JOHN HOLLAND

INLAND RAIL

ILLABO TO STOCKINBINGAL PROJECT

I2S | Low Impact Works Assessment - Gates

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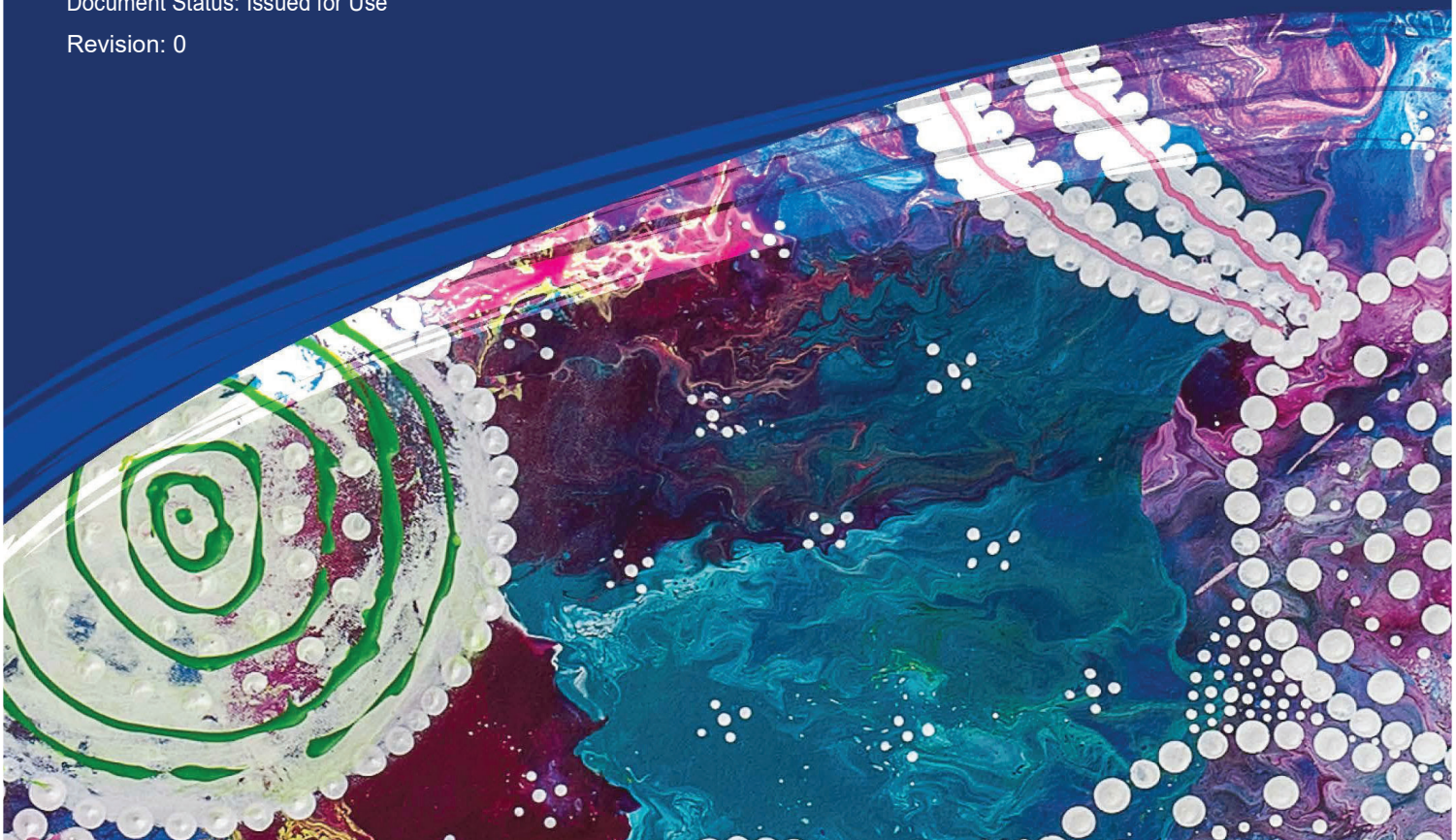

Document Control

Document Title	I2S | Low Impact Works Assessment - Gates
IRPL Document No.	5-0019-220-EEC-00-RA-0002
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APPROVED BY	
Name	Andy Robertson
Title	Environmental & Sustainability Manager
Signature **Date**	JOHN HOLLAND Document Number 5-0019-220-EEC-00-RA-0002 Revision 0 **Approved** Mr Andy Robertson - John Holland Pty Ltd May 1, 2025, 4:10 PM GMT+10:00 This review has been completed using Aconex Workflow for the Inland Rail - Illabo to Stockinbingal (I2S) Project.

Specialist Inputs

APPROVALS AND PLANNING SPECAILST	
Name	Scott Grunsell
Title	Director
Company	Apical Environmental Services
Inputs provided (i.e. review, specialist advice)	Review of risk assessment process and suggested mitigation
ECOLOGY SPECIALIST	
Name	Michial Sutherland
Title	Manager
Company	NGH
Inputs provided (i.e. review, specialist advice)	Biodiversity advice for low impact works.
ECOLOGY SPECIALIST	
Name	Fiona Leslie
Title	Director
Company	MTS Heritage
Inputs provided (i.e. review, specialist advice)	Heritage advice for low impact works.

Revision History

REVISION	DATE ISSUED	DESCRIPTION
A	26/02/2024	Issued for Review
B	9/04/2025	Issued for Review
C	22/04/2025	Issued for Review
D	30/04/2025	Issued for Review
0	1/05/2025	Issued for Use

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1 Revisions and Distribution

1.1 Revisions

Draft issues of this document are identified as Revision A, B, C etc. Following acceptance by the document approver, the first finalised revision will be Revision 0. Subsequent revisions will have an increase of “1” in the revision number (1, 2, 3 etc.).

1.2 Distribution

The controlled master version of this document is available for distribution as appropriate and maintained on the document management system being used on the project. All circulated hard copies of this document are deemed to be uncontrolled.

Client’s Representative	Conrad Strachan (IRPL)
Project Director	Rob Pitt (JHG)
Rail Systems Manager	Andy Buchanan (JHG)
Quality & Completions Manager (Project Quality Representative)	Shane Aberdeen (JHG)
Environmental and Sustainability Manager	Andy Robertson (JHG)
Environmental Representative	Ricardo Prieto-Curiel (Wolfpeak)
Environmental Representative	Derek Low (Wolfpeak)
Environmental Representative	Tim Elder (Wolfpeak)

1.3 Certification

This assessment applies to the Low Impact Work definitions checked in Table 4-4.. Further to the details provided above, the proposed works are considered (tick one):

☒	Consistent with the Minister's Conditions of Approval (CoA) SSI-9406 and the definition of 'Low Impact Work' and are not defined as 'Construction'.
☐	Not consistent with the Minister's Conditions of Approval (CoA) SSI-9406 and/or defined as 'Construction'.

Environmental Representative

Note: *The Environmental Representative (ER) has reviewed the Unexpected and Incidental Finds Protocol (Aconex Ref:* ***5-0019-220-PES-00-PR-0001)*** *in accordance with CoA A17 and determined it to be compliant with the relevant approvals.*

ER Reviewed ☒	ER Endorsed ☒	ER Approved ☐

Signed	Mr Ricardo Prieto-Curiel - WolfPeak May 2, 2025, 2:00 PM GMT+10:00
Name	Ricardo Prieto-Curiel
Name	Derek Low
Name	Tim Elder
Position	Environmental Representative
Date	

Comments	This endorsement verifies that the ER is satisfied that the works meet the definition of low impact works under the terms of the approval. This endorsement does not verify that all pre-work requirements have been fulfilled
Name	

2 Definitions and Abbreviations

Definitions and abbreviations to be applied to this assessment are listed below.

2.1 Definitions and Abbreviations

Table 2-1: Definitions and Abbreviations

Term/Abbreviation	Definition
ACT	John Holland's Accountable Culture Tool
ARTC	Australian Rail Track Corporation
AMS	Activity Method Statement
Ancillary Facility	A temporary facility for construction of the CSSI including office and amenities compound, construction compound, material crushing and screening plant, batching plant, materials storage compound, maintenance workshop, testing laboratory, car parking facilities, a site used for assembly of infrastructure and a fixed material stockpile area.
A2P	Albury to Parkes
BC Act	*Biodiversity Conservation Act 2016*
BCS	Biodiversity, Conservation and Science Division of the Environment and Heritage Group of the NSW Department of Climate Change, Energy, the Environment and Water
BMSP	Biosecurity Management Sub-plan required under CoA Condition C25
CBMP	Construction Biodiversity Management Sub-Plan required under CoA Condition C20
CCS	Community Communication Strategy
CEMP	Construction Environmental Management Plan as defined in Conditions C12 and C13.
CH	Chainage
CMP	Construction monitoring Program
CNVMP	Construction Noise and Vibration Management Sub-plan required under CoA Condition C19
CoA	The Minister's Conditions of Approval for the CSSI
Construction	Includes work required to construct the CSSI as defined in the documents listed in Condition A1, including commissioning trials of equipment and temporary use of any part of the CSSI, but excluding low impact work which is carried out or completed prior to approval of the CEMP
Consultation	To provide information and actively engage with and obtain and consider feedback from stakeholders during development of post approval documents. How the feedback has been considered and whether any changes have been made in response to this feedback is then documented and communicated back to stakeholders. Consultation should not be limited to one-way notification about the project.
CSWMP	Construction Soil and Water Management Sub-plan required under CoA Condition C22
CNVMP	Construction Noise and Vibration Management Sub-Plan required under CoA Condition C19

Term/Abbreviation	Definition
CSSI	Critical State Significant Infrastructure, as generally described in Schedule 1 (of the Conditions of Approval), the carrying out of which is approved under the terms of the Conditions of Approval.
CTTAMP	Traffic, Transport and Access Management Sub Plan required under Condition CoA C21
D&C	Design and Construct
DEECCW	NSW Department of Climate Change, Energy, the Environment and Water
DPHI	Department of Planning, Housing and Infrastructure
DPI Agriculture	NSW Department of Primary Industry – Agriculture
Environmental Assessment Documentation	• Inland Rail – Illabo to Stockinbingal Environmental Impact Statement (ARTC 2022) • Illabo to Stockinbingal Project Response to Submissions (ARTC 2023) • Response to Submissions – Appendix E - Biodiversity Development Assessment Report version 12 (IRDJV, June 2024) • I2S – Mitigation Measures (Inland Rail, April 2024) • Illabo to Stockinbingal (SSI-9604) Additional and Appropriate Measures for Box Gum Woodland Impacts (Inland Rail, June 2024) • Technical and Approvals Consultancy Services: Illabo to Stockinbingal – Box Gum Woodland Gum Flat Rehabilitation Opportunity (IRDJV, June 2024)
EID	Environment in Design
EIS	The Environmental Impact Statement referred to in Condition A1 submitted to the Planning Secretary seeking approval to carry out the CSSI described in it, as revised if required by the Planning Secretary under the EP&A Act, and including any additional information provided by the Proponent in support of the application for approval of the CSSI
EMS	Environmental Management System
EMIS	Environmental Management Information System
Environment	Includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings.
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPA	NSW Environment Protection Authority
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
EPL	*Environment Protection Licence under the Protection of the Environment Operations Act 1997 (NSW)*
ER	Environmental Representative for the CSSI as approved by the Planning Secretary
ESCPs	Erosion and Sediment Control Plans
ESD	Ecologically Sustainable Development
FEMP	Flood Emergency Management Sub-plan required under CoA Condition C24

Term/Abbreviation	Definition
GMRs	Global Mandatory Requirements
HMP	Heritage Management Sub-plan required under CoA Condition C23
Heritage NSW	Heritage NSW, Department of Climate Change, Energy, the Environment and Water
HSE	Health, Safety and Environment
IBC	Intermediate Bulk Container
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.
IMS	John Holland Integrated Management System
ISCA	Infrastructure Sustainability Council of Australia
ISC	Infrastructure Sustainability Council
IS	Infrastructure Sustainability
IRPL	Inland Rail Pty Ltd
I2S	Illabo to Stockinbingal
JHG	John Holland Group
km	kilometres
LAA	Land Access Agreement
LALC	Local Aboriginal Land Council
LGA	Local Government Area
LIW	Low Impact Work as defined by Table 1 of the CoA (CSSI-9406).
LIWA	Low Impact Work Assessment (i.e. this Risk Assessment document)
LLS	Local Land Services
MAF	Minor Ancillary Facility
Material Harm	is harm that: (a) involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial; or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment).
Non-compliance	An occurrence, set of circumstances or development that is a breach of this approval.
NSW	New South Wales
OEMP	Operational Environmental Management Plan
OSR	Old Sydney Road
OOHW	Out-of-Hours Work
OOHWP	Out-of-Hours Work Protocol
Planning Secretary	Planning Secretary of the Department (or nominee, whether nominated before or after the date on which this approval was granted).

Term/Abbreviation	Definition
PIRMP	Pollution Incident Response Management Plan
PDCA	Plan-Do-Check-Act
POEO Act	*Protection of the Environment Operations Act 1997 (NSW)*
RMAR	rail maintenance access road
RAPs	Registered Aboriginal Parties
Relevant Councils	Cootamundra Gundagai Reginal Council; Junee Council
RTS	The Proponent's response to issues raised in submissions received during the public exhibition of the CSSI application.
ROL	Road Occupancy Licence
SEARs	Secretary's Environmental Assessment Requirements
SEMP	Site Establishment Management Plan
SAP	Site Access Point
SEP	Site Environmental Plan
SES	NSW State Emergency Services
SIMP	Social impact Management Plan
SMART	Specific, Measurable, Achievable, Realistic and Timely
SME	Subject Matter Expert
SQE	Safety, Quality and Environment
SuMP	Construction Sustainability Management Plan
TRA	Task Risk Assessment
Total Station	Surveying tool that measures distance and angles, and is made up of a theodolite, an electronic distance metre, and a control panel.
TfNSW	Transport for NSW
The 'Blue Book'	*Managing Urban Stormwater – Guidelines published by Landcom, 2004* and used for industry best practice erosion and sediment control planning and management
UMMs	Updated Mitigation Measures
Work	Any physical work for the purpose of the CSSI including construction and low impact work but not including operational maintenance work
WRA	Workplace Risk Assessment

3 Introduction

3.1 Background

Inland Rail is an approximate 1,600 kilometres (km) freight rail network that will connect Melbourne and Brisbane via regional Victoria, New South Wales (NSW) and Queensland. Comprising 12 sections, a staged approach is being undertaken to deliver Inland Rail.

The Australian Rail Track Corporation (ARTC), with Inland Rail Pty Ltd (IRPL) as its subsidiary for the Inland Rail project, received infrastructure approval for the Illabo to Stockinbingal (I2S) section of Inland Rail in September 2024. The approval for I2S (the Project) was granted by the Minister for Planning and Public Spaces under section 5.19 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act).

The Project is located in south-western New South Wales (NSW) in the Riverina region (Figure 1-1). Illabo is a small town of approximately 132 people (Australian Bureau of Statistics, 2021) located at the southern end of the alignment, 16 kilometres (km) north-east of Junee in the Junee Local Government Area (LGA). Stockinbingal is a town of approximately 347 people (Australian Bureau of Statistics, 2021) is situated at the northern end of the project, approximately 20 km north-west of Cootamundra in the Cootamundra–Gundagai Regional LGA. The major towns surrounding the project are Wagga Wagga, about 50 km to the south, Young to the north-east and Cootamundra to the east.

The Project comprises a new rail corridor that would connect Illabo to Stockinbingal. The alignment branches out from the existing rail line north-east of Illabo and travels north to join the Stockinbingal–Parkes Line west of Stockinbingal. The route will travel primarily through undeveloped land predominantly used for agriculture. The project includes modifications to the tie-in points at Illabo and Stockinbingal to allow for trains to safely enter and exit the Illabo to Stockinbingal section of Inland Rail. The alignment also crosses several local and private roads, watercourses and privately owned properties. Additionally, no major towns are located within the project site between Illabo and Stockinbingal.

The Project will include a total extent of approximately 42.5 km, including 39 km of new, greenfield railway which will incorporate the following key features:

- Connection to other rail lines, including Stockinbingal to Parkes line, Lake Cargelligo line, and Main Southern Railway
- One crossing loop and maintenance siding
- Level crossings and stock crossings
- Bridges over rivers and other watercourses, floodplains, and roads
- Upgrades of around 3.5km of existing track for the tie-in works to the existing Main South Line at Illabo
- New track to maintain Lake Cargelligo line connection either side of the proposal
- Realignment and road-over rail bridge for a section of the Burley Griffin Way at Stockinbingal
- Realignment of Ironbong Road to allow for safe sight lines at the new active level crossing
- Ancillary infrastructure to support the proposal, inclusive of signalling and communications, drainage, drainage control areas, signage and fencing, and services and utilities
- Construction infrastructure, including ancillary facilities, and a temporary workforce accommodation facility

The Project will also include upgrades to approximately 3 km of existing track associated with tie-in works and construction of an additional 1.7 km of new track to maintain the existing rail network connections. Road upgrade works will also be undertaken to re-align approximately 1.4 km of Burley Griffin Way to provide a road-over-rail bridge at Stockinbingal. Re-alignment of Ironbong Road will also be completed to allow for safe sight lines. A temporary workforce accommodation camp will also be constructed to house the workforce for the duration of works.

3.2 Purpose of this Report

The purpose of this Low Impact Work Assessment (LIWA) is to provide an assessment of environmental impacts for the low impact works associated with activities at specific locations along the alignment.

The LIWA provides an overview of the activities and approach that John Holland Group (JHG) will take to undertake Low Impact Works (LIW). It also includes the mitigation measures to be applied throughout the LIW.

This Assessment Report is for select activities deemed to meet the definition of low impact work under the CoA.

This report is applicable to only the activities and the locations listed in Table 4-2 of this report. This assessment includes:

- a list of proposed activities and their locations to be completed
- the environmental risk assessments that have assessed each environmental impact associated with each proposed activity at its location, including the access to and from that location
- Site Environmental Plans (Appendix A)
- outlines how John Holland (JHG) propose to manage LIW, related to the following aspects, during LIW works associated with the I2S Project:
  - Heritage (both Aboriginal Heritage and non-Aboriginal Heritage)
  - Biodiversity and Biosecurity
  - Noise and Vibration
  - Soils
  - Erosion and Sediment Control
  - Contamination
  - Waste
  - Traffic and Transport
  - Access
  - Specialist mitigation and advice where required (i.e. in areas where specialist advice would be needed to address potential impacts).

The key objective of this LIWA is to provide an assessment of the potential risks associated with LIW, to determine if the proposed activities meet the LIW definition as provided in the Conditions of Approval (CoA) (CSSI-9406) (refer to Table 4-4).

The relevant CoA, Revised Mitigation Measures (REMMs) and ARTC Construction Environmental Framework – A2P (Document Ref No: 0-0000-900-EEC-00-SP-0002_2) will be implemented to minimise potential environmental impacts and to inform JHG staff and subcontractors of the environmental requirements associated with LIW activities. Additionally, the Unexpected and Incidental Finds Protocol has been developed in accordance with CoA Condition A17 and will be implemented during all LIW activities for the Project. A copy of the Unexpected and Incidental Finds Protocol is available via Aconex (reference: **5-0019-220-PES-00-PR-0001)**. Table 3-1 provides an overview of the conditions that need to be met prior to the commencement of LIW and how these have been complied with.

Table 3-1: Conditions required to be complied with prior to the commencement of Low Impact Work

Condition (CoA SSI-9406)	How the condition has been satisfied
A17 Prior to the commencement of low impact work, an Unexpected and Incidental Finds Protocol must be developed for:	An Unexpected and Incidental Finds Protocol has been developed for the project in

Condition (CoA SSI-9406)	How the condition has been satisfied
a) threatened species and threatened ecological communities; b) contamination, hazards and contaminated land; c) Aboriginal Cultural Heritage; and d) non-Aboriginal Heritage. The Unexpected and Incidental Finds Protocol must include procedures for: i) all Work in the associated location to stop to prevent further impact; and ii) notifying the Planning Secretary and relevant state agencies in writing. Work must not recommence until the relevant state agencies have been consulted and any required approvals have been obtained. The Unexpected and Incidental Finds Protocol must be made publicly available prior to low impact work commencing and must be implemented during low impact work.	accordance with CoA A17. The Protocol has been made publicly available. Aconex reference: **5-0019-220-PES-00-PR-0001**
E143 An Unexpected Heritage Finds and Human Remains Procedure must be prepared to manage unexpected heritage finds in accordance with any guidelines and standards prepared by Heritage NSW and submitted to the Planning Secretary for information before the commencement of Work.	An Unexpected and Incidental Finds Protocol has been developed for the project in accordance with CoA E143. The Protocol has been made publicly available. Aconex reference: **5-0019-220-PES-00-PR-0001**
E144 The Unexpected Heritage Finds and Human Remains Procedure, as submitted to the Planning Secretary, must be implemented for the duration of Work. *Note: Human remains that are found unexpectedly during the carrying out of Work may be under the jurisdiction of the NSW State Coroner and must be reported to the NSW Police immediately*	An Unexpected and Incidental Finds Protocol has been developed for the project in accordance with CoA E144. The Protocol has been made publicly available. Aconex reference: **5-0019-220-PES-00-PR-0001**
E117 The Proponent must prepare and implement a Workforce Code of Conduct for employees and contractors involved in the construction of the CSSI. The Code of Conduct must be prepared by a suitably qualified and experienced person(s) in the human resources sector and made publicly available prior to work commencing. The Code of Conduct sets out the ethical standards that employees are expected to adhere to in the construction site and interaction with the local community.	The Workforce Code of Conduct has been made publicly available. The approved Workforce Code of Conduct is available via Aconex reference: **5-0019-220-PHR-00-SM-0001**

Condition (CoA SSI-9406)	How the condition has been satisfied
B3 The Community Communication Strategy must be submitted to the Planning Secretary for approval no later than one (1) month before the commencement of any Work.	The Community Communication Strategy was approved by the Planning Secretary on the 13/11/24. Aconex reference: **6-0001-220-EEC-00-LT-0003**
B12 A Community Complaints Mediator that is: a) independent of the design and construction personnel; and b) accredited under the National Mediator Accreditation System, administered by the Mediator Standards Board must be nominated by the Proponent, approved by the Planning Secretary and engaged while the Complaints Management System required by Condition B6 is in operation. The nomination of the Community Complaints Mediator must be submitted to the Planning Secretary for approval within one month before the commencement of Work.	A Community Complaints Mediator (Jack Ellis) was appointed to the project by the DPHI on 1/10/2024. Aconex reference: **IR2200-DCACT-000879**
A7 The Department must be notified in writing of the dates of commencement of Work (in relation to low impact works), construction and operation at least one (1) month before those dates.	Notification of commencement of LIW was issued to the Department on 4/10/24. Aconex reference: **6-0000-220-EEC-00-LT-0007**
B18 A website or webpage providing information in relation to the CSSI must be established before commencement of Work and maintained for the duration of construction, and for a minimum of 24 months following the completion of construction, or unless otherwise agreed with the Planning Secretary. Up-to-date information (excluding confidential commercial information) must be published before the relevant work commencing and maintained on the website or dedicated pages including: information on the current implementation status of the CSSI; a copy of the documents listed in Condition A1 of this approval, and any documentation relating to any modifications made to the CSSI or the terms of this approval; a copy of this approval in its original form, a current consolidated copy of this approval (that is, including any approved modifications to its terms), and copies of any approval granted by the Minister to a modification of the terms of this approval;	A website has been established for the Inland Rail program, available at: https://inlandrail.com.au

Condition (CoA SSI-9406)	How the condition has been satisfied
a copy of each statutory approval, licence or permit required and obtained in relation to the CSSI; a current copy of each document required under the terms of this approval must be published before the commencement of any work to which they relate or before their implementation, as the case may be; and a copy of the compliance and audit reports required under this approval. A copy of each document required to be made publicly available under this approval must be published within 14 days of the finalisation or approval of the relevant document unless an alternate timeframe is prescribed by another condition of this approval. Where the information / document relates to a particular work or is required to be implemented, it must be published before the commencement of the relevant work to which they / it relates or before its implementation. All information required in this condition is to be provided on the Proponent's website, ordered in a logical sequence and be easy to navigate. *Notes:* 1. *The intention of this condition is to increase transparency and for information/documents required as part of the approval to be provided proactively and publicly in an easily accessible manner. Where information is excepted by this condition, it is intended that these documents are provided in their redacted form.* 2. *The Planning Secretary may instruct the Proponent to finalise and upload any report or documents to the Project's website in accordance with Condition A4.* 3. *The publishing of documents should occur a minimum of a week before the relevant Work / activity is going to commence.* 4. *In determining what information should be published under this condition, the proponent should have regard to the principles in Division 2 of Part 2 of the Government Information (Public Access) Act, 2009.* 5. *Documents should be named to be consistent with the conditions of approval where possible. The name should also give an overall impression of what the document is about. The names should be simple and concise (no more than 50 characters) without any unnecessary punctuation or under scoring in the title.*	
B7 The Complaints Management System must make the following information publicly available to facilitate community enquiries and manage complaints, from one (1) month before the commencement of Work and for 12 months following the completion of construction of the CSSI: a 24- hour telephone number for the registration of complaints and enquiries about the CSSI; a postal address to which written complaints and enquires may be sent;	Complaints Management System prepared and information under the Complaints Management System made public available in the following website: https://inlandrail.com.au/

Condition (CoA SSI-9406)	How the condition has been satisfied
an email address to which electronic complaints and enquiries may be transmitted; and a mediation system for complaints unable to be resolved. This information must be accessible to all in the community regardless of age, ethnicity, disability or literacy level.	
E3 Despite Conditions E1 and E2 work may be undertaken outside the hours specified in the following circumstances: (a) Safety and emergencies, including: (i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or (ii) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm; or (b) Low impact noise activities, including: (i) construction that causes LAeq(15 minute) noise levels: • no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and • no more than the 'noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land uses; and ii) construction that causes LAFmax noise levels no more than 15 dB(A) above the rating background level at any residence during the night period as defined in the Noise Policy for Industry (EPA, 2017); and (iii) construction that causes: • continuous or impulsive vibration values, measured at the most affected residence, are no more than the preferred values for human exposure to vibration specified in Table 2.2 of Assessing vibration: A technical guideline (DEC, 2006), or • intermittent vibration values, measured at the most	LIW must comply with the parameters set in CoA E3 (b) where Out of Hours Works are proposed to be undertaken outside the rail corridor (as described in the definition of 'Low impact work' in SSI-9406). OOHW within the rail corridor will be subject to, and must be compliant with, ARTC EPL #3142.

Condition (CoA SSI-9406)	How the condition has been satisfied
affected residence, are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing vibration: A technical guideline (DEC, 2006); or (c) By approval or agreement, including: (i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or (ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition E5; or (iii) negotiated agreements with directly affected residents and sensitive land uses. On becoming aware of the need for emergency work in accordance with Condition E3(a)(ii) above, the ER, the Planning Secretary and the EPA must be notified of the reasons for such work. The Proponent must use best endeavours to notify as soon as practicable all noise and/or vibration affected sensitive land uses of the likely impact and duration of those work. All negotiated agreements with owners and occupiers of sensitive land uses to carry out work in accordance with Condition E3(c)(iii) must be in writing, and include the hours, duration and likely noise levels compared to the NML defined in the ICNG. The negotiated agreement must be agreed and finalised before the commencement of work affecting the sensitive land uses.	
The following conditions must be met prior to Works, however, are not applicable to this assessment:	
E135 Prior to the commencement of any ground disturbance work within areas identified as requiring archaeological investigation or salvage identified in documents listed in Condition A1, the Proponent must prepare and implement an Additional Aboriginal Archaeological Survey Methodology and an Aboriginal Archaeological Test Excavation Methodology. The methodology must include procedures for additional archaeological survey of Zones 5, 6, 9 and 10, and management protocols including consultation with the Registered Aboriginal Parties, for any Aboriginal objects and sites identified during the survey.	No ground disturbing LIW included in this assessment is proposed within the Indigenous Survey Zones, including those identified as requiring archaeological investigations or salvage. Only walking and driving on existing roads or tracks will be undertaken. More information is provided in Section 8.
E145 Before commencement of any work, a structural engineer must undertake condition surveys of all buildings, structures, utilities and the like identified in the documents listed in Condition A1 as being at risk of	No buildings or structures identified in the Environmental Assessment Documentation

Condition (CoA SSI-9406)	How the condition has been satisfied
damage. The results of the surveys must be documented in a Condition Survey Report for each item surveyed. Copies of Condition Survey Reports must be provided to the owners of the items surveyed, and no later than one month before the commencement of construction.	as being at risk of damage are affected by the LIW included in this assessment. For DPHI correspondence on the interpretation of this condition, please see Aconex reference: **IR2200-CA-000017**

4 Description of the Proposed LIW Activities

This Assessment is for LIW activities as part of the Illabo to Stockinbingal project "the Project" (CSSI 9406).

Table 4-1 Details of proposed works

Details of Proposed Works	
Purpose of the proposed low-impact works	Temporary gate installation along existing property fence lines for the purpose of facilitating access during construction. This will aim to minimise the use of access routes across private land.
Description of the proposed low-impact works	**Scope:** The scope of works covered in this assessment are gate installations. Gates will be installed at varying locations along the alignment along existing farm fence lines. Gates will be single (4.8m) or double (9.6m) width. Fence posts will be driven in approximately 1-1.5m into the ground at each location of the existing farm fence lines. **Access:** • Via existing farm tracks, gates and public road corridors. **Site Location / Description:** • Between the townships of Illabo and Stockinbingal, within the Cootamundra-Gundagai LGA and Junee Shire LGA • Gates will be installed at a number of locations along the alignment. These locations are provided in Appendix A. The maps provided show the locations of gates along the existing fence line. Gates will only be installed within the allocated area on the maps. • All gates are to be installed within the CIZ, unless otherwise approved under a Consistency Assessment.
Proposed plant and equipment	• Light vehicles • Trailer (attached to a light vehicle) • Hand-held auger (post hole digger) • Concrete mixer • Hand/power tools • Shovel • Fence post driver (manual) • Fence post driver (motorised) • Hammer • Sledgehammer • Nips • Wire cutters • Pliers • Saw • Drill • Crowbar
Proposed dates of works:	The works proposed as part of this application are for a period commencing following the approval of this LIWA (est. 3rd May, 2025) to the commencement of Construction, subject to all relevant approvals being obtained.
Will works outside of the standard hours of	If 'Yes', justification is to be provided, and an activity specific noise assessment is required to predict potential noise impacts and identify impacted sensitive receivers:

Details of Proposed Works	
construction be required? *Standard hours as specified by the relevant SSI approval.*	**No.** The approved working hours for the LIW activities included in this on the Project are (CoA E1) assessment are: • Monday to Friday: 7am to 6pm • Saturday: 7am to 6pm • Sunday and public holidays: no work Where OOHW are required, works will be subject to CoA E3 (b), as per the definition of 'Low impact work' in SSI-9406. All relevant OOHW must be obtained prior to the commencement of OOHW activities. This approval will be sought via separate application/permit as OOHW are required. Note that despite Conditions E1 and E2 work may be undertaken outside the hours specified in the following circumstances: (a) Safety and emergencies, including: (i) for the delivery of materials required by the NSW Police Force or other authority for safety reasons; or (ii) where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm; or (b) Low impact noise activities, including: (i) construction that causes LAeq(15 minute) noise levels: • no more than 5 dB(A) above the rating background level at any residence in accordance with the ICNG, and • no more than the 'noise affected' NMLs specified in Table 3 of the ICNG at other sensitive land uses; and (ii) construction that causes LAFmax noise levels no more than 15 dB(A) above the rating background level at any residence during the night period as defined in the *Noise Policy for Industry* (EPA, 2017); and (iii) construction that causes: • continuous or impulsive vibration values, measured at the most affected residence, are no more than the preferred values for human exposure to vibration specified in Table 2.2 of Assessing vibration: A technical guideline (DEC, 2006), or • intermittent vibration values, measured at the most affected residence, are no more than the preferred values for human exposure to vibration, specified in Table 2.4 of Assessing vibration: A technical guideline (DEC, 2006); or (c) By approval or agreement, including: (i) where different construction hours are permitted or required under an EPL in force in respect of the CSSI; or (ii) works which are not subject to an EPL that are approved under an Out-of-Hours Work Protocol as required by Condition E5; or

Details of Proposed Works	
	(iii) negotiated agreements with directly affected residents and sensitive land uses. A noise assessment has been conducted for the works included in this application, provided in Appendix B.
Other relevant licenses and approvals	Some works in this assessment may be required to be undertaken under a possession arrangement for works within an existing rail corridor. All works will be undertaken in accordance with the relevant EPL with the approval/agreement of the license holder (ARTC for ARTC EPL 3142). Prior to the approval of the Project Out of Hours Work Protocol, LIW must comply with the parameters set in CoA E3 (b) where Out of Hours Works are proposed to be undertaken outside the rail corridor. OOHW within the rail corridor will be subject to, and must be compliant with, ARTC EPL #3142. Whilst no works are proposed within the UGL rail corridor at this stage, all works within the UGL rail corridor will be subject to, and must be compliant with UGL EPL #13421.

A list of the access gates that will be utilised to access the works location has also been included below in Table 4-3. Any Minor Ancillary Facilities (MAFs) required for these works will be applied for in a separate application and will be subject to approval by the ER in accordance with CSSI CoA C9. A 5–15-meter buffer has been applied for the installation of access gates in this LIWA (visible in Appendix A) to allow for contingency and flexibility in response to on-site conditions varying from the time of their initial constructability assessment.

