

### 3. Land use and project approvals

A land use assessment has been undertaken to identify potential impacts of the Project on land use in the vicinity of the proposed MLARP. This section addresses the following:

- The existing land tenure and land use environment within, adjacent to and in the vicinity of the project area
- Likely and planned future land use within, adjacent to and in the vicinity of the project area during both the construction and operational phases of the Project
- The existing statutory land use controls that govern future development in the area
- Potential impacts of the proposed Project on land use within, adjacent to and in the vicinity of the project area

#### 3.1 Methodology

##### 3.1.1 Existing tenure

Land tenure within the project area was identified through information obtained from the DNRW Digital Cadastre Database and from the Gladstone Regional Council (GRC).

##### 3.1.2 Existing land use

Land use information was obtained principally from the GRC and from aerial photographs, topographic data and from a site visit to the project area on 4 and 5 March 2008.

##### 3.1.3 Future land use

In order to determine possible future land use in the vicinity of the project area, it was necessary to:

- Review the strategic planning sections of relevant planning documents (Gladstone Integrated Regional Transport Plan, Gladstone State Development Area Development Scheme).
- Identify immediate development plans for the area, by obtaining details of existing development applications undergoing the Integrated Development Assessment System (IDAS) process and valid development permits (where the development has not yet occurred) from the GRC and the Coordinator-General (CG).
- Liaise with State Government agencies and development assessment personnel to discuss general development opportunities within the project area, and obtaining information on the potential future use of government owned land.

##### 3.1.4 Potential impacts and mitigation measures

The assessment of the potential impacts of the Project included identifying sensitive land uses adjacent to, or in the vicinity of the project area. Potential threatening processes, environmental nuisances or environmental harm due to the construction and/or operation of the Project have been identified in other sections of this EIS.

The necessary mitigation measures required to prevent the potential impacts of the Project on the surrounding land uses were identified, and where appropriate included in the relevant section of this EIS.

### 3.1.5 Legislation and project approvals

A review was undertaken of the following statutory land use controls that apply to land both within and directly adjacent to the project area:

- *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
- *Native Title Act 1993 (Commonwealth)*
- *State Development and Public Works Organisation Act 1971*
- *Integrated Planning Act 1997 (IPA)*
- *Transport Infrastructure Act 1994*
- *Environmental Protection Act 1994*
- *Fisheries Act 1994*
- *Vegetation Management Act 1999*
- *Nature Conservation Act 1992*
- *Water Act 2000*

### 3.2 Land tenure

The general land tenure of the Project is shown in Figure 3.1. The proposed rail corridor is to be located on land currently owned or leased by the State Government (including the Department of Infrastructure and Planning and Queensland Transport), QR, Gladstone Ports Corporation (GPC) and private landowners.

Table 3.1 is a summary of properties directly impacted by the Project.

**Table 3.1 Properties directly impacted by the Project**

| Ownership  | Lot and Plan Number  | Tenure     |
|--|--|------------|
| Private  | Lot 475 on CL40216 <sup>+</sup> , Lot 1 on CTN1342 <sup>-</sup> , Lot 1 on RP614238 <sup>-</sup> , Lot 2 on RP614238 <sup>-</sup> , Lot 3 on CTN1343 <sup>+</sup> , Lot 4 RP608908 <sup>+</sup> , Lot 1 on RP609338 <sup>+</sup> , Lot 8 on CP883534 <sup>+</sup> , Lot 72 on SP128563, Lot 2 on RP609719, Lot 12 on SP190336, Lot 30 on SP130898                | Freehold   |
| Minister for Industrial Development of Queensland                          | Lot 30 on CTN107, Lot 1 on RP616273, Lot 2 on SP157677, Lot 6 on SP101558 <sup>^</sup> , Lot 6 on RP620658 <sup>^</sup> , Lot 2 on RP610233 <sup>^</sup> , Lot 1 on RP612266 <sup>^</sup> , Lot 1 on RP612288 <sup>^</sup> , Lot 201 on SP116496 <sup>^</sup> , Lot 5 on SP200836 <sup>^</sup> , Lot 9 on SP200837 <sup>^</sup> , Lot 8 on SP200847 <sup>^</sup> | Freehold   |
| Queensland Rail  | Lot 151 on SP122293, Lot 153 on SP122294, Lot 3 on SP101558, Lot 5 on SP101558, Lot 7 on SP101558, Lot 1 on SP101560, Lot 72 on SP122249, Lot 73 on SP122249, Lot 74 on SP122249, Lot 91 on SP122250, Lot 92 on SP122251, Lot 140 on SP122252, Lot 2 on RP609335   | Leasehold  |
|  | Lot 1 on CTN1508, Lot 2 on CTN1508, Lot 75 on SP122249   | Railway    |
|  | Lot 1 on RP612265, Lot 2 on RP610857, Lot 142 on SP130895  | Freehold   |
|  | Lot 1 on CTN1335, Lot 3 on CTN1335   | State Land |
| The State of Queensland (Represented by DNRW)                              | Lot 12 on CP843217   | Reserve    |
| The State of Queensland (Represented by DNRW)                              | Lot 3 on CP911258, Lot 4 on CP911258,  | Freehold   |
| The State of QLD (Represented by the Co-ordinator General)                 | Lot 2 on RP611962, Lot 3 on RP611962, Lot 4 on RP616225, Lot 5 on RP616224, Lot 9 on RP620156, Lot 110 on CTN1848  | Freehold   |
| The State of QLD (Represented by the Department of Industrial Development) | Lot 200 on SP116496 <sup>^</sup>   | Freehold   |

| Ownership  | Lot and Plan Number  | Tenure     |
|--|--|------------|
| Gladstone Ports Corporation  | Lot 124 on CTN1362, Lot 13 on RP620157   | Freehold   |
| Powerlink, Gladstone Area Water Board, Telstra, Ergon Energy, APA Group, Cement Australia, Reef Networks, Singapore Power International/Alinta | Easements and corridors intersecting the project area  | State Land |
| State of Queensland  | Bruce Highway Road Corridor*, Dawson Highway Road Corridor*, Gladstone – Mount Larcom Road Corridor*, Calliope River Road Corridor#, The Narrows Road#, Cullen Road#, Targinie Road#, Flynn Road#, Halls Road#, Daetz Road#, Calliope River and Larcom Creek | Crown land |

**Table notes:**

~ - Moura Link Western Option

+ - Moura Link Eastern Option

^ - Grazing Lease

\* - State Controlled Road (ie declared under the *Transport Infrastructure Act 1994*) is under the management and control of Department of Main Roads

# - Local Council (Gladstone Regional Council) controlled road

Railway Land vested for railway purposes in the Queensland Transport or Queensland Rail.

Reserve Land reserved by the Department of Natural Resources and Water for community or public purposes.

Freehold Land held by the State in Fee Simple (freehold title) which includes titles surrendered to the State of Queensland (or Crown) in terms of Section 358 of the *Land Act 1994*.

State Land Land held by the State of Queensland as Unallocated State Land and other areas vested in the State (or Crown) but not held in Fee Simple or as a lease issued under the *Lands Act 1994*.

**Source:** QR Limited Property Division 2008

Figure 3.2 illustrates the directly impacted properties. Existing utilities impacted by the Project are discussed in Section 3.3, while the local road and rail network is discussed in Section 13.

Lot 8 on RP620660, a privately owned parcel of land may be developed as part of the Project however, this is dependent on QR's final strategy is adopted for the accommodation of the construction workforce.

### 3.3 Existing land use

#### 3.3.1 General description

The closest residential settlements to the Project are the townships of Mount Larcom and Yarwun, which consist of residential properties, local shops, and Yarwun Primary School. Aldoga is the smallest of the settlements with a cluster of houses on rural-residential sites.

Existing land use in the project area consists predominantly of cattle grazing. There are large areas of pasture land interspersed with areas of mature trees and bush. There are very limited areas of horticultural production within and adjoining the project area. Figure 3.3 identifies these key settlements and identifies the main land uses of the project area.

There are large industrial uses located near to the Project, for example the Cement Australia East End Mine to the west of the Bruce Highway, the quarry near the township of Yarwun and industrial facilities in the Gladstone State Development Area (GSDA), including:

- Rio Tinto Alumina Refinery and Residue Facility
- Orica chemical manufacturing complex
- Transpacific Industries waste management and recycling facility
- Air Liquide air separation facility

The Aldoga Aluminium Smelter is also approved for the Aldoga Precinct of the GSDA but is yet to be constructed. The Aldoga sewerage treatment plant which is yet to be completed was constructed primarily to service the Aldoga Aluminium Smelter.

In addition to these major industries, other land uses include grazing leases, state forests, recreational areas, rural residential uses, a plantation forestry trial, as well as waste storage areas for industrial activities, a Key Resource Area (KRA), telecommunications and other utilities infrastructure. The GSDA is discussed in greater detail in Section 3.4.2.

### 3.3.2 Environmental Areas

As an important area for recreation within the local area, the Mount Larcom Range is on the Register of the National Estate (listed on the Australian Heritage Database) as an "Indicative Place". The proposed rail infrastructure does not traverse this area. The eastern extent of the Project adjoins Mount Stowe State Forest east of the Yarwun township.

The project area is located within the freshwater reaches of the Calliope River catchment approximately 40 km upstream of the Great Barrier Reef World Heritage Area (GBRWHA). The GBRWHA extends from the low water mark of the mainland and encompasses Port Curtis the main downstream receiving environment of the Calliope River. The Project is likely to have minimal impact on the environmental values of the GBRWHA due to:

- The separation distance of the project area to the GBRWHA (approximately 40 km)
- The nature of the works (eg rail infrastructure)
- Existing environmental values of the area

In addition, QR is committed to the development and implementation of relevant environmental procedures and measures to mitigate and/or prevent environmental harm during construction and operation (refer Section 20).

### 3.3.3 Mining interests

A number of mining leases have also been identified within the Gladstone region (refer Figure 3.4). The project area does not encroach into these mining lease areas, however pressures on shared transportation routes and supporting resources (eg construction workforce) may occur. This is dependent on overlap of the Project with the mining leases development timeframe (majority of the leases are currently in the planning process).

