OLYMPIC DAM EXPANSION

DRAFT ENVIRONMENTAL IMPACT STATEMENT 2009

APPENDIX G
LOCAL PLANNING REQUIREMENTS

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resourcing the future

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APPENDIX G

LOCAL PLANNING REQUIREMENTS

CONTENTS

APPENDIX G1

Planning Strategy for Regional South Australia

G1 PLANNING STRATEGY FOR REGIONAL SOUTH AUSTRALIA

G1.1 INTRODUCTION

The Planning Strategy for Regional South Australia has been developed by the South Australian Government to act as a guide by which all South Australians can prosper and grow in a socially equitable, environmentally and economically sustainable way. The Planning Strategy is based on the key economic, social and environmental imperatives facing regional South Australia and has been prepared in two parts: it provides information, issues and broad strategies to deal with important regional subjects, followed by a description of the effects of those strategies on the main areas that make up the region. First released in 2003, the Planning Strategy was updated in December 2007.

G1.2 CONTRIBUTION OF THE PROPOSED EXPANSION

Table G1.1 outlines how the proposed Olympic Dam expansion would contribute to the achievement of the regional goals of the Planning Strategy for Regional South Australia.

Components of the Olympic Dam expansion are predominantly located in the Outback planning area under the Planning Strategy (see Figure G1.1). There are also components of the expansion located in the Upper Spencer Gulf planning area (the proposed desalination plant at Point Lowly and associated infrastructure; and the proposed landing facility, access corridor and pre-assembly yard at Port Augusta).

Tables G1.2 and G1.3 outline how the proposed expansion would contribute to the goals specific to the Outback and Upper Spencer Gulf planning and development areas, respectively.

Table G1.1 Contribution of the proposed Olympic Dam expansion to the Planning Strategy for Regional South Australia

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
Economic Activity		
Mining, Oil and Gas		
17 Attract and encourage exploration for and development of mineral and petroleum resources in the State in accordance with environmental standards 18 Accelerate resource discoveries by stimulating increased investment in exploration 19 Maximise the on-shore processing of mineral and petroleum resources within acceptable environmental standards	The proposed Olympic Dam expansion, as described in Chapter 5, Description of the Proposed Expansion, would provide for additional mineral exploration and production in the Olympic Dam region through the extension of the area covered by the Special Mining Lease and the construction of new plant and infrastructure for minerals processing and associated activities. The proposed expansion would also stimulate further exploration of the mineral potential of the region; the resulting establishment of key support infrastructure and industries at Roxby Downs would encourage exploration in adjacent areas.	Chapter 5
	BHP Billiton would develop appropriate management plans to govern the post-closure use and rehabilitation of land affected by mining (see Chapter 23 Rehabilitation and Closure).	Chapter 23 Appendix T
Industry		
20 Provide an adequate and appropriate supply of services land for industrial and commercial purposes	The proposed expansion, through the Roxby Downs Draft Master Plan, would provide for the clustering of related light and heavy industries in Roxby Downs and the establishment of appropriate separation distances between industrial precincts and areas of more sensitive activity.	Appendix F4
Education and Training		
23 Continue to develop linkages between schools, TAFE Institutes and private training providers, universities and industry in response to the needs of enterprises and the community 25 Provide education and training which results in direct employment outcomes in industry and the local community 26 Support further development of vocational education and training sector providing quality training to meet the skill needs of enterprises and the community	The expansion of the Roxby Downs township, as broadly described in the Roxby Downs Draft Master Plan, would include provisions for the installation or upgrade of high capacity broadband telecommunications infrastructure which would be capable of supporting and enabling education and training initiatives.	Appendix F4
	The proposed expansion would contribute to regional skills bases by increasing local demand for apprentices and trainees and attracting additional skilled personnel to work at Olympic Dam and the local area.	19.5.1
	BHP Billiton would continue to consult with Government and relevant industry groups with regard to addressing skills shortages, and would develop an Aboriginal Engagement Plan for training and employment of local Aboriginal people.	19.5.1
Environment and Resources		
Ecologically Sustainable Development		
1 Promote ecologically sustainable development principles and apply them in all aspects of development and revitalisation	The proposed expansion would plan for and coordinate the sustainable management of renewable natural resources and the efficient use of non-renewable resources. The principles of ESD are relevant to the existing operation and the proposed expansion, and specific requirements of these principles are discussed in Chapter 25, Cumulative Effects and Appendix E2. BHP Billiton would investigate methods to reduce greenhouse gas emissions, for example through the use of renewable energy, reduction of energy demand and maximisation of energy efficiency (see Chapter 13, Greenhouse Gas and Air Quality). The Roxby Downs Draft Master Plan, which guides the proposed expansion of the Roxby Downs township, has been developed with a focus on ecologically sustainable development principles.	5.8.8 Chapter 25 Appendix E2 13.2 Appendix F4
Integrated Natural Resource Management		
2 Ensure the sustainable management of natural resources	The ongoing management and monitoring of Arid Recovery, through the partnership involving BHP Billiton, local pastoralists, the University of Adelaide and the Department for Environment and Heritage, would continue to provide significant information to assist in the assessment and sustainable management of the local environment, the conservation of biodiversity and research into arid land ecology and the potential for re-establishment of threatened fauna species.	9.3.2 15.5.5

Table G1.1 Contribution of the proposed Olympic Dam expansion to the Planning Strategy for Regional South Australia (cont'd)

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
Biodiversity		
3 Conserve biodiversity and integrate with land use planning	The Draft EIS has undertaken a number of specialised studies (focusing on the major components of the proposed expansion as well as the proposed infrastructure corridors) and has employed a rigorous impact assessment process (which has included feedback of biodiversity information into design) to ensure the proposed expansion does not result in significant impacts on biodiversity. The Roxby Downs Draft Master Plan has been developed using local ecological information, and has been developed to reflect and retain the arid dune landscape, utilise local native species in revegetation programs and planting of open space, locate development zones in areas of low ecological significance, and minimise impacts to ecologically sensitive areas. The relocated Borefield Road would be aligned (where practicable) to avoid fragmentation of sensitive dune areas.	5.9.4 Chapter 9 Appendix F4 Appendix G2
Native Title		
8 Foster productive negotiations with native title claimants with a view to developing indigenous land use agreements	BHP Billiton would continue communication and consultation with local Aboriginal communities and native title claimant groups through the Olympic Dam Agreement, which has been negotiated between BHP Billiton and groups claiming an interest in the Olympic Dam region and infrastructure corridors.	17.2.2
Heritage		
9 Conserve places of Aboriginal and non-Aboriginal heritage value	The Olympic Dam Agreement has established mechanisms for effective consultation with local Aboriginal people and an ongoing regime to protect and manage Aboriginal cultural heritage sites and values. The proposed expansion would provide measures and prevent any direct or indirect impacts on places of Aboriginal and non-Aboriginal heritage value.	17.2.2 Chapter 18
Pollution and Waste Management		
10 Consider community and industry requirements for noise and air quality control when developing performance-based policies	The design of components of the proposed expansion has included separation distances in accordance with the relevant standards to minimise any impact of the expansion on more sensitive land uses in the surrounding areas.	14.4
11 Protect land from contamination and encourage progressive restoration of contaminated land 12 Locate waste facilities in an orderly and rational manner	BHP Billiton would develop management plans to prevent contamination and to manage the ongoing rehabilitation of land affected by the existing operation and as a result of the proposed expansion.	10.5.4 Chapter 23 Chapter 24
13 Manage hazardous, industrial, commercial and hazardous waste	The location and operation of waste management facilities associated with the proposed expansion would follow the existing site practices, which are controlled through the site Environmental Management Program. The Roxby Downs Draft Master Plan allows for the upgrade of the existing Roxby Downs landfill and the construction of a new waste transfer facility.	5.6 Appendix F4
	BHP Billiton would ensure that waste generated by the proposed expansion would be managed in accordance with existing approved procedures, ensuring the safe and efficient transport of listed wastes to protect the community and the environment.	5.6
Waste Minimisation		
14 Minimise waste through a range of approaches including avoidance, reduction, recycling, reuse and recovery of materials	The existing Olympic Dam Waste Management Strategy calls for the implementation of the waste hierarchy into on-site waste management, specifically the requirement to avoid or minimise waste generation and, where practicable, the reuse or recycling of wastes. The expanded operation would continue to implement the waste hierarchy through investigating waste avoidance and minimisation programmes and promoting reuse and recycling.	5.6

Table G1.1 Contribution of the proposed Olympic Dam expansion to the Planning Strategy for Regional South Australia (cont'd)

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
People, Towns and Housing		
Housing		
1 Ensure diverse and affordable housing to suit community needs and preferences 4 Develop higher residential densities close to services	The Roxby Downs Draft Master Plan incorporates initiatives which incorporate consideration of the following values: • provision of sufficient land supply and infrastructure • encouraging diversity of housing types and higher housing densities • investigating a range of affordable housing alternatives.	19.5.3 Appendix F4
Design		
6 Provide safe, secure and healthy living environments 7 Promote good design in public spaces 8 Establish urban design guidelines that reflect community values 9 Improve built environments through a focus on strategic urban design, in particular infrastructure links, open space, built form and scale, accessibility and environmental management	The Roxby Downs Draft Master Plan provides a comprehensive, strategic approach to the urban design requirements of the proposed expansion, with an emphasis on sustainability, accessibility and liveability. The strategic design measures incorporated in the Roxby Downs Draft Master Plan aim to: • encourage the improvement of residential amenity and community sustainability through the urban regeneration of existing areas and the expansion of residential, commercial and industrial areas in a controlled and sustainable manner • include indicative design strategies for the various land use areas of the township • include features in residential zones, public areas and transport corridors that are designed to improve and promote access and mobility, enhance safety and encourage physical activity • include provision for the upgrade and redevelopment of the civic and commercial centre of Roxby Downs within or adjacent to the existing central precincts • encourage greater casual surveillance through allotment design, providing a greater community security. The Draft Master Plan process has encouraged community participation in the development of the concept urban design, which has enabled the planning of the proposed redevelopment and revitalisation of living areas and regional town business centres to align, where possible, with community expectations and desires. The proposed Hiltaba Village would also incorporate similar strategic features within the concept development design to enhance the sustainability, accessibility and liveability of the built-up areas associated with contractor accommodation.	5.10.2 19.5.3 Appendix F4
Town Growth and Business Centres		
11 Establish environmentally responsible practices in urban development through joint ventures and other development activities 13 Integrate the planning and management of urban infrastructure in an efficient manner, to conveniently locate facilities and to create an attractive, safe, inclusive and enjoyable place to live 14 Concentrate shops, offices, services, civic and community activities in towns and business centres	The Roxby Downs Draft Master Plan encourages ecological sustainability in new housing construction and infill programs, and would promote development that supports energy and water conservation principles in the siting and design of new construction, reduce energy demand with good site design, and promote the use of building materials which are energy efficient and low in embodied energy. The Draft Master Plan allows for the provision of infrastructure to meet existing and future needs of the community, including the design of roads, bicycle paths and pedestrian walkways to reduce conflict between vehicles and pedestrians, to increase connectivity and accessibility, and to encourage physical activity. The Draft Master Plan promotes the development of additional housing, commercial, recreational and civic areas within compact extensions of existing built-up areas of similar use, and allows for the expansion and redevelopment of the centre of Roxby Downs to ensure retailing and other commercial activities remain in designated central areas. The Draft Master Plan also encourages the development of housing within or adjacent to town and business centres, particularly to accommodate people without access to private transport.	19.5 Appendix F4

Table G1.1 Contribution of the proposed Olympic Dam expansion to the Planning Strategy for Regional South Australia (cont'd)

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
Community Services		
16 Provide access to high quality, responsive and timely services 17 Plan services and facilities to accommodate changing use over time and enhance accessibility through careful design and siting	BHP Billiton would actively participate in the development of a human services plan by the State government in order to identify and deliver the appropriate social services and infrastructure to meet the needs of the community resulting from the proposed expansion. This would include services for the expanded Roxby Downs population, the construction workforce and for the region as a whole, and may include the establishment of planning groups to manage the plan, assess population projections, review existing services and capacity, determine priorities and requirements for new services, secure necessary funding commitments and monitor implementation.	19.5.4 Appendix F4
Support for Individuals and Families		
18 Facilitate the economic, social and cultural wellbeing of Aboriginal people	BHP Billiton would continue to act under the provisions of the Olympic Dam Agreement to foster and maintain productive relationships with local Aboriginal groups, and would develop an Aboriginal Engagement Plan, which would allow for the employment and training of local Aboriginal people and identification of potential positions for Aboriginal people, including training programs and apprenticeships.	17.2 19.5.1
21 Provide a network of centres for family and community support in consultation with local communities through coordination and integration of family services	The Roxby Downs Community Board, the Roxby Downs Draft Master Plan and other initiatives would be able to identify the changing requirements for family and community services (such as health care and childcare), and ensure the provision of adequate services.	19.5.4
Water Resources		
Efficient Use of Water		
Industry and Town Water Use		
2 Plan for the sustainable, economic and efficient use of water resources 3 Protect water resources while allowing sustainable economic development	The introduction of water recycling, reuse and conservation initiatives as part of the proposed expansion would provide for the sustainable, efficient and economic use of water supplies. These initiatives would be implemented in the mining and processing operation, Roxby Downs township and Hiltaba Village. No additional water beyond existing licences would be extracted from the Great Artesian Basin (GAB) to supply the proposed expansion.	5.7 5.10.2
Water Quality and Quantity		
Environment		
7 Integrate water resource policies and local water planning with land use planning	In accordance with existing licences and regulations, the proposed expansion would manage and monitor groundwater resources to ensure their sustainable use and protection from pollution and overuse.	Chapter 12
Pollution		
11 Protect catchments from poor land use and management practices	Potential sources of pollution associated with the proposed expansion that could impact on catchments or groundwater basins have been identified; these sources would be managed such that any potential impacts to water resources in the region would be reduced or avoided.	11.5.2

Table G1.1 Contribution of the proposed Olympic Dam expansion to the Planning Strategy for Regional South Australia (cont'd)

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
Infrastructure		
Industry Support		
1 Enhance the economic competitiveness of the State by supporting the provision of suitable infrastructure at a reasonable cost	The proposed expansion would include an upgrade to the existing network to enable a high speed broadband internet and telecommunication connection to Roxby Downs and Olympic Dam. The proposed expansion would improve the security and quality of water supply to the State through the construction of a coastal seawater desalination plant at Point Lowly, which would provide additional potable water to Olympic Dam, Roxby Downs township and Hiltaba Village, as well as to the Upper Spencer Gulf and Eyre Peninsula regions through the existing SA Water network.	5.7.4
Energy		
2 Enhance access to competitive energy supplies of all customers across the State	The electricity requirements of the proposed expansion would require the construction of expanded or new electricity generation facilities. Initial responses from the electricity market to BHP Billiton in relation to meeting the required additional supply has been overwhelming, with numerous suppliers wanting to supply the required electricity. The proposed expansion would promote the development of renewable energy sources through the purchase of renewable energy for the proposed desalination plant, installing solar hot water systems at Hiltaba Village and investigating renewable energy sources for Roxby Downs.	5.8 5.10.2 25.4.4
Water		
3 Plan for water infrastructure 4 Ensure water supply, sewage and stormwater drainage services of appropriate standards and cost are available to meet community needs	BHP Billiton has identified the opportunity for the provision of an alternative water source through the construction of a coastal seawater desalination plant, which would provide the primary water supply for the proposed expansion. The desalination plant would also provide the State Government with supplementary potable water, which would be distributed through the SA Water network to the Upper Spencer Gulf and Eyre Peninsula regions, reducing reliance on River Murray water for urban and domestic use. Sewage and stormwater systems for the expanded Roxby Downs township would be designed in accordance with Roxby Downs Draft Master Plan.	5.7.4 5.10.2
Electronic Information and Communications		
11 Provide enhanced communications infrastructure to support cost effective provision of internet services to regional customers	The proposed expansion would include upgraded infrastructure to enable a high performance broadband internet connection to Roxby Downs and Olympic Dam capable of carrying large volumes without congestion. The Roxby Downs Draft Master Plan also encourages investigating the establishment of a wireless broadband network within Roxby Downs.	Appendix F4 5.10.2
Moving People, Goods and Services		
Road		
19 Enable the safe and efficient movement of people and goods	The proposed relocation of Borefield Road to the east would increase the access and safety of road travel to regions north of Olympic Dam by redirecting traffic around, rather than through, the Olympic Dam Special Mining Lease (SML). The construction of passing bays on the Stuart Highway would enable continued traffic flow, reducing disruptions to tourists and other road users and increasing road safety.	5.9.4
21 Progressively improve the environment surrounding the road transport system 22 Develop an integrated transport system that provides access for all users	The construction of the proposed access corridor would provide a dedicated freight transport corridor, which would ensure safe access to and use of the existing road system. The proposed Pimba intermodal (rail/road) freight facility and new rail line would reduce the potential impacts of road transport on regional communities by reducing the volume of freight transported to Olympic Dam by road. The access corridor, intermodal facility, new rail line and relocated Borefield Road would maximise the efficiency of the transport system by utilising a variety of transport modes and reducing reliance on road freight.	5.9.2 5.9.3 5.9.4

Table G1.1 Contribution of the proposed Olympic Dam expansion to the Planning Strategy for Regional South Australia (cont'd)

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
25 Ensure the road transport system supports tourism	The proposed construction of passing bays on the Stuart Highway, and the relocation of Borefield Road would support continued access to towns and tourism destinations north of Olympic Dam.	5.9.4
Air		
26 Develop an integrated, efficient and competitive air transport system that supports South Australian businesses and regional communities	The proposed expansion would include the development of a new airport, which would have a greater capacity than the existing airport. This would provide additional opportunities for tourism, business and community.	5.9.6
Sea		
27 Develop an integrated, efficient and competitive sea transport system that supports South Australian businesses	The proposed expansion would incorporate a landing facility south of Port Augusta, an intermodal facility at Pimba, and a new sulphur handling facility at Outer Harbor. These components would allow for increased sea and rail freight and a decreased volume of road freight.	5.9.2 5.9.5
Rail		
29 Upgrade and maintain an efficient and competitive rail system to and within regions	In addition to the intermodal facility at Pimba, the proposed expansion would include the construction of a rail spur direct to Olympic Dam, which would reduce road traffic volumes.	5.9.2

Table G1.2 Contribution of the proposed expansion to the specific planning goals for the Outback Planning and Development Area

