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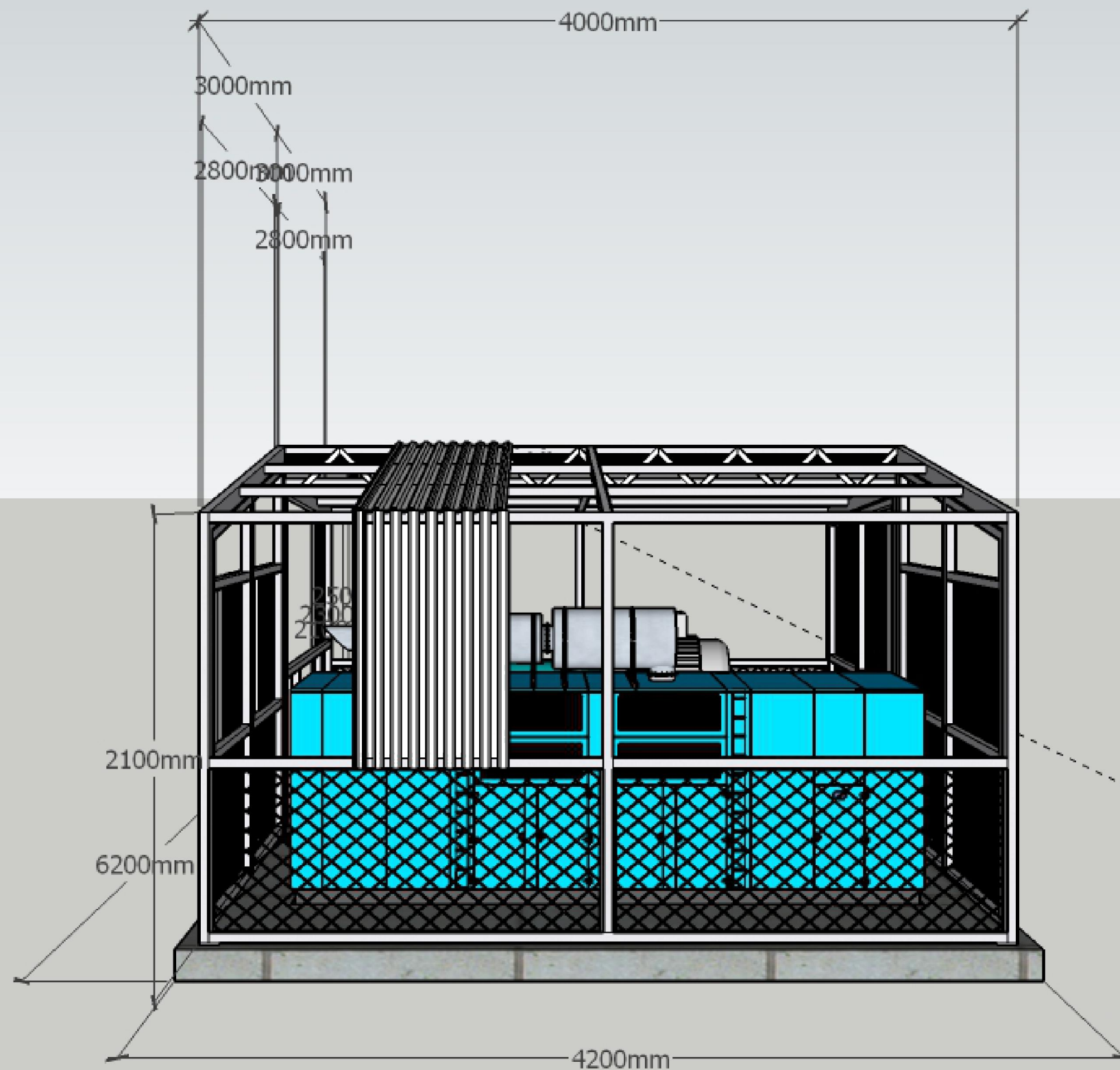
Project:
Maudesley Pump Supply Relocation
Client:
Maudsley Pty Ltd
Address:
'Forest Gate'
Cobb Hwy Mathoura, NSW

Date: 06/12/2022
Job No: QU-0785
Waterway: Gulpa Creek
Plan:
Shed showing pump
Plan View

Scale: 1:40

Sheet Size: A3

Comments:
Sheet 1 of 5
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.



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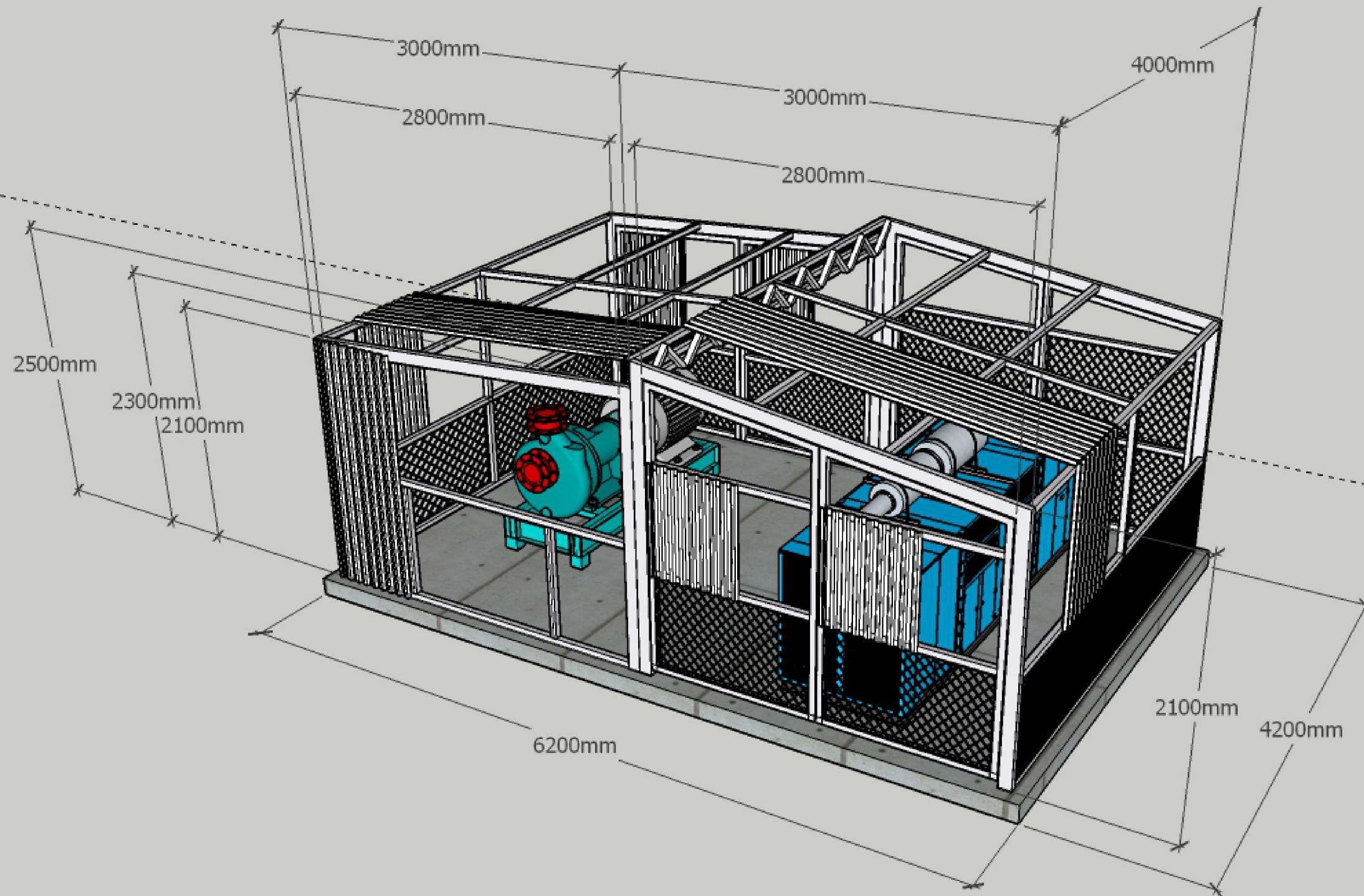
Waterway: Gulpa Creek

Plan:
Shed showing pump
West Elevation

Scale: 1:25

Sheet Size: A3

Comments:
Sheet 2 of 5
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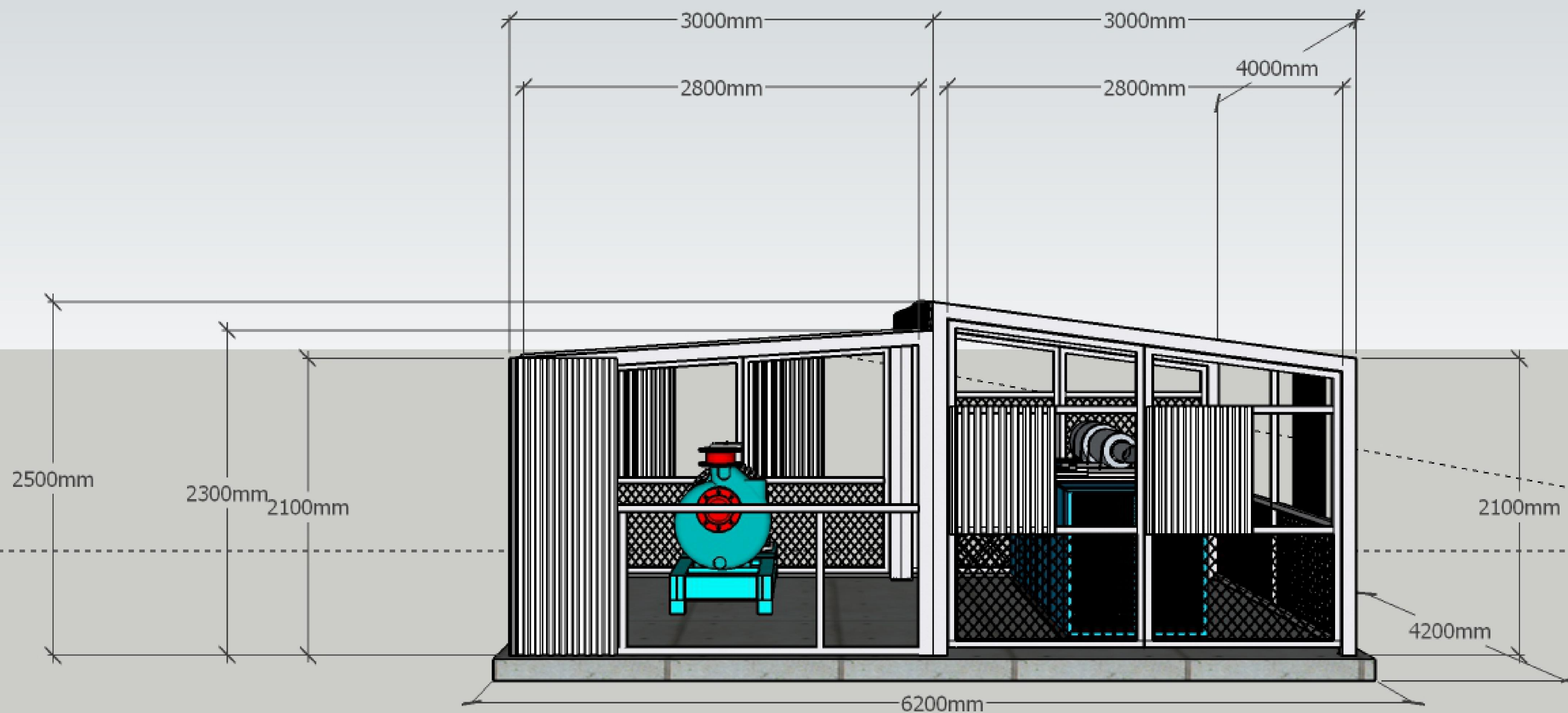
Waterway: Gulpa Creek

Plan:
Shed showing pump
North west Elevation

Scale: 1:40

Sheet Size: A3

Comments:
Sheet 3 of 5
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Waterway: Gulpa Creek

Plan:
Shed showing pump
North Elevation

Scale: 1:30

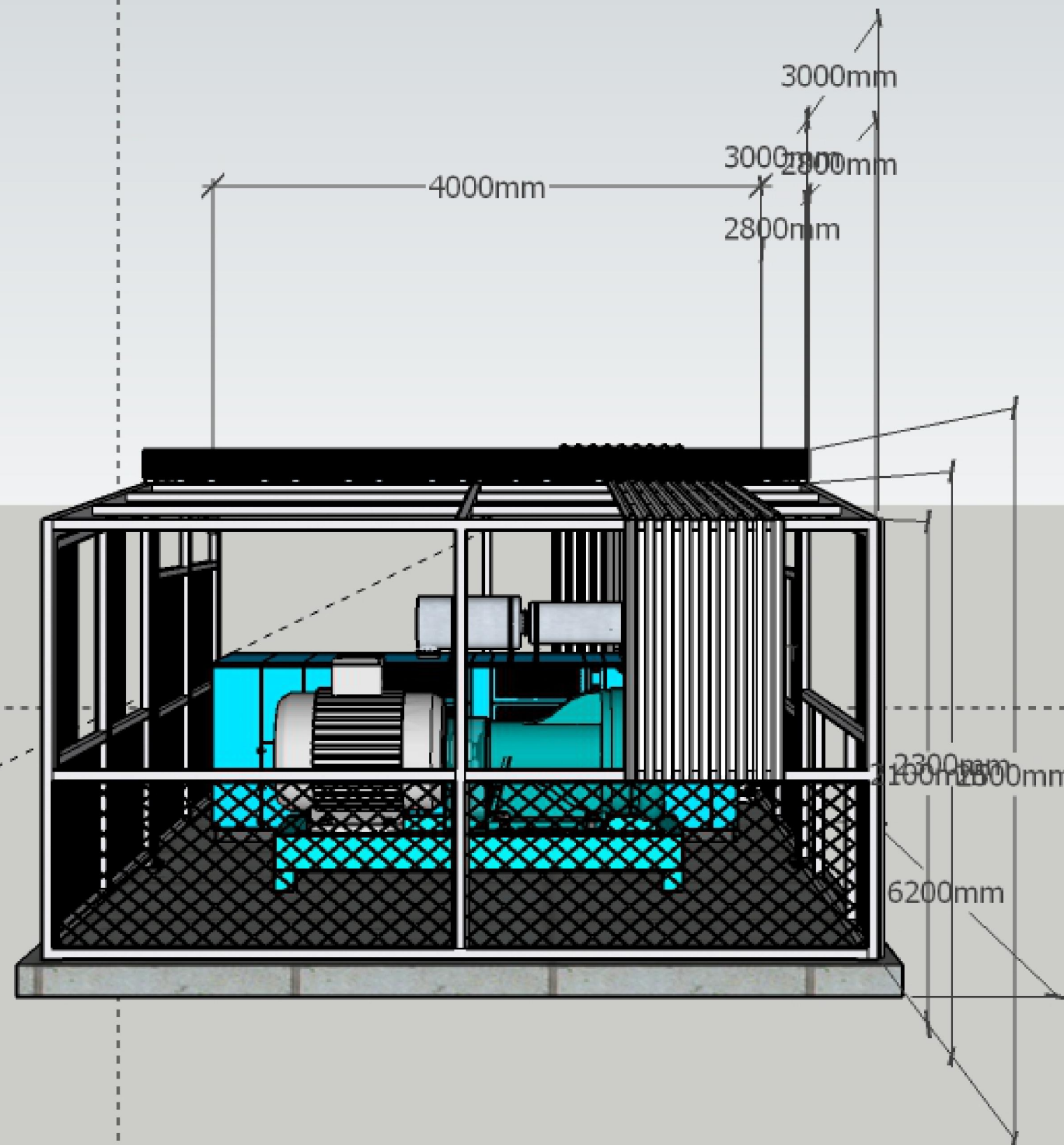
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Cobb Hwy Mathoura, NSW

Date: 06/12/2022

Job No: QU-0785

Waterway: Gulpa Creek

Plan:

Shed showing pump

East Elevation

Scale: 1:25

Sheet Size: A3

Comments:

