



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)

- 3.7.1. Shipping to and from Australia ports
- 5.1 Working in harsh conditions

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 201 River and sea transport
- 507 Water, power, major transport routes

11.1 AESTHETIC VALUE*

Cape Leeuwin lighthouse is a striking feature which rises dramatically upwards in a landscape that is essentially barren and comparatively flat. The slender tower is visible at the point of Cape Leeuwin long before any other buildings come into focus and appears to stand as an exclamation point in the centre of the narrow strip of land which is Cape Leeuwin. (Criterion 1.3)

Due to the general topography of Cape Leeuwin, it was not possible to place the keepers' cottages in a sheltered position. Thus, the whole precinct is very exposed to both the weather and the observer's eye. When the entire precinct is viewed from the north, the quarters and service buildings, which in themselves do not have any aesthetic value, assist in leading the eye along to the tall, stately form of the lighthouse at the south. (Criterion 1.4)

The steep pitch of the cottage roofs and the enclosure of the verandahs, has given the residences a lumbering presence which contrasts with the delicate spire of the lighthouse tower and the rounded forms of the natural landscape. (Criterion 1.4)

* For consistency, all references to architectural style are taken from Apperly, Richard; Irving, Robert and Reynolds, Peter *A Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present*, Angus & Robertson, North Ryde, 1989.

11. 2. HISTORIC VALUE

Cape Leeuwin Lighthouse and Quarters was an important link in the development of coastal lights which eventually circled mainland Australia. The need for a light on the south western corner of Australia was recognised as early as 1873 during the inter-colonial conference on the care and management of coastal lights. At this conference, two lights were recommended as being required for the benefit of Australian coastal shipping, one on Cape Naturaliste and the other on Cape Hamelin (just to the north of Cape Leeuwin). As Cape Leeuwin was considered to be the more treacherous Cape, a light was placed here first. (Criterion 2.2)

Western Australia's development of coastal lights was comparatively slow, when compared to the eastern colonies. This was due in part to less shipping and a lack of government funds to erect lights. The discovery of gold in Western Australia in the 1890s permitted Western Australia to begin an active government building programme, *Cape Leeuwin Lighthouse and Quarters* represents a part of this programme. At the time of *Cape Leeuwin Lighthouse and Quarters'* opening, Sir John Forrest was inordinately proud of his state's achievement and he dedicated the light to all mariners. (Criterion 2.2)

The erection of *Cape Leeuwin Lighthouse and Quarters* was important to the local timber industry which was developing around Augusta during the 1880s. Due to its isolated location, timber had to be transported to market by boat and the treacherous conditions often experienced around Cape Leeuwin were a constant worry to local mariners and timber merchants. (Criterion 2.2)

The new service buildings which were constructed during the 1950s and 1970s, while intrusive architecturally, none-the-less have historical importance as they show the development in lighthouse technology over the years. (Criterion 2.2)

Cape Leeuwin Lighthouse and Quarters have strong associations with Sir John Forrest who pushed for many years to have a new light erected on the south west corner of Western Australia. The place also has strong associations with M.C. Davies and George Temple Poole. M.C. Davies was instrumental in developing the timber industry around Augusta and he was keen to see the installation of a light on Cape Leeuwin as it would greatly assist the local shipping upon which the timber industry depended. George Temple Poole, the Chief Government architect, was responsible for the design of the light keepers' quarters and supervised the erection of the lighthouse. (Criterion 2.3)

At the time of Cape Leeuwin lighthouse's completion, it had the most powerful lamp in Australia and it was the first light to use the relatively new technology of a mercury bath to support the heavy lens mechanism. It was also one of the last lighthouse's to convert from a pressurised kerosene mantle to a halogen lamp powered by electricity. (Criterion 2.4)

11. 3. SCIENTIFIC VALUE

The Chance Brothers lens and optical equipment is still in operation in the lighthouse and presents as a piece of precision engineering equipment which is still in perfect working order more than 100 years after its initial installation. (Criterion 3.3)

Cape Leeuwin Lighthouse and Quarters was occupied by keepers for nearly 100 years, and due to the place's isolated conditions, the archaeological information retained beneath the floorboards of the cottages and in the refuse dumps (which no doubt still exist somewhere on the site), would give invaluable information about the lives and habits of these isolated families. (Criterion 3.2)

