

Guidelines

for the preparation of an
Environmental Impact Statement

**Cape Hardy deep sea port, infrastructure
corridor and long term employee village**

Proposal by Iron Road Limited

November 2014



*Development
Assessment
Commission*

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ISBN 978-0-7590-0149-7 (print version)
ISBN 978-0-7590-0155-8 (electronic version)

FIS 24405

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1 INTRODUCTION

On 15 August 2013 (republished 22 August 2013 and varied on 29 May 2014), the Minister for Planning ('the Minister') made a declaration in the Government Gazette for a Deep Sea Port at Cape Hardy, Infrastructure Corridor and Long Term Employee Village proposal to be assessed as a Major Development under the provisions of Section 46 of the *Development Act 1993* (the 'Act').

The proponent of the proposed development is Iron Road Limited (Iron Road). This is a South Australian focussed resource company that targets exploration, evaluation and development of iron ore projects in South Australia and Western Australia. Their vision is to become a trusted and reliable supplier of premium iron concentrates to the Asian marketplace. Their flagship project to achieve this vision is the Central Eyre Iron Project (CEIP).

The proposal comprises the following elements:

- 1 A deep sea port and exporting facility with capacity to export up to 70 Mtpa located at Cape Hardy approximately seven km south of Port Neill on the east coast of Eyre Peninsula.
- 2 Iron concentrate stockpile.
- 3 A new jetty structure (approx. 900m long, accessing 20m depth of water).
- 4 Ship loading wharves (approx. 400m long at the end of the jetty, for Panamax and Cape size vessels).
- 5 Conveying and ship loader equipment to export approx. 21.5 Mtpa of iron concentrate (Iron Road only).
- 6 Ancillary amenities and infrastructure (at Cape Hardy).
- 7 An infrastructure corridor approximately 145km long including a new rail line connecting the proposed mine near Warrambo to the port at Cape Hardy, a service road and a power transmission line.
- 8 A power transmission line from a substation near Yadnarie to connect into the infrastructure corridor near the Birdseye Highway.
- 9 Temporary construction camp facilities at the port site.
- 10 Long term employee village adjacent to the township of Wudinna (to the north east) to house operational mine staff.
- 11 A borefield and water supply pipeline to service the proposed mine.

The mine site itself is not included in this Major Development proposal and is the subject of a Mine Lease Application under the *Mining Act 1971*.

Plans provided to date of the proposal are included at Appendix C.

A delegate of the Commonwealth Minister for the Environment decided that the proposed development could be assessed through the State government Major Development assessment process in accordance with the provisions of the current

Bilateral Agreement (Assessment) between the Commonwealth of Australia and the State of South Australia. This Bilateral Agreement accredits the Major Development provisions when considering environmental impact assessment under the Commonwealth's *Environment Protection & Biodiversity Conservation Act 1999* (EPBC).

The Development Assessment Commission (DAC) is the independent statutory authority that has the task of determining the appropriate form of assessment for a Major Development. Following consideration of the potential implications of the proposal, the DAC has determined the proposal will be subject to the processes and procedures of an Environmental Impact Statement (EIS), as set out in Section 46B of the Act. An EIS is considered appropriate due to wide range of issues to be investigated, including:

- Potential impact on the marine environment.
- The level of conformity with existing respective Development Plan provisions within the Development Plan/s.
- The establishment of a large shipping port in a rural coastal location.
- Traffic generation and implications for the existing road network.
- Potential economic benefits to the region or strategic provision of port facilities.
- Community impacts on the town of Wudinna and other regional centres including the township of Port Neill.
- Climate change impacts.
- Greenhouse gas emissions.
- Construction and operational impacts (including noise, dust, odour and vibration).
- Infrastructure requirements.
- Rail infrastructure requirements.

For the purposes of environmental impact assessment under the Act the meaning of 'environment' is taken to include an assessment of environmental (biological and physical), social and economic effects associated with the development and the means by which those effects can be managed.

This document comprises the assessment Guidelines for the development which are based on a range of environmental, social and economic issues. The EIS should be prepared in accordance with these Guidelines and should describe what the proponent wants to do, what the environmental effects will be and how the proponent plans to manage the project.

The DAC's role in the assessment process is now fulfilled. The Minister will now continue with the assessment process under Section 46 of the Act. The object of Section 46 is to ensure that significant matters affecting the environment, the community or the economy are fully examined and taken into account.

The documentation and the analyses from the assessment process will then be used by the Governor in the decision-making process, under Section 48 of the Act, to decide whether the proposal can be approved, and what conditions may apply.

In accordance with the requirements of the Bilateral Agreement, the State of South Australia will also provide an assessment report to the Commonwealth Environment Minister for the purposes of Part 9 of the EPBC Act.

The Major Developments process is detailed in Appendix B.

2 THE ENVIRONMENTAL IMPACT STATEMENT PROCESS

An EIS, as defined in Section 46B of the Act, includes a description and analysis of issues relevant to the development and the means by which those issues can be addressed.

The EIS should detail the expected environmental, social and economic effects of the development. The EIS should also state the proponent's commitments to meet conditions (if any) placed on any approval that may be given to avoid, mitigate or satisfactorily control and manage any potential adverse impacts of the development on the environment. Further to this, any other information required by the Minister must be considered.

In preparing the EIS, the proponent should bear in mind the following aims of the EIS and public review process:

- 2.1.1 To provide a source of information from which interested individuals and groups may gain an understanding of the proposal, the need for the proposal, the alternatives, the environment that will be affected, the impacts that may occur and the measures to be taken to minimise these impacts.
- 2.1.2 To provide a forum for public consultation and informed comment on the proposal.
- 2.1.3 To provide a framework in which decision-makers may consider the environmental aspects of the proposal in parallel with social, economic, technical and other factors.

