



PROJECT CHINA STONE

INITIAL ADVICE STATEMENT

for

Macmines Austasia Pty Ltd

September 2012

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ENVIRONMENTAL CONSULTANTS

PROJECT CHINA STONE

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PROJECT CHINA STONE INITIAL ADVICE STATEMENT

for Macmines Austasia Pty Ltd

1 INTRODUCTION

1.1 PROJECT OVERVIEW

Project China Stone (the project) involves the construction and operation of a large-scale greenfield coal mine in Central Queensland. The project site is located approximately 270 km south of Townsville and 300 km west of Mackay at the northern end of the Galilee Basin (Figure 1).

The project is anticipated to have a peak production rate in the order of 60 million tonnes per annum (Mtpa) of Run of Mine (ROM) coal. This equates to a peak clean thermal coal production rate of approximately 45 Mtpa, for the export market. Mining will target coal seams within the Colinlea Sandstone and Bandanna Formation. Coal will be mined using both open cut and underground mining methods. The project will have a mine life in excess of 40 years.

The project will also require the development of a rail connection from the mine site to port and the development of suitable port capacity. A number of options are currently being considered in relation to off-lease rail connections. Abbot Point is the current preferred port option (Figure 1).

The project proponent is Macmines Austasia Pty Ltd (MacMines). MacMines is wholly owned by the Yao family and is a related entity of Shanxi Meijin Energy Group Limited (Meijin). Meijin is a Chinese based privately owned energy company. Further detail on the project proponent is provided in Section 2.1.

1.2 REGULATORY APPROVALS

This Initial Advice Statement (IAS) provides introductory information about the mine project. It supports an application to the Department of Environment and Heritage Protection (EHP) for approval to prepare a voluntary Environmental Impact Statement (EIS) for the mine project. It includes all supporting information specified in EHP's form titled "Application to Prepare a Voluntary Environmental Impact Statement (EIS)".

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 mine project.

A referral to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) will be lodged in the coming months to obtain confirmation of whether the mine project is a Controlled Action requiring approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). MacMines will lodge a separate application in the event that approval under the EPBC Act is required and does not propose to use the bilateral agreement between the Queensland and Commonwealth governments.

Separate regulatory approvals will be sought for off-lease infrastructure required to support the mine site operations including rail connection, port facilities, access roads and any off-lease utility connections.

2 PROJECT DESCRIPTION

2.1 PROJECT PROPONENT

The project proponent is MacMines, which is wholly owned by the Yao family and is a related entity of Meijin.

MacMines was registered and established in Queensland in 1999 and has been focussed on geological exploration since its inception. The Yao family, the owners of Meijin, acquired a 100% stake in MacMines in 2007.

Meijin was founded in 1981 and is based in Qingxu County, Shanxi Province, China. Meijin is the largest manufacturer of commercial metallurgical coke in China and is the owner, operator and manager of a fully integrated mine to steel product chain.

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). The project site is remote, with the closest townships being Charters Towers, approximately 170 km to the north, and Moranbah which is approximately 190 km to the south-east (Figure 1). The project site is at the western limit of the Isaac Regional Council administrative area, and adjoins the Charters Towers Regional Council administrative area to the west (Figure 2).

The project site is located entirely within the southern block of Exploration Permit for Coal (EPC) 987 (Figure 6). The northern boundary of the Carmichael Coal Project Mining Lease Application area is located approximately 3 km to the south of the project site (Figure 2).

The project site comprises approximately 20,000 ha of well vegetated land, with low-lying scrub in the south and east and a densely vegetated ridgeline, known as 'Darkies Range', running north to south through the western portion of the site.

Significant natural features on the site include Darkies Range and a number of ephemeral drainage lines that traverse the site generally from west to east, including North Creek (Figure 2). Lake Buchanan is located approximately 20 km to the north-west of the project site (Figure 2).

Preliminary vegetation mapping indicates that the south-eastern portion of the site is characterised by flat to undulating sand plains that support large expanses of savannah woodlands. These sand plains graduate to elevated sandstone ranges in the north and west of the project site that support low eucalypt woodlands and shrublands.

Government mapping shows that there is no strategic cropping land (SCL) on the project site.

Cattle grazing and coal exploration are the current land uses on the project site. There is virtually no built infrastructure on the project site. A number of unsealed farm access tracks and exploration tracks traverse the project site. Other minor farm infrastructure present includes various stock fences, creek crossings and farm dams.

There are three landowners within the project site (Figure 5). A stock route traverses the southern part of the project site from south-west to north-east (Figure 5).

An Exploration Permit for Minerals Application (EPMA 19712) and two Exploration Permits for Petroleum (EPP 744 and EPP 1044) are located on the project site (Figures 7 and 8).

2.3 PROJECT DESCRIPTION

The project involves the development of a large-scale greenfield coal mine. Open cut mining operations are likely to involve multiple draglines, truck and shovel pre-stripping and in-pit crushing and conveying systems. Underground mining will involve up to four operating longwalls and potentially top-coal caving. Coal will be washed and processed on site and product coal will be transported from site by rail. A portion of the coal washery rejects may also be used as fuel for an on-site power station.

Abbot Point is the current preferred coal terminal for export. MacMines will seek to utilise additional capacity in accordance with the Queensland government's Abbot Point Coal Terminal development program.

MacMines is currently investigating a number of options for rail connections from the mine site to the Abbot Point Coal Terminal. The current preferred option involves a connection

from the southern end of the mine site to the western end of the state governments declared east-west Galilee Basin rail corridor that will connect the central Galilee Basin mines to the existing rail network near Moranbah. Separate approvals will be sought for the rail connection. MacMines will continue to evaluate alternative port and rail options.

It is anticipated that mine construction will commence in 2015. First open cut coal production is scheduled to commence in 2017 and first longwall coal production is scheduled to commence in 2019. The mine life will be in excess of 40 years. Mining will be followed by a period of final rehabilitation and decommissioning.

