services

- 1937-1939 — Economic improvement sees construction or upgrade of many recreational/commercial buildings, often in Art Deco style. Notable architects include Marshall Clifton, John Fitzhardinge, John Oldham, William Bennett.

Infrastructure – Transport and Communications

- 1898 — First motor car in WA. Early vehicles were expensive and unreliable, with most roads unsuited to them.
- 1928 — 25,270 motor vehicles in WA (ten times more than in 1918).
- 1950s — Horse-drawn transport replaced by motorised vehicles, with 220,000 motor vehicles in WA (for approximately 720,000 people) by 1960.

Economy – Commerce

- 1984 — Brewtech (from 1995, Matilda Bay Brewing Company) begins marketing craft beer, through Sail & Anchor Hotel Fremantle. This was the first boutique brewery in Australia to challenge the dominance of big brewers.

Contextual History

Fremantle is in the Beeliar region of Wjadjuk Noongar land, and its Noongar name is Walyalup (the place of walyo). To the local Whadjuk people, Fremantle is a place of ceremonies, significant cultural practices and trading.[2]

Although Fremantle was settled quickly after establishment of the Swan River Colony in 1829, North Fremantle was slower to develop. In the 1850s, allotments were surveyed in North Fremantle for the site of the first settlement of Pensioner Guards and other settlers gradually followed, assisted by the construction of the first road bridge in 1867.[3]

It is likely that the first factory in the area was the tannery on the river's edge established in 1871 by the Pearse Brothers. Manufacturers clustered around the riverbanks for the access to transport and water for manufacture.[4] The completion of the railway bridge in 1881 secured the rail link between Perth and Fremantle and enabled transport of materials and workers.

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2 Overview, Aboriginal History, About City of Fremantle, City of Fremantle website, https://www.fremantle.wa.gov.au/council/about-city-fremantle/aboriginal-history, accessed November 2023.

3 Robinson, James, *North Fremantle: a changing environment*, Thesis, Murdoch, WA: Environmental Science, Murdoch University, 1987, p. 27.

4 Bosworth, M, 'North Fremantle: Introduction and Bibliography', written for the North Fremantle Community, Parish Map Project, 1993, p. 3.

In the 1890s, gold discoveries brought prosperity to Western Australia. Construction of the Fremantle harbour between 1892 and 1897, using limestone sourced from the Rocky Bay and Buckland Hill areas, led to greater settlement of North Fremantle, a changing topography, and the creation of the Municipality of North Fremantle in 1895.[5]

In the 1920s, when *Ford Motor Co Factory (fmr)* was built, North Fremantle was attractive for industry due to its proximity to the port at Fremantle, which was readily accessible via the railway line. Labour was available in the area or could commute by rail. Some commentators also noted that North Fremantle was sufficiently isolated between the river and ocean so as not to provide an eyesore or nuisance to Fremantle's major commercial and residential areas.[6]

Motor vehicle assembly in Western Australia

The first motor car arrived in Western Australia in 1898.[7] Six years later, the first Ford Motor Company car, a Model A, was imported to Australia. The establishment of a Ford dealership in Perth by Grave and Dwyer, who held the franchise from c1909,[8] was indicative of the growth in demand for automobiles in the first decade of the 20th century.[9]

Ford Motor Company had been founded in the United States in 1903 by Henry Ford, and from 1905 to 1925, Ford cars were imported to Australia through agents and distributors from the United States and Canada. In 1919, Ford Canada established a branch office in Melbourne and on 31 March 1925, the Ford Motor Company of Australia was formed.[10]

Upon establishment in 1904, Ford Canada held the exclusive right to 'manufacture and sell' Ford products in the British Empire, except for the United Kingdom and Ireland.[11] In addition to Australia, in the 1920s and 1930s Ford Canada established subsidiaries in South Africa, India, Singapore (Malaya) and New Zealand.[12]

Complete motor car manufacture in Western Australia was never economically viable because of the State's small population. Although importing finished vehicles would have been a reasonable alternative, a national tariff on imported vehicle bodies was introduced in 1917. The standard practice was therefore to assemble motor vehicles from parts made elsewhere. In the pre-1960 era, motor cars imported to Western Australia were in a completely-knocked-down (CKD) or 'walk-around' form, or semi-knocked-down (SKD) form, which required various levels of assembly.[13]

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5 Robinson, *North Fremantle*, p. 2.

6 Robinson, *North Fremantle*, p. 35; and Bosworth, 'North Fremantle: Introduction and Bibliography', p. 3.

7 'A Thematic History of Western Australia' (incl. Framework Spreadsheet & Narratives). Prepared for the Heritage Council of WA by Clare Menck, Historian, June 2018.

8 Robinson, *North Fremantle*, p. 35.

9 'A Thematic History of Western Australia' (incl. Framework Spreadsheet & Narratives). Prepared for the Heritage Council of WA by Clare Menck, Historian, June 2018.

10 About Us, Ford Motor Company of Australia Pty Ltd, https://www.ford.com.au/about-ford/, accessed October 2023.

11 Anastakis, Dimitry, 'From Independence to Integration: The Corporate Evolution of the Ford Motor Company of Canada, 1904-2004', *Business History Review*, Vol. 78, No. 2, Summer 2004, p. 221.

12 Ibid., p. 222; 'The Ford Works', *The Age,* 23 July 1928, p. 17, http://nla.gov.au/nla.news-article205472255.

13 The WA Ford Assembly Plant, unpublished document by A. John Parker. Unpaginated.

There were several car assembly workshops in the 1920s including Adams Motors Ltd and Comet Moros in Subiaco, and Winterbottom Motor Co Ltd in Perth.[14] Ford was the first major international automotive company to invest in Australia and in WA. The General Motors Holden assembly plant in Mosman Park, established in 1926, was the only assembly plant of a similar scale of operation to the future *Ford Motor Co Factory (fmr)*.[15]

Ford Motor Co Factory (fmr) site and construction

In 1925 Ford Motor Company originally leased a warehouse on the western side of the railway line at Leighton from Westralian Farmers Ltd. Ford Motor vehicles were assembled at the Leighton location, now North Fremantle, from imported parts railed to the plant from Fremantle port. Vehicles were then taken by rail for distribution around the state.[16]

Ford Motor Co Factory (fmr) comprises part of the original Lot 220 in North Fremantle, which was purchased by Ford Motor Company of Australia in February 1929. The five-acre site was an irregular shaped parcel of vacant Crown land with street frontage on Victoria Avenue (now Stirling Highway), Coventry Parade and McCabe Street.[17] The purchase was formalised in May 1929.[18]

Proximity to the port at Fremantle was the top priority for Ford's 'permanent home' in Western Australia,[19] and the North Fremantle site was chosen due to its elevated position, so the building would be visible to every ocean-going vessel entering and leaving Fremantle Harbour.[20]

Reports of the acquisition outlined Ford's plans to 'erect a large new structure, somewhat similar to the building of the same company in Brisbane' and outlined Ford's standard design principles in Australia comprising offices along the front of the building, a crane bay, and natural lighting provided by the roof construction. It was also noted:

> 'A distinct feature of Ford's works are the gardens and lawns, careful attention being given to the aesthetic aspect of the lay-out. With the buildings standing well back from the main road and an eye kept to beauty there is little fear that the works will be a blot on the landscape.'[21]

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14 The WA Ford Assembly Plant, unpublished document by A. John Parker. Unpaginated.

15 Polizotto, Carolyn *The Factory Floor; a visual and oral record, 1900-1960* Fremantle Arts Centre Press, 1988, p. 231. The Holden Assembly plant was located on the corner of Victoria Street and Buckland Avenue Mosman Park.

16 The WA Ford Assembly Plant, unpublished document by A. John Parker. Unpaginated; 'Ford Ltd., Australia Western Australian Branch Opening at North Fremantle', *Daily News*, 12 June 1925, http://nla.gov.au/nla.news-article84059482; 'Ford Company's Factory', *Sunday Times*, 14 June 1925, p. 13, http://nla.gov.au/nla.news-article58219428; 'Ford Factory At North Fremantle', *Advertiser*, 26 June 1925, p. 1, http://nla.gov.au/nla.news-article255942596.

17 'Ford's Buy Land', *Daily News*, 20 February 1929, p. 6, http://nla.gov.au/nla.news-article83475533; Master Builders Association of WA 'Building and Construction' Shipping Newspapers, 22 February 1929, p. 6.

18 Original Crown Grant Vol 1007/Fol 711, Landgate.

19 'Ford Ltd., Australia Western Australian Branch Opening at North Fremantle', *Daily News*, 12 June 1925, http://nla.gov.au/nla.news-article84059482

20 'A permanent home: Ford's Fremantle Building', *Daily News*, 6 June 1929, p. 6, https://trove.nla.gov.au/newspaper/article/85144565/8204693

21 'Ford's Buy Land', *Daily News*, 20 February 1929, p. 6, http://nla.gov.au/nla.news-article83475533; Master Builders Association of WA 'Building and Construction' Shipping Newspapers, 22 February 1929, p. 6.