The State Planning Policy (SPP) 2/07 Guideline Protection of Extractive Resources identifies extractive resources of State or regional significance and aims to protect those resources from incompatible developments (eg residential) that might constrain current or future extraction of required resources. The Policy identifies the location of extractive resources as a KRA which contain three elements – a resource/processing area, a separation area and an associated transport route. The SPP 2/07 seeks to ensure as far as practicable, that development is compatible with existing or future extractive industries.

A quarry site, separation area and transport corridor situated south west of the intersection of Targinie Road and Gladstone-Mount Larcom Road are within the SPP 2/07 Protection of Extractive Resources and KRA 20 (refer Figure 3.4).

### 3.3.4 Existing infrastructure

The existing linear infrastructure surrounding the project area includes a gas pipeline, power easements, telecommunication towers, utilities infrastructure and services (sewer, potable water and stormwater).

The Gladstone Area Water Board (GAWB) is the major bulk water provider for the Gladstone region. The GAWB services Gladstone City, Calliope, Tannum Sands, Benaraby and Mount Larcom townships, the GSDA and major industrial facilities including those in nearby Boyne Island and Yarwun/Fisherman's Landing areas and power stations near Biloela. Raw water, from Awoonga dam, accounts for approximately 77% of water utilised in the region, supplied in its raw form to various industries. The remaining 23% of raw water is sent to the Gladstone and Yarwun water treatment plants.

GAWB water pipeline (Fisherman's landing pipeline) extends south west from Fisherman's Landing, crossing the Gladstone-Mount Larcom Road (west of Targinie Road) prior to running parallel to NCL for approximately 1.6 km. The pipeline then crosses the NCL at Quarry Road prior to continuing through the GSDA and across the Bruce Highway to East End Mine (refer Figure 3.5). The Project intersects the water pipeline to the north of Larcom Creek (Moura Link), while design measures have been implemented to minimise the impact from the quadruplication works (ie to avoid impact on this infrastructure and other linear infrastructure within this corridor the proposed quadruplication works will occur to the south of the NCL).

The Queensland Gas Pipeline, managed Alinta (owned by Singapore Power International), follows a similar path as GAWB water pipeline (refer Figure 3.5). However, this pipeline diverges from the water pipeline east of Larcom Creek and continues west to the south of Larcom Creek prior to crossing the Bruce Highway. The Project will intersect the corridor to the south of Larcom Creek in addition to the area near Quarry Road. The construction and operation of the pipeline is governed through a Petroleum Pipeline permit issued under the *Petroleum Act 1923* and managed by Department of Mines and Energy (DME).

Another gas pipeline managed by APA Group (owned by Envestra Ltd) crosses the NCL at the eastern extent of the project area and follows the Calliope River Road corridor south (refer Figure 3.5). The construction and operation of the pipeline is governed through a Petroleum Pipeline permit issued under the *Petroleum Act 1923* and managed by DME.

The Project also intercepts low voltage and high voltage services currently managed by Ergon Energy (refer Figure 3.6). The majority this infrastructure is associated with the township of Yarwun and major roads including the Dawson Highway, Bruce Highway and Gladstone-Mount Larcom Road.

A number of power easements have been identified within and surrounding the project area. The project area intersects Powerlink's 275 kV transmission line which extends west from Gladstone Power Station to Biloela. Another 275 kV transmission line runs parallel to the Gladstone-Mount Larcom Road north of the proposed Aldoga Rail Yard. Powerlink currently propose to construct a 275 kV substation development, Mount Larcom Substation (incorporating 275 kV-132 kV transformers), on Lot 1 on SP157677, directly north of the project area.

They also propose to link the substation to the Biloela transmission line east of Cedarvale via the construction of a new 275 kV transmission line. This proposed transmission line extends south from the proposed substation and will cross the NCL and the proposed Aldoga Rail Yard. A second transmission line is also planned to service the Aldoga Aluminium Smelter which is currently in hiatus.

Telecommunications facilities in the vicinity of the Project include a Telstra Line and Telstra Optic Fibre easement which extends from Gladstone city area to the north, south and west. Telstra cables are located predominantly within the road corridors, including the Bruce and Dawson Highways, Gladstone-Mount Larcom Road and Mount Larcom-Yarwun Road corridor, which runs parallel to the NCL (refer Section 13).

Works associated with the upgrade of Flynn Road and the quadruplication of the NCL will potentially impact on this cable. In addition, the Moura Link will intersect the cable in a number of locations, including where the link crosses the Dawson and Bruce Highways and also to the north of the EEBML.

A fibre optic cable also extends north from the NCL through the proposed Aldoga Rail Yard to a mobile phone tower located on Mount McCabe. Other telecommunication lines and fibre optics follow the NCL and MSL corridor, including QR's trackside telecommunications network facility.

Other linear disturbances include the major road and rail corridors of the Bruce Highway, the Gladstone-Mount Larcom Road, the Dawson Highway, the NCL, EEMBL and the MSL. The potential impacts of the Project on the local road and rail network has been discussed in Section 13.

### 3.4 Planning framework

A review of key strategic documents has been undertaken. The Calliope and Gladstone strategic plans were assessed to identify the preferred future land uses for the areas. In addition, the GSDA Development Scheme was also reviewed. In order to determine the likely immediate future land uses for properties surrounding the project area, former Calliope Shire Council, former Gladstone City Council and the Department of Infrastructure and Planning (DIP) were contacted to determine existing development approvals yet to be implemented, as well as current development applications.

#### 3.4.1 Gladstone State Development Area Development Scheme

##### Background

The GSDA encompasses an area of approximately 22,000 ha (refer Figure 3.7). The GSDA Development Scheme separates the GSDA into land use areas/designation, as illustrated in Figure 3.7 and listed below.

- Aldoga Precinct
- Yarwun Precinct
- Materials Transportation and Services Corridor
- Corridor Buffer Area
- Stuart Oil Shale Resource Preservation Area
- Targinie Precinct
- Clinton Precinct

All parts of the Project north of the Bruce Highway fall within the GSDA. The Western and Eastern Moura Link Options are located outside the GSDA. The Project is predominantly contained in the Aldoga Precinct but also falls within parts of the Materials Transportation and Services Corridor and the Corridor Buffer Area Precinct.

The purpose and intent of each of these precincts is described below.

##### *Aldoga Precinct*

- To encourage the establishment of industrial development that is of national, State or regional significance. In particular large scale, large plant footprint industrial development requiring undeveloped sites will be encouraged.
- To provide for the management of waste from industry.
- To manage and develop the area in an appropriate manner recognising that this area may in the future include land uses other than industry.
- To provide for infrastructure that may or may not be associated with activities within the GSDA.
- To have regard to strategic plans of development and physical characteristics of the land in considering the location of the industrial development.
- To recognise and protect a reserve for environmental purposes located on Lot 87 on SP144431 in the southern part of the precinct.
- To encourage and promote industry having regard to the cultural heritage values of the Aldoga Precinct.



### *Materials Transportation and Services Corridor*

- To establish the priority in the Materials Transportation and Services Corridor of materials transportation infrastructure and utility and service infrastructure over alternate land uses.
- To provide an efficient and effective route for infrastructure and utility services to link the Port of Gladstone with GSDA precincts and areas external to the GSDA.
- To provide for infrastructure that may or may not be associated with activities within the GSDA.
- To provide for multiple users and for multiple purposes in the Materials Transportation and Services Corridor. Appropriate purposes include conveying materials, products and wastes and services by pipe or conveyor and compatible infrastructure services.
- To develop the Materials Transportation and Services Corridor in a manner that efficiently uses the land in the corridor.
- To recognise the requirements of existing users' infrastructure in considering the appropriateness of future infrastructure.

This majority of the utilities described in Section 3.3.4 are located within this area.

### *Corridor Buffer Area*

- To recognise that activity in the Materials Transportation and Services Corridor may have adverse impacts and that there should be a physical separation between these activities and areas where sensitive land uses may occur.
- To ensure activity on land adjoining the Materials Transportation and Services Corridor is compatible with the long term operation of the Materials Transportation and Services Corridor.
- To make effective use of the buffer areas consistent with the operation of the Materials Transportation and Services Corridor.
- To provide for infrastructure that may or may not be associated with activities within the GSDA.
- To strongly discourage sensitive land uses such as dwellings from locating near to the Materials Transportation and Services Corridor.

Linear corridors to services this area including the proposed Western connector transport corridor from the Bruce Highway (south of Larcom Creek) to Gladstone-Mount Larcom Road are currently being investigated.

### **Approval under the GSDA Development Scheme**

An application for material change of use (MCU) in the GSDA is assessed by the CG under the provisions of GSDA Development Scheme. All development under the IPA other than a material change of use is assessed under the IPA.

The assessment procedure undertaken by the CG is outlined in Appendix C2.

Explanatory definitions are contained in Section 2 of the GSDA Development Scheme and some reference is made to the Calliope Shire Planning Scheme for definitions not listed. Schedules 1 to 4 of the GSDA Development Scheme are relevant to the Project since they apply as follows:

- Schedule 1, Aldoga Precinct
- Schedule 2, Materials Transportation and Services Corridor
- Schedule 3, Corridor Buffer Area Precinct
- Schedule 4, Yarwun Precinct

Each of the Schedules set requirements for development according to the following:

- Column 2(a) – uses that are considered highly likely to meet the purpose of the land use designation
- Column 2 (b) – uses that may meet the purpose of the land use designation

- Column 2 (c) – uses that are considered likely to compromise the purpose of the land use designation

Material transport infrastructure is listed in Column 2(a) of Schedules 1 to 3 and Column 2(b) of Schedule 4. However, the definition specifically excludes railways:

*“Materials transport infrastructure” means infrastructure used to transport materials and includes pipes used to transport materials (other than for utility purposes eg. water, sewerage, electricity, telecommunications and gas), and conveyors used to transport raw material and products but does not include a road, railway or port.*

Therefore, the Project which involves rail infrastructure is not provided for in either Column 2(a) or 2(c) of Schedules 1 to 4, but in support of industrial activities it falls within consideration of Column 2(b) of each Schedule.

### 3.4.2 Calliope Shire Council Planning Scheme

The Project traverses land under the jurisdiction of the former Calliope Shire Council. Since 15 March 2008, the GRC administers the Calliope Shire Council Planning Scheme (the Planning Scheme). The Planning Scheme is an IPA-compliant planning scheme that commenced on 13 April 2007. The Planning Scheme contains two main statutory controls that aim to produce ecological sustainable development outcomes, firstly through a zoning based assessment process, secondly through overlays, the majority of which apply the relevant State Planning Policies.

