



REGISTER OF HERITAGE PLACES

CORRECTED – Assessment Documentation

On 9 July 2021 the Heritage Council resolved to correct the name of Vlaming Head Lighthouse Group to be Vlamingh Head Lighthouse Group under s.53(2)(a) of the *Heritage Act 2018*

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)

- 2.16.1 Dealing with hazards and disasters
- 3.8.1 Shipping to and from Australian ports
- 5.1 Working in harsh environments
- 7.7 Defending Australia

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 106 Workers (incl. Aboriginal, convict)
- 201 River and sea transport
- 501 World Wars & other wars
- 507 Water, power, major transport routes

11.1 AESTHETIC VALUE*

Vlamingh Head Lighthouse Group is a landmark from both the ocean and the sea in its elevated position on a bluff. (Criterion 1.3)

Vlamingh Head Lighthouse Group forms a cohesive cultural environment in the harsh natural land and sea scape, sharing the aesthetic character of concrete and steel elements. (Criterion 1.4)

11.2 HISTORIC VALUE

Vlamingh Head Lighthouse and associated buildings were an important part of the development of coastal lights in Western Australia during the early 20th century when the increased population of the State and the development of the North West meant a greater number of ship movements. (Criterion 2.1)

The Radar Station is a remnant of the World War II installation established as part of Operation Potshot in association with Learmonth airfield and was part of a system of radar stations established in Western Australia the early 1940s. (Criterion 2.1)

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

For consistency, all references to garden and landscape types and styles are taken from Ramsay, J. *Parks, Gardens and Special Trees: A Classification and Assessment Method for the Register of the National Estate*, Australian Government Publishing Service, Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

The Radar Station played an important role in protecting the State between 1943 and 1946. (Criterion 2.2)

Vlamingh Head Lighthouse Group is one of the earliest European inhabited sites on the North West Cape. (Criterion 2.2)

Vlamingh Head Lighthouse Group demonstrates a way of life no longer practised in where accommodation was provide for those working in the adjacent lighthouse. (Criterion 2.2)

The place is associated with construction worker Joseph Frank Reddy whose grave is a stark reminder of the harshness of life in isolated locations of the North West in the early 20th century. (Criterion 2.3)

11.3 SCIENTIFIC VALUE

Vlamingh Head Lighthouse demonstrates the shuttered stone construction technique, which uses concrete and local stone as a primary building material. (Criterion 3.1)

11.4 SOCIAL VALUE

Vlamingh Head Lighthouse Group is highly valued by the local and wider community for its historical associations with coastal shipping and World War II defence, and for the grave of construction worker J.F. Reddy, as evidenced by the Lighthouse Caravan Park development, restoration activities, well maintained gravesite and heritage listings at State and National level. (Criterion 4.1)

Vlamingh Head Lighthouse Group contributes significantly to the local and wider community's sense of place for its landmark value and historical associations. (Criterion 4.2)

12. DEGREE OF SIGNIFICANCE

12.1 RARITY

The Lighthouse Quarters is rare as a duplex type light keepers residence. (Criterion 5.1)

12.2 REPRESENTATIVENESS

Vlamingh Head Lighthouse is a good representative example of shuttered stone construction from the early 1900s. (Criterion 6.1)

Vlamingh Head Lighthouse, Store and Quarters assist in understanding the place, and represent a typical example of a lighthouse complex in an isolated location on the north west coast. (Criterion 6.2)

12.3 CONDITION

Vlamingh Head Lighthouse Group is in fair to good condition. There are rusted elements in the exposed lantern area of the Lighthouse, and the remains of the camouflage netting is entirely rusted.

12.4 INTEGRITY

Vlamingh Head Lighthouse Group no longer functions in its original purpose. The entire site is a place of tourism interest. The Quarters are integral within a tourist development and still function as residential accommodation. Although the original functions will never be reinstated, the functions are clear and as such the place has a moderate degree of integrity.

12.5 AUTHENTICITY

Vlamingh Head Lighthouse Group shows some evidence of changes to the fabric over time, particularly the painting of the Radar Station. Minimal external changes have taken place to the Quarters, but the interior situation is unknown. Despite that, the place displays a moderate to high degree of authenticity.

13. SUPPORTING EVIDENCE

The documentary evidence has been compiled by Irene Sauman, Historian. The physical evidence has been compiled by Laura Gray, Heritage and Conservation Consultant.

Supporting evidence has been taken from J. Christopher Keen, KTA Partnership, *Conservation Plan Vlamingh Head Lighthouse, Exmouth*, Dept of Administrative Services, 1992; David Wood, Wood Fiocco & Associates, *Exmouth 31 Radar Station Conservation Plan*, c.1995 and Palassis Architects, *Vlamingh Head Lighthouse and Store, Exmouth: Final Report*, January 2001.