2.3.1 Open Cut Mining

The proposed open cut mining area is shown in Figure 3. The coal seams dip to the west and mining will generally progress down-dip in an east-west direction.

Overburden removal will involve the use of multiple draglines and truck and shovel pre-stripping. In order to achieve the production rate a number of mining pits will be active at any point in time. Initial overburden will be stored in out-of-pit overburden emplacement areas to the east of the open cut mining area (Figure 3). Once the open cut pits have been developed, overburden will be placed in-pit. In-pit crushers and overburden conveyors are also being considered as an option to minimise truck haulage.

The overburden emplacement areas will be rehabilitated progressively as the mine develops using proven rehabilitation techniques.

Coal from the open cut pits will be mined with excavators, surface miners and rope shovels. Coal will be transported from the pits by haul trucks and/or conveyors.

2.3.2 Underground Mining

The proposed underground mining areas are shown in Figure 3. Underground mining is proposed in lower seams below the northern and southern ends of the open cut mining area. Underground mining will involve up to four operating longwalls. Top coal caving is also being considered in the top seams away from the open cut mining area.

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

Natural features above the proposed longwall mining areas include a number of ephemeral drainage lines and Darkies Range (Figure 2). The EIS will include an assessment of the impacts and mitigation for any subsidence of natural features.

2.3.3 Mine Infrastructure

The majority of the mine infrastructure will be located in the eastern portion of the project site (Figure 3), and will include:

- Haul roads and surface conveyors;
- Coal stockpiles;
- Coal Handling and Preparation Plant (CHPP) and associated equipment;
- Tailings storage facility, associated return water dam and conveyor to transport rejects from the CHPP to the tailings storage facility;
- Rail loop and train loading facilities;
- Administration buildings, bathhouse and employee facilities;
- Power Station and fly-ash storage facility;
- Power and water supply infrastructure including internal combustion power supply;
- Workshop and warehouses;
- Vehicle wash down, servicing and refuelling facilities;
- Underground mine surface facilities including:
 - Underground mine access drift portals;
 - Coal stockpiles; and
 - Administration buildings, bathhouse and employee facilities.
- Various dams for sediment control, mine water storage and raw water storage;
- Workforce accommodation village; and
- Private airstrip.

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.

A workforce accommodation village and private airstrip for the transport of mine employees are proposed to be located in the south-eastern part of the project site (Figure 3).

Options being considered for power supply for the mine include an on-site power station fuelled by coal washery rejects and connection to the existing power grid via a new transmission line.

The on-site power station would have a generation capacity of up to 800 MW and would have

sufficient capacity to power the mine and could potentially provide power to other users. The power station would utilise feasible low emission technology and operate in accordance with the carbon pricing mechanism under the Commonwealth governments *Clean Energy Act 2011*. The power station and associated fly ash storage facility would be located adjacent to the mine infrastructure area (Figure 3).

MacMines is currently investigating alternatives for project water supply. Options being considered include re-use of mine affected water and a water allocation from the Burdekin Dam via a new pipeline.

2.4 ENVIRONMENTAL IMPACT ASSESSMENT

An EIS will be prepared for the mine 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:

- Surface water and mine water management;
- Groundwater;
- Soils and land capability;
- Geochemistry of mine wastes;
- Design of the tailings and fly ash storage facilities;
- Subsidence;
- Mine rehabilitation;
- Terrestrial flora and fauna;
- Aquatic biology and stygofauna;
- Noise and vibration;
- Air quality and greenhouse gas;
- 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 project include the following:

- Level 1 Mining Project: 5 – Mining Black Coal;
- ERA 8 Chemical Storage;
- ERA 10 Gas Producing;
- ERA 14 Electricity Generation;
- 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 43 Concrete Batching;
- 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 4 and 5, 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.

Further consultation will involve responding to stakeholder issues and feeding back the results of the EIS. It is anticipated that a range of consultation methods may be used, including individual meetings, group presentations and distribution of information sheets.

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*.

4 AFFECTED PERSONS

A list of persons identified as potentially being affected by the project is provided in Tables 1a to 1d:

Table 1a
Affected Persons – Land within and adjoining the Project Site

(*Refer to Figure 5)

Map ID*	Property Description	Affected Person		Address
		Landowner	Other	
Land within and adjoining the Project Site				
1	Lot 2493 Plan PH 771 (within and adjoining)	<i>Crown Land</i>	Lessee: Brian Allan Corbett & Lorraine Ellen Corbett	"Hyde Park" MS984 Charters Towers, QLD 4820
2	Lot 3978 Plan PH 772 (within and adjoining)	<i>Crown Land</i>	Lessee: Coovin Pastoral Company Pty Ltd	Condon Treasure, 54 Hawthorne Street, Roma, QLD, 4455
3	Lot 662 Plan PH 1491 (within and adjoining)	<i>Crown Land</i>	Lessee: Adani Mining Pty Ltd	'AMP Place' Level 30, 10 Eagle Street, Brisbane, QLD, 4000
4	Lot 5158 Plan PH 991 (adjoining)	<i>Crown Land</i>	Lessee: Pathmont Pty Ltd	Attn: Jeff Stevenson Moonoomoo Station (via Pentland), QLD 4816
5	Lot 1 Plan AY 31 (adjoining)	<i>Crown Land</i>	Lessee: Brian Allan Corbett & Lorraine Ellen Corbett	"Hyde Park" MS984 Charters Towers, QLD 4820

Table 1b
Affected Persons – Easement Holders within the Project Site

Map ID	Easement Description	Affected Person		Address
		Easement Holder	Other	
Easement Holders within the Project Site				
<i>There are currently no easements located within the Project Site</i>				

