



# CHAPTER 19

## ABORIGINAL HERITAGE AND NATIVE TITLE



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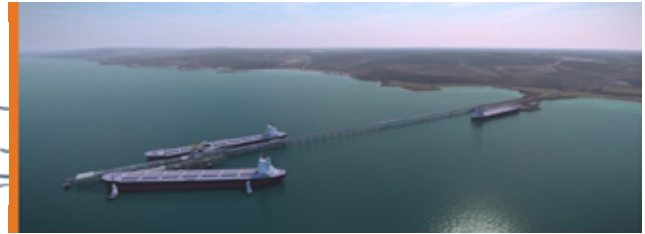
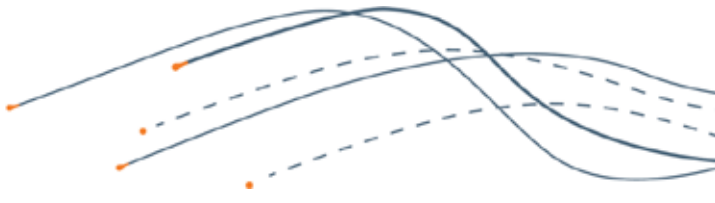
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## 19 Aboriginal Heritage and Native Title

This chapter discusses the values relevant to Aboriginal heritage and the native title rights and interests in relation to the CEIP Infrastructure areas. It sets out the outcomes of consultation with the relevant Aboriginal people with an interest in the land, and describes measures to identify, record, manage and protect sites and places of significance to Aboriginal people.

Known Aboriginal sites, objects or remains are also identified, including registered places, places identified in SA Museum records or through field surveys, and consultation with Traditional Owners. It also discusses any risks of disturbance to either known, or as yet unidentified, sites, objects or remains, as a result of construction, operation or closure activities.

Every effort will be made to endeavour that there is no damage, disturbance or interference with any Aboriginal sites, objects or remains. Iron Road has proposed management and control strategies to ensure that, should any be discovered during the course of construction, operation or closure activities, they are protected as required under the Aboriginal Heritage Act. Where relevant, it covers management and mitigation measures that would minimise potential impacts.

The impact of the proposed CEIP Infrastructure on non-Aboriginal heritage is addressed in Chapter 20.

### 19.1 Applicable Legislation and Standards

The following operative legislative documents are relevant to an assessment of Aboriginal Heritage in the CEIP Infrastructure area:

- *Aboriginal Heritage Act 1988 (SA)*
- *Native Title (South Australia) Act 1994*
- *Native Title (South Australia) (Validation and Confirmation) Amendment Act 2000*
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1994 (Commonwealth)*
- *Native Title Act 1993 (Commonwealth)*
- *Native Title Amendment Act 1998 (Commonwealth)*

The objective of the *Aboriginal Heritage Act 1988* is to protect and preserve Aboriginal heritage, including sites, objects and remains. The areas comprising the CEIP Infrastructure may include sites that are of Aboriginal heritage significance.

The *Native Title Act 1993* provides for the recognition and protection of native title. The Barngarla Aboriginal group has a registered native title claim (SAD 6011/1998) over the area comprising all elements of the proposed CEIP Infrastructure together with the proposed CEIP Mine. That claim was subject to a Federal Court judgement handed down by Justice Mansfield on 22 January 2015, which recognised that the Barngarla people have had the requisite connection to the land since sovereignty, with certain exceptions. The decision of the Federal Court has confirmed that the correct Aboriginal group with whom Iron Road is to be engaging, consulting and negotiating is the Barngarla.

A formal determination of relevant land within the native title claim area will be made by the Federal Court later in 2015, allowing the Barngarla to be recognised as native title holders of the land.

## 19.2 Assessment Method

To initially identify any existing Aboriginal heritage over the CEIP Infrastructure areas, Iron Road:

- Consulted with the Department of State Development – Aboriginal Affairs and Reconciliation (DSD-AAR) and reviewed information obtained from a search of the Central Archive of the DSD-AAR, including the Register of Aboriginal Sites and Objects.
- Searched the National Native Title Tribunal's database to identify all Native Title determinations or claims.
- Collated existing archival and published material, including that available from the South Australian Museum.
- Developed predictive statements regarding the likely nature and distribution of Aboriginal heritage sites within the CEIP Infrastructure area based on a review of existing information.

Based on this initial assessment:

- The Barngarla people were identified as the relevant group with whom to consult.
- Iron Road initiated an engagement programme with the Barngarla in order to discuss the possibility of negotiating an Indigenous Land Use Agreement (ILUA) to cover all elements of the CEIP.
- A heritage clearance survey was undertaken by the Barngarla to determine if there were any sites, objects or remains of Aboriginal significance.

### 19.2.1 Indigenous Land Use Agreement

Iron Road has established an excellent working relationship with the Barngarla people over a series of meetings in 2014 and 2015. These meetings have resulted in the successful negotiation of an ILUA between Iron Road and the Barngarla Aboriginal Corporation on behalf of the Barngarla native title group. Other parties to the ILUA are the Attorney-General of South Australia and South Australian Native Title Services Limited (SANTS).

The terms and conditions of the ILUA were subject to an authorisation meeting held in Whyalla on 3 June 2015 and were unanimously accepted by the broader Barngarla community at that time. The ILUA is now in the process of being executed by all parties and will then be submitted to the National Native Title Tribunal for registration under the *Native Title Act 1993* (Commonwealth). More details about the ILUA can be found in Section 19.6.

