HERITAGE COUNCIL OF WESTERN AUSTRALIA

REGISTER OF HERITAGE PLACES

ASSESSMENT DOCUMENTATION

11. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

The criteria adopted by the Heritage Council in November 1996 have been used to determine the cultural heritage significance of the place.

PRINCIPAL AUSTRALIAN HISTORIC THEME(S)

- 3.5.3 Developing agricultural industries
- 3.8.1 Shipping to and from Australian ports
- 3.8.5 Moving goods and people on land
- 3.8.6 Building and maintaining railways

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 201 River and sea transport
- 202 Rail and light rail transport
- 301 Grazing, pastoralism and dairying

11. 1 AESTHETIC VALUE*

Co-operative Bulk Handling Building (fmr), West Perth is significant as an example of a strongly modelled purpose built office building designed in the Late Twentieth-Century International style, displaying evidence of being influenced by the tradition of Le Corbusier's *Unité d'Habitation* schemes and also demonstrating the influence of Oscar Niemeyer. (Criteria 1.1 & 1.2)

Co-operative Bulk Handling Building (fmr), West Perth contributes positively to the surrounding area and streetscape and is visually linked to the Harold Boas Gardens, which was redesigned to ensure that the water feature was visible from the building. (Criteria 1.3 & 1.4)

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* 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Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

11. 2. HISTORIC VALUE

Co-operative Bulk Handling Building (fmr), West Perth is strongly connected with the 20th-century history of grain production in Western Australia, being purpose-built for and occupied by Co-operative Bulk Handling Ltd from 1968 to 2003. (Criterion 2.2)

Co-operative Bulk Handling Building (fmr), West Perth was designed by prominent architectural firm, Summerhayes and Associates (Criterion 2.3)

Co-operative Bulk Handling Building (fmr), West Perth has historic value as the first building in Western Australia to utilise the concrete *brise-soleil* as a means of environmental control.[1] (Criterion 2.4)

11. 3. SCIENTIFIC VALUE

Co-operative Bulk Handling Building (fmr), West Perth was a recipient of several design awards. It was considered to be a progressive building of its time, one of the first in Perth to provide *brise-soleil* to a high level of detail. It is an excellent example of the use of architecture to control solar radiation. (Criterion 3.3)

11. 4. SOCIAL VALUE

Co-operative Bulk Handling Building (fmr), West Perth has social importance as the headquarters of Co-operative Bulk Handling Ltd, who have handled grain for the State's farmers for more then 70 years. (Criterion 4.1)

12. DEGREE OF SIGNIFICANCE

12. 1. RARITY

Co-operative Bulk Handling Building (fmr), West Perth is rare in Western Australia for its exhibition of a Le Corbusier inspired external treatment. (Criterion 5.1)

Co-operative Bulk Handling Building (fmr), West Perth is a rare example of highly regarded Late Twentieth-Century International style building in Western Australia (Criterion 5.1)

The Caretaker's Flat located within the service core at the roof level of *Co-operative Bulk Handling Building (fmr), West Perth* demonstrates a way of life no longer practiced in a metropolitan area, when such staff were expected to live at their place of work. (Criterion 5.2)

12. 2 REPRESENTATIVENESS

Co-operative Bulk Handling Building (fmr), West Perth is representative of Late-Twentieth Century International Style office buildings. (Criterion 6.1)

12. 3 CONDITION

The *Co-operative Bulk Handling Building (fmr), West Perth* is in good condition overall. In 2015, rust is present at various fixing points of the *brise-soleil* which may impact on its structural integrity.

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1 A *brise-soleil* (plural brise-soliel), or sun-break, is an architectural element most frequently associated with the International Style, composed of horizontal (and later vertical) blades that manage the quantity of solar rays entering a building. Originally often made of concrete, they were later constructed in lighter materials which allowed them to be adjustable.

12. 4 INTEGRITY

Co-operative Bulk Handling Building (fmr), West Perth has a medium level of integrity. The original intent is mostly readable, current use compatible and the values of the place are likely to be sustained. The changes that have occurred are generally not easily reversible. The caretaker's apartment has a high level of integrity.

12. 5 AUTHENTICITY

The *Co-operative Bulk Handling Building (fmr), West Perth* has a medium level of authenticity. The external fabric, overall form, location of service core, roof area, caretaker's apartment and basement fabric is largely original. The internal fabric has predominantly been replaced.

13. SUPPORTING EVIDENCE

The documentation for this place is based on the heritage assessment completed by State Heritage Officers, Annabel Wills and Eddie Marcus, in October 2006, with amendments and/or additions by State Heritage Office staff and the Register Committee.

13. 1 DOCUMENTARY EVIDENCE

Co-operative Bulk Handling Building (fmr), West Perth (1968) is a strongly modelled six-storey office building in the tradition of Le Corbusier's *Unité d'Habitation* schemes. It is situated to the north of Delhi Square in West Perth and is bounded by Delhi Street, Colin Street, Campbell Street and the railway. The same concrete *brise-soleil* (sunscreens) on the north elevation are applied in reverse on the south. The roof, again reminiscent of Le Corbusier, is an opportunity for sculpture and retrieval of greenery.

Following its foundation on 12 August 1829, the townsite of Perth was laid out between Mount Eliza and Heirisson Island, facing the Swan River to the south, with a chain of swamps and lagoons to the north. From the 1840s, land to the north of the original townsite began to be taken up when drainage of the wetlands made the ground available for agriculture.

The year 1830 saw the first recorded wheat planted in Western Australia and a flourmill built at Fremantle. Three years later, the Swan River Colony attained self-sufficiency in wheat production and, in the same year, the Government guaranteed farmers the cost of production, 15/– (shillings) a bushel. By 1840, production had increased to 16,070 acres, mostly around Guildford.[2]

By the 1870s, the centre of Perth was consolidated on the grid laid out in John Septimus Roe's survey, and 800 houses accommodated some 4,600 people.[3] In 1877-78, the Colonial Secretary, Col. R.T. Goldsworthy, named a number of streets and places in Perth in celebration of the suppression of the First Indian War of Independence (sometimes known as the Indian Mutiny), and the subsequent crowning of Queen Victoria as Empress of India. These included Delhi Square, a five-acre park in West Perth.[4]

In September 1878, Robert Henry Hester was granted land in the area now occupied by *Co-operative Bulk Handling Building (fmr), West Perth*, with a further grant of adjacent land in October 1882.[5] This land fronted Parkes Street (renamed Delhi Street c.1939)[6] to the south. The land changed hands a number of times over the next two decades before being purchased by John Thomas Mosey, a Perth House Agent, in February 1897, with the first houses built in 1899, as numbers 16 and 22 Parkes Street. Number 14 was erected c.1901,

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2 *A Co-operative Enterprise* (Perth: CBH Ltd, 1965), p. 6

3 Campbell, Robin McK, in Margaret Pitt Morrison and John White (eds.), *Western Towns and Buildings* (Nedlands: UWA Press, 1979), p. 104

4 *The Sunday Times*, 4 August 1929, p. 4; C.T. Stannage, *The People of Perth* (Perth: Perth City Council, 1979), p. 317; also see HCWA Assessment for *Harold Boas Gardens* (#04241). An alternative (if unlikely) explanation offered for the naming of Delhi Street is that 'Afghans' used to water their camels in the area (for example, see www.abc.net.au/gardening/stories/s126301.htm, consulted 25 August 2006).