The Project is largely contained within the Gladstone State Development Locality with the exception of the Moura Link options that are contained in the Calliope Rural Locality (refer Figure 3.8).

In the GSDA Locality the Planning Scheme only applies to “Other Development”. It has no force or effect in regards to a Material Change of Use on land within the GSDA.

The Planning Scheme lists the Overall Outcomes for the GSDA Locality Code as:

- industrial development of regional, State and national significance within the Gladstone State Development Zone.*
- a planned industrial development that protects environmental values and optimises benefits to the community.*
- support services and facilities to the industrial activities.*
- dedicated and efficient means of access for materials, products, wastes and services between the Aldoga Industrial Area, Targinie area, Yarwun Industrial Estate and the Port of Gladstone.*
- compliance with the Development Scheme for the Gladstone State Development Area as approved by the Governor in Council.*

The Project is consistent with these objectives since it will provide new rail transport routes and add support to industrial activities in the GSDA and to the Port of Gladstone.

The relevance of the Planning Scheme to the Project is discussed in Section 3.7.3.

### 3.4.3 Gladstone Regional Council (Regional Council)

GRC is a new local government area created on 15 March 2008 and was amalgamated from Calliope Shire Council, Gladstone City Council and Miriam Vale Shire Council.

It was envisaged that the amalgamation of these three local governments creates an organisation of a scale and capacity to undertake comprehensive natural resource management across the region in an integrated manner, in addition to managing its urban growth areas.



For those aspects of the Project that require approval under the Calliope Shire Planning Scheme, application will be made to the GRC.

### 3.4.4 Development and Conservation of Good Quality Agricultural Land – SPP 1/92

#### Overview

SPP for the Development and the Conservation of Agricultural Land SPP1/92 “addresses the conservation of good quality agricultural land and provides guidance to local authorities on how this issue should be addressed when carrying out their range of planning duties.”

Good Quality Agricultural Land (GQAL) is a valuable resource and must, where possible, be protected from incompatible development. When considering development on GQAL, the Assessment Manager should consider whether it can be demonstrated that there is an overriding need for the development in terms of benefit to the community.

#### Relevance to Project

The Project will impact on agricultural land of the following classes as identified in Figure 4.7:

- C1 Pasture land suitable for sown pastures
- C2 Pasture land suitable for native pastures
- C3 Pasture land suitable for light grazing of native pastures
- Category A Land suitable for plantation, tree and vine crops with minor or moderate limitations

The greatest proportion of agricultural land affected by the Project falls within the category of C2 Pasture land suitable for native pastures. There is a small pocket of C1 in and around the Moura Link Western and Eastern options in the southern part of the project area. Around the township of Yarwun there are very small areas of Category A Land. The NCL currently crosses these small areas and the incremental change will be minor. Agricultural land has been discussed further in Section 4.

The majority of the Project is located within the GSDA which has been designated for industrial purposes. The industrial land use of the area has been considered by State Government as the highest and best use of the area.

For the southern portion of the Moura Link (outside GSDA) the loss of agricultural land within this area is minimal due to the narrow width of the rail corridor, the strategic location along existing property boundaries (Moura Link Eastern Option) and the location alongside existing road and rail infrastructure.

### 3.4.5 Other Planning Policies

Other following SPPs potentially relevant to the Project include:

- Development in the Vicinity of Certain Airports and Aviation Facilities – SPP 1/02
- Planning and Managing Development Involving Acid Sulfate Soils – SPP 2/02
- Mitigating the Adverse Impacts of Flood, Bushfire and Landslide – SPP 1/03

These and other SPPs are discussed in further detail in Appendix C1.

### 3.4.6 Industrial expansions

There are a number of proposed rail network and industrial expansion projects within the Gladstone-Calliope region which are either under investigation or construction. Figure 3.3 illustrates the location of major industrial projects in the Gladstone area. These projects are outlined in Table 3.2.

**Table 3.2 Summary of recently completed and proposed industries and future expansion projects**

| Project name  | Description   |
|---|---|
| RG Tanna Coal Terminal – Third Rail Unloading Station (GPC)                   | The third rail in-loading station is part of the port's expansion of the RG Tanna Coal Terminal and Barney Point Coal Terminals to boost the port's capacity to handle 75 Mtpa of coal, up from its current capacity of 45 Mtpa. Started – early 2005. Completed November 2006.   |
| Orica Ammonium Nitrate Plant Expansion (Orica Australia)                      | Upgrade of the ammonium nitrate complex to increase production capacity from 300,000 tpa to a nominal capacity of 600,000 tpa, making the plant the second largest in the world. Started - December 2004, Completed - August 2006.  |
| S230 Anode Project - Boyne Island Smelters (Boyne Smelters)                   | Line 1 and 2 anode assembly successfully implemented, increasing aluminium production by 11,000 tpa, taking the smelter's capacity to over 550,000 tpa.   |
| Gladstone Port – RG Tanna Coal Terminal Expansion (GPC)                       | The expansion includes a third rail in-loading station (completed - November 2006), a third ship loader, a fourth berth, and five additional coal stockpiles (to total of 21), to make it one of the largest coal handling facilities in Australia. Construction is well advanced, with each strategic component delivering progressive increases in capacity to the terminal. Dredging works relating to the fourth berth have already been completed. Subject to demand, additional minor expansion of 3 Mtpa may also be undertaken in the future. Construction started early 2005. Completion – October 2007  |
| Dawson Mining Complex Development Project (Anglo American and Mitsui and Co.) | The project includes development of three mining areas, Dawson North, Dawson Central and Dawson South along the strike of the coal deposits. The expansion includes the construction of a new coal handling and coal preparation plant at an estimated cost of \$346 million, installing new mining equipment and upgrading the transport fleet. The combined new mining operations will produce around 7.1 Mtpa of high quality metallurgical coal and 5.6 Mtpa of thermal coal mainly for export via the Port of Gladstone.   |
| Queensland Coke and Energy Plant Project (Macarthur Coal)                     | Development of a merchant coke plant producing up to 3.2 Mtpa of coke for export through Gladstone to international steel mills. Cogeneration of up to 280 MW of electricity from surplus heat in coking process. 5 Mt of coking coal will be sourced from new or expanded coal mine developments in the Bowen Basin. Benefits include value-adding to Queensland coal resources and low emission power generation (construction - 1,200, operation – 145) URS Australia, Babcock and Brown to develop and operate the associated power station.  |
| Wiggins Island Coal Terminal (GPC)  | Development of a 25 Mtpa coal terminal (Stage 1) on the western side of the Calliope River, up harbour from the existing RG Tanna Coal Terminal, with a capability to upgrade to 70 Mtpa. Depending on the material handling efficiencies achieved, the actual capacity of the ultimate facility could increase by up to 20% above the nominal capacity (ie 84 Mtpa). Construction and operation of electrified rail access from the north and west and supporting infrastructure.  |
| Gladstone Pacific Nickel Refinery (Gladstone Pacific Nickel)                  | A nickel and cobalt laterite mine at Marlborough and a high pressure acid leach plant at Yarwun to process Marlborough ore and imported ore. Stage 1 and 2 will produce about 126,000 Mtpa of nickel and 10,400 Mtpa of cobalt from both the Marlborough and imported ores. About 2.5 Mtpa of ore from the mine may be transported to Gladstone through a dedicated 175 km ore slurry pipeline.   |
| Rio Tinto Alumina Yarwun Refinery - Stage 2 (Rio Tinto Aluminium)             | Rio Tinto Aluminium (RTA) is considering the \$2.1 billion Stage 2 expansion of their Yarwun Alumina Refinery. Stage 2 will produce an additional 2 Mtpa of alumina and will take three years to construct. The expansion will also require two additional ships to transport an additional 4.5 Mt of bauxite from Weipa each year. A gas fired cogeneration plant is included in the project to provide steam and power which will require 23 PetaJoules of gas and export 80 MW of low greenhouse gas power to the state power grid. The State Government has offered assistance with common user infrastructure for Stage 2, including certain dredging work in Port Curtis and a second berth at Fisherman's Landing. |

| Project name   | Description  |
|--|--|
| Moranbah to Gladstone Gas Pipeline Project (AGL-Arrow Joint Venture) | <p>The 440 km long high-pressure gas pipeline will be built, originally owned and operated by Enertrade, and is intended to provide a strategic link for coal seam gas supply between the Northern Bowen Basin and Gladstone. The pipeline will also provide interconnection with the Queensland gas pipeline network, giving the north Bowen Basin gas access to additional Queensland markets.</p> <p>The pipeline will be located predominantly within the Materials, Transportation and Services Corridor of the GSDA (refer Figure 3.7). However the alignment will diverge from this corridor near Police Creek and extend north west along the a proposed easement (ie petroleum pipeline license, refer Figure 3.4)</p>  |
| Mount Cannindah Copper, Gold project (Queensland Ores)               | <p>The company is investigating a copper-gold open-cut operation, with later potential for underground operations. It plans to drill the Mount Cannindah Mine prospect to infill previous drilling and carry out final metallurgical testwork, engineering studies and mine planning. There is potential for the nearby Monument-Lifesaver and United Allies deposits to provide long-term feed to a plant, and potential for the Cannindah East deposit to provide relatively gold-rich feed to the plant.</p>  |
| Rockhampton to Gladstone Pipeline (GAWB)                             | <p>Water pipeline from Fitzroy River to Gladstone to improve reliability for industrial users. Gladstone-Fitzroy Pipeline project is a key outcome of the 2006 Central Queensland Regional Water Supply Strategy, a strategy developed by the Queensland Government with cooperation from local councils, regional water supply bodies and other stakeholders. The project is being proposed as a contingent source strategy to ensure a reliable supply of water to the region. The Gladstone Area Water Board (GAWB) has secured a reservation of up to 30,000 ML of water each year to be drawn from the Fitzroy River to provide a dual water source for GAWB's supply network.</p> <p>The pipeline will be located predominantly within the Materials, Transportation and Services Corridor of the GSDA (refer Figure 3.7). However the alignment will diverge from this corridor near Police Creek and extend north west along the a proposed easement (ie petroleum pipeline license, refer Figure 3.4)</p> |

**Source:** Gladstone Economic and Industrial Development Board 2008

### 3.5 Potential impacts

There will be some direct property impacts associated with the land required for the Project.