Following the release of these Guidelines:

- 2.1.4 The EIS must be prepared by the proponent in accordance with these Guidelines.
- 2.1.5 The EIS is referred to the District Councils of Tumby Bay, Cleve, Kimba and Wudinna and to any prescribed authority or body, and to other relevant authorities or bodies for comment.
- 2.1.6 Public exhibition of the EIS document by advertisement is undertaken for at least 30 business days. Written submissions are invited.
- 2.1.7 A public meeting or meetings is held in the locality by the Department of Planning, Transport and Infrastructure during the period for making submissions, in order to provide information on the development or project, to explain the EIS document and processes, and to assist interested persons to make submissions under the Act.
- 2.1.8 Copies of the submissions from the public, Councils and other relevant agencies will be given to the proponent (Iron Road) soon after closing of the public comment period.

- 2.1.9 The proponent must then prepare a written response in a ‘Response Document’ to the matters raised by a Minister, Councils; any prescribed or specified authority or body and the public.
- 2.1.10 The Minister then prepares an Assessment Report, taking into account any submissions and the proponent’s response to them. Comments from any other authority or body may be considered as the Minister thinks fit.
- 2.1.11 The Assessment Report and the Response Document are to be kept available for inspection and purchase at a place and period determined by the Minister. Availability of each of these documents will be notified by advertisements in *The Advertiser* newspaper and local press.
- 2.1.12 Copies of the EIS, the Response Document and the Assessment Report will be available online and given to the District Councils of Tumby Bay, Cleve, Kimba and Wudinna for distribution purposes.
- 2.1.13 The Governor is the relevant decision maker under Section 48 of the Act, when a development application is subject to the EIS process.
- 2.1.14 In arriving at a decision, the Governor must have regard to:
- The provisions of the appropriate Development Plans and Regulations.
 - If relevant, the Building Rules.
 - The Planning Strategy.
 - The EIS, Response document and Assessment Report.
 - If relevant, the *Environment Protection Act 1993*.
 - If relevant, the objects of the *River Murray Act 2003* and any obligations under the Murray-Darling Basin Agreement.
 - If relevant, the objects of the *Adelaide Dolphin Sanctuary Act 2005*.
 - If relevant, the objects of the *Marine Parks Act 2007*.

The Governor can at any time, and prior to completion of the assessment process, determine that the development will not be granted authorisation. This may occur if it is clear that the development is inappropriate or cannot be managed properly. This is commonly referred to as an “early no”.

Australian Government Involvement in the Assessment Process

The Commonwealth of Australia has a Bilateral Agreement (Assessment) with the State of South Australia, under Section 45 of the EPBC Act, accrediting the South Australian Major Development environmental impact assessment process.

On 29 July 2014, the proponent submitted a Referral Notice for the proposal (i.e. proposed action) to the Australian Government Department of the Environment, in accordance with the Commonwealth EPBC Act.

On 26 August 2014, a delegate of the Commonwealth Minister for the Environment made a decision that the Cape Hardy Sea Port (and associated infrastructure corridor and borefield) proposal requires assessment and approval under the EPBC Act (EPBC no.2014/7285). This was because the proposed action is considered likely to have a significant impact on the following matter protected by the EPBC Act:

- Listed threatened species and communities (sections 18 and 18A)
- Migratory species (sections 20 and 20A)

A delegate of the Commonwealth Minister for the Environment decided that the proposal could be assessed through the State assessment under the Bilateral Agreement.

In accordance with the Bilateral Agreement (*Development Act 1993* provisions), the proposal will undergo a streamlined assessment process in co-ordination with the Australian Government Department of the Environment. This means there will only be one EIS document prepared, one period of public consultation undertaken and one Response/Supplementary EIS document prepared to satisfy the legislative requirements of each jurisdiction.

Following assessment, the State of South Australia will provide an Assessment Report to the Commonwealth Minister for the Environment, who will then make a decision whether or not to approve the proposed action under Part 9 of the EPBC Act.

The Australian Government Department of the Environment has had input into the preparation of these Guidelines in regard to issues related to the EPBC Act.

The EIS is outlined in further detail in Appendix B.

3 THE ENVIRONMENTAL IMPACT STATEMENT DOCUMENT - STRUCTURE

The Guidelines set out the issues associated with the proposal and their degree of significance, as determined by the Development Assessment Commission. It describes each issue and outlines the way that these issues should be dealt with in the Environmental Impact Statement (EIS).

In these Guidelines the terms “description” and other similar terminology should be taken to include both quantitative and qualitative materials as practicable and meaningful. Similarly, adverse and beneficial effects should be presented in quantitative and/or qualitative terms as appropriate.

The main text of the EIS should be clear and precise and presented in terms that are readily understood by the general reader. Technical details should be included in the appendices so that the EIS forms a self-contained entity.

The following is to be included in the EIS:

3.1.1 SUMMARY

The EIS should include a concise summary of the matters set out in section 46B of the Act and include all aspects covered under the headings set out in the Guidelines below, in order for the reader to obtain a quick but thorough understanding of the proposal and the resulting environmental impacts.

3.1.2 INTRODUCTION

- Background to, and objectives of, the proposed development.
- Details of the proponent.
- Relevant legislative requirements and approval processes.
- Purpose and description of the EIS process.

3.1.3 ASSESSMENT OF EXPECTED ENVIRONMENTAL, SOCIAL AND ECONOMIC EFFECTS

The assessment of effects should include all issues identified in Section 4 of these Guidelines and cross-referenced to supporting technical references.

3.1.4 AVOIDANCE, MITIGATION, OFFSET MANAGEMENT AND CONTROL OF ADVERSE EFFECTS

The proponent’s commitment to avoid, mitigate, and/or compensate (including environmental offsets) satisfactorily manage and/or control any potentially adverse impacts of the development on the physical,

social or economic environment, must be clearly stated as part of the EIS.