11. 4. SOCIAL VALUE

Cape Leeuwin Lighthouse and Quarters is highly valued by the local community as it has become an important tourist destination for visitors from overseas, inter-state and intra-state. This importance is reflected in the recent document released by the Department of Conservation and Land Management (CALM) requesting public comment not only on the conservation of the site, but also on the future management of the site as a tourist destination. (Criterion 4.2)

The importance of *Cape Leeuwin Lighthouse and Quarters* has been recognised by the Heritage Council of Western Australia, the National Trust, the Australian Heritage Commission and also by the people of Augusta-Margaret River who have placed the buildings on their local Municipal Inventory. The Department of Conservation and Land Management also recognises the importance of the precinct for its heritage values. The lighthouse still plays an on-going role in the local maritime community. (Criterion 4.2)

12. DEGREE OF SIGNIFICANCE

12. 1. RARITY

Cape Leeuwin Lighthouse and Quarters represents a way of life that is no longer practised today. At the time of its construction, the lighthouse was one of the most isolated lighthouses in Western Australia. The type of technology used (up until quite recently), to operate the revolving lamp, meant that it was essential to have keepers operating regular shifts to keep the lamp shining during the night. The keepers also played an important role in making weather observations, reporting shipping movements and generally maintaining the buildings in their care. On occasions they were also instrumental in saving the lives of shipwrecked sailors. However, the arrival of modern technology, and the automation of most of Australia's coastal lights, has made the occupation of lighthouse keeper redundant. The cottages where the keepers once lived are the only reminder of a once labour intensive job and isolated living conditions (Criterion 5.2)

12.2 REPRESENTATIVENESS

The lighthouse is an excellent example of a stone tower that was regularly used by many states and countries as the form most suitable to house the lens and light source which make up a lighthouse. Chance Brothers lights were used in most of Western Australia's lighthouses. (Criterion 6.1)

The keepers' quarters are a representative example of standard residences designed for public servants by the Public Works Department, and in particular for lighthouse keepers. (Criterion 6.1)

The service buildings on the site are representative examples of the types of utilitarian buildings constructed during the 1950s and 1970s. (Criterion 6.1)

12.3 CONDITION

None of the buildings display any major structural problems, although all of them are prey to extreme weather conditions. In general the buildings are in good condition.

12.4 INTEGRITY

The automation of the lighthouse and changes in technology have meant that not all of the buildings on the site have retained their original function, although their form remains largely unaltered. The lighthouse is the only building on the site which has retained its original form and function (with the exception of the attached oil room). The lighthouse has a high degree of integrity.

The three cottages, the laundries and the garages remained largely unchanged in form, apart from the enclosure of the cottages' verandahs. However, these dwellings are no longer used by light keepers and only rarely as residences, remaining largely unoccupied for most of the time. They have retained a moderate degree of integrity.

The service buildings have not undergone any alterations, although with the exception of the new power house, they have not retained their original functions. The former fuel room, power house and radio hut have retained a moderate degree of integrity. The power house and beacon room have retained a high degree of integrity.

12.5 AUTHENTICITY

Cape Leeuwin Lighthouse and Quarters have retained a high degree of their original fabric and fittings. The lighthouse retains all of its original working equipment, and although changes have been made to the actual lamp, the original lens, the mercury bath in which the mechanism floats and other internal fixtures, have all been retained. The substitution of glass blocks in some of the windows is regrettable as is the fixing of an aluminium mesh around the cast iron balustrade. In the latter case, this addition was clearly made for safety reasons. The lighthouse has a high degree of authenticity.

Minimal changes have been made to the cottages, their laundries and garages, apart from the enclosure of verandahs and the modernisation of

some of the facilities. The keepers' quarters, laundries and garages have a high degree of authenticity.

All of the service buildings are comparatively recent and have undergone minimal change. They have a high degree of authenticity.

13. SUPPORTING EVIDENCE

The documentary and physical evidence has been compiled by Fiona Bush.