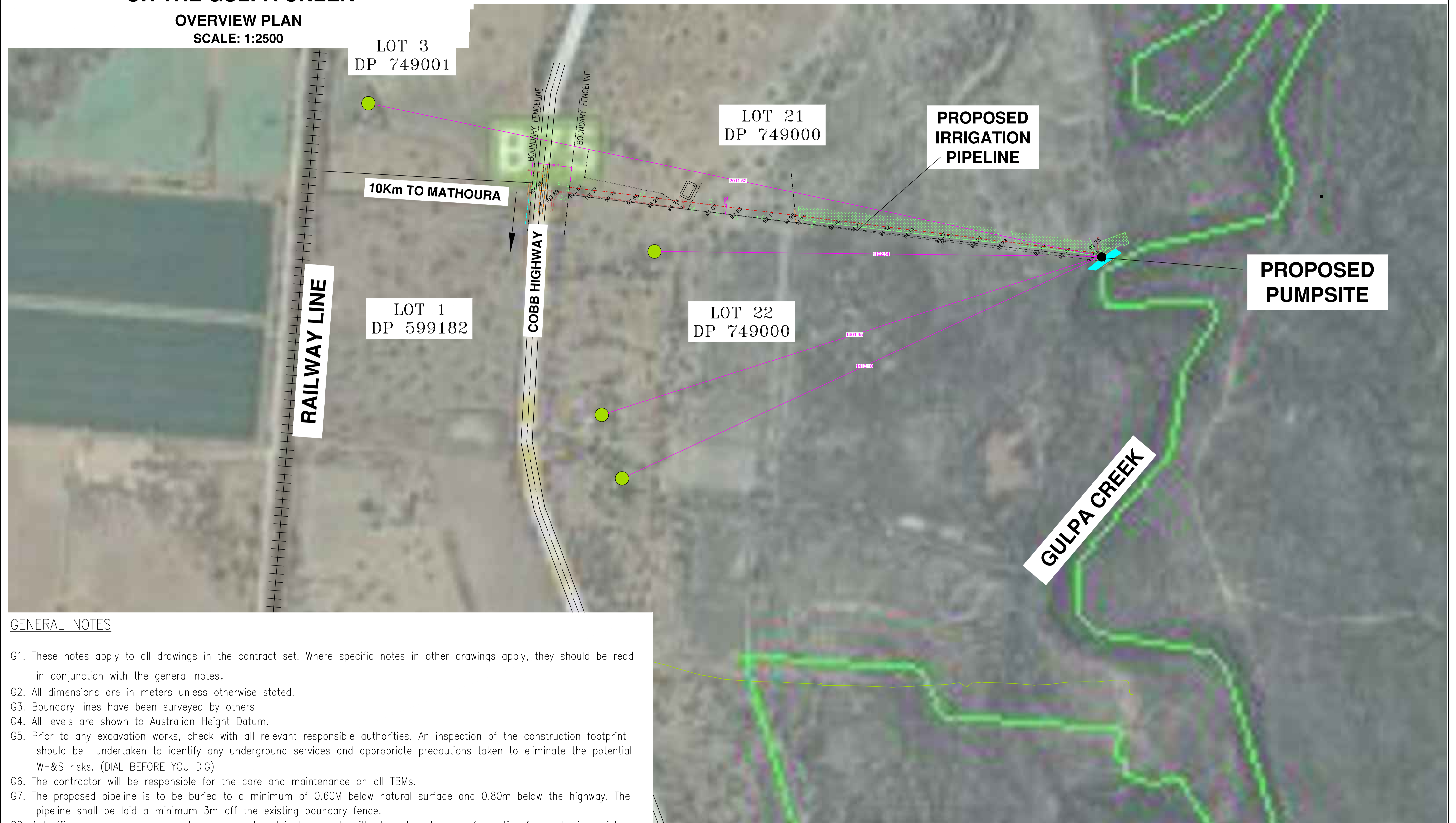
Sheet 5 of 5

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PROPOSED IRRIGATION PUMP AND PIPELINE ON THE GULPA CREEK

OVERVIEW PLAN
SCALE: 1:2500



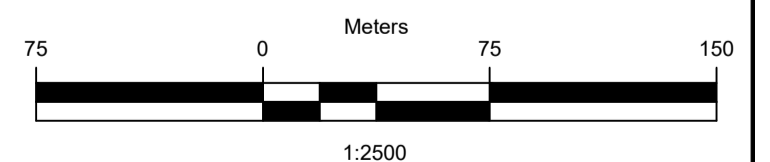
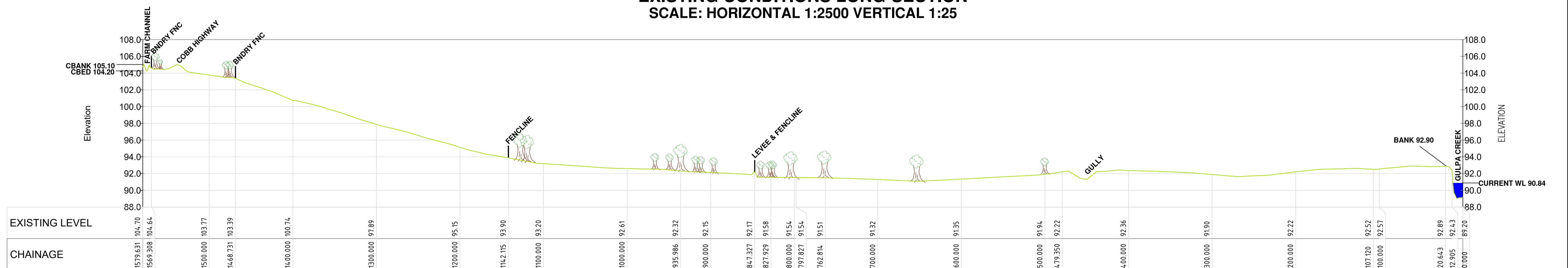
GENERAL NOTES

- G1. These notes apply to all drawings in the contract set. Where specific notes in other drawings apply, they should be read in conjunction with the general notes.
- G2. All dimensions are in meters unless otherwise stated.
- G3. Boundary lines have been surveyed by others
- G4. All levels are shown to Australian Height Datum.
- G5. Prior to any excavation works, check with all relevant responsible authorities. An inspection of the construction footprint should be undertaken to identify any underground services and appropriate precautions taken to eliminate the potential WH&S risks. (DIAL BEFORE YOU DIG)
- G6. The contractor will be responsible for the care and maintenance on all TBMs.
- G7. The proposed pipeline is to be buried to a minimum of 0.60M below natural surface and 0.80m below the highway. The pipeline shall be laid a minimum 3m off the existing boundary fence.
- G8. A traffic management plan must be prepared and is to comply with the relevant code of practice for work site safety traffic management in relation to any works undertaken within the road reserve.
- G9. These plans have been created in conjunction with pumpsite and pipeline designs by Wheeler Irrigation.

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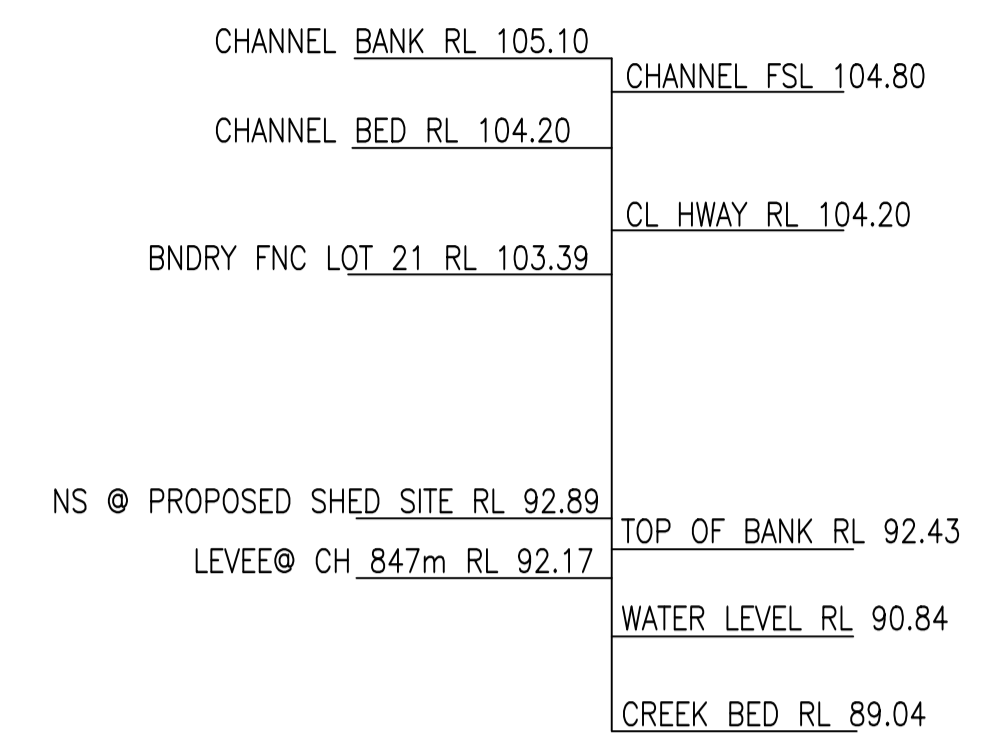
EXISTING CONDITIONS PLAN

SCALE: 1:2500

[illegible]

PROPOSED PIPELINE PLAN
SCALE: 1:2500

NOT TO SCALE



LOT 3

LOT 1

SEE SHEET 5 FOR
ROAD CROSSING
ENLARGEMENT

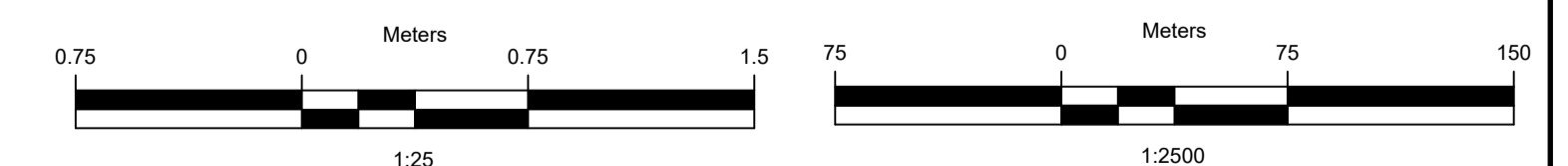
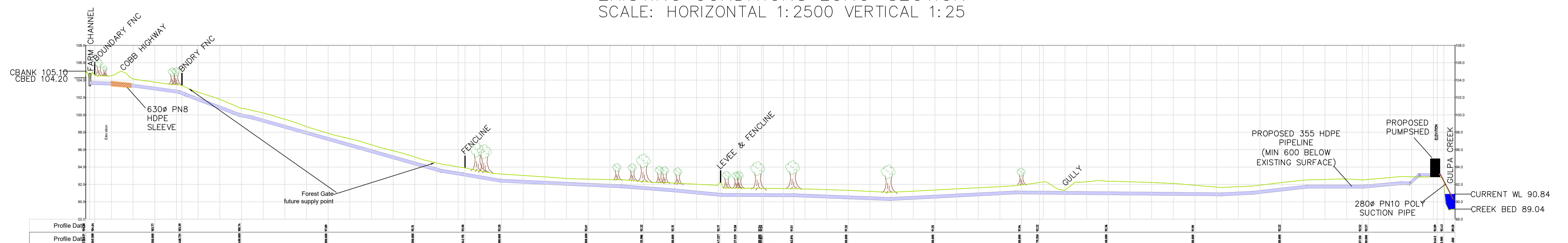
LOT 21

LOT 22

SEE SHEET 4 FOR
GULPA CREEK BANK
ENLARGEMENT

PIPELINE LAYOUT
ENLARGEMENT
NOT TO SCALE

EXISTING CONDITIONS LONG-SECTION
SCALE: HORIZONTAL 1:2500 VERTICAL 1:25

[illegible]

A photograph showing a riverbank with a wooden fence made of two vertical posts and a horizontal rail. The ground is covered in dry leaves and low-lying vegetation. In the background, there is a dense forest of tall, thin trees with light-colored bark, likely eucalyptus. The river is visible on the right side of the image.

A photograph of a small, calm pond or stream in a wooded area. The water is greenish-brown and reflects the surrounding trees. A large, gnarled tree trunk leans over the water from the left bank. The foreground is covered in dry grass and twigs.

A photograph of a dense forest of tall, slender trees with light-colored bark, likely eucalyptus, growing in a clearing. The ground is covered with dry grass and fallen branches.

**GULPA GREEK
PROPOSED PUMPSITE
ENLARGEMENT PLAN
SCALE: 1:200**

PUMP DETAILS
(AS PER SUPPLIER SPECIFICATIONS)
GENSET: 50kW Genset in silencer cabinet with double bundled fuel tank. (to be removed prior to flooding).
FUEL TANK: Double bundled fuel tank on trailer.
PUMP 1: Southern Cross Starline Pump 150 x 125 - 250 (to be removed prior to flooding).
PUMP2: Centrifugal 300mm pump
INLET PIPES: Max 300mm PN10 Poly.
OUTLET PIPE 1: 180mm PN8 Poly with 150mm Meter.
OUTLET PIPE 2: 300mm PN8 Poly with meter to meet requirements.
SUPPLY PIPELINE: 355mm PN4 Poly

D&S PUMP: 90mm Stock and Domestic
SUCTION: 90mm PN10 POLY
OUTLET: 90mm PN4 POLY
ROAD SECTION: 90mm PN8 POLY

Legend:
EXISTING LEVEL
CHAINAGE

Green colourbond shed
6m X 4m X 3m High

PORTABLE GENERATOR
90mm D&S PUMP
1800 PN8 DELIVERY PIPE
ELECTRIC PUMP X 2

150mm concrete slab

3.00m

900 PN4 D&S PIPE

1800 PN8 DELIVERY PIPE WITH 150mm METER
METER TO BE INSTALLED BY DULY QUALIFIED PERSONAL.

3550 HDPE PN4 PIPELINE

2 X MAX 3000 PN10 POLY SUCTION PIPE

WL 90.84




900 PN10 SUCTION

SCREEN TO BE INSTALLED TO MEET NSW FISHERIES REQUIREMENTS

BED 89.04

DATUM 88.00

Scale: 1:150

REVISIONS	DATE	DESCRIPTION.					CONTOURS @ 0.50m				 RICH RIVER IRRIGATION DEVELOPMENTS PTY LTD ACN 106 801 777	DATE - 15/09/22		SCALE. - SEE PLAN		SHEET 4 OF 5		
	15/09/22	Addition of centrifugal 300mm pump	Fence on Boundary — / — / —	Channel Bank × 105.12 abnk	Bench mark/datum point	Zone 55, AHD RL.—97.864	 Rich River Irrigation Developments. P/L BAUER <i>One Step Ahead FOR A GREEN WORLD</i>		26 McCulloch Drive Moama NSW 2731 Ph. 03 5482 2564, Fax. 03 5482 1918, Mob. 0427 691 042, Email. admin@rrid.com.au			A.B.N. 48 106 901 777		web. www.rrid.com.au		admin@rrid.com.au		
			Centerline of road --- -- --	Channel Bed × 104.26 cbnd	Existing Residence ●	Natural surface level			SURVEY C.HEARN INTERIM PLAN C.HEARN FINAL PLAN FILE: MAUDSLEY PRELIMINARY PLAN			SHEET SIZE A1		DRAWING NO. J000667				
			Existing Track - - - - -		Tree ●	Top of Bank												
			Boundary line = = = = =		Timber Belt ●	Toe of Bank												
			Proposed Easement - - - - -															