The design of the proposal should be flexible enough to incorporate changes to minimise any impacts highlighted by this evaluation or by post-operation monitoring programs.

The EIS should demonstrate that the proposed avoidance, mitigation, offset, management and control measures are consistent with the EPBC Act offsets policy and relevant recovery plans, conservation advice and threat abatement plans.

3.1.5 SOURCES OF INFORMATION

The sources of information (e.g. reference documents, literature services, research projects, authorities consulted) should be fully referenced, and reference should be made to any uncertainties in knowledge. Where judgments are made, or opinions given, these will need to be clearly identified as such, and the basis on which these judgments or opinions are made will need to be justified. The expertise of those making the judgments including the qualifications of consultants and authorities should also be provided.

3.1.6 APPENDICES

Technical and additional information relevant to the EIS that is not included in the text should be included in the appendices (maps, graphs, tables, photographs, reports etc). A glossary may also be appropriate.

3.1.7 OTHER

Appropriate plans, drawings and elevations are needed for a decision to be made. As much information as possible is required of the design and layout of the proposal.

4 ASSESSMENT OF EXPECTED ENVIRONMENTAL, SOCIAL AND ECONOMIC EFFECTS

4.1 PLANNING AND ENVIRONMENTAL LEGISLATION AND POLICIES

- 4.1.1 Describe the extent to which the expected effects of the development are consistent with the provisions of the relevant Development Plans and the relevant Planning Strategy.
- 4.1.2 Describe the extent to which the expected effects of the development are consistent with the objects of the Environment Protection Act 1993; the general environmental duty under that Act; and relevant environment protection policies under that Act.
- 4.1.3 Describe the extent to which the expected effects of the development are consistent with the prohibitions and restrictions applying within the marine park under the Marine Parks Act 2007; and the general duty of care under that Act.
- 4.1.4 Describe the proponents commitments to meet conditions (if any) that should be observed in order to avoid, mitigate or satisfactorily manage and control any potentially adverse effects of the development or project on the environment.
- 4.1.5 Describe the proposal's consistency with other State and Commonwealth legislation; including provisions of the EPBC Act 1999 (include consideration of principles of sustainable development and any relevant bioregional plans).
- 4.1.6 Identify the full scope of legislative requirements and the range of approvals needed to complete the proposed development.
- 4.1.7 Describe any changes that the proponent believes will need to be made to the zoning of the multiple sites to facilitate the ongoing use.

4.2 NEED FOR THE PROPOSAL

- 4.2.1 Outline current and predicted demand for the proposal.
- 4.2.2 Assess the 'do nothing' option (i.e. the consequences of not proceeding with the development).

4.3 ENVIRONMENTAL ISSUES

Coastal and Marine

- 4.3.1 Describe the impacts of jetty construction and tug wharf on the foreshore, intertidal, seabed and benthic communities (especially any nursery/spawning areas), and any mitigation measures that may be used.
- 4.3.2 Describe the coastal engineering requirements for the location, orientation and type of jetty structure.
- 4.3.3 Describe the impacts of any blasting activities, pile driving or screw piling activities on marine communities, especially turbidity/disturbance, vibration and underwater noise on vulnerable or sensitive receptors (including marine mammals) and any mitigation methods that may be used.
- 4.3.4 Describe the design and operational measures to protect water quality and prevent stormwater and other run-off from the site affecting the coastal and marine environment, during both construction and operation.
- 4.3.5 Describe the impact of any incidental concentrate spillage and dust emissions (point source and fugitive) during ship loading operations on the marine environment, especially water quality.
- 4.3.6 Describe how ship loading operations will minimise incidental concentrate spillage and dust emissions (point source and fugitive) during loading operations to avoid causing harm to marine or coastal flora or fauna species, and any mitigation measures that may be used.
- 4.3.7 Describe the potential impacts of increased shipping traffic and activities in the Spencer Gulf from offshore anchoring, transshipment or pilotage (especially on marine fauna, water quality, recreational activities and amenity), including effects on commercial and recreational fishing and aquaculture.
- 4.3.8 Describe how marine pests on the jetty will be monitored and managed. Detail the response procedure that will be followed in the event of a new pest record.
- 4.3.9 Investigate the sedimentary profiles in the area of construction and associated ship docking/manoeuvring areas, to determine if there are risks from the exposure of fine sediments or clays that would impact adversely on water quality (turbidity) and contribute to the production of sediment plumes in the region.
- 4.3.10 Detail measures to protect nearby beach and/or rocky foreshore areas during and after construction, including potential marine and terrestrial protection areas or associated buffers.

- 4.3.11 Describe existing sand movement and water flow characteristics through and around the jetty structure area, to identify any possible changes to beach profiles or sedimentation on sensitive flora and fauna, and to determine sand management requirements.

Native Vegetation (Terrestrial and Marine)

- 4.3.12 Quantify and detail the extent, condition and significance of native vegetation (individual species and communities) that currently exist at the Cape Hardy site, the infrastructure corridors and the long term employee village.
- 4.3.13 Quantify and detail the extent, condition and significance of native vegetation (individual species and communities) that may need to be cleared or disturbed during construction and the ability of communities or individual species to recover, regenerate or be rehabilitated.
- 4.3.14 Describe measures to deliver any significant environmental benefit that is required by the *Native Vegetation Act 1991*. Identify measures to minimise and mitigate vegetation clearance, including incorporating any remnant stands in the layout design, and to compensate for any loss of native vegetation and habitat.
- 4.3.15 Describe strategies to manage and monitor invasive weed species to protect terrestrial (particularly the Hambidge Wilderness Protection Area), coastal and marine species.
- 4.3.16 Identify impact avoidance, minimisation and mitigation measures and their effectiveness.
- 4.3.17 Describe how the proposal is not inconsistent with any relevant EPBC Act guidelines, conservation advice and/or recovery plans. For instance, the conservation advice for the Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Woodland Threatened Ecological Communities