### 19.2.2 Aboriginal Heritage Survey

As set out in Section 19.6, amongst other things the ILUA provides a clear mechanism for the protection of Aboriginal sites, objects and remains and a process for the undertaking of a heritage survey. As Iron Road was keen to have each component of the CEIP inspected by relevant traditional owners before the registration of the ILUA, the Barngarla agreed to enter into a separate Heritage Protocol.

The Heritage Protocol – which is also set out within the main body of the ILUA – governs the carrying out of a heritage survey by representatives of the Barngarla and includes:

- The organisation, composition and functions of a survey team
- The appointment of a specialist to advise the Barngarla
- Health, safety, insurances, vehicles and equipment
- Agreed budget
- Survey commencement
- Iron Road's representation and obligations
- Preparation of a confidential report upon conclusion of the survey by a specialist heritage advisor

As per the terms of the Heritage Protocol, the survey team comprised a total of five senior male and female Barngarla people nominated by the Barngarla to be part of the survey due to both their traditional authority and cultural knowledge of the area. In addition, the Barngarla nominated noted anthropologist/archaeologist Dr Scott Cane to be their heritage advisor during the course of the survey, and to prepare the confidential report upon conclusion of the survey.

Three Iron Road representatives accompanied the survey team in order to provide relevant project information and logistical support.

The survey participants travelled by vehicle and on foot, visiting the locations of the proposed CEIP Mine and all elements of the proposed CEIP Infrastructure. The outcomes were documented by the Barngarla survey team through Dr Cane in his report "Heritage Assessment of Iron Road Limited's Central Eyre Iron Project" dated 15 February 2015. As noted above, the Heritage Protocol sets out that the survey report prepared by Dr Cane is confidential and can only be released to a third party upon the prior written consent of each of the parties to the ILUA, being the Barngarla Aboriginal Corporation, Iron Road, the Attorney-General and SANTS.

While the survey report is confidential, a summary of the survey results has been set out in Section 19.3.4.



Plate 19-1 Members of the Survey Team inspecting the proposed port site, January 2015

## 19.3 Existing Environment

This section provides an overview of the existing environment of the proposed CEIP Infrastructure in relation to Aboriginal heritage and native title. More details on the heritage survey, including outcomes, are also discussed, together with further information on the ILUA.

### 19.3.1 Existing Information about Aboriginal Heritage

As researched by Dr Scott Cane, there have been very few Aboriginal heritage surveys conducted in the vicinity of the CEIP. However, two surveys have previously been undertaken over an area associated with the southern portion of the proposed infrastructure corridor near Port Neill where it crosses between the Lincoln Highway and Mounts Hill Road (Freeman 2002; Culture and Heritage 2011). Another study was conducted for the proposed Port Spencer port facility, approximately 7 km south of Iron Road's proposed port (Wood and Westell 2008). No archaeological sites or other sites of cultural significance were recorded in these surveys.

An inspection in 2014 of the Central Archive, including the Register of Aboriginal Sites and Objects administered by DSD-AAR, showed no registered sites within or near to areas to be disturbed during construction of the CEIP (refer to Figure 19-1). The Register shows that there are five archaeological sites and two burial sites recorded in the greater CEIP area, the closest of which is 5 km away from any aspect of the CEIP Infrastructure. Despite this, Iron Road acknowledges that there may be sites, objects or remains of significance in the region that have not been recorded or registered but which are still protected under the Aboriginal Heritage Act.

Records held by the South Australian Museum indicate that skeletal material and stone artefacts have been found in coastal dunes at Port Neill to the north of the proposed port at Cape Hardy, but their origin is uncertain and information is limited (Culture and Heritage 2011).

Each of the CEIP Infrastructure components are located across terrain that is unlikely to contain dense or archaeologically-significant remains. Nonetheless, the area does contain a number of habitable locations that were clearly significant to, and occupied by, Aboriginal people in the past. Their mythology is enshrined in regional place names (Cane 2015) and include:

- Kielpa: 'short distance'
- Kimba: 'fire' or 'bush on fire'
- Koongawa: 'good'
- Kyancutta: 'a hill in the vicinity'
- Waddikee: 'a rocky soakage nearby'
- Wudinna: 'a hill with granite rocks' (Eyre Peninsula NRM 2009)

Management and control strategies to protect any sites, object or remains that may exist on the surface or sub-surface will be implemented as set out in Section 19.6.