13.1 DOCUMENTARY EVIDENCE

Cape Leeuwin Lighthouse and Quarters comprises the stone lighthouse tower and oil store (1896), three stone cottages (1896) and detached stone laundries to the cottages (1896) which were constructed for the colonial government of Western Australia. Two asbestos cement garages (1953), an asbestos cement office (former fuel room 1954), an asbestos cement office (former power house, 1954), an asbestos cement weather room (former radio hut 1954) and a new brick power house and beacon room (1970s) were constructed for the Commonwealth Government.

The first lighthouse erected in Western Australian was on Rottnest Island. Henry Trigg, the Superintendent of Public Works, started work on that lighthouse in 1842 and the building was completed by 1851.¹ The colony's second light was constructed on Breaksea Island, near Albany, in 1858.² Western Australia had a very slow start in lighthouse construction, in comparison to the eastern colonies. However, the construction of lighthouses was directly linked to the amount of shipping reaching the colonies and more ships proceeded east rather than stopping on the west coast. In 1878, a third light was constructed at Geraldton, a direct result of the mining activity which was taking place at the Northampton mineral field.³

At an inter-colonial conference held in 1873 in Melbourne to discuss the management and maintenance of coastal lights, it was agreed that twenty-four new lights were required Australia - wide. Two new lights were suggested for the Western Australian coast; one at Cape Naturaliste and the other at Cape Hamelin (near Cape Leeuwin).⁴ The delegates agreed that the maintenance and construction of lighthouses would remain the responsibility of the colony in which the lighthouse was situated, unless the light was specifically sited for the benefit of another colony. In those instances, the cost of erecting such a light would be borne by the other colony (or colonies) affected. The light proposed for Cape Hamelin was considered to be one of those 'lights maintained especially for the use of vessels of another colony'.⁵

Augusta was first occupied by Europeans in May 1830 by settlers who arrived aboard the *Emily Taylor*.⁶ By 1834, the majority of these settlers had moved north to Busselton where farming conditions were considered to be

¹ Le Page, J.S.H., *Building a State: the story of the public works department of Western Australia 1829 - 1985*, Water Authority of Western Australia, 1986, pp 44 -45.

² Wolfe & Associates, 'The Breaksea Island Lighthouse; site particulars and history', Nov. 1994

³ *The Inquirer & Commercial News*, 21 April 1879.

⁴ Reid, G., *From Dusk till Dawn: a history of Australian lighthouses*, MacMillian, South Melbourne, 1988, p.116.

⁵ Reid, p.116.

⁶ Shire of Augusta-Margaret River, 'Municipal Inventory of Heritage Places', compiled January 1995 – May 1996, p. 14.

less harsh.⁷ A second wave of settlers arrived in the Augusta region in the 1860s.⁸

The presence of tall stands of timber tempted some of the early settlers into trying to establish a timber industry however, Augusta's isolated location made this resource difficult to exploit.⁹ It was not until Maurice Coleman Davies settled in Augusta in the 1880s, that the timber industry became a major force in the district. M.C. Davies established a number of mills in the area and constructed a tramway between his mills. Jetties were established at Hamelin Bay (used in summer) and Flinders Bay (used in winter).¹⁰ A number of small townships grew up around the timber mills including Karridale, Boranup, Hamelin and Jarrahdene.¹¹

Maurice Davies grew up in the Victorian goldfields and became a building supplier and contractor. He moved to Adelaide where he went into partnership with John Wishart. In 1875, Davies moved to Western Australia where he established a large timber milling business.¹²

M. C. Davies saw a need for a light near the south-west cape as his timber mills exported large quantities of timber from ports in this area. He began urging for the construction of a light in 1881.¹³ The then Premier, Sir John Forrest, was strongly in favour of a light and during 1881 the site for the new light was hotly debated.¹⁴ However, when Forrest sought monetary support from the eastern colonies for the erection of a light, which would be of major benefit to the eastern colonies, he found them unwilling to assist.¹⁵ During 1883, Forrest tried many avenues for monetary assistance: Lloyds of London and a proposal to get an Imperial Act authorising the collection of light dues. None were successful.¹⁶ Although the problem of paying for a new light remained unresolved, letters were sent to Chance Brothers and Co. Ltd of Birmingham (lighthouse specialists), requesting optical designs for a new light. The first design reached the government in February 1891. The final set of drawings was received in July 1893.¹⁷