Native Fauna (Terrestrial and Marine)

- 4.3.18 Quantify and detail the extent, condition and significance of native fauna (individual species and communities) that currently exist at the Cape Hardy site, the infrastructure corridors and the long term employee village. Identify sensitive receptors (i.e. species or life-history stages with particular sensitivity to construction or operational processes).
- 4.3.19 Quantify and detail the extent, condition and significance of potential native fauna habitat loss or disturbance during construction and operation and the ability of communities and individual species to recover, especially for resident or migratory shore birds, and Threatened, Endangered and Protected Species (TEPS) under the

EPBC Act and the South Australian *National Parks & Wildlife Act 1972* (NP&W).

- 4.3.20 Describe the measures taken to address displaced native fauna (if any).
- 4.3.21 Detail appropriate buffer distances that will be required between the proposed development and TEPS, including feeding areas, nesting sites and roosting sites.
- 4.3.22 Outline the effect of light pollution, noise emissions and vibrations on TEPS (including those listed under the EPBC and NPW Act's) and how these will be managed.
- 4.3.23 Describe the impacts of introduced species, especially vermin and nuisance species that can be attracted to port facilities.
- 4.3.24 Consider the potential cumulative impacts on marine fauna as a result of the proposed development and other planned or existing port facilities in the Spencer Gulf region.
- 4.3.25 Identify impact avoidance, minimisation, mitigation and offset (where appropriate) measures and their effectiveness.
- 4.3.26 Describe how the proposal is not inconsistent with any relevant EPBC Act guidelines, conservation advice and/or recovery plans. For instance, the recovery plan for the endangered Southern Right Whale

Geology and Soils

- 4.3.27 Describe the underlying geology and the nature of the soils with special reference to coastal landforms.
- 4.3.28 Outline the interaction between surface erosion processes and the proposed development.
- 4.3.29 Investigate, describe and illustrate the impact of the proposal on the landscape quality of the coastal environment and on any significant geological features.

Water Supply

- 4.3.30 Describe the known groundwater and surface water related environmental conditions, including consideration of any existing site contamination.
- 4.3.31 Describe the operational and management framework for the extraction of water from the borefield, delivery to the mine site, reuse and end use.
- 4.3.32 Describe any potential water quality/soil erosion impacts and changes

to hydrology (with reference to drainage patterns and groundwater characteristics) associated with construction and ongoing operational activities.

- 4.3.33 Detail the measures to be taken to manage and monitor any groundwater or surface water resources.

Climate Change and Sustainability

- 4.3.34 Outline the potential effects of climate change on the Project from a risk management perspective, including adaptive management strategies.
- 4.3.35 Describe measures to minimise, reduce and ameliorate greenhouse gas emissions, particularly the use of alternative or renewable energy sources and off-sets, energy efficiency measures and energy conservation, and identify barriers to implementation.
- 4.3.36 Detail the storm water management plan to be implemented including Water Sensitive Urban Design (WSUD) measures, including a description of how recycled water will be treated as part of any water sustainability measures.
- 4.3.37 Describe how the State Waste Strategy (www.zerowaste.sa.gov.au) will be implemented at all stages of the development, (with particular focus on the avoiding, reducing and reusing resources sections of the waste management hierarchy and the ability of existing infrastructure to deal with waste and recycling streams).

Air Quality and Noise

- 4.3.38 Detail the predicted levels of environmental noise associated with the operation of the development, identifying all potential noise sources, and describe the impact upon the immediate and wider locality (include sensitive receivers). Identify if the predicted noise from ongoing operational sources associated with the project will meet the noise goals in the *Environment Protection (Noise) Policy 2007* (Noise Policy) at the nearest noise sensitive receivers.
- 4.3.39 Detail how noise emissions will be reduced and contained (such as via building design/materials, noise barriers and buffers, and/or implementing operational procedures) to meet the requirements of the Noise Policy and minimise impacts upon the immediate and wider locality, including the effects from increased transport and the rail line.
- 4.3.40 Describe if predicted rail noise is consistent with the guidance contained in the Environment Protection Authority's 'Guidelines for the assessment of noise from rail infrastructure' (April 2013) at noise sensitive receivers. If the predicted rail noise is not consistent with the Guidelines, describe what measures will be implemented to mitigate rail noise such that it will be consistent with the Guidelines.

- 4.3.41 Provide an air quality impact assessment for all potential sources of dust/particles (Dust deposition, TSP, PM10 and PM2.5) and gaseous pollutants associated with ongoing operation of the proposed port and *infrastructure corridor which includes modelling undertaken in accordance with the EPA Guideline for 'Air quality impact assessment using design ground level pollutant concentrations (DGLCs)'* and assesses consistency with the requirements of the DGLC Guidelines, the *Environment Protection (Air Quality) Policy 1994* and the *National Environmental (Ambient Air Quality) Protection Measure (2003)*. Describe how all potential sources of air pollution from the *operation of the proposed development* (especially dust and particulates from transport, unloading, storage and ship loading) will be controlled / minimised to comply with the general environmental duty as described in section 25 of the *Environment Protection Act 1993* and relevant environment protection policies.