PROPOSED IRRIGATION PUMP AND PIPELINE ON THE GULPA CREEK

HIGHWAY CROSSING ENLARGMENT PLAN

SCALE: 1:200

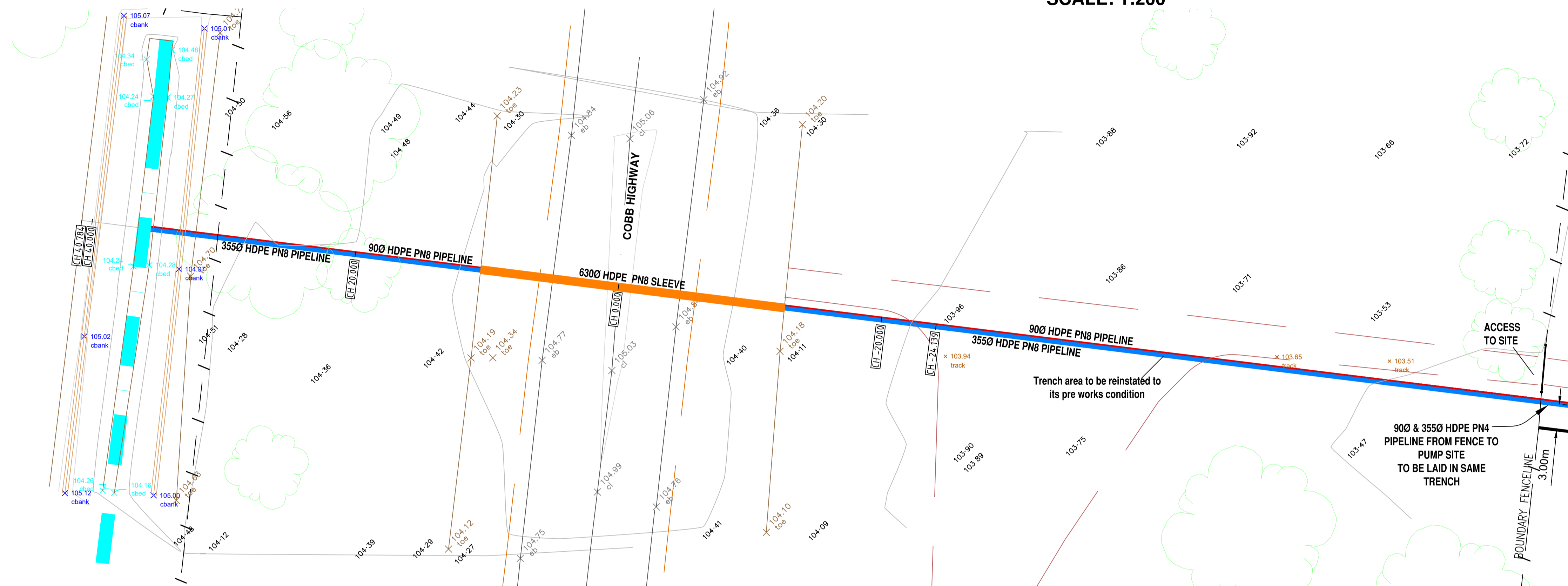


IMAGE 2: LOOKING NORTH



IMAGE 14: LOOKING EAST



HIGHWAY CROSSING ENLARGEMENT CROSS-SECTION

SCALE: HORIZONTAL 1:150 VERTICAL 1:30

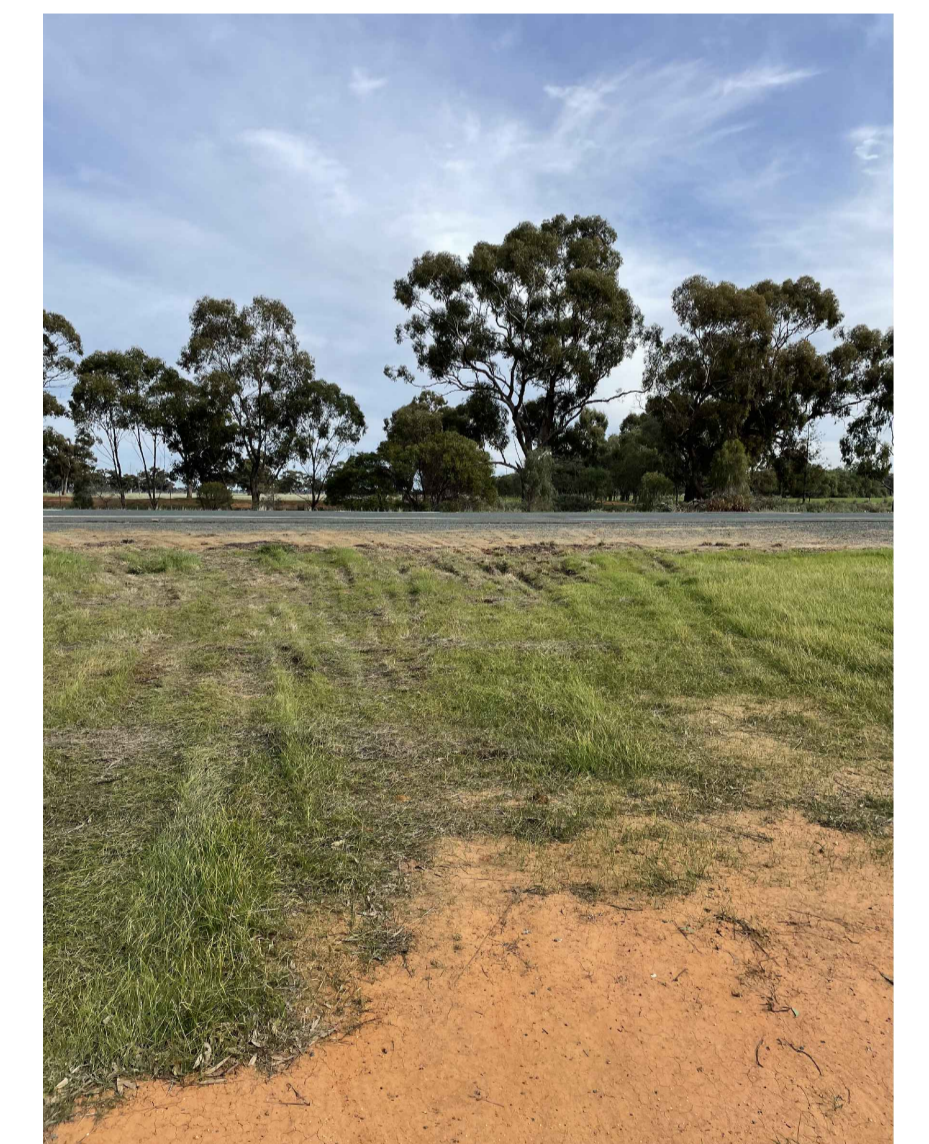
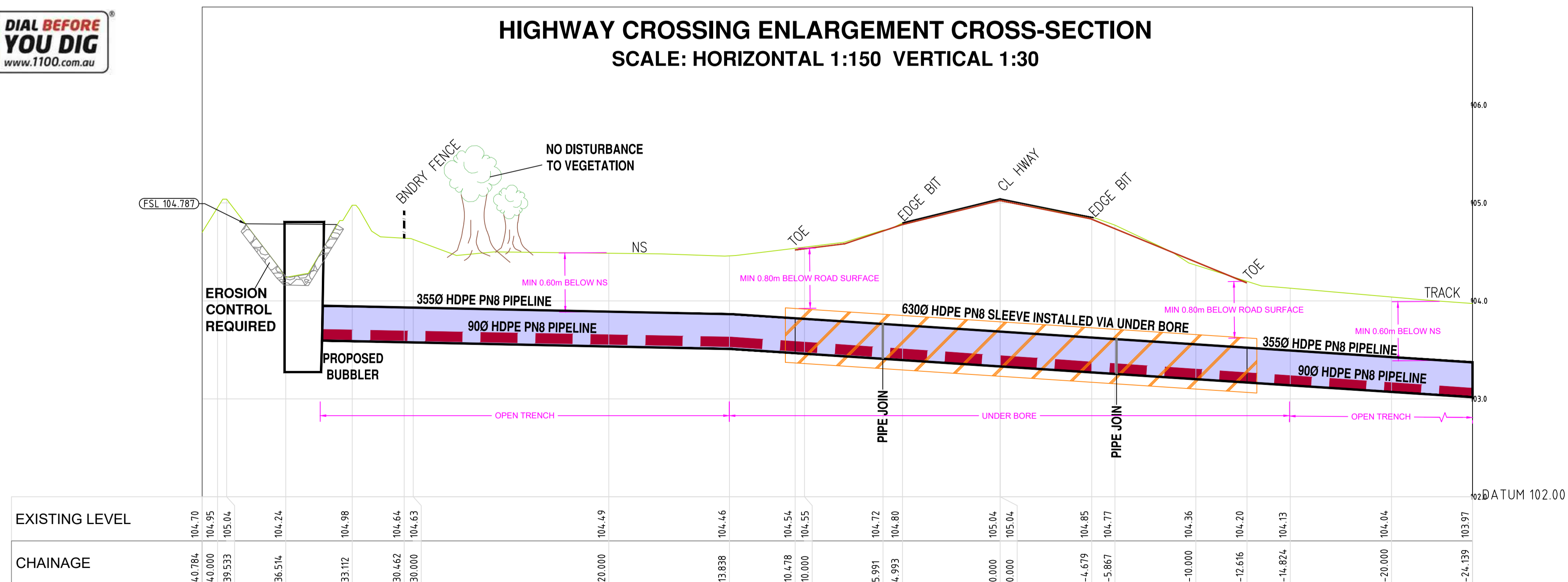


IMAGE 15: LOOKING WEST

[illegible]

LEGEND

Fence on Boundary	— / — / —
Centerline of road	— - - - -
Existing Track	- - - - -
Boundary line	- - - - -
Proposed Easement	- - - - -

Channel Bank ✕ 105.12
cbank

Channel Bed ✕ 104.26
cbcd

Existing Residence ●

Tree ☁

Timber Belt ☁ Timber

Bench mark/datum point ▲

Natural surface level

Top of Bank

Toe of Bank

CONTOURS @ 0.50m

DATUM. - SS 30118, MGA 2020

ZONE 55, AHD RL. -97.864

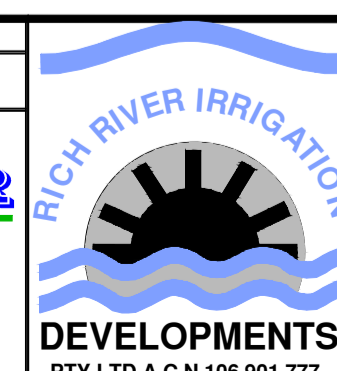
Rich River Irrigation Developments.

BAUER

FOR A GREEN WORLD

One Step Ahead

Centerstar- Centre pivot
 Linestar- Linear move
 Centerliner- Pivoting Linear, Ditch or Hose feed

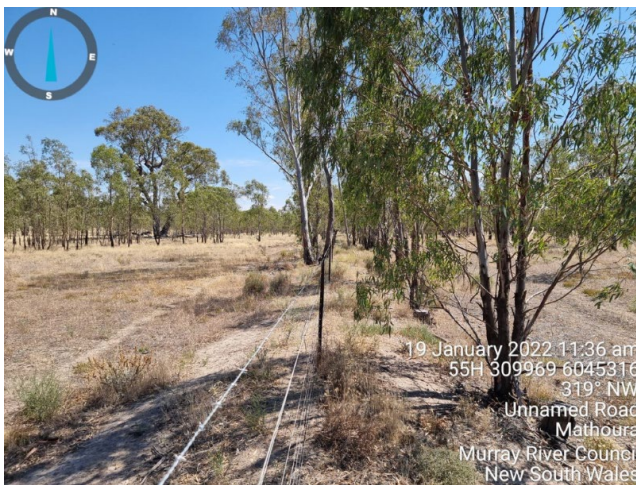


DATE - 20/07/22	SCALE - SEE PLAN	SHEET 5 OF 5
Rich River Irrigation Developments, P/L 26 McCulloch Drive Moama NSW 2731 Ph. 03 5482 2564, Fax. 03 5482 1918, Mob. 0427 691 042. Email. admin@rrid.com.au		A.B.N. 48 106 901 777 www.rrid.com.au
Client.- MAUDSLEY	SURVEY	C.HEARN
	INTERIM PLAN	C.HEARN
	FINAL PLAN	
	FILE: MAUDSLEY PRELIMINARY PLAN	
FINAL PLAN		SHEET SIZE A1 DRAWING NO. J000667



9.9. APPENDIX 9 – SITE PHOTOS (GPS REFERENCED)







Cultural Heritage Due Diligence Assessment

New pump site and pipeline on the Gulpa Creek and Cobb Hwy at
'Forest Gate', Gulpa NSW

September 2022



Progressive Rural Solutions

www.prsltd.com.au



Document Information Record

Project Details

Client name:	Maudsley Pty Ltd
Project:	New pump site and pipeline on the Gulpa Creek and Cobb Hwy at 'Forest Gate', Gulpa NSW
Project No:	J267

Document Control

Document Title	Aboriginal Cultural Heritage Due Diligence Assessment for a new pump site and pipeline on the Gulpa Creek and Cobb Hwy at 'Forest Gate', Gulpa NSW		
File Name:	J267- DDA – V1R4		
Revision:	V1R4		
Author	Rebecca Moodie	Position:	Director
Signature:	<i>RMoodie</i>	Date:	26/09/2022
Reviewed by:	Clare Fitzpatrick	Position:	Director
Signature:	<i>Clare Fitzpatrick</i>	Date:	26/09/2022
Approved by:	Maudsley Family	Position:	Client
Signature:		Date:	26/09/2022

Revision history

Version	Issue date	Reason for issue	Author	Reviewed by	Approved by
V1R1	16/06/2022	Initial Document	Clare Fitzpatrick	NA	NA
V1V2	27/08/2022	Draft	Rebecca Moodie	Clare Fitzpatrick	Clare Fitzpatrick
V1V3	25/09/2022	FINAL Draft	Clare Fitzpatrick	Client	Clare Fitzpatrick
V1R4	26/09/2022	Final	Clare Fitzpatrick	Clare Fitzpatrick	Clare Fitzpatrick

Distribution

Version	Recipient	Lodgement	Copies
V1R3	Client for review	Electronic	1
V1R4	Client & Contractor	Electronic & Hard	1
V1R4	Murray River Council & Relevant Referral Authorities	Electronic	1

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Related Documents

Type	Author	Name	Date
Statement of Environmental Effects	Progressive Rural Solutions	J267 – SEE – V1R4	06/12/2022
Pump Design Plan	Rich River Irrigation Developments Shane Wheeler Irrigation Specialists	J000667 1-5	20/07/2022
Local Aboriginal Land Council Inspection Report	Cummeragunja Local Aboriginal Land Council	LALC Site Inspection Report	09/06/2022

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1. INTRODUCTION

1.1. ORGANISATION

This report has been prepared for multiple parties which include Maudsley Pty Ltd, who are proposing to install a new pump set for the purpose of irrigation and stock and domestic located on the freehold property 'Forest Gate' owned by Mr Nicholas Dawson. The proposed works on the property will relate to the resupply of Gulpa Creek water to both the Maudsley property and the Dawson property as agreed from time to time. The works installed will be located on an easement the benefits the relevant parties supplied by the approved work.

Progressive Rural Solutions – Clare Fitzpatrick will be the contact person throughout the application process only. The main contractor proposed to undertake the project works is Mr Shane Wheeler of Wheeler Irrigation Specialists who will be the contact person during construction phase of the project. The operation of the approved work will be the party identified on the work approval being Maudsley Pty Ltd.

1.2. PURPOSE

This Aboriginal Cultural Heritage Due Diligence Assessment has been prepared by Progressive Rural Solutions (PRS) in conjunction with the Client, property owner and Local Aboriginal Land Council to assess potential impacts that may occur to Aboriginal objects and/or places as part of completing project works described below. The report has been prepared with reference to the following standards, guidelines, and policies:

- *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (NSW Department of Environment, Climate Change and Water [DECCW] 2010) (the Code).
- Statement of Environmental Effects - Progressive Rural Solutions
- Rich River Irrigation Developments and Wheeler Irrigation Specialists - design plans,
- NSW Office of Environment and Heritage (OEH) Aboriginal Heritage Management System (AHIMS) database,
- Other sources of information where available, and
- Reports as referenced throughout and at the end of the document.

1.3. REPORT FORMAT

This report is set out in the following format:

Section	Address
1	Objectives, documentation, and background.
2	Statutory context.
3	General project details, construction methodology, stages and alternatives considered.
4	Historical background.
5	Assessment.
6	Contingency Measures.
7	Conclusion.
Appendices	Plans and supporting reports.

1.4. OBJECTIVES

The key objective of this report is to ensure that impacts to potential Aboriginal cultural heritage are minimised. This includes undertaking the following:

- A search of the NSW OEH AHIMS database to determine if there are any objects or places recorded in the project area and to gain an understanding of records within the project and broader area,
- To review the landscape in and surrounding the project area to determine if there are landforms with potential to contain Aboriginal objects,
- Assess and record the nature of the level of disturbance of the site and landforms,
- Undertake a visual assessment of the project area to review disturbance activities, recorded items in the vicinity and potential for or the identification of Aboriginal objects,

- Complete a report to record the Due Diligence process and present any further recommendations including procedures to manage unexpected discovery of Aboriginal heritage items including the notification requirements,
- To summarise the legislative framework in New South Wales that relates to Aboriginal Heritage, and
- Ensure appropriate controls and procedures are implemented during construction activities to avoid or minimise potential adverse impacts to Aboriginal heritage.

1.5. BACKGROUND

The property owned by the Maudsley family, located at 'Fairview' 1085 Leetham Road Mathoura, which includes the land titles identified as Lots 10, 12 and 30 of Deposited Plan 756258 has been supplied historically from the Gulpa Creek via the Gulpa Creek Community Pumping Scheme (WaterNSW work approval 50WA503300) since its connection to the scheme in 1997 & 1998 (Source: WaterNSW). This scheme is also authorised to supply irrigation and stock and domestic water to multiple properties, including 'Forest Gate' formally known as Lot 21 Deposited Plan 749000 related to this application.

In reviewing the easements for water supply access, the owners of the property where the existing connected pump site is located (Rural Villages Pty Ltd), indicated that the 'Fairview' and 'Forest Gate' properties did not have legal access to the pump site. Irreconcilable differences between parties and the lack of clear legal access to water supply from the authorised works on the property mean that the owners of 'Fairview', 'Forest Gate' and others have now been forced to identify alternate feasible access to water supply from the Gulpa Creek.

This application, and related documents, propose a new pump site on the Gulpa Creek on the property known as 'Forest Gate' with the new infrastructure works located on a proposed easement on the southern boundary with the easement proposed to benefit the Maudsley operation. The proposed pump and pipe system owned and operated by Maudsley's will re-supply both irrigation and stock and domestic water from the Gulpa Creek via a new buried supply pipeline into the existing irrigation supply system on the western side of the Cobb Highway – resupplying 'Fairview'. The 'Forest Gate' property will also benefit from a connected water supply to future on farm developments and environmental water supply as negotiated in the future.

Both the pump site and the Cobb Highway Road crossing are considered as part of this application.

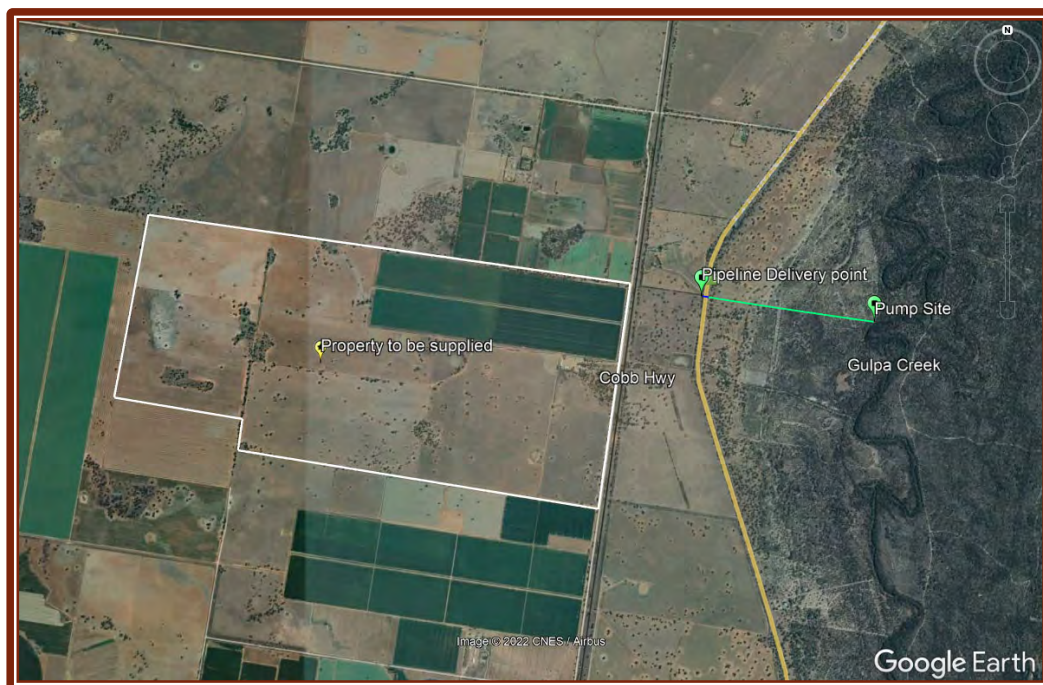


Figure 1-1 Image showing overview of property and location proposed works

The 'Water Supply Work Approval' extraction point remains within the same weir pool in the Gulpa Creek which runs between the Murray and Edward Rivers through Mathoura, NSW. Confirmation has been provided from NSW Crown land that the site is located on privately owned freehold land which enjoys presumptive title extending to the middle thread of the creek via the '*Ad Medium Filum Aqueae*' rule.

1.6. STUDY AREA

The pump project area is located on the west bank of the Gulpa Creek within the floodplain opposite the Gulpa Forest. The pipeline project area is located from the Gulpa Creek, running along the northern side of the southern property boundary parallel to the boundary fence, to the western side of the Cobb Hwy delivering into an existing irrigation channel.

2. STATUTORY CONTEXT

The conservation and management of Aboriginal heritage objects and places is undertaken in accordance with relevant Commonwealth, State or Local Government legislation.

2.1. COMMONWEALTH LEGISLATION

2.1.1. ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT, 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) provides objects within the Act which recognise the role Indigenous people play in the conservation and sustainable use of resources, and the need to promote the use of traditional knowledge to inform management and conservation decisions. The relevant objects for the purposes of this discussion are: to promote a co-operative approach to the protection and management of the environment involving governments, the community, landholders and Indigenous peoples; to recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity; and to promote the use of Indigenous peoples' traditional knowledge of biodiversity with the involvement of, and in co-operation with, the owners of the knowledge.

2.1.2. ABORIGINAL AND TORRES STRAIT ISLANDER HERITAGE PROTECTION ACT 1984

The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSHP) allows for the protection of Areas and objects that are of particular significance to Aboriginal people. This Act allows the Minister to make a declaration to protect an area, object, or class of objects from a threat of injury or desecration on application by an Aboriginal person or group.

