

# Uungula Wind Farm

## Traffic Management Plan



28 March 2026



Final

## Revision Control

Revision	Date	Issue	Author	Reviewed	Approved	Comment
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006D	28/03/2026	Final/Issued	Squadron Energy	V Chaplin D Keegan A Uddin	C.Somerville	Updated for Secretary approval of non-blade deliveries

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## Key Terms and Abbreviations

Term	Definition
<b>Applicant</b>	Uungula Wind Farm Pty Ltd, or any person carrying out the development approved under this approval
<b>CTAMP</b>	Construction Traffic and Access Management Plan
<b>CWO</b>	Central West Orana (Renewable Energy Zone)
<b>Development Consent</b>	Development Consent SSD-6687
<b>DPE</b>	Department of Planning and Environment (now DPPI)
<b>DPIE</b>	Department of Planning, Industry and Environment (now DPPI)
<b>DPPI</b>	Department of Planning, Housing and Infrastructure (formerly DPE and DPIE)
<b>DRC</b>	Dubbo Regional Council
<b>EMS</b>	Environmental Management System
<b>EnergyCo</b>	Energy Corporation of New South Wales
<b>EPA</b>	NSW Environment Protection Authority
<b>EPL</b>	Environment Protection License
<b>LGA</b>	Local Government Area
<b>MOD</b>	Modification Application
<b>NSW</b>	New South Wales
<b>NHVR</b>	National Heavy Vehicle Regulator
<b>OSOM</b>	Over Size Over Mass vehicles
<b>OSOM TMP</b>	OSOM Transport Management Plan
<b>PIRMP</b>	Pollution Incident Response Management Plan
<b>Planning Secretary</b>	Secretary of the Department of Planning and Housing and Infrastructure or nominee
<b>POEO Act</b>	Protection of the Environment Operations Act 1997
<b>PoN</b>	Port of Newcastle
<b>Proponent</b>	Uungula Wind Farm Pty Ltd
<b>REZ</b>	Renewable Energy Zone
<b>Roads Authority</b>	Transport for NSW – State and Regional roads Dubbo Regional Council - local roads within the Dubbo Regional LGA
<b>ROL</b>	Road Occupancy Licence
<b>Site</b>	The Site defined in Appendix 1 of the Development Consent SSD-6687.
<b>SQE</b>	Squadron Energy
<b>TfNSW</b>	Transport for NSW
<b>TGS</b>	Traffic Guidance Scheme
<b>The Consent</b>	Uungula Wind Farm Development Consent SSD-6687
<b>The Project</b>	The Uungula Wind Farm Project
<b>TMC</b>	TfNSW Transport Management Centre
<b>TMP</b>	Traffic Management Plan
<b>TTLG</b>	Transport and Traffic Liaison Group

<b>Term</b>	<b>Definition</b>
<b>UWF</b>	Uungula Wind Farm
<b>VMS</b>	Variable Message Sign
<b>WTG</b>	Wind Turbine Generator

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# 1 Introduction

## 1.1 Background

This Traffic Management Plan (TMP) has been prepared in accordance with Schedule 2, Condition B33 of the Uungula Wind Farm Development Consent (SSD-6687) for the Uungula Wind Farm (the Project or UWF).

The TMP incorporates the Uungula Wind Farm Project, Transport Assessment (TA document prepared by Samsa Consulting in April 2020), the Uungula Wind Farm Amendment Report (prepared by CWP Renewables in November 2020), Modification 3 Report (prepared by Squadron Energy in 2025) and the Uungula Wind Farm OSOM Transport Management Plan – Non-Blade Components Revision 0 (ARES, March 2026).

The purpose of this TMP is to:

- detail the transport routes to be used for all development-related traffic
- detail the road upgrade works required
- detail the dilapidation surveys required under the Development Consent
- detail the measures that will be implemented to minimise traffic safety impacts and disruptions to local road users during construction, upgrading or decommissioning works including cumulative impacts
- detail measures that will be implemented to comply with the traffic / transport consent conditions
- include general details for a driver's code of conduct.
- detail the management of over size over mass (OSOM) deliveries to the Project, with this revision addressing wind turbine generator (WTG) components and excluding blades (non-blade WTG OSOM deliveries) and substation transformers.

## 1.2 It is noted that OSOM deliveries associated with WTG blades and substation transformers will be addressed within future revisions of this plan Stakeholder consultation

The TMP has been reviewed and prepared in consultation with the following road authorities, in accordance with Condition B33 of the Development Consent:

- Transport for NSW (TfNSW)
- Dubbo Regional Council (DRC)

Refer to Section 8.1 of this TMP for a summary of the consultation outcomes.

Future revisions of this plan to include OSOM deliveries associated with WTG blades and substation transformers will be subject to further consultation with TfNSW and DRC and would be subject to Planning Secretary approval in accordance with Condition B33.

## 1.3 Scope and methodology

The preparation of this TMP report included the following tasks:

- Review of background information for the Project.
- Project discussions with Uungula Wind Farm Project (UWF) team.
- Discussions with DRC, TfNSW and the Department of Planning, Housing and Infrastructure (DPHI).

- Site inspections of the wind farm project area and surrounding road network, including the preferred transportation routes.
- Development of measures to mitigate and/or manage potential impacts, including construction traffic control, road dilapidation surveys and measures to control dust generated by development related traffic.

This TMP is to be used during the construction, operation and decommissioning phases of the subject Project. This TMP will be revised prior to the delivery of other high risk OSOM components such as transformers and wind turbine blades, in consultation with TfNSW and DRC and with the approval of the Planning Secretary. This TMP will be further revised prior to the commencement of the Operations and Decommissioning phases. Once approved, in accordance with Development Consent Condition C16, the TMP will be implemented and made publicly available on the Uungula Wind Farm website:

<https://www.squadronenergy.com/our-projects/uungula-wind-farm>

## 1.4 Development consent requirements for traffic management

This report is a requirement of the UWF Development Consent SSD-6687 (the Consent) provided under Section 4.38 of the *Environmental Planning and Assessment Act 1979*, granted 7 May 2021, with later modifications on 21 April 2022, 2 December 2022 and 4 September 2025.

This TMP addresses Conditions B27 to B33 of the subject Development Consent in the following document sections provided in Table 1.1.

**Table 1.1 Conditions of Consent relating to this TMP**

Condition No.	Condition	Where addressed
B27	<b>Designated Heavy and Over-Dimensional Vehicle Routes</b>	Section 3 Appendix B
	All over-dimensional associated with the development must travel to and from the site via Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road, as identified in the 'Indicative OSOM Route' and 'Project Access Route' in the figure in Appendix 8, and the approved site access point off Twelve Mile Road, unless the Planning Secretary agrees otherwise.  Notes: <ul style="list-style-type: none"> <li>• The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network.</li> <li>• To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for over-dimensional access unless the Planning Secretary agrees otherwise.</li> </ul>	
B28	All heavy and light vehicles associated with the development must travel to and from the site via Twelve Mile Road (west) and the approved site access point off Twelve Mile Road, as identified by the 'Project Access Route' in the figure in Appendix 8, unless the Planning Secretary agrees otherwise.  Note: To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for heavy or light vehicle access, unless the Planning Secretary agrees otherwise.	Section 3 Appendix B
B29	Uungula Road, Wuuluman Road and Ilgingery Road must only be used by over-dimensional, heavy and light vehicles at the following locations to allow access between portions of the site: <ol style="list-style-type: none"> <li>a. the secondary intersection on Uungula Road</li> <li>b. the four secondary intersections on Ilgingery Road</li> <li>c. between secondary intersection (A) and secondary intersection (C) on Ilgingery Road.</li> </ol>	Section 3 Appendix B
		Section 4

Condition No.	Condition	Where addressed
	In addition, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road and Ilgingery Road for the purposes of upgrading the intersections in B29(a) and B29(b) above.	
<b>B30</b>	<p><b>Road Upgrades</b></p> <p>Unless the Planning Secretary agrees otherwise, the Applicant must implement the road upgrades identified in Appendix 7, in accordance with the relevant standard and timing requirements in Appendix 7, and to the satisfaction of the relevant roads authority. If there is a dispute about the road upgrades to be implemented, or the implementation of these upgrades, then either party may refer the matter to the Planning Secretary for resolution.</p>	Section 4
<b>B31</b>	<p><b>Road Maintenance</b></p> <p>The Applicant must:</p> <ul style="list-style-type: none"> <li>a. undertake an independent dilapidation survey to assess the: <ul style="list-style-type: none"> <li>• existing condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), prior to construction, upgrading or decommissioning works</li> <li>• condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29): <ul style="list-style-type: none"> <li>– within one month of the completion of any construction, upgrading or decommissioning works</li> <li>– on an annual basis during construction works</li> <li>– rehabilitate and/or make good any development-related damage</li> </ul> </li> </ul> </li> <li>b. repair Twelve Mile Road, on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), if dilapidation surveys identify that the road has been damaged during construction, upgrading or decommissioning works</li> </ul> <p>in consultation with the relevant road's authority, to the satisfaction of the Planning Secretary.</p>	Section 5
<b>B32</b>	<p><b>Unformed Crown Roads</b></p> <p>The Applicant must ensure any unformed Crown road reserves affected by the development are maintained for future use, unless otherwise agreed with the DPIE Crown Lands.</p>	Section 6.1
<b>B33</b>	<p><b>Traffic Management Plan</b></p> <p>Prior to commencing road upgrades, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and Council, and to the satisfaction of the Planning Secretary. This plan must include:</p> <ul style="list-style-type: none"> <li>a. details of the transport route to be used for all development-related traffic</li> <li>b. details of the road upgrade works required by condition B30 of Schedule 2 of this consent</li> <li>c. details of the measures that would be implemented to: <ul style="list-style-type: none"> <li>• minimise traffic safety impacts of the development and disruptions to local road users during construction, upgrading or decommissioning works, including: <ul style="list-style-type: none"> <li>– details of the dilapidation surveys required by Condition B31</li> <li>– temporary traffic controls, including detours and signage</li> <li>– notifying the local community about development-related traffic impacts</li> <li>– procedures for receiving and addressing complaints from the community about development-related traffic</li> </ul> </li> </ul> </li> </ul>	<p>This document</p> <p>Section 3</p> <p>Appendix B</p> <p>Section 4</p> <p>Section 5.1</p> <p>Section 6.2</p> <p>Section 6.3</p> <p>Section 6.4</p>

Condition No.	Condition	Where addressed
	– minimising potential cumulative traffic impacts with other State significant development projects in the area	Section 6.6
	– minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queuing on the public road network	Sections 6.7
	– implementing measures to minimise development-related traffic on the public road network outside of standard construction hours	Section 6.8
	– minimising dirt tracked onto the public road network from development-related traffic	Section 6.9
	– details of the employee shuttle bus service (if proposed), including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service	Section 6.10
	– encouraging car-pooling or ride sharing by employees	Section 6.11
	– scheduling of haulage vehicle movements to minimise convoy length or platoons	Section 6.12
	– responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding	Section 6.13
	– ensuring loaded vehicles entering or leaving the site have their loads covered or contained	Section 6.9
	– responding to any emergency repair or maintenance requirements	Section 6.16.4
	– a traffic management system for managing over-dimensional vehicles	Section 6.14
	– fatigue management.	Section 6.15
	• comply with the traffic conditions in this consent	
d.	include a Driver's Code of Conduct that addresses:	Section 6.16
	• travelling speeds	
	• procedures to ensure that drivers to and from the development adhere to the designated over-dimensional and heavy vehicle routes	Section 6.16.1 Section 6.16.2
	• procedures to ensure that drivers to and from the development implement safe driving practices	Section 6.16.3
	• include a detailed program to monitor and report on the effectiveness of these measures and the code of conduct.	Section 6.16.4
	Following the Planning Secretary's approval, the Applicant must implement the Traffic Management Plan.	

In addition to the Conditions listed in Table 1.1, Appendix C outlines Project compliance with a range of additional Development Consent Conditions, including:

- Evidence of Consultation (Condition A9)
- Compliance (Condition A13)
- Community Consultative Committee (Condition A20)
- Revision of Strategies, Plans and Programs (Condition C2)
- Staging, Combining and Updating Strategies, Plans or Programs (Condition C3, C4, C5 and C6)
- Notification of Department (Condition C7)
- Submission of Final Layout Plans (Condition C8)
- Submission of Works as Executed Plans (Condition C9)

- Incident Notification (Condition C10)
- Non-compliance Notification (Conditions C11, C12 and C13)
- Access to Information (Condition C16).

## 1.5 Statement of commitments

A Statement of Commitments was prepared as part of the Uungula Wind Farm Amendment Report (CWP Renewables, 2020). The Proponent's Statement of Commitments that relate to traffic and transport are provided in Table 1.2.

**Table 1.2 Statement of Commitments relating to Traffic and Transport**

Commitment	Where addressed
Prior to the commencement of construction, a TMP will be prepared for the Project in consultation with Transport for NSW and the relevant Councils.	Section 1.5 This document Section 8.1
Prior to transport, the over-size / over-mass (OSOM) transport route and port of entry will be confirmed by the construction contractor. Following which, the TMP will be updated and accompanied with a route survey for approval from the DPE.	Section 3 Section 4.2 Appendix B Appendix D
Road dilapidation surveys will be undertaken in accordance with guidelines and standards established by Austroads of the designated vehicle route prior to construction and decommissioning works and post-construction and decommissioning. Following completion of construction and decommissioning works, any development related damage identified in post dilapidation survey will be rehabilitated / repaired.	Section 5
Road infrastructure upgrade works will be undertaken to allow heavy vehicle and OSOM movements along the transport routes, subject to final Port selection and transport route identification. Road upgrades will be undertaken in consultation with relevant road authorities and permits / approvals obtained under the <i>Roads Act 1993</i> .	Section 4 Section 8.2 Appendix B Appendix D
During peak traffic generation activities and movement of OSOM vehicles, escort vehicles and appropriate traffic management will be adopted to ensure safe passage from the public road network onto the Site. Relevant permits under the Heavy Vehicle National Law (NSW) for over-dimensional vehicle use will be sought by the construction contractor.	Section 3 Section 6 Appendix D
The Twelve Mile Road intersection with Goolma Road will be upgraded prior to the commencement of construction generally in accordance with the drawing set entitled " <i>TMR / Goolma Road Intersection Preliminary Upgrade Design - Version 2</i> ".	Section 4
Twelve Mile Road will be upgraded prior to the commencement of construction generally in accordance with the drawing included in the EIS as <i>Appendix N</i> (which are subject to detailed investigations and design).	Section 4
The parts of Ilgingery and Uungula Roads within the Development Corridor will be upgraded and maintained generally in accordance with <i>Table 1</i> of the DRC submission " <i>Uungula Wind Farm – Dubbo Regional Council Road Upgrades / Rectification Works</i> ": " <i>Construct intersections for safe exit and entry movements and to provide adequate wind farm component access</i> ."	Section 4
Access to the Site by all OSOM, heavy and light vehicles travelling from Goolma Road will only be via the western end of Twelve Mile Road.	Section 3 Appendix D

## 1.6 Project environmental management strategy

This TMP has been developed to complement other management plans and as a component of and must be read in conjunction with the Project's Environmental Management Strategy (EMS).

The EMS has been developed to meet the requirements of Condition C1 of the Development Consent providing the strategic framework for environmental management of the Project. The EMS details how the Project will comply with the Development Consent conditions including but not limited to:

- Management Plan review and revision (Condition C2)
- Incident notification (Condition C10)
- Non-compliance notification (Conditions C11, C12 and C13)
- Access to Management Plans (Condition C16)
- Community Consultative Committee (Condition A20)
- Notification of Department (Condition C7)
- Submission of Final Layout Plans (Condition C8)
- Submission of Works as Executed Plans (Condition C9)
- Access to information (Condition C16).

## **1.7 Traffic management plan structure**

The remainder of this TMP is presented as follows:

- Chapter 2 Project description including typical activities during the construction, operation, and decommissioning phases.
- Chapter 3 The existing road network, and identification of the designated transport routes for Over Size Over Mass (OSOM) vehicles and other construction traffic associated with the Project.
- Chapter 4 Road upgrade works and temporary modifications required as part of the Project.
- Chapter 5 Road maintenance and dilapidation reporting requirements.
- Chapter 6 Traffic management measures including management of potential conflicts and driver conduct.
- Chapter 7 provides a summary of incident and non-compliance notification and reporting requirements.
- Chapter 8 Stakeholder consultation outcomes, requirements for review and improvement of the TMP, and references.
- Appendix A Proposed Wind Farm Layout.
- Appendix B OSOM Transport Route maps.
- Appendix C Additional Compliance Requirements.
- Appendix D Non-blade WTG OSOM Transport Management Plan.
- Appendix E Condition B30 Amendment Approval – Use of Twelve Mile Road and Goolma Road for Construction prior to upgrade.
- Appendix F Relocation of Secondary Intersections Amendment Approval.
- Appendix G Condition B30 Amendment Approval – Non-blade WTG OSOM deliveries.

## 2 Project description

### 2.1 Project background

The Uungula Wind Farm is located on rural land between Wellington and Twelve Mile in New South Wales (NSW). The Project Site (the 'Site') is located within Dubbo Regional Council Local Government Area (LGA) to the west of Cudgegong River.

The approved layout of the Uungula Wind Farm Project is provided in Appendix A and described in the Project's EMS document.

Development Consent SSD 6687 was granted by DPE on 7 May 2021.

The Development Consent was modified by DPE on 21 April 2022 (Modification 1). Modification 1 related to:

- addition of three freehold land lots in an updated Schedule of Land (being Crown Roads that have been closed and transferred since Development Consent SSD 6687 was granted)
- removal of four WTGs
- avoided creek crossings in Crown Waterways
- reduction in track length, underground cabling and clearing required.

The Development Consent was modified by DPE on 2 December 2022 (Modification 2). Modification 2 related to an update to subdivision plans and minor updates to figures from Modification 1.

Modification 3 was approved by the DPHI on 4 September 2025. Modification 3 related to minor additional road upgrades and is further detailed below in Section 2.1.1.

This TMP addresses the requirements of the Development Consent.

#### 2.1.1 Modification 3 – Minor Additional Road Upgrades

Modification 3 amended the Schedule of Road Upgrades specified in Appendix 7 of the Development Consent to include road upgrades required along the OSOM Transport route proposed to be undertaken by the Project, and opportunistically, minor administrative changes.

In particular, Modification 3 included the upgrade of the Mitchell Highway and Goolma Road intersection for OSOM vehicles, as detailed Appendix 7 of the consolidated consent. The upgrade to the Mitchell Highway and Goolma Road intersection included the placement of hardstand on both sides of Goolma Road at its intersection with the Mitchell Highway as shown in Figure 4 in Appendix 7 of the Development Consent. Appendix 7 states that the intersection will be upgraded prior to commencing the use of Mitchell Highway / Goolma Road intersection for any over-dimensional traffic associated with the delivery of components for the development.

Condition B27 of the Development Consent authorises the use of this transport route with all over dimensional traffic associated with the development conditionally required to travel to and from site via Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road and the approved site access point off Twelve Mile Road, identified in the 'Indicative OSOM Route' and 'Project Access Route' figure provided in Appendix 8 of the Development Consent, unless the Planning Secretary agrees otherwise.

The works required at the Mitchell Highway / Goolma Road intersection involve a "no parking" area to be placed on the right-hand side prior to the intersection, the addition of hardstand on the exit of the corner, and some signs to be made removable.

It is noted that the Energy Corporation of NSW (EnergyCo) are undertaking the balance of works to facilitate the project's OSOM movements from the Port of Newcastle to the Elong Elong intersection of Golden Highway / Saxa (Coborra) Road. The Project will not commence OSOM deliveries until written confirmation has been received from EnergyCo that intersection upgrades relevant to each OSOM delivery type have been completed. Upgrades to accommodate non-blade WTG components have been completed as of 3 March 2026.

## 2.2 Overview of the development

The Project generally consists of the installation, operation, maintenance and decommissioning of up to 93 wind turbine generators up to 250 metres (m) in height (base to tip), an energy storage facility (ESF), ancillary infrastructure and temporary facilities. It is estimated to have an installed generating capacity of approximately 400 MW.

The Project will connect to the 330 kV transmission line running approximately east-west within the northern part of the Site.

Other features of the Project include:

- operation and maintenance facility incorporating a control room and equipment storage
- temporary concrete batching plants and construction facilities
- access tracks required for each wind turbine and the related ancillary facilities
- minor upgrades to local roads, as required for the delivery of the wind turbines
- up to six temporary meteorological masts and up to six permanent monitoring masts for wind speed verification, weather and general monitoring purposes.

## 2.3 Construction, operation and decommissioning

It is anticipated that the Project will take approximately 24 to 30 months to construct and will be operational over an initial term of approximately 30 years. The Project could be repowered and extended for a longer term depending on market and commercial circumstances. Alternatively, decommissioning and restoration will occur at the end of the operational life of the Project.

The Project will involve the following phases:

### Pre-construction activities

- Public road network upgrades to enable site access for wind farm construction vehicles.
- Building / road dilapidation surveys.
- Investigative drilling, excavation or salvage.
- Minor clearing or relocation of native vegetation.
- Establishing temporary site offices (in locations meeting the criteria identified in the conditions of this approval).
- Installation of environmental impact mitigation measures, fencing, enabling works, etc.
- Minor access roads and minor adjustments to services / utilities, etc.

### Wind farm construction

- On-site civil works for internal access roads, crane pads, lay-down areas, wind turbine footings and cable trenching.
- Delivery and installation of OSOM components / materials.
- Transport of non-OSOM wind turbine infrastructure to the site.
- Installation of wind turbines on site via cranes.
- Construction of electrical sub-stations.
- Construction of site control room and operations and maintenance facilities.
- Construction of electrical transmission lines.

- Rehabilitation of disturbed areas.

**Wind farm operation and maintenance**

- Scheduled / routine technical and mechanical servicing and maintenance of facilities and wind farm infrastructure.
- Replacement of major turbine components, if required (e.g. blades).
- Unscheduled servicing and maintenance.
- Access track and drainage network maintenance.
- Environmental condition monitoring, surveys.
- Landowner management.

**Wind farm decommissioning**

- Reverse staging of construction over a shorter timeframe.
- Site restoration activities.

## 3 Road network access and transport routes

Table 3.1 Development Consent Conditions related to road network access

Condition no.	Condition
B27	<p>Designated Heavy and Over-Dimensional Vehicle Routes</p> <p>All over-dimensional associated with the development must travel to and from the site via Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road and the approved site access point off Twelve Mile Road, as identified in the 'Indicative OSOM Route' and 'Project Access Route' in the figure in Appendix 8, unless the Planning Secretary agrees otherwise.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network.</li> <li>To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for over-dimensional access unless the Planning Secretary agrees otherwise.</li> </ul>
B28	<p>All heavy and light vehicles associated with the development must travel to and from the site via Twelve Mile Road (west) and the approved site access point off Twelve Mile Road, unless the Planning Secretary agrees otherwise.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for heavy or light vehicle access, unless the Planning Secretary agrees otherwise.</li> </ul>
B29	<p>Uungula Road, Wuuluman Road and Ilgingery Road must only be used by over-dimensional, heavy and light vehicles at the following locations to allow access between portions of the site:</p> <ol style="list-style-type: none"> <li>the secondary intersection on Uungula Road</li> <li>the four secondary intersections on Ilgingery Road</li> <li>between secondary intersection (A) and secondary intersection (C) on Ilgingery Road.</li> </ol> <p>In addition, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road and Ilgingery Road for the purposes of upgrading the intersections in B29(a) and B29(b) above.</p>

### 3.1 Description of existing road network

#### 3.1.1 State road network

##### Industrial Drive and Maitland Road

Approximately 13.5 km section of Industrial Drive and Maitland Road will be required for OSOM transport between Selwyn Street in the south and The New England Highway in the north. This section is a dual carriageway road.

##### New England Highway

The New England Highway forms part of the inland interstate road link between Brisbane and Sydney and is a dual carriageway road. Approximately 4 km in length of the New England Highway will be used for the OSOM transport route.

##### John Renshaw Drive

John Renshaw Drive is part of the state road network. An approximate 12 km section will be required for OSOM transport between The New England Highway and the Hunter Expressway. This section is a dual carriageway road.

### **Hunter Expressway**

The Hunter Expressway (M15) is 39.5 km long, running generally northwest from the Pacific Motorway at the Newcastle Link Road interchange to the eastern end of the Belford Bends Deviation on the New England Highway. Only 30 km will be required for OSOM transport between John Renshaw Drive in the south and The New England Highway in the north. It is a dual carriageway road with a speed zone of 110 kilometres per hour (km/h).

### **Golden Highway**

The Golden Highway is a State Highway (SH84), forming arterial route from New England Highway to the Newell Highway. Between Dunedoo and Elong, the Golden Highway is generally a two-lane, undivided road with varying shoulder widths and formations. The pavement condition is generally good, commensurate with its status as a State Highway suitable for larger heavy vehicles, e.g. B-doubles.

The road environment is generally flat to gently rolling terrain with some moderate curved alignments requiring lower advisory speeds within the background 100 km/h speed zone. The road environment and alignment are generally conducive to OSOM vehicle transport. Specific OSOM vehicle transport will be managed under the National Heavy Vehicle Regulator (NHVR) permit system.

### **Mitchell Highway**

Mitchell Highway is a State Highway (SH7). Approximately 2.5 km section (north of Wellington) will be required for OSOM transport between Saxa Road in the north and Goolma Road in the south.

Approaching Wellington, Mitchell Highway is a two-lane, undivided road with relatively wide shoulder widths and formations. The speed zoning of 80 km/h south of Saxa Road reduces to 60 km/h prior to Goolma Road. The pavement condition is generally good, commensurate with its status as a State Highway suitable for larger heavy vehicles, e.g. B-doubles.

The road environment is flat terrain with some gentle curves. The road environment and alignment are generally conducive to OSOM vehicle transport. Specific OSOM vehicle transport will be managed under the NHVR permit system.

### **Goolma Road**

Approximately 3.2 km of Goolma Road (at its western end) will be required for OSOM transport between Mitchell Highway in the west and Twelve Mile Road in the east. Goolma Road is a State Road (MR 233) with a single carriageway, two-lane road and a 100 km/h speed zone.

Goolma Road varies in condition and standard along the relevant length at its western end. It is approximately 7 to 8 m wide incorporating two travel lanes and varying shoulder conditions. Centreline marking and edge line marking is present. Variable pavement conditions are typically average to good with some below average sections characterised by potholes, rutting and soft shoulder areas.

The road environment at Goolma Road's relevant western end is relatively flat terrain with some moderate curved alignments requiring lower advisory speeds within the background 100 km/h speed zone. Goolma Road is a B-Double route with a school bus route running along its length.

## **3.1.2 Regional road network**

### **Saxa Road**

Saxa Road (formerly Cobbora Road) is a Regional Road (MR 353), connecting Mitchell Highway in Wellington and the Golden Highway at Elong. It is a single carriageway, two-lane road with a 100 km/h speed zone.

Saxa Road is relatively consistent in condition and standard along its length. It is generally 6 m wide incorporating two travel lanes and varying shoulder conditions. Centreline marking is provided with edge-line marking available along wider carriageway sections. The pavement is asphalt, in typically good / passable condition.

The general road environment is relatively flat with sections of gently rolling terrain and gentle curved alignments requiring lower advisory speeds within the background 100 km/h speed zone.

Saxa Road is a major local community link as the main access for the local population. The road is a B-Double route with one school bus completing two runs per day servicing schools in Wellington.

### **3.1.3 Local road network**

#### **Selwyn Street and George Street**

Selwyn Street and George Street make up the local road network.

Selwyn Street is the local road continuing from George Street providing access to the private roads within the Port of Newcastle (PoN) site. It is a two-lane undivided road with a sign posted speed limit of 50 km/h. Selwyn Street is a B-Double approved vehicle route.

George Street is a four-lane road with two traffic lanes and two parking lanes. To the east of the intersection George Street links Industrial Drive and Selwyn Street. Approximately 70m of George Street will be required to connect the Selwyn Street and Industrial Drive Route.

#### **Twelve Mile Road**

At its western end, Twelve Mile Road is sealed with an approximate pavement width of 5 to 6 m and a generally soft shoulder area. The road width reduces east of Uungula Road with sections similar to the western end.

The road pavement condition is considered above average. Some minor sections have rutting, potholes and previous patching works.

The road is not line-marked except for sporadic centreline marking through curved sections of the road for vehicle guidance. Guide posts are at irregular intervals for guidance.

The general road environment can be described as flat to gently rolling terrain with no speed limit signage. There is a school bus route along this section of Twelve Mile Road.

The road is unsealed from approximately 22.7 km east of Goolma Road. The unsealed section is generally of average condition and up to approximately 5 m wide. East of Uamby Road, Twelve Mile Road narrows considerably with a 3 m to 4 m width.

#### **Uungula Road / Wuuluman Road/ Ilgingery Road**

Uungula Road, Wuuluman Road and Ilgingery Road are unclassified local roads. Uungula Road begins at Twelve Mile Road in the north continuing in an easterly direction, through the Site and farming land to Guroba Road located east of the Site.

A section of Wuuluman Road (approximately 800 m in length) connects Uungula Road to Ilgingery Road. From its junction with Wuuluman Road, Ilgingery Road continues to the south terminating at the state water boundary of Lake Burrendong.

The Uungula Road / Wuuluman Road / Ilgingery Road routes have relatively consistent conditions and standards along their lengths. The pavement is unsealed with a varying carriageway width up to approximately 4 m, with numerous sections of narrower carriageway width and poor pavement, especially at the southern end. Although unsealed, the pavement conditions generally appear relatively stable, poor to average at best with substantial rutting, potholes and corrugations.

The general alignment is relatively flat to gently undulating with some smaller radius curves, some localised hilly sections and relatively sharp crest alignments. The roads are used for large stock transport vehicles and other heavy vehicles during Council road maintenance works.

## 3.2 Road network access during road upgrade works

Pursuant to Condition B30 of the Development Consent, the road upgrades listed in Appendix 7 are to be completed in accordance with the timing requirements set out in that Appendix. Appendix 7 states that the Twelve Mile Road and Goolma Road intersection would be upgraded “prior to construction commencing”. On 23 November 2023, conditional approval was received from the Planning Secretary to allow use of the Twelve Mile Road and Goolma Road intersection for construction traffic prior to its upgrade. It is noted that the Twelve Mile Road and Goolma Road intersection upgrade works were completed in March 2026 and the old intersection is no longer in use. The Planning Secretary request is discussed further in Section 4.1.1.

On 27/03/2026, conditional approval was also received from the Planning Secretary to utilise the existing Mitchell Highway and Goolma Road intersection for OSOM vehicles, excluding the delivery of WTG blades, prior to the finalisation of upgrade works. This approval is discussed further in Section 4.1.3.

In accordance with Condition B29 of the Development Consent, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road, and Ilgingery Road for the purpose of upgrading the intersections listed in Condition B29(a) and B29(b), being:

- the secondary intersection on Uungula Road
- the four secondary intersections on Ilgingery Road.

Figure 4.1 highlights the sections of Uungula Road, Wuuluman Road and Ilgingery Road for use when undertaking road intersection upgrades on Uungula Road and Ilgingery Road.

The road upgrades are described further in Section 4 of this TMP.

## 3.3 Road network access during construction and operation

### 3.3.1 Site access points

The Project site is accessed via the primary Project site entry off Twelve Mile Road (west), approximately 17 km east of Wellington. This is the Primary access point for OSOM vehicles and heavy and light vehicles.

The secondary intersections and cross-over locations along Uungula and Ilgingery Roads may be used as part of the internal site road network during the construction and operation phases. Secondary access points will facilitate the internal site road network, allow access within the Site (required for construction and operational vehicles) and link the public road network with the Site wind turbine locations.

During Wind Farm construction, all Wind Farm traffic will gain initial entry via the Primary Access point on Twelve Mile Road, to access Uungula Road and Ilgingery Road and between portions of the site.

### 3.3.2 Road network access – OSOM transport route

Transport of materials, components and equipment will travel along the major road network surrounding the site, namely Golden Highway and Mitchell Highway. This includes all OSOM loads.

WTG components including nacelles, drive-trains, hubs, and tower sections are to be imported to Australia and will arrive via the Port of Newcastle.

All routes from the port of entry at Newcastle to the Site are via National routes or State highways utilising Saxa and Goolma roads. The major road network provides a high standard of road infrastructure with relatively wide carriageways and road formations, pavement line marking and controlled access to side roads.

It is noted that a number of road upgrades are required to facilitate OSOM deliveries. These include:

- Intersections identified within Appendix 7 of the Development Consent
- Intersections, stopping bays and other adjustments occurring as part of the EnergyCo Port to REZ road upgrade project.

The project will not undertake OSOM deliveries until the EnergyCo Port to REZ road upgrade works are complete. It is noted that the upgrades required to accommodate WTG non-blade components are expected to be finalised earlier than those required for WTG blade components (at the time of writing, early March for non-blade components and late May for blade components).

OSOM deliveries for non-blade WTG components may occur prior to the finalisation of the Mitchell Highway and Goolma Road intersection where approved by the Planning Secretary. Refer to Section 4.1.3.

All OSOM movements for WTG non-blade component delivery are captured within the Uungula Wind Farm OSOM Transport Management Plan – Non-Blade Components Revision 0 (ARES, March 2026) (based on the indicative Transport Route Study and appendices to the EIS).

The OSOM transport route from Port of Newcastle to the Site follows:

- Selwyn Street, George Street, Industrial Drive, Maitland Road, New England Highway, John Renshaw Drive, Hunter Expressway, New England Highway, Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road (to primary site access point).