Curtilage for the various elements is shown on the accompanying site plan. Curtilage for the Lighthouse and Radar Station on Lot 4 includes an access way along Johnson Road. Curtilage for the Quarters and Grave on Lot 2 include access from Yardie Creek Road.

13.1 DOCUMENTARY EVIDENCE

Vlamingh Head Lighthouse Group comprises Vlamingh Head Lighthouse, Store and Quarters built by the Public Works Department in 1912, the grave of Frank Joseph Reddy, a labourer who died in 1912 during construction of the Lighthouse complex, and the remains of the World War II Exmouth 31 Radar Station (1943-46).

The first lighthouse built in Western Australia was on Rottnest Island to enable safer approach to the Fremantle port. It began operation in 1851. Albany was the major port of the Swan River Colony at this time, and lights were established there on Breaksea Island and King Point in 1858. These lighthouses were of masonry construction. In 1878, a prefabricated cast iron light tower, imported from England, was erected at Point Moore to serve the Geraldton port.¹

The construction and maintenance of lighthouses along the coastline was the responsibility of each colony, but it was not until the granting of independence in 1890 and the discovery of gold that Western Australia could afford to build more lighthouses. The need was also greater, as the rapidly increasing population and spread of settlements meant a greater number of shipping movements around the coast. The developing pearling industry, and gold finds in the Pilbara and Kimberley regions, led to further pastoral expansion in those areas. Three lighthouses were built in the late 1890s, and eight lights came into operation between 1900 and 1905. While the population of the State stood at 179,000 in 1900 it had reached 282,000 by 1911.²

In 1906, the Federal Government was indicating its intention to take over control of all coastal lights. This prompted a flurry of activity from the West Australian Government, because, as the Colonial Secretary pointed out:

[I]f we do not get all necessary lights established before that I am afraid it will be difficult to get the Federal Govt to put them there, but if the lights are erected now, the F. Govt. must continue them.³

The area of coastline most in need of navigation lights was the north west coast. At the request of the Public Works Department, the Chief Harbour Master, Captain G. Irvine, called for submissions from shipmasters 'in the trade' as to

¹ Cumming, D. A., Glasson, M. & McCarthy, M., *Lighthouses on the Western Australian coast and off-shore islands*, WA Maritime Museum, Fremantle, November 1995, pp. 6-9.

² Cumming, D. A., Glasson, M. & McCarthy, M., op cit, pp. 6-9.

³ Correspondence 25 September 1906, Harbour & Lights file, SROWA, AN 16/5, ACC 1066 Item 549/1911.

where lights should be established in the north-west. Cape Inscription, Point Cloates, Bedout Island and Cape Leveque were the most favoured sites.⁴

A Board of Enquiry was established to interview shipmasters and make final recommendations. The Board concurred with the original choices, submitting their report on 13 March 1907. The previous day, however, the steamship *Mildura*, sailing from Wyndham to Fremantle, had been wrecked off the North West Cape and the siting of lighthouses in that section of the coast, in particular at Point Cloates, was called into question. Following an enquiry into the circumstances of the shipwreck, the Board recommended an additional three lights for the area, but only one, at Vlamingh Head, was approved for construction at the time.⁵

Vlamingh Head was about 60 miles from Point Cloates, and there had been a number of earlier shipwrecks recorded along that section of coast, including the *Rapid* (1811), pearling schooner *Fairy Queen* and barque *Stefano* (1875), steamship *Perth* (1877), cutter *Ada May* (1899) and steamship *Zuir* (1902).⁶

The State had insufficient funds to build all five lighthouses, so it proceeded with construction of the original four and left the fate of the Vlamingh Head Lighthouse to the Federal Government. The four lighthouses were completed in 1909-1910, but the Federal Government had still not taken over responsibility for lighthouses by that time, so the State borrowed an extra £10,000 in 1910 for construction of the lighthouse at Vlamingh Head.⁷ The Commonwealth Navigation Act covering lighthouses was proclaimed in 1911, but the Commonwealth did not take control until 1915.⁸

A 160-acre Reserve was allocated for the Vlamingh Head Lighthouse, as Reserve 14933, designated Lyndon Location 22.⁹ Building commenced in November 1911.¹⁰ The Lighthouse was described in 1912 by G.E. Farrar, designing engineer for the Harbour and Lights Department,

The site of the tower is 200 feet above high-water mark. The tower is being constructed in cement concrete, and will be 30 feet in height from base to level of gallery floor and 17 feet 8 inches in diameter at the base. In this will be installed a second-order dioptric double flash light comprising optic of four panels making one revolution in 15 seconds, two flashes every 7½ seconds; duration of flash, 3/10th of a second; range of visibility, 18 miles...¹¹

A later description puts the height of the tower at 40 feet, which may refer to the total height including the lantern.¹² The Lighthouse, Store and Quarters were built of shuttered stone. In this construction method, the walls are built up by layers of

4 Correspondence 25 September 1906, Harbour & Lights Dept file, Item 549/1911, op cit.

5 Correspondence, 13 & 23 March, 2 April 1907, Harbour & Lights Dept file, Item 549/1911, op cit; *Northern Times*, 23 March 1907.