Prominent local architects Oldham Boas and Ednie Brown were engaged to design the building.[22] The firm Todd Bros prepared the site for £1325, and the factory was constructed by firm Finlay and Stoneman.[23] Construction of the Ford Factory progressed throughout 1929 and the factory was completed in May 1930 at a cost of £30,300.[24]

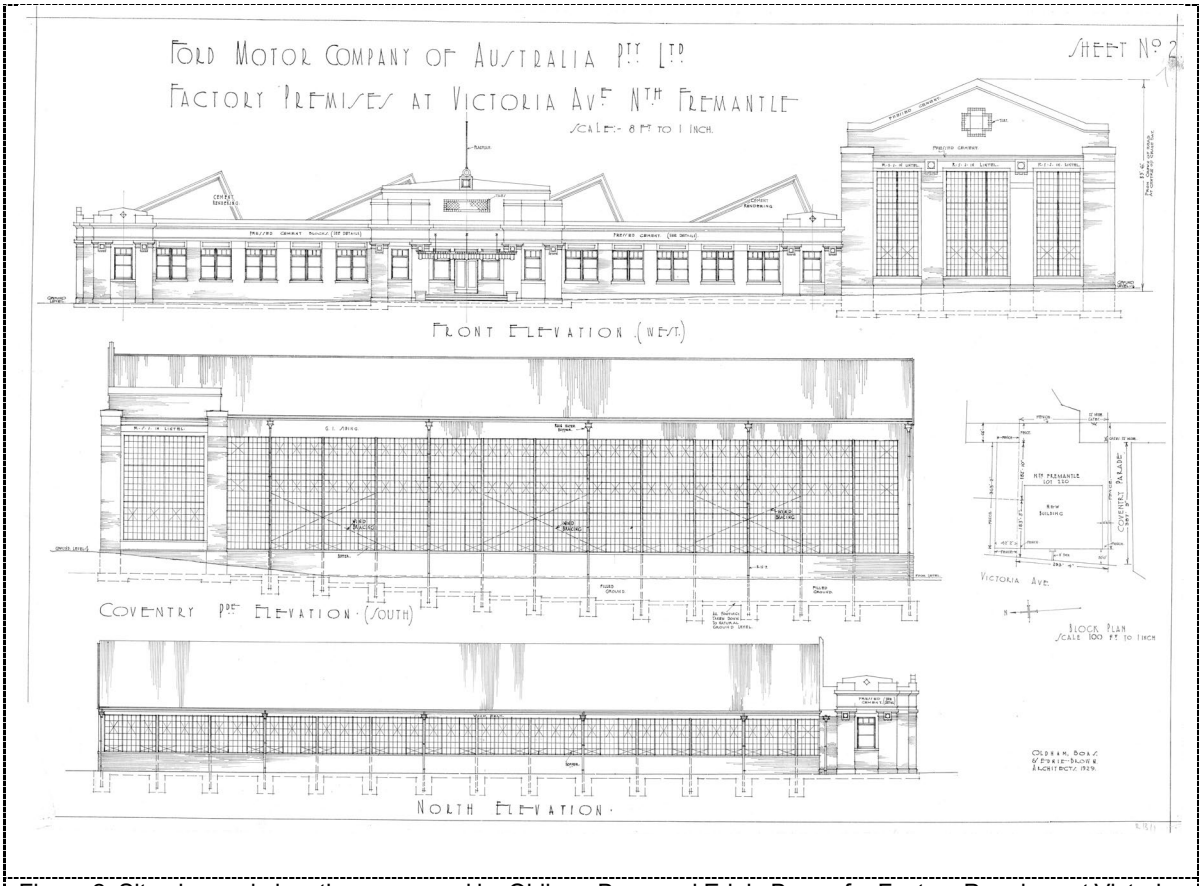

Figure 2. Site plan and elevations prepared by Oldham Boas and Ednie Brown for Factory Premises at Victoria Avenue, North Fremantle, 1929.

Courtesy The Buchan Group Australia Pty Ltd (formerly Oldham Boas Ednie-Brown Pty Ltd).

The completed building was described in May 1930:

> The building has a frontage of about 257ft. to Victoria-avenue (part of the main road between Perth and Fremantle), and a depth of 200ft. to a railway siding, which is served by a spur line off the railway to the State Implement Works, and those of Cuming, Smith and Mt. Lyell Farmers' Fertilisers Limited. The factory is set back about 50ft. from the Victoria-avenue alignment to permit a beautification scheme to be carried out, and each of the side walls is 15ft. 6in. from the boundary. The architects (Messrs. Oldham, Boas and Ednie Brown) designed the building on the lines of the company's other plants in Australia. It has a steel frame and brick panel wall throughout, concrete floor, steel-framed windows, office partitions of jarrah, and roof supports of karri (of which 70,000 superficial feet was supplied by the State Saw Mills). The roof is the full principal type

22 'Ford Motor Factory', *West Australian*, 3 May 1930, p. 6, http://nla.gov.au/nla.news-article31078345; 'A permanent home: Ford's Fremantle Building', *Daily News*, 6 June 1929, p. 6, https://trove.nla.gov.au/newspaper/article/85144565/8204693

23 'Building and Construction' 16 August 1929, pp. 13, 19.

24 'Ford Motor Factory', *West Australian*, 3 May 1930, p. 6, http://nla.gov.au/nla.news-article31078345; 'Ford Motor Factory', *West Australian,* 14 December 1929, p. 10, with photograph of assembly plant under construction, http://nla.gov.au/nla.news-article32338098

> over the crane bay, but the remainder has a saw-tooth design, admitting plenty of light for working purposes and ensuring efficient ventilation. The crane bay (66ft by 200ft.), with a large travelling crane, is in the southern side of the building.
>
> The front of the building by a depth of 24ft. is occupied by the general offices on one side, reception hall and show room in the centre, and administrative offices on the other side.[25]

The design of the *Ford Motor Co Factory (fmr)* is intentionally consistent with other Australian Ford Factories,[26] and bears a strong resemblance to overseas plants including the Ford Motor Company Assembly Plant in Richmond, California, constructed in 1930.[27]

The design style owed much to influential American architect Albert Kahn, who refined the 'daylight factory' concept characterised by large volumes of unobstructed space and light.[28] Kahn's 1909 design of Ford's Highland Park plant was also significant for the automotive industry and wider industrial practice as the place where Ford developed his moving assembly line method, which revolutionised production. Kahn's new factory architecture of wide floor spaces uninterrupted by walls and well-lit work areas with excellent ventilation enabled the innovative moving assembly line.[29]

Kahn and Ford introduced another innovative factory design with the River Rouge complex in 1918, of a tall, single-storey steel framed building encased in glass, and with butterfly roof monitors with glass windows. The design allowed greater flexibility in arranging production and removed the need to move materials vertically.[30] It is claimed that by 1938 his firm was responsible for 20% of all architect designed factories in the US, of which over 1,000 commissions were from Henry Ford and hundreds from other automakers.[31]

Likewise, *Ford Motor Co Factory (fmr)* featured unimpeded access between the large volume steel framed crane bay and saw tooth roof factory section, with an expanse of windows on the south façade and clerestory windows on the saw tooth roof form. The building's south-facing windows faced away from the equator to allow natural light while shielding workers and machinery from direct sunlight.[32]

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25 'Ford Motor Factory', *West Australian*, 3 May 1930, p. 6, http://nla.gov.au/nla.news-article31078345

26 Photographs of the Ford plants in Sydney, Adelaide and Brisbane show similarity of style and detail. Refer to Section 12.4 Comparative Information.

27 External and internal photographs of the Ford Richmond Assembly Plant are at Ford Motor History website, http://fordmotorhistory.com/factories/richmond/index.php, Accessed 1 December 2023.

28 David Rasner, 'Albert Kahn – The Evolution of the Factory', *Architektur Geschichte 2*, published on issuu website 10 March 2016, https://issuu.com/a1579/docs/albert_kahn_factory. Although Kahn's influence is apparent, no evidence has been found to suggest direct involvement in the specific design of *Ford Motor Co Factory (fmr)*.

