



MORANBAH SOUTH PROJECT

INITIAL ADVICE STATEMENT

for

Anglo American Metallurgical Coal Pty Ltd

May 2012

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ENVIRONMENTAL CONSULTANTS

MORANBAH SOUTH PROJECT

INITIAL ADVICE STATEMENT

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1 INTRODUCTION

1.1 PROJECT OVERVIEW

The Moranbah South Project (the project) involves the construction and operation of a greenfield underground coal mine in Central Queensland. The project is located directly to the south of the township of Moranbah, approximately 150 km south-west of Mackay (Figure 1).

The project is anticipated to have a peak production rate of up to 18 million tonnes per annum (Mtpa) of Run of Mine (ROM) coal, which equates to a peak volume of approximately 14 Mtpa of high quality coking coal for the export market. The Goonyella Middle (GM) coal seam is the target seam. Coal will be mined using underground mining methods, with two longwalls and a bord and pillar operation proposed. The project will have a mine life in excess of 30 years.

The project proponent is a 50:50 unincorporated Joint Venture between Anglo Coal (Grosvenor) Pty Ltd and Exxaro Australia Pty Ltd. Further detail on the project proponent is provided in Section 2.1.

1.2 REGULATORY APPROVAL PROCESS

This Initial Advice Statement (IAS) provides introductory information about the project. The IAS was prepared for submission to the Department of Environment and Heritage Protection (EHP) to aid in the development of the EIS Terms of Reference (ToR) for the project.

An application to prepare a voluntary Environmental Impact Statement (EIS) for the project was approved by EHP on 27 March 2012. A Mining Lease (ML) application under the *Mineral Resources Act 1989*, and application for an Environmental Authority (EA) under the *Environmental Protection Act 1994* (EP Act) will be lodged in the coming months and the EIS will ultimately support the EA application for the project.

A referral under the Federal *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was lodged by the proponent on 4 April 2012. A referral decision was made on 24 May 2012 under the EPBC Act, classifying the project as a Controlled Action, with the controlling provisions being the potential impacts on listed threatened species and communities (Sections 18 and 18A). The project is also classified under the EPBC Act as Not a Controlled Action for the remaining provisions protected by Part 3 of the EPBC Act

(including actions on Commonwealth land) provided it is undertaken in accordance with the specifications detailed in the decision notice. The proponent intends using the bilateral agreement so that the EIS prepared under the EP Act can also support the EPBC approval.

2 PROJECT DESCRIPTION

2.1 PROJECT PROPONENT

The project proponent is a 50:50 unincorporated Joint Venture between Anglo Coal (Grosvenor) Pty Ltd and Exxaro Australia Pty Ltd. Anglo Coal (Grosvenor) Pty Ltd and Anglo American Metallurgical Coal Pty Ltd are members of Anglo American plc's Metallurgical Coal Division (Met Coal). Anglo American Metallurgical Coal Pty Ltd is the Manager of the project. Met Coal has extensive coal mining interests in Queensland and New South Wales, including the Moranbah North Mine and Grosvenor Project in Moranbah. Met Coal is the second largest coal exporter in Australia, producing approximately 30 Mtpa of saleable thermal and coking coal.

Exxaro Australia Pty Ltd is a wholly owned subsidiary of Exxaro Resources Limited which is a South African-based mining group, listed on the Johannesburg Stock Exchange (JSE Limited). Exxaro Resources Limited has a diverse portfolio of interests in coal, mineral sands, iron ore and base metals and is the second-largest South African coal producer generating approximately 45 Mtpa of thermal and coking coal. It currently has operational interests in South Africa, Namibia, Australia and China. Anglo American plc hold a 10% interest in Exxaro Resources Limited (South Africa and Australia).

2.2 DESCRIPTION OF THE PROJECT SITE

The project site is defined, for the purposes of this document, as the area that will ultimately form the ML for the project (Figure 2). It is located directly to the south of the township of Moranbah in Central Queensland. Moranbah, which is located within the Isaac Regional Council (IRC) area, is also the administrative centre for the IRC.

The project site includes the full extent of Mineral Development Licence (MDL) 277 and parts of MDL 377, and Exploration Permits for Coal (EPC) 602 and EPC 548.

The project site adjoins the Peak Downs ML to the south, the Caval Ridge ML to the west, the Eagle Downs ML to the south-east and overlaps with the Integrated Isaac Plains Project Mining Lease Application (MLA) area to the east (refer Figure 2).

The project site comprises approximately 17,550 ha of gently undulating land, much of which had been cleared in the past primarily for grazing activities. Significant natural features include the Isaac River, Grosvenor Creek and Cherwell Creek (Figure 2). Vegetation

mapping of the project site is still being completed, but preliminary work has indicated that vegetation consists of open woodlands, natural grasslands, in addition to introduced pasture grasses. Government mapping shows the presence of some strategic cropping land (SCL) on the project site and field surveys are being undertaken to confirm the presence and extent of SCL.

Built infrastructure on the project site includes the Peak Downs Highway, Moranbah Access Road, Winchester Road and part of the Moranbah Airport. Bridges are established where the Peak Downs Highway crosses the Isaac River and Winchester Road crosses Cherwell Creek. Other infrastructure on the site includes a service station on the Peak Downs Highway, powerlines, and water and gas pipelines.

There are approximately 18 landowners and 16 easement holders across the project site (Figures 5 and 6). Grazing is the primary land use on the project site, although there are areas where sorghum and leucaena are grown. Three quarries are currently operating within the project site, two on crown owned land, and one on land owned by Isaac Waters Pty Ltd.

Two Petroleum Leases (PL) 196 and PL 224 for the extraction of coal seam gas exist in the northern portion of the project site, and a Petroleum Lease Application (PLA) 222 is current for the central portion of the project site. Arrow Energy is currently undertaking coal seam gas exploration activities within the tenement boundaries.

2.3 PROJECT DESCRIPTION

The project is a proposed underground mine, using longwall and bord and pillar mining methods. Coal will be washed and processed on site, and product coal will be transported from site by rail. Abbot Point is the preferred Coal Terminal for export, with Dalrymple Bay and Dudgeon Point being alternatives.

It is anticipated that construction activities will commence in 2014. First longwall coal production will commence in 2017, following the construction of underground mine access and initial development works. The mine life will be in excess of 30 years. Mining will be followed by a decommissioning and rehabilitation period.

2.3.1 Surface Facilities

The majority of the mine surface facilities will be located to the east of the Moranbah Airport (Figure 3), and will include:

- Underground mine access drift portals, with separate drifts servicing the longwall mining areas and the bord and pillar mining area;
- Surface conveyors;

- Coal stockpiles;
- Coal Handling and Preparation Plant (CHPP) and associated equipment;
- Rail loop and train loading facilities;
- Dry Rejects Emplacement Area (DREA) and conveyor to transport rejects from the CHPP to the DREA;
- Administration buildings, bathhouse and employee facilities;
- Power and water supply infrastructure;
- Workshop, warehouses and vehicle wash down, servicing and refuelling facilities;
- Various sediment, raw, and mine water storage dams; and
- Buildings associated with the bord and pillar operations, which may include facilities such as a radio control centre, offices and employee facilities.