The discovery of gold during the 1890s saw the states' coffers begin to fill, and by 1893 the Western Australian government was able to afford the cost of erecting a light. The debate of where to put the light had finally arrived at Cape Leeuwin, rather than Cape Hamelin.¹⁸ In deference to those who considered that a light on Cape Leeuwin would be hazardous, due to the presence of rocks and shoals near the Cape, a secondary, red warning light

7 Jennings, R., *Busselton: "...outstation on the Vasse"*, Shire of Busselton, Busselton, 1983.

8 Augusta-Margaret River Municipal Inventory, pp. 18 – 19.

9 Augusta-Margaret River Municipal Inventory, pp. 21.

10 Augusta-Margaret River Municipal Inventory, pp. 21.

11 Augusta-Margaret River Municipal Inventory, pp. 24.

12 R. Watson, 'Cape Leeuwin Lighthouse.' Transcript read at meeting of Augusta Historical Society, 18 May 1978, p. 61.

13 R. Watson, p. 4.

14 R. Watson, p. 4.

15 R. Watson, p. 7.

16 R. Watson, pp 4 & 5.

17 R. Watson, p. 17.

18 R. Watson, p. 14.

was incorporated into the Chance Brothers' design; although the government received considerable adverse comments on the advisability of this secondary light.¹⁹

Advice for the construction of the lighthouse was sought from the English consulting engineer, William T. Douglass. His design, for a 115 foot stone tower with a small secondary light that was linked to the tower by a small fuel room, was received in 1894.²⁰ Tenders for the construction of the lighthouse, three keepers' quarters and a water-wheel were called in January 1895. The government architect, George Temple Poole, drew up the plans for the tender document.²¹ Maurice Davies and his partner John Wishart won the tender for the sum of £7,782.11s.6p. The contract period was to run from 2 April 1895 to 1 February 1896.²²

On 13 December 1895, the Premier, Sir John Forrest laid the foundation stone for the lighthouse. A jar containing current newspapers, coins and other documents was placed under the stone.²³ While the light was under construction controversy still raged over the secondary light. In the end it appears that the "anti-light lobby" won the day as only the foundations for the secondary light were constructed.²⁴

Local limestone, which was quarried from nearby Quarry Bay, was used in the construction of the tower and the two southern residences. The northern residence was constructed from granite, quarried on site.²⁵ The optical apparatus was a first order, white, dioptric lens with a quarter second flash every 5 seconds. The apparatus floated in a mercury bath using a clock-work mechanism. The installation of the mercury bath was the first of its type in Australia. The light was produced by a kerosene burning wick which produced a light of 200,000 candelas, visible for 20 nautical miles. At the time, the Cape Leeuwin light was the most powerful light in Australia. The circular steel staircase, and all of the other iron fittings were manufactured in England.²⁶ The lighthouse was also connected to the colony's telegraphic system.

When the Cape Leeuwin light came on line, illumination was provided by an Argand lamp which operated on a system of concentric wicks which burnt kerosene or mineral oil. The higher the number of wicks used, the greater the illumination.²⁷ The power of the smokeless lamp was further enhanced by the use of a system of concentric prisms around a central light. The prisms reflected and refracted the light, greatly enhancing its natural

19 R. Watson, pp 28 - 31.

20 R. Watson, p. 18.

21 R. Watson, pp 14, 18 and 23. The water wheel has been assessed separately. See HCWA document No. 0106.

22 Research Note number 619, Battye Library. Cape Leeuwin Lighthouse and Waterwheel.

23 R. Watson, p. 24.

24 R. Watson, p. 31.

25 Creswell, G., *The Light of the Leeuwin. The Augusta-Margaret River Shire History*, Augusta-Margaret River Shire History Group, Margaret River, 19??, p. 52.