5 A total of 0.56ha, being Perth Town Lots V112 and V113

6 *Wise's Post Office Directory*, 1939

number 18 c.1905, and number 20 c.1907.[7] *Wise's Post Office Directory* shows the five houses on the land finally to be occupied by *Co-operative Bulk Handling Building (fmr), West Perth* having a variety of residents over the next fifty years.[8]

Technological advances during the 19th century assisted in the expansion of the wheat industry into larger scale operations. Mechanical advancements such as the scrub roller, the 'stump jump' plough and the header harvester allowed for the clearing and preparation of large tracts of land and harvesting of bigger crops. The industry was further assisted by the opening up of the inland railway networks which improved the efficiency of crop transportation. These advancements were complemented by research and development of new wheat varieties more suitable to Australian conditions.[9]

Nevertheless, at the time of Federation, wheat farming was still a labour intensive occupation carried out on relatively small farms, with all planting and harvesting carried out using a mixture of horse-drawn machinery and manual labour.[10] Harvested grain was loaded by hand into jute bags in the paddock, which were sewn up and manually hoisted into wagons to be transported to the nearest railway siding. Here the bags were weighed before being stacked for loading. It was then transported by rail to Fremantle, weighed again, before being loaded into ships. As the process involved limited mechanical assistance it was slow. Furthermore the bags often burst due to vermin attacks and simple wear-and tear.[11]

Wheat farming in Western Australia experienced a boom in the first decades after Federation. By 1905 over 79,000 hectares of land had been planted with crops, mainly wheat, double what had been in cultivation in 1900. Wheat had become the State's major export earner.[12] With the further development of the tractor and mechanical power in the years prior to World War I, production advanced dramatically, with growing areas extending north and east as railways were surveyed and laid.

In 1913, it was recommended that steps be taken to introduce bulk handling. Bulk handling involved transporting grain in bulk to a storage facility near a railway line. The grain was then loaded into enclosed rolling stock and transported to a port, where it was again stored in bulk before being loaded into ships.[13] The idea of bulk handling had been tested overseas before the establishment of a co-operative in Western Australia, but the methods were crude and the increased profits to the growers were considered marginal compared to the cost of

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7 Details obtained from certificates of title, and *Wise's Post Office Directories*. For full details of ownership before CBH obtained the land, see the various certificates of title.

8 *Wise's Post Office Directories* (1900-49)

9 *The Australian Wheat Industry*, Australian Bureau of Statistics, online article downloaded from http://www.abs.gov.au/ausstats/abs@.nsf/previousproducts/1301.0feature%20article212006?opendocument&tabname=summary&prodno=1301.0&issue=2006&num=&view= on 9 June 2014.

10 *Wheat - Planting and Harvesting*, State Library of Western Australia, online article downloaded from http://slwa.wa.gov.au/wepon/land/html/wheat.html on 6 June 2014.

11 Ayris, Cyril, *A Heritage Ingrained* (Perth: CBH Ltd, 1999), p. 15.

12 *Wheat - Planting and Harvesting*, State Library of Western Australia, online article downloaded from http://slwa.wa.gov.au/wepon/land/html/wheat.html on 6 June 2014.

13 Ayris, Cyril, *A Heritage Ingrained* (Perth: CBH Ltd, 1999), p. 15.

converting to a new system.[14] The outbreak of war halted any action on bulk handling at this time.

In view of the expansion of the wheat industry during the early 20th century, it was inevitable that a farmers' association would develop. In Western Australia, the co-operative farmers' movement served as a commercial representative for Western Australian primary producers,[15] and in 1914, the movement founded the Westralian Farmers Co-operative Limited ('Wesfarmers') and its allied institutions, notably the Wheat Pool of Western Australia.

Within twelve months of commencing trading in 1915, Wesfarmers and its eight staff moved from their original location in Howard Street to larger premises at 332 Murray Street, and soon expanded to occupy two storeys of that building. Despite the impact of the War on the local economy, Wesfarmers continued to grow and this necessitated a shift to yet larger premises, and in 1918, the firm moved to *Wesfarmers Building (fmr)* on Wellington Street, which had been built in 1898 as warehouse space for Sargood Importers & Merchants.[16]

From this point, two strands of the co-operative movement developed in Western Australia: the co-operative units in the country where each unit was a company in its own right with its own body of shareholders; and Wesfarmers located in Perth with branches in various country centres, and shareholders across the State. It was at the headquarters of Wesfarmers in Perth that the strategic initiatives of wheat pooling, co-operative bulk handling and the co-ordination of the co-operative movement were overseen.[17]

During WWI, the first of the Australia-wide compulsory grain pools began, and Wesfarmers emerged as the dominant organisation for grain handling in WA. Before the compulsory grain pools ended in 1922, Wesfarmers, in conjunction with the Co-operative Federation and the Primary Producers Association, had taken the initial steps to form the Co-operative Wheat Pool of Western Australia. The Pool tried to exert a stabilising influence on the market, ensure a fair return to its member participants, eliminate third party profits and use its reserve funds for the benefit of wheat growers generally. It was this reserve fund that was to furnish the necessary capital to found Co-operative Bulk Handling Limited (CBH).

At the end of the War, the idea of bulk handling was revived by the Government, but not developed. Opposition to the concept came from many directions, not least from those with a vested interest in maintaining a system of bagging wheat; namely bag manufacturers and private grain merchants.[18] But the Depression saw a resurgence in interest in bulk handling. The price of wheat had fallen to such an extent that it was barely worth harvesting,[19] and costs needed to be reduced so farmers could survive. In spite of a record crop in 1930-31, growers

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14 Ayris, Cyril, *A Heritage Ingrained* (Perth: CBH Ltd, 1999), p. 13.