Management and Monitoring

- 4.3.42 Describe measures to minimise, manage, monitor and rehabilitate impacts on the terrestrial, coastal and marine environment within and around the development, including managing the spread of pest plants and animals.
- 4.3.43 Describe the risk across the inventory of ecological assets and identification/management of sensitive receptors of causing or exacerbating any environmental problems in the locality, and describe mitigation measures and their expected effectiveness during all stages of construction and post construction.
- 4.3.44 Describe all of the monitoring measures, reporting regimes and audits for terrestrial, coastal and marine flora, fauna (especially TEPS or significant species), water (surface water and groundwater), energy, waste, soil erosion and introduced species.
- 4.3.45 Outline how potential air pollution from the proposed development (especially dust and particulates from transport, unloading, storage and ship loading) would be monitored during ongoing operations.

4.4 BUILT FORM AND DESIGN

- 4.4.1 Describe the rationale and design intent for the major elements of the proposed development (including reference to the *Principles of Good Design* (2014), prepared by the Office for Design and Architecture SA) and measures to mitigate their visual impact.
- 4.4.2 Provide details of construction materials, colours and landscaping for all buildings and structures.
- 4.4.3 Describe how the design and construction of all buildings and

structures will be controlled to ensure environmental sustainability and cohesive visual amenity.

4.5 TRANSPORT AND ACCESS

- 4.5.1 Identify the traffic impacts on the local and arterial road network, including the Port Neill Access/Lincoln Highway intersection and locations for rail crossings of the Lincoln and Birdseye Highways, during both construction and operation. A Traffic Impact Assessment should be undertaken, taking into consideration existing traffic data, accident statistics and predicted traffic volumes (including vehicle types, numbers/frequencies and traffic peaks).
- 4.5.2 Detail any infrastructure improvements that will be required to provide safe and efficient car parking and road access to the Port and/or Construction Village, along with the Long Term Employee Village adjacent to Wudinna, including any potential junction / intersection treatments on the arterial road network.
- 4.5.3 Describe access and parking arrangements for all vehicles during construction, including any approvals and specific access requirements for over-dimensional vehicles.
- 4.5.4 Describe the requirements and management aspects for the future rail operations including, impact on the existing rail network, fuelling locations, maintenance facilities, noise management, access to / across the corridor (particularly where land in contiguous ownership is bisected by the corridor), fencing of the corridor and speed of trains.
- 4.5.5 Assess all proposed level crossings along the route against Australian Standard AS1742 Manual of uniform traffic control devices, Part 7 – Railway crossings (AS1742.7) and DPTI's Operational Instruction OI 7.9 Railway Level Crossing Treatments for Restricted Access Vehicles, (paying particular attention to the safety implications and possible changes in transport routes with regards to school buses) of proposed treatments and identifying any design issues that need to be addressed.

4.6 ECONOMIC DEVELOPMENT

- 4.6.1 Provide a full economic analysis of the proposal including the long term economic viability of the development.
- 4.6.2 Outline the financial strategies to be employed to ensure the relevant infrastructure is in place for each stage of the development.
- 4.6.3 Identify the economic effect the construction and on-going workforce will have locally and regionally, including preparing a South Australian Industry Participation Plan (see www.icn.org.au).
- 4.6.4 Describe the land tenure arrangements during and after construction.

4.7 RISK/HAZARD MANAGEMENT

- 4.7.1 Describe the use of ‘veneering’ on the iron concentrate storage stockpiles at Cape Hardy and any dust management issues and/or any potential contamination of stormwater runoff from stockpiles.
- 4.7.2 Detail procedures to be adopted to confirm whether site contamination exists (such as site history, site audit and site contamination reporting) and any remedial measures proposed, including potential acid sulphate soils.
- 4.7.3 Detail management measures that will be required during construction and operation to prevent site contamination.
- 4.7.4 Describe procedures and strategies to prevent, manage and mitigate ship oil spills, pollution spills or sewage leaks at the port.
- 4.7.5 For any areas where liquids (other than rainwater) are proposed to be stored, describe measures (including bunding) to minimise the risk of environmental harm from spills and leaks.
- 4.7.6 Detail measures and strategies for the management of hazardous, flammable or explosive materials, including risk contours.
- 4.7.7 Identify the flooding risk to the site from seawater inundation (including inundation exacerbated by sea level rise) and extreme rainfall events.
- 4.7.8 Detail fire management processes and measures to reduce bushfire risk, particularly the risk from electricity and rail infrastructure to the Hambidge Wilderness Protection Area.
- 4.7.9 Describe strategies for ensuring public safety during construction and operation.

4.8 EFFECTS ON COMMUNITIES

- 4.8.1 Outline the likely size and composition of the construction and operational workforce and other employees, how accommodation requirements will be met and detail employment opportunities for the local community, including the multiplier effect.
- 4.8.2 Describe the expected effects of the additional workforce on community infrastructure and services (including recreation, health, education, child care and other local human services) and how these are proposed to be managed.
- 4.8.3 Describe the potential positive and negative social impacts that could result from an increased population and how this is proposed to be managed.

- 4.8.4 Outline the impact of the project on existing land uses (including grazing/cropping/conservation or National Park land). Include potential impacts on fences, water supply and stock watering points, movement of agricultural machinery and grain trucks.
- 4.8.5 Detail opportunities for local aboriginal vocational training and employment.
- 4.8.6 Describe the impacts on the tourism and recreation values of the respective area due to increased human activity and disturbance.
- 4.8.7 Describe the impact on neighbouring land and water users, such as primary production, commercial fishing and aquaculture, including the need for adequate separation distances from adjoining uses, and the effects of access loss due to increased shipping traffic and anchorages.
- 4.8.8 Describe and illustrate the visual effect of the proposed development on the locality when viewed from important viewing points, including from the land and sea.
- 4.8.9 Describe the use of amenity/landscape plantings and potential broad scale revegetation, including the opportunities for the use of locally endemic species.
- 4.8.10 Describe the consultation strategy adopted in the preparation of the EIS.