2.1.3. NATIVE TITLE ACT 1993

The *Native Title Act 1993* provides a national system for the recognition and protection of native title and for its co-existence with the national land management system. The native title is recognised where: the rights and interests are possessed under traditional laws and customs that continue to be acknowledged and observed by the relevant Indigenous Australians, by virtue of those laws and customs, the relevant Indigenous Australians have a connection with the land or waters, the native title rights and interests are recognised by the common law of Australia.

2.1.4. BURRA CHARTER: THE AUSTRALIA ICOMOS CHARTER FOR PLACES OF CULTURAL SIGNIFICANCE

The Burra Charter is the shorter title given to the Australian ICOMOS Charter for the Conservation of Places of Cultural Significance agreed at the historic mining town of Burra in South Australia in 1979. This Charter has been recognised as having pioneered the understanding of cultural heritage and has been adopted by the Australian Heritage Council, Heritage Council of NSW, Queensland Heritage Council, and the Heritage Council of Victoria. It is also recommended by the Heritage Council of Western Australia and the Tasmanian Heritage Council.

The Burra Charter importantly defines the basic principles and procedures to be followed in the preservation of all types of sites and defines Cultural significance as a term used to encompass all meanings and values referring to 'aesthetic, historical, scientific or social values for past, present or future generations.'

2.2. STATE LEGISLATION

2.2.1. NATIONAL PARKS AND WILDLIFE ACT 1974 & NATIONAL PARKS AND WILDLIFE AMENDMENT REGULATION 2019

The *National Parks and Wildlife Act 1974* (NPW Act) specifies that the Director-General of the National Parks and Wildlife Service (NPWS; previously DECCW and OEH now Biodiversity Conservation Division [BCD]) is responsible for the care, control, and management of various natural and cultural areas, including Aboriginal places and objects throughout NSW. Under this Act, all Aboriginal objects are protected regardless of significance or land tenure. Such Aboriginal objects include pre-contact features like scarred trees, middens and open camp sites, and post-contact features such as Aboriginal fringe camps. The Act also protects Aboriginal places, which can only be declared by the Minister administering the NPW Act; these are defined as being a place that is or was of special significance with respect to Aboriginal culture.

There are no declared Aboriginal Places within the study area or its vicinity.

Under Section 90 of the NPW Act, it is an offence to destroy, deface, damage, or desecrate an Aboriginal object or Aboriginal place, unless an Aboriginal Heritage Impact Permit (AHIP) has been issued by the BCD of the NSW DPIE. The Act requires that reasonable precautions and due diligence be undertaken to avoid impacts on Aboriginal Objects.

The *National Parks and Wildlife Amendment Regulation 2019* excludes activities carried out in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* from the definition of harm in the NPW Act, meaning that test excavations may be carried out in accordance with this Code of Practice, without requiring an AHIP. The Regulation also outlines Aboriginal community consultation requirements (*Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*), and a *Due Diligence Code of Practice* which specifies activities that are low impact, thus providing a defence to the strict liability offence of harming an Aboriginal object.

An 'Aboriginal object' is defined as *"any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains"*.

There have been no Aboriginal objects identified as part of the desktop or visual assessment at the project site however sites have been within the broader vicinity of the area.

2.2.2. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The *Environmental Planning and Assessment Act 1979* (EP&A Act) regulates land use planning and development in NSW, including the making of environmental planning instruments (EPIs). The two types of EPIs are State Environment Planning Policies (SEPPs), which cover areas of State or regional environmental planning significance; and Local Environmental Plans (LEPs), which cover Local Government Areas (LGAs). SEPPs and LEPs identify and provide for the protection of local heritage items and heritage conservation areas. Division 6 of Part 3 of the EP&A Act introduces requirements for Development Control Plans to supplement the LEPs and provide more detailed provisions to guide development.

2.2.3. HERITAGE ACT 1977

The *Heritage Act 1977* protects heritage places, buildings, works, moveable objects, precincts and archaeological sites that are important to the people of NSW. Items that have particular importance to the State of NSW are listed on the State Heritage Register (SHR). Such items can include those of Aboriginal and non-Aboriginal heritage significance. The *Heritage Act* offers blanket protection for relics, defined as:

Any deposit, object, or material evidence:

- a) *Which relates to the settlement of the area that comprises New South Wales, not being Aboriginal Settlement, and*
- b) *Which is 50 or more years old.*

This includes all historical archaeological sites, places, and relics in NSW older than 50 years, regardless of their level of Aboriginal cultural heritage significance.

There are no Aboriginal heritage items or places within the study area listed on the State Heritage Register.

2.3. LOCAL LEGISLATION

2.3.1. MURRAY LOCAL ENVIRONMENT PLAN 2011

The local environment plans guide planning decisions for local government areas. These plans ensure that development is undertaken through zoning and development controls and ensure that local development is undertaken appropriately. The earthworks provision identify that all earthworks will not have a detrimental impact on cultural or heritage items in relation to the NPW Act particularly Section 86.

3. SITE DESCRIPTION AND WORKS

3.1. LOCATION

The project work is located within New South Wales on the Gulpa Creek north of Mathoura. The proposed pump to be located on 'Forest Gate' formally identified as Lot 21 of Deposited Plan 749000. The closest formal township to the project site is Mathoura located 10.5km to the south to south-west.

The property address of the project site is 1 Cobb Highway Mathoura on the western side of the Gulpa Creek. The original freehold title for this land was granted on 20 December 1898 which is prior to May 1918 after which the beds of creeks and rivers were reserved to the crown and as such the owner is entitled to presumptive title to the middle thread of the respective creek or river.

It must be recognised that the physical title boundary identified by registered title surveyor between 'Forest Gate' and the adjoining southern property does not follow occupation (fence line). The actual title at the Gulpa Creek end of the title boundary is located 7 meters south of the fence line intersection with the Gulpa Creek.

Specific locations of the pump site is shown below in Error! Reference source not found., **Figure** and **Table 3-1**.

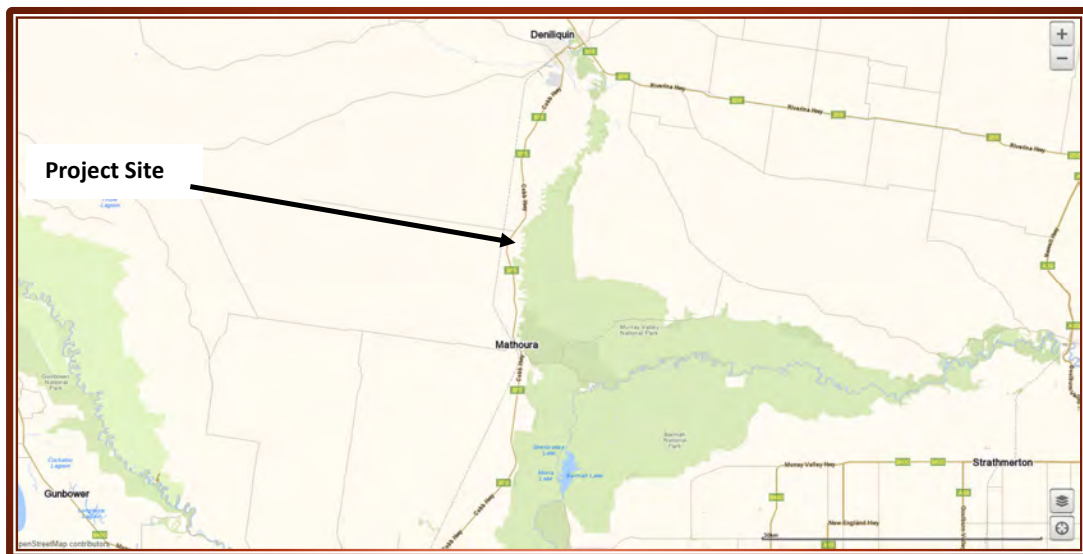


Figure 3-1 - Location of project site in relation to the region

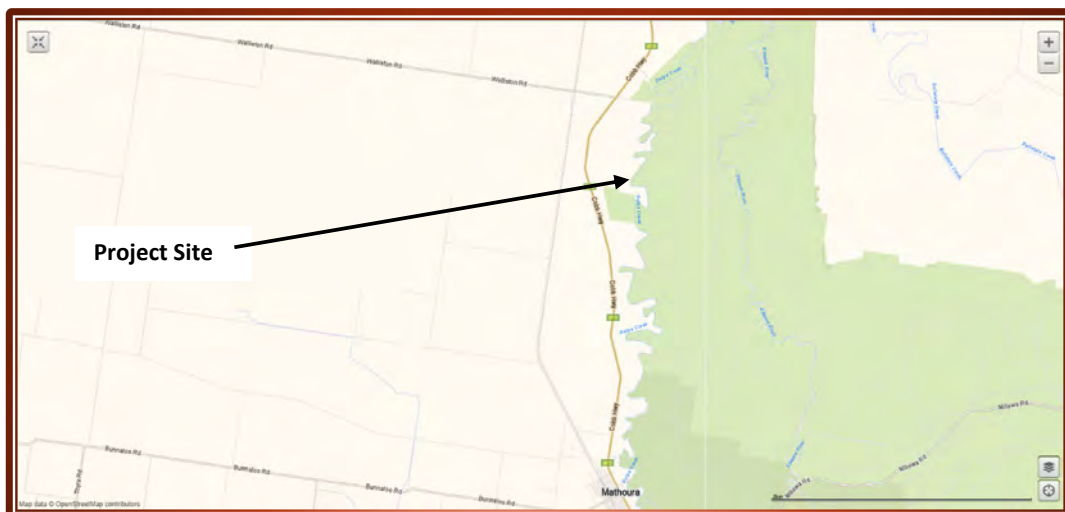


Figure 3-2 - Location of project in relation to the local area

The land details of the project are summarised as follows:

Table 3-1 - Land details of the project

Details	Specific related to project site
Lot number	21
Deposited Plan	749000
Parish	Boyeo
County	Townsend
Local Shire	Murray River Council
LEP Zone	Zone RU1- Primary Production
Catchment Area	Murray
IBRA Sub-region	Riverina - Murray Fans
Mitchell Landscapes	Murray Channels and Floodplains
Plant Community Type	Inland Riverine Forests - River Red Gum
Aboriginal Land Council	Cummeragunja Local Aboriginal Land Council
Floodplain Management Plan	Nil
Land Stature	Freehold
GPS Reference E:	310796
GPS Reference N:	6045211
MGA Zone:	55

3.2. SITE DESCRIPTION

The project works are located in NSW on Lot 21 DP749000 within the Murray River Council area. The property enjoys presumptive rights whereby the title extends to the centre thread of the River channel.

The proposed pump site works are located within an existing cleared area adjoining an existing fence line and access track through the property. The site within this area has been historically modified lacking large old trees found within other areas on the property. The area between the Gulpa Creek and Cobb Hwy have been historically cleared to maintain a boundary fence line between this property and the adjoining one to the south. It must be noted that the fence is not true to title on the eastern end, with the actual title located approx. 7m further south at its intersection with the Gulpa Creek.

The Cobb Hwy area where the proposed road crossing and under bore is proposed has been modified via several access tracks from the property to the road and parallel to the property. No works are proposed within an area that has not been historically modified.

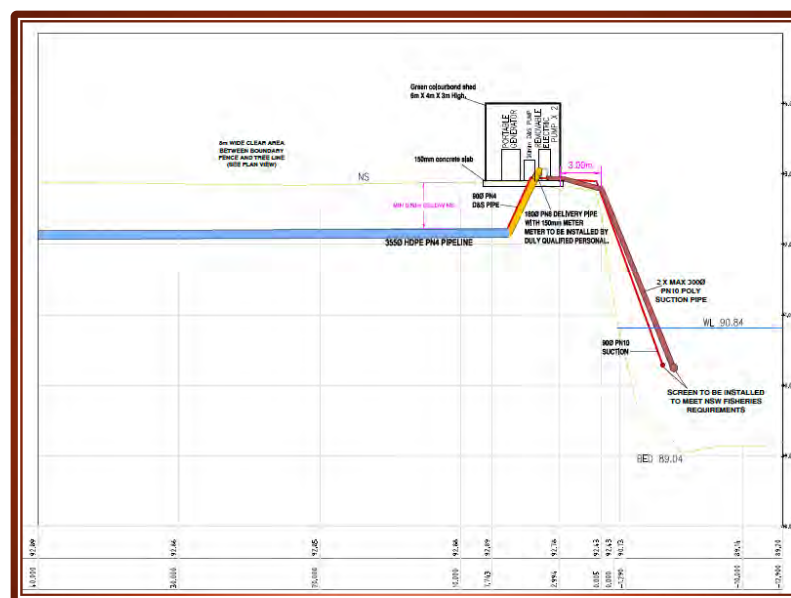


Figure 3-3 - Image showing cross section of project pump site (Source Rich River Irrigation Developments Plans)

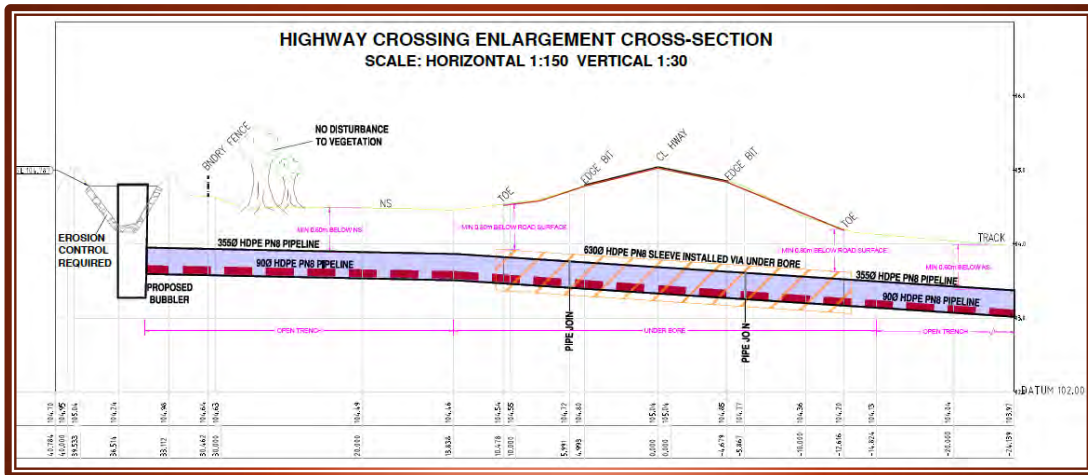


Figure 3-4 - Image showing cross section of project Cobb Highway crossing (Source Rich River Irrigation Developments Plans)

3.3. PROJECT DESCRIPTION

3.3.1. PROJECT WORKS

The works proposed relating to this report are for the installation and operation of up to three new pumps, two for irrigation supply and one for supply stock and domestic. Pumps will be installed within a green Colourbond shed 6m x 4m x 3m high.

Associated works relating to the pumps include the installation of a water supply meter and a pipeline which will extend from the pump site to the Cobb Highway, under the highway and to the existing irrigation supply channel. The Cobb Highway Road crossing is to be installed via under bore.

3.3.2. INFRASTRUCTURE

The new infrastructure will include:

1. 2 x up to 300mm PN10 HDPE suction pipeline,
2. 1 x 90mm PN10 HDPE suction pipeline,
3. Suitable filtration system on suction inlets to meet NSW Fisheries requirements,
4. Approx. 1570m of 355mm and 90mm HDPE delivery pipe located within a shared trench,
5. 1 x WaterNSW compliant meter on the irrigation delivery line installed by a Duly Qualified Person,
6. 1 x electric (diesel driven) mine spec generator contained within a lockable sound deadened cabinet and installed within shed. Design noise level 67 dBA @ 7m (un-enclosed).
7. 1 x solar stock and domestic 90mm pump (with generator connection as back up),
8. 2 x up to 300mm end suction electric pumps to operate between 6ML and 15ML/day,
9. 1 X 630mm HDPE PN8 sleeve installed from table drain to table drain (pipe joins not beneath the pavement) under the Cobb Hwy to sleeve a 355mm HDPE PN8 pipe and a 90mm PN8 HDPE Pipe.

3.3.3. PROJECT METHODOLOGY

The proposed construction methodology is as follows:

1. Required approval are gained,
2. Relevant notifications are given to authorities – where required,
3. Plans are reviewed with contractors and all “No-Go Zones” are identified,
4. Erosion and sediment controls are reviewed and where required installed,
5. Delivery pipeline welded into strings ready for installation into completed trenches,
6. Delivery pipeline trench (within easement) excavated, and delivery pipelines installed, and trench backfilled,
7. Pad for the shed is prepared,
8. Footings for the pump shed and suction line are prepared,
9. Suction pipeline installed and anchored with connection points driven into the bank,
10. Remaining delivery pipeline is trenched, installed and back filled to the meter location,

11. Prefabricated shed delivered and installed on site,
12. Pump installed within shed,
13. Generator installed within shed,
14. Compliant meter installed within delivery pipeline (above ground),
15. Suction and delivery pipelines connected to pump,
16. Pump commissioned and tested,
17. NSW meter validated,
18. Cobb highway under bore pipeline welded and prepared for installation on property (eastern site of Cobb Hwy),
19. Utility within the vicinity identified and marked (if required, physically located),
20. Traffic Control Plan activated as per approved plans and Road Occupation Licence,
21. If required, site specific erosion and sediment controls installed,
22. Under bore excavation undertaken and bore completed,
23. Site backfilled to natural surface,
24. Erosion and sediment control measures removed, and
25. Project site monitored for ongoing erosion and rehabilitation.

No Native Vegetation (dead or alive) is to be removed and excavation and ground disturbance activities are only to occur in approved locations.

The construction methodology of utilising horizontal under boring for pipeline installation beneath the Cobb highway is diagrammatically shown below. The benefits of utilising this installation methodology is as can be seen below, there is minimal disturbance of the ground surface and no vegetation is required to be removed as part of the project works.

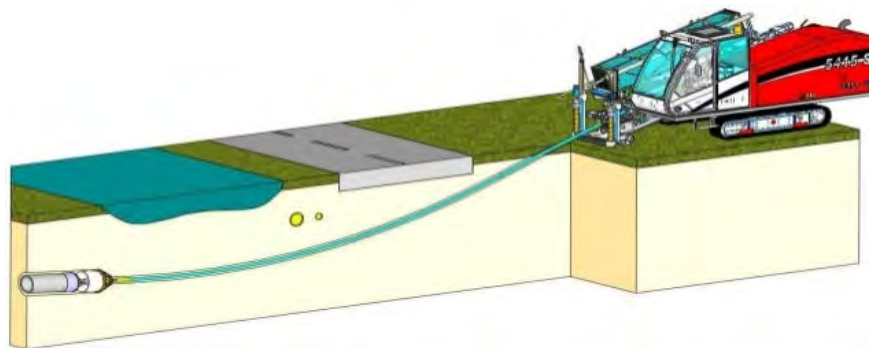


Figure 3-5 – diagram showing the construction method of Horizontal boring.