Table 1c
Affected Persons – Tenement Holders within and adjoining the Project Site
 (Refer to Figures 6,7,8 and 9)

Tenement Description	Affected Person	Address
Tenement Holders within and adjoining the Project Site		
EPC 987 (Within and adjoining)	Macmines Austasia Pty Ltd	Suite 17, Level 9, 320 Adelaide Street, Brisbane, QLD, 4000
EPC 926 (Adjoining)	Vale Coal Exploration Pty Ltd	Level 11, 100 Creek Street, Brisbane, QLD, 4000
EPC 1483 (Adjoining)	Matilda Coal Pty Ltd	Grange Consulting Pty Ltd 945 Wellington Street, West Perth, WA, 6005
EPC 1663 (Adjoining)	Resolve Coal Pty Ltd	Level 8, 46 Edward Street, Brisbane, QLD, 4000
EPCA 2166 (Adjoining)	Spinifex Rural Management Pty Ltd	Level 8, 10 Market Street, Brisbane, QLD, 4000
EPC 1080 (Adjoining) EPCA 1105 (Adjoining) EPC 1288 (Adjoining)	Waratah Coal Pty Ltd	Level 7, 380 Queen Street, Brisbane, QLD, 4000
EPMA 19712 (Within and adjoining)	Monteagle Resources Pty Ltd	6 Glenard Drive, Eaglemont, VIC, 3084
EPP 744 (Within and adjoining)	Comet Ridge Ltd	Level 1, 283 Elizabeth Street, Brisbane, QLD, 4000
EPP 1044 (Within and adjoining)	Queensland Energy Resources Ltd	Level 10, 200 Mary Street, Brisbane, QLD, 4000
MLA	<i>There are no MLs or MLAs located within the project site</i>	

Table 1d
Affected Persons – Local Government and Native Title Claimants
within the Project Site

Description	Affected Person	Address
Local Government	Isaac Regional Council	PO Box 229, Clermont Qld 4721
Native Title Claimants	Wangan and Jagalingou People <i>(Claim No. QC04/6; Federal Court No. QUD85/04)</i>	Wangan and Jagalingou Traditional Owners Corporation PO Box 8018 Woollongabba 4102 Qld

5 INTERESTED PERSONS

A list of persons identified as potentially being interested in the project is provided in Table 2.

Table 2
Interested Persons

Interested Person	Address
AgForce	PO Box 13186, George Street, Brisbane QLD 4003
Capricorn Conservation Council	PO Box 401, Rockhampton QLD 4700
Civil Aviation Safety Authority (CASA)	GPO Box 2005, Canberra ACT 2601
Department of Agriculture, Fisheries and Forestry	GPO Box 46, Brisbane QLD 4001
Department of Communities, Disability Services, and Child Safety	GPO Box 806, Brisbane QLD 4001
Department of Community Safety	GPO Box 1425, Brisbane QLD 4001
Department of Energy and Water Supply	PO BOX 15456, City East QLD 4002
Department of Environment and Heritage Protection	GPO Box 2454, Brisbane QLD 4001
Department of Natural Resources and Mines	PO Box 15216, City East QLD 4002
Department of State Development, Infrastructure and Planning	PO Box 15009, City East QLD 4002
Department of Transport and Main Roads	GPO Box 1549, Brisbane QLD 4001
NQ Dry Tropics	2 McIlwraith St, Townsville QLD 4810
Regional Development Australia Mackay Whitsunday	PO Box 1877, Mackay QLD 4740