26 Danvers, Architects, 'Conservation Plan of Cape Leeuwin Lightstation', Western Australia, September 1992, p. 11.

27 G. Reid, p. xiv.

power.²⁸ Lights could be made to 'flash' by revolving both the light and the prisms. The revolving mechanism utilised a heavy weight on a chain (like a grandfather clock), which fell down the centre of the tower.²⁹ The mechanism was periodically wound through the night to keep the light revolving. The capability of lights to 'flash' more than once in one revolution was solved by adding additional prisms.³⁰ The incandescent mantle replaced the wick system, permitting kerosene to be burned under pressure and producing a stronger light. In the Chance lights, the kerosene is preheated to produce a slight vapour which then burns under slight pressure and ignites a textile mantle. Lights fitted with this new system also had to be fitted with a pressurised fuel tank which would force the fuel into the lamp. Pressure was maintained by occasional pumping.³¹

A year after the foundation laying ceremony, Sir John Forrest returned to Cape Leeuwin to officially open the lighthouse on 10 December 1896. In his official speech Forrest referred to the fact that the light had been fully funded by Western Australia primarily for ships that were not owned by West Australians. He dedicated the light to the world's mariners.³²

In 1908, it was decided that an additional assistant lighthouse keeper was required. Mr Longbottom was the successful tenderer for the erection of a new dwelling, at £605. The weatherboard building took three months to construct and was completed by September 1908. It lay to the south of the other three cottages.³³ Other additional buildings which once existed on the site included stables, chaff house and a cart house.³⁴ Early photographs show that each of the residences were once surrounded by a timber picket fence.³⁵

The early keepers were expected not only to keep the light operational, but they also passed on shipping reports and kept weather records.³⁶ There have been only two shipwrecks off Cape Leeuwin. The *Pericles* in 1910 and *HMAS Nizam* in 1945. In both instances, the keepers assisted the shipwrecked passengers and sailors to safety and alerted authorities to the tragedies.³⁷

Upon Federation, the most important coastal lights were brought under Commonwealth control. Commander Brewis was commissioned in 1912 to undertake an extensive investigation of all existing coastal lights. In his report on the Cape Leeuwin light, he noted that the lantern, tower and dwellings were in good condition. Brewis recorded that the light had an intensity of 450,000 candelas and the illuminant was pressurised kerosene.

28 G. Reid, pp 189 - 194.

29 G. Reid, p. xv.

30 G. Reid, p. 194.

31 G. Reid, p. 195.

32 Ayris, Cyril, *Leeuwin Lighthouse: a brief history*, Cyril Ayris, Perth, 1996, p.20.

33 Danvers, p. 14.

34 Danvers, p. 14.

35 Danvers, p. 29.

36 Ayris, pp 23 - 26.

37 Ayris, pp 27 - 29.

(Sometime prior to 1912, the old wick light appears to have been replaced with a kerosene mantle thereby increasing the intensity of the light). He also recommended that the flash be lengthened and only three keepers be retained.³⁸

General repairs were made to all the buildings in 1915 and on 9 August 1916, *Cape Leeuwin Lighthouse and Quarters* was transferred from the Western Australian government to the Commonwealth. At the time of the transfer the land, buildings (the lighthouse, four cottages and other miscellaneous structures), and water usage rights were valued at £15,776.³⁹

In 1925, the light's power was increased to 780,000 candelas with the installation of a larger kerosene mantle. In 1953, the verandahs on the cottages were enclosed and garages were erected next to each dwelling. It is not known when the fourth cottage was removed although the foundations are still in situ.⁴⁰ Tenders were accepted for additional structures in January 1954. Mr J.R. Trantham, won the tender to construct three timber framed buildings. These included a fuel store (Building No.5), a power house (Building No. 6) and a weather hut (Building No. 7). Two years later in September 1955, a marine radio beacon was installed. Sometime in the late 1970s a new brick power house and beacon room (Building No. 8), were constructed.⁴¹

In June 1982, the mantle lamp was converted from vaporised kerosene to a 1000 watt halogen tungsten filament lamp inside the original Chance lens. The light's intensity was increased to 1,000,000 candelas with a range of 26 nautical miles.⁴² Power was supplied by an on-site diesel engine. When the lamp was converted, it was one of the last coastal lights still operating on pressurised kerosene vapour and mantles.⁴³ The lighthouse was automated in November 1995.⁴⁴

In June 1996, *Cape Leeuwin Lighthouse and Quarters* was entered into the Augusta-Margaret River Municipal Heritage Inventory. (This inventory does not designate management categories).