29 Charles K. Hyde, 'Assembly-Line Architecture: Albert Kahn and the Evolution of the U.S. Auto Factory, 1905-1940', *Journal of the Society for Industrial Archaeology,* Vol. 22, No. 2, 1996, p. 14, accessed 1 February 2024, https://www.jstor.org/stable/40968351

30 Charles K. Hyde, 'Assembly-Line Architecture: Albert Kahn and the Evolution of the U.S. Auto Factory, 1905-1940', *Journal of the Society for Industrial Archaeology,* Vol. 22, No. 2, 1996, p. 15, accessed 1 February 2024, https://www.jstor.org/stable/40968351

31 'Albert Kahn – Inducted 2012 – 1869-1942', Automotive Hall of Fame website, accessed 25 January 2024, https://www.automotivehalloffame.org/honoree/albert-kahn/

32 Glanze Patrick, 'The Sawtooth Roof's Timeless Legacy in Industrial Elegance and Modern Architecture', Design Times, 18 January 2024. Accessed 1 February 2024, https://www.designtimes.com/articles/3513/20240118/sawtooth-roof-s-timeless-legacy-industrial-elegance-modern-architecture.htm

Some elements of the original design were altered due to local factors. For example, Oldham, Boas and Ednie-Brown persuaded Ford to use State Saw Mills' karri for the roof construction, rather than steel as was standard throughout their other Australian factories, as data showed a saving of £3000.[33]

Ford Motor Company Assembly Plant

Upon opening in 1930, Ford's North Fremantle plant was to be used for the assembly of motor car chassis imported in parts, building car bodies, and associated work.[34] During the 1930s, the assembly plant produced cars and the Fordson tractor. The car chassis were shipped from Canada, and the bodies were made almost entirely of Australian materials at the Ford factory in Geelong, Victoria.[35]

The factory's moving assembly line started in the large volume southern warehouse, where packing cases of parts were brought into the building by the railway line spur, before snaking through the saw tooth roof factory. An overhead travelling crane in the southern warehouse lifted the crates of parts to the required position and was also used to invert the chassis for installation of the Canadian-manufactured engine, clutch and transmission.[36]

The packing cases were recycled by Kailis Bros as fruit boxes and Ford worker, Charlie Ren made toys from the timber for the children of Ford employees at Christmas.[37]

State Library of Western Australia

Figure 3. Ford Motor Company assembly plant, 1935.

West Australian Newspapers collection of photographs. Courtesy State Library of Western Australia, 095466PD.

33 'Use of Karri. Ford Company's Factory Roofs', *West Australian*, 12 June 1930, p. 16, http://nla.gov.au/nla.news-article33359432 and accompanying photograph https://trove.nla.gov.au/newspaper/article/33359425/2857008

34 'Ford Motor Factory', *West Australian,* 3 May 1930, p. 6, http://nla.gov.au/nla.news-article31078345.

35 'New Ford Cars', *West Australian*, 31 August 1932, p. 14, http://nla.gov.au/nla.news-article32543168

36 'A Visit to the Ford Assembling Factory', 30 July 1930, p. 8, http://nla.gov.au/nla.news-article251159533

37 Ford Motor Co, document compiled from information supplied by former ford workers Doug Ireland, Ron Parker, Tony Buswell, Bill Oxwell, Ray Fallon and Bill Logan, 23 January 1995, held in Fremantle Local History Collection, file 629.22.

Figure 4. Ford Factory, aerial view, 1935.

Stuart Gore collection. Courtesy State Library of Western Australia, 019508PD.

A 1939 sewerage plan shows tanks and bowsers to the rear of *Ford Motor Co Factory (fmr)*, and an oil tank to the south east near the corner of Coventry Parade and Thompson Street, adjacent to the railway tracks which entered the rear of the building. Ancillary sheds of galvanised iron and asbestos were located on the northern side of the lot. A tank stand is shown adjacent to the north east corner of the building, which like other assembly plants in Australia, was painted boldly with the Ford logo.[38]

The roughly triangular shaped portion of land beyond the junction with Thompson Road was shown to be vacant and fenced off from the remainder of the site.[39] The vacant space behind the plant was probably used for storage of finished vehicles, parts and equipment.[40]

The lots adjacent to the original Lot 220 were residential, but the area was characterised by industrial buildings, notably the fertiliser plant at Rocky Bay and the State Implement works.[41]

The Ford Assembly Plant during World War II

With the outbreak of World War II, the Commonwealth Government requisitioned manufacturing plants to produce essential components for the war effort. In Western Australia, private and government premises, such as the Midland Railway Workshops (State Register of Heritage Places P03273), were assigned to manufacture munitions and a range of essential equipment.[42]

38 Aerial photographs c. May 1956, in Photographic Study compiled by Plant Manager John R Marshall, provided courtesy of A John Parker Collection. Photographs of the Adelaide and Geelong plants prominently feature water tanks.

39 Metropolitan Water Supply, Sewerage and Drainage Department, Survey Sheet 2027, May 1939, SROWA.

40 A photograph of the rear of the site c.1951 shows that this area was used for storage of vehicles, equipment and machinery. Photo from A John Parker, Publications Historique.

41 Aerial photograph of the former Ford Factory 1935, Battye Library 019508PD.

42 WA Thematic.

Ford Motor Company factories in the United States were requisitioned for the war effort, as were their Australian factories, most notably Ford's Geelong manufacturing plant.[43] More than 2,300 men working in Ford factories in Australia were reported in May 1941 to be producing more than 9,000 vehicles for the Australian Army.[44] It has been claimed that *Ford Motor Co Factory (fmr)* was likewise requisitioned for the production of military equipment, including Bren Gun carriers and landing craft, although further research would be required to verify this and the importance of the place to the war effort.[45] At the outbreak of war, all the single men working at Ford's Fremantle assembly plant were released for war service.[46]

The staff on the factory floor was predominantly described as 'British' although this may have referred to all individuals of British origin not just British migrants. Only one Norwegian was noted among the reports.[47]

One former worker recalled that during the War, approximately 500 people worked at the plant, and in the latter years of the war many were displaced persons sent to work at Ford by the Government.[48] Many of these workers had poor English and were given less demanding tasks, such as painting and gardening.

Although Ford demanded uniformity in its assembly plants, even dictating uniform greenery across the globe,[49] the company could be a generous and considerate employer. Bernadette Morris, who worked at Ford from 1943, recalled that 'Ford was such a pleasant place to work it didn't seem like work at all'.[50]

Post-war years

In the post-war years, the plant resumed the assembly of vehicles including 'Fords and Mercury's and the 'Aussie' ute, heavy Canadian trucks and Fordson tractor kits from the United Kingdom. Later, it resumed assembly of the British Prefect and Anglia sedans and soft-tops.[51]

By July 1950, the assembly plant employed more than two and a half times as many staff as before the war, supported by an expansion of 20,560 square feet (approximately 1,910 square metres).[52] Photographic evidence shows that the extension to the rear of the factory and warehouse spaces, which reflected the original form of the building, was underway in 1947.[53] Although the original

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43 'Ford – Australia Aids Ammunition Production', *Gilgandra Weekly and Castlereagh,* 30 January 1941, p. 4, http://nla.gov.au/nla.news-article113018778; 'War Work – Australian Production in Ford Factory', *Daily Mercury*, 9 May 1941, p. 9, http://nla.gov.au/nla.news-article170358057

44 'War Work – Australian Production in Ford Factory', *Daily Mercury*, 9 May 1941, p. 9, http://nla.gov.au/nla.news-article170358057

45 Bill Tuckey, *True Blue: 75 Years of Ford in Australia,* Focus Publishing, Edgecliff, NSW, 2000, p. 55, cited in The WA Ford Assembly Plant, unpublished document by A. John Parker. Unpaginated.

46 Interview with Les Bales, Ford employee 1936-38 as spare parts clerk, quoted in Parker.

47 Notification of Accidents – Ford Motor Company, item 1941/0374, cons 749, SROWA.

48 See Ford Motor Co, information supplied by Ireland, et al, 23 January 1995, held in Fremantle Local History Collection, file 629.22. unpaginated.

49 It was not noted what these plants were. See Ford Motor Co, information supplied by Ireland, et al, 23 January 1995, held in Fremantle Local History Collection, file 629.22. unpaginated.

50 ibid.

51 The WA Ford Assembly Plant, unpublished document by A. John Parker. Unpaginated.

52 '25 Years in Australia', *West Australian,* 27 July 1950, p. 19, http://nla.gov.au/nla.news-article47877277

53 Landgate Aerial Imagery, Perth, 1947.

construction had diverted from Ford's standard use of steel trusses in favour of local timber, steel was used in the extension.