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
Outback Planning and Development Area		
Economic Activity Strategies		
2 Attract and support major development based on the strengths of the area	The proposed expansion would increase mining production and processing, and would stimulate further mineral exploration of the region. In addition, the establishment of key support infrastructure and industries at Roxby Downs would encourage exploration in adjacent areas.	5.4 5.5
Environment and Resources Strategies		
6 Manage pastoral and rangeland areas on a sustainable environmental basis, supported by suitable research and development facilities	The ongoing management and rehabilitation of Arid Recovery provides a foundation for the re-establishment of threatened flora and fauna, which would assist in reversing the negative impacts of invasive plants, feral animals and inappropriate grazing practices.	9.3.2 15.5.4 15.5.5
7 Conserve and manage the biodiversity of the area	As part of the package of environmental offsets to be implemented by BHP Billiton, areas of suitable conservation significance would be identified and, where practical, would be included in the areas provided for conservation purposes.	15.5.4 15.5.5
	BHP Billiton would develop and implement Environmental Management Programs to conserve biodiversity and to identify, control and (where practicable) rehabilitate areas affected by activities associated with the proposed expansion.	Chapter 15 Chapter 23 Chapter 24
8 Maintain reserves and parks as core assets for regional tourism and biodiversity conservation by ensuring infrastructure is sustainable and conservation values are maintained	BHP Billiton has agreements with the adjacent Billa Kalina and Mulgaria pastoral stations with regard to the ongoing management of Arid Recovery to ensure its long-term conservation values are maintained.	Chapter 15
	The Draft EIS has incorporated extensive surveys to identify sensitive environmental areas and significant cultural heritage areas in order to ensure that these would be, where practicable, avoided by the components of the proposed expansion or conserved and protected from any potential impacts arising from the expansion.	18.5
9 Maximise sustainable use of regional water supplies by managing demand and providing opportunities to supply future areas	BHP Billiton would continue to desalinate groundwater at Olympic Dam, and would ensure the ongoing sustainable use of groundwater resources. Water from the proposed desalination plant would provide the primary water supply for the proposed expansion and would also supply the Roxby Downs township and Hiltaba Village.	5.7.4
People, Towns and Housing Strategies		
10 Encourage a variety of housing types appropriate to the location, size and character of townships	The Roxby Downs Draft Master Plan would allow for an increased choice in and diversity of housing designs to meet the needs of current and future residents.	19.5.3 Appendix F4
11 Improve access to quality health and community services, such as regional hospitals, aged care facilities, mental health services and Aboriginal health programs	The Roxby Downs Draft Master Plan has set aside land to allow for the expansion of the Roxby Downs Hospital and ancillary community care facilities.	19.5.4
12 Provide opportunities for young people in education, employment and recreation	The proposed expansion would provide for direct employment opportunities within the mining and metallurgical processing operation, and indirect employment opportunities with support and service industries. BHP Billiton would investigate the potential for the provision of or support for additional traineeships and/or apprenticeships, including through the implementation of the Aboriginal Engagement Plan.	19.5.1
Infrastructure Strategies		
13 Ensure transport infrastructure and services provide efficient, safe and reliable movement of goods and serve the needs of local communities and residents	The relocation of Borefield Road to the east outside of the SML would allow for safer travel to pastoral and tourist destinations north of Olympic Dam, reducing the potential for conflict between private and mine vehicular traffic. The development of a road and rail linkage through the Pimba intermodal terminal, and the eventual construction of a rail spur directly to Olympic Dam would facilitate efficient transport processes, and would reduce the volume of freight transported on public roads.	5.9

Table G1.2 Contribution of the proposed expansion to the specific planning goals for the Outback Planning and Development Area (cont'd)

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
15 Develop alternative sources of energy supply for use in the mining, agricultural and tourism industry and by local communities	The proposed expansion includes the generation of power using waste heat from sulphur burning acid plants, and the possible construction of a combined cycle gas turbine power station. These alternative power sources would reduce demand on the existing National Electricity Market. Renewable energy sources would be investigated for use in both the proposed desalination plant and the expanded Roxby Downs township.	5.8.5 5.8.7 5.8.8 5.10.2
16 Promote adequate supply of water of sufficient quantity and quality for industry development and domestic use	Sustainable water management techniques, involving recycling, reuse and conservation, have been promoted in the development of the Roxby Downs Draft Master Plan.	5.10.2 Appendix F4
	The construction of the proposed desalination plant at Point Lowly would provide a secure water supply for Olympic Dam, the Roxby Downs township and Hiltaba Village.	5.7.4

Table G1.3 Contribution of the proposed expansion to the specific planning goals for the Upper Spencer Gulf Planning and Development Area

Planning Strategy for Regional South Australia Sector/Strategy	Description of the Olympic Dam expansion's contribution or relevance to the target	EIS Section
People, Towns and Housing Strategies		
Economic Activity		
1 Support government, business and the community working together toward a common vision to achieve sustainable economic growth in the Upper Spencer Gulf	The construction of the landing facility, access corridor, pre-assembly yard and coastal desalination plant would provide ongoing employment opportunities for the region. The water provided by the desalination plant would enable additional growth which would help sustain the area into the future.	5.7.4 5.9.5
Environment and Resources Strategies		
9 Develop innovative water supply and energy alternatives to establish the area as a world leader in arid land management and renewable energy technologies, supported by research facilities at Whyalla	The proposed development of the desalination plant at Point Lowly would provide an alternative water supply for the Upper Spencer Gulf and Eyre Peninsula regions.	5.7.4
13 Manage coastal and marine environments in a sustainable way to meet multiple objectives	The proposed desalination plant and landing facility would be sited and constructed to avoid damage to the coast and the adjacent marine environment.	5.7.4 5.9.5 Chapter 16
People, Towns and Housing Strategies		
19 Foster employment opportunities for Indigenous people	Possibilities for providing additional employment opportunities for Aboriginal people in the Upper Spencer Gulf would be investigated by BHP Billiton through the Olympic Dam Agreement and the Aboriginal Engagement Plan.	17.2.2 19.5.1
Infrastructure Strategies		
26 Promote improved energy supply though the development of innovative energy alternatives supported by renewable energy technologies to reduce costs and supplement the grid supply	BHP Billiton would investigate opportunities for using renewable energy to power the proposed desalination plant.	5.7.4

G1.3 REFERENCES

Planning SA, 2007, *'Planning Strategy for Regional South Australia, January 2003 (as amended at December 2007)'*, Department of Transport and Urban Planning, Adelaide.

Figure G1.1 EIS Study Area with Regional SA Planning and Development Areas

APPENDIX G2

Development plans assessment

G2 DEVELOPMENT PLANS ASSESSMENT

G2.1 INTRODUCTION

In South Australia, Development Plans have been implemented for each council area and for areas described as land not within a council area, under the provisions of the *Development Act 1993*. Each Development Plan contains objectives and principles of development control for the council area.

Components of the proposed expansion are located in several council areas and in areas described as land not within a council area (see Figures G2.1 to G2.12). An assessment against the intent and objectives of the relevant Development Plans for each of the project components has been undertaken and is presented in Sections G2.2 to G2.7.

The *Development Act 1993* does not have general application to development activities within core project areas including the SML, and areas that BHP Billiton owns, occupies or is entitled to tenure over, which are required for the transport, supply or provision of petroleum, electricity or water for the project. However, most major development activities related to the proposed expansion are within the scope of the Major Development processes and as such are considered to be consent use. While not bound by the Development Plans, the Minister for Mineral Resources Development is to have regard to the provisions of the relevant plans during the assessment process.

Following project approval, the Development Plans that apply to the proposed expansion would be amended (through the Plan Amendment process) so as not to prevent or unduly hinder the proposed development and to provide a long-term planning policy framework against which future development proposals can be assessed.

An assessment is also provided for the Port of Darwin in relation to the Northern Territory Planning Scheme and the proposed concentrate storage and handling facility at the East Arm Port future facilities area (see Section G2.8 and Figure G2.13).

G2.2 LAND NOT WITHIN A COUNCIL AREA (EYRE, FAR NORTH, RIVERLAND AND WHYALLA)

The region covered by the Land Not Within A Council Area (Eyre, Far North, Riverland and Whyalla) Development Plan (consolidated 14 August 2008) encompasses almost three quarters of South Australia's land area, is rich in environmental and heritage assets, and contains important mineral resources. A large portion of the EIS Study Area is within the Far North region including the proposed Special Mining Lease, gas pipeline corridor options, Pimba intermodal facility and about 200 km of the southern infrastructure corridor (see Figures G2.1 to G2.6). About 27 km of the proposed water supply pipeline is located in the Eyre region (see Figure G2.7 and G2.8). All of the project components covered by this plan are in the Remote Areas Zone (see Table G2.1).

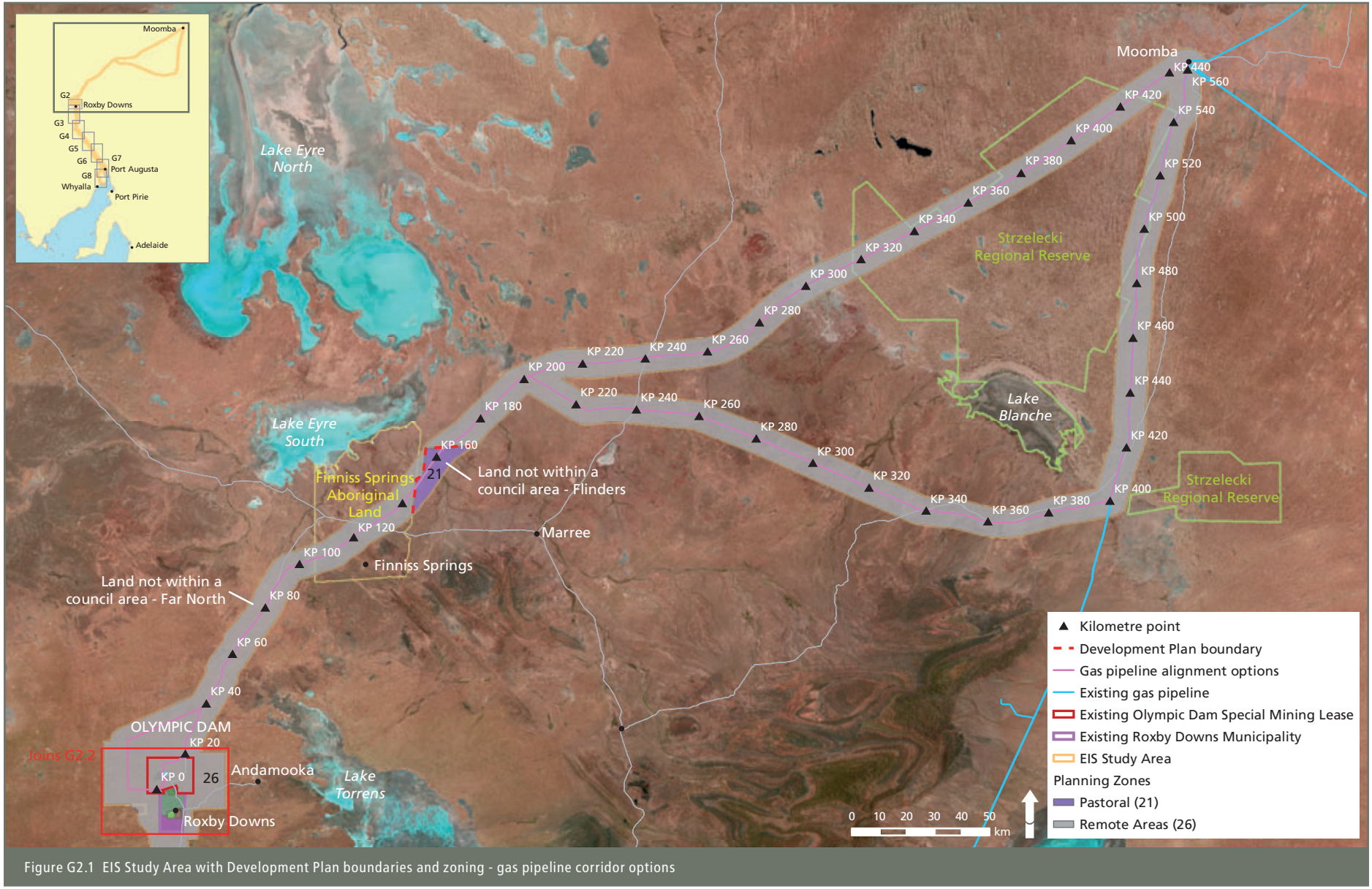

Figure G2.1 EIS Study Area with Development Plan boundaries and zoning - gas pipeline corridor options

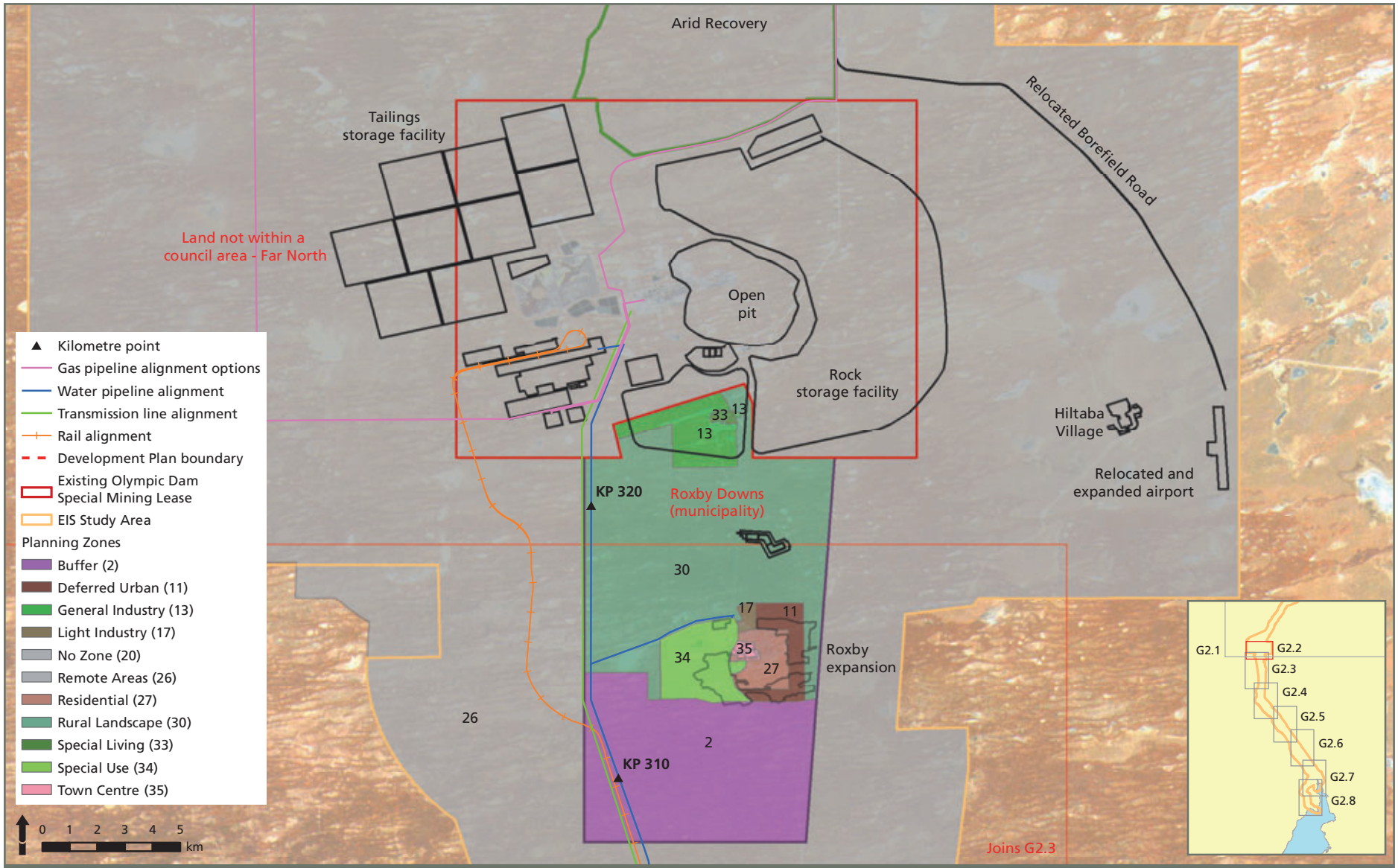

Figure G2.2 EIS Study Area with Development Plan boundaries and zoning - Special Mining Lease and Roxby Downs

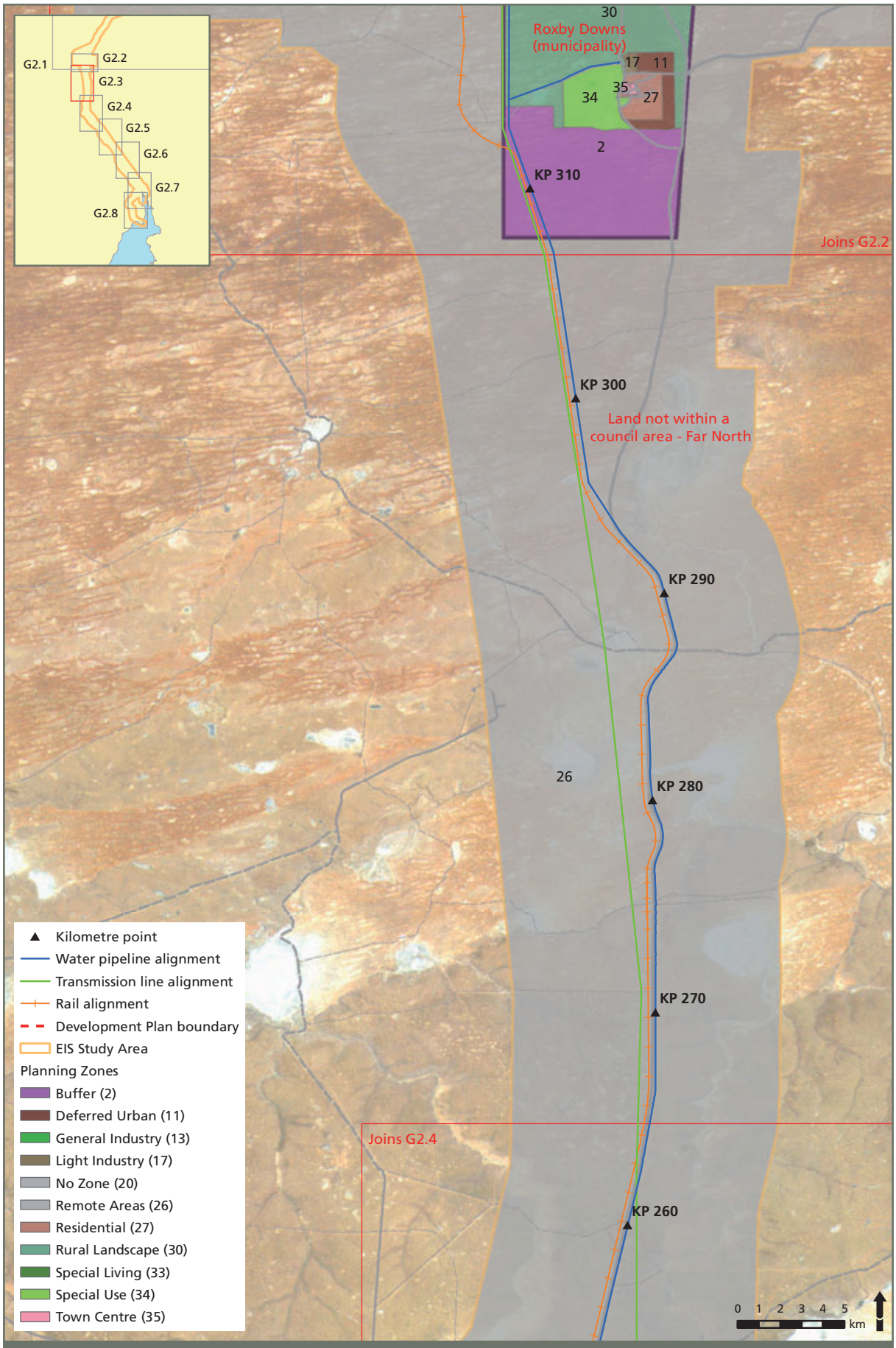

Figure G2.3 EIS Study Area with Development Plan boundaries and zoning - southern linear infrastructure corridor

