



BARALABA SOUTH PROJECT

Updated Non-Indigenous Cultural Heritage
Technical Report

For AARC

September 2023

Version 3

DOCUMENT CONTROL

DOCUMENT

| | |
|----------------|--|
| Project | Baralaba South NICH Update |
| Project Number | 24013 |
| Document Title | Updated Baralaba South NICH Technical Report |
| File Location | Z:\Projects\24013 BANANA SC Baralaba South NICH EIS\Reporting |
| Client | AARC |

| VERSION | AUTHOR | QUALITY REVIEW | DATE |
|---------|------------------|------------------|------------|
| 1 | Samantha Negoita | Ulrike Oppermann | 13/09/2023 |
| 2 | Samantha Negoita | - | 22/09/2023 |
| 3 | Samantha Negoita | - | 26/09/2023 |

© Archaeo Cultural Heritage Services Pty Ltd as Trustee for the Ardent Unit Trust (Converge Heritage + Community). All rights reserved. 2023.

Converge has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of Converge. Converge undertakes no duty, nor accepts any responsibility, to a third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and Converge's experience, having regard to assumptions that Converge can reasonably be expected to make in accordance with sound professional principles. Converge may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced, or disseminated by the Client only in its entirety.

ABN 71 366 535 889

BRISBANE

Suite 3, Level 2, 303 Adelaide St, Brisbane, QLD, 4000
GPO Box, Brisbane, QLD, 4001
Ph +61 7 3211 9522

HERVEY BAY

57 East St, Scarness, QLD, 4655
PO Box, 1974, Pinalba, QLD, 4655
Ph +61 7 4124 1938

CAIRNS

PO Box 2666, Cairns, QLD, 4870
Ph +61 7 4031 2355

www.convergehc.com.au

admin@convergehc.com.au

EXECUTIVE SUMMARY

Baralaba South Pty Ltd (ACN 603 037 065) (formerly Mount Ramsay Coal Company Pty Ltd and Wonbindi TLO Holdings Pty Limited) proposes to develop the Baralaba South Project (the Project), which is a greenfield, open-cut metallurgical coal mine. This report presents a Non-Indigenous Cultural Heritage technical report for the Baralaba South Project Environmental Impact Statement. Converge Heritage + Community was engaged by AARC for this assessment in August 2023. Previous assessments were undertaken by Converge Heritage + Community in 2012 and 2019 for the Project. This report provides an update on the previous assessments in consideration of changed Project plans.

This updated report includes:

- A contextual history of the region including the Project area;
- The results of the field assessment of Non-Indigenous Cultural Heritage conducted over the Project area in 2012 (*Note, an updated survey was not undertaken by Converge. Current photographs of the Project area were provided in September 2023 by AARC for this assessment*);
- The nature of cultural heritage significance of the proposed development area and the places noted during the field assessment;
- Specific management and mitigation recommendations for the identified Non-Indigenous Cultural Heritage sites and places contained within the Project area; and,
- Specific management recommendations for additional Non-Indigenous Cultural Heritage sites and places which potentially exist within the Project area, and which have not, to date, been assessed and/or identified as requiring assessment.

NICH sites

An initial total of 17 Non-Indigenous Cultural Heritage sites and places were identified in the original 2012 report. Of these, only 13 are located in the changed Project area in 2023. A summary of identified Non-Indigenous Cultural Heritage sites and places in the Project area is provided below. Details of individual significance and recommended management are contained within site details at Appendix 1. Refer also to Section 3 for site details.

| Site No. | Name | Location GDA94 | | Brief Description |
|----------|-----------------------|-----------------------------|-----------------------------|---|
| | | South | East | |
| B01 | Dam 1 | -24.252126 | 149.869606 | Earthen banked ovoid dam approximately 120 metres long and approximately 62 metres in diameter with up to 2.5 metres high bank on western side. Unfenced. |
| B02 | Turkey Nest 1 | -24.275497 | 149.870842 | Earthen banked circular turkey's nest approximately 27 metres in diameter with up to 2.5 metres high bank. Fenced with star droppers and split droppers and four strand barbed wire. |
| B05 | Dawson Valley Railway | -24.554837 to -24.234214 | 149.963779 to 149.846171 | Located on the western side of the MLA but largely outside the changed Project area. The railway line lies within an easement which lies between pastoral properties and various 'B roads'. The railway line has gravel and cobble base |

| Site No. | Name | Location GDA94 | | Brief Description |
|----------|-------------------------------|--------------------------|---------------------------|---|
| | | South | East | |
| | | | | repaired in places with blue metal up to approximately 0.5 metres high and up to 2.5 metres wide. The railway line has sections where the sleepers remain <i>in situ</i> . No rails are extant. |
| B06 | Telephone Line | -24.282884 to -24.234428 | 149.847350 to 149.8463626 | There were 50 telegraph poles aligned parallel with the eastern side of the broader railway easement that were originally surveyed in 2012 in the Baralaba South MLA. These are largely located outside the changed Project area. The poles have all been pushed over and lie on the ground. Several at the northern end have been pushed together. |
| B08 | Dam 2 | -24.235909 | 149.856175 | Earthen banked dam at foot of very shallow gully. The dam cuts off the gully on the south side. The banks rise to the south west to a maximum height of approximately 1.7 metres and 4 metres wide with an approximate diameter of 60 metres. |
| B10 | Dam 4 | -24.261322 | 149.855333 | Dry earthen banked expanded Gilgai approximately 30 metres in diameter at base of a hill which rises to the southwest. |
| B11 | Dam 5 | -24.264843 | 149.858920 | Large earthen banked dam which cuts off a gully and ephemeral creek. Land rises to the west and east. The earthen bank is located on the northern side of the creek and is approximately 5 metres high and 5 metres wide and is approximately 190 metres long. |
| B12 | Dam 6 | -24.275366 | 149.863127 | Earthen banked dam with associated disused southern cross windmill pump. The earthen bank cuts off a creek running down the slope in a gully on the northeast side of the dam. The windmill is constructed of galvanised angle iron with the frame approximately 7 metres high with galvanised iron blades on the fan and tail. |
| B13 | Turkey Nest 3 | -24.274854 | 149.860145 | Round raised earthen banked mound enclosed with modern star picket fence with four barb wire strands located at the top of a low hill. The banks are approximately 4 metres high with a depression approximately 1.5 metres in the centre with an approximate diameter of 40 metres. Disused. |
| B14 | Broadmeadow Homestead complex | -24.276132 | 149.868370 | Property includes a 1960-70s house and cottage, one set of stock yards and four sheds and a rubbish pit. |

| Site No. | Name | Location GDA94 | | Brief Description |
|----------|----------------------------|----------------|------------|--|
| | | South | East | |
| B15 | Dovedale Homestead Complex | -24.289001 | 149.883251 | Homestead complex comprising a 1950s house, cattle yards, two sheds (one derelict), water tanks and a silo located within an area approximately 220 metres by 140 metres at the southern end of the Baralaba South MLA. |
| B16 | Dam 7 | -24.288977 | 149.879670 | Earthen banked dam near the base of a hill sloping to the south at the point of the confluence of several ephemeral creeks. The bank is located on the east, west and south sides and is approximately 2.5 metres high. The resultant dam is approximately 50 metres by 30 metres and rectangular. |
| B17 | Survey Tree | -24.256629 | 149.868190 | Dead sandalwood tree, approximately 300 millimetres in diameter. Axe blaze on northwest face. There are no numbers or letters carved into the tree. |

Significance assessment

The Non-Indigenous Cultural Heritage significance of the entire Project area was evaluated using recognised benchmarks such as *The Burra Charter* and *GUIDELINE: Identifying and assessing places of local cultural heritage significance in Queensland'* (refer to Section 1.4.3 for heritage criteria and Section 1.7 for relevant heritage legislation and framework). The Baralaba South Project area is considered to have local significance under criteria 1 using the local heritage guidelines. It is representative of the period of closer settlement in the region from the 1930s with places that demonstrate grazing aspects of the region's cattle industry. It is also representative of a 1920s railway development in central Queensland. A segment of telephone line located on the eastern side of the railway represents a now uncommon aspect of this type of place in the Queensland landscape. A summary of the significance of the Project area using the local heritage criteria is as follows:

| Criteria | Discussion |
|-----------------|--|
| 1 | <p>The Project area contributes to contextual information related to closer settlement in central Queensland since the 1930s. This has resulted in a cultural landscape which is representative of this phase of Queensland's history in the region.</p> <p>The Project area is also closely associated with the establishment of the 1920s expansion of the rail network in the central Queensland area. The Dawson Valley Railway and remnant associated features provide tangible evidence of the importance of the rail networks in Queensland prior to the development of road transport.</p> <p>Telephone lines were once a ubiquitous feature of the Queensland landscape but are now becoming uncommon and endangered. Although not standing, the segment of telephone line located in the Project area provides an unusual example of the range of fittings and brackets associated with this type of place.</p> <p><u>The Project area is considered to have historic value at a low local level within this category.</u></p> |

The 13 Non-Indigenous Cultural Heritage sites and places have been attributed an individual cultural heritage significance rating. Refer to Section 4.3 for details.

| Site No. | Name/Type | Significance | Archaeological Potential |
|----------|-------------------------------|----------------|--------------------------|
| B01 | Dam 1 | Nil | Nil |
| B02 | Turkey Nest 1 | Nil | Nil |
| B05 | Dawson Valley Railway | Low local | Low |
| B06 | Telephone Line | Moderate local | Low |
| B08 | Dam 2 | Nil | Nil |
| B10 | Dam 4 | Nil | Nil |
| B11 | Dam 5 | Nil | Nil |
| B12 | Dam 6 | Nil | Nil |
| B13 | Turkey Nest 3 | Nil | Nil |
| B14 | Broadmeadow Homestead complex | Nil | Low |
| B15 | Dovedale Homestead Complex | Low local | Nil |
| B16 | Dam 7 | Nil | Nil |
| B17 | Survey Tree | Low Local | Nil |

Impact to NICH Sites and Places

All of the identified Non-Indigenous Cultural Heritage sites and places detailed above will be (or potentially be) removed by the Project. Recommendations to manage impacts to the significant Non-Indigenous Cultural Heritage sites and places are provided in Section 6. Refer to Section 5 for the impact assessment.

There is low potential for further Non-Indigenous Cultural Heritage places or items to exist within the Project area. Unidentified items/sites/places are likely to relate to pastoral activities, dams, historic survey trees, and remnant boundary fence lines. Recommendations to manage Project impact on unexpected finds are provided in Section 6.

Recommendations

The recommendations of this report (Section 6) provide strategies for the management of the Non-Indigenous Cultural Heritage values of the project area through:

- A general policy of avoidance of disturbance of significant Non-Indigenous Cultural Heritage sites and places where at all possible as the primary principle of management;
- The practice of diligence during works conducted within the Project area, particularly during any clearing or construction phases associated with initial preparation of the area;
- Management of artefacts associated with the Telephone line; and,
- The adoption of a process for the cultural heritage management of currently unknown Non-Indigenous Cultural Heritage.

CONTENTS

| | |
|--|-----------|
| EXECUTIVE SUMMARY | II |
| GLOSSARY OF TERMS..... | XI |
| 1 INTRODUCTION..... | 1 |
| 1.1 PROJECT SUMMARY..... | 1 |
| 1.2 PROJECT AREA..... | 2 |
| 1.3 TERMS OF REFERENCE AND ADDITIONAL REQUIREMENTS | 4 |
| 1.3.1 Terms of Reference..... | 4 |
| 1.3.2 Additional Requirements | 4 |
| 1.4 METHODOLOGY..... | 5 |
| 1.4.1 Desktop Assessment | 5 |
| 1.4.2 Field Survey (2012)..... | 5 |
| 1.4.3 Heritage Significance Criteria | 6 |
| 1.5 CONSTRAINTS | 9 |
| 1.6 DATES AND PERSONNEL | 9 |
| 1.7 HERITAGE FRAMEWORK..... | 9 |
| 1.7.1 World Heritage | 9 |
| 1.7.2 National Legislation | 10 |
| 1.7.3 State Legislation | 10 |
| 1.7.4 Local Legislation | 11 |
| 1.7.5 Non-Statutory Framework..... | 11 |
| 1.7.6 Other Guidelines and Charters | 11 |
| 2 HISTORY AND CONTEXT..... | 14 |
| 2.1 HERITAGE SEARCHES | 14 |
| 2.1.1 EPA Places..... | 14 |
| 2.2 PREVIOUS STUDIES | 14 |
| 2.3 HISTORY OF THE PROJECT AREA..... | 15 |
| 2.3.1 European Exploration..... | 15 |
| 2.3.2 The Establishment of Pastoralism | 16 |
| 2.3.3 Encounters Between Aboriginal People..... | 17 |
| 2.3.4 Consolidation and Closer Settlement | 18 |
| 2.3.5 Prickly Pear | 21 |
| 2.3.6 Irrigation Schemes | 22 |
| 2.3.7 Diversification..... | 22 |
| 2.3.8 Stock Routes, Roads and Railways..... | 23 |
| 2.3.9 Development of Baralaba | 25 |
| 2.3.10 Mining..... | 27 |
| 3 ASSESSMENT OUTCOMES | 31 |
| 3.1 SURVEY FINDINGS..... | 31 |
| 3.1.1 NICH Sites Identified..... | 41 |
| 3.2 ANALYSIS OF SURVEY RESULTS | 45 |
| 4 SIGNIFICANCE ASSESSMENT | 47 |
| 4.1 SIGNIFICANCE RATINGS FOR THE PROJECT AREA | 47 |
| 4.2 ARCHAEOLOGICAL PLACES..... | 47 |
| 4.3 SIGNIFICANCE OF IDENTIFIED NICH SITES | 48 |
| 5 POTENTIAL IMPACTS..... | 49 |

| | | |
|----------|--|-----------|
| 5.1 | TYPES OF POTENTIAL IMPACTS..... | 49 |
| 5.2 | PROJECT IMPACT ON IDENTIFIED NICH SITES AND PLACES | 49 |
| 5.3 | PROJECT IMPACT ON POTENTIAL NICH SITES AND PLACES | 51 |
| 6 | CONCLUSION AND RECOMMENDATIONS..... | 52 |
| 6.1 | AVOIDANCE OF SITES | 52 |
| 6.2 | NICH HERITAGE MANAGEMENT..... | 52 |
| 6.3 | MANAGEMENT OF ARTEFACTS ASSOCIATED WITH THE TELEPHONE LINE | 53 |
| 6.4 | NICH MANAGEMENT OF UNKNOWN SITES..... | 53 |
| | REFERENCES..... | 54 |
| | APPENDIX..... | 57 |
| | APPENDIX 1: SITE DETAILS | 58 |
| | APPENDIX 2: STOP WORK PROCEDURE..... | 77 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1: Regional location of the Project (Baralaba South 2023). | 3 |
| Figure 2: Location of the Project Area in Relation to Historic Stations (Google Earth 2019, overlaid with QSA Item ID 629073). | 17 |
| Figure 3: Harcourt consolidated run 1886 (Source QSA Item ID 28736). | 19 |
| Figure 4: Area of proposed coal reserve. Note location of coal seam identified by Dunstan (Source QSA ID Item 26851). | 20 |
| Figure 5: 1914 Stock routes (John Oxley Library, Item ID 629865.) | 24 |
| Figure 6: Baralaba railway station and buildings (Bedford 1997:np). | 26 |
| Figure 7: Coal Mining Leases 1903 (Source QSA ID 26851). | 27 |
| Figure 8: Location of early mining activity on the Baralaba field (Source Whitmore 1991: Figure 39, p327). | 28 |
| Figure 9: Example of a dam (Converge 2012). | 31 |
| Figure 10: Site B01, Dam 1, view to northeast, in 2012 (Converge 2012). | 32 |
| Figure 11: Site B01, Dam 1 in September 2023 (image provided by AARC). | 32 |
| Figure 12: Site B02, Turkey's Nest 1, in 2012 (Converge 2012). | 33 |
| Figure 13: Site B02, Turkey's Nest 1. Note the additional vegetation in 2023 compared to 2012 (image provided by AARC, September 2023). | 33 |
| Figure 14: Example of fencing in the Project area (Converge 2012). | 34 |
| Figure 15: Example of fencing in the Project area (Converge 2012). | 34 |
| Figure 16: Example of remnant terracing located to the northwest of Dovedale homestead (Converge 2012). | 34 |
| Figure 17: Aerial image of remnant terracing in the south section of the Project area (Google Earth Pro 2023). | 35 |
| Figure 18: Dovedale station looking to the southern corner of the Project area (Converge 2012). | 35 |
| Figure 19: Northern end of MLA looking to southeast (Converge 2012). | 35 |
| Figure 20: Site B15, Dovedale homestead in 2012 (Converge 2012). | 36 |
| Figure 21: Dovedale homestead in 2023, note some degradation in condition since 2012 (AARC 2023). | 36 |
| Figure 22: Sheds at the Broadmeadows homestead complex (AARC 2023). | 36 |
| Figure 23: Silo to west of Dovedale homestead (AARC 2023). | 36 |
| Figure 24: Shed to the west of Dovedale homestead (AARC 2023). | 37 |
| Figure 25: Cottage, Broadmeadows (AARC 2023). | 37 |
| Figure 26: Main house, Broadmeadows (AARC 2023). | 37 |
| Figure 27: Narrow chute at Broadmeadow stock yards (Converge 2012). | 38 |
| Figure 28: Stockyards, Broadmeadows (AARC 2023). | 38 |
| Figure 29: Dovedale stock yards. View to south west (Converge 2012). | 38 |
| Figure 30: Stock yards, Dovedale (AARC 2023). | 38 |
| Figure 31: Banana Baralaba Road. View to southeast (Converge 2012). | 39 |
| Figure 32: Exploration track. View to north (Converge 2012). | 39 |
| Figure 33: Example of remnant sleepers on embankment. View to the south (Converge 2012). | 39 |
| Figure 34: Site B06. Example of telephone pole. View to northwest (Converge 2012). | 40 |
| Figure 35: Example of telephone pole (AARC 2023). | 40 |
| Figure 36: Site B06. Example of alternate cross bar arrangement (Converge 2012). | 40 |
| Figure 37: Example of alternate cross bar arrangement and insulator(AARC 2023). | 40 |
| Figure 38: Site B17, survey tree (AARC 2023). | 41 |
| Figure 39: Location of identified NICH sites and places in the Project area (Converge 2023). | 44 |

| | |
|--|----|
| Figure 40: Dam 1 (AARC 2023)..... | 59 |
| Figure 41: Turkey's Nest 1 (AARC 2023). | 60 |
| Figure 42: Turkey Nest 1. View to W..... | 60 |
| Figure 43: Example of remnant sleepers on embankment. View to the south (Converge 2012)..... | 61 |
| Figure 44: Example of cross bar with remnant insulators (AARC 2023). | 63 |
| Figure 45: Example telephone pole (AARC 2023). | 63 |
| Figure 46: Dam 2 (AARC 2023). | 64 |
| Figure 47: Dam 4 (AARC 2023)..... | 65 |
| Figure 48: Dam 5 with old station track in foreground. View to east, south east..... | 66 |
| Figure 49: Dam 6: View to northwest (Converge 2012)..... | 67 |
| Figure 50: Turkey's nest 3 (AARC 2023). | 68 |
| Figure 51: Main house, Broadmeadows (AARC 2023)..... | 70 |
| Figure 52: Sheds, Broadmeadows (AARC 2023). | 70 |
| Figure 53: Stock yards, Broadmeadows (AARC 2023). | 71 |
| Figure 54: Cottage, Broadmeadows (AARC 2023). | 71 |
| Figure 55: Dovedale homestead (AARC 2023). | 73 |
| Figure 56: Silo to west (AARC 2023). | 73 |
| Figure 57: Shed to west of Dovedale homestead (AARC 2023). | 74 |
| Figure 58: Dovedale stock yards (AARC 2023). | 74 |
| Figure 59: Dam 7 (AARC 2023). | 75 |
| Figure 60: Blazed Tree (AARC 2023)..... | 76 |