In the 1950s, the male dominated workplace[54] was highly regulated with each employee to wear an identification badge and to clock in at the time clock. Sirens announced the start and finish of the work periods.[55]

Former Ford employees remember the 1950s as a period of great productivity and generally a good place to work. Many migrants worked at Ford during this period, and it is stated that Ford had a policy of employing 10% of their workforce from the population of 'New Australians', although no other source confirmed this.[56]

Research of the automotive assembly industry in 1957 found that despite holding a smaller share of the Western Australian market compared to Holden, Ford did considerably more in assembly, with a higher ratio of local staff employed per vehicle produced. Preference was extended to Ford vehicles in Government purchasing as a result.[57]

During the 1960s, the Ford Company was approached by the Minister for Industrial Development, Charles Court, who encouraged the company to use local manufacturers to supply parts for the cars and tractors it assembled. The parts considered to have potential for local manufacturing were pressings, castings, die-castings, plastics and moulded rubber.[58]

A visit from Ford staff from Geelong with over 90 component parts for potential manufacture resulted in only three possible locally manufactured items. The cost of 'tooling up' for the manufacture of these items was considered too expensive by Ford and local suppliers, and the program did not progress.[59] General Motors Holden assembly plant was also approached by the State Government in relation to the manufacture of component parts at this time.[60]

In the mid-1960s, car assembly was dropped at Fremantle and the plant was used for the rectification of vehicles transported to Western Australia by rail, although the plant did continue to assemble Fordson tractors until 1987.[61] The place was also used as a depot for spare parts for the Ford dealerships.[62]

In 1980, *Ford Motor Co Factory (fmr)* was identified by the Fremantle Society as significant for its contribution to the unique character of Fremantle.

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54 Information from Adrian Ryan, Ford Historian, Ford Archive Centre, January 2008.

55 *Your Job here at Ford,* Ford Motor Company of Australia Pty Ltd, Fremantle Branch, Western Australia, 1953, Battye Library, 338.762 FOR, p. 11.

56 The WA ford Assembly Plant, unpublished document by A. John Parker. Unpaginated. In Nonja Peters work on the migrant experience *Milk and Honey- but no gold: post war migration to Western Australia, 1945-1965*, UWA Press, 2001 she writes that most immigrants were forced to work in rural areas with little chance to make their own choices of workplace.

57 Motor Component Parts – Ford Motor Co, n.d. Item 1961/141, cons 1543, SROWA.

58 Motor Component Parts – Ford Motor Co, n.d. Item 1961/141, cons 1543, SROWA.

59 Motor Component Parts – Ford Motor Co, n.d. Item 1961/141, cons 1543, SROWA.

60 Motor Component Parts – General Motors Holden, item 1961/0142, cons 1551, SROWA.

61 The WA ford Assembly Plant, unpublished document by A. John Parker. Unpaginated; Motor Component Parts – Ford Motor Co, 9 February 1968, Item 1961/141, cons 1543, SROWA.

62 Ford History Timeline, 02 May 2004 - www.ford.com.au/fordAlive/content/student_info/History/SI_H_FA_ford history Timeline.pdf - Trove (nla.gov.au), accessed 16 November 2023.

Matilda Bay Brewing Company

In 1988, the property was transferred to H.L.H. Holdings,[63] who initially intended to convert the place into a retail and residential development.[64] This development did not go ahead, and instead H.L.H. Holdings entered into a lease agreement with the Matilda Bay Brewing Company. The Matilda Bay Brewing Company sought to expand their production of locally made beers previously undertaken in premises in Nedlands, and undertook a major construction programme to convert the buildings for its new function as a brewery.

The Matilda Bay Brewing Company was established by Phillip Sexton and Garry Gosatti in 1984 as Brewtech, with the aim to produce traditionally brewed beers using natural ingredients in a range of styles inspired by European models. At that time all pubs in Western Australia were owned by the big breweries and only sold their proprietary beers. Brewtech originally purchased the Freemasons Hotel in Fremantle in 1984 and established a mini brewery on site, with the renamed Sail and Anchor[65] Australia's first pub-brewery. It was an instant success particularly as it coincided with the America's Cup celebrations in Fremantle. The firm went on to achieve major success, acquiring new hotels and increasing the volume of products as well as the range of beers but always with an emphasis on quality.[66] The company developed the concept of 'retail brewing' which directly controlled the hotels in which its beer is sold. From 1985, the company successfully expanded into other Australian states.[67]

Conversion of factory to brewery

In 1988, Brewtech changed its name to the Matilda Bay Brewery Company and was listed on the Australian Stock Exchange.[68]

Designs for the conversion of the former Ford Factory were prepared by architect Michael Patroni.[69] The partitions of several small cubicles in the southern area of the administration wing were removed to create an open plan space that is still in evidence as at 2023.

In its conversion to a brewery, the building was gutted of any evidence of the former use as the Ford assembly plant.[70] Construction work included the installation of '25 storage tanks, three brewing kettles each designed to hold a different brews and a giant refrigerator where the beer will continue to ferment after being bottled'.[71] Three kettles were built into a new mezzanine floor that was constructed under the main gable closest to the front elevation. It is likely that the cool rooms were located in the rooms that were formerly used for training of mechanics on the

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63 Certificate of Title, Vol 1007 Fol 711, Landgate, dated 7 January 1988.

64 *Daily News,* 29 October 1987, as quoted in the National Trust assessment.

65 P01002 *Sail and Anchor Hotel* (RHP), Register Entry and Assessment Documentation, 1996, https://inherit.dplh.wa.gov.au/Admin/api/file/1cc2406f-f59c-6781-c7ce-3373a2725529

66 *The Great Australian Beer Guide* Alexandria, NSW: Federal Pub. Co., 1989, p. 34. Matilda Bay File 663.3, Fremantle Local History Collection.

67 Matilda Bay Brewing Co Ltd, undated, Matilda Bay File 663.3, Fremantle Local History Collection.

68 *West Australian* 24 October 1988, p. 68, Matilda Bay File 663.3, Fremantle Local History Collection.

69 City of Fremantle Building Plans, Michael Patroni Architect, plan dated 12 July 1988 stamped for approval 23 August 1988.

70 *Fremantle Gazette,* 13 Dec 1988, p. 11, Matilda Bay File 663.3, Fremantle Local History collection.

71 ibid.

northern side of the factory space.[72] The new premises were opened by William McKenzie, Chairman of the State Planning Commission on 10 August 1989.[73]

In April 1990, the locally owned Matilda Bay Brewery was bought by the beverage company Carlton United Breweries (CUB) which subsequently became part of the Fosters Group.[74] The brewery retained its name and continued to brew the original beers associated with Matilda Bay Brewery as well as CUB brand beers.

Architects Michael Patroni Pty Ltd prepared plans for further refurbishments to the northern end of the administration offices in 1991, which included the creation of a new boardroom with external door in place of the former male and female toilets and associated lobby.[75]

By 1993, $8 million had been spent upgrading the plant since CUB took over the Matilda Bay Brewing Company.[76] A consequence of the bigger production was the shift away from the 'boutique' beers to a more mainstream product.[77]

During the 1990s and early 2000s, several extensions and additional facilities were also constructed on the site to the north and east of *Ford Motor Co Factory (fmr)*, including a new double storey administration building on the northern side of the existing office space, which is steel stud framed and entirely clad in zinc and aluminium corrugated sheeting, designed by architect Paul Burnham in 1995. The building was under consideration for a Fremantle Heritage Award that year.[78]

In 2001, the production facilities at the Matilda Bay Brewery were increased with expenditure of $2 million to increase production by 20%, and the brewery produced 25% more beer than the previous year.[79]

In 2007, Fosters announced that production would cease at the Matilda Bay Brewing Company site, with the loss of 70 jobs, with the decision to move all brewing to the eastern states. By 2008 the plant equipment had been removed for use at other Fosters Group breweries in the eastern states, although the distinctive brass brewing kettles were left in situ with the intent of being a feature of future site development.[80] The 100 sales and marketing staff initially continued to occupy the office spaces, and in 2011 approximately two thirds of the saw tooth roof factory

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72 Schematic Diagram of the Ford Motor Company Assembly Plant – Leighton WA 1948-58, from A John Parker, Publications Historique; site plan of Matilda Bay Brewery 2008 showing wastewater drainage.

73 Plaque at the entrance to the building.

74 *West Australian* 28 June 2007, unnumbered, Matilda Bay File 663.3, Local History Collection.

75 City of Fremantle Building Plans, Michael Patroni Pty Ltd, Administration Office Refurb, Matilda Bay Brewery. plan dated 17 June 1991 stamped for approval 12 July 1991.

76 *West Australian* 29 July 1993, p. 38, Matilda Bay File 663.3, Fremantle Local History Collection.

77 *West Australian* 29 July 1993, p. 38, Matilda Bay File 663.3, Fremantle Local History Collection.

78 City of Fremantle Building Plans, Scott & Associates, Consulting Engineers, plan dated May 1990 stamped for approval 23 October 1990; *Fremantle Gazette* 21 August 1990, unnumbered, Matilda Bay File 663.3, Local History Collection; Fremantle Awards nomination information, 29 March 1995, Matilda Bay Brewery File, Fremantle Local History Collection; Site plan of Matilda Bay Brewery 2008 showing waste water drain and information from site visit to Matilda Bay Brewery by Prue Griffin and Yen Nee Goh of Hocking Planning & Architecture, 29 October 2007. Note, this building is not located within the curtilage of the place.