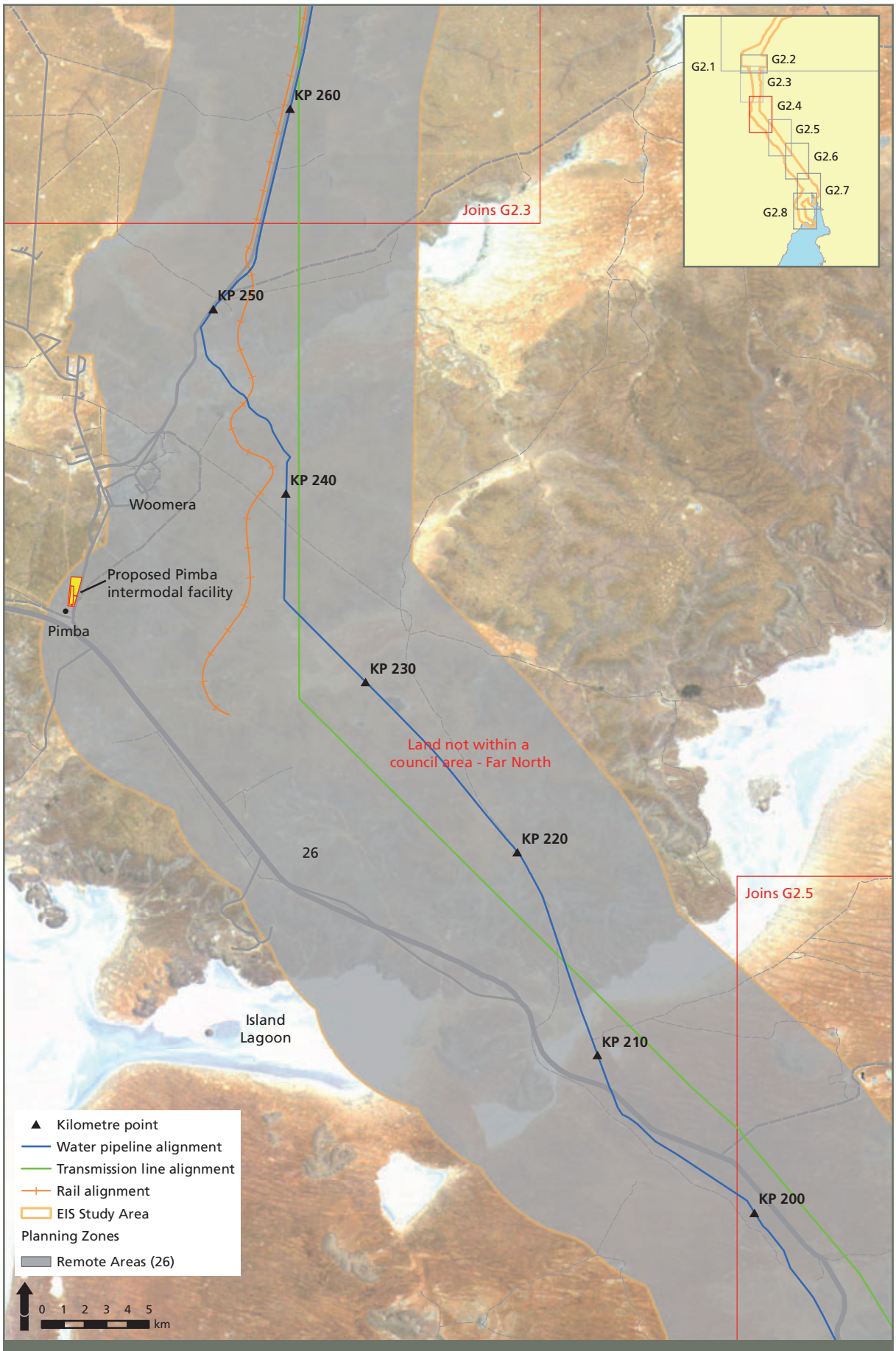

Figure G2.4 EIS Study Area with Development Plan boundaries and zoning - southern linear infrastructure corridor

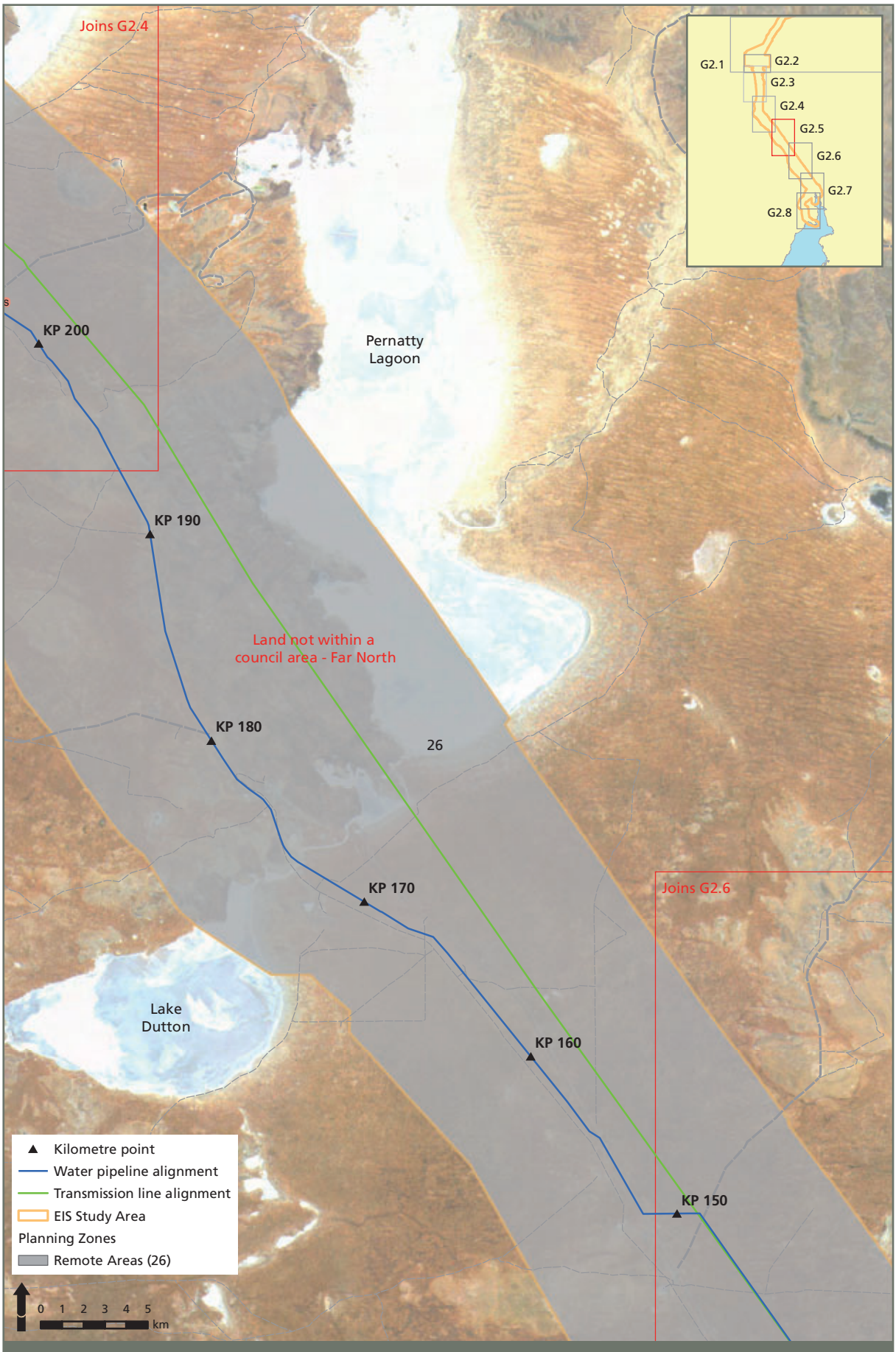

Figure G2.5 EIS Study Area with Development Plan boundaries and zoning - southern linear infrastructure corridor

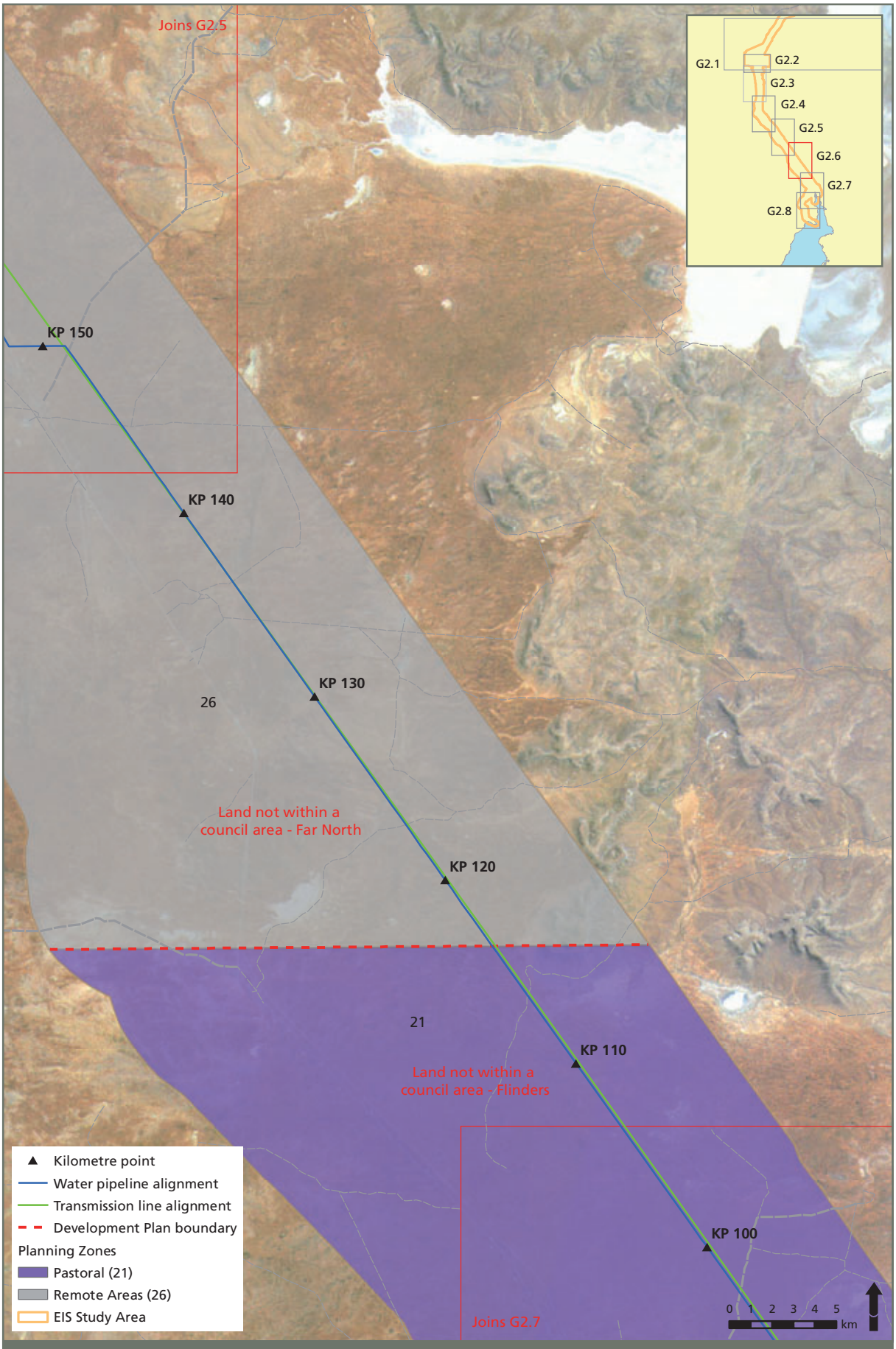

Figure G2.6 EIS Study Area with Development Plan boundaries and zoning - southern linear infrastructure corridor

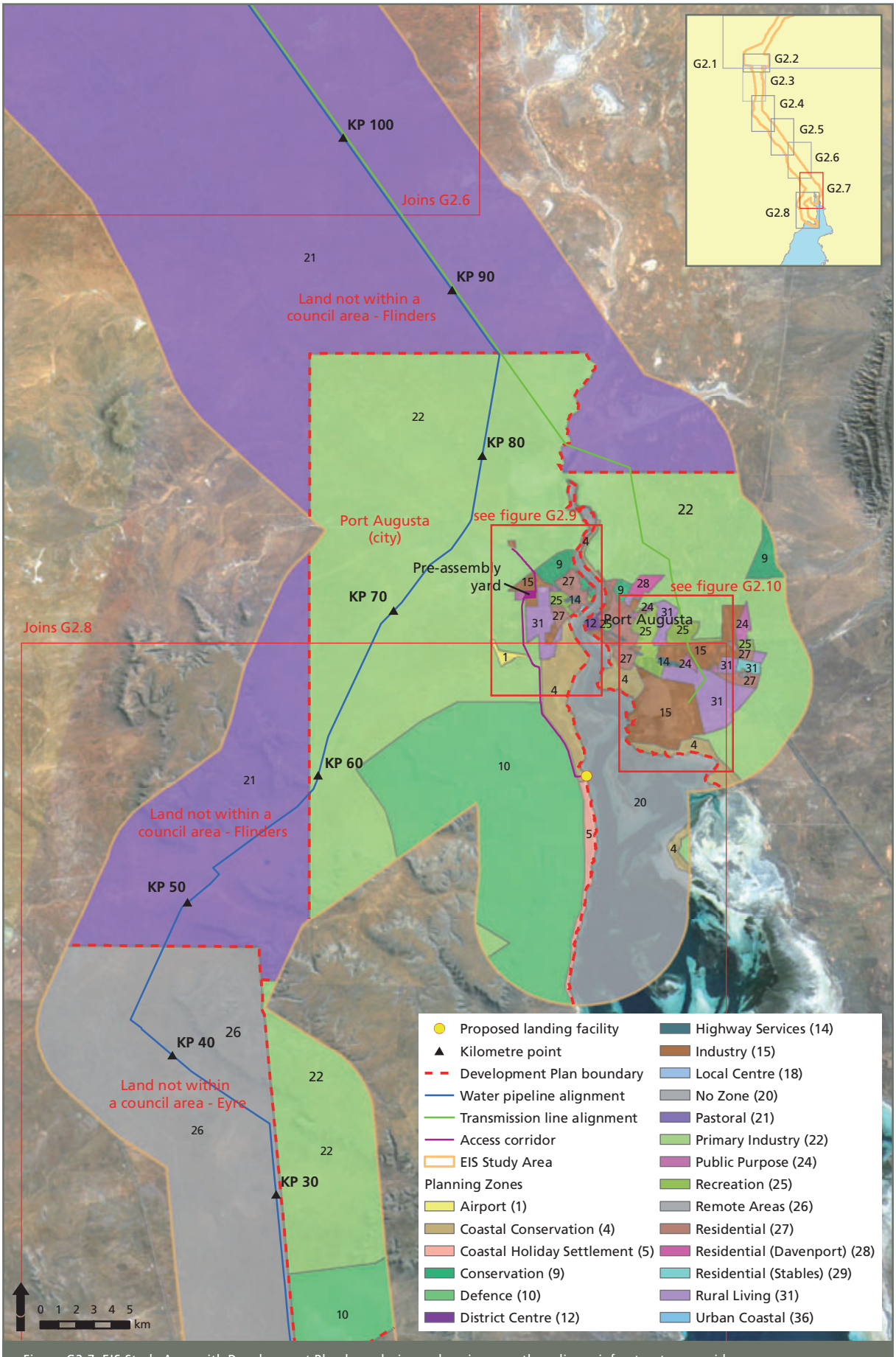

Figure G2.7 EIS Study Area with Development Plan boundaries and zoning - southern linear infrastructure corridor