3.3.4. PROJECT STAGES AND TIMING

The project works will be completed in a single stage.

The horizontal boring of the Cobb Highway delivery pipeline will be completed within 2 days and the pump installation and connection within 5 days and the meter installation and validation within 1 day. Other works relating to the project - pipeline installation, fencing etc (no development application required) will occur outside of these timeframes.

Relevant authorities requesting so will be notified prior to commencement of works through an “Intent to construct letter”.

Works will be undertaken as soon as approvals are held, and the sites are accessible. All works will be undertaken in accordance with any agreements to access the property. The aim for the project is for connection to irrigation areas in preparation for the 2023 winter crop preparation.

3.4. GROUND DISTURBANCE ACTIVITIES

The ground disturbance works are to be limited to works within the pump shed, pipeline and storage and laydown area. The ground disturbance area for the pump shed directly adjoining the Gulpa Creek will encompass an area of approx. 200m². Access and site operation areas are proposed within and on existing access tracks within the site.

The ground disturbance area within the Cobb Highway area is approx. 140m² with only the eastern side of the road to be disturbed.

The site parking storage and lay-down area is proposed to occur approx. 140m from the property entrance from the Cobb Highway within the existing cropping/farming area. No excavation activities relating to this project are proposed in this area.

3.5. GENERAL SETTING AND PHYSIOGRAPHY

3.5.1. CLIMATE

The climate in the Deniliquin area can be described as a semi-arid climate under the Koppen climate classification with warm to hot summers and cool winters. Temperature extremes are quite variable across the year and the highest temperature recorded at Deniliquin was 46.4 degrees on the 16th January 2019. The lowest temperature was -5.9 on the 17th June 1977. The average annual rainfall is 403.4mm.

Table 3-2 – Table showing climate data (Deniliquin)

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Year
Highest High	46.0	46.6	41.2	35.5	27.0	24.4	22.0	27.6	35.0	37.6	44.0	44.8	46.6
Mean High	33.1	32.1	28.6	23.4	18.6	15.0	14.2	16.2	19.8	23.7	27.9	30.4	23.6
Mean Low	16.6	16.2	13.5	9.5	6.1	4.3	3.4	4.1	6.1	8.4	12.0	14.2	9.5
Lowest Low	5.7	6.0	3.5	1.0	-2.0	-4.4	-4.9	-5.0	-1.6	-0.3	1.1	5.0	-5.0
Mean rainfall	23.8	32.5	24.8	25.8	27.4	32.0	29.6	33.5	37.6	33.6	47.0	29.0	376.8
Avg rainfall days	4.3	5.0	4.4	5.7	7.8	13.1	14.6	11.0	9.1	6.5	6.8	5.8	89.4
Avg daily Evaporation	9.6	8.8	6.6	3.9	2.0	1.3	1.3	2.0	3.3	5.2	7.5	9.2	5.1

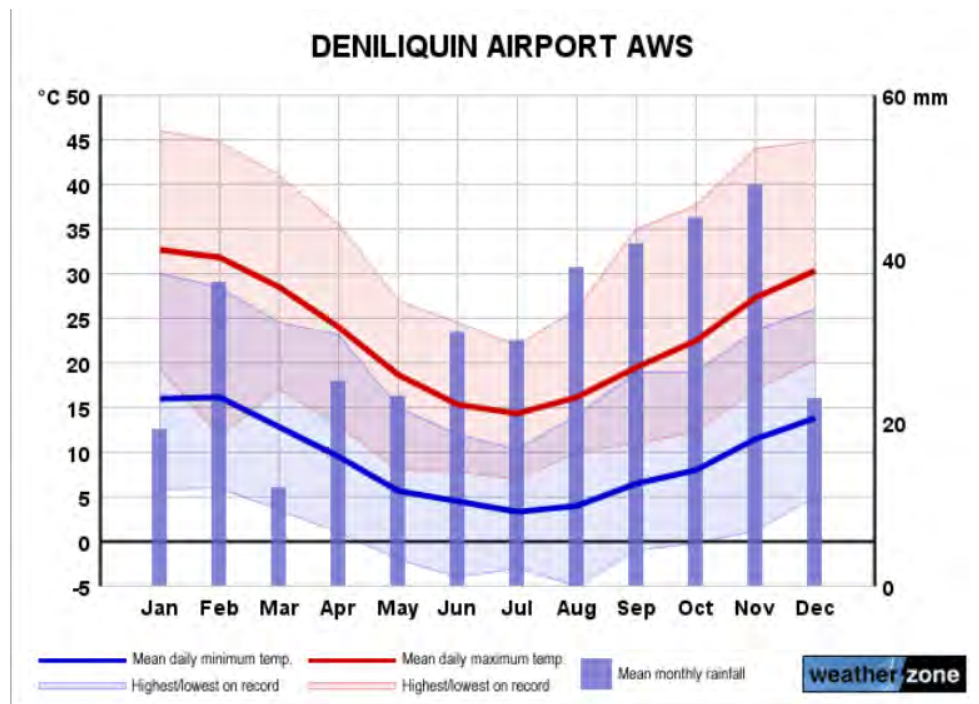


Figure 3-6 - Image showing climate data for Deniliquin (Source: Farmonline)

3.5.2. GEOLOGY AND GEOMORPHOLOGY

The project site is located within the Riverine plain of South-Eastern Australia and is bordered by the Great Dividing Range in the south and south-east, the Manara and Cocoparra ranges in the north and north-east, and the Mallee in the west - see **Figure 3-9** below. The Riverine Plain is approximately 76,800 km²

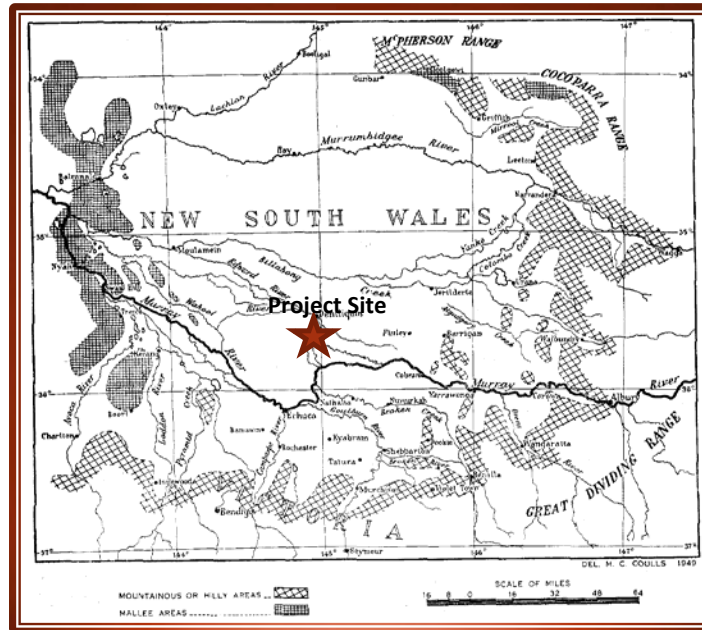


Figure 3-7 - The Riverine Plain of South-eastern Australia and its chief physiographic features (Butler 1950, pg 232.)

The Riverine Plain has built up from alluvial and aeolian sediments deposited over the past 65 million years. Bedrock occurs at the land surface around the southern and eastern rim of the plain while sediments are known to be in excess of 300m in depth in the north-west region near the town of Hay, NSW.

The geomorphic (surface features) of the Riverine Plain have developed from fluvial (action of streams), lacustrine (action of lakes and wetlands) and aeolian (action of wind) activity. These processes have resulted in the current level of soil formation on the plain. The geomorphology and soils of the site are documented by (Butler,1973). In accordance with this publication, the mapping unit covering the site is noted as “CS” or “Confined traces (deposition within a confined belt) >650m wide”. An extract of the map produced by Butler is provided in **Figure 3-8** It can also be noted that adjoining the area are also the formations of “Plc” being Plain with channels and “D” being Source-bordering Dunes.

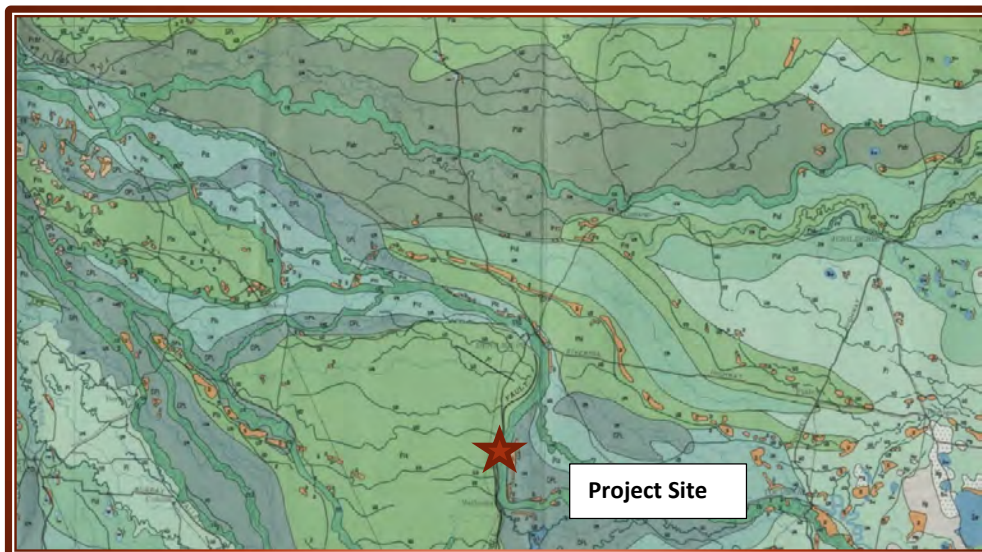


Figure 3-8 - Geomorphic map of the area showing prior streams, plains, and dunes

The pattern of soil deposition, stream location and flooding occurrence determines the vegetation pattern across the plain. River Red Gum (*E. Camaldulensis*) is generally found close to water courses where a one-in-three to one-in-seven-year flood event is received. Black Box (*E. lagiflorens*) is generally found at further reaches and is a one-in-ten to one-in-thirty-year flood species.

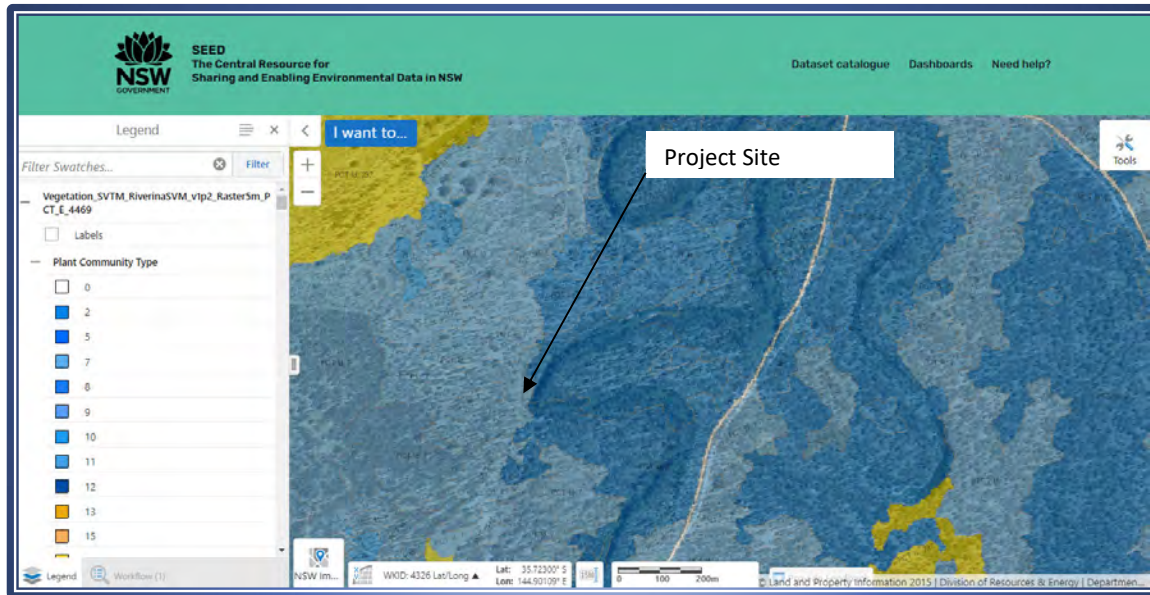


Figure 3-9 - Map of the area showing mapped Plant Community Types (Source: Seed)

3.5.3. TOPOGRAPHY

The pump site is location on the Gulpa Creek and within an area that is subject to overland flows. The Cobb Hwy Road crossing is located at the top of the Cadell Tilt within an area that is not subject to flooding being located nearly 12m higher in elevation than the area at the lower side of the tilt.

The general trend of slopes from the top of the Cadell Tilt within the district is to the west at approximately 1:10,000 (10cm/km or 0.01%). The area at the bottom of the Cadell Tilt slopes generally gently towards the Gulpa Creek and internal property lagoon system. This pump site has a natural surface elevation of 92.89m AHD at the top of bank and the Cobb Hwy road crossing has a natural surface elevation of 104.20 at road centreline.

A cross section of the project site from south to north including the proposed works in included in the attached plans.

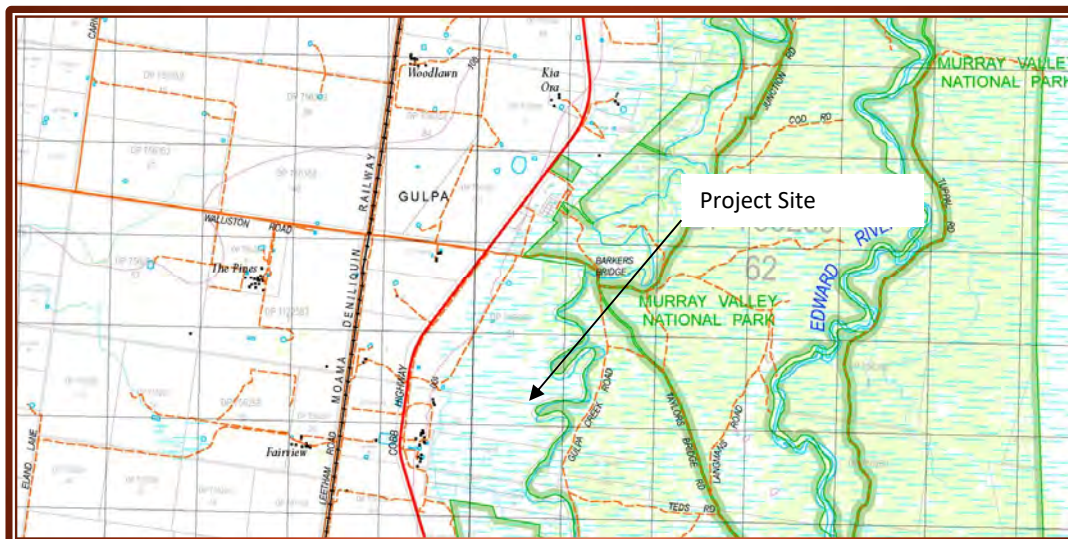


Figure 3-10 - Image showing topography of the project site. (Source Six maps)

3.5.4. SOILS

The “soil and land resources” layer from espade.environment.nsw.gov.au, State of NSW and Office of Environment and Heritage, 2022 has been utilised to review both the soils at the site and the surrounding area. This mapping identifies the soils at the site as Moira Marshes (shaded in grey) being described as silty alluvial soils that dominate the floodplain along low lying channels and flood runners. The landscape is broad floodplain with anastomosing channels caused by damming and diversion of the Murray River by the Cadell Tilt Block. This includes features such as wetlands, channel networks, and stream channels. The alluvial soils and landscape features described above broadly match those visually identified within the broader area and on site.

The adjoining area is defined as Bunnaloo (shown below shaded in yellow) being described as Predominantly transitional red-brown earth on level and gently undulating plains. This soil typically has a sodic subsoil. Calcareous nodules are common in the subsoil. Occasionally occurring on localised higher sandy rises are red earths, and siliceous sands).

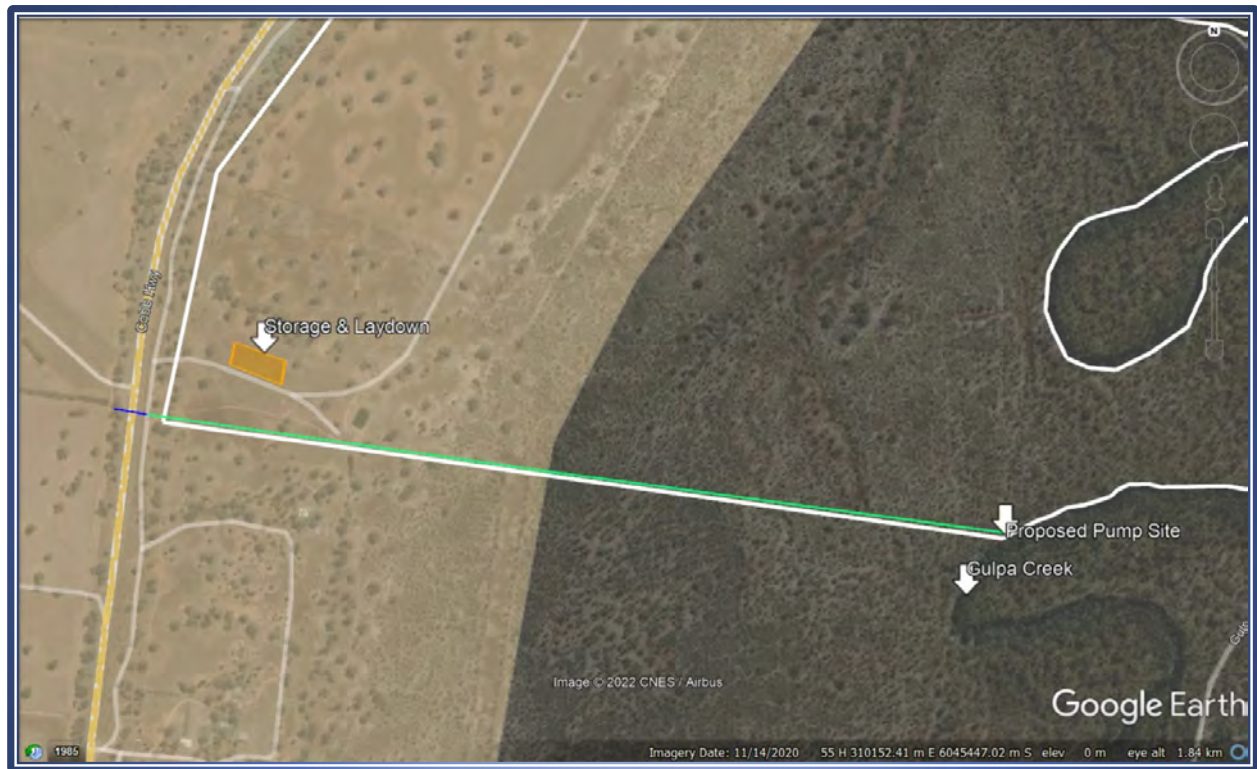


Figure 3-11 - Image showing soils and project site Source: Google earth and eSPADE)

A desktop assessment has been undertaken of the NSW SEED system has been undertaken on the 5th September, 2022 to review and identify the soil types on site and the potential mapped hazards of soils and landscapes within the project area. The site inspection provided additional visual clarification on identified soil types and confirmed the mapping results.