During construction and operation of the Project, there is potential for the amenity of adjoining areas to be adversely affected. Potential impacts include:

- An increase in dust (refer Section 10)
- An increase in noise and vibration (refer Section 11)
- Traffic impacts (temporary road closures, permanent road closures, construction traffic) (refer Section 13)
- A decrease in visual amenity and additional lighting impacts (refer Section 15)

These potential impacts from the Project are discussed in the relevant sections of this EIS.

It is QR's practice to engage all private landowners in consultation and negotiate a deal for acquisition of land required for the Project. QR has commenced discussion with all of the concerned private landowners.

### 3.5.1 Direct property impacts

As discussed in Section 3.2 there are several properties that will be directly affected by the Project. Table 3.1 provides the properties directly impacted by the Project.

A large portion of the properties required for the Project are either existing QR properties or owned by the Queensland Government, including:

- Twenty one QR owned land parcels
- Twenty four State of Queensland (various Departments) owned land parcels

In addition, the Project intercepts a number State and GRC controlled roads, privately managed utility corridors (eg gas pipelines), telecommunication services and power easements (refer Table 3.1).

The Project will also directly affect a number of private land parcels (refer Table 3.1):

- The works associated with the NCL quadruplication intercepts four private properties including two properties within the GSDA
- The Moura Link Eastern Option configuration intersects five private properties
- The Moura Link Western Option configuration intersects four private properties

Therefore, with the development of the preferred Moura Link Eastern Option configuration nine private properties will be intersected.

Lot 8 on RP620660, a privately owned parcel of land may be developed however, this is dependent on QR's final strategy is adopted for the accommodation of the construction workforce.

### 3.5.2 Compensation for acquired properties

QR's preference is to negotiate the purchase of the land required for the Project based on independent market valuation. If a negotiated purchase is not achieved, QR will seek to engage the resumption powers of State Government (Queensland Transport) where compensation can be paid to land owners if a pecuniary interest in land is taken (ie if it is resumed). Assessment of compensation is based on the market value of the property at the date of Gazettal of the acquisition. Under the *Acquisition of Land Act 1967* there is currently no provision to compensate property owners that are not directly affected by the Project. In assessing the compensation to be paid, regard is given to the value of the land taken, severance, injurious affection and disturbance. In a resumption situation only that land required for the Project and immediately impacted will be acquired.

If a land owner's principal place of residence is impacted by the Project and subsequently resumed, the following allowances are made in addition to the market value of the property:

- Stamp duty on the purchase of a replacement dwelling to equal value
- Conveyancing fees associated with the purchase of another dwelling of equal value
- A reasonable allowance to cover the cost of relocation of personal effects and furniture
- Charges associated with re-establishing a mortgage of equal value to that existing at the resumption date
- Post and telephone reconnection costs
- Other costs reasonably incurred in relocating to a comparable residence
- Professional fees associated with the negotiation and conveyance of the acquisitions

Land tenure and land use issues were taken into account during the project master planning and concept engineering design. This process minimised potential land use impacts without adversely affecting the safety and efficiency of the proposed rail alignment.

### 3.5.3 Other potential impacts

Due to the nature and scale of the Project, there is the potential to impact existing and future land uses within the project area. This section of the EIS assesses the following land use suitability objectives:

- To ensure that potential negative construction and operational impacts of the Project on existing land uses (and likely future land uses) can be ameliorated by the appropriate preventative strategies and mitigation measures.
- To ensure that the potential land use benefits of the Project outweigh the direct property impacts of the Project.
- To ensure the compliance of the Project with relevant planning policies and provisions.

#### Impacts on agricultural lands

Land that is occupied by the proposed rail infrastructure will no longer be available for grazing, which is the predominant agricultural use in the project area. The proposed rail line will either be fenced or constructed in a manner that prevents stock wandering onto the rail line. This has the potential to isolate land parcels and can act as a barrier to other parts of the grazing lease. During construction there is the potential for an area wider than the rail corridor itself to be affected by earthmoving and construction machinery and other vehicles.

Within the GSDA there are large areas of land currently leased for grazing pending future development for industrial activities. In these areas the Project is principally located adjacent and/or adjoining the existing rail or road corridor. This reduces the potential for the proposed rail infrastructure to act as a barrier to continued grazing (ie the rail alignment has been designed to limit the degree of severance to a property). This should assist in mitigating the constraints on cattle movement within and between paddocks).

In the southern area of the Project, the Eastern and Western Moura Link Options traverse land used for cattle grazing. The potential impacts on this agricultural land would also typically include disruption to agricultural activities during construction primarily from noisy machinery, dust and restrictions to access.

The Eastern Moura Link Option to the north of the Calliope River adjoins the property boundary between Wycheproof and Fairview reducing the degree of severance. To the south of the Calliope River the degree of severance is larger due in part to topographical constraints (ie the rail alignment is unable to follow the existing lot boundary within this area).

The Eastern Moura Link Option also crosses the Calliope River within an area identified by the local landowner as the main thoroughfare for cattle. If this thoroughfare is blocked an alternative route will be required which has the potential to impact on the riverine environment and current farming practice adopted by the landowner.

Due to the potential constraints associated with the proposed Castle Hope Dam, the alternative Moura Link Western Option has been designed to be immune at a full supply level of 35 m plus 3.5m. This has resulted in the severance of grazing land to the north and south of the Calliope River.

Significant disruptions to existing grazing activities have the potential to impact on the economic viability of agricultural activities in these affected areas. QR will consult with the relevant landowner to determine effective measures to mitigate the restricted access (ie the establishment of occupational crossings for vehicles and cattle) and limit potential impacts on current farming practices.

### Impacts on industrial land

The Project provides substantial benefits by improving the rail infrastructure within the GSDA, including the possible expansion of the proposed Moura Link to service future industry requirements within the GSDA.

The proposed rail infrastructure has the potential to isolate and restrict access to GSDA land if alternative road access is not provided. At this time access from the Bruce Highway into the GSDA is provided by a number of unsealed tracks which are predominantly used by leaseholders or maintenance crews servicing existing easements and service corridors. This issue will be addressed by the DIP as part of their infrastructure planning for the GSDA.

In addition, the Project will intercept existing utilities including gas pipelines, telecommunications, power easements and water pipelines. This may result in the realignment of existing infrastructure or changes to the preliminary engineering design. QR will consult with key stakeholders during detailed design to ensure that a viable solution is developed for both parties.

The quarry near the township of Yarwun provides rock to the surrounding area. The processing area and access via Quarry Road are to the south of the NCL. The Project is unlikely to impact on the operation of the quarry other than introduce other heavy machinery and construction work within the buffer area of the quarry. Potential traffic impacts are discussed in Section 13.

### Impacts on natural areas

The project area waterways and vegetated areas do not represent a pristine environment, but one that has been modified to provide for grazing activities. In the GSDA, future industrial activities will alter the appearance and other qualities of remnant natural areas. The Project does not traverse conservation land, forest reserves, or other land with similar environmental protection. Sections 5 and 6 discuss the potential impacts of the Project on nearby natural areas.

### Impacts on homesteads in the rural area

In addition to direct impacts on rural residential properties (eg severance) the Project has the potential to impact on other rural residential properties adjacent the project area.

Figure 3.9 identifies the residential dwellings within the vicinity of the project area along with other potentially non-compatible land uses. As mentioned previously, the closest residential settlements are located within the townships of Mount Larcom and Yarwun. Rural residential properties were also identified along the Dawson Highway, the Bruce Highway, Gladstone-Mount Larcom Road and Mount Alma Road.

A concentration of rural dwellings near the township of Yarwun on Flynn Road is located in proximity to the proposed NCL quadruplication and the Aldoga Rail Yard access road. These properties are located in the GSDA and include private and leased properties. Under the GSDA Development Scheme these properties can be acquired for relevant purposes consistent with the GSDA.

During construction there is the potential for noise, dust and other construction related activities to impact on the rural residences within these areas. There may also be a need to make temporary changes to the access for these dwellings during construction activities.

The Project also has the potential to upgrade existing road infrastructure servicing these areas such including Flynn Road (refer Section 13).



Potential impacts on rural homesteads associated with operation of the rail traffic along the Moura Link and NCL include dust, noise and visual amenity. The operation of the Aldoga Rail Yard will impact predominantly on the areas visual amenity (eg lighting).

Within some areas impacts associated with the construction and operation will be minimised due to the topography of the area, its mature vegetation and separation distance from the Project.

### 3.6 Mitigation measures

The measures proposed to mitigate potential land use impacts of the Project are discussed in Section 20.

### 3.7 Project approvals

#### 3.7.1 Summary of approvals

Table 3.3 summarises the likely approvals required for the construction and operational phases of the Project.