Minor surface infrastructure will be located above the underground mine workings. These will include ventilation shafts, water management infrastructure, gas drainage boreholes, underground communication cables, services and boreholes for supply of materials from the surface.

The proponent is currently investigating alternatives for project water supply. Options being considered include an allocation from the Eungella Water Pipeline, water from the Connors or Burdekin Dams, and water generated by Arrow Energy's coal seam gas extraction processes.

An accommodation village is proposed to be located in the north-western part of the project site (Figure 3).

2.3.2 Underground Mining

The potential underground mining areas are shown in Figure 3, including the longwall mining areas and bord and pillar mining areas.

The bord and pillar mine will be designed with factors of safety sufficient to ensure that there will be no surface impacts from the mining operations (i.e. there will be no surface subsidence from the bord and pillar mining operations).

Longwall mining typically results in subsidence of the overlying surface areas, through the progressive formation of gentle trough-like depressions on the surface relative to the natural topography. Subsidence may also cause surface cracking in limited areas, within the boundary of the proposed longwall mining area (Figure 3).

The following built infrastructure and natural features are located above the proposed longwall mining areas (Figure 3):

- A number of watercourses, including parts of the Isaac River, Cherwell Creek, Grosvenor Creek and Conrock Gully;
- Peak Downs Highway;
- Moranbah Access Road;
- Winchester Road;
- Service Station; and
- Other infrastructure such as pipelines and powerlines.

The underground mine plan has been designed to ensure that there will be no subsidence of the Moranbah Airport. The EIS will include an assessment of the impacts and mitigation for any subsidence of natural features. The proponent will work with infrastructure owners to develop suitable strategies to manage any subsidence of built infrastructure.

2.4 ENVIRONMENTAL IMPACT ASSESSMENT

An EIS will be prepared for the project. The EIS will address the EHP's EIS Terms of Reference (TOR) for the project. The EIS will include an environmental impact assessment of all of the activities within the project site (Figure 3). The EIS will consider the impacts from the construction, operation and decommissioning stages of the project.

The key areas that will be studied during preparation of the EIS include the following:

- Subsidence;
- Surface water and mine water management;
- Groundwater;
- Design of the rejects emplacement area;
- Geochemistry of mine wastes;
- Soils and land capability;
- Terrestrial flora and fauna;
- Aquatic biology and stygofauna;
- Noise and vibration;
- Air quality and greenhouse gas issues;
- Waste management;
- Social and economic impact assessment;
- Scenic values;
- Non-Indigenous cultural heritage; and
- Traffic and transportation.

2.5 ENVIRONMENTALLY RELEVANT ACTIVITIES

The Environmentally Relevant Activities (ERA) as listed under the *Environmental Protection Regulation 2008* that are proposed to be carried out as part of the Moranbah South Project include the following:

- Level 1 Mining Project: 5 – Mining Black Coal;
- ERA 8 Chemical Storage;
- ERA 10 Gas Producing;
- ERA 15 Fuel Burning;
- ERA 16 Extractive and Screening Activities;
- ERA 17 Abrasive Blasting;
- ERA 18 Boilermaking or Engineering;
- ERA 21 Motor Vehicle Workshop Operation;
- ERA 31 Mineral Processing;
- ERA 33 Crushing, Milling, Grinding or Screening;
- ERA 50 Bulk Material Handling;
- ERA 56 Regulated Waste Storage;
- ERA 60 Waste Disposal;
- ERA 63 Sewage Treatment; and
- ERA 64 Water Treatment.

The approximate location of these ERAs is represented in Figure 4.

3 STAKEHOLDER CONSULTATION

3.1 STAKEHOLDER CONSULTATION PROGRAM

A comprehensive stakeholder consultation program will be conducted for the project. The program will be conducted throughout the EIS preparation phase and will be integrated with environmental impact assessment and project planning. The program will include consultation with all affected and interested persons as listed in Sections 3.2 and 3.3, and any other relevant stakeholders identified during the consultation program.

The objectives of the stakeholder consultation program will be to:

- Establish open communication with all stakeholders;
- Identify stakeholder issues and concerns with the project;
- Respond to stakeholder issues through environmental impact assessment, project planning or communication;
- Provide feedback to stakeholders in relation to their issues and how they have been addressed; and
- Facilitate stakeholder understanding of the project.

The initial phase of the stakeholder consultation program will involve the identification of stakeholder issues. This phase will involve interviews with individual stakeholders. The interviews will include provision of an overview of the project, the EIS and project approval process, and the consultation program. A project information sheet will be provided to stakeholders to assist with this phase.

It is anticipated that a range of methods may be used, including individual meetings and group presentations.

3.1.1 Aboriginal Group Consultation

Consultation with the registered Native Title claimants will be conducted in relation to Native Title issues in accordance with the requirements of the *Native Title Act 1993*. Consultation in relation to Aboriginal Cultural Heritage will be conducted with the relevant Aboriginal Party in accordance with the requirements of the *Aboriginal Cultural Heritage Act 2003*.