6 Keen, *Conservation Plan*, op cit, p. 13.

7 Correspondence, 4 October 1909, Harbour & Lights Dept file, AN 16/5 ACC 1066, Item 959/1909.

8 Correspondence 14 October 1936, Point Cloates lighthouse, National Archives file, Series PP828/1, 1975/75, 1936-1971.

9 DOLA, Reserves Index, Reserve 14933; Farrar, G. E., 'Recent examples of lighthouse construction on the West Australian coast', *Western Australian Institution of Engineers. Proceedings*, 1912, pp. 103-111; Site plan, 5 November 1940, Vlamingh Head Lighthouse site, National Archives file, Series K273/44, 1943/22 Part 1, 1943-1967.

10 Brewis, Commander, *Lighting of the Western Coast of Australia (King George Sound to Cambridge Gulf)*, Gov Printer Victoria, November 1912, p. 21.

11 Farrar, G. E., op cit. His signature appears on the original plans for the place.

12 Brewis, Commander, op cit, p. 21.

concrete mortar and stone within a formwork of rough timber. The exterior and interior of the walls were then rendered or plastered.¹³

All the internal ironwork of the tower, including the floors and stairs, was made in Perth. The lantern was a prefabricated steel-domed apparatus supplied by Chance Bros Ltd of Birmingham.¹⁴ The light was fuelled by kerosene, a supply of which was kept in the Store adjacent to the Lighthouse.

The Quarters were described as similar in design to those at Point Cloates. The Quarters consisted of a duplex residence for two light keepers and their families. Each duplex half comprised a living room, two bedrooms, kitchen, bathroom and store room, and spacious verandah back and front.¹⁵ The rooms had ripple iron ceilings.¹⁶ Stabling and washhouses were also provided.¹⁷ The Quarters were located a quarter mile from the Lighthouse, 'in order to obtain the necessary shelter'. Accommodation for an unmarried light keeper is also reported as having been provided, but no information on this structure has been found.¹⁸ All construction work was carried out by the Department of Public Works at an estimated cost of £17,300.¹⁹

A 2-foot (600mm) wide tramway was built from the beach landing place and materials and provisions were hauled along the track on a float drawn by horse power.²⁰ The length of the tramway was 3.25 miles to the Quarters with a branch that wound 0.75 miles up to the Lighthouse.²¹ Drinking water for the workmen during construction was provided by a condensing plant, but the supply was of a poor quality and all the men suffered from dysentery. One of the labourers, Frank Joseph Reddy, died of the condition on 27 May 1912, at the age of 26, and was buried north-east of the Quarters.²² A large underground tank, with a capacity of 16,000 gallons, was installed for the lighthouse keepers. Water was pumped by hand up to service tanks at the Quarters.²³ The condenser remained in case of emergency but in later years, when the tank supply failed, water was carted from Yardie Creek Homestead.²⁴

Vlamingh Head Lighthouse commenced operation on 10 December 1912. It was the first navigation beacon encountered on the west coast by ships travelling from Singapore and other Asian ports.²⁵ When Commander Brewis conducted his survey of lighthouses for the Commonwealth Government in 1912, he recommended that wireless telegraph communications be installed and a Morse lamp provided for communication with ships. He also recommended that the accommodation provided for an unmarried third light keeper be increased to accommodate a married man and his family.²⁶ The Morse lamp was known to have been provided.

13 Keen, *Conservation Plan*, op cit, 22.

14 Keen, *Conservation Plan*, op cit, 22; Farrar, G. E., op cit.

15 Farrar, G. E., op cit.

16 Correspondence, 14 June 1968, National Archives file, Vlamingh Head, National archives file, Series K432, 1955/149, 1959-1974.

17 Farrar, G. E., op cit.

18 Brewis, Commander, op cit, p. 21.

19 Farrar, G. E., op cit.

20 Farrar, G. E., op cit; Brewis, Commander, op cit, p. 21.

21 Site plan, 5 November 1940, National Archives file, 1943/22 Part 1, op cit.

22 Death certificate of F. J. Reddy, from Keen, *Conservation Plan*, op cit, p. 16.

23 Valuation of lighthouse property, 16 September 1943, National Archives file, 1943/22 Part 1, op cit.

24 Correspondence 21 February 1956, Vlamingh Head, National archives file, Series K432, 1955/150, 1955-1969.

25 Keen, *Conservation Plan*, op cit, 14.

The pilotage information provided for Vlamingh Head stated:

The anchorage is approached with the lighthouse bearing 80 degrees True, keeping the lead going with soundings from 9 fathoms between the 3 fathoms bank and the main reefs, and gradually shoaling to 6½ fathoms at the anchorage when the lighthouse at 60' bears 70 degrees true, and the white painted shed on the beach 134 degrees true.