**Table 3.3 Summary of likely approvals required for the Project**

| Legislation  | Administering authority           | Trigger  | Project response   |
|--|-----------------------------------|--|--|
| <i>Environment Protection and Biodiversity Conservation Act 1999</i> | Commonwealth Environment Minister | Potential impact on matter of NES: Section 12 and 15A (World Heritage); Section 18 and 18A (Listed threatened species and communities); and Section 20 and 20A (Listed migratory species)  | Commonwealth Environment Minister declared the Project not a controlled action (7 December 2007) |
| <i>State Development and Public Works Organisation Act 1971</i>      | Coordinator-General/ DIP          | Initial Advice Statement prepared by QR, identified the level of investment necessary for the Project, employment opportunities provided by the Project, potential impact on the environment, potential effects on relevant infrastructure and the significance of the Project to the region and State | Coordinator-General declared the Project a significant project (26 September 2007)               |
|  |                                   | Change of land use under the Gladstone State Development Area Development Scheme   | Change of land use approval to be obtained   |
| <i>Dangerous Goods Safety Management Act 2001</i>                    | DES                               | Large dangerous goods location established   | Notify the Chief Executive (DES). Emergency plans and procedures to be prepared                  |
| <i>Aboriginal Cultural Heritage Act 2003</i>                         | DNRW                              | Duty of care to take all reasonable and practicable measures not to harm Aboriginal cultural heritage  | Aboriginal cultural heritage investigation and Cultural Heritage Management Plan prepared        |

| Legislation   | Administering authority | Trigger   | Project response  |
|---|-------------------------|---|---|
| <i>Environmental Protection Act 1994 and Integrated Planning Act 1997</i> | EPA                     | ERA 7: Storing chemicals (other than crude oil, natural gas and petroleum products)   | Development permits and Registration Certificates to be obtained      |
|   |                         | ERA 11: Crude oil or petroleum product storing in tanks or containers having a combined total storage capacity of:<br>(a) 10,000L or more but less than 500,000L (construction) |   |
|   |                         | ERA 15 (b): Operating a sewage treatment plant having a peak design capacity to treat sewage of 100 or more equivalent persons but less than 1500 equivalent persons            |   |
|   |                         | ERA 19: dredging material from the bed of any waters  |   |
|   |                         | ERA 20: Extracting rock or other material   |   |
|   |                         | ERA 22: Screening, washing, crushing, grinding, milling, sizing or separating material extracted from the earth   |   |
|   |                         | ERA 28: Operating a motor vehicle workshop  |   |
|   |                         | ERA 62: Concrete batching   |   |
|   |                         | ERA 72: Operating any railway facility for refuelling and maintaining or repairing rolling stock  |   |
|   |                         | ERA 76: Incineration of waste   |   |
|   |                         | Removal of contaminated soil from sites listed on CLR or EMR  | Disposal permit to be obtained  |
| <i>Explosives Act 1999</i>  | DNRW                    | Possession, storage and use of explosives   | Authority required for possession, storage and use of explosives      |
| <i>Fisheries Act 1994 and Integrated Planning Act 1997</i>                | DPIF                    | The construction or raising of a waterway barrier   | Development permit to be obtained                                     |
| <i>Nature Conservation Act 1992</i>                                       | EPA                     | Taking, using, keeping or interfering with a protected animal or plant  | Fauna to be relocated in accordance with Fauna Management Plan        |
|   |                         |   | Permit to be obtained if protected plants are affected by the Project |
| <i>Water Act 2000</i>   | DNRW                    | Works in a watercourse  | Development permit to be obtained                                     |
|   |                         | Extracting of surface water and/or groundwater for use during construction and operation  | Licence to be obtained  |
| <i>Vegetation Management Act 1999 and Integrated Planning Act 1997</i>    | DNRW                    | Removal of Regional Ecosystems as defined by the EPA under the Act (outside existing rail corridor land)  | Development permit to be obtained                                     |

| Legislation                              | Administering authority | Trigger  | Project response        |
|--|-------------------------|--|-------------------------|
| <i>Transport Infrastructure Act 1994</i> | DMR                     | Any activity within a State Controlled Road (Section 50)<br>Construction within a State Controlled Road (Section 33)<br>Access onto State Controlled Road (Section 62) | Permit/s to be obtained |

**Table notes:**

- CLR = Contaminated Land Register
- DES = Department of Emergency Services
- DIP = Department of Infrastructure and Planning
- DMR = Department of Main Roads
- DNRW = Department of Natural Resources and Water
- DPIF = Department of Primary Industries and Fisheries
- EMR = Environmental Management Register
- EPA = Environmental Protection Agency
- ERA = Environmentally Relevant Activity
- NES = National Environmental Significance

### 3.7.2 Commonwealth Legislation and Approvals

#### Environment Protection and Biodiversity Conservation Act 1999

##### *Background*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides that any action (ie a project, development, undertaking, activity or series of activities) which has, will have or is likely to have a significant impact on a matter of National Environmental Significance (NES), or other matter protected under the Act such as the environment of Commonwealth land, requires approval from the Commonwealth Environment Minister (the Minister). If the Minister decides that approval is required, the proposed action is termed a "controlled action". The proposal is then required to go through a formal assessment and approval process before it can proceed.

The matters of NES identified in the EPBC Act as triggers for potential Commonwealth assessment and approval are:

- National Heritage places
- World Heritage properties
- Ramsar wetlands of international importance
- Listed migratory species
- Listed threatened species and ecological communities
- Commonwealth marine areas (and Commonwealth land)
- Nuclear actions

The EPBC Act also provides that actions that are likely to have a significant impact on the environment of Commonwealth land (even if undertaken outside Commonwealth land) may also require approval under the EPBC Act.

##### *Relevance to Project*

An EPBC Referral for the Project was referred to the Minister in October 2007. The Minister deemed that the Project was not a controlled action under Section 75 of the EPBC Act on 7 December 2008 (refer Appendix A3).

## Native Title Act 1993

### Overview

The *Native Title Act 1993 (Cth)* is the Australian Government's legislative response to the High Court decision in *Mabo & others v Queensland (No 2) (1992) 175 CLR 1*. The Act provides the legal principles for the recognition of native title and the integration of this form of property right into the existing land title system. The Act provides for the validation of past Commonwealth acts (s.14) and makes the same provision for the States and Territories (s.19). The Act establishes the processes involved in having native title recognised and the role and responsibilities of the different bodies involved in this process.

The *Native Title Act 1993* adopts the common law definition of "native title". The Act establishes the National Native Title Tribunal and governs how native title is dealt with across Australia. The *Commonwealth Native Title Amendment Act 1998* made extensive amendments to the *Native Title Act 1993*. The amendments confirmed that native title rights and interests may exist over land which is or has been subject to a pastoral lease and other forms of lease and other forms of leasehold tenure.

### Relevance to the Project

The Port Curtis Coral Coast Native Title Applicants are the traditional owner claimants for the area. This claimant group is represented by four Aboriginal groups including:

- The Bailai People
- The Gooreng Gooreng People
- The Gurang People
- The Taribelang Bunda People

The Port Curtis Coral Coast application covers an area of about 19,280 km<sup>2</sup> including the GRC local government area. Not all areas of land and water within the application's external boundary are claimed: for example, the application excludes private freehold land.

The *Commonwealth Native Title Amendment Act 1998* made extensive amendments to the *Native Title Act 1993*. The amendments confirmed that native title rights and interests may exist over land which is or has been subject to a pastoral lease and other forms of lease and other forms of leasehold tenure for the project area.

If there is still native title in existence on that land then QR must deal with it under the future act provisions of the *Native Title Act 1993*. QR will undertake all native title assessments in accordance with the State of Queensland work procedures to assess whether native title may exist on that land. Where it is assessed that native title exists on the land QR will make application to Queensland Transport for the issue of a 24KA notification under Section 24 of the *Native Title Act 1993*.

## Aboriginal and Torres Strait Islander Protection Act 1984

### Overview

The *Aboriginal and Torres Strait Islander Protection Act 1984* provides for Aboriginal or Torres Strait Islander people the "preservation and protection from injury or desecration of areas and objects in Australia and in Australian waters being areas and objects that are of particular significance to Aboriginals in accordance with Aboriginal tradition."

#### *Relevance to the Project*

The Act provides Aboriginal people with the right to request the Federal Minister for Aboriginal Affairs to intervene through an injunction process where they consider that their cultural heritage is at risk. The Act does not determine significance, or limit the type and place for which protection is being sought.

#### *Project compliance*

The Port Curtis Coral Coast claimants were notified of the Project and invited to be involved in preparing a Cultural Heritage Management Plan for which they expressed their interest in being involved as endorsed Indigenous parties under the *Aboriginal Cultural Heritage Act 2003* (ACH Act).

### **Australian Heritage Council Act 2003**

#### *Overview*

The Australian Heritage Council, established under the *Australian Heritage Council Act 2003*, is the principal adviser to the Australian Government on heritage matters. The Council assesses nominations for the National Heritage List and the Commonwealth Heritage List to promote the identification, assessment, conservation and monitoring of heritage and to keep the Register of National Estate (RNE).

#### *Relevance to the Project*

The Mount Larcom Range was included as an 'indicative place' in the RNE. The range located to the north of the project area is accessible via Targinie Road and Flynn Road. Project activities will not encroach on this area; however the proposed permanent access may extend into the limited parts of the range.

#### *Project compliance*

Ensure that no Commonwealth heritage listed places located near the project area are impacted by construction activities through appropriate design and location of associated infrastructure.

### **3.7.3 State Legislation and approvals**

#### **State Development and Public Works Organisation Act 1971**

##### *Background*

The *State Development and Public Works Organisation Act 1971* (SDPWO Act) establishes the framework for environmental assessment of major projects in Queensland and with the IPA is the controlling legislation for the Project at the State level. The SDPWO Act provides the CG with the power to coordinate the environmental assessment of major projects through the declaration of significant projects which require the preparation of an EIS (Section 26).

On review of the EIS, consideration of submissions and any other material the CG deems relevant to the Project, the CG must prepare a report evaluating the EIS (Section 35). In evaluating the EIS the CG may state conditions or make recommendations to impose on the proposed project or refuse the Project. The CG's report (Evaluation Report) links the approval processes in other legislation such as the EPBC Act, the IPA and other State legislation.

In addition, pursuant to Part 6 Division 1 of the SDPWO Act:

*“A regulation may declare any part of the State or of any area over which the State claims jurisdiction to be a State development area, if the Governor in Council is satisfied that the public interest or general welfare of persons resident in any part of the State requires it.”*

The SDPWO Act also requires that when a State Development Area has been declared the CG is required to prepare a Development Scheme.

In December 1993, the Government declared by gazette the GSDA and a Development Scheme was prepared by the CG which established the long term planning intent for the region and set out a framework for development assessment in the area. Section 3.4.1 contains further details.

#### *Relevance to Project*

The CG declared the Project a significant project requiring an EIS on 26 September 2007 pursuant to Section 26 of the SDPWO Act. The CG has required QR to prepare an EIS under Part 4 of the SDPWO Act. The CG issued the final ToR for the EIS on 14 March 2008 (refer Appendix A1).

The Project is also subject to assessment under the GSDA Development Scheme, as the majority of Project works (north of the Bruce Highway) are contained within the GSDA (refer Figure 3.1).

Applications for material change of use in the GSDA are assessed by the CG under the provisions of GSDA Development Scheme.

The assessment procedure undertaken by the CG is outlined in Appendix C2.

## **Integrated Planning Act 1997**

#### *General background*

The IPA is Queensland's principal planning legislation, and seeks to achieve ecologically sustainable development.