LIST OF TABLES

| | |
|---|----|
| Table 1: Relative Significance Criteria..... | 8 |
| Table 2: Results of heritage searches..... | 14 |
| Table 3: Historic themes..... | 15 |
| Table 4: Sites identified in current Project area..... | 41 |
| Table 5: Significance ratings for the Project area..... | 47 |
| Table 6: Significance of identified sites..... | 48 |
| Table 7: Project impact on NICH..... | 49 |

GLOSSARY OF TERMS

| ABBREVIATION | TERM |
|---------------------|---|
| ACH Act | <i>Australian Heritage Council Act 2003</i> |
| ACH | Australian Heritage Council |
| The Proponent | Baralaba South Pty Ltd (ACN 603 037 065) (formerly Mount Ramsay Coal Company Pty Ltd and Wonbindi TLO Holdings Pty Limited) |
| Burra Charter | <i>The Burra Charter of Australia International Council on Monuments and Sites</i> |
| BSC | Banana Shire Council |
| CHPP | Coal Handling Preparation Plant |
| Converge | Converge Heritage + Community |
| CHL | Commonwealth Heritage List |
| DCCEEW | Department of Climate Change, Energy, the Environment and Water |
| DES | Department of Environment and Science |
| EIS | Environmental Impact Statement |
| ETL | electricity transmission line |
| GPS | global positioning system |
| GSV | ground surface visibility |
| km | kilometres |
| LGA | Local Government Area |
| LHR | Local Heritage Register |
| m | metres |
| mm | millimetres |
| MLA | Mining Lease Application |
| Mtpa | million tonnes per annum |
| NICH | Non-Indigenous Cultural Heritage |
| NHL | National Heritage List |
| Project (the) | Baralaba South Project |
| PCI | pulverized coal injection |
| QHA | <i>Queensland Heritage Act 1992</i> |
| QHC | Queensland Heritage Council |
| QHR | Queensland Heritage Register |
| QNT | Queensland National Trust |
| RNE | Register of the National Estate (former) |
| ROM | run-of-mine |
| ToR | Terms of Reference |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| WHL | World Heritage List |

1 INTRODUCTION

Converge Heritage + Community (Converge) prepared a Non-Indigenous Cultural Heritage (NICH) technical report for the Baralaba South Project Environmental Impact Statement (EIS) in 2012 for Cockatoo Coal, which was updated in 2019 for Mount Ramsay Coal Company Pty Ltd. The Project did not progress at that time and the previous NICH report now requires update for the revised Project. This desktop report for the Baralaba South Project (the Project) is based on the work completed by Converge in 2012 and 2019. Converge was engaged by AARC for this assessment.

Owing to the changed Project plans, the specific changes in this report, compared to the 2012 and 2019 reports, include the Project description, impact assessment and recommendations. 17 NICH places were identified in the 2012 report. Of these, only 13 are located in the changed Project area.

1.1 Project Summary

The following summary description of the project was provided by AARC (21/07/2023).

Baralaba South Pty Ltd (ACN 603 037 065) (formerly Mount Ramsay Coal Company Pty Ltd and Wonbindi TLO Holdings Pty Limited) (the Proponent) proposes to develop the Project. The Project is a greenfield, open-cut metallurgical coal mine which would extract up to 2.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal to produce pulverised coal injection (PCI) coal for international export to the steel production industry. There will be up to a two year construction period followed by an operational life of approximately 23 years under optimal mining conditions (with an overlap in construction and operation in 2030). Construction is planned to start in 2029 with an operational start date of 2030.

Open-cut coal mining activities would target the Baralaba Coal Measures, including the basal sub-unit Kaloola Member, where the structural dip of the Permian geology brings them to or near the surface within Mining Lease Application (MLA) 700057. The MLA is 2,214 hectares (ha). The total disturbance footprint of the water extraction/release infrastructure, road realignment and ETL assessment zone is 1,752 ha and the total disturbance within the MLA is 1,208 ha. The road re-alignment will be approximately a 4.5 kilometres (km) section of Moura - Baralaba road with approximately 10 ha of disturbance. The ETL disturbance will be approximately 16 ha and the water release/extraction pipeline will approximately 1 ha of disturbance.

The total resource targeted comprises 49 Mt of ROM coal estimated to produce approximately 36 Mt of PCI product coal over the life of the Project. Overburden and interburden will be disposed of in out-of-pit spoil dumps located contiguous with the pit excavation, and in-pit dumps as part of ongoing progressive rehabilitation behind the advancing operations.

The Project will provide a continuation of mining operations within the local area, wherein mining operations decline at the Baralaba North Mine, mining operations will ramp up at the Project. The main activities associated with the Project include:

- A greenfield open-cut coal mine to be developed within the MLA 700057, including:
 - Open-cut mining operations using conventional truck and excavator methods.
 - A Coal Handling Preparation Plant (CHPP).

- A mining infrastructure area, including workshops, administration buildings, fuel and chemical storage facilities, warehouse and hardstand areas.
- ROM coal and product coal stockpile pads.
- Topsoil stockpiles, laydown areas and borrow areas.
- Haul roads and internal roads.
- Water management infrastructure.
- Flood protection levee around the north-western boundary of the MLA within the floodplain of the Dawson River .
- Backfilling of mine voids with waste rock behind the advancing open-cut mining operations and the placement of waste rock in out-of-pit emplacements adjacent to the pit extents.
- Dewatering of CHPP coal rejects and disposal on-site within mine voids behind the advancing open-cut mining operation.
- Recovery and recycling of processed wastewater through the CHPP.
- Other associated minor infrastructure, plant, equipment, and activities; and
- Exploration activities.
- The realignment of the Moura Baralaba Road to the east of MLA 700057 is subject to separate approvals;
- Product coal road transport approximately 40 km via the existing Baralaba North Mine haul route on public Council-controlled roads to the existing train load-out facility located approximately 2 km east of Moura; and
- Product coal rail transport to the Port of Gladstone for export to international markets.

The ETL is approximately 8 km in length within a 20 metre (m) wide easement. The ETL will link the Project with the Baralaba Substation, located approximately 6 km east-south-east of the Baralaba township. Two ETL alignment options are being considered for the Project and the final ETL alignment will be determined at a later date in consideration of the outcomes of the assessments conducted for the EIS. The ETL will be subject to separate approvals, for which the necessary permitting will be undertaken by Ergon.

1.2 Project Area

The Project will be located approximately 8 km south of the township of Baralaba and 115 km west of Rockhampton and 2 km east of Moura in the lower Bowen Basin region of Central Queensland (Figure 1). The Baralaba South Project is approximately 12 km south of the existing Baralaba North Mine and is located within the Banana Shire Council (BSC) Local Government Area (LGA).

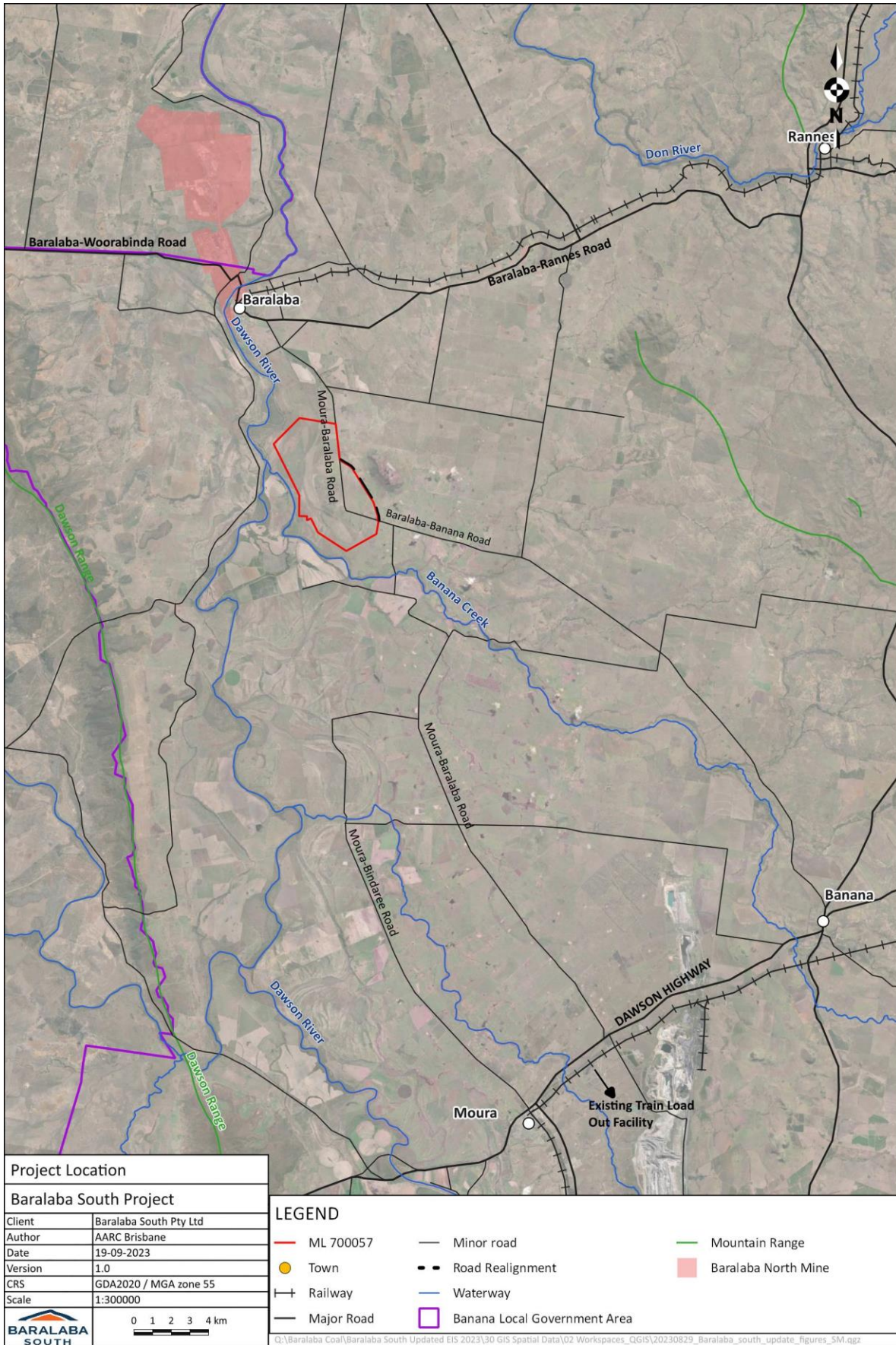


Figure 1: Regional location of the Project (Baralaba South 2023).

1.3 Terms of Reference and Additional Requirements

1.3.1 Terms of Reference

The following Terms of Reference (ToR) for NICH are sourced verbatim from the '*Terms of Reference for the Baralaba South Project, Environmental Impact Statement, Proposed by Wonbindi Coal Pty Ltd*' (July 2017).

8.11 Cultural heritage

Objective

The construction and operation of the Project should aim to ensure that the nature and scale of the Project does not compromise the cultural heritage significance of a heritage place or heritage area.

Information requirements (8.11.2)

For non-Indigenous historical heritage, undertake a study of, and describe, the known and potential historical cultural and landscape heritage values of the area potentially affected by the Project. Any such study should be conducted by an appropriately qualified cultural heritage practitioner. Provide strategies to mitigate and manage any negative impacts on non-Indigenous cultural heritage values and enhance any positive impacts.

1.3.2 Additional Requirements

Requirements for a NICH assessment for an EIS are also set out in the '*Non-Indigenous cultural heritage—EIS information guideline*' prepared by the Department of Environment and Science (DES, April 2022). A NICH study is to include, as a minimum, the following elements:

- *A desktop assessment reviewing all sources of information on non-Indigenous historical cultural and landscape heritage values within the region of the project site, including:*
 - *The Queensland Heritage Register for places already protected under the Queensland Heritage Act.*
 - *Local government heritage registers, lists or inventories.*
 - *Results of previous cultural and landscape heritage studies conducted in the region.*
 - *Appropriate national and international guidelines for the descriptions of sites, places and regions.*
- *A physical archaeological investigation of the area potentially affected by the project (based on the results of the desktop assessment) that addresses:*
 - *All types of historical heritage places located within the project area including built, archaeological and non-Indigenous cultural landscape values.*
 - *The discovery and protection of any previously unidentified archaeological artefacts or archaeological places during the course of the archaeological investigation in accordance with Part 9 of the Queensland Heritage Act.*
- *An investigation of whether the area potentially affected by the project includes places of possible state or local heritage significance, including:*

- *An assessment of places of potential heritage significance against the criteria contained in Division 1 of the Queensland Heritage Act.*
- *Consultation with appropriate academic historians and with local history organisations about the history of the area and potential for physical evidence of this history within the project area.*
- *Notification to the department of any archaeological artefacts, or places that are of potential state or local heritage significance but not currently on the state or local heritage register.*

1.4 Methodology

The following methodology was employed to meet the Project's ToR for NICH (see Section 1.3), as well as following the DES guidelines for NICH EIS preparation (see above), best practice and legislative framework (see Section 1.7.6).

1.4.1 Desktop Assessment

An initial desktop assessment was undertaken in 2012 to determine the existence, extent and probable levels of significance of any places likely to be located within the Project area. This assessment comprised searches of statutory and non-statutory registers and databases, and a review of existing published and unpublished reports, surveys and assessments of the Project area and its immediate surroundings. Revised database searches were undertaken in 2019, and again for the current assessment in 2023 to determine if any heritage places had been added to these databases since the previous report was prepared. Refer to Section 2.1.

The results of these desktop assessments were used to develop a targeted field survey of the Project area in 2012, and informed the assessment provided in this report. Current photographs of the Project area and identified NICH places were provided by AARC (September 2023) and have been reviewed and included in the current assessment, which has been undertaken as desktop only.

1.4.2 Field Survey (2012)

The survey methodology adopted for the assessments incorporated a vehicle and pedestrian survey undertaken by Converge consultants across the Project area from 26th – 29th September 2012. Updated field surveys were not included in the current study.

Sampling strategies (where to look) can be 'purposive', where specific areas are targeted, or 'probabilistic', where decisions are made to survey without any prior knowledge or predictive model of what heritage resources might exist in the landscape to be surveyed. Cultural heritage survey strategies generally involve transects across the Project area chosen at random (probabilistic) to avoid possible bias in the results or transects within areas (purposive) known to potentially contain places of historic significance, that are earmarked for development or that contain places identified in previous research or surveys.

The surveys for this report generally relied on a purposive sampling strategy. Historical and contextual research combined with the results of previous surveys enabled an initial assessment of those areas known to be of historical interest. Identified NICH sites and places were recorded regarding site title, location, site integrity, ground surface visibility,

condition and relevant comments including type of site and type of artefacts located at the site.

All assessment data was recorded in field notebooks and locations of any items, sites or places of NICH significance were captured via a hand held global positioning system (GPS) receiver, accurate to ± 5 metres using datum WGS 84/UTM 55 S. This information was then used to create maps identifying the location of sites and features noted during the assessment. Where access was not possible the general location of the site in relation to the nearest road access was identified by GPS. Areas of interest were photographed using a digital camera.

1.4.3 Heritage Significance Criteria

Determining the significance of a heritage place, item or site requires research to enable an understanding of its value or level of importance. Assessments of heritage significance for this assessment were based on an understanding of the Project area's history, together with the physical analysis (field survey) and an appreciation of the comparative level of rarity or representativeness that the site possesses. In Queensland, heritage practitioners rely on two key documents to undertake significance assessments: *The Burra Charter of Australia International Council on Monuments and Sites* (The Burra Charter) (Australia ICOMOS 2013) and the *Queensland Heritage Act 1992* (QHA).

1.4.3.1 State Heritage

The QHA outlines the following criteria for assessing cultural significance of heritage places. Under Section 35 (1) of the QHA, a place may be entered in the register if it satisfies one or more of the following eight criteria:

- A. If the place is important in demonstrating the evolution or pattern of Queensland's history.
- B. If the place demonstrates rare, uncommon or endangered aspects of Queensland's cultural heritage.
- C. If the place has potential to yield information that will contribute to an understanding of Queensland's history.
- D. If the place is important in demonstrating the principal characteristics of a particular class of cultural places.
- E. If the place is important because of its aesthetic significance.
- F. If the place is important in demonstrating a high degree of creative or technical achievement at a particular period.
- G. If the place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- H. If the place has a special association with the life or work of a particular person, group or organisation of importance in Queensland's history.

1.4.3.2 Local Heritage

DES prepared the '*GUIDELINE: Identifying and assessing places of local cultural heritage significance in Queensland*' (Queensland Government 2020) which is used for assessing places of potential local heritage significance. This Guideline takes the State cultural

heritage criteria (see Section 1.4.3.1) as a starting point but reduces the number of local cultural heritage criteria to five, with various sub-criteria.

The criteria used for assessing places of local heritage significance is shown below:

1. Historical – The place makes a significant contribution to our understanding of local history.
 - 1.1 is associated with an event, phase, movement, activity, way of life, custom, process, function or land use that has made a notable or influential contribution to local history;
 - 1.2 exemplifies a way of life, custom, process, function or land use that once was common but is now rare or uncommon or that has always been uncommon;
 - 1.3 shows creative or technical achievement at a particular period in local history; or
 - 1.4 has a special association with a person, group of people or organisation who or which has made a notable or influential contribution to local history.

2. Scientific – The place has potential to yield information that may make a significant contribution to our understanding of local history.
 - 2.1 knowledge that may lead to a greater understanding of an aspect of local history; or
 - 2.2 knowledge that may aid in comparative analysis of similar places.