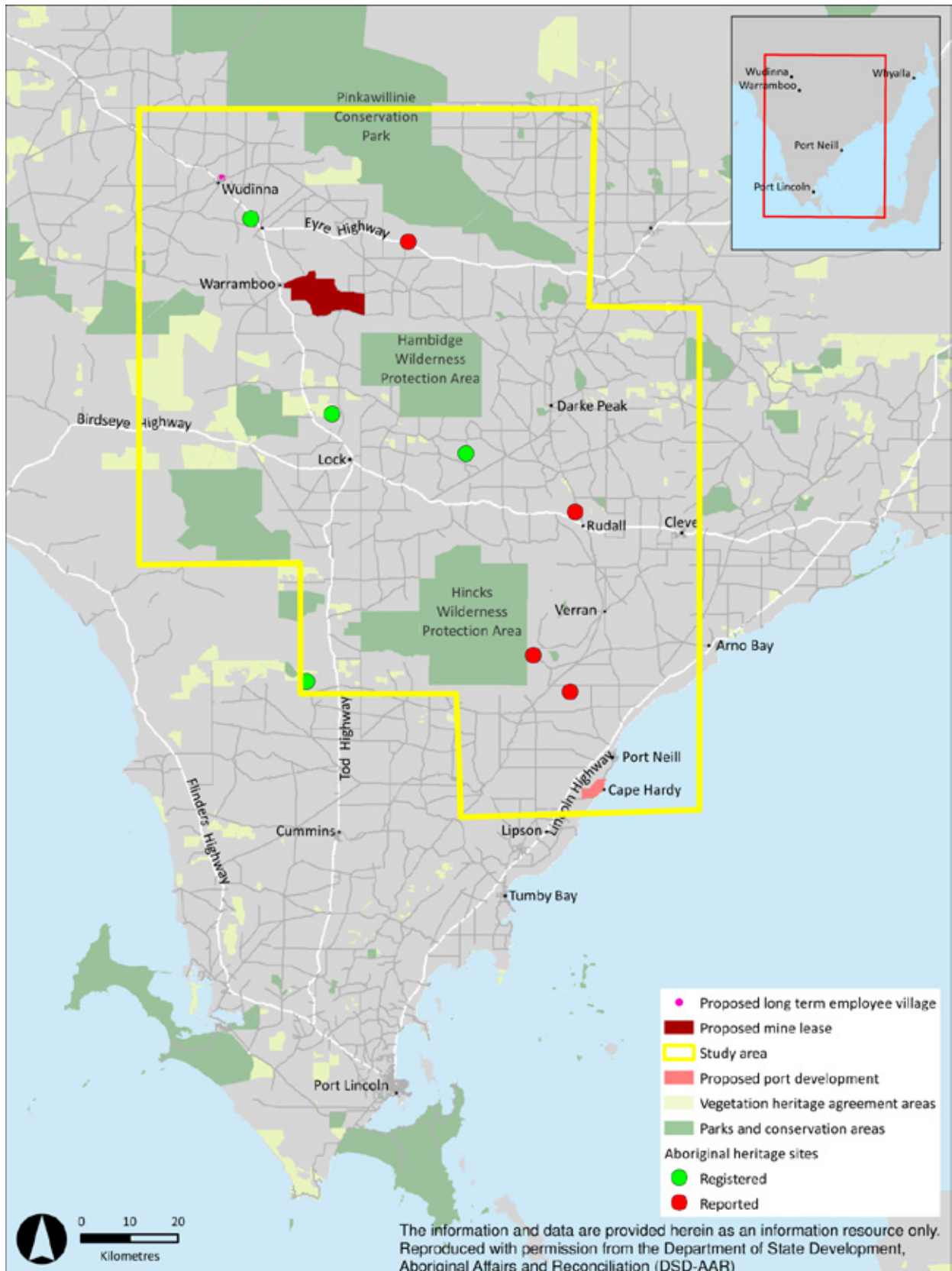


Figure 19-1 Plan Excerpt from DSD-AAR Central Archive

### 19.3.2 Aboriginal Connection with Land on the Eyre Peninsula

The earliest contact between Aboriginal and European people on the Eyre Peninsula occurred in 1802 when the crew of the English vessel, HMS Investigator, landed in a harbour which the vessel's captain, Matthew Flinders, named Boston Bay. Captain Flinders, from Lincolnshire in England, named the locality in which he landed "Port Lincoln". Substantive European contact and settlement of the region continued from the late 1830s.

At sovereignty, the Barngarla was an Aboriginal society covering a wide area of territory on the Eyre Peninsula and was also described in the early anthropological and ethnographic literature by other names including 'Pangkarla', 'Parnkalla', 'Pangkala' and 'Bangala'. Tindale (1974) described Barngarla territory as follows: 'East side of Lake Torrens south of Edeowie and west of Hookina and Port Augusta; west of Lake Torrens to Island Lagoon and Yardea; at Woorakimba, Hesson, Yudnapinna, Gawler Rangers; south to Kimba, Darke Peak, Cleve and Franklin Harbor'.

The earliest writings about the Barngarla were by Clamor Schurmann, a Lutheran missionary who lived in Port Lincoln in the 1840s and had substantial contact with the Barngarla. He published a dictionary of the 'Parnkalla' language in 1844 and located them on 'the eastern coast of Eyre Peninsula from Port Lincoln probably as far as the head of (Spencer) Gulf' (Schurmann 1844 and 1846). By 1890, Matthews recorded that the Barngarla were 'the largest nation in South Australia occupying a territory upwards of 700 miles in length' (Matthews 1890). Edward Eyre, in his exploration of the peninsula that would take his name, had reported that the Aboriginal people with whom he came into contact had a real concept of attachment to, and interest in, the land (Eyre 2010).

### 19.3.3 Native Title

The Barngarla people lodged a native title claim over a large portion of the Eyre Peninsula in April 1996 (SAD6011/1998) and, almost 20 years later in January 2015, the Federal Court of Australia acknowledged their connection to the land and waters of the eastern half of the Eyre Peninsula and extending in a broad finger northwest of Kyancutta.

The Federal Court stated that 'there was at sovereignty, a group of people known as the Barngarla People who were bound together by language and by their traditional law and customs, passed on from generation to generation' (Croft on behalf of the Barngarla Native Title Claim Group v State of South Australia (2015) FCA 9).

A formal determination of all relevant land within their native title claim will be made by the Federal Court later in 2015 and will allow the Barngarla to be recognised as native title holders of that land.

Although all CEIP components (infrastructure and mine) fall within this native title area, only a small portion of land and waters within the CEIP Infrastructure footprint can be considered 'native title land' (e.g. that land that is not held under freehold title or other tenure that may have extinguished native title rights and interests) and the ILUA deals with that land.