### **3.3.3 Road network access – Heavy and light vehicles**

Transport of other construction materials such as gravel, concrete, steel, cement, water, construction plant and other miscellaneous equipment will be transported to the Site via Twelve Mile Road west, in accordance with Condition B28 of the Development Consent.

Condition B28 of the Development Consent does not allow the use of Twelve Mile Road east of the approved primary site access point for heavy or light vehicle access unless the Planning Secretary agrees otherwise. Only legitimate vehicle users of the minor road network east of the primary Project Site entry (i.e. for travel along Twelve Mile Road to the east) and that have been agreed to by the Planning Secretary will be permitted to travel along this route to access the primary Project Site entry.

Light vehicles (LVs) can utilise other surrounding major and local road networks west of the approved Site access point and will not be constrained to the designated transport route approved for OSOM vehicles.

It is likely that light vehicles associated with construction will include workers travelling to and from the from the centres of Wellington and Dubbo. Light vehicles travelling from Wellington will use Goolma Road and Twelve Mile Road. Light vehicles travelling from Dubbo will use Mitchell Highway, Goolma Road and Twelve Mile Road. The Project workforce will be encouraged to utilise car-pooling and ride-sharing from nearby centres to minimise construction and operational staff trips (refer to Section 6.11).



## 4 Road upgrades and temporary modifications

**Table 4.1 Development Consent Conditions related to Road Upgrades**

Condition No.	Condition
B27	<p><b>Designated Heavy and Over-Dimensional Vehicle Routes</b></p> <p>All over-dimensional associated with the development must travel to and from the site via Golden Highway, Saxa Road, Mitchell Highway, Goolma Road, Twelve Mile Road and the approved site access point off Twelve Mile Road, as identified in the 'Indicative OSOM Route' and 'Project Access Route' in the figure in Appendix 8, unless the Planning Secretary agrees otherwise.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of over-dimensional vehicles on the road network.</li> </ul> <p>To avoid any doubt, this consent does not allow the use of Twelve Mile Road east of the approved site access point off Twelve Mile Road for over-dimensional access unless the Planning Secretary agrees otherwise.</p>
B29	<p>Uungula Road, Wuuluman Road and Ilgingery Road must only be used by over-dimensional, heavy and light vehicles at the following locations to allow access between portions of the site:</p> <ol style="list-style-type: none"> <li>the secondary intersection on Uungula Road</li> <li>the four secondary intersections on Ilgingery Road</li> <li>between secondary intersection (A) and secondary intersection (C) on Ilgingery Road.</li> </ol> <p>In addition, heavy vehicles and light vehicles may use Uungula Road, Wuuluman Road and Ilgingery Road for the purposes of upgrading the intersections in B29(a) and B29(b) above.</p>
B30	<p><b>Road Upgrades</b></p> <p>Unless the Planning Secretary agrees otherwise, the Applicant must implement the road upgrades identified in Appendix 7, in accordance with the relevant standard and timing requirements in Appendix 7, and to the satisfaction of the relevant roads authority. If there is a dispute about the road upgrades to be implemented, or the implementation of these upgrades, then either party may refer the matter to the Planning Secretary for resolution.</p>

### 4.1 Road upgrades identified in Development Consent Appendix 7

Public Road upgrade works detailed in the Development Consent are summarised in Table 4.2. Figure 4.1 highlights (in yellow) the sections of Uungula Road, Wuuluman Road and Ilgingery Road that may be used for the purpose of accessing and undertaking the Uungula and Ilgingery Road intersection upgrades.

In the event of a dispute in relation to road upgrades either party may refer the matter to the Planning Secretary for resolution. Advice may also be sought if mediation is considered to be required to resolve the dispute.

**Table 4.2 Consent Appendix 7 - Road upgrades summary**

Road / intersection	Upgrade	Timing
Twelve Mile Road/Goolma Road	<ul style="list-style-type: none"> <li>Permanently remove and close the existing intersection.</li> <li>Design and construct a new intersection with a channelised right (CHR) turn lane and an Auxiliary Left (AUL) turn lane treatment, generally in accordance with Figures 2 and 3 in this TMP.</li> </ul>	<p>Prior to commencing construction.</p> <p>Note 1: The Planning Secretary has provided approval for construction to commence prior to completing this road upgrade. Refer to Section 4.1.1 and Appendix E for full details.</p>

Road / intersection	Upgrade	Timing
<b>Mitchell Highway/Goolma Road</b>	Placement of hardstand on both sides of Goolma Road at its intersection with the Mitchell Highway as shown on Figure 4 of Appendix 7 of the Development Consent.	Prior to commencing the use of Mitchell Highway / Goolma Road intersection for any over-dimensional traffic associated with the delivery of components for the development.  The Planning Secretary has provided approval for non-blade WTG OSOM deliveries through this intersection prior to completing this road upgrade. Approval was received 27/03/2026. Refer to Section 4.1.3 and Appendix G for full details.
Roads Authority: Dubbo Regional Council		
Twelve Mile Road	Reconstruct the pavement full length to the horizontal and vertical alignment, generally in accordance with Appendix N of the EIS, in compliance with TfNSW's Roadworks specifications – design and construct (TfNSW, 2020) or its latest version.	Prior to commencing construction
Twelve Mile Road	Construct the primary project site access, generally in accordance with Appendix N of the EIS.	Prior to commencing construction.
Uungula Road	Construct secondary intersection for safe exit and entry movements, and to provide adequate wind farm component access.	Prior to any use by traffic associated with the construction of the development.  Note: The Planning Secretary has provided approval for the minor relocation of this Secondary Intersection. Refer to Section 4.1.2 for full details.
Ilgingery Road	Construct secondary intersections for safe exit and entry movements, and to provide adequate wind farm component access.	Prior to any use by traffic associated with the construction of the development.  Note: The Planning Secretary has provided approval for the minor relocation of one Secondary Intersection on Ilgingery Road. Refer to Section 4.1.2 for full details.
Ilgingery Road	Extend stock grid approach seal to 20 m x 4.5 m each side of grid with a two-coat flush seal.	Prior to any use by traffic associated with the construction of the development.

The timing of upgrade works will be planned to minimise the impacts on major and minor road networks and facilitate cost effective construction phases.

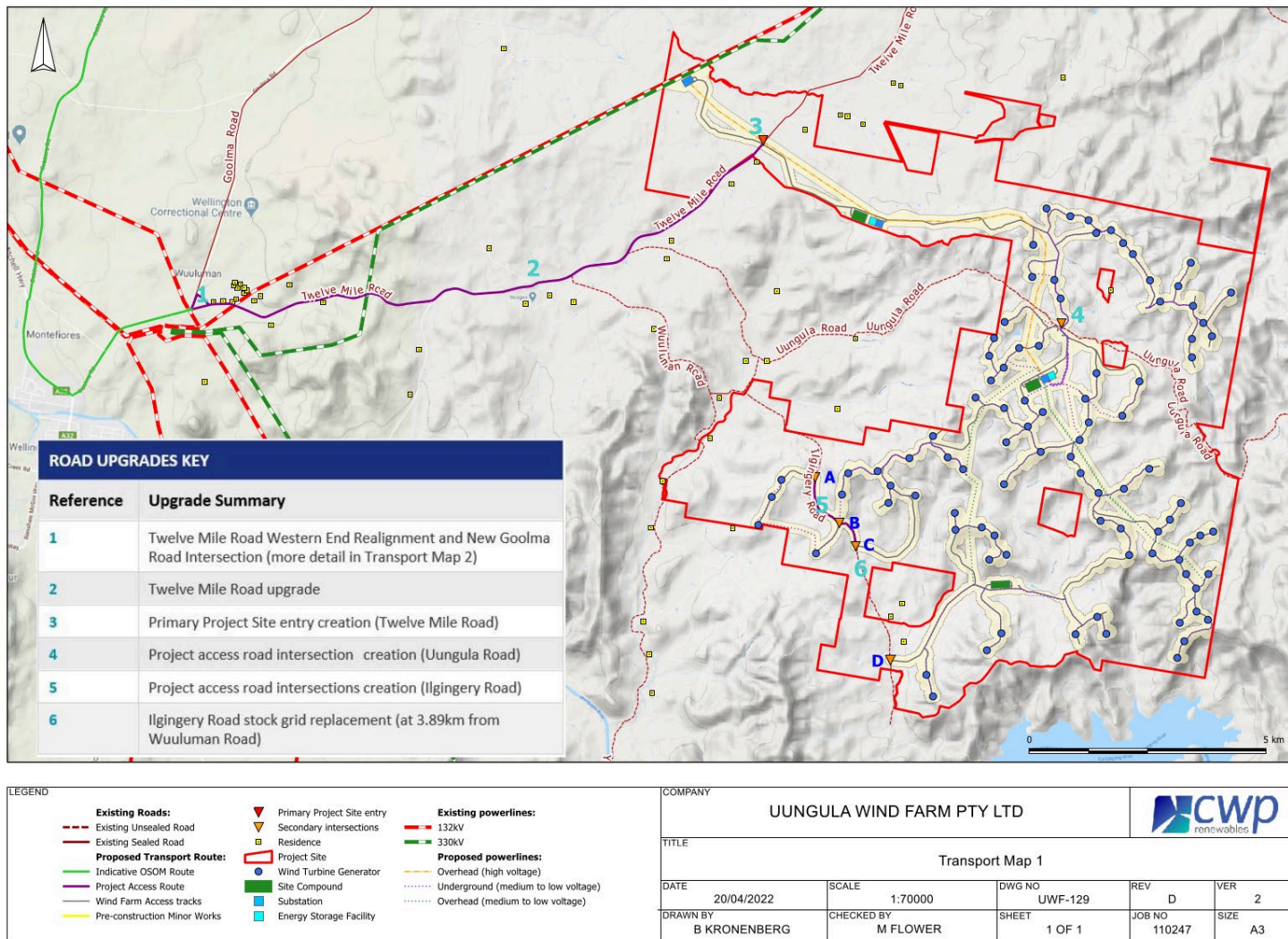


Figure 4.1 Development Consent road upgrades

### 4.1.1 Twelve Mile Road / Goolma Road intersection upgrade

An amendment request to Condition B30 of the Consent for the timing of the Goolma Road / Twelve Mile Road intersection upgrade was submitted by Squadron Energy (SQE) to the Department of Planning and Environment (DPE) on the 2 November 2023 for the Planning Secretary's consideration. The submission, with conditional support from TfNSW and the DRC, was to alter the completion of the upgrade 'prior to commencing construction' to 'prior to any use by over-dimensional vehicles'.

Approval from the Planning Secretary and the DPE was received on 23 November 2023 (Appendix E) to use the current intersection located on Twelve Mile Road and Goolma Road for light and heavy vehicles for construction:

- as long the new intersection is constructed and the old intersection is removed and closed prior to the route being used for OSOM.
- subject to the TMP being updated in consultation with TfNSW and Council, approved and implemented to safely manage construction traffic:
  - prior to construction commencing (for construction stage prior to OSOM)
  - further updated prior to OSOM using the new intersection.

As defined in Condition B30, OSOM movements associated with the project must not occur via the existing alignment of Goolma Road / Twelve Mile Road or commence until completion of the Goolma Road / Twelve Mile Road intersection upgrade.

The Twelve Mile Road/Goolma Road intersection upgrade commenced in April 2025 and was finalised in March 2026. The works must include the removal of the old intersection. It is noted that rehabilitation works associated with the decommissioned intersection may continue beyond March 2026, however from a functional perspective the new intersection is now operational for project and private traffic and the old intersection is no longer available for use.

The Wind Farm construction commenced on 31 May 2025. As such, some of the wind farm construction activities (and associated construction traffic movements) commenced prior to the completion of the Twelve Mile Road / Goolma Road intersection upgrades.

Below is a high-level summary of the key wind farm construction activities that may be undertaken prior to or concurrently with the Twelve Mile Road / Goolma Road intersection upgrade, with indicative start and finish dates.

**Table 4.3 Summary of the key wind farm construction activities**

Wind farm construction activity	Scheduled start	Scheduled finish
Construct main wind farm construction compound and facilities establishment and commissioning.	Early-mid April 2025	May 2025
Construct the wind farm switching station compound.	Early-mid April 2025	May 2025
Construct the wind farm switching station.	April 2025	Ongoing
Construct site access tracks to access the substation compound.	Early-mid April 2025	Ongoing
Construct the wind farm substation compound.	May 2025	Ongoing
Construct the wind farm substation.	May 2025	Ongoing
Commence construction of wind farm access tracks and turbine pads.	Early-mid April 2025	Ongoing

Wind farm construction traffic will access Twelve Mile Road via the existing Goolma Road intersection until such time as the new Goolma Road intersection has been constructed and opened to public traffic.

The safe access of wind farm construction traffic through the existing Twelve Mile Road / Goolma Road intersection will be managed through the use of temporary traffic control plans, a construction traffic and access management plan and Traffic Guidance Schemes (TGS) to be implemented by the contractor in association with the intersection upgrade (refer to Section 6.2 for details of these traffic management and control measures). These plans will incorporate safety measures to ensure use of the intersection prior to completion, will adequately protect road users and construction personnel.

#### **4.1.2 Approved relocation of secondary intersections – Uungula and Ilgingery Roads**

In September 2023, UWF obtained the Planning Secretary's approval (refer to Appendix F) for the relocation of two secondary intersections identified in the Development Consent Appendix 7, being:

- Uungula Road Secondary Intersection - relocated approximately 750 m to the north-west on Uungula Road, to accommodate internal road design
- Ilgingery Road Secondary Intersection - relocated approximately 300 m to the west along Ilgingery Road, to accommodate internal road design. The internal road will approach Ilgingery Road from the north-east, from Turbine No. 105.

The final locations of these secondary intersections will be subject to final design and micro-siting of internal access tracks.

#### **4.1.3 Approved Non-blade WTG OSOM deliveries Mitchell Highway/ Goolma Road intersection prior to upgrade finalisation**

In accordance with Condition 30, a request for the Project to utilise the current Mitchell Highway and Goolma Road intersection prior to the completion of upgrade works for the delivery of non-blade WTG deliveries, was submitted by SQE to DPHI on the 06/03/2026 for the Planning Secretary's consideration.

It is noted that for the purpose of the Planning Secretary request non-blade WTG OSOM deliveries account for all OSOM deliveries apart from the blades, including, but not limited to turbine components including nacelles, drive-trains, hubs, and tower sections, also subject to approval of this TMP. The Planning Secretary request also refers to the delivery of OSOM substation transformers prior to the completion of intersection upgrades. Substation transformers are scheduled for delivery from late- April. For clarity, delivery of the substation transformer would be subject to approval of a subsequent revision of this TMP, including a transformer specific OSOM Transport Management Plan. Any subsequent revision of this TMP would be subject to consultation with TfNSW and DRC and would be developed to the satisfaction of the Planning Secretary. Consultation on subsequent revisions of the TMP will occur once sufficient detail is available, noting that TfNSW and DRC would be provided with as much time as possible to review the updated plan. The delivery of WTG blades through the Mitchell Highway/Goolma Road intersection is excluded from the Planning Secretary request.

Non-blade WTG OSOM deliveries are scheduled to commence on the 30 March 2026. The Mitchell Highway and Goolma Road intersection upgrade, as required in accordance with Appendix 7 of the Development Consent, will be completed by 16 May 2026, pending delays. As such, deliveries are proposed to occur over a period 42 days (Monday to Saturday) prior to the intersection upgrade works being completed.

Utilising the schedule included on page 7 of the OSOM Transport Management Plan (Appendix D) and information from the transformer OSOM transporter, it is estimated that up to 42 non-blade high risk WTG OSOM tower component deliveries would occur prior to the finalisation of the Mitchell Highway/Goolma Road intersection upgrade. There would be approximately three to four OSOM deliveries per day.

In total, including OSOM deliveries that are not considered high-risk, there would be approximately 147 OSOM deliveries in the period prior to the finalisation of intersection upgrade works as required under Appendix 7 of the Development Consent.

OSOM vehicle dimensions are included within the OSOM Transport Management Plan (Appendix D) for reference.

To clarify, non-blade WTG OSOM deliveries would continue after the intersection upgrades have been completed and will continue until late 2026/early 2027 depending on any delays. With up to 93 WTG to be installed and each turbine having 13 major OSOM components (including blades), more than 1,200 OSOM deliveries may occur as part of the Project.

Following stakeholder consultation, the proposal received conditional support from TfNSW, DRC and EnergyCo. The support was received on the basis that:

- TfNSW and DRC both support the delivery of non-blade components prior to completion of road upgrades;
- the Mitchell Highway and Goolma Road intersection is currently in good condition with a large turning geometry;
- a swept-path assessment shows that the largest and widest non-blade OSOM vehicle will be able to turn left from the Mitchell Highway into Goolma Road without impacting any road infrastructure;
- traffic control will be in place to safely manage temporary road user impacts and facilitate the OSOM movements; and
- the commencement of deliveries prior to completion of these works will not impact the construction works or completion dates for the intersection upgrade.

Approval from the Planning Secretary was received on 27/03/2026 (Appendix G) to use the current Mitchell Highway and Goolma Road intersection prior to the completion of upgrade works for the delivery of non-blade WTG deliveries on the following basis:

- the Traffic Management Plan relevant to this stage of the development has been updated and approved prior to commencement non-blade OSOM movements;
- monthly updates on road upgrades and works, including timing, are provided to the relevant road authority and the Department;
- the road upgrades meet the requirements of the development consent; and
- all other requirements of the consent (including timing of any other relevant management plans and notifications) are adhered to.

The safe transport of non-blade WTG OSOM deliveries through the existing Mitchell Highway/Goolma Road intersection will be managed through the use of temporary traffic control plans, a construction traffic and access management plan and Traffic Guidance Schemes (TGS) (i.e. during construction a TGS would be in place, implemented by the contractor undertaking road works) to be implemented by the Contractor (refer to Section 6.2 for details of these traffic management and control measures). These documents will incorporate safety measures to enable the safe use of the Mitchell Highway and Goolma Road intersection for non-blade WTG OSOM deliveries prior to completion, ensuring adequate protection for road users and construction personnel.

Any OSOM delivery is subject to NHVR approval. The NHVR approval is separate from the approval of this TMP.

It is noted that EnergyCo are upgrading a number of intersections between the Port of Newcastle and the Central West Orana Renewable Energy Zone. For clarity, these works do not form part of the Planning Secretary request. The project would utilise these upgraded intersections. Confirmation has been received from Energy Co that intersection upgrade works required to facilitate non-blade WTG OSOM deliveries were complete as of February 2026. Squadron would not transport any blade or transformer high risk OSOM deliveries through these intersections until they are complete and a revised version of this TMP that captures these movements has been approved.

## **4.2 Road upgrades required along the OSOM transport route**

Road infrastructure upgrades will be required to enable over-dimensional vehicles to transport wind turbine components and other oversize equipment from the Port of Newcastle to the site of the Uungula Wind Farm.

The road infrastructure upgrades along the primary OSOM Transport route have been identified and assessed in Appendix M of the EIS and the updated OSOM Transport Management Plan – Non-Blade

Components (ARES, 2026) for the Uungula Wind Farm. The OSOM Transport route also overlaps with the 'Port to REZ' OSOM route proposed by EnergyCo for the Central West Orana Renewable Energy Zone (REZ).

No road upgrades are required for the secondary OSOM transport route for the control room and switchgear building. This route originates in South Australia and primarily follows national roads and state highways.

The approval of Modification 3 on 4 September 2025, as detailed in Section 2.1.1, includes an additional upgrade of the Mitchell Highway/ Goolma Road intersection to support OSOM blade deliveries.

EnergyCo has confirmed that the OSOM road infrastructure upgrades required for the Uungula Wind Farm are incorporated in the Port to REZ scope of work and the associated Review of Environmental Factors prepared by EnergyCo and approved by Transport for NSW (TfNSW). EnergyCo has commenced these works in 2025 and with necessary works to facilitate non-blade OSOM deliveries now complete, and works required to facilitate blade OSOM movements to be completed by the end of May 2026.

In developing the OSOM TMP-Non-Blade Components Revision 0, ARES Group have undertaken extensive consultation with TfNSW to understand and mitigate potential risks associated with road upgrades along the route. Consultation and subsequent OSOM TMP updates have also considered matters such as pinch points and the use of existing bridges (such as Denman Bridge), coordination with ongoing construction projects along the route, avoiding deliveries during school drop off and pick-up periods. These matters are addressed within the OSOM TMP Revision 0.

Any road upgrade not included within the EnergyCo Port to REZ scope that are required to facilitate OSOM movements, (i.e. those identified in Appendix 7 of the Development Consent), have either been completed or are currently under construction. It is noted that certain upgrades listed in Appendix 7 are required only to facilitate OSOM deliveries, and that the existing road network can accommodate other project-related vehicles in its current condition (e.g. the Mitchell Highway and Goolma Road intersection). OSOM deliveries will not occur until the relevant road works have been completed.

Noting that road works to facilitate non-blade OSOM deliveries and road works associated with the Goolma Road and Twelve Mile Road intersections have been completed, outstanding relevant road upgrade completion dates at the time of writing are;

- Mitchell Highway/Goolma Road Intersection (SQE) – 16 May 2026
- Port to REZ Road upgrades accommodating UWF WTG blades – 31 May 2026

The appropriate authorisations and permits were obtained from the Roads Authority prior to commencing the road upgrade work.

Upgrade works to the Goolma Road / Twelve Mile Road intersection, as required by Appendix 7 of the Development Consent, have been completed. Upon completion of the intersection upgrade the existing intersection would no longer be utilised, the existing pavement would be removed and the area would be rehabilitated.

Squadron Energy considers that remaining road infrastructure upgrades closer to the site, from the intersection at Goolma Road and Twelve Mile Road, are covered by the Uungula Wind Farm State Significant Development consent for the project.

## 5 Road maintenance / dilapidation reports

Table 5.1 Development Consent Conditions related to road dilapidation and maintenance

Condition No.	Condition
B31	<p><b>Road Maintenance</b></p> <p>The Applicant must:</p> <ul style="list-style-type: none"> <li>a. undertake an independent dilapidation survey to assess the: <ul style="list-style-type: none"> <li>• existing condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), prior to construction, upgrading or decommissioning works</li> <li>• condition of Twelve Mile Road on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29): <ul style="list-style-type: none"> <li>– within one month of the completion of any construction, upgrading or decommissioning works</li> <li>– on an annual basis during construction works</li> <li>– rehabilitate and/or make good any development-related damage</li> </ul> </li> </ul> </li> <li>b. repair Twelve Mile Road, on the transport route, and the sections of Uungula Road, Wuuluman Road and Ilgingery Road (described in Condition B29), if dilapidation surveys identify that the road has been damaged during construction, upgrading or decommissioning works</li> </ul> <p>in consultation with the relevant roads authority, to the satisfaction of the Planning Secretary.</p>

### 5.1 Dilapidation reporting

#### 5.1.1 Pre and Post-construction - Dilapidation reporting

A pre-construction dilapidation report was developed in 2023. The report was updated prior to commencing construction incorporating all upgrades to Twelve Mile Road. A post-construction dilapidation report will be developed following completion of construction works. Dilapidation surveys will be undertaken in accordance with the guidelines and standards established by Austroads and the Consent Condition B31.

The methodology for Project road dilapidations includes:

1. Pre-construction inspection, which records the existing condition of the relevant road pavements and forms the basis for future comparison.
2. Annual contractor inspections throughout the construction works period to identify any project-related damage that may require repair.
3. Post-construction inspection to record any observable change in the road pavement condition.
4. Ongoing monitoring during warranty and defects periods for repair work.

The extent of the dilapidation surveys for post-construction traffic impact is proposed along Twelve Mile Road on the transport route and the sections of Uungula Road, Wuuluman Road and Ilgingery Road, as per the pre-construction dilapidation survey.

The dilapidation report was provided to TfNSW and DRC for consultation and was approved by the Planning Secretary on 6 June 2023, prior to construction-related transport occurring on public roads, in particular the local road network.

The inspection method to determine the local road condition and transport as well as the survey methodology is:

- Pavement condition – a survey will be carried out using a video drive through. Each travel lane will be surveyed. A desktop inspection will be carried out of the video to locate any existing defects.

- Bridge and culvert condition – structural inspection and reporting.
- Structural condition of footpaths, buildings and other utilities in the vicinity of the Project – identification of existing defects.
- Signs – surveyed using the video from the pavement survey. This will identify any faded, damaged or out of specification minor signs.

Reporting will include street location, identifying features, photos and condition information for existing defects. This information will be collated and provided to Council (and TfNSW as relevant) prior to the use of the local road network for construction transport activities:

- Videos of public roads.
- Dilapidation reports.
- Details of any defects or damage identified during the inspection – to be recorded in a register and presented in a spreadsheet format.

The reporting will document the review record / comment form from relevant road authorities. Once prepared and reviewed by the relevant road authorities, the dilapidation reports are to be submitted for the approval of the Planning Secretary.

On an annual basis during construction and within one month of the completion of all construction activities, a report will be prepared to assess any damage to the road that may have resulted from the construction of the Project. The same methodology outlined in pre-construction will be implemented to undertake the survey.

Any damage resulting from construction traffic, except that resulting from normal wear and tear, would be repaired to pre-existing conditions. The proponent would outline the proposed works, design criteria, location and scheduling of the work for approval by the relevant road authorities. Alternatively, a monetary contribution amount would be negotiated. In the event of a dispute between the proponent and Council or TfNSW on repair techniques, designs and the like, the matter would be referred to the Planning Secretary for resolution.

### **5.1.2 Decommissioning – Dilapidation reporting**

Decommissioning of the wind farm would occur after approximately 30 years of operation. Dilapidation surveys will be undertaken prior to the commencement of decommissioning activities and within one month after the completion of decommissioning activities.

In accordance with Condition C2 of the Development Consent, the TMP will be updated to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning on the Site. At this time, the TMP will be updated to detail the extent and scope of the pre and-post decommissioning phase dilapidation surveys, which will be developed to suit the local and regional traffic and road conditions/ requirements at the time. The decommissioning phase dilapidation survey requirements will be developed in consultation with the relevant road authorities.

## **5.2 Road maintenance**

Any damage caused by the Project works will be raised to the relevant Council representative to seek work permit approvals to allow for remediation works. Repairs and damage resulting from construction traffic will be undertaken as soon as practicable after the damage is identified and within a response time deemed (in conjunction with Council and/or the relevant roads authority) as reasonable. Urgent repairs, which threaten the safety of road users would be undertaken immediately in consultation with TfNSW and Council.

Repair work undertaken before the post construction dilapidation report would be in accordance with restoration requirements found in Road Opening Permit/s. Photos will be taken and placed on record after repairs are undertaken. The Council and TfNSW representative/s would be invited to inspect works and provide sign-off.

Any repairs identified during the annual and post construction dilapidation survey will be undertaken in consultation with the relevant roads authority and to the satisfaction of the Planning Secretary.

## 6 Traffic management measures

Table 6.1 Development Consent Conditions related to traffic management measures

Condition No.	Condition
<b>B32</b>	<p><b>Unformed Crown Roads</b></p> <p>The Applicant must ensure any unformed Crown road reserves affected by the development are maintained for future use, unless otherwise agreed with the DPIE Crown Lands.</p>
<b>B33</b>	<p><b>Traffic Management Plan</b></p> <p>Prior to commencing road upgrades, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and Council, and to the satisfaction of the Planning Secretary. This plan must include:</p> <ol style="list-style-type: none"> <li>details of the transport route to be used for all development-related traffic</li> <li>details of the road upgrade works required by condition B30 of Schedule 2 of this consent</li> <li>details of the measures that would be implemented to: <ul style="list-style-type: none"> <li>• minimise traffic safety impacts of the development and disruptions to local road users</li> <li>• during construction, upgrading or decommissioning works, including: <ul style="list-style-type: none"> <li>– details of the dilapidation surveys required by Condition B31</li> <li>– temporary traffic controls, including detours and signage</li> <li>– notifying the local community about development-related traffic impacts</li> <li>– procedures for receiving and addressing complaints from the community about development-related traffic</li> <li>– minimising potential cumulative traffic impacts with other State significant development projects in the area</li> <li>– minimising potential conflict between development-related traffic and rail services, stock movements and school buses, in consultation with local schools, including preventing queuing on the public road network</li> <li>– implementing measures to minimise development-related traffic on the public road network outside of standard construction hours</li> <li>– minimising dirt tracked onto the public road network from development-related traffic</li> <li>– details of the employee shuttle bus service (if proposed), including pick-up and drop-off points and associated parking arrangements for construction workers, and measures to encourage employee use of this service</li> <li>– encouraging car-pooling or ride sharing by employees</li> <li>– scheduling of haulage vehicle movements to minimise convoy length or platoons</li> <li>– responding to local climate conditions that may affect road safety such as fog, dust, wet weather and flooding</li> <li>– ensuring loaded vehicles entering or leaving the site have their loads covered or contained</li> <li>– responding to any emergency repair or maintenance requirements</li> <li>– a traffic management system for managing over-dimensional vehicles</li> <li>– fatigue management.</li> </ul> </li> </ul> </li> </ol> <ul style="list-style-type: none"> <li>• comply with the traffic conditions in this consent</li> <li>d. include a drivers code of conduct that addresses: <ul style="list-style-type: none"> <li>• travelling speeds</li> <li>• procedures to ensure that drivers to and from the development adhere to the designated over-dimensional and heavy vehicle routes</li> <li>• procedures to ensure that drivers to and from the development implement safe driving practices</li> <li>• include a detailed program to monitor and report on the effectiveness of these measures and the code of conduct.</li> </ul> </li> </ul> <p>Following the Planning Secretary's approval, the Applicant must implement the Traffic Management Plan.</p>

## 6.1 Crown road reserves

The project has been designed and will be constructed to ensure that the future use of any unformed Crown Road Reserve will not be compromised by the development.

## 6.2 Traffic management and controls

### 6.2.1 Contractor traffic plans and controls

The civil contractor will prepare and implement a Construction Traffic and Access Management Plan (CTAMP) to further manage the construction related traffic. The CTAMP will identify and manage traffic management risks, requirements and controls for the Project, in line with this TMP.

Temporary traffic control plans will be prepared by the construction contractor in accordance with the TCWS manual and AS 1742.3. The plans will identify traffic control personnel, spotters and/or signage and devices, fencing, lighting and safety barriers on public roads.

Information and advance warning signage will be installed at the work sites and the surrounding road network for:

- protection of workers
- adequate warning of changes in road surface condition and the presence of personnel or plant engaged in work on the road
- adequate instruction of road users and their safe guidance through, around or past work site(s).

The potential traffic control measures to be used during construction work will include:

- single-lane alternate (stop / slow) operations which may result in short-term delays
- transport haulage operations and OSOM vehicle movements, which may impact other vehicles in the vicinity of haulage operations
- short-term lane closures with reduced speed limits, which may result in short-term delays.

Notifications would be prepared for the local community as outlined in Section 6.3 of this TMP.

### 6.2.2 Traffic Guidance Schemes (TGSs)

Detailed Traffic Guidance Schemes (TGSs) will or have been developed by the construction contractor for:

- intersection upgrade of Mitchell Highway / Goolma Road (Table 4.1), including for use by non-blade WTG OSOM deliveries prior to the completion of the intersection upgrade (to be implemented by the roadworks contractor)
- intersection treatment works at the primary Site access point off Twelve Mile Road and the secondary Site access intersections / cross-overs along Uungula Road and Ilgingery Road (Table 4.1)
- road modification works for OSOM deliveries, especially along the local road network (Table 4.1).

The project TGS will be documented separately from this TMP.

### 6.2.3 Traffic control devices and measures

On completion of short-term traffic control (one shift or less), all temporary traffic control signage and devices associated with the works / shift will be removed or covered. Any long-term traffic control devices and measures would remain in place until no longer required and then would also be removed.

Flashing arrow signs (vehicle or trailer mounted units) may also be used to protect the workforce and provide driver guidance during the installation, or removal of lane closures or during the initial implementation of traffic route alterations.

Portable variable message signs (VMS) may be deployed during the works to inform motorists of any significant changes to the road network.

Consideration will be given to installing truck mounted attenuators (TMAs) on vehicles to be used:

- to effect lane closures on multi-lane section of roads
- as shadow vehicles on mobile works as a device for traffic management and to protect workers.

Temporary speed zones will be implemented during road works to assist in controlling the speed of traffic through roadwork sites. Any reduced road speed zones would be implemented during works on public roads as per the Traffic Control at Work Sites (TCAWS) manual with approval from TfNSW. All non-applicable or redundant speed limit signs will be securely covered or removed (not turned around) during any period for which roadwork speed limits apply. Appropriate records will be kept for seven years of the locations, dates and times that road work speed limits are in operation.

### **6.2.4 Construction inspections and monitoring**

During construction, the site will be monitored by the site supervisor. Signage, delineation and pavement markings that impact on public road users will be monitored daily during site operating hours (as per the TCAWS manual guidelines).

The following monitoring will occur during construction:

- Inspection and maintenance monitoring for the local road access network to ensure road conditions are maintained in a safe state.
- Monitoring of internal access tracks to ensure safe access.
- Additional traffic monitoring may be undertaken in response to complaints or incidents regarding traffic.
- Inspection of traffic control in accordance with the TCAWS manual including:
  - daily pre-start and pre-close down inspections of short-term traffic control
  - weekly inspections of long-term traffic control
  - night inspections of long-term traffic control
  - pre-opening inspections of traffic switches.