3. Typological – The place demonstrates the key characteristics of a type or class of place that makes a significant contribution to our understanding of local history.
 - 3.1 a way of life or custom, function, process or land use, that has made a notable contribution to local history;
 - 3.2 the impact of an ideology, value or philosophy on the local built environment (including cultural landscapes);
 - 3.3 the work of a designer who has made a notable or influential contribution to the local built environment (including cultural landscapes);
 - 3.4 a form that has made a notable contribution to the local built environment (including cultural landscapes);
 - 3.5 an architectural style that has made a notable contribution to the local built environment (including cultural landscapes);
 - 3.6 a construction technique or specific use of materials that has made a conspicuous or early contribution to the local built environment (including cultural landscapes);
 - 3.7 the evolution or development of the key characteristics of a type of class of place; or
 - 3.8 a design or form that once was common but is now rare or uncommon or that has always been uncommon.

4. Aesthetic – The place has aesthetic qualities that contribute to its cultural heritage significance.
 - 4.1 beautiful attributes;
 - 4.2 natural aesthetic quality;
 - 4.3 picturesque or evocative attributes;

- 4.4 expressive attributes;
 - 4.5 landmark quality;
 - 4.6 streetscape contribution;
 - 4.7 symbolic meaning;
 - 4.8 artistic value;
 - 4.9 design merit (including in architectural design, landscape design, technological design or construction technique); or
 - 4.10 a high level of craftsmanship.
5. **Spiritual** – The place has a strong or special association with a local community or local cultural group, for social, cultural or spiritual reasons.
- 5.1 is important to a local community as a landmark, marker or signature;
 - 5.2 offers a valued customary experience;
 - 5.3 is a popular meeting or gathering place;
 - 5.4 is associated with events having a profound effect on a local community or cultural group;
 - 5.5 is a venue for ritual or ceremony;
 - 5.6 symbolically represents the past in the present; or
 - 5.7 has an essential community function leading to special attachment.

1.4.3.3 *Relative Significance*

The following thresholds (Table 1) of relative significance are applied to determine the level (i.e., local, state, or national) at which a site or element is considered significant.

Table 1: Relative Significance Criteria.

| DEFINITION | THRESHOLD |
|---|---|
| Element of outstanding/exceptional significance or heritage value - embodies national or state heritage significance in its own right and makes an irreplaceable contribution to the significance/heritage value of the place as a whole. | Likely to fulfil national heritage entry criteria. |
| Element of high significance or heritage value - embodies state heritage significance in its own right and makes an irreplaceable contribution to the significance/heritage value of the place as a whole. | Likely to fulfil state heritage entry criteria. |
| Element of moderate significance or heritage value - embodies state or local heritage values in its own right and makes an irreplaceable contribution to values of the place as a whole. | Likely to fulfil state and/or local heritage entry criteria |
| Element of low significance or heritage value - embodies local heritage values in its own right and makes a significant contribution to the significance/heritage value of the place as a whole. | Likely to fulfil local heritage entry criteria |
| Element is neutral, with little or no heritage value. | Unlikely to fulfil local heritage entry criteria. May contribute to other elements of heritage value. |

DEFINITION

Intrusive element which detracts, or has the potential to detract, from the significance of the place.

THRESHOLD

Does not have heritage value.
Does not contribute to other elements of heritage value.

Section 4 presents the results of the significance assessment of the Project area. The results from the significance assessment informed the impact assessment (Section 5), recommendations and management strategies for management of identified and potential NICH in the Project area (refer to Section 6).

1.5 Constraints

This report is desktop only. Results from the 2012 fieldwork and study as well as current photographs (AARC 2023) of the project area were used to inform this report. Aboriginal cultural heritage is not included in this report.

1.6 Dates and Personnel

2012 Study: McCollum Environmental Management Services Pty Ltd commissioned Converge to undertake the study between September 2011 and October 2012. Karen Townrow, Senior Archaeologist, completed the desktop literature review and prepared the 2012 report. The fieldwork was undertaken in September 2012 by Karen Townrow and Frances Dawson, Archaeologist.

2019 Study: Converge was commissioned in December 2018 by AARC to prepare an updated report. The draft updated report was completed in January 2019 and was finalised in September 2019. The 2019 report was prepared by Samantha Negoita, Senior Heritage Consultant. Dr James Smith, Senior Archaeologist and GIS Specialist, prepared the mapping for this report.

2023 Study: Converge was commissioned in August 2023 by AARC to provide a further update to the report. This updated report was prepared by Samantha Negoita, Professional Services Manager. Dr James Smith prepared the updated mapping for this report. The draft updated report was prepared in September 2023.

1.7 Heritage Framework

Several national, state and local Acts and regulations are relevant to this NICH assessment. Knowledge of the heritage framework is essential when assessing sites, places or items of NICH significance. Searches of relevant statutory heritage registers associated with national, state and local legislation were undertaken for this study (refer to Section 2.1 for the results). Places included on these registers possess an established level of significance. However, the absence of a place on these registers does not demonstrate that it is not significant, as the registers are not comprehensive. Values can also change and evolve, and places may become significant as a result.

1.7.1 World Heritage

The World Heritage List (WHL) is compiled by United Nations Educational, Scientific and Cultural Organisation (UNESCO) and is an inventory of places considered to have

outstanding universal value. WHL places in Australia are managed under the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), see below.

1.7.2 National Legislation

1.7.2.1 *Environment Protection and Biodiversity Conservation Act 1999*

The EPBC Act is the key national heritage legislation and is administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEE). This Act provides a number of statutory and legislative controls for heritage places. The EPBC Act protects Australia's heritage. This includes:

- Natural, historic or Indigenous places of outstanding national heritage value.
- Heritage places on or in Commonwealth lands and waters, or under Australian Government control.
- Areas on the WHL, or that the minister declares as a World Heritage property.

Places of national heritage value and those owned or managed by the Commonwealth are located on the National Heritage List (NHL) and Commonwealth Heritage List (CHL) respectively.

1.7.2.2 *Australian Heritage Council Act 2003*

The *Australian Heritage Council Act 2003* (AHC Act) provides for the establishment of the Australian Heritage Council (AHC), which is the principal advisory group to the Australian Government on heritage issues. The AHC Act is also responsible for the assessment and nomination of places to the NHL and CHL.

1.7.2.3 *Protection of Moveable Cultural Heritage Act 1986*

The *Protection of Moveable Cultural Heritage Act 1986* regulates the export of Australia's significant cultural heritage objects. The Act does not restrict normal and legitimate trade in cultural property and does not affect an individual's right to own or sell within Australia.

1.7.3 State Legislation

Places of State heritage significance in Queensland are managed under the QHA. The Act provides for the establishment of the Queensland Heritage Council (QHC) and the Queensland Heritage Register (QHR), which lists places of cultural heritage significance to Queensland and regulates development of registered places. Under the provisions of the QHA, any development of a place listed on the QHR must be carried out in accordance with the QHA. A place may be entered in the register if it satisfies one or more of the assessment criteria under Section 35 (1) of this Act (see Section 1.4.3.1 for the criteria).

The QHA also applies to potential archaeological places:

- Under Part 9 'Discovery and protection of archaeological artefacts and underwater cultural heritage artefacts'; Section 88 – 90.
- Section 89 requires a person to advise the Chief Executive Officer of the DES of an archaeological artefact that is an important source of information about an aspect

of Queensland's history. This advice must be given as soon as practicable after the person discovers the item.

- Section 90 stipulates that it is an offence to interfere with an archaeological artefact once notice has been given of the artefact to the Chief Executive Officer.

1.7.4 Local Legislation

Local heritage places are managed under 'Part 11: Provisions about places of cultural heritage significance in local government areas' under the QHA, local planning schemes. It is mandatory for local governments to have a Local Heritage Register (LHR). The QHA provides a process for establishing and nominating places to LHRs. Specific criteria must be met to nominate a place to the LHR, and these include:

- Enough information to identify the location and boundaries of the place.
- A statement about the cultural heritage significance of the place.

The Project area is located within the LGA of the BSC. The relevant planning scheme for the Project area is the *Banana Shire Planning Scheme 2021*. Places listed in the 'Banana Shire Local Heritage Register' are managed under the 'Local Heritage Place Code' and are identified on the 'Heritage Overlay Map' of the planning scheme. Refer to Section 1.4.3.2 for local heritage criteria.

1.7.5 Non-Statutory Framework

There are other sources for heritage places or historic sites than statutory registers. Places included in these sources are not afforded legislative protection. Nonetheless, places identified during searches of these sources contribute to a better understanding of the Project area and often identify places that have been overlooked for entry on statutory heritage registers. This is particularly important when considering the provisions of the QHA with regard to archaeological places.

1.7.5.1 Register of the National Estate – Archive

The AHC manages the former Register of the National Estate (RNE). The RNE was frozen in 2007 and from February 2012 ceased to exist as a statutory register. The RNE remains an archive of information for more than 13,000 places across Australia, many of which are of local and state significance, and is therefore considered in this report.

1.7.5.2 Queensland National Trust

The register of the Queensland National Trust (QNT) was searched for the Project. The QNT is the Queensland branch of the National Trust of Australia, which is a community based, non-government organisation that maintains a non-statutory register of heritage places. The listing of a place on the QNT register, known as 'classification', has no legal force; however, it is widely recognised as an authoritative statement of the cultural significance of a place.

1.7.6 Other Guidelines and Charters

This Section provides details of the relevant guidelines and charters that are applicable to heritage practice in Australia. These key documents include the *Burra Charter*

(Australia ICOMOS 2013), the *Australian Historic Themes Framework*, and *Using the criteria: a methodology guideline* and are often used to assist practitioners in determining the heritage value of a place.

1.7.6.1 *The Burra Charter*

The *Burra Charter* is the leading guideline for heritage practitioners and provides guidance for the conservation and management of significant places. It defines cultural significance as “aesthetic, historic, scientific or social value for past, present and future generations” and goes on to state “cultural significance is embodied in the *place* itself, its *fabric, setting, use, associations, meanings, records, related places* and *related objects*” (Australia ICOMOS 2013). It outlines a specific methodology/process for assessing sites.

1.7.6.2 *Queensland Heritage Council Using The Criteria: A Methodology Guideline*

QHC provides guidelines to assist in assessing which level of cultural heritage significance is applicable to a site (QHC 2006). These guidelines provide the following definitions:

A place is of local cultural heritage significance if its heritage values are of a purely localised nature and do not contribute significantly to our understanding of the wider pattern and evolution of Queensland's history and heritage...

A place is of state cultural heritage significance if its heritage values contribute to our understanding of the wider pattern and evolution of Queensland's history and heritage. This includes places that contribute significantly to our understanding of the regional pattern and development of Queensland.

1.7.6.3 *Archaeological Research Potential*

The heritage significance of archaeological relics within the Project area was considered according to their potential ability to contribute to our understanding of the culture and history of the nation, state and local area, and the site itself. On the whole, more intact deposits and archaeological resources that can be used to address important research questions, or which can reveal information about little known aspects of history, will have the highest heritage significance. This is a matter that has been considered in an influential paper by Bickford and Sullivan (1984). They note that archaeological significance has long been accepted elsewhere in the world as being linked directly to scientific research value:

A site or resource is said to be scientifically significant when its further study may be expected to help answer questions. That is scientific significance is defined as research potential.

This is a concept that has been extended by Bickford and Sullivan (1984) in the context of Australian archaeology and refined to the following three questions which can be used as a guide for assessing the significance of an archaeological site or resource within a relative framework:

- Can the site contribute knowledge which no other resource can?
- Can the site contribute knowledge which no other site can?

- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

2 HISTORY AND CONTEXT

This Chapter provides results of heritage register searches and a contextual background for the Project area.

2.1 Heritage Searches

Table 2 presents the results of the NICH database and register searches which were undertaken on 15 August 2023.

Table 2: Results of heritage searches.

| DATABASE | HERITAGE PLACE |
|----------|--|
| WHL | <ul style="list-style-type: none">No places were identified on the WHL within the Project area. |
| NHL | <ul style="list-style-type: none">No places were identified on the NHL within the Project area. |
| CHL | <ul style="list-style-type: none">No places were identified on the CHL within the Project area. |
| QHR | <ul style="list-style-type: none">No places were identified on the QHR within the Project area.The Dawson River Colliery/Baralaba Coal Mine (Place No. 602723) lies approximately 7 km north of the Project area. |
| LHR | <ul style="list-style-type: none">No places were identified on the LHR within the Project area. |
| RNE | <ul style="list-style-type: none">No places were identified on the RNE within the Project area. |
| QNT | <ul style="list-style-type: none">No places were identified on the QNT register within the Project area. |

2.1.1 EPA Places

A list of reported places was compiled in 2006 by the then Department of Environment Protection Agency. Locations were provided but these were not verified, and no descriptive information was included with the list. Some of these places were later revisited and listed on the QHR. Two such places lie to the north but outside of the Project area and one lies to the south but outside the Project area as follows:

- 24310: Baralaba Reserve Campsite at -24.168311/149.815835. This place is identified as an Aboriginal camp at Baralaba.
- 24228: Kokotunga Campsite at -24.142937/149.760282
- 24804: Moura Mill Site at -24.584722/149.965278

2.2 Previous Studies

A number of previous cultural heritage reports were consulted for the assessment and provided background information for the historical context. These include:

- AW&A, 1996. *A Predictive assessment of a proposed weir at Paranui, Dawson River, Moura*. Unpublished report for Hyder Consulting (Australia) Pty Ltd.
- AW&A, 1997. *Biloela Callide Power station advice report*. Unpublished report to Gutteridge Haskins & Davey (GH&D), for Powerlink.
- Converge Heritage + Community, 2008. *Assessment of the Historical Values Associated with the Proposed Nathan Dam Dawson River, Taroom*. Unpublished report prepared for MWH.

- Converge Heritage + Community, 2012. *Non-Indigenous Cultural Heritage Assessment, Woori Coal Project, Central Queensland*. Unpublished report prepared for Cockatoo Coal Limited.
- Central Queensland Cultural Heritage Management, 2005. *Statement concerning the Cultural Heritage Values and Places Associated with Great Artesian Basin Springs, Queensland*. Statement prepared for Department of Natural Resources and Mines (Queensland). Rockhampton.

2.3 History of the Project Area

The following historical discussion is not intended to be a complete history of the present Project area. It is based on library research of primary and secondary sources and is intended to provide a contextual background for the identification and assessment of cultural heritage sites, places and features relevant to the Project. This history has been amended from previous reports prepared by Converge for the Project (2012 and 2019).

An understanding of historical themes is central to determining whether a building or site should be included in a heritage register (using the framework provided under the QHA). This history, therefore, is structured using historical themes as an organisational aid. An historical thematic framework was developed by Blake in conjunction with DES heritage staff (2006), which in turn drew upon the *Australian Historic Theme Framework* developed by the AHC (2001).

The following main themes have been identified as being likely to be of relevance to the Project area:

Table 3: Historic themes.

| PRIMARY THEME | SUBTHEME |
|---|--|
| 2. Exploiting, utilising and transforming the land. | 2.1 Exploring, surveying and mapping the land. 2.3 Pastoral activity. 2.4 Agricultural activities. |
| 3. Developing secondary and tertiary industries. | 3.5 Struggling with remoteness, hardship and failure. |
| 5. Moving goods, people and information. | 5.3 Using rail. 5.7 Telecommunications. |

2.3.1 European Exploration

As with most inland districts of Australia west of the Great Dividing Range, the members of an exploration party were the first non-Indigenous travellers to traverse the landscape of both the Darling Downs and the Dawson River. Exploration was an important colonial activity, both to establish the basic geography of the Australian continent and to identify basic natural advantages such as watercourses, arable land, and grazing country. The routes taken by the early expeditions often followed Aboriginal pathways and consequently confirmed these paths as the first transport corridors for the horses, carts, drays, and livestock of the first European 'settlers'.

Whilst Ludwig Leichhardt and his exploration party skirted the region in the vicinity of the Project area in 1844, it was the early pastoralists/squatters who first explored the upper reaches of the Dawson Valley in their speculative endeavours to secure the best country for their sheep in the first large pastoral 'runs' in the area. The Archer brothers; Charles, David, William and Thomas, explored the regions to the south and east of the Project area during the 1840s and early 1850s. The Leith-Hay brothers; Charles, James, and Norman, were also exploring the area from their Rannes run (to the east of the Project area), which they had claimed in 1853. Rannes was located at the base of the junction of two rivers they named the Don and the Dee (also named the Stanks by Charles Archer). Leith-Hay and his men also surveyed Mt Cooper and Mt Ramsay in 1853. Much of the region appears to have comprised impenetrable pockets of brigalow and scrub with open river flats and valleys (Perry 2005: 7-11).

2.3.2 The Establishment of Pastoralism

After mounting pressure from the people such as the Leith-Hays and Archers, the Dawson Valley area was proclaimed part of the 40,000 square mile Leichhardt district in 1854 (AW&A 1996:np). Pastoral runs required reliable water such as that offered by the tributaries around the Dawson River. Consequently, the first pastoral properties were taken up alongside lagoons and larger creeks, as license holders or applicants brought in flocks of sheep overland and pastured them in large, unfenced paddocks. Runs relevant to the Project area are Elsie Bank and Harcourt (see Figure 2). James Leith-Hay took up Benleith on the east side of the Dawson River and immediately north of the Project area in 1857 (see Figure 2). It was transferred to John Glen and the explorer William Landsborough in 1862 and James Gillespie in 1864 before being forfeited. In 1879, Albert Wright took over Benleith. From 1879 to 1881, Wright consolidated Benleith with several other selections, including one adjoining the southern boundaries of Benleith which he named Elsie Bank, into the 347 square mile Nulalbin (see Figure 2, Perry 2005:40). Elsie Bank is described at this time as largely comprising open brigalow and salt bush on the eastern side with well grassed open forest, box and Moreton Bay Ash flats on the west side (QSA Item ID 26851). Despite most of this run being ceded to the Daringa Divisional Board in 1881, Nulalbin remained in the Wright family (Perry 2005:40, Bedford, 1977:3).

Harcourt, located immediately to the south of Elsie Bank (see Figure 2), was originally granted to James Leith-Hay in 1857. Harcourt was forfeited in 1870 and briefly taken up by Filmer Collard before he too abandoned them some months later. In 1872 it was selected by Duncan and Andrew Urquhart and John Findlayson (Perry 2005:39). The Moura run, located to the south of the Project area, was one of five runs taken up by Thomas Gillespie in 1857. Gillespie added further runs to the original five in the following years, but all were had been abandoned and surrendered by 1871. Moura was taken up again in 1874 by Homer & Company and by 1889 had been consolidated with nine additional runs to form 322 square miles and covered most of the Dawson riverfront between Harcourt and Gibber Gunyah (south of the Project area). By 1892, although prone to flooding¹, it was considered the ninth most successful run in the Shire (Perry 2005:28).