Table 3-3 - Table identifying soils properties at the site

Layer	Identified in Mapping	Identified on site	Further Assessment required?
Acid Sulphate Soil Risk	No	No	No
Naturally Occurring Asbestos	No	No	No
Contamination	No	No	No
Soil Fertility	Moderate	Yes	No
Australian Soil Classification Map of NSW	Hydrosols	Yes	No
Land Management Unit	Urban and Intensive uses	Yes	No
Dispersive/Sodic Soils	Yes	Yes	Erosion and Sediment Controls

3.5.5. VEGETATION

Vegetation generally consists of River Red Gums (*Eucalyptus camaldulensis*) along the banks of rivers and creek lines and Black Box (*Eucalyptus largiflorens*) with a lignum (*Muehlenbeckia cunninghamii*) understorey on surrounding floodplains.

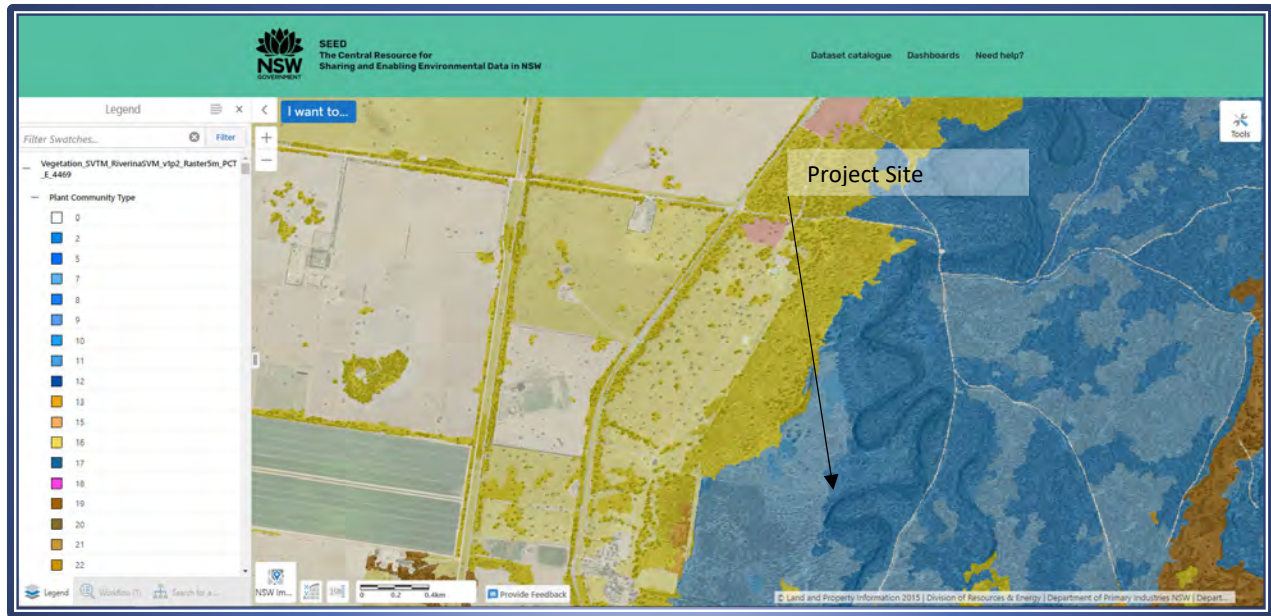


Figure 3-12 - Snapshot showing mapped Plant Community Type of the project area (Source: SEED)

3.6. SURROUNDING AREA

The project is located within the Riverina area of NSW and Victoria. This region broadly covers 9,576,964ha (7,090,008ha in NSW, remaining Victoria). The Murray and the Murrumbidgee Rivers together with the Lachlan and the Goulburn Rivers are the major tributaries which flow from the highlands in the east, west across the plains. (NSW National Parks and Wildlife Service, 2003)

Agriculture is the predominant land use to the north and west of the project area which includes dryland and irrigated cropping, pasture and livestock grazing. Other land uses within the vicinity of the project area include the Gulpa Island National Park to the east and the Gulpa Community to the south. The closest densely populated area is the township of Mathoura which has a population of approximately 938 (2016 census).

The Mitchell Landscape for the area is defined as Murray Channels and Floodplains which are defined as: *Active channels and seasonally inundated floodplains of the Murray streams in Quaternary alluvium with associated billabongs, swamps, channels, levees and source bordering dunes, relief to 10m. Includes scalded alluvial flats, broad elevated floodplains and associated relict channels; isolated sandy rises, relief to 5m.* (Eco Logical Australia, 2008)

The general area is serviced by a State highway, landline and mobile phone service, electricity, internet and riparian water access. Power is not proposed to be connected to the pump site.

4. HISTORICAL BACKGROUND

4.1. ABORIGINAL HISTORY

The abundant and reliable food and water resources of the Murray River, its tributaries and associated floodplains supported some of the densest Aboriginal populations in Australia (Butlin, 1983). The importance of the river to Aboriginal subsistence was substantial with fish, crayfish and shellfish providing reliable sources of protein. The latter were dried for while fish were caught by a number of methods including the construction of weirs and dams and the use of nets and spears. Other sources of protein available on the floodplain and riverine plains included possums, kangaroos, emus, reptiles and waterfowl and their eggs (Edmonds, 1998).

The property is located within the Cummeragunja Local Aboriginal Land Council area however due to its proximity has been identified as an area that would have been utilised as a shared resource area by multiple groups.

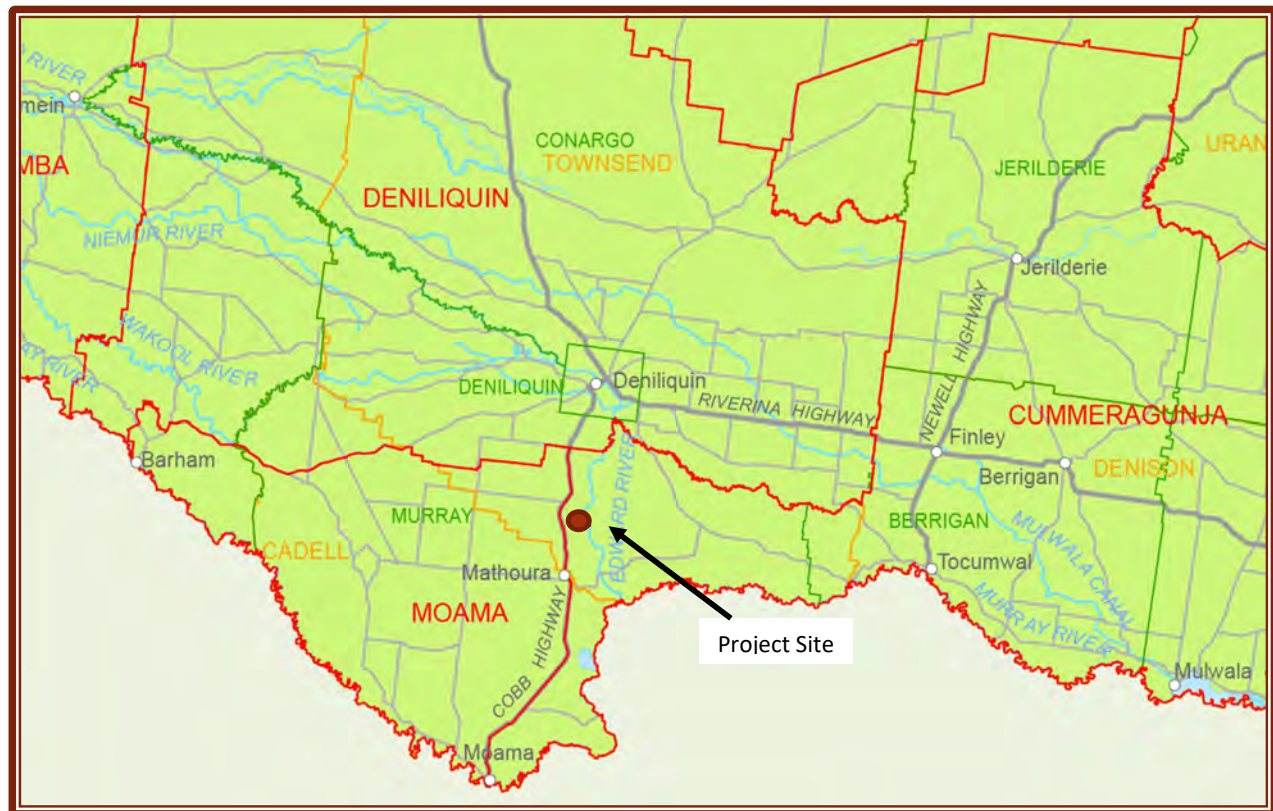


Figure 4-1 - Map showing the locations of the Aboriginal Land Councils (LPI Office, June 2013)

Language groups along the Murray River often identified themselves with a name which consisted of their word for 'no' repeated. For example, Wemba Wemba, Latji Latji and Wadi Wadi. The project area is located just north of the central area within Jotijota territory. This territory spans the Edward River and Gulpa Creek system and includes areas in in both NSW and Victoria (Clark, 1990).

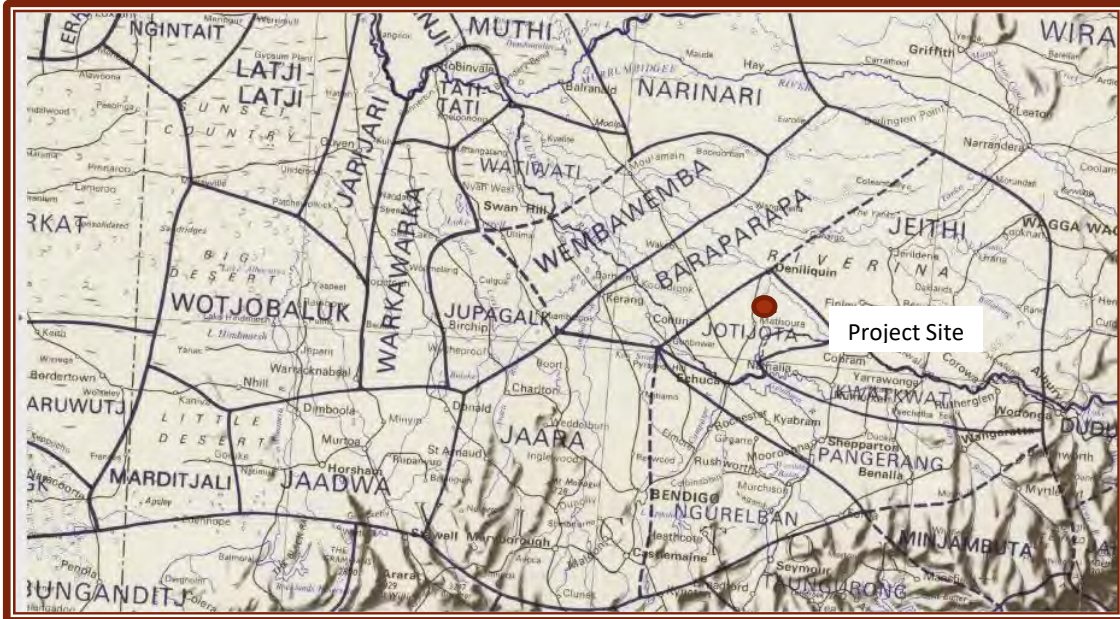


Figure 4-2 - Map from Aboriginal Tribes of Australia – project region (Tindale, 1974)

4.1.1. AHIMS SEARCH

A search of the OEH AHIMS database was undertaken on 2nd May 2022 which identified 39 recorded Aboriginal sites within 1km of the NSW property title being Lot 21 DP749000. A copy of this search is included in Section 10.2. A summary of the recorded sites is shown below:

Site Type	Total	Percentage	Landform
Aboriginal Ancestral Remains (Burial)*	2	5.1%	Floodplain Mound
Artefact Scatter	2	5.1%	Floodplain Mound
Earth Feature	23	58.9%	Floodplain Mound
Modified Tree	12	30.9%	Floodplain, Rise, Plain
Total	39	100%	

* **Note:** one site noted as a possible burial.

4.1.2. OTHER ARCHAEOLOGICAL ASSESSMENTS

A search of AHIMs Archaeological Reports has been undertaken to identify if any reports have been completed on or surrounding the project area. This search showed 1 (one) result however site cards have referred to have indicated that an additional assessment was undertaken but not published.

- Regional Studies:
 - Craib, J 1991 Archaeological survey in the Moira Millewa State Forests
- Local Studies
 - Cusack, Sneddon 2011 Illiderton (Schoeffel Property) Conservation Area Study, Mathoura NSW, Unpublished report to Murray Catchment Management Authority

4.2. EUROPEAN HISTORY

The first Europeans to traverse the project area and surrounds was explorer Charles Sturt in 1838. This exploration was followed by Edward Howe who overlanded cattle in 1840 stopping on the banks of the Gulpa Creek possibly at the project location. Land was first taken up in the area by a squatter called Peter Stuckey and it is recorded that a man named Ward had a shanty on the banks of the Gulpa Creek at the location now known as Mathoura.

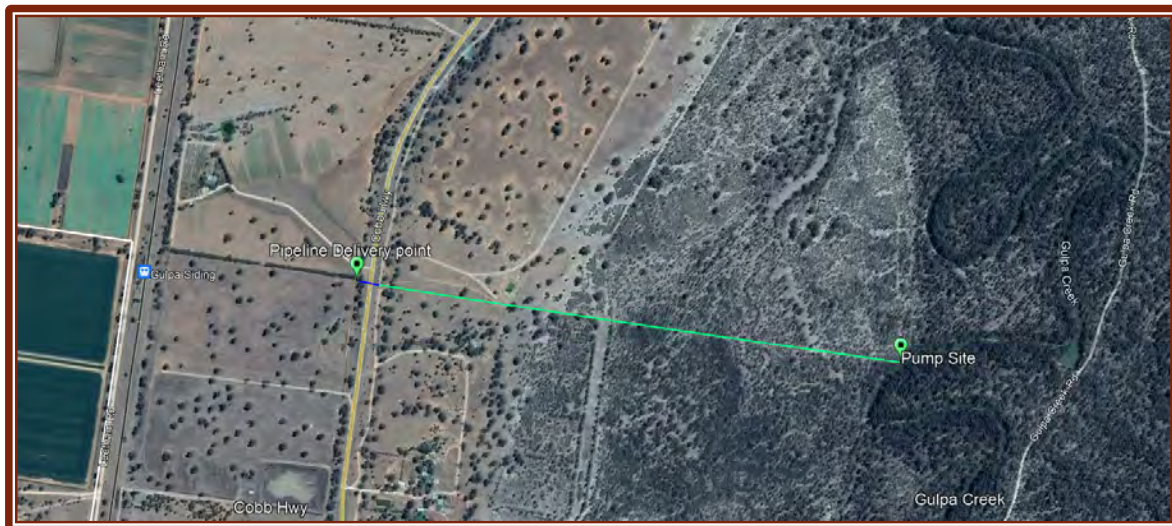
The area was first surveyed in 1858 by Surveyor McCulloch when the townships of Mathoura and Yalama (located just north of the property) were named. The following year Cobb & Co coaches commenced servicing the area. By 1865, the area had its first sawmill and 1876 the Moama to Deniliquin Railway line. Local accounts have identified that the general

area of the project site was directly adjoining timber cutters camp who cut sleepers for the railway lines and then continued following its completion to live in the area using it as a base. The creek at this location either at or close to the project site would have been the access point for water for travelling stock and travellers between Deniliquin and the Victorian border.

The area surrounding the project site was used as travelling stock reserve likely as the banks of the creek are gradual allowing both sheep and cattle good access to reliable water at this location. The area is also shaded offering stock travelling a well sheltered place to rest.

The historical activities with the European settlement times have impacted the general area through:

- Damage to vegetation cover caused by the grazing of livestock (recorded as early as 1840),
- Significant modifications to the land surface and water drainage regime with the modification to the land for irrigation and stock watering infrastructure,
- Logging and clearing operations (recorded as early as 1865) which remain evident in the vegetation remaining on the property today,
- Increased soil erosion from grazing, clearing and severe droughts,
- Depletion of reed beds through cattle grazing,
- Spread of feral species such as rabbits causing widespread damage to vegetation, soil structure and quality, and
- The construction of infrastructure such as road, rail, levees, buildings, houses, fences, and sheds.



5. ASSESSMENT

This assessment has been completed using reference to the above-described searches and assessments and utilising the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*, DECCW. This code of practice is used to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects and to determine whether they should apply for consent in the form of an Aboriginal Heritage Impact Permit (AHIP).

The *National Parks and Wildlife Act 1974* (NPW Act) provides that a person who exercises due diligence in determining that their actions will not harm Aboriginal objects has a defence against prosecution for the strict liability offence if they later unknowingly harm an object without an AHIP. (NSW, DECCW, 2010)

STEP 1 – WILL THE ACTIVITY DISTURB THE GROUND SURFACE OR ANY CULTURALLY MODIFIED TREES?