Table 4-2: LIW gate installation IDs and relevant landholders

Gate ID	Relevant Landholder(s)
G01-01	1 – Pam McInerney and Peter Curran
G02-01	2 - David and Jenny Thompson
G02/03	2 - David and Jenny Thompson/3 - Helen Dunstan
G03-01	3 - Helen Dunstan
G03-02	3 – Helen Dunstan
G03-03	3 - Helen Dunstan
G03-04	3 - Helen Dunstan
G03-05	3 - Helen Dunstan
G03-07	3 – Helen Dunstan
G03-07A	3 - Helen Dunstan
G03-07B	3 - Helen Dunstan
G04-01	4 – John Green
G04-02	4 - John Green
BG04/05	4 - John Green & 5 - Mal & Maria Lloyd-Jones
G05-01	5 - Mal & Maria Lloyd-Jones
G06-01	6 - Tony Lloyd-Jones
G06-02	6 - Tony Lloyd-Jones

BG05/06	5 - Mal & Maria Lloyd-Jones & 6 - Tony Lloyd-Jones
G05-03	5 – Mal & Maria Lloyd-Jones
G05-04	5 – Mal & Maria Lloyd-Jones
G05-05	5 - Mal & Maria Lloyd-Jones
G05-06	5 - Mal & Maria Lloyd-Jones
G05-07	5 - Mal & Maria Lloyd-Jones
G05-08	5 - Mal & Maria Lloyd-Jones
G_Deakin-01	ARTC 12000 - Deakin
G_Deakin-02	ARTC 12000 - Deakin
G_Deakin-03	ARTC 12000 - Deakin
G_Deakin-04	ARTC 12000 - Deakin
G_Deakin-05	ARTC 12000 - Deakin
G_Deakin-06	ARTC 12000 - Deakin
BG_Deakin/Gumflat	ARTC 12000 - Deakin & ARTC 13500 Gumflat
G_Gumflat-01	ARTC 13500 Gumflat
G_Gumflat-02	ARTC 13500 Gumflat
BG_Gumflat/07	ARTC 13500 Gumflat & 7 - Eric & Diane McKenzie, Yvette McKenzie
BG08/09-A	9 - Ian & Deborah Friend; Chris Friend
BG08/09-B	9 - Ian & Deborah Friend; Chris Friend
BG09/10	9 - Ian & Deborah Friend; Chris Friend & 10 - David Carr (CCC)
G10-01	10 - David Carr (CCC)
BG09/10	10 - David Carr (CCC)
G09-01	9 - Ian & Deborah Friend
G09-02	9 - Ian & Deborah Friend
G10-01	10 - David Carr (CCC)
G10-02	10 - David Carr (CCC)
G10-03	10 - David Carr (CCC)
G10-04	10 - David Carr (CCC)
G10-05	10 - David Carr (CCC)
G11-03	11 - Charlie Ryals
G11-04	11 - Charlie Ryals
G12-04	12 – Nigel Emery
BG13/15	13 - Peter McClintock & 15 - Tony & Diana Hill
G15-01	15 - Tony and Diana Hill
G15-02	15 - Tony and Diana Hill
BG15/14	15- Tony & Diana Hill, 14 Tony & Diana Hill, Alex Hill
G14-01	14 - Tony & Diana Hill, Alex Hill
BG14/16	14 - Tony & Diana Hill, Alex Hill & 16 - Tony & Diana Hill, Alex Hill
G16-01	16 - Tony & Diana Hill, Alex Hill

G17-02A	17 - Tim Berryman
G17-02B	17 - Tim Berryman
G_Harold-01	ARTC 37500 Harold Park
G20-01	20 - Grant Little & Robyn Gray (CCC)
G20-02	20 - Grant Little & Robyn Gray (CCC)
G20-03	20 - Grant Little & Robyn Gray (CCC)
G21-05	21 - Craig Morton

Table 4-3: Existing access gates to be used for the works

SAP ID	Location	Gate Location (CH)	Property Boundary
i	Existing Olympic Hwy LX	-700	01 - Pam McInerney & Peter Curran
XLVIII	Warrens Lane	400	01 - Pam McInerney & Peter Curran
XLIX	Old Sydney Rd	1300	2 – Davis & Jenny Thompson
2	Olympic Highway	2793	2 – Davis & Jenny Thompson 3 – Helen Dunstan
3 South	Old Sydney Rd	5600	3 – Helen Dunstan
3 North	Old Sydney Rd	5600	04 - John Green
xxxix	Ironbong Rd	8000	05 - Mal & Maria Lloyd-Jones
4	Ironbong Rd	8200	06 - Tony Lloyd-Jones
Ii	Eulomo Settlement Rd	8750	05 - Mal & Maria Lloyd-Jones
Iii	Ironbong Rd	8750	06 - Tony Lloyd-Jones
xxxv	Ironbong Rd	8800	05 - Mal & Maria Lloyd-Jones, 06 - Tony Lloyd-Jones
xxxvi	Ironbong Rd	9700	05 - Mal & Maria Lloyd-Jones
4A	Ironbong Rd	11400	05 - Mal & Maria Lloyd-Jones ARTC (Deakin), ARTC (Gumflat)
iv	Ironbong Rd	11950	ARTC (Deakin), ARTC (Gumflat)
vii	Ironbong Rd	16000	7 – Eric & Diane McKenzie; Yvette McKenzie
xii South Access	Dirnaseer Rd	18450	7 – Eric & Diane McKenzie; Yvette McKenzie
xiii	Private Road of Dudauman Road South	19800	08 / 09 – Chris Friend 10 – David Carr (CC)
xix	Private Road of Old Cootamunda Road	24580	11 – Charlie Ryals 12 – Nigel Emery
xxi	Private Road of Old Cootamundra Road	27470	12 – Nigel Emery
6	Old Cootamundra Rd	28250	12 - Nigel Emery, 13 - Peter McClintock
LIII	Dudauman Rd North	29950	13 - Peter McClintock
7	Private Rd of Dudauman Rd North	30850	15 - Tony & Diana Hill
LI	Dudauman Rd North	31000	15 - Tony & Diana Hill

SAP ID	Location	Gate Location (CH)	Property Boundary
xxii	Dudauman Rd North	32150	14 - Tony & Diana Hill; Alex Hill
xxiii	Dudauman Rd North	32150	14 - Tony & Diana Hill; Alex Hill
xxx	Corbys Lane	33780	16 – Tony & Diana Hill; Alex Hill, 17 – Tim Berryman
7A	Dudauman Rd North	34950	18 – Peter Kepreotes (Tony Hill)
LII	Temora St	37200	17 – Tim Berryman
8	Burley Griffin Way (East)	37250	17 – Tim Berryman
xxvi	Burley Griffin Way (West)	37300	ARTC – Harold Park
XLV	Burley Griffin Way (East)	37500	19 – Linx Haulage
XLIV	Hibernia St	37550	Stockinbingal Yard
10	Hibernia St	37550	Stockinbingal Yard
XLIII	West St	37700	20 – Little & Gray
xxxi	West St	38200	21 – Craig Morton
11	Grogan Road	40250	21 – Craig Morton
xxix	McLaughlins Ln	40700	21 – Craig Morton
xxvii	McLaughlins Ln	40700	21 – Craig Morton
XLI	Grogan Road	40950	ARTC Corridor
XLII	Freeman's Lane	41665	ARTC Corridor

4.1 Conditions of Approval and Classification of LIW

This assessment has been developed in accordance with the Condition of Approval (CoA) definitions of Low Impact Work, which is provided in Table 4-3. The checked boxes indicate the applicable clauses of LIW definition that is included in this assessment.

Table 4-4: LIW as defined in the CoA

Ref	Description The work subject to this submission meets the definition of Low Impact Work under SSI 9406 by being (where a green shaded check box is ticked, the ER shall endorse this form):	Applicable
(a)	survey works including carrying out general alignment surveys, installing survey controls (including installation of global positioning system (GPS)), installing repeater stations, carrying out surveys of existing and future utilities and building and road dilapidation surveys;	☐
(b)	Investigations including investigative drilling, contamination investigations and excavation	☐
(c)	installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments;	☐
(d)	property acquisition adjustment work including installation of property fencing;	☒
(e)	archaeological testing under the Code of practice for archaeological investigation of Aboriginal objects in NSW (Department of Environment Climate Change and Water, 2010) or archaeological monitoring undertaken in association with Low Impact work to ensure that there is no impact on heritage items;	☐

Ref	Description The work subject to this submission meets the definition of Low Impact Work under SSI 9406 by being (where a green shaded check box is ticked, the ER shall endorse this form):	Applicable
(f)	archaeological and cultural salvage undertaken in accordance with a strategy or salvage operation required by the conditions of this approval;	☐
(g)	maintenance work to existing buildings and structures as required to facilitate the carrying out of the CSSI; and	☐
(h)	other activities determined by the ER to have minimal environmental impact which may include relocation and connection of utilities, establishment of minor ancillary facilities in accordance with Condition C9 construction of minor access roads (other than access roads' connection to the road network), temporary relocation of pedestrian paths and the provision of property access.	☒
(i)	Site establishment work approved under a Site Establishment Management Plan in accordance with Condition C5.	☐
Despite the above, the following works are not Low Impact Work:		
(i)	where heritage items, or threatened species or their habitat, or threatened ecological communities (within the meaning of the Biodiversity Conservation Act 2016), are adversely affected or potentially adversely affected by any low impact work as defined in (a) to (i) above, that work is construction, unless otherwise determined by the Planning Secretary in consultation with Heritage NSW, BCS or DPI Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation); and	☐
(ii)	any Work undertaken outside the hours specified in Condition E1 that exceeds noise management and vibration levels as identified in Condition E3(b)	☐

Will Low Impact Work?		
Adversely affect or potentially adversely affect Heritage Items	YES ☐	NO ☒
Adversely affect or potentially adversely affect Threatened Species (or their habitat)	YES ☐	NO ☒
Adversely affect or potentially adversely affect Threatened Ecological Communities (within the meaning of the *Biodiversity Conservation Act 2016*)	YES ☐	NO ☒
Adversely affect or potentially adversely affect matters of national significance (within the meaning of the *Environmental Protection and Biodiversity Conservation Act 1999*)	YES ☐	NO ☒
If the answer is "YES" to any of the above, then the work is Construction (unless otherwise agreed or determined by the Planning Secretary in consultation with Heritage NSW, EHG or DPI Fisheries.		

JHG has determined that the proposed LIW activities meet the clauses (d) property acquisition adjustment work including installation of property and (h) the provision of property access. The determination of these proposed works being LIW is provided in Section 8 of this document.

4.2 Change Management

In accordance with Condition A27(b) of the Environmental Impact Statement (EIS) and the Conditions of Approval (CoAs), the Project team has initially identified locations for each Low Impact Work (LIW) activity for the ER's consideration by evaluating:

- Proximity to a sensitive receiver or environment
- Environmental constraints identified within existing GIS layers of the EIS

- Subject matter expert (SME) advice
- General requirements of the EIS, CoA and associated IRPL and JHG IRPL guidelines and documents.

To comply with the CoAs and to ensure the ER is involved in the change management process, the process for managing changes for access or any other scope associated with works in this LIW will be the following:

1. If the scope of work or access is found that it will deviate from the detail or maps included in the LIWA document, The Project team will contact the JHG Environmental Representative to advise of the change.
2. Details of the change including relevant evidence documentation will be provided to the ER and IRPL over Aconex, which will require review by IRPL and endorsement or approval by the ER. The documentation provided must show that the new location or activity has been assessed, and confirmation that the changes are of low impact and remain consistent with the definition of Low Impact Work under SSI-9406.

5 Workforce Notification

5.1 Induction

All personnel (including sub-contractors) will attend a compulsory site induction that includes an environmental component prior to commencement on-site. This is done to ensure all personnel involved in the Project are aware of the requirements of LIW and to ensure the implementation of mitigation measures as indicated in this assessment. The Project induction includes a summary of the following environmental factors:

- Obligations on I2S, including individual obligations under the *Protection of the Environment Operations Act 1997 (NSW)* and approvals (SSI-9406) and EPBC (2018-8233).
- Noise and vibration
- Waste management
- Biodiversity and biosecurity
- How to use and follow a Site Environmental Plan (SEP)
- Water
- Soil, erosion and sediment control
- Heritage (including Aboriginal and non-Aboriginal Heritage)
- Contamination
- Complaints management procedure.

5.2 Pre-Start Briefing

The details included in this application will be communicated to all staff at the daily pre-start meeting.

The Construction Superintendent (or delegate) will conduct a daily pre-start meeting with the site workforce before the commencement of work each day (or shift) or where changes occur during a shift. Daily pre-start meetings are generally succinct in nature and take approximately 10-15 minutes.

Specific environmental components relevant to the location of works to be undertaken will be communicated by the relevant foreman (or delegate) and environmental personnel and will include any environmental issues that could potentially be impacted by, or impact on, the day's activities (as defined in the relevant Site Environment Plan).

All attendees will be required to sign on to the pre-start and acknowledge their understanding of the issues explained.

5.3 In-field Reference Materials

A copy of this application and permit will be required to be retained in the field by the Site Supervisor for reference as required.

Site Environmental Plans (SEPs) are visual figures that outline the location of protection measures, monitoring requirements, sensitive receivers and environmentally sensitive areas. SEPs are to be used in project inductions, during site set-up and as part of general work management.

SEPs identify control measures and mitigation strategies outlined in the operational control documentation such as this assessment. As more information relating to land access becomes available to JHG, SEPs may be updated to reflect the correct work method (as per the change management process in Section 4.2) and will be developed specifically for each work area

5.4 Training

Targeted environmental awareness training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. John Holland will establish and maintain a register of environmental training carried out, including dates, names of persons trained and trainer details. JHG are required to complete relevant safety inductions for works within the rail corridor.

6 Consultation

Consultation with relevant land holders is required at least 7 days prior to the commencement of works relating to that landholder. Landholders relating to this application will be notified of works to be undertaken on their property. All landholders will be consulted on the installation of gates on their property prior to works commencement and will be installed with the consent of the landowner.

The project team will adhere to the specific access points specified/outlined by existing Land Access Agreements or Individual Property Management Plans and in accordance with the Landowners Agreements and Plans.

Complaints and enquiries will be managed in accordance with the I2S Community Communication Strategy *(4-0000-220-PCS-00-ST-0001*), which was endorsed by the ER on the 15th October, 2024.

Enquiries and complaints will be managed in line with Inland Rail's:

i) *0-0000-900-PCS-00-SP-0001 Specification – Complaints Management Requirements*
ii) *0-0000-900-PCS-00-ST-0005 Inland Rail Reputation Strategic Plan*
iii) *2-0000-220-PCS-00-PL-0001 I2S Engagement Implementation Plan; and*
iv) *Conditions of Approval.*

Complaints may include any interaction with a stakeholder who expresses dissatisfaction with the project, policies, contractor's services, staff members, actions or proposed actions during the project.

John Holland will attend to enquiries and complaints in a responsive and consistent manner to ensure feedback is considered and addressed in a timely and productive way. This will help ensure that the Project benefits from local input and impacts on the community are minimised wherever possible.

Community enquiries and complaints will generally be received via:

- Inland Rail's 24-hour telephone number: 1800 732 761
- Inland Rail's email: inlandrailnsw@inlandrail.com.au

The 24-hour telephone number and email address will be answered by John Holland, during business hours and Possessions, any Out of Hours phones calls not associated with possessions will be directed to a call Centre who will notify John Holland the following day. All complaints will be managed in accordance with the Community Communication Strategy. John Holland will notify Inland Rail of all content specific to the Project for investigation and response in accordance with required response time frames. The phone number and email are included on all written project communications.

All calls to 1800 732 761 are answered and responded to 24 hours a day, seven days a week

7 Roles and Responsibilities

An outline of responsibilities for site personnel throughout the duration of LIW is included in Table 7-1.

Table 7-1: Roles and responsibilities during LIW

Role	Responsibility
Environmental and Sustainability Manager	• Implementation of procedures • Liaise with specialist consultants and IRPL. • Notify regulators and relevant stakeholders as required • Complete incident investigation and reporting (where required) • Updates to scheduled activities and management plans as a result of varying on-site conditions and any changes are communicated to the Project Team • Ensures compliance on site with the project approvals, including this assessment.
Site Supervisors	• Ensure that this Assessment Report and relevant documentation are communicated to all site personnel under their management and are being fully implemented on site • Stop work as required • Ensure that any scope changes are approved by ER/IRPL prior to undertaking works. • Delineate the area • Contact Environmental Manager and Project Manager • Manage access into and out of the site
Specialist consultants – Ecologist, Archaeologist, Contaminated Land Expert, Site Auditor (Contamination)	• Indicate the required exclusion area or “no-go” zone for any nearby works • Advise on any controls that should be put in place to due to changing on-site conditions • Develop any required management plan (or equivalent) for the management of LIW • Call on other technical specialists as required to assist in any identification and management of LIW • Assist in the completion of any required notifications in consultation with the Project Environment Team • Assist in implementation of the unexpected and incidental finds procedure
ARTC / Inland Rail	• Liaise between relevant government agencies and relevant stakeholders in relation to any incidents • Provide written approval for works • Liaise between relevant government agencies for any ARTC approvals and/or with other stakeholders as required in relation to incidents/events.
Community and Stakeholder Engagement Team	• Develop and maintain open lines with the community, stakeholders, and landowners to ensure their concerns and feedback are effectively captured and addressed • Provide notifications to the community for LIWA and manage the complaints management process associated with LIWA.

Role	Responsibility
	• Facilitate engagement activities, such as public meetings, information sessions, and consultations • Coordinate with the Project Team to integrate community feedback into project planning and decision-making processes • Prepare and disseminate clear, accurate, and timely information about activities and changes to ensure transparency
Environmental Representative(s) (ER)	• Consider and recommend improvements to work practices to reduce environmental impact and enhance community well-being • Review and validate project documentation to ensure consistency with planning approvals and environmental regulations • Conduct regular site inspections to monitor compliance with environmental standards and provide on-site environmental advice to support the project team

7.1 Emergency Contacts

A list of key emergency services contacts is provided in Table 7-2. Specific contacts from ARTC/IRPL and JHG will be included in each SEP for staff in the field to be able to contact the relevant parties in the event of an incident or unexpected find.

Table 7-2: Emergency Services Contacts

Emergency Contact	Contact Details	When to contact
Environment Protection Authority (EPA)	131 555	In the event of confirmed contamination
SafeWork NSW	131 050	In the event of confirmed contamination
RSPCA / WIRES	1300 094 737	To report injury to wildlife
Heritage NSW	(02) 9873 8500	In the event of confirmed heritage item or suspected human remains
NSW Police	(02) 6922 2599 (Wagga Wagga District Command) 000 (emergency only)	In the event of suspected human remains
DPHI Unit (Compliance)	1300 305 695	In the event of an incident
Cootamundra – Gundagai Council	1300 459 689	As required
Junee Council	(02) 6924 8100	As required

7.2 Review

This assessment will be reviewed as needed in response to circumstances where on-site conditions vary from the time of desktop assessment.

7.3 Hold Points

The following hold points have been identified in the ARTC Construction Environmental Management Framework and are to be included in planning to manage risks associated with these activities. Hold points are anticipated to be triggered by this LIW associated with general approvals are confirmed to be in place prior to commencement.

Table 7-3: Environment Hold Points

Hold Point	Release Authority	Milestone
All Approvals required for commencement of early works or other works (as the case may be) have been obtained prior to commencing those works.	ARTC Environmental Manager or delegate	Submission of evidence to ARTC 5 days before commencing works, including a list of applicable approval requirements (including under any CoA) and a statement of how those requirements have been satisfied
Outside Hours Work Permit for proposed out of hours works	ARTC Environmental Manager or delegate	Submission of evidence to ARTC 5 days before commencing works
Relaxation of impact to sensitive receivers	ARTC Environmental Manager or delegate	Submission of evidence to ARTC 5 days before commencing works
Flora and Fauna No Go Zones assessed and protected/delineated prior to commencing any relevant works	ARTC Environmental Manager or delegate	Submission of evidence to ARTC 5 days before commencing works.
Cultural Heritage No Go Zones have been assessed, protected/delineated and (where relevant) salvaged prior to commencing any works	ARTC Environmental Manager or delegate	Submission of evidence to ARTC 5 days before commencing works.
Disturbance footprint/Construction Impact Zone to be delineated by a surveyor before works commence.	ARTC Environmental Manager or delegate	Submission of evidence to ARTC 5 days before commencing works.

7.4 Incident Reporting

If an environmental incident occurs whilst conducting LIW activities, the ARTC Environmental Event Management Process is to be followed. In addition, the JH Incident Management Procedure (JH-MPR-SQE-010) will be used to manage incidents. All events are to be entered into the Horizon360 software for reporting and close-out.

Soteria is John Holland's Health, Safety, Environment, & Sustainability platform. Soteria is a web-based application for entry and review of events, incident Management, NCRs, infringements, investigations and action data. Incidents must also be lodged through Aconex. The Project Environment Advisor and/or appropriate delegates will immediately notify (verbally) IRPL of any incidents or non-compliances.

This includes any environmental or heritage incidents or the Unexpected Finds Protocol and associated procedures. Soteria will be regularly updated with identified corrective actions, non-compliances, proposed actions, close-out dates, and the owner of specific actions. Upon completion of proposed actions, the Project Environment Advisor will update the register to review and ensure close out as appropriate and has been addressed in a timely manner.

7.5 Inspections

Inspections of the works will include monitoring for the implementation of environmental controls in accordance with this assessment, and performance of the controls.

The Project Environment Team will undertake inspections of the work sites to evaluate the effectiveness of environmental controls using John Holland's reporting system, Soteria. Additional inspections may be undertaken by other appropriate delegates.

If any maintenance and/or deficiencies in environmental controls or in the standard of environmental performance are observed, they will be recorded in Soteria. Records will also include details of any maintenance required, the nature of the deficiency, any actions required and an implementation priority.

All inspections will be uploaded/recorded in Soteria along with any corresponding corrective action items or non-conformances.

8 Environmental Risk and Impact Assessment

This environmental impact and risk assessment considers whether the LIW for the works proposed meets the relevant conditions of approval and Revised Mitigation Measures (REMMs) from the EIS. This assessment also considers whether these CoA's and REMMs can be implemented in a compliant manner (where relevant) as part of the proposed works. Mitigation measures to be implemented on-site have been included in Table 8-1.

For the purposes of determining whether the proposed activities meet the description of LIW, a summary for each environmental aspect has been considered below.

8.1 Risk and Impact Assessment

The following table (Table 8-1) provides a description of the risks identified based on the outcomes of the assessment. The table below provides a summary of the risks identified per aspect. Maps show constraints across the areas included in this assessment and mitigation measures to be applied on-site, and are included in Appendix A.

Table 8-1 Summary of impacts

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
Aboriginal Heritage	No ground disturbing LIW activities included in this package were identified as being in the Indigenous Survey Zones listed in the EIS (Zones 1-11 East) Specialist heritage advice provided in Appendix F allows for non-ground disturbing activities (walk-through, visual observation and driving on existing vehicle tracks) to occur within Indigenous Survey Zones 1-11 East. Aboriginal archaeological sites that are not located within the Indigenous Survey Zones that would need to be avoided are marked on the SEP. No ground disturbance is to occur in the Indigenous Survey Zones to avoid harm to Aboriginal sites or objects. These zones are identified in maps (see Appendix A), where relevant. The activities described in this assessment are not vibration intensive works that are liable to create ground borne vibration. No ground disturbance works will be occurring in Indigenous Survey Zones (Zones 1-11 East). The works identified in this assessment can proceed under the definition of LIW. Items identified as sensitive with respect to Aboriginal Heritage (within and outside Indigenous Survey Zones 1-11 East) are provided below.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs.** - **Conditions A17** - **Condition E127 & E128** - **Condition E143 & E144** - **AH1** - **AH7** - **AH11** - **Condition E130** - **Condition E135** - **Condition E140** - **Condition E142**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS

Table 5: Items identified as sensitive with respect to Aboriginal Heritage

Zone	New site recording	AHIMS ID[1]	Site type
1	ARTC1	50-5-0266	Low-density artefact scatter/isolated artefacts
	ARTC2	50-5-0267	
	ARTC3	50-5-0274	
	ARTC4	50-5-0276	
	ARTC5	50-5-0275	Grindstone and zone of archaeological potential
	Site Zone 1	50-5-0280	Zone of archaeological potential
2	ARTC6	50-5-0277	Scarred tree
	Site Zone 2	50-5-0287	Zone of archaeological potential
3	–[2]	50-5-0117[2]	Scarred tree
	–	50-5-0120[2]	Scarred tree
	–	50-5-0121[2]	Scarred tree
	ARTC18	50-5-0286	Scarred tree
	ARTC 20	AHIMS pending	Scarred tree
4	ARTC7	50-5-0285	Isolated artefact
	ARTC8	50-5-0284	Artefact scatter and zone of archaeological potential
	ARTC9	50-5-0283	Isolated artefact
7	ARTC12	50-5-0268	Isolated artefacts
	ARTC13	50-5-0269	
	ARTC14	50-5-0270	
	ARTC15	50-5-0271	
	ARTC16	50-5-0272	
	ARTC17	50-5-0273	
8	–	–	–
11	ARTC10	50-2-0054	Isolated artefacts and zone of archaeological potential
	ARTC11	50-2-0055	
11 East[3]	ARTC19	50-2-0058	Scarred tree

1. New site recordings identified during survey were subsequently registered as AHIMS sites.
2. Three scarred trees were previously recorded in the AHIMS search.
3. Zone 11 East was not included in the original survey, but subsequent investigation revealed a scarred tree within a new zone of the proposed alignment.

It is noted that some items are located outside of Indigenous Survey Zones 1-11 East (e.g. ARTC-20).

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	Additional mitigation measures: • Zones identified as sensitive with respect to Aboriginal Heritage are Indicated on SEPs. Aboriginal Heritage items are provided in Table 5. Items located outside of Indigenous Survey Zones 1-11 East are also indicated on SEPs, and will be avoided. • Walking through the Indigenous Survey Zones and driving on existing vehicle tracks with light vehicles will be undertaken. • Delineation using bollards and/or star picketed signage will be in place as the work group progresses through the alignment. The delineation will act as the beginning of the no-ground disturbance zone. • On-site personnel will be regularly briefed on the exact locations of Indigenous Survey Zones. • All site personnel will be inducted to the Project before the commencement of work activities. The project induction includes a visual depiction of sensitive Aboriginal Heritage areas (including Indigenous Survey Zones 1-11 East and other Aboriginal Heritage items) along the alignment, and their restrictions. • Indigenous Survey Zones 1-11 East are indicated on SEPs. Hard copies are available on site and provided to all JHG site personnel via email. • The Unexpected and Incidental Finds Procedures Unexpected Heritage Finds and Human Remains Procedure (E143 and E144) for heritage is available on site and provided to all JHG site personnel via email. • Regular checks and documentation procedures will be established to monitor the integrity and adherence to No-Go zone restrictions. • Consultation with Heritage NSW and relevant local council will occur as required to ensure impact to Aboriginal Heritage items are avoided and mitigated. No consultation is expected to be required for this portion of LIW. Consultation requirements would be undertaken in line with the conditions of approval and the Unexpected and Incidental Finds Protocol and Procedure(s). • A 25m buffer has been applied around areas Aboriginal heritage to reduce potential impacts encroaching on these areas. No works will be undertaken within the buffer zone or Aboriginal Heritage areas for this portion of work. These will be shown in SEPs used across the project. • Site personnel will have access to geospatial data indicating areas of Aboriginal Heritage (Indigenous Survey Zones 1-11 East, plus a 25m buffer zone on each border) available whilst moving across the alignment.	

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
Non-Aboriginal Heritage	Heritage listed items: Two non-Aboriginal heritage listed items have been identified within the proposal site: • the Stockinbingal Railway Station • Stockinbingal Heritage Conservation Area (heritage conservation area). Both are listed with 'local' significance under the Cootamundra LEP. Two non-Aboriginal heritage items have been identified during the EIS phase as holding potential heritage significance: • Billabong Creek Rail Underbridge • Historic sawmill site No impact is expected to occur to non-Aboriginal heritage listed items during this portion of LIW. G20-02 is located approximately 250m from the Stockinbingal Heritage Conservation Area. The TfNSW Construction Noise and Vibration Guideline states that; "Attended vibration measurements shall be undertaken at all buildings within 25 m of vibration generating activities when these activities commence to confirm that vibration levels are within the acceptable range to prevent cosmetic building damage." Vibration monitoring is therefore not deemed to be required during LIW. Potential impacts to non-Aboriginal heritage items may include: • potential for vibration impacts close the proposal site as a result of construction works and the movement of plant, vehicles and machinery • accidental damage because of the movement of machinery and equipment. • changes to the visual landscape, noise and vibration Impacts to non-Aboriginal Heritage are not expected to occur as a result of the works included in this application, as the works do not require vibration generating equipment. Items of non-Aboriginal Heritage are indicated as no-go zones in the LIW induction, and as such, are unlikely to face accidental damage due to plant movements. The works will not cause significant impacts to visual impact or the existing landscape. Additional mitigation measures: • Non-Aboriginal heritage sites will be clearly defined as exclusion zones in SEPs, with appropriate barriers such as bollards and hazard tape where required to ensure their preservation and to mitigate the risk of inadvertent damage.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs.** - **NAH1** - **NAH2** - **NAH4** - **Conditions A17** - **Condition E127 & E128** - **Conditions E143 and E144**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	• The project teams will be updated on the exact locations of these heritage-sensitive areas and the importance of complying with restrictions via toolboxes, pre-starts, SEPs, and the LIW induction. • Regular checks and documentation procedures will be established to monitor the integrity and adherence to No-Go zone restrictions. • Consultation with Heritage NSW and relevant local council will occur as required to ensure impact to non-Aboriginal heritage assets are avoided and mitigated. No consultation is expected to be required for this portion of LIW due to the low-risk nature of the works. Consultation requirements would be undertaken in line with the conditions of approval and the Unexpected and Incidental Finds Protocol and Procedure(s).	
Biodiversity and Biosecurity	The Project site is predominantly Category 1 Land (exempt land where native vegetation can be cleared without approval from Local Land Services, low conservation grasslands or land containing only low conservation groundcover (not being grasslands)) and has been heavily fragmented and disturbed due to ongoing agricultural practices, with existing habitat connectivity to remnant vegetation to the east and west limited to creek lines and road reserves. LIW will be undertaken in a manner to avoid areas with known biodiversity values or their accompanying habitat. This measure has been precursor to the assessment of other environmental factors to eliminate avoidable direct and indirect impacts to biodiversity. Works within TEC or their habitat will be conducted in accordance with the approved *Inland Rail, Illabo to Stockinbingal - Biodiversity Advice, Low Impact Works* (Appendix D) letter. Ecological pre-clearance will be undertaken at sites within TEC or their habitat and provided to the ER at appropriate intervals. Any additional mitigation measures imposed by Land Access Agreements (LAA) and Farm Management Plans (FMPs) for LIW will be included as mitigation measures as they become available to JHG. Crossing property boundaries within the alignment and to access the alignment have been avoided to the maximum extent practicable. <u>Additional mitigation measures:</u> • Bollards and bunting will be used where required to delineate the approved works area from no-ground disturbance zones.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs.** - **Condition C9** - **Condition E27** - **BD-4** - **BD-5** - **BD-6**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS

	• On-site personnel will receive an induction on biodiversity and biosecurity which includes;
	  • A list of TEC's and their habitat,
	  • Instructions for no-go and no-ground disturbance areas,
	  • What to do in the case of an unexpected find.
	• TEC zones are indicated on SEPs. Hard copies are available on site and provided to all JHG site personnel via email. SEPs are provided in Appendix A.
	• Lands not surveyed are included in SEPs.
	• The Unexpected and Incidental Finds Procedures for biodiversity are available on site and provided to all JHG site personnel via email.
	• A biosecurity fact sheet is available in on site.
	• Biosecurity risk will be mitigated through the implementation of a Cleanliness Declaration Checklist. The checklist will be completed when making between-property movements as part of conducting the activities included in this assessment. This checklist ensures that prior to making between-property movements, vehicles and personnel footwear are visually inspected and free of organic material. Vehicles will be required to be brush down if required to remove any organic material.
	• Personnel footwear and vehicles will then be disinfected with bleach before moving to the next property. The checklist remains valid as long as the vehicle/equipment/personnel stay within the designated work area (the CIZ footprint) and have not crossed a property boundary or other designated boundary.
	• Site personnel will have access to geospatial data indicating areas containing TECs or their habitat available whilst moving across the alignment.	

<table>
<tr><th>Discipline</th><th>Risk Summary Based On The Outcomes Of The Risk Assessment</th><th>Consistency with CoA & EIS</th></tr>
<tr><td>Noise and Vibration</td><td>Due to the nature of the proposed LIW in this assessment daily noise and vibration impacts are expected to be negligible. No OOHW planned for the activities outlined in this assessment, as all procedures are scheduled to be conducted within standard hours. No out of hours work is to occur prior to the approval of the Project Out of Hours Work Protocol. Out of Hours works may need to be conducted under a possession arrangement. All OOHW requirements must be approved prior to the commencement of OOHW, and comply with any conditions specified under an EPL.

A noise assessment has been prepared for all activities included in this assessment (Appendix B). Noise modelling was undertaken using a ‘worst case scenario’ approach. The table below provides a summary of the dBA exceedances (if any) of NML each activity to residential receivers. More detail is presented in Appendix B.

The closest receiver for these works would be at 84 Hibernia St, chainage 37650. This is within 30 metres of the proposed work area. The impacts (as per ICNG) are deemed not to exceed the highly noise affected level (75dB(A)) during standard hours.

Any out of hours works will be applied for separately via permit.

<table>
<tr><th>Gate</th><th>dBA exceedance of NML</th><th>Number of properties affected</th></tr>
<tr><td>G20-02</td><td>6.1</td><td>1</td></tr>
</table>
</td><td>YES

Works will be undertaken in accordance with the following conditions and REMMs

- Condition C9
- Condition E3
- Condition E6 and E7
- NV8
- E1
- E2</td></tr>
</table>

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	REMMs and CoAs will be applied to the LIW for these works, including project notification and verification monitoring in response to complaints. No LIW access routes included in this package were identified as being in the highly affected dBA range at the closest sensitive receiver. Noise impacts from access routes will be temporary in nature, due to the intermittent nature of access/egress. Additional mitigation measures: **TABLE 16-1: NOISE MANAGEMENT LEVELS FOR RESIDENTIAL RECEIVERS** **Timing** / **RBL (dBA)[1]** / **NML (dBA)** / **Highly noise affected level (dBA)** Standard hours / 35 / 45 / 75 Out of hours—Day / 35 / 40 / N/A Out of hours—Evening / 30 / 35 / N/A Out of hours—Night / 30 / 35 / N/A 1. Background levels are below the minimum assumed rating background noise levels at all measurement locations along the proposal site; as such, they have been adjusted to 35dBA during the day period, and 30dBA during the evening and night periods. As a minimum, all affected landowners will be notified of the works to be undertaken in or around their properties within 7 days prior to the commencement of works in accordance with the Community Communication Strategy (CCS). Generally, affected residences will be notified of; • A diagram that identifies the location of the proposed works in relation to nearby cross streets and local landmarks • The nature, scope and duration of the works, including start and finish times • The expected noise impacts on receivers • Information on how to obtain further information or make a complaint, including an after-hours number and Inland Rail Program website. As these works are planned to be undertaken within standard hours, the recommended mitigation as per the ARTC IRPL NSW Construction Noise and Vibration Framework will be the implementation of standard environmental mitigation measures. These are provided below and will be implemented where reasonable and feasible.	