¹ For example, the 1890 flood resulted in the river rising 15 metres and spreading over 11 km wide. Stock losses amounted to 500 cattle, 90 horses and 3,000 sheep (Perry 2005:28).



Figure 2: Location of the Project Area in Relation to Historic Stations (Google Earth 2019, overlaid with QSA Item ID 629073).

2.3.3 Encounters Between Aboriginal People

Pastoral expansion into the Dawson region in the nineteenth century inevitably incited conflict between Europeans and the Aboriginal people. Valuable water holes and watercourses were essential to the success of grazing, but European incursion diminished local game and deprived local Aboriginal communities of access to food resources and sacred or ceremonial sites. On the other hand, the squatters' livestock provided an alternative and apparently plentiful food source, and so Aboriginal raids on sheep pens became commonplace, occasionally accompanied by attacks on the shepherds and outstations themselves. Squatters had little tolerance for such attacks on their property and employees, and consequently, as elsewhere, a state of intermittent conflict occasionally sliding into open warfare developed on the Dawson frontier (Reynolds: 1987:42).

By the 1850s the tribes of the Burnett, Auburn, Condamine, Dawson and Maranoa river districts were in open warfare. Accordingly, the NSW colonial government sent a

detachment of Native Mounted Police (NMP) under Captain Frederick Walker to set up depots at various locations across the Leichhardt Pastoral District. At the agitation of Leith-Hay, this included the establishment of a permanent camp at Rannes in May 1854 (Perry 2005:15). Their official task was to maintain law and order, but in practice the punitive patrols and raids of the NMP brought death and devastation to traditional Indigenous communities on the Dawson. Campsites were attacked and violently 'dispersed' by NMP patrols and miscreants, and the innocent were alike punished for any trouble real or perceived (Reynolds 1987:18; Rowley 1970:157-168).

The NMP's presence at frontier districts like the Dawson Valley in the 1850s was partially in response to, and partly a cause of, a brutal cycle of retribution and further violence. In 1853 four shepherds had been killed in two incidents at Rannes and there were several incidents on the track between Rannes and Gladstone. Official reports in 1855 stated that the Aboriginal people west of Rannes were numerous and hostile and later in the year a group of them attacked the police camp killing three troopers as part of a retaliatory action to the earlier abduction by troopers of an Aboriginal woman (Perry 2005:16-17).

It is not possible to estimate the true extent of Aboriginal deaths as the result of NMP raids and settler vigilante activities, but events appear to have reached a peak because of the Hornet Bank massacre in 1857. Retribution and counter attacks across the region resulted in the deaths of an unknown number of the Dawson tribe. It also resulted in the relocation of the remnants of the Rannes troop to a new camp at Banana. Resistance continued into 1865 (Perry 2005:17-19).

In time the local Aboriginal people were dispersed and pacified by the NMP. It became common practice to use local Aboriginal men as labourers on stations and women as domestic servants (French 1989:109). The last large known gathering of Aboriginal people in the vicinity of the Project area appears to have been in 1871 when Albert Wright of Nulalbin saw an estimated 500 Aboriginal people gathered near the abandoned Rio and Harcourt runs (Perry 2005:19).

A camp at Baralaba existed at various locations on the north side of the Dawson River, "down from the bridge". By the 1920s the camp was located at the place locally known as the Ryrie's Yards (Bedford 1977:4). A formally gazetted reserve was located at Baralaba after the enactment of the *Aborigines Protection and Restriction of the Sale of Opium Act, 1897* and numerous Ghungalou people lived at this location (Godwin et al 2002:200 and CQCHU 2005:10). After the 1928 flood, those who remained at the Baralaba camp were removed to Woorabinda (Bedford 1997:4).

2.3.4 Consolidation and Closer Settlement

Whilst the usual effect of the *Crown Lands Act of 1884* and later acts generally resulted in the closer settlement of regions this does not appear to be the case in the Project area. Sinclair and Harcourt runs were consolidated as Harcourt in 1886 and then divided with the resumed portion being used by the Urquharts to depasture stock (QSA Item ID 2678 and 28796). A map of the run and the resumed portion is at Figure 3.

At this time the run was still largely scrub and no improvements were apparent in the Project area. The head station was in a bend of the Dawson River to the south of the Project area. Originally the area was stocked with sheep, but these were replaced with shorthorn cattle and then Herefords (Perry 2005:39, Bedford 1977:23). This pattern was

repeated elsewhere in the region. Sheep ate the native grasses without allowing time for them to seed resulting in spear grass gradually becoming the dominant grass species and making it unsuitable for sheep. Combined with drought in most areas, but also floods associated with the Dawson River, fires and threats from dingoes, cattle began to replace sheep from the mid-1870s (Johansen: 2004:17, Bedford 1977:23). Thus, sheep numbers dropped to 40,000 in the Banana Shire whilst cattle numbers rose to 61,000 (Perry 2005:23).

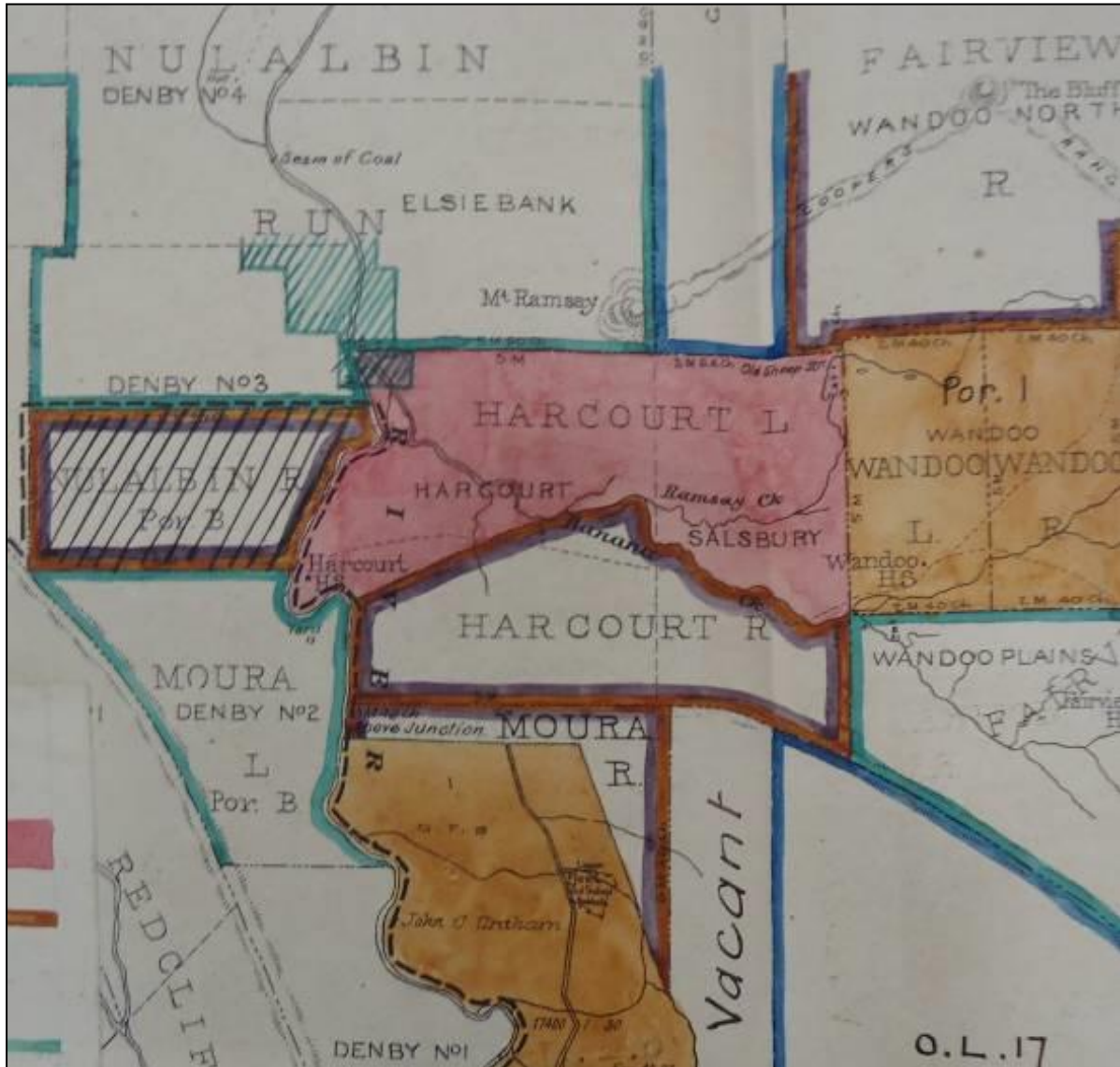


Figure 3: Harcourt consolidated run 1886 (Source QSA Item ID 28736).

During the 1890s there was a huge downturn in cattle prices, but these were somewhat offset through the breeding of 'whalers' for the Indian and British armies (Perry 2005: 23). By 1899, as a result of a report by the assistant geologist Dunstan (see Section 2.3.10 in relation to the development of coal mining in the area) Benleith and Elsie Bank were proposed for coal reserves (see Figure 4). It appears that this proposal resulted in the first official survey of Elsie Bank and trees at regular intervals were blazed to mark the boundaries.

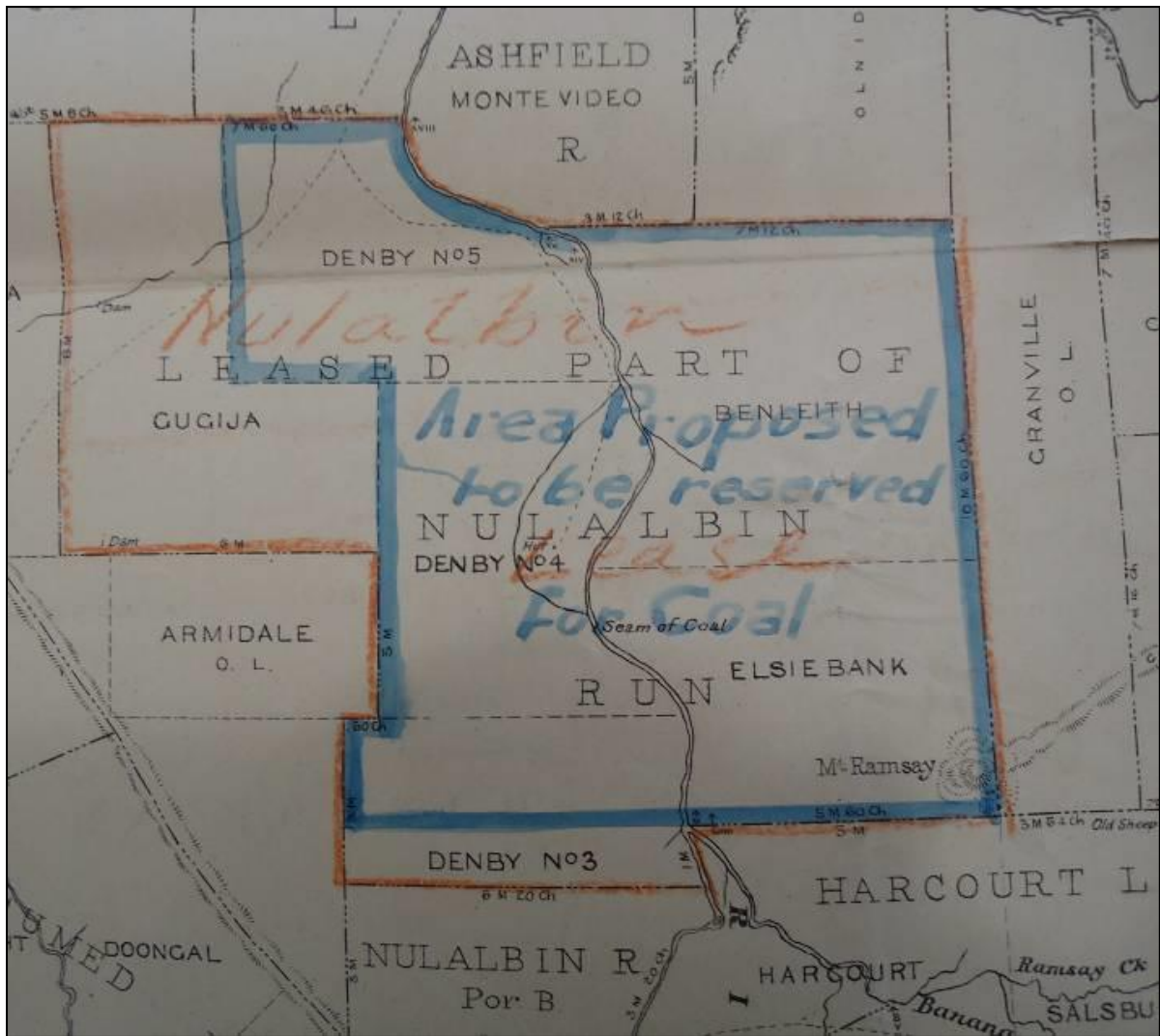


Figure 4: Area of proposed coal reserve. Note location of coal seam identified by Dunstan (Source QSA ID Item 26851).

Coal mining leases were granted along the Dawson River corridor from 1900. By 1903 camps had been established at lease 34 and 80. The camp at Lease 34 later became the site for Baralaba. Despite these developments most of Elsie Bank remained undeveloped and covered in thick scrub with only a narrow strip of open native pasture (QSA Item ID 26851).

Whilst the Project area was less affected by the Federation drought (1895 – 1903), due to its proximity to the Dawson River, around Cracow, to the southeast of the Project area, 36 head out of 8,000 head of cattle survived (Perry 2005:23). Compounding the drought was the spread of ticks into the region which necessitated the construction of dips and yards and the regular mustering of cattle all of which imposed additional expense on already depleted financial resources. Many people defaulted or walked off their properties (Perry 2005:23). Drought was followed by the spread of prickly pear.

2.3.5 Prickly Pear

Prickly Pear² was identified as an agricultural menace in the last decades of the nineteenth century. Originally introduced by homesick European settlers, prickly pear spread rapidly in the Australian environment, out-competing native grasses, and other vegetation, especially in degraded pastoral areas. By 1850 it was established in Chinchilla and by 1863 in Taroom (Freeman 1992:415). In the first decades of the twentieth century, regarded as the peak of the prickly pear infestation, it is estimated that approximately 250,000 square kilometres (an area larger than Great Britain) was virtually rendered useless by thick prickly pear infestations (Freeman, 1992:416). Until effective biological controls were identified and implemented, the chief means through which the colonial and later State governments sought to control prickly pear was through land reform and closer settlement. Specifically, the government sought to encourage settlers to clear prickly pear by imposing targets for clearing pear as part of the conditions of small grazing and farming leases. A series of Acts and amendments passed between 1895 and 1908 created a new class of prickly pear leases, under which land was made available to settlers at cheap or no rent, on the basis that they would clear defined amounts of pear from their blocks over the duration of the lease (Freeman, 1992:419-422). A complicated set of arrangements existed for these prickly pear leases, depending on the degree of prickly pear infestation as assessed by local land commissioners. Prickly pear selections were typically around 2,500 acres and selectors could only acquire a maximum of 5,000 acres. How these Acts were applied to the Project area remains unclear however both Elsie Bank and Harcourt were the subject of reports from the local land ranger (QSA Item ID s28849 and 26789).

In 1913, Urquhart claimed that Harcourt was free of prickly pear as he removed plants as they appeared. A land ranger's report generally agrees with this statement although saying that there was a light infestation of prickly pear. However, a reassessment later in the year found the run to be heavily infested particularly on the north side of Banana Creek in the brigalow scrub and flood prone areas. In the open areas the pear was considered to be under control. This remained the situation into 1919. It was not until 1921 that the property had been largely cleared of pear although a thick patch on the south side of Banana Creek was still problematic in 1929. By this time Urquhart was also undertaking various ringbarking activities (QSA Item ID 28796). Less is known about Elsie Bank but by 1926 only occasional plants were noted (QSA Item ID 28849).

More generally along the Dawson River corridor the brigalow scrub and open river flats became infested with prickly pear so thick that the land was rendered valueless. Cattle were unable to be mustered and became feral within the thickly infested areas. Large areas remained vacant despite it being offered in smaller lots under various lease arrangements (Perry 2005:23, 40).

With the release of the cactoblastis caterpillar in the 1920s, which effectively eradicated prickly pear, small farmers were able to use the full extent of their lands. A new series of Acts and Amendments between 1923 and 1930 developed further classes of small farming leases, based on the capacity of the land, post prickly pear. These leases, many issued over

² Prickly Pear is the common name for several species of the genus *Opuntia* (family Cactaceae) that are indigenous to the Western Hemisphere (Freeman, 1992: 414).

existing prickly pear schemes, were capable of being converted to fee simple upon the elimination of prickly pear and the payment of the original price (*Queensland Government Gazette* No 124, Monday, 15th December 1930 printed in Woodside 1997:71-75). In 1934, land in the Baralaba area was divided into 1 – 2,000-acre blocks and issued for selection under the Prickly Pear Development Scheme (Perry 2005:40). Harcourt was not subdivided largely because it was flood prone (it had been completely submerged in the 1890 and 1928 floods) and if the run was divided the higher parts would then not be accessible. A condition of the new Deed of Grant Homestead lease was increased ringbarking and keeping the property prickly-pear free (QSA Item ID 28796). Nulalbin also appears to have remained largely intact and it was only in 1950 that division of the run into two Grazing Homestead leases was implemented and the western portions associated with Perch Creek opened for selection (QSA Item ID 28849).

2.3.6 Irrigation Schemes

In the late 1880s the Government surveyors, Henderson, McKinnon, and Rigby, undertook surveys of Queensland's river systems and the Dawson River won high praise for its fertile black soils of excellent quality. Several irrigation projects were suggested, but progress was slow, hindered by the 1890s depression and infrastructure challenges. In the meantime, agricultural selectors deprived of regular water during poor seasons were required to excavate their own small dams, which proved of little value.

Construction of a large storage dam across the Nathan Gorge on the Dawson River to provide water for an ambitious Dawson Valley Irrigation Scheme was first suggested as early as 1921, but in the event the scheme was beset by various difficulties and was eventually postponed in favour of smaller weirs built at Theodore (in timber, 1925 and rebuilt 1929) and Orange Creek (1932). A network of irrigation channels was also installed.

Much later three further weirs were constructed. The weir at Baralaba was opened on 3rd September 1976. It was built by the Irrigation and Water Supply Commission over a two-year period and was located outside of the town to the north of the Project area (Bedford 1977:16). The Glebe Weir was also opened in 1976, and another weir at Gylanda in 1987 (Converge 2008:26).