Disturbance of the ground surface is often significant when machinery is used to dig, grade, bulldoze, scrap, plough, or drill the ground surface for the purpose of building a structure or removing vegetation. If an activity will disturb the ground surface, there is a higher likelihood that Aboriginal objects will be harmed.

COMMENT

The proposed project activities will disturb the ground surface however will not remove, disturb, or impact any culturally modified trees. Ground disturbance activities at the pump site are minimised to driving bracing into the banks to maintain the suction, preparing the natural surface for the shed floor, and trenching through the previously disturbed area to install a buried pipeline along the fence line between the site and the western side of the Cobb Highway. The Cobb Highway corridor will be partially excavated within the disturbed area and under bored beneath the pavement and into the adjoining property to further minimise disturbance. (see Section 0). ➡ - Check the AHIMS database

STEP 2A – SEARCH THE AHIMS DATABASE AND USE ANY OTHER SOURCES OF INFORMATION WHICH MAY BE AVAILABLE.

A search the AHIMS database must be undertaken to check whether any Aboriginal sites have been recorded in the area of the Project. If the results of the initial AHIMS search indicates that AHIMS contains information about recorded Aboriginal objects in the area of the proposed activity, a copy of these records must be obtained. After obtaining the records from AHIMS of any recorded Aboriginal objects, these objects should be confirmed that they are located in the area where the activity is proposed.

COMMENT

An extensive AHIMS search has been undertaken over the project site and within 1km of the whole property. The results identified that there are 39 recorded Aboriginal heritage places or objects within the broader area with none identified within the project works footprint. The sites identified were all connected to mounds or are scarred trees. (see Section 4.1.1). ➡ – other information sources

STEP 2B. ARE THERE ANY OTHER SOURCES OF INFORMATION OF WHICH A PERSON IS ALREADY AWARE?

If there are any other sources of information, these need to be used to identify whether or not Aboriginal objects are likely to be present in the area. Other sources of information can include previous studies, reports or surveys which have been commissioned or are otherwise aware of.

COMMENT

Archaeological assessments relating to the local area, where available, have been reviewed. (see Section 0). One report included the project footprint however no sites were identified at the site. ➡ - landscape features

STEP 2C – ACTIVITIES IN THE AREAS WHERE LANDSCAPE FEATURES INDICATE THE PRESENCE OF ABORIGINAL OBJECTS

Regardless of whether the AHIMS search indicates known Aboriginal objects, consideration of whether Aboriginal objects are likely to be in the area of the proposed activity need to be made having regard to the above described landscape features.

If after completing steps 2a and 2b it is reasonable to conclude that there are no known Aboriginal objects or a low probability of objects occurring in the area of the proposed activity, you can proceed with caution without applying for an AHIP.

COMMENT

The project area is located within and adjoining River or 'waters' which is considered a landscape feature. ➡ If yes to 2a), 2b) or 2c) - Proceed to Q3 – Avoidance of Harm.

STEP 3 – CAN HARM TO THE ABOVE ABORIGINAL HERITAGE OR LANDSCAPE FEATURES BE AVOIDED BY THE ACTIVITY?

This step only applies if your activity is on land that is not disturbed land or contains known Aboriginal objects. Whereas a result of step 2a you think it is likely that there are Aboriginal objects present in the area of the proposed activity, you need to decide whether you can avoid the harm to those objects. Where as a result of step 2b you have concluded that the landscape features listed are present, you need to decide whether you can move your activity away from the area with the landscape feature(s) so as to avoid disturbing any Aboriginal objects which may be present. If you can't avoid harm to the object or disturbance of the landscape feature(s) you must go to step 4. If you can avoid harm to the object and disturbance of the landscape feature(s) you can proceed with caution without applying for an AHIP.

COMMENT

The project works relating to the Gulpa Creek being a landscape feature cannot be avoided as the works adjoining the Creek form an essential part of the project. Works can be confined to being within the existing previously disturbed area. ➡ Proceed to Step 4 – Desktop and Visual Assessment

STEP 4 – DOES A DESKTOP ASSESSMENT AND VISUAL INSPECTION CONFIRM THAT THERE ARE ABORIGINAL OBJECTS OR THAT THEY ARE LIKELY?

This step only applies if your activity is on land that is not disturbed land or contains known Aboriginal objects. The assessment process is primarily a desktop exercise that involves examination and collation of the readily available information. The assessment must consider the area of the proposed activity as a whole, not just particular areas where any Aboriginal objects have been recorded on AHIMS or areas where landscape features are located.

At a minimum, the information reviewed as part of the desktop assessment should include existing knowledge of Aboriginal cultural heritage gleaned from previous heritage studies or reports for the area, including any archaeological studies on AHIMS.

A visual inspection of the area must be undertaken to see if Aboriginal objects can be identified or are likely to be present below the surface. This visual inspection must be done by a person with expertise in locating and identifying Aboriginal objects. This person with expertise could be an Aboriginal person or landholder with experience in locating and identifying Aboriginal objects or a consultant with appropriate qualifications or training in locating and identifying Aboriginal objects.

Where either the desktop assessment or visual inspection indicates that there are (or are likely to be) Aboriginal objects in the area of the proposed activity, more detailed investigation and impact assessment will be required. This will need to be done by a person with expertise in Aboriginal cultural heritage management. Go to step 5. Where the desktop assessment or visual inspection does not indicate that there are (or are likely to be) Aboriginal objects, you can proceed with caution without an AHIP application.

COMMENT

The desktop assessment has identified that there is a landscape feature (waters) within the project area. Sites have been previously identified and a previous assessment have been undertaken at this location including over the project area. It has also been identified that there is an extensive history of significant ground disturbance. Following the identification of a landscape feature and recognising that the project works will result in ground disturbance activities, a visual inspection has been undertaken to review and record:

- The project location, area, and landscape feature to identify its potential for Aboriginal objects or places,
- The extent of disturbance activities within the site and that those activities remain clear and discernible.

The visual inspection was undertaken on the 18th May 2022 in conjunction with the Cummeragunja Local Aboriginal Land Council (LALC) representative Mr Roland Atkinson who has extensive experience in undertaking work of this type and the local area. The project site and surrounds were inspected on foot with specific attention paid to the areas proposed for ground disturbance. This inspection confirmed that areas of the site varied in modification however has generally experienced previous disturbance through the evidence of clearing, earthworks for levees, pipelines, power installation, fencing, firebreaks, and general agricultural activities.

The site inspection did not reveal any further objects and a Site Survey Report was provided and is included as part of this assessment included in **Appendix 3** of this report.

6. RESULTS AND MITIGATION

6.1. LOCAL ABORIGINAL LAND COUNCIL INSPECTION

6.1.1. INSPECTION

A site inspection was conducted on 18 May 2022 by Traditional Owner Roland Atkinson of the Cummeragunja Local Aboriginal Land Council. Roland was accompanied by Mrs Clare Fitzpatrick, Progressive Rural Solutions and Mr Nick Dawson, property owner.

The project works proposed, and their location were inspected and discussed which relate to the installation of a buried pipeline by trenching and under boring and an above ground suction line and pump shed. No work is proposed within the vicinity of recorded sites and no vegetation is required to be removed and the site works will be limited to targeted areas on a 30m wide easement on the property and the Cobb Hwy.

A visual inspection of the pump site and pipeline works area, and the immediate vicinity of the site was undertaken with a specific focus on the ground surface. There were no indications that there is any potential for impact on Aboriginal cultural objects within the area proposed for disturbance. The inspection identified that there has been significant disturbance of the area proposed for excavation works which includes levee banks, fences, firebreaks, roads, drains and other agricultural and forestry activities.

6.1.2. RECOMMENDATIONS

The following recommendations were made in the report:

- That the project be allowed to proceed without constraint on the area as identified and discussed on site.
- That works, and vehicle access and disturbance does not occur in areas not previously disturbed within the vegetation area and within the vicinity of any recorded sites.
- That all contractors be aware of their responsibilities under the *NSW National Parks and Wildlife Act 1974*, Section 86 that;

a) A person must not harm or desecrate an object that the person knows is an Aboriginal object.

And Section 86 Defences that:

- b) It is a defence to a prosecution for an offence under section 86 (1), (2) or (4) if (a) the harm or desecration concerned was authorised by an Aboriginal heritage impact permit, and (b) the conditions to which that Aboriginal heritage impact permit was subject were not contravened.*
- c) It is a defence to a prosecution for an offence under section 86 (2) if the defendant shows that the defendant exercised due diligence to determine whether the act or omission constituting the alleged offence would harm an Aboriginal object and reasonably determined that no Aboriginal object would be harmed.*

6.2. CONTINGENCY MEASURES

All Aboriginal objects and sites in NSW are protected under the *National Parks and Wildlife Act 1974*. It is an offence to knowingly harm or desecrate an Aboriginal object or Aboriginal place. If in the course of the project activities, a potential object is identified, contingency measures have been provided below.

These measures identify the obligations in the event of the discovery of Aboriginal objects either identified or suspected during the project works within the NSW portion. This section should be read in conjunction with the Contingency measures identified in the Cultural Heritage Management Plan for works within Victoria.

6.2.1. UNEXPECTED FIND OF ABORIGINAL OBJECT

In the event that a potential Aboriginal object is encountered during project activities the following steps should be undertaken.

1. All ground surface disturbance in the area of the find(s) and the fill zone for earthworks will cease immediately following the discovery or potential discovery of a find and
 - a. The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be halted and ensure that there is no further harm to the object,

- b. The discoverer of the find(s) will secure the area and prevent equipment or personnel from entering the area except in accordance with this protocol, and
 - c. The site supervisor/project manager will be informed of the find(s).
 2. If finds are suspected to be human skeletal remains, then NSW Police and HeritageNSW will be contacted as a matter of priority and the procedure for Unexpected Discovery of Possible Human Skeletal Remains should be followed.
 3. The following process will be followed once the site is secured:
 - a. Immediately notify the following authorities or personnel of the discovery if not already done so:
 - i. HeritageNSW (Environment Line: 131 555); and
 - ii. Relevant Aboriginal Community Representatives, including the Local Aboriginal Land Council.
 - b. Facilitate, in co-operation by an appropriately qualified person with the appropriate authorities and relevant Aboriginal community representatives:
 - i. The recording and assessment of the finds;
 - ii. Fulfilling any legal constraints arising from the find(s). This will include complying with HeritageNSW directions; and
 - iii. The development and conduct of appropriate management strategies. Strategies will depend on consultation with stakeholders, the assessment of the significance of the find(s) and the relevant permits.
 4. A Heritage specialist may be engaged to assess the Aboriginal place or object encountered, a Representative from any Local Aboriginal Land Council for the project may also be engaged to assess the cultural significance of the place or object as part of any obligations of an AHIP assessment process if relevant.
 5. Re-commencement of ground disturbing works may only resume in the area of the find(s) following compliance with any consequential legal requirements and gaining written approval from HeritageNSW.

6.2.2. UNEXPECTED FIND OF HUMAN SKELETAL REMAINS

In the event that possible human skeletal material (remains) are encountered during construction, the following steps should be undertaken:

1. Works at that location of discovery and placement of material will cease, and an appropriate buffer zone of at least 50 metres will be established,
2. The site must be immediately secured to prevent unauthorized access and (any further) harm,
3. Contact police as the discovery of human remains triggers a process which assumes that they are associated with a crime. The NSW Police will retain carriage of the process until such time as the remains are confirmed to be Aboriginal or historic,
4. Contact HeritageNSW should the human remains be deemed Aboriginal or historical by the police, HeritageNSW must be notified immediately to assess the remains – Contact number 131 555,
5. The Local Aboriginal Land Council and any other relevant Aboriginal Party should also be notified,
6. A project Archaeologist may also be engaged at this stage to assist with further representation of the proponent/applicant/owner/company.
 - All directions dictated by the HeritageNSW's South West Branch, in discussion with the project Archaeologist (where relevant), must be followed. This may include the need to engage technical specialist (e.g. Forensic Anthropologist), and liaison with and RAPs, to formulate future management of the remains.
 - Work is not to commence in the area unless authorised in writing by HeritageNSW and/or the NSW Police.

7. CONCLUSION

The project works relate to the installation and operation of a new pump site and pipeline on the Gulpa Creek and pipeline under the Cobb Highway. The project ground disturbance works are limited to minor excavation at the pump site consisting of preparation for a shed pad, trenching along the pipeline and the remaining works bored beneath the ground surface under the Cobb Highway connecting to an existing irrigation channel.

Following an assessment utilising the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* it was identified that the project works area are located within a known landscape feature however work within this feature has been designed to avoid impact to this landform. The project area has been assessed by both an archaeologist (1996 & 2011) and representatives from Cummeragunja Local Aboriginal Land Council and did not identify any sites or objects and concluded that the project works did not have the potential to impact on Aboriginal Cultural Heritage.

While site work is being carried out, if a person reasonably suspects a relic of Aboriginal object is discovered:

- a) the work in the area of the discovery must cease immediately,*
- b) the following must be notified*
 - i) for a relic – the Heritage Council; or*
 - ii) for an Aboriginal object – the person who is the authority for the protection of Aboriginal objects and Aboriginal places in New South Wales under the National Parks and Wildlife Act 1974, section 85.*

Site work may recommence at a time confirmed in writing by:

- a) for a relic – the Heritage Council; or*
- b) for an Aboriginal object – the person who is the authority for the protection of Aboriginal objects and Aboriginal places in New South Wales under the National Parks and Wildlife Act 1974, section 85.*

In the event that skeletal remains are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and HeritageNSW contacted.

8. GLOSSARY

Abbreviation	Term
ACHA	Aboriginal Cultural Heritage Assessment
AHIMS	Aboriginal Heritage Information System
BCD	Biodiversity Conservation Division of DPIE
DA	Determining Authority
DECCW	Former NSW Department of Environment, Climate Change and Water (Now BCD)
DP	Deposited Plan
DPIE	NSW Department of Planning, Industry and Environment
EPA	Environment Protection Authority
GDA	Geocentric Datum of Australia
GPS	Global Positioning System
GSV	Ground Surface Visibility
ICOMOS	International Council on Monuments and Sites
LALC	Local Aboriginal Land Council
LEP	Local Environment Plan
LGA	Local Government Area
MGA	Map Grid of Australia
NHL	National Heritage List
NNTT	National Native Title Tribunal
NPW Act	<i>National Parks and Wildlife Act 1974</i>
NPW Regulation	<i>National Parks and Wildlife Regulation 2009</i>
NPWS	National Parks and Wildlife Service
NSW	New South Wales
NTSCORP	Native Title Services Corporation
OEH	Former NSW Office of Environment and Heritage (Now BCD)
PAD	Potential Archaeological Deposit
RAP	Registered Aboriginal Party
REF	Review of Environmental Factors
REP	Regional Environmental Plan
SEPP	State Environmental Planning Policy

9. REFERENCES

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10. APPENDICES

10.1. APPENDIX 1 – AHIMS BASIC SEARCH



AHIMS Web Services (AWS) Search Result

Your Ref/PO Number : J267 Maudsley

Client Service ID : 679344

Progressive Rural Solutions

Date: 02 May 2022

PO Box 74

Deniliquin New South Wales 2710

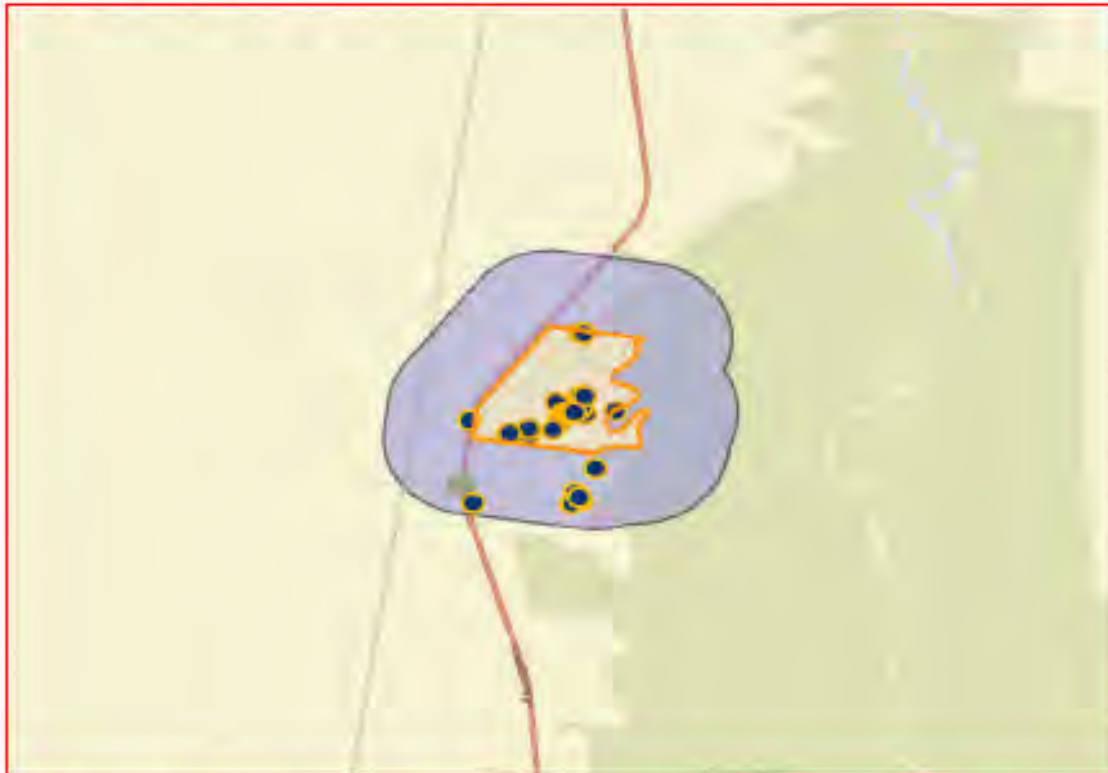
Attention: Clare Fitzpatrick

Email: clare@prsltd.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 21, DP:DP749000, Section : - with a Buffer of 1000 meters, conducted by Clare Fitzpatrick on 02 May 2022.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