15 Sandford, John, *Walter Harper and the Farmers* (Perth: Westralian Farmers Co-operative Limited Printing Works, 1955), p. 25

16 *Wesfarmers Building (fmr),* State Register of Heritage Places – Assessment Documentation, downloaded from http://inherit.stateheritage.wa.gov.au/Public/Content/PdfLoader.aspx?id=d04587ae-5457-4e0e-8c2c-f8abec6fcd58&type=assessment on 6 June 2014, p 4.

17 Sanford, op cit , p.39

18 Ayris, p. 15.

19 *Our History,* CBH Group, downloaded at https://www.cbh.com.au/about-us/our-history.aspx, downloaded on 6 June 2014.

were receiving less than they had ten years earlier. The cost of handling and merchandising had increased threefold in two years, and a few pence per bushel meant the difference between bankruptcy and solvency. There were nevertheless logistical challenges that still needed to be overcome in designing a bulk handling system.

John Thompson, General Manager of Wesfarmers, was convinced that a bulk handling system could be made to work and together with Wheat Department Manager H. E Braine and Chief Wheat Inspector Steve Wood, began conducting a range of experiments to test different options. Their primary objective was to create a system that was cheap, simple, effective and capable of being constructed in the country, preferably by unskilled labour.[20] Together they developed an integrated system of elevators that loaded the grain into simple corrugated iron wheat bins that was to define the rural Western Australian landscape.[21]

On the basis of these developments, Wesfarmers constructed five horizontal bins in the Wyalkatchem area at Benjaberring, Korrelocking, Nembudding, Yelbeni and Trayning, each of which held 14,000 tonnes of wheat. About 200 steel box wagons were then converted to transport the wheat, with hessian liners added to made them leak proof.[22]

In 1933, the State government introduced a Bill to give monopoly powers and a State guarantee of finance to the bulk handling scheme, but it was rejected by Parliament despite the recommendation of a Joint Select Committee. The Wesfarmer's scheme was therefore denied the protection and assistance afforded by legislation.

Undeterred, the Trustees of the Wheat Pool of WA and Wesfarmers jointly registered Co-operative Bulk Handling Limited (CBH) on 5 April 1933. The company took over the existing five sidings already established by Wesfarmers and set about equipping a further 48.

The system was hard pressed in its first season. Anticipating a receival of six million bushels, it accepted double this quantity. Not only was the total bulk delivery of the growers higher than all estimates, but growers outside the areas serviced by the scheme also delivered to the bins, travelling distances of more than 20 miles.

Private wheat merchants opposed the scheme and this opposition was sharpened by the fact that Wesfarmers, their principal competitor, promoted the new Company. Others believed that bulk handling should be managed by a public utility owned and operated by the State. Opposition from some growers stemmed from dissatisfaction with low wheat prices. To force the Government to grant assistance, the Wheat Growers' Union encouraged growers not to deliver wheat during the 1932-33 season. Wesfarmers and the Wheat Pool did not support the move, claiming a commitment to growers who wanted to deliver and their failure to support the Union lead to bitter feelings and hostility.[23]

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20 Ayris, p. 17

21 Ayris, p. 18

22 Ayris, p. 19

23 Ayris, p. 19

As a result of opposition to CBH, the Government instructed the Railway Department to refuse the construction of any more bulk handling sites and appointed a Departmental Committee enquiry, followed by a Royal Commission. Some 90 growers who had used the new scheme were unanimous that it had resulted in savings of 2½d per bushel. The Commission recommended that the Company should be allowed to continue and the necessary legislation be passed.

Although the policy of the Government favoured State ownership of utilities, it accepted these recommendations and introduced a Bill. Opponents of CBH delayed legislation for some time, but the *Bulk Handling Act 1935* finally came into effect on 1 February 1936.

CBH, now operating under a scheme sanctioned by Parliament and secured by legislation, continued to expand. By 1937, there were 103 equipped sidings, 137 the following year and 174 the next. In the 1939-40 season, 208 sidings were equipped, increasing to 234 in 1940-41. In 1943 it became apparent that no further expansion of the scheme would be possible until the end of the War. With the end of the war, the expansion of the wheat industry again gathered momentum. Improved seed, better farming techniques and machinery exercised an ever-accelerating influence on the size of wheat harvests.

By 1949 CBH had accumulated a great deal of capital. It formed Westralian Wheat Buildings and began acquiring a significant property portfolio in Perth.[24] In the 1950s it expanded its grain systems to include oats and barley.[25]

Many young men spent their summer holidays 'working on the bins' to make enough money to pay their way through university. Hundreds applied for the work every year, some returning year after year. Dental surgeon Norman Robson remembered working for CBH as a 17-year-old in 1959, living in a hut with two iron beds and a wood stove. His supervisor lived on a diet of beer and cigarettes, yet was able to 'work like a Trojan' for long hours.[26]

Although Wesfarmers was originally established as an outlet for farm merchandise and a buyer and broker for wheat, its activities gradually expanded to include dairying, honey, fruit, superphosphate, cotton, and lamb and wool exporting. It moved into areas outside rural production, including shipping, freighting and road transport. By the 1960s, Wesfarmers had an office in London, and its interests included gas, insurance, transport, taxation advice, travel assistance, and real estate.[27]

Meanwhile, working conditions at *Wesfarmers Building (fmr)* on Wellington Street were not good. Recollecting his days there in the 1940s and 1950s, Norm Tidy had far from exclusively happy memories of the place:

> There were no floor coverings, only pine boards. The ceilings were painted grey and over the windows were fan lights which were opened with spiral rods.
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> It was a very hot building, we had to sit at the table in summer and keep a piece of blotting paper under our arm to soak up the perspiration to keep our work clean.