*

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for

HANSEN BAILEY



Craig Brown
Environmental Planner



Peter Hansen
Director

FIGURES

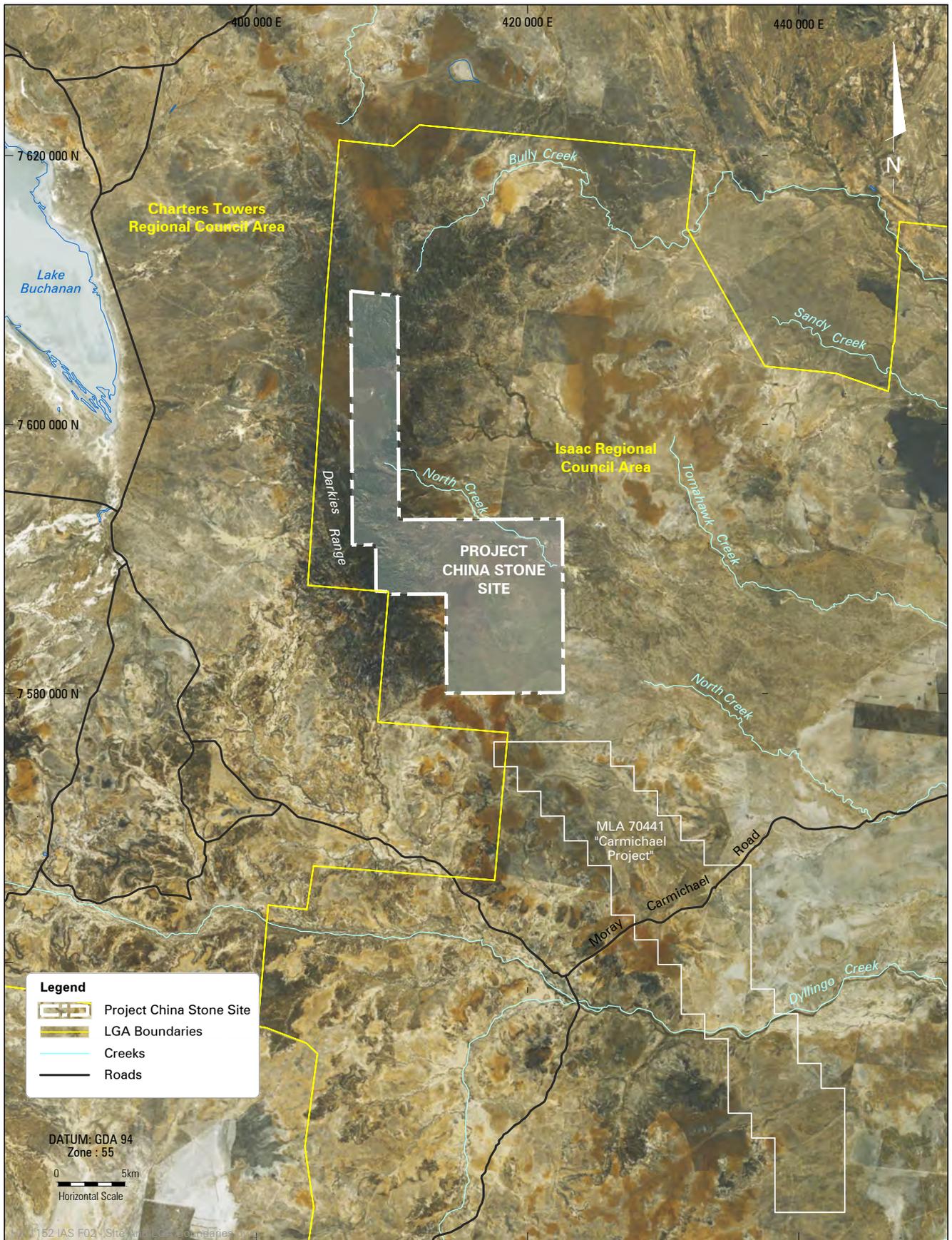


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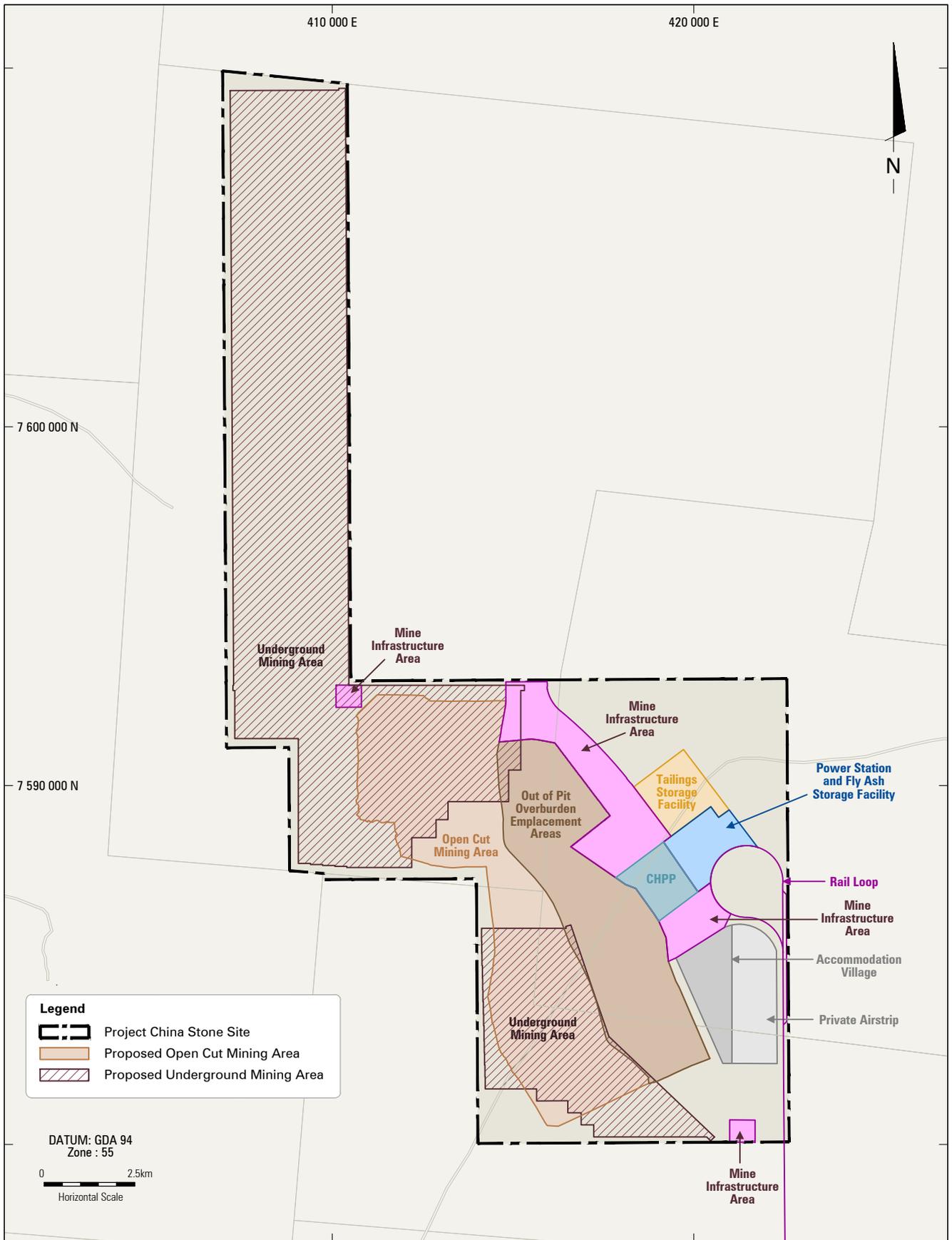