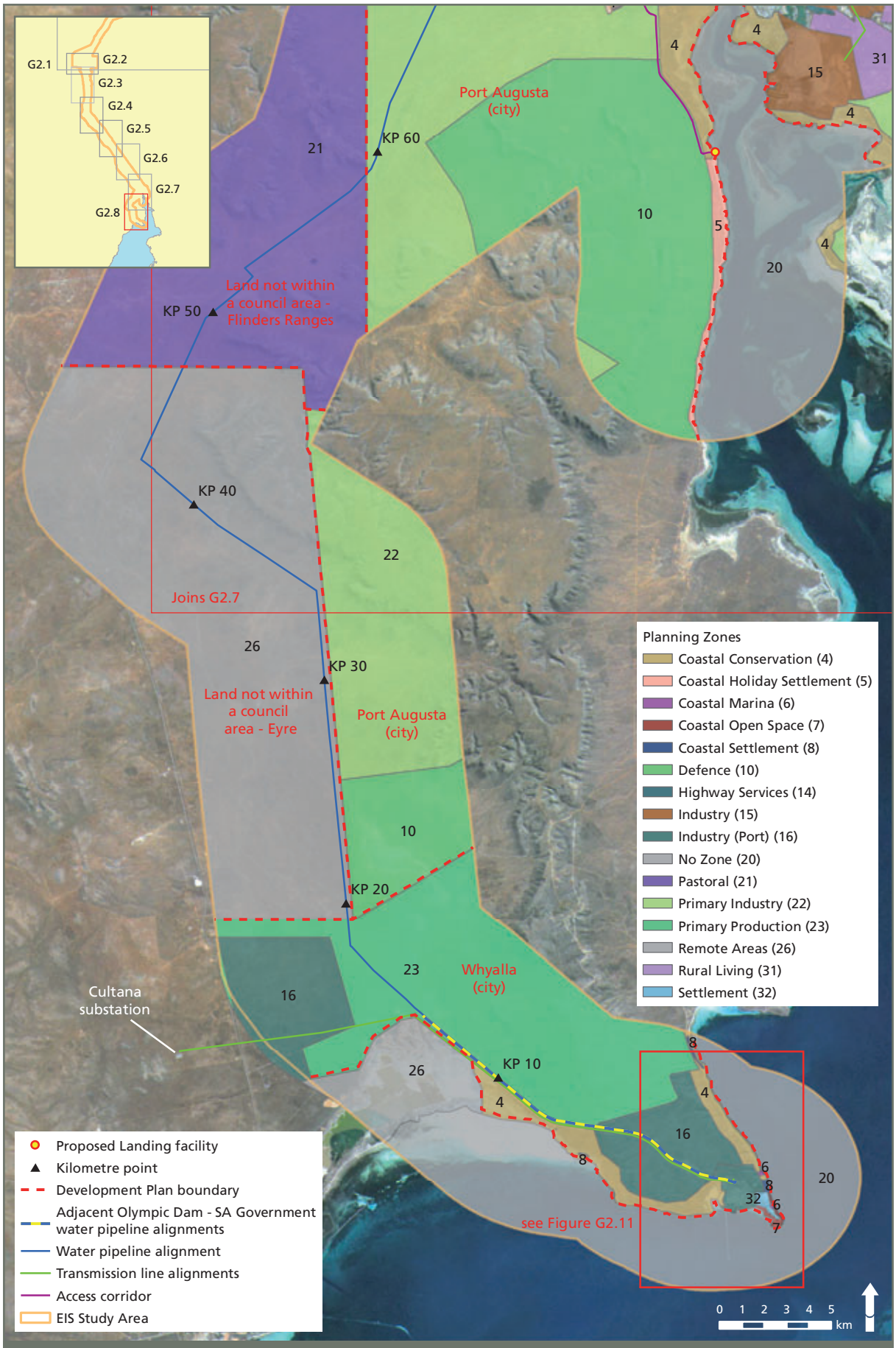

Figure G2.8 EIS Study Area with Development Plan boundaries and zoning - southern linear infrastructure corridor

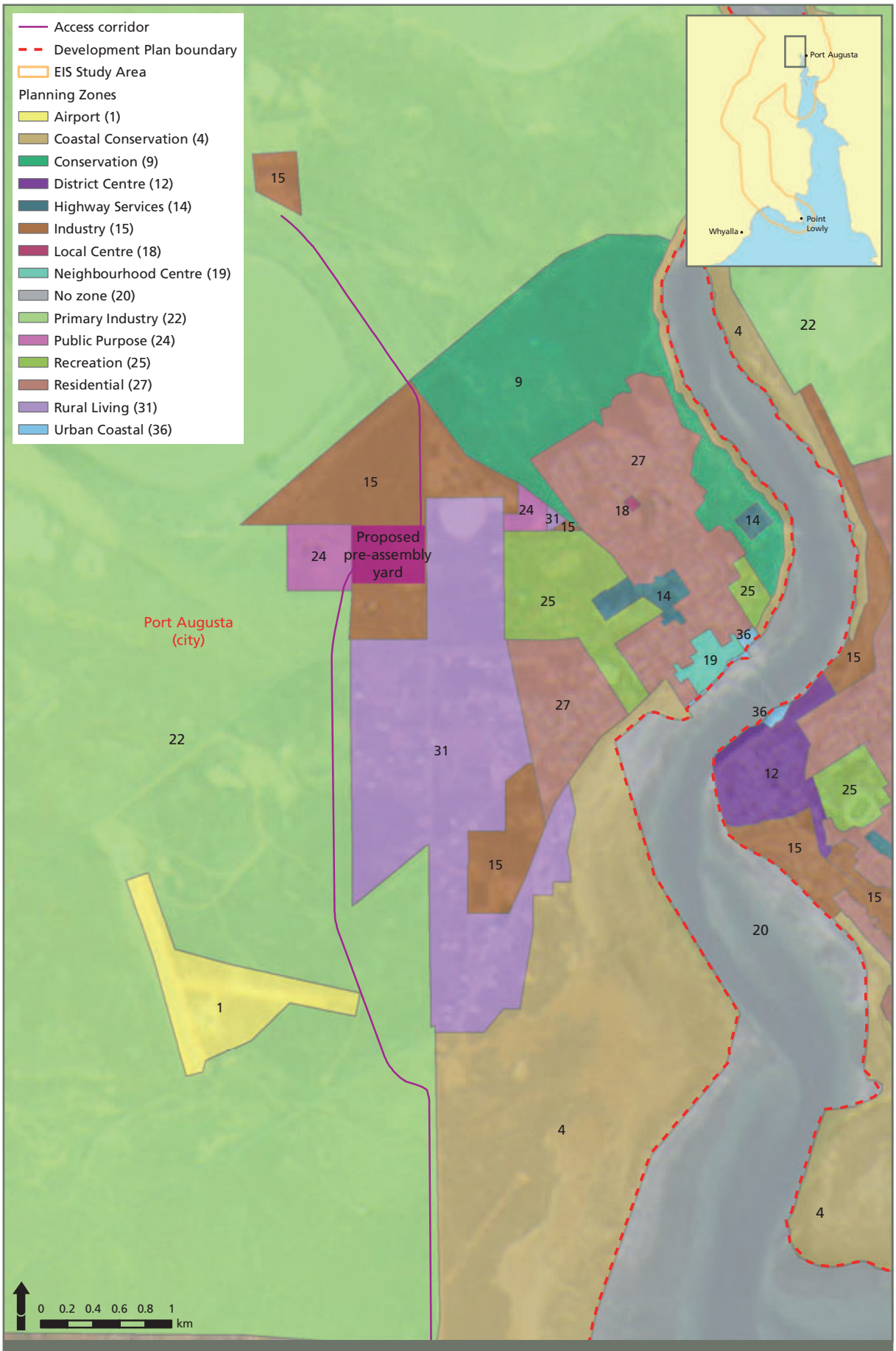

Figure G2.9 EIS Study Area with Development Plan boundaries and zoning - Pre-assembly yard at Port Augusta

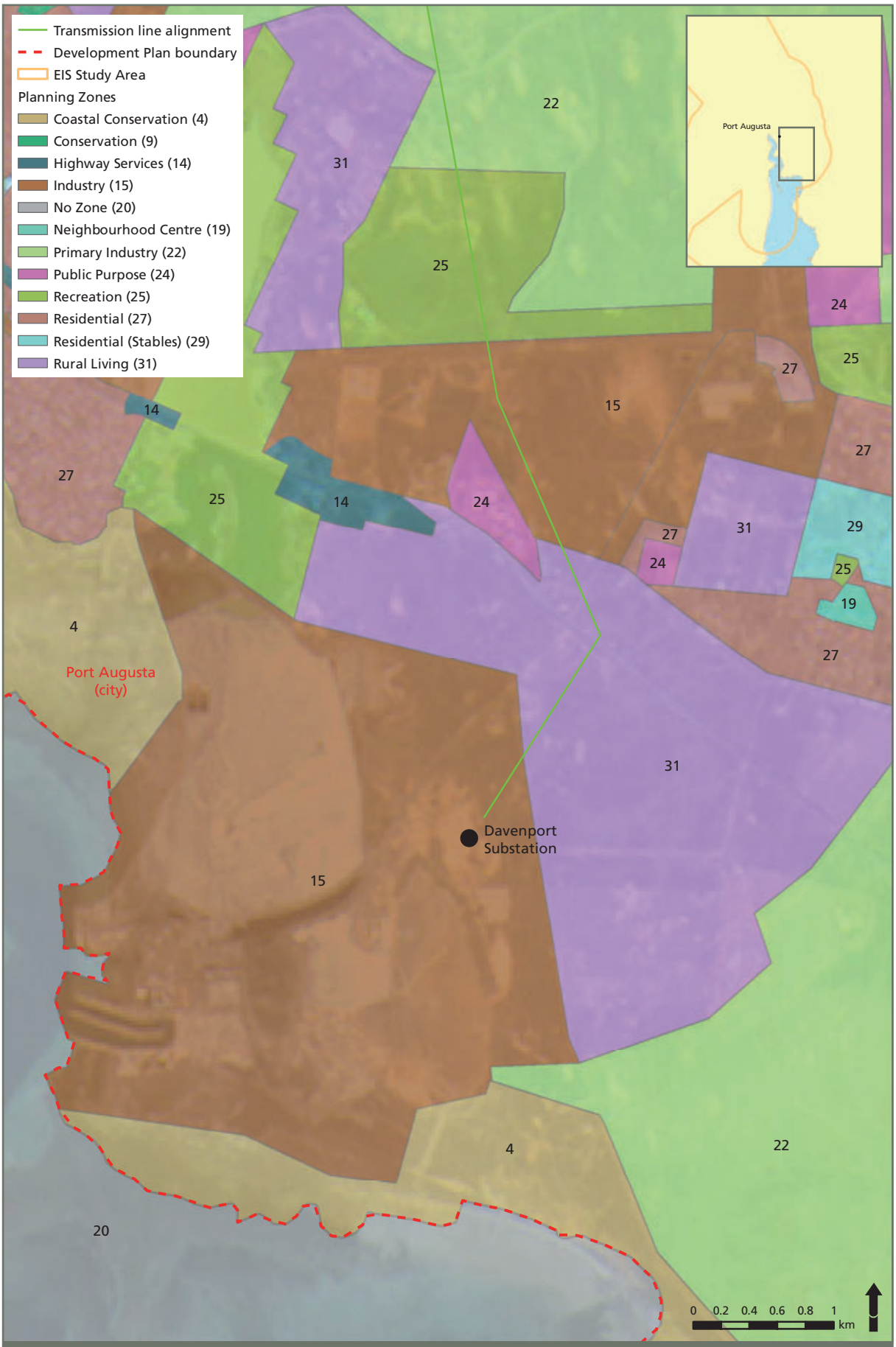

Figure G2.10 EIS Study Area with Development Plan boundaries and zoning - proposed electricity transmission line

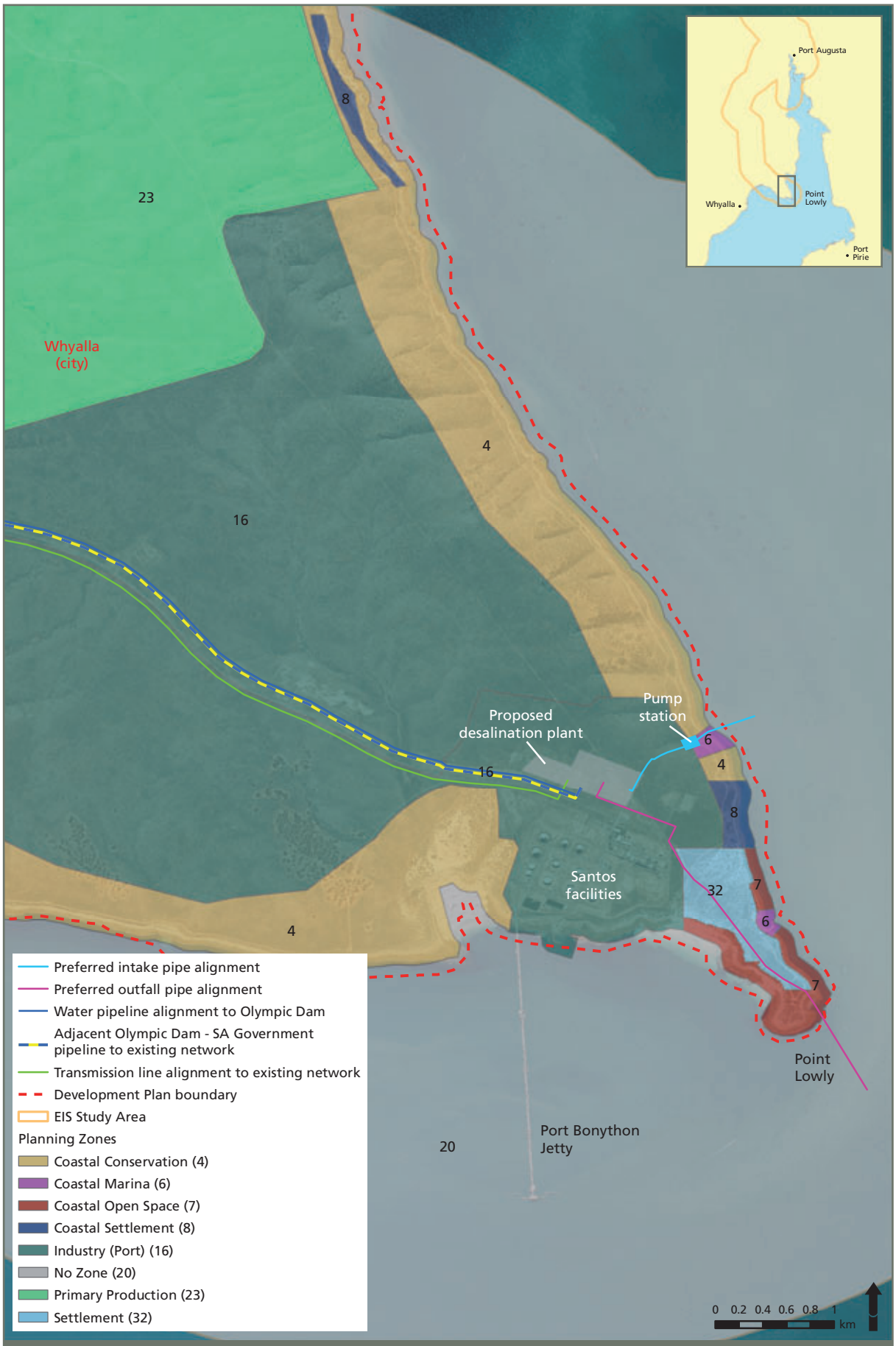

Figure G2.11 EIS Study Area with Development Plan boundaries and zoning - desalination plant at Point Lowly

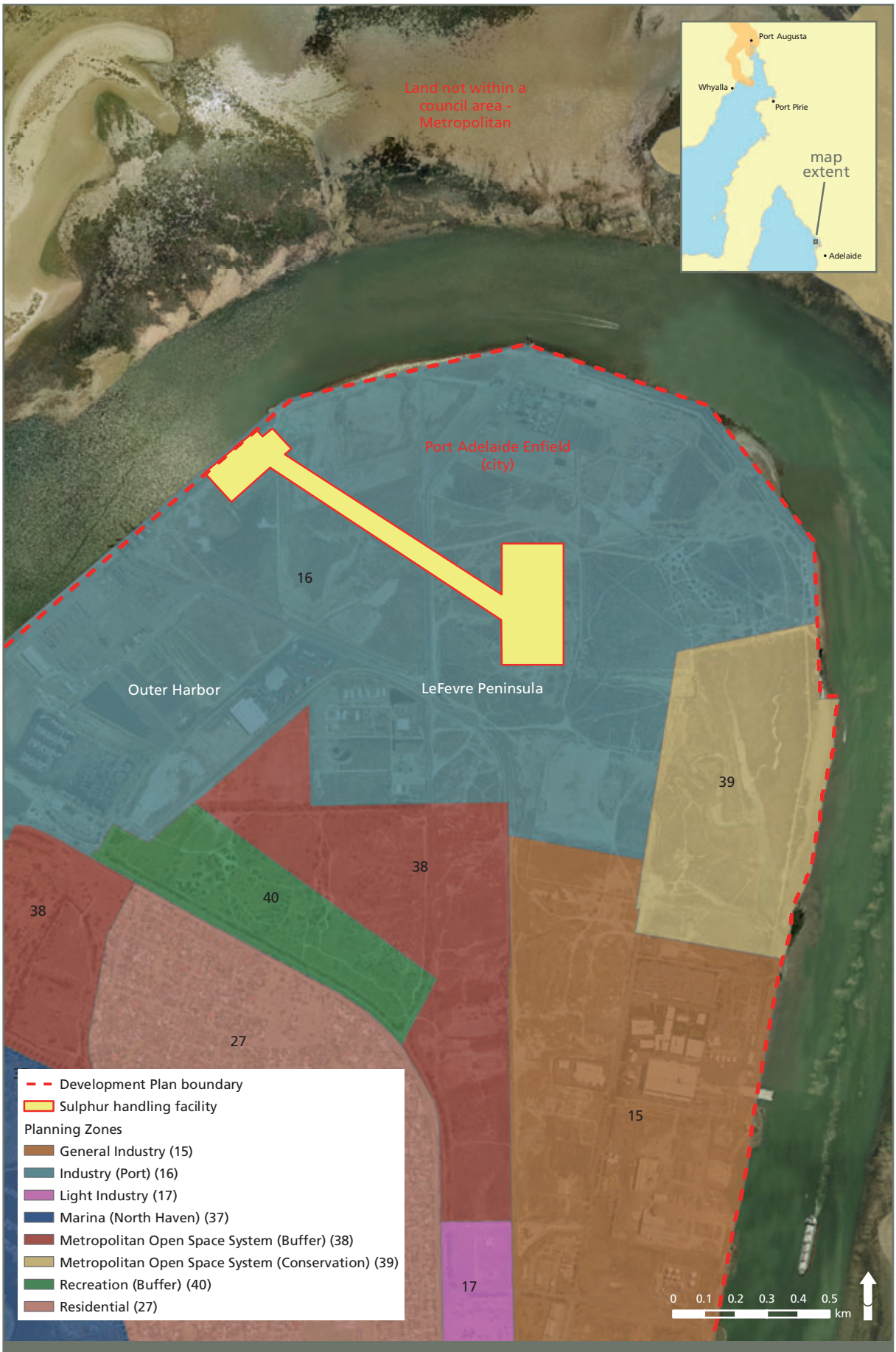

Figure G2.12 Development Plan boundaries and zoning - Outer Harbor sulphur handling and storage facility

Table G2.1 Land Not Within a Council Area (Eyre, Far North, Riverland and Whyalla)