The anchorage at this landing is not safe at all times, and care must be taken if remaining overnight. Whilst the approach is at time difficult owing to the heavy ground swell which rolls into the anchorage and breaks heavily over the 3 fathoms bank on the outside, the holding ground is good.²⁷

Vlamingh Head was difficult to supply because of its isolation. Supplies were taken by steamship from Fremantle to Ashburton Roads (Onslow), which was the nearest port some 150 miles away, and then back to the Cape by schooner. Mails and other supplies were brought overland from Onslow by camel, although during World War I, at least, the mail was delivered once a month from Carnarvon by an Aboriginal mailman.²⁸

An early light keeper was Sydney Arthur Butler, who was sent to Vlamingh Head in 1914 with his wife Mary Jane and their five-month-old child. The other light keeper at this time was a single man. The Lighthouse Reserve was fenced for the benefit of the light keepers. As well as a Clydesdale horse that pulled the tramway trolley, Mary Butler recorded that she kept a herd of goats for milk and collected turtle eggs from the beach to supplement their provisions. She also recorded the presence of Aborigines, who appear to have camped near the Lighthouse from time to time. Other human contact was with Yardie Creek Station, where meat could also be obtained. The Quarters were described as 'excellent with large rooms and verandahs' but in the evening the crabs came up from the beach and swarmed across the verandahs, making them unusable at night.²⁹

Starting between 4pm and 6pm and finishing as late as 8am, the keepers kept watch throughout the night. The light source was derived from kerosene vapour sprayed onto the mantle and the lens was rotated by a system of gears, motivated by a weight situated in a column running up the centre of the tower. It was the duty of the light keeper to keep up the pressure in the kerosene tanks and to periodically wind the lens weight. Maintenance and other work on the light had to be carried out during the daylight hours.³⁰

In 1943, RAAF support unit No. 310 Radar (later numbered 31) was sent to North West Cape as part of Operation Potshot, which was the name given to the Exmouth Gulf area where an American submarine refuelling base and the Learmonth air base had been established. The 31 Exmouth Radar Station was established on the bluff immediately north of the Vlamingh Head Lighthouse and the Lighthouse Quarters were occupied by R31 personnel. The civilian light

26 Brewis, Commander, op cit, p. 21.

27 Cumming, D. A., Glasson, M. & McCarthy, M., op cit, p. 15B.

28 Brewis, Commander, op cit, p. 21; Butler, Mary Jane, undated letter to the Shire of Exmouth, in Keen, *Conservation Plan*, op cit, pp. 17-19.

29 Butler, Mary Jane, op cit; Farrar, G. E., op cit.

30 Keen, *Conservation Plan*, op cit, pp. 9 & 14, citing, 'Report of watches kept and duties performed, NW Cape', National Archives file, PT 457/3, 1944-1964.

keepers had been evacuated from the area. The purpose of the Radar Station was as an early warning and tracking facility for aircraft coming in from the sea.³¹

The Radar Station was surrounded by wooden walls with sand bags sandwiched between them and the whole site was camouflaged with wire netting covered with spinifex. Two 18-pound guns were installed. By September 1943, there were 43 personnel stationed at the Cape.³²

The Radar Station was one of a number of similar defence installations located around the coastline of Australia during World War II. Fifteen Radar Stations had become operational in Western Australia during 1943. Except for a gap at Carnarvon and another at Roebourne, the West Australian coast had radar coverage from Albany to Cambridge Gulf, where Northern Territory radar took over.³³

The Potshot submarine base was not successful as a refuelling station, due to the often extreme weather conditions in the area. Three enemy raids on the base were made in 1943, the aircraft involved being tracked by the Radar Station for hundreds of miles.³⁴ The 31 Radar personnel were also responsible for manning the Lighthouse on at least one occasion during the War, although for most of this period it appears not to have been operational.³⁵

A second radar station, no. 161 was relocated to Vlamingh Head from Learmonth airbase in June 1944. It was sited beside the airstrip that had been established northeast of the Lighthouse Quarters. In August 1944, this radar station was destroyed by fire and no. 155 mobile radar station was set up on the site to replace it.³⁶

On 2 February 1945, both radar stations were severely damaged by a cyclone. A lightweight air warning station (LW/AW) was flown in and erected on a nearby site to replace the damaged 31 Radar Station. The replacement LW/AW station was also numbered 31. The 155 radar station was repaired but not put into use on a regular basis and the 155 unit was disbanded in October 1945. After the War, the LW/AW station provided navigation information for Qantas flights from Europe flying through Ceylon.³⁷ On 17 February 1946, fire destroyed the LW/AW station and the radar base was decommissioned. The Lighthouse must have been in operation again by this time and manned by service personnel, as it was reported that the radar unit could not leave until civilian light keepers had arrived to take over the Lighthouse duties. The Radar Station personnel left Vlamingh Head on 18 March 1946, and the 31 Radar Station unit was formally disbanded on 25 March 1946.³⁸

Vlamingh Lighthouse continued in normal operation after the War. In 1953, a cyclone caused considerable damage to the buildings. The roofing and verandah at one end of the Quarters shifted and required reconstruction. Many windows

31 Peet, Lindsay J., *World War II Military aviation sites survey: Western Australia*, Aviation Heritage Museum of WA, June 1996, pp. 31-32 & 57; Wood Fiocco & Associates, *Conservation Plan*, pp. 1-15 & sketch site plan of the station, p. 20; Correspondence, 20 October 1943, National Archives file, 1943/22 Part 1, op cit.