79 *The Gazette* 11 Dec 2001, unnumbered, Matilda Bay File 663.3, Local History Collection.

80 *West Australian* 28 June 2007, no page number, Matilda Bay File 663.3, Fremantle Local History Collection.

bays were demolished and replaced with car parking space, modifying the building's roughly square footprint to an L-shape.[81]

Fitters and electricians' workshops north of *Ford Motor Co Factory (fmr)*, which appear to have been constructed for the assembly plant in the mid to late 1930s, were also demolished in 2011.[82] Other works during this period included conservation works to the building's southern façade. By the end of their lease in 2013, Fosters had decommissioned the site. [83]

In 2014, the property was transferred to the current owners, 3 Oceans Property Pty Ltd, who plan to develop the site for residential and mixed use. The site has continued to be occupied by various leaseholders, and at 2023 the office space is occupied by 3 Oceans Property Pty Ltd, with the factory and warehouse space used for short-term leases.[84]

12. 2 PHYSICAL EVIDENCE

Ford Motor Co Factory (fmr) is a remnant of an industrial complex consisting of a single storey brick and iron administrative wing (1930), attached to the remaining timber framed factory bays with a south facing, saw tooth construction (1930; 1947 extension and some 1930 bays demolished 2011), and a gabled roof large volume steel and timber framed warehouse structure clad with corrugated iron and glass (1930; extended 1947) on the southern side. *Ford Motor Co Factory (fmr)* is located within a larger site that is predominantly paved with some landscaping on the front verge facing Stirling Highway, and later structures to the north and east, including an adjacent small two-storey steel framed administration building clad with corrugated zincalume (1995) to the north.

Site

Ford Motor Co Factory (fmr) is located on the eastern side of Stirling Highway, North Fremantle at the intersection of Coventry Parade and overlooking the Indian Ocean.

The place forms a landmark in the locality due to its scale and architectural form compared to the relatively smaller developments either side. There are uninterrupted views to and from the place. Whilst redevelopment has occurred in the locality, a further factory building on the northern corner of Stirling Highway and McCabe Street demonstrates the former industrial character of the area. Residential developments are located to the south and east of the subject site.

Ford Motor Co Factory (fmr) is set back behind a grass and planted verge to the Stirling Highway frontage and built to the boundary of Coventry Parade. Due to the partial demolition of the saw tooth roofed factory area in 2011, the site has a more open character with a large carparking area behind the remaining sections of the factory and offices, accessed via McCabe Street. A cluster of sheds are located to the east of *Ford Motor Co Factory (fmr)*, some of which were constructed as

81 Landgate Aerial Imagery, Perth, 2010, Summer 2011, Winter 2011. Note, the site of factory bays demolished in 2011 is not included in the curtilage of the place.

82 Note: the site of fitters and electricians' workshops is not included in the curtilage of the place.

83 Stephen Carrick Architects, Heritage Impact Statement – Matilda Bay Brewing Company Building (Former), Prepared for 3 Oceans Property (North Fremantle) Pty Ltd, November 2015.

84 Officer observations from site visit, 17 September 2023.

extensions to the factory but are now freestanding structures separated by the carpark.

Figure 5. Palm trees and planting including green verge garden to the west of the building contributing to the green setting of the building along Stirling Highway.

A large sign with the wording 'Matilda Bay Brewery' is located on the grassed area perpendicular to the front elevation.

Figure 6. The southern side of the building is built hard to the boundary along Coventry Parade with angled parking along Coventry Parade.

Figure 7. View looking west through Lot 220 towards the southern warehouse building with the remnant saw tooth roofed factory in the background.

Exterior

Ford Motor Co Factory (fmr) presents in two distinct parts: the single storey Inter-War Functionalist style brick and iron office wing, and a large volume factory space of brick, steel and timber framed construction. Each of the sections are clearly reflective of the functions the building has accommodated.

Although regarded as an example of Inter-War Functionalist architecture, there are classical overtones to the presentation of the place. The large volume factory portion presents with a classical balance of horizontal pressed cement banding and vertical brick pilasters formed by the recessed vertical glazed panels under a gabled roof line. The single storey office section is of symmetrical presentation with a regular rhythm of fenestration flanking a prominent central entrance.

To the street frontages, the external fabric of the place is consistent with the original design with minor alterations to the main façade facing Stirling Highway. The administration block, which documentary evidence indicates was originally unpainted brick with cream coloured stucco, is currently painted a brick terracotta colour, altering the original finish to the place and impacting on the contrast between materials.

Figure 8. The large volume factory section has a classical presentation at the front elevation, with a classical balance of horizontal banding and vertical brick pilasters formed by the recessed vertical glazed panels under a gabled roof line.

The original glazing has been replaced with larger panels.

Figure 9. The main entrance is marked by a simple and stripped back cantilevered canopy, attached to the facade by structural tie rods. The entry element stands proud to the façade with decorative parapet, pilasters and horizontal pressed cement banding.

A mosaic tile rectangular detail located in the parapet responds to a geometric shaped detail in the gable parapet of the factory front. A c1959 photo shows that it previously featured Ford signage, though it appears blank in a 1935 photo.[85]

85 Photograph, Ford Motor Works, North Fremantle, 1935, West Australian Newspapers Collection of Photographs, State Library of Western Australia 095466PD; Photograph, Taking a tour of the Ford Motor Company factory, North Fremantle, c1959, Portman collection of photographs, State Library of Western Australia 131091PD.

Figure 10. Providing a counterbalance to the dominant factory frontage, the single storey office building has a horizontal emphasis with a symmetrical presentation. The central entrance section is flanked by recessed wings which present with a rhythm of fenestration.

The original window shutters have been replaced by aluminium louvres.

Figure 11. The south elevation of the large volume factory section is predominantly a glass curtain wall. The expansive elevation is effectively divided into bays by the prominent original rainwater heads. The fascia is corrugated metal sheeting.

Figure 12. Contrast of glazing styles in the south elevation. The glazing panels to the 1930 section have been replaced with large rectangular panels with metal glazing bars.

The last two bays at the eastern end, constructed in 1947, retain their original much smaller panes and centre pivot windows. Historical photographs indicate this glazing style was consistent with the original 1930 section.[86]

The glass panels are sat on a brick plinth with a rendered band separating the brick from the glazing panels.

86 Exterior and interior photographs c. May 1956, in Photographic Study compiled by Plant Manager John R Marshall, provided courtesy of A John Parker Collection.

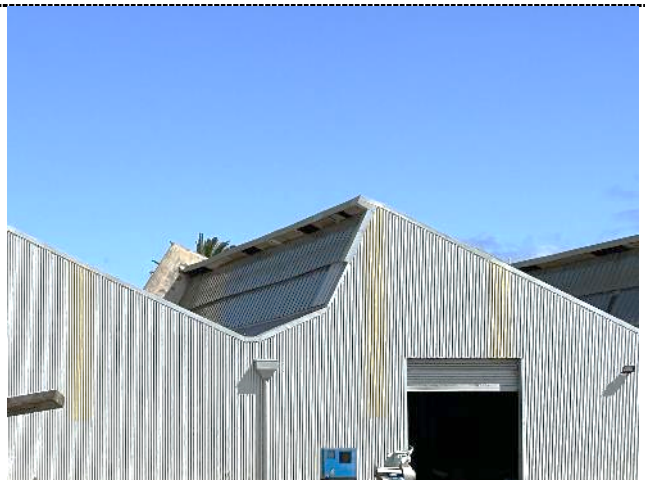
	Figure 13. The north elevation presents in a single storey form with white painted brick finish. Windows are a mix of larger office windows with horizontal louvers and high level metal framed openings. This elevation does not contain any distinctive features. Adjacent to the north elevation, and outside the curtilage of the place, is the two storey detached 1995 Administration Building addition, and parking area created as a result of the demolition of a mid-to-late 1930s workshop.
	Figure 14. The saw tooth roof warehouse bays extend from the rear of the office section and were reduced in size in 2011. The distinctive roof form has been retained and the new east elevations have been clad with corrugated metal sheeting with two strips of translucent sheeting to each bay to allow for natural light. The southern plane of the roof form is glazed.
	Figure 15. The glazed panelling to the southern side of the roof form and truck entry into the warehouse.

Figure 16. The full length double height warehouse building along the southern edge of the site has a gable roof clad in a variety of corrugated sheeting. Walls are corrugated metal sheeting with high level windows. The form of the windows reflects those on the southern side in that the panes to the 1930 construction are the larger rectangular shape, with the last two bays added in 1947 having smaller panes.