Project Location

FIGURE 1



PROJECT CHINA STONE

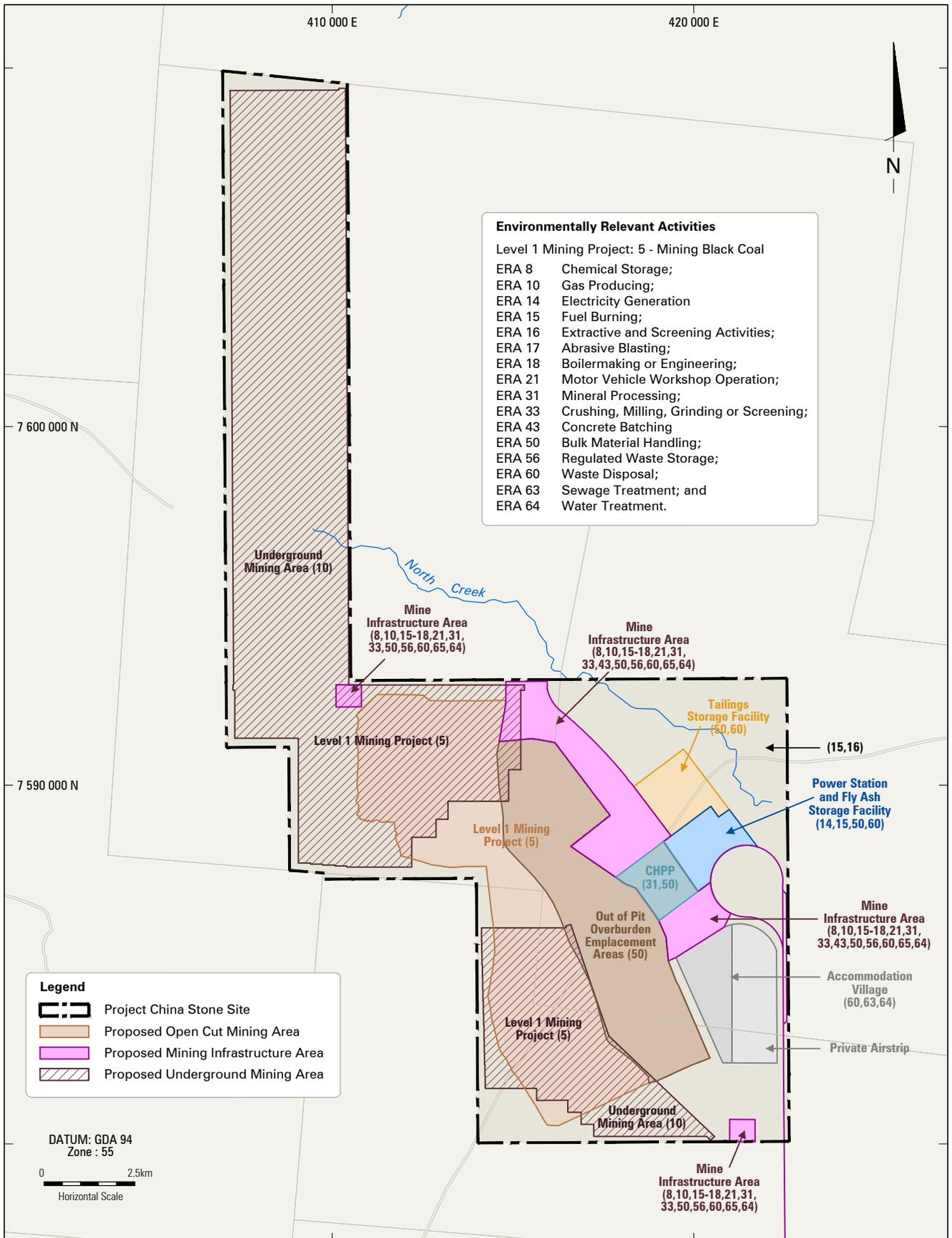


PROJECT CHINA STONE



Conceptual Project Layout

FIGURE 3

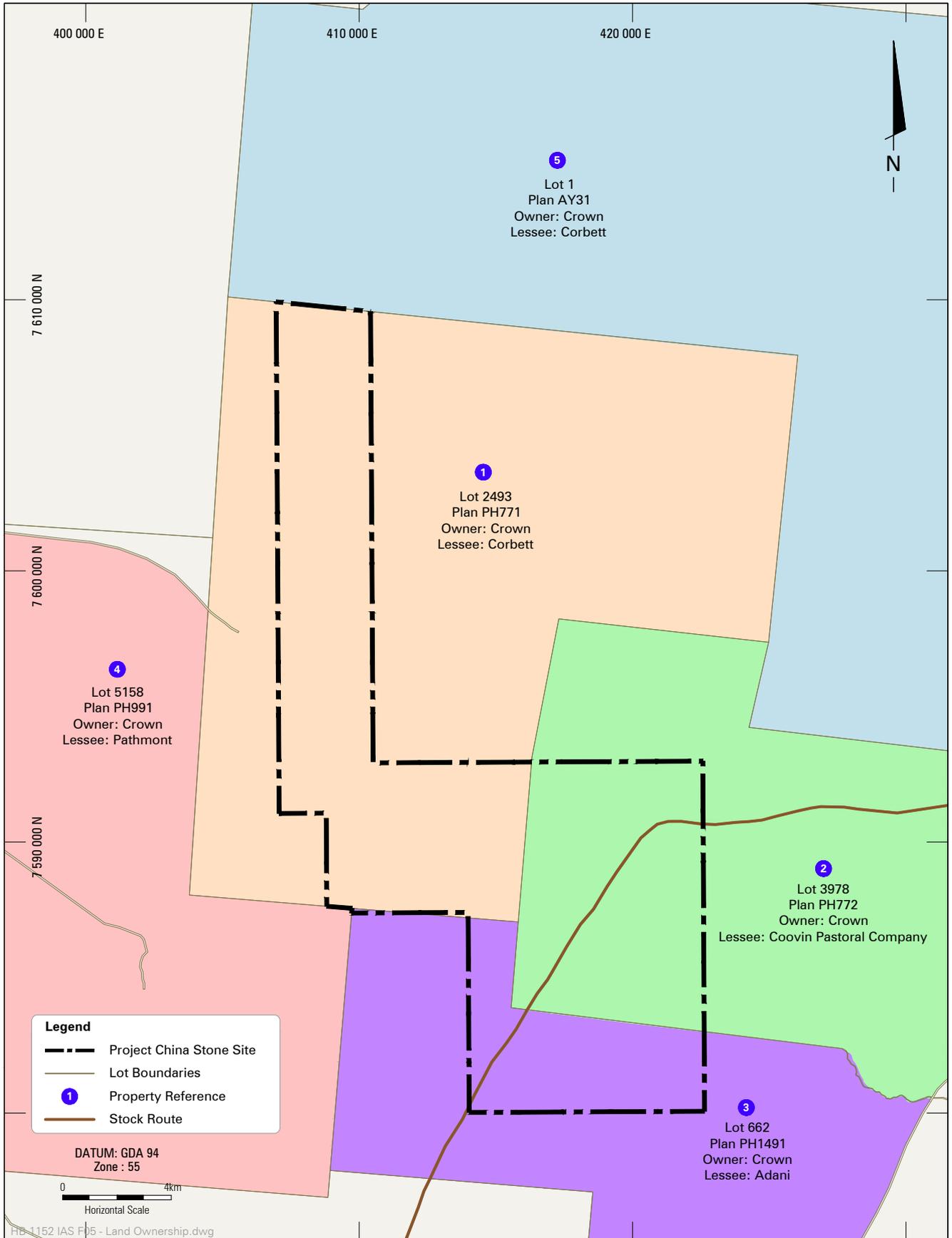


PROJECT CHINA STONE

Conceptual Project Layout Showing Proposed Location of Environmentally Relevant Activities

