RYE PARK WIND FARM

Traffic Management Plan

Development Consent State Significant Development: 6693

June 2022

SAMSA CONSULTING
TRANSPORT PLANNING & TRAFFIC ENGINEERING

renewables

Rye Park Wind Farm

Document Title: Traffic Management Plan

Revision: Rev 4

Date: 21 June 2022

Document History and Status

Revision	Date	Description	Prepared by	Reviewed by	Approved
Rev 1	September 2021	Final for lodgement with DPIE	C. Layton (Tilt Renewables)	A. Samsa (Samsa Consulting)	C. Layton (Tilt Renewables)
Rev 2	October 2021	Final post DPIE feedback	M. Glass (Tilt Renewables)	C. Layton (Tilt Renewables)	C. Layton (Tilt Renewables)
Rev 3	November 2021	Final post DPIE /TfNSW feedback	M. Glass (Tilt Renewables)	C. Layton (Tilt Renewables)	C. Layton (Tilt Renewables)
Rev 4	June 2022	Reflect changes to Staging Report (Rev4)	J. Beckett (Tilt Renewables)	C. Layton (Tilt Renewables)	J. Shuker (Tilt Renewables)

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Our ref: SSD-6693-PA-53

James Beckett
Senior Environment and Development Planner
Rye Park Renewable Energy Pty Ltd
By email: James.Beckett@tiltrenewables.com

11/08/2022

Subject: Traffic Management Plan for Rye Park Wind Farm (Condition 30, Schedule 3 of SSD-6693)

Dear Mr Beckett,

I refer to your submission dated 21 June 2022, requesting approval of the Traffic Management Plan (Revision 4, 21 June 2022).

The Department has carefully reviewed the revised Traffic Management Plan, noting that the changes from the currently approved Traffic Management Plan (Revision 3) relate to the timing for two proposed road upgrades. The Department notes that relevant road authorities (Hilltop Council and Upper Lachlan Shire Council) have agreed to the proposed timing.

I note the Traffic Management Plan has been:

- prepared in consultation with Upper Lachlan Shire Council and Hilltops Council; and
- is consistent with the Revised Staging Report approved by the Department on 30 May 2022;

Accordingly, as nominee of the Planning Secretary, I approve the Traffic Management Plan (Revision 4, 21 June 2022) under Condition 30 of Schedule 3.

You are reminded that if there is any inconsistency between the approved document and the conditions of approval, then the requirements of the conditions of approval prevail.

Please ensure you make the document and this approval letter publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Anthony Ko on 02 8217 2022.

Yours sincerely

Nicole Brewer
Director
Energy Assessments
As nominee of the Planning Secretary

Contents

Acronyms, Abbreviations and Definitions

the Applicant	Rye Park Renewable Energy Pty Ltd, a wholly owned subsidy of Tilt Renewables Pty Ltd (has the same meaning as ‘the Developer’), or any person carrying out the Development approved under the Development Consent.
CCC	Community Consultative Committee
Code of Conduct	Transport Code of Conduct
Commissioning	means all activities, including turning of turbines, after the components of the first complete wind turbine are installed. The date on which commissioning commences is the first date on which the blades of the first completed wind turbine start rotating.
Construction	means the construction of the development, including but not limited to the construction of wind turbines, ancillary infrastructure and road upgrades, and excluding preconstruction minor works.
the Councils	Includes Yass Valley Council, Upper Lachlan Shire Council and Hilltops Council
Decommissioning	The removal of wind turbines and any associated above ground infrastructure.
the Department	Department of Planning, Industry and Environment (DPIE)
the Developer	Rye Park Renewable Energy Pty Ltd (has the same meaning as ‘the Applicant’)
the Development	the Rye Park Wind Farm
Development Consent	Development Consent SSD 6693 granted under the EP&A Act for up to 77 wind turbines with a 200 m tip height.
EIS	The Environmental Impact Statement for the Rye Park Wind Farm, (Epuron Pty Ltd, January 2014), as modified by: • the Response to Submissions, dated 12 May 2016; • the Modification Application for the changes to turbines of the project dated 23 April 2020, including associated Response to Submissions dated 18 August 2020, the Amendment Reports dated 19 August 2020 and 19 March 2021 and additional information provided on 30 October 2020 and 15 January 2021.
EMS	Environmental Management Strategy
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
Feasible	Feasible relates to engineering considerations and what is practical to build or implement.
GCM	Gross Combination Mass
Heavy vehicle	As defined under the Heavy Vehicle National Law (NSW) but excluding light and medium rigid trucks and buses no more than 8 tonnes and with not more than 2 axles.
Incident	A set of circumstances that:

	• causes or threatens to cause material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in the consent.
Minimise	To implement all reasonable and feasible mitigation measures to reduce the impacts of the development.
Minister	The Minister for Planning and Public Spaces, or delegate.
Mitigation	Activities associated with reducing the impacts of the development
MOD 1	Modification 1 to Development Consent (SSD 6693)
NHVR	National Heavy Vehicle Regulator
Non-associated residence	Any residence on privately-owned land where the owner has not reached a commercial or in kind agreement with the Applicant in relation to the development. In some cases, this agreement will be restricted. First, it may only cover certain aspects of the development (such as the noise or visual impacts). In such cases, the residence is only associated for those aspects covered by the agreement and remains a non-associated residence for all those aspects that are not covered by the agreement. Second, while the agreement may cover a certain aspect of the development (such as noise impacts), it may limit the extent of any such impact (by setting absolute noise levels at a residence, for instance). In these cases, the residence is only associated to the extent that the impact is covered by the agreement, and is considered to be non-associated for any impacts that exceed the limits specified in the agreement.
NSW	New South Wales
OD	Over-dimensional, meaning over-mass and/or over-size/length vehicles (has the same meaning as 'OSOM').
OOH	out-of-hours
Operations	The operation of the development but does not include commissioning trials of equipment or use of temporary facilities.
OSOM	Over-mass and/or over-size/length vehicles.
PAC	NSW Planning Assessment Commission (now known as IPC)
Planning Secretary	The Secretary of the Department, or nominee.
Pre-construction minor works	Pre-construction works includes the following • activities: • building/road dilapidation surveys; • investigative drilling, • excavation or salvage; • minor clearing or translocation of native • vegetation; • establishing temporary site offices (in locations meeting the criteria identified in the conditions of the Development Consent); • installation of environmental impact mitigation measures, fencing, enabling works; and • minor access roads and minor adjustments to services/utilities, etc.
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, draining, sewerage, gas

	supply, electricity, telephone, telecommunications, etc.
RAVs	Restricted Access Vehicles
Reasonable	The application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements.
Residence	Any dwelling in existence at the date of the Development Consent, or a dwelling that is either the subject of a development consent or development application that was lodged but not yet determined at the date of the Development Consent once a final occupation certification has been issued for the dwelling.
RFS	Rural Fire Service
ROL	Road Occupancy Licence
ROPs	Road Opening Permits
Site	The land defined in Appendix 1 of the Development Consent
Site Access Point No.10	Grassy Creek Road, approximately 6.5 km north of Rye Park Road
Site Access Point No.12	Dalton Road, approximately 14.7 km south of Rye Park Road
Site Access Point No.2	Grassy Creek Road, approximately 5.3 km north of Rye Park Road
SoCs	Statement of Commitments
SSD	State Significant Development
T&TA	Traffic and Transport Assessment
TCWS	*Traffic Control at Work Sites, Technical Manual – Issue 6.0*
Temporary facilities	Temporary facilities used for the construction and/or decommissioning of the development, including but not limited to temporary site offices and compounds, concrete batching plants, materials storage compounds, maintenance workshops, testing laboratories or material stockpiles.
TfNSW	Transport for NSW
TGS	Traffic Guidance Scheme
TIA	Traffic Impact Assessment
TMA	Truck Mounted Attenuators
TMC	Transport Management Centre
TMP	Traffic Management Plan
TSR	Traveling Stock Reserve
VMS	Variable Message Signs
WAD	Works Authorisation Deed
website	Means a set of related web pages located under a single domain name attributed to the Development and available to the public (www.ryeparkwf.com.au).
WTG	Wind Turbine Generator

1 Introduction

1.1 Background

The Rye Park Wind Farm (the Development) is located to the west of Rye Park, to the north-west of Yass and south-east of Boorowa, in New South Wales (NSW) (refer Figure 1).

Development Consent (SSD 6693) (the Development Consent) was granted by the NSW Planning Assessment Commission (PAC, now known as the Independent Planning Commission) under the *Environmental Planning & Assessment Act 1979* (EP&A Act) on 22 May 2017, and modification (MOD 1) approved 15 April 2021.

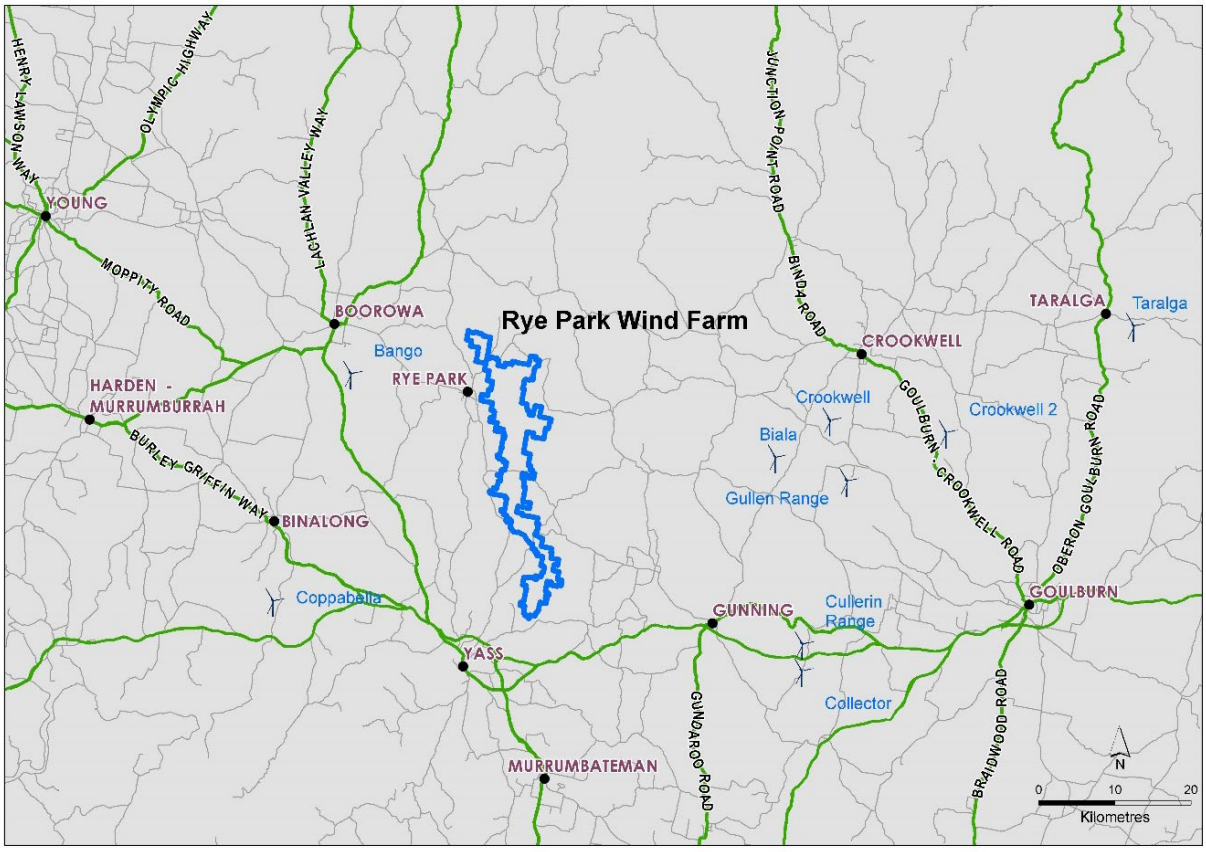
The Development has also been granted approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC 2020/8837) on 1 June 2021.