Cape Leeuwin Lighthouse and Quarters was transferred from the Australian Maritime Safety Authority (AMSA or the Commonwealth) to CALM in 2000.⁴⁵ While AMSA retains responsibility for the lighthouse tower, the lighthouse precinct is now vested in the Conservation Commission of WA as part of the

³⁸ Brewis, C.R.W., *Lighting of the west coast of Australia. King George Sound to Cambridge Gulf*, Dept. of Trade and Customs, Victoria, 1912, p. 15.

³⁹ Danvers, p. 14.

⁴⁰ Danvers, p. 14.

⁴¹ Danvers p. 14.

⁴² Reid, p 122.

⁴³ Cumming, D.A, Glasson, M. & McCarthy, M., 'Lighthouses of the Western Australian coast and off-shore islands, Working File #1: Lighthouses and lightstations A to Z', Dept. Maritime Archaeology, West Australian Maritime Museum, No. 100., 1995, Cape Leeuwin.

⁴⁴ Ayris, p. 37.

⁴⁵ CALM, 'Leeuwin-Naturaliste National Park: Cape Leeuwin Lighthouse Concept Plan', 15 October 2001, p.1.

Leeuwin Naturaliste National Park. Since this vesting, CALM has produced a concept plan inviting public comments for conceptual ideas on providing a balance between the conservation of the site and the promotion of the site as a tourist destination.⁴⁶ The site is currently a popular tourist destination for intra-state, inter-state and overseas visitors.

13.2 PHYSICAL EVIDENCE

Cape Leeuwin Lighthouse and Quarters comprises the stone lighthouse tower and oil store (1896), three stone cottages (1896) detached stone laundries to the cottages (1896), two asbestos cement garages (1953), asbestos cement store (former fuel room 1954), asbestos cement office (former power house, 1954), asbestos cement weather room (former radio hut 1954) and a new brick power house and beacon room (1970s).

Cape Leeuwin Lighthouse and Quarters sit on a windy, narrow stretch of land with the Indian Ocean on the western side and the Southern Ocean on the eastern side. The Cape represents the south-west 'corner' of Western Australia. The coastline in this area is rocky and the sea to the south of the lighthouse is strewn with rocky shoals and several small islets. What vegetation that has been able to survive is stunted due to the high winds which this area often experiences.

The site is defined by a sealed car park which lies to the north of the buildings. The lighthouse precinct is enclosed behind a cyclone mesh fence. A sealed bitumen path leads from the entry gates past the western side of the service buildings and up to the lighthouse. Bitumen driveways lead down to the garages (Buildings 2b and 3b). The cottages and service buildings form two separate parallel groups stretching north-south. The eastern line is represented by the three cottages, while the western line contains the new service buildings to the north with the lighthouse at the southern end.

Lighthouse and Oil Store (1896)

This building has two parts, the 35 metre tall circular stone tower, which sits on a squared base, and a single storey room, which once served as the oil store, on the southern side. The stone work is quarry-faced limestone with dressed stone to all openings and corners. The main entry is on the northern side through a pair of timber doors. Windows are alternately spaced around the tower, with a row of windows beneath the parapet. Some of the windows have fixed panes in metal frames, while others have been replaced with glass blocks. Above the parapet is the lantern which opens out onto a circular balcony with an iron floor. An iron balustrade runs around the outer edge of the walkway. An aluminium mesh has been placed around the balustrade. The roof of the lantern dome is copper sheeting. The interior of the tower features a circular iron staircase with ornamental balustrading. Through the centre of the staircase runs the metal casing which holds the clockwork mechanism. The original Chance

⁴⁶ CALM, p. 1.

dioptric lens is still insitu in the lantern room which has a cast iron floor. The door leading out onto the balcony is cast iron.

The former oil store is accessed through a pair of ledged and braced doors. Additional openings lie in the eastern (double doors) and western walls (fixed window). The hipped roof is covered with corrugated galvanised iron.

Both the tower and the former oil store appear to be in good condition and the original fabric and fittings remain largely intact. The lighthouse retains its original function while the oil store is no longer used for its original purpose.