2.3.7 Diversification

Closer settlement and other government initiatives throughout the Banana Shire led to the development of dairy, pig, cotton, and crop industries. Dry land cotton cropping was developed in the Dundee/Wowan district in the 1920s and by the mid-1920s covered over 40,000 acres in both the Callide and Dawson Valleys. Improvements in mechanisation, pest control and irrigation allowed cotton growing to peak in the late 1980s before declining somewhat in the 1990s. Nevertheless, it remains an important crop in the broader region (Perry 2005:141-2).

Early experiments in wheat production in the 1930s to World War II led to a rebirth in the 1950s partly resulting from the Fitzroy Basin Brigalow Land Development Scheme. Investigations in to this scheme began in the late 1950s with a view to developing those areas which had remained undeveloped largely due to brigalow scrub which survived despite attempts to eradicate it through ringbarking, burning, and slashing. The resultant scheme saw the offer of new 10,000-acre leases on resumed long term tenures and or Crown land and assistance to local councils for the development of local road networks

(Perry 2005:89, Daringa Shire Council 1981:34). By 1966, wheat storage facilities had been built in a number of towns including Moura (Perry 2005:143). These were expanded in the 1970s and in the early 1990s including the connecting of the BGQ grain depot at Moura with the Gladstone rail line (Perry 2005:143).

Other crops grown in the region at various times have included sorghum, maize oats, barley, peanuts, chick peas stock and culinary bean, Lucerne, and safflower (Perry 2005:144-5).

In the Project area it appears that much of the country remained relatively uncleared into the 1940s. Land that was hand cleared was burnt and cotton grown on the ashes as an initial cash crop. Dairying was a major local industry in the 1930s and 1940s with cream being transported either to Wowan or Theodore by rail. After World War II, tractors began to be introduced to the area which enabled large areas of brigalow to be pulled and cleared. This phase of clearing continued into the 1960s. Some crop cultivation of wheat then sorghum was undertaken until it became unprofitable at which time beef cattle farming became the norm (P. Bienik, C. Major pers. comm).

2.3.8 Stock Routes, Roads and Railways

In 1853, even before the Leichhardt District had been declared, Leith-Hays' employee Mr Spencer made a track from Rannes to Gladstone via the Don River across the range and descending to the flats via the Calliope (Liffey) River and across to the embryonic port (Perry 2005:11). However, in 1855, as the port of Gladstone had not been completed the first wool from the Rannes was carted to Rockhampton via another track which connected Roma via Taroom to Banana Station, then Rannes and thence to Rockhampton (AW&A 1996: n.p). No tracks are apparent in the Project area at this time. A coach route had been developed by 1876 but passed well north of the Project area and linked Westwood with Rocky Creek, Daringa, and on to Springsure. This route was altered in line with rail construction into the region over the next ten years (Tranter 1990:124-5).

Within the Project area the main access routes for many years appear to be those developed from the bush tracks pushed through during the exploration. Many of these are likely to have originally been Aboriginal pathways. Development of upgraded tracks appears to have been slow and the area was considered to be remote into the early 1900s when the first phases of coal exploration were underway. In 1903 it was still two full days travel by horse and buggy from Rockhampton (Whitmore 1991:334). The closer settlement schemes of the 1910s and increased activity in the area appears to have led to the formalisation of a stock route through the area by the beginning of World War 1 (see Figure 5). This ran on the south side of Banana Creek (on the south side of the Project area) and passed through Harcourt and on through the Nulalbin head station to the northwest. The authorised route of the railway is also noted on this map.

proposed line via Westwood and Mount Morgan. New surveys were completed by 1907 but work only began in 1910. Further delays because of the onset of World War I and because of the difficult terrain meant that it had only reached Wowan (about half way) by 1914. It finally reached the Baralaba coalfield in mid-1917 (Whitmore 1991: 361-2, Kerr 1990:118).

A 95-kilometre extension of the line to Moura and then Theodore was approved in 1922. Its development was in response to the agricultural potential of the area and the Dawson Valley Irrigation Scheme. The first section completed, 72 kilometres to Moura and Nipan, was opened on 16th June 1926 and the final 23 kilometres were opened on 11th May 1927. The Castle Creek terminus, centre of the Dawson Valley irrigation project was named Theodore (Kerr 1990:118). It was known as the Dawson Valley Railway. Several sidings were established to pick up cream and drop off goods. Sidings from Baralaba to Moura were Wondbindi, Harcourt, Bindaree, and Mungi (P. Bienek pers. comm. QSA Item ID 2879). Of these stations and sidings Harcourt, Bindaree and Mungi sidings are in proximity to the Project area.

After the development of the Kianga and Moura coal mines in the early 1960s, the Dawson Valley Railway was used to transport coal via Mount Morgan and Rockhampton to the loading terminal at Gladstone however by the mid-1960s this had proved to be inefficient, and a new line was developed between 1965 and 1968. This was called the Moura Short Line and provided a direct link between the Moura coal mines and the coal terminal at Gladstone (Kerr 1990:197). It is still in use. By the mid-1980s the Dawson Valley Railway had become unprofitable, and the line was closed on 1st August 1987. Subsequently it was removed (Kerr 1990:189, C. Major pers. comm).

2.3.9 Development of Baralaba

Baralaba lies to the north of the Project area. The town was established relatively late in Queensland's history. The original town comprised drillers for coal, timber cutters and carters who, by 1915, occupied a 'bag township' three miles upriver of the town which subsequently developed (Bedford 1977:17).

In 1917, a second town area was settled on the Benleith portion of the original Nulalbin run at the terminus of the new railway line from Rockhampton (Perry 2005:95). The name Baralaba came from an Aboriginal term for 'High Mountain' in 1917 (Perry 2005:95). The town grew randomly, and it was only with the offering of town allotments in 1921 that some sort of order was imposed. Other developments in 1921 included the construction of a telegraph office at the upgraded railway station. An ambulance centre and "a self-governing hospital centre" were also built owing to lobbying by the miners (Perry 2005:96).

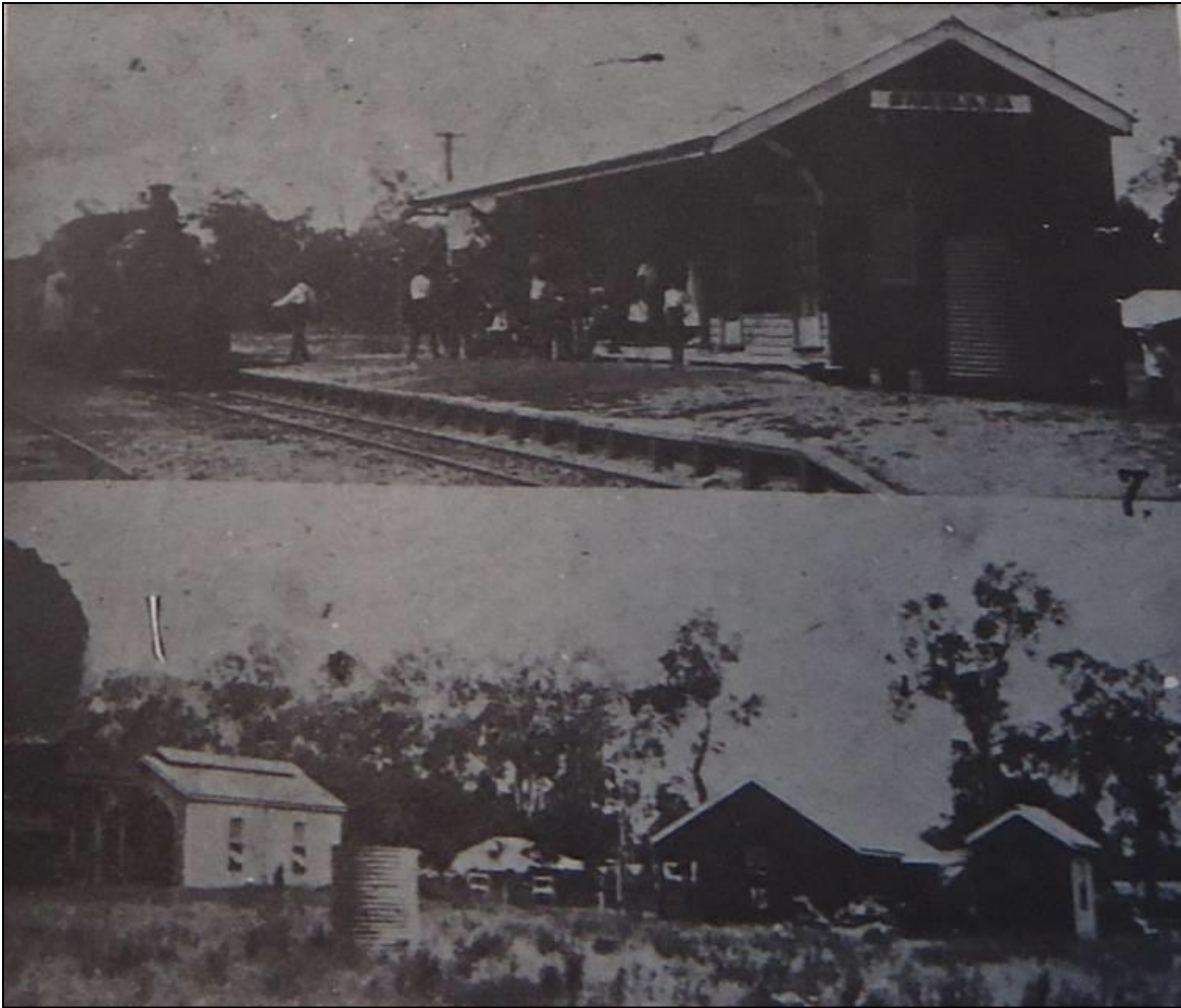


Figure 6: Baralaba railway station and buildings (Bedford 1997:np).

By 1924, land that was thought to be worthless was offered to the miners as Homestead Leases (Perry 2005:96). Some housing was initially constructed using bush timber framing with thick hessian walls covered in white wash render and corrugated iron roof and stove enclave. Roof linings were also of hessian sacking and the floor was dirt. By the 1930s most of these houses had been replaced with timber homes (Pryor 1989:2-3). The land was in such demand that it was fetching prices comparable to city blocks.

The town suffered a severe decline as a result of the 1928 flood, the closing of the State coal mine and the virtual closing of the Dawson Valley Colliery and by 1930 the population had fallen to 242 who lived in about thirty dwellings. Remaining townspeople were mainly involved in the mine and railway. At this time the road through town remained unsealed, there was no electricity, street lighting or water supply and sanitation was via a night cart (Pryor 1989:3, Perry 2005:96).

The hospital, establishment of a rural sale yard, located in on the west side of the town, the establishment of a sawmill processing local cypress pine the opening of a State Government Forestry office and establishment of a number of local shops all assisted in its survival until the re-opening of the coal mine in 1936 (Perry 2005:97-100). A telephone line and power reached Baralaba in the early 1960s (P. Bienek pers. comm.). Baralaba

flourished until the Dawson Valley Colliery closure in 1969, which combined with drought resulted in the second decline in the town's population (Perry 2005:97-100).

2.3.10 Mining

Mining commenced in 1890 with the discovery of coal at Callide Creek by prospectors Peters, Dunn and Otty. Initial mining efforts were limited to several small-scale shafts. Further exploration in the Dawson River area in 1899 by assistant government geologist Benjamin Dunstan described the coal that had been located at the foot of Mount Ramsay as being of exceptional quality and recommended that the surrounding land be designated a coal reserve (Whitmore 1991: 318).

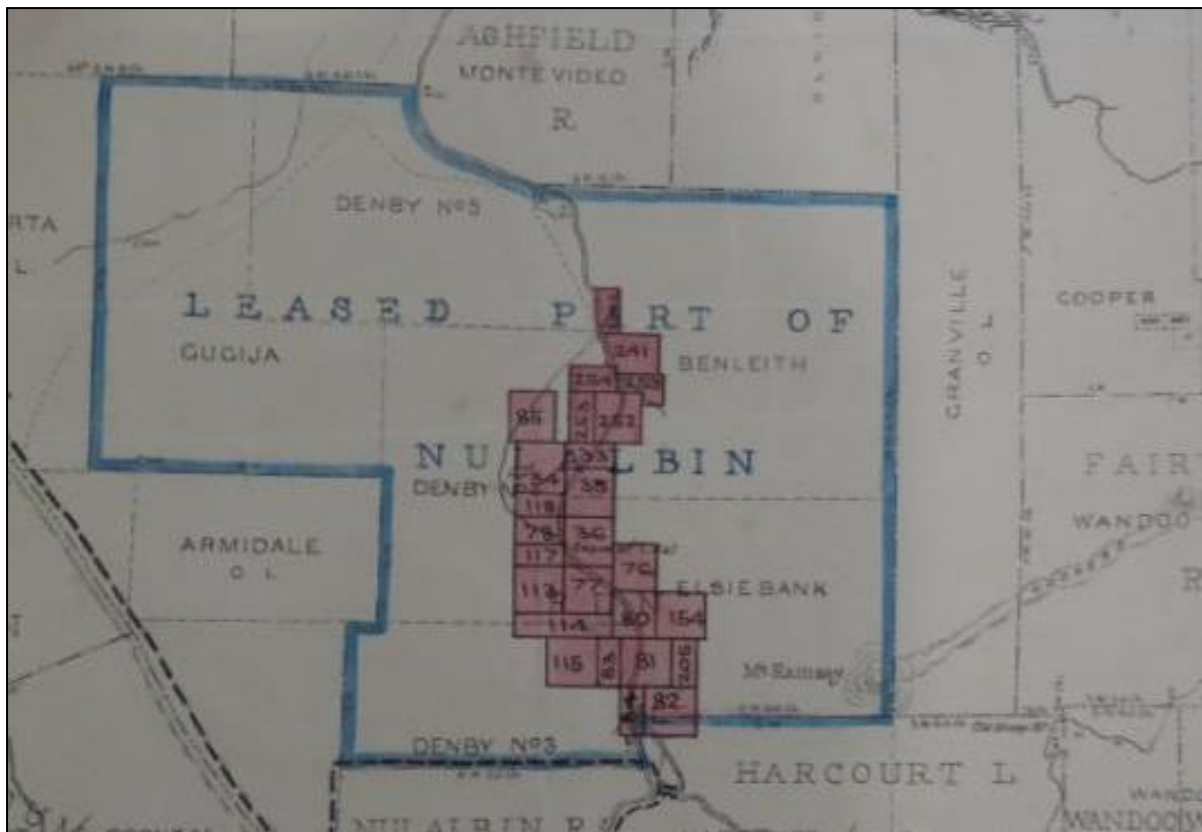


Figure 7: Coal Mining Leases 1903 (Source QSA ID 26851).

The Lands Department and the local mining warden were therefore warned that no land was to be taken up in the area without specific permission from the under-secretary for mines (Whitmore 1991: 318). The release of Dunstan's report in 1901 resulted in a flurry of exploration activity in the region. Two Rockhampton entrepreneurs took up leases over most of the Benleith, Elsie Bank and some of the Denby river frontage (Whitmore 1991:326 Perry 2005:40). Another Rockhampton syndicate known as the Dawson River Anthracite Coal Prospecting Company Limited (DRACPC) applied for the licenses covering 13 square kilometres upstream of Mount Ramsay. Initially neither syndicate's exploration program was overly successful although a coal sample taken from the river bank was assayed as being first class quality coal for steam purposes. This resulted in the formation of the Central Queensland Steam Coal Syndicate Limited with the first group of Rockhampton entrepreneurs receiving additional backing from a group of Glaswegian colliery

proprietors. This group was generally known as the Dunstan syndicate (Whitmore 1991:325-6).

The Federation drought resulted in river levels decreasing to such an extent in 1903 that a stretch of the Dawson River within the Benleith run and in or adjoining the DRACPC leases exposed three seams of coal. Eventually after an extremely frustrating five year of effort, failures and despite a government initiative instigated by the State treasurer and MLA for Rockhampton, William Kidston, a combined DRACPC/Dunstan shaft sunk on the west side of the Dawson was unable to extract a 200-tonne coal sample (Whitmore 1991:328-338).

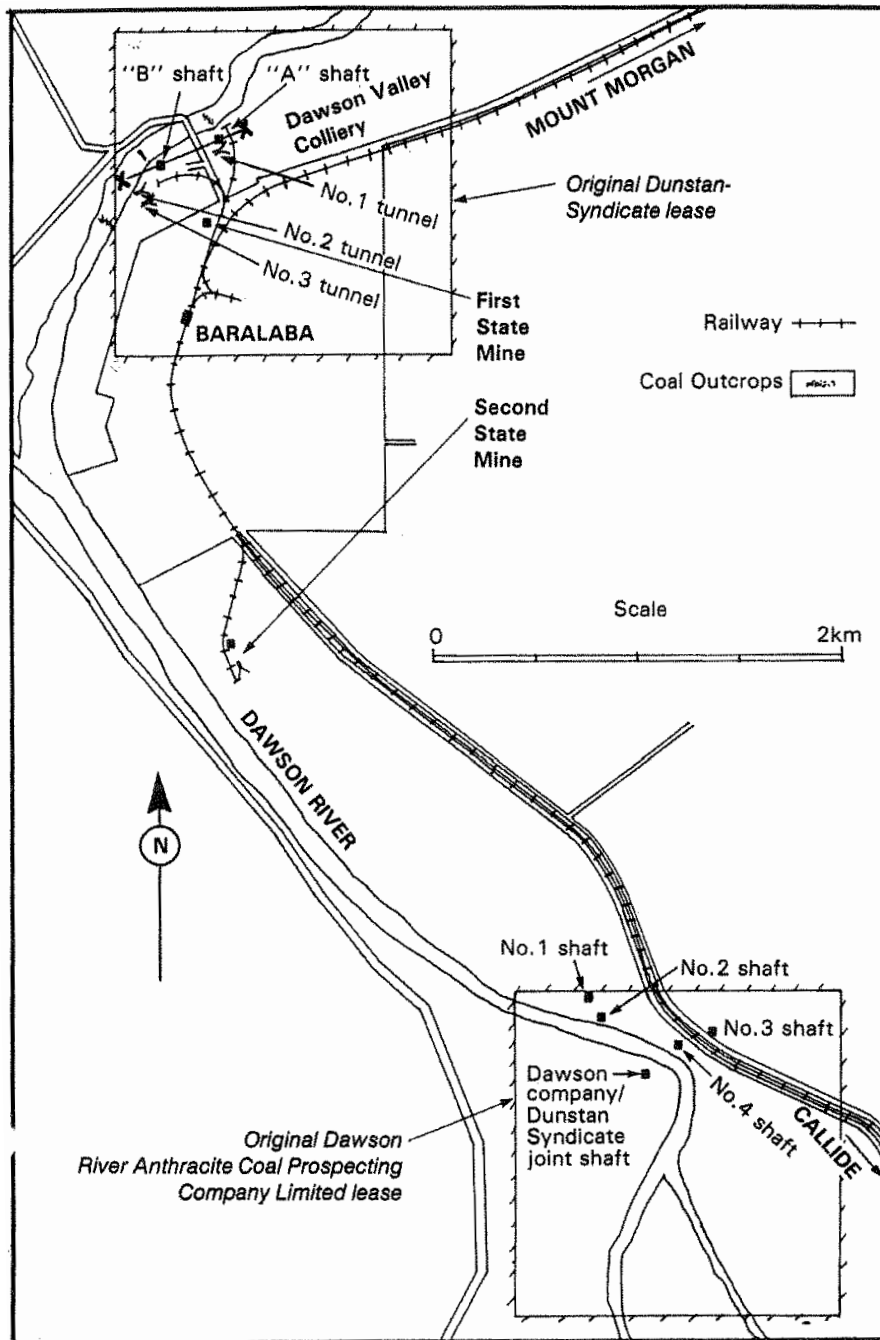


Figure 8: Location of early mining activity on the Baralaba field (Source Whitmore 1991: Figure 39, p327).