### 19.3.4 Survey Findings

#### Infrastructure Corridor including Borefield and Power Transmission Line

Access along the proposed infrastructure corridor for the purpose of the survey was restricted to vantage points from existing roads, as the majority of the land is held under freehold tenure and is utilised for agricultural purposes. In view of this, the risk of surviving Aboriginal sites of significance in such an environment was considered by the survey team to be very low.

However, restricting the survey to the public roads required significant pre-planning in order to provide comprehensive regional views that would allow the survey participants to make an informed assessment of the likely metaphysical (religious) and physical (archaeological) significance of the area along the proposed corridor.

Dr Scott Cane, the Barnjarla's heritage advisor, later reported that this strategy was successful, as the open, undulating nature of the terrain meant that large swathes of country could be examined from 23 vantage points along the proposed infrastructure corridor.

A total of 182 linear kilometres were inspected between the port and mine sites. This provided a reasonable geographic context to assess the likely impact of the corridor on any areas of Aboriginal heritage sensitivity along or near its alignment. The location of the survey route and the inspection points are presented in Figure 19-2. This figure also shows the country visible from the inspection points that were used to assess any impacts of the proposed corridor on the regional cultural geography.

The proposed infrastructure corridor crosses terrain which has largely been disturbed by farming practices. The significance of Dutton Creek, just west of the Lincoln Highway, north of Port Neill, was considered during the survey, but it was not deemed to be significantly threatened by the proposed development. The sensitivity of this creek was also considered in the 2011 survey for the Eyre Iron Project, where it was also not deemed to be threatened by that development proposal (Culture and Heritage 2011).

The proposed borefield will comprise 10 wells located approximately 5 km southwest of Kielpa. The well sites will all be located within existing road reserves, therefore the locations have been subject to previous disturbance. Each proposed well site was inspected to inform the survey team of the location and environmental condition. The survey team did not report any sites, objects or remains of significance.

The proposed power line from the Yadnarie substation into the infrastructure corridor will follow the existing ElectraNet transmission line and was inspected from public road reserves. Like the majority of the proposed corridor, the land is utilised for agricultural purposes and the survey team did not report any sites, objects or remains of significance.

Iron Road acknowledge that sites, objects or remains may be identified during construction, operation or closure activities of the CEIP Infrastructure, therefore management and control strategies to protect any sites, objects or remains that may exist on the surface or sub-surface will be implemented as described in Section 19.6.