This Traffic Management Plan (TMP) addresses the requirements of the Development Consent, specifically including Schedule 3 Condition 30.

The Development will be carried out generally in accordance with the Environmental Impact Statement (EIS) and the Development Consent as per Schedule 2 Condition 2 of the Development Consent. All conditions listed within Development Consent will be adhered to and implemented throughout the life of the Development.

Transportation of materials, components and equipment will be along the approved transport route, whereby the Development has been able to select the one route from Port, Route 1 - Port of Newcastle (see Section 2.3 for further details).

Figure 1: Development Location



1.2 Purpose of the Traffic Management Plan

The TMP has been prepared to meet the requirements of Schedule 3 Condition 30 of the Development Consent and other relevant requirements.

To meet the requirements of the Development Consent and EPBC 2020/8837 and to support the implementation of other licenses and permits an environmental framework has been developed including the Environmental Management Strategy (EMS) and associated management plans (including (but not limited to) the TMP, Heritage Management Plan, Biodiversity Management Plan and Emergency Plan) as well as Offset Strategy have been prepared.

The TMP is an integral part of this environmental framework for the Development which ensures appropriate traffic management throughout construction, operational and decommissioning phases of the Development.

A checklist of where each element of Schedule 3 Condition 30 of the Development Consent has been addressed within this document is presented in Table 1, whilst Table 2 details the other traffic related conditions in which this TMP complies.

It is also noted that the TMP has been prepared in considering compliance with all requirements of the Development Consent including (but not limited to) summarised in Table 3.

Table 1: Traffic Management Plan – Schedule 3 Condition 30 of the Development Consent

Condition	Requirement	Where addressed in the TMP
Schedule 3 Condition 30	Prior to the commencement of construction, the Applicant must prepare a Traffic Management Plan for the development in consultation with TfNSW and the Councils, and to the satisfaction of the Planning Secretary. This plan must: (a) detail the measures that would be implemented to:	This document
	• minimise the traffic safety impacts of the development and disruptions to local road users during the construction and decommissioning of the development, including: ○ temporary traffic controls, including detours and signage;	Section 6.17
	○ notifying the local community about development-related traffic impacts;	Section 6.12
	○ minimising potential conflict between development-related traffic and: ▪ rail services; ▪ stock movements; and ▪ school buses, in consultation with local schools;	Sections 6.5, 6.7, and Appendix C.
	○ ensuring development-related traffic does not track dirt onto the public road network;	Section 6.2
	○ ensuring loaded vehicles entering or leaving the site have their loads covered or contained;	Appendix B
	○ providing sufficient parking on site for all development-related traffic;	Section 6.3

Condition	Requirement	Where addressed in the TMP
	○ responding to any emergency repair requirements or maintenance during construction and/or decommissioning; and	Section 8.2.2
	○ a traffic management system for managing over-dimensional vehicles;	Section 6.15
	• comply with the traffic conditions in this consent;	Sections 8.1 and 8.3
	(b) include a drivers code of conduct that addresses: • travelling speeds; • procedures to ensure that drivers to and from the development adhere to the designated over-dimensional and heavy vehicle routes; and • procedures to ensure that drivers to and from the development implement safe driving practices, particularly if using local roads through Boorowa, Jerrawa, Rye Park and Yass;	Appendix B
	(c) include a detailed program to monitor and report on the effectiveness of these measures and the code of conduct. Following the Planning Secretary's approval, the Applicant must implement the Traffic Management Plan.	Section 8

Table 2: Other Traffic Relevant Conditions

Condition	Requirement	Where addressed in the TMP
Schedule 3 Condition 26	**Designated Heavy and Over-Dimensional Vehicle Routes** The Applicant must ensure that all over-dimensional and heavy vehicle access to and from the site is via Trucking Yard Road, Dillon Street, Long Street, Boorowa-Rye Park Road, Grassy Creek Road, Yass Street, Gunning Road and Rye Park-Dalton Road and: • Route 1 - Port of Newcastle to project site via Gunning (using the Port of Newcastle via Selwyn Street, Industrial Drive, George Street, Maitland Road, New England Highway, John Renshaw Drive, M1, Pennant Hills Road, M2, M7, Hume Highway and Lachlan Valley Way); or *[Selected Route]* • Route 2 - Port of Newcastle to project site via Dubbo - for tower sections only (using the Port of Newcastle via Selwyn Street, Industrial Drive, George Street, Maitland Road, New England Highway, John Renshaw Drive, Hunter Expressway, Golden Highway, Putty Road, Denman Road, Bengalla Road, Wybong Road, Boothenba Road, Troy Bridge Road, Bunglegumbie Road, Mitchell Highway, Manildra Street, Derribong Avenue, Algalah Street, Tomingley Road, Newell Highway, Thomas Street, Moulden Street, Henry Parkes Way, Westlime Road, Hartigan Avenue, Goldfields Way, Kitchener Road, Bundawarrah Road, Milvale Road, Waratah Street, Burley Griffin Way, Hume Highway and Lachlan Valley Way); *[Route not used]* or	Section 6.15 Appendix A