In 1906, the government took over and contracted the managing director of the Queensland Collieries Company Limited, William Rankin, to undertake the task. He completed the task after the wet season in 1907. Unfortunately, the coal tested as being of a poorer quality than hoped and the navy abandoned work on it. Work on the Dunstan leases was also abandoned within the year (Whitmore 1991:328-338). It was realised that it would not be possible to effectively export coal from the area until a more efficient transport network had been developed. Thus, once the railway (see Section 2.3.8) was finally on its final approach to the coalfield in 1916, the government took the opportunity to confiscate the Dunstan leases. The confiscation was finalised in 1917 on the grounds that insufficient work had been undertaken. After further testing by the deputy government geologist, Walter Cameron, a site for the new State mine was identified on the east side of the Dawson River in the railway yard of the newly named township of Baralaba. Work progressed after the wet season in 1919 on the site which was called the Dunstan State Coal Mine but was halted after a bulk sample was tested as being of extremely poor quality (Whitmore 1991:328-338). Perry 2005:171).

A further exploration program identified a site between the Dunstan and DRACRC. Meanwhile the northern leases and site of the first government shaft were taken up by the Mount Morgan Gold Mining Company Limited. They opened the Dawson Valley Colliery and by the end of 1921 were successfully providing all the requirements for the boiler section of the Mount Morgan Company. By 1922 production had increased to 40 tonnes per day and by 1924, 150 tonnes per day. The second State mine had also progressed albeit more slowly but was producing 100 tonnes per day by 1924. However, the quality of the coal from the State mine, which was used by the railways, was considered to be poor and the Railway Department increasingly sourced coal from alternate mines. The matter was resolved in 1928 when floods destroyed the mine and forced its complete abandonment (Whitmore 1991: 360-367). The Dawson Valley Colliery was also in decline and was as good as closed in 1929 when the Mount Morgan Gold Mining Company went into liquidation. Small orders were filled until 1936 by the offshoot company of the Dawson Valley Colliery, the Dawson Valley Coal Company.

Extended operations recommenced at the Dawson Valley Colliery once Mount Morgan Ltd acquired the leases in 1936 (Perry 2005: 171). The mine was mechanised, and mining techniques changed from board and pillar system to the breast method in c. 1946. Mining continued despite setbacks caused by the 1954 and 1967 floods reaching peak production 38,523 tonnes in 1965 (QHR No 602723). In 1969 the Mount Morgan Ltd decided to convert from coal to oil resulting in the complete closure of the mine in 1969. The shaft was sealed in 1975 and various exploration activities continued in the area but did not result in the re-opening of either the Dawson Valley Colliery or the State mine (Perry 2005: 171-2). The location of the various phases of mining in the Baralaba area is identified in Figure 8.

The history of coal mining to the south of the Project area is considerably more recent. In 1957, the Thiess Brothers acquired the coal leases for an area within Kianga station to the east of Moura. After a slow start, additional exploration drilling to the north of the original deposit and the expansion of the exploration licence area proved an economically exploitable resource. The coal extracted from both areas combined provided coal suitable for the Japanese steel market. This resulted in a hugely successful operation involving the development of the Moura Short Railway (see Section 2.3.8), a large open cut mine at Kianga followed by two underground mines (at Kianga and Moura) then strip mining. Ownership of the mines has changed a number of times through the years and

operations remain ongoing (Perry 2005:172-175). Remains of some of the workings in the vicinity of Baralaba were evident in 1986 (Whitmore 1991:368) and the Dawson Valley Colliery is now listed on the Queensland Heritage Register (Place No. 602723) under criterion A, B, C, D and H (see Section 1.4.3.1 for definitions of these criterion). The Dawson Valley Colliery, second State mine and Kianga/Moura operations are located outside the Project area.

3 ASSESSMENT OUTCOMES

This Chapter sets out the results of the site assessment for the Project area. The original site assessment included a physical survey of the Project area which was undertaken by Converge in 2012. The current assessment is based on the previous assessments and, where necessary, has updated descriptions of identified NICH using recent photographs provided by the Proponent in September 2023. No physical site inspection or survey was undertaken for this updated report. The methodology used for the survey are set out in Section 1.4.2.

3.1 Survey Findings

An estimated 70% of the Project area was assessed in 2012. A variety of site and place types were located, largely representing pastoral, transport, and communication themes. None of the early mining sites associated with the area and the development of Baralaba are located within the Project area. Within the current Project area, the pastoral sites comprise six dams and two turkey's nests and two relatively modern stock yards which comprise components of two homestead complexes. One site represents the survey of the area ('survey tree') and the telephone line represents early communication infrastructure in the region – this is largely outside the current Project area. The remnants of the railway are also largely outside the current Project area.

The integrity of the Project area is variable. The vast majority of the area comprises grazing land which is the result of various phases of land clearing but particularly the clearing undertaken in the 1950s and 1960s. The most common type of site and/or place within the Project area reflect the development of pastoralism in the area and particularly water management associated with the pastoral industry; dams and turkey's nests.

Many of the dams and turkey's nests which remain within this area are understood to be in their original locations although enlarged in more recent times (R. McLaughlin pers. comm. 2012). A 'turkey's nest' is a small earth dam adjacent to, and higher than, a larger earth dam, to feed water by gravity to a cattle trough (Collins English Dictionary). Dams and turkey's nests comprise bodies of water and associated earthen bunds/banks of varying height, width, and length. Dams are sometimes found in association with water management infrastructure such as windmills.



Figure 9: Example of a dam (Converge 2012).

Whilst it is difficult to provenance dams, the earlier dams within the Project area appear to have taken advantage of the lie of the land and existing ephemeral creeks, gullies and/or Gilgais. In this, and in their method of construction, they are representative of their type in central Queensland. It is also noted that some dams have been enlarged (R. Laughlin pers. comm. 2012). The most recent dam appears to be the Dam 7 (Site B16) which is roughly rectangular. All dams are earthen banked (Figures 9 – 11). Despite the proximity of the Project area to the Dawson River, the presence of dams in the landscape emphasises the primary importance of this aspect of stock management in the area.



Figure 10: Site B01, Dam 1, view to northeast, in 2012 (Converge 2012).



Figure 11: Site B01, Dam 1 in September 2023 (image provided by AARC).

Turkey's nests are an additional form of water management (Figures 12 and 13). Sites B02 and B13 are apparently fed by the dam located near the Broadmeadows homestead complex (B12). It is noted that no bores were identified within the Project area. This is likely to be because early trials were unsuccessful as water located by this means was salty (P. Bienek pers. comm. 2012).



Figure 12: Site B02, Turkey's Nest 1, in 2012 (Converge 2012).



Figure 13: Site B02, Turkey's Nest 1. Note the additional vegetation in 2023 compared to 2012 (image provided by AARC, September 2023).

The water courses comprise a number of shallow gullies and ephemeral creeks, most of which have been ploughed through.

Fencing, with a few exceptions, appears to be of the most recent era comprising four strand barbed wire with either split paling or star dropper posts. Occasionally split palings had been re-used when new wire had been strung. Early fencing in the central Queensland region generally comprised two slung rail fencing or, for longer runs, either two or three strand plain wire, or one plain, one barbed wire. No fences of this nature were located during the survey. Fencing is largely in good condition and comprise four strand barbed wire fencing, often with star picket strainers implying that they have been continually maintained through time (Figures 14 and 15). Whilst fencing may have reflected earlier alignments, as stated above, most appear to be recent and are of no cultural heritage significance.



Figure 14: Example of fencing in the Project area (Converge 2012).



Figure 15: Example of fencing in the Project area (Converge 2012).

An additional feature of the landscape are areas of remnant terracing probably resulting from cultivation of crops (Figures 16 and 17), some of which appear to be recent. Considering the general history of the region it appears unlikely that the terracing was constructed prior to mechanisation suggesting a date post 1950s.



Figure 16: Example of remnant terracing located to the northwest of Dovedale homestead (Converge 2012).



Figure 17: Aerial image of remnant terracing in the south section of the Project area (Google Earth Pro 2023).

Grazing land extends across the majority of the Project area. Paddocks have been cleared and mechanically stick raked and blade-ploughed. Stations are divided into smaller paddocks by fencing. Cattle now graze over most of the area. There is a diversity of introduced grasses and native grasses across the Project area, particularly buffel grass. Some items of equipment associated with sites and places are visible. Potential surface items of an archaeological nature are likely to have been obscured by grass coverage at the time of the site assessment (Figures 18 and 19).



Figure 18: Dovedale station looking to the southern corner of the Project area (Converge 2012).



Figure 19: Northern end of MLA looking to southeast (Converge 2012).

Early buildings within the Project area are said to have been very basic. For example, a bush pole and hessian walled structure is said to have been located near the rail corridor in the vicinity of Banana Creek (C. Major pers. comm. 2012). No evidence of this structure was located during the survey in 2012, and it appears likely that flooding events and

ongoing pastoral activities have resulted in its total removal. Homestead complexes generally demonstrated good site integrity and are relatively modern. Some modifications and/or repairs of these structures are evident. Two homestead complexes (B14 and B15) are located which both post-date World War II. Neither are remarkable. The main house at Broadmeadows is a low concrete stumped rectangular, chamferboard structure with corrugated iron gabled roof. Dovedale homestead is a weatherboard structure with fibro board modifications and separate bathroom and kitchen annexes projecting from either end of the house. Sheds associated with both complexes are generally clad with corrugated iron. None appear unusual or remarkable from a cultural heritage perspective. The original landform in these areas may have been slightly modified through clearing and levelling activities to provide appropriate spaces for residential precincts. See Figures 20 – 26 for images of the homestead complexes.



Figure 20: Site B15, Dovedale homestead in 2012 (Converge 2012).



Figure 21: Dovedale homestead in 2023, note some degradation in condition since 2012 (AARC 2023).



Figure 22: Sheds at the Broadmeadows homestead complex (AARC 2023).



Figure 23: Silo to west of Dovedale homestead (AARC 2023).



Figure 24: Shed to the west of Dovedale homestead (AARC 2023).



Figure 25: Cottage, Broadmeadows (AARC 2023).



Figure 26: Main house, Broadmeadows (AARC 2023).

The stock yards are generally relatively modern. All are largely constructed of steel post and rail and comprise a component of the homestead complexes. The Dovedale yard contains elements of an earlier stock yard with the western sides comprising wood post and rail. The remainder appear to represent a steel post and rail upgrade in a typical configuration. No livestock dips are located in association with the homestead complexes or within the Project area. See Figures 27 – 30 for images of the stock yards associated with the homestead complexes.



Figure 27: Narrow chute at Broadmeadow stock yards (Converge 2012).



Figure 29: Dovedale stock yards. View to south west (Converge 2012).



Figure 28: Stockyards, Broadmeadows (AARC 2023).



Figure 30: Stock yards, Dovedale (AARC 2023).

A number of internal vehicular access tracks traverse the Project area in addition to the gazetted road; the Banana-Baralaba Road. The designated road has been subject to clearing and minor levelling activities. Older internal vehicular access tracks are gravelled whilst recent mine exploration tracks appeared to result from a single dozer blade (Figures 31 and 32). The Banana – Baralaba road is not considered important as its alignment and construction was undertaken by the Council in the 1980s (P. Bienek pers. comm. 2012). No evidence of the earlier road which ran parallel to the railway between Baralaba and Harcourt (see Section 2.3.8) is evident and it appears likely that a combination of ongoing pastoral activity and flooding events have removed evidence of it within the MLA.



Figure 31: Banana Baralaba Road. View to southeast (Converge 2012).



Figure 32: Exploration track. View to north (Converge 2012).

The Dawson Valley Railway was the dominant NICH feature located during the survey in 2012. This is now located largely outside the Project area, with a small area of the alignment (approx. 200m) located at the west side of the Project area (see Figure 39 showing the location of the former railway in association with the current Project area). The railway has low integrity because of its removal in the late 1980s. Thus, the railway is now largely evidenced by a remnant low embankment, dirt and sleepers bulldozed into piles, occasional scattered rail spikes, and remnant features comprising bridges and drains. The remnant railway is located within an often heavily overgrown easement defined by west and east boundary fences. It is evident that the entire rail track had been taken up and removed. The embankment itself varies in height and does not attain a height of over 0.5 metres. See Figure 33 for an example of remnant railway features identified in 2012.



Figure 33: Example of remnant sleepers on embankment. View to the south (Converge 2012)

The remnant telephone line was only evident on the eastern side of the railway easement, at the western side of the MLA (see Figure 39 for site location plan) and only partially inside the current Project area. The poles are in variable condition but appear to have been pushed down rather than having fallen as a result of termite damage. The removal of the line most likely postdate 1964 as some of the insulators have this production date stamped on them. Telstra underground markers are noted in several locations in the southern section of the railway, and it therefore appears possible that the line was abandoned and knocked down in relatively recent times. The telephone line itself appears to be typical of its type and the remains evidence several phases of repairs to both the cross bars holding the insulators and numerous replacements of the insulators themselves. In all, nine different types of insulators are located in association with the telephone line. The glass insulators (brown, clear and light green) provide evidence of the earlier phases of the line whilst the varieties of ceramic insulators represent ongoing maintenance and upgrades. It is noted that the quality of galvanising of brackets associated with the poles is high and generally thicker than is common in modern galvanised products. See Figure 34 – 37.



Figure 34: Site B06. Example of telephone pole. View to northwest (Converge 2012).



Figure 35: Example of telephone pole (AARC 2023).



Figure 36: Site B06. Example of alternate cross bar arrangement (Converge 2012).



Figure 37: Example of alternate cross bar arrangement and insulator (AARC 2023).



The survey tree is a small dead sandalwood into which an axe blaze is evident – see red circle in Figure 38. There are no numbers or letters cut into this blaze suggesting that it may have marked a general orientation/alignment rather than a corner of a property or boundary

Figure 38: Site B17, survey tree (AARC 2023).

3.1.1 NICH Sites Identified

In 2012, 17 NICH sites and places were identified during the field survey within the Project area. Of these original 17 NICH sites, only 13 are located within the footprint of the changed Project area. The location of the remaining 13 sites and places are identified in Table 4 and Figure 39 and details of each site or place are provided at Appendix 1.

Table 4: Sites identified in current Project area.

| NAME | SITE NO. | SOUTH | EAST | BRIEF DESC |
|-----------------|----------|------------|------------|--|
| Dam 1 | B01 | -24.252126 | 149.869606 | Earthen banked ovoid dam approximately 120 metres long and approximately 62 metres in diameter with up to 2.5 metres high bank on western side. Unfenced. |
| Turkey's Nest 1 | B02 | -24.275497 | 149.870842 | Earthen banked circular turkey's nest approximately 27 metres in diameter with up to 2.5 metres high bank. Fenced with star droppers and split droppers and four strand barbed wire. |

| NAME | SITE NO. | SOUTH | EAST | BRIEF DESC |
|-----------------------|----------|--------------------------------|--------------------------------|--|
| Telephone Line | B06 | -24.234428 | 149.8463626 | Located on the western side of the MLA but largely outside the changed Project area. The railway lies within an easement which lies between pastoral properties and various 'B roads'. The railway line has gravel and cobble base repaired in places with blue metal up to approximately 0.5 metres high and up to 2.5 metres wide. The railway line has sections where the sleepers remain <i>in situ</i> . No rails are extant. |
| Dawson Valley Railway | B05 | -24.554837 to -24.234214 | 149.963779 to 149.846171 | There were 50 telegraph poles aligned parallel with the eastern side of the broader railway easement that were originally surveyed in 2012 in the Baralaba South MLA. These are largely located outside the changed Project area. The poles have all been pushed over and lie on the ground. Several at the northern end have been pushed together. |
| Dam 2 | B08 | -24.235909 | 149.856175 | Earthen banked dam at foot of very shallow gully. The dam cuts off the gully on the south side. The banks rise to the south west to a maximum height of approximately 1.7 metres and 4 metres wide with an approximate diameter of 60 metres. |
| Dam 4 | B10 | -24.261322 | 149.855333 | Dry earthen banked expanded Gilgai approximately 30 metres in diameter at base of a hill which rises to the southwest. |
| Dam 5 | B11 | -24.264843 | 149.85892 | Large earthen banked dam which cuts off gully and ephemeral creek. Land rises to the west and east. The earthen bank is located on the northern side of the creek and is approximately 5 metres high and 5 metres wide and approximately 190 metres long. |
| Dam 6 | B12 | -24.275366 | 149.863127 | Earthen banked dam with associated disused southern cross windmill pump. The earthen bank cuts off a creek running down the slope in a gully on the northeast side of the dam. The windmill is constructed of galvanised angle iron frame approximately 7 metres |

| NAME | SITE NO. | SOUTH | EAST | BRIEF DESC |
|-------------------------------|----------|------------|------------|--|
| | | | | high with galvanised iron blades on the fan and tail. |
| Turkey's Nest 3 | B13 | -24.274854 | 149.860145 | Round raised earthen banked mound enclosed with modern star picket fence with four barb wire strands located at the top of a low hill. The banks are approximately 4 metres high with a depression approximately 1.5 metres in the centre with an approximate diameter of 40 metres. Disused. |
| Broadmeadow Homestead complex | B14 | -24.276132 | 149.86837 | Property includes a 1960-70s house and cottage, one set of stock yards and four sheds and a rubbish pit. |
| Dovedale Homestead Complex | B15 | -24.289001 | 149.883251 | Homestead complex comprising a 1950s house, cattle yards, two sheds (one derelict), water tanks and a silo located within an area approximately 220 metres by 140 metres at the southern end of the Baralaba South MLA. |
| Dam 7 | B16 | -24.288977 | 149.87967 | Earthen banked dam near the base of a hill sloping to the south at the point of the confluence of several ephemeral creeks. The bank is located on the east, west and south sides and is approximately 2.5 metres high. The resultant dam is approximately 50 metres by 30 metres and rectangular. |
| Survey Tree | B17 | -24.256629 | 149.86819 | Dead sandalwood tree which is approximately 300mm in diameter. Axe blaze on northwest face. There are no numbers or letters carved into the tree. |

