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)

- 3.8 Moving goods and people

HERITAGE COUNCIL OF WESTERN AUSTRALIA THEME(S)

- 202 Rail and light rail transport
- 303 Mining (including mineral processing)
- 310 Manufacturing and processing

11. 1 AESTHETIC VALUE*

Caron Coal Stage is a simple example of the underlying structure of an elevated coal bin. (Criterion 1.1)

Caron Coal Stage is a prominent landmark as a large, high structure in a flat, open landscape. (Criterion 1.3)

11. 2. HISTORIC VALUE

Caron Coal Stage was one of a number of mechanical coal stages constructed by the Western Australian Government Railways between 1925 and the 1950s to provide for the economical storage and handling of coal for fuelling trains. (Criteria 2.2 and 2.3)

11. 3. SCIENTIFIC VALUE

Caron Coal Stage contributes to the understanding of past coal handling procedures. (Criterion 3.2 &3.3)

11. 4. SOCIAL VALUE

Caron Coal Stage is valued by the local community as the only remnant of the Caron Railway Siding, a landmark on the Wubin-Morawa Road and the Wongan-Mullewa railway. (Criterion 4.2)

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Canberra, 1991, with additional reference to Richards, O. *Theoretical Framework for Designed Landscapes in WA*, unpublished report, 1997.

12. DEGREE OF SIGNIFICANCE

12. 1. RARITY

Although a number of mechanical coaling plants were constructed by the Western Australian Government Railways between 1925 and the 1950s, *Caron Coal Stage* was the only one built of concrete and is the only remaining coal stage of this type in Western Australia. (Criteria 5.1 and 5.2)

12. 2 REPRESENTATIVENESS

Caron Coal Stage is representative of the mechanical coaling plants constructed by the Western Australian Government Railways from the 1920s to 1950s. (Criterion 6.1)

12. 3 CONDITION

What little remains of *Caron Coal Stage* is in fair condition. Being constructed of concrete, it is the only coal stage that has survived to the present. It is not known what maintenance or management programs exist, if any, but the site remains in a clean state, free of debris.

12. 4 INTEGRITY

Despite the removal of much of the plant and equipment associated with the coal stage, the place retains a moderate to high level of integrity. The original intention is intact, as it is currently not used. The long term sustainability of the values is high and the place could be restored or remain as is.

12. 5 AUTHENTICITY

Despite the removal of much of the plant and equipment associated with the coal stage, the elements that remain have a high level of authenticity.

13. SUPPORTING EVIDENCE

The documentation for this place is based on the heritage assessment completed by Jacqui Sherriff, Historian and Annabel Wills, Architect, in May 2004, with amendments and/or additions by HCWA staff and the Register Committee.

13. 1 DOCUMENTARY EVIDENCE

Caron Coal Stage comprises a concrete elevated coal bin (1930) and is the only remaining element of the Caron Siding.

Caron Coal Stage was constructed by the Western Australian Railways Department (WAGR) in 1930 to replace an earlier structure that was destroyed by fire. The coal stage was part of the railway infrastructure at Caron, a siding on the Eastern Railway between Wongan Hills and Mullewa. In addition to providing for the refuelling of trains, Caron was also an important watering depot for trains. Although *Caron Coal Stage* was one of a number of mechanical coaling plants constructed by WAGR between 1925 and the 1950s, it was the only one constructed of concrete. As such, it is the only railway coaling stage to survive in Western Australia and is the only remnant of Caron Siding still extant.

In July 1869, explorer John Forrest named Damperwash Hills and Springs. Prospectors followed his route, and in 1894 George Woodley was the first to find gold, ten miles west of the springs at Rothesay. The seam was sufficiently rich to warrant further investigation and by 1897 the Rothesay mine supported a town of about 300 residents.[1] Most of the surrounding mining leases were quickly taken up, with the Glasgow Syndicate taking up many claims of likely worth. The company established a mine on Woodley's Reward c.1898, which operated until 1902. The mine was subsequently operated by a number of companies, the majority of which had little success in finding gold.[2]