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	Mitigation measures Using portable temporary acoustic screens where effective to screen the noise emissions. Avoid the simultaneous operation of noisy plant within discernible range of noise sensitive receivers where possible. Where available, equipment selection will favour the use of quieter and less vibration emitting construction methods. Using noise source controls, such as the use of residential class mufflers, to reduce noise from all plant and equipment including bulldozers, cranes, graders, excavators and trucks Static plant should be located as far as possible from sensitive receivers, be located to take advantage of natural acoustic screening such as terrain, site buildings, etc and where necessary for reduction of noise impacts, provided with an acoustic enclosure. A telephone, email and web-based community information service shall be established to allow the community to obtain additional information on construction activities, provide feedback or make a complaint. Regular communications on the activities and progress of the proposal shall be provided to the community (e.g. via newsletter, email and/or website). Noise or vibration monitoring in response to complaints shall be undertaken where the results or the process assist in resolving or understanding the receiver's issue. Where vibration levels are predicted to approach the criteria for cosmetic building damage or limits for critical or sensitive areas, attended vibration measurements shall be undertaken at the commencement of vibration generating activities to confirm that vibration limits are within the acceptable range. A respite period shall be provided for receivers impacted by weekend work (see Definitions). The respite period will ensure that no single receiver is impacted for two consecutive periods of weekend work. Respite will be provided every second weekend commencing at 1pm on Saturday and concluding at 7am on Monday. Additionally, Project inductions and pre-starts will include that; • Non-tonal reversing alarms must be fitted and used on all construction vehicles and mobile plant.	

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	• Quieter and less noise emitting construction methods should be used whenever possible. • Avoid shouting and slamming doors to minimise unnecessary noise. • All vehicles accessing the project site must comply with local speed restrictions. • Plant equipment engines should be turned off when not in use to reduce potential noise impacts on surrounding stakeholders. Based on the assessment of noise impacts, these works can be undertaken as low impact works. Noise monitoring equipment will be carried in site vehicles available on-site in case of monitoring required to be undertaken in response to complaints.	
Soils (ERSED)	No stockpiling of material will be required for the installation of gates. The risk of soil erosion is deemed low. Mitigation measures included in this LIW Assessment will be sufficient in mitigating the potential impacts associated with soil and ERSED management. <u>Additional mitigation measures:</u> • Appropriate sediment and erosion control devices are to be installed on site to minimise transport of sediment for the works. In addition, sediment/erosion controls such as the installation of coir logs, silt socks or sand bags will be installed where required (near drains, waterways and high slope angles). • Erosion and sediment control measures would be maintained and left in place until the works are complete and areas are stabilised. • Reinstatement of voids will be completed to ensure stable landform consistent with the surrounding environment. • The volume of excavated material to be removed from site from digging post holes will be minimised by maximising reuse of excavated material where possible and practical. • All erosion and sediment control measures are to be inspected, and any damage would be rectified. Control measures are required to be inspected regularly during and after rainfall events to ensure their effectiveness over the duration of the works. • Sediment would be cleared from behind barriers/sand bags/filtration devices on a regular basis and all controls would be managed to ensure they always work effectively.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **Condition C9** - **Condition E150** - **SC9**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
Contamination	Site investigations undertaken as part of the Environmental Assessment for I2S identified a number of areas requiring further investigation and potential remediation (i.e. AECs). Works included in this LIWA are at low risk of mobilising contaminants. In the event contaminated land or material is encountered, it will be managed in accordance with the Unexpected and Incidental Finds Protocol and mitigation measures specific for working in and around each AEC. Mitigation measures have been included in SEPs where relevant, Soil contamination could occur as a result of any accidental spills or leaks of fuels, oils and other chemicals from equipment and vehicles during construction. The REMMS relevant to this LIW assessment are sufficient in managing potential contamination risks associated with the works. <u>Additional mitigation measures:</u> • Vehicles are to drive on established pathways and farm tracks as much as reasonably practicable. • Works in proximity to AECs must be undertaken in accordance with the appropriate mitigation measures determined by a contamination specialist and endorsed by the Site Auditor. The proximity around each AEC that is required will also be agreed with the Site Auditor to confirm the extent of locations where mitigation measures are required (above and beyond the current measure of undertaking works under the Unexpected and Incidental Finds Protocol). • Driving over AECs are of low risk at mobilising contaminants as no contamination is expected to be present at the surface. • Contamination encountered will be managed in accordance with the Unexpected and Incidental Finds Protocol for Contamination. • Spill kits will be stored in site vehicles and their indicative locations indicated on SEPs. • Site personnel will be made aware of AECs via SEPs. • All refuelling operations (if any are required) will occur >50m from a waterway, ephemeral watercourse or wetland. All refuelling activities will be undertaken in either a bunded area or with a drip tray.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **Condition A17** - **Condition E159** - **Condition E161**
Waste	Waste streams in high volumes are not expected to be generated from the LIW activities in this assessment. All excavations will be backfilled into the hole. All excess materials will be removed offsite. Waste generated may include:	**YES**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	• Hard plastic • Soft plastic • Organic/food waste • Paper/cardboard • Vegetative waste (as a result of vehicle wheel cleaning and boot brush) • Concrete • General Solid Waste (GSW) and spoil (excavated material) <u>Additional mitigation measures:</u> • All spoil generated as a result of the excavations will be backfilled into the excavations. Any excess spoil will be disposed of offsite. ○ All waste being disposed of offsite must be classified in accordance with the NSW Waste Classification Guidelines. Waste will be disposed of at a facility licensed to accept the waste type. • Plastic bags will be in place in site vehicles to ensure that any waste produced by the team remains in the site vehicles and is contained. • All waste will be recycled where possible. • Waste generation will be avoided where possible, and where avoidance is not reasonably practicable, waste generation will be reduced. • Concrete to stabilise fence posts may be required. Mixing of concrete will occur on site within a bucket or wheelbarrow. Concrete washout of buckets, wheelbarrows and mixing tools is not permitted to be undertaken on site to avoid potential impacts to the receiving environment. Mixing of concrete prior to pouring will occur on flat surfaces where possible atop plastic sheeting to prevent aggregate spill into the surrounding environment. • All waste will be disposed of at facilities licensed to accept the respective waste types. • Where disposal at waste facilities is undertaken, waste transport and disposal dockets will be maintained.	**Works will be undertaken in accordance with the following conditions and REMMs** - **WM3** - **Condition C9** - **Condition E165** - **Condition E163**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
Water	No LIW activities submitted in this package are within a waterbody. Water bodies in this case include farm dams, streams, creeks, and rivers, or other depressions in the landscape carrying water. Construction teams will use routes indicated on the SEPs and JHG risk management documentation (AMSs and TRAs). Based on the assessment of impacts to water, these works can be undertaken as low impact works. <u>Additional mitigation measures:</u> Prior to crossing a dry creek, stream or drainage line with a vehicle, onsite personnel are to assess whether site conditions will not cause adverse environmental impacts to the receiving environment. These include large slope angles (erosion potential), weather forecasts, potential biosecurity concerns, the presence of overly dry or wet soil, and the presence of vegetation. This will be communicated to site teams via pre-start briefings and the I2S induction. Potential streams and creeks are indicated on SEPs. Prior to crossing a dry creek, stream or drainage line with a vehicle, onsite personnel are to assess whether site conditions will not cause adverse environmental impacts to the receiving environment. These include large slope angles (erosion potential), weather forecasts, potential biosecurity concerns, the presence of overly dry or wet soil, and the presence of vegetation. Personnel are to contact the JHG environmental manager or delegate prior to crossing a dry creek where there is a significant risk of generating sediment runoff, impacting vegetation or altering the existing landform to a state that would require rehabilitation or alter existing flow paths.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **Condition C9** - **Condition E150** - **SC9** - **E42**
Traffic and transport	The proposal is located between sections of existing rail line near the townships of Illabo in the south and Stockinbingal in the north. These townships are predominantly surrounded by large rural properties connected by minor local roads. There are no major towns located along the proposal site between Illabo and Stockinbingal.	**YES** **Survey works will be undertaken in accordance with the following conditions and REMMs** - **T6** - **Condition C9**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	The LIW may generate some additional traffic as a result of light and heavy vehicles accessing sites. The volume of extra vehicles and traffic is expected to be minimal. No closure or diversion of roads, level crossings or other ancillary transport items will occur as part of the activities in this assessment. Based on the assessment of traffic and transport, the works can be classified as low impact. Road occupancy licenses (ROLs) from the relevant approval authorities (TfNSW or otherwise) will be obtained prior to works occurring within the road seal or verge. ROLs obtained for the Project to date are available on request. <u>Additional mitigation measures:</u> • Right of way will be given to the public (road users and pedestrians) at access points into work areas. • Traffic control will be implemented where required to manage the flow of traffic at access gates. • Appropriate land access approvals will be obtained prior to the commencement of LIW. • The construction workforce and project staff will be encouraged to ride-share to reduce the number of light vehicles travelling to and from site and within the project alignment.	- **Condition E100** - **Condition E107**
Access	Access routes are visually presented in Appendix A. Proposed access points for activities in this assessment are provided in Table 4-3. Existing approved access points (SAP 2-11, Chapter 11 p. 15 of the EIS) will be preferentially used, however, many of these locations are limited due to constructability constraints (i.e. the size of gates, landscape limitations, the requirement to cross creeks to access the worksite, etc.). All access routes proposed for these works are either public roads or existing farm tracks, no construction of new access roads will be required. Access locations will be subject to IRPL and landowner approval in accordance with the Inland Rail Community Communication Strategy (CCS). Agreements are to be reached with landholders and communications to be undertaken in accordance with the CCS. SAP i (shown in Appendix A and Table 4-3) is within the Project area of CSSI-1055 (the Olympic Highway Level Crossing).	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **LP1** - **LP4** - **LP5** - **LP7** - **LP8** - **LP10** - **Condition C9** - **Condition E94**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
	Based on the assessment of access gates and routes to the LIW activities included, the works have been classified as low impact. These works can be carried out as LIW using the mitigation measures included in this LIWA.	- **Condition E95** - **Condition E97**
Air quality	LIW could result in minor air quality impacts associated with: • Dust emissions: the use of light vehicles during investigations. • Gaseous emissions: inclusive of vehicle emissions and fugitive emissions from equipment and plant. Based on the assessment of impacts to air quality, the works can be undertaken as low impact works. <u>Additional mitigation measures:</u> • Site vehicles are to go the speed limits enforced on NSW roads and within private properties to avoid excessive dust and disturbance of dirt roads.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **AQ2**
Sustainability	Sustainable practices would be implemented from the outset of the LIW. Efficient plant use and effective waste management processes would be undertaken. This includes the reporting of energy, waste and water in Project Pack Web (PPW) - John Holland's compliance reporting program. Procurement would be undertaken in accordance with the *Inland Rail Sustainable Procurement Policy* (ARTC, 2018c), the *Sustainable Procurement Guide* (Commonwealth of Australia, 2021) and the *NSW Government Resource Efficiency Policy* (OEH, 2014b).	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **SU1**
Landscape & Visual Impacts	Landscape and visual impacts are not anticipated during LIW. LIW included in this assessment will be mobile and minor in terms of vehicles, plant and equipment with all materials and staff moving offsite at the end of each day and moving throughout the CIZ footprint.	**YES** **Works will be undertaken in accordance with the following conditions and REMMs** - **LV4** - **LV6**

Discipline	Risk Summary Based On The Outcomes Of The Risk Assessment	Consistency with CoA & EIS
		- Condition C9

9 Mitigation Measures

Based on the level of impacts described above, the LIW activities associated with this package will be managed under the REMMs and relevant conditions of approval.

Communication of specific REMMs associated with activities will be described and communicated through the planning and implementation documents prepared by John Holland (the AMS, TRA and SEP) as well as this document communicated as part of the sign off process for staff prior to undertaking any work.

In addition to the REMMs and CoA's, the following General Mitigation Measures have been included for works associated with this assessment:

- All vehicles entering the site will be equipped with portable spill kits and all personnel will have access to these kits, to rapidly address any incidental leaks, ensuring immediate containment and cleanup.
- Concrete washouts (if any) would be contained and removed off-site.
- All spoil generated as a result of the excavations will be backfilled into the excavations. Any excess spoil will be disposed of offsite.
    - All waste being disposed of offsite must be classified in accordance with the NSW Waste Classification Guidelines. Waste will be disposed of at a facility licensed to accept the waste type.
- Vehicles transitioning from dirt roads onto public asphalted roads will undergo a visual inspection to prevent debris from being transported off-site and to maintain cleanliness on public roadways.
- Farm gates encountered during LIW will be left in the condition specified by the landowner, whether that be open or closed. If no contact with relevant landowner is achieved, the specific gate will be left in the condition it was found in.
- TEC's and TEC habitat locations will be available electronically and via hard copies of the SEPs to all site personnel. Vegetation within the CIZ will be delineated as required with appropriate barriers such as bollards and bunting.
- All site personnel are to be inducted to the Project. The project induction includes the controls and mitigation measures within this assessment, along with visual depictions of no-go zones.
- Biosecurity measures will be established. Prior to making between-property movements, all personnel's boots and vehicles will undergo a cleanliness inspection to ensure they are clean and free of organic material.
- Prior to the initiation of any work, access routes crossing private property will be established in consensus with the respective landowners.
- The utilisation of existing farm tracks will be adhered to as much as reasonably practicable for the proposed activities, thereby reducing the environmental impact of the works.
- Non-tonal reversing alarms must be fitted and used on all construction vehicles and mobile plant.
- Quieter and less noise emitting construction methods will be used whenever possible.
- Shouting and slamming doors to minimise unnecessary noise will be avoided.
- All vehicles accessing the project site must comply with local speed restrictions.
- Plant equipment engines should be turned off when not in use to reduce potential noise impacts on surrounding stakeholders.

10 Appendices

Appendix A—Site Environmental Plans (SEPs)

I2S LIW Gates Site Environmental Plan (SEP)

JOHN HOLLAND

General

Misc. Construction Controls to avoid Environmental Incidents
Out of Hours Work (OOHW) as approved by Inland Rail and the ER. OOHW as described in the Out of Hours Work Protocol *(5-0019-220-EEC-00-PO-0001)*.
No works to be undertaken outside of standard construction hours without prior approval from the ER.
Fatigue monitored to ensure environmental & safety incidents are avoided.
Plant and equipment to be operated by a trained competent and authorised person only.
Pre-mobilisation Inspection for all plant and equipment.
Licensed Asbestos Contractor Class A for removal of friable asbestos and Class B for bonded asbestos.

Environmental Risks

Impact	Risk
Noise Pollution	[L]
Water Pollution	[M]
Air Quality	[L]
Chemical Spills	[L]
Waste and Resource	[L]
Flora & Flora	[M]
Housekeeping	[L]
Traffic Management	[L]
Heritage	[M]

EVENT MANAGEMENT

All environmental incidents to be reported immediately to Inland Rail and Environmental Representative and entered into Horizon360 within 24 hours of the event.

Air Quality Management

Avoid works during unfavourable weather conditions, i.e., following BOM weather alerts and/or warnings.	**Site Supervisor**
Plant/equipment will cease where excessive emission of black smoke from the responsible plant/equipment is observed.	**Site Supervisor**

Contamination

Controls / Actions	Responsibility
Upon identification/suspicion of contaminants, work must cease and the procedure in the Unexpected and Incidental Finds Protocol be adhered to (*5-0019-220-PES-00-PR-0001*).	**Site Personnel**

Project Contacts

Project Title	Name	Contact No.
Site Supervisor	Matt Estens	0407 310 353
JHG Rail Systems Manager	Andy Buchanan	0417 014 864
JHG Construction Manager	Chad Bevan	0492 853 768
JHG Environment Manager	Dave Carberry	0428 918 886
JHG Environment Delegate	Tess Anastakis	0427 275 193
JHG Safety Manager	Kevin Hasler	0483 308 737
IRPL Project Manager	Michael Matthews	0411 324 445
EPA Pollution Hotline		131 555
WIRES – Animal rescue		1300 094 737
Project Information Line		1800 732 761
Riverina Fire Brigade		6929 5700
Emergency – Police, Fire and Rescue		000 OR 112

Working Hours

Standard Construction Hours:
Mon – Sat 07:00 to 18:00

ALL HOURS OUTSIDE OF THESE TIMES ARE TO BE CONSIDERED AS OUT OF HOURS WORK (OOHW) AND MUST BE APPROVED BY THE ER PRIOR TO OOHW COMMENCING

Traffic Management

Controls / Actions	Responsibility
Ensure safe exit and entry to the site is maintained at all times.	**Site Supervisor**
Site vehicles will be parked within or in close proximity to the CIZ to support project activities and minimise public disruption and overall impact.	**Site Supervisor**
Ensure public/pedestrian access is maintained.	**Site Supervisor**
Site access is only permitted via routes that have been approved by the ER, IRPL and relevant landowners.	**Site Supervisor**
Adhere to speed limit restrictions on all roads to minimise dust generation	**Site Supervisor**

Soil and Water Management

Controls / Actions	Responsibility
Appropriate erosion and sediment controls will be installed in accordance with Blue Book for stormwater/rail corridor drains (as required). Monitor the sediment and erosion controls – repair and reinstate where these are damaged.	**Site Supervisor** **Project Manager**
Water will not be discharged unless approved by the JHG Environment Team.	**Project Engineer**
Inspection of the erosion and sediment controls to be completed after 20mm in 24hours.	**Site Supervisor**
Groundwater would be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014)	**Site Supervisor**

Refuelling / Servicing

Spill kits to be located in close proximity to refuelling operations.	**Site Supervisor**
If required, only minor servicing activities are to be undertaken on site. >50m from drainage lines.	**Site Personnel**
Ground protection measures (drip trays and plastic sheeting) must be installed prior to servicing / refuelling activities.	**Site Personnel**
Prevent the discharge of pollutants to stormwater. Undertake regular checks of equipment to ensure leaks and spills are rectified and cleaned immediately.	**Site Supervisor** **Site Personnel**
Report all environmental incidents to the JHG Environment Team.	**Site Personnel**

Waste and Resource Consumption

Prevent waste being blown or washed outside of the construction boundary (CIZ).	**Site Supervisor**
Waste generated from workers consumables to be disposed of in bins.	**Site Supervisor**
All waste will be classified and managed in accordance with the NSW Environment Protection Agency (EPA) *Waste Classification Guidelines*.	**Project Engineer**

Chemical Storage

Chemicals, fuels and oils to be stored in the securely bunded area within the storage area.	**All personnel**
Spill kits and absorbent material to be located in the site plant, light vehicles and in work area.	**Site Supervisor**

Heritage Management

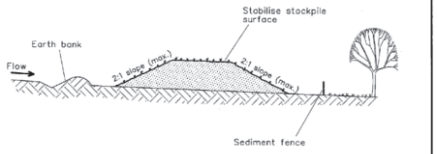
Controls / Actions	Responsibility
No ground disturbance to Aboriginal Heritage Zones (1-11). Activities permitted in these zones: • Driving (existing vehicle tracks **ONLY**) • Walking	**Site Supervisor** **Project Manager**
No works within 10m of Stockinbingal Heritage Conservation Area.	
Unexpected Heritage finds must be managed in accordance with the Unexpected and Incidental Finds Protocol (*5-0019-220-PES-00-PR-0001*).	**Site Personnel**

Flora and Fauna Management

No ground disturbance within TEC zones prior to endorsement of the Project ecologist	**Site Personnel**
Contact project ecologist to have fauna relocated if found.	**Site Personnel**
NO VEGETATION IS TO BE REMOVED OR TRIMMED.	**Site Personnel**
Unexpected biodiversity finds must be managed in accordance with the Unexpected and Incidental Finds Protocol (*5-0019-220-PES-00-PR-0001*).	**Site Personnel**
Where no TEC polygons are present on the SEPs, all trees are to be avoided and protected where required.	**Site Personnel**
Vehicles to be inspected before movement between different landowners' properties.	**Site Personnel**
Vehicles to be brushed down of any mud/soil material and tires sprayed with disinfectant prior to making between between-property movements.	**Site Personnel**

Noise Management

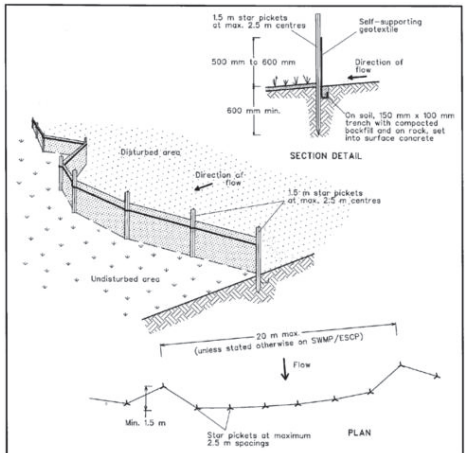
No works to occur outside standard construction hours, unless otherwise approved by Inland Rail and the ER. Comply with Out of Hours Protocol conditions of approval, if applicable.	**Project Manager** **Site Engineer**
All plant equipment engines, including delivery vehicles, must be turned off when not in use to reduce potential noise impacts to the surrounding community.	**Site Supervisor** **Environmental Representative**
Non-tonal reverse mechanisms will be installed on plant.	
No unnecessary shouting, slamming doors	



Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

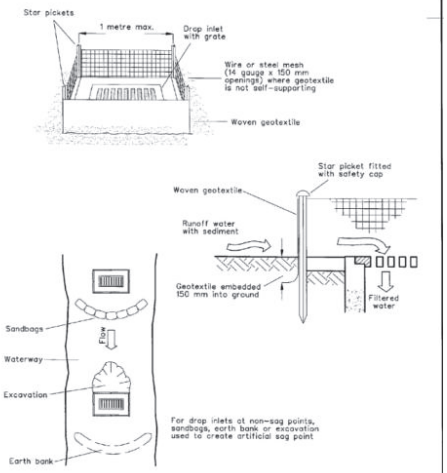
STOCKPILES SD 4-1



Construction Notes

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metre long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

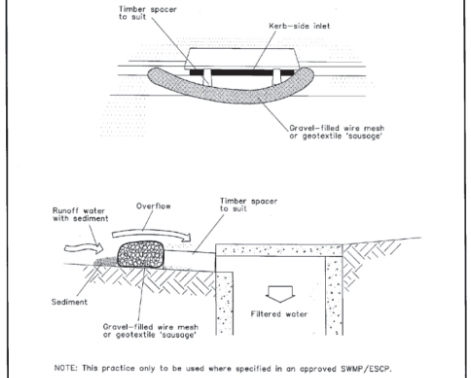
SEDIMENT FENCE SD 6-8



Construction Notes

1. Fabricate a sediment barrier made from geotextile or straw bales.
2. Follow Standard Drawing 6-7 and Standard Drawing 6-8 for installation procedures for the straw bales or geofabric. Reduce the picket spacing to 1 metre centres.
3. In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
4. Do not cover the inlet with geotextile unless the design is adequate to allow for all waters to bypass it.

GEOTEXTILE INLET FILTER SD 6-12



NOTE: This practice only to be used where specified in an approved SWMP/ESCP.

Construction Notes

1. Install filters to kerb inlets only at sag points.
2. Fabricate a sleeve made from geotextile or wire mesh longer than the length of the inlet pit and fill it with 25 mm to 50 mm gravel.
3. Form an elliptical cross-section about 150 mm high x 400 mm wide.
4. Place the filter at the opening leaving at least a 100-mm space between it and the kerb inlet. Maintain the opening with spacer blocks.
5. Form a seal with the kerb to prevent sediment bypassing the filter.
6. Sandbags filled with gravel can substitute for the mesh or geotextile providing they are placed so that they firmly abut each other and sediment-laden waters cannot pass between.

MESH AND GRAVEL INLET FILTER SD 6-11

Legend

- AEC
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
- Grey-crowned Babbler
- Little Eagle
- Little Eagle – Nest (Confirmed)
- Spotted Harrier
- Spotted Harrier – Nest (Confirmed)
- Square-tailed Kite
- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Euphrasia arguta, Grevillea wilkinsonii,Prasophyllum sp. Wybong
- Flora - Diuris Tricolor
- Flora - Cullen Parvum
- Caladenia arenaria, Eleocharis obicis,Indigofera efoliata,Swainsona sericea
- Austrostipa Wakoolica and Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

Note: Figures from the Blue Book

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G01-01

Site Access Point: XLVIII, i

JOHN HOLLAND

Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
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- Flame Robin
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- Little Eagle
- Little Eagle – Nest (Confirmed)
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- Gate buffer area
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- Indigenous Survey Zones
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- State Heritage
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- Private level crossing
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Erosion and Sediment Controls (ESC):

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- Where appropriate, geofabric would underlay the stockpile to facilitate easier site clean-up upon removal of the stockpile.
- Groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014).
- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period).

INDIGENOUS SURVEY ZONES +25m:

No ground disturbance activities to commence prior to **heritage endorsement** of works

- Walking permitted
- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

No activities to commence prior to **endorsement of works by an ecologist.**

TEC ZONES OR TEC HABITAT:

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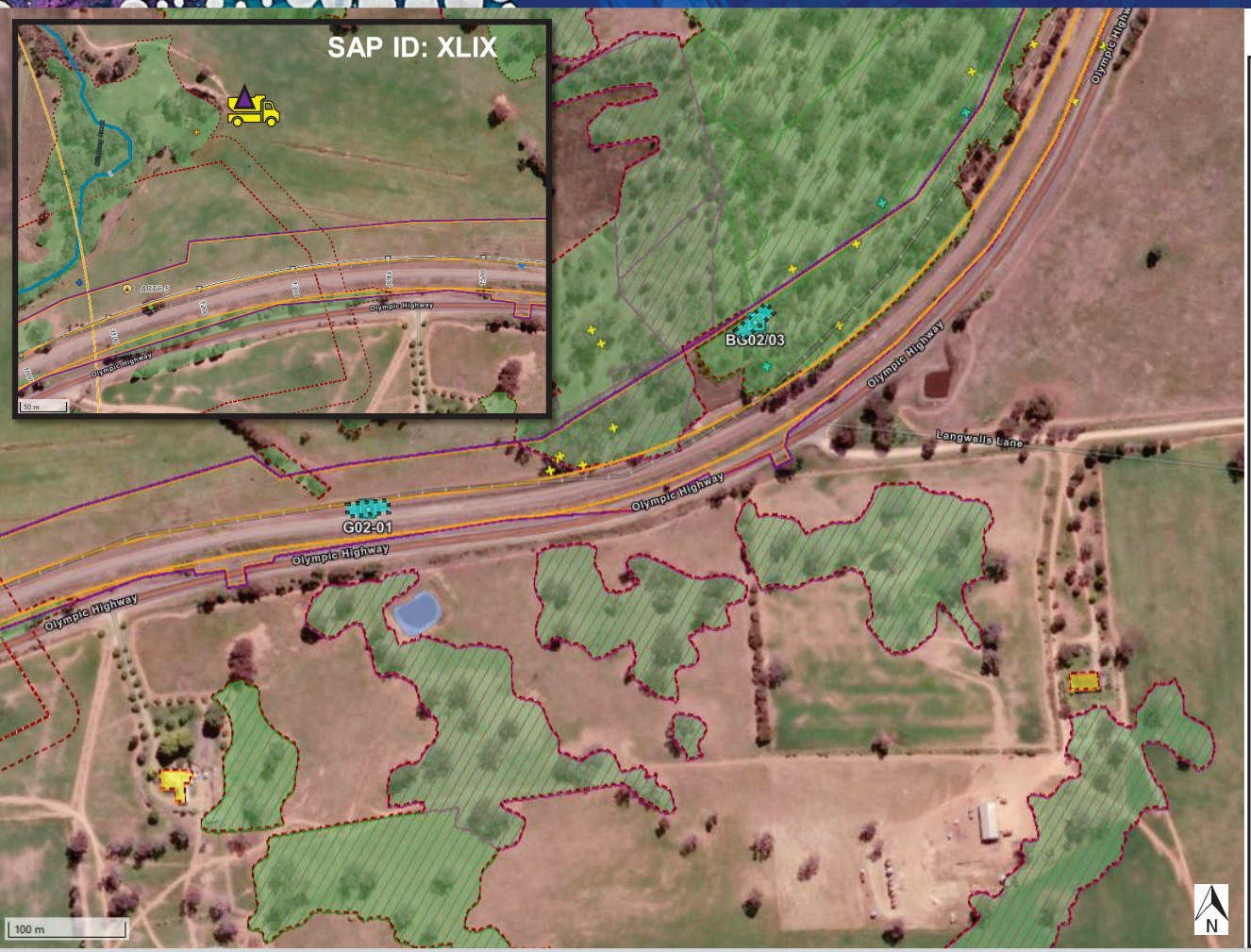
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G02-01 and BG02/03

Site Access Point: XLIX

JOHN HOLLAND



Legend

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- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
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- Spill kit
- Chainage
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- Gate location
- Gate buffer area
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- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
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- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
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- Land not surveyed (ecologically)
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I2S LIW Gates Site Environmental Plan (SEP)

Site Access Point: XLIX

Property #2 – David and Jenny Thompson

JOHN HOLLAND

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- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
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- White-Box-Yellow Box-Blakely's Red Gum
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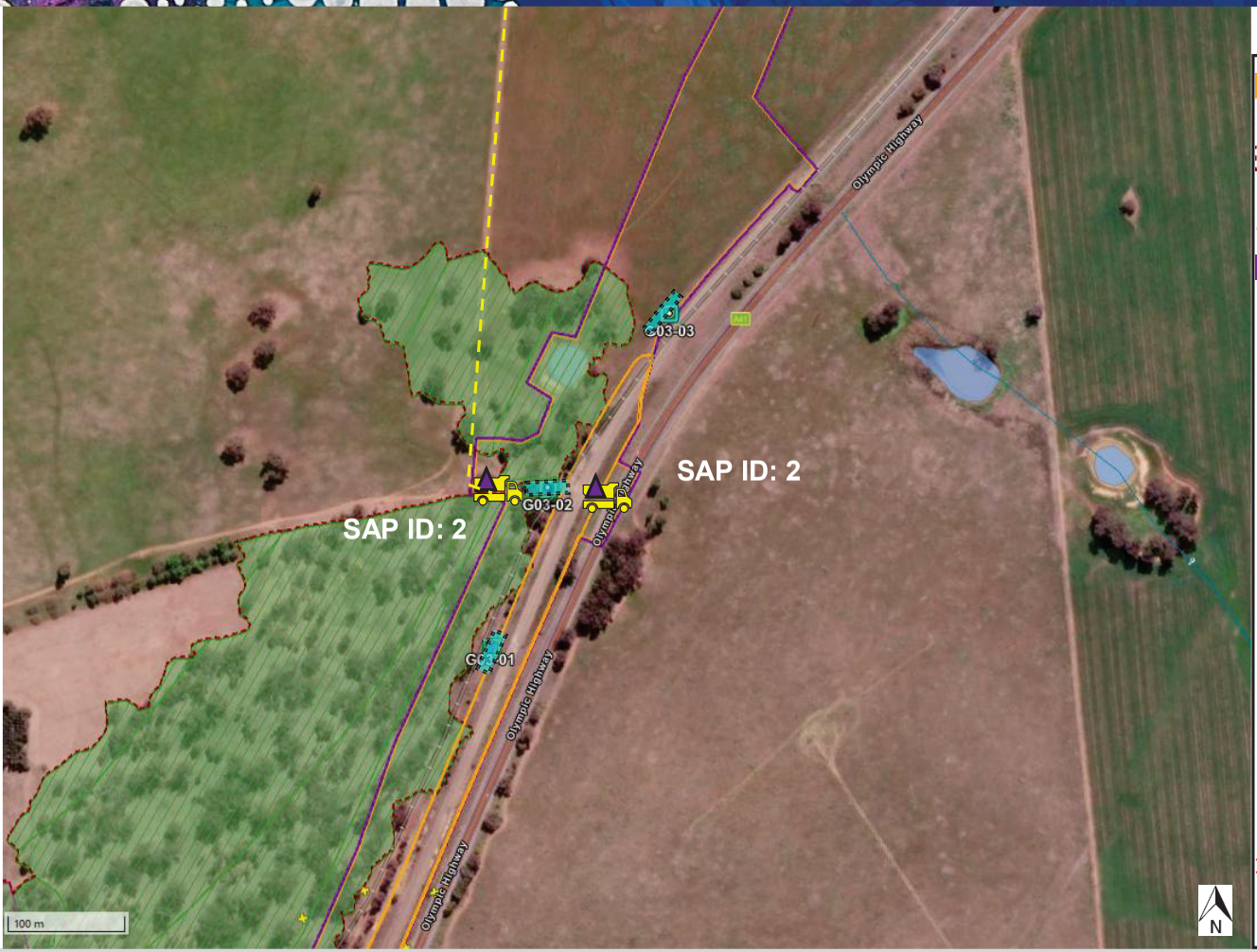
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G03-01, G03-02 and G03-03

Site Access Point: 2

JOHN HOLLAND



Legend

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- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
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- Flame Robin
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- Little Eagle
- Little Eagle – Nest (Confirmed)
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- Local Heritage
- State Heritage
- Scattered Paddock Tree
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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G03-04

Site Access Point: i, XLVIII

JOHN HOLLAND

Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
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- All spoil generated as a result of hydraulic excavation will be contained within a sucker truck and liquid waste bins and will be disposed of as liquid waste at an appropriately licenced facility.
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- Where appropriate, geofabric would underlay the stockpile to facilitate easier site clean-up upon removal of the stockpile.
- Groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014).
- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period).

INDIGENOUS SURVEY ZONES +25m:

No ground disturbance activities to commence prior to **heritage endorsement** of works

- Walking permitted
- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

No activities to commence prior to **endorsement of works by an ecologist.**

TEC ZONES OR TEC HABITAT:

No ground disturbance activities to commence prior **to endorsement of works by ecologist.** Ecologist mitigation to be included on all excavation permits (where relevant to the works).