The cleared area to the east of the factory resulted from the partial demolition of the place in 2011, which has allowed for increased parking on site. This area is not included in the curtilage of the place.

Interior

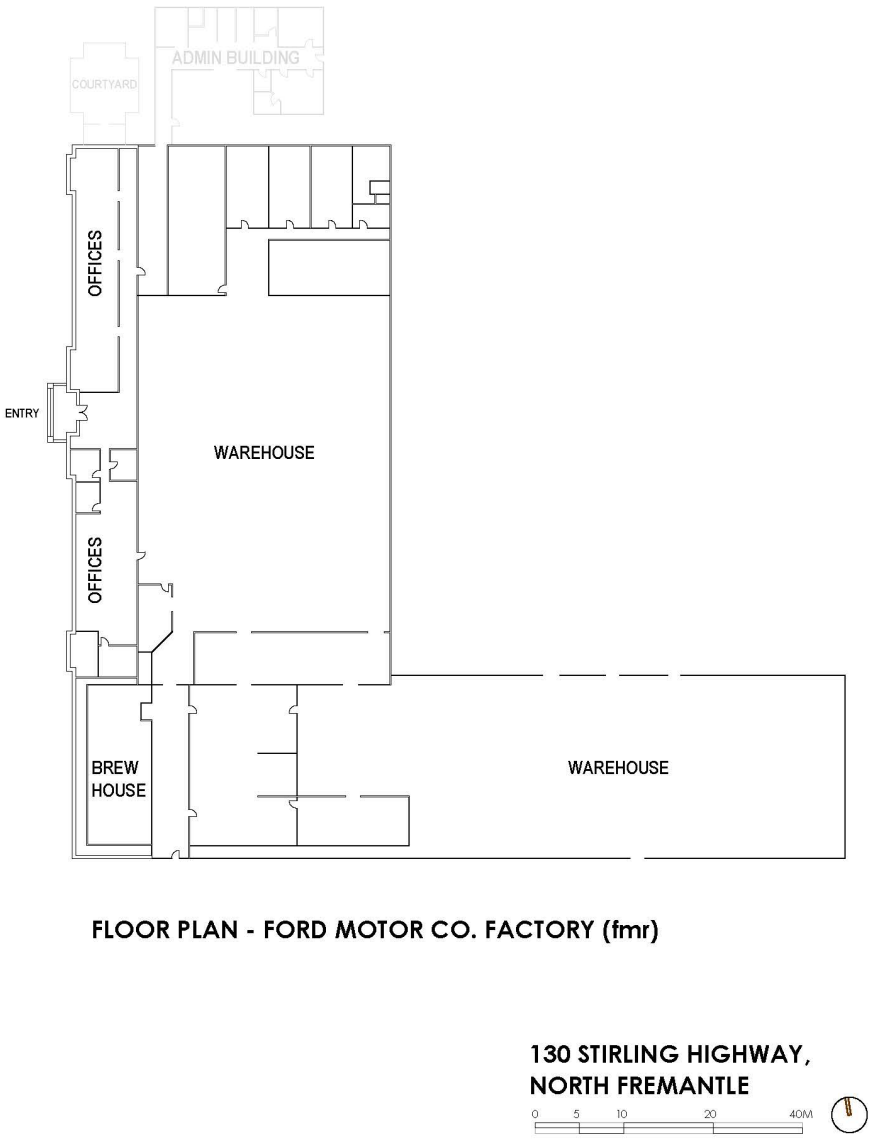


Figure 17. Floor Plan. Elements attached to main building but outside curtilage of *Ford Motor Co Factory (fmr)* are lined in grey.

Administration wing

The single storey administration wing is divided into three sections: a central reception and display area, offices and boardroom to the northern wing and a large open room to the south. The spaces have been divided by timber framed and

timber and glass panelled partitions. Evidence on the ceiling suggests these partitions have been altered over time. The ceiling is plaster with decorative moulding in a grid pattern with most of the partitions being in line with an east-west grid line. The pattern of the ceiling grids alters over the reception and display area showing three styles of ceiling. The darker elements in the ceiling grid are representative of where walls have been removed.

Figure 18. Reception/display area. The reception desk is not original although has been constructed to reflect the original timber partitioning of the offices. The ceiling is original.

Figure 19. Typical office formed by timber and glazed partitioning. The partitions throughout the northern office area are a mix of extant and non-original. Changes to the details in the timber partitioning is evident in places, for example widths of timber panels and details on the architraves indicate that new material has been introduced and original fabric also altered to suit occupier requirements.

Figure 20. Hallway looking north towards the boardroom.

The offices in the northern wing are all located on the west side of the building with a hallway extending up the side and terminating in the board room. The hallway partition is the same as the office partitions. The east wall of the hallway is plastered and painted with a timber dado rail. The hallway ceiling is not original.

The boardroom is an altered space added in 1991, occupying an area that previously housed bathroom facilities, with replacement ceiling and panelling. Following the conversion of the place to a brewery, a bar was installed along the eastern side of the boardroom.

Figure 21. Bar in the 1991 boardroom. The panelling reflects the original timber panelling of the building though does not match exactly with an increased width of panel in the later panels.

The ceiling of the large office area to the south of the reception area follows the same suspended grid pattern as the smaller offices to the north. Current glass and timber panels reflect different eras of construction and do not match the ceiling grid pattern. Services and bulkheads have also been added further distorting the pattern of the ceiling. This room was originally subdivided into three offices and made into open plan in the 1980s. The aluminium windows framed in timber surrounds are not the originals.

Adjoining the northern offices in the north of the saw tooth factory is a concrete block structure containing amenities, with a mezzanine level accessed by a timber stair.

Factory/warehouse spaces

To the east and south of the office section is the factory area accessed via a single door in the north hallway and double doors from the large office room to the south. The interior of the factory space comprises two sections, a saw tooth roof section with four rectilinear bays and a gabled roof large volume section to the south. Access between the two spaces was originally unimpeded, but the remaining factory space has been sectioned off vertically from the southern warehouse with corrugated galvanized steel.

The southern warehouse is a double volume space with concrete floors and timber truss with steel tie rods, fixed to steel columns, and steel trusses in the 1947 section. The southern warehouse has a timber truss that appears to have been constructed in two parts (possibly due to the maximum length of timber), then fixed at the centre with a timber bridging piece each side.

A rail track extends through part of the space, along the southern side of the floor, which previously connected as a spur to the railway line running past the east of the site. The front end faces Stirling Highway, with a brew house and a mezzanine floor accommodating offices added in 1989. The brewing kettles are visible from Stirling Highway and are a notable element of the building's visually prominent form.

Figure 22. The brew house (1989), located at the south western end of the factory space.

The addition of a mezzanine floor was part of the 1989 modifications to support the copper brewing kettles.

Where the brick façade is located, the timber trusses are fixed to a concrete ring beam set into the brick wall.

Figure 23. The underside of the brew chambers below the mezzanine floor.

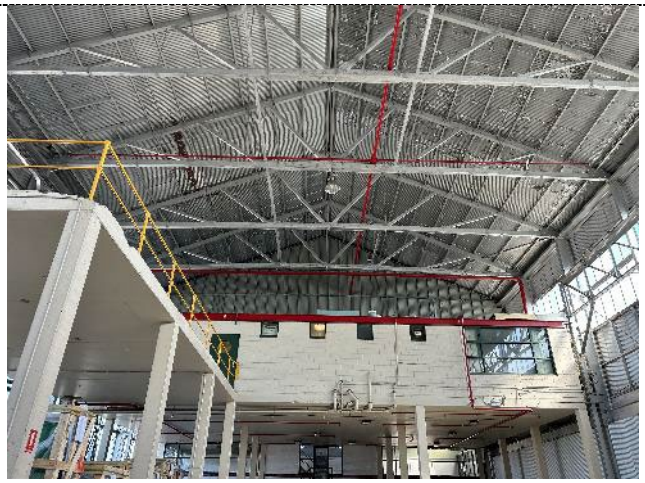


Figure 24. The 1989 mezzanine extends east of the brew house to accommodate offices, which have views out into the double height southern warehouse. The offices have metal cladding to the upper sections of the wall, steel trusses and concrete block walls below the windows.