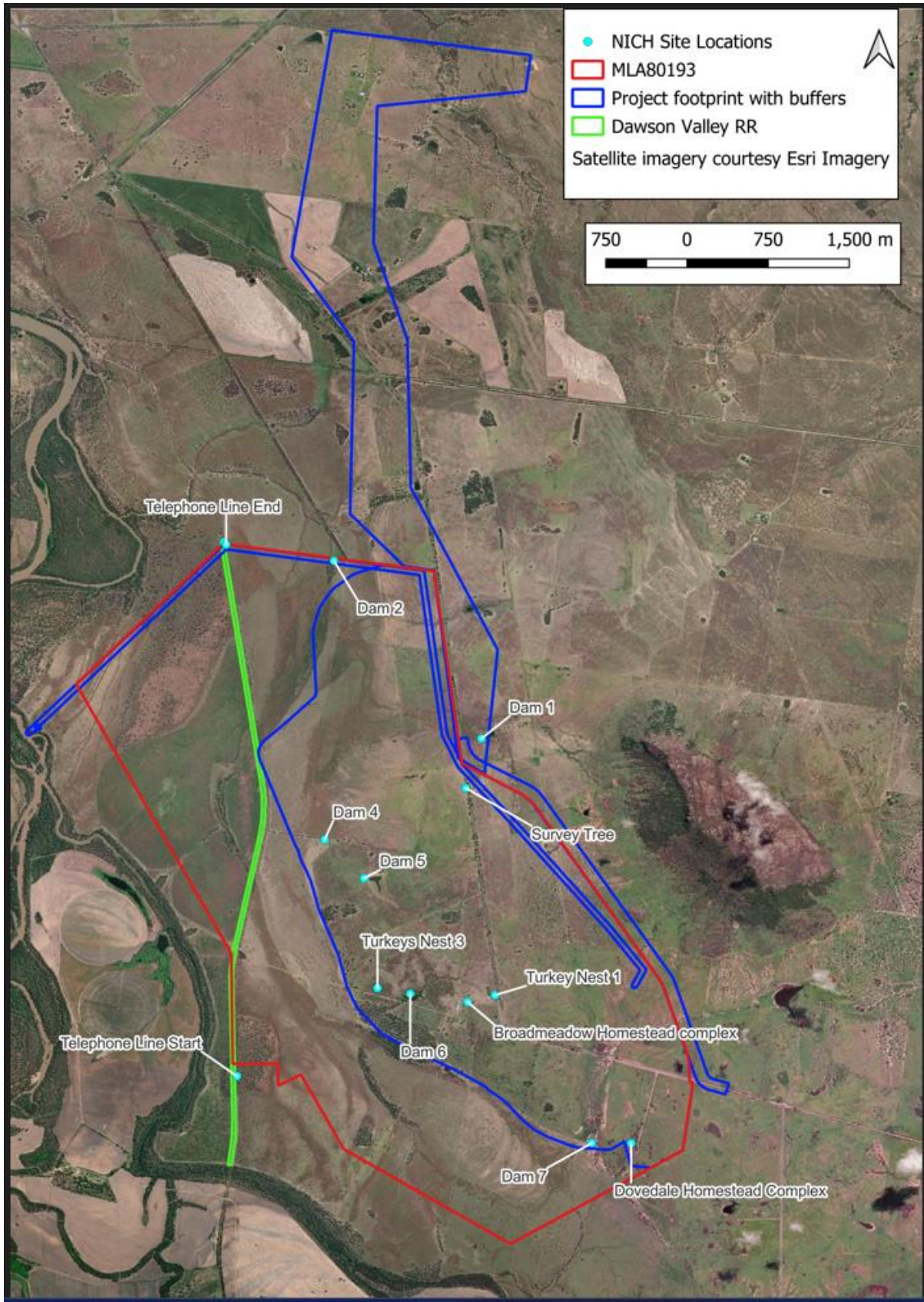


Figure 39: Location of identified NICH sites and places in the Project area (Converge 2023).

3.2 Analysis of Survey Results

The cultural landscape of the Project area reflects the pastoral industry, communications, and activities associated with the Dawson Valley Railway.

3.2.1 NICH Sites and Places

The types of sites and places directly relating to the pastoral industry include dams, turkey's nests, and stock yards. The dams and turkey's nests appear representative of their type and common to the Project area and the region. Thus, further mitigation of these types of places is unnecessary.

The stock yards appear typical of recent stock yards within the region. Only the Dovedale partly represents the common changes to types of material used in building stock yards with the earliest, timber post rails being replaced on a needs basis with steel posts and rails. It is considered that a comprehensive recording of the yards would not contribute further to our knowledge of stock yards in Queensland or the local region.

Of the homestead complexes which lie within the Project area, the Dovedale complex appears the earliest (c.1950s). However, neither complex is considered to have cultural heritage significance sufficient to require further management or mitigation as part of the development of the Project.

The Dawson Valley Railway was constructed in the late 1920s in response to government initiatives of closer settlement and the Dawson Valley Irrigation Scheme. Whilst its alignment remains apparent, its integrity has been greatly affected. As such it is considered that the recording carried out as part of this assessment is sufficient to meet the needs of the Project for the management of the NICH located within the Project area.

Although the telephone line's alignment is of interest, it is unremarkable, although it is noted that these types of sites and associated fabric are becoming increasingly rare in the Queensland regional landscape.

The survey tree is of interest, and it is noted that these types of sites are becoming increasingly rare in the Queensland regional landscape. However, it is not considered to have cultural heritage significance sufficient to require further management or mitigation as part of the development of the Project.

3.2.2 Archaeology

The Project area is considered to have limited archaeological potential. It is considered that any archaeological potential associated with the Dawson Valley Railway would be confined to the method of construction of the embankment and various drains and bridges located within the railway corridor and/or the standard construction of telephone lines dating from the 1920s. These methods are likely to be documented in government archives and the archaeological potential of methods not already documented is low.

The telephone line is considered to have some archaeological potential as a range of insulators and fittings are represented, many of which are now relatively uncommon. A recommendation in relation to the management of the components of this site is outlined in Section 6.

It is known that at least one dump is associated with a homestead complex (Broadmeadows). However, as the homestead complexes are relatively recent it is unlikely that any artefacts located within archaeological deposits associated with dumps would be an important source of information about Queensland's history.

3.2.3 Unknown NICH

It is likely that further currently unknown sites/items/places exist within the Project area. These are likely to relate to pastoral/agricultural activities, such as dams, tracks, and fence lines. It is also possible that additional surveyor's marks (often blazed trees) may exist within the Project area. A suggested process to manage incidental cultural heritage finds is outlined at Appendix 2.

4 SIGNIFICANCE ASSESSMENT

4.1 Significance Ratings for the Project Area

The following statement of significance has been provided to reflect the Baralaba South Project area's cultural heritage significance within the current legislative frameworks. The Baralaba South Project area is broadly considered to have local significance under criteria 1 using the local heritage guidelines (see Section 1.4.3.2). It is representative of the period of closer settlement in the region from the 1930s with places that demonstrate grazing aspects of the region's cattle industry. It is also representative of a 1920s railway development in central Queensland. A segment of telephone line located on the eastern side of the railway represents a now uncommon aspect of this type of place in the Queensland landscape.

A summary of the significance of the Project area using the criteria identified under the *GUIDELINE: Identifying and assessing places of local cultural heritage significance in Queensland'* is:

Table 5: Significance ratings for the Project area.

| Criteria | Discussion |
|----------|--|
| 1 | <p>The Project area contributes to contextual information related to closer settlement in central Queensland since the 1930s. This has resulted in a cultural landscape which is representative of this phase of Queensland's history in the region.</p> <p>The Project area is also closely associated with the establishment of 1920s expansion of the rail network in the central Queensland area. The Dawson Valley Railway and remnant associated features provide tangible evidence of the importance of the rail networks in Queensland prior to the development of road transport.</p> <p>Telephone lines were once a ubiquitous feature of the Queensland landscape but are now becoming uncommon and endangered. Although not standing, the segment of telephone line located in the Project area provides an unusual example of the range of fittings and brackets associated with this type of place.</p> <p><u>The Project area is considered to have historic value at a low local level within this category.</u></p> |

4.2 Archaeological Places

There are no archaeological deposits currently identified within the Project area which are likely to contain an archaeological artefact that is an important source of information about Queensland's history. However, the material comprising the telephone line includes artefacts which are a source of information about this once common feature of the Queensland landscape. The Project area is not considered to have significant levels archaeological potential; however, components of the telephone line do provide a material record of this type of place through time.

4.3 Significance of Identified NICH Sites

Cultural heritage significance relates to people’s perspective of place and sense of value, within the context of history, environment, aesthetics, and social organisation.

17 sites were assessed within the 2012 survey, but four are outside the changed Project area. The remaining 13 sites have been attributed an individual cultural heritage significance rating (refer to Table 6).

Each of these sites were assessed against the significance assessment criteria outlined in Section 1.4.3.2 considering the contextual historical information available for the Project area, results of register searches and previous heritage studies. To assist in determining appropriate management processes for the sites, this assessment was further refined to determine levels of local significance using the method set out in Section 1.4.3.3. This enabled the development of specific management processes for specific sites in order that the heritage values of the place be appropriately managed through the life of the Project.

Of the 13 remaining sites identified within the current Project area, three are considered to have low local heritage significance (B05, B15 and B17) and one is considered to have moderate local heritage significance (B06). The remaining 9 sites do not threshold for local heritage significance listing but contribute to the overall historical development of the Project area. No sites are considered to threshold for State heritage listing.

Table 6: Significance of identified sites.

| Site No. | Name/Type | Significance | Archaeological Potential |
|----------|-------------------------------|----------------|--------------------------|
| B01 | Dam 1 | Nil | Nil |
| B02 | Turkey’s Nest 1 | Nil | Nil |
| B05 | Dawson Valley Railway | Low local | Low |
| B06 | Telephone Line | Moderate local | Moderate |
| B08 | Dam 2 | Nil | Nil |
| B10 | Dam 4 | Nil | Nil |
| B11 | Dam 5 | Nil | Nil |
| B12 | Dam 6 | Nil | Nil |
| B13 | Turkey’s Nest 3 | Nil | Nil |
| B14 | Broadmeadow Homestead complex | Nil | Low (re dump) |
| B15 | Dovedale Homestead Complex | Low local | Nil |
| B16 | Dam 7 | Nil | Nil |
| B17 | Survey Tree | Low Local | Nil |

Whilst unlikely, this assessment suggests further historic items may exist within the Project area as the size and nature of the assessment, and ground surface visibility due to long grass did not allow for a complete assessment in 2012. A process for managing historic cultural heritage material which may be located during further development within the Project area is itemised in a flowchart in Appendix 2.

5 POTENTIAL IMPACTS

5.1 Types of Potential Impacts

NICH sites and places in the Project area are likely to be impacted by the initial vegetation clearing, topsoil stripping, excavation and bulldozing of the land, and drilling and blasting activities.

5.2 Project Impact on Identified NICH Sites and Places

The following impact assessment provides details for each identified NICH site and place in the Project area. Refer to Figure 39 for the location of these NICH sites and places.

Table 7: Project impact on NICH.

| SITE | NAME/TYPE | SIGNIFICANCE | IMPACT ASSESSMENT | RECOMMENDATION |
|------|-----------------------|----------------|--|--|
| B01 | Dam 1 | Nil | Located inside the proposed footprint of the mine. Site will be removed by the Project. | No management required. |
| B02 | Turkey's Nest 1 | Nil | Located inside the proposed footprint of the mine. Site will be removed by the Project. | No management required. |
| B05 | Dawson Valley Railway | Low local | Partially located in the proposed release pipeline footprint. Also partially located in the western side of the mine footprint. Site will likely be partially removed by the Project. | Avoid if possible. Recording undertaken as part of 2012 assessment is sufficient if avoidance is not possible. |
| B06 | Telephone Line | Moderate local | Partially located in the proposed release pipeline footprint. Also partially located in the western side of the mine footprint. Site will likely be partially removed by the Project. | Avoid if possible. Recording undertaken as part of assessment sufficient if avoidance not possible. Undertake diagnostic collection of artefacts (insulators and brackets) associated with the telephone line. |
| B08 | Dam 2 | Nil | Located in the proposed release pipeline footprint. | No management required. |

| SITE | NAME/TYPE | SIGNIFICANCE | IMPACT ASSESSMENT | RECOMMENDATION |
|------|-------------------------------|--------------|---|---|
| | | | Site will be removed by the Project. | |
| B10 | Dam 4 | Nil | Located in the proposed mine footprint. Site will be removed by the Project. | No management required. |
| B11 | Dam 5 | Nil | Located in the proposed mine footprint. Site will be removed by the Project. | No management required. |
| B12 | Dam 6 | Nil | Located in the proposed mine footprint. Site will be removed by the Project. | No management required. |
| B13 | Turkey's Nest 3 | Nil | Located in the proposed mine footprint. Site will be removed by the Project. | No management required. |
| B14 | Broadmeadow Homestead complex | Nil | Located in the proposed mine footprint. Site will be removed by the Project. | No management required. |
| B15 | Dovedale Homestead Complex | Low local | Located in the proposed mine footprint. Site will be removed by the Project. | Avoid if possible. Recording undertaken as part of 2012 assessment is sufficient if avoidance is not possible. |
| B16 | Dam 7 | Nil | Located in the proposed mine footprint. Site will be removed by the Project. | No management required. |
| B17 | Survey Tree | Low Local | Located in the proposed mine footprint. Site will be removed by the Project. | Avoid if possible. Recording undertaken as part of 2012 assessment is sufficient if avoidance is not possible. |

As shown above, all the identified NICH sites and places will be (or potentially be) removed by the Project. Recommendations to manage impacts to the significant NICH sites and places are provided in Section 6.

5.3 Project Impact on Potential NICH Sites and Places

It is concluded that there is low potential for further NICH sites/ items/places to exist within the Project area as the nature of field assessment and access constraints did not allow for a comprehensive survey of 100% of the area. These yet unidentified sites are likely to consist of sites relating to pastoral activities dams, historic survey trees and remnant boundary fence lines. Recommendations to manage potential Project impact on unexpected finds are provided in Section 6.

6 CONCLUSION AND RECOMMENDATIONS

This assessment has identified 13 NICH sites in the current Project area of which, only four are considered to have local heritage value (three are considered low and one is moderate). The remaining 9 sites do not threshold for local heritage significance but contribute to the overall historical development of the Project area.

Of the 13 sites, 11 are likely to be directly impacted by the Project, and two will potentially be impacted by the Project. Of the four sites assessed as having local or moderate heritage significance in Section 4.3 (B05, B06, B15 and B17), two will be directly impacted (B15 and B17) and two will potentially be impacted (B05 and B06).

This Section provides specific recommendations in relation to the four significant NICH sites and general mitigation recommendations to manage unknown and unexpected historic cultural heritage sites which may be located within the Project area. Currently unknown historic cultural sites or places may include or be related to remains from settlement pastoral/cultivation activities such as remnant fencing or survey/blazed trees.

6.1 Avoidance of Sites

The best form of cultural heritage management is to avoid impact on sites and places of significance, including B05, B06, B15 and B17. It is recommended that the design of the Project area consider these heritage sites and places, and, where possible, avoids impacting on these sites. If this is not possible, then implement the relevant mitigation measures as recommended in this report.

Site specific recommendations are also included in the site cards in Appendix 1.

6.2 NICH Heritage Management

It is recommended that due diligence be practiced during works conducted within the Project area, particularly during any clearing or construction phases associated with initial preparation of the area. To facilitate this diligence, it is recommended that a NICH Induction Booklet be developed, once all approvals for the Project are in place but prior to ground disturbing activities, which can be incorporated into the General Site Induction. The NICH Induction Booklet should be prepared by a qualified heritage professional and include the following:

- Specific instructions for crews regarding their obligations to look for and avoid impacting on NICH material until it has been properly assessed;
- Presentation of familiarisation material for work crews so that they are aware of what constitutes a NICH find;
- Provision of educational material to personnel informing them what archaeological material may look like, and provide clear instructions on what to do should any such material be found; and,
- A process for the collection, transport, and storage of any NICH items.

6.3 Management of Artefacts Associated with the Telephone Line

The fabric, such as insulators and associated brackets, comprising telephone lines are becoming a more uncommon feature/object type in the Queensland landscape.

It is recommended that a cultural heritage professional undertake a collection of a diagnostic sample of the material associated with the telephone line (site B06) including samples of the different types of insulators and associated brackets. This material should be offered to a museum which has an appropriate collection policy for this object type, for example the Telstra Museum, Brisbane or the Cardwell Bush Telegraph Heritage Centre.

6.4 NICH Management of Unknown Sites

It is possible that currently unknown sites of NICH significance exist within the Project area. In these circumstances it is recommended that the process outlined in Appendix 2 is adopted.

REFERENCES

- AW&A, 1996, A Predictive assessment of a proposed weir at Paranui, Dawson River, Moura. Unpublished report for Hyder Consulting (Australia) Pty Ltd.
- AW&A, 1997, Biloela Callide Power station advice report. Unpublished report to Gutteridge Haskins & Davey (GH&D), for Powerlink.
- Australian ICOMOS, 2000, *The Illustrated Burra Charter*. Australia ICOMOS Secretariat, c/- Faculty of Arts, Deakin University, Burwood, Victoria.
- Bedford, M, 1977, *Baralaba 1917 to 1977 anniversary: 60th anniversary of Baralaba township: 50th anniversary of Baralaba Cottage Hospital*. Baralaba Pioneer Committee, Baralaba, Qld.
- Bickford, A and S Sullivan, 1984, 'Assessing the Research Significance of Historic Sites', in Sullivan, S and S Bowdler (eds) *Site Surveys and Significance Assessment in Australian Archaeology* (Proceedings of the 1981 Springwood Conference on Australian Prehistory), Department of Prehistory, Research School of Pacific Studies, The Australian National University, Canberra, pp 19–26.
- Bull, 1960, Historic Queensland Stations. *Queensland Country Life*, Brisbane.
- Central Queensland Cultural Heritage Management, 2005, Statement concerning the Cultural Heritage Values and Places Associated with Great Artesian Basin Springs, Queensland. Statement prepared for Department of Natural Resources and Mines (Queensland), Rockhampton.
- Converge Heritage + Community, 2008, Historical Heritage Management Plan, Nathan Dam. Report prepared for MWH.
- Converge Heritage + Community, 2012, Non-Indigenous Cultural Heritage Assessment, Woori Coal Project, Central Queensland. Report prepared for SKM for Cockatoo Coal Limited.
- Duaringa Shire Council, 1981, Duaringa Shire – 100 Years of Local Government 1881 – 1981 (ed) D. Turner. Duaringa Shire Council. Duaringa.
- Evans, R. 2007, *A History of Queensland*. Cambridge University Press, Melbourne.
- Freeman, D. B., 1992, 'Prickly Pear Menace in Eastern Australia 1880-1940' in *Geographical Review*, Vol. 82, No. 4 (Oct. 1992), pp. 413-429.
- French, M. 1989, *Conflict on the Condamine: Aborigines and the European Invasion*. Darling Downs Institute Press. Toowoomba.
- Fitzgerald, R. 1984, *A History of Queensland: From 1915 to the 1980s*. University of Queensland Press. Brisbane.
- Irrigation and Water Supply Commission, 1926, The Dawson Valley Irrigation Scheme and What It Offers to Settlers Brisbane, The Commission.