Condition	Requirement	Where addressed in the TMP
	• Route 3 - Port Kembla to project site (using Port Kembla via Tom Thumb Road, Masters Road, M1, Picton Road, Hume Highway and Lachlan Valley Way), *[Route not used]* unless the Planning Secretary agrees otherwise. Notes: • *The Applicant is required to obtain relevant permits under the Heavy Vehicle National Law (NSW) for the use of overdimensional vehicles on the road network.* • *To avoid any doubt, this consent does not allow the use of Banks Street, Blakney Creek South Road, Cemetery Drive, Cook Streets and Dirthole Creek Road as over-dimensional or heavy vehicle access routes.* • *Certain over-dimensional vehicles travelling towards the site would use dedicated access road on Lot 1 DP580999 to turn from Rye Park Road north onto Grassy Creek Road and south onto Yass Street.* • *To avoid any doubt, this consent does not allow the use of site access points 1, 3 to 6, 9 and 13 identified in the EIS.*	
Schedule 3 Condition 27	**Road Upgrades** The Applicant must implement the road upgrades identified in Appendix 6 in accordance with the relevant timing requirements unless otherwise agreed to by the Planning Secretary, 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.	Section 6.16
Schedule 3 Condition 28	**Road Maintenance** The Applicant must: (a) prepare a dilapidation survey of the designated over-dimensional and heavy vehicle route: • prior to the commencement of any construction or decommissioning works other than preconstruction minor works; • within 1 month of the completion of any construction or decommissioning works other than preconstruction minor works; (b) rehabilitate and/or make good any development-related damage: • identified during the carrying out of the relevant construction and/or decommissioning works if it could endanger road safety, as soon as possible after the damage is identified but within 7 days at the latest; and • identified during any dilapidation survey carried out following the completion of the relevant construction and/or decommissioning works within 2 months of the completion of the survey, unless the relevant roads authority agrees otherwise, to the satisfaction of the relevant roads authority. If the construction and/or decommissioning of the development is to be staged, the obligations in this condition apply to each stage of construction and/or decommissioning.	Section 8

Condition	Requirement	Where addressed in the TMP
	If there is a dispute about the scope of any remedial works or the implementation of these works, then either party may refer the matter to the Planning Secretary for resolution.	
Schedule 3 Condition 29	**Unformed Crown Roads** The Applicant must ensure any unformed Crown road reserves affected by the development are maintained for future use, unless otherwise agreed with the Department's Crown Lands Division.	Section 7

Table 3: Other Relevant Conditions

Condition	Requirement	Where addressed in the TMP
Schedule 2 Condition 11	Notification of Department	Section 8.6
Schedule 2 Condition 14	Protection of Public Infrastructure	Section 8.2.2
Schedule 2 Condition 15	Operation of Plant and Equipment	Section 6.15.3
Schedule 2 Condition 16	Updating and Staging of Strategies, Plans or Programs	Section 9
Schedule 3 Condition 7 & 8	Construction and Decommissioning Noise	Section 6.15.3, Section 6.15.4, Section 6.18 and Appendix B
Schedule 3 Condition 15	Air	Section 6.15.3, Section 6.15.4, and Appendix B
Schedule 5 Condition 2	Revision of Strategies, Plans or Programs	Section 9
Schedule 5 Condition 4	Notification to the Department	Section 8.6
Schedule 5 Condition 7	Incident Notification	Section 8.4 and Section 8.6
Schedule 5 Condition 8, 9 & 10	Non-Compliance Notification	Section 8.6
Schedule 5 Condition 11, 12, 13, 14, 15 & 16	Independent Environmental Audit	Section 8.5
Schedule 5 Condition 17	Access to Information	Section 1.4 and Section 6.12

The Statement of Commitments (SoCs) are commitments made during the assessment process relating to the implementation of measures for environmental mitigation, management and monitoring for the Development and are contained at Appendix G of the Amendments Report 1 (RPRE, August 2020). The SoCs relevant to this TMP are outlined in Table 4.

Table 4: Relevant Statement of Commitments

SoC	Description	Where addressed
14	Develop and implement a Traffic Management Plan in consultation with TfNSW and Councils to facilitate appropriate management of potential traffic impacts	This document Section 3
15	Prior to the commencement of construction, the Proponent will carry out any necessary upgrades to the local roads to be used during construction in consultation with the relevant roads' authority. Road upgrades will be undertaken along the preferred transport route.	Section 6.16
16	The Proponent will prepare a pre-dilapidation survey of the transport route prior to construction and a post-dilapidation survey after construction and will make good any project-related damage as soon as practicable	Section 8.2

1.3 Application of the TMP

This TMP applies to all employees, contractors and visitors during the construction, operation and decommissioning of the Development, as described in the Development Consent. The TMP:

- Sets out the traffic management initiative that will be deployed to minimise disruption to, and ensure the safety of the wide range of stakeholders potentially affected by the works, including but not limited to:
    - motorists,
    - pedestrians,
    - cyclists,
    - public transport users,
    - local residents and property owners,
    - business owners, and
    - employees engaged on the Development.
- Details the measures to mitigate and/or manage potential transport impacts including construction traffic control, road safety and road dilapidation surveys as a result of Development related traffic.