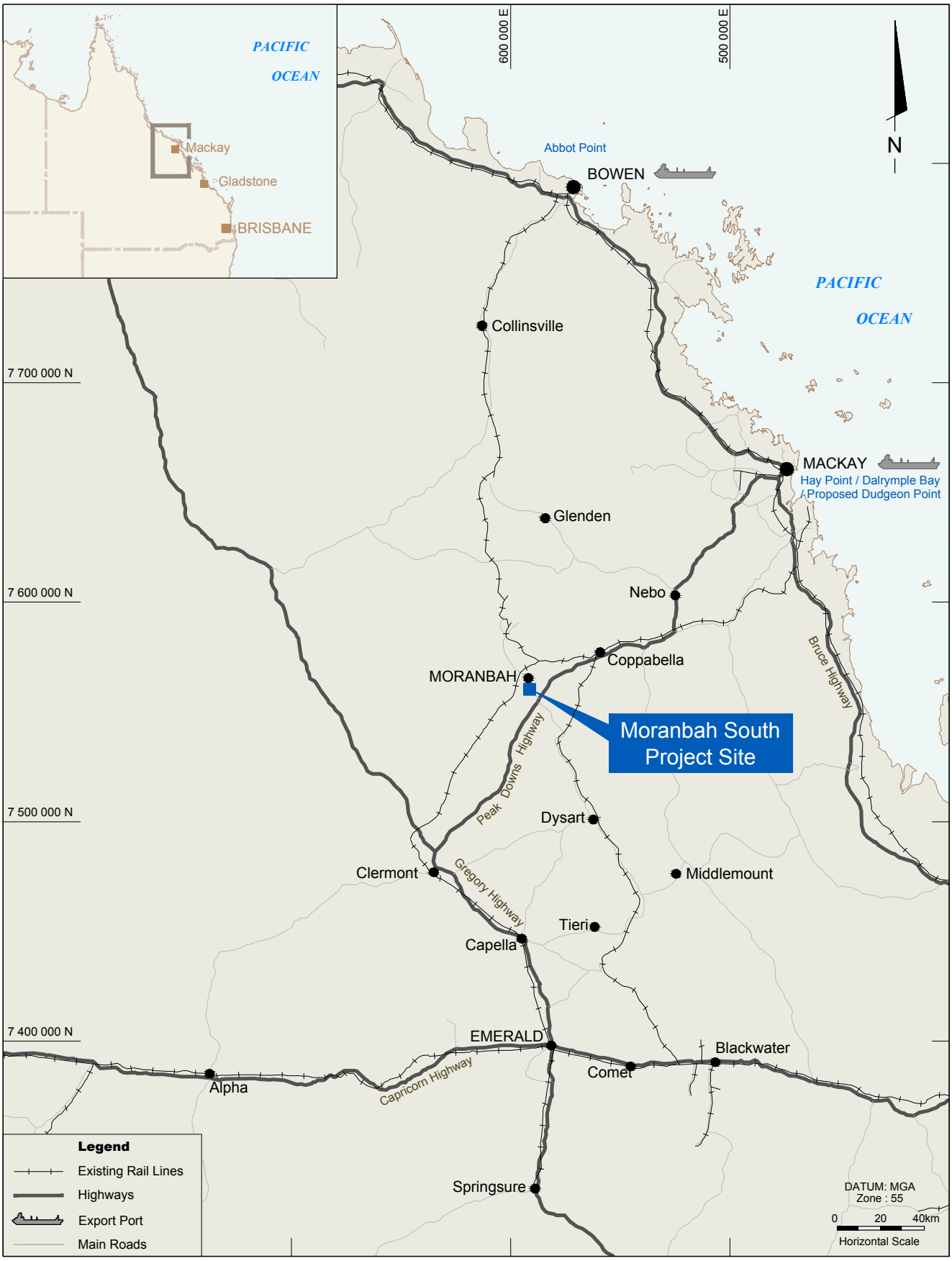
* * *

for
HANSEN BAILEY

Laura Knowles
Principal Environmental Scientist

Peter Hansen
Director

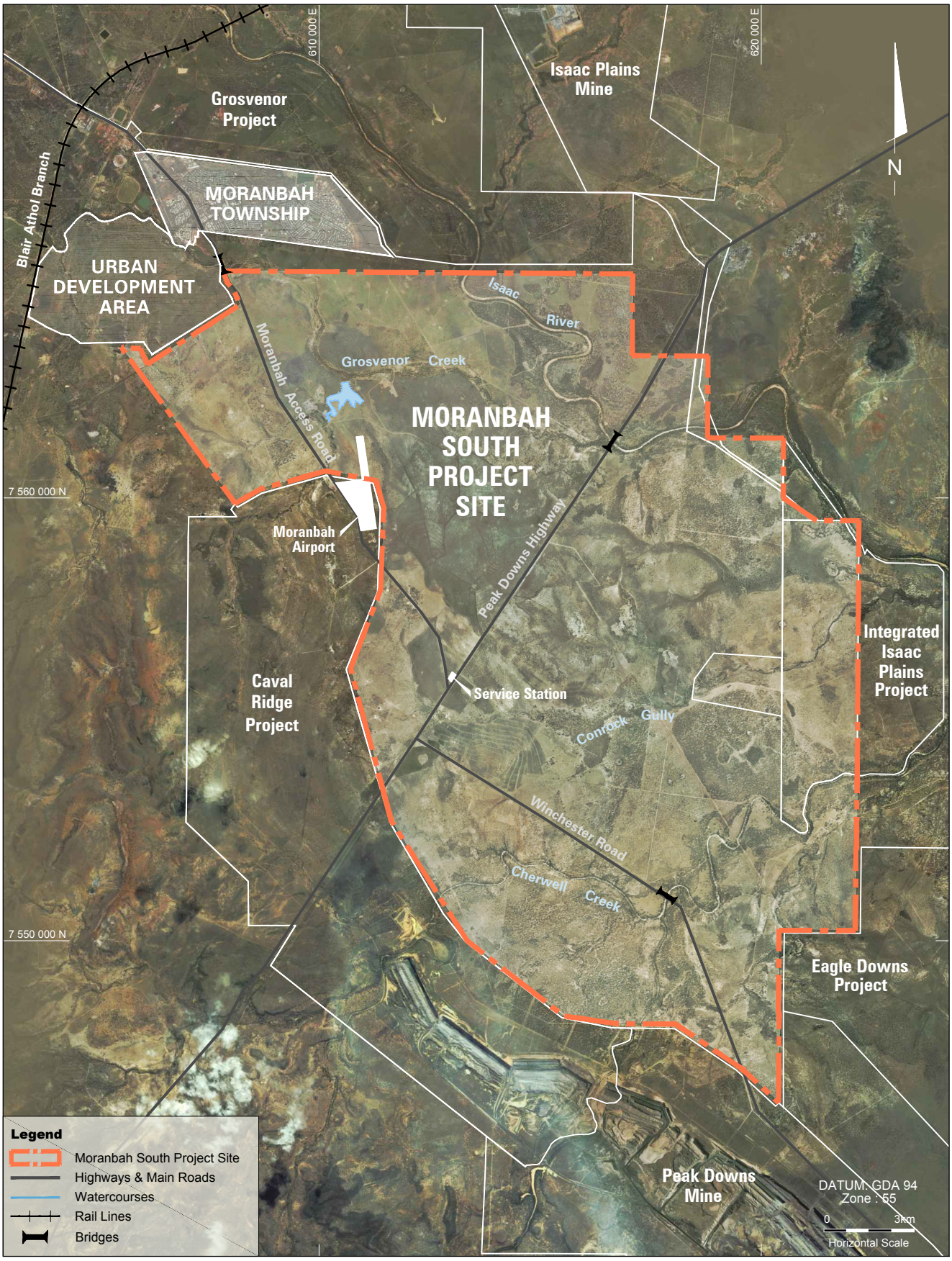
FIGURES



MORANBAH SOUTH PROJECT

Project Location