Remote Areas Zone (Far North, Eyre)	
Project components in this zone: Special Mining Lease, Hiltaba Village, airport, gas supply pipeline, rail line, intermodal facility, water supply pipeline and electricity transmission line (see Figures G2.1 to G2.6)	
Objectives	**Comment**
Objective 1: To maintain the area as a zone representing the remote areas of the state suited to pastoral, conservation, mining and remote townships, settlements, Aboriginal lands and accommodating defence related facilities.	The proposed mining and processing operations and associated infrastructure, including accommodation, is described in Chapter 5, Description of the Proposed Expansion, and is in keeping with this objective. Further details about land use and the visual amenity of the project are also available in Chapters 9, Land Use and 20, Visual Amenity, respectively. Furthermore, there are details of the longer term rehabilitation and closure plans discussed in Chapter 23, Rehabilitation and Closure.
Objective 2: To ensure the zone continues to be recognised for the associated Aboriginal and non-Aboriginal cultural significance of the region, including remote townships and settlements, places of heritage significance and established pastoral, grazing and farming activities.	Chapter 17, Aboriginal Cultural Heritage and Chapter 18, Non-Aboriginal Cultural Heritage, describe the cultural heritage values of the area, the assessments undertaken and the proposed management measures to minimise potential impacts and maximise potential benefits to Aboriginal and non-Aboriginal cultural heritage sites and values.
Objective 3: To protect the conservation value of the region including a variety of environments: arid and wetland environments, ranges and riverine environments.	Chapter 15, Terrestrial Ecology, addresses the potential impacts of the proposed development on the terrestrial environment. This chapter also discusses proposed management measures to protect the environment, including an environmental offsets package. Chapter 15 highlights that a total of approximately 16,900 ha of land will need to be cleared from 16 vegetation associations that occur within the Remote Areas Zone. The vegetation associations in which clearing would occur are widespread in the rangelands of South Australia and the proposed percentage loss of each association within the EIS Study Area (<1 to 6%) would result in no change to current protection standards for any vegetation association or animal species. Furthermore, this clearance would be positively offset by the SEB strategy (see Section 15.5.1).
Objective 5: To ensure development of the zone reflects the sustained growth in mining, petroleum exploration and related activities, recognising the significance of mineral deposits throughout the region.	The proposed expansion would significantly enhance the mining industry in South Australia and provide additional infrastructure with regional benefits. Chapter 5 (see Section 5.4.1) highlights the production capacity of the proposed development, making Olympic Dam a significant producer of both copper and uranium on a world scale. Further to this, Chapter 21, Economic Assessment, assesses the economics of the development with an increase in GRP for the Northern Statistical Division of $22.6 billion (above the business as usual case) over the next 30 years (NPV 7%) (see Section 21.4.1).
Objective 6: To ensure petroleum related settlements and related infrastructure are located in areas that are not environmentally or culturally significant or sensitive, nor on sites subject to hazards, nor within close proximity to townships or settlements.	The proposed gas supply pipeline would transport natural gas from the Moomba gasfields to Olympic Dam. Chapters 17 and 18 assess the cultural heritage of the proposed development whilst Chapter 15 assesses the terrestrial environment. From the assessments and recommendations outlined in these chapters the proposed gas supply pipeline works would be managed to avoid significantly impacting on environmentally or culturally significant or sensitive sites. The closest sensitive receiver, Muloorina homestead, is located 1.3 km from the proposed gas pipeline (see Chapter 14, Noise and Vibration, Section 14.5.1).
Objective 7: To ensure that development contributes to the desired character of the zone.	The proposed development is outlined in Chapter 5 and, based on the description of the 'desired character' below, can be considered to contribute to the desired character of the Remote Areas Zone.
Desired character	**Comment**
The zone encompasses significant parts of the remote areas of the State which include land rich in minerals, fossil fuels, and underground water; extensive areas of cultural significance to people of Aboriginal and Non-Aboriginal heritage; and established pastoral and grazing activities. The area contains a number of remote settlements and townships and areas of recognised environmental importance including wetlands and regions of Lake Eyre. Significant growth and development in the mining industry (including petroleum exploration) of South Australia is anticipated in this zone. The proposed extension of the Olympic Dam mine and other targeted mining activities represent the potential growth in this region. Consequently, it is desirable that the zone and policy intent for the remote Far North regions of the state guide the sustainable growth and development of mining related activities.	The proposed development of the BHP Billiton Olympic Dam site will contribute to significant growth in the mining industry for South Australia. The proposed expansion (as described in Chapter 5) would make Olympic Dam a significant world producer of copper and uranium (see Section 5.4.1). Further to this, the assessments undertaken for the Draft EIS identify that the potential impacts of the proposed expansion on the environment, local communities, cultural heritage and the economy can be sustainably managed. Separate, high-quality accommodation (Hiltaba Village), with on-site entertainment, recreation and sports facilities would be constructed to accommodate the workforce required for the construction and operation of the proposed expansion (as described in Chapters 5 and 19, Social Environment).

Table G2.1 Land Not Within a Council Area (Eyre, Far North, Riverland and Whyalla) (cont'd)

Desired character	Comment
Mining settlements, in association with an approved mining lease, are anticipated in the zone. These settlements may include a range of uses, such as laundries, dining halls, recreation facilities, taverns, administrative buildings, storage areas, shops or cafes and various forms of workers' accommodation. Throughout the zone, particularly the Far North region of the state, tourism accommodation and development are inherently part of the 'Outback' identity and experience. Tourism routes, sites and localities are to be preserved and enhanced to promote the tourism industry (i.e. recognition of Outback areas and tracks such as the Strzelcki Track, Oodnadatta and sites within both the Gawler and Flinders ranges).	
Principles of Development Control (PDC) – Land Use	**Comment**
PDC 1: The following forms of development are envisaged: Airfields; Heliports; Industry in Association with Mining; Prescribed Mining Activities (including petroleum exploration and production); Pastoral, Grazing and Farming Activities; Remote Townships and Settlements; Tourism development; mining settlements in association with an approved mining lease.	The proposed mining and processing activities within the SML, the airport, Hiltaba Village and gas supply pipeline are consistent with the types of development envisaged within this zone. The proposed intermodal facility and linear infrastructure components are not specifically identified in PDC 1, however they are required to facilitate the development of the expanded mining activities. The details of these proposed developments are described in Chapter 5.
PDC 2: Development listed as non-complying is generally inappropriate and not acceptable unless it can be demonstrated that it does not undermine the objectives and principles of the Development Plan.	The project components (as described in Chapter 5) are not specifically identified as non-complying development.
PDC 3: The natural features and scenic beauty of the zone should be protected.	The proposed project components (described in detail in Chapter 5) would be designed to minimise potential visual impacts and to avoid natural features where practicable, with a preference for utilising existing linear infrastructure corridors. Furthermore, Chapter 20 assesses the visual amenity of the proposed development and describes the predicted levels of visual impact, most of which are moderate or lower.
PDC 4: Tourist routes, sites and localities throughout the region should be protected and enhanced.	The project components would not directly disturb tourist sites (such as Point Lowly, see Chapter 18) or prevent access to tourist routes to the Flinders Ranges and Outback areas (described in Chapter 19). The proposed mine expansion may provide future tourism opportunities (as described in Chapter 23) for viewing of the decommissioned mine pit, rock storage facility and associated areas.
PDC 5: Mining settlements should be constructed in association with an approved mining lease and may include an appropriate range of facilities for persons engaged in mining exploration or the continuation and maintenance of a mine and associated plant.	Separate, high-quality accommodation (Hiltaba Village), with on-site entertainment, recreation and sports facilities would be constructed to accommodate the workforce required for the construction and operation of the proposed expansion (as described in Chapters 5 and 19).
Principles of Development Control (PDC) – Form and Character	**Comment**
PDC 6: Development should not be undertaken unless it is consistent with the desired character for the zone.	As described above (and in Chapter 5), the proposed development is considered to contribute to the desired character of the Remote Areas Zone.

G2.3 ROXBY DOWNS (MUNICIPALITY)

The proposed expansion of the Roxby Downs town is subject to the Roxby Downs (Municipality) Development Plan (consolidated 1 November 2007). The objectives and principles of development control have been considered in the development of the Draft Master Plan for Roxby Downs (see Appendix F4). The Roxby Downs (Municipality) Development Plan would need to be revised (through the Plan Amendment process) to reflect the growth of the town, as expressed in the Draft Master Plan. Planning policy changes would be required to ensure that new development would be compliant. As the public consultation process for the Roxby Downs Expansion Plan Amendment is being conducted concurrently with consultation on the Draft EIS (and would be subsequently authorised if a decision to proceed with the project is made) a detailed assessment of the proposed town expansion against the Development Plan is not included here.

For a distance of about 13 km, the proposed linear infrastructure (rail line, water supply pipeline and electricity transmission line) traverse the Buffer Zone and Rural Landscape Zone of the Roxby Downs (Municipality) Development Plan (see Figure G2.2). Where practicable, the linear infrastructure has been located within the existing designated services corridor to ensure consistency with the objectives of these zones (see Table G2.2).

Table G2.2 Roxby Downs (Municipality)

Buffer Zone	
Project components in this zone: rail line, water supply pipeline and electricity transmission line (see Figure G2.2)	
Objectives	**Comment**
Objective 1: To ensure the establishment and maintenance of a zone, defined as a 'Buffer Zone' in Clause 25 of the Schedule to the *Roxby Downs (Indenture Ratification) Act 1982*.	The proposed linear infrastructure (water supply pipeline, electricity transmission line and rail line) would traverse this zone, within or adjacent to the existing designated services corridor. As noted in the Development Plan, the extent and area of the Buffer Zone may be altered as required through the *Roxby Downs (Indenture Ratification) Act 1982*. The proposed linear infrastructure is necessary to undertake the proposed mining and processing operations as described in Chapter 5, Description of the Proposed Expansion.
Objective 2: To ensure the preservation of the natural open character of the zone and the regeneration of the natural vegetation.	With the exception of the rail line, the proposed linear infrastructure (water supply pipeline and electricity transmission line) would not impair the existing land uses and any disturbance during construction would be rehabilitated (as described in Chapters 9, Land Use and 23, Rehabilitation and Closure). The rail line would not create a visual impediment to the natural open character of the zone as its visual impact has been assessed as slight (see Chapter 20, Visual Amenity).
Principles of Development Control	**Comment**
PDC 1: Development undertaken in the zone should comprise only those uses that contribute to natural regeneration or the use of the zone for passive recreation.	With the exception of the rail line, the proposed linear infrastructure (water supply pipeline and electricity transmission line) would not impair the existing land uses and would not inhibit passive recreation (see Chapter 9). The passive recreation areas would in fact be enhanced through the proposed Draft Master Plan (see Appendix F4). The rail line would result in a minor reduction (about 5 ha) of the area available within the Buffer Zone.
PDC 2: Buildings other than public toilets and shelters should not be erected.	It is acknowledged that the proposed water supply pipeline, electricity transmission line and rail line would all require some degree of above ground structures – such as pump stations, transmission towers and rail track (as described in Chapter 5). This infrastructure would be designed for minimal visual impact.
PDC 3: Only passive recreation should be undertaken in this zone.	Apart from the operation of the linear infrastructure (water supply pipeline, electricity transmission line and rail line) no other uses associated with the proposed expansion are identified for this area. As the infrastructure would be designed for minimal impact (through burying the pipeline and aligning the other infrastructure with existing infrastructure corridors (see Chapter 5)) and located where practicable within or adjacent to the existing designated services corridor, passive recreation would continue.
Principles of Development Control – Non-complying Development	**Comment**
PDC 4: The following kinds of development are non-complying: All kinds of development but not including public toilets and shelters.	The proposed linear infrastructure (water supply pipeline, electricity transmission line and rail line discussed in Chapter 5) are non-complying uses, however they would be located adjacent to the existing designated services corridor and are necessary for the proposed expansion to mining and processing activities.

Table G2.2 Roxby Downs (Municipality) (cont'd)

Rural Landscape Zone	
Project components in this zone: water supply pipeline and electricity transmission line (see Figure G2.2)	
Objectives	**Comment**
Objective 1: To ensure the preservation of the natural open character of the zone and the regeneration of the natural vegetation, with recreational uses occurring in suitable parts of the zone.	The proposed linear infrastructure (water supply pipeline and electricity transmission line) would not impair the existing land uses and any disturbance during construction would be rehabilitated (as described in Chapters 9 and 23). Recreational use could still occur within the zone.
Principles of Development Control	**Comment**
PDC 1: Development undertaken in the zone should comprise only those uses that contribute to natural regeneration of the area or are necessary for community recreation.	The proposed linear infrastructure (water supply pipeline and electricity transmission line) would not impair the existing land uses and would not inhibit community recreation (see Chapter 9). The recreation areas would in fact be enhanced through the proposed Draft Master Plan (see Appendix F4).
PDC 2: Development should not promote dune or soil instability or erosion.	Chapter 10, Topography and Soils, assesses the potential for soil erosion problems and describes the need for protection measures in areas where high erosion risk soils have been identified (see Section 10.5.1 and Figures 10.5 and 10.6). Design measures would be implemented to prevent soil erosion around the electricity transmission line tower bases at these locations. The water supply pipeline would be buried, with erosion control measures implemented during construction and the disturbance footprint rehabilitated on completion of construction (see Chapter 5).
PDC 3: Development should incorporate a management program to ensure minimal adverse affects on the environment during the life of the development and a rehabilitation program should the development have to be relocated.	Chapter 24, Environmental Management Framework, provides details of the proposed management strategies, plans and programs to be implemented during the planning and design, construction and operation phases of the proposed expansion. Details of the longer term rehabilitation and closure plans are discussed in Chapter 23.
Principles of Development Control – Non-complying Development	**Comment**
PDC 5: The following kinds of development are non-complying: Dwelling; Industry; Land Division; Shop	The proposed water supply pipeline and electricity transmission line are not specifically identified as non-complying uses, and they would be located within or adjacent to the existing designated services corridor.

G2.4 LAND NOT WITHIN A COUNCIL AREA (FLINDERS)

The Land Not Within A Council Area (Flinders) Development Plan (consolidated 25 September 2003) predominantly covers the area of the Flinders Ranges. The Flinders region is rich in mineral resources and land use is dominated by pastoral, tourism and conservation activities. Part of the EIS Study Area is within the Flinders region including about 20 km of the gas pipeline corridor options (see Figure G1) and about 45 km of the southern infrastructure corridor (see Figures G2.6 and G2.7). All of the project components covered by this plan are in the Pastoral Zone (see Table G2.3).

Table G2.3 Land Not Within a Council Area (Flinders)

Pastoral Zone	
Project components in this zone: gas supply pipeline (see Figure G2.1), water supply pipeline and electricity transmission line (see Figures G2.6 and G2.7)	
Objectives	**Comment**
Objective 1: To preserve the natural environment and character of the zone.	The proposed infrastructure (see Chapter 5, Description of the Proposed Expansion) would be designed to minimise the potential visual impacts (such as by burying the pipelines and positioning the electricity transmission line adjacent to existing lines) and to avoid natural features where practicable. The visual amenity of the proposed infrastructure corridors is described at levels of slight or lower within this zone (see Chapter 20, Visual Amenity). Chapter 15, Terrestrial Ecology, provides an assessment of the potential impact on the terrestrial environment and describes mitigation measures.
Objective 2: To maintain the area as a zone in which the predominant activities are those which relate to the grazing of livestock.	As described in Chapter 9, Land Use (Section 9.7) the grazing of livestock would remain the predominant activity in this region. During construction there may be some localised disruption to grazing activities (about 300 ha) however during operation the gas and water supply pipelines (which would be buried) and the electricity transmission line would not prevent grazing activities with about 10 ha of land permanently changed.
Principles of Development Control	**Comment**
PDC 1: Development should not impair the natural or scenic features of the Pastoral Zone.	The proposed project components would be designed to minimise potential visual impacts and to avoid natural features where practicable (as outlined in Objective 1 above and in Chapter 20, Section 20.4). The gas and water supply pipelines would be buried and the electricity transmission line would be adjacent to existing lines.
PDC 2: The following kinds of development are complying in the Pastoral Zone not closer than two kilometres to a township boundary: Stockyards and Ramps; Tanks; Windmills, Aerials and Antennae	The proposed project components (as described in Chapter 5) are not specifically identified as complying development. As the proposed land use is also not identified as non-complying development, and the infrastructure corridors do not pass within 2 km of any township boundary, the use is to be considered on an individual merit basis.
PDC 3: The following kinds of development in the Pastoral Zone are complying within one kilometre of the established principal place of residence (ie main homestead residential building) and not closer than two kilometres to a township boundary: Dwellings for Pastoralists or their Employees Engaged in Pastoralism; Buildings Associated with Pastoral Activities (including outbuildings, shearing and crutching sheds); Powerlines from Generator Plants to Dwellings and Other Buildings	The proposed project components (as described in Chapter 5) are not specifically identified as complying development. As the proposed land use is not identified as non-complying development either, and the infrastructure corridors are not within 1 km of a principal place of residence or within 2 km of a township boundary, the use is to be considered on its merits.

G2.5 PORT AUGUSTA (CITY) DEVELOPMENT PLAN

The Port Augusta (City) Development Plan (consolidated 28 August 2003) provides policy direction for the city of Port Augusta and its surrounding region. Port Augusta is a focal point of the wider Flinders region and functions as a service centre for the region. The project components located within the Port Augusta (City) Development Plan are the water supply pipeline, electricity transmission line, access corridor, landing facility and pre-assembly yard and they traverse six zones within the plan (see Table G2.4 and Figures G2.7 to G2.10).