WATERWAYS (OR POTENTIAL WATERWAYS):

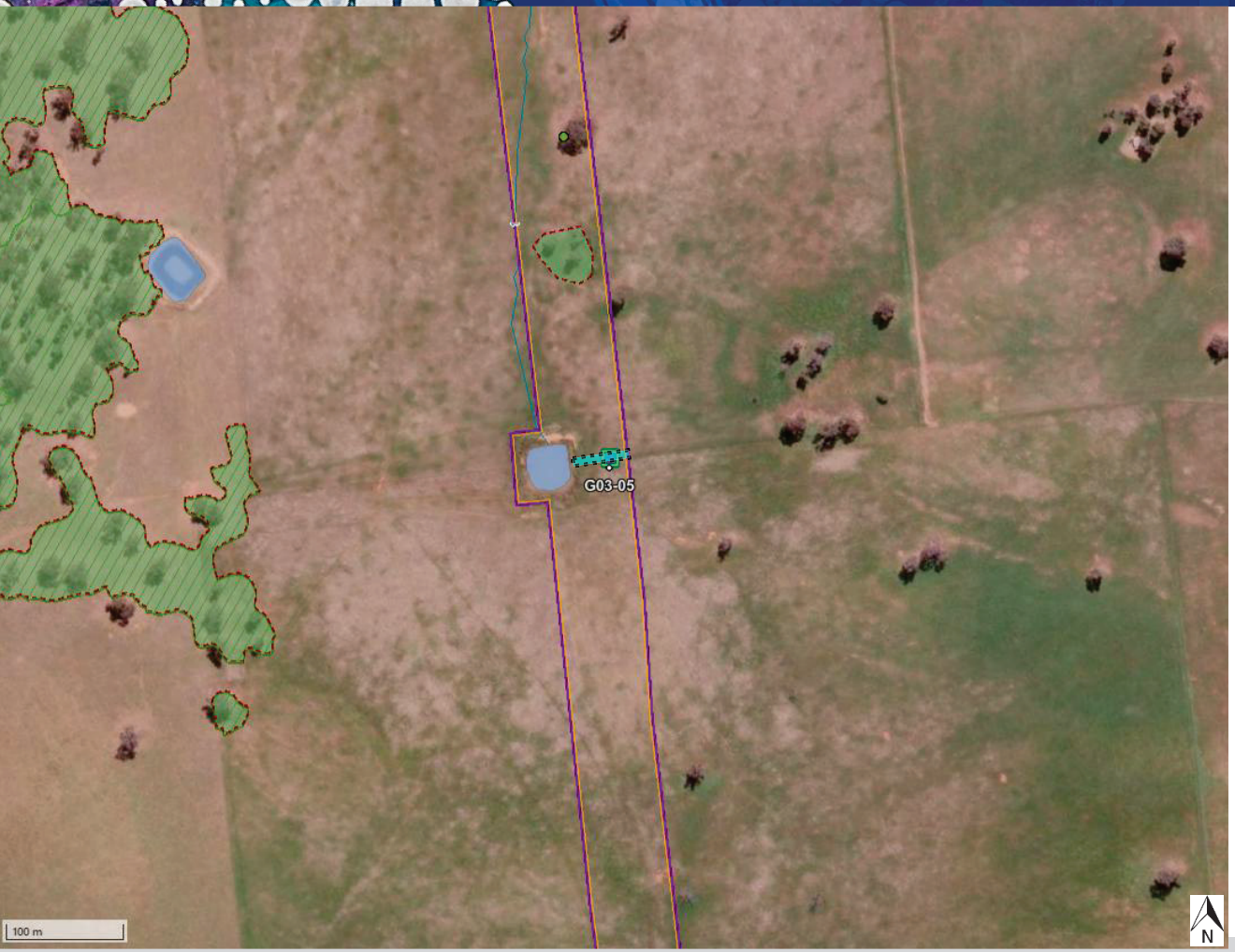
- Vehicles may only proceed following an assessment of on-site conditions (i.e. high risk of erosion, >20mm of rainfall in 24h, change to existing flow path)

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G03-05

Site Access Point: i, XLVIII

JOHN HOLLAND



Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
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- Spill kit
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- Ammobium craspedioides
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- Habitat connectivity
- Stream (incl. ephemeral)
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- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

Erosion and Sediment Controls (ESC):

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- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period).

INDIGENOUS SURVEY ZONES +25m:

No ground disturbance activities to commence prior to **heritage endorsement** of works

- Walking permitted
- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

No activities to commence prior to **endorsement of works by an ecologist.**

TEC ZONES OR TEC HABITAT:

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WATERWAYS (OR POTENTIAL WATERWAYS):

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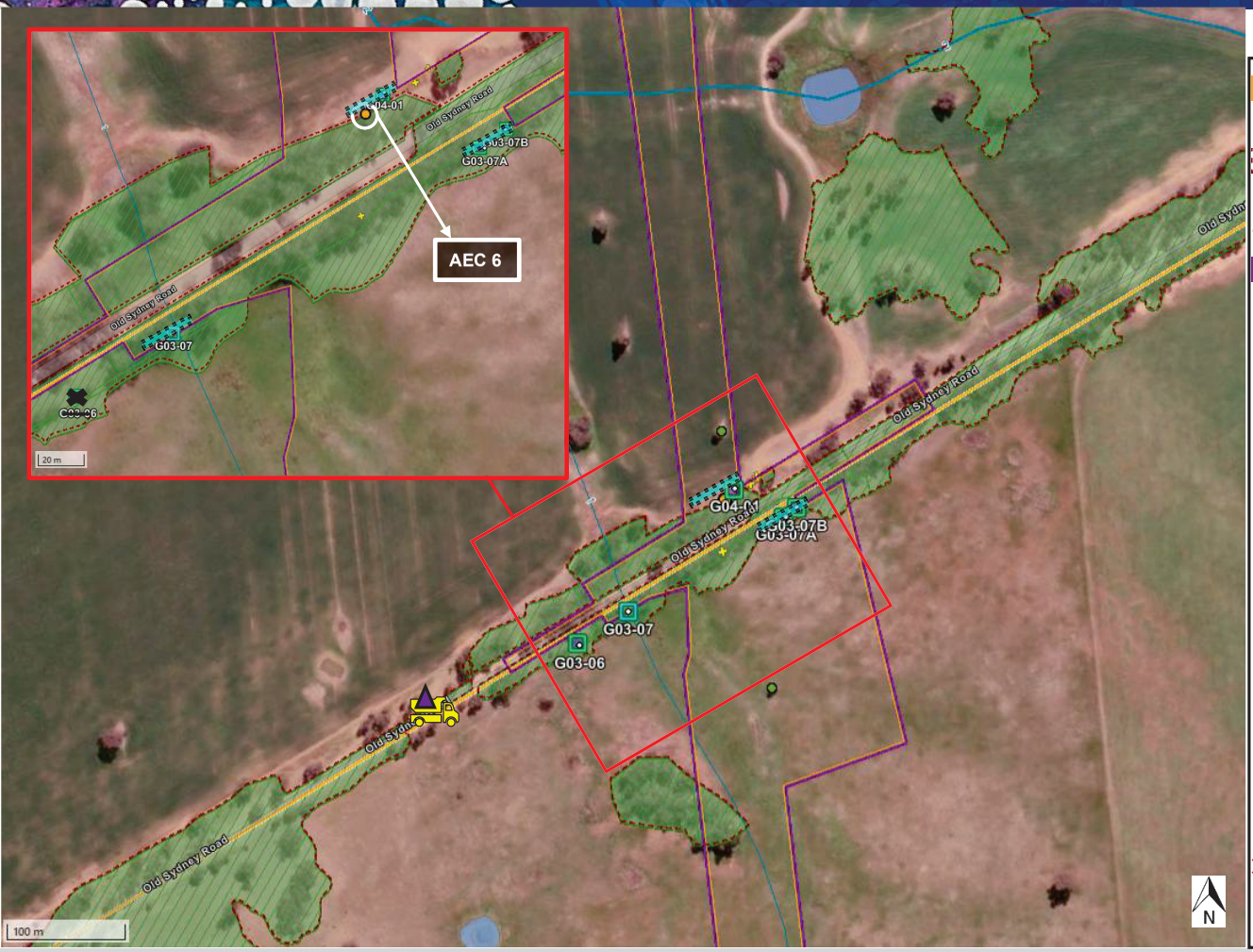
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G03-07, G03-07A, G03-07B and G04-01

Site Access Point: 3 South, Old Sydney Road (direct)

JOHN HOLLAND



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- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
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Erosion and Sediment Controls (ESC):

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- Groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014).
- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period)

Mitigation for works within/around AEC:

***AEC 6** – Fox baits.*

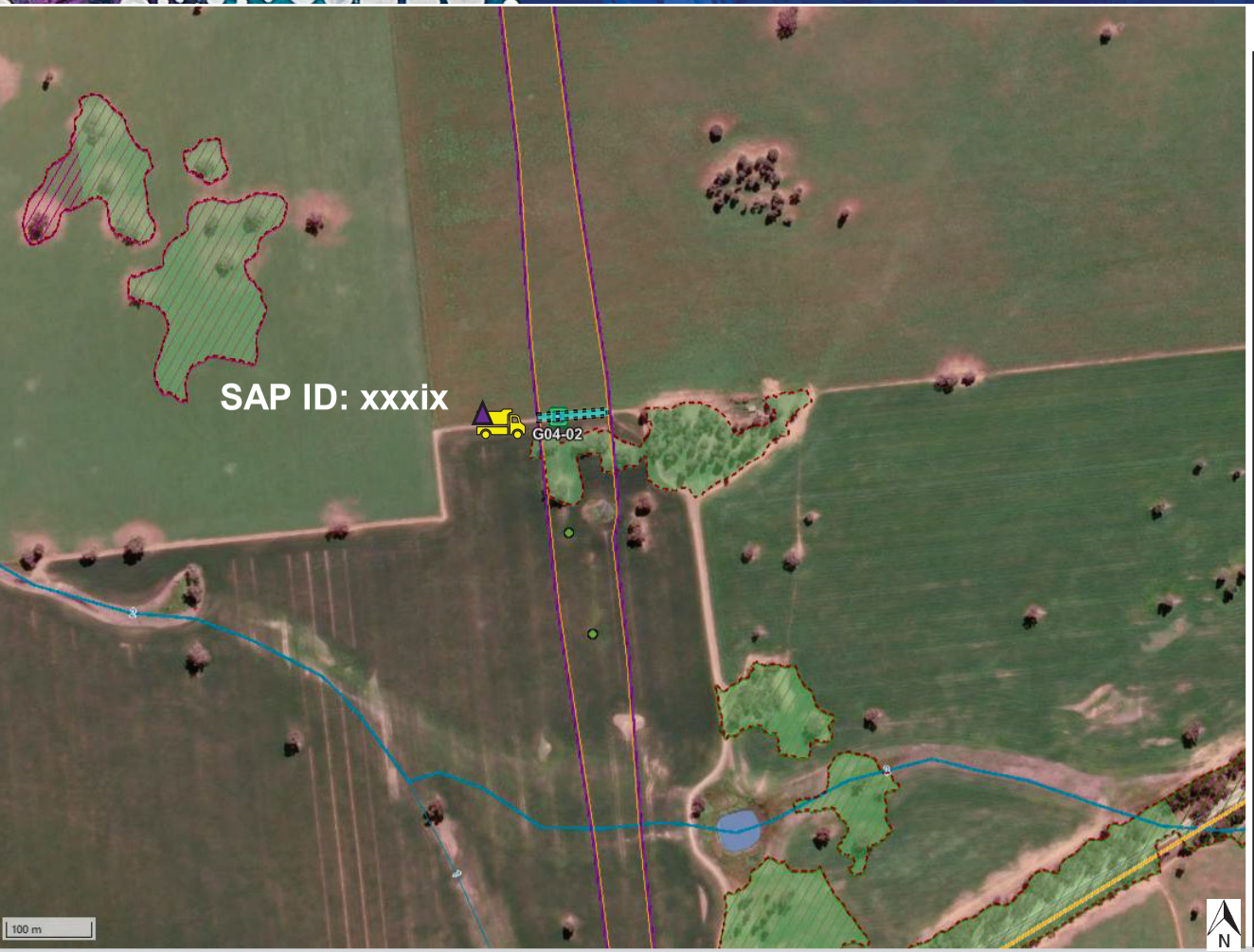
- If visual indicators are identified onsite, stop work immediately and implement the Unexpected Finds Procedure
- The location of fox baits cannot be predicted. Avoid contact with observed bates, any carcass or small (matchbox size) pieces of meat.

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G04-02

Site Access Point: xxxix

JOHN HOLLAND



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- Ammobium craspedioides
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- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
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- State Heritage
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INDIGENOUS SURVEY ZONES +25m:

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UNSURVEYED LANDS:

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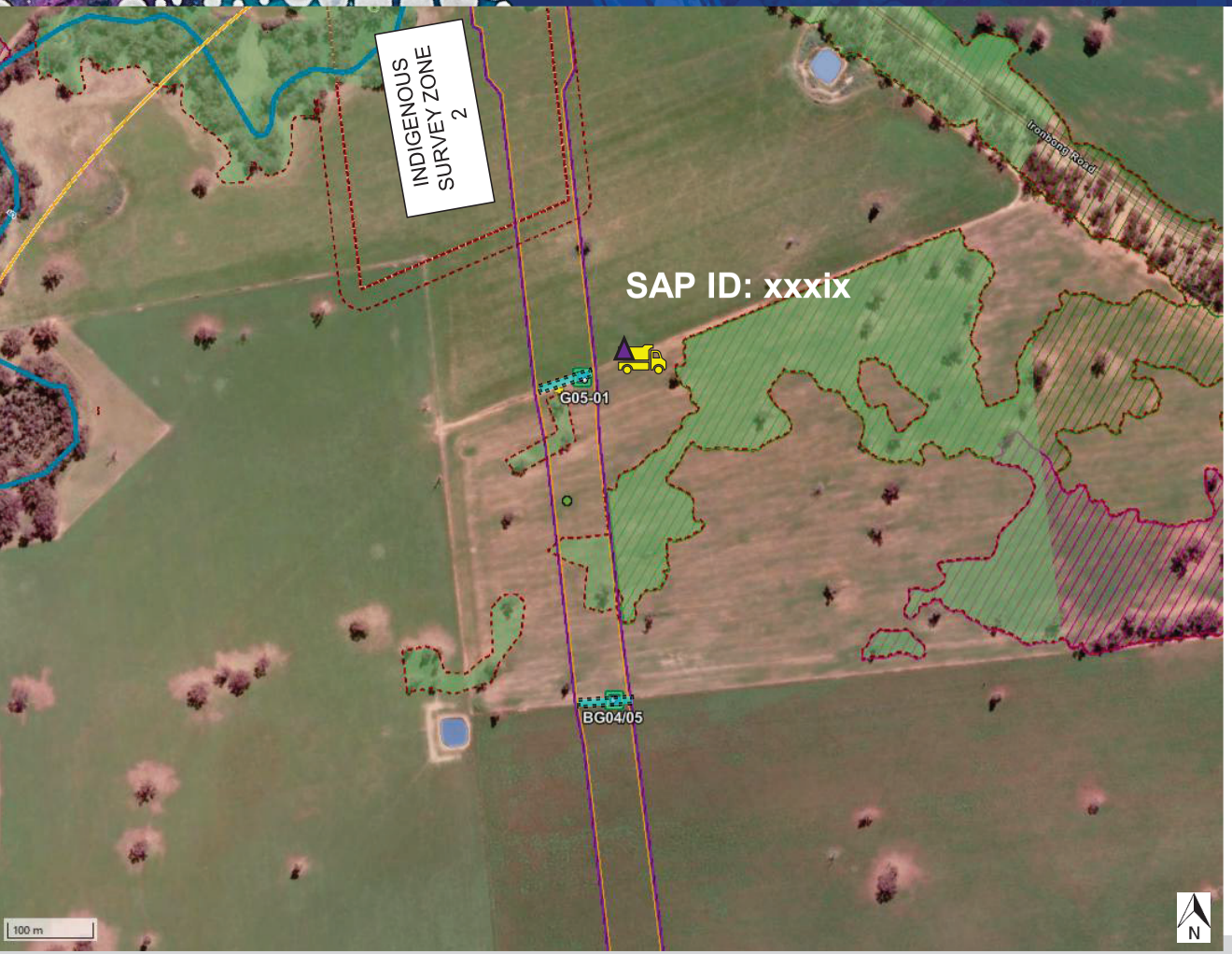
- Vehicles may only proceed following an assessment of on-site conditions (i.e. high risk of erosion, >20mm of rainfall in 24h, change to existing flow path)

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG04/05 and G05-01

Site Access Point: xxxix

JOHN HOLLAND



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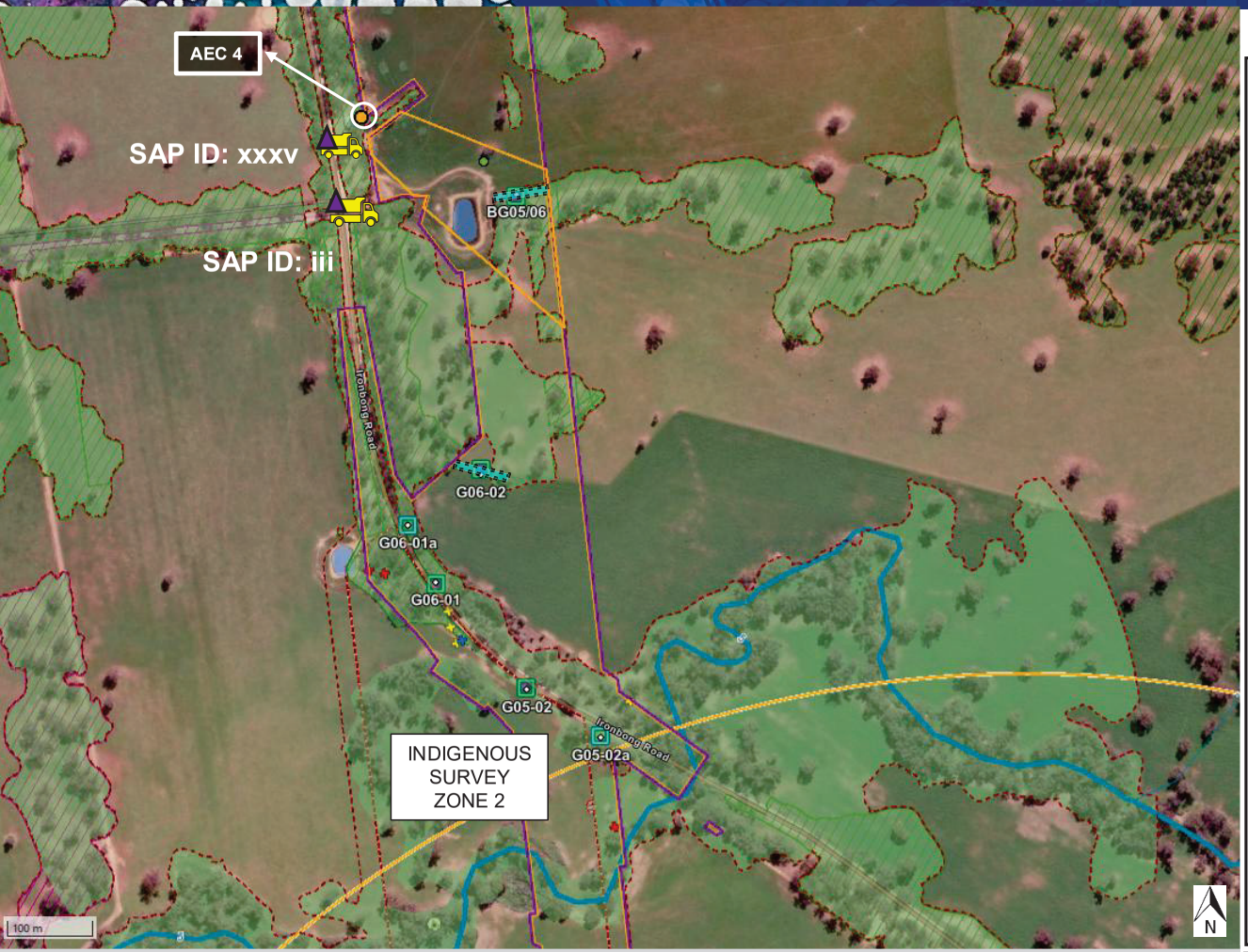
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G05-02A, G05-02, G06-01A, G06-01, G06-02, BG05-06

Site Access Point: iii, xxxv

JOHN HOLLAND



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Monitoring of ESC:

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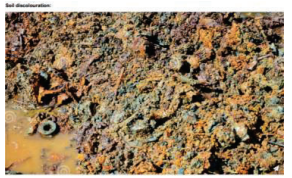
Mitigation for works within/around AEC:

***AEC 4** - Bethungra Rural Fire Brigade service shed with associated fire suppressants and one water tank*

- If visual indicators are identified onsite, stop work immediately and implement the Unexpected Finds Procedure
- Appropriate PPE will be worn as required, such as in dusty / high wind conditions, confined spaces or works likely to result in particulate inhalation.
- Do not disturb building and demolition waste (refer to AEC 7 if stockpiles of waste are identified).
- Ensure equipment is inspected, clean and contaminant free prior to leaving site.
- Do not disturb historic machinery.



I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G05-03, G05-04 and G05-05

Site Access Point: iii, xxxv

JOHN HOLLAND

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- Sediment control to be implemented in all laydown areas, specifically drains and gutters for stormwater control.
- ESC to be in place on the downward side of stockpiles. All temporary stockpiles to be covered and weighted down with plastic sheeting to prevent wind and water erosion.
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- Stockpiles not to exceed 2 metres in height.
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  (cover is essential for preventing ingress of rainwater).
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- Groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014).
- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period)

Mitigation for works within/around AEC:

AEC 3 - *Four grain silos and machinery associated with these silos including tractors and multi-feeders within a private property*

- If visual indicators are identified onsite, stop work immediately and implement the Unexpected Finds Procedure
- Appropriate PPE will be worn as required, such as in dusty / high wind conditions, confined spaces or works likely to result in particulate inhalation.
- Do not disturb building and demolition waste (refer to AEC 7 if stockpiles of waste are identified).
- Ensure equipment is inspected, clean and contaminant free prior to leaving site.
- Do not disturb historic machinery.

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G05-06, G05-07 and G05-08

Site Access Point: xxxvi

JOHN HOLLAND

Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
- Grey-crowned Babbler
- Little Eagle
- Little Eagle – Nest (Confirmed)
- Spotted Harrier
- Spotted Harrier – Nest (Confirmed)
- Square-tailed Kite
- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
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- Flora - Cullen Parvum
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- Austrostipa Wakoolica, Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

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INDIGENOUS SURVEY ZONES +25m:

No ground disturbance activities to commence prior to **heritage endorsement** of works

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UNSURVEYED LANDS:

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TEC ZONES OR TEC HABITAT:

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WATERWAYS (OR POTENTIAL WATERWAYS):

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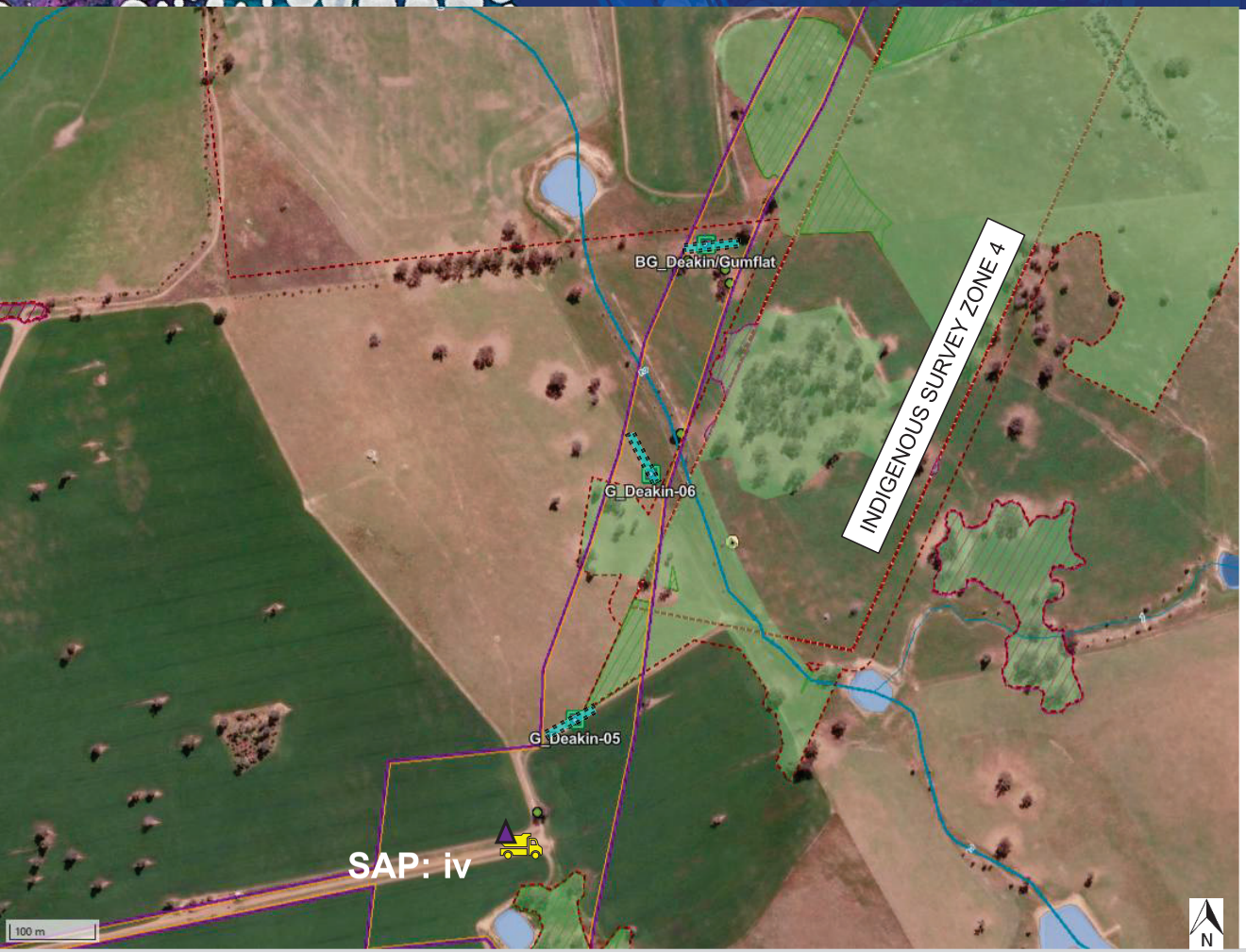
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG_Deakin/Gumflat, G_Deakin-05 and G_Deakin-06

Site Access Point: iv

JOHN HOLLAND



Legend

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- CIZ boundary
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- Black Falcon
- Brown Treecreeper
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- White-fronted Chat
- Spill kit
- Chainage
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- Gate location
- Gate buffer area
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- Austrostipa Wakoolica, Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
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- Culvert point

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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G_Gumflat-01 and G_Gumflat-02

Site Access Point: iv

JOHN HOLLAND

Legend

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- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
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- Flame Robin
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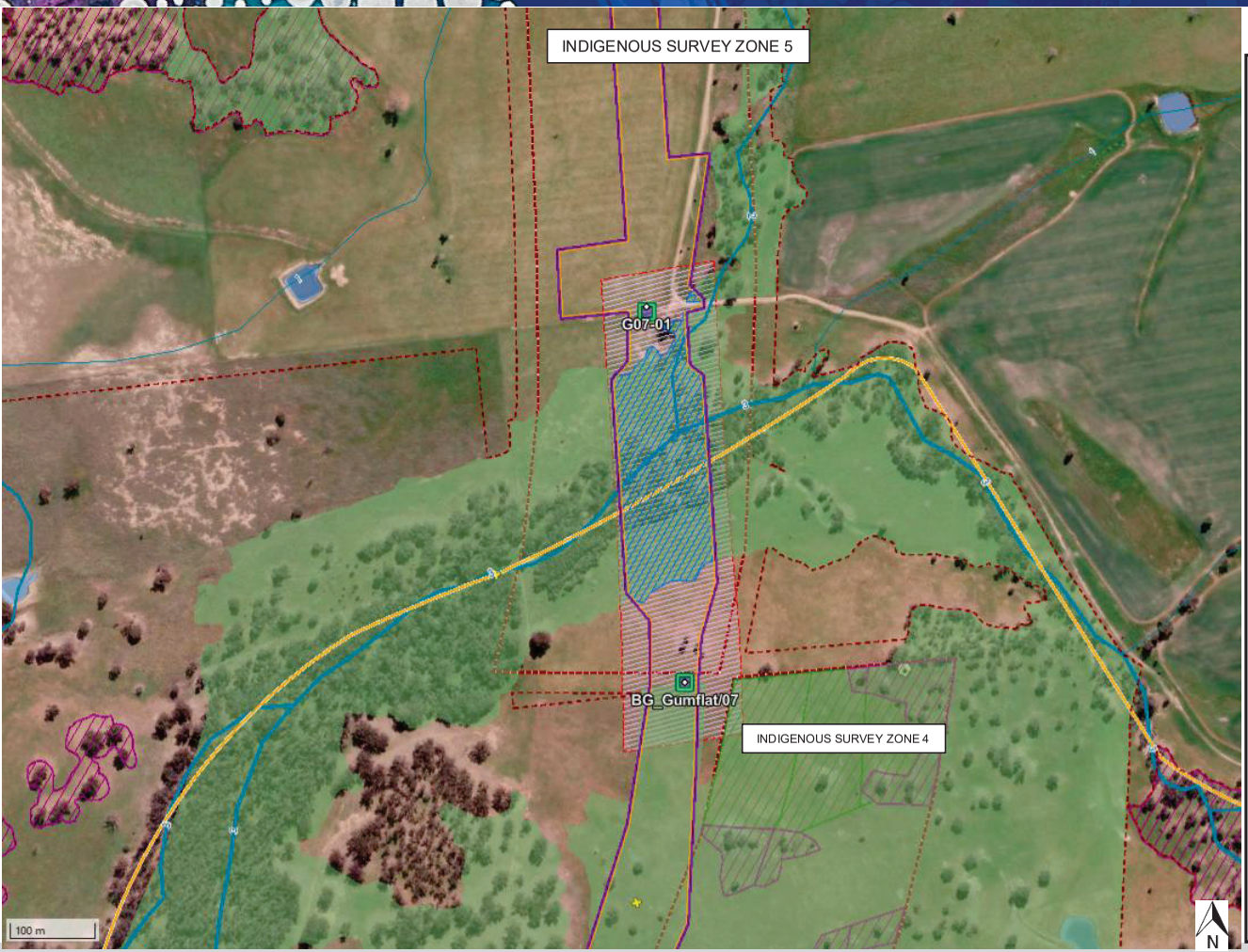
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G07-01 and BG_Gumflat/07

Site Access Point: iv

JOHN HOLLAND



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- State Heritage
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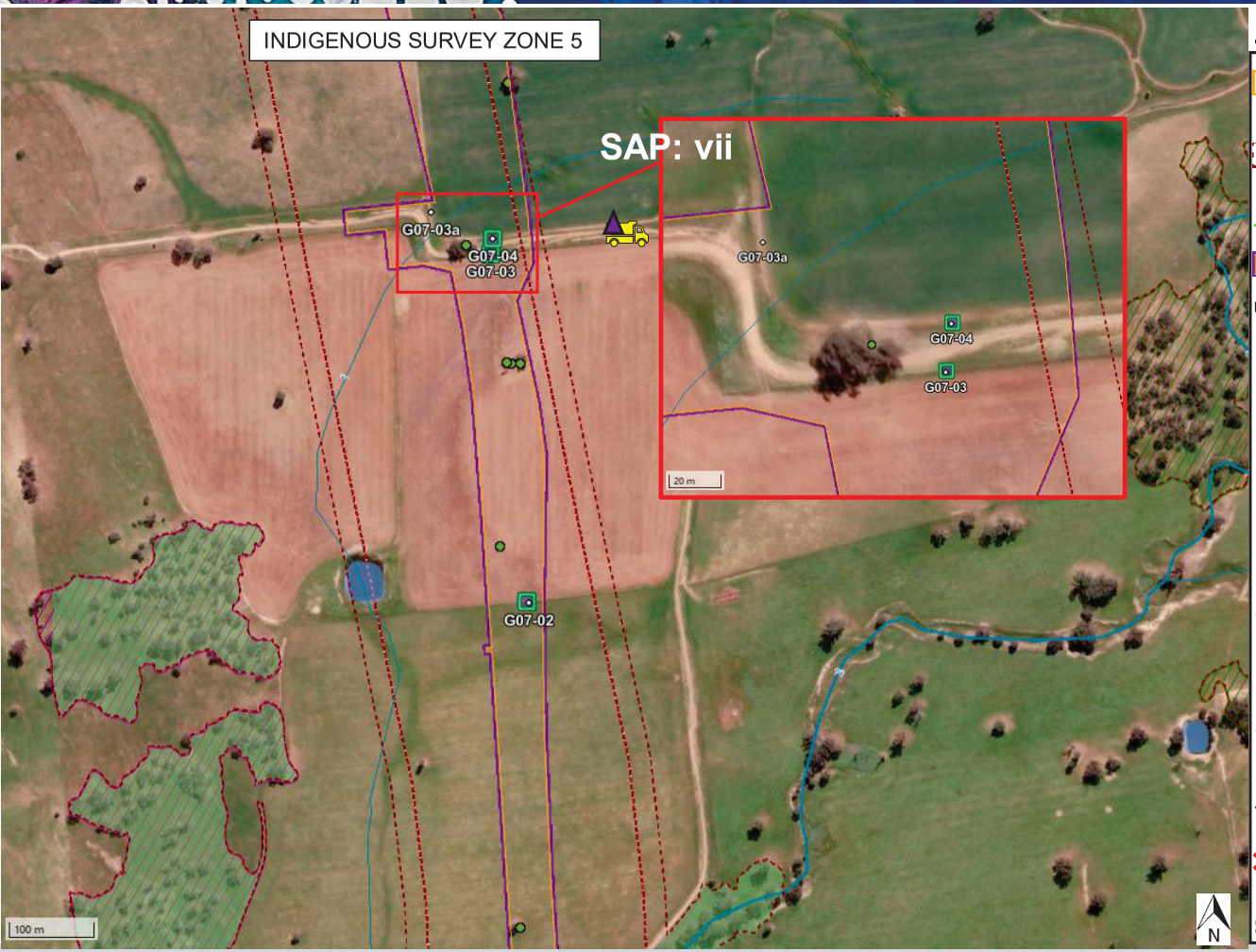
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G07-02, G07-03a, G07-03 and G07-04

Site Access Point: vii

JOHN HOLLAND



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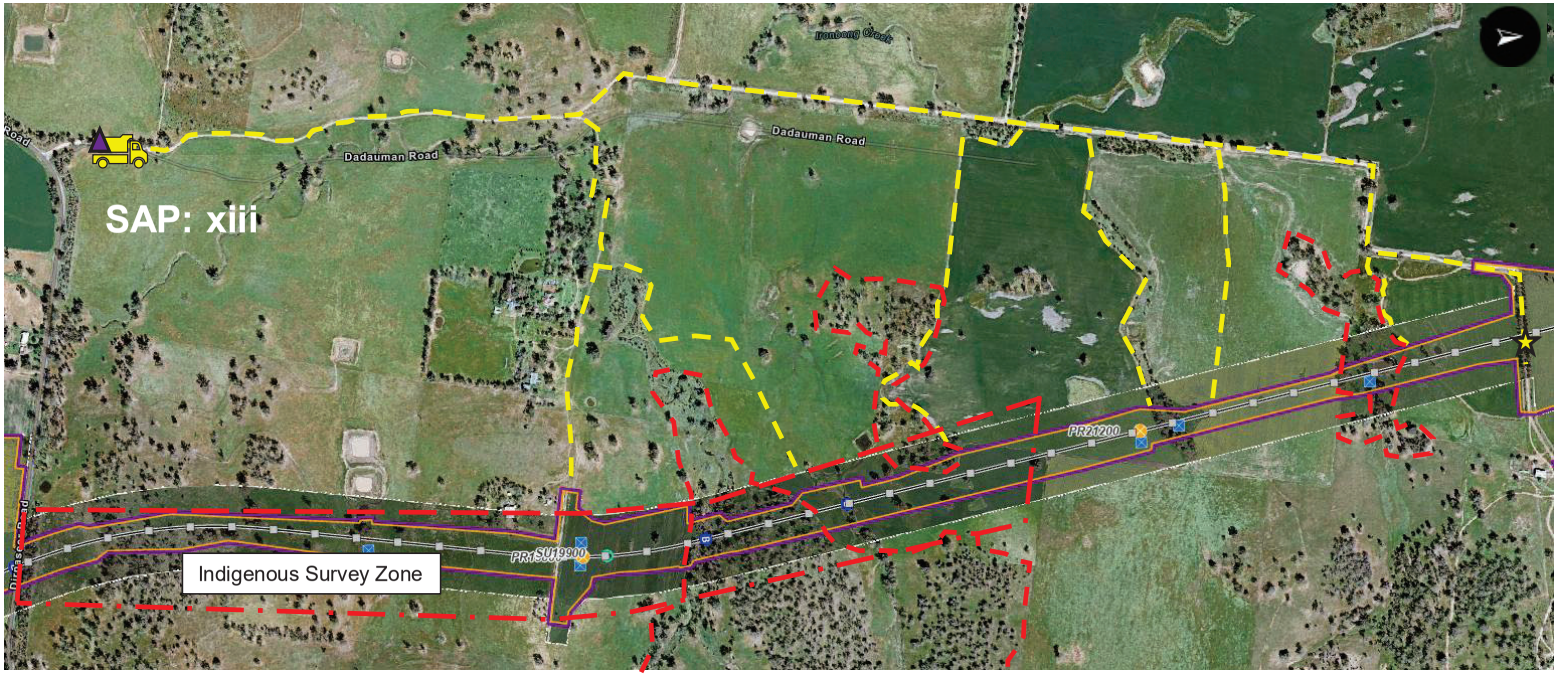
Site Access xiii