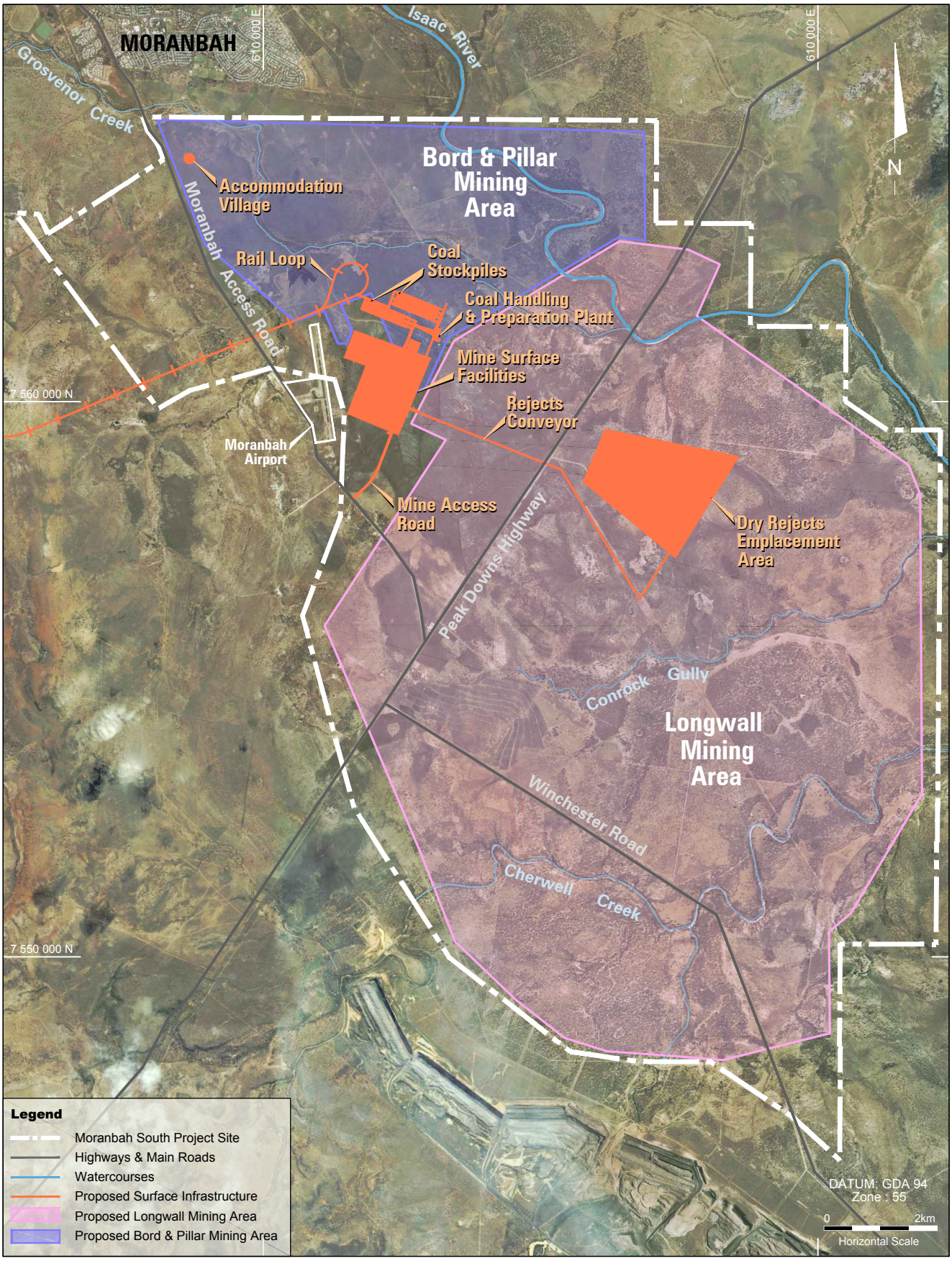
FIGURE 1



MORANBAH SOUTH PROJECT

Local Setting

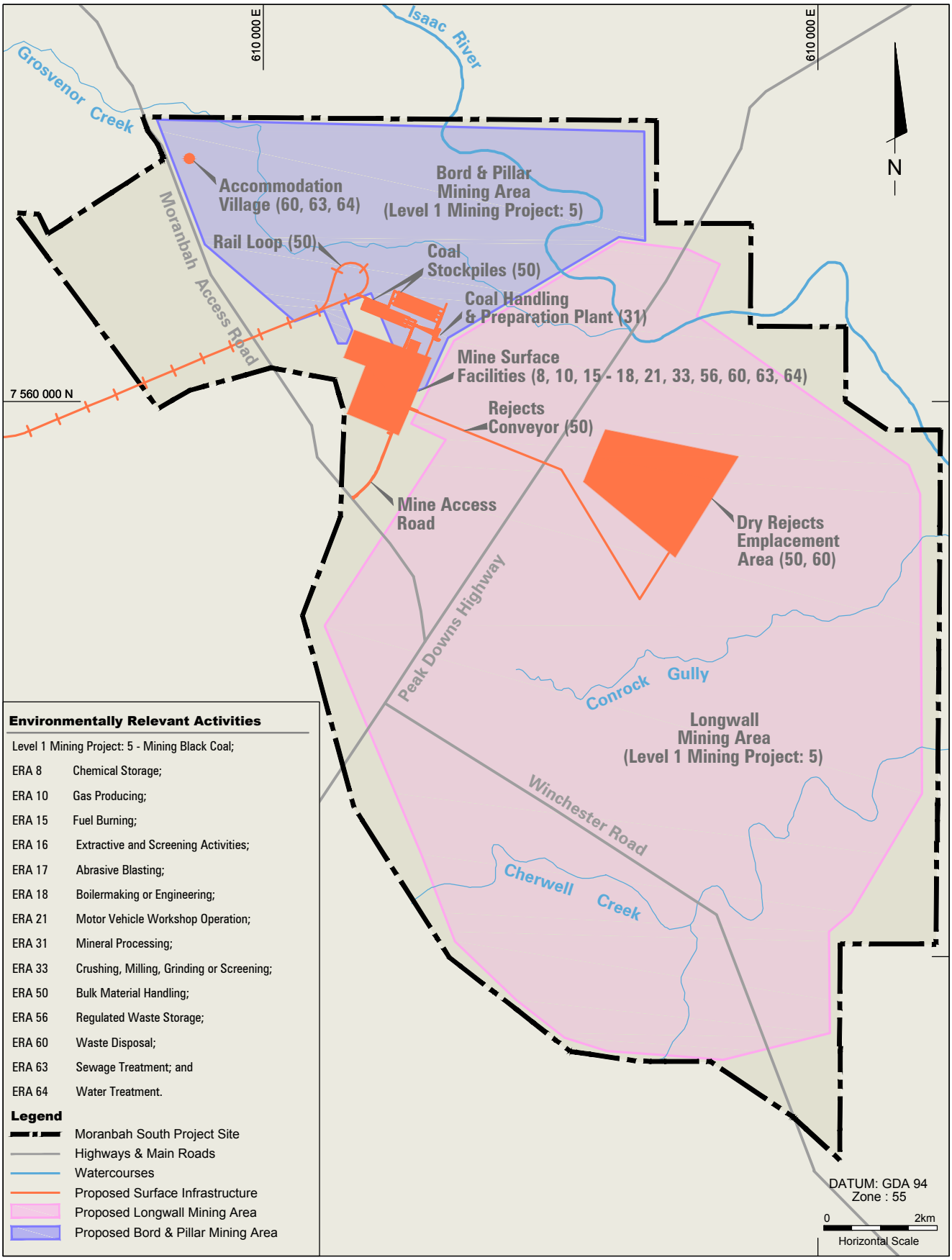
FIGURE 2



MORANBAH SOUTH PROJECT

Conceptual Project Layout

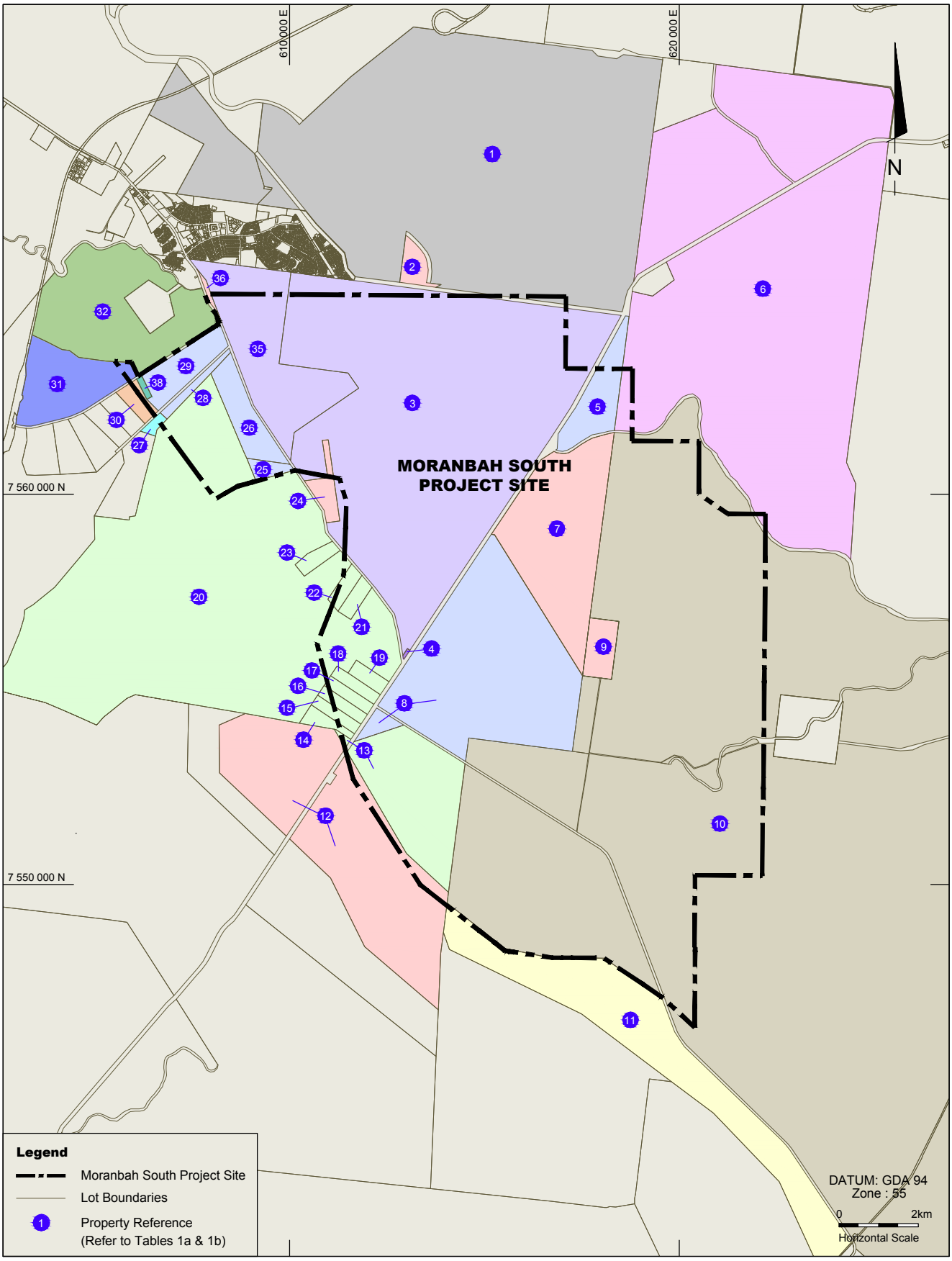
FIGURE 3



MORANBAH SOUTH PROJECT