Table G2.4 Port Augusta (City) Development Plan

Coastal Conservation Zone	
Project components in this zone: landing facility and access corridor (see Figure G2.7)	
Objectives	**Comment**
Objective 1: To protect coastal features from development, including mining, that has the potential to permanently impair its scenic attractiveness or adversely affect its conservation significance.	As discussed in Chapter 20, Visual Amenity (Section 20.5) the landing facility and access corridor will have some predicted visual impact: slight to moderate for the landing facility; and slight to substantial for the access corridor (depending on the viewpoint and the offset by other infrastructure or vegetation). Both of these facilities would be in use throughout the operation phase, although the intensity of the use would vary. Following construction, it is expected intensive use would occur for a period of approximately seven years as the conduit for a range of large scale infrastructure required for the mine expansion. In subsequent years, use would decrease and be concentrated on equipment replacement. Development and use of these facilities is described in Chapter 5, Description of the Proposed Expansion, and would seek to minimise potential impacts on the coastal environment.
Objective 4: To preserve and manage coastal land and features, environmentally important natural features, including lakes, wetlands, dunes, stands of native vegetation, wildlife habitat, estuarine areas, exposed cliffs, headlands, hilltops and areas which form an attractive background to urban and tourist developments.	The coastal environment and potential impacts of the proposed development are assessed in detail in Chapter 16, Marine Environment. The proposed site has been chosen to avoid marine vegetation (including mangroves and seagrass beds) and the landing facility designed as a piered structure to minimise the disturbance area. Less than one hectare of seagrass would be removed from the construction of the landing facility. Modelling has shown that the proposed structure would not change the existing coastal processes in the area (see Chapter 16). The proposed site for the adjacent quarantine laydown area has been previously disturbed.
Objective 5: To preserve and manage sites of heritage, cultural, scientific, environmental or educational importance.	Chapter 17, Aboriginal Cultural Heritage and Chapter 18, Non-Aboriginal Cultural Heritage, describe the cultural heritage values of the area. The proposed landing facility and the access corridor would not disturb any sites of cultural heritage value. Chapter 15, Terrestrial Ecology, addresses the potential impacts on the terrestrial environment. As the access corridor traverses this zone for only a short distance (about 4 km), the potential impacts would be minimal.
Objective 6: To ensure development is only undertaken on land which is subject to, or can be appropriately protected from, coastal hazards and does not adversely affect the natural processes.	The proposed landing facility and adjacent quarantine laydown areas would be designed in accordance with relevant standards to ensure the infrastructure was protected from coastal hazards, including potential sea level rise. Coastal process modelling (see Chapter 16) has shown that the design of the landing facility as a piered structure would not adversely affect the natural processes occurring along the coast.
Objective 7: To avoid development which is likely to adversely affect the coast by pollution, erosion, damage or depletion of physical or biological resources.	The potential impacts of the proposed landing facility on the coastal environment are assessed in detail in Chapter 16. Chapter 24, Environmental Management Framework, provides details of the proposed management strategies, plans and programs to be implemented during the planning and design, construction and operation phases of the proposed expansion. Details of the longer term rehabilitation and closure plans are discussed in Chapter 23, Rehabilitation and Closure.
Objective 8: To ensure development will not require now, or in the future, public expenditure on protection of the development or the environment.	As the landing facility and access corridor are part of the overall Olympic Dam expansion project, BHP Billiton would be responsible for the capital and operational costs of the infrastructure. Design measures would be incorporated to ensure the infrastructure was structurally sound. Chapter 24 provides details of how environmental protection measures would be incorporated into design, construction and operation. Furthermore, a rehabilitation and closure plan is provided in Chapter 23.
Principles of Development Control – Form of Development	**Comment**
PDC 1: Development should be compatible with conservation and enhancement of the coastal environment and scenic beauty of the zone.	Chapter 20 assessed the visual impact of the landing facility as slight to moderate and for the access corridor slight to substantial (dependent on the location viewed from and the current land use). Design measures would be incorporated where practicable to reduce the potential visual impact of the infrastructure.
PDC 3: Buildings and structures should mainly be for essential purposes such as shelters and toilet facilities, associated with public recreation, and for navigation or necessary minor public works.	A quarantine laydown area of about 2 ha would be established adjacent to the landing facility as per quarantine requirements for the purpose of temporary storage and inspection prior to the off-loaded modules being transported to Olympic Dam. A site office would be established in this area and include crib and toilet facilities. The access corridor would not require any buildings.

Table G2.4 Port Augusta (City) Development Plan (cont'd)

PDC 4: Development involving the removal of shellgrit, sand or the disposal of domestic and industrial waste should not be undertaken.	During construction of the proposed landing facility and adjacent quarantine laydown area, some earthworks would be necessary, however removal of in-situ material would be avoided where practicable. Any domestic or industrial waste generated would be collected and transferred to an existing waste management facility (see Chapter 5 for details).
PDC 5: Buildings and structures should be designed, sited, clustered, constructed, and landscaped to ensure that their appearance is in harmony with the coastal landscape.	As described in PDC 3, the only building required would be a site office and this would be designed to minimise potential visual impact (see Chapter 20). The proposed landing facility would be a piered jetty structure and again would be designed to minimise potential visual impact.
PDC 6: Development (including land division where relevant) should: (a) be visually compatible with the area in which it is located (b) not impair the environmental significance of the area (c) not adversely impact upon the ability to maintain the coastal frontage in a stable and natural condition (d) minimise vehicle access to the area the subject of the development (e) avoid adverse impact on the environment by the appropriate location of vehicle access means to the coast (f) provide the maximum practicable waterfront reserve between buildings and the water (g) provide or maintain public access routes to waterfront reserves (h) be undertaken in a manner which minimises the effect on natural features, flora and fauna, land adjoining water or scenic routes or scenically attractive areas (i) not impair the use or management of natural resources in the best interests of the community (j) be designed to minimise potential risk from bushfire hazard (k) not detract from the value or significance within the locality of items, land, buildings and structures of exceptional beauty or aesthetic, architectural, scientific, cultural, historic or other heritage value, including Aboriginal sites of anthropological, archaeological or historic significance (l) be landscaped with locally indigenous species in order to enhance the amenity of the area and to screen buildings from public view.	The Draft EIS provides an assessment of the potential environment, cultural and social impacts of the proposed landing facility and access corridor. (a) Chapter 20 assesses the visual impact of the landing facility as slight to moderate and for the access corridor slight to substantial (dependent on the location viewed from and the current land use). (b) the existing environmental values of the proposed landing facility site and access corridor are described in Chapters 15 and 16. The proposed activities are not predicted to result in significant adverse impacts. (c) the coastal process modelling shows that the landing facility would have no significant impact on the natural condition of the coastline (see Chapter 16). (d) and (e) vehicle access would be restricted to those necessary for construction and operation of the landing facility and access corridor. (f) and (g) direct public access to the landing facility and quarantine laydown area would be restricted for safety and security reasons, however the surrounding areas would remain accessible (see Chapter 19, Social Environment) (h) the landing facility has been designed as a piered jetty structure to minimise potential impacts on the marine environment during both construction and operation (see Chapters 5 and 16). (i) the landing facility and access corridor would not impair the use or management of natural resources in this zone. (j) the vegetation types within the area (ie. mainly low shrubs, few trees) do not present a high bushfire hazard (see Chapter 15). (k) there are no known items or sites of significant heritage value in the area of the proposed landing facility or access corridor (see Chapters 17 and 18). (l) landscaping requirements would be considered during the detailed design phase for the landing facility and access corridor (as described in Chapter 20).
Principles of Development Control – Conservation	**Comment**
PDC 7: Development should not be undertaken unless the appearance and character of land in the zone within view from the foreshore is retained.	As discussed in Chapter 20 the landing facility would have a slight to moderate predicted visual impact, depending on the viewing location and how well screened it was or mixed with the power station view.
PDC 8: Development should not be undertaken on coastal dune systems, tidal wetlands, sand dunes or other environmentally significant areas.	The proposed location for the landing facility and quarantine laydown area avoids environmentally significant areas, including nearby mangroves (see Chapter 15).
PDC 9: Development should not detract from the natural features, scenic qualities, landscape qualities or amenity of the locality.	As discussed in Chapter 20 the landing facility and access corridor would have some predicted visual impact: slight to moderate for the landing facility (depending on viewing location and how well screened it was or mixed with the power station view); and slight to substantial for the access corridor (depending on the viewpoint and the offset by other infrastructure or vegetation).

Table G2.4 Port Augusta (City) Development Plan (cont'd)

PDC 10: Development should not contribute to the degradation of any fragile or potentially fragile landform.	The proposed location of the landing facility and quarantine laydown area has been previously disturbed and no fragile landforms are present. The access corridor alignment is adjacent an existing road and does not impact on any fragile landforms (see Chapter 10, Topography and Soils and Chapter 15).
PDC 11: Development should not be undertaken that may adversely affect coastal features, prevent public access or despoil native vegetation, wildlife habitats or significant views.	The proposed landing facility has been assessed as having a slight to moderate visual impact (see Chapter 20). While direct public access to the landing facility would be restricted, access would be maintained for the surrounding area. The quarantine laydown area has been previously disturbed and would not require significant clearance of native vegetation (less than 2 ha). As the access corridor traverses only 4 km of this zone, the area of native vegetation clearance would also be minimal (about 14 ha) and would be offset by the SEB strategy (see Chapter 15).
PDC 12: Development should not result in pollution or other damage to the coast, seabed or coastal waters.	The design of the landing facility as a piered jetty structure requires minimal excavation, reducing disturbance of the seabed and the generation of turbidity in surrounding waters. Management measures and controls would be implemented during the construction and operation of the landing facility to minimise potential impacts on the coast, seabed and coastal waters (see Chapters 16 and 24).
Principles of Development Control – Public Access	**Comment**
PDC 13: Access to beaches and reserves should be by means of walkways and roads suitably designed and constructed to meet the environmental objectives and principles of development control for the zone. Access roads should be located back from the coast and only where the road would not detract from the amenity of the area or lead to management problems.	Direct public access to the landing facility would be restricted for safety and security reasons. Existing access to the surrounding coastal environment would be maintained in its current form (see Chapter 19). The access corridor has been set back at least 150 m from the coast, adjacent to the existing Shack Road (see Chapter 5).
PDC 14: In sensitive locations where public access is necessary, the construction of walkways and appropriate fencing should be provided for effective access control.	Direct public access to the landing facility would be restricted for safety and security reasons. Existing access to the surrounding coastal environment would be maintained in its current form (see Chapter 19).
PDC 15: Development should not prevent public access to the coast.	As per PDC 14.
Principles of Development Control – Coastal Hazards	**Comment**
PDC 16: Development should not be undertaken where there is a risk of flooding, erosion or sand drift.	Coastal process modelling (see Chapter 16) shows that the landing facility would not change the existing coastal processes (including sand drift). Chapter 11, Surface Water, assesses the risk of flooding as low (assuming design incorporates the potential for sea level rise) and Chapter 10 assesses the risk of soil erosion as medium (see Figure 10.6).
PDC 17: Development should not be undertaken where it would create or aggravate coastal erosion, or if it would require coast protection works which would cause or aggravate coastal erosion.	The proposed landing facility would not create or aggravate coastal erosion as demonstrated by the coastal process modelling (see Chapter 16).
PDC 18: Development should be designed having regard to natural coastal processes. Where applicable, it should incorporate suitable protective works.	The coastal process modelling demonstrated that the piered jetty design for the proposed landing facility would not change the existing coastal processes (see Chapter 16). Standard engineering protection measures for this type of structure would be installed.
PDC 19: Where applicable, a buffer area should be provided between the seaward extent of the development and high water mark. The width of this buffer should be sufficient to accommodate erosion during storms and also long-term erosion. On stable coasts, development should be designed to avoid any problems due to spray or wave overwash.	The landing facility and quarantine laydown area would be designed to withstand storm surge and waves. The coastal process modelling demonstrated that the landing facility would not affect, or be affected by, long-term coastal erosion (see Chapter 16). The potential for sea level rise would also be considered during detailed design of the infrastructure.
Principles of Development Control – Non-complying Development	**Comment**
PDC 21: The following kinds of development are non-complying: Amusement Hall; Builder's Yard; Camping Area (excluding the Winninowie Conservation Park); Caravan Park; Dwelling; Fuel Depot; Hotel; Industry; Intensive Animal Keeping; Junk Yard; Tourist Accommodation; Motor Repair Station; Office; Petrol Filling Station; Road Transport Terminal; Shop; Stock Saleyard; Stock Slaughter Works; Timber Yard; Tourist Accommodation; Waste Disposal Depot.	The proposed landing facility and access corridor are not compatible with the Coastal Conservation Zone, however they have been sited and designed to minimise potential environmental, social and visual impacts (see Chapters 16, 19 and 20 respectively).

Table G2.4 Port Augusta (City) Development Plan (cont'd)

Defence Zone	
Project components in this zone: access corridor (see Figure G2.7 and G2.8)	
Objectives	**Comment**
Objective 1: To maintain a zone accommodating defence installations, activities and buildings.	This zone incorporates the Cultana Training Area (CTA) (see description in Chapter 9, Land Use). The proposed access corridor would pass through the CTA for about 4 km along the eastern boundary and would not interfere with defence installations, activities or buildings.
Principles of Development Control	**Comment**
PDC 1: Development undertaken in the Defence Zone should be primarily for defence installations, activities and buildings.	The proposed access corridor would not be used for defence activities. Discussions have been held with Defence to obtain agreement on aligning the proposed access corridor within the CTA (see Chapter 7, Stakeholder Consultation and Engagement).
PDC 4: Development in this zone should be designed, and sited, and be of such external materials and finishes so as to conserve the rural character of the zone.	The access corridor would be constructed of compacted crushed rock and gravel and would remain unsealed, which is in keeping with existing roads in the rural area.
PDC 5: Natural and man-made features should be protected against mismanagement and more intensive development which may degrade the quality of the landscape.	The access corridor would be managed and maintained by BHP Billiton to a standard necessary for its intended use.
PDC 6: Trees and remnants of indigenous vegetation in the rural areas should be preserved.	Chapter 15 provides a description of the native vegetation in the area. Within this zone, the access corridor would require the clearance of about 14 ha, which is a small proportion of the CTA (48,000 ha).
PDC 8: The following kinds of development are complying: Commercial Forestry; Defence establishment; Farming; Horticulture (excluding olive orchards).	The proposed access corridor is not specifically identified as complying development, however initial discussions with Defence have indicated the development would be acceptable.
PDC 9: The following kinds of development are non-complying: Junk Yard; Tourist Accommodation; Shop; Special industry; Stock Slaughter Works; Used Car Lot; Landfill; Land division <40 ha.	The proposed access corridor is not specifically identified as non-complying development.
Industry Zone	
Project components in this zone: access corridor, Port Augusta pre-assembly yard (see Figure G2.9) and electricity transmission line (see Figure G2.10)	
Objectives	**Comment**
Objective 1: To maintain the area as a zone accommodating industrial activities other than extractive industrial activities.	The proposed electricity transmission line, access corridor and Port Augusta pre-assembly yard (described in Chapter 5) are consistent with the type of development that would be required for industrial activities intended for this zone.
Objective 2: To ensure the area remains a zone in which industrial uses are protected from adverse impacts of other forms of land use and encroachment of incompatible uses.	As per Objective 1.
Objective 3: To ensure that development is capable of meeting contemporary environmental standards.	The Draft EIS provides a detailed assessment of the potential impacts associated with all aspects of the proposed Olympic Dam expansion. Management measures are identified where required to ensure that BHP Billiton, government and industry standards are achieved.
Objective 4: To ensure that there is enhancement of the landscape qualities of the zone through appropriate landscaping, siting and design of development.	Chapter 20 assesses the visual impact of the proposed infrastructure. During detailed design, landscaping options would be considered to minimise visual impacts and retain the character of the existing environment.
Principles of Development Control – General	**Comment**
PDC 1: Development undertaken in the Industry Zone should primarily be industrial activities other than extractive industrial activities.	The proposed electricity transmission line, access corridor and Port Augusta pre-assembly yard (described in Chapter 5) are consistent with the type of development that would be required for industrial activities intended for this zone. The electricity transmission line would be located adjacent to existing lines and the access corridor aligned adjacent existing roads where practicable. The Port Augusta pre-assembly yard would be used for industrial activities, including prefabrication and assembly of infrastructure modules.
PDC 2: Industrial development should be screened from public view with a dense landscaping buffer.	The proposed infrastructure has been located where practicable adjacent to existing infrastructure to minimise potential visual impacts. Where practicable, landscaping would be incorporated into detailed design to screen the proposed infrastructure from public view.

Table G2.4 Port Augusta (City) Development Plan (cont'd)

Principles of Development Control – Emissions, Noise and Lighting	Comment
PDC 5: Development should incorporate necessary acoustic treatment to ensure that the noise level associated with the operation of the activity does not exceed a noise level of 55 dB(A) during the day and 45 dB(A) during the night, when measured and adjusted in accordance with the relevant Environment Protection Policy relating to noise, at the nearest noise sensitive receiver that is located appropriately in a noise sensitive zone.	Chapter 14, Noise and Vibration, provides an assessment of potential noise impacts during construction and operation. The electricity transmission lines would produce some temporary, localised noise during construction of the towers, however during the operation of this infrastructure there would be minimal additional noise in the area (beyond the background hum and annual helicopter inspection). The access corridor would have associated noise during construction and traffic noise during operation however would be within compliance limits. The Port Augusta pre-assembly yard would operate within the compliance limits.
PDC 6: Activities which have the potential for off-site environmental impacts should be appropriately located in relation to more sensitive land uses.	The activities associated with the electricity transmission line and Port Augusta pre-assembly yard would not result in off-site impacts. Traffic movement along the access corridor has the potential to generate dust, however management measures would be implemented to control dust generation (see Chapter 13, Greenhouse Gas and Air Quality, and Chapter 24).
PDC 7: The intensity and/or nature of an industrial activity should not result in land, water or air pollution and should effectively manage wastes/ emissions in an environmentally responsible manner.	During construction of the proposed electricity transmission line there may be some localised dust and noise impacts, however these would be appropriately managed (see Chapters 13 and 14). Erosion protection measures would also be installed in high erosion risk areas to control the movement of sediment from disturbed areas (see Chapter 10). The access corridor has the potential to generate localised dust, however this would be of short duration and would be appropriately managed (see Chapter 13). The Port Augusta pre-assembly yard would be designed and managed to control potential stormwater run-off, spillages and air emissions.
PDC 8: Emissions and odour from development should not have a detrimental effect on any areas zoned for residential or future urban residential purposes or other sensitive land uses.	The proposed electricity transmission line, access corridor and Port Augusta pre-assembly yard are located close to areas currently zoned as Rural Living, which may have future residential land use (see Figures G2.9 and G2.10). The access corridor and pre-assembly yard have the potential to generate dust or other air emissions, however management measures would be implemented (see Chapter 13).
PDC 9: Noise emissions should be controlled through the use of attenuation devices and sound proofing or appropriate set-back of development from noise sensitive uses.	The practices recommended in the SA EPA Environment Protection (Noise) Policy 2007 would be adopted to ensure noise levels were kept as low as reasonably practicable during construction activities (see Chapter 14). These include considering the timing of noise-generating activities and the use of mufflers and noise control equipment on items of construction plant and equipment. During operation, the access corridor and Port Augusta pre-assembly yard would operate within compliance limits and further mitigation would be investigated if these limits were exceeded.
PDC 10: Lighting should be designed to minimise impacts on neighbouring properties whilst providing for safe movement and access.	The electricity transmission line and access corridor would not require any lighting. The Port Augusta pre-assembly yard would operate predominantly during daylight hours and would only require security lighting.
Principles of Development Control – Landscaping	**Comment**
PDC 31: Landscaping within a site should be provided so that: (a) landscaping should include trees which can be expected, where practicable, to grow to the maximum height of the main building on the site (excluding major structures) (b) a substantial proportion of the trees should be planted within the car parking areas (c) landscaping should include provision for smaller trees and shrubs and ground covers.	As the predicted visual impact of the proposed electricity transmission line is slight (due to the presence of the existing line nearby), no landscaping would be required for this infrastructure (see Chapter 20, Section 20.5.3). Landscaping for the access corridor may be required in some areas where the predicted visual impact is moderate to substantial (see Chapter 20) and this would be considered (where practicable) during the detailed design phase. Consideration would also be given to appropriate landscaping of the Port Augusta pre-assembly yard during detailed design.
Principles of Development Control – Complying Development	**Comment**
PDC 33: The following kinds of development are complying: General Industry in the General Industry Policy Area; Light Industry except in the Service Industry Policy Area; Motor Repair Station in the General Industry and Transport Policy Areas; Office directly associated and ancillary to an industrial activity; Petrol Filling Station in the Transport Policy Area; Road Transport Terminal in the Transport Policy Area; Service Industry in the General Industry, Light Industry and Service Industry Policy Areas; Store; Warehouse.	The proposed Port Augusta pre-assembly yard is considered to be a complying use in the Industry Zone. The proposed electricity transmission line and access corridor are not specifically identified as complying use, however they would be located adjacent existing infrastructure.