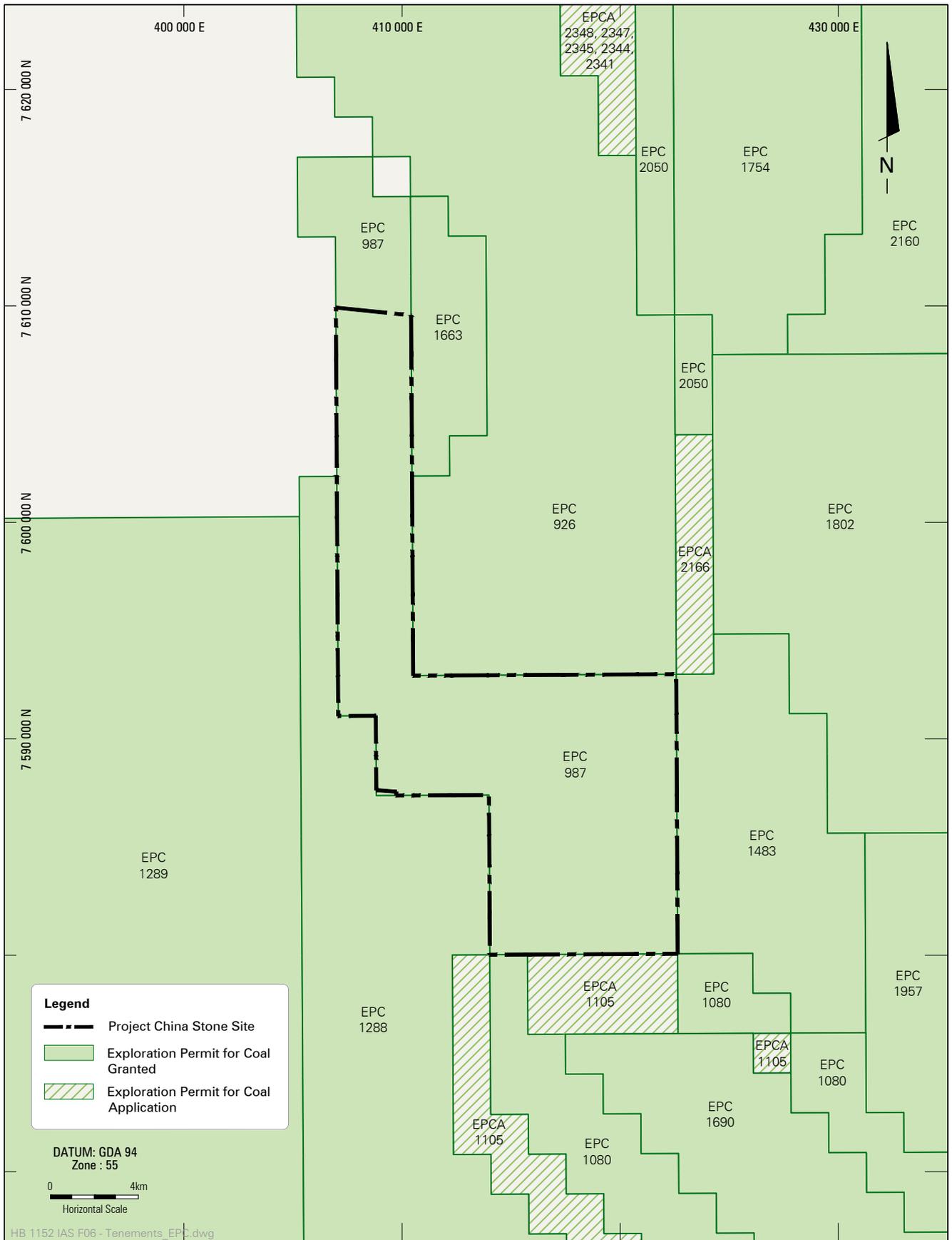
FIGURE 4





PROJECT CHINA STONE
Landowners Within and Adjoining
the Project Site

FIGURE 5

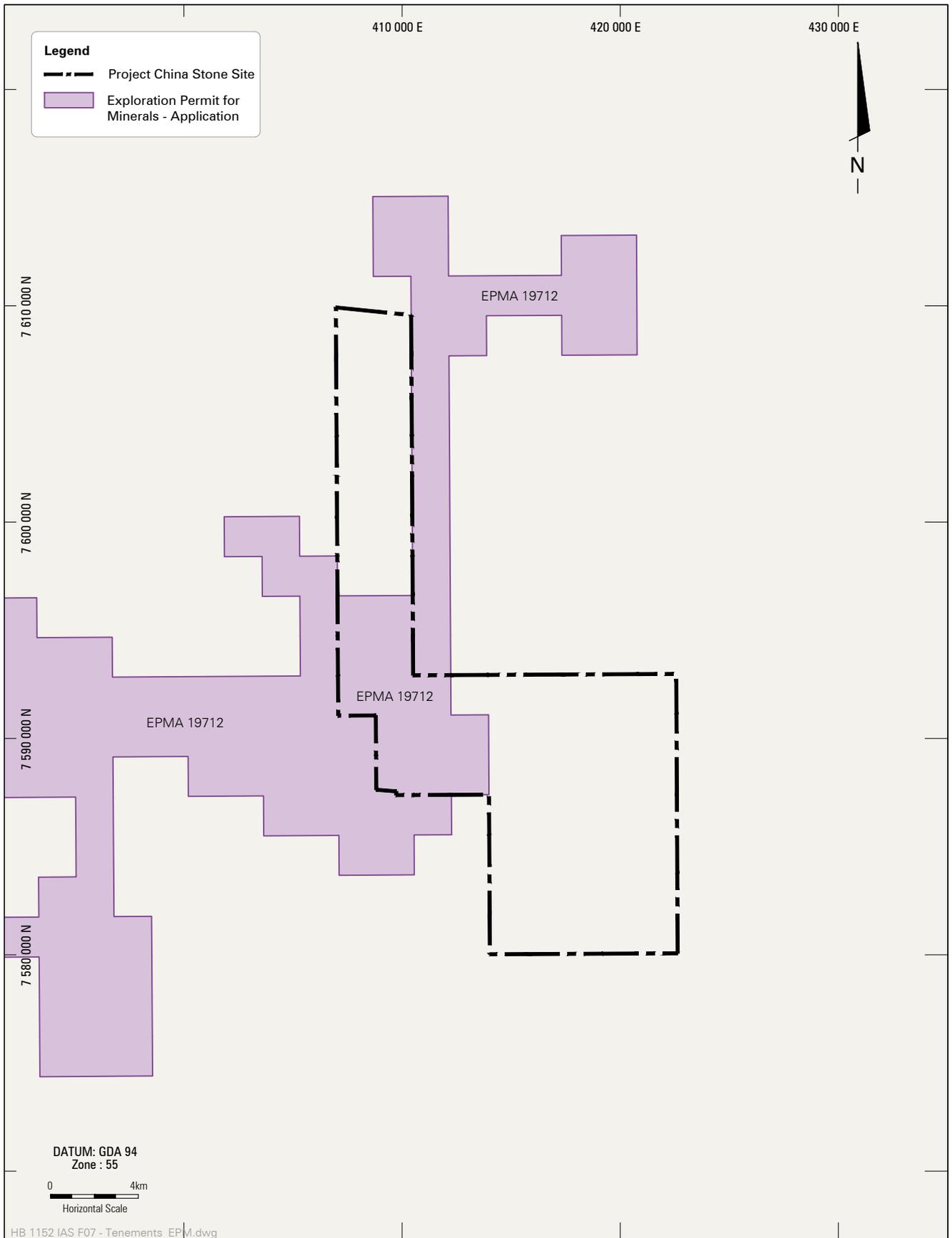