1.4 Methodology

This TMP has been prepared by Rye Park Renewable Energy Pty Ltd (the Applicant and the Developer), a wholly owned subsidiary of Tilt Renewables Australia Pty Ltd, based on technical advice from Samsa Consulting Pty Ltd.

This TMP has been informed by the Rye Park Wind Farm Traffic and Transport Assessment (Original TIA) (Epuron, April 2016) and the Rye Park Wind Farm Traffic Impact assessment (Mod 1 TIA) (SMEC, April 2020) and the Rye Park Wind Farm – Route Assessment Peer Review (prepared by GTA Consultants on 12 August 2020).

Preparation of this TMP has included the following tasks:

- review of background information for the Development,
- ongoing discussions with the Development team,
- consultation with Yass Valley, Upper Lachlan Shire and Hilltops Councils in addition to Transport for NSW (TfNSW),

- site inspections of the Development area and surrounding road network, including the preferred transportation routes, and
- 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.

Once approved, the TMP will be published on the Rye Park Wind Farm website (www.ryeparkwf.com.au).

2 Overview of the Development

2.1 Key Components

The main components of the Development are as follows:

- 66 wind turbines, each with:
    - a capacity to generate up to approximately 6 MW
    - three blades mounted on a tubular steel tower, with a combined height of blade and tower limited to a maximum tip height of 200 metres
    - crane hardstand area, and related turbine lay down area.
- A new 33 kV wind farm collection substation in the northern section of the Development site.
- A new 330 kV wind farm connection substation located adjacent to the existing TransGrid 330 kV transmission line in the southern section of the Development site.
- A temporary construction compound at the northern section of the Development site.
- A temporary construction compound to facilitate the upgrades on the TransGrid owned existing 330kV Transmission Line at the southern section of the Development site.
- A new overhead powerline approximately 30 km in length, rated at up to 330 kV (nominal) capacity, running north-south along the length of the wind farm between the two substations. The powerline would be mounted on a single pole type structure and will either be single-circuit or double-circuit as required.
- Underground and overhead 33 kV electrical cabling linking the wind turbines to the on-site collection substations and connection substation.
- Operation and maintenance facility incorporating a control room and equipment storage at the northern section of the Development site.
- Temporary concrete batching plants and construction facilities.
- Access tracks required for each wind turbine and the related ancillary facilities above.
- Minor upgrades to local roads, as required for the delivery of the wind turbines.
- Three temporary meteorological masts and two permanent monitoring masts for wind speed verification, weather and general monitoring purposes. The permanent monitoring masts may be either static guyed or un-guyed structures and will be to a minimum height of the wind turbine hubs (119 m).

The general location of the Development is shown on Figure 1.

2.2 Final Layout

The pre-construction final layout is shown on the Final Layout Plans prepared in accordance with Schedule 2 Condition 10 of the Development Consent and Condition 12 of EPBC 2020/8837).

The final layout is submitted to the relevant departments, and will be available on the Development's website (www.ryeparkwf.com.au), including:

- details on the micro-siting of any wind turbines and/or ancillary infrastructure, and
- the GPS coordinates of the wind turbines.

The developed layout will continue to be refined through the detailed design / construction stages. It is noted that micro-siting of the wind turbines is permitted under Schedule 2 Condition 8 of the Development Consent and the conditions of the EPBC 2020/8837.

Prior to the commencement of operations (or following any upgrades of any wind turbines or ancillary infrastructure), work as executed plans / completed layout showing the comparison to the pre-construction final layout will be prepared in accordance with Schedule 5 Condition 6 of the Development Consent and Condition 5 of the EPBC 2020/8837, will be submitted to the relevant departments, and will be available on the Development's website.

2.3 Transport Routes and Access Points

This section describes the proposed traffic and transport routes and access points to be used during the construction, operation and decommissioning phases of the Development for all vehicles.

2.3.1 Site Access Points

In accordance with Schedule 3 Condition 26 of the Development Consent, the Developer proposes to use site access points 2, 10 and 12 off the public road network (refer to Figure 2).

The site accesses are proposed to be located as follows:

- Site Access Point No.2: Grassy Creek Road, approximately 5.3 km north of Rye Park Road. Site access would be directly off the northern side of Grassy Creek Road. This access will be used during construction and operation for light, heavy and OSOM vehicles.
- Site Access Point No.10: Grassy Creek Road, approximately 6.5 km north of Rye Park Road. Site access would be directly off the southern side of Grassy Creek Road. This access will be used during construction and operation for light, heavy and OSOM vehicles.
- Site Access Point No.12: Dalton Road, approximately 14.7 km south of Rye Park Road. Site access would be directly off the eastern side of Dalton Road. This access will be used during construction and operation for light, heavy and OSOM vehicles.

2.3.2 Road Network Access

Transportation of materials, components and equipment will be along the major road network surrounding the Development site, namely the Hume Highway and Lachlan Valley Way. This will include all OSOM loads.

All routes from the port of entry to the Boorowa and Rye Park areas are via National Routes or State Highways to Lachlan Valley Way. 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. In general, they have 100 km/h speed limits and subject to statutory permit conditions, the road network can readily accommodate OSOM vehicles.