32 Wood Fiocco & Associates, *Conservation Plan*, pp. 1-15 & sketch site plan of the station, p. 20.

33 Peet, Lindsay J., op cit, p. 31.

34 Wood Fiocco & Associates, *Conservation Plan*, pp. 16-22.

35 Wood Fiocco & Associates, *Conservation Plan*, pp. 1-15 & sketch site plan of the station, p. 20; Correspondence, 20 October 1943, National Archives file, 1943/22 Part 1, op cit.

36 Fenton, M. E., *The Exmouth Radar Story: 310 RS, 31 RS, 161 RS, 155 RS*, M. E. Fenton, Locksley (SA), 1994, p. v.

37 Wood Fiocco & Associates, *Conservation Plan*, pp. 16-22.

38 Wood Fiocco & Associates, *Conservation Plan*, pp. 14 & 19; Fenton, M. E., op cit.

were broken in both the Quarters and the Lighthouse, poultry sheds were demolished and the windmill, fences, aerals and power poles were badly damaged. A team of workmen were sent by ship to make the necessary repairs.³⁹

There were improvements to living conditions recorded in the immediate post-war period, some of which, such as the installation of a powerhouse with diesel engine and generator, most likely date from the war years. Other improvements included installation of LP gas and solar hot water systems, and new laundries with stainless steel troughs and gas coppers installed on the rear verandah. Fibre sheet verandah dados were added, and a septic system, double garage with gravel floor, and a 3,000-gallon concrete stove water tank were installed in 1956. The Lighthouse continued to operate with a kerosene fuelled light.⁴⁰

In 1963 an agreement was finalized between the Australian and United States governments for construction of a US controlled Naval Communication Station at North West Cape. Construction of the Station also resulted in the establishment of Exmouth, as a support town. The installation at the Communication Station included a large VLF aerial array with 13 support towers.⁴¹ In 1967, a light was installed on Tower 11 at a height of 1,196 feet (364.5 metres), and the Vlamingh Head Lighthouse was decommissioned 'on or about' 21 April 1967.⁴²

In 1968, pensioner Robert Christie was occupied the Lighthouse Quarters as caretaker. Twice that year, curtains in the lantern dome caught fire, caused by the intense heat generated from the lens reflector. In 1970, with the backing of the Tourist Development Authority, the Shire of Exmouth was endeavouring to gain control of the Lighthouse to develop as an historical exhibition.⁴³

In 1976, Vlamingh Head Lighthouse and Quarters were classified by the National Trust, and in 1978, the place was entered on the Register of the National Estate.⁴⁴ The Vlamingh Head Lighthouse Reserve 14933 was cancelled in 1981.⁴⁵

In 1987, the 64 hectare Lyndon Location 22 was subdivided on Plan 14685 into Lot 4 (1,647 square metres), being the site of the Lighthouse, Store and Radar Station and Lot 5, which encompassed the remainder of the land.⁴⁶ Lot 5 was acquired by the Shire of Exmouth and subdivided on Plan 14686 to create Lot 2 of 14.8 hectare incorporating the site of the Quarters and Grave.⁴⁷ Lot 2 was then purchased by Harlena Nominees Pty Ltd, who developed a tourist operation on the site with a store, chalets, bungalows, caravan bays, a swimming pool, gas barbeques and tennis court.⁴⁸ The place operated as the Lighthouse Caravan Park, with the Lighthouse Quarters occupied by the owner/manager.⁴⁹ It is likely during this occupation that new roof cladding was installed on the Quarters.