PROJECT CHINA STONE

Exploration Permits for Coal

FIGURE 6





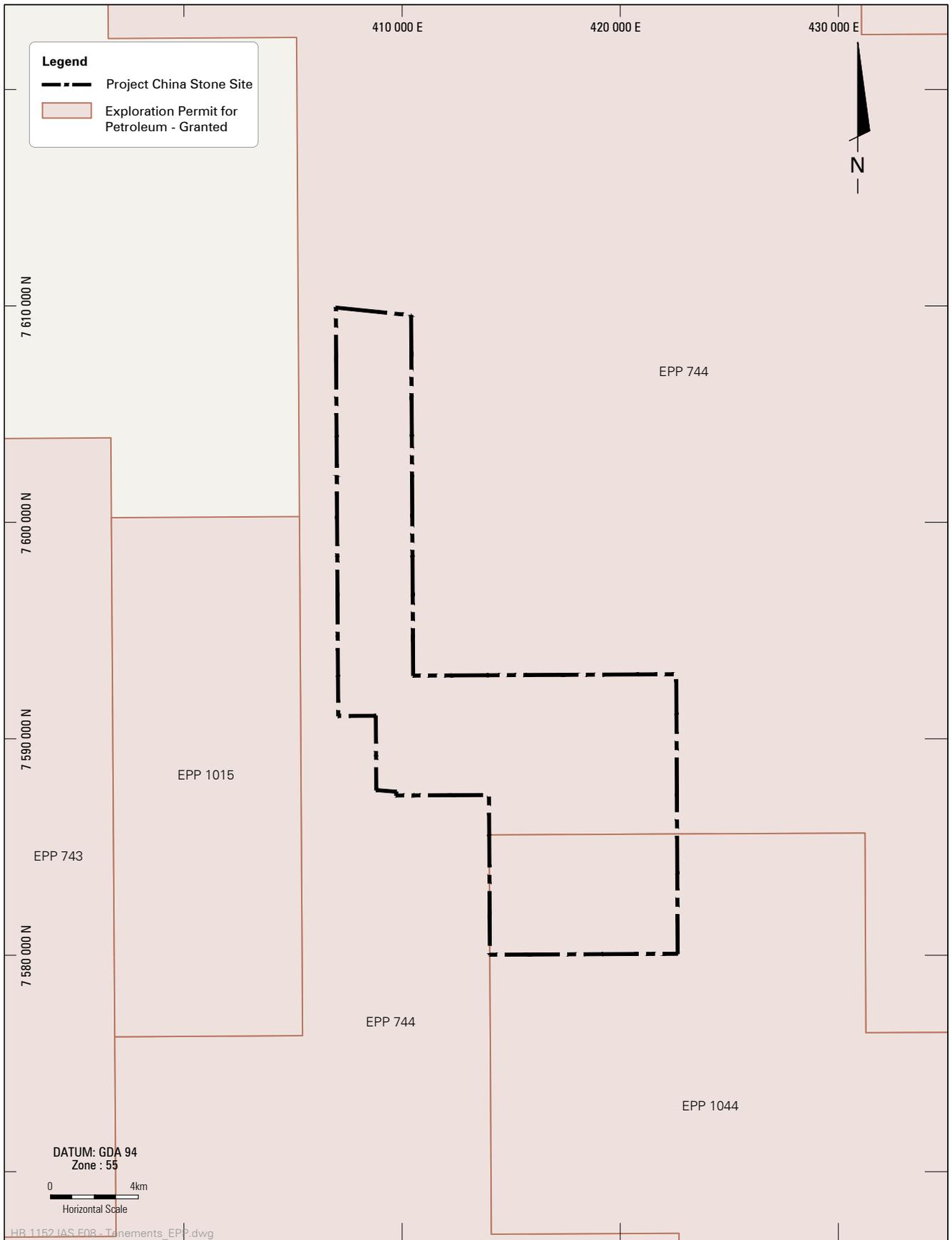
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PROJECT CHINA STONE