39	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *



10.2. APPENDIX 2 - AHIMS EXTENSIVE SEARCH

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
54-5-0207	Ilderton Scarred Tree (RVA)	GDA	55	309358	6044553	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0223	Scarred Tree 8	GDA	55	309960	6045463	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0211	Ilderton Burial 1	GDA	55	310496	6044713	Open site	Valid	Burial : 1		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0226	Oven Mound 4	GDA	55	310552	6045967	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0224	Scarred Tree 9	GDA	55	309957	6045535	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0235	Oven Mound 17	GDA	55	310283	6045630	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0230	Oven Mound 6	GDA	55	310496	6045934	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0219	Scarred Tree 2	GDA	55	310513	6045873	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0061	Site 110;	AGD	55	310400	6046620	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2205
	Contact	Recorders	John Craib							

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
54-5-0213	Ilderton Isolated Artefact 1	GDA	55	310568	6044609	Open site	Valid	Artefact : 1		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0062	Site 111 Scarred tree;	AGD	55	310440	6046620	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2205
	Contact	Recorders	John Craib					Permits		
54-5-0214	Oven Mound 2	GDA	55	310444	6045755	Open site	Valid	Earth Mound : 1		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0229	Oven Mound 5	GDA	55	310521	6045983	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0232	Oven Mound 8	GDA	55	310533	6045866	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0254	Ilderton Survey Square 4	GDA	55	310257	6045889	Open site	Valid	Aboriginal Resource and Gathering : -, Earth Mound : -		
	Contact	Recorders	Ms.Julia Cusack					Permits		
54-5-0218	Scarred Tree 4 (3a)	GDA	55	310346	6045756	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0239	Oven Mound 12	GDA	55	310443	6045772	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0234	Oven Mound 11	GDA	55	310484	6045767	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0228	Oven Mound 16	GDA	55	310319	6045687	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		
54-5-0215	Oven Mound 19	GDA	55	310531	6045835	Open site	Valid	Earth Mound : 1		
	Contact	Recorders	Ms.Julia Cusack,UniQuest Pty Ltd					Permits		

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
54-5-0217	Oven Mound 15	GDA	55	310589	6045747	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0253	Ilderton Survey Square 2	GDA	55	310925	6045794	Open site	Valid	Aboriginal Resource and Gathering : -, Earth Mound : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack							
54-5-0227	Oven Mound 14	GDA	55	310370	6045732	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0233	Oven Mound 10a	GDA	55	310492	6045796	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0238	Oven Mound 10	GDA	55	310504	6045799	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0231	Oven Mound 7	GDA	55	310505	6045889	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0305	Cobb Hwy Scarred Tree	GDA	55	309288	6045638	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>	<u>Recorders</u>	Mr.Gary Currey							
54-5-0220	Scarred Tree 6	GDA	55	309723	6045449	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0221	Scarred Tree 7	GDA	55	309745	6045476	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Julia Cusack,UniQuest Pty Ltd							
54-5-0240	Oven Mound 13	GDA	55	310405	6045735	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : J267 Maudsley

Client Service ID : 679345

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0237	Oven Mound 9	GDA	55	310514	6045829	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0252	Ilderton Square 1	GDA	55	310539	6045831	Open site	Valid	Aboriginal Resource and Gathering : -, Earth Mound : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0225	Oven Mound-3	GDA	55	310581	6045981	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0236	Oven Mound 18	GDA	55	310231	6045533	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0208	Ilderton Scarred Tree 1	GDA	55	310465	6044564	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0216	Isolated Artefact 3-Burnt Clay	GDA	55	310443	6045754	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0222	Scarred Tree 10	GDA	55	310462	6045763	Open site	Valid	Modified Tree (Carved or Scarred) : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0206	Ilderton Possible Burial 1	GDA	55	310543	6044647	Open site	Valid	Burial : 1		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>
54-5-0212	Oven Mound 1	GDA	55	310717	6045029	Open site	Valid	Earth Mound : 1, Aboriginal Resource and Gathering : -		
	<u>Contact</u>	<u>Recorders</u>								<u>Permits</u>

Report generated by AHIMS Web Service on 02/05/2022 for Clare Fitzpatrick for the following area at Lot : 21, DP:DP749000, Section : null with a Buffer of 1000 meters.. Number of Aboriginal sites and Aboriginal objects found is 39

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : J267 Maudsley

Client Service ID : 679345

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status **</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
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**** Site Status**

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 02/05/2022 for Clare Fitzpatrick for the following area at Lot : 21, DP:DP749000, Section : null with a Buffer of 1000 meters.. Number of Aboriginal sites and Aboriginal objects found is 39

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10.3. APPENDIX 3 – CUMMERAGUNJA LALC SITE INSPECTION REPORT



ABN 71 459 172 253
PO BOX 99, MOAMA, NSW, 2731

Mobile: 0417314170
EMAIL: CEO@CummeraLALC.com.au

Kevin Atkinson
Cummeragunja Local Aboriginal Land Council
PO Box 99
MOAMA, NSW 2731

9th June 2022

Site Inspection Report for Lot 21 DP749000, Ilderton North, Cobb Hwy Gulpa- Proposed Gulpa Creek pump site

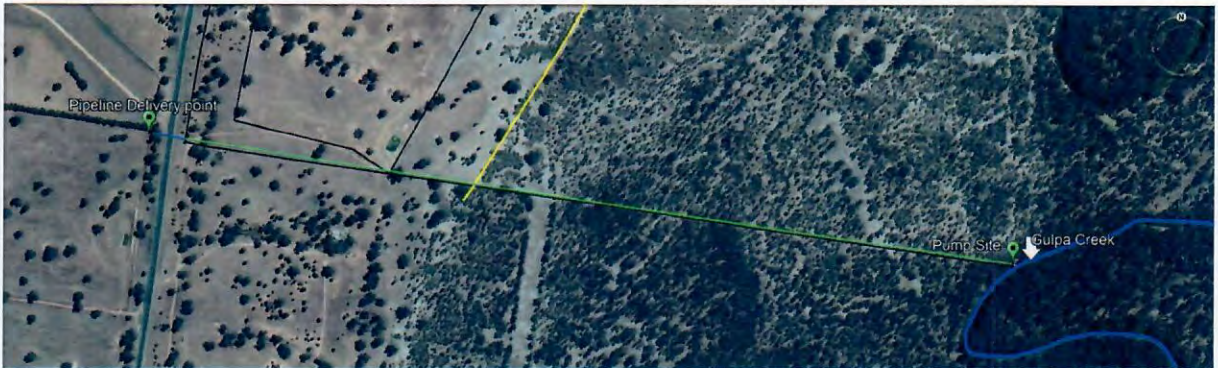
Purpose

The purpose of the site survey report is to provide written confirmation on the findings of the project site inspected for ground disturbance works and potential Aboriginal items, objects or places.

This report is intended to provide information on the site survey findings and any recommendations for the site management and project works. This report does not in any way provide an approval to harm (destroy, deface or damage) or desecrate an Aboriginal object or Aboriginal place or in relation to an object, move the object from its current location within the landscape. These actions constitute an offence under the *National Parks and Wildlife Act 1974*.

Site Location

The pump project area is located on the west bank of the Gulpa Creek within the floodplain opposite the Gulpa Forest. The pipeline project area is located from the Gulpa Creek, running along the northern side of the southern property boundary parallel to the boundary fence, to the western side of the Cobb Hwy delivering into an existing irrigation channel.



Assessment Conditions

The assessment was completed on the 18th May 2022 commencing at 10:45AM. The temperature was approx. 14°C, with light winds and a partially cloudy to clear morning. There had been recent rain at the site and the ground was moist but not muddy. The area assessed was reasonably clear with fair to good ground visibility. Roland Atkinson, Traditional Owner was accompanied by Mrs Clare Fitzpatrick of Progressive Rural Solutions and Mr Nick Dawson, property owner.

Assessment

Available information on the site was provided by Mrs Clare Fitzpatrick prior to the inspection which included the recorded sites within the area and their type. The project works proposed, and their location were discussed which relate to the installation of a buried pipeline by trenching and under boring and an above ground suction line and pump shed. No work is proposed within the vicinity of recorded sites and no vegetation is required to be removed and the site works will be limited to targeted areas on a 30m wide easement on the property.

A visual inspection of the pump site and pipeline works area, and the immediate vicinity of the site was undertaken with a specific focus on the ground surface. There were no indications that there is any potential for impact on Aboriginal cultural objects within the area proposed for disturbance. The inspection identified that there has been significant disturbance of the area proposed for excavation works which includes levee banks, fences, firebreaks and other agricultural and forestry activities.

In addition to the project area, the sites recorded on the provided AHIMs search were reviewed within the broader landscape (away from the project area). These sites are focused around a wetland area away from the creek at the foot of the Cadell Tilt on the floodplain. General discussions were held on the potential to provide water back to the disconnected wetland and area through a small addition to project works which will be aimed to be included in the project works. It was also recommended to identify potential funding opportunities for protecting and enhancing this area.

Recommendations

This report provides the following recommendations:

- That the project be allowed to proceed without constraint on the area as identified and discussed on site.

- That works, and vehicle access and disturbance does not occur in areas not previously disturbed within the vegetation area and within the vicinity of any recorded sites.
- That all contractors be aware of their responsibilities under the *NSW National Parks and Wildlife Act 1974*, Section 86 that;
 - a) *A person must not harm or desecrate an object that the person knows is an Aboriginal object.*

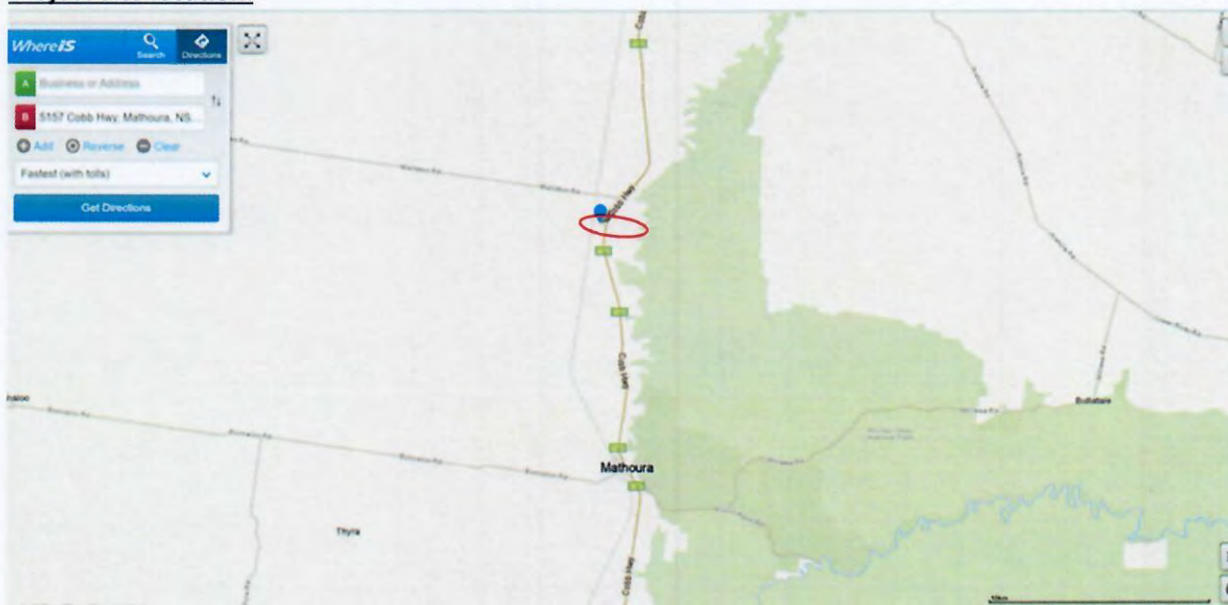
And Section 86 Defences that:

- b) *It is a defence to a prosecution for an offence under section 86 (1), (2) or (4) if (a) the harm or desecration concerned was authorised by an Aboriginal heritage impact permit, and (b) the conditions to which that Aboriginal heritage impact permit was subject were not contravened.*
- c) *It is a defence to a prosecution for an offence under section 86 (2) if the defendant shows that the defendant exercised due diligence to determine whether the act or omission constituting the alleged offence would harm an Aboriginal object and reasonably determined that no Aboriginal object would be harmed.*

Signed:



Project Site location:



Project site photos:





General Project Information

Development Application PAN Number: PAN-289257

DA/CDC Number:

Applicants name: Maudsley Pty Ltd
ABN: 78 006 226 553Applicant's Address: 'Fairview' 1085 LETHBRIDGE RD MATHOUA 2710
PO BOX 6
MATHOUA 2710

Date: 16/10/2022

Development Name

Development Type: Water Supply System - New pump station

Development Description: Installation of a new pump site on the Gulpa Creek at 'Forest Gate' and Cobb Highway underbore at Gulpa, NSW

Total Shed Size	Length	6m
	Width	4m
	Height	3m
	Floor Area	24
	Underbore	65m long
	Meter	Supply and installation
	Pump	Pumps, generator and fuel tank
Other	Suction	Suction pipes and filter

Cost Estimate:

Materials:	No.	Cost	Total Cost	Quote (Q)/
Shed & footings	1	\$ 12,500.00	\$ 12,500.00	Q
Irrigation Pump	2	\$ 6,000.00	\$ 12,000.00	Q
Solar Pump	1	\$ 1,800.00	\$ 1,800.00	E
Drive and VFD	1	\$ 6,878.10	\$ 6,878.10	Q
Generator	1	\$ 16,500.00	\$ 16,500.00	Q
Diesel tank on trailer	1	\$ 7,700.00	\$ 7,700.00	Q
Meter	1	\$ 6,371.25	\$ 6,371.25	Q
Suction pipeline and filter	1	\$ 5,681.95	\$ 5,681.95	Q
Pipeline for highway connections (PN10)	24	\$ 320.00	\$ 7,680.00	Q
Pipeline within sleeve under highway (PN8)	102	\$ 93.00	\$ 9,486.00	Q
		\$ -	\$ -	
Total Materials			\$ 86,597.30	

Installation/Construction		Cost		Quote (Q)/
Delivery to site	2	\$ 850.00	\$ 1,700.00	Q
Site Preparation	1	\$ 1,500.00	\$ 1,500.00	Q
Shed, pump and motor installation	16	\$ 180.00	\$ 2,880.00	Q
Meter installation and testing	8	\$ 100.00	\$ 800.00	Q
Underbore	24	\$ 250.00	\$ 6,000.00	Q
Highway crossing installation	80	\$ 5.50	\$ 440.00	Q
Total Installation			\$ 13,320.00	

Project Cost Estimate: \$ 99,917.30**Cost Estimate:**

I Michelle Maudsley, have obtained quotations to complete the works described in the related application and declare that the total development cost is \$ 99,917.30

Signed:

Michelle Maudsley
17/10/22

Name:



Department of Planning and Environment

Our reference: 17/02004

Contact: Peter Bisset
Phone: 02 6990 1801
Email: peter.bisset@crowland.nsw.gov.au

Clare Fitzpatrick
Progressive Rural Solutions
P.O. Box 74
Deniliquin NSW 2710

Dear Clare,

RE: PRESUMPTIVE TITLE – LOT 21 DP 749000

I refer to your email for a Landowner's Consent to authorise the occupation of Crown land for a proposed new pumpsite.

A historical search has determined that the title boundary to Lot 21 Deposited Plan (DP) 749000 currently held by Nicholas Michael Dawson where it fronts the Gulpa Creek extends to the middle thread of the creek by means of presumption title (via the '*Ad Medium Filum Aquae*' rule).

The original freehold title for this land was granted on 28 December 1898.

As a general rule where a freehold title of land bounded by a non-tidal stream issued prior to the gazettal date of 3 May 1918 (being the date the beds of creeks and rivers etc. in the Central and Eastern Divisions of NSW were reserved to the Crown) or 31 May 1935 (being the date the beds of creeks and rivers etc. in the Western Division of NSW were reserved to the Crown) and the plan of survey on which the freehold title is based shows the bank as the boundary, then the "ad medium filum aquae" rule (under Common Law) applies in that the riparian owner would enjoy presumptive title to the middle thread of the respective creek or river.

The presumption applies unless it has been rebutted by a statement in the freehold title or subsequent dealing in the land. In the case of this land there is no evidence of rebuttal and the chances of a rebuttal is considered highly unlikely.

The title plan (DP749000) clearly shows the bank of the creek as the allotment boundary, and the freehold title was issued prior to the Reservation on 3 May 1918.

From this information, I am confident that Lot 21 DP 749000 enjoys presumptive title to the middle thread of the Gulpa Creek under the provisions of Section 45A of the *Real Property Act 1900*. On that basis, I do not consider the bed of the Gulpa Creek between the documentary title boundary and the middle thread to be Crown land.

Please note:

- (1) The physical location of the bed and centre thread of the creek or river can only be determined by survey. Formal claims to the centre line of the must be made in all cases to NSW Land Registry Services, Legal Division. As such, this letter does not constitute legal advice.
- (2) This advice is only in relation to Lot 21 DP 749000. Each freehold adjoining parcel of land adjoining a non-tidal creek or river is unique and a thorough examination of the history of the original grant of the title to the land is required as evidence to necessitate the existence of presumptive title.

- (3) The proposed works/activities are subject to the requirements of various other pieces of legislation. It is the responsibility of the holder to obtain any appropriate information and to observe any requirements of these other laws. These include (but are not necessarily limited to) the:
- a. *Water Management Act 2000*- authorisation for water supply and works approvals from the WaterNSW; and
 - b. *Environmental Planning and Assessment Act 1979 / Local Environment Plans*- development consent from your local Council.

If you have questions regarding this letter, please contact Peter Bisset, Natural Resource Management Project Officer on (phone) 02 6990 1801 or (email) peter.bisset@crowland.nsw.gov.au.

Yours sincerely,



Peter Bisset
NRM Project Officer
Date: 6 May 2022



NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 21/749000

SEARCH DATE	TIME	EDITION NO	DATE
-----	----	-----	----
16/10/2022	8:50 PM	5	23/8/2021

LAND

LOT 21 IN DEPOSITED PLAN 749000
AT BOYEO
LOCAL GOVERNMENT AREA MURRAY RIVER
PARISH OF BOYEO COUNTY OF TOWNSEND
TITLE DIAGRAM DP749000

FIRST SCHEDULE

NICHOLAS MICHAEL DAWSON (T AR359806)

SECOND SCHEDULE (2 NOTIFICATIONS)

- 1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)
- 2 AR359807 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP
LIMITED

NOTATIONS

UNREGISTERED DEALINGS: PP DP1286102.

*** END OF SEARCH ***

dda2255000

PRINTED ON 16/10/2022