#### *Level of assessment*

Under IPA, development is either Assessable, Self-Assessable or Exempt. Schedule 8 of IPA prescribes certain developments to be Assessable or Self-Assessable. Schedule 9 of IPA prescribes certain developments to be Exempt Development. Section 2.1.3 (2) states that planning schemes prepared by a Local Government for their area may identify what development is Assessable or Self-Assessable. Development that is prescribed by the State in Schedule 8 or by local government through their planning scheme as Assessable Development requires application for development approval under IPA.

#### *Assessment process*

IPA establishes two frameworks for assessing new development applications: the IDAS and the Community Infrastructure Designation (CID) process. Planning approval through the EIS process however, is the preferred planning mechanism for large community infrastructure undertakings that require consideration of planning issues at the regional or State level. The Project will utilise both the IDAS and EIS assessment processes to obtain a decision on the Project.



IDAS is a four stage assessment process, including:

1. Application Stage
2. Information and Referral Stage
3. Notification Stage
4. Decision Stage

Not all stages of IDAS are required for all applications, particularly where a project has been declared a "significant project" under the SDPWO Act. In this instance, the EIS process for a significant project is being undertaken before an IDAS application is made and as the CG's Evaluation Report is taken to have fulfilled the Information and Referral and the Notification stages of IDAS, only the Application and Decision stages of IDAS will apply to MCU applications.

In effect, the CG Evaluation Report will be taken as being a Concurrence Agency response under IPA and will be provided to the Assessment Manager to consider when issuing a Decision Notice.

#### *Relevance to Project*

Schedule 9 of the IPA outlines development that is exempt from assessment against a planning scheme. Development listed in Schedule 9 can not be made assessable or self-assessable development against a planning scheme. However, the development may still be assessable against Schedule 8.

Under Schedule 9, Table 5 - Community infrastructure activities "All aspects of development for community infrastructure prescribed under a regulation" is Exempt Development. Schedule 11 of the *Integrated Planning Regulation 1998* (IP Reg) further defines development for community infrastructure that is exempt under Schedule 9, Table 5, Item 5 of the IPA and states:

*All aspects of development for the maintenance, repair, upgrading, augmentation or duplication of — (a) rail transport infrastructure under the Transport Infrastructure Act 1994;*

"Rail transport infrastructure" is defined in the *Transport Infrastructure Act 1994* (TIA), as follows:

*operating a railway, including—*

*(a) railway track and works built for the railway, including, for example—  
cuttings  
drainage works  
excavations  
land fill  
track support earthworks; and*

*(b) any of the following things that are associated with the railway's operation—*

*bridges  
communication systems  
machinery and other equipment  
marshalling yards  
notice boards, notice markers and signs  
overhead electrical power supply systems  
over-track structures  
platforms  
power and communication cables  
service roads  
signalling facilities and equipment  
stations  
survey stations, pegs and marks  
train operation control facilities*

tunnels  
under-track structures;

But does not include other rail infrastructure.

“Other rail infrastructure” is defined by TIA as follows:

- (a) freight centres or depots
- (b) maintenance depots
- (c) office buildings or housing
- (d) rolling stock or other vehicles that operate on a railway
- (e) workshops
- (f) any railway track, works or other thing that is part of anything mentioned in paragraphs (a) to (e)

Those aspects of the Project considered “rail transport infrastructure” include:

- Moura Link
- Quadruplication of the NCL from the proposed Aldoga Yard Rail Yard to the WICT rail infrastructure
- Supporting infrastructure, such as roads, bridges and services within the yard area

Those aspects of the Project considered “other rail infrastructure”, include:

- Aldoga Rail Yard
- Supporting infrastructure, such as roads, bridges and services

Therefore all aspects of development for the Project involving development for the maintenance, repair, upgrading, augmentation or duplication of “rail transport infrastructure” (as defined above) is exempt from assessment against the Calliope Shire Planning Scheme.

In addition, Schedule 9, Table 4, Item 1 identifies “operational works carried out, by or on behalf of a public sector entity, authorised under State law to carry out the work”, is Exempt Development. This does not apply to operational works made Assessable Development under Schedule 8 of IPA.

It should be noted that the Schedule 9 exemptions only apply to land subject to a local government planning scheme and do not apply to those activities undertaken within the GSDA. All land use changing activities undertaken within the GSDA are subject to assessment against the GSDA Development Scheme and the planning framework outlined in that document.

As stated previously, development that is prescribed as Assessable Development by Schedule 8 of IPA requires an application for development approval under IPA, with the Assessment Manager identified in Schedule 8A of IPA. Therefore, any Material Change of Use (eg ERAs) or Operational Works (eg Raising a Waterway Barrier, clearing a Regional Ecosystem) development that is associated with the Project will be required to be assessed under IPA if matters covered under Schedule 8 are triggered. These triggers are generally contained in other related environmental legislation. While other matters may be triggered, a preliminary assessment of the proposed Project has identified that the following legislation trigger IPA referrals/assessment:

- *Transport Infrastructure Act 1994 (TIA)*
- *Environmental Protection Act 1994 (EP Act)*
- *Fisheries Act 1994*
- *Vegetation Management Act 1999*
- *Water Act 2000*

Development applications for works made Assessable Development by Schedule 8 of IPA will be lodged with the relevant agencies during the detailed design phase of the Project.

Those works defined as “other rail infrastructure” will be subject to the Calliope Shire Planning Scheme 2007, which defines the works as follows:

**Major Infrastructure (Industry (High Impact))** means the use of premises for the purpose of the provision of facilities and services providing services such as electricity supply, gas, raw water, transport (air, rail, road and sea), rail terminals, pipelines and conveyors, and telecommunications which is likely to have a notable impact.

**Minor Infrastructure (Minor Infrastructure)** means the use of premises for the purpose of the provision of facilities and services providing services such as electricity supply, gas, raw water, transport (air, rail, road and sea), rail terminals, pipelines and conveyors, and telecommunications which is not included in the Major Infrastructure definition and is likely to have a minimal impact and where the impact is confined to adjoining premises.

The proposed project is on land zoned either “GSDA Locality” or “Rural Locality”. The Calliope Shire Planning Scheme lists minor infrastructure as exempt development and major infrastructure development as impact assessable development. The GSDA Zone Code identifies the proposed activities as falling within consideration under the GSDA Development Scheme.

## Environmental Protection Act 1994

### *Background*

The object of the EP Act is to protect Queensland’s environment while allowing for development that improves the total quality of life both now and in the future, in a way that maintains the ecological processes on which life depends (“ecologically sustainable development”) (also refer Section 2.3).

### *Environmentally Relevant Activities*

The EP Act, together with IPA, provides a licensing and approval regime for a range of ERAs. These are activities that the Governor in Council is satisfied a contaminant will be released into the environment when the activity is carried out and the release of the contaminant will or may cause environmental harm (s 18, s 19). ERAs are defined in Schedule 1 of the *Environmental Protection Regulation 1998*.

The EP Act requires that any person carrying out an ERA must hold, or be acting under, a registration certificate for the activity. It is an offence to carry out an ERA unless the person is a registered operator for the activity, or is acting under a registration certificate for the activity. All operators are also required to have a development permit approval for the activity, unless a code of environmental compliance applies to the activity. Development permit approvals are granted under the IPA.

ERAs which will be carried out during the construction and operational phases of the Project are outlined in Table 3.3.

Approval for these ERAs will take the form of development permits granted under IPA and Registration Certificates granted under the EP Act. Construction contractors will be responsible for the application for Registration Certificates from the EPA under the EP Act for their planned activities.

QR will also need to seek Registration Certificates from the EPA under the EP Act for operational ERAs.

In accordance with Section 424 of the EP Act a person removing and disposing of contaminated soil from land which is recorded on the EMR or CLR to an offsite location must obtain a disposal permit from the EPA. Disposal permits enable appropriate and legal disposal and tracking of contaminated soil or materials.

## Acquisition of Land Act 1967 and Land Act 1994

### *Background*

The *Acquisition of Land Act 1967* and the *Land Act 1994* provide for the acquisition and resumption of land. State leasehold land is usually acquired under the *Land Act 1994* though other Acts may also be used. Freehold land is acquired under the *Acquisition of Land Act 1967*. The public purposes for which land can be acquired (eg for schools and hospitals) are identified in the second schedule to the Act.

Several 'Constructing Authorities', for example, Energex, have the power to acquire land for public purposes related to their business. These 'Constructing Authorities' are established through separate statutes in accordance with the *Acquisition of Land Act 1967*.

Pursuant to the *Acquisition of Land Act 1967* a 'Constructing Authority' is:

- (a) the State; or
- (b) a local government; or
- (c) a person authorised by an Act to take land for any purpose.

The State, through the DNRW, is the Constructing Authority for various government departments, such as the Department of Education and the EPA, which are not Constructing Authorities themselves.

Under the legislation acquisition can occur in two ways:

### By agreement:

To begin this process, DNRW writes to the relevant landholder/s and expresses the State's interest in acquiring their land for a public purpose. If an agreement can be reached between the landholder and the Constructing Authority regarding the purchase of the property and the level of compensation to be paid, the purchase can be undertaken as soon as the necessary transfer documents are executed and signed.

Alternatively, the acquisition could proceed by way of an agreement in accordance with Section 15 of the *Acquisition of Land Act 1967*. This leads to the publication of a gazette notice in the Government Gazette, which authorises the transfer of the ownership of the subject land to the relevant Constructing Authority.

### Compulsorily:

If an agreement between the landholder and the Constructing Authority cannot be reached, an acquisition may occur compulsorily.

To begin this process a 'Notice of Intention to Resume' will be forwarded to the landholder. This Notice will detail:

- The location and area of the land to be acquired.
- A date (not less than 30 days later) by which a written objection may be lodged by the landholder. This statement must set out the grounds on which the objection is being made (the grounds stated must not relate to the level of compensation).
- A time and place where the landholders can appear in person and explain more fully to the Constructing Authority the grounds of their objection.

Following the hearing date, and after considering all points of the objection (if applicable), a final decision will be made by the Constructing Authority.

A copy of the gazette notice will then be forwarded to all relevant parties. At the date of the gazette notice, ownership of the subject land will transfer to the Constructing Authority.