Exploration Permits for Minerals

FIGURE 7

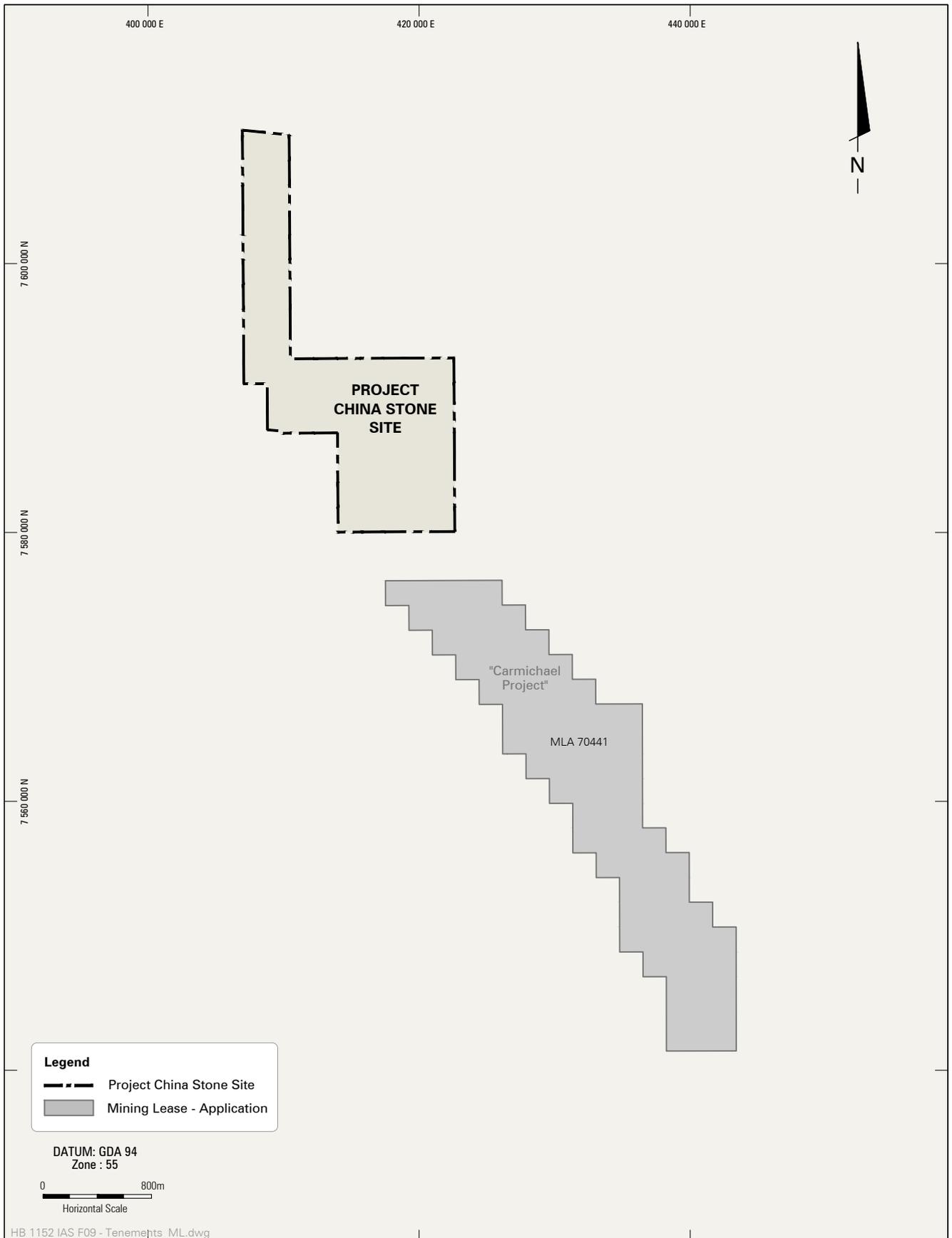


PROJECT CHINA STONE



Exploration Permits for Petroleum

FIGURE 8



PROJECT CHINA STONE

Mining Lease Applications

FIGURE 9