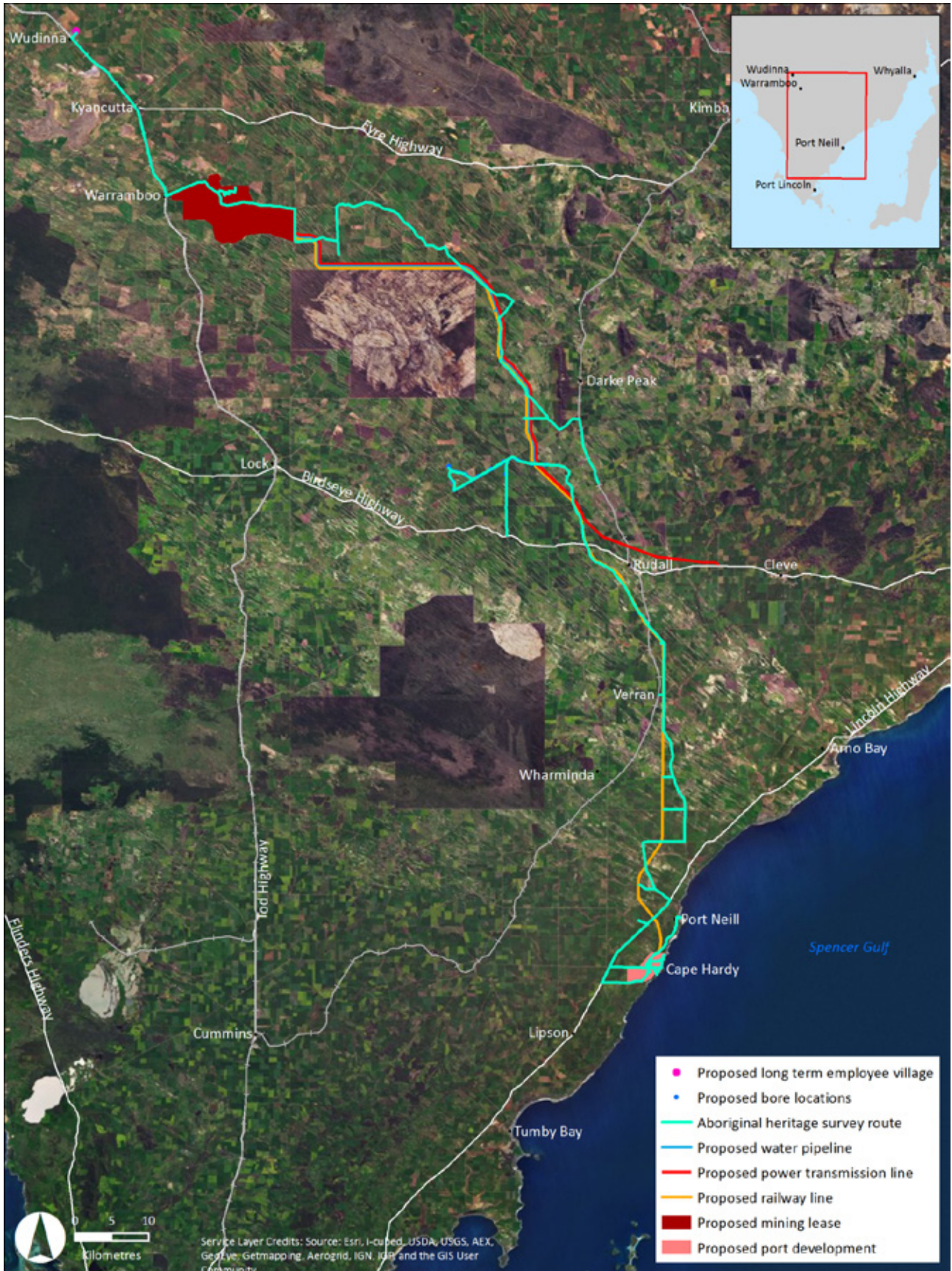


Figure 19-2 Inspection Points for Heritage Survey of Infrastructure Corridor

### Long-Term Employee Village Site

As the exact location of the proposed long-term employee village has not yet been determined, the survey team viewed the length of an “investigation zone” immediately adjacent to the town of Wudinna on the north-eastern side. All of the land within that “zone” is utilised for agricultural purposes and two of the wheat paddocks are separated by a public, unsealed road. As with most of the other land within the CEIP Infrastructure footprint, the land has been subject to farming for approximately 100 years. The survey team did not identify any sites, objects or remains of significance but, as set out above, Iron Road will establish management and control strategies in order to protect any sites, objects or remains that may be identified during construction, operation or closure.

### Port Site

The survey team covered an area of 18 linear kilometres through the proposed port development area. Full access was achievable as the land is owned by an Iron Road subsidiary company and the survey team chose various inspection points that allowed them to view the entire area. Particular attention was given to coastal dunes, creeks and the headland selected for the wharf development.

During the survey the team identified seven archaeological sites of interest; however, four of those sites are located in coastal dunes outside of the port development boundary. Those four sites generally consisted of groundwater-rolled (beach) granite cobbles, flaked quartzite and artefacts and the occasional remains of shell fish such as turbo, abalone and periwinkle. The material is typically sparse (quartzite flakes and cores in the order of two to four flakes per 10 – 20 m<sup>2</sup>), being isolated ground cobbles and individual fragments of shell. Remains of this kind were found at each location examined where erosion provided a window through sand and soil coverage. It is expected that similar material remains will be found along the coast in similar densities.

The other three sites of interest are located in eroded areas adjacent to creeks. Two of the sites are located along a spring-fed creek 2 km from the coast as shown in Plate 19-1. The team reported that the spring water feeding into and forming the creek is extremely salty to taste but may have been better quality in the past before vegetation was removed to allow for farming practices.

Dr Cane has reported that the sites contained occasional quartzite flakes and cores. The density of these materials was low – approximately one artefact every 20 - 50 m<sup>2</sup>. A total distance of 700 m was walked along the creek and artefacts were observed at densities that varied within this range. Artefacts may also be present along the creek towards the coast but both visibility and water flow (from the spring) decreases as the creek heads towards the sea. This suggests that settlement and the associated artefact discard rate may also decrease.

These sites are all located onshore within the land owned by an Iron Road subsidiary, but outside of the area that will be developed as part of the port facility and will therefore not be disturbed by any construction or operation activities.

By way of comparison, a 600 m transect was also walked along the upper reaches of the second (dry) creek to the south and running from the hinterland to the southern side of the headland selected for wharf construction. Only two quartzite artefacts were recorded during inspection of this less watered creek.

The survey team did not locate any artefacts on or near the headland selected for jetty construction. No fish traps were seen along the foreshore. In fact, it is likely that fish trapping would have been ineffective in this area due to the deep-shelving nature of the shore and the presence of large rounded granite boulders around the headland that facilitate the movement of fish in and out of tidal pools.



**Plate 19-1 Spring Fed Creek Located at the Proposed Port Site**

The foreshore adjoining the headland was also inspected and this revealed considerable past disturbance. No artefacts were observed although evidence of clay (hand-made) bricks, introduced vegetation, broken glass and rock infill suggests the area has been settled and disturbed consistently through time. It is therefore unlikely to contain undisturbed Aboriginal cultural material – the level of disturbance creating a proportional reduction in the interpretive value of the material culture.

The survey also revealed that the granite headlands along that part of the coast (within and outside the proposed port site) were formed by the repeated intrusions of basalt and quartzite during cycles of ancient volcanic activity. This has resulted in narrow bands of quartzite forming in the basalt that provided a ready supply of stone for Aboriginal inhabitants. Several seams of quartzite were inspected on the northern shore of the headland selected for the proposed wharf. None of this appears to have been flaked or quarried. However the quartz detaches in small angular blocks and could have been removed and used to produce stone tools without leaving any signs of artificial extraction.

### **19.3.5 Summary of Key Environmental Values**

The majority of the proposed CEIP Infrastructure is located across terrain and on sites that have been disturbed by farming practices and other development for over 100 years. Nonetheless, the area does contain a number of habitable locations and was clearly significant to, and occupied by Aboriginal people in the past. Iron Road will establish management and control measures to ensure that any sites, objects or remains that may be identified during construction, operation or closure activities are protected.

Areas of heritage interest to the Barngarla people were identified by the survey team at the proposed port site, along the coastal dunes and at a spring-fed creek 2 km from the coast, and are considered key environmental values.

## 19.4 Design Measures to Protect Environmental Values

The design of the various CEIP Infrastructure components has incorporated several measures to minimise potential impacts on Aboriginal heritage and native title, and these are summarised below.