Conceptual Project Layout
Showing Proposed Location of
Environmentally Relevant Activities

FIGURE 4



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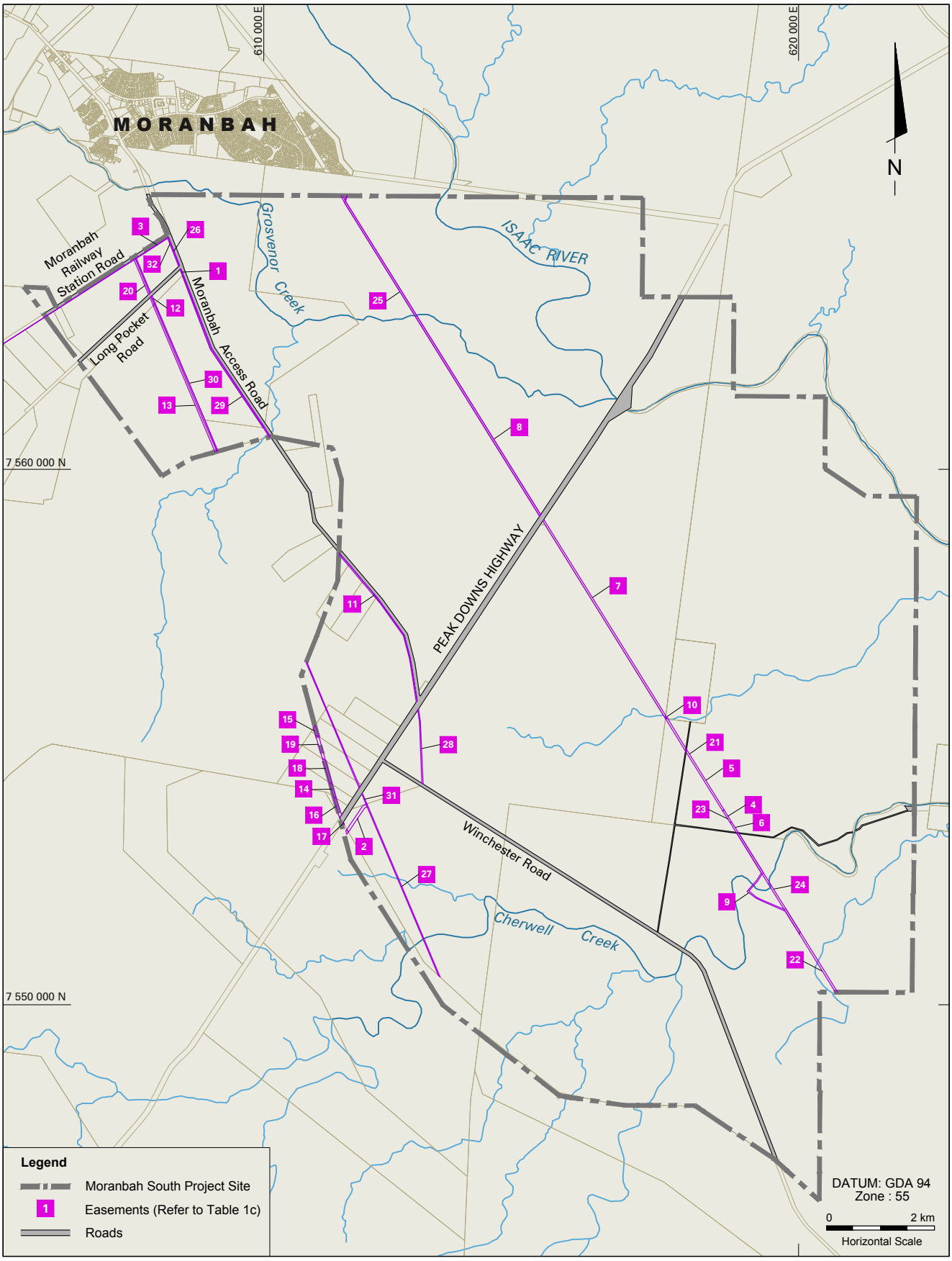
Landholders Within and Adjoining the Project Site