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24 Ayris, p. 144

25 *A Co-operative Enterprise*, pp. 6ff

26 ibid., p. 54-55

27 Smith, Kevin P., *A Bunch of Pirates: The Story of a Farmers Co-operative* (Perth: Westralian Farmers Co-operative Limited, 1984) pp. 1-4, 6

> Easterly winds blew through in the summer bringing smoke from the railway yards. There were rats which often died between the floor and the ceiling above so that boards had to be prised up to trace the smell. In winter the whole building was freezing cold…
>
> There were few staff amenities though there was a waterbag hanging near the front door where we could quench our thirst. The men got no morning or afternoon tea, only the women had that luxury. The men were allowed morning and afternoon breaks only after CBH took over.
>
> When we workers left at 5pm, the cleaning lady arrived with a box filled with wood shavings soaked in oil which she scattered across the floor to 'lay the dust'. It was not a very successful operation; when she swept up the shavings there was dust everywhere. Our first chore in the morning was to dust everything. (Everybody had their own duster for the purpose.)[28]

In 1963, CBH bought the land where *Co-operative Bulk Handling Building (fmr), West Perth* is now located from Charles John Besley Veryard. Veryard was a Perth City Councillor from 1927-64 and Mayor of Perth from 1964 to his death in 1967. In August 1967, CBH Ltd transferred the land to CBH Superannuation Holdings.[29] One CBH employee later recalled:

> In September 1968, when the offices at Westralian Farmers [on Wellington Street] was bursting at the seams, [Mick Lane, General Manager of CBH] initiated the move to West Perth. We had looked at various rental properties but Mick was keen on West Perth where we had a grain handling facility, a laboratory and a store. We had been buying properties in the area for years ...[30]

Another employee remembered:

> When we moved to Delhi Street we knocked down two houses then bought and knocked down a few more. We started off buying them fairly cheaply until the owners realised what was happening and began putting up their prices.[31]

The contract for designing the new building in West Perth went to Summerhayes and Associates. Geoffrey Summerhayes was a third-generation Claremont architect. Edwin Summerhayes, his grandfather, had arrived in Claremont in 1896, and his work included Claremont Council Chambers (1899) and the War Memorial (1922) (registered together as P484 *Claremont Council Offices and Surroundings*). His son Reginald (Geoffrey's father) joined the practice in 1925, designing the refurbishment of the *Claremont Council Offices* (1935) as well as Swanbourne Hotel. Geoffrey joined the practice in 1953, and is best known for his contribution to the design of P16722 *Art Gallery of Western Australia*, the City Arcade Building and his own house, 3 The Coombe, Mosman Park.[32]

In the 1950s the majority of newly graduated Australian architects left for work experience in Europe, and especially England. Geoffrey Summerhayes was one of a few who left for further education, not work experience, and also chose not to go to Europe. In 1951 he attended Princeton on a Lowell M. Palmer Fellowship, a year after Robert Venturi had completed the same postgraduate course.

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28 Ayris, pp. 143-4

29 Certificates of title

30 Ayris, p. 151; the dates of purchase appear to be remembered imperfectly

31 Ayris, p. 101

32 *Town Talk*, August-September 2004, p. 3; Despite being one of only two places on the Docomomo Register for Western Australia (the other being Council House, Perth), *Summerhayes House* (1960), 3 The Coombe, Mosman Park, was demolished and replaced with a new building in 2003-04.

Summerhayes was instructed by many of the same teachers as Venturi, including Jean Labatut and Marcel Bruer. Venturi has credited Labatut with having an important role in his own development.[33]

Despite similarities to the work of Breuer, Summerhayes' designs of the later 1950s and 1960s are closer to Venturi's early buildings, though not in terms of the latter's conspicuous signatures. Despite the fact that Summerhayes appears to have been unaware of Venturi's work at this time, both developed an interest in the thin box, a volume made of planes emphasising thinness of surface.[34] Doubtless this arose from having experienced the same course at Princeton.

From the mid 1960s to the early 1970s Summerhayes and Associates grew to be a large firm. With a large office, Summerhayes' relationship to the work altered and he was no longer as directly involved with design. Responsibilities were delegated to associates, many of whom were selectively recruited by Daryl Way. Among them were Ralph Drexel, Binky Collins, David Melsom and Colin Moore. This business structure lasted virtually until the recession of the early 1970s when the office contracted. This group were responsible for the larger works of the late 1960s, including *Co-operative Bulk Handling Building (fmr), West Perth*, 3-5 Bennett Street and 2 Bindaring Parade Apartment Building. They worked as a team and it would be a mistake to assign design attribution to any one person.

Ralph Drexel later recalled:

> [W]e had a good team of young architects who got on with each other. Geoff's role… was always the senior partner. His statement was, we work as a team. But there was always number one, and everyone else, he had the only office in the building, which was… fair enough.

Summerhayes describes himself as the 'design controller' and 'job getter' for the project. Drexel is portrayed as the 'ideas man' who was mainly responsible for the finish of *Co-operative Bulk Handling Building (fmr), West Perth*, Moore as the man who 'sat on the drawing board and made the project work', and Way as the person responsible for dealing with the client. Each member of the team desired to express his own individual philosophy in the finished design, and this creative tension resulted in *Co-operative Bulk Handling Building (fmr), West Perth*. One way in which the creative tension manifested itself was when Summerhayes, as project manager, discovered that a black elevator interior had been installed in *Co-operative Bulk Handling Building (fmr), West Perth*. He remembers demanding its replacement, however the owners had already replaced the colour scheme before the architects could react.[35]

Way and Drexel executed the initial scheme for the *Co-operative Bulk Handling Building (fmr), West Perth*. The core and entrance lobby of the first design were joined by bridges to an office volume standing above a car park on pilotis. Moore joined the office to document CBH when the design was still unresolved and it remained so until a decision was made to push the elements together and get rid of the space between. This led to a more restrained building of open façades,

33 Markham, Michael, 'White Gothic' in *Geoffrey Summerhayes: Architectural Projects* (Nedlands: UWA Press, 1993), p. 4

34 Markham, p.4.

35 Interview with Geoffrey Summerhayes, 12 October 2006

virtually even fields of *brise-soleil*, framed by end walls with less aggressively expressed adjuncts.[36]

Way and Moore had both worked for the same firm in London, and it was through their influence that the Le Corbusier overtones came to be exercised over the façade. This enabled the expression of 'shapes and forms not seen before in Perth', but also meant that the building was atypical of work previously connected with Summerhayes and Associates.[37]

The brief had been to provide office space for CBH with additional space for the Grain Pool of WA and the Australian Wheat Board. In order to allow for future development, the building was located in the southwest corner of the site. This afforded the added advantages of a north-south orientation and an aspect from the building across Delhi Square (now Harold Boas Gardens) to the south.

An analysis of the physical requirements of the brief led to the provision of five office floors of 5,500 sq ft each (511 sq m) with a sixth floor housing the training and cafeteria facilities. In order to leave individual floors as flexible as possible, all services were located outside the office area. To this end, air-conditioning, electrical, lighting, telephone, power, ceilings, windows and partitions were integrated to provide a flexible space.