Site Access Point: xiii (CH18550)

Property #8, #9 (Ian, Deborah & Chris Friend), #10 – (David Carr CCC)

JOHN HOLLAND



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- Walking permitted
- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

No activities to commence prior to **endorsement of works by an ecologist.**

TEC ZONES OR TEC HABITAT:

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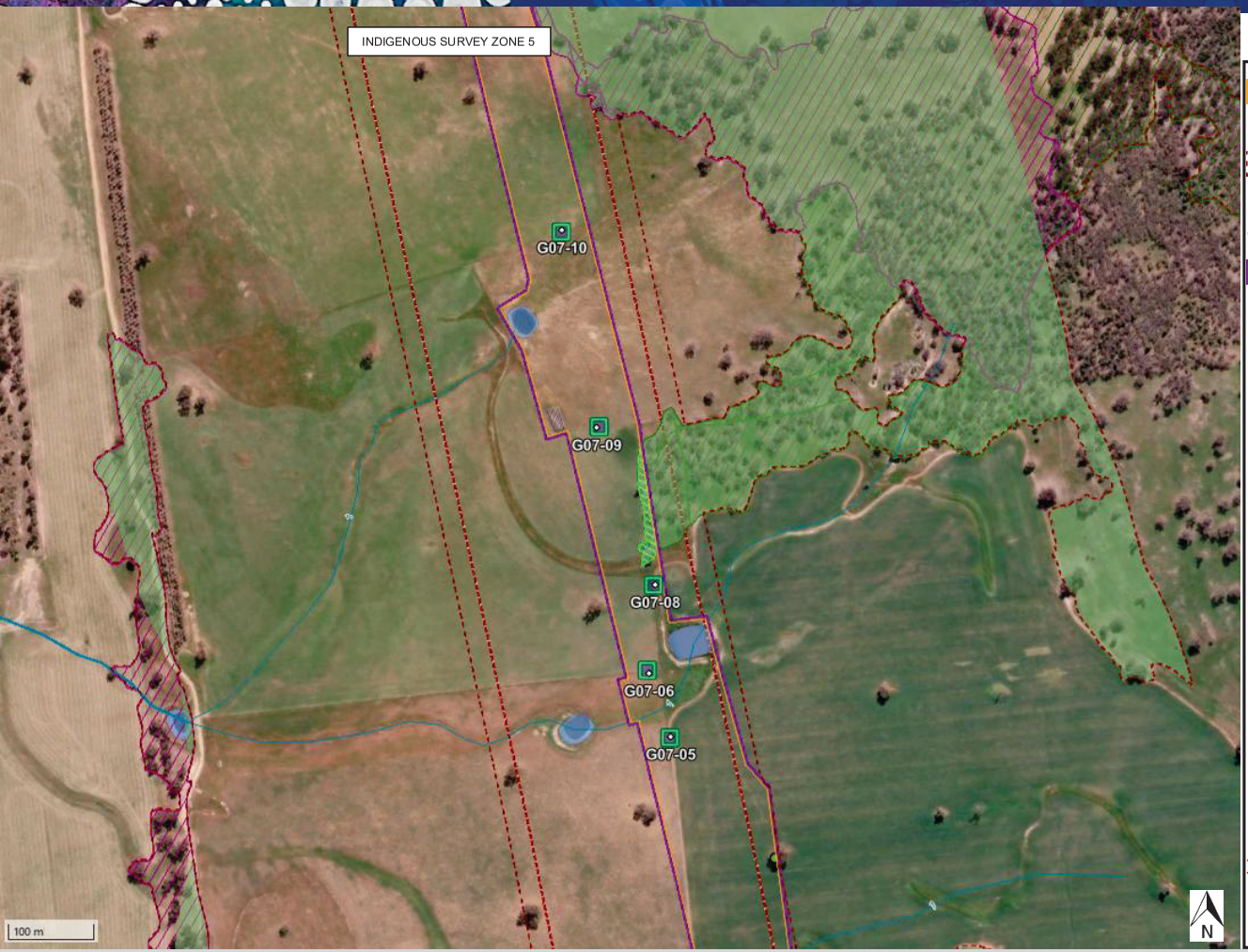
WATERWAYS (OR POTENTIAL WATERWAYS):

- Vehicles may only proceed following an assessment of on-site conditions (i.e. high risk of erosion, >20mm of rainfall in 24h, change to existing flow path)

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G07-05, G07-06, G07-08, G07-09 and G07-10

JOHN HOLLAND



Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
- Grey-crowned Babbler
- Little Eagle
- Little Eagle – Nest (Confirmed)
- Spotted Harrier
- Spotted Harrier – Nest (Confirmed)
- Square-tailed Kite
- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
- Euphrasia arguta, Grevillea wilkinsonii,Prasophyllum sp. Wybong
- Flora - Diuris Tricolor
- Flora - Cullen Parvum
- Caladenia arenaria, Eleocharis obicis,Indigofera efoliata,Swainsona sericea
- Austrostipa Wakoolica, Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

Erosion and Sediment Controls (ESC):

- All erosion and sediment controls are to follow the requirements of the Blue Book Managing Urban Stormwater, Volume 1, 4th Edition, March 2004.
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Monitoring of ESC:

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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G07-11, G07-12, G07-13 and G07-14

JOHN HOLLAND

Legend

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- Habitat connectivity
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- Receivers
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Gate G07-15, G07-15A, G07-15B, G08-01, G08-02, G08-03 and G08-04

Site Access Point: Dirnaseer Road

JOHN HOLLAND

Legend

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- Chainage
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- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
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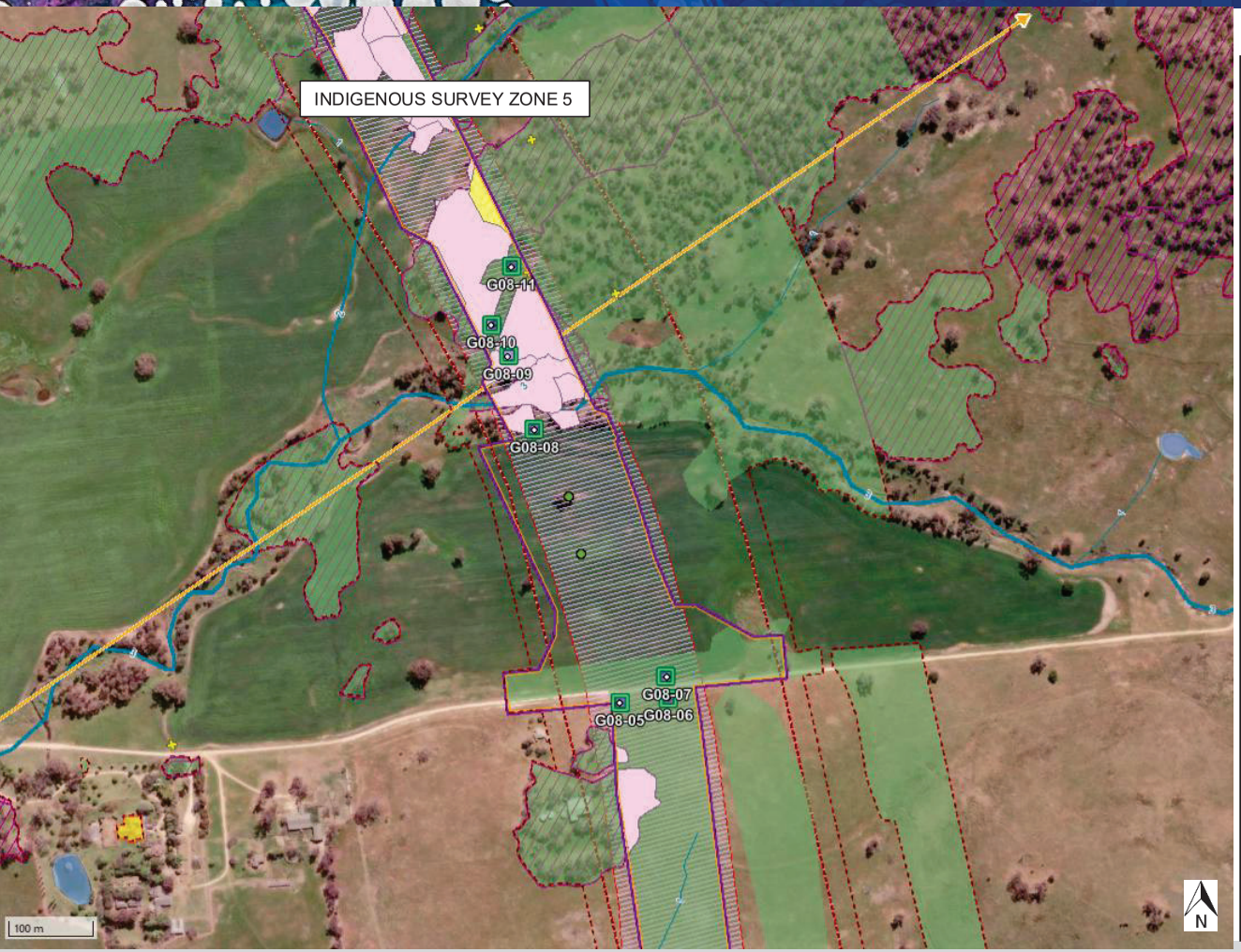
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G08-05, G08-06, G08-07, G08-08, G08-09, G08-10 and G08-11

JOHN HOLLAND



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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG08/09A, BG08/09B, G09-01, G09-02, BG09/10, G10-01

JOHN HOLLAND

Legend

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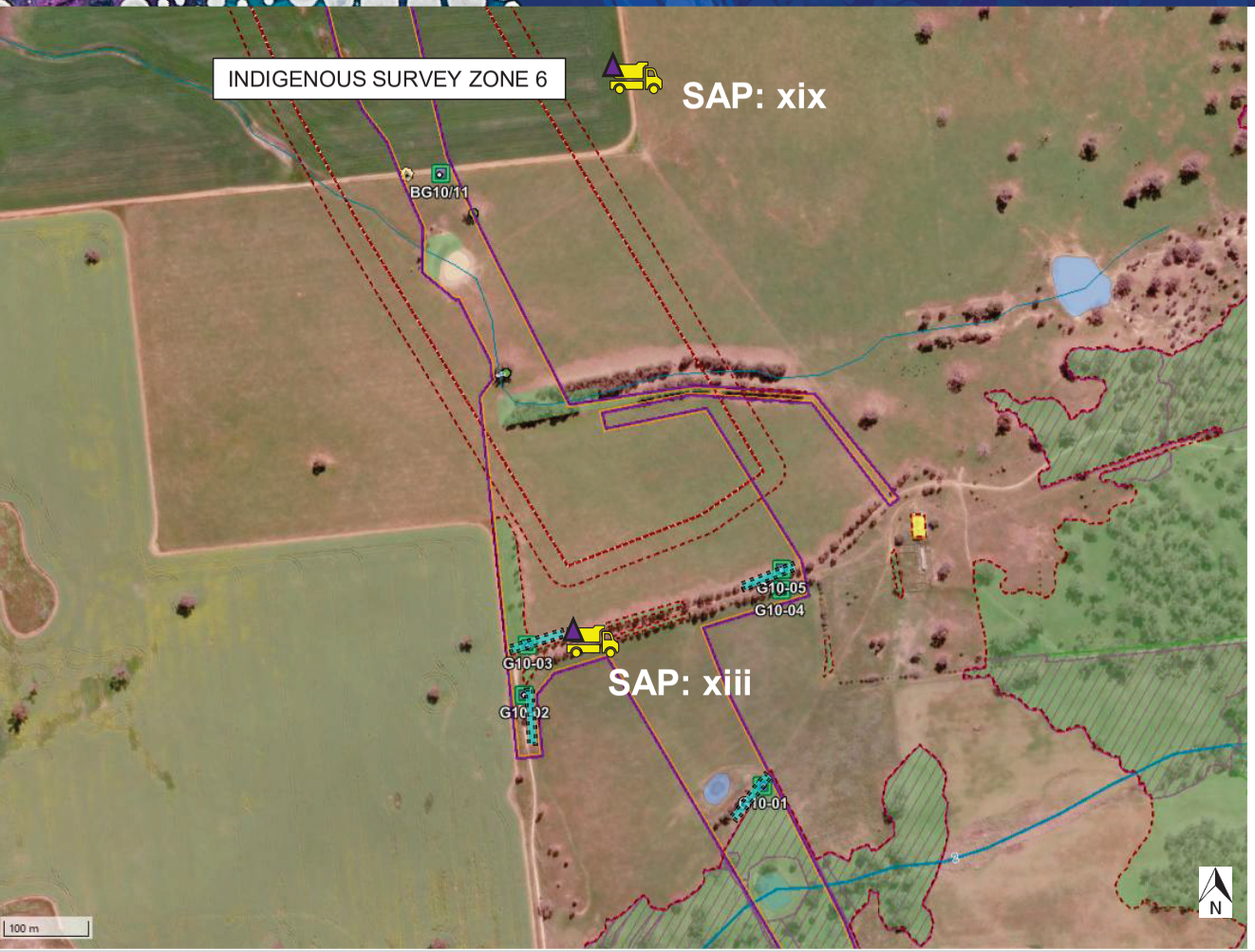
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G10-01, G10-02, G10-03, G10-04, G10-05 and BG10-11

Site Access Point: xiii, xix

JOHN HOLLAND



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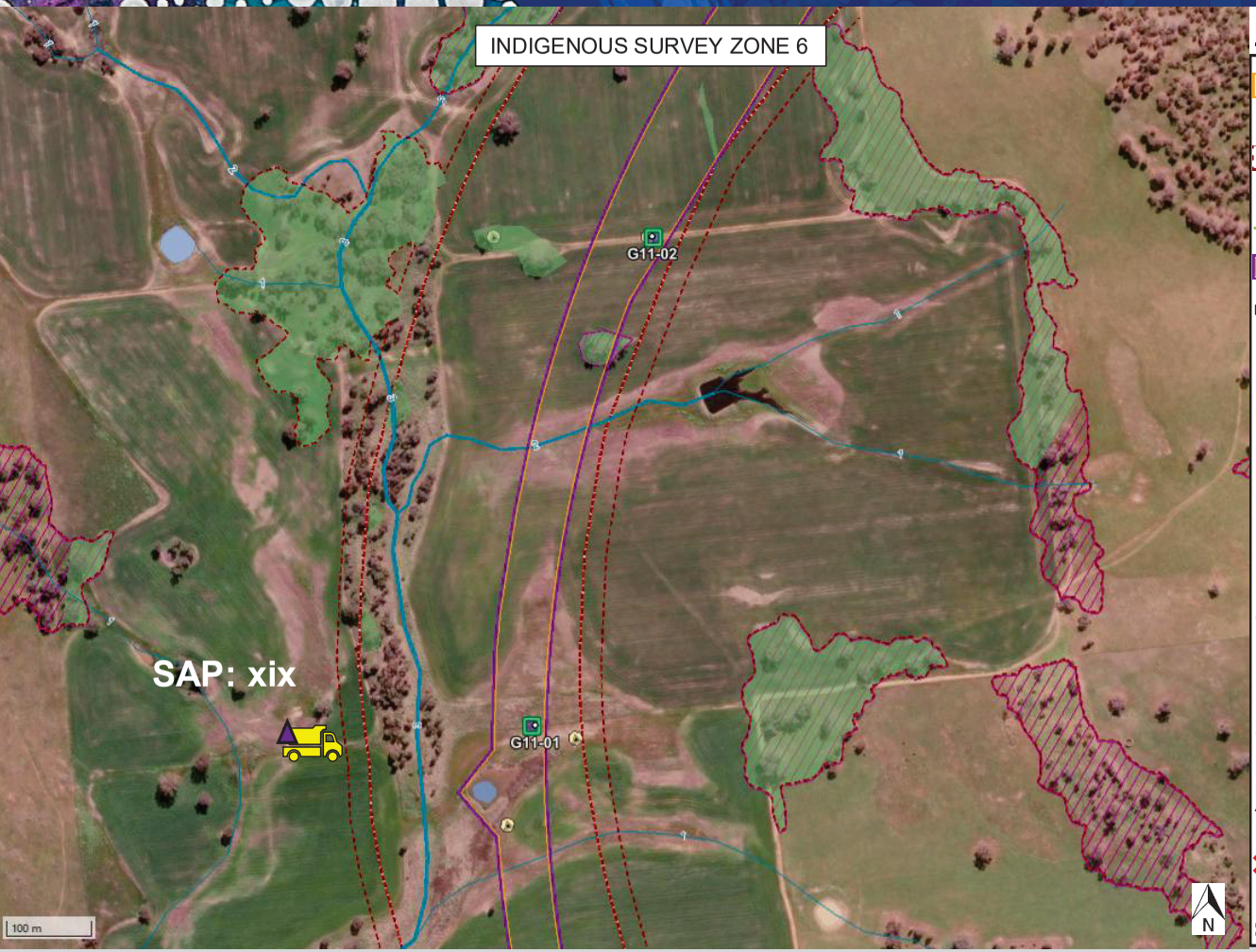
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G11-01 and G11-02

JOHN HOLLAND



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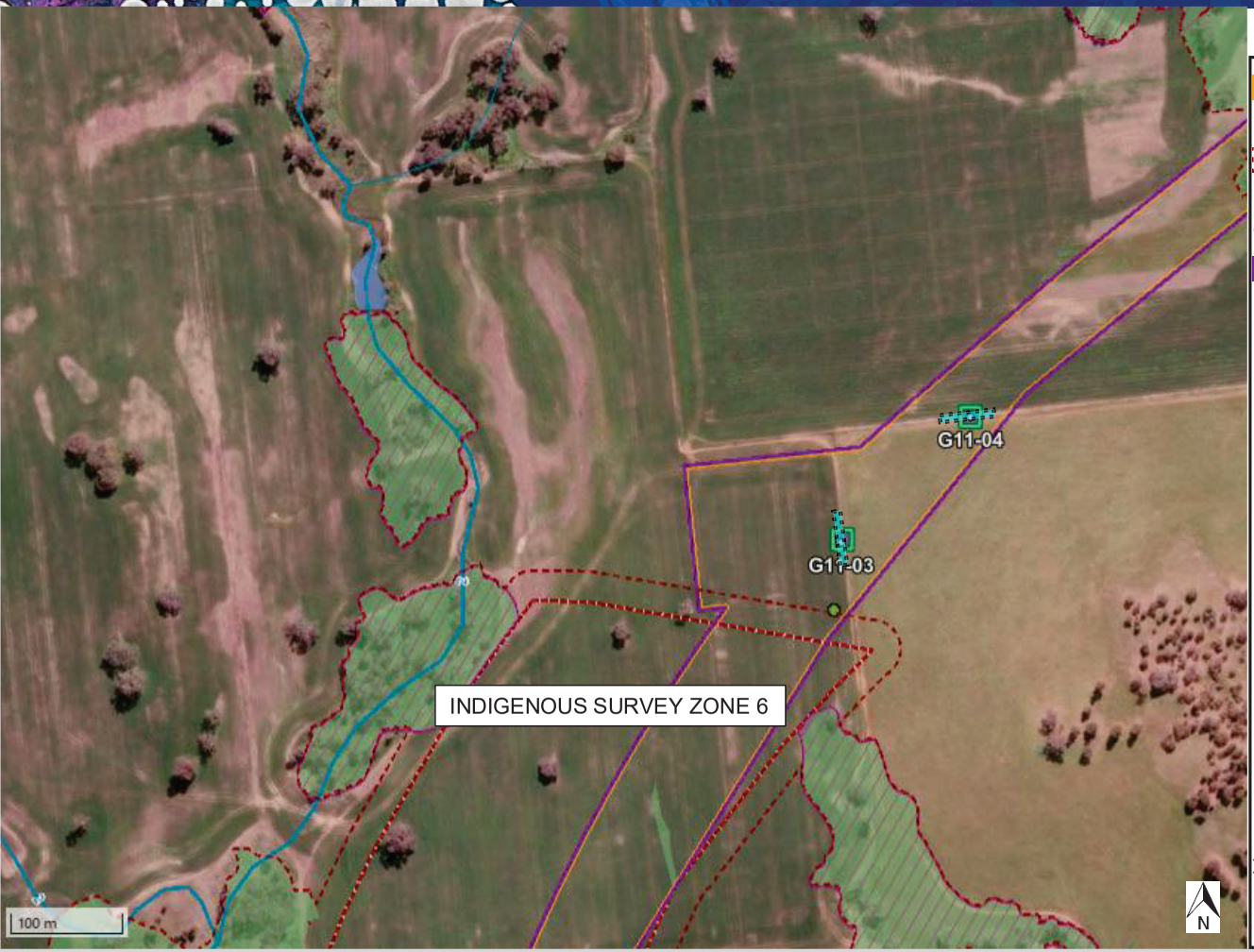
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G11-03 and G11-04

JOHN HOLLAND



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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G11-05 and BG11/12

JOHN HOLLAND

Legend

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Site Access for Property #11 Charlie Ryals

Site Access Point: xix (CH28200)

Property #11 (Charlie Ryals)

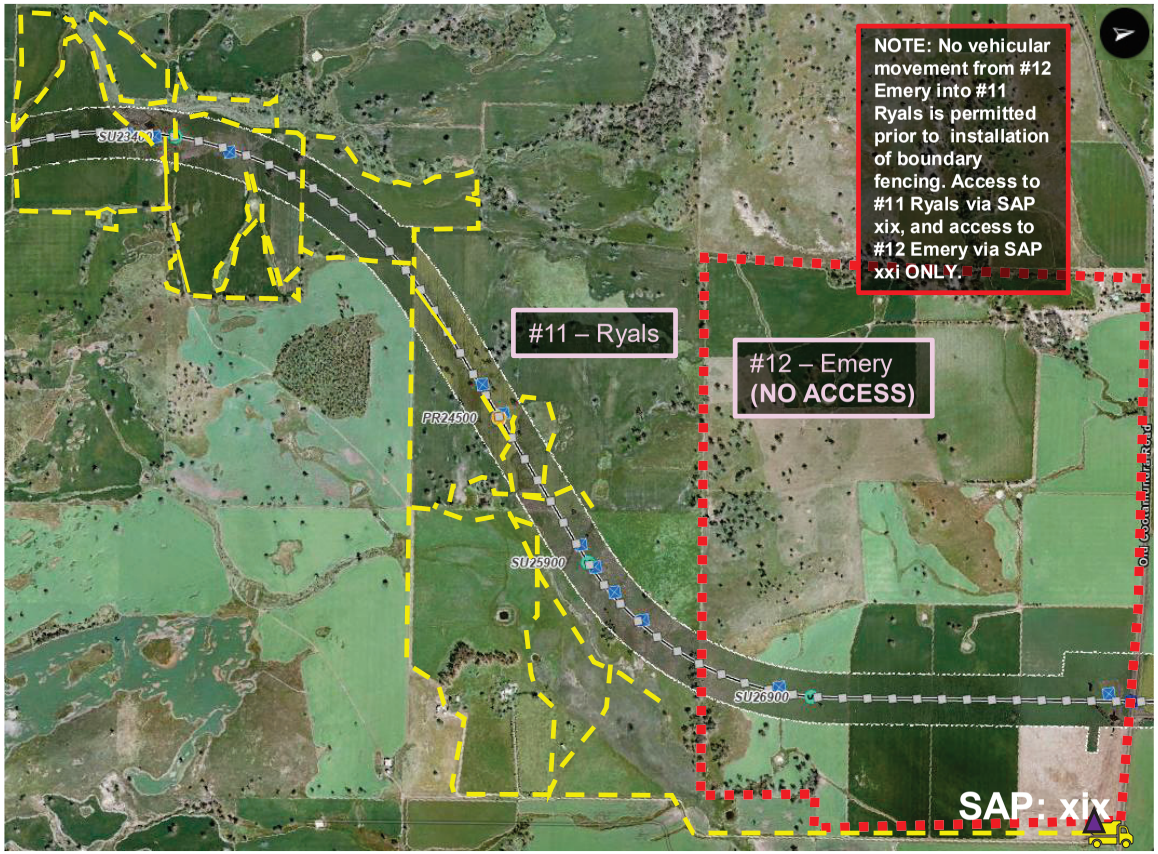
JOHN HOLLAND

Site Access

This access map is for access to #11 Charlie Ryals:

SAP: xix

For access to #12 Nigel Emery, please refer to the next slide.



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Site Access for Property #12 Nigel Emery

Site Access Point: xxi (CH28220), 6 South (CH28300)

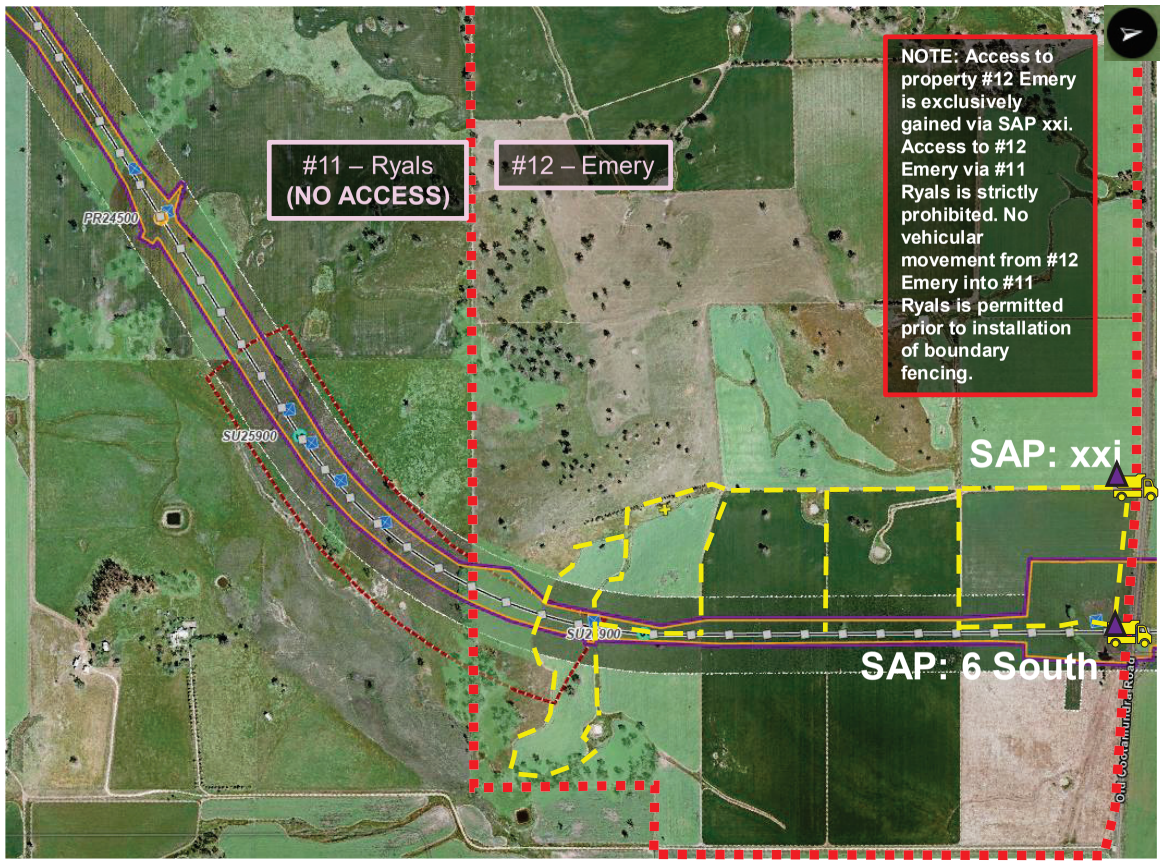
Property #11 (Charlie Ryals), #12 (Nigel Emery)

JOHN HOLLAND

Site Access

This access map is for access to #12 Nigel Emery:

SAP: xxi



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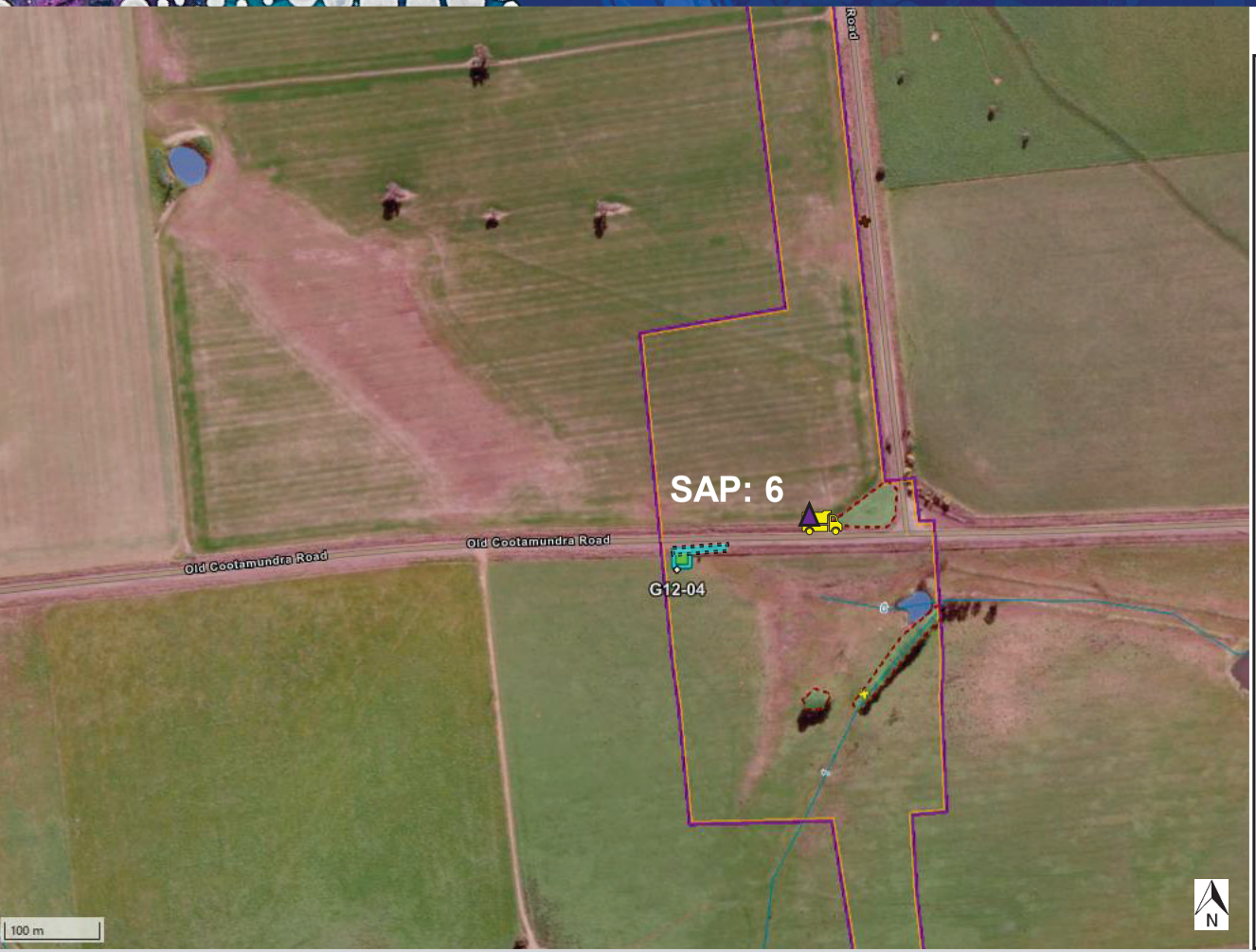
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G12-04

Site Access Point: Old Cootamundra Road, 6

JOHN HOLLAND



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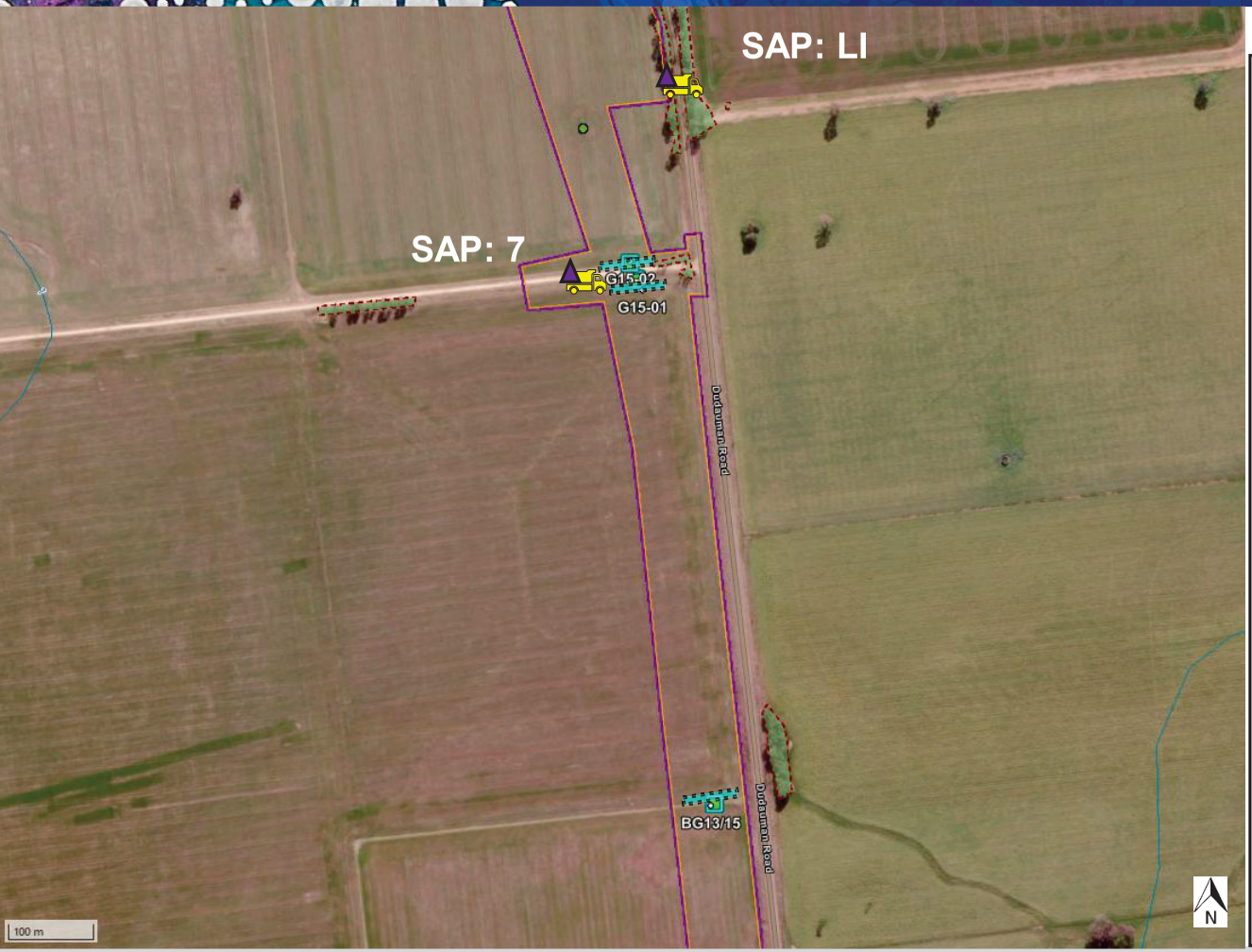
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG13/15, G15-01 and G15-02

Site Access Point: 7, LI

JOHN HOLLAND



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- All erosion and sediment controls are to follow the requirements of the Blue Book Managing Urban Stormwater, Volume 1, 4th Edition, March 2004.
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- Geotechnical excavation will be backfilled by excess soil.
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- Sediment control to be implemented in all laydown areas, specifically drains and gutters for stormwater control.
- ESC to be in place on the downward side of stockpiles. All temporary stockpiles to be covered and weighted down with plastic sheeting to prevent wind and water erosion.
- All spoil generated as a result of hydraulic excavation will be contained within a sucker truck and liquid waste bins and will be disposed of as liquid waste at an appropriately licenced facility.
- Stockpiles not to exceed 2 metres in height.
- Any material delivered to site or excavated material to be reused as fill would be neatly stockpiled only in the designated stockpile location until required. Materials may be stored in 'Bulka Bags' or covered skip bins (cover is essential for preventing ingress of rainwater).
- Where stockpiles are to be established overnight, they would be covered with impermeable material such as builder's plastic and a sandbag bund will be created to prevent erosion and sedimentation.
- Where appropriate, geofabric would underlay the stockpile to facilitate easier site clean-up upon removal of the stockpile.
- Groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014).
- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period).