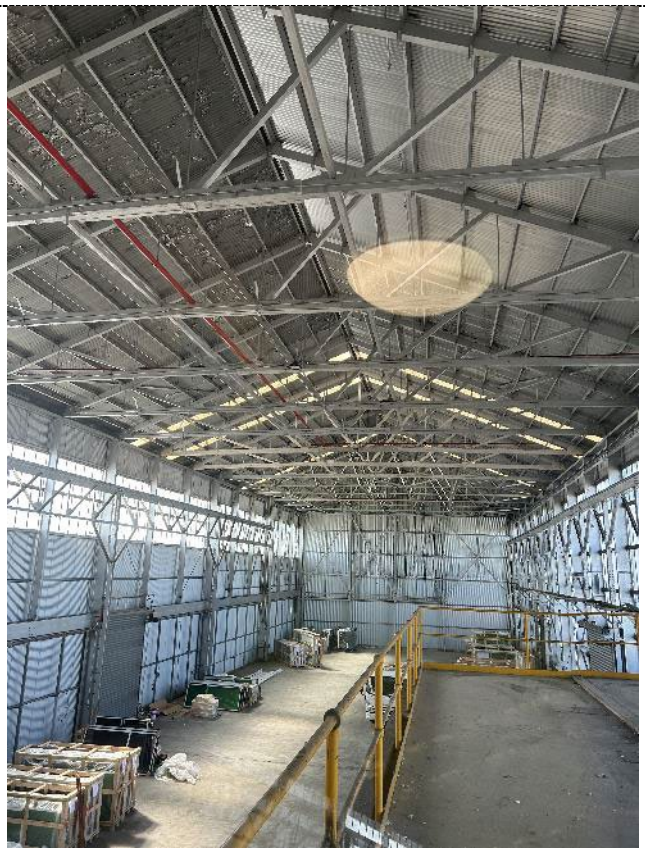


Figure 25. Southern warehouse, taken from the upper offices. The timber trusses have been painted silver.

The steel track for the overhead travelling crane, associated with the place's original use as a vehicle assembly plant, is still evident on the north and south sides of the space.

Figure 26. Southern warehouse, taken from the upper offices. The trusses are timber in the original section, while steel trusses have been used in the 1947 extension. The timber trusses have been painted silver.

Figure 27. Rail track extending through part of the southern warehouse, which is presumed to have originally connected to the spur railway line which entered the rear of the building at the south east corner.[87]

The remaining warehouse spaces in the saw tooth roof section are large open storage spaces with an abundance of natural light coming through the distinctive roof form. The construction for the saw tooth section is timber trusses with steel tie rods, fixed to steel columns. None of the 1947 extension to this section remains.

The interior has largely been stripped of internal elements of the vehicle assembly plant but was fundamentally designed as an open space allowing equipment to be changed depending on need.

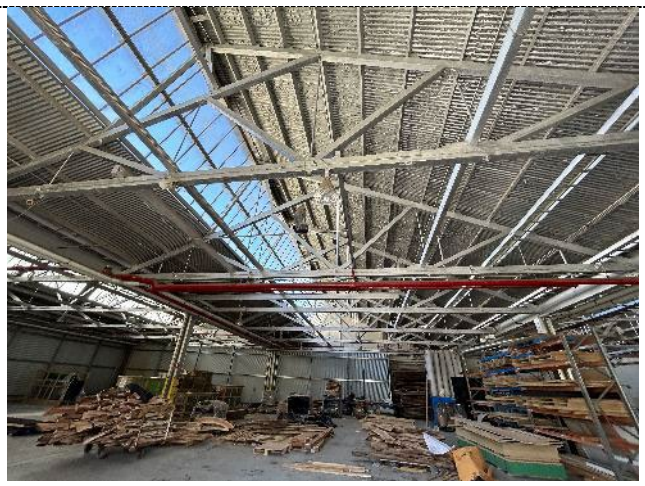


Figure 28. Saw tooth roof warehouse. The south facing saw tooth roof lights run the entire length of the bays in an east-west direction, facing south.

The original glazing has been replaced with larger panels.[88]

87 Aerial photographs c. May 1956, in Photographic Study compiled by Plant Manager John R Marshall, provided courtesy of A John Parker Collection.

88 Interior photographs c. May 1956, in Photographic Study compiled by Plant Manager John R Marshall, provided courtesy of A John Parker Collection.

Figure 29. Saw tooth roof warehouse. The remaining warehouse bays date to the original 1930 construction, with timber trusses throughout. The timber has been painted silver.

12. 3 CONDITION

Ford Motor Co Factory (fmr) is generally in good condition but showing evidence of general wear and tear to the finishes in places.

The administration section of the building has some minor areas of plaster deterioration in the ceiling and upper walls of the original administration offices. There is also evidence of rising damp in the large office room likely to be caused by the adjacent planter beds. Above the external main entrance to the building a box gutter is deteriorated causing some minor water damage.

The warehouse sections also appear to be in good condition. There is a lot of evidence of bird excrement in the brew house section.

12. 4 COMPARATIVE INFORMATION

Comparative Analysis

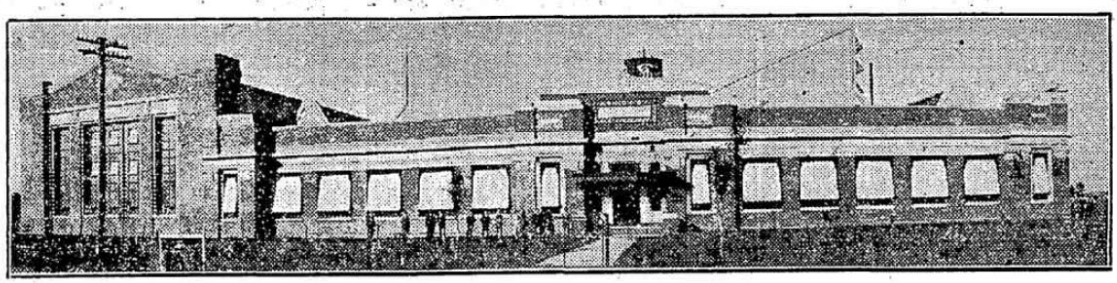
Constructed for the Ford Motor Company of Australia and operated as an assembly plant from 1930-1987, *Ford Motor Co Factory (fmr)* is part of a group of Ford Motor Company factories around Australia and internationally which shared many design similarities.

In Western Australia, *Ford Motor Co Factory (fmr)* is associated with the development of the local manufacturing industry in the inter-war and post-WWII period. The site was repurposed as a brewery in operation from 1989-2007 and is associated with the Matilda Bay Brewing Company's establishment of craft brewing in Western Australia, disrupting the big breweries.

Vehicle assembly plants

Ford Motor Co Factory (fmr) can be compared nationally and internationally with other notable industrial plants. The place has a direct association with the Ford plants in the United States, where innovations were developed that became standard features of Ford factories. Kahn's Ford Motor Company Assembly Plant in Richmond, California, for example, can be seen to exhibit the same stylistic elements as *Ford Motor Co Factory (fmr)*. The design of *Ford Motor Co Factory (fmr)* can also be seen to be influenced by the work of Peter Behrens, whose influential AEG factory in Berlin built in 1910 demonstrates the curtain wall of steel framed glass prominent in the Ford designs.

Directly comparable to *Ford Motor Co Factory (fmr)* are the remaining former Ford manufacturing and assembly plants in Australia, all of which are now closed, the last in 2016, but some of which have also be recognised as places with local or State cultural heritage values. Purpose-built plants existed in Adelaide, Brisbane, Geelong, Melbourne, and Sydney.[89]



The Brisbane frontag. of the Ford Motor Company (Aust.) Pty. Ltd. It is proposed to build along similar lines at North Fremantle.

Figure 30. Photograph of Ford Motor Company Australia's Brisbane assembly plant, published in the Daily News, 20 February 1929 as an example of the scale and design of the future plant at North Fremantle. National Library of Australia.[90]

The below are extant Ford factories in Australia:

- VHR H2305 *Ford Motor Company Complex* (Victorian Heritage Register) – constructed as Ford's Australian headquarters, the Geelong site features two steel-framed factory buildings with attached offices with red brick and painted render facades in the Stripped Classical style (1925-1942). The buildings are currently unused.[91]
- B7222 Ford Administration Building and Motor Assembly Plant (Classified National Trust) – the Broadmeadows Assembly Plant in Victoria, constructed from 1958, was the largest motor assembly complex in Australia.[92] It closed in 2016 and as at 2024 is proposed for redevelopment as a business precinct.[93]
- I63 Ford Factory Building (Former) - Brick Façade (Local Environmental Plan) – constructed c1936 in Homebush West, Sydney, the factory operated 24 hours a day employing around 1200 workers on split shifts. The façade was practically identical to *Ford Motor Co Factory (fmr)*.[94] Since closing in

89 Information from the Heritage Officer at Strathfield Council, NSW.

90 'Ford's Buy Land', *Daily News*, 20 February 1929, p. 6, http://nla.gov.au/nla.news-article83475533.