Records including TGSs and Road Occupancy Licences (ROL) implemented for pedestrian management, lane closures, etc. will be maintained on site. Any changes required to the traffic control set up will be authorised by a holder of an TfNSW "Prepare a Work Zone Traffic Management Plan" or equivalent.

## **6.3 Local community notification**

The Community Consultative Committee (CCC) including community members and stakeholders held their first forum on Monday 11 February 2013 (Condition A20 of the Consent). Forums are typically bi-annual providing details of transport-related construction, traffic delays, detours and other traffic impacts.

On-going community consultation activities with relevant stakeholders, resident landholders, emergency services, local businesses, school bus companies and other major projects in the area may include:

- notifications, prior to commencement of any significant works, to local residents, local newspapers, and on the project website
- notifications on a case-by-case basis as construction progresses, including via the project website, shop front, local councils, local residents, newsletters and the Community Consultative Committee
- a dedicated telephone contacts list to enable any issues or concerns to be rapidly identified and addressed.

The following measures will be undertaken where the works impact on the travelling public:

- Changes including road and lane closures and road changes in advance using appropriate traffic control signage for motoring public.
- Variable Message Sign (VMS) will be utilised in advance of road closures, major detours and for expected traffic delays.
- VMS will be used for advance warning for long-term vehicle detours, which may be replaced with static signs during the detour period.
- VMS may be used to alert drivers to risks associated with OSOM movements, such as expected movement and upcoming pinch points, where approved by TfNSW
- Pedestrians and cyclists will be provided with advance warning traffic control signs and static signage for long-term detours.
- Warning signs will be placed near each of the primary and secondary site access points informing road users of construction traffic exiting and entering the site as per the TCAWS manual.

Uungula Wind Farm Pty Ltd is responsible for the dissemination of information to the community including impacts to residents, DRC, Warrumbungle Shire Council, motorists, businesses and the community. Table 6.2 summarises the proposed communications to be implemented for this TMP.

**Table 6.2 Communication notifications**

Notification	Communication
Community notice	Major Project milestones. Expected period of OSOM deliveries to affected business owners and residents at significantly affected intersections. Major traffic disruptions including detours, notice of expected traffic delays.
E-mail	General Project information. Direct contact with individuals/companies providing regular updates, e.g. sensitive noise, traffic affected.
Community information centre	General Project information. Major Project milestones. Construction access locations and designated OSOM and heavy vehicle transport routes.
Internet	Major Project milestones. Construction access locations and approved transport routes. Expected period of OSOM deliveries. Projected component deliveries. Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc.
On site briefings	As required.
Press Release	Major Project milestones. Long-term road closures.
Community Consultative Committee	Major Project milestones. Expected period of OSOM deliveries. Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc.
Variable message signs	Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc. OSOM movement and associated pinch points As required by other approvals, e.g. road occupancy licence.

Notification	Communication
Advanced warning signage	Construction access locations.
Community notice	Major Project milestones. Expected period of OSOM deliveries to affected business owners and residents at significantly affected intersections. Major traffic disruptions including detours, notice of expected traffic delays.

Any enquiries, complaints and/or compliments will be directed to the Project information line, via e-mail or to the project office.

## 6.4 Receiving and addressing complaints

A 24-hour telephone number, postal and e-mail address to receive complaints and respond to enquiries has been established during the construction and operation periods and is provided on the website. All community liaisons are recorded and responded to within 48 hours. The complaints register includes:

- date and time of complaint
- type of communication (telephone, mail, meeting, e-mail, etc.)
- name, address, contact telephone number of complainant / enquirer (if possible)
- nature of the complaint and enquiry
- actions and implementation time frame
- if no action was taken, the reason no action was taken
- when and how the complainant was notified of the outcome.

For traffic / transport related complaints, the following management measures will be considered:

- Additional traffic controls (e.g. signage, safety barriers, lighting).
- Additional on-site traffic management (e.g. staffed traffic controllers).
- Alternate access route (where permitted in accordance with the Development Consent or otherwise seeking agreement from the Planning Secretary).
- Variation to construction hours (where permitted in accordance with the Development Consent or otherwise seeking agreement from the Planning Secretary).
- Failure to comply with the Driver's Code of Conduct (Section 6.26) may result in dismissal of specific operator(s) from the Project.
- Road damage allegations will be investigated and if determined to be project-related, action will be implemented to rectify / repair the road damages.

## 6.5 Police and emergency services

Police and Emergency Services including the NSW Rural Bushfire Service will be notified of relevant construction activities in a timely manner. Regular updates will be provided to emergency services via emails and face to face. Updates may include changes to traffic control (e.g. short-term lane closures, stop / slow traffic control, etc.), road conditions and worksite access locations.

If the New South Wales Police Service, Emergency Services, TfNSW and TfNSW Transport Management Centre (TMC) are managing an incident, the Project team:

- will comply with all instructions and directions by the New South Wales Police Service, Emergency Services, TfNSW and TMC in relation to any proposed full or partial road closure(s)

- will not restrict, close, interfere with or obstruct the free flow of traffic on the existing highway or a local road contrary to the instructions of the New South Wales Police Service, Emergency Services, TfNSW and TMC
- shall act in accordance with any instructions issued by the New South Wales Police Service, Emergency Services, TfNSW and TMC including to suspend any of the construction contractor's work and to re-open the full or partial road closure(s).

Traffic will be maintained along existing public roads under traffic control throughout construction of the site accesses. The arrangements during operation will not change any access public roads for emergency vehicles.

## 6.6 Cumulative traffic impacts

There are several road projects that may conflict with the OSOM movements currently planned for Q1 2026 onwards. These projects have been identified within Table 6.3 and are regularly reviewed. Transport operations will check proposed worksites daily to manage transport movements through each work site. Known major developments or projects may also result in cumulative impacts in conjunction with the Uungula Wind Farm Project summarised in Table 6.3.

**Table 6.3 Cumulative impacts**

Project name	Project development status as at March 2026
Liverpool Range Wind Farm	Progressive commencement of operations from 2025 to 2027.
Forest Glen Solar Farm	In development with projected operation date of 2026.
Cobbora Solar Farm	In development with construction projected to commence in 2026.
Dubbo Project (formerly known as the Dubbo Zirconia Mine)	Project construction has begun with preliminary site works. Project is "construction ready", however, is unclear on a construction timeline.
Wellington North Solar Farm	Operational
Wellington Solar Farm	Currently under construction.
Maryvale Solar Farm	Construction commenced in July 2025, with operations commencing 2027.
Mumbil Solar Farm	Project shelved – suspension announced, or no progress observed for at least two years.
Stubbo Solar Farm	Currently under construction.
Wollar Solar Farm	Construction started Feb 2023. Modification application for expansion has been made
Spicers Creek Wind Farm	Approved 31 October 2024. Planned to commence early Financial Year 2027
Wellington South BESS (Bulabul)	Currently under construction.
Orana BESS	Currently under construction.
Hexham Straight	Operational
M1 Pacific Motorway Extension to Raymond Terrace	Currently under construction.
CWO Port to REZ road upgrades	Currently under construction. <ul style="list-style-type: none"> <li>- Upgrades to facilitate non-blade WTG OSOM component delivery was completed February 2026</li> <li>- Upgrades to facilitate WTG blade OSOM delivery are targeted for completion on 31 May 2026</li> </ul>
Central West Orana Transmission Project	Currently under construction.

Mitigation measures to reduce the impact of shared OSOM and heavy vehicle transport routes includes, but is not limited to the following:

- Notifying other wind farm contractors of the projected Uungula Wind Farm Project OSOM deliveries to minimise potential conflict between road transport movements along the common Golden Highway, Saxa Road and Goolma Road routes.
- Notifying other wind farm contractors of any changes to traffic control (e.g. short-term lane closures, stop / slow traffic control), road conditions and worksite access locations as a result of the Uungula Wind Farm Project.
- Regular meetings during concurrent construction activities between staff from all the wind farm / solar farm/BESS projects and their respective construction / transport contractors to discuss load deliveries and plans to minimise potential traffic congestion and conflicts.
- Independent scheduling of construction activities and deliveries for each project so that they do not overlap to minimise road transport movements.
- Region-wide traffic management.
- Shared road infrastructure upgrade works.
- Targeted dilapidation and reinstatement programs.
- Collective community consultation programs.

There are no known / planned road or other work sites adjacent or within the immediate area that would likely impact on the current traffic and transport network.

### 6.6.1 Communication Process

Squadron Energy will establish a Transport and Traffic Liaison Group (TTLG). The group is proposed to include Squadron Energy, TfNSW, DRC and EnergyCo. It is proposed that the group would initially meet fortnightly for the first 6 weeks upon commencement of OSOM deliveries for the project, reducing to monthly for the remainder of the OSOM deliveries. The frequency of meetings identified here is indicative only and frequency may increase or decrease in agreement with all parties. Additional meetings may be called under circumstances such as an incident, non-compliance or other urgent matter. The agenda of the TTLG can cover any aspect as relevant, however in general the meeting would address; status of EnergyCo road upgrades and other road works, delivery performance, safety and community matters, effectiveness of mitigation and monitoring, incidents and non-compliance, other coordination issues (such as special events or OSOM movements associated with other projects) and opportunities for improvement

Along the OSOM transport route, an OSOM delivery schedule will be provided to any ongoing road works/construction projects on the route (such as the Hexham Straight Project) to assist in coordinating movements and mitigating impacts on road users. An updated schedule would be provided on a weekly basis to a point of contact nominated by the road works project. Where deviations to any scheduled OSOM delivery will occur that may impact upon a road works project, Squadron Energy (or its OSOM Transport provider) will contact the road works project contact as soon as possible, to alert them of any changes.

A weekly schedule will be provided to councils along the OSOM route so that any events may be coordinated. Further engagement with councils in regard to deliveries, including those that may coincide with special events, would occur as required.

Daily communication would occur with the road work sites to alert them of approaching OSOM deliveries. This communication would occur directly between the OSOM Transport provider and a nominated person from the road work site. In general, the OSOM delivery would provide the road work site personnel with a half hour notice prior to passing through site, noting it is expected that the road work site personnel would already be aware of the daily movements through distribution of the weekly schedule.

Similarly, the Project would maintain appropriate coordination with other projects utilising the CWO Port to REZ OSOM route. While overarching logistical coordination is undertaken by the National Heavy Vehicle Regulator, Squadron Energy and its Contractor would engage with other relevant projects — including those identified by TfNSW during TTLG meetings — to facilitate the sharing of OSOM delivery schedules and coordination of movements where required. This consultation would commence upon approval of this TMP and would focus on projects with approved TMPs. It is expected that coordination would occur on a reciprocal basis, with all projects utilising the route taking shared responsibility for communication and movement planning to minimise cumulative impacts.

TfNSW will also be notified of OSOM movements with the issue of a weekly OSOM movement schedule to [roadmanager@transport.nsw.gov.au](mailto:roadmanager@transport.nsw.gov.au) and [development.renewables@transport.nsw.gov.au](mailto:development.renewables@transport.nsw.gov.au)

Squadron Energy and the OSOM transport provider will continue consultation with the TfNSW Coordinator General's Office, the Road Access Manager and Development Services Renewables throughout the duration of the project.

Squadron Energy and its contractor maintain contact with EnergyCo in respect to OSOM deliveries and the program of road upgrades that EnergyCo is delivering as part of the Central West Orana "Port to REZ" project. Fortnightly meetings with EnergyCo, Squadron Energy and its Contractors will continue for the duration of OSOM deliveries or until such a time that EnergyCo road upgrades are complete and EnergyCo agrees that ongoing consultation is no longer needed. Depending on EnergyCo's acceptance on the invite to the TTLG meetings, these meetings may be replaced by the TTLG. Where EnergyCo declines the invite to the TTLG these meetings would continue separately.

No high-risk OSOM movements for the Project will occur until the relevant CWO Port to REZ road upgrades for the specific components have been completed and confirmation received from EnergyCo. For clarity, non-blade components may be delivered once the applicable upgrades are complete (anticipated early March 2026), whereas upgrades required to accommodate wind turbine blade deliveries are anticipated to be completed by the end of May 2026.

VMS boards may be positioned at certain pinch points along the route, where approved by TfNSW, to alert motorists of OSOM deliveries passing through constrained sections of the network. This would be determined by the Special Permit Unit (in consultation with within TfNSW prior to commencement of deliveries as part of the permit process. Key parts of the route for consideration are:

- Denman Bridge
- Collaroy Bridge Merriwa
- Krui River Bridge

The exact location and number of VMS boards would be agreed with TfNSW as part of the approval to mobilise these devices.

The OSOM transport provider or its sub-contractor will obtain all ARTC and UGLRL rail crossing permits. This includes any necessary communication with ARTC and UGLRL in obtaining the permits and as required by the conditions of those permits. The Protection Officer would be engaged by the OSOM Transport Provider and would undertake any necessary liaison with the rail operator to facilitate any crossing on the day of the delivery.

## 6.7 Potential conflict management

### 6.7.1 Public transport / Rail services

There are no regular public bus services in the vicinity of the Project Site or the general Wellington / Wuuluman / Uungula region.

The nearest train station is located at Wellington, almost 20 km to the west. Rail services and the road network servicing this train station will remain unaffected by the Project works due to their location from designated transport routes and/or roadwork sites associated with the Project.

### 6.7.2 Stock movements

The designated OSOM and heavy vehicle transport route passes Traveling Stock Reserves (TSRs) on Saxa Road and Twelve Mile Road. The grazing industry uses TSRs for grazing stock. Local Land Services is responsible for the care, control and management of TSR land.

The movement of stock on a TSR or along a public road requires a permit. The permit enables stock movement over TSRs between sunrise and sunset and must be applied for at least two working days in advance. Approved stock warning signs must be displayed when stock is moving or grazing near or on a public road.

Scheduling of OSOM movements will generally occur overnight (for blades) and outside of the stock permit hours to minimise potential conflicts with stock movements. Light vehicle traffic will travel on the roads during standard construction hours and may encounter stock movements at TSRs. Heavy vehicles movements will generally occur during standard construction hours with potential for overlap with stock movements at TSRs.

To manage unavoidable conflicts with TSRs and travelling stock, heavy and light vehicle drivers will be advised of possible livestock encounters and their requirement to adhere to safe driving practises at all times. The Driver's Code of Conduct (Section 6.16) specifies the driver's requirement to reduce speed when encountering a stock warning sign.

A community briefing session was held in February 2026 to discuss the delivery of non-blade OSOM components and the potential impact on stock and sales. Non-blade deliveries will arrive onsite by 1pm, noting that stock trucks will have departed Twelve Mile Road by this time with most sales commencing at 11am.

To ensure clear communication, Squadron Energy, the EPC and OSOM transporter will:

- establish live communication channels (e.g. email, WhatsApp, etc.)
- ensure residents and stakeholders are added to these channels
- use these channels to communicate day-to-day updates on delivery schedules, time slots, and emergency processes

These measures will be in place from the start of deliveries. General community notification would continue in addition to these measures, and any complaints or enquiries will be processed in accordance with the process outlined in Section 6.4

### 6.7.3 School buses

There are no schools or school speed zones along the designated OSOM and heavy vehicle transport route. Several school bus routes operated by Ogden's Coaches use Saxa Road, Goolma Road and Twelve Mile Road which may be impacted.

Ogden's coaches were provided a copy of this TMP for review and comment. Discussions were held to identify measures to be implemented to minimise potential conflict with school bus movements. No feedback or response was provided by Ogden's. No further consultation has occurred.

The Ogden's Coaches website provides school bus routes timetables in the area. All school bus routes operating along Saxa Road, Goolma Road and Twelve Mile Road were reviewed. To minimise interruption to the school bus routes, OSOM deliveries will occur outside school hours:

- OSOM vehicle movements will not occur along Saxa Road / Goolma Road / Twelve Mile Road between 7:30 am and 8:30 am or 3:30 pm and 4:30 pm on a school day.
- OSOM loads will not leave the site entrance between the hours of 2:30 pm and 4:30 pm.

Lay-by areas and rest stops along the designated OSOM and heavy vehicle transport route will be utilised to minimise traffic flow restriction during bus operational periods. This would include the Elong Elong Truck Parking Area as included within the OSOM Transport Management Plan – Non blade components and other

preceding stops for any other loads as required and managed by the OSOM Transport provider's coordinator.

School bus operators will be notified of any planned works along school bus routes (Section 6.3). Traffic management restricting traffic flow along Saxa Road / Goolma Road / Twelve Mile Road will be avoided during school bus operational periods.

Heavy vehicle movements during school drop-off and pick-up (8:00 am to 9:30 am and 2:30 pm to 4:00 pm) on school days will be avoided (including along the OSOM transport route) where possible to prevent conflicts with school buses and associated traffic. The Contractor will ensure appropriate training is provided during inductions and provided in the Driver's Code of Conduct.

#### **6.7.4 Pedestrians and cyclists**

Some of the project construction works for the road upgrades and access will include the closure of some road shoulder areas. Even though cyclist and pedestrian travel is anticipated to be very low to negligible in the affected project area, safe cyclist and pedestrian access will be maintained at all times through or around worksites during the construction phase. Pedestrians and cyclists will be provided with advance warning traffic control signs and static signage for long-term roadworks.

Local bicycle and walking groups will be updated as part of ongoing consultation on traffic controls / conditions throughout the works.

#### **6.7.5 Commercial and residential property access**

There are no expected impacts to existing commercial or residential property access and these will be retained.

#### **6.7.6 Special events**

Special events, including Wellington Show (May), Dunedoo Show (February), Festival of the Fleeces in Merriwa (June) and Gulgong Show (February) are typically held annually. These and other similar events are generally located in urban centres away from the main through transport routes. The scheduled events are not expected to be impacted by the Project works.

To mitigate the risk of impacts associated with transport in the vicinity of any special event, particularly as it relates to OSOM deliveries, local councils will be provided a weekly schedule of all OSOM movements as identified in Section 6.6.1. Further engagement with councils in regard to special events would occur as required.

### **6.8 Traffic management outside standard construction hours**

In general, construction will be limited to the following hours:

- Monday to Friday, 7:00 am to 6:00 pm.
- Saturday, 8:00 am to 1:00 pm.

Construction works required to be undertaken outside of the standard construction hours may be undertaken in the following circumstances:

- Activities that are inaudible at non-associated residences.
- The delivery of materials requested by the NSW Police Force or other authorities for safety reasons including the delivery of components by OSOM vehicles from the Port of Newcastle.
- Emergency work to avoid the loss of life, property and/or material harm to the environment
- or otherwise approved by the DPHI.

Heavy vehicle deliveries / movements will generally take place during standard construction hours.

It is anticipated that, subject to NHVR permit conditions, the majority of the OSOM transport will occur outside of standard construction hours at night. If deliveries are scheduled to arrive to site later than 7:00 am, the provision for school bus routes (Section 6.7.3) prevails and OSOM deliveries would standby at a pull-over bay as identified within the OSOM TMP

The final scheduling of OSOM night transport is subject to review and approval by the NHVR and TfNSW as part of the OSOM transport permit approval process. Detailed operational procedures for night transport (such as managing oncoming traffic, overtaking and end-of-queue management) will be produced as part of the NHVR Permit approval process in consultation with TfNSW. These matters will be subject to inspection and audit by Squadron Energy as identified in Section 6.14 and Section 7.2.1.

Road safety during night transport would be ensured by a combination of vehicle illumination, pilot / escort vehicles and detailed operational procedures produced as part of the NHVR permit approval process.

## 6.9 Soil tracking / covered load management

The operators of all vehicles associated with the Project will maintain a high level of vehicle maintenance. The following requirements will be exercised at all times:

- ensure their vehicle complies with relevant State legislation in relation to roadworthiness and modifications
- undergo regular vehicle checks and maintenance
- ensure that all loads are appropriately covered to restrict debris onto the public road network
- ensure vehicles have correctly fitted mufflers to minimise noise disturbance.

In order to minimise the potential for on-site soil and other debris being tracked onto the public road network at site accesses, soil shaker grids will be installed at all site access points. Regular inspection and cleaning will be undertaken during the construction and commissioning works to inspect for soil tracking onto public roads.

## 6.10 Construction parking

Parking of staff vehicles and queuing of heavy vehicles on public roads during construction would be avoided as sufficient on-site parking and manoeuvring areas will be available. Designated areas for the standing / manoeuvring of trucks and parking would be provided within the Site during construction.

Staff car parking during wind farm construction and operation will be located within the Site and shall be designed in accordance with AS2890.1. Parking shall be on formed laydown and hardstand areas.

## 6.11 Car-pooling / ride-sharing / employee shuttle bus

The site workforce will be encouraged to use car-pooling and ride-sharing from nearby centres to minimise construction and operational staff trips. Information will be provided during inductions on the benefits of car-pooling / ride-sharing. There is the potential to transport construction staff to site by shuttle buses from off-site hubs, which if utilised, could reduce the peak staff traffic generation.

Detailed plans and strategies for shuttle bus or car-pooling activities will be investigated by the EPC Contractor and their sub-contractors. If the EPC Contractor elects to implement a shuttle bus, drop-off and pick-up locations and parking arrangements will be determined in consultation with council dependant on:

- the location of employee accommodation
- staff roster arrangements
- subcontractor requirements.

Pick-up and drop-off locations will consider dispersed car parking at multiple locations away from facilities, businesses and the Wellington CBD to reduce impacts to local residents and businesses. Shuttle bus services and details if implemented will be updated in the TMP.

## 6.12 Haulage vehicle scheduling

Haulage vehicle movements will be scheduled to minimise local traffic disruption and to mitigate safety risks. The timing of the deliveries must meet with the requirements of the NHVR permit, any out-of-hours (OOH) permits (where work to unload or load occurs immediately prior to or after the delivery), and ROL (where a licence applies to the delivery).

Fleet management measures include:

- scheduling local deliveries to site during standard work hours and where practicable outside of peak travel periods, to mitigate safety issues on local roads, reduce disturbance for residences and minimise convoy length or platoons
- limiting trips number per day by consolidating transport, where practicable
- all vehicles will enter and exit the site to/from the public road network in a forward direction only
- all vehicles generated by construction staff will be accommodated within on-site parking areas
- notifying and consulting with other wind farm contractors of the projected Uungula Wind Farm Project OSOM deliveries to minimise any conflict between road transport movements along the common Golden Highway, Saxa Road and Goolma Road routes
- scheduling of OSOM transport deliveries to avoid school bus routes along Saxa Road, Goolma Road and Twelve Mile Road, ensuring that OSOM vehicles do not use these roads between 7.30 am and 8.30 am and 3:30 pm to 4:30 pm, unless in case of an emergency. OSOM loads will not leave the site entrance between the hours of 2:30 pm and 4:30 pm
- OSOM transport that passes through any school zones along the designated OSOM and heavy vehicle transport route would be avoided during school drop-off and pick-up times (8:00 am to 9:30 am and 2:30 pm to 4:00 pm) on school days to prevent conflicts with school traffic and buses
- scheduling of OSOM transport deliveries to minimise platoons and convoys of vehicles along public roads, unless required by a NHVR permit
- managing transport operations including provision of warning and guidance signage, traffic control devices, temporary construction speed zones and other temporary traffic control measures
- undertaking community consultation before and during OSOM and night transport activities
- community information in regard to OSOM and heavy vehicle movements to include contact details to ensure community concerns are logged and addressed
- Liaising with other projects, including those associated with road works on the OSOM route, to manage deliveries. This would include providing a schedule of the Projects planned movements to these projects.

## 6.13 Local climatic conditions

As part of the Driver's Code of Conduct, vehicle operators are required to drive appropriately to local climatic conditions that may affect road safety such as fog, dust, wet weather and flooding. Site toolbox talks will be carried out for site personnel and vehicle drivers to update them on adverse road conditions and any site access issues.

## 6.14 Traffic management of OSOM vehicles

A NHVR permit is required for road access for OSOM vehicles along the public road network from areas of component import or manufacture. Any permits under the Heavy Vehicle National Law (NSW) for the use of OSOM vehicles on the road network will also be obtained prior to the commencement of OSOM vehicle transport tasks.

Pilot vehicles, transport restrictions and appropriate traffic management will be adopted to ensure safe passage from the public road network onto the site by OSOM vehicles to be used for WTG component delivery.

OSOM vehicles, generally vehicles that are greater than 25 m length or 3.5 m width, will have a pilot(s) as per the road authority requirements. Extremely long or wide vehicles may require a police escort. Other conditions in the TfNSW publication 'Additional Access Conditions: Oversize and over mass heavy vehicles and loads' will be followed.

Transport companies are responsible for obtaining all required approvals and permits from NHVR, TfNSW and local Councils and complying with approval conditions. As identified in Section 7.2.1 any approval or permit is subject to monitoring, inspection or audit by Squadron Energy.

The designated OSOM transport routes have been inspected and non-blade OSOM deliveries have been planned accordingly. It is noted that planning has included ongoing consultation with EnergyCo in regard to road upgrade works being delivered as part of the EnergyCo Port to REZ road upgrades project. Consultation has also occurred with TfNSW.

### Rest stop areas

Suitable rest stop areas in the designated OSOM transport route include Whittingham, Mount Thorley, Warkworth, Sandy Hollow, Gungal, Merriwa, Cassillis (Golden Highway) and Elong Elong. Rest area use may be shared and coordinated with OSOM deliveries for other wind farm development transport contractors and TfNSW to ensure sufficient available parking space for all project vehicles. Typically pilot or escort vehicles will scout ahead of the load to ensure a proposed rest area is clear and ready to use by the approaching OSOM vehicles.

Details on pull over bays are included within the OSOM TMP within Appendix D.

### Night transport

It is anticipated that the majority of OSOM transport will commence or occur at night when background traffic volumes are low. This will minimise disruption to other road users. During night travel, all OSOM transport vehicles and escort vehicles will be equipped with flashing lights and illumination of the load. Detailed operational procedures for night transport such as managing oncoming traffic, overtaking and end-of-queue management will be determined in consultation with TfNSW as part of the NHVR permit approval process. Final scheduling is subject to review and approval by NHVR and TfNSW as part of the OSOM transport permit approval process.

### Monitoring of high-risk OSOM delivery timing

Monitoring of high-risk OSOM deliveries would be the responsibility of the Project Manager (or delegate), with assistance from the Environmental Advisor. The OSOM transport provider would provide accurate and detailed information in a timely manner where required to support monitoring.

High-risk non-blade WTG OSOM loads will be tracked via the OSOM transport provider's fleet GPS, with movement timing and location data recorded electronically by the OSOM transport provider. Departures from the Port of Newcastle will generally be staggered at minimum 30-minute intervals to maintain appropriate separation between loads. Blade deliveries, subject to approval under a future revision of this TMP, are anticipated to occur earlier in the morning to optimise network conditions. Where multiple non-blade WTG OSOM deliveries are scheduled on the same day, the order of dispatch will be managed to maintain appropriate separation between loads and reduce the risk of subsequent vehicles closing the gap on

preceding loads. Smaller and less complex loads will generally be dispatched first. Loads requiring configuration changes (i.e. those that must be lowered prior to crossing Denman Bridge) will be scheduled later in the delivery sequence. These movements will be coordinated by the OSOM transport provider. It is noted that the 30-minute stagger interval is indicative. The OSOM Transport provider will coordinate the dispatch of loads depending on load type, weather conditions, constraints such as school bus travel times, other factors on the network such as road works and any direction from the Transport Network Operations Team. The flexible dispatch arrangement aligns with Squadron Energy's adaptive management approach.

The OSOM transport provider will actively monitor each movement in real time to identify delays, disruptions or congestion, including through known sensitive locations such as the Denman Bridge pinch point, bridges, narrow sections of the road network, the Hunter Expressway and school zone areas along the approved route. Post-movement reviews will be undertaken to assess delivery performance, adherence to the requirements of this TMP and the NHVR permit and identify opportunities to improve efficiency and reliability of future movements. These would occur informally on a daily basis as a debrief between the delivery team and OSOM transport provider coordinator. Any matters of significance would be raised with Squadron Energy for consideration under the adaptive management process outlined in Section 8.2.2. Information and data on OSOM deliveries would be included within the monthly letter report as also identified in Section 8.2.2.

A Squadron Energy representative will accompany the first OSOM delivery of the following components: WTG tower top component (longest tower section), substation transformer and blade. These deliveries would be observed for any issues, non-compliances, incidents or areas for improvement. An inspection report would be produced for each occurrence and a copy provided to road authorities where requested. Squadron Energy may accompany other loads as required, including night deliveries, to assess compliance with this TMP and the NHVR permit. In some cases Squadron Energy may only attend part of the journey.

An internal audit relating to OSOM deliveries would commence within 3 months of the approval of this TMP in accordance with 7.2.1. The specific scope of the audit would be determined within an audit plan, based on any risks or opportunities identified within the first 3 months of OSOM deliveries.

Where operational improvements are identified that do not alter the approved route, or do not significantly change the management measures within this TMP (where the degree of significance is agreed with TfNSW), these will be implemented through the adaptive management strategy outlined in Section 8.2.2. Any proposed changes that may affect approved traffic management arrangements will be subject to consultation with TfNSW.

### **Lowering of loads at Denman Bridge**

OSOM deliveries would be lowered sufficiently to pass through the Denman Bridge, to a maximum height of 5.7 m. designated pull-over bay on the Golden Highway, approximately 2 km east of Denman Bridge (when travelling from the Port of Newcastle to the Site), will be used to lower the trailer and reduce the overall transport height prior to reaching the bridge.

All load heights are measured at standard ride height before departure from Port of Newcastle. Subsequently, the OSOM transporter will measure the amount of lowering by measuring the change in trailer height to ensure overall height is at 5.7 m or less prior to crossing the Denman Bridge (e.g. if overall travel height is 5.8 m departing Newcastle, then the trailer would be lowered by at least 100 mm prior to crossing Denman Bridge).

After passing beneath Denman Bridge, the transporter will proceed approximately 350 m west of the bridge to a second designated pull-over bay, where the trailer will be returned to its standard ride height for the remainder of the journey to the Project site.

The pull-over locations are identified in the OSOM Transport Management Plan – Non-blade Components (ARES, 2026) in relation to Pinch Point 28 – Denman Bridge.

## Protection Officers at railway crossings

Conditions for rail crossings are defined within rail crossing permits to be obtained from ARTC and UGLRL. The OSOM transport provider would engage appropriately qualified Protection Officers who will liaise with the rail authority in accordance with any permit.

Rail crossing management approach details are included within the OSOM TMP. Where any high-risk OSOM vehicle is to cross a rail crossing, and where that action requires a Protection Officer to be in place the Protection Officer will be in place prior to OSOM delivery approaching the rail crossing and allowing sufficient time for the Protection Officer to manage the crossing. This will mitigate the risk of delays or the risk of any OSOM delivery having to pull over to the nearest approved stopping bay.

It is noted that only two load types require supervision from a Protection Officer, as follows:

- Blades deliveries require a Protection Officer at all ARTC crossings. A protection officer will accompany the blade deliveries, hence there will be no delays.
- Top towers require a Protection Officer to attend at the Dunedoo rail crossing. Where the Protection Officer is not accompanying the load the Protection Officer would be present at the rail crossing prior to the loads arrival. The load shall stop at the Cassilis Truck Rest Area and confirm that the Protection Officer is in place. This would be undertaken by the driver or pilot contacting the Protection Officer via radio or mobile phone to confirm the load may proceed.
- No Protection Officer is required at the UGL RL crossing on Saxa Road.

## 6.15 Fatigue management

The NHVR has set out guidelines for managing driver fatigue. Fatigue management is a very important component of the transport haulage task, in particular OSOM transport. Due to the nature of the OSOM transport, the appointed transport contractor will develop a fatigue management system as described by the NHVR. The fatigue management system will typically cover the following items.

- Scheduling and rostering – scheduling of trips and rostering of drivers must incorporate fatigue management measures.
- Readiness for duty – drivers are in a fit state to safely perform required duties.
- Fatigue knowledge and awareness – all personnel involved in the management, operation, administration, participation and verification of the Fatigue Management System can demonstrate competency in fatigue knowledge relevant to their position on the causes, effects and management of fatigue and the operator's fatigue management system.
- Responsibilities – the authorisations, responsibilities and duties of all positions involved in the management, operation, administration, participation and verification of their operations under the Fatigue Management System are current, clearly defined and documented and carried out accordingly.
- Internal review – an internal review system is implemented to identify non-compliances and verify that the activities comply with the Fatigue Management System standards and the operator's fatigue management system.
- Records and documentation – the operator will implement, authorise, maintain and review documented policies and procedures that ensure the effective management, performance and verification of the Fatigue Management System in accordance with the standards. Records that demonstrated the compliant operation of the Fatigue Management System are collected, stored and maintained to verify compliance.
- Health – drivers are to participate in a health management system to identify and manage fatigue risks.
- Workplace conditions – workplace environments and conditions must assist in the prevention of fatigue.
- Management practices – management practices are to minimise the risks relating to driver fatigue.

- Operating limits – operating limits will provide drivers and operators with the flexibility to effectively manage fatigue.

For drivers not covered by an approved Fatigue Management System, the following fatigue minimisation strategies should be adopted for journeys over two hours in duration:

- Schedule journeys carefully to avoid night driving and those times of day when falling asleep is most likely (2:00 am to 6:00 am).
- Ensure that the driver is well rested prior to commencing their journey.
- Plan when and where to take rests of at least ten minutes every two hours.
- Take into account road hazards and weather conditions.
- Adhere to the legal restrictions on driving times, distances, drug and alcohol consumption.
- Allow for unexpected delays.
- Know what to do in case of an emergency.
- Notify supervisor upon arrival at the final destination.