Meanwhile, the area around the mines was settled for agriculture. W. H. (Bill) Herbert was the first to see agricultural potential in the area and took out a lease on 20,000 acres around the Perangery rock hole in 1905. In the same year, Frank W. Summers worked on the construction of the rabbit proof fence through the area. However, permanent settlement of the area did not begin in earnest until 1911, when land was opened for selection.[3]

It was government policy at the time that rail transport be provided as soon as an area was surveyed for selection. Legislation for the extension of the Eastern Railway from Wongan Hills to Mullewa was introduced in 1910 and construction was authorised on 26 January 1911. The work was to be done by Departmental day labour provided by the Railway Construction Branch, which at the time did not include railway workers employed on finished lines. There was considerable controversy, as many thought that the line should pass through the mining area near Rothesay, but the Government's promise to make provision for agricultural areas held sway, and it was agreed that a line north of Dalwallinu be surveyed in a north-westerly direction through or near the subdivisions of Perenjori (a corruption of Perangery) and Morawa.[4]

The laying of the line began at the Wongan Hills end on 22 May 1912 and at the Mullewa end on 12 June 1912. They met at Perenjori in December 1913 and the

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1 Enid S Cannon, *Golden Opportunities: A History of Perenjori*, UWA Press, Nedlands, 1983, p. 3.

2 Ibid., p. 4.

3 Ibid., pp. 14-15.

4 Ibid., p. 73.

line was handed over to the Western Australian Government Railways on 1 March 1915.[5] The line was officially opened for goods travel on 5 March 1915. The first official passengers did not travel until November that year.[6]

The temporary junction at Perenjori developed as a centre for all the farmers in the area. Several people built houses at the site and the town grew from then on. Private houses were followed by boarding houses, stores and so on, and the first townsite blocks were offered for sale on 15 February 1916. Perenjori was declared an official townsite the following day.[7] The district was initially governed from Irwin, but in 1916 the Perenjori-Morawa Roads Board was formed as a separate entity.[8]

There were many problems in securing an adequate water supply for the railway. With its good natural catchment area, Caron, approximately 12-15 km south of the town of Perenjori, became the main railway centre, and train crews were changed there instead of at Buntine where water was not readily available. Caron posed a threat to Perenjori for a while, with some local farmers being convinced that the Perenjori township would transfer to Caron.[9]

Railway facilities at Caron included staff quarters (cottages and barracks), an engine turntable, weighbridge, coaling chute, railway dam, refreshment rooms, office and goods shed. The elevated timber coal chute was constructed in 1913 to allow trains to refuel at the siding, which was strategically located half way between Wongan Hills and Mullewa.[10] Caron was gazetted in 1921, and was named after the railway station. The railway station is assumed to have been named after Carun Spring, which is situated about 26km west. Carun Spring first appeared on plans in 1895, but is incorrectly spelt "Caron Spring" on plans from 1907 to 1955, accounting for the spelling variation retained in the townsite name.[11]

After a fire destroyed the timber coal chute in January 1929[12], WAGR constructed a concrete mechanical coal stage at Caron. Work commenced in May 1930 and was completed in November that year.[13] The construction of mechanical coaling plants was listed as one of the Department's major expenses for the year. Although a number of mechanical coaling plants were built, it appears that the

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5 Adrian Gunberg & Jeff Austin, *Rails Through the Bush*, Light Railway Research Society of Australia, Melbourne, 1997, p. 207, as cited by Irene Sauman in 'Register of Heritage Places – Assessment Documentation: Railway Barracks, Wongan Hills', Heritage Council of Western Australia, October 2003.

6 Cannon, op. cit., pp. 73-74.

7 Ibid., p. 33.

8 Ibid., p. 40.

9 Ibid., p. 75.

10 Western Australian Government Railways (WAGR), Caron Coal Stage, CCE Plan 25419, 1945-74, Acc 1639, State Records of Western Australia (SRO); Entry for Caron Coal Stage in Philippa Uhe (comp), 'Survey of Railway Heritage in Western Australia (South of the 26th Parallel)', for the National Trust of Australia (WA), 1994.