Components of the turbines (including nacelles, drive-trains, hubs, blades and tower sections) that are to be imported to Australia will arrive at the Port of Newcastle. In general, the turbine components will be delivered to the site via the major road network of Hume Highway and Lachlan Valley Way.

The Development Consent permits the use of three routes (as shown in Appendix 7 of the Development Consent), the Development has been able to select the one route: 'Route 1 - Port of Newcastle to project site via Gunning' via Selwyn Street, George Street, Industrial Drive, Maitland Road, New England Highway, John Renshaw Drive, M1, Pennant Hills Road, M2, M7, M5, Hume Highway, Lachlan Valley Way, Trucking Yard Road, Dillon Street, Long Street, Rye Park Road, Grassy Creek Road (to site access points 2 and 10), Yass Street / Gunning Road and Dalton Road (to Site Access Point 12).

The selected approved OSOM transport route from port to site are detailed in specific route assessment undertaken for the Development (refer to Appendix B).

Transport of other construction materials such as gravel, concrete, steel, cement, water, plant and miscellaneous equipment will be transported via the approved transport routes for the class of vehicle used e.g., B-Double routes.

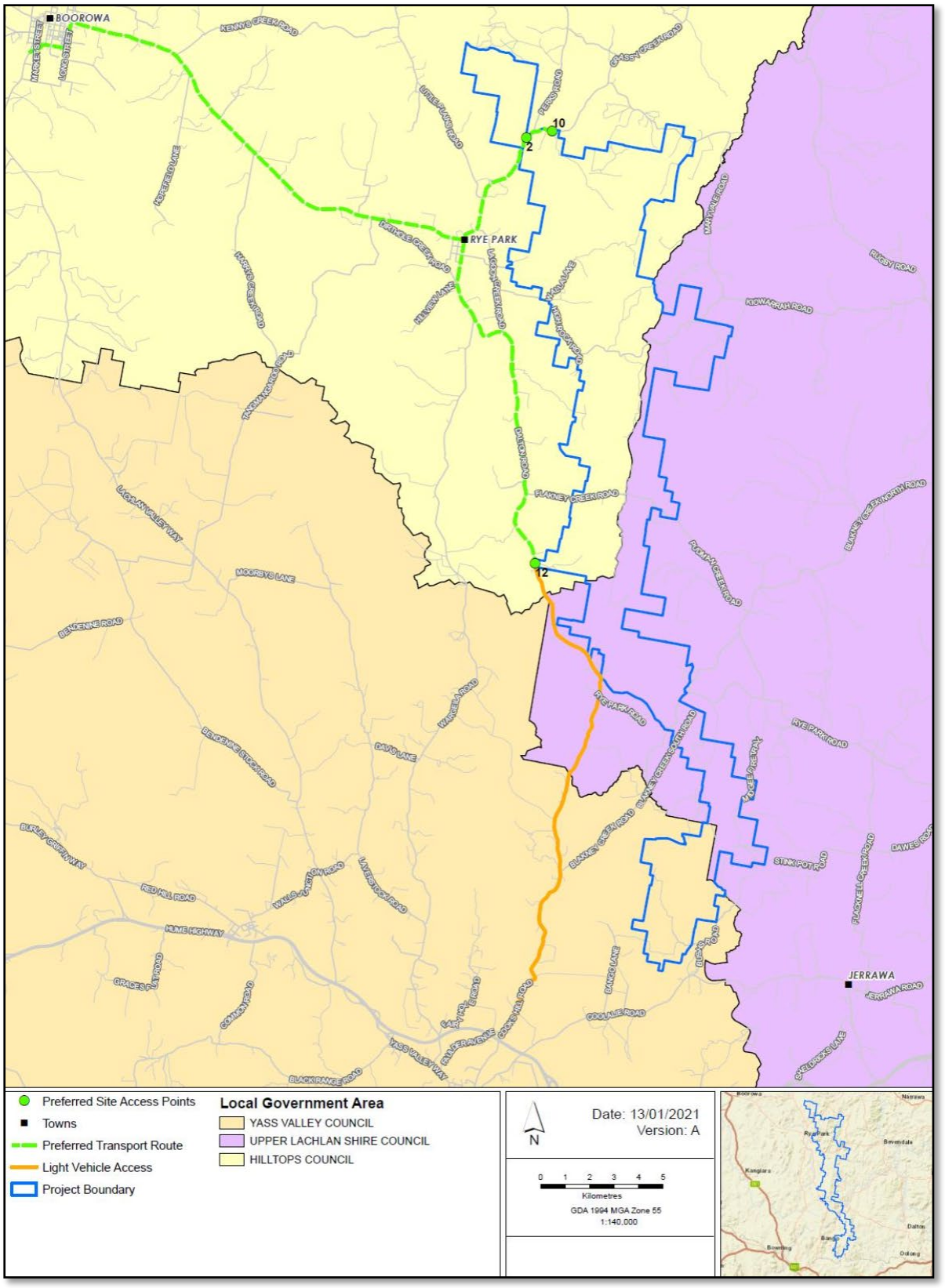
Light vehicles travelling from Yass will use Cooks Hill Rd and Rye Park-Dalton Rd to access the site.

2.3.3 Internal Access Roads

The construction and operation of the wind farm requires the construction of an internal site road network. In some cases, the site road network works will involve upgrades to existing access tracks and in other cases, constructing new access roads.

Access to construction site offices and operational and maintenance buildings will generally be available for conventional two-wheel drive vehicles. Access to individual wind turbine locations may be restricted to four-wheel drive or multiple wheel drive vehicles depending on the internal road network conditions.