## **6.16 Driver's Code of Conduct**

### **6.16.1 Travel speeds**

All personnel will adhere to site and public road vehicle speed limits. Along external routes, speed limits will be observed as signposted unless driving conditions or restrictions imposed on the personnel or vehicle to drive at a lower speed.

In situations where driver's visibility and traffic safety on public roads is affected by weather related conditions such as heavy rainfall or fog, construction vehicles should reduce their speed limit until visibility and traffic safety has improved.

Sections of Saxa Road, Goolma Road, and Twelve Mile Road have adjacent TSRs. When being used, the TSRs must be appropriately signposted. Driver's must reduce their speeds when encountering any stock warning signage.

Internal traffic movements will be restricted to a maximum of 40 km/h on site and 10 km/h around personnel or as otherwise signposted. The speed limit within the construction compound will be 10 km/h. There would be a reduced speed limit of 15 km/h on approach to the primary and secondary site access intersections along Twelve Mile Road, Uungula Road and Ilgingery Road.

### **6.16.2 Adherence with designated transport routes**

All large vehicles, including OSOM vehicles, associated with the Project will follow the approved, designated transport routes and main roads near the project area to minimise impact to the local road network and road users. A map of the approved transport routes highlighting critical locations is attached to the Code.

Drivers are to ensure that they use the appropriate transport route for their vehicle type in accordance with the Project's Development Consent and Road Authority permits. The OSOM routes may be further restricted and the routes approved on the permit for the particular load / time and day from the road authority would prevail.

### **6.16.3 Safe driving practices**

All personnel will attend a site induction and show competence in the safety, quality and environmental requirements of the Project. The induction will include the Driver's Code of Conduct and the requirements set out in this TMP covering vehicle maintenance requirements, covering of loads, travelling stock reserves, and site-specific conditions relating to school bus routes / school zones.

Operators and drivers will be required to have general construction industry induction cards and will be required to attend ongoing general project and site-specific inductions.

All operators will be comprehensively trained with regard to community expectations and impacts from haulage operations. The induction will have a particular focus on operator behaviour. Operator competency and standards of behaviour will be continually assessed, and discipline procedures will be put in place to maintain compliance. Drivers are expected to hold and maintain an appropriate valid licence and operate any vehicle in a lawful manner. Assessment of driver competency and performance would occur in the form of weekly inspection reports (i.e. spot checks) and quarterly audits as identified within Section 7.2.1. Community feedback through any complaints or enquiries relating to worker driving (on-site or off-site) would also be considered.

Site toolbox talks will be carried out for site personnel and vehicle drivers to update on road conditions and any access issues. Vehicle operators will be advised of designated access routes and roadways during inductions.

Details of the traffic and access training and induction will focus on:

- objectives of the TMP
- performance goals
- mitigation measures required to be implemented
- traffic and access monitoring and reporting requirements
- incident investigation and response.

Training is to be provided prior to start-up of any traffic and access related management tasks and updated if task, equipment or procedures are expected to or have changed.

Heavy vehicles to be used on the Project will be compliant with NSW legislation and standards including the Heavy Vehicle National Legislation.

Drivers of vehicles shall be responsible for driving safely and in accordance with the road rules, exercising care and working in accordance with VMPs.

The following requirements would always be exercised:

- obey all the laws and regulations
- not drive whilst under the influence of alcohol, drugs, nor any medication which may affect their ability to drive
- be medically fit to drive at all times and must inform site co-ordinators if they have any medical condition that may affect their ability to drive
- drive in a considerate manner at all times and respect the rights of others to use and share the road space
- report all vehicle defects to their employer – serious defects must be corrected immediately, or an alternative vehicle supplied
- any vehicle accident resulting in injury and/or damage to property must be reported to the Police
- report any near misses
- only drive during designated construction hours when conducting project works (unless permission to conduct project works has been provided at other times and only in accordance with permits for travel from the relevant road authority)
- securely fasten and cover loads as appropriate
- keep their vehicle clean and in good mechanical condition to reduce any environmental impact.

The transport contractor is to develop and implement:

- safety initiatives for transport through residential areas and/or school zones (incorporating the requirements in the TMP and Code)
- a maintenance program for the heavy transport vehicles that is consistent with these safety requirements.

#### **6.16.4 Monitoring and reporting and Traffic related incidents**

All traffic related complaints will be managed in accordance with the project complaints handling procedures described in the Environmental Management Strategy. Complaints will be investigated and a report prepared on the circumstances of the complaints, risks arising and any non-compliance with project procedures. Failure to comply with any procedures for safe transport may result in dismissal of specific operator(s) from the Project.

In the event of a transport-related incident, the following management measures would typically be implemented:

- The construction contractor would coordinate with TMC's Traffic Operations Manager in event of incidents or undue congestion to minimise delays and improve public safety.
- In the event of a traffic accident occurring within the construction work sites or at other locations affected by the works, the project team is required to record the facts and photograph the approach to the accident site including the location of all safety devices and signs as soon as possible after the accident. A report with this information must be forwarded to the TfNSW TMC and WorkCover.
- A written incident notification is to be submitted within seven days after the Applicant becomes aware of an incident. Within 30 days of the incident occurring (or as otherwise agreed to by the Planning Secretary), the Applicant must provide a detailed report covering the following:
  - Summary of the incident.
  - Details of the outcomes of the incident investigation including causation.
  - Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence.
  - Details of communication with other stakeholders regarding the incident.
- The construction contractor will assign labour, plant and material to repair, make safe and/or cordon areas where an incident has occurred. For example:
  - in the event of vehicle breakdown, arrange for load to be retrieved and vehicle towed (without load)
  - in the event of pavement damage that affects road safety, repair damage as soon as possible
  - in the event of materials on roadway arrange crane to retrieve materials.
- Traffic control by qualified traffic controllers would be provided for emergencies associated with the Project within or adjacent to the work sites, roadways and footpaths.
- Planned works that will interfere with the incident or create additional delays to those road users already affected by incident would be re-scheduled until the incident has been resolved.
- TGSs and this TMP document would be reviewed and updated, in response to an incident, if deemed necessary.
- In the event of flooding or bushfire in the area, the construction contractor will allow for emergency or evacuation access for local properties via the worksite and/or internal road under instruction of emergency services and in accordance with emergency evacuation plans.

#### **6.16.5 General**

The following general rules / principles would always generally apply to the Driver's Code of Conduct:

- Obey all laws and regulations.
- Ensure that drivers have a copy of Road Authority permits.
- Drive with head lights on during daylight hours for increased visibility.
- Drive appropriately to local climatic conditions that may affect road safety such as fog, dust, wet weather and flooding.
- Always cover or tie down loads.
- Always give way to pedestrians and cyclists at designated crossings or where they have right of way.
- Do not queue across intersections.
- Wear seatbelts at all times.
- Obey the sign posted speed limits.
- Minimise tracking soil from construction vehicles onto the public road network from the Site.
- Avoid compression braking near sensitive receivers and in built up areas.
- Avoid the use of sounding of horns and reversing alarms to minimise traffic generated noise.
- Take extra precaution during school periods.
- Obey school speed zones.
- Take extra precaution and reduce speeds whenever stock warning signs or livestock are encountered on the road.
- Do not queue or idle on public roads or adjacent to sensitive receivers.
- Never drive between machines when they are being unloaded.
- Stick to the identified access tracks onsite.
- Follow all on-site signage (directional and speed).
- Undertake appropriate induction training where required as part of your task.

# 7 Incident and non-conformance notification and reporting

## 7.1 Incident notification and reporting

In accordance with the Development Consent, an incident is defined as:

- 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.

If the Applicant becomes aware of an incident, the Department must be notified via the Major Projects portal immediately. The notification must identify the Development (SSD-6687; Uungula Wind Farm) and set out the location and nature of the incident.

A subsequent written notification must be given to the Planning Secretary within 7 days after the Applicant becomes aware of an Incident via the Major Projects portal and will:

- a. identify the development and application number (Uungula Wind Farm; SSD-6687)
- b. provide details of the Incident (date, time, location, a brief description of what occurred and why it is classified as an Incident)
- c. identify how the incident was detected
- d. identify when the applicant became aware of the Incident
- e. identify any actual or potential Non-compliance with conditions of consent
- f. describe what immediate steps were taken in relation to the Incident
- g. identify further action(s) that will be taken in relation to the Incident
- h. identify a project contact for further communication regarding the Incident.

Within 30 days of the date on which the Incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the Incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must include:

- a. a summary of the Incident
- b. outcomes of an Incident investigation, including identification of the cause of the Incident
- c. details of the corrective and preventative actions that have been, or will be, implemented to address the Incident and prevent recurrence
- d. details of any communication with other stakeholders regarding the Incident.

## 7.2 Non-compliance notification and reporting

In accordance with the Development Consent, a Non-compliance is defined as:

- an occurrence, set of circumstances or development that is a breach of this consent.

If the Applicant becomes aware of a Non-compliance, the Planning Secretary will be notified in writing via the Major Projects website within seven days of becoming aware of the Non-compliance. The written notification must identify the development and the application number (Uungula Wind Farm; SSD-6687), set out the condition of consent that the development is non-compliance with, the way in which it does not comply, and the reasons for the Non-compliance (if known) and what actions have been or will be, undertaken to address the Non-compliance.

A Non-compliance which has been notified as an Incident does not need to also be notified as a Non-compliance.

Non-compliances or complaints that relate to the movement of high-risk OSOM deliveries will be reported to TfNSW.

### 7.2.1 Compliance Monitoring

Squadron Energy will monitor for compliance with the requirements of the EIS, Development Consent and this TMP (including compliance with any processes and mitigation measures) through implementation of the Project Environmental Management Strategy (Revision 005 approved by the Planning Secretary on 20/06/2025).

Section 6 of the Environmental Management Strategy outlines how non-compliances will be identified and investigated.

Non-compliance may be identified in a number of ways, such as internal or external audit, inspection, incident investigation, community and stakeholder complaints, or review. Where a non-compliance has been identified:

1. The non-compliance will be notified to the UWF Project Manager and Project Environmental Advisor.
2. The UWF Project Manager and Project Environmental Advisor (or delegate) will ensure that the noncompliance is investigated by the responsible party (the party responsible for the non-compliance) in order to ascertain the source, reason, and implications of the non-compliance.
3. Corrective/ preventive actions will be developed and implemented by the responsible party, in consultation with UWF, and may include:
  - amendment of the EMS or relevant strategy, plan, program, or procedure
  - additional control measures
  - staff training
  - disciplinary actions.
4. The responsible party will prepare and submit a report to UWF which documents the above information.

Any stakeholder or community complaints will be managed in accordance with Section 6.4 of this TMP and Section 5.4 of the Environmental Management Strategy.

Where a non-compliance has occurred, action will be undertaken in accordance with Section 6.16.4.

#### Monitoring of Compliance with this TMP

Section 6 of the Environmental Management Strategy provides information on the Independent Environmental Audits that will be undertaken in accordance with Condition C15 of the Development Consent. These audits may review matters addressed within the EIS, Development consent and this TMP.

As outlined in Section 6 of the Environmental Management Strategy, Squadron Energy will undertake internal audits to verify compliance with the Developments statutory approvals, the Environmental Management Strategy, and the associated Strategies, Plans and Programs, including the TMP. An audit plan will identify the scope of the audit, timing of the audit, and the person(s) who will conduct the audit. The scope of the audit will be dependent on any perceived risks, complaints, incidents or non-compliances within the audit period.

The internal project audits will be coordinated by the Project Environmental Advisor together with the Project Manager.

Internal audits relating to traffic management are currently scheduled, by scope, as follows;

- OSOM transport, including any night travel requirements and adherence to any NHVR permit – to commence within 3 months of the approval of this TMP

- General matters – to commence within 6 months of the approval of this TMP and 6 monthly thereafter until completion of the project

In addition to audits, the Project would undertake monitoring of general traffic management (as outline in Table 7.1). The Project would also undertake monitoring for OSOM deliveries as captured within Section 6.14 and outlined in Table 7.1.

Table 5 of the Environmental Management Strategy sets out monitoring required for the project, including monitoring requirements for traffic related matters. Relevant matters to this TMP are captured in Table 7.1.

**Table 7.1 Summary of Monitoring**

Type of Monitoring	Condition Reference	Monitoring requirement and method	Timing / frequency	Responsibility	Reporting output and submission requirements
OSOM Transport monitoring	Condition B27	Monitoring to ensure all OSOM vehicles associated with the development are travelling to and from the site in accordance with the approved OSOM Route per the OSOM TMP and the development consent, the conditions of this TMP and the NHVR permit.  Monitoring of timing of deliveries via GPS or other means such as gatekeeper records plus reporting any issues where they occur  SQE accompanying the first tower top section delivery, substation transformer delivery, blade delivery  Internal audit of outcomes against commitments in TMP	Ongoing daily monitoring for the duration of OSOM deliveries.  Review of delivery data <sup>1</sup>	EPC Contractor and OSOM Transport Provider – ongoing monitoring and correspondence to SQE to raise any issues  SQE – review of daily data, accompanying first loads, develop monthly report and internal audits.	OSOM delivery data and correspondence as required  Load Accompaniment reports  Internal audit reports  Monthly OSOM delivery report
Project vehicle monitoring	Condition B28	Monitoring to ensure that all heavy and light vehicles associated with the development are travelling to and from the site via Twelve Mile Road (west) and the approved site access point on Twelve Mile Road (unless the Secretary agrees otherwise).	Ongoing daily monitoring for the duration of the development. During weekly environmental inspections.	EPC Contractor. The proponent may also conduct monitoring in relation to vehicle movements through site inspection and audits.	Environmental inspection checklists. Contractor records. Internal audit reports
Traffic monitoring	Condition B33	Monitoring of the effectiveness of the measures within the TMP	During weekly environmental inspections	EPC Contractor. The proponent may also conduct monitoring in relation to traffic management	Environmental inspection checklists. Internal audit report

Type of Monitoring	Condition Reference	Monitoring requirement and method	Timing / frequency	Responsibility	Reporting output and submission requirements
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through site inspection and audits.

1. It is noted that due to the flexible approach to staggering load dispatch and the number of factors that could contribute to travel timing such as weather or congestion, any data captured would be used for the purpose of determining areas within the route that present a risk and opportunities for improvement, rather than "compliance" with travel times

**Corrective and preventative measures**

Where monitoring, inspections, audits or post-movement reviews identify non-compliances, incidents, near misses, or operational inefficiencies, corrective actions will be implemented commensurate with the nature and risk of the issue. Corrective actions may include adjustment of dispatch intervals, modification to load sequencing, additional escort or traffic control measures, targeted driver briefings, refinement of communication protocols with road work sites, or temporary suspension of movements where required to address safety or network performance concerns.

Preventative actions will also be identified to reduce the likelihood of recurrence. These may include updates to delivery scheduling procedures, revision of pre-start briefings and route-specific risk assessments, additional training for escort and transport personnel and enhanced coordination with relevant stakeholders.

All corrective and preventative actions will be documented and tracked to close-out under the adaptive management framework outlined in Section 8.2.2. Where actions require amendment to approved traffic management measures, consultation with TfNSW and DRC and approval of the Planning Secretary will occur prior to implementation.

## 8 Other

### 8.1 Stakeholder consultation summary

A number of stakeholders were consulted during the iterative development and preparation of this TMP. Details of the consultation are summarised in Table 6.

**Table 8.1 Stakeholder consultation during preparation of the TMP**

Stakeholder	Date	Consultation	Outcome / Response
Dubbo Regional Council	3 December 2021	Draft TMP emailed to DRC for review and comment.	DRC provided their comments on 22 March 2022.
	5 April 2022	A meeting was held between DRC and CWPR, to discuss the comments that DRC had provided on 22 March 2022.	Agreement was reached between DRC and CWP - all comments resolved. The Draft TMP was amended accordingly.
	6 April 2022	Email sent to DRC containing a summary of the meeting outcomes. A table identifying all DRC comments and CWPR responses was included.	No further response received from DRC.
	15 October 2025	Revised TMP v006 was emailed to DRC for their review and comment.	
	29 January 2026	Council provided written confirmation that they were satisfied with the contents of the Traffic Management Plan v006A	No further action until subsequent TMP submissions are required
Transport for NSW	December 2021	Draft TMP emailed to TfNSW for review and comment.	TfNSW provided their comments on 31 January 2022. The Draft TMP was amended to address the TfNSW comments.
	21 April 2022	A table identifying all TfNSW comments and CWPR responses was emailed to TfNSW.	No further response received from TfNSW.
	22 September 2023	Revised TMP v004 was emailed to TfNSW for their review and comment.	TfNSW provided comments on 3 November 2023.
	5 March 2024	Alignment workshop held at Parkes Office with GE, SQE and TfNSW	TMP was amended accordingly.
	17 April 2024	Follow up meeting held at Parkes Office with GE, SQE and TfNSW.	TfNSW provided further comments for TMP review.
	1 July 2024	Received letter from TfNSW outlining further comments.	TMP updated accordingly.
	29 July 2024	Email correspondence from TfNSW clarifying final comments for TMP review.	
	20 August 2024	Email correspondence from TfNSW clarifying final comments for TMP review.	
	15 October 2025	Revised TMP v006 was emailed to TfNSW for their review and comment.	
	21 November 2025	Received letter from TfNSW outlining comments on updated TMP	

Stakeholder	Date	Consultation	Outcome / Response
	1 December 2025	Online meeting with TfNSW to clarify comments	TMP updated accordingly.
	17 February 2026	Online meeting with TfNSW to clarify comments	TMP and OSOM Transport Management Plan updated accordingly.
EnergyCo	20 August 2025	Coordination Kick-off Initial liaison meeting with EnergyCo's road upgrade team to establish a consultation framework. Project schedules were exchanged, and points of contact designated. EnergyCo shared its Port-to-REZ upgrade timeline, ensuring UWF was aware of works on state roads (including Hunter Expressway approaches) being handled by EnergyCo. This meeting opened a continuous dialogue to align OSOM route readiness.	
	17 September 2025	Progress Meeting Follow-up coordination with EnergyCo to review route preparation status. EnergyCo confirmed overhead line adjustments on the route were on track for completion by mid-December 2025, and that all major road upgrades for OSOM access (except the two intersections under Squadron Energy's scope) would be finished by early 2026. UWF's team presented the anticipated OSOM delivery schedule (targeting non-blade convoys in Q1 2026, blades by Q2 2026), which aligned with EnergyCo's timeline. Both parties agreed to continue meeting monthly.	Adjustment to delivery schedule
	26 November 2025	Route Readiness Update Joint review meeting with EnergyCo to finalise route preparation status. EnergyCo reported all overhead wiring adjustments along the haul route were completed by the end of Nov 2025, slightly ahead of schedule, and that the last Port-to-REZ road upgrade was on target for mid-February 2026. No new issues affecting the Hunter Expressway segment were identified. UWF confirmed our intended timeline for commencing OSOM convoys (pending DPHI approval of the early-delivery request). Both teams noted that coordination had been successful to date, with regular information exchange to continue	Adjustment to delivery schedule
	28 January 2026	A meeting was held with EnergyCo to provide updates on road intersection upgrades program for the Port of Newcastle to Renewable Energy Zone road network and coordination for timing of OSOM movements for non-blade and blade deliveries.	Adjustment to delivery schedule
	11 February 2026	A meeting was held with EnergyCo, UWF, GE Vernova and ARES to provide updates on road intersection upgrades	Adjustment to delivery schedule

Stakeholder	Date	Consultation	Outcome / Response
		for the Port of Newcastle to Renewable Energy Zone road network and coordination for timing of OSOM movements for non-blade and blade deliveries. (Meetings now being scheduled for fortnightly)	
	2 March 2026	An email was received from EnergyCo providing a status update on the completion of Port to REZ Road works	Adjustment to delivery schedule
School bus operator – Ogden's Coaches	20 August 2024	Email correspondence from TfNSW clarifying final comments for TMP review.	
	9 February 2022	Phone call to discuss the Project and the TMP. Email to provide a copy of the TMP.	Nil

## 8.2 Review and improvement

This TMP and its implementation will be reviewed at least every six months from commencement of construction including:

- client, site personnel and relevant agency comments
- environmental monitoring records
- complaints
- incident reports
- non-compliance reports
- changes in organisational structure
- changes in construction methodology
- changes in legislation and standards.

The effectiveness of the TGSs and site implementation will be assessed against relevant criteria. This will be reported monthly by the construction contractor to the Principal and during inspections, audit, incident management and compliance tracking. As appropriate, and in accordance with the EMS, reviews and updates may be made to the project risk register, objectives and targets of the TMP.

Specific triggers for TMP Review and Revision include:

- within three months of a submission of an audit report under condition C15 of Schedule 2 of the Development Consent
- prior to commencement of construction (per Planning Secretary Approval letter, Appendix E)
- prior to OSOM use of the new Goolma Road / Twelve Mile Road intersection (per Planning Secretary Approval letter, Appendix E)
- prior to commencing the wind farm Operations phase
- prior to commencing the wind farm Decommissioning phase.

### 8.2.1 Revisions to the Traffic Management Plan to address the High Risk OSOM non-blade movements

This TMP has been revised in response to TfNSW Development Services Renewables Team comments on Version 006 and Version 006A as it relates high risk non-blade OSOM movements. This revised plan,

Version 006B will accompany a revised Planning Secretary request under Condition B30 (also updated for TfNSW comments). This TMP has been prepared in consultation with TfNSW Development Services Renewables Team and approved by the Planning Secretary before commencing the high-risk (non-blade WTG) OSOM movements.

The Project will detail WTG blade and substation transformer OSOM deliveries within subsequent revisions of the TMP. In accordance with Condition B33 any further revisions to this TMP will be subject to consultation with TfNSW and DRC and will be developed to the satisfaction of the Planning Secretary. Squadron Energy acknowledge that this revision of the TMP does not allow for the delivery of substation transformers or WTG blades.

At this stage, consultation with TfNSW and DRC in relation to WTG blade and substation Transformer deliveries is expected to commence in mid-March 2026.

## **8.2.2 Review of TMP following approval of Planning Secretary Request and commencement of OSOM deliveries**

The Uungula Wind Farm will be one of the first renewables projects to utilise the upgraded intersections associated with EnergyCo Port to REZ road upgrades for OSOM deliveries. Significant planning and consultation have occurred in preparation for these deliveries. Squadron Energy acknowledge that by nature of these upgrade works, some unidentified risks may remain.

As such, following the approval of this TMP for Modification 3 and the approval of the Planning Secretary request under Condition B30 for the use of the Mitchell Highway/Goolma Road and Goolam Road / Twelve Mile Road intersections for non-blade WTG OSOM movements prior to the completion of upgrade works, Squadron will implement the following review mechanisms:

1. Transport and Traffic Liaison Group - as described in Section 6.6.1, a TTLG would be established. Any matters related to OSOM delivery performance, the effectiveness of monitoring and management measures and any incident or non-compliance would be reviewed.
2. Where operational adjustments are identified as necessary, or where mitigation measures or monitoring outcomes indicate that refinements may be beneficial, Squadron Energy will consult with the relevant road authority to agree an appropriate response. Any agreed refinements would be documented in writing with the relevant road authority and noted with DPHI, which may occur through correspondence or meeting minutes to facilitate timely implementation.

This adaptive management approach allows for practical and proportionate refinements to be implemented efficiently, without necessitating immediate formal revision of the overarching management documentation, unless otherwise required.

3. Squadron Energy will prepare a letter report on a monthly basis and will provide a copy to TfNSW, DRC and DPHI. The letter report will include a review of the following as it relates to the non-blade WTG OSOM deliveries through the network, including the Mitchell Highway / Goolma Road intersection that is the subject of the Planning Secretary request:
  - The effectiveness of the mitigation measures applied to the deliveries, including those implemented as part of any conditional approval requirements.
  - Any monitoring that was undertaken
  - General performance of OSOM deliveries including any safety concerns and interactions with other projects
  - Any complaints, incidents or non-compliances.
  - Any opportunities for improvement.
  - An update on timing of the completion of intersection upgrades.

Any stakeholder feedback on the monthly report would be addressed in consultation with the stakeholder and in accordance with the adaptive management approach described below.

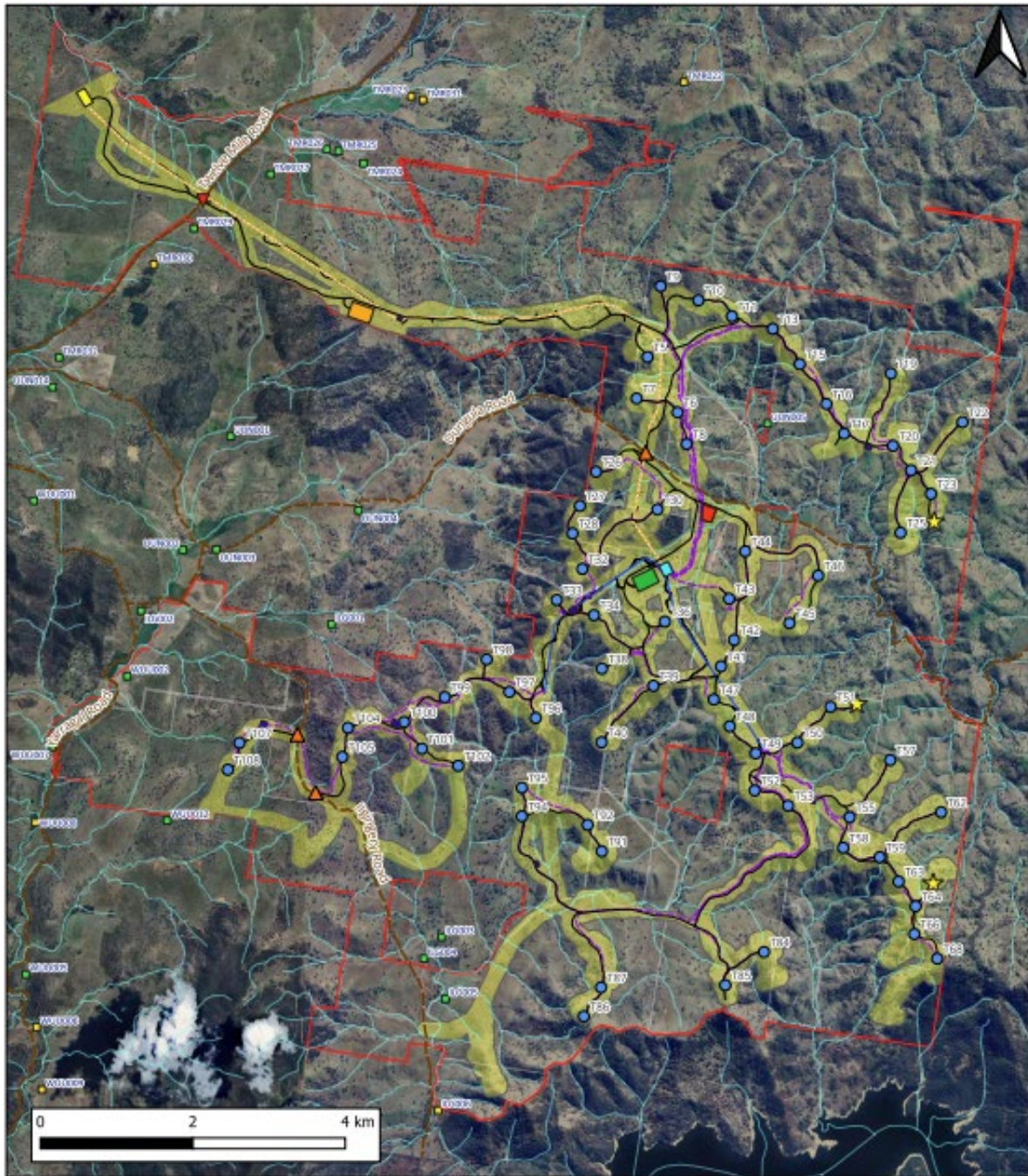
The TMP would be updated in accordance with the requirements of Condition C2 (including submission of an incident report that relates to OSOM deliveries) and where otherwise required, including where consultation with the relevant road authority or DPHI determines that a formal revision is warranted, noting that routine operational refinements as agreed with the road authority may be implemented in accordance with the adaptive management approach. Squadron Energy would provide sufficient time for stakeholder review where any TMP update is required and would provide notice to the relevant stakeholders that an update is to occur as soon as known.

## 9 References

The following references, guides and documents were used in the development of this TMP:

- ARES Group “Uungula Wind Farm OSOM Transport Management Plan – Non-Blade Components Revision 0” March 2026
- Austroads “Guide to Road Design Part 3: Geometric Design (Edition 3.3)”, April 2020
- Austroads “Guide to Road Design Part 4: Intersections and Crossings – General”, 2017
- Austroads “Guide to Road Design Part 4A: Unsignalised and Signalised Intersections”, October 2017
- Austroads “Rural Road Design: A Guide to the Geometric Design of Rural Roads”, 2003
- CWP Renewables “Uungula Wind Farm: Environmental Management Strategy”, 2021
- CWP Renewables “Uungula Wind Farm – Amendment Report”, November 2020
- CWP Renewables “Uungula Wind Farm – Submissions Report”, November 2020
- CWP Renewables “Uungula Wind Farm (SSD-6687): Response to Request for Additional Information”, 22 January 2021
- NSW Centre for Road Safety “NSW Speed Zoning Guidelines (Version 4.0)”, 2011
- NSW Department of Planning, Industry and Environment “Development Consent for Application number SSD 6687”, 7 May 2021
- Relevant Austroads guides and TfNSW / RMS supplements
- Rex J Andrews “Transport Management Plan - Newcastle port to Uungula Windfarm REV08”, August 2024.
- RTA “Delineation Guidelines: Parts 1 to 19 & Appendices A & B”, assorted dates
- Samsa Consulting “Uungula Wind Farm Project: Transport Assessment”, April 2020
- Standards Australia “AS 1742.1 – 2003: Manual of uniform traffic control devices, Part 1: General introduction and index of signs”, 2003
- Standards Australia “AS 1742.3 – 2009: Manual of uniform traffic control devices, Part 3: Traffic control for works on roads”, 2009
- Standards Australia “AS 2890.1 – 2004: Parking Facilities, Part 1: Off-street car parking”, 2004
- Transport Management Centre “Road Occupancy Manual”, 14 May 2015
- Transport for NSW “Additional Access Conditions: Oversize and overmass heavy vehicles and loads”, October 2020
- Transport for NSW “Traffic Control at Work Sites, Technical Manual – Issue 6.0”, 14 September 2020

# Appendix A Approved wind farm layout



WTG (69)		Public Roads		Company	
Project Site Boundary		Waterways		SQUADRON ENERGY	
Development Corridor		Access tracks		SQUADRON ENERGY	
<b>Proposed Powerlines</b>		Primary site entrance (RHT)		Title	
Internal Overhead Line		Secondary Intersections		UUNGULA WIND FARM - FINAL LAYOUT PLAN	
Internal Underground Line		Permanent Metmast		Date	7/11/2023
Metmast Underground Line		Batch Plant		Projection	GDA94 Zn55
External Overhead Line		Collector Sub		Drawing No	UWF-02-FLP
<b>Residences</b>		Extra Work Space		Rev	2
Non-Associated Residence		Site Compound		Ver	A
Associated Residence		Switching Sub		Drawn By	A GORDJIN
		Temporary Construction Compound		Checked By	S KIDZIAK
				Sheet	1 OF 1
				Proj Code	UWF
				Site	A3

## **Appendix B OSOM transport route maps**





# **Appendix C Additional compliance requirements**

Condition	Condition wording	Commitment to compliance
<b>Evidence of consultation</b>		
<b>A9</b>	<p>Where conditions of this consent require consultation with an identified party, the Applicant must:</p> <ol style="list-style-type: none"> <li>a. consult with the relevant party prior to submitting the subject document to the Planning Secretary for approval; and</li> <li>b. provide details of the consultation undertaken including: <ul style="list-style-type: none"> <li>- the outcome of that consultation, matters resolved and unresolved; and</li> <li>- details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.</li> </ul> </li> </ol>	<p>Details of consultation completed with an identified party are included in this Management Strategy/Plan/Program.</p>
<b>Compliance</b>		
<b>A13</b>	<p>The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.</p>	<p>Employees, contractors, and sub-contractors will be made aware of, and are instructed to comply with the conditions of the consent, including the requirements of Management Plans and Strategies that are relevant to the works they carry out. This will be achieved through Project inductions, toolbox talks, and other training and awareness requirements detailed within the Environmental Management Strategy.</p>
<b>Community consultative committee</b>		
<b>A20</b>	<p>The Applicant must operate a Community Consultative Committee (CCC) for the development in accordance with the Department's Community Consultative Committee Guidelines: State Significant Projects (2016), or its latest version.</p>	<p>A Community Consultative Committee (CCC) was established for the Uungula Wind Farm in accordance with the Department's Guideline. Minutes of the CCC meetings are publicly available via the Project Website, at: <a href="http://cwprenewables.com/our-projects/uungula-wind-farm">http://cwprenewables.com/our-projects/uungula-wind-farm</a></p>
<b>Revision of strategies, plans and programs</b>		
<b>C2</b>	<p>The Applicant must:</p> <ol style="list-style-type: none"> <li>a. update the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary prior to carrying out any upgrading or decommissioning activities on site; and</li> <li>b. review and, if necessary, revise the strategies, plans or programs required under this consent to the satisfaction of the Planning Secretary within 3 months of the: <ul style="list-style-type: none"> <li>- submission of an incident report under condition C10 of Schedule 2;</li> <li>- submission of an audit report under condition C15 of Schedule 2; or</li> <li>- any modification to the conditions of this consent.</li> </ul> </li> </ol>	<p>The Proponent will ensure that Management Strategies, Plans, and Programs will be reviewed and updated in accordance with the requirements of this Condition.</p> <p>If a Strategy, Plan or Program is updated, then the Proponent will comply with the requirements of Condition C3 regarding approval.</p>