The structure was basically off-form reinforced concrete with some internal walls in concrete blockwork. Glass to the office area was full-height tinted, double-glazed and heat absorbent. Sun control to the north and south facades was provided through pre-cast *brise-soleil* sunscreens. The same elements were used on both facades but reversed on the south to 'open up' to the view over the park.

The total building cost was $932,578.55, including partitions, cafeteria and kitchen equipment, computer room service facilities, and covered parking for 18 cars and surface parking for 62 cars.[38]

CBH moved into its new premises in 1968. The Australian Wheat Board took the first floor of the new building while the Grain Pool of WA took most of the second floor. It was the idea of CBH's General Manager, Mick Lane, to have the three organisations together. Later the Grain Pool moved to its own office behind His Majesty's Theatre.[39]

In July 1968, following discussions with Lane, City of Perth's General Purposes Committee requested that a plan be drawn for the redevelopment of the Delhi Street Gardens (later renamed Harold Boas Gardens), incorporating an area for a water feature. The plan was duly presented and approved by the Committee on 11 October 1968. After further discussions, Lane offered a donation of $5,000 from CBH to assist in the development of this feature, which would commemorate the bulk handling of wheat.[40] On 10 March 1969, the General Purposes Committee accepted the proposal for the redevelopment of Delhi Square.

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36 Markham, pp. 6-7; In interview, 12 October 2006, Geoffrey Summerhayes raised doubts over the complete accuracy of this story, but did not offer an alternative account.

37 Interview with Geoffrey Summerhayes, 12 October 2006; see Comparative Information for details on buildings considered by Summerhayes to present a more typical appearance of his and his firm's work.

38 *The Architect* (December 1969)

39 Ayris, p. 101

40 City of Perth General Purposes Committee Minutes, 1970-78, SROWA Acc. 5204 WAS 290 Item 22, 10 May 1971, p. 233

However, the matter was deferred, as finance was unavailable.[41] Nevertheless, the previously even slope of the land was altered 'to form a valley character with a meandering watercourse as the principal element', and 'in consideration' of CBH's donation to the project, the main waterfall was 'positioned and oriented the […] so it could be seen' from the CBH building, which overlooked the park.[42]

In 1969, the building was the recipient of a citation in the RAIA Bronze Medal Award.[43]

The 1972 decision to build the grain terminal at Kwinana was a bold decision by CBH. The $42 million loan, which eventually increased to $72 million, was one of the biggest raised in Australia at that time. CBH argued it had to move from Fremantle where the harbour was shallow and dockside space limited. Growers questioned the wisdom of the vast capital expenditure when wheat quotas were in force and the Fremantle terminal had just been upgraded. In the event, the Kwinana terminal was a success. Storing 912,000 tonnes and loading ships at a rate of 5,000 tonnes per hour, it is recognised as one of the best in the world.

In 1986, a Royal Commission into the bulk handling of grain in Australia led to the decision, three years later, to deregulate the domestic grain market, impacting on CBH's storage arrangements and resulting in the loss of its sole handling rights.

In 2000, a proposal for CBH to move from a co-operative to a corporate structure failed to get sufficient support from shareholders. In 2002 Co-operative Bulk Handling Ltd merged with the Grain Pool of Western Australia to form the CBH Group. The new group was now responsible for storage, handling and marketing of WA's grain. A new headquarters was opened at 30 in 2003 at 30 Delhi Street, named Gayfer House after Mick Gayfer, Director of CBH for 37 years (1959-96).[44]

Planning applications lodged with City of Perth reveal that although there had been a large number of internal refurbishments to *Co-operative Bulk Handling Building (fmr), West Perth* while it was owned by CBH, no changes were made to the structure.

In late 2003, Queensland-based developer, First State Developments, purchased *Co-operative Bulk Handling Building (fmr), West Perth* from CBH Superannuation Holdings. The building was recognised as one of the few development opportunities in West Perth. First State WA manager, Glen Bridge, told the media the company planned to spend $2.5 million on refurbishment, including a new entry foyer, updated building infrastructure and the construction of four penthouses on the building's roof. When completed the building would have around 3,000 sq m of net lettable area, with 60 car bays. 'We expect it to attract mining, IT and tenants who don't want to be in the CBD,' Bridge said.[45]

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41 City of Perth General Purposes Committee Minutes, 1970-78, op. cit.

42 Information from Peter Cala & Associates to HCWA, 4 September 2003

43 Molyneux, Ian, *Looking Around Perth: A Guide to the Architecture of Perth* (East Fremantle: Wescolour Press, 1981), p. 81

44 www.abc.net.au/rural/wa/stories/s828428.htm, consulted 25 August 2006. Harry Walker ('Mick') Gayfer was an MLA from 1963-74, and an MLC from 1974-89. During his time with the company, the CBH terminal at Kwinana was built, grain receival points were rationalised and he was instrumental in introducing taxation relief for the company.

45 *West Australian Business News*, 11-17 March 2004, p. 4

First State also pursued development approval for a $20 million, 58-apartment development on the portion of the site facing 6 Campbell Street. It also sold off the eastern part of the CBH, between *Co-operative Bulk Handling Building (fmr), West Perth* and east return of Dehli Street, to residential property developer Australand, who constructed a $27 million development: called 'Platform CBH[46]; a seven-level, atrium style building of 84 apartments, which was sold out before construction commenced.[47]

Relocating from its Thelma Street premises in 2006, the WA office of Australian Finance Group (AFG) moved into the ground floor of *CBH Building*. AFG invested considerable money in the transfer, providing its staff of 120 with a new working environment. The interior of *Co-operative Bulk Handling Building (fmr), West Perth* was refurbished, and the exterior had CBH's name removed and AFG's personality stamped upon it.[48]

In 2015, the current owners, Warrington Property have undertaken further upgrades to the interior of the building, and are intending to carry out repairs to the *brise-soleil* to address corrosion.

13. 2 PHYSICAL EVIDENCE

Co-operative Bulk Handling Building (fmr), West Perth, a six-storey strongly modelled office building in the tradition of Le Corbusier's *Unité d'Habitation* scheme, was constructed in 1968. It is located on Delhi Street in West Perth, a business centre secondary to the central business district (CBD) were many architects, engineers, medical specialists, lawyers, accountants etc are located.

West Perth is bounded by the CBD to the east, Subiaco to the west, the railway line to the north and Kings Park to the south. *Co-operative Bulk Handling Building (fmr), West Perth* is located on Delhi Street, a small street located near the railway line in the northern portion of the suburb. Until recently, buildings in the area tended to be a lower scale than within the CBD, being mostly between two and six storeys, although several taller buildings have been erected since 2010. *Co-operative Bulk Handling Building (fmr), West Perth* is located opposite the Harold Boas Gardens, a grassed and treed garden with a water feature running through (which is clearly visible from *CBH Building)*.