INDIGENOUS SURVEY ZONES +25m:

No ground disturbance activities to commence prior to **heritage endorsement** of works

- Walking permitted
- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

No activities to commence prior to **endorsement of works by an ecologist.**

TEC ZONES OR TEC HABITAT:

No ground disturbance activities to commence prior **to endorsement of works by ecologist.** Ecologist mitigation to be included on all excavation permits (where relevant to the works).

WATERWAYS (OR POTENTIAL WATERWAYS):

- Vehicles may only proceed following an assessment of on-site conditions (i.e. high risk of erosion, >20mm of rainfall in 24h, change to existing flow path)

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G14-01 and BG15/14

Site Access Point: xxii

JOHN HOLLAND

Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
- Grey-crowned Babbler
- Little Eagle
- Little Eagle – Nest (Confirmed)
- Spotted Harrier
- Spotted Harrier – Nest (Confirmed)
- Square-tailed Kite
- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
- Euphrasia arguta, Grevillea wilkinsonii,Prasophyllum sp. Wybong
- Flora - Diuris Tricolor
- Flora - Cullen Parvum
- Caladenia arenaria, Eleocharis obicis,Indigofera efoliata,Swainsona sericea
- Austrostipa Wakoolica, Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

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- Driving on existing vehicle tracks *only*

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WATERWAYS (OR POTENTIAL WATERWAYS):

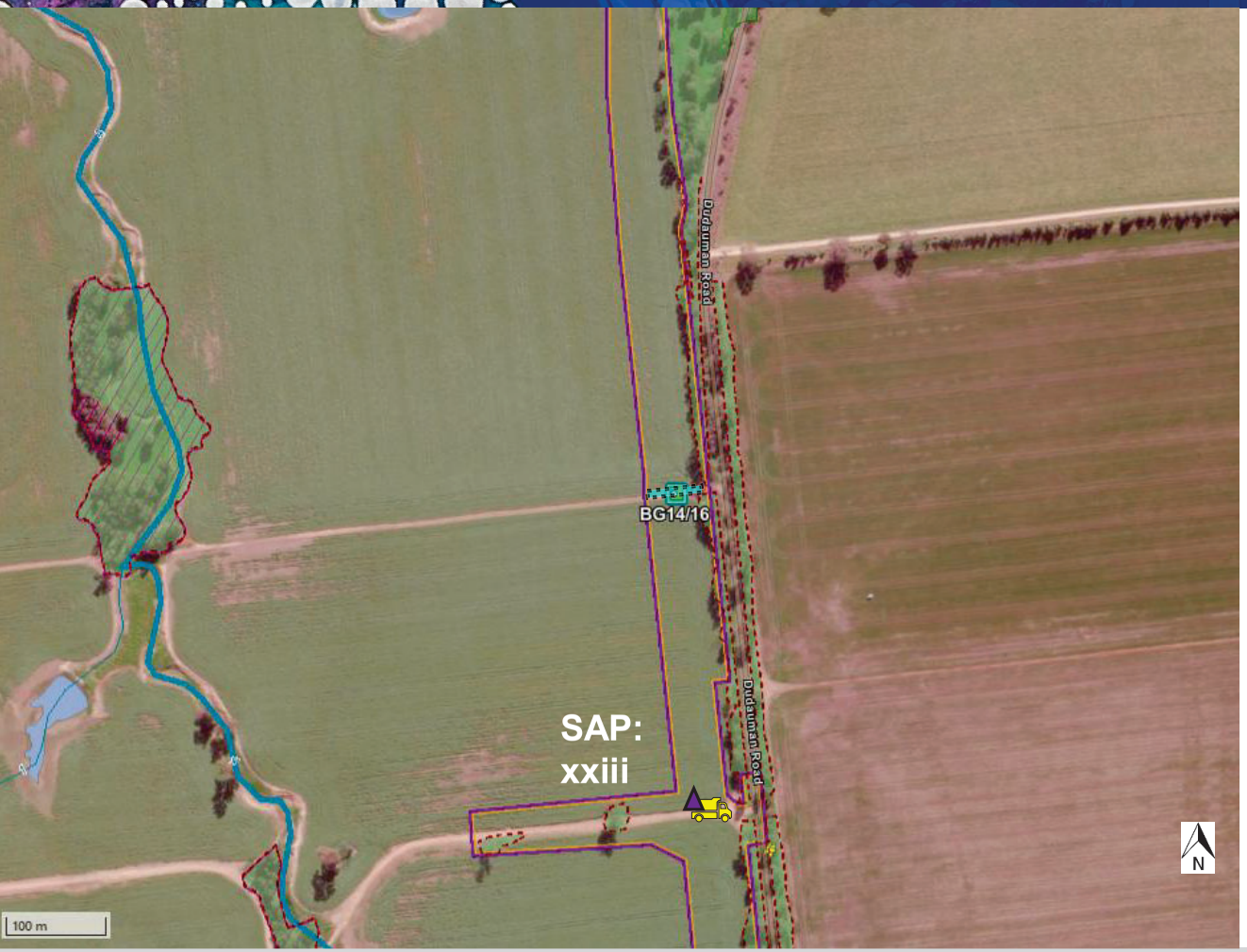
- Vehicles may only proceed following an assessment of on-site conditions (i.e. high risk of erosion, >20mm of rainfall in 24h, change to existing flow path)

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG14/16

Site Access Point: xxiii

JOHN HOLLAND



Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
- Grey-crowned Babbler
- Little Eagle
- Little Eagle – Nest (Confirmed)
- Spotted Harrier
- Spotted Harrier – Nest (Confirmed)
- Square-tailed Kite
- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
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- Flora - Diuris Tricolor
- Flora - Cullen Parvum
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- Austrostipa Wakoolica, Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

Erosion and Sediment Controls (ESC):

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- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period).

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No ground disturbance activities to commence prior to **heritage endorsement** of works

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- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

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WATERWAYS (OR POTENTIAL WATERWAYS):

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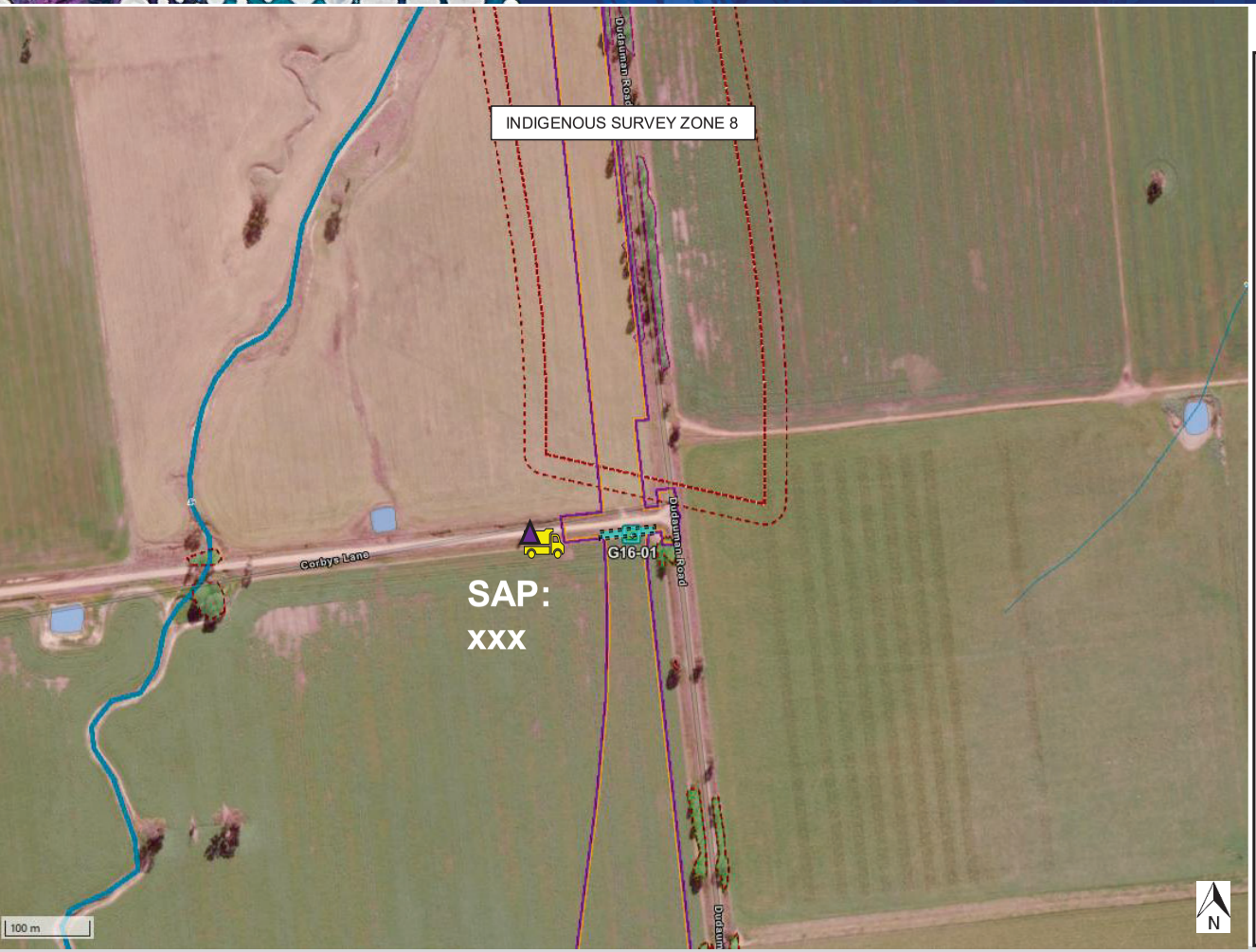
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G16-01

Site Access Point: xxx

JOHN HOLLAND



Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
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- Spotted Harrier – Nest (Confirmed)
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- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
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- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

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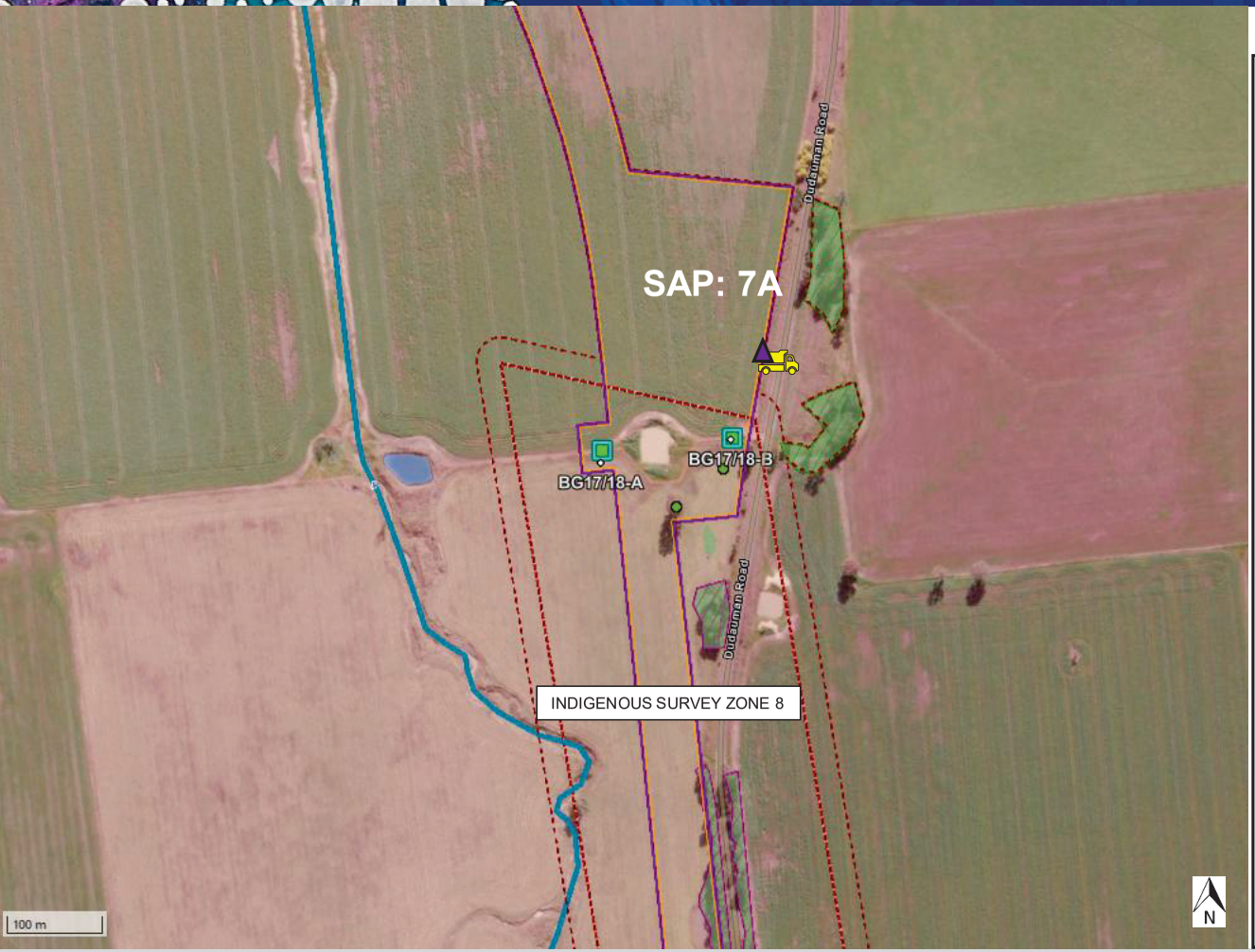
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG17/18A and BG17/18B

Site Access Point: 7A

JOHN HOLLAND



Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
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- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
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- Habitat connectivity
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- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G17-01 and BG17/18-C

Site Access Point: LI

JOHN HOLLAND

Legend

- AEC (Contamination)
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- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
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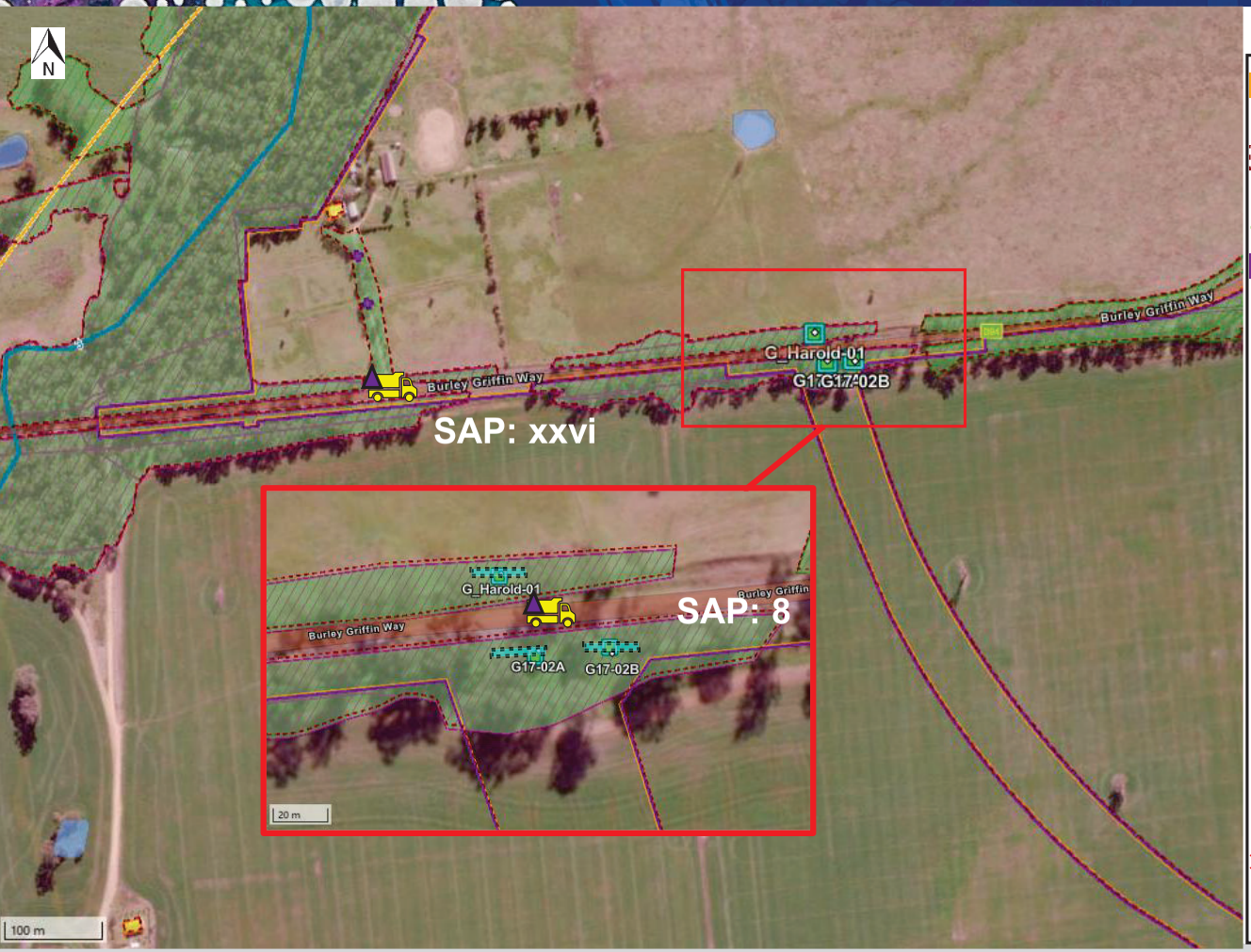
I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G-Harold-01, G17-02A and G17-02B

Site Access Point: 8, xxvi

JOHN HOLLAND



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- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
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- ERSED controls have been included on the SEPs in areas where potential ERSED risks are anticipated. Additional ERSED control equipment will be available to site teams if required. The orientation and position of ERSED controls indicated in maps must be determined appropriately on site (i.e. downslope of work activity, covering a drain, etc.).

The following ESC are implemented for the project site:

- Appropriate ESC (e.g. geofabric) to be placed over stormwater/rail corridor drains (as required – if works have potential to impact).
- All temporary stockpiling of materials will take place away from drainage lines and creeks.
- Geotechnical excavation will be backfilled by excess soil.
- Water will not be discharged or pumped off-site or to drains. For any water discharge, the Environment Team must be contacted immediately (for water testing methodology for removal i.e. vacuum truck or to re-use on site).
- Sediment control to be implemented in all laydown areas, specifically drains and gutters for stormwater control.
- ESC to be in place on the downward side of stockpiles. All temporary stockpiles to be covered and weighted down with plastic sheeting to prevent wind and water erosion.
- All spoil generated as a result of hydraulic excavation will be contained within a sucker truck and liquid waste bins and will be disposed of as liquid waste at an appropriately licenced facility.
- Stockpiles not to exceed 2 metres in height.
- Any material delivered to site or excavated material to be reused as fill would be neatly stockpiled only in the designated stockpile location until required. Materials may be stored in 'Bulka Bags' or covered skip bins (cover is essential for preventing ingress of rainwater).
- Where stockpiles are to be established overnight, they would be covered with impermeable material such as builder's plastic and a sandbag bund will be created to prevent erosion and sedimentation.
- Where appropriate, geofabric would underlay the stockpile to facilitate easier site clean-up upon removal of the stockpile.
- Groundwater will be managed in accordance with the requirements of the Waste Classification Guidelines (EPA, 2014).
- Water will be used for dust suppression as required.

Monitoring of ESC:

- Periodic monitoring of the effectiveness of the ESC to be undertaken as part of environmental inspections, prior to unfavourable weather conditions and after heavy rainfall events (>20mm in 24-hour period).

INDIGENOUS SURVEY ZONES +25m:

No ground disturbance activities to commence prior to **heritage endorsement** of works

- Walking permitted
- Driving on existing vehicle tracks *only*

UNSURVEYED LANDS:

No activities to commence prior to **endorsement of works by an ecologist.**

TEC ZONES OR TEC HABITAT:

No ground disturbance activities to commence prior **to endorsement of works by ecologist.** Ecologist mitigation to be included on all excavation permits (where relevant to the works).

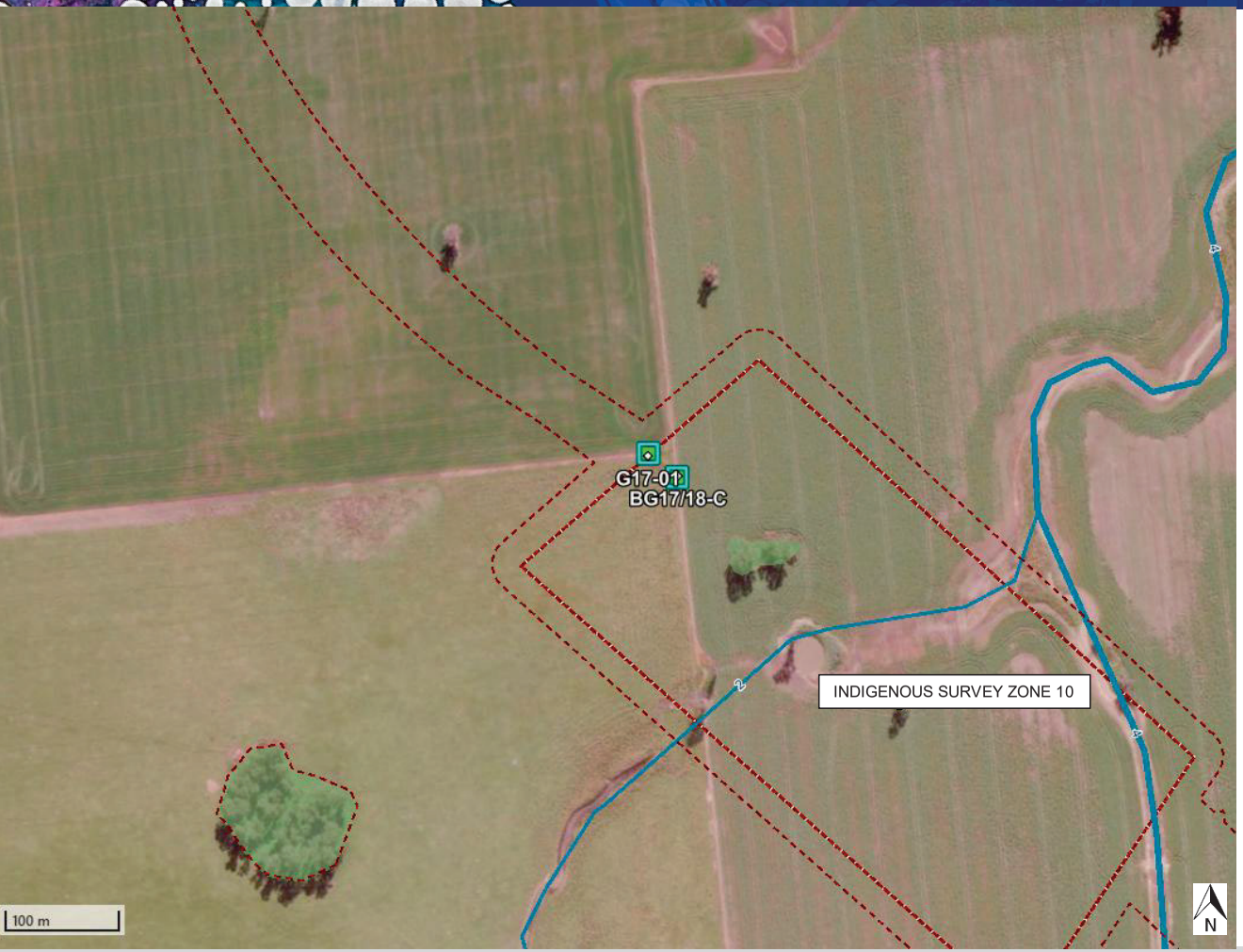
WATERWAYS (OR POTENTIAL WATERWAYS):

- Vehicles may only proceed following an assessment of on-site conditions (i.e. high risk of erosion, >20mm of rainfall in 24h, change to existing flow path)

I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G17-01 and BG17/18-C

JOHN HOLLAND



Legend

- AEC (Contamination)
- Sensitive area
- Proposed fencing
- CIZ boundary
- Aboriginal Heritage artefact
- Black Falcon
- Brown Treecreeper
- Diamond Firetail
- Dusk Woodswallow
- Flame Robin
- Grey-crowned Babbler
- Little Eagle
- Little Eagle – Nest (Confirmed)
- Spotted Harrier
- Spotted Harrier – Nest (Confirmed)
- Square-tailed Kite
- Squirrel Glider
- Superb Parrot
- Superb Parrot - Nesting
- White-fronted Chat
- Spill kit
- Chainage
- START/END fence line
- Gate location
- Gate buffer area
- Euphrasia arguta, Grevillea wilkinsonii,Prasophyllum sp. Wybong
- Flora - Diuris Tricolor
- Flora - Cullen Parvum
- Caladenia arenaria, Eleocharis obicis,Indigofera efoliata,Swainsona sericea
- Austrostipa Wakoolica, Swainsona Murrayanaa
- Ammobium craspedioides
- Acacia ausfeldii
- Habitat connectivity
- Stream (incl. ephemeral)
- Grey Box (E. macrocarpa)
- White-Box-Yellow Box-Blakely's Red Gum
- Receivers
- Indigenous Survey Zones
- Local Heritage
- State Heritage
- Scattered Paddock Tree
- Land not surveyed (ecologically)
- Access/egress point
- Public level crossing
- Private level crossing
- Bridge point
- Stock crossing
- Culvert point

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WATERWAYS (OR POTENTIAL WATERWAYS):

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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate BG20/21-A, BG20/21-B, G20-01, G20-02 and G20-03
Site Access Point: XLIV, xxvii, XLV, XLIII

JOHN HOLLAND

Legend

- AEC (Contamination)
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- Proposed fencing
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- Flame Robin
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I2S LIW Access Gates Site Environmental Plan (SEP)

Gate G21-01, G21-02, G21-05, G21-06, G21-07 and G21-08

Site Access Point: 11, XLI, xxix, XL

JOHN HOLLAND

Erosion and Sediment Controls (ESC):

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Mitigation for works within/around AEC:

AEC 8, 9, 10

- If visual indicators are identified onsite, stop work immediately and implement the Unexpected Finds Procedure.
- Appropriate PPE will be worn as required, such as in dusty / high wind conditions, confined spaces or works likely to result in particulate inhalation.
- Do not disturb building and demolition waste (refer to AEC 7 if stockpiles of waste are identified).
- Ensure equipment is inspected, clean and contaminant free prior to leaving site.
- Double bag soil samples and label with "Warning this sample may contain asbestos fibers and fines"
- Do not disturb historic machinery.

AEC 7

- If visual indicators are identified onsite, stop work immediately and implement the Unexpected Finds Procedure
- Appropriate PPE will be worn as required, such as in dusty / high wind conditions, confined spaces or works likely to result in particulate inhalation.
- Do not disturb building and demolition waste.
- Stockpiled material will not be moved until the contamination assessment has been completed.
- All stockpiles identified within the Project site will be delineated at a distance that is at least twice as wide as they are tall.
- Ensure equipment is inspected, clean and contaminant free prior to leaving site.
- Double bag soil samples and label with "Warning this sample may contain asbestos fibres and fines".

Appendix B—Noise Assessment

Appendix B – Noise Assessment

Noise model summary:

A scenario-based approach has been applied to the low impact works assessment to assess potential noise impacts associated with Low Impact Works (LIW).

Standard construction hours on I2S are;

– 7:00am to 6:00pm Monday to Friday

– 7:00am to 6:00pm Saturday

– At no time on Sunday or public holidays.

Where out of hours works are required, they must comply with CoA E3 (b) as per the definition of 'Low impact work' as per SSI-9406. All relevant OOHW must be obtained prior to the commencement of OOHW activities. This approval will be sought via separate application/permit as OOHW are required.

Site Characteristics:

The existing noise environment is characteristic of a rural landscape. Most of the proposal site has little or no road traffic noise, sparse settlement patterns, and generally being characterised by low background noise levels. Burley Griffin Way, Olympic Highway and the existing rail lines are the main noise sources within the proposal site; however, traffic along these roads is typically sparse and does not significantly impact the background noise levels of the surrounding environment.

The most significant existing sources of vibration along the proposal site include those generated by traffic on the local road network and existing rail operations at Illabo and Stockinbingal. Although not measured directly, vibration due to existing road and rail sources is considered to be below the structural damage and human comfort criteria for all vibration sensitive receivers.

Most residential receivers are in Stockinbingal, east of the proposal site, including low-density residential dwellings. Residential receivers located within the study area outside of Stockinbingal are typically present as isolated rural residential dwellings within open farmland. Residential dwellings located near the proposal are predominantly single storey.

Rationale:

The following noise model is for the activities to be undertaken during Low Impact Works for the Illabo to Stockinbingal Project.

The works planned for 2025, which are included in this assessment, are mostly set to occur at expansive distances from sensitive and residential receivers, as established by an initial assessment of access and on-site investigations. The closest receiver for these works would be at Hibernia St, chainage 37650. Positioned within the CIZ, this receiver is within 30 metres from the proposed work area. The impacts (as per the ICNG) are deemed to be not within the highly noise affect dBA range (75dB(A)).

Modelling has been conducted via a 'worst case scenario' approach for the activity to be conducted throughout LIW. Activities included in this noise assessment are not proposed to be undertaken concurrently. If any activities overlap, this would be subject to additional noise modelling to assess the potential cumulative impacts of multiple work activities at the same location. This would be subject to approval by the ER.

A model for each activity is provided in the below sections, which includes;

- A map, showing the work activities and their proximity to receivers (if any);
- The noise model inputs (showing equipment usage percentages and quantity);
- The noise model outputs (showing the results of the modelling).

Noise Management Levels

TABLE 16-1: NOISE MANAGEMENT LEVELS FOR RESIDENTIAL RECEIVERS

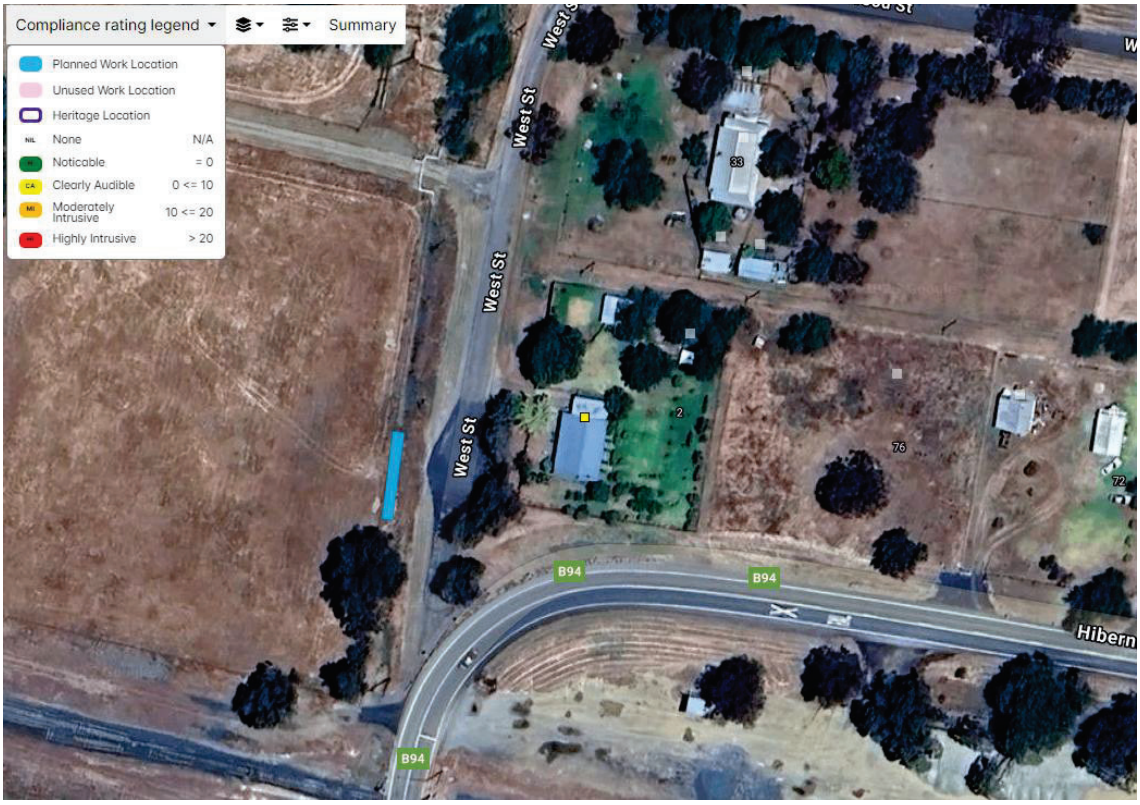
Timing	RBL (dBA)[1]	NML (dBA)	Highly noise affected level (dBA)
Standard hours	35	45	75
Out of hours—Day	35	40	N/A
Out of hours—Evening	30	35	N/A
Out of hours—Night	30	35	N/A

1. Background levels are below the minimum assumed rating background noise levels at all measurement locations along the proposal site; as such, they have been adjusted to 35dBA during the day period, and 30dBA during the evening and night periods.