Table G2.4 Port Augusta (City) Development Plan (cont'd)

Principles of Development Control – Non-complying Development	Comment
PDC 34: The following kinds of development are non-complying: Amusement Machine Centre; Caravan Park; Community Centre; Consulting Room in the General Industry and Transport Policy Areas; Dwelling; Educational Establishment; Extractive Industry; General Industry in the Light Industry and Service Industry Policy Areas; Health Centre; Hospital; Hotel; Landfill that constitutes solid waste disposal required to be licensed as a waste depot under the *Environment Protection Act 1993*; Indoor Recreation Centre; Library; Meeting Hall; Motor Showroom; Nursing Home; Place of Worship; Retail Showroom; Shop with gross leasable floor area of greater than 250 square metres; Special Industry in the Light Industry, Service Industry and Transport Policy Areas; Welfare Institution.	The proposed electricity transmission line, access corridor and Port Augusta pre-assembly yard are not specifically identified as non-complying uses.
Primary Industry Zone	
Project components in this zone: water supply pipeline (see Figure G2.7), access corridor (see Figure G2.7 and G2.9) and electricity transmission line (see Figure G2.7 and G2.10)	
Objectives	**Comment**
Objective 1: To maintain the area as a zone accommodating a range of agricultural activities with emphasis on conserving the rural character, natural resources and scenic landscape.	The regional land use in this area would not be significantly impacted in the long term and it is anticipated that current land uses in the area would continue (see Chapter 9, Section 9.7). The proposed infrastructure (described in detail in Chapter 5) would be designed to minimise the potential visual impacts (such as by burying the water supply pipeline and positioning the electricity transmission line and access corridor adjacent to existing infrastructure) and to avoid natural features where practicable. The visual amenity of the proposed development is described in Chapter 20 whilst Chapter 15 addresses the potential impact on the terrestrial environment.
Principles of Development Control	**Comment**
PDC 1: Agricultural and pastoral development undertaken in this zone should have regard for the need to conserve the zone's natural resources.	The proposed infrastructure does not involve any agricultural or pastoral development. Furthermore, the regional land use in this area would not be significantly impacted in the long term and it is anticipated that current land uses in the area would continue. Designated crossing points would be established along the access corridor to allow neighbouring activities to continue (see Chapter 9, Section 9.7).
PDC 2: Development in this zone should be designed, and sited, and be of such external materials and finishes so as to conserve the rural character of the zone.	As described in Chapter 5, the proposed water supply pipeline would be buried, the electricity transmission line would be positioned in close proximity to the existing line and the access corridor would not include any buildings. The unsealed, at-grade nature of the access corridor would be consistent with the rural character of the zone.
PDC 3: Natural and man-made features in this zone should be protected against more intensive development which may degrade the quality of the landscape.	Chapters 17 and 18 describe the cultural heritage values of the area, the assessments undertaken and the proposed management measures to minimise potential impacts and maximise potential benefits to Aboriginal and non-Aboriginal cultural heritage sites and values. Furthermore, Chapter 15 addresses the terrestrial environment and discusses the potential impact of this infrastructure on the natural systems and concludes that SEB offsets would result in a residual benefit to the region.
PDC 4: Trees and remnants of indigenous vegetation in the rural areas should be preserved	Chapter 15 provides an assessment of the degree of clearing required for the infrastructure requirements of the proposed development (see Table 15.4). While some clearing during construction is anticipated, efforts would be made to minimise vegetation clearing by: reducing the width of the transmission line clearance corridor to 5 m and siting the infrastructure near previously cleared areas for existing infrastructure corridors, resulting in the required clearing being approximately – 80 ha (water pipeline), 11 ha (electricity transmission line) and 26 ha (access corridor).
PDC 6: Buildings should be sited, designed and constructed of materials which blend with the natural features of the landscape.	No buildings are required in this zone for the proposed water supply pipeline, electricity transmission line and access corridor.

Table G2.4 Port Augusta (City) Development Plan (cont'd)

PDC 18: Industrial development should only occur where it: (a) cannot be accommodated within the boundaries of a township or appropriately zoned areas (b) is unlikely to limit or jeopardise the use of adjoining land for primary production (c) would not result in the alienation of land or water resources identified as significant for primary industry development (d) is sited to allow safe and convenient access to an all weather public road (e) would not result in disfigurement of the land's appearance (f) complements the character and amenity of the locality (g) is designed, located and landscaped to minimise its visual impact (h) does not involve or necessitate the creation of an additional allotment(s).	(a) the proposed water supply pipeline, electricity transmission line and access corridor have been located where practicable adjacent to existing infrastructure corridors. (b) and (c) the water supply pipeline would be buried and the electricity transmission line located adjacent the existing line, allowing current land uses to continue. The access corridor has been aligned where practicable with adjacent existing road infrastructure and would result in a long-term change to land use in this zone of about 26 ha. The access corridor would incorporate design measures to facilitate continuation of neighbouring activities, such as designated crossing points (see Chapter 9, Section 9.7.5). (d) locating the proposed infrastructure adjacent to existing corridors allows for established roads and/or access tracks to be used. (e), (f) and (g) Chapter 20 describes the potential visual impact of the proposed infrastructure. The water supply pipeline would be buried and so have no visual impact. The electricity transmission line would have only a slight visual impact as it would be located adjacent to the existing line. The access corridor would have a slight to substantial visual impact, however as it would be at-grade and unsealed, it would be in keeping with the existing character of rural roads. (h) No additional allotment(s) would be required for the proposed linear infrastructure.
Principles of Development Control – Complying Development	**Comment**
PDC 19: The following kinds of development are complying: Farming; Horticulture (excluding olive orchards).	The proposed water supply pipeline, electricity transmission line and access corridor are not specifically identified as complying development. However, following the construction phase, it is not anticipated that the operation of the water supply pipeline, electricity transmission line and access corridor would significantly hinder farming or horticultural activities in the long term (see Chapter 9).
Principles of Development Control – Non-complying Development	**Comment**
PDC 20: The following kinds of development are non-complying: Advertisements which are located within 500 metres of the centre-line of any primary, arterial or secondary arterial road, tourist road or scenic route, with the exceptions of where the advertisement has an advertisement area of two square metres or less, and providing the message contained thereon relates entirely to a lawful use of land, the advertisement is erected on the same site as that use, and a total of no more than two advertisements would be erected on the site; Camping Area; Caravan Park; Dwellings on an allotment of less than 20 hectares in area; Junk Yard; Land division resulting in the creation of additional allotments of less than 40 hectares in area; Landfill that constitutes solid waste disposal required to be licensed as a waste depot under the *Environment Protection Act 1993*; Tourist Accommodation; Motor Repair Station; Multiple Dwelling; Petrol Filling Station; Residential Flat Building; Row Dwelling; Semi-detached Dwelling; Shop; Special Industry; Stock Slaughter Works; Used Car Lot; Warehouse.	The proposed water supply pipeline, electricity transmission line and access corridor are not specifically identified as non-complying development.
Rural Living Zone	
Project components in this zone: electricity transmission line (see Figure G2.10)	
Objectives	**Comment**
Objective 1: To ensure that the area remains a zone primarily accommodating detached dwellings on large allotments set in a semi-rural environment, with limited opportunities for agricultural activities.	As described in Chapter 5, the proposed electricity transmission line has been located adjacent to the existing transmission line and traverses this zone for only 4 km. Existing land use would not be affected (except for a limited time during construction) and as described in Chapter 20, the impact on visual amenity as a result of this infrastructure has been assessed as slight (Section 20.5.3).

Table G2.4 Port Augusta (City) Development Plan (cont'd)

Principles of Development Control	Comment
PDC 1: Development undertaken in the Rural Living Zone should be, primarily, detached dwellings on large allotments set in a semi-rural environment with limited opportunities for agricultural activities.	As described above, the proposed electricity transmission line has been located adjacent to the existing transmission line and existing land use would not be affected.
PDC 4: Development should retain the natural vegetation and should not create soil erosion, drift or denude the existing vegetation, or cause nuisance to adjoining property owners.	The proposed electricity transmission line traverses this zone for only 4 km. During construction about 3 ha would be disturbed, however long-term disturbance would be minimal as the proposed line would be located adjacent to the existing line. Chapter 10 identifies the soil erosion potential in this area as low, however if required, protection would be installed around the tower bases and in areas within 50 m of a drainage channel or watercourse, to protect the environment from erosion and the resulting sedimentation.
Principles of Development Control – Development Adjacent to the Industry Zone	**Comment**
PDC 11: Development within the Rural Living Zone should not be undertaken which would prejudice the operation of existing and future industrial activities in the adjacent Industry Zone.	The proposed electricity transmission line would be located adjacent to the existing transmission line and would not preclude existing and future industrial activities.
PDC 12: Development adjacent to the Industry Zone should address any potential impact from existing or future industrial activities through appropriate separation distances and the incorporation of densely landscaped open space buffers.	The proposed transmission line would be designed to incorporate the required separation distances (see Chapter 5).
Principles of Development Control – Complying Development	**Comment**
PDC 13: The following kind of development is complying: Recreation Area	The proposed electricity transmission line is not specifically identified as a complying use. However the passive, low intensity nature of the transmission line, and the location adjacent to the existing line, would not hinder the intended use of the zone.
Principles of Development Control – Non-complying Development	**Comment**
PDC 14: The following kinds of development are non-complying: Abattoir; Amusement Hall; Amusement Park; Auction Room; Billiard Saloon; Boarding House; Bowling Alley; Builder's Yard; Bus Depot; Bus Station; Community Centre; Dance Hall; Educational Establishment; Exhibition Hall; Fire Station; Fun Fair; General Industry; Group Dwelling; Gymnasium; Health Centre; Hospital; Hotel; Intensive Animal Keeping; Junk Yard; Landfill that constitutes solid waste disposal required to be licensed as a waste depot under the *Environment Protection Act 1993*; Land Division which results in the creation of allotments less than one hectare; Library; Major Public Service Depot; Meeting Hall; Tourist Accommodation; Motor Repair Station; Motor Showroom; Multiple Dwelling; Non-residential Club; Petrol Filling Station; Place of Worship; Police Station; Tourist Accommodation; Refuse Destructor; Residential Club; Residential Flat Building; Row Dwelling; Semi-detached Dwelling; Shop or group of shops with a gross leasable floor area of greater than 200 square metres; Special Industry; Theatre; Timber Yard; Warehouse.	The proposed electricity transmission line is not specifically identified as a non-complying use.

Table G2.4 Port Augusta (City) Development Plan (cont'd)

Recreation Zone	
Project components in this zone: electricity transmission line (see Figure G2.10)	
Objectives	**Comment**
Objective 1: To retain the provision of land for community, sporting, recreational and leisure uses for the local and visiting population.	The proposed electricity transmission line would be located adjacent to the existing line and traverse this zone for only 1.5 km, requiring a temporary disturbance area of about 1 ha. There would be minimal impact on existing or proposed community, sporting, recreational and leisure uses.
Principles of Development Control – Complying Development	**Comment**
PDC 11: The following kinds of development are complying: Amusement Park; Clubrooms; Recreation Area; Community Hall; Fun Fair.	The proposed electricity transmission line is not specifically identified as a complying use. However the passive, low intensity nature of the transmission line, and the location adjacent to the existing line, would not hinder the intended use of the zone.
Principles of Development Control – Non-complying Development	**Comment**
PDC 12: The following kinds of development are non-complying: Bank; Builder's Yard; Bus Depot; Fire Station; Fuel Depot; Hotel; Industry; Junk Yard; Landfill that constitutes solid waste disposal required to be licensed as a waste depot under the *Environment Protection Act 1993*; Motor Repair Station; Motor Showroom; Petrol Filling Station; Plant Nursery; Prescribed Mining Operations; Road Transport Terminal; Semi-detached Dwelling; Shop or group of shops with a gross leasable area greater than 200 square metres; Store; Timber Yard; Used Car Lot.	The proposed electricity transmission line is not specifically identified as a non-complying use.

G2.6 WHYALLA (CITY) DEVELOPMENT PLAN

The Whyalla (City) Development Plan (consolidated 20 March 2008) provides policy direction for the city of Whyalla and its surrounding region. The project components located within the Whyalla (City) Development Plan are the desalination plant and the associated intake and outfall pipes, seawater pumping station, the water supply pipeline and electricity transmission line from the Cultana substation to the desalination plant. These components traverse five zones within the plan (see Table G2.5 and Figures G2.8 and G2.11).

Table G2.5 Whyalla (City) Development Plan

Industry (Port) Zone	
Project components in this zone: desalination plant, intake and outfall pipes, seawater pumping station, water supply pipeline and electricity transmission line (see Figure G2.8 and G2.11)	
Objectives	**Comment**
Objective 1: To maintain the area as a zone primarily accommodating industry of significance to the State or region, that is dependent on a portside location or capitalises on existing industry or infrastructure within the zone.	The proposed desalination plant, water supply pipeline and electricity transmission line (described in Chapter 5, Description of the Proposed Expansion) are consistent with the type of development that would be required for industrial activities intended for this zone. The proposed desalination plant is a necessary component of the proposed expansion and is of regional and State significance. The desalination plant has special siting requirements and would be appropriately located at Point Lowly due to its physical requirements (i.e. intake of seawater and discharge of return water into a high energy environment – see Chapter 16, Marine Environment).
Objective 2: To ensure the development of chemical industries that are compatible with existing industries and are designed to maximise the sharing of infrastructure and resources, and the trade of downstream products.	The proposed desalination plant (described in Chapter 5) would be designed to be compatible with existing industries. The South Australian Government may also utilise the desalination plant to provide potable water to surrounding communities.
Objective 3: To ensure that development contributes to the desired character of the zone.	The proposed development is described in Chapter 5, and based on the description of the 'desired character' below, can be considered to contribute to the desired character of the Industry (Port) Zone.
Desired character	**Comment**
The design and siting of development will minimise impacts on adjoining more sensitive zones, particularly the Settlement Zone at Point Lowly and the Coastal Conservation Zone. Development will avoid areas of conservation significance, where possible, and incorporate native vegetation into landscape design and buffers, especially at the interface with adjoining zones. In addition, industry will be designed to minimise impacts upon the marine/terrestrial environment of the Spencer Gulf and the recreation resource of the Point Lowly Peninsula. Fencing used within the zone will be chain mesh rather than solid fencing and not detract from the general appearance of the locality.	The proposed desalination plant is located wholly within the Industry (Port) Zone and not immediately adjacent to either the Coastal Conservation Zone or the Settlement Zone. The proposed intake and outfall pipes and seawater pumping station have been located outside of the Coastal Conservation Zone. The proposed desalination plant has been designed to minimise impacts on the marine and terrestrial environment. Detailed modelling has predicted that the return water discharge from the desalination plant would not adversely affect the marine environment (see Chapter 16). The results of the near field modelling predicted that the salinity of the return water would disperse to within less than 10% of background within 100 m of the outfall. The proposed site for the desalination plant is located adjacent to existing infrastructure and industrial facilities, thus consolidating disturbance footprints rather than fragmenting terrestrial habitats (see Chapter 15, Terrestrial Ecology).
Principles of Development Control – Land Use	**Comment**
PDC 1: The following forms of development are envisaged in the zone: Bulk storage and handling facilities; General industry at Cultana; Special industry (including petrochemicals) at Point Lowly; Transport infrastructure.	The proposed desalination plant, intake and outfall pipes, seawater pumping station, water supply pipeline and electricity transmission line (described in Chapter 5) would be consistent with the type of development envisaged within this zone.
PDC 2: Development listed as non-complying is generally inappropriate and not acceptable unless it can be demonstrated that it does not undermine the objectives and principles of the Development Plan.	The proposed desalination plant, intake and outfall pipes, seawater pumping station, water supply pipeline and electricity transmission line are not specifically identified as non-complying forms of development.
Principles of Development Control – Form and Character	**Comment**
PDC 3: Development should not be undertaken unless it is consistent with the desired character for the zone.	The proposed development is described in Chapter 5 and based on the description of the 'desired character' above, can be considered to contribute to the desired character of the Industry (Port) Zone.
PDC 5: Buildings and structures should be constructed of good quality materials and maintained in good repair and condition.	Proposed buildings and structures would be designed in accordance with industry standards, be constructed of good quality materials and maintained in good repair and condition.