4.9 ABORIGINAL HERITAGE

- 4.9.1 Describe the measures taken in consultation with the Department of State Development Aboriginal Affairs and Reconciliation (DSD-AAR) to identify the Aboriginal heritage in the project area, including the outcomes of:
 - A request for a search of the Register of Aboriginal Sites and Objects maintained by DSD-AAR
 - Discussion with the relevant Traditional Owners
 - Engagement of an expert archaeologist/anthropologist to assist with the assessment of any heritage sites
- 4.9.2 Describe the measures put in place to manage the risk of damaging, disturbing or interfering with any heritage that has been identified by the consultation undertaken above and any plans to deal with the discovery of Aboriginal heritage during work activities. If avoidance has not been possible in the project design, please detail the steps taken in consultation with DSD-AAR to ensure that any unavoidable damage, disturbance and interference is done in compliance with the *Aboriginal Heritage Act 1988*.

4.10 NATIVE TITLE

- 4.10.1 Identify any Native Title issues in respect of the requirements of the *Native Title Act 1993*.
- 4.10.2 Describe the impact on the appropriate Native Title Claimants and the consequent impact on the potential ongoing enjoyment of native title rights (if any) by native title holders.
- 4.10.3 Describe how Aboriginal heritage protection is being dealt with in the context of any measures taken to comply with the *Native Title Act 1993*.

4.11 EUROPEAN OR OTHER HERITAGE

- 4.11.1 Identify the impact on the heritage significance of any known non-aboriginal heritage places on or adjacent the site, including state or local heritage places entered on the South Australian Heritage Register (www.sa.gov.au), or identified after consultation with the Department of Environment, Water and Natural Resources, the District Councils of Tumby Bay, Cleve, Kimba and Wudinna or community groups.
- 4.11.2 Identify measures to protect any historic shipwrecks with the port/coastal area during construction, in accordance with the *Historic Shipwrecks Act 1981*.

4.12 EFFECTS ON INFRASTRUCTURE REQUIREMENTS

- 4.12.1 Outline the requirements for an adequate supply and the location of distribution networks for gas, electricity, water, sewerage, stormwater management, waste management, waste water treatment and disposal, communications systems and roads infrastructure, including any potential costs and/or savings to state and Local Government of infrastructure expansion beyond the site boundaries.
- 4.12.2 Outline opportunities to incorporate best practice infrastructure design.

4.13 CONSTRUCTION AND OPERATIONAL EFFECTS

- 4.13.1 Provide a draft environmental management plan, for both construction and operational activities, for all components of the development.
- 4.13.2 Outline the timing of construction and the time of year it is likely to occur.
- 4.13.3 Assess the requirement for any hazardous exclusion zones around the proposed jetty during ship loading activities, including the tug harbour.

- 4.13.4 Describe the level of cut and fill required and the effect on the natural topography of the site, including the access corridors and the storage of concentrate area.
- 4.13.5 Where possible, identify the source and origin of construction materials for buildings and infrastructure (such as road making) and the opportunity for the use of recycled materials.
- 4.13.6 Provide information about the transport and storage of construction materials to minimise effects on the local environment.
- 4.13.7 Identify measures to stabilise disturbed areas and areas susceptible to soil erosion.
- 4.13.8 Describe the implementation of environmentally acceptable work practices and monitoring programs.
- 4.13.9 Describe the management agreements between the District Councils of Tumby Bay, Cleve, Kimba and Wudinna and the proponent during and after construction.
- 4.13.10 Detail long-term management/maintenance arrangements for the operation and decommissioning of the facility, including the ownership of land and infrastructure, sand management and any coastal protection measures
- 4.13.11 Describe the re-habilitation strategy to be adopted if the development ceases prior to completion or during any stage of the development.

5 AVAILABILITY OF GUIDELINES

- Copies of the Guidelines will be made available at the following locations:

Department of Planning, Transport and Infrastructure
5th Floor Public Counter
136 North Terrace
ADELAIDE SA 5605

District Council of Cleve
10 Main Street
CLEVE SA 5640

District Council of Kimba
Cross Street
KIMBA SA 5641

District Council of Tumby Bay
Cnr Mortlock Street & West Terrace
TUMBY BAY SA 5605