John Oxley Library, 1892, Queensland in 1892, Illustrating Stock Routes, Main Roads, Railway Lines and Artesian Bores and Tanks, 45 miles to the inch. Brisbane, Survey Office & Railway Commissioner.

Johansen, G, 2003, *Pioneers to Prosperity: A History of Fitzroy Shire 1853 – 2003*. Central Queensland University Press, Rockhampton, Queensland.

Johnston, W, 1982, *The Call of the Land: A History of Queensland to the Present Day*. Jacaranda Press. Brisbane.

Godwin, L. and S. L'Oste-Brown, 2002, A Past remembered: Aboriginal 'historical' places in central Queensland. In *After Captain Cook: The Archaeology of the Recent Indigenous Past in Australia*. R. Harrison and C. Williamson (eds). Sydney University Archaeological Methods Series 8. Sydney.

Kerr, J. 1998, *Triumph of Narrow Gauge: A History of Queensland Railways*. Brisbane, Boolarong Press.

Perry, B. 2005, *Two Valleys – One Destiny; A History of Banana "Shire of Opportunity"*. Banana Shire Council, Biloela.

Pryor, A, 1989, *Growing Up in Baralaba*. Unpublished transcript sourced at University of Queensland Library.

Queensland Environmental Protection Agency, 2006, *Using the criteria: a methodology*. Cultural Heritage Branch, EPA, Queensland

Queensland Heritage Register, 2019, QHR No 602723: Dawson Valley Colliery. Department of Environment and Science. Brisbane

Reynolds, H. 1987, *Frontier*. Sydney. Allen and Unwin

Rowley, C.D. 1970, *The Destruction of Aboriginal Society: Aboriginal Policy and Practice VI*. Australian National University Press. Canberra

Telfer, D. 1995, *Ecological and Physical Assessment of the Condition of Streams in the Dawson River Catchment*. Department of Primary Industries. Brisbane

Tranter, D. 1990, *Cobb & Co: Coaching in Queensland*. Queensland Museum. Brisbane

Whitmore. R. L, 1991, *Coal in Queensland from Federation to the Twenties 1900 to 1925*. University of Queensland Press. Queensland

Queensland State Archives

Queensland stock route map from 1914. Sheet 1. 30 miles to the inch. Survey Office, Brisbane. Courtesy of John Oxley Library, Item ID 629865.

Leichhardt District from 1897 showing surveyed and unsurveyed runs, part of the Queensland Run Maps Series. 12 miles to the inch. Survey Office, Brisbane. Courtesy of the Queensland State Archives, Item ID 629073.

Queensland State Archives, Series 14031 Item ID 26851, Nulalbin, Leichhardt District Run No. 1546 part 1

Queensland State Archives, Series 14031 Item ID 28849, Nulalbin, Leichhardt District Run No. 1546 part 2

Queensland State Archives, Series 14031 Item ID 26789, Harcourt, Leichhardt District Run No. 787

Queensland State Archives, Series 14031 Item ID 28796, Harcourt, Leichhardt District Run No. 3008

Personal Communication

Peter Maxwell, Maxim Consulting Services, interview 9/10/2012

Paul Bienek, interview 26/9/2012


Colin Majors, interview 26/9/2012

Ross McLaughlin, interview 28/9/2012


APPENDIX

Appendix 1: Site Details

Baralaba 01 – Dam 1

| SITE NO | BARALABA 01 |
|--------------------------------|--|
| Type/Name | Dam 1 |
| Location (Datum GDA94) | -24.252126/149.869606 |
| Description | Earthen banked ovoid dam approximately 120 metres long and approximately 62 metres in diameter with up to 2.5-metre-high bank on western side. Unfenced at edges of the dam. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Appears to be still in use. |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p>Figure 40: Dam 1 (AARC 2023).</p> |

Baralaba 02 – Turkey’s Nest 1

| SITE NO | BARALABA 02 |
|--------------------------------|---|
| Type/Name | Turkey’s Nest 1 |
| Location (Datum GDA94) | -24.275497/149.870842 |
| Description | <p>Earthen banked circular turkey’s nest approximately 27 metres in diameter with up to 2.5-metre-high bank. Fenced with star droppers and split droppers and four strand barbed wire.</p> <p>Associated with ‘Broadmeadow’ homestead; approximately 270 metres east of homestead just inside fence line on Baralaba-Banana Road.</p> |
| Provenance | c.1960 – 70s |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Overgrown with vegetation. |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p>Figure 41: Turkey’s Nest 1 (AARC 2023).</p> |

Baralaba 05 – Dawson Valley Railway

| Site No | Baralaba 05 |
|--|---|
| Type/Name | Dawson Valley Railway |
| Location (Datum GDA94) | -24.554837/149.963779 to -24.234214/149.846171. |
| General Description (note only 200m remaining in Project area) | <p>The Baralaba Moura railway corridor is located on the western side of the MLA. The average width of the easement is approximately 30 metres.</p> <p>Several sidings are reflected in the widening of the easement to approximately 84 metres wide. The railway line has a gravel and cobble base repaired in places with blue metal up to approximately 0.5 metres high and up to 2.5 metres wide.</p> <p>No rails are extant. The railway line is relatively undisturbed with sections where the sleepers remain <i>in situ</i>. The sleepers are approximately 2.2 metres long, 120mm thick by 220mm wide, set in place with dog spikes approximately 0.7 metre apart.</p> |
| Provenance | 1920s |
| Historic Theme | 5.3 using rail |
| Condition/ Integrity | Low |
| Potential Impact | Lies within Baralaba South MLA (partially) |
| Archaeological Potential | Low |
| Individual Site Significance | Low Local |
| Site Management Recommendation | <ul style="list-style-type: none"> • Avoid if possible. • Sufficient recording undertaken if retention not possible. • No further mitigation required. |
| Image |  <p>Figure 43: Example of remnant sleepers on embankment. View to the south (Converge 2012).</p> |

Baralaba 06 – Telephone Line

| SITE NO | BARALABA 06 |
|--|---|
| Type/Name | Telephone Line |
| Location (Datum GDA94) | -24.282884/149.847350 to -24.234428/149.8463626 |
| General Description (note only 200m remaining in Project area) | <p>Several telegraph poles aligned parallel with the eastern side of the railway easement within the west side of the Baralaba South MLA. The poles have all been pushed over and lie on the ground. Several at the northern end have been pushed together. Integrity of the poles varies with some remaining virtually intact with crossbar and insulator brackets <i>in-situ</i> whilst others have been significantly affected by termite activity and/or only the top of the pole with remnant cross bars remaining. The poles were approximately 7 metres long bush poles; broader at the base than at the top.</p> <p>Wooden crossbar planks are either in set in two rows with insulators fitted directly onto the bar or a single crossbar with galvanised bracket fitted onto which the insulators with fitted in sets of four. The top of the bush poles is capped with a 'v shaped' galvanised sheet. Continual maintenance and upgrade is reflected in the 9 types of insulators used to carry the copper wire (fragments of wire remain attached to some insulators.</p> <p>There are 3 glass insulators: brown, light green, and clear, and 6 ceramic insulators: cream dated 1963, cream dated 1964, cream with no date, 2 white insulators with blue 'made in Japan' trademarks and 1 white insulator with a broad base. One pole had a galvanised stay wire still attached. Located between 50 and 320 metres apart.</p> |
| Provenance | 1920s-1960s |
| Historic Theme | 5.7 telecommunications |
| Condition/ Integrity | Low |
| Potential Impact | Lies within the Baralaba South MLA (partially) |
| Archaeological Potential | Moderate |
| Individual Site Significance | Moderate local |
| Site Management Recommendation | <ul style="list-style-type: none"> • Avoid if possible. • Recording undertaken as part of assessment sufficient if avoidance not possible. • Undertake diagnostic collection of artefacts (insulators and brackets) associated with the telephone line. |

SITE NO

BARALABA 06

Images




Figure 44: Example of cross bar with remnant insulators (AARC 2023).




Figure 45: Example telephone pole (AARC 2023).

Baralaba 08 – Dam 2

| SITE NO | BARALABA 08 |
|--------------------------------|---|
| Type/Name | Dam 2 |
| Location (Datum GDA94) | -24.235909/149.856175 |
| Description | Dry earthen bank dam surrounded by trees located near northern boundary of MLA at foot of very shallow gully. The dam cuts off the gully on the south side. The banks rise to the south west to a maximum height of approximately 1.7 metres and 4 metres wide. The dam has an approximate diameter of 60 metres. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Low |
| Potential Impact | Located within the release pipeline footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p>Figure 46: Dam 2 (AARC 2023).</p> |


Baralaba 10 – Dam 4

| SITE NO | BARALABA 10 |
|--------------------------------|--|
| Type/Name | Dam 4 |
| Location (Datum GDA94) | -24.261322/149.855333 |
| Description | Dry earthen banked expanded Gilgai approximately 30 metres in diameter at base of a hill which rises to the southwest. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Low |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p data-bbox="491 1532 826 1559">Figure 47: Dam 4 (AARC 2023).</p> |


Baralaba 11 – Dam 5

| SITE NO | BARALABA 11 |
|--------------------------------|---|
| Type/Name | Dam 5 |
| Location (Datum GDA94) | -24.264843/149.858920 |
| Description | Large earthen banked dam which cuts off gully and ephemeral creek. Land rises to the west and east. The earthen bank is located on the northern side of the creek and is approximately 5 metres high and 5 metres wide and approximately 190 metres long. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | High |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p>Figure 48: Dam 5 with old station track in foreground. View to east, south east (Converge 2012).</p> |

Baralaba 12 – Dam 6 (associated with Turkey's Nest 3)

| SITE NO | BARALABA 12 |
|--------------------------------|---|
| Type/Name | Dam 6 (associated with Turkey's Nest 3) |
| Location (Datum GDA94) | -24.275366/149.863127 |
| Description | Earthen banked dam with associated disused southern cross windmill pump that no longer works. The earthen bank cuts off a creek running down the slope in a gully on the northeast side of the dam. The dam lies on the southern side and is approximately 2 metres high and 2.5 metres wide. The windmill is constructed of galvanised angle iron frame approximately 7 metres high with galvanised iron blades on the fan and tail. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | High |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p>Figure 49: Dam 6: View to northwest (Converge 2012).</p> |

Baralaba 13 – Turkey’s Nest 3 (associated with Dam 6)

| SITE NO | BARALABA 13 |
|--------------------------------|---|
| Type/Name | Turkey’s Nest 3 (associated with Dam 6) |
| Location (Datum GDA94) | -24.274854/149.860145 |
| Description | Round raised earthen banked mound enclosed with modern star picket fence with four barb wire strands located at the top of a low hill. The banks are approximately 4 metres high with a depression approximately 1.5 metres in centre with an approximate diameter of 40 metres. Disused and overgrown. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Low |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p>Figure 50: Turkey’s nest 3 (AARC 2023).</p> |

Baralaba 14 – Broadmeadow Homestead Complex

| SITE NO | BARALABA 14 |
|--------------------------------|---|
| Type/Name | Broadmeadow Homestead complex |
| Location (Datum GDA94) | -24.276132/149.868370 |
| Description | <p>Property includes one house, one cottage, one set of cattle yards and four sheds and a rubbish pit within an area approximately 350 metres by 160 metres. The main house is located at the northern end of the site. It is a low concrete stumped rectangular, chamferboard structure with corrugated iron gabled roof approximately 15 metres wide by 23 metres long. A car port is located on the southeast side and a partial verandah on the eastern side. It is internally lined with fibro board and a thin tin decorative finish in the halls. A gravelled turning circle is located on the eastern side of the house with water tanks on the south west side. Three large sheds extend to the southwest. An additional new shed has been constructed to the southwest of the house.</p> <p>A second cottage is located approximately 190 metres to the south west. The cottage is a low set rectangular structure with concrete stumps, chamferboard cladding and a more recent enclosed verandah on the northeast side with open verandah and steps from the verandah to the front garden. It has a new hipped roof and is approximately 10 metres by 15 metres with water tank and septic tank on the southwest side.</p> <p>A steel post and rail cattle yard are located 80 metres to the west of the cottage. The yard is recent with metal shoot and crush and loading ramp all metal and framed. The yard is 50 metres by 30 metres and has a small shute possibly for sheep or calves, a metal cattle crush and loading ramp. A waste tip lies approximately 275 metres south west of the cottage.</p> |
| Provenance | 1960s – 70s |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Moderate to High |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Low (re dump site) |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |

SITE NO

BARALABA 14

Images



Figure 51: Main house, Broadmeadows (AARC 2023).



Figure 52: Sheds, Broadmeadows (AARC 2023).

SITE NO

BARALABA 14



Figure 53: Stock yards, Broadmeadows (AARC 2023).



Figure 54: Cottage, Broadmeadows (AARC 2023).

Baralaba 15 – Dovedale Homestead Complex

| SITE NO | BARALABA 15 |
|--------------------------------|--|
| Type/Name | Dovedale Homestead Complex |
| Location (Datum GDA94) | -24.289001/149.883251 |
| Description | <p>Homestead complex comprising house, cattle yards, two sheds (one derelict), water tanks and a silo located within an area approximately 220 metres by 140 metres at the southern end of the Baralaba South MLA.</p> <p>The house is a low set weatherboard house with kitchen and bathroom annexes on the east and west of the house respectively and an open garage added off the north side of the house. Repairs on the northern side of the house have been done in fibro board. It is approximately 9 metres by 15 metres with a gabled roof extending over an enclosed verandah on the northern side. Water tanks are located to the south of the house and in an open shed which lies to the south of the house. Additional sheds are located approximately 90 metres southwest of the house and a corrugated iron silo approximately 100 metres to the southwest of the house.</p> <p>The cattle yards comprise several small yards with a loading ramp and are located approximately 160 metres south of the house and a constructed of metal post and rail with some remnant wood post and rail on the southern side.</p> |
| Provenance | 1950s |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | Moderate to High |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Low Local |
| Site Management Recommendation | <ul style="list-style-type: none"> • Avoid if possible. • Recording already undertaken as part of 2012 NICH assessment sufficient if avoidance not possible. • No further mitigation required. |

SITE NO

BARALABA 15

Images



Figure 55: Dovedale homestead (AARC 2023).



Figure 56: Silo to west (AARC 2023).

SITE NO

BARALABA 15




Figure 57: Shed to west of Dovedale homestead (AARC 2023).




Figure 58: Dovedale stock yards (AARC 2023).

Baralaba 16 – Dam 7

| SITE NO | BARALABA 16 |
|---------------------------------|---|
| Type/Name | Dam 7 |
| Location (Datum GDA94 Zone 56J) | -24.288977/149.879670 |
| Description | Earthen banked dam near the base of a hill sloping to the south at the point of the confluence of several ephemeral creeks. The bank is located on the east, west and south sides and is approximately 2.5 metres high. The resultant dam is approximately 50 metres by 30 metres and rectangular in shape. |
| Provenance | Unknown |
| Historic Theme | 2.3 pastoral activities |
| Condition/ Integrity | High |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Nil |
| Site Management Recommendation | No cultural heritage management required. |
| Image |  <p data-bbox="491 1632 826 1664">Figure 59: Dam 7 (AARC 2023).</p> |

Baralaba 17 – Survey Tree

| SITE NO | BARALABA 17 |
|---------------------------------|---|
| Type/Name | Survey Tree |
| Location (Datum GDA94 Zone 56J) | -24.256629/149.868190 |
| Description | Dead sandalwood tree with approximately 300mm diameter. Axe blaze on northwest face. There are no numbers or letters carved into the tree. |
| Provenance | Unknown |
| Historic Theme | 2.1 exploring, surveying and mapping the land. |
| Condition/ Integrity | Low |
| Potential Impact | Located within proposed mine footprint. |
| Archaeological Potential | Nil |
| Individual Site Significance | Low Local |
| Site Management Recommendation | <ul style="list-style-type: none"> • Avoid if possible. • Recording undertaken as part of assessment sufficient if avoidance not possible. • No further mitigation required. |
| Image |  <p>Figure 60: Blazed Tree (AARC 2023).</p> |

Appendix 2: Stop Work Procedure

Procedure for Discovery of a NICH Site, Place or Item of Potential Cultural Heritage Significance (Converge 2023)

Stop Work
 If potential places, sites or items of NICH are located during works: stop work, mark and protect the site. Work can continue elsewhere, if it will not affect the item.



Initial Contact
 Contact the Proponent's Environment Officer immediately and notify them of the item.



Notification to Heritage Advisor
 The Proponent's Environment Officer is to contact a suitably qualified heritage practitioner, including details of the nature of the item. It is recommended that a heritage practitioner is commissioned in an 'on-call' capacity during the Project construction phases to assist with incidental finds.



Assess Significance
 The heritage practitioner will attend the site (if necessary) as soon as possible to assess significance of item and recommend a course of action. These may include:

- i) protect and avoid;
- ii) excavate, record and remove;
- iii) investigate and preserve;
- iv) collection, storage and conservation strategies; or
- v) no action if the item is deemed to have no significance.

Recommendations i), ii) and iii) will require preparation of a work method statement in consultation with DES Cultural Heritage Branch prior to any action commencing.

Is Item Discovered Significant?

Yes ↓

Report Find to DES Cultural Heritage Branch
 Reporting of find to DES Cultural Heritage Branch is required by law.
 Depending on the nature of the find, the heritage practitioner and DES will negotiate the requirements of the find.



Complete Recording/ Field Work
 Complete the cultural heritage or remedial works in accordance with the consent permit or agreed course of action. Advise the Proponent's Environment Officer when the assessment is complete.



Work Recommences
 Proponent's Environment Officer to advise when works can re-commence in the original or changed form.



Submit Final Report
 The heritage practitioner completes reporting in accordance with the appropriate guidelines and conditions. A copy of the report to go to relevant government authorities (where applicable) and Proponent's Environment Officer.

No ↓

Recording
 Items deemed to have no significance will require recording as evidence. A photograph of the item and a description of why it is not of significance should be recorded by the heritage practitioner and forwarded to the Proponent's Environment Officer.



Advice
 Advise the Proponent's Environment Officer when the assessment is complete.
 Confirm advice with DES Cultural Heritage Branch if required.