39 Vlamingh Head quarters, National Archives file, Series K1150, A325, 1953-54.

40 Correspondence and list of buildings, 10 April 1967, National Archives files, 1955/149 & 1955/150, op cit.

41 Palassis Architects, *Naval Communication Station Harold E. Holt: A conservation plan for Department of Defence*, draft, January 2002, p. 33

42 Correspondence, Discontinuance of Vlamingh Head Lighthouse, 13 March 1967, National Archives file, Series K432, 1967/100, 1966-1973

43 National Archives file 1955/149, op cit. Folios dating from the early 1970s were sealed and could not be viewed.

44 Heritage Council database.

45 DOLA Reserves Index, Reserve 14933.

46 Certificate of Title, Vol. 1125 Fol. 930; DOLA, Survey plans 14685 & 14686.

47 Certificate of Title Vol. 1782 Fol. 438 & 439, 5 November 1987.

48 Ningaloo Lighthouse Caravan Park website, www.ningaloolighthouse.com.

49 Certificate of Title, Vol. 1782 Fol. 440, 5 November 1987.

In 1992, the Western Australian office of the Commonwealth Department of Administrative Services commissioned a conservation plan for the Vlamingh Head Lighthouse, and the Lighthouse and Quarters were given interim registration on the State Register of Heritage Places.⁵⁰

In 1995, ownership of Lot 4 was transferred to the Shire of Exmouth.⁵¹ Although the Lighthouse and Store were deteriorating the Shire did not have the funds for the required restoration work. The Shire commissioned a conservation plan for the Radar Station about this time.⁵² Some restoration work, such as stabilising the structure and painting has been undertaken. The site adjacent to the Radar Station has been developed as a lookout and a telescope has been installed.⁵³

A plaque on the Radar Station reads:

World War II Aircraft Warning Radar.
Wrecked by cyclone February 1945
Shipping in Exmouth Gulf was
bombed by Japanese aircraft
on three nights in May 1943.⁵⁴

In 1995, ownership of the Lighthouse Caravan Park was transferred to Ningaloo Lighthouse Resort Exmouth Pty Ltd.⁵⁵

In 1998, Vlamingh Head Lighthouse, Quarters, Radar Station (R31) and Grave were entered on the Shire of Exmouth Municipal Inventory. There are no management recommendations.⁵⁶

In March 1999, Cyclone Vance inflicted more damage on the Lighthouse. Funding at this time was provided by the Maritime Museum of WA and the Heritage Council of WA for work on the exterior of the Lighthouse and some \$80,000 was spent on restoration, overseen by Palassis Architects.⁵⁷

A plaque attached to the lighthouse commemorates the restoration work and reads in part:

Vlamingh Completed	Head	Lighthouse 1912
Hon. J.	Scaddan	Premier
Hon. W.D.	M.L.A. Johnson	M.L.A.
Minister	for	Works
James	Thompson	M.Inst.C.E.
Engineer in Charge. ⁵⁸		

Business partners Ron Campbell and Wayne Britton restored the interior of the Lighthouse, stripping off old paint and repainting and putting all the equipment in good working order. In May 2001, Ron Campbell secured a commercial lease on the Lighthouse for tours and associated activities, such as whale spotting. A kitchen was installed in the Store to provide drinks and snacks and solar panels

⁵⁰ Keen, *Conservation Plan*, op cit.

⁵¹ Certificate of Title, Vol. 2041 Fol. 19, 24 April 1995.

⁵² Wood Fiocco & Associates, *Conservation plan*, op cit.

⁵³ Physical evidence.

⁵⁴ Physical evidence.

⁵⁵ Certificate of Title, Vol. 1782 Fol. 440, 22 November 1995.

⁵⁶ O'Brien Planning Consultants, *Shire of Exmouth Municipal Heritage Inventory*, 1998, Places 6, 16, 17 & 18.

⁵⁷ Palassis Architects, *Final Report*, op cit.

⁵⁸ Photograph of plaque, physical evidence.

were installed to provide electricity for the Store kitchen.⁵⁹ This lease appears to have ended recently.

In 2004, Vlamingh Head Lighthouse and Store are unoccupied, the Radar Station remains standing, the Lighthouse Quarters are occupied as a residence by the owner/manager of the Lighthouse Caravan Park and the Grave is well maintained.

13.2 PHYSICAL EVIDENCE

Vlamingh Head Lighthouse Group comprises Vlamingh Head Lighthouse and Store, Radar Station (R31) and associated remnants, Lighthouse Quarters and Reddy's grave.

Vlamingh Head Lighthouse Group is located at the northern most extremity of the Cape Range, on the North West Cape, 17km north of Exmouth that is located 1270km north of Perth. Yardie Creek Road approaches the site from the east from Exmouth; with the Grave and the Lighthouse Quarters situated within the Lighthouse Caravan Park nestled at the base of the Cape Range bluff, on which the remaining elements of the *Vlamingh Head Lighthouse Group* are located. *Vlamingh Head Lighthouse Group* is located on the south side of Yardie Creek Road, with the Lighthouse access road approximately one kilometre west of the caravan park, winding its way up the bluff to the highest point approximately 800 metres along Johnson Road, where the Lighthouse and Store, are located. A further 100 metres on the east side of the bluff, on a lower platform, is the Radar Station and associated elements. Vlamingh Head Lighthouse is a landmark on North West Cape.