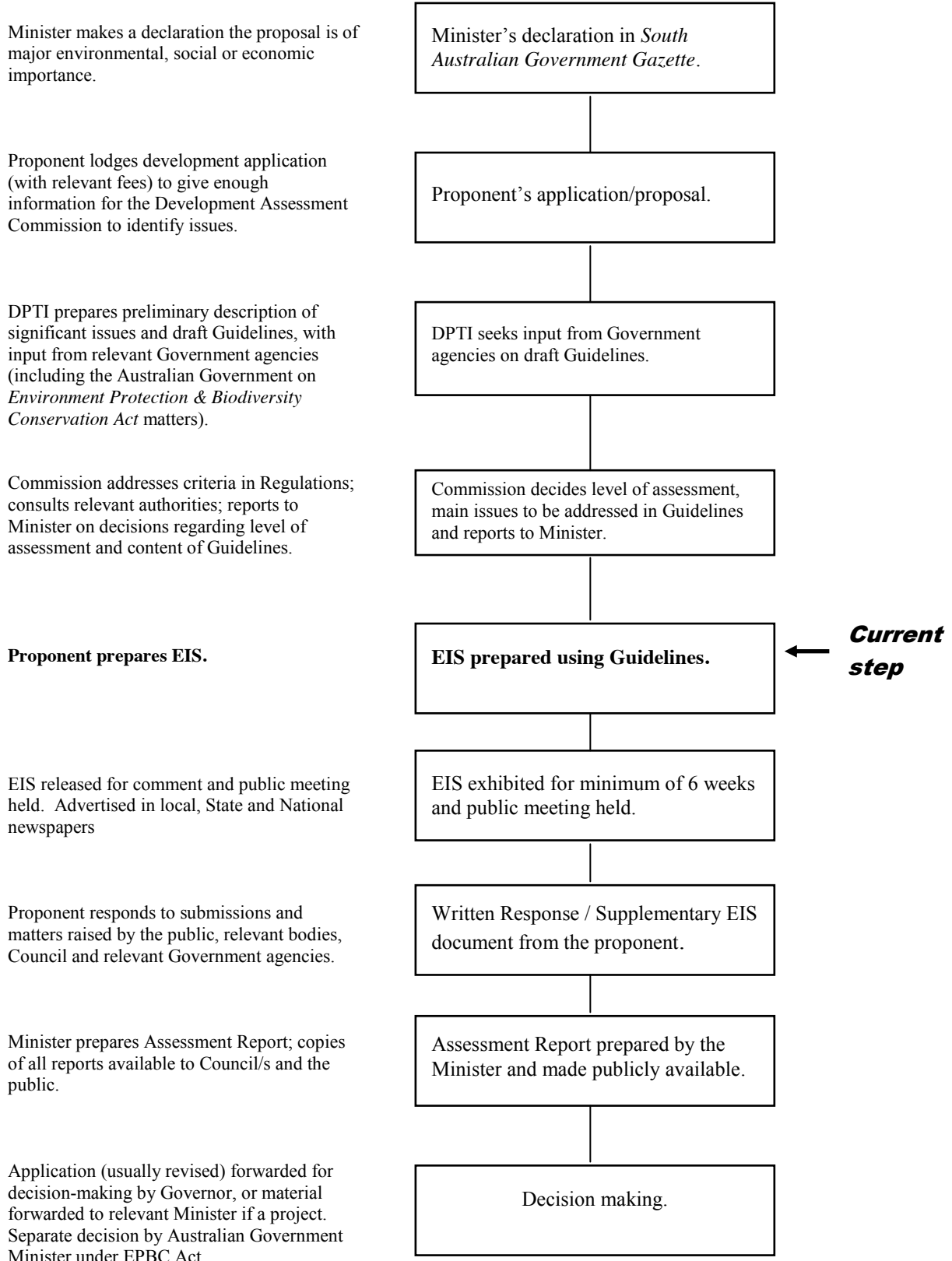
Wudinna District Council
11 Burton Terrace
WUDINNA SA 5652

Electronic copies can also be downloaded from the following web sites:

www.dac.sa.gov.au

www.sa.gov.au

MAJOR DEVELOPMENTS - ASSESSMENT PROCESS AND DECISION-MAKING



Development Act, Section 46B:

EIS process—Specific provisions

- (1) This section applies if an EIS must be prepared for a proposed development or project.
- (2) The Minister will, after consultation with the proponent—
 - (a) require the proponent to prepare the EIS; or
 - (b) determine that the Minister will arrange for the preparation of the EIS.
- (3) The EIS must be prepared in accordance with guidelines determined by the Development Assessment Commission under this Subdivision.
- (4) The EIS must include a statement of—
 - (a) the expected environmental, social and economic effects of the development or project;
 - (b) the extent to which the expected effects of the development or project are consistent with the provisions of—
 - (i) any relevant Development Plan; and
 - (ii) the Planning Strategy; and
 - (iii) any matters prescribed by the regulations;
 - (c) if the development or project involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects of the *Environment Protection Act 1993*; and
 - (ii) the general environmental duty under that Act; and
 - (iii) relevant environment protection policies under that Act;
 - (ca) if the development or project is to be undertaken within the Murray-Darling Basin, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects of the *River Murray Act 2003*; and
 - (ii) the *Objectives for a Healthy River Murray* under that Act; and
 - (iii) the general duty of care under that Act;
 - (cb) if the development or project is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, the extent to which the expected effects of the development or project are consistent with—
 - (i) the objects and objectives of the *Adelaide Dolphin Sanctuary Act 2005*; and

- (ii) the general duty of care under that Act;
 - (cc) if the development or project is to be undertaken within, or is likely to have a direct impact on, a marine park, the extent to which the expected effects of the development or project are consistent with –
 - (i) the prohibitions and restrictions applying within the marine park under the *Marine Parks Act 2007*; and
 - (ii) the general duty of care under that Act;
 - (d) the proponent's commitments to meet conditions (if any) that should be observed in order to avoid, mitigate or satisfactorily manage and control any potentially adverse effects of the development or project on the environment;
 - (e) other particulars in relation to the development or project required—
 - (i) by the regulations; or
 - (ii) by the Minister.
- (5) After the EIS has been prepared, the Minister—
- (a) —
 - (i) must, if the EIS relates to a development or project that involves, or is for the purposes of, a prescribed activity of environmental significance as defined by the *Environment Protection Act 1993*, refer the EIS to the Environment Protection Authority; and
 - (ia) must, if the EIS relates to a development or project that is to be undertaken within the Murray-Darling Basin, refer the EIS to the Minister for the River Murray; and
 - (ib) must, if the EIS relates to a development or project that is to be undertaken within, or is likely to have a direct impact on, the Adelaide Dolphin Sanctuary, refer the EIS to the Minister for the Adelaide Dolphin Sanctuary; and
 - (ic) must, if the EIS relates to a development or project that is to be undertaken within, or is likely to have a direct impact on, a marine park, refer the EIS to the Minister for Marine Parks; and
 - (ii) must refer the EIS to the relevant council (or councils), and to any prescribed authority or body; and
 - (iii) may refer the EIS to such other authorities or bodies as the Minister thinks fit,

for comment and report within the time prescribed by the regulations; and
 - (b) must ensure that copies of the EIS are available for public inspection and purchase (during normal office hours) for at least 30 business days at a place or places determined by the Minister and, by public advertisement, give notice of the availability of copies of the EIS and invite interested persons to make written submissions to the Minister on the EIS within the time determined by the Minister for the purposes of this paragraph.