Co-operative Bulk Handling Building (fmr), West Perth is located on the south-west corner of the site with the main entrance also on the south west corner. The site has been subdivided, with new residential units constructed to the north-east. A smaller scale (single-storey) commercial building is located on the northern part of the site between *Co-operative Bulk Handling Building (fmr), West Perth* and the railway line. The current lot that *Co-operative Bulk Handling Building (fmr), West Perth* is situated on is 2,102 sq m on the corner of Delhi and Campbell Streets. The site contains *Co-operative Bulk Handling Building (fmr), West Perth* and a two-level parking area.

Co-operative Bulk Handling Building (fmr), West Perth is a purpose built office building constructed in 1968. Designed in the Late Twentieth-Century

46 *West Australian Business News*, 11-17 March 2004, p. 4

47 www.waproperty.net/news-details.php?id=20, consulted 23 August 2006

48 www.afgonline.com.au/afg_frontend/default.aspx?ContentID=336, consulted 23 August 2006

International style of architecture,[49] it was originally constructed as a five office floors of 511 sq m each with a sixth floor to house training and cafeteria facilities, a caretakers flat and a basement car park. The original design located all services together including lifts, stairs, toilets, air-conditioning and electrical. This service core is located to the western side of the building, and contains the caretakers flat at roof level. A second escape stair is located on the eastern end.

The structure is basically off-form reinforced concrete with some internal walls in concrete block work. There is full height glazing to the external northern and southern walls and blind walls to the eastern and western walls. Glazing to the office areas is full-height tinted, double-glazed and heat absorbent. Sun control to the north and south facades is provided through pre-cast concrete *brise-soleil* (sunscreens). The same elements are on both facades but reversed on the south.

At the time the place was assessed in 2006, it contained six levels of lettable office space, each floor being approximately 515 sq m. All original internal partitions and finishes had been removed. A typical floor has no standard layout as tenants undertake individual fit outs.

The service core remains in its original location, although it has undergone some modifications. The original lifts remain however the interiors of the lift cars have been refurbished. The original concept of male and female toilet facilities being located on alternating floors has been altered with both now provided on each floor with the entrances from the escape stair. What was the air conditioning duct on each floor is now a storeroom. The lift lobby has been retiled, new lighting installed and a tea prep room provided to each floor.

Externally the building remains as constructed with reinforced concrete and pre-cast concrete *brise-soleil* (sunshades). Originally white, these sunshades have been painted a dark grey colour considerably altering the external appearance. In 2015, the sunshades are showing signs of corrosion (concrete cancer). The glazing is to the north and south elevations and is full height and aluminium framed. A new entrance has been constructed at the south-west corner of the building. This entrance has a steel framed and timber lined fly away roof, aluminium framed doors and frameless glass walls, with a large angular painted concrete blade wall that contained the AFG logo (since removed). The AFG sign was also mounted at the top of the service core of the building in the located where the CBH sign was originally, but has since been removed. At the time of assessment in 2006, the CBH sign was still visible from the lift lobby at the roof level of the building.

The basement level of the building remains substantially as originally constructed containing car parking.

The roof level also remains largely unaltered, still containing the lift motor room, air conditioning plant room and the two level caretaker's apartment within the service core. The lift motor room is accessible via an original steel circular stair. Visible adjacent to this stair is the reverse of the CBH sign. The air conditioning plant room contains the original equipment, now decommissioned. New air conditioning units have been placed on the roof.

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49 Apperly, Irving, & Reynolds, pp. 232-5.

The caretaker's apartment is generally as originally constructed. Accessed from the lift lobby, it contains two bedrooms, a bathroom and a laundry to the upper level and a two-storey volume lounge room to the lower level. It is not known if any kitchen facilities were provided. The finishes to this apartment are generally original. The apartment is no longer in use.

As outlined in the documentary evidence, the building underwent many internal refurbishments, with minimal alterations to the exterior of the building by 2006.

To date the refurbishment works have included the new entry foyer, complete internal refurbishments including all lettable spaces, lift cars, toilet and tea prep facilities, foyers and lobbies, electrical and air conditioning services, a two level car parking deck, external painting, signage and landscaping.

As at 2015 the planned penthouse redevelopment has been superseded by a proposal by the new owners to construct a rooftop pavilion, and a new building entry, as well as the refurbishment of the brise-soleil, which are showing signs of concrete cancer.

Despite the above-mentioned changes the building still demonstrates the influence of Le Corbusier's use of concrete, the *brise-soleil* as a deep sculptural container, and the roof as free form landscaping.

13. 3 COMPARATIVE INFORMATION

Late Twentieth-Century Architecture and the International Style

Of the more than 25,000 places in the State Heritage Office places database, only 190 are noted as being in one of the twelve Late Twentieth-Century architectural styles. Of these places, less than half are included on Municipal Inventories and/or Local Planning Schemes.[50] It is likely that there are many other examples of buildings in these styles in Western Australia, but few are currently regarded as having cultural significance.

The most common Late Twentieth-Century style in the database is Perth Regional (83 places), with the two next most common styles the Brutalist (32 places) and International styles (31 places).

Most of the 31 places in the Late Twentieth-Century International Style in the database are multi-storeyed, non-residential buildings. This is consistent with the application of this style world-wide, where it has been mainly used for commercial and institutional buildings.[51]

Three Late Twentieth-Century International Style buildings are on the State Register:

- P3048 *Western Australian Police Service Complex* (1965) a nine storey administrative building and attached three-storey police station and lock-up, that includes the only 1960s multi-storey office building of curvilinear form extant within Western Australia

50 It is difficult to be definitive about which places in this style are on Municipal Inventories and/or Local Planning Schemes as the database information on this is not complete

51 Apperly, Irving, & Reynolds, pp. 233.

- P3553 *Beatty Park Leisure Centre and Beatty Park* (1962) originally a brick and concrete swimming pool complex in the Late Twentieth-Century International style, with a steel and block-work aquatic leisure centre complex in the Late Twentieth Century Structuralist style, in a park like recreation ground setting.
- P10551 *Perth Observatory* (1964) a complex of Late Twentieth Century International style masonry buildings constructed to accommodate the equipment and functions of the former Observatory scattered around a 30-acre State Forest site.