At the top of the bluff, Johnson Road approaches the Lighthouse from the south west, with the Store and then the Lighthouse, on the south east side. The road continues past the Lighthouse, down the other side of the bluff and plateaus into an informal unsealed car park where the Radar Station and associated remnants are located on the north-west, with the recent lookout and telescope close by on the north east. On a separate site, Reddy's grave is located on the eastern extremity of the Lighthouse Caravan Park, only 10 metres south of Yardie Creek Road and approximately 100 metres east of the entry to the caravan park, on the corner of an unnamed non-gazetted road (part of lot 6). The Lighthouse Quarters are located central within the caravan park, providing residential accommodation for the owner of the caravan park. A gravel pedestrian track has been worn into the steep bluff connecting the Lighthouse Quarters at the base of the bluff and the Lighthouse at the top of the bluff. The caravan park owners discourage the use of the pathway.

The Lighthouse dominates the site of *Vlamingh Head Lighthouse Group*, overlooking the Indian Ocean to the west and north, and the Exmouth Gulf to the north-east. The Lighthouse is a landmark rising over 15m in height from the highest point of the north bluff of Cape Range. The 4.25m diameter base is defined by a concrete apron perimeter and broad steps on the south-east side aligned with the double entry doors. The rendered concrete form tapers up from the base to the curved balcony support at 9m in height. The balcony encircles the concrete form and is accessed by a single door, since boarded over. A cast iron balustrade with horizontal elements between vertical posts surrounds the balcony. Two metres above the balcony is a narrow decorative cast ledge and balustrade extending from the lantern floor level. The Lighthouse structure above that level is a steel framed glazed construction topped with a domed metal roof.

⁵⁹ Certificate of Title, Vol. 2041 Fol. 19, 28 April 1995; 'Lighthouse switches on to new era', *Destinations Magazine*, May/June 2003, pp. 14-15.

The footprint of the Lighthouse is circular with platforms at various levels; landing, service floor, lantern floor and gallery floor (from base to top). The ground floor is concrete. The interior walls have a sand render finish that has been painted. There is no physical evidence of quoined detailing as indicated on original plans, although the numbers 1912 are raised in the render above the entry doors. There is a brass plaque (c.2001) located on the wall on the east side of the front door. The windows are central within the thick concrete lined shuttered stone walls with deep rendered reveals on the interior and exterior. The windows are sets of double timber-framed casements with original brass wind-out mechanisms in place. A central steel column penetrates the centre of the Lighthouse to the underside of the gallery floor. An open-tread cast iron stairway spirals around the perimeter of the interior wall from the ground floor up to the service floor level. The spiral stair is supported by decorative cast brackets bolted to the inside walls of the Lighthouse. The service floor level has infilled walls in timber-framed panels lined with vertical miniorb. At the service floor level there is a built in desk under the window facing north-east, a cupboard and built in copper tap. A panelled door secures the area from the double open space below. From the service floor level, a steel ladder connects to the gallery floor level above through a hatch in the steel floor. On the gallery level, equipment dominates. Another ladder accesses the floor of the lantern gallery. The floor is decorative cast iron as for the balcony on the exterior at the same level. On the interior of the lantern level, the perimeter floor encircles the central dioptric lantern. On the outside perimeter of the lantern area, the steel framed windows are concealed by drop down vertical sections of canvas. The central roof form is exposed.

Immediately adjacent to the Lighthouse, on the west side, is the Store. It is aligned parallel with the Johnson Road access, with the double entry doors facing north-east. The Store is a masonry construction with rendered interior and exterior walls and a gable zincalume clad roof. The interior has a basic kitchen fitout to facilitate tourism services. An open wire enclosure on the south side holds the battery store for the solar power. An area on the south east of the store, linking across to the Lighthouse, has been developed as an outdoor seated area, with a concrete floor and colorbond dado height fencing. South of the Store, on the downhill is a bank of solar panels that provides power to the Store kitchen facility.

North east of the Lighthouse, 100 metres down a slope to a level area, is the Radar Station and remains comprising camouflage remnants, concrete footings and various blocks, and a more recent lookout and telescope. The Radar Station is a bolted steel framed structure that has been painted gun metal grey. The dominant structure of the square form is steel angle iron on a concrete slab, with flat iron cross bracing and angle iron struts. The lower level of the frame is splayed out in support of a platform frame, with a square form frame about that, up to another platform with a centre conical frame between the platforms. On three sides of the Radar Station, south-west, north-west and north-east, are the remains of the sand bag embankments. The fabric of the bags has long since disintegrated but their form and texture can be seen in the solidified remains of the contents of the bags. On the north and west sides, on steep slopes below the Radar Station, are concrete blocks and some wire remnants of the guy wire supports and anchor points. One of the blocks has names and dates gouged into the concrete, showing the year '1943'. Approximately 20 metres to the north east of the Radar Station is a large rectangular section of buckled, rusted wire netting that is likely an interpretive remains of the camouflage netting used to conceal the site in war time. A further 20 metres down the north-east bank is a single remaining steel post.