91 Ford Motor Company Complex, Victorian Heritage Database, accessed 19 January 2024, https://vhd.heritagecouncil.vic.gov.au/places/12548; David Morley, 'The history of Ford's Geelong factory', Cars Guide website, 3 March 2022, accessed 19 January 2024, https://www.carsguide.com.au/car-advice/the-history-of-fords-geelong-factory-86011; Photo, Ford Manufacturing Company of Australia Pty Ltd car assembly plant at North Geelong, Charles Daniel Pratt, March 1926, State Library of Victoria, https://find.slv.vic.gov.au/permalink/61SLV_INST/1sev8ar/alma9939657503807636

92 Ford Administration Building And Motor Assembly Plant, Victorian Heritage Database, accessed 19 January 2024, https://vhd.heritagecouncil.vic.gov.au/places/70189

93 Assembly Business Precinct, https://www.assemblybroadmeadows.com.au/, accessed 19 October 2023.

94 National Archives image A1200, L16122, http://naa.gov.au accessed 19 October 2023; Ford Factory Building (Former) – Brick Façade, State Heritage Inventory, NSW Government, accessed 19 January 2024, https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2450120

1994, only the façade has been retained and incorporated into a business park development.[95]

- Former Ford Motor Company Assembly Plant, Largs Bay (no heritage listing) – operating from 1926 to 1961, the South Australian plant was also of an identical design to *Ford Motor Co Factory (fmr)* except for a different roof line. The plant is extant and occupied by a business as at 2024.[96]

The former assembly plant at Eagle Farm, Brisbane was demolished c2013.[97]

WA's only other purpose-built motor assembly plant of a similar scale, the former General Motors Holden Assembly Plant in Mosman Park (1926), was closed in 1973[98] and demolished in 1984.[99]

Large-scale industrial buildings

Ford Motor Co Factory (fmr) is an example of a landmark industrial building constructed in the Inter-War Functionalist style and represents a scale of industry and manufacturing that is no longer practiced in increasingly urbanised metropolitan areas. It also demonstrates the successful adaptation of a large industrial space for another other use, and comprises easily read fabric from both phases within the place.

The following place was also designed by Olham Boas and Ednie-Brown and associated with industrial or manufacturing use:

- P08728 *Mackay's Aerated Water Factory (fmr), Northbridge* (RHP) – a single and double storey place of brick and iron built in the Inter-War Functionalist style (1928) by Oldham Boas and Ednie-Brown for the manufacture of aerated drinks and cordials.

The following places entered on the State Register are examples of extant large-scale industrial buildings which have significance as prominent landmarks, being visible remnants of the State's industrial past:

- P03645 *Great Southern Roller Flour Mill* (RHP) – constructed from 1922, the place has landmark quality with strong vertical proportions, height and massing, the Dingo Flour brand image and the Norfolk Island Pine.
- P03318 *East Perth Power Station* (RHP) – the place is rare as a large-scale thermal power station retaining its plant and equipment, constructed prior to

95 Information from the Heritage Officer at Strathfield Council, NSW; Cathy Jones, 'Former Ford Factory, Homebush', Strathfield Heritage website, accessed 19 January 2024, https://strathfieldheritage.com/industry-commerce/former-ford-factory-homebush/

96 'Ford Australia's Largs Bay Assembly Plant', National Motor Museum website, accessed 19 January 2024, https://motor.history.sa.gov.au/research-types/ford-australias-largs-bay-assembly-plant/; Google Streetview image data, July 2022, corner of Jetty and Victoria Roads, Largs Bay, South Australia.

97 Photo, Ford Motor Company, Eagle Farm, 1936 and prior to demolition in 2013, Lost Brisbane Facebook page, accessed 22 January 2024, https://www.facebook.com/Lost.Brisbane/photos/a.658322534278851/5161024464008613/?type=3; Street View Data, Schneider Road, Eagle Farm, QLD, November 2009 and January 2014, Google Maps.

98 'GM Holden Factory', Mosman Park Heritage Trail brochure, 2014, Town of Mosman Park website, accessed 22 January 2024 https://www.mosmanpark.wa.gov.au/wp-content/uploads/2021/02/SHP-MP-Sign-12-GM-Holden-Factory-2014-J1.pdf

99 Polizotto, *The Factory Floor*, p. 231.

the end of World War I, being one of only two in Australia and a small number globally.

- P03381 *South Fremantle Power Station* (RHP) – a high volume steel frame and concrete former coal-fired electric power station (1951), the second and largest purpose-built thermal power station in the State.
- P00852 *Elders Wool Stores*, 38 Cantonment Street (RHP) – the place is a rare and good example of a massively scaled utilitarian warehouse building, built in 1927 as a result of government policies to safeguard the Australian wool industry.
- P15820 *Dalgety Wool Stores (fmr)* (RHP) – comprising a four-level brick and iron warehouse building constructed from 1922 and adjoining single-storey warehouse (1942, 1952), the place is an outstanding example of its architectural style and demonstrates the development of WA's wool industry.
- P02410 *Maylands Brickworks* (RHP) – comprising a Hoffman Kiln, section of drying kilns, pug mill, gate house, change rooms and workshop, the place (1927) is an important example of brickmaking technology and is a significant example of industrial archaeology.
- P00868 *Bristile Kilns (fmr), Belmont* (RHP) – an industrial site comprising eight brick circular downdraught kilns and five tall brick chimneys, which is the largest in Australia, and an increasingly rare structure nationally.

Several of these places are sites of completed or proposed adaptive reuse redevelopment projects.

Breweries

Ford Motor Co Factory (fmr) is associated with the disruption of the brewing industry with the introduction of microbreweries from the mid-1980s, initiated in 1984 by Brewtech, which produced the Matilda Bay brand from 1985 before consolidating the business under the Matilda Bay Brewing Company name. Following the company's success, the craft beer industry has since rapidly grown with 686 craft breweries operating nationwide at 2023.[100]

Of the three breweries included in the State Register, the following place is the only brewery associated with this phase, as the site of the first boutique pub brewery in Australia established by Brewtech:

- P01002 *Sail and Anchor Hotel* (RHP) – a two storey stone and brick building in the Federation Filigree style (1901), the place was bought by Brewtech in 1984, who undertook a major restoration and upgrade of the hotel including installation of a microbrewery, becoming the first boutique pub brewery in Australia to challenge the dominance of big brewers.

The adaptive reuse of existing buildings, often with heritage values, is a key innovation of microbreweries compared to historically dominant breweries. In its

100 Henry Johnstone, 'What it takes to make it in Australia's booming craft brewery industry', Real Commercial – News website, 25 October 2023. Accessed 6 February 2024, https://www.realcommercial.com.au/news/what-it-takes-to-make-it-in-australias-booming-craft-brewery-industry#:~:text=Australia%27s%20craft%20beer%20scene%20has,686%20breweries%20currently%20operating%20nationwide.

direct association with the creators of Australia's first boutique pub brewery, *Ford Motor Co Factory (fmr)* is one of the earliest examples of a microbrewery in an industrial space, which has since been widely replicated. For example, the Little Creatures Brewery in Fremantle, established by previous staff and one of the founders of Matilda Bay Brewing Company, is in a building originally constructed to house the 1987 America's Cup defence yachts.[101] In 2022, A Shed, included in P03602 *Victoria Quay, Fremantle* (RHP), was adapted to a microbrewery by Gage Roads Brewing Company.[102]

Conclusion

Ford Motor Co Factory (fmr) is a rare example of a landmark industrial building demonstrating the application of international innovations in factory design styles, notably the expansive steel framed glass curtain wall which has no comparison in WA. The substantial plant also reflects the rare example of investment in Western Australia by an influential, multinational company at a time when the State was comparatively small and unknown on a global stage. As the only extant remaining example of a purpose-built car assembly plant in Western Australia, the place is also a rare example of this type of industrial place.

While there are other breweries on the State Register, *Ford Motor Co Factory (fmr)* reflects the shift in the beer industry from the mid-1980s due to market disruption by microbreweries. At the time of conversion to a microbrewery, such use was uncommon, but is now commonplace, in part due to Matilda Bay Brewing Company's success at the site. The place also stands as an early example of a successful adaptive reuse of an industrial building.

12. 5 KEY REFERENCES

See footnotes.

National Trust Classification, 28 August 1995.

City of Fremantle Heritage Inventory, Ford Motor Co Factory (fmr).

12. 6 FURTHER RESEARCH

Further research that could provide additional information regarding the two phases of the place could address the automotive industry in Western Australia, particularly the role of Ford during World War II and in the post-war period, and the history of factories in Western Australia.

101 'Little Creatures Fremantle', Little Creatures website, accessed 15 February 2024, https://littlecreatures.com.au/locations/fremantle/little-creatures-fremantle/

102 'Gage Roads new brewpub set to open in Fremantle next week', *Perth Now,* online article, accessed 15 February 2024, https://www.perthnow.com.au/lifestyle/gage-roads-new-brewpub-to-open-in-fremantle-next-week-c-5265532