11 www.perenjori.wa.gov.au

12 SRO, Index Card, Acc 1781/19579. A Royal Commission into the coal industry (1916) found that some of the older timber coal bins presented a fire hazard and had to be sealed to exclude air from the bins in order to reduce the risk of spontaneous combustion. It is not known if the original bin at Caron was fireproofed as the Commission recommended or how the fire started. *Report of the Royal Commission on the Collie Coal Industry*, Government Printer, Perth, 1916, p. xxii.

13 Western Australian Government Railways, Tramways, Ferries and Electricity Department, Annual Report, 1930/31, p. 72; 1931/32, p. 70.

one at Caron was the only one constructed in concrete. [14] It is not clear why concrete was used at Caron and timber at other centres.

By this time, WAGR had a policy of replacing the older elevated (overhead) coal bins (such as the original at Caron) with mechanical coal stages where funds allowed. The traditional method of conveying coal to the overhead bins was to use cranes ('grabbing'), but this caused damage to railway wagons when lumps of coal slipped and had high costs associated with coal workers, crane maintenance and wages for the crane operator. The elevator system was much more economical and labour saving. However, the grab system was still operating at a number of centres in 1936.[15]

Coal stages provided an efficient means of bulk handling and storing coal and mechanical coaling plants such as that at Caron used an elevator system to take coal from supply wagons to the top of the stage. A grid over the top of the stage screened out lumps of coal too large for efficient transportation or firing. Coal was fed into locomotive tenders through a hopper and down a chute.[16]

Caron Coal Stage became redundant in 1956, when the Eastern Railway was fully dieselised.[17] The siding at Caron largely became redundant after passenger travel ceased in the 1970s[18] and elements of the siding were gradually demolished. In 2005, only the concrete coal stage remains of the railway infrastructure.

Caron Coal Stage was classified by the National Trust of Australia (WA) in 1994[19] and was included in the Shire of Perenjori Municipal Heritage Inventory in 1999, with a recommendation that it be considered for entry in the Register of Heritage Places.[20] A railway heritage survey, completed in 1994, also recommended that the place be considered for entry in the State Register.[21]

The population of the Shire of Perenjori, 8,214 square kilometres in area, is now approximately 700. It consists primarily of agricultural farming land with a few mining leases. The main town in the Shire is Perenjori, which is located in the northwest portion of the Shire and has a population of approximately 300. The other main town in the Shire is Latham with a population of approximately 60. The remaining population is scattered through the surrounding farmland. There is no population at Caron. [22]

In 2005, *Caron Coal Stage* is an isolated and unused structure.

13. 2 PHYSICAL EVIDENCE

Caron Coal Stage, comprising a concrete elevated coal bin constructed in 1930, is the only remaining element of the Caron Siding.

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14 WAGR, Elevated Coal Bins, c. 1929, Ways and Works Plan 25631A, Standard Plan 3F, Standard Coal Chutes, AN 262/2, Acc 1641, State Records Office of Western Australia (SRO).

15 WAGR, Merredin – Coaling Facilities, correspondence from Secretary for Railways to Clerk in Charge, District Traffic Superintendent's Office, Merredin, 2 July 1936, folios 7, 5, AN 262/2, Acc 1240, Item R4615/38, SRO.

16 WAGR, Coal Handling Plant – Mullewa, various sheets, Acc 1781, Item 22588, SRO. No plans for records have been located for Caron Coal Handling Plant. See also Uhe, op. cit.

17 WAGR, Coal Supplies – General File, folio 37, AN 262/1, Acc 1240, Item R329/38, SRO.

18 Cannon, op. cit., p. 77.

19 HCWA Database

20 HCWA Database

21 Uhe, op. cit.

22 www.perenjori.wa.gov.au

Caron is a townsite in the north east wheatbelt, located just south of Perenjori. *Caron Coal Stage* is the only remaining element of the Caron townsite and is located on the western side of the Eastern Railway, which travels between Wongan Hills and Mullewa. The railway line, in turn is located on the western side of the Wubin-Morawa Road, one of the two main access roads for the Shire of Perenjori. Its exact location is Latitude 29 38 S Longitude 116 19 E.