P16722 *Art Gallery of Western Australia Complex* also contains linking elements constructed in the Late Twentieth-Century International Style, but these are of lesser significance to main Late Twentieth-Century Brutalist gallery building.

Aside from *Co-operative Bulk Handling Building (fmr), West Perth*, there are four other places that contain elements in the Late Twentieth Century International style on the Heritage Council's Assessment Program:

- P16494 Education Department Head Quarters (1970); a perambulatory low-rise building which maximises the southern exposure to the park and allows full development of the site. Being low rise allowed for a cost effective simple repetitive flat plate structural system. The columns are circular, chosen for aesthetic appeal and minimal cross section.
- P5068 Sister Kate's Children's Home (fmr), Queens Park contained two, two storey circular-plan accommodation units Myola (1972) and Elouera, (1973). Myola was demolished in 2012.
- P11923 Subiaco Oval, which includes Subiaco Oval Football Club (1971), a sequence of two and three tier grand stands built between 1969-2000.
- P13702 University of Western Australia, Crawley Campus which contains several buildings in this style, although two of the most notable have been demolished: University House in 2005, and the Chemistry Building in 2006.

In 1988, the Royal Australian Institute of Architects compiled a "Register of Significant Twentieth-Century Architecture". Of the 75 places listed, five are in the Late Twentieth-Century International Style, including the *Co-operative Bulk Handling Building (fmr), West Perth*. The other four buildings are

- 16488 Telephone Exchange Tower, a multi-storey nearly windowless tower built of light coloured reinforced concrete, designed to reduce solar heat load on heat producing equipment. (determined not to warrant assessment in 2007).
- P13702 University of Western Australia (see above)
- P16494 Education Department Head Quarters (see above)
- P16722 Art Gallery of Western Australia (see above)

Co-operative Bulk Handling Building (fmr), West Perth is a rare example of highly regarded Late Twentieth-Century International style building in Western Australia.

Geoffrey Summerhayes and Summerhayes and Associates

Summerhayes and Associates was formed by Reginald Summerhayes in 1952. Geoffrey Summerhayes joined the firm in 1953, and although Reginald remained a Senior Partner, he took diminishing responsibility for the firm from this point on.[52] Geoffrey then became the design controller and driving force of Summerhayes and Associates.

Geoffrey described his firm's signature look as being buildings exhibiting geometric regularity, which are gridded in elevation.[53] He also noted the firm's usual style was to design simple, functional methods for keeping the sun out of buildings.

Apart from *Co-operative Bulk Handling Building (fmr), West Perth* there are only three other places in the State Heritage Office database noted as having been designed by Summerhayes and Associates after Geoffrey joined the firm:

- P8966 Northampton Shire Offices (1957), an almost domestically scaled painted brick building of the 'modernist' period. The place has not been reviewed by the Register Committee.
- Marian Convent (1955), a simple L-shaped brick and asbestos building comprising of a kitchen and ablution wing and a residential wing, the place is associated with P1612 *Church of the Holy Cross & Priest's Cell*, Morowa but not included in the registration. The place has not been reviewed by the Register Committee.
- Chelsea Village Shopping Centre (1972), a landmark 2-3 storey brick and iron shopping complex developed by influential WA businessman, Dallas Dempster, that originally incorporated a Tavern. The place has a distinctive Mediterranean aesthetic that resembles a hill-side town with numerous steps, passageways, courtyards and balconies. The place has not been reviewed by the Register Committee.

In Summerhayes' own opinion, the buildings that most exemplified his firm's style were the Queensland Insurance Building (1964) (later known as the QBE Building) at 178 St George's Terrace, Perth,[54] and the Offices at 3-5 Bennett Street, East Perth:[55]

In the case of the Queensland Insurance Building (1964), the design was restricted by the narrow site and the necessity to provide reciprocal light areas to those already provided by the SGIO Building immediately to the west. The 9th floor had a caretaker's flat on the street front, and air conditioning plant rooms to the rear. Constructed of reinforced concrete with a flat plate, the external

52 *Reg Summerhayes*, Western Australian Architect Biographies, Australian Institute of Architects, available online at http://10.2.1.72:9091/servlet/com.trend.iwss.user.servlet.sendfile?downloadfile=IRES-353220591-171A0A20-24205-24174-152, downloaded on 10 June 2014.

53 Interview with Geoffrey Summerhayes, 12 October 2006

54 See *The Architect* (September 1965) for more details.

55 Summerhayes also referred to 220 St George's Terrace as a typical building of his, but no information has been sourced on this place.

exposed concrete was white bush-hammered. The negative details to the exterior surface were produced with a technique invented specifically for this building.[56] Infill walls were brick internally where rendered, and white concrete masonry blocks externally and within the entrance lobby. Aluminium window walls and grey glass with grey anodised infill panels beneath the glass were used throughout. Aluminium fins on the south elevation protected the building from late afternoon sun. Aluminium grilles on the north elevation controlled the mid-year sun.[57] The building has been extensively modified externally since it was constructed and the fins are no longer extant.

Offices, 3-5 Bennett Street, East Perth (1967) was built to provide a large, comparatively open area with overhead south lighting, expansive river views, air conditioning and maximum allowable parking. Summerhayes and Associates occupied the fourth floor, whose south-facing windows once looked across Langley Park and Perth Water. Construction was of load bearing brick walls and piers in fair face brickwork painted internally and externally; reinforced concrete floors finished with carpet to all tenancy areas; reinforced concrete roof with skylights; suspended ceiling with ventilated tee-bars and integrated lighting; and unit air conditioning sharing a common cooling tower. The overall cost was $311,000, with three floors of 4,000 sq ft and the fourth floor (occupied by Summerhayes) at 5,000 sq ft.[58] The building is still substantially intact, but additions to the east façade have substantially altered its appearance from Bennett Street. In 2014, some original details still appear to be evident in the south façade looking up Bennett Street.