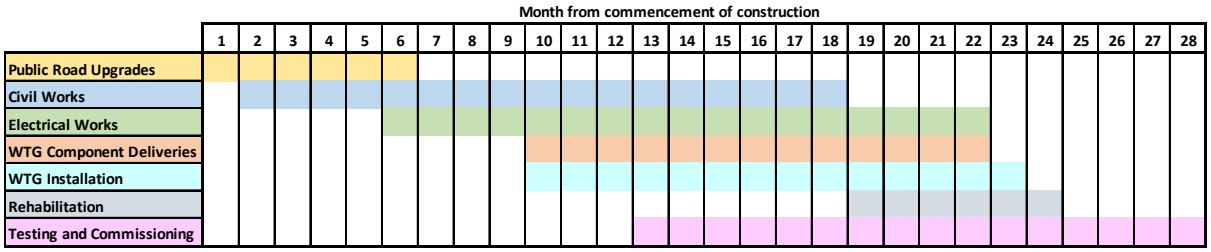
Figure 2: Site Access Locations



2.4 Development Phases

Construction of the Development is scheduled to commence in late 2021, with practical completion scheduled in early 2024. Figure 3 shows the planned construction schedule for the Development.

Figure 3: Construction schedule



The Development will be constructed in its entirety including pre-construction and construction (including road upgrades, wind farm construction and commissioning) activities over an approximately 28-month period. The Development is expected to be operational for approximately 30 years, with decommissioning to occur at the end of the Development's life. The key activities for each of the pre-construction, construction, operations and decommissioning phases are included in Table 5.

The commencement of wind farm construction activities will be sequenced in four stages, each triggered by the completion of defined road upgrades. Details of the four stages (including the conditions that permit the commencement of the next phase) are contained within the Development's Staging Report, available on the website (www.ryeparkwf.com.au). A summary shown in Table 6.

The Development is expected to be operational for approximately 25-30 years, with decommissioning to occur at the end of the Development's life.

Table 5: Development Phases

Phase	Activities
Pre-construction	Key construction activities that will occur during the pre-construction phase of the Development will include: • building / road dilapidation surveys; • investigative drilling, excavation or salvage; • minor clearing or relocation of native vegetation; • establishing temporary site offices; • installation of environmental impact mitigation measures including fencing and enabling works; and • construction of minor access roads and minor adjustments to services and utilities. In accordance with the Development Consent, these pre-construction minor works are permitted and do not trigger the formal commencement of construction of the Development.
Construction	Key construction activities that will occur during the construction phase of the Development will include: <u>Road Upgrades</u> • Removal of vegetation and unsuitable material; • Stripping of existing seal; • Earthworks to widen and reconstruct road formations; • Removal and replacement or repair of drainage structures such as culverts and causeways; • Sealing of roads; • Installation of line marking and road furniture; and

Phase	Activities
	• Patching and maintenance of pavement/seal. <u>Wind Farm</u> • 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 Development site; • installation of wind turbines on site using cranes; • construction of electrical substations; • construction of site control room and operations and maintenance facilities; • construction of electrical transmission lines; and • re-habitation of disturbed areas. <u>Commissioning</u> • Testing of mechanical and electrical equipment; • Start up of mechanical equipment; • Energisation of electrical equipment; • Wind farm performance testing; and • Grid compliance testing.
Operations	Key activities that will occur during the operation phase of the Development will include: • on-site civil maintenance works for internal access roads, crane pads, lay-down areas, wind turbine footings and cable trenching; • maintenance of OSOM components / materials; • maintenance of wind turbines on site, using cranes when required; • maintenance of electrical substations; • use of site control room and operations and maintenance facilities; and • maintenance of electrical transmission lines.
Decommissioning	Key construction activities that will occur during the decommissioning phase of the Development will include: • similar staging as construction e.g., disconnecting electrical infrastructure and dismantling wind turbines, but in reverse and across a shorter timeframe; and • site restoration activities.

Table 6 Road Upgrade Stages

Road Upgrade Stage	Time Period	Road Upgrade Scope	Wind Farm Construction Scope			Conditions that permit commencement of next stage[1]
			Activities	Maximum One-Off Drop Deliveries	Maximum Wind Farm Construction Daily HV Traffic Movements[2] (one-way)	
Stage 1	For the period between commencement of construction (road upgrades) and Milestone 1	• Site Entry Intersections – Complete • Yass Street - Commenced • Heavy Patching of Rye Park - Dalton Road – Commenced • Maintenance of all roads – Commenced • Grassy Creek Road – Commenced • Boorowa Bypass – Commenced	Nil[3]	0	0	Completion of the following will allow for Stage 2 to commence: • Site Entry Intersections – Complete

[1] It is noted that where the road upgrades have been completed (or where no upgrade is required) in accordance withTable 10, this road (or section of road) may be used for the purpose of Wind Farm construction.

[2] Wind Farm Construction Daily HV Traffic Movements is defined as movements entering the Site for purpose of wind farm construction.