The Lighthouse Quarters are located approximately 300 metres east of the Lighthouse, at the base of the bluff. It is located central within the Lighthouse Caravan Park tourism development. No access was gained to the site. From an external view, the place appears mostly intact in form and materials. The expansive hipped roof has been reclad with zincalume and all the external perimeter verandahs have been enclosed with fibre sheet dado walls with colonial cross brace timber detailing on the exterior and hinged shutters above. The setting of the place has been impacted by the construction of a store and office in close proximity on the west frontage, the overall caravan park development, and storage and other operation facilities in close proximity along the rear of the building. The landscaping includes various palms (*Phoenix* and *Livistona* sp) comprising mature specimens and more recent plantings, and windbreak plantings (possibly athel trees, *Tamarisk aphylla*).

Outside the general caravan park development, but within the site, on the extreme east corner of an unnamed private access road, is the grave of F.J. Reddy. The Grave is marked by a low chain link surround, white stone piled on the site, and a simple headstone.

Vlamingh Head Lighthouse Group is in fair to good condition. The Lighthouse is currently not used other than as a visual attraction for tourists. There has been relatively minimal intervention to the original fabric. The place demonstrates a moderate degree of integrity and authenticity.

13.3 COMPARATIVE INFORMATION

There are 23 lighthouses entered on the HCWA database, of which 14 are on the State Register. All lighthouses in the State are unattended, the last attended light being Cape Naturaliste, automated in 1996.

Vlamingh Head Lighthouse was one of five lighthouses installed on the North West Coast between 1909 and 1912. The other four are:

Cape Inscription Lighthouse and Quarters (Place 3261) located on Dirk Hartog Island, south of Carnarvon, was of a similar concrete construction to Vlamingh Head with the tower being 4-feet taller at 34-feet in height. The Quarters is of similar duplex design and is currently undergoing restoration work for the purpose of a tourist attraction, including the addition of a new roof structure and roof cladding.⁶⁰ The place is on the State Register.⁶¹

Point Cloates Lighthouse and Quarters (ruins) (Place 5491) is currently being assessment. This lighthouse was constructed from local sandstone. The tower was taller, being 47-feet in height. Point Cloates was decommissioned in 1936 as it had been built on an unstable sand dune. It was replaced by an unattended light on Frazer Island. Point Cloates Lighthouse and Quarters is a ruin.⁶²

Cape Leveque Lighthouse has a cast iron tower designed and manufactured in Perth. It has a height of 28.3 feet to the gallery floor. The duplex Quarters were built to the same standard plan but were timber-framed, clad with horizontal corrugated iron on the exterior. This construction was designed to cool quickly in the evening, and was an adaptation to the tropical location. The Quarters are not extant.⁶³ The Lighthouse is on the State Register.⁶⁴

60 Farrar, G. E., op cit; HCWA assessment documentation, Place 2461; personal knowledge.

61 Farrar, G. E., op cit; HCWA assessment documentation, Place 2461; personal knowledge.

62 Farrar, G. E., op cit; HCWA assessment documentation, Place 5491.

63 Farrar, G. E., op cit; HCWA assessment documentation, Place 7198.

64 Farrar, G. E., op cit; HCWA assessment documentation, Place 7198.

The fifth light, at Bedout Island, was an unattended light powered by acetylene gas. It was the first of its type in Western Australia. The tower was an open-braced steel structure 51 feet tall, on a concrete base. It was demolished in 1970 and replaced with a stainless-steel lattice tower, again the first of its type in the State.⁶⁵ Bedout Island Lighthouse is not entered on the HCWA database or the State Register.

Cape Naturaliste Lighthouse and Quarters (Place 2914) came into operation in 1904. The Quarters consist of three identical single cottages. A custodian occupies one dwelling as a residence and a museum is located in another. *Woodman Point Lighthouse & Keepers' Cottages* (Place 508) built in 1902, are single bungalow style residences of limestone construction. *Carnarvon Lighthouse Keeper's Cottage (fmr)* at Babbage Island, Carnarvon (Place 462) is a single weatherboard bungalow built in 1897 and occupied as a museum. *Bathurst Lighthouse & Quarters*, Rottnest (Place 517) is a limestone and fibro bungalow built in 1900. All these quarters are on the State Register.⁶⁶

Lighthouses constructed in the second half of the 20th century were for the most part unattended lights on steel lattice towers.

Vlamingh Head Lighthouse is a good example of the type and the quarters are an excellent remaining example of the duplex type of dwelling constructed for light keepers on the North West Coast.

The place is rare as a duplex type lighthouse quarters.

13.4 KEY REFERENCES

Harbour and Lights Department files, State Record Office as referenced.

Files relating to Vlamingh Head Lighthouse held at the National Archives, Perth, as referenced.

13.5 FURTHER RESEARCH

⁶⁵ Lighthouses of Western Australia website, www.upnaway.com.

⁶⁶ HCWA database and assessment documentation.