Condition	Condition wording	Commitment to compliance
<b>Staging, combining and updating strategies, plans or programs</b>		
<b>C3</b>	<p>With the approval of the Planning Secretary, the Applicant may:</p> <ul style="list-style-type: none"> <li>prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program)</li> <li>combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined)</li> <li>update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development).</li> </ul>	<p>The Project will be developed in two stages:</p> <ul style="list-style-type: none"> <li>Stage 1: Wind Farm and associated infrastructure with the exception of the 'Battery Storage Facility'.</li> <li>Stage 2: Battery Storage Facility.</li> </ul> <p>The Planning Secretary has agreed that the Fire Hazard Analysis (condition B38) and Fire Safety Study (condition B39) are only required for Stage 2.</p> <p>All other Strategies, Plans and Programs will be prepared and submitted for Stage 1, and then updated for Stage 2 where required.</p> <p>Updated Strategies, Plans and Programs will be submitted to the Planning Secretary for approval in accordance with Condition C3(c).</p>
<b>C4</b>	<p>If the Planning Secretary agrees, a strategy, plan or program may be staged or updated without consultation being undertaken with all parties required to be consulted in the relevant condition in this consent</p>	<p>The Proponent will stage or update Strategies, Plans or Programs in consultation with the relevant identified party, unless the Secretary has agreed that the consultation is not required.</p>
<b>C5</b>	<p>If approved by the Planning Secretary, updated strategies, plans or programs supersede the previous versions of them and must be implemented in accordance with the condition that requires the strategy, plan or program.</p>	<p>Updated Strategies, Plans and Programs will supersede the previous versions of them and will be implemented in accordance with the relevant condition. Also, the plan will be updated on the project website in accordance with Condition C16.</p>
<b>C6</b>	<p>If the Planning Secretary agrees, a strategy, plan or program may be staged without addressing particular requirements of the relevant condition of this consent if those requirements are not applicable to the particular stage.</p>	<p>The Project will be developed in two stages:</p> <ul style="list-style-type: none"> <li>Stage 1: Wind Farm and associated infrastructure with the exception of the 'Battery Storage Facility'.</li> <li>Stage 2: Battery Storage Facility.</li> </ul> <p>The Planning Secretary has agreed that the Fire Hazard Analysis (condition B38) and Fire Safety Study (condition B39) are only required for Stage 2.</p> <p>All other Strategies, Plans and Programs will be prepared and submitted for Stage 1, and then updated for Stage 2 where required.</p>

Condition	Condition wording	Commitment to compliance
<b>Notification of Department</b>		
<b>C7</b>	Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant must notify the Department in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase. If any of these phases of the development are to be staged, then the Applicant must notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.	Prior to commencing the construction, operations, upgrading or decommissioning of the development or the cessation of operations, the Applicant will notify the Department in writing via the Major Projects website portal of the date of commencement, or cessation, of the relevant phase. If any of these phases of the development are to be staged, then the Applicant will notify the Department in writing prior to commencing the relevant stage, and clearly identify the development that would be carried out during the relevant stage.
<b>Final layout plans</b>		
<b>C8</b>	<p>Prior to commencing construction, the Applicant must submit detailed plans of the final layout of the development to the Department via the Major Projects website, including:</p> <ul style="list-style-type: none"> <li>• details on siting of wind turbines, including micro-siting of any wind turbines and/or ancillary infrastructure (including wind monitoring masts)</li> <li>• the GPS coordinates of the wind turbines</li> <li>• showing comparison to the approved layout. The Applicant must ensure that the development is constructed in accordance with the Final Layout Plans.</li> </ul>	Detailed plans of the final layout of the development will be submitted to the Department via the Major Projects website, prior to the commencement of construction, in accordance with this Condition.
<b>Work as executed</b>		
<b>C9</b>	Prior to commencing operations or following the upgrades of any wind turbines or ancillary infrastructure, the Applicant must submit work as executed plans of the development and showing comparison to the final layout plans to the Planning Secretary, via the Major Projects website.	<p>Work As Executed Plans will be submitted to the Planning Secretary prior to commencing operations or following the upgrades of any wind turbines or ancillary infrastructure.</p> <p>Note: The Work as Executed Plans can only be produced upon completion of construction of the development.</p>
<b>Incident notification</b>		
<b>C10</b>	The Department must be notified via the Major Projects website portal immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 9.	<p>If the Applicant becomes aware of an Incident, the Department will be notified in writing via the Major Projects portal as soon as practicable.</p> <p>The requirements of Appendix 9 '<i>Incident Notification and Reporting Requirements</i>' are listed at the bottom of this Table.</p> <p>An Incident is defined as: <i>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.</i></p>
<b>Non-compliance notification</b>		
<b>C11</b>	The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance.	<p>The Proponent will submit a written notification to the Department via the Major Projects website, within seven days of becoming aware of any non-compliance.</p> <p>A non-compliance is defined as: <i>An occurrence, set of circumstances or development that is a breach of this consent.</i></p>

Condition	Condition wording	Commitment to compliance
<b>C12</b>	A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Any non-compliance notification submitted to the Department under Condition C11 will address the requirements of Condition C12.
<b>C13</b>	A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance	The Proponent notes that a non-compliance does not need to be notified to the Department if it has already been notified as an Incident.
<b>Independent environmental audit</b>		
<b>C15</b>	Independent Audits of the development must be conducted and carried out at the frequency described and in accordance with the Independent Audit Post Approval Requirements (2020), unless otherwise agreed or directed by the Planning Secretary.	Unless otherwise agreed or directed by the Planning Secretary, an Independent Environmental Audit will be conducted in accordance with the timeframes nominated in the PAR (2020), being: <ul style="list-style-type: none"> <li>• within the 12 weeks of the commencement of construction</li> <li>• during construction, at intervals no greater than 6 months from the date of the initial audit</li> <li>• within 6 months of commencement of operations</li> <li>• at intervals no greater than 3 years from the initial operational audit.</li> </ul>
<b>Access to information</b>		
<b>C16</b>	The Applicant must: <ol style="list-style-type: none"> <li>a) make the following information publicly available on its website as relevant to the stage of the development: <ol style="list-style-type: none"> <li>i) the EIS;</li> <li>ii) the final layout plans for the development;</li> <li>iii) current statutory approvals for the development;</li> <li>iv) approved strategies, plans or programs required under the conditions of this consent;</li> <li>v) the proposed staging plans for the development if the construction, operation and/or decommissioning of the development is to be staged;</li> <li>vi) a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>vii) a complaints register, which is to be updated on a monthly basis;</li> <li>viii) minutes of CCC meetings;</li> <li>ix) the annual Statement of Compliance with the EPL;</li> <li>x) any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>xi) any other matter required by the Planning Secretary; and</li> <li>xii) keep this information up to date</li> </ol> </li> </ol>	The Proponent will make this information available on the website, including Management Strategies, Plans and Programs per item (iv).

Condition	Condition wording	Commitment to compliance
<b>Incident notification and reporting requirements</b>		
<b>APPENDIX 9</b>	<ol style="list-style-type: none"> <li>1. A written incident notification addressing the requirements set out below must be submitted to the Planning Secretary via the Major Projects website within seven days after the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition C10 of Schedule 2 or, having given such notification, subsequently forms the view that an incident has not occurred.</li> <li>2. Written notification of an incident must:               <ol style="list-style-type: none"> <li>a. identify the development and application number</li> <li>b. provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident)</li> <li>c. identify how the incident was detected</li> <li>d. identify when the applicant became aware of the incident</li> <li>e. identify any actual or potential non-compliance with conditions of consent</li> <li>f. describe what immediate steps were taken in relation to the incident</li> <li>g. identify further action(s) that will be taken in relation to the incident</li> <li>h. identify a project contact for further communication regarding the incident</li> </ol> </li> <li>3. Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.</li> <li>4. The Incident Report must include:               <ol style="list-style-type: none"> <li>a. a summary of the incident</li> <li>b. outcomes of an incident investigation, including identification of the cause of the incident</li> <li>c. details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence</li> <li>d. details of any communication with other stakeholders regarding the incident.</li> </ol> </li> </ol>	<p>This information will be included in any written Incident Notification that is submitted to the Department in accordance with Condition C10.</p>

# **Appendix D WTG non-blade OSOM transport management plan**



# UUNGULA WIND FARM

OSOM Transport Management  
Plan

Date: November 2025  
Client: GE Vernova  
Type: TMP  
Rev: 5

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## Revision History

Revision	Date	Details	Prepared	Checked	Approved
0	12/02/2024	First issue	ICW	ICW	JJM
1	03/07/2025	Updated route via NICB	ICW	RV	JJM
2	03/10/2025	Updated to reflect TfNSW comments	ICW	DJ	JJM
3	27/10/2025	Updated TGS reference and o/all dimensions	ICW	SS	JJM
4	03/12/2025	Updated to reflect TfNSW comments, removed Route 1B	ICW	SS	JJM
5	15/12/2025	Updated to reflect additional TfNSW comments	ICW	SS	JJM

## Disclaimer

This report has been prepared for advisory purposes only. Information provided within the report is based on data provided by the Client as well as publicly available information and, to the best of ARES Project Services Pty Ltd's knowledge and experience, is accurate at the time of publication. All proposed routes, methodologies and schedules described in this report are subject to approval and issue of permits from the relevant stakeholders. Transport equipment is based on ARES Project Services Pty Ltd vehicles and trailers, and swept path analysis results may differ if using equipment by third parties.

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# Introduction

Uungula Wind Farm is a renewable energy development located in New South Wales currently under construction. When complete, the wind farm will have a total of 69 GE wind turbine generators producing an output of 414MW.

The project is located approximately 14km east of the town of Wellington, in the Dubbo region of NSW. It is situated within the Central-West Orana Renewable Energy Zone (REZ) and will tap into the 330kV transmission network.

ARES have been appointed by our client, GE Vernova, to transport oversize overmass (OSOM) wind turbine components from the Port of Newcastle to site. This Transport Management Plan (TMP) details the routes, methodology, resources and procedures we will use to safely deliver these components.

This TMP is designed for those involved in the project that have a limited knowledge of transportation, including a comprehensive outline of the routes and actions required to achieve delivery.



Murra Warra WF

Murra Warra Stage 1 components had to be transported over 250km from the Port of Portland to site. Cargo included 5.8m diameter towers such as these pictured.



# 01

---

## Overview

# Project Overview

The Uungula Wind Farm is a renewable energy development currently under construction in the Central West Orana region of NSW.

## Scope of TMP

Uungula Wind Farm is located approximately 14km east of the town of Wellington in NSW.

ARES has been tasked with transporting OSOM wind turbine components from the Port of Import (Newcastle) to the construction site. The scope of this TMP will include all roads on the public road network, with some discussion on Port storage as well as general conditions within the construction site.

ARES physically drove the route in June 2025. The aim of the drive was to visually verify the results of an initial desktop study, take physical measurements and obtain drone footage at pinch points where the existing aerial imagery from sources such as Google and Nearmaps was of insufficient quality. This data then fed into our swept path analysis.

## Port of Import

The Port of Newcastle serves as a vital import/export hub into much of northern and central-west NSW. Much of its operation is driven by coal exports via Kooragang Island. However in recent years the port has invested heavily in expanding and diversifying its capabilities to handle a variety of other cargoes and ships.

The primary berth for break bulk cargo is Mayfield Berth 4, which has a large storage area (~120,000sqm) adjacent to the berth. Cargo from ships can be discharged directly into storage. This berth has hosted

a number of wind projects recently, including Rye Park, Bodangora and Sapphire Wind Farms, and has proven capacity to process wind turbine cargo.

Newcastle Port has excellent connections to both road and rail. For heavy vehicle traffic, the primary route out of the port is via Industrial Drive and then Pacific Hwy. Curfews are in place for the Newcastle Metro area which have to be observed when using heavy vehicles.

## Site

The project construction site is accessed via Twelve Mile Rd, with the turn-off approximately 17km east of Wellington. The terrain on site is generally steep as the WTGs are mainly located along ridgelines, and site assist vehicles or block trucks will most likely be required.

Twelve Mile Rd itself has been upgraded by the project's civil contractor. These upgrades will be complete by the time of commencement of transport.

Site roads will be newly constructed and will be designed to accommodate the volume and axle loading of the largest and heaviest components (nacelle/towers), as well as the turning circle and swept path of the longest components (blades).

## Cargo Dimensions

Component	Qty	Length (m)	Width (m)	Height (m)	Weight (t)
Nacelle	69	13.4	4.8	4.2	96.0
Drivetrain	69	7.4	3.3	3.2	81.5
Hub	69	4.1	4.5	3.9	50.0
Blade	207	80.5	4.2	4.5	35.0
Tower Base	69	9.8	5.5	5.5	77.6
Tower Mid E	69	12.9	5.0	5.0	69.2
Tower Mid D	69	16.0	5.0	5.0	73.7
Tower Mid C	69	19.3	4.6	4.6	78.4
Tower Mid B	69	22.7	4.3	4.3	78.0
Tower Mid A	69	29.1	4.3	4.3	73.6
Tower Top	69	35.9	4.3	4.3	64.8

## Overall Dimensions

Component	Equipment	O/A Length (m)	O/A Width (m)	O/A Height (m)	O/A Weight (t)
Nacelle	PM PM 10R8	43.61	4.8	5.30	162.5
Drivetrain	PM 2R8 5R8	26.04	4.27	4.03	119.0
Hub	PM 5R8	21.63	4.27	4.80	81.5
Blade	PM 2R8 3R8 (Blade)	<b>93.25</b>	4.0	<b>5.80</b>	82.5
Tower Base	PM 2R8 5R8	25.40	5.5	<b>5.78</b>	119.1
Tower Mid E	PM 5R8	22.86	5.0	<b>5.77</b>	104.7
Tower Mid D	PM 2R8 5R8	29.66	5.0	<b>5.61</b>	115.2
Tower Mid C	PM 2R8 5R8	32.48	4.8	5.46	119.9
Tower Mid B	PM 10R8	33.28	4.3	5.46	144.5
Tower Mid A	(PM) PM 10R8 EXT	<b>(50.57)</b> 39.07	4.3	5.42	162.1
Tower Top	PM 2R8 3R8 Jinker	<b>44.28</b>	4.3	5.16	95.6

The deliveries deemed as "High Risk OSOM Moves" are the blades and tower sections highlighted in yellow above due to their overall length exceeding 40m or overall height exceeding 5.2m and coming within 200mm of an overhead structure(s).

# Project Equipment

Oversize and Overmass cargo requires specialized trailers for transport.

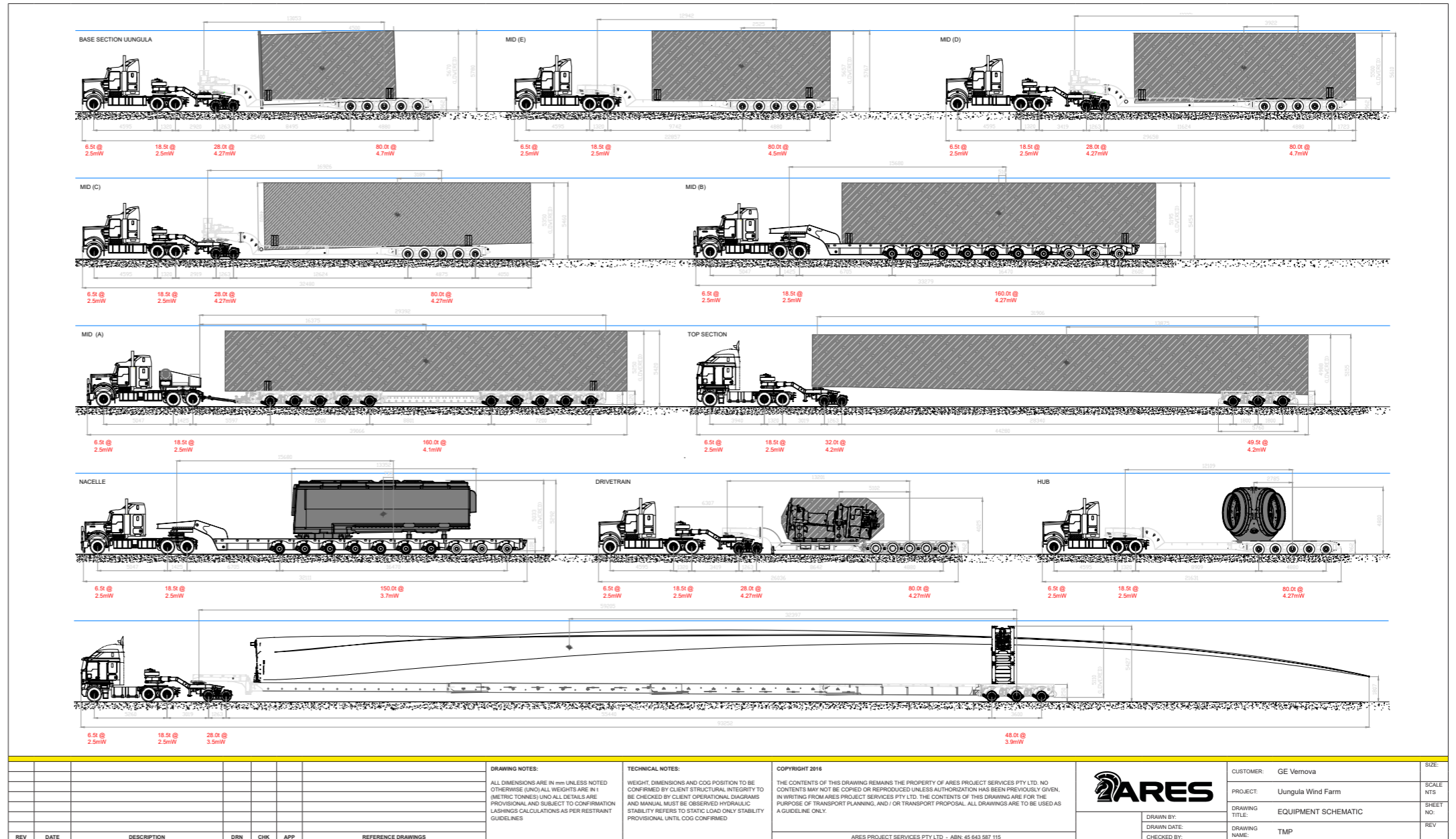


All loads will be transported using a prime mover(s), standard low loaders, extendable widening low loaders, jinker trailers and extendable modular platforms as shown in the schematic on the opposite page.

All loads will be escorted by pilot and police escort vehicles as per the TfNSW pilot matrix. Two loads (nacelle and Mid A Tower) require pull trucks which will be attached the entire journey from Port to site. The Mid A's pull truck triggers the requirement of a police escort (length >45m). Ares will re-evaluate the need for a pull truck for this load after 4 weeks of deliveries. Permits will be submitted for a combination both with and without the pull truck.

Component	Pilot Vehicles	Police Vehicles	Police w/ Pull Truck
Nacelle (inc. Pull Truck)	3	0	0
Drivetrain	2	0	0
Hub	2	0	0
Blade	4	2	2
Tower Base	2	0	0
Tower Mid E	2	0	0
Tower Mid D	2	0	0
Tower Mid C	2	0	0
Tower Mid B	2	0	0
Tower Mid A	4	0	1
Tower Top	4	0	1*

\*pull truck not required due to low gross combination mass





### Daily Schedule

Proposed journey plans are provided below to illustrate how high risk OSOM components would be transported to site from Newcastle.

Time	Location	Distance
04:00	Depart Mayfield 4	
04:45	Enter Hunter Expy	30 km
05:30	Enter Golden Hwy	38 km
06:00	Warkworth	30 km
07:00	Denman	35 km
09:00	Cassilis (rest break)	120 km
09:30	Depart Cassilis	-
10:30	Dunedoo	38 km
12:30	Wellington	87 km
13:00	Site Entrance	17 km

**Total Time:** 9.5 hours  
**Total Distance:** 395 km

Load departures will be staggered by 30mins to ensure adequate spacing between each. With up to 3 towers/nacelle per day, this would result in departure times of 04:00, 04:30 and 05:00. These times may be adjusted according to sunrise time variations throughout the course of the year.

### Project Timing

Uungula Wind Farm is scheduled to commence construction in 2025, with wind turbine component deliveries commencing in Q4 2025. Please note, this delivery schedule is subject to change and should be treated as indicative at this stage.

With 13 major OSOM components expected per turbine, this would mean a total of up to **26 oversized deliveries per week** or **4-5 deliveries per day** to site, spread over six days (Mon-Sat).

The proposed delivery run rate is 2 complete turbines per week. We anticipate total duration of OSOM transport to be approximately **9 months**.

The proposed weekly delivery schedule is shown in the table below (subject to change due to resourcing, operational and permit requirements).

Component	Mon	Tue	Wed	Thu	Fri	Sat
Nacelle			●			●
Drivetrain	●			●		
Hub		●			●	
Blades	●	●	●	●	●	●
Tower Base	●			●		
Tower Mid E	●			●		
Tower Mid D	●			●		
Tower Mid C		●			●	
Tower Mid B		●			●	
Tower Mid A			●			●
Tower Top			●			●

### Blades

Due to their length and risk profile, we propose that blades are transported through the night via a night time travel exemption.

Time	Location	Distance
00:00	Depart Mayfield 4	
01:00	Enter Hunter Expy	30 km
01:30	Enter Golden Hwy	38 km
02:30	Jerrys Plains	40 km
03:30	Denman	25 km
06:00	Cassilis (rest break)	120 km
06:30	Depart Cassilis	-
07:30	Dunedoo	38 km
09:30	Wellington	87 km
10:00	Site Entrance	17 km

**Total Time:** 10.0 hours  
**Total Distance:** 395 km

### Tower Sections and Nacelle

Towers and the nacelle will depart Newcastle during the early morning to clear the metropolitan area. They may be required to pull up at Warkworth and wait briefly for sunrise before continuing.

### Other Components

All other components will depart Newcastle after 09:00 and travel during daylight hours.

**Total Time:** 7-8 hours  
**Total Distance:** 395 km

### Notes:

- Departure times subject to TfNSW and NSW Police approval.
- Return journey to be reverse of delivery (subject to permits and approvals)
- Times are indicative only and may change depending on traffic conditions and operational considerations.

# Newcastle to Uungula WF

## General Route Notes

### Road Quality

The transport routes will be primarily along state highways (Golden Hwy), which are generally designed to a higher specification and able to handle heavier and higher volumes of traffic. The route utilises the NSW EnergyCo 'Port to REZ' route to Central West Orana.

The entire route is paved up to Twelve Mile Rd.

### Rest Stops

There are numerous truck rest areas along the Golden Highway which are suitable for rest breaks and layovers if necessary - refer to "Rest Stop" section.

### Overhead Structures

All components will take the same route, with the only difference between Routes 1 and 2 being a number of contraflow movements required for blades on Route 1. The route has a height limit of 5.8m at Denman Bridge, which will require some loads to lower prior to crossing the bridge (refer to Pinch Point 28). There is an additional height restriction on this route at the Golden Hwy overpass at Mount Thorley which, while listed at 5.51m, has been physically measured by ARES at 6.1m in the westbound lane. This will not pose any issues as all loads have a travel height of 5.8m or less.

### Overhead Power Lines

In general, a travel height below around 5.5m is not an issue with respect to power lines. Loads above 4.6m travel height will require a high load permit from the power authorities prior to travel.

The route traverses through both Ausgrid and Essential Energy distribution networks. High load permits have been obtained from both authorities to travel.

### Bridges and Culverts

Structures on state highways are generally not a concern as they will be designed to handle heavy vehicle loads. The route also uses the official 'Port to REZ' route from Newcastle to Central West Orana REZ up to Saxa Rd, Elong Elong which was selected with high volume OSOM traffic in mind. Transport for NSW will ultimately confirm the suitability of structures on state roads during the permitting process.

Closer to site the route uses Dubbo Regional Council (DRC) roads. Any structures on these sections of road will need to be assessed by DRC.

### Rail Crossings

There are 4 rail level crossings along the route - Selwyn St, Golden Hwy Denman, Golden Hwy Dunedoo and Saxa Rd. Permissions will be required from rail authorities to travel through these crossings. Blades will require a Track Protection Officer (TPO) to accompany them across the rail crossings, and the top tower section will need a TPO to cross at Dunedoo. Refer to the crossing pinch points for specific requirements at each.

### Roadworks

There are a number of road upgrade projects planned along the route which may affect transport of components, depending on timing.

It is recommended that close liaison with TfNSW is maintained throughout the project to keep abreast of



Above: Central West Orana 'Port to REZ' upgrade scope. (Source: Transport for NSW)

any developments on the following projects:

- Hexham Straight Upgrade project
- EnergyCo 'Port to REZ' upgrades
- Rankin Park to Jesmond NICB extension project

In particular, the 'Port to REZ' upgrades are planned to run from Q2 2025 to Q1 2026, and may overlap with the transport timings for the project.

### Approvals

Modifications to NSW State Roads will require a Works Authorisation Deed (WAD) signed between the project developer and Transport for NSW (TfNSW). Designs will need to be done by a pre-approved engineering consultant and signed off by TfNSW prior to construction.

Transport permits will need to be obtained from NHVR prior to travel. Third party permits include overhead authorities and rail authorities.



Above: Denman Bridge - 5.8m clearance.

Below: Tarro Interchange overpass - 6.2m clearance.





# 02

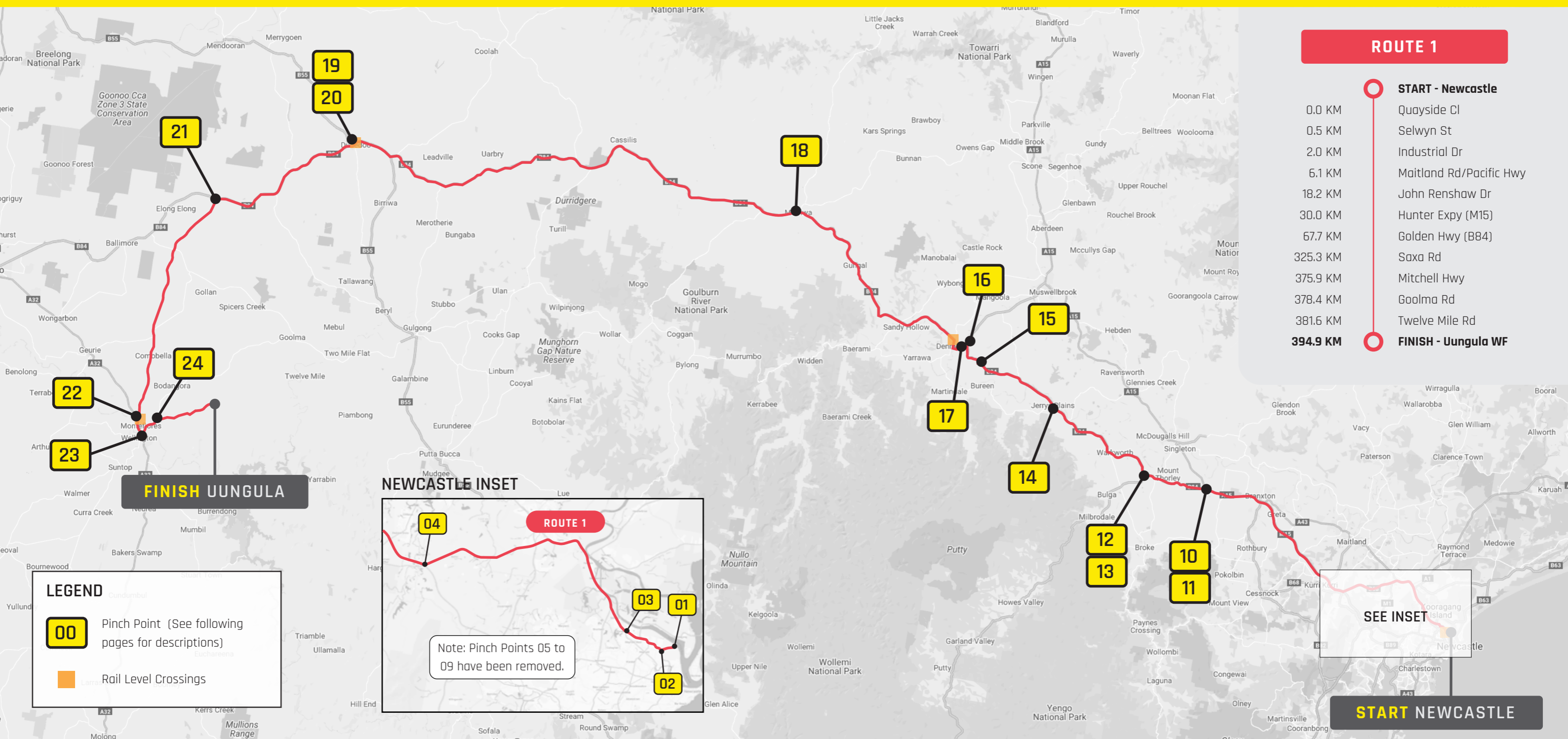
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**Route 1 - Blades**

# Blade Route

## ROUTE 1 Blades via John Renshaw Dr

NHVR Route ID: 2M4VT-9 v7



### ROUTE 1

- 0.0 KM START - Newcastle
- 0.5 KM Quayside Cl
- 2.0 KM Selwyn St
- 6.1 KM Industrial Dr
- 18.2 KM Maitland Rd/Pacific Hwy
- 30.0 KM John Renshaw Dr
- 67.7 KM Hunter Expy (M15)
- 325.3 KM Golden Hwy (B84)
- 375.9 KM Saxa Rd
- 378.4 KM Mitchell Hwy
- 381.6 KM Goolma Rd
- 394.9 KM Twelve Mile Rd
- FINISH - Uungula WF

**LEGEND**

- 00 Pinch Point (See following pages for descriptions)
- Rail Level Crossings

**NEWCASTLE INSET**

ROUTE 1

Note: Pinch Points 05 to 09 have been removed.

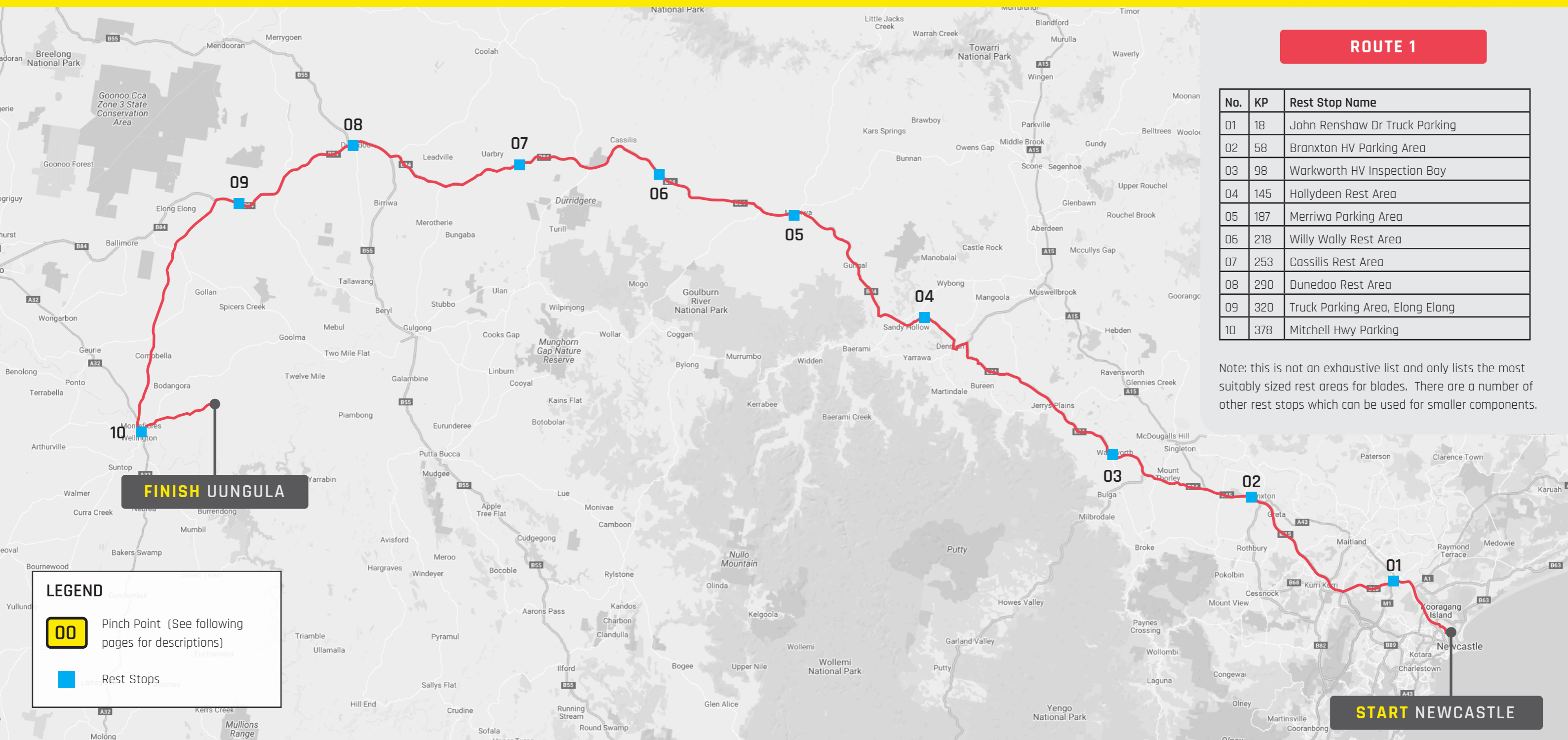
SEE INSET

START NEWCASTLE

# Rest Stops

**ROUTE 1** Blades via John Renshaw Dr

NHVR Route ID: 2M4VT-9 v7 ([MyMaps Link](#))



**LEGEND**

- Pinch Point (See following pages for descriptions)
- Rest Stops

**ROUTE 1**

No.	KP	Rest Stop Name
01	18	John Renshaw Dr Truck Parking
02	58	Branxton HV Parking Area
03	98	Warkworth HV Inspection Bay
04	145	Hollydeen Rest Area
05	187	Merriwa Parking Area
06	218	Willy Wally Rest Area
07	253	Cassilis Rest Area
08	290	Dunedoo Rest Area
09	320	Truck Parking Area, Elong Elong
10	378	Mitchell Hwy Parking

Note: this is not an exhaustive list and only lists the most suitably sized rest areas for blades. There are a number of other rest stops which can be used for smaller components.