While the route design has endeavoured to minimise the risk of any damage, disturbance or interference with Aboriginal sites, objects or remains, Iron Road has proposed management and control strategies to ensure that, should any be discovered during the course of construction, operation or closure activities, they are protected as required under the Aboriginal Heritage Act.

### 19.4.1 Proposed Infrastructure Corridor

#### Proposed Railway Line

- The route was selected to avoid known areas of high ecological value such as conservation parks, reserves and vegetation heritage agreement areas, which may also have undisturbed Aboriginal heritage values.
- The width of the proposed infrastructure corridor will be minimised where possible and infrastructure components co-located within a single corridor to reduce the overall footprint (whilst enabling the safe development of required infrastructure) to minimise the overall disturbance footprint.
- Existing road reserves and other previously disturbed areas were utilised where possible during the design process, again in order to avoid areas that may contain undisturbed Aboriginal heritage values.
- The route was selected to ensure that only a small number of potential parcels of “native title land” will be impacted by the corridor.

#### Proposed Power Transmission Line

- The proposed power transmission line route will follow the route of an existing transmission line easement within land previously disturbed by farming activities.
- The transmission line will utilise poles rather than towers in order to further minimise the disturbance footprint.
- No “native title land” exists within the transmission line route.

#### Long-Term Employee Village

- The “zone” adjacent to the northeast of Wudinna that will incorporate the proposed long-term employee village site is in previously disturbed areas.
- No “native title land” exists within the “zone”.

### 19.4.2 Proposed Port Development

The design of the proposed port development included the following measures to minimise potential impacts on Aboriginal heritage:

- Previously disturbed areas as opposed to areas of native vegetation were utilised wherever possible during the design process.
- The findings of the Aboriginal heritage survey have resulted in a commitment by Iron Road to protect a narrow corridor of land along the spring-fed creek and the surrounding granite hills. While this area was not in the original development design, Iron Road will take care to protect it due to its significance to the Barngarla people.
- No “native title land” exists within the onshore land required for the port development.

- The Gulf waters are likely to be considered “native title land” and the design of the offshore components of the port, such as the jetty and wharf, has strived to minimise the footprint required, whilst still taking into account the area that will be required by law for other purposes such as safety and security.

## 19.5 Impact Assessment

This section assesses impacts that the construction and operation of the proposed CEIP Infrastructure may have on Aboriginal heritage and native title.

Impacts have been assessed in accordance with the impact assessment methodology outlined in Chapter 9 and Section 19.2. A summary table of these impacts is provided in Section 19.5.5.

Iron Road acknowledges that **no impacts** to Aboriginal sites, objects or remains are acceptable, and should any be discovered as a result of construction, operations or closure activities, only the Minister for Aboriginal Affairs and Reconciliation can authorise any damage, disturbance or interference.

### 19.5.1 Sources of Impacts

Activities associated with the construction of the CEIP Infrastructure that may have the potential to disturb items or sites of Aboriginal heritage significance that have not been discovered to date include:

- Encroachment of vehicles or activities into the coastal dunes or in the vicinity of the spring-fed creek at the port site.
- Land disturbance (e.g. clear and grub, cut and fill) along the infrastructure corridor and at the port site.
- Blasting operations at the port site and along the infrastructure corridor (if required).
- Establishment of other infrastructure including buildings and haul roads.
- Laydown areas and material stockpiling.

In respect to native title, any such actions that may impact on the Barngarla’s rights and interests would only be applicable if those actions take place on “native title land”. However, the ILUA between the Barngarla and Iron Road considers and deals with such activities and how to control and manage them.

### 19.5.2 Infrastructure Corridor

The proposed infrastructure corridor crosses disturbed farming land and was not deemed by the Barngarla survey team or their advisor to have an adverse effect on known heritage values. During the heritage survey the possible sensitivity of the location of the Dutton Creek crossing, just west of the Lincoln Highway, north of Port Neill, was considered. The view of the senior Barngarla men and women was that the proposed infrastructure corridor would not add significantly to that level of disturbance that has occurred in the past and thus would not further desecrate the integrity of the landform. As it is considered that the development of the proposed infrastructure corridor would not result in any further impact on Aboriginal heritage values, the impact is expected to be **negligible**.

Each proposed borefield well site was inspected by the survey team and no impediments were identified, therefore the impact is expected to be **negligible**.

The proposed route of the power transmission line was inspected and no impediments were identified, therefore the impact is expected to be **negligible**.



### 19.5.3 Long-Term Employee Village

The “zone” area adjacent to Wudinna was deemed by the survey team not to have any heritage significance. As such, impacts associated with the construction and operation of the long-term employee village is considered to be **negligible**.

### 19.5.4 Port Site

Activities undertaken during construction and operation of the port facility represent a number of potential impacts and risks to the existing environmental values of the area. During the survey, seven archaeological sites were located both adjacent to, and within, the port area as described in Section 19.3.4, with some located in coastal dunes and others in areas adjacent to creeks. It is expected that similar material remains will be found along the coast in similar densities to those found in the coastal dunes and creeks. Proposed conditions for dealing with the identified artefacts were outlined with the Barngarla after consultation and are highlighted in Table 19-1.

No artefacts were located on or near the headland selected for jetty construction and no fish traps were seen along the foreshore. The foreshore adjoining the headland was also inspected and revealed considerable past disturbance. No artefacts were observed although evidence of clay (hand-made) bricks, introduced vegetation, broken glass and rock infill suggests the area has been settled and disturbed consistently through time. It is therefore unlikely to contain undisturbed Aboriginal heritage material, with the level of disturbance creating a proportional reduction in the interpretive value of the material culture. Construction and operation in the headland and foreshore area was not deemed by the survey team to have an adverse effect on Aboriginal heritage.