Modelling was conducted using standard hours Noise Management Level (NML) of 45dBA. The NMLs used are source from the EIS and Construction Noise and Vibration Impact Assessment prepared for the Project (*Environmental Impact Statement: Inland Rail: Illabo to Stockinbingal, 2022),* please refer below. Noise modelling has been conducted using Hutchinson Weller's KNOWNoise software.

Map Overview (CH37650).

The following map is based on a residential property located on Hibernia St. Their EIS receiver ID is 321056. The distance of this receiver from the activity is 30m.



Noise Model Inputs:

The following inputs (equipment type, quantity and usage) were entered into the noise model.

12/02/2025 09:00AM - 12/02/2025 10:00AM

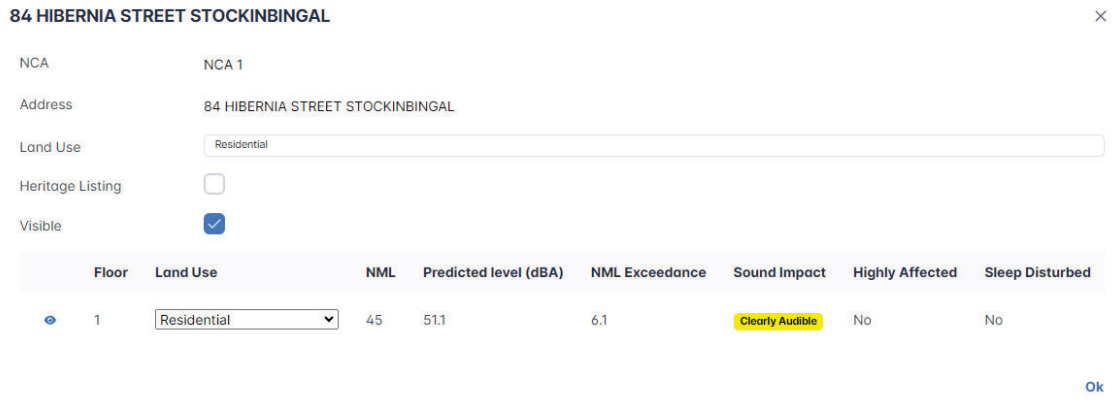
GATE G20-02

Equipment type	Qty	Usage	Reduction	Sound power level LAeq	Sound power level LAmax
Cordless drill	1	15%	0	85	98
Hand Tools (electric)	2	15%	0	89	99
Hydraulic Post Driver (Impact)	1	5%	0	87	105
Ute	2	5%	0	75	90

Activity Sound Power Level: 92

Impact to Receivers:

A detailed noise output profile for the closest residential receiver to the MAF is provided in the figure below.



Noise model summary:

A scenario-based approach has been applied to the low impact works assessment to assess potential noise impacts associated with Low Impact Works (LIW). A summary of the noise impacts associated with the works are included in the table below.

Gate	dBA exceedance of NML (upper limit)	Number of properties affected
G20-02	6.1	1

The impacts (as per the ICNG) are deemed to be not within the highly noise affect dBA range (75dB(A)) during standard hours.

Conclusion and Mitigation:

Although noise impacts are expected to be minor based on the nature of the low impact works and their planned hours (standard hours), mitigation measures will be implemented to manage noise and vibration impacts. The following measures will be implemented where reasonable and practicable in accordance with the ARTC NSW Noise and Vibration Framework Specification.

Mitigation measures
Using portable temporary acoustic screens where effective to screen the noise emissions.
Avoid the simultaneous operation of noisy plant within discernible range of noise sensitive receivers where possible.
Where available, equipment selection will favour the use of quieter and less vibration emitting construction methods.
Using noise source controls, such as the use of residential class mufflers, to reduce noise from all plant and equipment including bulldozers, cranes, graders, excavators and trucks
Static plant should be located as far as possible from sensitive receivers, be located to take advantage of natural acoustic screening such as terrain, site buildings, etc and where necessary for reduction of noise impacts, provided with an acoustic enclosure.
A telephone, email and web-based community information service shall be established to allow the community to obtain additional information on construction activities, provide feedback or make a complaint.

Regular communications on the activities and progress of the proposal shall be provided to the community (e.g. via newsletter, email and/or website).
Noise or vibration monitoring in response to complaints shall be undertaken where the results or the process assist in resolving or understanding the receiver's issue.
Where possible, construction compounds should be located a minimum of 1km from the nearest resident or noise sensitive receiver.
Where vibration levels are predicted to approach the criteria for cosmetic building damage or limits for critical or sensitive areas, attended vibration measurements shall be undertaken at the commencement of vibration generating activities to confirm that vibration limits are within the acceptable range.
Early morning works between 6am-7am will be low impact noise activities[1]
A respite period shall be provided for receivers impacted by weekend work (see Definitions). The respite period will ensure that no single receiver is impacted for two consecutive periods of weekend work. Respite will be provided every second weekend commencing at 1pm on Saturday and concluding at 7am on Monday.

Note 1: Work is limited to low impact works which generate low levels of noise and vibration at the nearest receivers (e.g. light vehicle movements, deliveries, site shed set up, toolbox talks, generators, hand-tools) and where the relevant NML or vibration criteria are not predicted to be exceeded or as defined by the relevant Conditions of Approval.

As a minimum, all affected landowners will be notified of the works to be undertaken in or around their properties at least 7 days prior to works commencement in accordance with the Community Communication Strategy (CCS).

Additionally, pre-starts and inductions will detail noise mitigation measures for all personnel, which includes that;

- Non-tonal reversing alarms must be fitted and used on all construction vehicles and mobile plant.
- Quieter and less noise emitting construction methods should be used whenever possible.
- Avoid shouting and slamming doors to minimise unnecessary noise.
- All vehicles accessing the project site must comply with local speed restrictions.
- Plant equipment engines should be turned off when not in use to reduce potential noise impacts on surrounding stakeholders.

Based on the assessment of noise impacts, these works can be undertaken as low impact works.

Appendix C—Community Notification

Low Impact Works
Illabo to Stockinbingal
1 – 31 May 2025

Throughout **May 2025**, John Holland will continue with their low impact works including site investigations as part of the Illabo to Stockinbingal (I2S) section of Inland Rail in New South Wales.

Description of works

Ahead of construction, site investigations are required to provide essential information to assist with design. Inland Rail's contractor, John Holland, will undertake work as part of these investigations.

Activities will include (subject to approval):

- Surveying the project/property boundaries, road and pavement levels at multiple locations
- Underground and overhead utility locating and mapping using non-destructive digging (NDD)
- Geotechnical investigation works including drilling, soil sampling and drone operation
- Environmental investigations through inspection and monitoring activities including out-of-hours fauna spotting
- Installation of temporary fencing, permanent boundary fencing and gates in consultation with landowners.
- Dilapidation survey of existing roads, bridges, culverts, leased land and buildings and road traffic counts on Burley Griffin Way.
- Establishment of temporary workers' accommodation facilities on Grogan Road, north of Stockinbingal. (More information will be provided in a separate notification).
- Inspections of existing railway infrastructure and assets.

What can I expect?

- Light vehicles entering and exiting the temporary site facilities between 7am – 6pm Monday to Saturday
- Works occurring between 7am – 6pm, Monday to Saturday
- Property owners will be contacted regarding access prior to works commencing
- Traffic management may be required in some locations where works are occurring close to roads or for safe access. Please observe all traffic management instructions and signage
- Reduced speed limits down to 40km/h near works, where applicable
- Workers operating machinery, equipment, hand tools and service vehicles at each site
- Nearby residents may hear some noise during these works and can expect some additional construction workers and vehicles in the area.

Machinery used

Excavators, drill rigs, small truck mounted drill rig, NDD (Non-destructive digging) truck, water carts and support vehicles, workers using hand tools, survey equipment (including drones), traffic management equipment and signage.

How we're managing impacts

- Traffic management and reduced road speeds, where applicable
- Environmental controls in place
- Access to private properties will be maintained
- Temporary fencing around excavation sites

Cancellation of works

Works can sometimes be cancelled at short notice depending on weather and other factors. Should this occur, works will be rescheduled.

For any concerns or enquiries phone 1800 732 761 or email inlandrailnsw@inlandrail.com.au

Thank you for your patience and cooperation while we carry out these works.

Scan **QR code** for latest information.

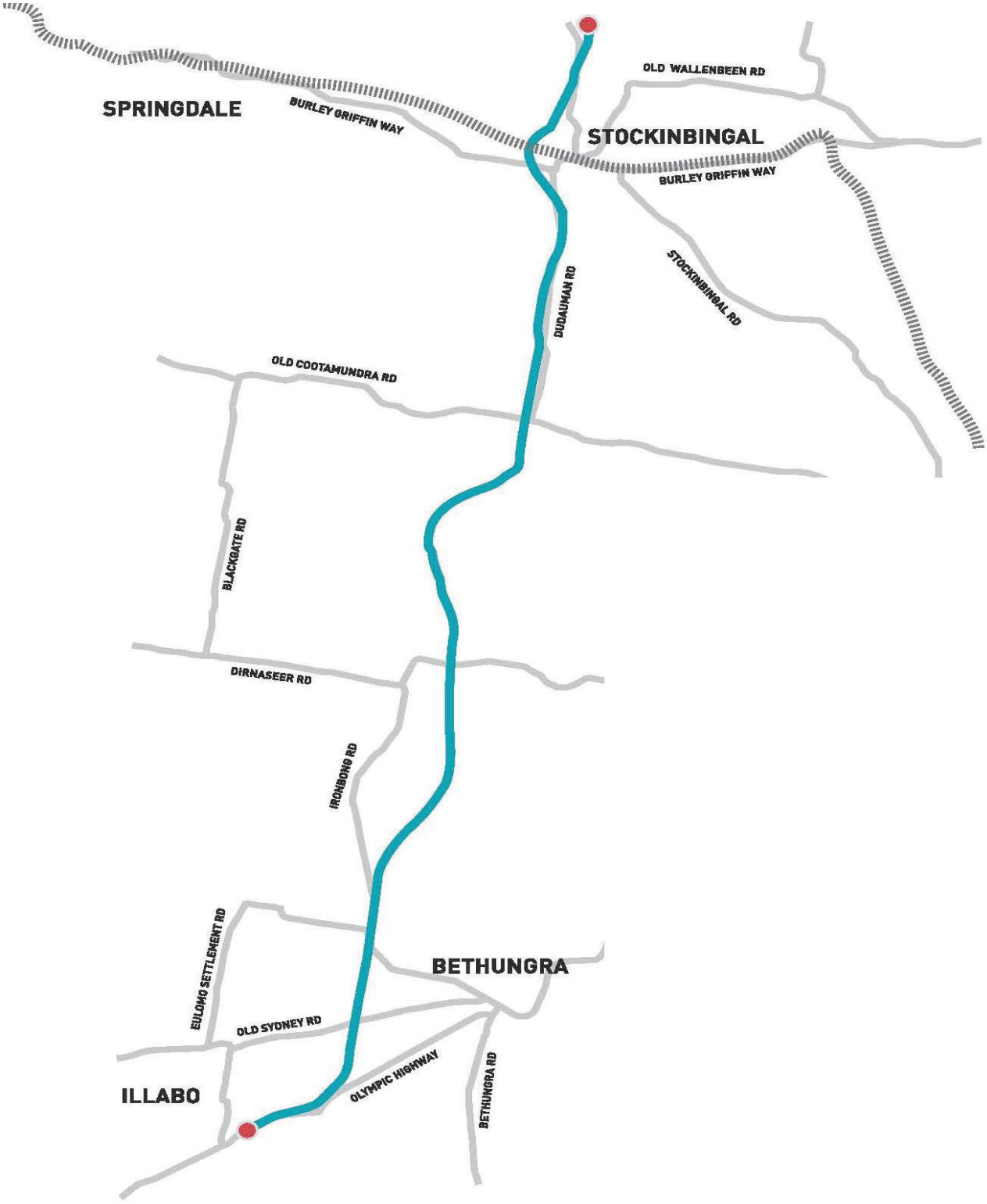
1800 732 761 inlandrailnsw@inlandrail.com.au

GPO Box 14, Sydney NSW 2000

Please call our free translation and interpreter service on **131 450** (24 hours a day) if English is your second language and you need help reading this document

Work locations

Work will occur at various locations within the project boundaries (shown in blue on the map below) and will be discussed with individual property owners / lessees prior to commencement.



1800 732 761 @ inlandrailnsw@inlandrail.com.au

GPO Box 14, Sydney NSW 2000

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INLAND RAIL

Appendix D—LIW Biodiversity Advice

14 March 2025

Daniel Lidbetter
Environmental Approvals Manager
Inland Rail Illabo to Stockinbingal
John Holland Pty Ltd
Level 5, 15 Bourke Road
Mascot NSW 2020

daniel.lidbetter3@jhg.com.au
cc: tess.anastakis@jhg.com.au

Dear Daniel

Re: 240107 – Inland Rail, Illabo to Stockinbingal - Biodiversity Advice, Low Impact Works

Introduction

Thank you for requesting biodiversity advice on approved Low Impact Work (LIW) within the Inland Rail Illabo to Stockinbingal Project area prior to construction. John Holland needs to conduct LIW (Table 2) activities within the Project area under the definition of LIW and Construction as described in the conditions of consent (Table 4). LIW activities must not impact biodiversity values of the CSSI # SSI-9406 to be compliant with Conditions of Approval (CoA) including (but not limited to) E26, E28 and E29. In addition, LIW must not trigger the requirement to retire offset credits.

Low Impact Works are unlikely to result in significant ground or native vegetation disturbance over and above routine agricultural cropping, grazing and maintenance activities. To protect project biodiversity values LIW activities are limited to previously impacted land. Land **Status** (Table 1) has been conservatively derived from existing use and the vegetation zone (PCT and Condition as per the BDAR) where native vegetation is present at the LIW location. The land status used in Tables 1, 2 and 3 include:

- Existing roads and tracks
- Category 1 land (cropping land)
- Poor quality native vegetation (no shrubs & exotic groundcover), (Table 1)
- High quality native vegetation or unsurveyed land or derived grassland, (Table 1)

Table 1 Native Vegetation zones (PCT and condition) used to determine land status

Vegetation Type*	Condition*	Status
PCT 79 River Red Gum shrub/grass riparian tall woodland or open forest wetland mainly in the upper slopes sub-region of the NSW South Western Slopes Bioregion and western South Eastern Highlands Bioregion	Moderate	High
	Poor	Poor
PCT 76 Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions	Good	High
	Moderate	High
	Poor	Poor
	Low -DNG	Poor
PCT 80 Western Grey Box – White Cypress Pine tall woodland on loam soil on	Moderate	High

Vegetation Type*	Condition*	Status
alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion	Poor	Poor
PCT 266 White Box grassy woodland in the upper slopes sub-region of the NSW South Western Slopes Bioregion	Moderate	High
	Poor	Poor
	Low -DNG	Poor
PCT 276 Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion	Moderate	High
	Poor, canopy only	Poor
PCT 277 Blakely's Red Gum – Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion	Moderate	High
	Poor	Poor
	Low -DNG	Poor
	Planted	Poor
PCT 309 Black Cypress Pine – Red Stringybark – red gum – box low open forest on siliceous rocky outcrops in the NSW South Western Slopes Bioregion	Moderate	High
PCT 347 White Box – Blakely's Red Gum shrub/grass woodland on metamorphic hillslopes in the mid-southern part of the upper slopes subregion of the NSW South Western Slopes Bioregion	Moderate	High
	Poor	Poor

*PCT condition derived from BDAR

Note: Planted native vegetation will generate offset requirements. Apply traffic controls as per Table 2 and Table 3.

Land previously assessed as native vegetation has been ascribed a status based on Vegetation zone, see Table 1 and the **Process** below.

The level of controls for LIW increases with the quality of biodiversity to protect project biodiversity values. Where the controls for LIW are implemented vegetation integrity, habitat suitability, threatened species abundance, vegetation abundance, habitat connectivity, threatened species movement, flight path integrity and water sustainability would be maintained across the project.

As such, conducting LIW activities would not adversely affect, potentially adversely affect or adversely impact the biodiversity values of threatened species or Critically Endangered Ecological Community (CEEC) / Endangered Ecological Community (EEC) / Threatened Ecological Community (TEC) and would be permissible under the consent when the traffic light controls are followed (Table 3).

Note, no threatened flora species were recorded on site during field surveys for the Environmental Impact Statement (EIS). Threatened fauna species recorded during field surveys for the EIS are highly mobile and unlikely to be impacted by LIW as their foraging, nesting and breeding habitat features would not be impacted. The minor transient and infrequent nature of LIW activities are unlikely to create sufficient noise and vibration to disturb roosting or nesting fauna.

A traffic light system of controls has been adopted to manage the potential for impacts to biodiversity values across the project from LIW activities. The traffic light system uses three terms, including:

- Allow – negligible potential for impact to project wide biodiversity values when controls followed

- Caution - low potential for impact to project wide biodiversity values additional controls to follow
- Delay – high risk of impact to project wide biodiversity values, delay until CEMP and subplans are approved, additional surveys completed and biodiversity offset credits are retired, unless otherwise approved by the minister

Process

An ecologist will assess LIW areas and complete an Ecological Clearance Form prior to works to reduce the potential for inadvertent impacts to biodiversity values as a result of LIW.

a) Identify the location for the LIW and required access.
b) Determine through reference to constraints mapping/site observations the land status in Table 2.
c) Check Table 2 to determine the LIW and if access is allowed, check also if caution is required or if the LIW should be delayed until "construction".
d) If the LIW is allowed, or if caution is required, refer to the traffic light controls in Table 3.
e) Determine if the traffic light controls can be implemented or not.
f) Ecologist to complete an Ecological Clearance Form and lodge same with Senior Project Engineer (or delegate).
g) If the traffic light controls can be implemented, document the above steps in an Excavation Permit and submit to the Senior Project Engineer (or delegate) for approval.
h) Once the Excavation Permit is approved, implement the controls in Table 3 and proceed with works.
i) Any breach of the controls should be reported to the supervising engineer as a non-conformance for assessment and subsequent action.

Where this procedure and controls can be implemented it is expected that there is a will be no impact to biodiversity values across the project adversely affecting threatened species or CEEC / EEC / TEC and would be permissible under the consent.

If you have any questions, please contact me or Jane Love. We would be pleased to discuss any aspect of this letter with you.

Yours sincerely,

Michial Sutherland
Manager
0427953053

Table 2: LIW activity v land type and traffic light controls

Low Impact Work	**Existing roads and tracks.**	**Category 1 land (cropping land)**	**Poor quality native vegetation** (Table 1)	**High quality native veg or unsurveyed land or derived grassland** (Table 1)
Cadastral survey	Allowed	Allowed	Allowed	Caution
Boreholes	Allowed	Allowed	Caution	Delay
Geotechnical test pits	Allowed	Allowed	Caution	Delay
Subsoil and topsoil test pits	Allowed	Allowed	Caution	Delay
Service investigations	Allowed	Allowed	Caution	Delay
Auger holes	Allowed	Allowed	Caution	Caution
Erosion threshold velocity testing	Allowed	Allowed	Caution	Delay
Pavement cores	Allowed	N/A	N/A	N/A
Geophysics	Allowed	Allowed	Allowed	Caution
Establish minor ancillary facilities	Allowed	Allowed	Caution	Delay
Enviro. survey, investigation / site works	Allowed	Allowed	Allowed	Caution
Construct minor access roads	Allowed	Allowed	Caution	Delay
Corridor fencing	Allowed	Allowed	Caution	Caution

Table 3: Traffic light controls

Low Impact Work	**Existing roads and tracks**	**Category 1 land (cropping land)**	**Poor quality native vegetation defined in** Table 1	**Moderate to high quality native veg or unsurveyed land or derived native grassland defined in** Table 1
Cadastral survey	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter. • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Target previously disturbed areas only. • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene	• Target previously disturbed areas only. • No more than 0.2 m^2 ground disturbance • No pruning of limbs over 50 mm diameter or hollow-bearing ** • No removal of native trees • Avoid crossings flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Use existing tracks. Where there is no existing track, limit vehicle movements to no more than twice at any given location.
Boreholes	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Target previously disturbed areas only • No more than 5 m^2 ground disturbance • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff	Delay
Geotechnical test pits	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	• Target previously disturbed areas only • No more than 5 m^2 ground disturbance • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing ** • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste	Delay

Low Impact Work	**Existing roads and tracks**	**Category 1 land (cropping land)**	**Poor quality native vegetation defined in** Table 1	**Moderate to high quality native veg or unsurveyed land or derived native grassland defined in** Table 1
	• Topsoil, fertilise & reseed, or reseal		• Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	
Subsoil & topsoil test pits	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	• Target previously disturbed areas only • No more than 5 m^2 ground disturbance • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	Delay
Service investigations	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	• Target previously disturbed areas only • No more than 5 m^2 ground disturbance • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	Delay
Auger holes	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings	• Target previously disturbed areas only. • No more than 2 m^2 ground disturbance • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Use existing tracks where available	Delay

Low Impact Work	**Existing roads and tracks**	**Category 1 land (cropping land)**	**Poor quality native vegetation defined in** Table 1	**Moderate to high quality native veg or unsurveyed land or derived native grassland defined in** Table 1
	• Remove all waste • Use vehicle hygiene	• Remove all waste • Use vehicle hygiene	• Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	
Erosion threshold velocity testing	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	• Target previously disturbed areas only. • No more than 4 m^2 ground disturbance • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	Delay
Pavement Cores	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	Not Applicable	Not Applicable	Not Applicable
Geophysics	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter	• No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing • Use existing tracks where available • Avoid crossing flowing creeks	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Avoid crossings flowing creeks

Low Impact Work	**Existing roads and tracks**	**Category 1 land (cropping land)**	**Poor quality native vegetation defined in** Table 1	**Moderate to high quality native veg or unsurveyed land or derived native grassland defined in** Table 1
	• Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use formed creek crossings where available • Remove all waste • Use vehicle hygiene	• Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Use existing tracks. Where there is no existing track, limit vehicle movements to no more than twice at any given location.
Establish minor ancillary facilities	• Minimise the footprint • Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	• Minimise the footprint • Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	Delay	Delay
Enviro. survey, investigation / site works	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	• No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing • Use existing tracks where available • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	• Target previously disturbed areas only • No more than 2 m^2 ground disturbance • Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Avoid crossings flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed • Use existing tracks where available. Where there is no existing track, limit vehicle movements to no more than twice at any given location.

Low Impact Work	**Existing roads and tracks**	**Category 1 land (cropping land)**	**Poor quality native vegetation defined in** Table 1	**Moderate to high quality native veg or unsurveyed land or derived native grassland defined in** Table 1
Construct minor access roads	• Not connected to a public road • Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed, or reseal	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene • Topsoil, fertilise & reseed	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff • Topsoil, fertilise & reseed	Delay
Corridor fencing	• Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter. • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter • Use existing creek crossings • Remove all waste • Use vehicle hygiene	• Use existing tracks where available • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist review and signoff	• Target previously disturbed areas only • No more than 2 m^2 ground disturbance • Use existing tracks • No removal of native trees • No pruning of limbs over 50 mm diameter or hollow-bearing** • Avoid crossing flowing creeks • Use formed creek crossings where available • Remove all waste • Use vehicle hygiene • Light vehicles only • Stable soil conditions • Ecologist pre-works inspection, review and signoff • Use existing tracks where available. Where there is no existing track, limit vehicle movements to no more than twice at any given location.

** - Pruning is not considered as clearing under NSW biodiversity legislation and guidance. The 50 mm limb diameter limitation on pruning restricts the potential to impact limbs that may provide habitat for any native fauna.

Table 4: SSI-940 *CoAs and Terms and Definitions* 6

Term	Definition
Construction	Includes work required to construct the CSSI as defined in the documents listed in **Condition A1**, including commissioning trials of equipment and temporary use of any part of the CSSI, but excluding **low impact work** which is carried out or completed prior to approval of the CEMP.
Low Impact work	Work defined as low impact includes: (a) survey works including carrying out general alignment surveys, installing survey controls (including installation of global positioning system (GPS)), installing repeater stations, carrying out surveys of existing and future utilities and building and road dilapidation surveys; (b) investigations including investigative drilling, contamination investigations and excavation*;* (c) installation of mitigation measures including erosion and sediment controls, temporary exclusion fencing for sensitive areas and acoustic treatments; (d) property acquisition adjustment work including installation of property fencing; (e) archaeological testing under the *Code of practice for archaeological investigation of Aboriginal objects in NSW* (Department of Environment Climate Change and Water, 2010) or archaeological monitoring undertaken in association with Low Impact work to ensure that there is no impact on heritage items; (f) archaeological and cultural salvage undertaken in accordance with a strategy or salvage operation required by the conditions of this approval; (g) maintenance work to existing buildings and structures as required to facilitate the carrying out of the CSSI; and (h) other activities determined by the ER to have minimal environmental impact which may include relocation and connection of utilities, establishment of minor ancillary facilities in accordance with **Condition C9** construction of minor access roads (other than access roads' connection to the road network), temporary relocation of pedestrian paths and the provision of property access. (i) Site establishment work approved under a Site Establishment Management Plan in accordance with **Condition C5**. Despite the above, the following works are not Low Impact Work: i. where heritage items, or threatened species or their habitat, or threatened ecological communities (within the meaning of the Biodiversity Conservation Act 2016), are adversely affected or potentially adversely affected by any low impact work as defined in (a) to (i) above, that work is construction, unless otherwise determined by the Planning Secretary in consultation with Heritage NSW, BCS or DPI Fisheries (in the case of impact upon fish, aquatic invertebrates or marine vegetation); and ii. any Work undertaken outside the hours specified in Condition E1 that exceeds noise management and vibration levels as identified in Condition E3(b). Notes: 1. Early stages of Work are not necessarily low impact work. 2. Low Impact work is not Construction as defined by this approval. 3. The low impact work described in this definition becomes Construction with the approval of a CEMP. Where low impact work has already commenced, this is considered to remain as low impact work and is managed in accordance with the framework under which it commenced.
C9: Minor Ancillary Facilities	Minor ancillary facilities including lunch sheds, office sheds, portable toilet facilities, material lay down sites, stockpile areas, areas used to assemble infrastructure and the like can be established and used where they satisfy the following criteria: (a) are located within the construction boundary; and (b) have been assessed by the ER to have -

	i. minimal amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and ii. minimal environmental impact with respect to waste management and flooding, and iii. no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.
E26 Biodiversity	Prior to impacts on the biodiversity values of the CSSI, the number and classes of ecosystem credits and species credits (like-for-like) as set out in the BAM Biodiversity Credit Report which forms part of the Condition A1(c), must be retired. The number and classes of ecosystem credits and species credits that must be retired (prior to impacting the biodiversity values) are detailed in SCHEDULE 1 and SCHEDULE 2 of APPENDIX C. The Proponent may review and reduce the ecosystem and species credit requirements in Tables in SCHEDULE 1 and SCHEDULE 2 of APPENDIX C to reflect the final construction footprint; the further surveys required by Condition E31; and the resulting extent and type of plant community types to be cleared. Amendments to the ecosystem and species credit requirements must be undertaken in consultation with BCS and DECCEW(Cth) and documented in a report prepared in accordance the Biodiversity Assessment Method and accompanied by an updated Credit Report. The report and the updated Credit Report must be submitted to the Planning Secretary for approval prior to the retirement of credits.
E28 Biodiversity	The retirement of the credits must be carried out in accordance with the Biodiversity Conservation Act 2016 (BC Act), and can be achieved by: (a) acquiring and retiring "biodiversity credits" within the meaning of the BC Act; and / or (b) making a payment into the Biodiversity Conservation Fund of an amount equivalent to the class and number of ecosystem and species credits, as calculated by the Biodiversity Conservation Fund (BCF) Charge System; and/or (c) funding a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules of the Biodiversity Offset Scheme.
E29 Biodiversity	Evidence of the retirement of credits in satisfaction of **Condition E28** must be provided to the Planning Secretary prior to impacts to the biodiversity values occurring.

Definitions

Land Type

- Existing roads and tracks include formed roads and tracks, sealed or unsealed that may include cut, fill and pavement formations, routinely used/constructed creek crossings
- Category 1 land (cropping land):
  - Land cleared of native vegetation as at 1 January 1990 or lawfully cleared after 1 January 1990
  - Low conservation grasslands
  - Land containing only low conservation groundcover (not being grasslands)
  - Native vegetation identified as regrowth in a Property Vegetation Plan (PVP) under the repealed Native Vegetation Act 2003 only where the PVP specifies a regrowth date.
  - Land bio-certified under the Biodiversity Conservation Act 2016
- Poor quality native vegetation (no shrubs & exotic groundcover) as defined in the BDAR

- High quality native vegetation or unsurveyed land or derived grassland as defined in the BDAR where minimal disturbance would have a negligible impact on to biodiversity values across the project

Biodiversity Values

The NSW *Biodiversity Conservation Act* 2016 in Cl. 1.5 states:

Biodiversity and biodiversity values for purposes of Act

1) For the purposes of this Act, biodiversity is the variety of living animal and plant life from all sources, and includes diversity within and between species and diversity of ecosystems.
2) For the purposes of this Act, biodiversity values are the following biodiversity values—
   (a) vegetation integrity—being the degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state,
   (b) habitat suitability—being the degree to which the habitat needs of threatened species are present at a particular site,
   (c) biodiversity values, or biodiversity-related values, prescribed by the regulations.

The *Biodiversity Conservation Regulation* 2017 in Cl. 1.4 states:

Additional biodiversity values (section 1.5 of the Act)

The following are prescribed as additional biodiversity values for the purposes of the Act—

(a) threatened species abundance—being the occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site,
(b) vegetation abundance—being the occurrence and abundance of vegetation at a particular site,
(c) habitat connectivity—being the degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range,
(d) threatened species movement—being the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle,
(e) flight path integrity—being the degree to which the flight paths of protected animals over a particular site are free from interference,
(f) water sustainability—being the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.

The Updated BDAR for the project response to submissions in the definition states:

Biodiversity value	Are the following values: • vegetation integrity--being the degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state • habitat suitability--being the degree to which the habitat needs of threatened species are present at a particular site • biodiversity values, or biodiversity-related values, prescribed by the regulations.

Appendix E—LIW Heritage Advice

MTS Heritage Pty Ltd
Suite 1A, 167-169 Macquarie Road,
Springwood, NSW 2777
ABN: 68 668 095 458

3 March 2025

Tess Anastakis
Environment and Sustainability Graduate
John Holland Pty Ltd
Level 5, 15 Bourke Road
Mascot NSW 2020

RE: Inland Rail, Illabo to Stockinbingal - Heritage Advice on Geotechnical Activities

Dear Tess,

Thank you for requesting heritage advice on proposed geotechnical activities within the Inland Rail Illabo to Stockinbingal Project area. We understand that John Holland requires access to certain parts of the Project area to conduct the following geotechnical activities:

- Bore holes
- Test pits
- Auger holes
- Survey
- Geophysics
- Pot holing
- Slot trenching
- Pavement cores

It is understood that ground disturbing geotechnical activities (i.e. bore holes, test pits, auger holes, pot holing, slot trenching and pavement cores) are only initially planned outside the Zones of Aboriginal Sensitivity identified in the Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared by GML Heritage as part of the EIS submission. In addition, geotechnical ground disturbing activities proposed in Zones 5, 6, 9 and 10, will only take place after archaeological survey and test excavation has commenced and they have been endorsed by MTS Heritage as being cleared. These Zones of Aboriginal Sensitivity (no-ground disturbance zones) are shown in the series of plans attached.

Given the careful placement of initial ground disturbing activities outside the Zones of Aboriginal Sensitivity, conducting these activities is considered unlikely to result in any harm to Aboriginal sites and objects and would be permissible. We support the following mitigations measures proposed by John Holland to avoid any impacts to Aboriginal heritage in these no-ground disturbance zones:

- The Zones of Aboriginal Sensitivity will be identified on the ground with a 25m buffer. Bollards will be placed to temporarily delineate these no-ground disturbance zones.
- All site personnel will be inducted to the Project before the commencement of geotechnical activities. This induction will include a visual depiction of the no-ground disturbance zones and their restrictions.
- On-site personnel will be regularly briefed on the exact locations of the no-ground disturbance zones.
- Hard-copies of maps showing the no-ground disturbance zones will be placed in site utes and provided to all JHG site personnel via email.
- Site personnel will be provided access to geospatial data which show the no-ground disturbance zones (including the 25m buffer).
- The Unexpected and Incidental Finds Procedures for Heritage are available in all site utes and provided to all JHG site personnel via email.

With regards to geotechnical survey, it is understood that John Holland and appointed Subcontractors require vehicle and pedestrian access within the Zones of Aboriginal Sensitivity to validate and visually assess these areas for future geotechnical investigations. These geotechnical surveys would not result in any ground disturbance and, as such, would be permissible. We recommend that existing vehicle tracks be used to access these areas where possible to minimise ground disturbance.

If any further heritage advice on specific activities is required, please don't hesitate to call or email.