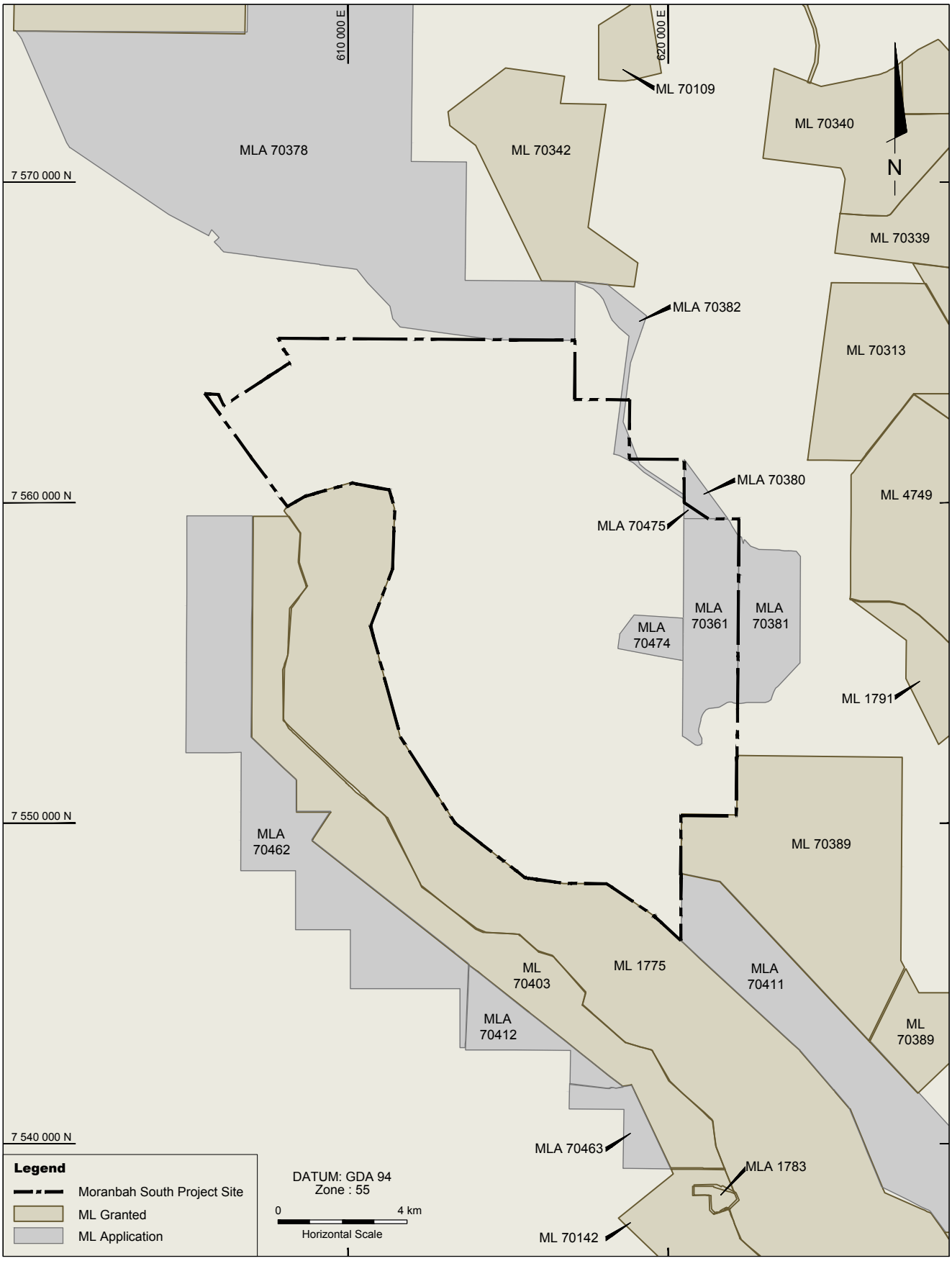
FIGURE 5



MORANBAH SOUTH PROJECT

Existing Easements within the Moranbah South Project Site

FIGURE 6



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