As noted in the Documentary Evidence, in relation to *Co-operative Bulk Handling Building (fmr), West Perth,* Summerhayes worked as part of a collaborative team. One consequence of this was that the finished product had 'more design' than Summerhayes usually demonstrated in his buildings.[59]

Summerhayes identified influences of both Le Corbusier and Oscar Niemeyer in *Co-operative Bulk Handling Building (fmr), West Perth*, although his training under Jean Labatut and Marcel Breuer at Princeton cannot be discounted as additional stimuli.[60] Reflecting the influence of Le Corbusier's use of concrete, the *brise-soleil* (sunshields) as a deep sculptural container, and the roof as free form landscaping, Summerhayes was also responding to his experience in the USA. This can be seen in the thinness of the pre-cast *brise-soleil* at *Co-operative Bulk Handling Building (fmr), West Perth* and their rational determination: the north facing screens tilt downwards to inhibit summer sun, while the south facing screens tilt upwards to encourage light.[61]

While many of Summerhayes' designs show clear influences from other architects, it has been argued that these are not copies but instead are simply characteristic of architecture in the 1950s and 1960s, when 'reproductions were

56 Interview with Geoffrey Summerhayes, 12 October 2006

57 This building has subsequently been covered in a glass exterior occulting the grilles.

58 *Architecture in Australia* (June 1970), pp. 461-3

59 Interview with Geoffrey Summerhayes, 12 October 2006

60 Markham, p. 4

61 London, Geoffrey, *A Short History of Perth Architecture* (Balmain, NSW: Pesaro Publishing, 2002), p. 95

less copies of each other than common re-workings of principles established by the architecture of Mies van der Rohe in the early part of the twentieth century'.[62]

Despite the complexities of attributing a clear design origin, the *brise-soleil* (sunshades) at *Co-operative Bulk Handling Building (fmr), West Perth* do appear to show a deal of indebtedness to Le Corbusier's use of the device.[63] The Secretariat in Chandigarh (Le Corbusier, 1953) is constructed in *beton brut* (rough-cast concrete) and its characteristic feature is its system of *brise-soleil* façades. The building shows variations of structure and internal distribution that do not interrupt its compact volume, but are reproduced two-dimensionally in the very elaborate design of the *brise-soleil*.[64]

Geoffrey Summerhayes died in 2010. Aside from the 1993 retrospective by the University of Western Australia[65], there has yet to be any widespread recognition of his contribution to architecture in Western Australia, or that of Summerhayes and Associates more generally.

No other building known to have been designed by Summerhayes is comparable to *Co-operative Bulk Handling Building (fmr), West Perth*, although others did apply features such as *brise-soeil* as part of their passive solar design.[66] Overall, *Co-operative Bulk Handling Building (fmr), West Perth* is representative of 1960s office architecture in Western Australia but particularly Perth, and somewhat representative of Geoffrey Summerhayes' designs, and the designs of Summerhayes and Associates.

Brise-soleil (sunshades)

A *brise-soleil* (plural *brise-soliel*), (aka sunshade/sun-breaks), is an architectural element most frequently associated with the International styles of the post-war period and late 20th century, where they were often used en mass across entire facades or as design features.. Put simply, a *brise-soleil* is a window awning designed to limit the entry of heat and light into a building in summer, while maximising these in winter.

They are often composed of horizontal (and later vertical) blades that manage the quantity of solar rays entering a building. Often made of concrete, they were later constructed in lighter materials which allowed them to be adjustable. Sometimes they appear integral to the building, while at other times they extend obviously out from the main façade. In other instances, they form a grille across window openings.

Individual concrete window awnings began to appear in Western Australia on Inter-War Functionalist style buildings, but it was not until the post-war period that they began to be used more extensively, particularly on buildings in the Post-War International style.

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62 Nordeck, Meghan, 'Photographic Houses', in *Summerhayes: Architectural Projects*, p. 13

63 It should, however, be noted that Markham (op cit) has disputed this: 'The expressive sunshades are surely what leads popular opinion to regard [CBH] building as Corbusian. However the *brise-soleils* of three-inch think concrete are too delicate to be like Le Corbusier's massive *beton brute*'.

64 http://www.tourtravelworld.com/hot_spots/chandigarh/the_secretariat_building/ (consulted 29 September 2006)

65 Markham, Michael, *Geoffrey Summerhayes: Architectural Projects* (Nedlands: UWA Press, 1993).

66 The following descriptions are adapted from *Summerhayes: Architectural Projects.*

Early steel framed high rise buildings in Perth, such as the MLC Building (1957), relied entirely on mechanical means to counter the high responsiveness of the lightweight cladding to temperature change. But by the 1960s, external devices were being applied to buildings to modify the high temperatures resulting from sun falling on large expanses of glass. The external T-forms at Council House (1963) illustrate this development, demonstrating an achievement in thermal control without compromising the desired aesthetic of a transparent form. Later developments saw the introduction of horizontal slab projections as an integral extension of the structure, such as at *Dumas House*. These not only shaded the glazing but also served as a platform for window cleaning. The east and west elevations could not be shaded effectively by projecting forms, hence the solid end walls.[67]

There are a small number of known examples of the use of *brise-soleil* in the Post-War International style in Western Australia including:

- Industry House (originally the Chamber of Manufacturers Industry Building) (1957), a four-storey concrete frame building with a concrete sun-grille (a different form of *brise-soleil*) on the western façade. The place is on the Heritage Council's Assessment Program.
- P11562 Offices, 837-839 Wellington Street, West Perth (1960), a two-storey rendered masonry building on a plinth of lightly dressed split stone, the front (northern) façade is covered by a grid of deep, rendered *brise-soleil* expressed as a single cubic mass. The place is in the Heritage Council's Assessment Program.
- P16489 Trimby House, 813-815 Wellington Street, West Perth (1960), a two-storey masonry building. The front façade has a feature wall of lightly dressed split stone, and a recessed section where the upper windows are shielded by a grill of slimly profiled *brise-soleil*. The side (west) elevation to Coolgardie Street has vertical fins. The place has not been considered by the Register Committee.
- P2097 *Council House, Perth*, (designed in 1960 and completed in 1963) a concrete and steel framed 11-storey office building which incorporates white tiled T-shaped 'sun hoods/sun screens' on all elevations.
- *Dumas House*, West Perth (1966), a 14-storey office building that incorporates horizontal projecting slabs over windows on the north and south elevations as part of a range of passive solar features incorporated into the design. These were a development of the environmental controls on earlier buildings such as the T-shaped features on *Council House.*

As noted above, there is a lack of widespread recognition of the cultural heritage of buildings from the late-20th century, and few have been listed or described. There are therefore few known or recognised examples of buildings that employ *brise-soleil* in their design from the late-20th century period. While it is unlikely that *Co-operative Bulk Handling Building (fmr),*

67 *Dumas House*, Register of Heritage Places – Assessment Documentation, available at www.inherit.stateheritage.wa.gov.au, downloaded on 12 June 2014.

West Perth is a rare example of the application of *brise-soleil* in a multi-storey office block from this period, it is nevertheless a well-known example.

13. 4 KEY REFERENCES

No key references.

13. 5 FURTHER RESEARCH