Pinch Point

# 01

RIGHT TURN  
Quayside Cl  
& Selwyn St

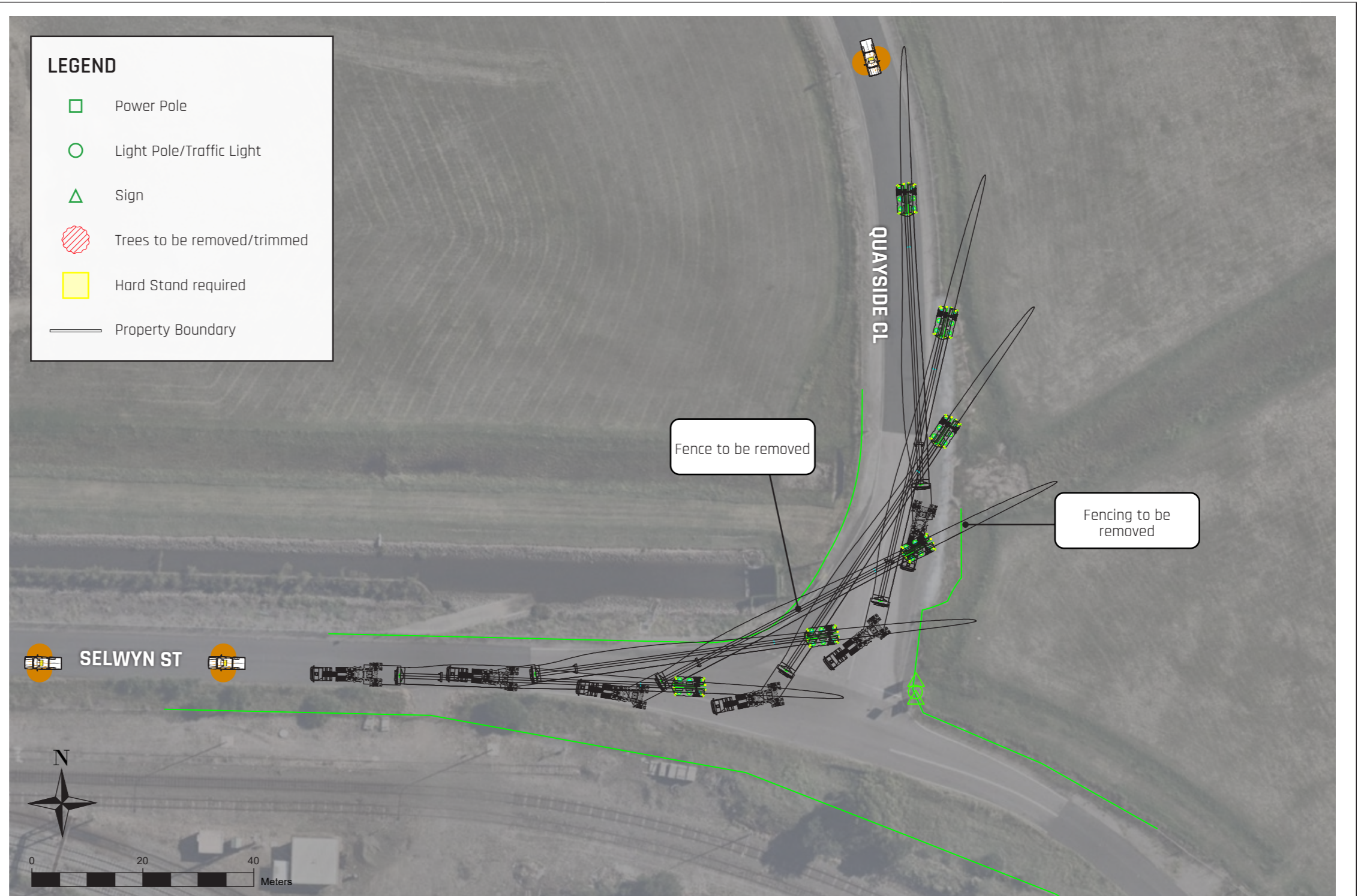
**ROUTE 1**

Loads make their way south from the Mayfield 4 storage area to the public road network, making a right hand turn onto Selwyn St. This intersection has been upgraded in the past for 79m blades with additional hard stand and temporary fencing on Quayside Close.

Fencing on the corner will need to be removed to clear a path for the blade and trailer.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ.




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Pinch Point



RAIL CROSSING  
Selwyn St

**ROUTE 1**

The rail crossing at Selwyn St in Mayfield will require rail authority approval prior to crossing. Loads are to travel straight ahead.

Rail Manager: ARTC  
Line: Port Waratah - BHP Lines  
Control Type: Active  
Controls: Boom Gates & Flashing Lights  
Tracks: Single

Track Protection Officers will be in attendance as required by the ARTC Permit.



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Pinch Point

# 02

RIGHT TURN  
Selwyn St &  
Industrial Dr

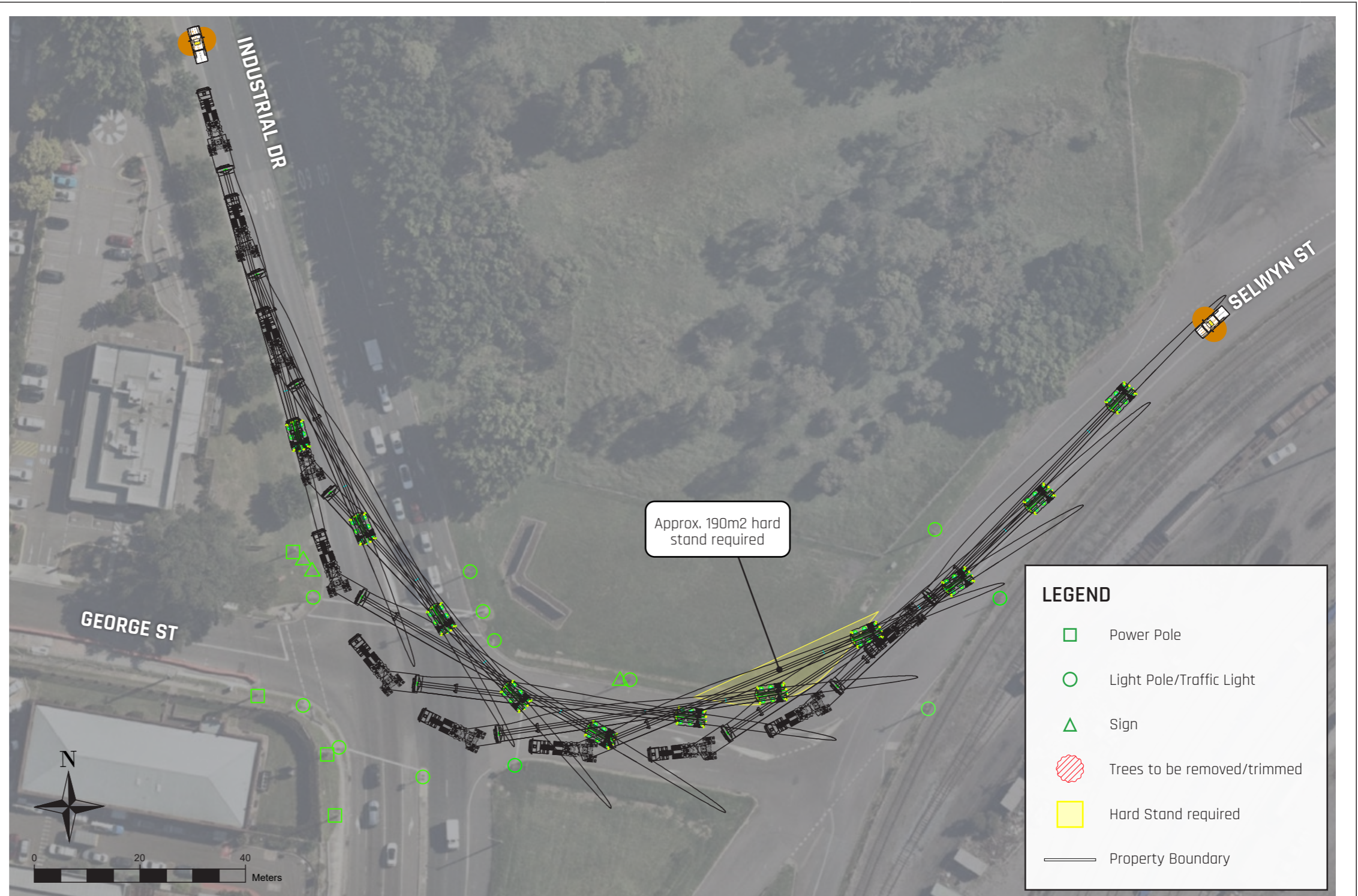
**ROUTE 1**

The blade trailer will need to avoid poles to the east adjacent to the railway line, and traffic lights on Industrial Dr. To do this, hard stand is required on the inside of the turn onto George St (as per proposed 'Port to REZ' upgrades).

Police escorts will need to hold traffic in all directions whilst the turn is being completed.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ.



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Pinch Point

# 03

RIGHT TURN  
Industrial Dr  
& Maitland Rd

**ROUTE 1**

To make this turn, blades need to turn onto the incorrect side of Maitland Rd from the incorrect side of Industrial Dr. The contraflow will start around 200m from the intersection, with blades crossing over prior to the start of the concrete median kerb. Once clear onto Maitland Rd, there is a crossover point around 150m further on where the blades can return to the correct side of the road.


Police will need to control traffic while the contraflow manoeuvre is being completed.

No modifications are required on this corner.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ.



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Pinch Point

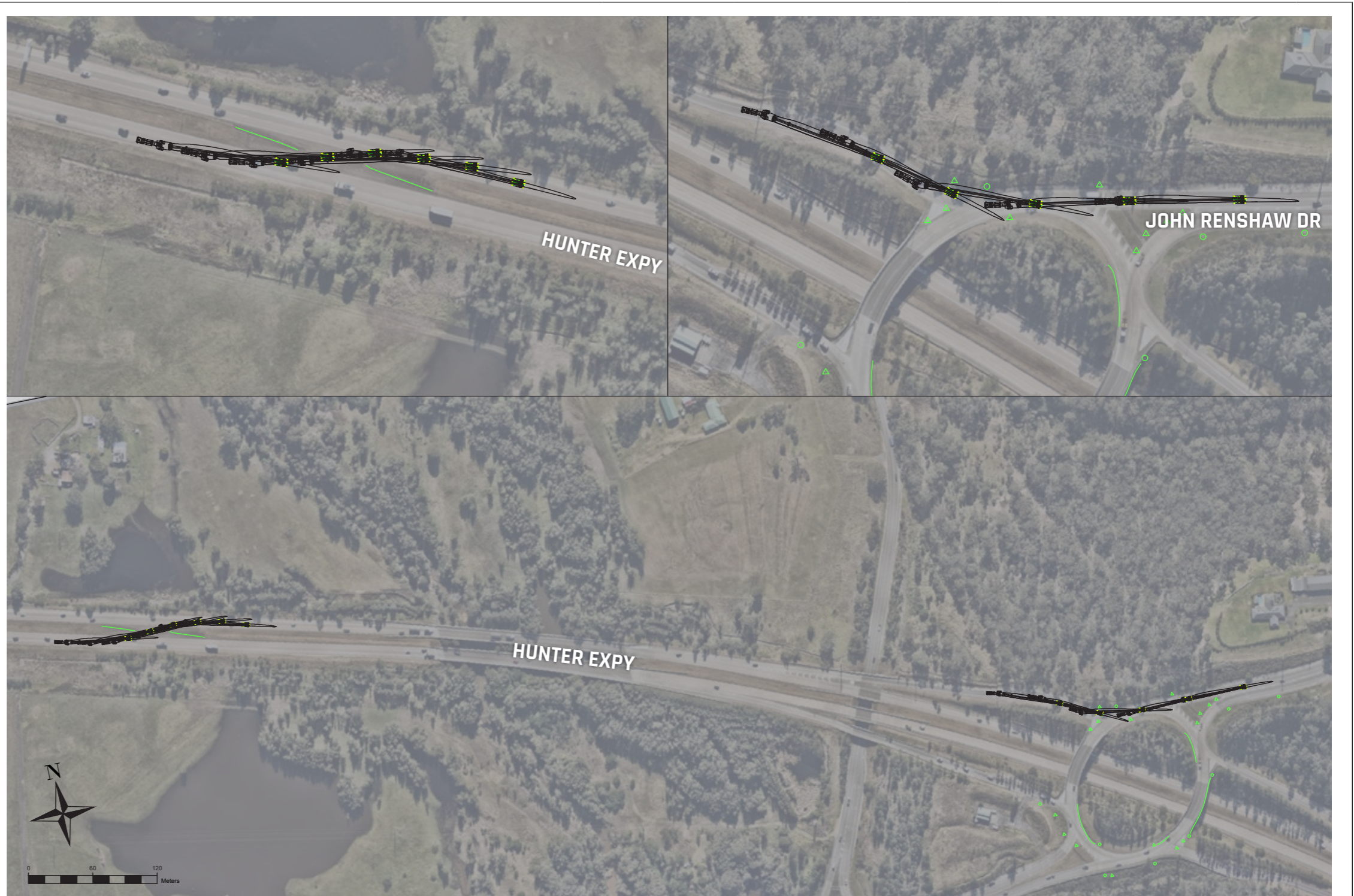
# 04

RIGHT TURN  
John Renshaw Dr  
& Hunter Expy

**ROUTE 1**

Blades are unable to negotiate the roundabout onto Hunter Expy and will have to contraflow the opposing on-ramp. The front police escort will need to proceed ahead and establish traffic control eastbound on Hunter Expy. The blade will then proceed down the on-ramp and contraflow on the Hunter Expy for about 800m before reaching a cross-over point. Meanwhile, the other escort/pilots will take the correct side of Hunter Expy and establish control of traffic westbound, allowing the blade to cross over safely.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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Pinch Point

# 10

LEFT TURN  
New England Hwy  
& Golden Hwy

**ROUTE 1**

The turn onto the Golden Hwy at Whittingham is straightforward and can be taken with no modifications required. Due to the blade tip swinging into the opposing lane of the New England Hwy, police escorts will need to control southbound traffic while the blade turns.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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CUSTOMER: GE Vernova

PROJECT: Uungula Wind Farm

DRAWING TITLE: SWEPT PATH DRAWING

DRAWING NAME: Route Survey

SIZE:

SCALE NTS

SHEET NO:

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Pinch Point

# 11

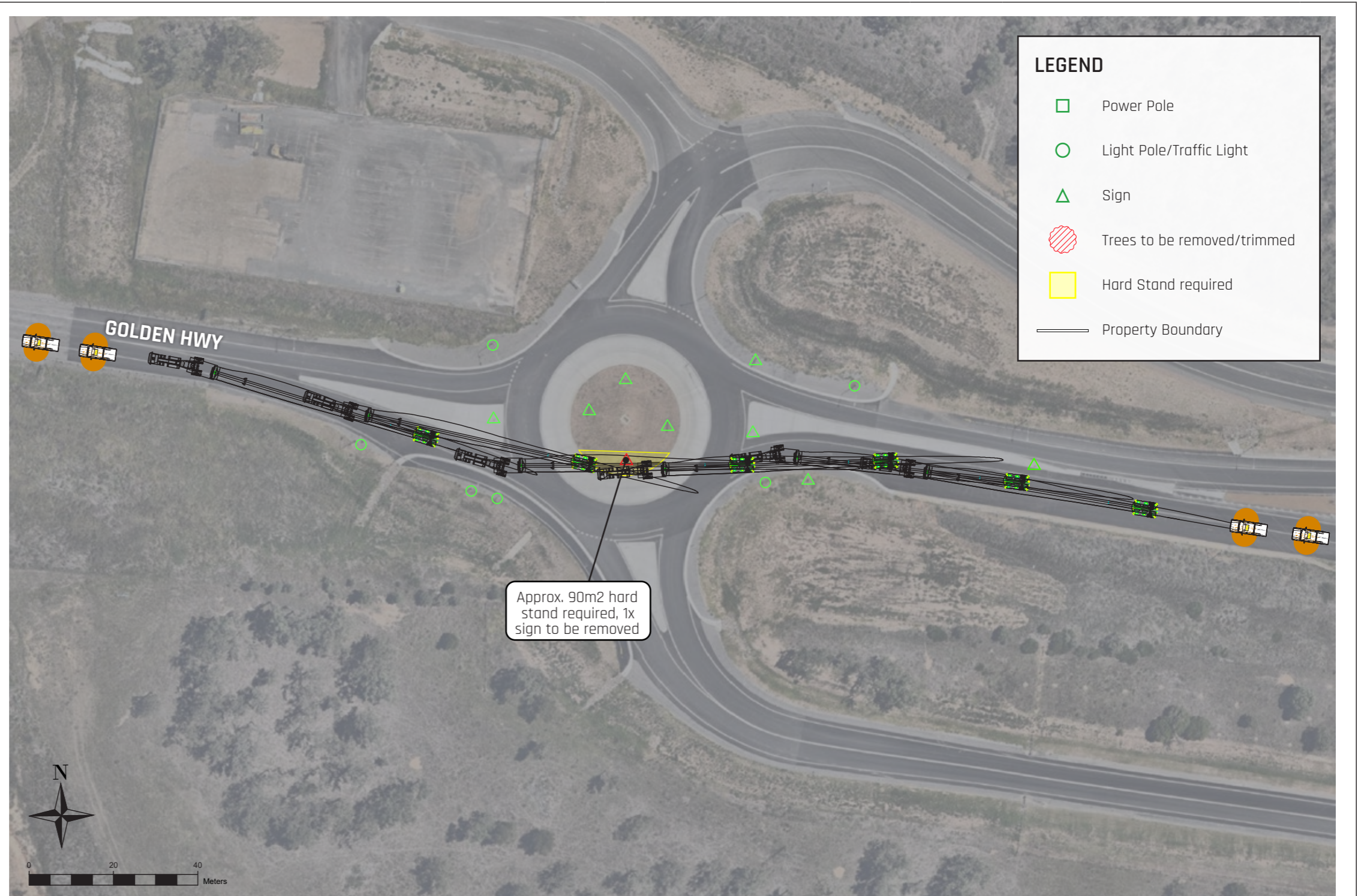
ROUNDAABOUT  
Golden Hwy,  
Whittingham

**ROUTE 1**

The new roundabout on the Golden Hwy at Whittingham will require modifications to allow the blade to take a straighter line through the roundabout and avoid light poles to the south. Hard stand on the south side of the roundabout is needed, and one sign on the roundabout is to be made removeable (as per the proposed 'Port to REZ' upgrades).

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ.



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		PROJECT:	Uungula Wind Farm	SCALE NTS
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Pinch Point

# 12

LEFT TURN  
Golden Hwy  
& Putty Rd

**ROUTE 1**

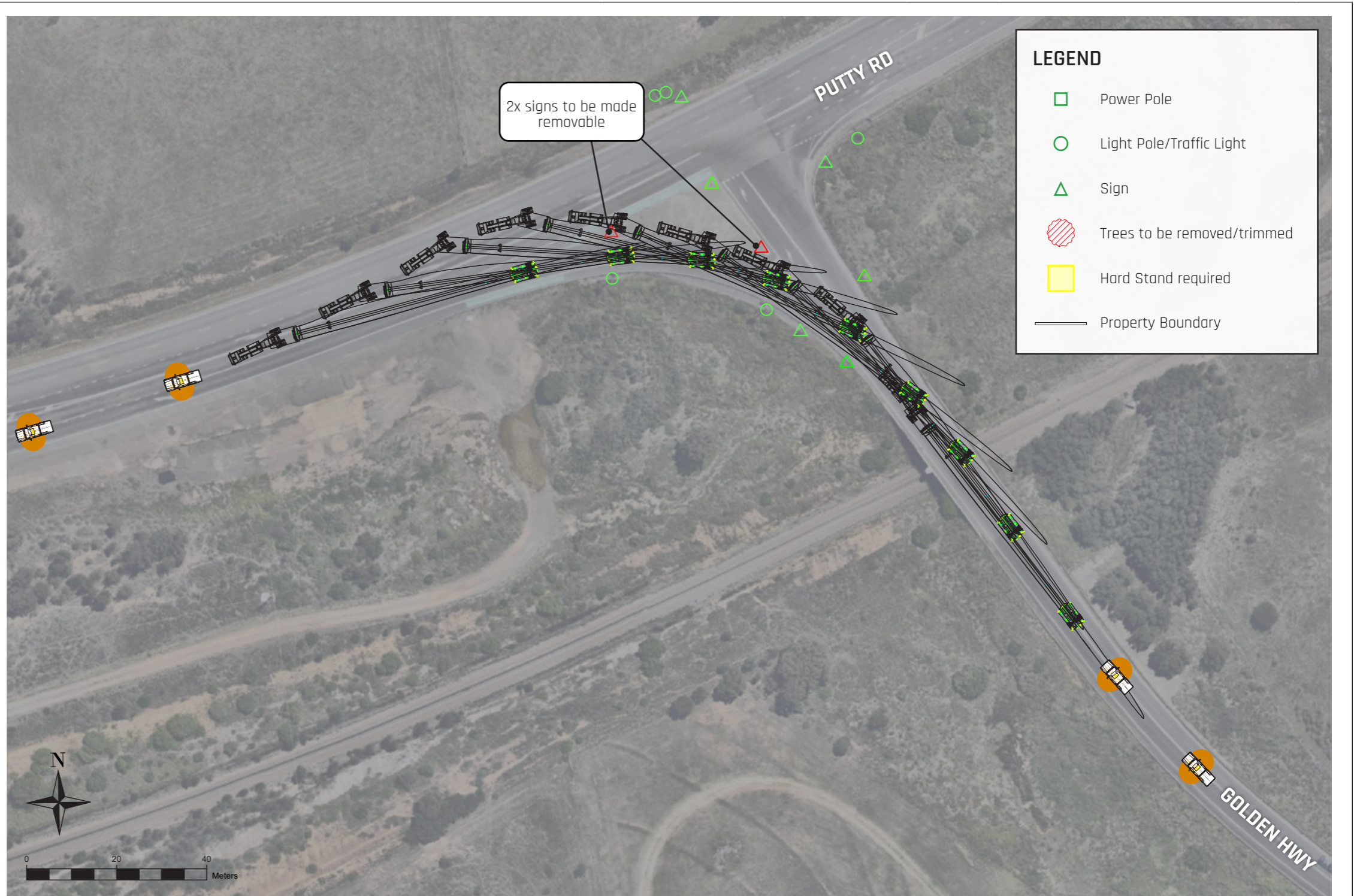
The blades take a left turn from Golden Hwy and onto Putty Rd. The combination will need to mount the traffic island and temporarily use the incorrect side of Putty Rd. The blade tip is free to swing over the eastern side of Golden Hwy.

Two signs on the traffic island will need to be made removeable or relocated (as per the proposed 'Port to REZ' upgrades).

Police will need to control traffic in all directions whilst the manoeuvre is being completed.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ.



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Pinch Point

# 13

RIGHT TURN  
Putty Rd  
& Golden Hwy

**ROUTE 1**

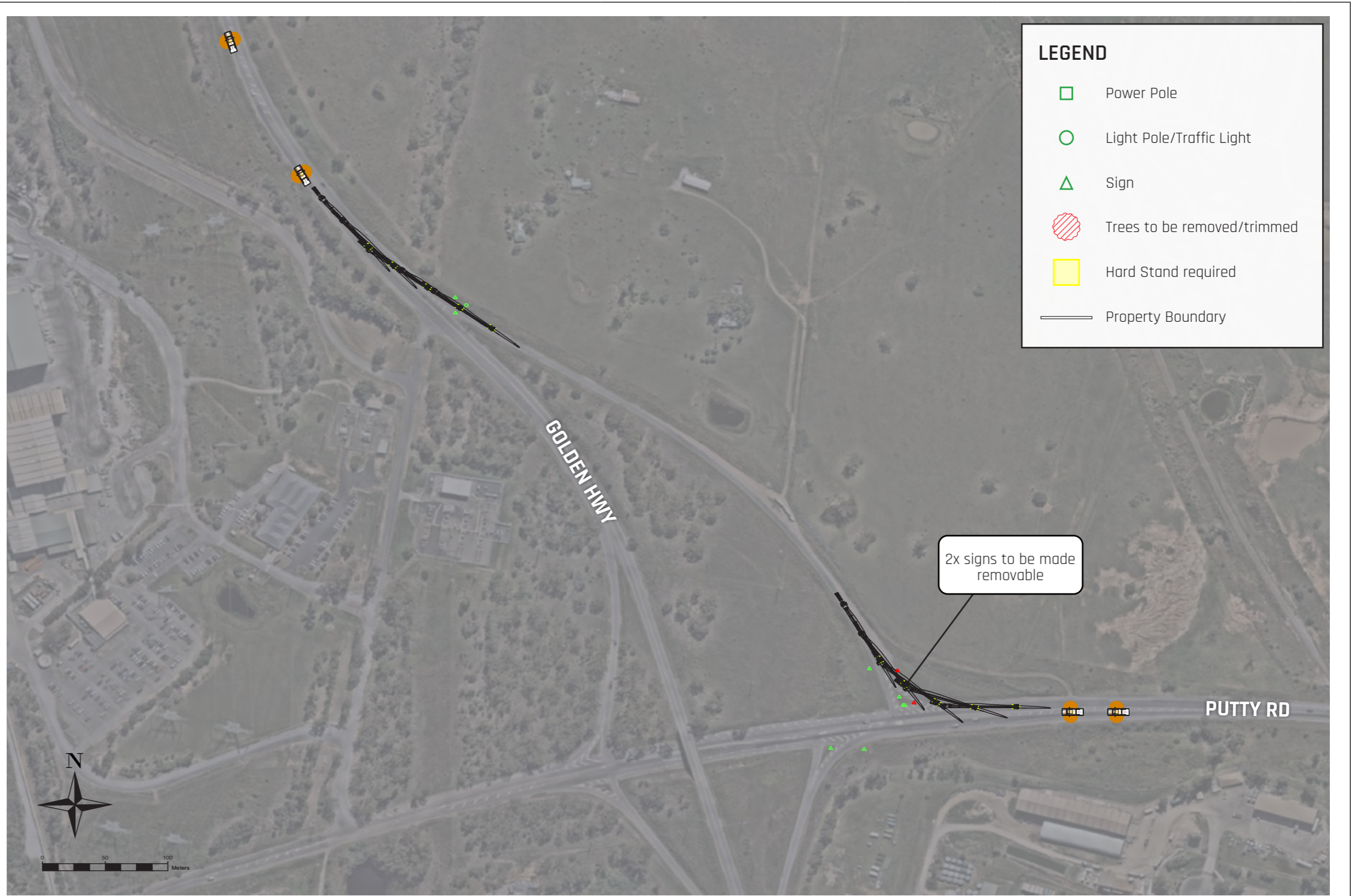
Due to the sharpness of the turn onto the on-ramp, blades will have to contraflow the off-ramp at Mount Thorley to rejoin the Golden Hwy.

Police will control traffic at the top of the off-ramp before allowing the blade to start the contraflow procedure. There is approximately 600m of contraflow before the blades cross back over to the correct side of the Golden Hwy.

Modifications required for this turn include the removal of 2 signs (as per the proposed 'Port to REZ' upgrades).

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ.



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Pinch Point

# 14

S-TURN  
Lonsdale St,  
Golden Hwy

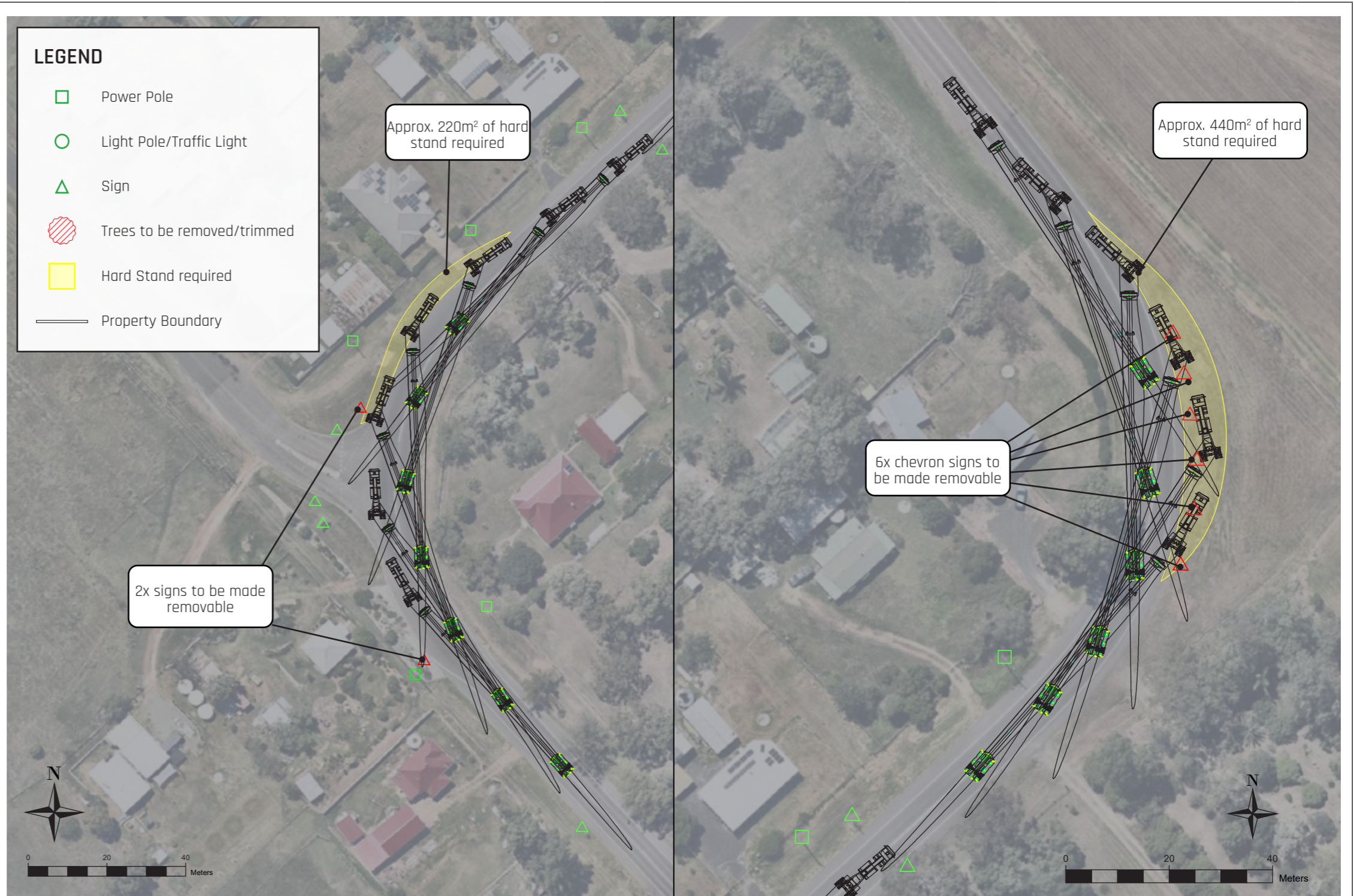
**ROUTE 1**


At Jerrys Plains on Lonsdale St (Golden Hwy), there is a right/left combination S-turn which the blades will have to negotiate. Hard stand material will be required on the outside of both turns. 2 signs to be made removable on the first turn while 6 chevron arrow signs will need to be made removable at the second turn. All modifications are in line with those proposed by the 'Port to REZ' upgrades.

Police will need to control traffic at both ends while the blades are making their way through these turns.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ. If completed in time, upgrades will make the corner significantly easier to take.