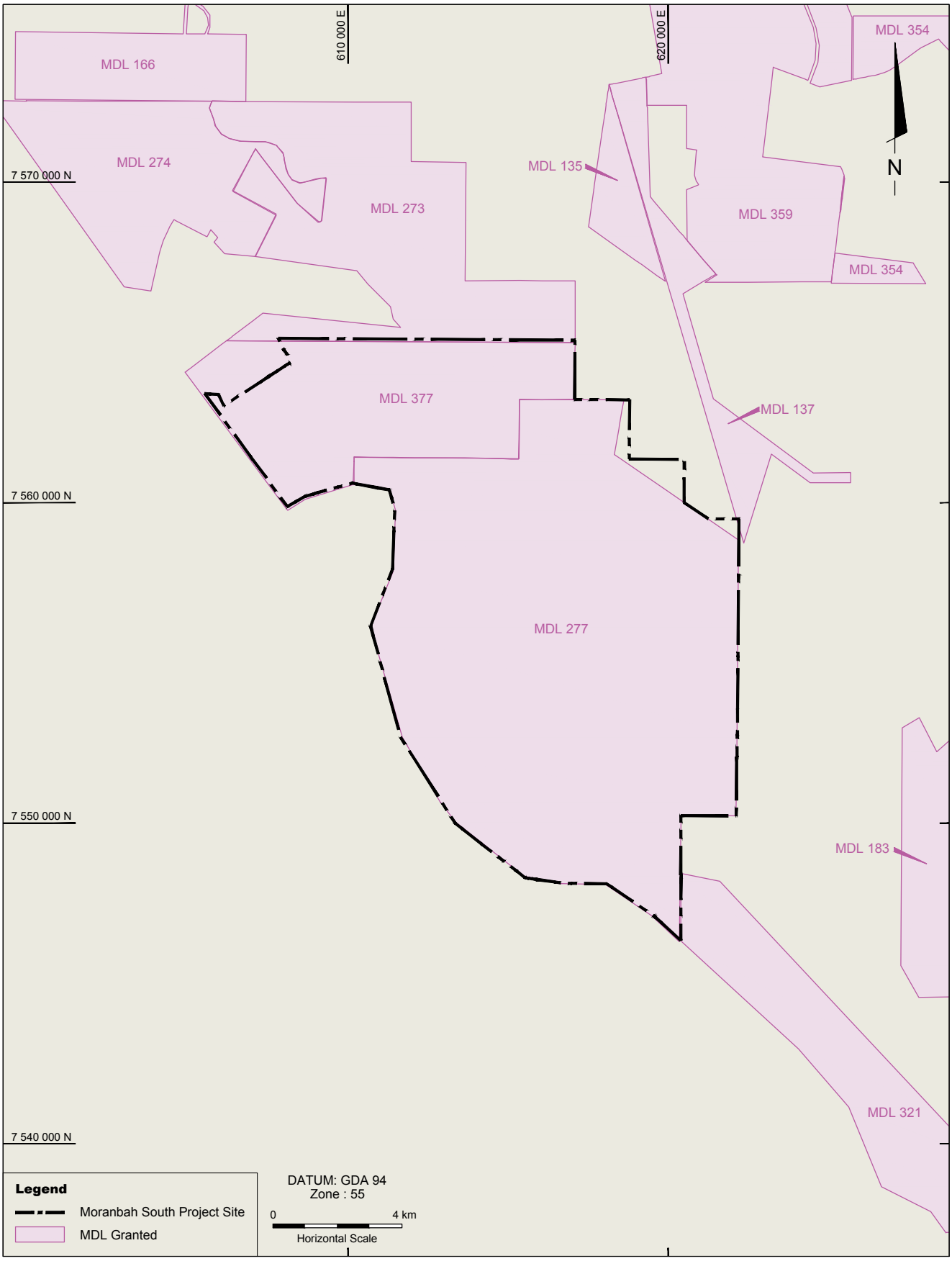
Mining Lease Boundaries

FIGURE 7



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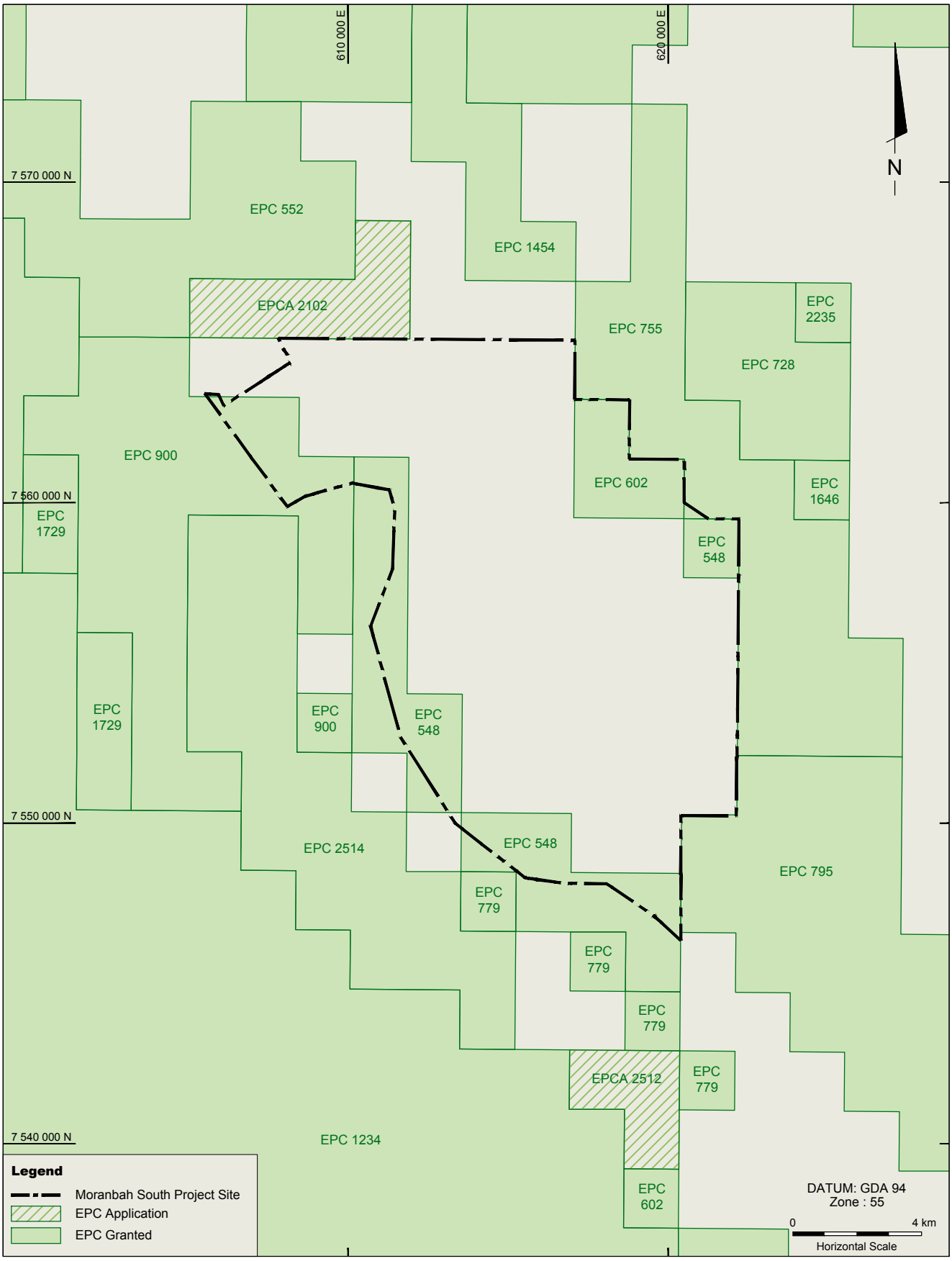
Mineral Development License Boundaries