From the date the land is acquired, any person having an estate or interest in the land being taken may lodge, with the Constructing Authority, a claim for compensation for the loss of their interests therein.

The Constructing Authority will engage a registered valuer who will make an assessment of the amount of compensation payable at the date of the acquisition, which should ultimately not financially disadvantage or advantage the claimant in any way.

The amount of compensation will be based on:

- The market value of the land and any fixed improvements
- Any severance of the land from other land owned by the claimant
- Any injurious affection caused to other land held by the claimant

The Constructing Authority will then negotiate with the claimant regarding the final amount of compensation to be paid for the acquisition. If an agreement cannot be reached over the amount of compensation payable, the Constructing Authority or the claimant may refer the matter to the Land Court or Land Appeal Court for hearing and determination.

Following lodgement of the written claim for compensation, the claimant can also apply in writing, for an advance against the compensation to be paid by the Constructing Authority.

Any rates, land tax or rent outstanding as at the date the land is acquired, must be paid by the dispossessed landholder or may be deducted from the compensation payable by the Constructing Authority.

#### *Relevance to Project*

QR's preference is to negotiate the purchase price for the land required for the Project based on independent market valuation. If a negotiated purchase is not achieved, QR will seek to engage the resumption powers of State Government where compensation can be paid to land owners if a pecuniary interest in land is taken (ie if it is resumed). Assessment of compensation is based on the market value of the property at the date of Gazettal of the acquisition.

Under the *Acquisition of Land Act 1967* there is currently no provision to compensate property owners that are not directly affected by the proposal. In assessing the compensation to be paid, regard is given to the value of the land taken, severance, injurious affection and disturbance. In a resumption situation only that land required for the Project and immediately impacted will be acquired.

If a land owner's principal place of residence is impacted by the Project and subsequently resumed, the following allowances are made in addition to the market value of the property:

- Stamp duty on the purchase of a replacement dwelling to equal value.
- Conveyancing fees associated with the purchase of another dwelling of equal value.
- A reasonable allowance to cover the cost of relocation of personal effects and furniture.
- Charges associated with re-establishing a mortgage of equal value to that existing at the resumption date.
- Post and telephone reconnection costs.
- Other costs reasonably incurred in relocating to a comparable residence.
- Professional fees associated with the negotiation and conveyance of the acquisitions.

Land tenure and land use issues were taken into account during the project master planning and concept design engineering. This allowed the rail alignment to minimise potential land use impacts without adversely affecting the safety and efficiency of the proposed infrastructure.

## Coastal Protection and Management Act 1995

### *Background*

*The Coastal Protection and Management Act 1995* (Coastal Act) provides for the protection, conservation, rehabilitation and management of the coast, including its resources and biological diversity (s 3). Coastal management is to be achieved by coordinated and integrated planning and decision making, involving coastal management plans, coastal management districts and the use of other legislation (s 4).

Coastal management plans identify principles and policies for coastal management, identify key coastal sites and coastal resources in the coastal zone and plan for their long term protection or management. Coastal management plans are developed in consultation with the public having regard to Aboriginal tradition and Island custom of Aboriginal and Torres Strait Islander people particularly concerned with land affected by the plans (s 4).

The *State Coastal Management Plan – Queensland's Coastal Policy* (State Coastal Plan) was prepared by the Minister in accordance with Section 30 of the Coastal Act. The State Coastal Plan deals with matters of international, national and state significance (EPA 2003). It is a requirement under Section 35 of the Coastal Act that the Minister also prepare regional coastal management plans to provide regional direction for the implementation of the State Coastal Plan, and identify coastal management districts in each region. Coastal management districts are areas requiring special development controls and management practices.

In accordance with the State Coastal Plan, the *Curtis Coast Regional Coastal Management Plan 2003* was developed to operate in conjunction with the State Coastal Plan and include region-specific policies as well as applying State Coastal Plan policies to specific geographic areas (refer Appendix C1).

### *Relevance to Project*

The Project is located upstream of the following Coastal Management Districts:

- Gladstone – located approximately 4 km downstream of the project area at the mouth of Boat Creek
- Calliope River - located approximately 10 km downstream of the Moura Link Eastern Option

Subsequently development applications required for the Project will not trigger referral to the EPA as a Concurrence Agency as the works are not being undertaken within a Coastal Management District.

However, the Project is located within the Calliope River catchment and is therefore within the coastal zone. The coastal zone is defined in Section 11 of the Coastal Act as:

*“coastal waters and all areas to the landward side of coastal waters in which there are physical features, ecological or natural processes or human activities that affect, or potentially affect, the coast or coastal resources.”*

Therefore, the Project needs to consider relevant components of the State Coastal Management Plan and the Curtis Coast Regional Coastal Management Plan. The relevance of the Project to these plans has been discussed in Appendix C1.



## Fisheries Act 1994

### *Background*

The *Fisheries Act 1994* provides for the management, use, development and protection of fisheries resources and fish habitats, and the management of aquaculture activities. The Act holds provisions for the following:

- Taking, causing damage to or disturbance to marine plants, including mangroves
- Works in a declared fish habitat
- Waterway barrier works
- Tidal water, fresh and marine aquaculture operations

Schedule 8, Part 1, Table 4 of IPA specifies that operational work for the purposes of the above activities under the *Fisheries Act 1994* is assessable development. Fisheries development approvals for the above activities are required under the IPA.

### *Waterway barrier works*

Schedule 8, Part 1, Table 4, Item 6 of IPA specifies that operational work for the purpose of constructing or raising waterway barrier works under the *Fisheries Act 1994* is assessable development. This states that development is assessable where involving:

*Operational work that is the constructing or raising of a waterway barrier works if it is not self-assessable development.*

### *Relevance to Project*

Fish movement will be addressed during the detailed design of works within watercourses.

QR will need to obtain approval under the *Fisheries Act 1994* for any waterway barrier works from DPIF. Section 2 identifies the likely structures required for the project (eg bridge structure on the Calliope River).

## Nature Conservation Act 1992 (NCA)

### *Background*

The NCA provides for the conservation of nature through two mechanisms:

1. Declaration and management of protected areas; and
2. The protection of native wildlife that is not found within a protected area.

Protected areas are declared under the Act as:

- National parks including scientific and Aboriginal and Torres Strait Islander land
- Conservation parks
- Resource reserves
- Nature refuges
- Coordinated conservation areas
- Wilderness areas
- World Heritage management areas
- International agreement areas

Wildlife (animals and plants) can be declared under the Act within the following classes:

- Presumed extinct wildlife
- Endangered wildlife
- Vulnerable wildlife
- Rare wildlife
- Common wildlife
- International wildlife
- Prohibited wildlife

The Act provides for interim conservation orders to conserve, protect or manage wildlife, habitat or areas subject to a threatening process likely to have significant detrimental effect.

The *Nature Conservation (Protected Plants) Conservation Plan 2000* and the *Nature Conservation Regulation 1994* apply to the clearing of protected plants in the wild. All native plants in Queensland are protected plants.

#### *Relevance to Project*

All native wildlife is protected under this act. If threatened plants (all native plants in Queensland are protected plants) need to be cleared, a permit under the NCA will be required (refer Section 5).

A licensed Fauna Spotter Catcher will be employed during the initial vegetation clearing to relocate native fauna if required.

### **Vegetation Management Act 1999 (VMA)**

#### *Background*

Clearing of native vegetation is assessable development under Schedule 8, Part 1, Table 4, items 1A to 1G unless the clearing is of a type or for a purpose specified in these items. These purpose specific activities are generally referred to as “exemptions”.

The exemptions that apply for clearing vegetation differ according to land tenure. In this instance there are two exemptions which may apply to the Project should any of the works constitute a “specified activity” or “essential management”

Essential Management means clearing vegetation –

*a) for establishing or maintaining a necessary firebreak to protect infrastructure other than a fence, road or vehicular track, if the maximum width of the firebreak is equivalent to 1.5 times the height of the tallest vegetation adjacent to the infrastructure, or 20 m, whichever is the greater; or*

*b) for establishing a necessary fire management line if the maximum width of the clearing for the fire management line is 10 m; or*

*c) necessary to remove or reduce the imminent risk that the vegetation poses of serious personal injury or damage to infrastructure; or*

*d) by fire under the Fire and Rescue Service Act 1990 to reduce hazardous fuel load; or*

*e) necessary to maintain infrastructure including airstrips, buildings, fences, helipads, roads, stockyards, vehicular tracks, watering facilities and constructed drains other than contour banks, other than to source construction material; or*

f) for maintaining a garden or orchard, other than clearing predominant canopy trees to maintain under-plantings established within remnant vegetation; or

g) on land subject to a lease issued under the Land Act 1994 for agriculture or grazing purposes to source construction timber to repair existing infrastructure on the land, if—

i) the infrastructure is in need of immediate repair; and

ii) the clearing does not cause land degradation as defined by VMA; and

iii) restoration of a similar type, and to the extent of the removed trees, is ensured; or

h) by the owner on freehold land to source construction timber to maintain infrastructure on any land of the owner, if—

i) the clearing does not cause land degradation as defined by VMA; and

ii) restoration of a similar type, and to the extent of the removed trees, is ensured.

Specified Activity means –

a) clearing under a development approval for a material change of use or the reconfiguration of a lot, if the approval is given for a development application—

i) made after the commencement of this definition; and

ii) for which the chief executive administering VMA is a concurrence agency; or

ab) clearing an area of vegetation that is less than 0.125 ha within a watercourse or lake for an activity (other than an activity relating to a material change of use of premises or the reconfiguring of a lot) that is subject to an approval process and is approved under this or another Act if—

i) the area is shown on a property map of assessable vegetation as a category 3 area, a category 4 area or a category X area; or

ii) for the area, there is no property map of assessable vegetation and the vegetation is a remnant not of concern regional ecosystem or the vegetation is not remnant vegetation; or

b) a traditional Aboriginal or Torres Strait Islander cultural activity, other than a commercial activity; or

c) a mining activity or a petroleum activity as defined under the Environmental Protection Act 1994; or

ca) any aspect of development for geothermal exploration carried out under a geothermal exploration permit under the Geothermal Exploration Act 2004; or

d) an activity under the Fire and Rescue Service Act 1990, section 53, 68 or 69; or

e) an activity under—

i) the Electricity Act 1994, section 101 or 112A; or

ii) the Electricity Regulation 2006, section 17; or

f) for a State-controlled road under the Transport Infrastructure Act 1994—

i) road works carried out on the State-controlled road; or

ii) ancillary works and encroachments carried out under section 50 of that Act; or

g) clearing, for routine transport corridor management and safety purposes, on existing rail corridor land, new rail corridor land, non-rail corridor land or commercial corridor land (within the meaning of the Transport Infrastructure Act 1994) that is not subject to a commercial lease; or

h) any activity authorised under the Forestry Act 1959.