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Pinch Point

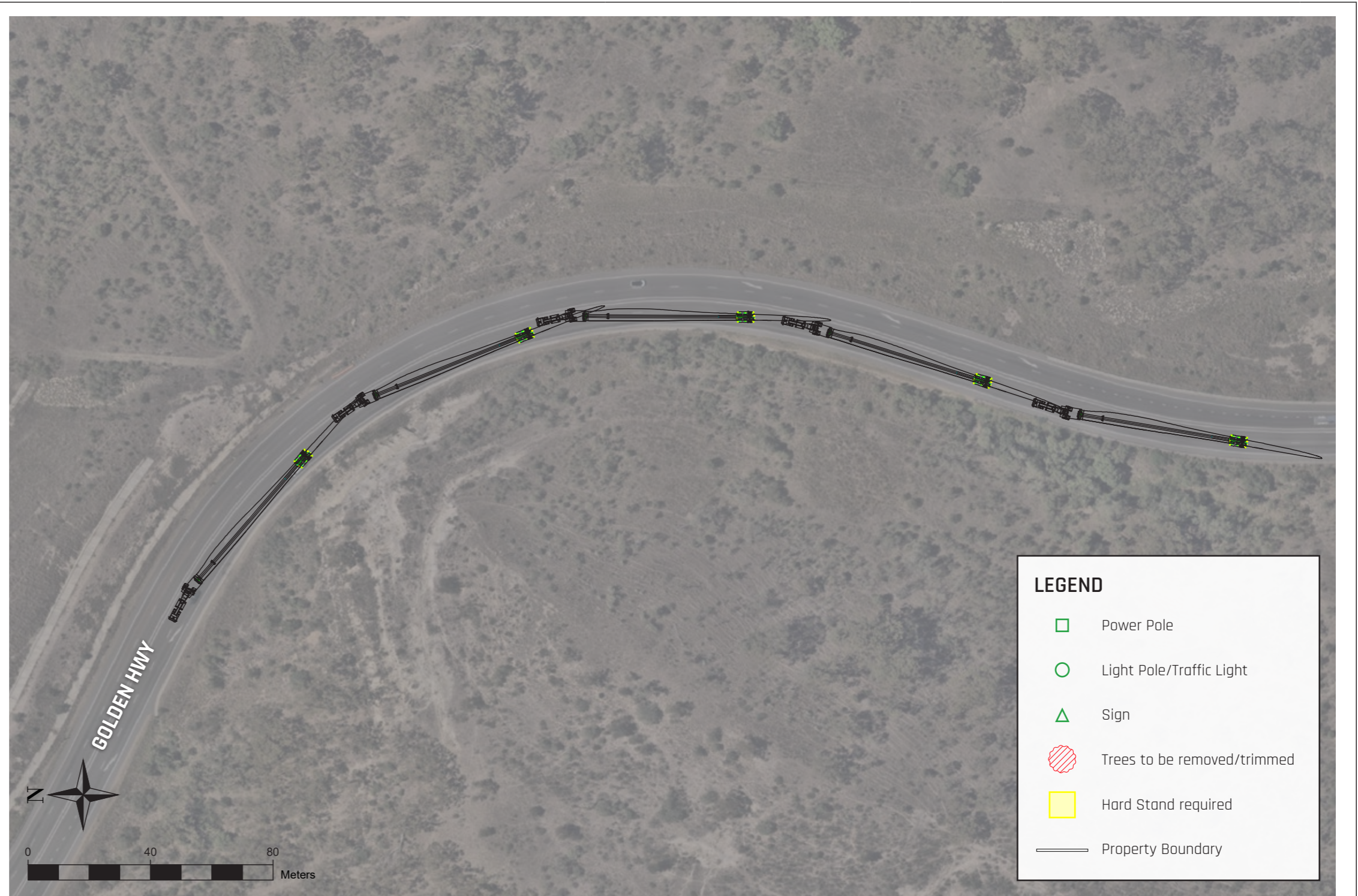
# 15

COMBINATION TURN  
Ogilvie's Hill,  
Denman

**ROUTE 1**

The route between Jerrys Plains and Denman includes traversing Denman Gap via Ogilvie's Hill. The blades are able to negotiate this winding section of road with the blade staying fully within the correct side of the road.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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Pinch Point

# 16

LEFT TURN  
Golden Hwy &  
Denman Rd

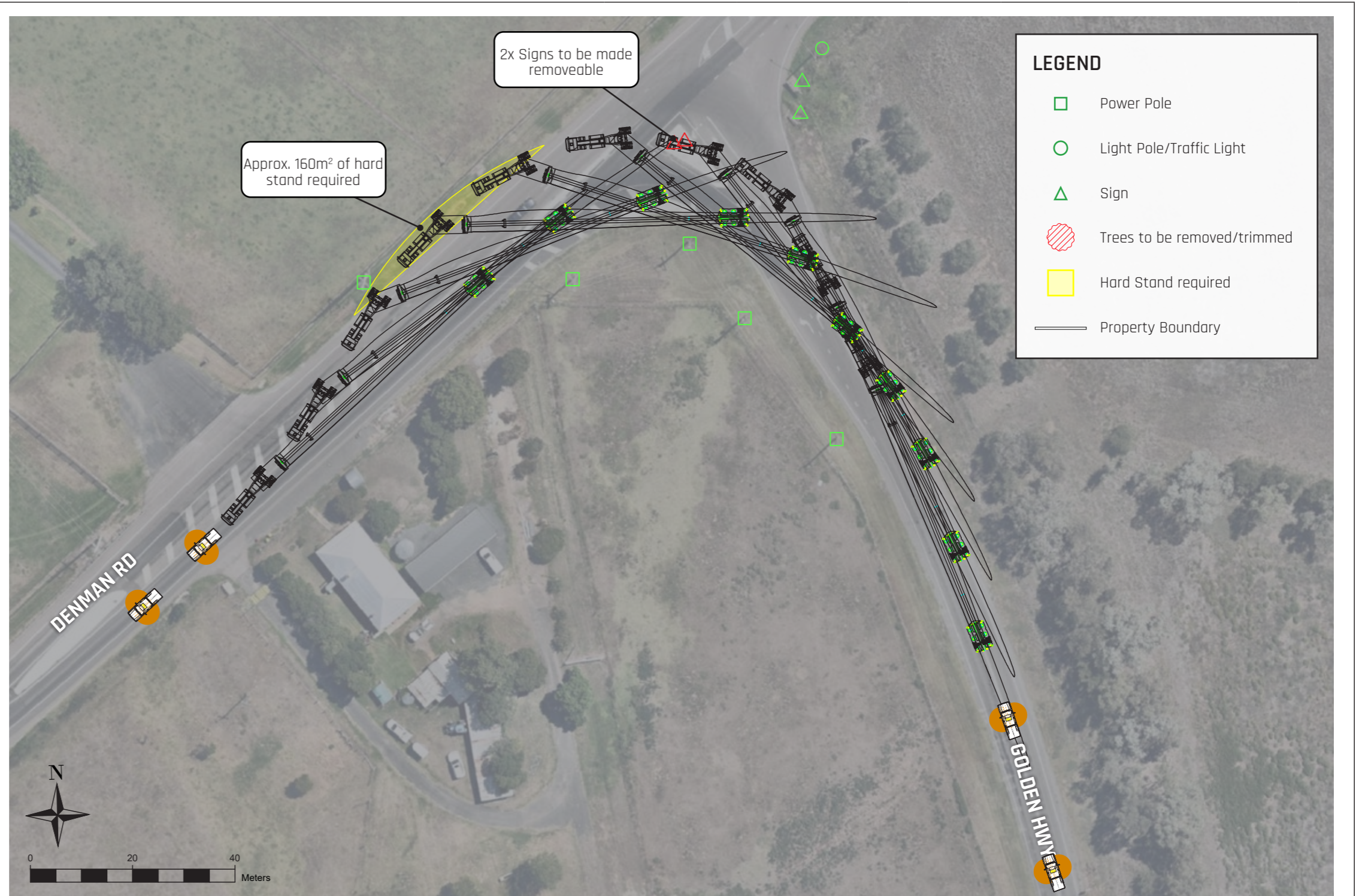
**ROUTE 1**

The blades will make this left hand turn starting from the wrong side of Golden Hwy, going over the traffic island and crossing over to the far side of Denman Rd, which will require hard stand. Two road signs located on the traffic island will need to be made removeable. All modifications are in line with the proposed 'Port to REZ' upgrades.

Police will need to control traffic in all directions whilst the manoeuvre is being completed.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ. If completed in time, upgrades will make the corner significantly easier to take.



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Pinch Point

# 17

RIGHT TURN  
Golden Hwy,  
Denman

**ROUTE 1**

The blades follow the Golden Hwy right at the town of Denman. The gradual right hand turn won't require any modifications but police escorts will need to control opposing traffic while the blade turns as it will require the full width of the road.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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Pinch Point



RAIL CROSSING  
Golden Hwy,  
Denman

**ROUTE 1**

The rail crossing at Denman will require rail authority approval prior to crossing. Loads are to travel straight ahead.

Rail Manager: ARTC  
Line: Ulan  
Control Type: Active  
Controls: Boom Gates & Flashing Lights  
Tracks: Single

Track Protection Officers will be in attendance as required by the ARTC Permit.



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Pinch Point

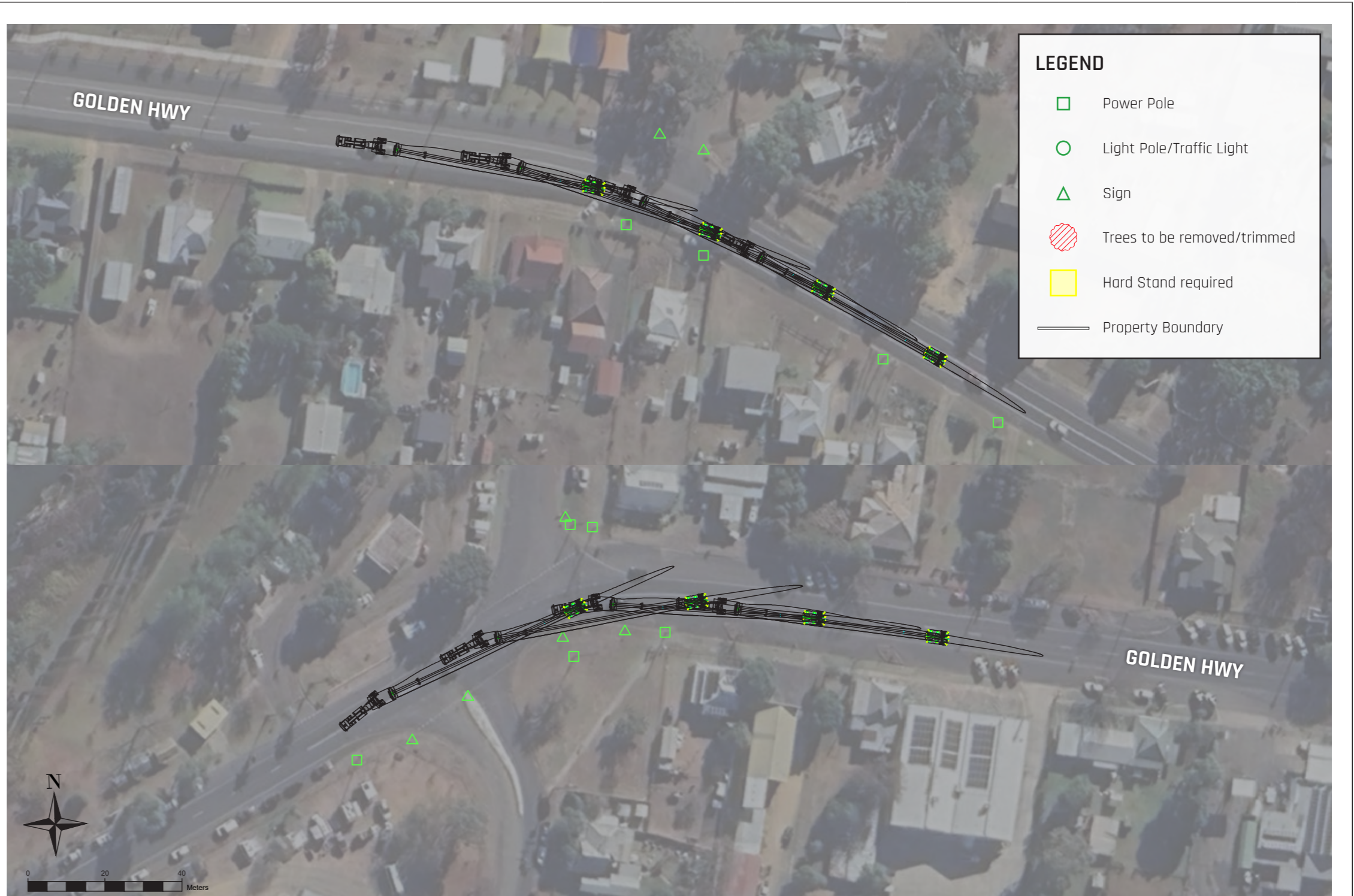
# 18

LEFT TURNS  
Golden Hwy,  
Merriwa

**ROUTE 1**

Through the town of Merriwa, the Golden Hwy has two slight left turns. The blade tip will sweep into the oncoming lane so police will need to control traffic during these turns.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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Pinch Point

# 19

LEFT TURN  
Golden Hwy,  
Dunedoo

**ROUTE 1**

Prior to entering Dunedoo, the blades will follow the highway left to cross the railway line. The blade tip will sweep into the opposite lane when turning, and police will need to control eastbound traffic while the blade makes the turn.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



**LEGEND**

- Power Pole
- Light Pole/Traffic Light
- △ Sign
- ▨ Trees to be removed/trimmed
- Hard Stand required
- Property Boundary

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Pinch Point



RAIL CROSSING  
Golden Hwy,  
Dunedoo


**ROUTE 1**

The rail crossing at Dunedoo will require rail authority approval prior to crossing. Loads are to travel across the crossing and turn right in accordance with the following pinch point.

Rail Manager: ARTC  
Line: Wallerawang - Gwabegar  
Control Type: Active  
Controls: Flashing Lights  
Tracks: Single

Track Protection Officers will be in attendance as required by the ARTC Permit. Where these Track Protection Officers are required and are not accompanying the load, the load shall stop at the Cassilis Truck Rest Area and call the attending officer to ensure that they will be in attendance at the anticipated arrival time of the component at the crossing.



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Pinch Point

# 20

RIGHT TURN  
Golden Hwy,  
Dunedoo

**ROUTE 1**

The blades go across a level crossing along Golden Hwy in the town of Dunedoo before turning right towards the town centre.

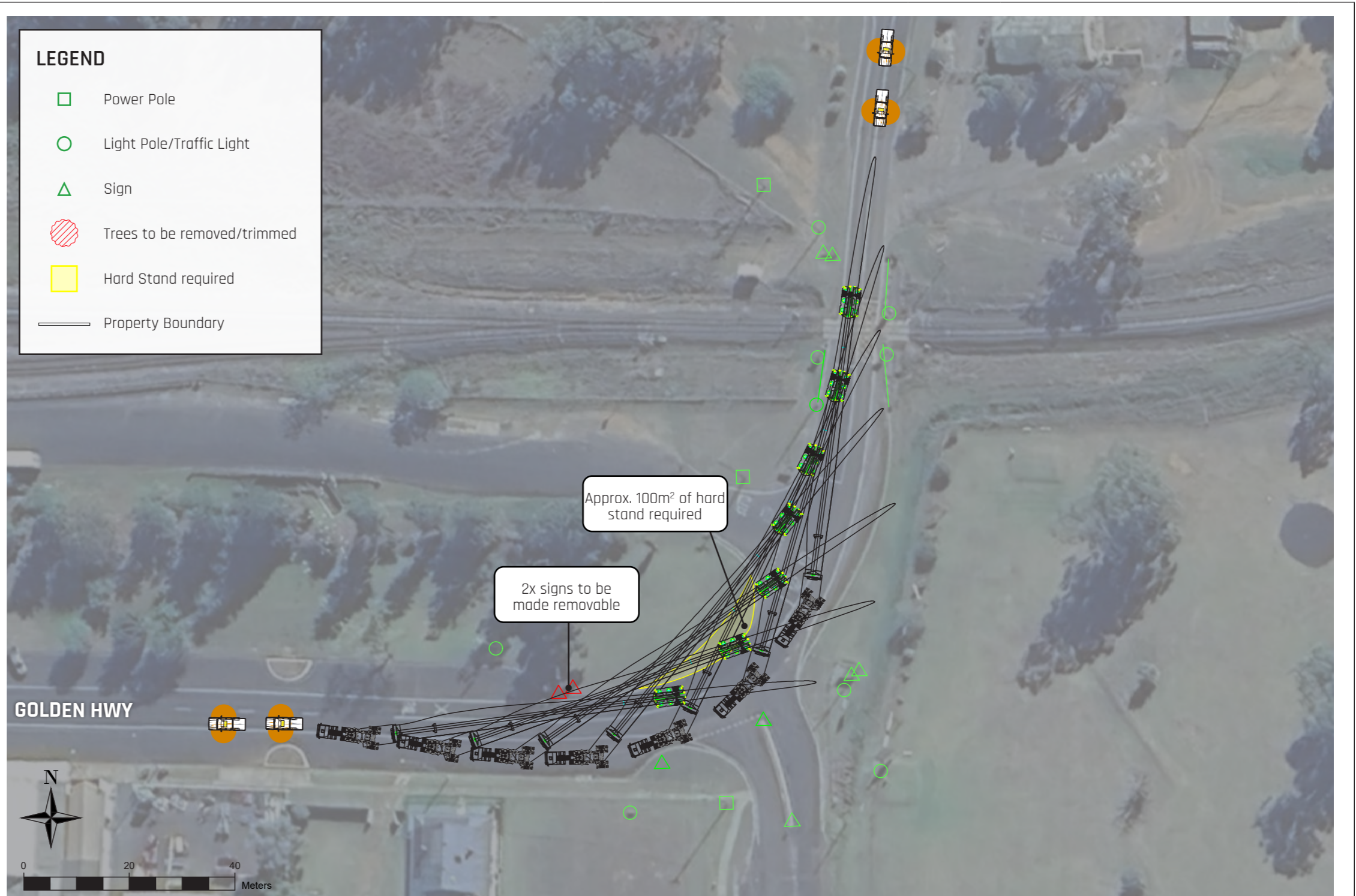
Due to the low height of the blade tip, the blade trailer will need to be steered very carefully to allow the tip to miss the rail crossing signals as the combination turns right.

Hard stand will be required on the inside of the turn, and two signs are to be made removable (as per the proposed 'Port to REZ' upgrades).

Police will need to control traffic in all directions whilst the manoeuvre is being completed.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.

Note: this corner is to be upgraded as part of NSW EnergyCo's 'Port to REZ' upgrades to Central West Orana REZ. If completed in time, upgrades will make the corner significantly easier to take.



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Pinch Point

# 21

LEFT TURN  
Golden Hwy  
& Saxa Rd

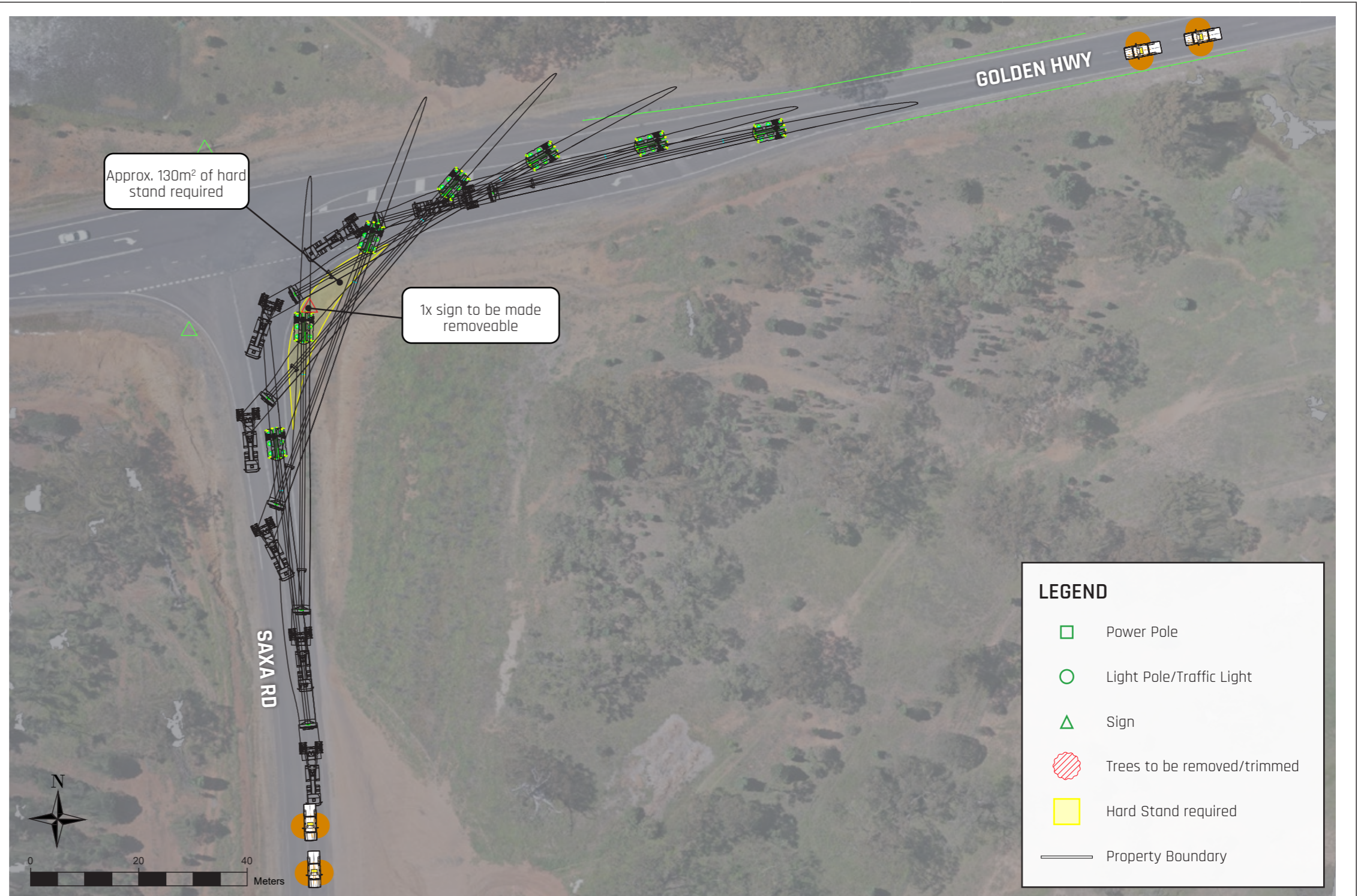
**ROUTE 1**

The left turn to join onto Saxa Rd will require upgrades, including hard stand on the inside of the turn and the removal of one sign, as per the proposed 'Port to REZ' upgrades.

Police will need to control traffic in all directions whilst the manoeuvre is being completed.

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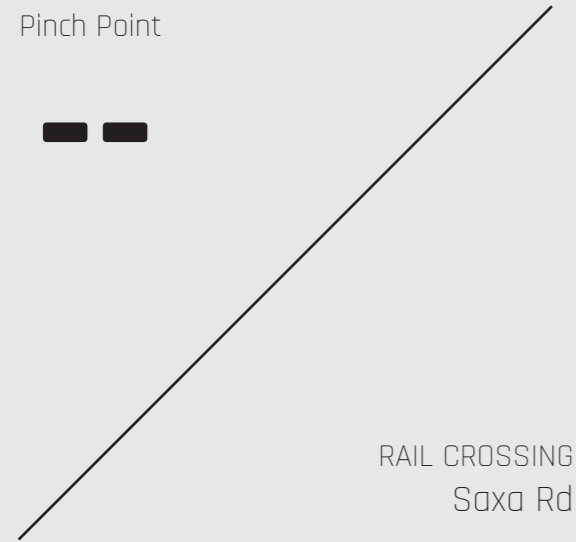


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Pinch Point



RAIL CROSSING  
Saxa Rd

**ROUTE 1**

The rail crossing at Saxa Rd north of Wellington will require rail authority approval prior to crossing. Loads are to travel across the crossing and then turn in accordance with the following pinch point.

Rail Manager: UGL Regional Linx  
Line: Main West  
Control Type: Active  
Controls: Boom Gates & Flashing Lights  
Tracks: Single

Track Protection Officers will be in attendance as required by the UGL RL Permit.



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Pinch Point

# 22

LEFT TURN  
Saxa Rd &  
Mitchell Hwy


**ROUTE 1**

The left turn to join onto the Michell Hwy requires the blades turning onto the wrong side of Mitchell Hwy before returning to the correct side. Only 1 sign needs to be made removable for this turn.

Police will need to control traffic in all directions whilst the manoeuvre is being completed.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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		PROJECT:	Uungula Wind Farm	SCALE NTS
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		DRAWING NAME:	Route Survey	REV
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Pinch Point

# 23

LEFT TURN  
Mitchell Hwy  
& Goolma Rd


**ROUTE 1**

To avoid the light poles on the south side of the highway, blades will require hard stand to be placed on the inside and outside of the corner within road reserve. Two road signs on the inside of the corner will have to be made removeable.

Police escorts will need to control traffic on Mitchell Hwy and Goolma Rd as shown on the right, with pilots assisting.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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Pinch Point

# 24


RIGHT TURN  
Goolma Rd &  
Twelve Mile Rd

**ROUTE 1**

A new intersection is being constructed further north of the existing intersection of Goolma Rd and Twelve Mile Rd as part of the wind farm development. The intersection has been designed with blade transport in mind and there are no issues with taking this turn. The analysis on the right shows the blade swept path overlaid on top of the civil design provided by the civil contractor performing the upgrades.

Note: The pilot vehicles illustrated are positioned purely as escorting the load and are not intended as any function of traffic control. All traffic control functions will be provided by NSW Police.



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**03**

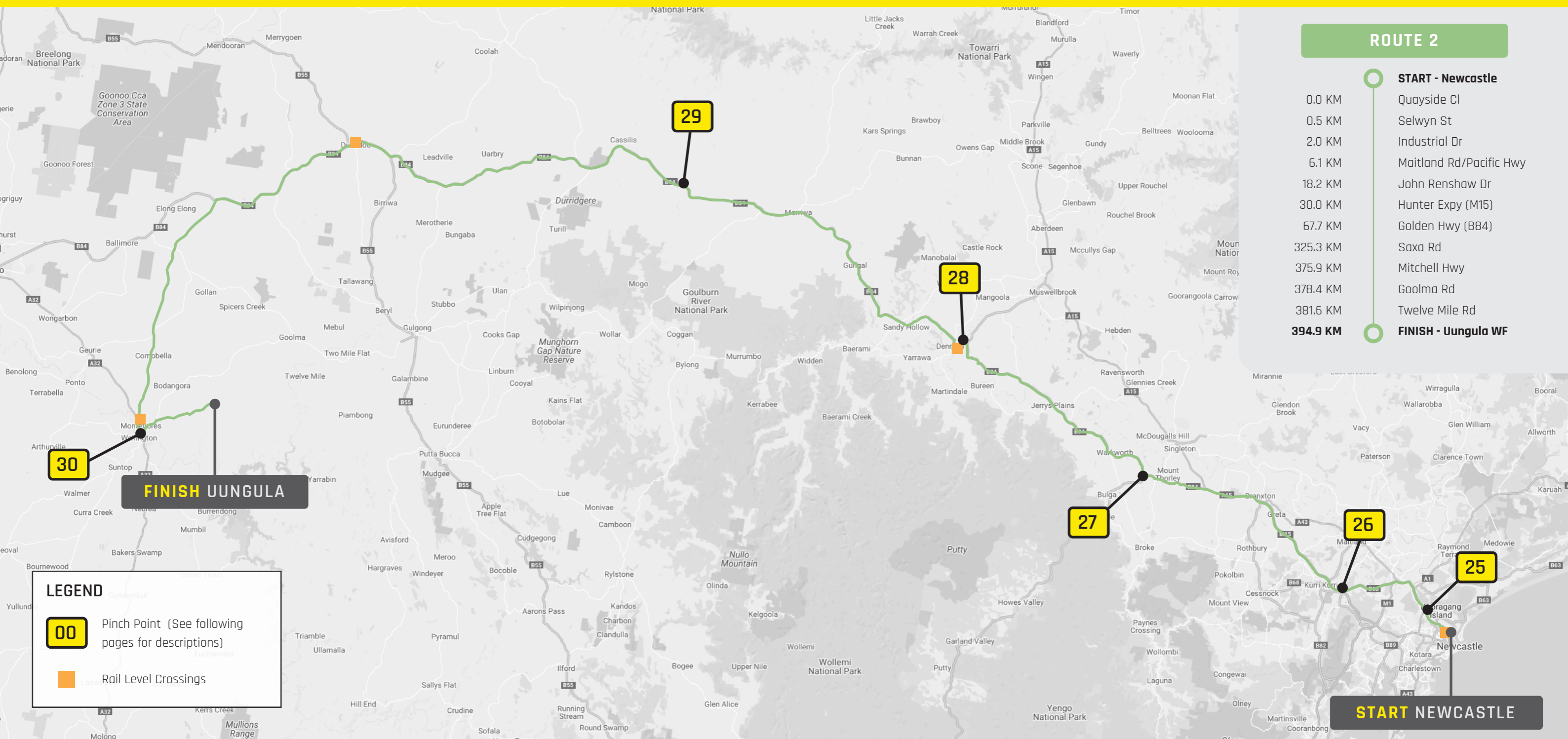
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**Route 2 - All Other  
Components**

# Newcastle to Uungula WF

## ROUTE 2 Non-Blade Components

NHVR Route ID: 2M4VT-9 v7 ([MyMaps Link](#))



**LEGEND**

- Pinch Point (See following pages for descriptions)
- Rail Level Crossings

Pinch Point

# 25

OVERHEAD OBSTACLES  
Traffic Lights,  
Industrial Dr

**ROUTE 1**

There are a number of overhead traffic signals along Industrial Dr between George St and Maitland Rd/Pacific Hwy, the lowest of which is the Steel River Blvd signal at 5.4m high. High loads above 5.3m loaded height will need to take the right hand lane to avoid these obstacles.



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DRAWN DATE:

CHECKED BY:

CUSTOMER: GE Vernova

PROJECT: Uungula Wind Farm

DRAWING TITLE: SWEPT PATH DRAWING

DRAWING NAME: Route Survey

SIZE:

SCALE NTS

SHEET NO:

REV

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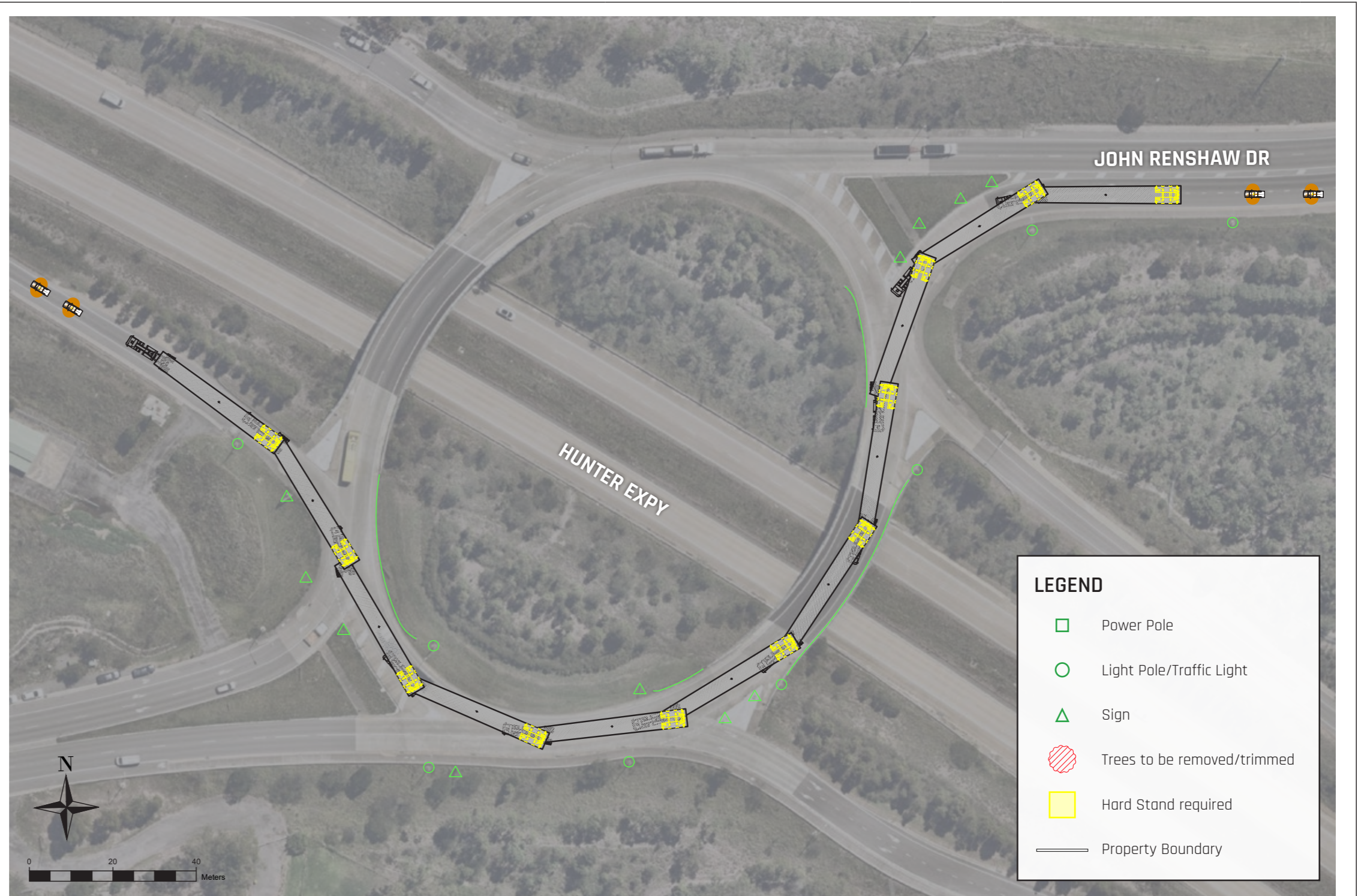
Pinch Point

# 26

ROUNDAABOUT  
John Renshaw Dr  
& Hunter Expy

**ROUTE 2**

Loads travelling on Route 2 will turn onto the Hunter Expressway at this intersection. The longest tower section has been modelled for worst case swept path purposes and as shown, can take this turn conventionally with no issues or modifications required.