FIGURE 8



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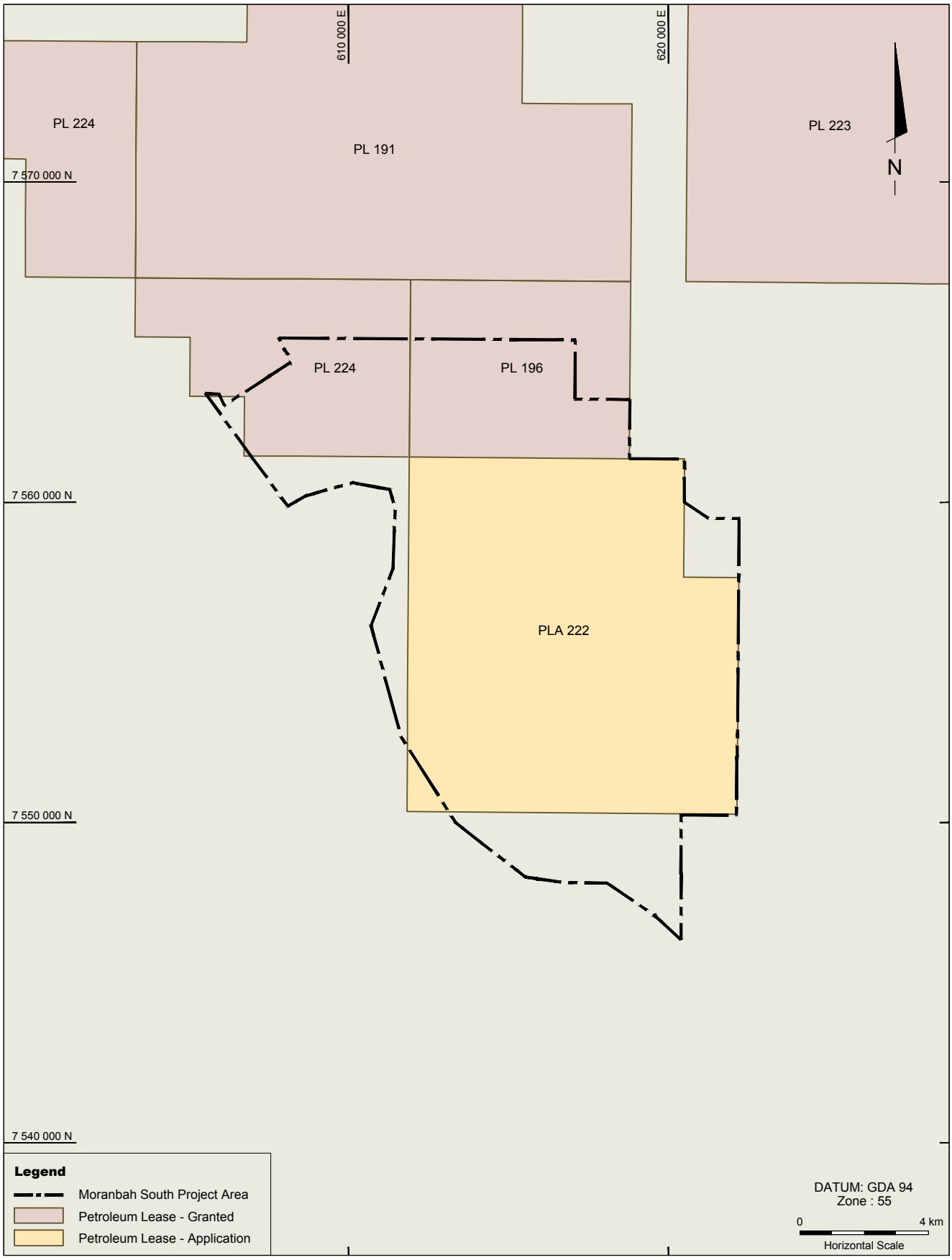
Exploration Permit for Coal Boundaries

FIGURE 9



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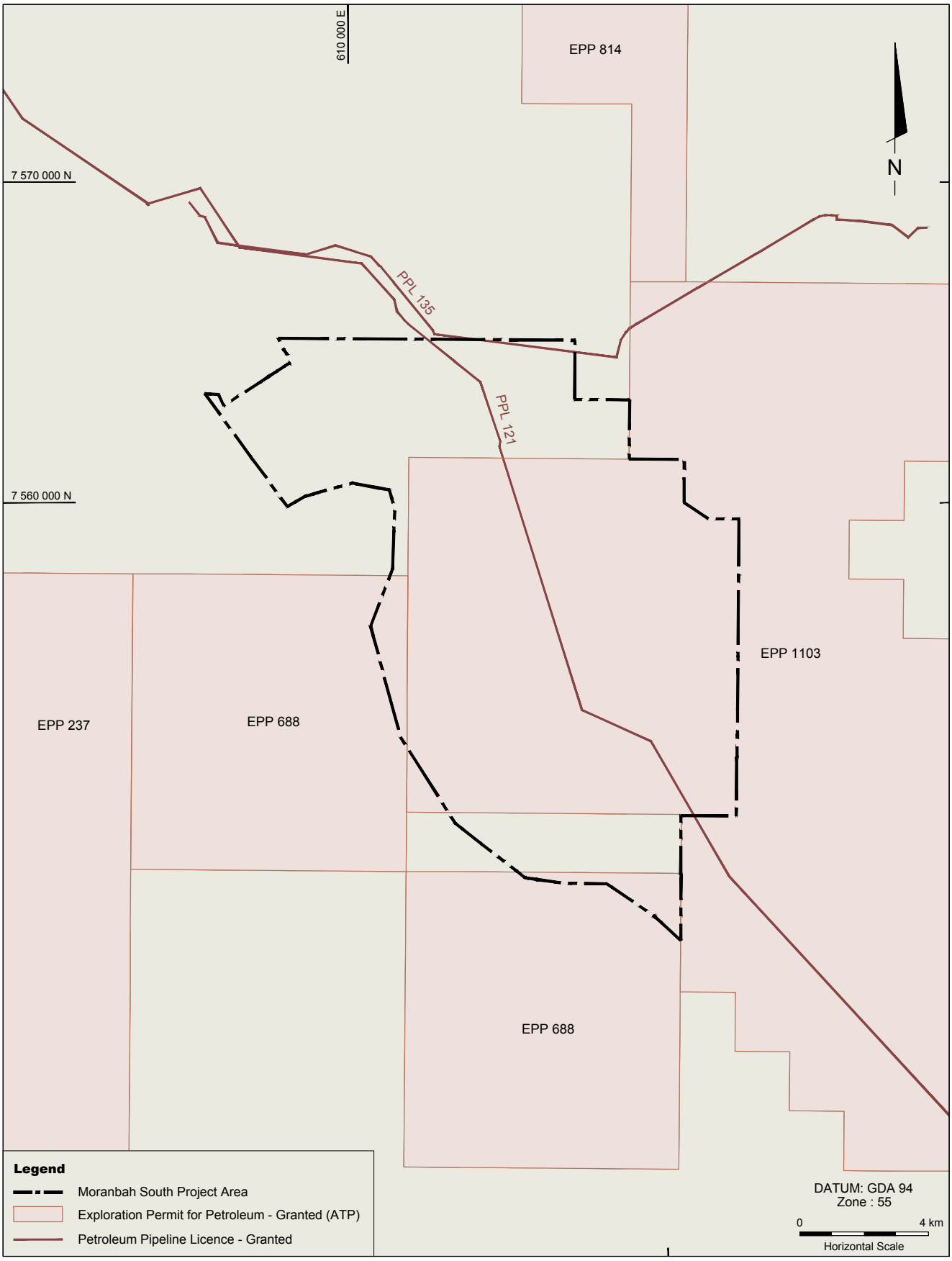
Petroleum Lease Boundaries

FIGURE 10



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Petroleum Pipeline Licence &
Exploration Permits for Petroleum Boundaries

FIGURE 11