Following the survey which identified heritage values at the proposed port site, conditions were requested by the Barngarla to protect those areas, each of which have been agreed to by Iron Road as detailed in Table 19-1.

**Table 19-1 Conditions Requested by the Barngarla and Iron Road’s Response**

Project Component	Proposed Conditions of the Barngarla	Iron Road’s Response
Port - Archaeological Sites in coastal dunes	Seaward perimeter to be resurveyed and relocated with input from senior Barngarla representatives and a heritage advisor to: <ul style="list-style-type: none"> <li>• Avoid the sites identified in the heritage survey.</li> <li>• Reduce the risk of damaging other unidentified cultural material (including the possibility of skeletal remains) that may be hidden within the coastal dune system.</li> </ul>	Although these sites are not within the port development area, Iron Road will work with the Barngarla and their heritage advisor to conduct a further survey of the area and take appropriate steps to ensure these sites are protected.
Port - Archaeological site onshore	In consultation with senior Barngarla representatives and a heritage advisor, a corridor along the spring-fed creek (associated with this site) to be excluded from development impacts to: <ul style="list-style-type: none"> <li>• Protect the Aboriginal heritage surrounding the creek.</li> <li>• Maintain a representative sample of Aboriginal settlement in the coastal hinterland.</li> </ul>	The site is an area not earmarked for development by Iron Road and can therefore be protected without the requirement to re-design. Consultation will occur with the Barngarla and their heritage advisor in relation to the most effective method of protection (e.g. fencing).

With the implementation of design and control measures, the impact on Aboriginal heritage values at the proposed port site is expected to be undetectable and therefore **negligible**.

### 19.5.5 Summary of Impacts

The residual impacts due to the construction and operation of the proposed CEIP Infrastructure on Aboriginal heritage are summarised in Table 19-2.

Through the adoption of design measures (refer to Section 19.4) and management strategies (refer to Section 19.6), all identified impacts were categorised as negligible and were considered to be as low as reasonably practicable (ALARP) and therefore acceptable.

**Table 19-2 Summary of Impacts: Aboriginal Heritage**

Impact	Comment	Level of Impact
Impacts on items of Aboriginal heritage significance during construction and operation of the proposed railway line.	No changes to existing Aboriginal heritage values are anticipated as no areas of significance were identified.	Negligible
Impacts on items of Aboriginal heritage significance during construction and operation of the proposed borefield.	No changes to existing Aboriginal heritage values are anticipated as no areas of significance were identified.	Negligible
Impacts on items of Aboriginal heritage significance during construction and operation of the proposed power transmission line.	No changes to existing Aboriginal heritage values are anticipated as no areas of significance were identified.	Negligible
Impacts on items of Aboriginal heritage significance during construction and operation of the long-term employee village.	No changes to existing Aboriginal heritage values are anticipated as no areas of significance were identified.	Negligible
Impacts on items of Aboriginal heritage significance during construction and operation of the proposed port development.	Several artefacts have been identified in the area of the proposed port site. However measures have been agreed that will prevent impacts on these sites during construction and operation of the proposed port development.	Negligible

## 19.6 Control and Management Strategies

In order to minimise and mitigate impacts on, and potential risks to, Aboriginal heritage values during construction, operation and closure activities, the following control and management strategies as outlined in Table 19-3 below will be incorporated into the Construction Environmental Management Plan (CEMP) and Operations Environmental Management Plan (OEMP). Iron Road's commitments to the ILUA are also provided below.

### 19.6.1 Impact Minimisation

In order to minimise the impact on, and potential risks to, Aboriginal heritage values during construction and operation, a series of control and management strategies will be incorporated into the CEMP and OEMP and implemented for each project component. Key control and management strategies are summarised in Table 19-3. Chapter 24 provides a framework for implementation of these strategies and environmental controls for the whole of the CEIP Infrastructure. A draft CEMP is contained in Appendix AA and a draft OEMP is contained in Appendix BB.

Table 19-3 Control and Management Strategies: Aboriginal Heritage

Control and Management Strategies	EMP ID
<p>Develop and implement an Aboriginal heritage management protocol in accordance with the ILUA, including procedures to be followed in the event that Aboriginal heritage sites are uncovered during project construction, operation or closure. Procedures will comply with the relevant legislation and will include stop work and appropriate notification and assessment procedures.</p> <p>Site inductions and training to include:</p> <ul style="list-style-type: none"> <li>• Obligation for machine operators to conduct surface earthworks and surface excavations with due care.</li> <li>• Obligations in the event that an Indigenous item / site of significance are discovered.</li> <li>• Notification to the Barngarla.</li> <li>• Iron Road to avoid areas so as to not damage, disturb or interfere with that item / site unless it is not possible to avoid it. Should avoidance not be possible, the Barngarla will support an application by Iron Road to the Minister for Aboriginal Affairs, pursuant to either Section 21 or Section 23 of the Aboriginal Heritage Act.</li> </ul>	<p>HD_C1 HD_C2</p>

### 19.6.2 Compliance

The ILUA negotiated between the Barngarla and Iron Road includes measures to ensure compliance with all laws, regulations and commitments in relation to native title and Aboriginal heritage during construction, operation and closure of the CEIP. The relevant measures are:

- Inclusion of a Heritage Management Protocol with provisions relating to:
  - the discovery and protection of objects, sites and remains
  - the conduct of further heritage surveys if required
  - consultation about any applications made by Iron Road pursuant to the *Aboriginal Heritage Act 1988 (SA)*
- The establishment of a Liaison Committee comprising representatives of both the Barngarla and Iron Road to facilitate regular engagement between the parties on all project-related matters including heritage management and protection
- The provision of cross-cultural training to all Iron Road employees and contractors
- A procedure for the resolution of any disputes
- Periodic reviews of the ILUA

## 19.7 Residual Risk Assessment

This section identifies and assesses Aboriginal heritage risks that would not be expected as part of the normal operation of the project, but could occur as a result of faults, failures and unplanned events. Although the risks may or may not eventuate, the purpose of the risk assessment process is to identify management and mitigation measures required to reduce the identified risks to a level that is considered to be ALARP and therefore acceptable. The Aboriginal heritage control and management measures are identified and presented in Section 19.6 and form the basis of the Environmental Management Framework presented in Chapter 24.

A summary of the residual environmental risks after management and control strategies are applied is presented in Table 19-4.

### 19.7.1 Construction Aboriginal Heritage Risks

During construction, the residual risks to Aboriginal heritage would include:

- *Previously unidentified Aboriginal heritage sites, objects or remains may be disturbed during construction in areas not previously surveyed or in areas which were not visible during the survey.*

There is a risk that Aboriginal sites, objects or remains are located within or adjoining the CEIP Infrastructure areas that have not yet been identified and may therefore be inadvertently impacted by construction activities, particularly cut and fill and other ground-disturbing work. Should a site, objects or remains be encountered, work would cease in the vicinity and appropriate notification procedures would be implemented. As such, any consequences would be localised and expected to be **minor**. Given the historical use of the project area and the proximity of known areas of significance, the likelihood of encountering a previously unidentified item of Aboriginal heritage significance is considered to be **possible**. Therefore the overall risk of disturbing not previously identified sites of Aboriginal heritage significance is considered to be **low**.

- *Failure by construction crews to follow mitigation measures resulting in disturbance of Aboriginal heritage sites.*

There is a risk that both identified and unidentified sites, objects or remains of Aboriginal heritage significance may be impacted as a result of construction crews failing to follow mitigation measures, resulting in the disturbance of items or sites. The impact would be localised and therefore consequence is considered to be **minor**. The likelihood of this occurring is considered to be **possible**. Therefore the overall risk of construction crews not following mitigation measures in response to Aboriginal heritage items is considered to be **low**.

### 19.7.2 Operational Aboriginal Heritage Risks

During operation, the residual Aboriginal heritage risks would include:

- *Failure by operational crews to follow mitigation measures resulting in disturbance of Aboriginal sites, objects or remains.*

Unanticipated impacts on either identified or previously unidentified sites, objects and remains of Aboriginal heritage significance could occur where mitigation or control measures fail. The nearest identified places of Aboriginal heritage significance are located within the port site area. Should disturbance occur, the consequences are expected to be **minor** given the localised nature of any impacts. As further ground disturbance may occur when control measures fail (e.g. vehicles in undesignated areas), impacts on sites or items of Aboriginal heritage significance are considered to be **possible**. As such, the risk of damaging either identified or unidentified sites, objects or remains is considered to be **low**.

### 19.7.3 Summary of Risks

The residual risks associated with Aboriginal heritage are presented in Table 19-4. Through the adoption of design modification or specific mitigation measures, all identified risks are reduced to levels of low, which is considered to be ALARP and therefore acceptable. Risks would be monitored through the CEIP Environmental Management Framework presented in Chapter 24.

Table 19-4 Residual Risk Assessment Outcomes: Aboriginal Heritage

Risk Event	Pathway	Receptor	Consequence	Likelihood	Residual Risk
Disturbance to identified or unidentified Aboriginal sites, objects or remains during construction.	Sites, objects, remains not identified. Failure to follow mitigation measures.	Sites, objects or remains (identified/unidentified).	Minor	Possible	Low
Disturbance to identified or unidentified Aboriginal sites, objects or remains during operation.	Failure to follow mitigation measures.	Sites, objects or remains (identified/unidentified).	Minor	Possible	Low

## 19.8 Findings and Conclusion

A desktop assessment of Aboriginal heritage and native title was conducted based on the Register of Aboriginal Sites and Objects, the National Native Title Tribunal database, previous survey reports and material made available through the South Australian Museum. Five archaeological sites were identified during the desktop assessment, all of which are located at least 5 km away from the areas proposed for CEIP Infrastructure.

Ongoing consultation has occurred with representatives of the Barngarla Aboriginal Corporation on behalf of the Barngarla people, as native title claimants of all the land within the CEIP Infrastructure footprint. The recent judgement handed down in the Federal Court has confirmed that the Barngarla have demonstrated their connection to land and are therefore the correct Aboriginal group for Iron Road to consult and negotiate with in respect to the proposed development.

As part of the ILUA negotiations, a heritage protocol was agreed between the Barngarla and Iron Road which enabled the facilitation of a heritage survey of all CEIP components at the end of January 2015.

An ILUA has been negotiated and is in the process of being executed by all the parties. That ILUA will manage all native title and Aboriginal heritage matters going forward.

In view of the above, and once design and management measures have been considered, impacts on Aboriginal heritage and native title are considered to be negligible. All risks associated with Aboriginal heritage and native title are considered to be low and therefore are acceptable. However, Iron Road acknowledges that only the Minister for Aboriginal Affairs and Reconciliation can authorise any damage, disturbance or interference to an Aboriginal site, object or remains and has therefore proposed management and control strategies to ensure protection as required under the Aboriginal Heritage Act.



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