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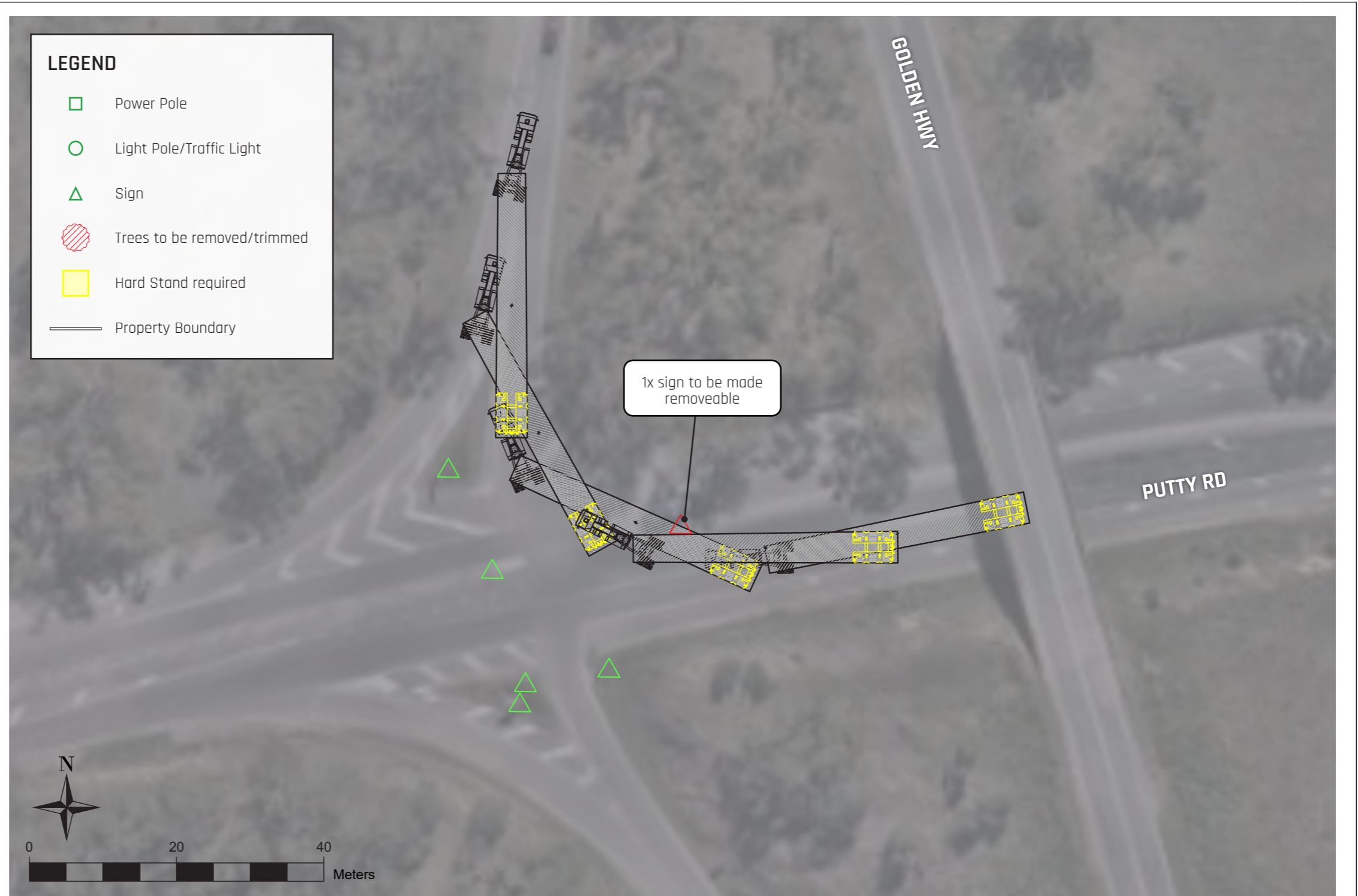
Pinch Point

# 27

LEFT TURN  
Putty Rd &  
Golden Hwy

**ROUTE 2**

All non-blade loads are able to pass safely underneath the overpass at Mt Thorley (physically measured at 6.1m in the westbound lanes) and turn right to continue along the Golden Hwy. One sign will need to be made removeable in the centre median.



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Pinch Point

# 28

BRIDGE CROSSING  
Denman Bridge

**ROUTE 2**

Loads higher than 5.6m loaded height will need to lower before crossing Denman Bridge. These would be the bottom tower sections (Base, Mid E and Mid D). Note: The Mid D is only marginally over at 5.61m and may not require lowering.


The lowering of the trailer will take place at a gravel stopping area on the southbound side of Golden Hwy, approx. 1.4km south of Denman Rd. This area is 80m long by 15m wide and allows the trailer to pull completely off the road to lower safely.

Once lowered, the combination will continue to Denman Rd and cross Denman Bridge.

400m to the west of Denman Bridge there is a hard stand verge where the trailer can pull over and be reset to its normal ride height. This area is approx. 60m long by 5.5m wide and allows the trailer to pull off the carriageway to stop and hydraulically raise up.

Total duration from start of trailer lowering to end of trailer raising is estimated to be approximately 15 minutes.



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Pinch Point


# 29

BRIDGE CROSSING  
Golden Hwy  
over Krui River

**ROUTE 2**

The crossing of the Krui River west of Merriwa involves travelling over a narrow two-lane bridge with road barriers extending several hundred metres from both sides of the bridge. The lead pilot vehicle(s) will need to proceed ahead of the load and warn oncoming traffic to pull over and wait prior to the barrierred section of highway, allowing the wide load to straddle the middle of the bridge and cross safely.



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Pinch Point

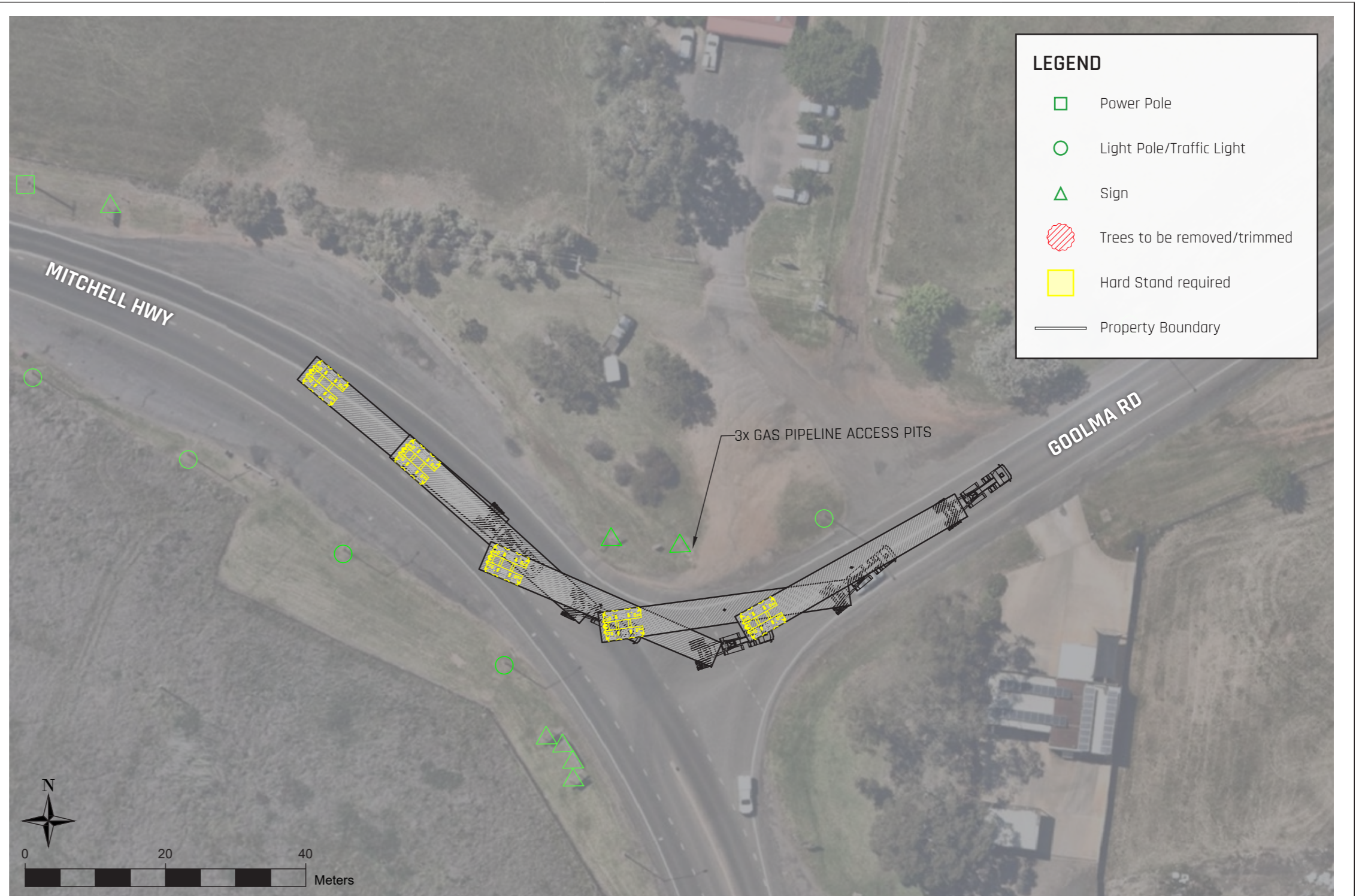
# 30

LEFT TURN  
Mitchell Hwy  
& Goolma Rd

**ROUTE 2**

Non-blade components are able to take this intersection without any modifications, staying on the existing paved surface at all times. Swept path analyses have been performed for the longest non-blade component (top tower section at 45m overall length) and widest non-blade component (base tower section at 5.5m overall width).

The swept path on the right is for the top tower section.



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PROJECT: Uungula Wind Farm

DRAWING TITLE: SWEPT PATH DRAWING

DRAWING NAME: Route Survey

SIZE:

SCALE NTS

SHEET NO:

REV

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Pinch Point

# 30

LEFT TURN  
Mitchell Hwy  
& Goolma Rd

**ROUTE 2**

Non-blade components are able to take this intersection without any modifications, staying on the existing paved surface at all times. Swept path analyses have been performed for the longest non-blade component (top tower section at 45m overall length) and widest non-blade component (base tower section at 5.5m overall width).

The swept path on the right is for the base tower section.



**LEGEND**

- Power Pole
- Light Pole/Traffic Light
- Sign
- Trees to be removed/trimmed
- Hard Stand required
- Property Boundary

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# 04

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**HSEQ**

## Health, Safety and Environment

Safety is always the highest priority for Ares.

### Permits

NSW Permits to complete this project will be required from the following parties:

- NHVR Oversize Overmass Permit(s)
- Transport for NSW
- NSW Police Approval
- Council Permits (e.g. Newcastle, Dubbo)
- Rail Infrastructure Manager Approval
- Ausgrid High Load permit
- Essential Energy High Load permit
- Telstra Approval

### Verification of Competency

All ARES drivers will be in possession of a valid driver's license, which will be checked prior to commencement of transport operations. All drivers are to comply with fatigue management legislation and will be regularly audited by ARES management.

### Personal Protective Equipment

It is ARES policy for all drivers to wear the required personal protective equipment (PPE) whenever it is required and to ensure it is of the appropriate type.

This includes but is not limited to:

- Protective Gloves – AS/NZS 2161.2:1998
- Safety Helmet - AS/NZS 1801:1997
- Lace up (Steel Cap) Safety Boots – AS/NZS 2210.1:2010
- Long Sleeve / Pants - Hi Vis safety work clothing – AS/NZS 4602.1:2011
- Safety Glasses – AS/NZS 1337.1:2010

### Hazard Identification, Risk Assessment & Control

All drivers are trained in the use of the standard Hazard Reporting Form. Safe Work Method Statements (SWMS) are created for all activities to be undertaken and reviewed on a regular basis. Personnel undertaking an activity are required to sign onto the relevant SWMS.

ARES personnel are also encouraged to use their Take 5 booklets, which are available in each truck and also at site offices.

Incident reporting is overseen by the HSEQ representative and all details are recorded in an online form on the ARES Portal. Remedial and close out actions are reviewed on a regular basis by ARES management.

### Communication

All selected radio channels will be documented in the SWMS and all Project personnel will be advised of the selected channels prior to the commencement of work, via the SWMS, Tool Box Meeting and/or the Operations Manager.

Communication between all parties in the Oversize vehicles and pilots will be on UHF Channel 40 and it will be used to keep in positive contact at all times.



## Quality

Ares is accredited to ISO 9001:2015 and maintains strict standards for quality.

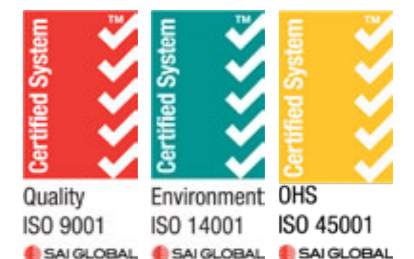
### Equipment Servicing & Maintenance

ARES's equipment maintenance programme is accredited to the NHVAS and designed to keep our trucks and trailers in optimal running condition. Prime Movers are serviced every 3 months, and trailers are serviced every 12 months.

All service and maintenance records are kept online in the ARES Portal, and are available for review upon request.

### Non Conformances

Non conformances noted by ARES management or by external parties are recorded as Non Conformance Reports (NCRs) in the ARES Portal. Each NCR is treated in a similar fashion to an incident and is assigned an actioner to rectify and close out the non conformity.

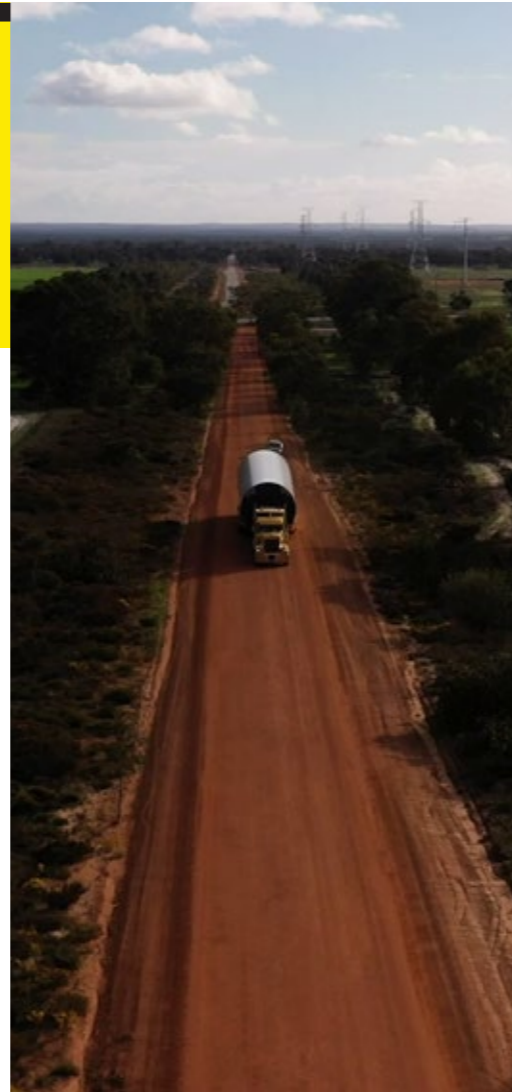


## Breakdown Contingency Plan

In the event of an emergency such as a breakdown or incident, ARES will notify the NSW Transport Management Centre (TMC) on 1800 679 782 / 131 700 immediately to provide information regarding any issues of the movement. We will then move the load to the next available pull over area or to the left lane and shoulder to ensure the traffic impact is minimal. Pilot vehicles are to position themselves at front and rear of stricken load to provide warning to other road users of hazard ahead. Police (if present) are to direct and manage traffic as appropriate with pilots accompanying the load to assist under the direction of police.

ARES will then consult and engage any one of the following service providers:

A Heavy Tow Truck will be engaged by ARES for the project to be on call to assist in the event of a breakdown and as a ballast/block truck where required. There will also be a number of other heavy rated prime movers at port and on the wind farm site which may



be called upon if required.

If specialist equipment and contractors are required such as cranes and traffic management, these will be engaged on an as-required basis.

Contact	Operator	Phone No.
Standby Prime Mover	ARES Block Truck	TBC
Tow Truck Operator	TBC	TBC
Crane Operator	TBC	TBC
Traffic Control Contractor	Evolution Traffic Mgmt	1300 880 476
Tyres	Beaurepaires / Bridgestone	132 381 / 131 229
Mechanical	TBC	TBC
Fire/Police/Ambulance	-	000
Transport Management Centre (TMC)	-	131 700
ARES Project Manager	Stephen Spiller	0435 901 680

ARES will make contact with TMC again once the issue is resolved and the load is moving again. This will enable TMC to notify other road users that may be affected by the breakdown or incident.

**Opposite page, top:**

Base tower section being transported in remote Western Australia for the Yandin project.

**Opposite page, bottom:**

Dump truck and block truck assisting a tower section up the hill at Crowlands Wind Farm. Some sections of the site roads were around 20% gradient.

**Above, left:**

Biala base section travelling down the Princes Motorway at night time, similar to conditions proposed for Flyers Creek.

**Above, right:**

A tower section on bookend trailers traversing the ridge line at Crowlands Wind Farm.

## Night Time Travel

Extra precautions are required when travelling with oversized loads at night time.



**ARES has extensive experience transporting wind components at night - having recently done so for the Flyers Creek Wind Farm in New South Wales.**

### Approvals

A night time travel exemption is required from Transport for NSW for the blades as there are curfew restrictions on oversized travel along the route. The following sections outline how Ares plan to mitigate the risks of traveling down these roads at night.

### Route Checks

Prior to starting deliveries, the Project/Transport Manager will check current traffic (via LiveTraffic) and weather conditions along the route to ensure there are no unplanned disruptions which would affect transport. These include traffic incidents, roadworks, road closures, flooding, bushfire etc. If there is a disruption, the Project/Transport Manager shall make a Go/No Go decision based on consultation with relevant parties including TfNSW, TMC, client and site, the nature/duration of the disruption and the available time window for transport.

If an issue along the route becomes known when the load is already en route, the load shall pull up at the next available rest stop or safe stopping place and await further instructions from the Transport/Project Manager. Depending on the severity of the disruption, the load may be instructed to continue when safe, stop for the

day, or proceed to a safer stopping point and park up.

### Lighting and Visibility

In addition to the standard lights and flashing beacons equipped as standard on ARES trucks, trailers and pilot vehicles, the extremities of the load shall be illuminated by suitable method (e.g. flood lights mounted on prime mover/dolly, or portable battery-operated magnetic lights). Care shall be taken to ensure the lighting is not directed in such a way as to dazzle other drivers.

Blades will be escorted front and rear by police cars with red/blue flashing lights for additional visibility.

### Police Escorts and Pilots

Each oversized load will be escorted by a complement of pilot vehicles and police escort vehicles, as shown on page 10. These numbers include additional pilots included to mitigate the risk of transporting oversized components at night, as required by Transport for NSW guidelines.

Police will provide traffic management at pinch points, with assistance from pilot vehicles where required and as directed by the Police.

Whilst on the road, typically the lead vehicle(s) will take a position at least 300m ahead of the load to establish a buffer zone, and to allow for sufficient warning time to the truck driver in case of any unexpected obstructions or conditions, such as roadkill, traffic incidents, parked cars etc. The rear vehicle(s) will take up a protective position behind the load to observe and manage any traffic coming up from behind.

Clear and positive communication between all pilot/police vehicles and truck driver shall be maintained by CB radio at all times. If communication is lost at any time between any element of the convoy, the convoy must stop and rectify the issue before continuing.

The proposed arrangements for pilot and police vehicle positioning for each type of load are provided on the following page. Please note that the exact

arrangements may change based on road, traffic or weather conditions, vehicle speed, as well as any directions given by Police.

### Management of Traffic

The pilots, in close consultation with police where present, shall manage the build up of traffic behind the load by instructing the driver to pull off the road at suitably safe points to allow any queued traffic behind to pass. This is mainly applicable to single carriageway sections of the Golden Highway. Potential passing points have been identified in advance (refer to [Google My Maps link](#)) and include:

- Overtaking lanes
- Rest Areas
- Stretches of road with wider shoulders and clear line of sight ahead

The lead pilot / police is primarily responsible for monitoring oncoming traffic, identifying safe passing points ahead and communicating with the driver of the load and other escorts to slow and pull over. When oncoming traffic is encountered, the lead pilot will use light wands to alert the traffic to slow down, with the following pilot reinforcing. The load will also be instructed via radio to slow down and pull to one side to allow the oncoming traffic to pass safely.

The rear pilot / police is responsible for monitoring the amount of queued traffic behind the load and providing feedback to the lead pilot / police. At nominated passing points, the lead pilots will monitor for oncoming traffic whilst the load slows and pulls over to one side, allowing any queued traffic to safely pass. The rear pilot (if present) will position themselves at the rear of the load to mark the outer extremities of the load whilst vehicles pass. Rear pilots should actively look to allow queued traffic to pass when there is a significant queue observed (i.e. >10 vehicles) or if traffic has been observed to be following behind for more than 15-20 minutes.

### Timing

Deliveries have been purposely scheduled for night time to minimize disruptions to local traffic. The road from Newcastle to Muswellbrook in particular is a heavily used thoroughfare westbound during morning hours for commuting to the mines, with significant quantities of heavy vehicle and truck traffic as well. Wind Farm deliveries have been timed to get ahead of the increase in traffic volumes. In consultation with TfNSW, NSW Police and local councils, we believe that night time transport for the wind turbine components is the best solution.

To achieve the required timing, ARES will require dispensation to depart Port of Newcastle at 00:00 (or possibly earlier). This should allow loads to clear Muswellbrook prior to traffic picking up in the morning.

Components will stop at the Warkworth inspection bay to wait for sunrise before continuing on to site, with the exception of blades which will travel through the night to site.

### Communication Plan

To further mitigate the risks associated with night travel, the project will notify and inform local residents in advance of movements. These may include any of the following:

- radio advertisements
- print advertisements
- letter drops
- Communication via Community Consultation Committee (CCC)
- notices on official windfarm website
- social media

The communications will contain information on the proposed times and locations of oversized transport along the route, as well as the nature of expected disruptions.

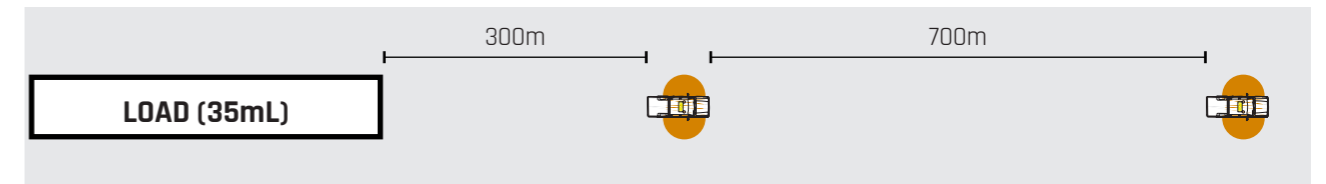
ARES will coordinate the communication strategy with Transport for NSW, NSW Police and project proponent to ensure consistent messaging is provided to the public regarding oversized deliveries for the project.

## PROPOSED ESCORT LAYOUTS

### Drivetrain, Hub, Nacelle, Lower 5 Tower Sections

Length: Up to 35m, Width: up to 5.5m, 2 Pilot Vehicles

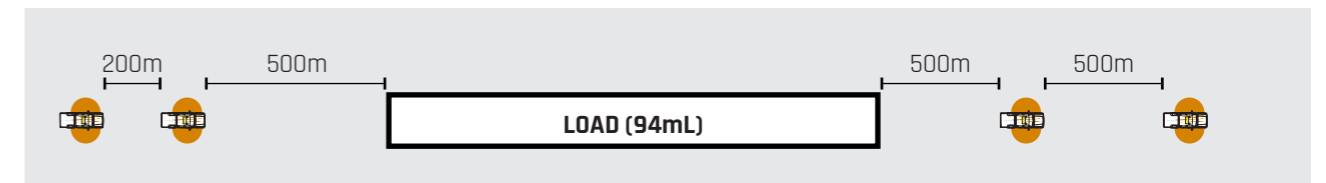
Both Pilot Vehicles will position themselves in front of the load to warn oncoming traffic of the approaching wide load. The load will position itself in the centreline of the road, taking up two lanes of a single carriageway and preventing overtaking except at nominated passing spots.



### Blade

Length: 94m, Width: 4.2m, 4 Pilot Vehicles, 2 Police Escorts

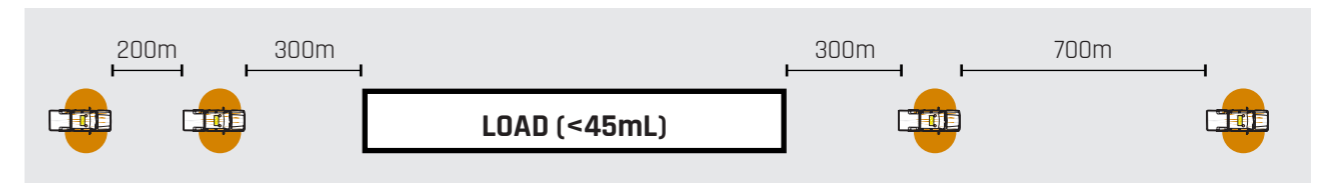
Pilot vehicles will be present in front and behind the load as shown, with police escorts on hand to provide stoppage and direction of traffic at pinch points, as well as the management of any queued traffic behind.



### Upper 2 Tower Sections

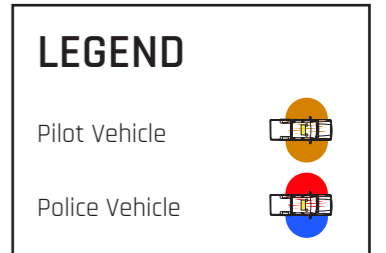
Length: <45m, Width: 4.3m, 4 Pilot Vehicles

Two Pilot Vehicles will stay ahead of the load to provide warning to oncoming traffic, whilst the remaining pilot(s) will alert any traffic coming from behind. The load will position itself in the centreline of the road, taking up two lanes of a single carriageway and preventing overtaking except at nominated passing spots.



DRAWINGS NOT TO SCALE

SPACINGS ARE CONTINUALLY ADJUSTED BASED ON TRAVEL SPEED AND CONDITIONS AND ARE A GUIDE ONLY





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## **Appendix E Condition B30 Planning Secretary Approval – Use of Twelve Mile Road and Goolma Road for Construction prior to upgrade**

Our ref: SSD-6687-PA-18

Ms Alana Gordijn  
Environmental Officer  
Uungula Wind Farm Pty. Ltd.  
PO Box 1708  
Newcastle, NSW, 2300

23/11/2023

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Subject: Intersection on Twelve Mile Road and Goolma Road

Dear Ms Gordijn,

I refer to your request dated 2 November 2023 in accordance with Condition B30, Schedule 2 of the development consent for Uungula Wind Farm (SSD-6687), seeking the Planning Secretary's approval to allow use of the Twelve Mile Road and Goolma Road intersection for construction traffic prior to its upgrade, including the letters of support from Transport for NSW (TfNSW) and Dubbo Regional Council (Council) dated 28 August and 4 September 2023, respectively.

I note that:

- in accordance with Condition B30, the Applicant must implement the road upgrades identified in Appendix 7 prior to commencing construction, unless the Planning Secretary agrees otherwise;
- TfNSW and Council are the relevant roads authority, and both are supportive of allowing the use of the intersection located on Twelve Mile Road and Goolma Road for light and heavy vehicles for construction:
  - as long the new intersection is completed prior to the route being used for over-mass and/or over-size/length vehicles (OSOM); and
  - subject to implementation of a Traffic Management Plan (TMP) to safely manage all traffic generated by the development for construction.

Accordingly, as nominee of the Planning Secretary, I approve use of the current intersection located on Twelve Mile Road and Goolma Road for light and heavy vehicles for construction:

- as long the new intersection is constructed and the old intersection is removed and closed prior to the route being used for OSOM; and
- subject to the TMP being updated in consultation with TfNSW and Council, approved and implemented to safely manage construction traffic:
  - prior to construction commencing (for construction stage prior to OSOM); and
  - further updated prior to OSOM using the new intersection.

## Department of Planning and Environment



If you wish to discuss the matter further, please contact Jess Watson on 02 9373 2845 or via email at [jess.watson@dpie.nsw.gov.au](mailto:jess.watson@dpie.nsw.gov.au).

Yours sincerely

A handwritten signature in blue ink, appearing to be "Nicole Brewer".

Nicole Brewer  
Director  
Energy Assessments  
As nominee of the Secretary

# **Appendix F Relocation of secondary intersections Planning Secretary approval**

Miss Alana Gordijn  
Environmental Officer  
Uungula Wind Farm Pty. Ltd.  
PO Box 1708  
Newcastle, NSW, 2300

10/09/2023

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**Subject:** Relocation of minor secondary intersections on Uungula Road and Ilgingery Road

Dear Miss Gordijn

I refer to your letter dated 27 June 2023 seeking the Planning Secretary's approval for the relocation of the minor secondary intersections located on Uungula Road and Ilgingery Road, in accordance with Schedule 2, Condition B30 of the approval for Uungula Wind Farm (SSD-6687). I also acknowledge your response to the Department's review comments and request for additional information.

The Department has carefully reviewed the information provided, and notes that:

- Dubbo Regional Council is the relevant road authority and did not raise concerns about the proposed relocations; and
- the proposed relocations would not increase impacts beyond what is already permitted under SSD-6687.

Accordingly, as nominee of the Planning Secretary, I approve the request to relocate the minor secondary intersection locations in accordance with the letter request dated 27 June 2023 and the additional information provided.

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Jess Watson on 02 9373 2845 or via email at [jess.watson@dpie.nsw.gov.au](mailto:jess.watson@dpie.nsw.gov.au).

Yours sincerely



Nicole Brewer  
Director  
Energy Assessments

As nominee of the Planning Secretary

# **Appendix G Condition B30 Planning Secretary Approval – Non-blade OSOM deliveries**

Vincent Chaplin  
Senior Environmental Advisor  
Uungula Wind Farm Pty Ltd  
Level 12, 55 Market Street  
Sydney NSW 2000

27/03/2026

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Subject: Uungula Wind Farm – Request to vary road upgrade timing, Condition B30

Dear Mr Chaplin,

I refer to your submission dated 6 March 2026, requesting approval for a variation in the timing of road upgrades under Schedule 2, Condition B30 of the development consent for Uungula Wind Farm (SSD-6687).

The Department understands you are requesting Secretary's discretion to allow early non-blade Over Size Over Mass (OSOM) deliveries through the Mitchell Highway and Goolma Road intersection prior to completion of intersection upgrade works as required by Condition B30 and Appendix 7 of the development consent.

It is noted your request has been prepared in consultation with Transport for NSW (TfNSW) and Dubbo Regional Council (DRC).

Modification 3 was developed to seek approval to include a specific upgrade to the Mitchell Highway and Goolma Road intersection to allow for the delivery of blades to site. Appendix 7 of the consent states that this intersection upgrade is to occur prior to commencing use of Mitchell Highway and Goolma Road intersection for any over-dimensional traffic associated with the delivery of components for the development.

It is understood:

- TfNSW and DRC both support the delivery of non-blade components prior to completion of road upgrades;
- the Mitchell Highway and Goolma Road intersection is currently in good condition with a large turning geometry;
- a swept-path assessment shows that the largest and widest non-blade OSOM vehicle will be able to turn left from the Mitchell Highway into Goolma Road without impacting any road infrastructure;
- traffic control will be in place to safely manage temporary road user impacts and facilitate the OSOM movements; and

- the commencement of deliveries prior to completion of these works will not impact the construction works or completion dates for the intersection upgrade.

Accordingly, as nominee of the Planning Secretary, I approve the commencement of non-blade OSOM movements prior to the completion of the upgrade of the Mitchell Highway and Goolma Road intersection.

Please ensure:

- the Traffic Management Plan relevant to this stage of the development has been updated and approved prior to commencement non-blade OSOM movements;
- monthly updates on road upgrades and works, including timing, are provided to the relevant road authority and the Department;
- the road upgrades meet the requirements of the development consent; and
- all other requirements of the consent (including timing of any other relevant management plans and notifications) are adhered to.

If you wish to discuss the matter further, please contact Katie Weekes on 4927 3223.

Yours sincerely,



Nicole Brewer  
Director  
Energy Assessments

As nominee of the Planning Secretary

Squadron Energy is Australia's leading renewable energy company. Proudly Australian owned, our mission is to be a driving force in Australia's transition to a clean energy future by providing green power to our customers.

We develop, operate and own renewable energy assets in Australia, with 1.1 gigawatts (GW) of renewable energy in operation and a development pipeline of 20GW.

With proven experience and expertise across the project lifecycle, we work with local communities and our customers to lead the transition to Australia's clean energy future.

Squadron Energy acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past, present, and emerging.