Light keepers' Quarters (1896)

The three stone quarters are identical in layout and are located on land which slopes gently down to the east. Buildings 3 and 4 are constructed of limestone, while Building 2 (the northern most cottage) is constructed of granite. The walls of the cottages are constructed using random coursed stone (painted), the hipped roofs are covered with corrugated galvanised iron and the verandahs have been enclosed with asbestos cement sheeting on a timber frame. The chimney stacks have been removed and replaced with metal flues. Much of the original timber joinery (including doors and windows) has been retained as have the lathe and plaster ceilings and wall finishes. The front doors lie on the western side. The layout of the buildings is two front rooms either side of a central corridor. The east-west corridor leads into a larger room at the back (east) with a slightly smaller room opening off it on the northern side. On the eastern side of the large room, a door leads off onto the rear, enclosed verandah which provides access to three rooms lying under a skillion roof. (see plans). As the ground on the eastern side of the building slopes away, stairs permit access to and from the rear verandah.

The buildings are in good condition and have not undergone extensive alterations with the exception of the enclosure of the verandahs and modifications to the ablution facilities. The cottages are still occasionally used for residential purposes, although for most of the year they lie unoccupied.

Laundries and W.C.s (1896)

The three structures are constructed from painted, random coursed stonework and asbestos cement sheeting on the northern sides. Buildings 2a and 4a are covered with hipped, corrugated galvanised roofs, while Building 3a has had its hipped roof replaced with a skillion. The layout is one large room (the laundry) on the western side, with a smaller room (the toilet) on the eastern side. The floors are concrete. The structures are generally in good condition and have not undergone any extensive alterations with the exception of Building 3a which has had its roof replaced.

Garages (1953)

Buildings 2b & 3b have a timber framed construction which is clad with asbestos cement sheeting. The gable roofs are covered with corrugated

asbestos sheeting. The floors are concrete. The garages are in good condition and remain largely unaltered.

Former Fuel Room (1954)

This structure (Building 5), together with Buildings 6, 7, and 8, forms part of a new group of service buildings. The building is timber framed and clad with asbestos cement sheeting. The gable roof is covered with corrugated asbestos sheets. The building is in good condition and is generally unaltered. Originally built to store fuel, it is now used as the tourist kiosk.

Former Power House (1954)

Building 6 is timber framed structure clad with asbestos cement sheeting. The gable roof is covered with corrugated asbestos cement sheeting. The building is in good condition and remains generally unaltered. It was originally constructed to house the generator which provided emergency power. The generator has been removed and it is now used as an office.

Former Radio Hut (1954)

Building 7 is timber framed structure clad with asbestos cement sheeting. The gable roof is covered with corrugated asbestos cement sheeting. The building is in good condition and remains generally unaltered. It was originally used as a communications hut but is now used to record weather information.

Power House and Beacon Room (1970s)

Building 8 is constructed from brick with a gable roof covered with corrugated asbestos cement sheets. The building is in good condition and has not been altered. It is used to house the emergency generator and the radio beacon equipment.

13.3 COMPARATIVE INFORMATION

Prior to the construction of Cape Leeuwin, Western Australia had constructed only four lighthouses: the first Rottnest tower (1851), the first Breaksea tower at Albany (1858), Point Moore at Geraldton (1878) and Jarman Is near Cossack (1888). Of these four early lighthouses, only Point Moore and Jarman Island remain intact, and Breaksea is a ruin. Both these remaining lighthouses are constructed from pre-fabricated metal sheets. Henry Trigg's lighthouse was replaced with a new sandstone tower (33.46 m), in 1896. A secondary stone lighthouse was built on Rottnest at Bathurst Point in 1900 (19.8 m) . The 1858 Breaksea light was replaced with a new stone tower in 1902 (10.3m).

After the initial early period when only a few lights were constructed, Western Australia went on to build an additional eight lighthouses prior to the handover the Commonwealth Government. Of these lights, only two had stone towers Cape Naturaliste (18.89 m) and Cloat's Point light (21.94 m).

At 35 metres, Cape Leeuwin lighthouse is the tallest tower in Western Australia.

13. 4 KEY REFERENCES

Ayris, Cyril, *Leeuwin Lighthouse: a brief history*, Cyril Ayris, Perth, 1996.

Danvers, Architects, 'Conservation Plan of Cape Leeuwin Lightstation, Western Australia', September 1992

National Trust Assessment Form (Lighthouse),

National Trust Assessment Form (Residences),

Australian Heritage Commission Data Sheet

13. 5 FURTHER RESEARCH