Table G2.5 Whyalla (City) Development Plan (cont'd)

PDC 6: Special industry should be located, designed and developed such that the industry presents no danger to adjoining industry or any detrimental impact on nearby residential development or public open space.	Existing and approved industrial activities on Point Lowly Peninsula would not be affected by the proposed desalination plant and associated infrastructure. During construction, nearby residences may experience minor impacts (e.g. dust and noise) however this would be temporary and appropriate management measures implemented (see Chapters 13, Greenhouse Gas and Air Quality and 14, Noise and Vibration). Direct public access to the desalination plant would be restricted for safety and security reasons.
PDC 7: Building facades facing the Settlement Zone at Point Lowly should not contain openings or entrance ways that would result in the transmission of noise in a manner that would adversely affect the amenity of that Zone.	Buildings associated with the proposed desalination plant would be at least 500m from the boundary of the Settlement Zone. Any potential noise impacts during the construction phase would be managed in accordance with the SA EPA Environment Protection (Noise) Policy 2007 (see Chapter 14).
PDC 8: Any external plant and equipment (including a chimney stack or air-conditioning plant) should be sited as far as possible from adjoining non-industrially zoned allotments, and should be designed to minimise its effect on the amenity of the locality	The proposed desalination plant would be located wholly within the Industry (Port) Zone, at least 500m from the boundary of the Settlement Zone. As the intake and outfall pipes and seawater pumping station would be buried, the amenity of the locality would not be affected (see Chapter 20, Visual Amenity).
Principles of Development Control – Land Division	**Comment**
PDC 11: Land division should create allotments that are of a size and shape suitable for the intended use.	Any future land division, boundary realignments or creation of easements associated with the proposed desalination plant, intake and outfall pipes, seawater pumping station, water supply pipeline and electricity transmission line would be designed to facilitate the intended use of the land.
Settlement Zone	
Project components in this zone: outfall pipe (see Figure G2.11)	
Objectives	**Comment**
Objective 1: To provide a mixed use village environment with a small collection of low-density dwellings, holiday accommodation, recreation and community facilities.	As described in Chapter 5, the outfall pipe would be buried and located preferentially within the road reserve, and would not preclude future development within the zone.
Objective 2: Ensure the area is maintained as a zone accommodating a range of small scale tourist related accommodation and recreational facilities and holiday houses.	No tourist related accommodation or recreation facilities are proposed. The outfall pipe would be buried and located preferentially within the road reserve, and would not preclude future development within the zone.
Objective 4: To ensure development that contributes to the desired character of the zone.	The proposed outfall pipe would not be considered to detract from the 'desired character' of the Settlement Zone.
Desired Character	**Comment**
This zone includes the small settlement at Point Lowly that is not identified as being at immediate risk of coastal processes at this stage. Located on the Point Lowly Peninsula, it gradually rises from the Spencer Gulf and includes public amenities and some informal camping areas. The desired character of the Zone is one that highlights the natural beauty and tourism potential of the area. Point Lowly is the start of the northern coastline of Whyalla that looks across at Spencer Gulf to the lower Flinders Ranges. By ensuring access to the coast and a coastal road, a majestic view of the Gulf and Ranges will be maintained as a crucial character element of the policy area.	The proposed outfall pipe would be buried and located preferentially within the road reserve and would not affect the amenity of the Point Lowly area. During construction of the outfall pipe, management measures would be implemented to reduce potential disturbance to access to the Point Lowly area (see Chapter 19, Social Environment) and the disturbance footprint would be rehabilitated on completion of construction (see Chapter 23, Rehabilitation and Closure).
Principles of Development Control – Land Use	**Comment**
PDC 1: The following forms of development are envisaged in the zone: Dwelling; domestic outbuilding in association with a dwelling; domestic structure; dwelling addition; holiday house; local community facility; shop or group of shops under 250 square metres in size; recreation area; recreation facility; supported accommodation; tourist related accommodation.	The proposed outfall pipe is not specifically identified as complying development, however the location, design and operation of the outfall pipe would not undermine the primary intent of the zone.
PDC 4: Industry uses should be restricted to light and service industry activities that provide small-scale facilities to the community or are agriculturally based industries that process local produce.	The proposed outfall pipe is required to facilitate the operation of the proposed desalination plant.

Table G2.5 Whyalla (City) Development Plan (cont'd)

Principles of Development Control – Form and Character	**Comment**
PDC 5: Development should not be undertaken unless it is consistent with the desired character for the zone.	As discussed above, the proposed outfall pipe would not detract from the 'desired character' of the Settlement Zone.
PDC 6: Public access along the foreshore should generally be located between public and private land and along streets.	During construction public access may be affected in the immediate vicinity of construction activities, however measures would be implemented to ensure access was maintained to the foreshore.
Coastal Marina Zone	
Project components in this zone: intake pipe and seawater pump station (see Figure G2.11)	
Objectives	**Comment**
Objective 1: To provide for a marina and maritime structures including: Pontoons; jetties; piers; boat berths; slipways; repair facilities; wastewater collection, storage and transfer facilities.	The intake pipe and seawater pump station would be located below ground and would not preclude future development within the zone.
Objective 2: Development that contributes to the desired character of the zone.	The proposed intake pipe and seawater pumping station would not be considered to detract from the 'desired character' of the Coastal Marina Zone.
Desired character	**Comment**
This zone primarily accommodates coast protection works, marine waterways, berths, pontoons, jetties, piers, slipways and boat ramps. Support services that are integral to the functioning of a marina, such as refuelling areas, and waste management services are also anticipated within the zone, but will be carefully located to avoid conflicts with existing and future adjoining land uses. The zone will be characterised by a high degree of pedestrian activity, with a particular focus on the waterfront and associated public reserves that provide for passive recreation.	The proposed intake pipe and seawater pumping station would be located below ground and would not affect the functioning of activities associated with the Coastal Marina Zone. During construction, management measures would be implemented to reduce potential disturbance to access to the Coastal Marina Zone and the disturbance footprint would be rehabilitated on completion of construction.
Principles of Development Control – Land Use	**Comment**
PDC 1: The following forms of development are envisaged in the zone: Boat berth; boat construction, maintenance, repair or sale; boat servicing facility (including fuel supply, power, water, effluent pump, toilets and showers); coastal protection works; clubroom in association with a marina; loading and unloading facilities; marina; parking for vehicles and boats; small scale tourist development; storage; wastewater collection, storage and transfer facilities.	The proposed intake pipe and seawater pumping station are not specifically identified as complying development, however their location, design and operation would not undermine the primary intent of the zone.
PDC 2: Development listed as non-complying is generally inappropriate and not acceptable unless it can be demonstrated that it does not undermine the objectives and principles of the Development Plan.	The intake pipe and seawater pumping station are not specifically identified as non-complying forms of development.
Principles of Development Control – Form and Character	**Comment**
PDC 3: Development should not be undertaken unless it is consistent with the desired character for the zone.	As discussed above, the proposed intake pipe and seawater pumping station would not detract from the 'desired character' of the Coastal Marina Zone.
Coastal Open Space Zone	
Project components in this zone: outfall pipe (see Figure G2.11)	
Objectives	**Comment**
Objective 1: To ensure coastal land is protected from development other than that necessary for conservation, recreational activity and public facilities.	The proposed outfall pipe is required to facilitate the operation of the proposed desalination plant (see Chapter 5).

Table G2.5 Whyalla (City) Development Plan (cont'd)

Objective 2: To preserve and upgrade the scenic character of the coastal landscape and foreshore areas fronting urban areas, townships or settlements.	The proposed outfall pipe would be buried and the disturbance footprint would be rehabilitated on completion of construction (see Chapter 5 and 16).
Objective 4: To ensure land subject to inundation or susceptible to erosion is kept free of development.	By necessity, the outfall pipe would traverse the rocky shoreline of Point Lowly, which is subject to inundation. The pipe would be buried and engineered controls installed to prevent instability or erosion of the shoreline, during both construction and operation.
Objective 5: To ensure development is designed to be sympathetic to the heritage value and historical significance of the zone including the Point Lowly Lighthouse and Lighthouse cottages.	The outfall pipe has been located to avoid direct disturbance to the Point Lowly Lighthouse and Lighthouse cottages. The pipe would be buried and not detract from the visual amenity of the area (see Chapters 5 and 18, Non-Aboriginal Cultural Heritage).
Objective 6: To ensure development that contributes to the desired character of the zone.	The proposed outfall pipe would not detract from the 'desired character' of the Coastal Open Space Zone.
Desired character	**Comment**
The zone encompasses the foreshore area of the Point Lowly Peninsula, which contains the Point Lowly Lighthouse and Cottages, which are the oldest buildings in the local government area. The lighthouse and cottages are major landmarks and key buildings. The Peninsula is a small marina, which is utilised by private boat owners.	The outfall pipe has been located to avoid direct disturbance to the Point Lowly Lighthouse and Lighthouse cottages. The pipe would be buried and not detract from the visual amenity of the area (see Chapters 5 and 18, Non-Aboriginal Cultural Heritage). During construction there may be some short-term access constraints, however these would be appropriately communicated and managed (see Chapter 19).
Principles of Development Control – Land Use	**Comment**
PDC 1: The following forms of development are considered appropriate in the zone: Coast protection works; conservation works; jetty and boat ramp; public car parking; recreation area; sporting club facilities directly related to water activities (such as sailing clubs and boat ramps); toilet blocks and barbecue facilities.	The proposed outfall pipe is not specifically identified as an appropriate form of development, however its location below ground would not prevent future development.
PDC 4: Development that does not require a coastal location should not be located in the zone.	The proposed outfall pipe requires a coastal location (see Chapter 5).
Principles of Development Control – Form and Character	**Comment**
PDC 5: Development should not be undertaken unless it is consistent with the desired character for the zone.	As discussed above, the proposed outfall pipe would not detract from the 'desired character' of the Coastal Open Space Zone.
PDC 6: Development should not diminish the ability of the public to use and enjoy the coast or to gain access to the foreshore.	During construction there may be some short-term access constraints, however these would be appropriately communicated and managed (see Chapter 19). On completion of construction, the proposed outfall pipe would be buried and the disturbance footprint rehabilitated and foreshore access maintained.
PDC 9: Development should be designed and sited to be compatible with conservation and enhancement of the coastal environment and scenic beauty of the zone.	Facilities on the coast would be sited, constructed and operated to minimise environmental impact.
Primary Production Zone	
Project components in this zone: water supply pipeline and electricity transmission line (see Figure G2.8)	
Objectives	**Comment**
Objective 1: To maintain economically productive, efficient and environmentally sustainable primary production.	The proposed electricity transmission line would be located adjacent to the existing transmission line and the water supply pipeline would be buried, allowing for existing or future primary production activities to continue (see Chapter 9, Land Use).
Objective 3: To protect primary production from encroachment by incompatible land uses and protection of scenic qualities of rural landscapes.	The proposed linear infrastructure would be designed to minimise the potential visual impacts (such as by burying the water supply pipeline and positioning the electricity transmission line adjacent to existing infrastructure) (see Chapter 20). These design features would also allow for existing land use to continue (see Chapter 9).
Objective 4: To promote development that contributes to the desired character of the zone.	The proposed linear infrastructure does not detract from the desired character of the Primary Production Zone.

Table G2.5 Whyalla (City) Development Plan (cont'd)

Desired character	Comment
The desired character of the zone is development that enhances the natural environment while promoting economic development. The zone spans a considerable area. It is characterised by pastoral activities predominantly to the south, and defence activities to the north of Whyalla proper.	The proposed linear infrastructure would be designed to avoid natural features where practicable, and any disturbance during construction would be rehabilitated (as described in Chapter 23). Potential visual impacts would be minimised by burying the water supply pipeline and locating the electricity transmission line adjacent to the existing line (see Chapter 20). The location of the proposed desalination plant and associated infrastructure at Point Lowly would contribute to the economic development of the region (see Chapter 21, Economic Assessment).
Principles of Development Control – Land Use	**Comment**
PDC 1: The following forms of development are envisaged in the zone: Bulk handling and storage facility; diversification of existing farming activities through small scale tourist accommodation (within existing buildings; or in the form of farm stay, guesthouse, rural or nature retreat, or bed and breakfast accommodation as an integral part of the farm buildings complex); farming; horticulture; intensive animal keeping.	The proposed water supply pipeline and electricity transmission line are not specifically identified as appropriate forms of development, however they would not preclude future development within the Zone.
PDC 2: Development listed as non-complying is generally inappropriate and not acceptable unless it can be demonstrated that it does not undermine the objectives and principles of the Development Plan.	The proposed water supply pipeline and electricity transmission line are not specifically listed as non-complying forms of development.

G2.7 PORT ADELAIDE ENFIELD (CITY)

The Port Adelaide Enfield (City) Development Plan (consolidated 17 January 2008) provides policy direction for the Port Adelaide Enfield region, comprising approximately 92 square kilometres in Adelaide's northern and north western suburbs. The project component located within the Port Adelaide Enfield (City) Development Plan is the sulphur handling and storage facility, which is located on land at Outer Harbor zoned as Industry (Port) within the plan (see Table G2.6 and Figures G2.12).

Table G2.6 Port Adelaide Enfield (City)

Industry (Port) Zone	
Project components in this zone: Sulphur storage and handling facility (see Figure G2.12)	
Objectives	**Comment**
Objective 1: To provide land for the long-term growth of the port and accommodating activities dependent on a port-side location.	The proposed expansion requires an increase in the volume of sulphur to be imported through Port Adelaide (as described in Chapter 5, Description of the Proposed Expansion). A new bulk sulphur off-loading and storage facility would be built on available land at Outer Harbor. The operation of the proposed facility would contribute to the long term growth at the Port.
Objective 2: To ensure the selective use of land in a manner commensurate with the strategic and economic State significance of the Zone for the handling of export and import commodities.	The proposed facility would be located in an appropriate location, enabling access to wharf facilities to off-load imported sulphur and an inland location for the transfer and storage facilities (see Chapter 5 for details).
Objective 3: To ensure land with direct water frontage is developed to accommodate only those activities which rely upon that water frontage.	The proposed facility would require some land with direct water frontage for the ship wharf unloader (see Chapter 5).
Principles of Development Control	**Comment**
PDC 1: To ensure development undertaken in the Industry (Port) Zone is primarily for activities dependent on a port-side location.	The proposed sulphur storage and handling facility would be dependent on a port-side location for the ship-based import of sulphur.
PDC 2: To ensure only those activities which require direct frontage to the water be located on the water fronting portions of the Zone. These activities are limited to those functions of the port involving waterborne vessels and/or the movement of products or items from the water to the land and vice versa and may include: gantry and loading structures; wharf facilities and berthing operations; harbour installations and navigational aids.	The proposed facility would require some land with direct water frontage for the ship wharf unloader and associated conveyor to transfer the sulphur to the inland storage facility.
PDC 4: To ensure that Port related activities be sited inland including those activities which are engaged in the transporting, processing, making, storing or handling of products or items to be, or which have been, transported by ship.	As described in Chapter 5, the proposed facilities at Outer Harbor would include a sulphur storage shed, a conveyor structure, rail loop, office buildings and maintenance area. These components would be located inland of the proposed wharf unloader.
PDC 7: Development adjoining the waterfront should incorporate, where possible, formal landscape plantings such as lawns and large trees to screen unsightly storage areas otherwise open to public view and enhance the appearance of the development and the waterfront and provide an amenity for employees on the site.	The proposed sulphur transportation system would be closed (as described in Chapter 5) and would not be open to public view. The facility would be designed with consideration of public amenity.
PDC 8: Buildings and structures should be constructed of good quality materials and maintained in good repair and condition.	All buildings and structures would be designed and constructed in accordance with relevant building standard codes, constructed of good quality materials and maintained in good repair and condition.
PDC 9: Outdoor storage and/or work areas should where possible be screened from public view.	The proposed sulphur transportation system would be closed (as described in Chapter 5) and would not be open to public view.
PDC 10: To ensure that development does not pollute the water of Port Adelaide River. Development associated with the Port of Adelaide at Outer Harbor that is within 120 metres of the southern boundary of the Zone, should not unreasonably impact on the residential areas within the locality through noise, traffic, fumes, dust, vibration, or any other harmful or nuisance-creating impact.	Chapter 24, Environmental Management Framework, describes the process that would be implemented to ensure that the proposed facilities have minimal potential impact on water quality of the Port Adelaide River. Potential dust, noise and traffic impacts on surrounding residents have been addressed in Chapters 13, Greenhouse Gas and Air Quality, 14, Noise and Vibration and 20, Social Environment respectively.

Table G2.6 Port Adelaide Enfield (City) (cont'd)

PDC 12: The extent of port related activities and other industrial activities should not jeopardise the attainment of the Objectives of the Zone.	As described above, the proposed sulphur handling and storage facility is consistent with Objectives 1, 2 and 3 of the Industry (Port) Zone.
PDC 13: Land located east of Pelican Point Road on the northern portion of Le Fevre Peninsula should not be developed until an open space linkage of a minimum width of 100 metres is defined, with 50 metres being in this Zone, between the MOSS (Conservation) Zone to the east and the MOSS (Buffer) Zone to the west.	The proposed facility would be developed within land currently under industrial uses, and would not require any incursion into MOSS Zones or potential linkages between MOSS Zones.
PDC 14: The following kinds of development are complying in the Industry (Port) Zone: Berthing Operation, Coastguard Station, Fire Station, Gantry and Loading Structures, Harbor Installation, Navigational Aid, Telecommunications towers, masts and monopoles, Telecommunications Antennae, Wharf Facilities	The proposed sulphur handling and storage facility (as described in Chapter 5) would be complying development within the Industry (Port) Zone.
PDC 16: The following kinds of development are assigned to Category 1 in the Industry (Port) Zone: Bunker Facility, Cargo Handling Facilities, Container Terminals, Customs Operations, Harbor Installations, Intermodal Cargo Transfer Facilities, Navigational Aids, Offices associated with port activities where the office is ancillary to the port activity, Ship Repair Facility, Storage Areas used for the temporary holding of port cargo, Telecommunications towers, masts and monopoles (where the proposed development is located, greater than 30 metres from a residential zone), Telecommunications Antennae, Transhipment Facilities	The proposed facility would include the type of development assigned as Category 1 development.

G2.8 NORTHERN TERRITORY PLANNING SCHEME – EAST ARM PORT (PORT OF DARWIN)

As part of the proposed expansion, BHP Billiton would propose to store and handle concentrate at the Port of Darwin (East Arm) prior to export. It would be expected that additional land reclamation would occur as part of the Port's ongoing development at East Arm and that this land would support the new infrastructure to be built by or for BHP Billiton, including a storage shed and bulk materials loading facility.

BHP Billiton facilities are likely to be built within the East Arm Port Future Facilities area, which includes provision for future berth extensions, bulk solids stockpile area, marine industry support facilities and future reclamation. East Arm Wharf is currently zoned as Industry - Development under the Northern Territory Planning Scheme.

Table G2.7 Northern Territory Planning Scheme and East Arm Masterplan

Industry – Development Zone	
Project components in this zone: concentrate storage and loading facility (see Figure G2.13)	
Provisions	**Comment**
1: To provide for the development of major strategic industries including gas based, road, rail or port related industries.	As described in Chapter 5, Description of the Proposed Expansion, the proposed storage and handling facility is required for the export of concentrate from the Port of Darwin. The proposed infrastructure includes a rail loop, concentrate storage shed, enclosed conveyor, wash-down facility, office buildings and maintenance area.
2: To provide for major industrial development that is of strategic importance to the future economic development of the Territory.	The proposed export of additional uranium oxide and concentrate would contribute to the future economic development of the Territory. Preliminary economic analysis (based on Selection Phase studies) indicates an initial $300 million in expenditure for the construction of the facility and an annual operating expenditure ranging between $7 million and $25 million. Economic modelling projections indicate that the proposed development could contribute $936 million (above the business as usual case) to the Northern Territory Gross State Product (GSP) over a 30 year period (NPV7%) (see Chapter 21, Economic Assessment).
3: Development is to be assessed having regard to, among other things, the environmental impact and the effect on the surrounding development because of the processes involved, the method of manufacture or the nature of the materials used, produced or stored.	The construction and operation of the proposed facility has been assessed in detail in the Draft EIS and Appendix E4, having regard to environmental, economic, cultural and social values.
East Arm Masterplan	**Comment**
Future Facilities zone, including future berth extensions, bulk solids stockpile area, marine industry support services and future reclamation.	The proposed concentrate storage and handling facility is consistent with the proposed intent of the Future Facilities zone.

Figure G2.13 East Arm Wharf future facilities - zone concentrate storage and loading facility