- (6) The Minister must appoint a suitable person to conduct a public meeting during the period that applies under subsection (5)(b) in accordance with the requirements of the regulations.
- (7) The Minister must, after the expiration of the time period that applies under subsection (5)(b), give to the proponent copies of all submissions made within time under that subsection.
- (8) The proponent must then prepare a written response to—
 - (a) matters raised by a Minister, the Environment Protection Authority, any council or any prescribed or specified authority or body, for consideration by the proponent; and
 - (b) all submissions referred to the proponent under subsection (7),and provide a copy of that response to the Minister.
- (9) The Minister must then prepare a report (an ***Assessment Report***) that sets out or includes—
 - (a) the Minister's assessment of the development or project; and
 - (b) the Minister's comments (if any) on—
 - (i) the EIS; and
 - (ii) any submissions made under subsection (5); and
 - (iii) the proponent's response under subsection (8); and
 - (c) comments provided by the Environment Protection Authority, a council or other authority or body for inclusion in the report; and
 - (d) other comments or matter as the Minister thinks fit.
- (10) The Minister must—
 - (a) notify a person who made a written submission under subsection (5) of the availability of the Assessment Report in the manner prescribed by the regulations; and
 - (b) by public advertisement, give notice of the place or places at which copies of the Assessment Report are available for inspection and purchase.
- (11) Copies of the EIS, the proponent's response under subsection (8), and the Assessment Report must be kept available for inspection and purchase at a place determined by the Minister for a period determined by the Minister.
- (12) If a proposed development or project to which an EIS relates will, if the development or project proceeds, be situated wholly or partly within the area of a council, the Minister must give a copy of the EIS, the proponent's response under subsection (8), and the Assessment Report to the council.

APPENDIX C

Relevant Plans of the Proposal



Figure 1-1 CEIP Location

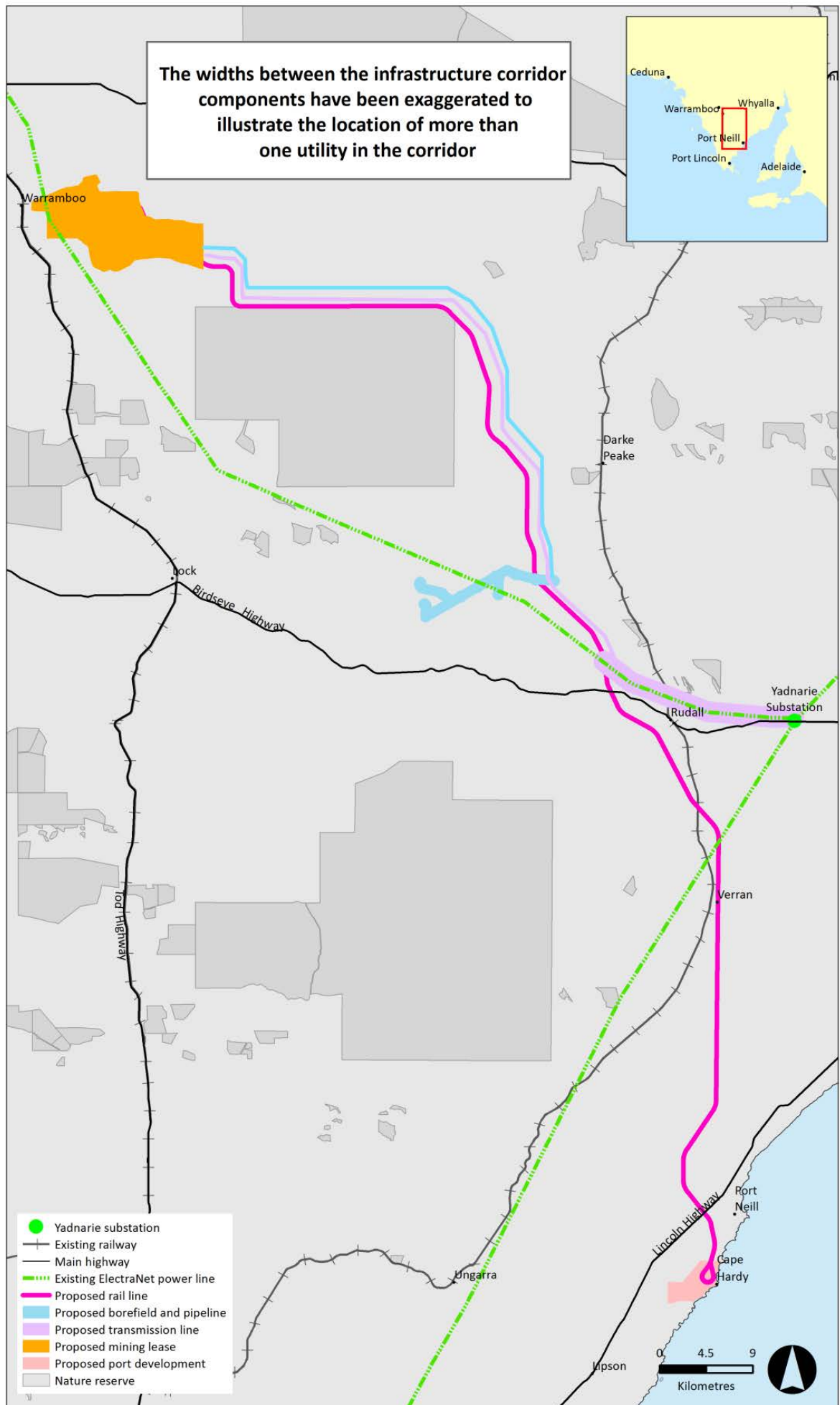


Figure 1-2 Overview of CEIP components