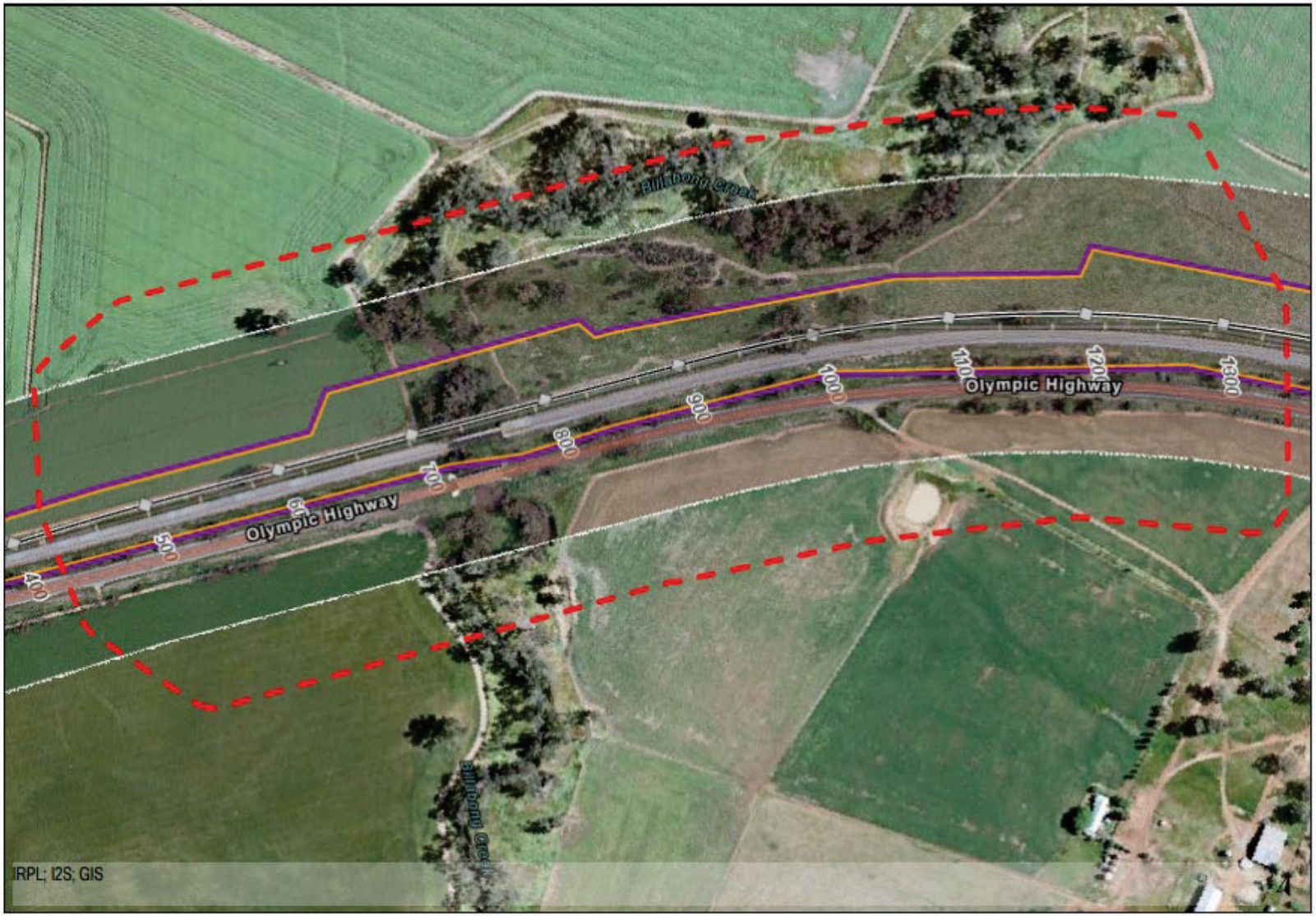
Yours sincerely,

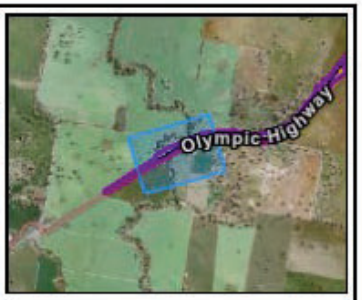
Fiona Leslie
Director / Principal Heritage Consultant

Attachment: Plans showing the Zones of Aboriginal Sensitivity with 25m buffer

INLAND RAIL

Indigenous Survey Zone 1





Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Aerial Image 5cm 20220925

Red: band_1

Green: band_2

Blue: band3

Aerial Image 10cm 2015

Red: band_1

Green: band_2

Blue: band3

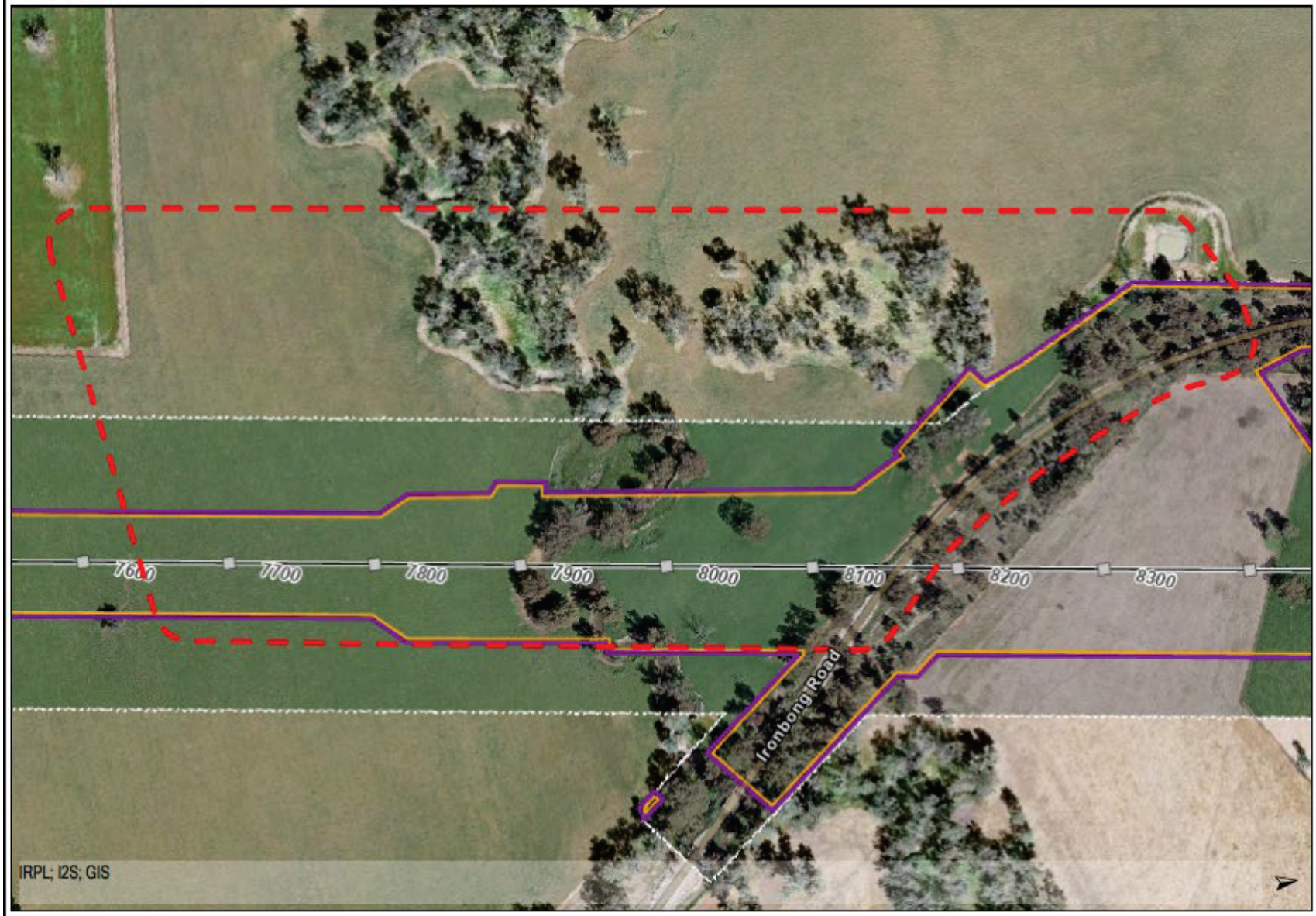
Notes

I2S Low Impact Work

0 200 400 m

INLAND RAIL

Indigenous Survey Zone 2



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

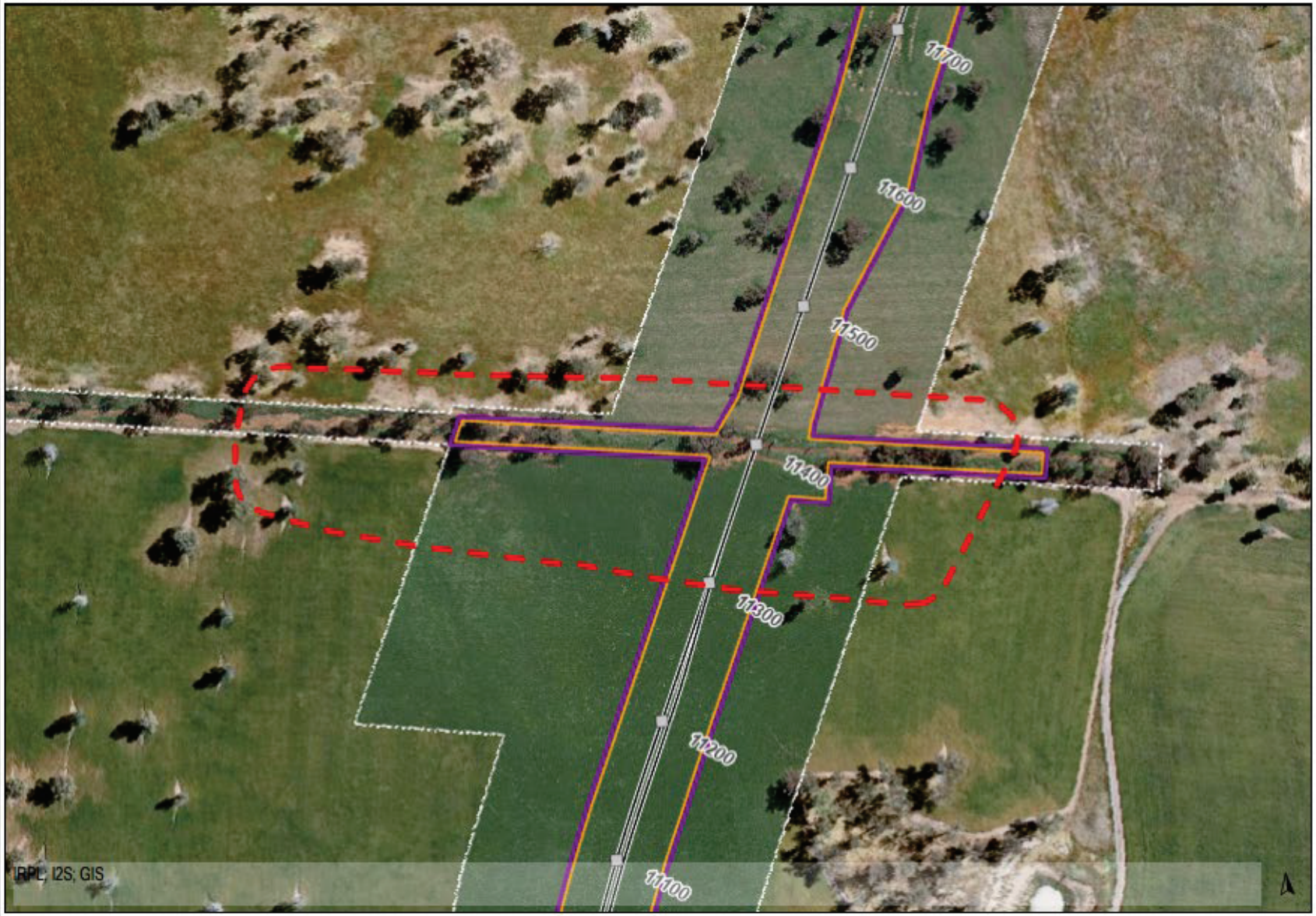
0 200 400 m

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

INLAND RAIL

Indigenous Survey Zone 3



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 200 400 m

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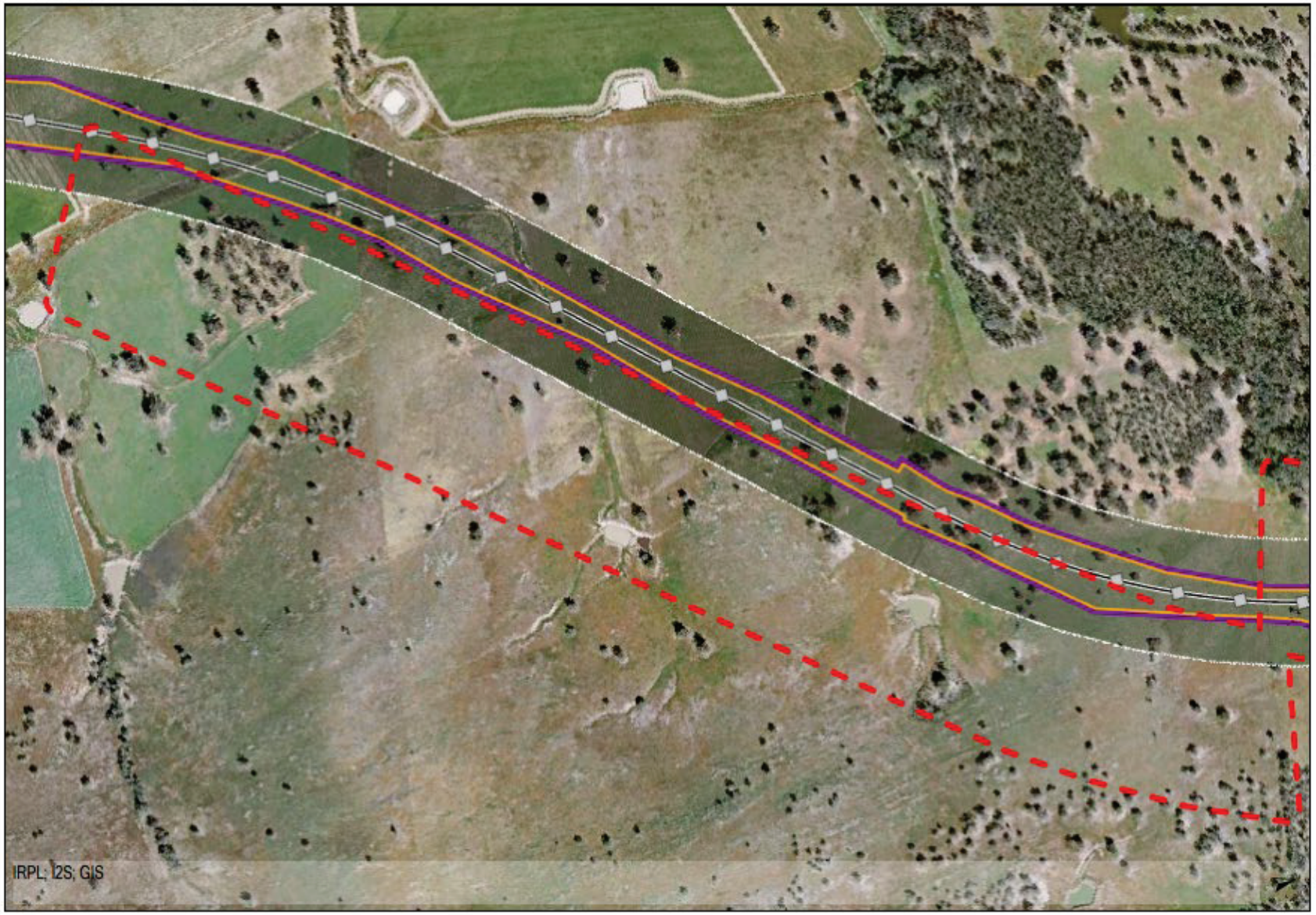
THIS MAP IS NOT TO BE USED FOR NAVIGATION

INLAND RAIL

Indigenous Survey Zone 4



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 450 900 m

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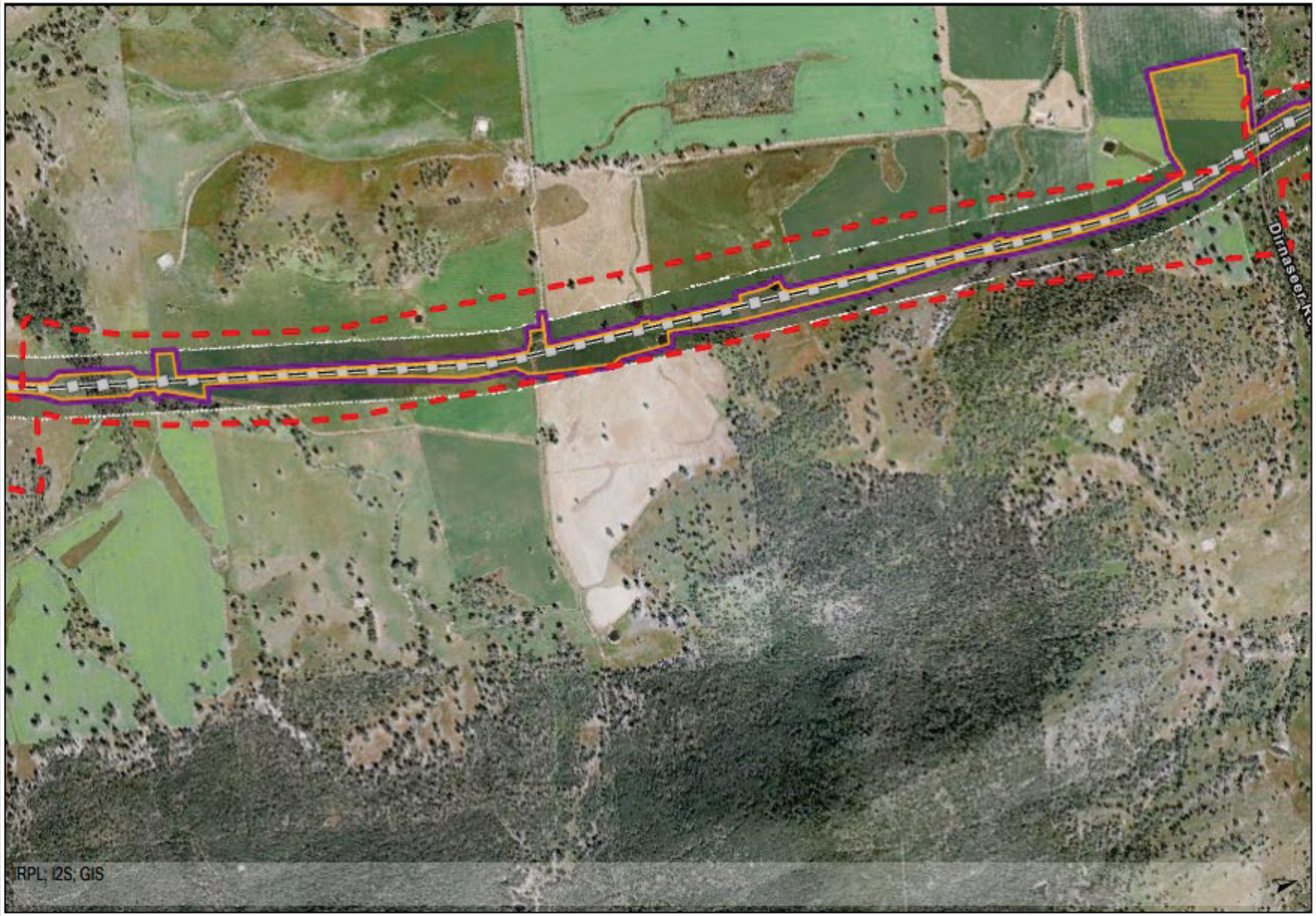
THIS MAP IS NOT TO BE USED FOR NAVIGATION

INLAND RAIL

Indigenous Survey Zone 5



Legend

IndigenousSurveyZones_Buffer25m.s

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 1 2 km

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INLAND RAIL

Indigenous Survey Zone 6

Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 0.5 1 km

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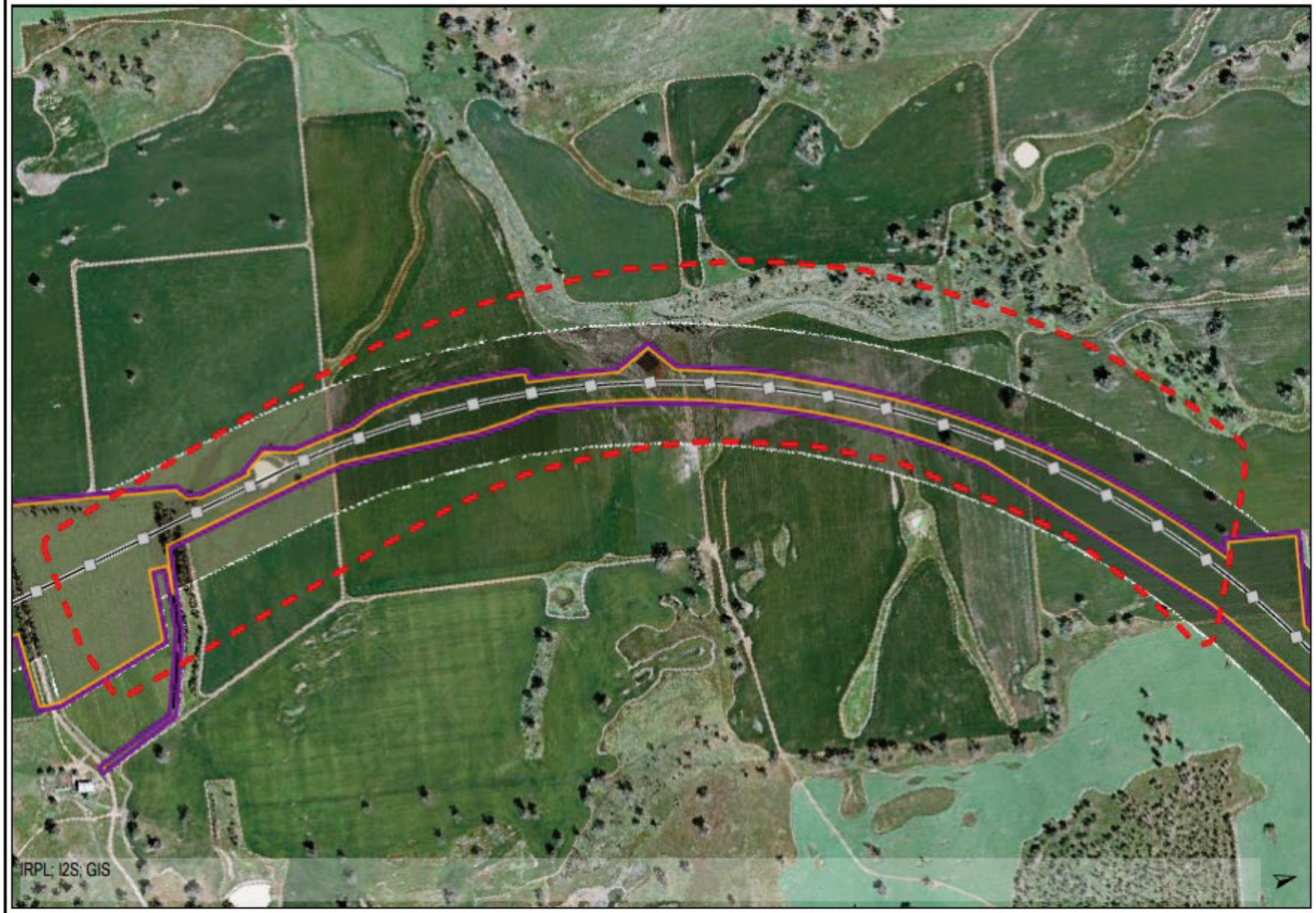
INLAND RAIL

Indigenous Survey Zone 7



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 0.5 1 km

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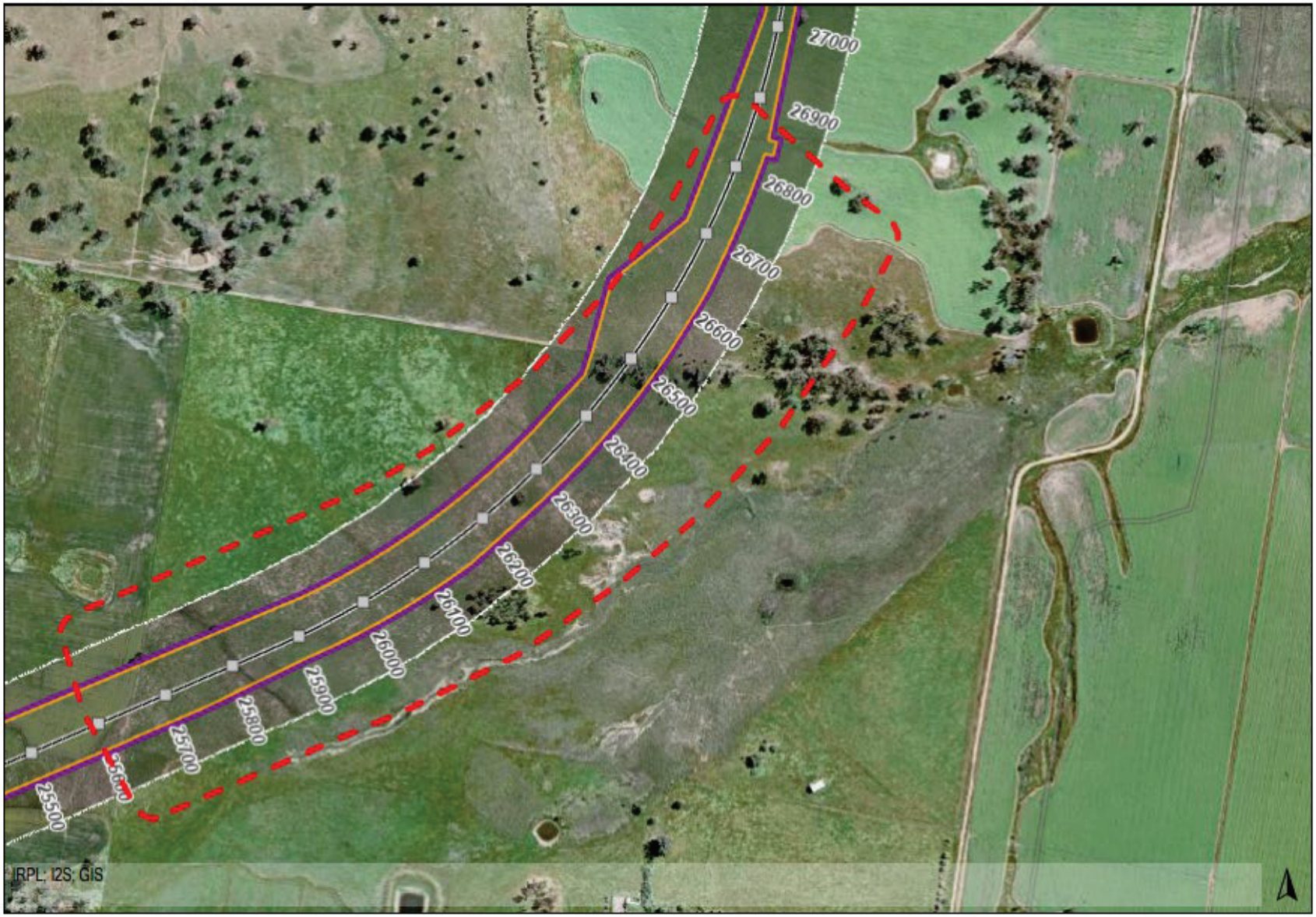
INLAND RAIL

Indigenous Survey Zone 8



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

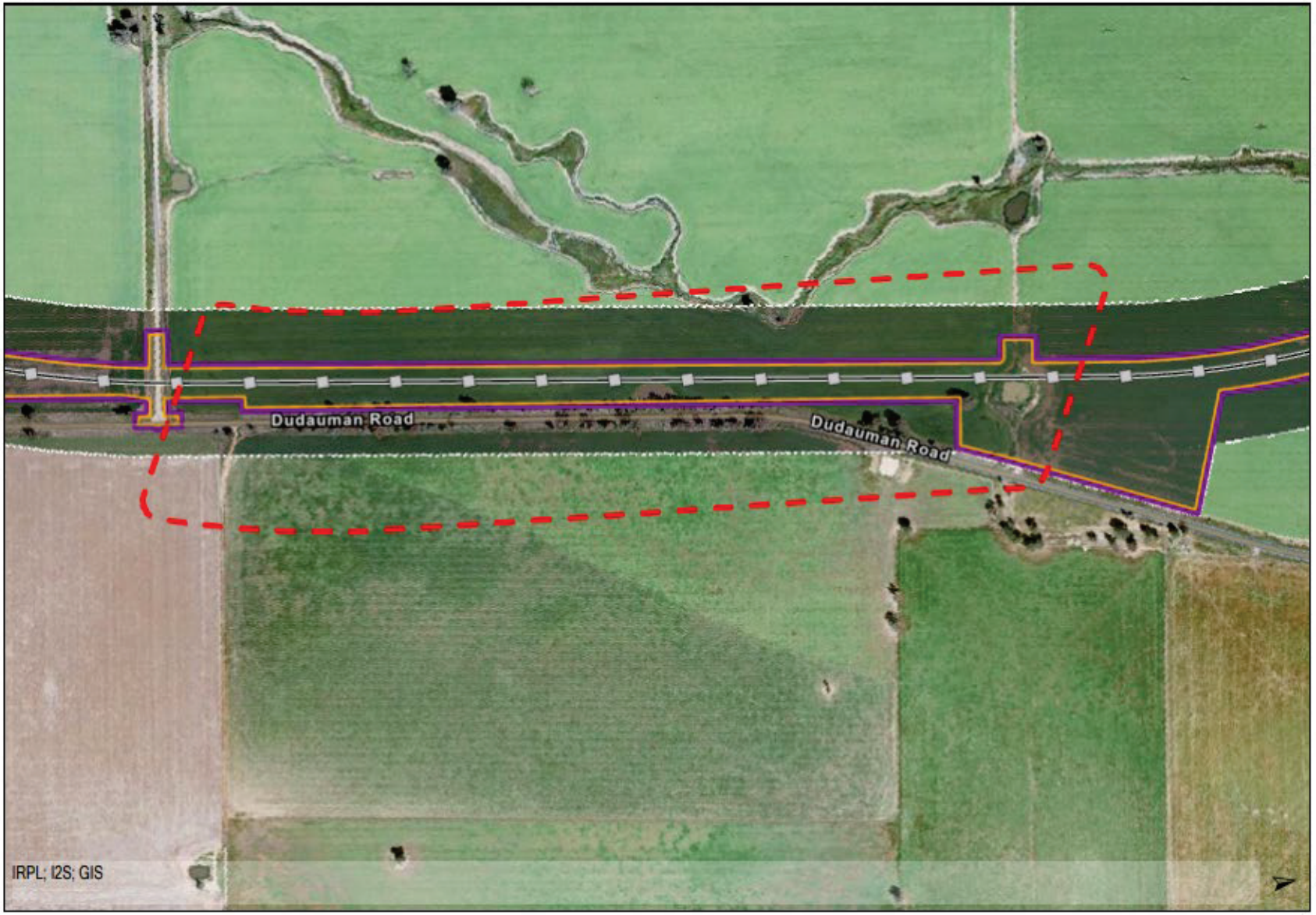
Notes

I2S Low Impact Work

0 400 800 m

INLAND RAIL

Indigenous Survey Zone 9



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 400 800 m

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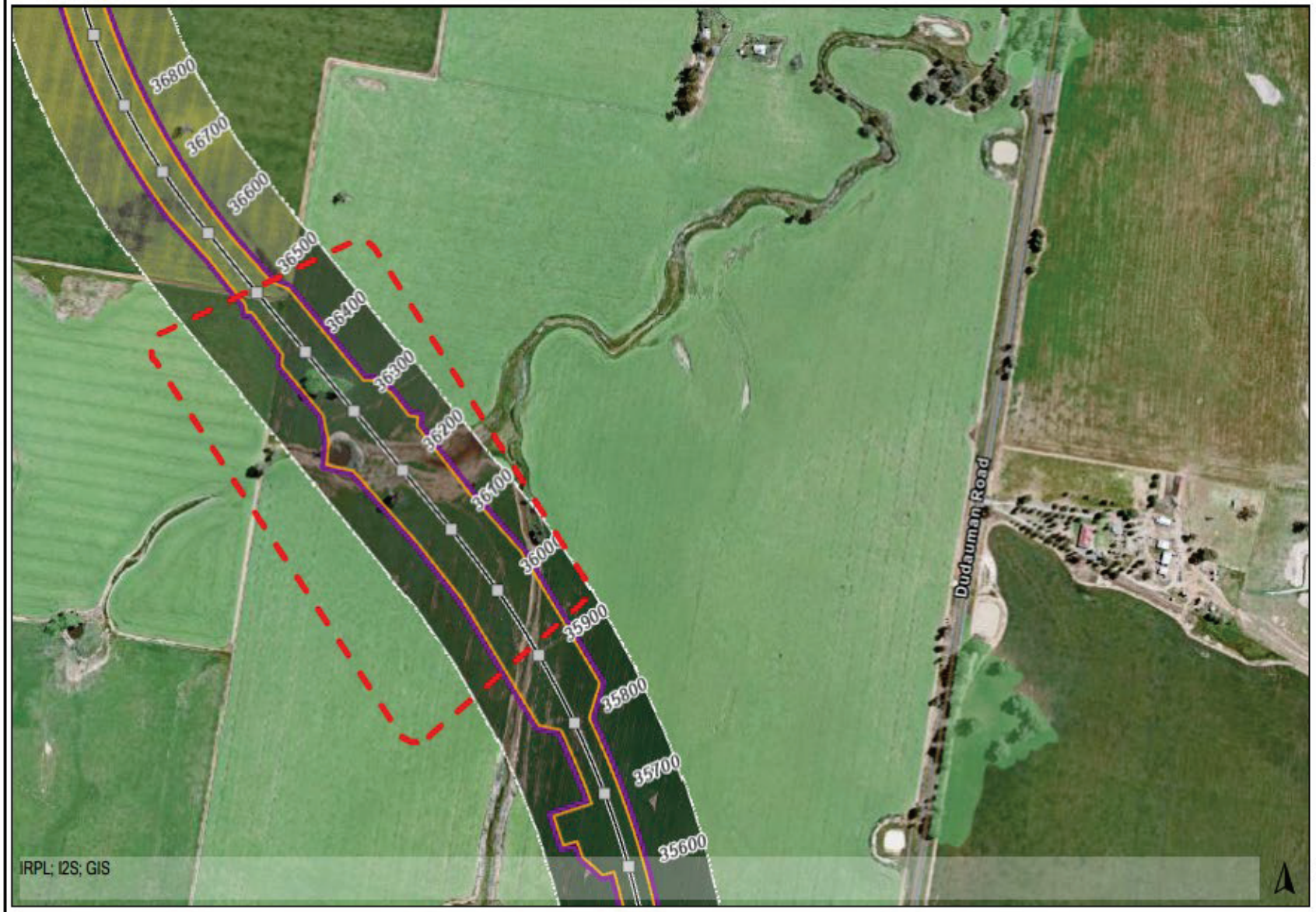
INLAND RAIL

Indigenous Survey Zone 10



Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 350 700 m

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INLAND RAIL

Indigenous Survey Zone 11

Legend

IndigenousSurveyZones_Buffer25m.z

Reference Data

Delta Change - CIZ EIS (Rev3)

Outside CIZ Project WIP

CIZ EIS - Construction (Rev3)

Chainage

Rail Alignment

Notes

I2S Low Impact Work

0 350 700 m

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