The area surrounding *Caron Coal Stage* is flat scrub land which is cleared on both sides of the railway line and surrounding the Coal Stage. *Caron Coal Stage* is located approximately 8 metres from the railway line. Apart from the railway line and road there are no other structures within sight of *Caron Coal Stage.*

Caron Coal Stage is a large concrete structure. It is comprised of a single concrete bin on top of a concrete tower frame, with a total height of approximately 20 metres. The western edge of the concrete bin is approximately 2.5 metres deep. The bottom of the bin then slopes east at approximately 45 degrees, such that the eastern edge is approximately 11 metres deep. The tower comprises four concrete legs at the corners of the bin, set approximately 10.5 metres apart. The legs are approximately 9 metres high, connecting with the bottom of the bin at the eastern edge, and horizontal concrete bars on the other three sides. The northern legs then extend a further 8.5 metres to support the top of the bin. Unlike the Mullewa Mechanical Coal Handling Plant, the Caron Mechanical Coal Handling Plant only operated with the one bin.

There is no evidence of elements such as spray pipes, tie beams, elevating plant, conveyor and filler pit, conveyor side skirt. There is evidence of the metal chute at high level with some remnant timber elements of the chute 'shutter' remaining. These elements are located on the eastern elevation facing the railway line. The southern elevation has some remnant elements of the stairs.

What little remains of *Caron Coal Stage* is in fair condition.

13. 3 COMPARATIVE INFORMATION

A number of mechanical coaling plants were constructed in Western Australia between 1925 until the 1950s, when diesel replaced coal fuel on the Western Australian Government Railways. For example, mechanical coaling plants were constructed at Mullewa (1925; 80 tons), East Perth, Bunbury, Brunswick Junction (1930), Narrogin (1940; 80 tons), Merredin (c. 1940).[23] The documentary evidence indicates the *Caron Coal Stage* was the only concrete coal stage constructed.

Other methods of coal storage for refuelling included elevated coal bins and low level coaling roads. Elevated coal bins of 20 to 25 ton capacity were built before 1925 at East Perth, Fremantle, Midland Junction, Collie, Bunbury, Northam, Wongan Hills, York, Merredin, Narrogin, Southern Cross, Kalgoorlie, Geraldton, Caron and Mullewa. Those at East Perth, Bunbury and Mullewa were replaced by mechanical plant by c. 1929.[24] Cranes were used to convey coal to the elevated bins and the 'grab' system was still in operation at Merredin, Midland

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23 WAGR, Elevated Coal Bins, c. 1929, Ways and Works Plan 25631A, Standard Plan 3F, Standard Coal Chutes, AN 262/2, Acc 1641; Narrogin Coaling Appliances, folios 10, 19, AN 262/2, Acc 1240, Item R4543/38; Merredin – Coaling Facilities, folios 28, 36, AN 262/2, Acc 1240, Item R4615/38, SRO.

24 WAGR, Elevated Coal Bins, c. 1929, Ways and Works Plan 25631A, Standard Plan 3F, Standard Coal Chutes, AN 262/2, Acc 1641, SRO; Various plans for standard coal stages dated c. 1901 to 1914, elevated coaling road (c. 1944) and shelters over low level coaling roads (c. 1948), WAGR, Standard Plan 3E, Standard Coal Stage, AN 262/2, Acc 1641, SRO.

Junction, Southern Cross, Narrogin, Geraldton, Collie, Fremantle and Wongan Hills in 1936.[25]

According to the 1994 Railway Heritage Survey, *Caron Coal Stage* is the only mechanical coaling plant extant in Western Australia. A survey of heritage registers of other states in Australia and contact with heritage agencies in Canada, New Zealand, the United States, England and Scotland suggests that there are few such structures extant.

13. 4 KEY REFERENCES

No key references.

13. 5 FURTHER RESEARCH

Despite an extensive search of records held by the Battye Library of Western Australian History and the State Records Office of Western Australia, little information had been located specifically related to *Caron Coal Stage*. The documentary evidence provided has largely been inferred from scattered pieces of information and records relating to coaling facilities at other locations. Should any information specific to Caron be located, this documentation should be reviewed.

25 WAGR, Merredin – Coaling Facilities, correspondence from Chief Traffic Manager to Commissioner of Railways, 24 June 1936, folio 5, AN 262/2, Acc 1240, Item R4615/38, SRO.