When clearing vegetation not considered a “specified activity” or “essential management” a Development Permit will be required prior to works being undertaken.

The Policy for Vegetation Management Offsets 2007 applies to an offset proposed as a solution to meet a performance requirement in an applicable VMA code.

#### *Relevance to Project*

The Project will require removal of Regional Ecosystems (RE) as defined by the EPA under the VM Act. Section 5 addresses those properties affected by the Project that are mapped as REs.

The proposed infrastructure, outside the existing rail corridor land, is not defined as a “specified activity” or “essential management”, therefore a permit to clear vegetation will be required for the Project.

This issue is further discussed in Section 5 of the EIS.

### **Water Act 2000**

The *Water Act 2000* fulfils Queensland’s responsibilities under the 1994 Water Resources Policy of the Council of Australian Governments. The Act provides a legislative base for the sustainable planning of Queensland’s non tidal waters.

### **Water related development**

#### *Background*

Schedule 8, Part 1, Table 4, Item 3 of IPA specifies that operational work for the purpose of taking or interfering with water under the *Water Act 2000* is assessable development. This includes:

*Operational work of any kind and for all things constructed or installed that allow the taking, or interfering with, water (other than using a water truck to pump water) under the Water Act 2000, if the operations allow, under that Act—*

*(a) taking or interfering with, water from a watercourse, lake or spring (other than under the*

*Water Act 2000, section 20(2), (3) or (5)) or from a dam constructed on a watercourse; or*

*(b) taking, or interfering with, artesian water under the Water Act 2000; or*

*(c) taking, or interfering with—*

*(i) overland flow water, if the operations are mentioned as assessable development in a water resource plan under the Water Act 2000, a wild river declaration or prescribed under a regulation under this or another Act; or*

*(ii) sub artesian water, if the operations are mentioned as assessable development in a water resource plan under the Water Act 2000, a wild river declaration or prescribed under a regulation under this or another Act; or*

*(d) interfering with overland flow water in an area declared under the Water Act 2000 to be a drainage and embankment area if the operations are declared under that Act or a wild river declaration to be assessable development.*

This means that certain water related development is assessable development and requires assessment and approval under the IPA for most works in a watercourse (pumps, gravity diversion, stream diversion, weirs, barrages and dams). Development permits are required for the above activities through the IDAS of the IPA.

### *Relevance to Project*

Watercourses are contained within the project area. Stream diversion may be required on one or more of the channels pending detailed design. If one or more stream diversions are required, a development permit will be required under IPA.

## **Riverine Protection Permits**

### *Background*

The *Water Act 2000* requires that a proponent obtain a Riverine Protection Permit for the removal of vegetation, excavating or placing of fill in a watercourse, lake or spring (s 266).

Under a Riverine Protection Permit, extraction of riverine quarry material requires a quarry material allocation notice to obtain a 'share' of the resource (s 280) and a permit to physically remove the resource from the watercourse or lake.

In Part 5 of the *Water Act 2000*, the excavation, placing of fill, or destruction of vegetation in a watercourse, lake or spring is permitted if it is carried out in accordance with the *Guideline for Activities in a watercourse, lake or spring* (the Guideline). QR as an approved entity, must comply with the Guideline to allow exemption. The Guideline applies only to activities that are necessary for the construction, installation, removal, maintenance or protection of infrastructure under control of the entity. It does not remove QR's obligation to fully comply with all other relevant legislation and does not apply to excavation or placing fill.

If undertaking destruction of vegetation in a watercourse, lake or spring, advice should also be sought from the Vegetation Management Group of the DNRW before commencing activities under the Guideline. An additional approval under the IPA may be required if it is assessable development.

### *Relevance to Project*

Numerous watercourses are contained within the project area. The Project will aim to minimise works within watercourses. If works are required in watercourses, the detailed design will comply with the Guideline. Where this is not possible a Riverine Protection Permit will be obtained.

## **Water licence**

### *Background*

Division 2, Subdivision 1, Section 206, Subsection 1 under the *Water Act 2000* states that an application for a water licence will need to be submitted to the DNRW for any land parcel/s where the land owner intends to:

- a) *[take] water and [use] the water on any of the land; or*
- b) *to interfere with the flow of water on, under or adjoining any of the land.*

The water referred to under subsection 1(a) is any one of the following:

- c) *a watercourse, lake or spring on or adjoining any of the land*
- d) *an aquifer under any of the land*
- e) *water flowing across any of the land*

and also refers to water from a watercourse, lake, spring or aquifer that:

- i) *does not adjoin any of the applicant's land or the proposed point of taking the water is not on the applicant's land; or*
- ii) *water from an aquifer—the aquifer is not under the applicant's land (s206, subsection 3a)*

Under a Water Licence application, the applicant must show that they have permission from land owners of any intervening land to take water by way of a registrable lease or easement over the intervening land (s206, subsection 3b). Further information may need to be supplied to the DNRW in support of the application (s207) and the application must be made in the approved form, accompanied by the fee prescribed under the *Water Regulation 2000* (s206, subsection 6).

#### *Relevance to Project*

If extraction of water from watercourses and/or groundwater is required during construction a water licence would be required under the *Water Act 2000*.

### **Aboriginal Cultural Heritage Act 2003**

#### *Background*

The ACH Act binds all persons, including the state, to provide effective recognition, protection and conservation of Aboriginal cultural heritage. Aboriginal cultural heritage is defined under Section 8 of the Act as anything that is:

- “(a) a significant Aboriginal area in Queensland; or*
- (b) a significant Aboriginal object; or*
- (c) evidence of archaeological or historic significance, of Aboriginal occupation of an area of Queensland.”*

Section 14 of the Act denotes that as far as practicable, Aboriginal cultural heritage should be owned and protected by Aboriginal people with traditional or familial links to the cultural heritage if it is comprised of any of the following:

- Aboriginal human remains
- Secret or sacred objects
- Aboriginal cultural heritage lawfully taken away from an area

The ACH Act requires the development of a Cultural Heritage Management Plan (CHMP) if:

- An EIS is required
- An environment authority is required under a different Act
- Under IPA, a development application is made for the Project or the chief executive is a concurrence agency

The requirements of a CHMP and the assessment process are outlined in Part 7 of the Act.

A 'Duty of Care' guideline has been prepared to assist in ensuring that the Indigenous heritage is protected. Compliance with the guideline is not enforced however the guideline affords strict compliance with the Duty of Care of the Act.



#### *Relevance to Project*

As the Project requires an EIS, a CHMP will be developed in accordance with Section 87 of the Act.

Under the provisions of the ACH Act, the relevant Aboriginal Parties were identified through the DNRW database for the project area. For the proposed project area, a single Aboriginal Party has a claim over this area. The claimant group is Port Curtis Coral Coast.

In accordance with the ACH Act, the Port Curtis Coral Coast People were notified of the Project and invited to be involved in preparing a CHMP by QR. They expressed interest in being involved as an endorsed Indigenous party under the ACH Act.

A draft CHMP has been developed (refer Section 14), to manage Aboriginal cultural heritage in accordance with the ACH Act for the duration of the Project.

### **Queensland Heritage Act 1992**

#### *Background*

Historical cultural heritage can include artefacts, places and buildings that are non-indigenous but commonly of European origin. The major piece of historical cultural heritage legislation protecting non-indigenous heritage is the *Queensland Heritage Act 1992*, administered by the EPA. The Act underwent a major revision and update in 2003 and late 2007 making provision for the conservation of Queensland's cultural heritage by establishing the Queensland Heritage Council and by protecting places and areas listed on the Queensland Heritage Register.

#### *Relevance to Project*

There are no places listed in the Queensland Heritage Register located within the project area.

### **Other legislation**

In addition, other legislation relevant to the Project includes:

- *Dangerous Goods Safety Management Act 2001*
- *Explosives Act 1999*

## **3.8 Conclusion**

QR's preference is to negotiate the purchase price for the land required for the Project based on independent market valuation. If a negotiated purchase is not achieved, QR will seek to engage the resumption powers of State Government where compensation can be paid to land owners if a pecuniary interest in land is taken (ie if it is resumed). Assessment of compensation is based on the market value of the property at the date of Gazettal of the acquisition. Under the *Acquisition of Land Act 1967* there is currently no provision to compensate property owners that are not directly affected by the proposal. In assessing the compensation to be paid, regard is given to the value of the land taken, severance, injurious affection and disturbance. In a resumption situation only that land required for the Project and immediately impacted will be acquired.

The majority of land required by the Project is the GSDA adjacent to existing road and rail infrastructure. The Project is consistent with the objectives of the GSDA. While there will be a net loss of rural land, grazing activities can continue, and a new rail link will provide new opportunities to industrial development in the GSDA.

Following construction, surplus land not required for the Project or potential future rail development may be sold or leased to allow suitable land to return to rural or industrial activities.

The potential land use benefits of the Project will outweigh the direct property impacts and other potential land use impacts. Construction and operation of the Project will ensure that the economic advantage of the area is retained.

The Project generally complies with the planning intentions of the Calliope Shire Planning Scheme, the GSDA Development Scheme, and will comply with the applicable Commonwealth and State Legislation.

Management of land use changes adjacent to the project area must be guided by appropriate planning controls to ensure no inappropriate land uses and amenity issues occur.

In conclusion, from a land use perspective, the Project is a project of National, State and Regional significance. If it proceeds, it will have minimal impact on existing land uses if appropriate mitigation measures are implemented.

### 3.9 Commitments

The relevant land use and project approval commitments for the Project include:

- QR will continue consultation with directly affected land owners and key stakeholders.
- QR will obtain all required planning and environmental approvals for the construction and operation, and implement the management measures and conditions.
- QR to liaise with GRC to include the Eastern Moura Link Option and the potential Western Moura Link Option on the amended GRC Planning Scheme.