[3] Excluding pre-construction minor works

Road Upgrade Stage	Time Period	Road Upgrade Scope	Wind Farm Construction Scope			Conditions that permit commencement of next stage[1]
			Activities	Maximum One-Off Drop Deliveries	Maximum Wind Farm Construction Daily HV Traffic Movements[2] (one-way)	
		• Maintenance of all roads – Ongoing • Cooks Hill Road and ULSC section of Rye Park Dalton Road - Commenced				
Stage 2	For the period between Milestone 1 and Milestone 2	• Boorowa Bypass – Complete • Yass St - Complete • Grassy Creek Rd – Commenced • Heavy Patching of Rye Park - Dalton Rd - Commenced • Maintenance of all roads - Commenced • Rye Park - Boorowa Rd Upgrade - Commenced • Rye Park - Dalton Rd Upgrade – Commenced	• One off drop and civil works in Site Entry 12 (internal quarries) • One off drop and earthworks at Site Entries 2 and 10 • Delivery and installation of met masts • Heavy vehicles required to support earthworks e.g., fuel and servicing.	84 (with no more than 10 per day)	5	Completion of the following will allow for Stage 3 to commence: • Yass Street – Seal complete • Grassy Creek Road – Seal complete • Boorowa Bypass – Seal Complete • Minor causeway on Yass Street • Grassy Creek Road causeway (Grassy Creek Road)

Road Upgrade Stage	Time Period	Road Upgrade Scope	Wind Farm Construction Scope			Conditions that permit commencement of next stage[1]
			Activities	Maximum One-Off Drop Deliveries	Maximum Wind Farm Construction Daily HV Traffic Movements[2] (one-way)	
		• Cooks Hill Road and ULSC section of Rye Park Dalton Road - Ongoing • Maintenance of all roads - Ongoing				• Trucking Yard Road causeway (Boorowa Bypass) • Flakney Creek causeway (Rye Park Dalton Road) • Minor culverts on Boorowa Bypass, Yass Street and Grassy Creek Road.
Stage 3	For the period between Milestone 2 and Milestone 3	• Grassy Creek Road - Complete • Rye Park - Dalton Road Upgrade - Complete • Heavy Patching of Rye Park - Dalton Road - Complete • Rye Park - Boorowa Road Upgrade – Complete • Rye Park bus stop and pedestrian path – Complete	• One off drop and civil works in Site Entry 12 (internal quarries) • One off drop and earthworks at Site Entries 2 and 10 • Quarry material supplied from Quarries B and C to Site Entries 2 and 10		Boorowa Rye Park Road – 10 & Cumulative Cap of 30 Rye Park Dalton Road – 15 & Cumulative Cap of 37	Completion of the following will allow for works on the wind farm to commence in full: • Rye Park - Dalton Road Upgrade - Seal complete • Heavy Patching of Rye Park - Dalton Road - Complete • Rye Park - Boorowa Road Upgrade - Seal complete • Rye Park bus stop and pedestrian path – Complete

Road Upgrade Stage	Time Period	Road Upgrade Scope	Wind Farm Construction Scope			Conditions that permit commencement of next stage[1]
			Activities	Maximum One-Off Drop Deliveries	Maximum Wind Farm Construction Daily HV Traffic Movements[2] (one-way)	
		• Heavy Patching Rye Park - Boorowa Road – Complete • ULSC section of Rye Park Dalton Road - Complete • Maintenance of all roads - Ongoing	• Heavy vehicles required to support earthworks e.g., fuel and servicing.			• Heavy Patching Rye Park - Boorowa Rd – Complete • Minor culverts on Rye Park Boorowa Road and Rye Park Dalton Road. • ULSC section of Rye Park Dalton Road – Complete
Stage 4	For the period between Milestone 3 and completion of construction	• OSOM route intersections and access upgrades (Selwyn Street and Industrial Drive; Mayfield #4 berth and Selwyn Street; Industrial Drive and Maitland Road; M1 and Pennant Hills Road; Hume Highway and Lachlan Valley Way; Lachlan Valley Way and Trucking Yard Road; Grassy Creek Road - Pudman Creek Culvert) - Complete • Road upgrades within Site boundary - Complete	• Heavy vehicles to support ongoing civil and electrical construction activities • OSOM deliveries including transformers and wind turbines (e.g. blades and tower sections)	No cap - traffic generation as outlined in the TMP	No cap - traffic generation as outlined in the TMP	Completion of the OSOM route intersections and access upgrades is required to occur prior to the first OSOM delivery over relevant roads/intersections.

Road Upgrade Stage	Time Period	Road Upgrade Scope	Wind Farm Construction Scope			Conditions that permit commencement of next stage[1]
			Activities	Maximum One-Off Drop Deliveries	Maximum Wind Farm Construction Daily HV Traffic Movements[2] (one-way)	
		• Cooks Hill Road - Complete • Maintenance of all roads - Ongoing • Maintenance of all roads - Complete				

3 Consultation

3.1 Agency Consultation

As per the requirements of Schedule 3 Condition 30 of the Development Consent, the TMP has been prepared in consultation with Transport for NSW (TfNSW) and the Councils (Yass Valley Council, Upper Lachlan Shire Council and Hilltops Council).

Table *6* below outlines how the relevant agencies have been consulted with on the TMP, and key feedback that was received.

Table 7: Agency Consultation

Agency	Consultation Description	Date	Agency Feedback
TfNSW	Email requesting TfNSW input and requirements for TMP.	7 December 2020	Various with further and ongoing discussions to be held.
	Meeting held 9 June 2021 to discuss traffic related matters and issues.	9 June 2021	
	Meeting held 17 June 2021 to discuss regional road upgrade scope.	17 June 2021	
	Various emails between Tilt Renewables and Alexandra Power discussing Development Consent conditions and compliance matters.	June 2021	
	Meeting held 30 July to discuss feedback on the draft TMP (Rev 0)	30 July 2021	Contributed to the discussion with the other agencies and committed to providing more detailed feedback.
	Email from TfNSW providing comment on the draft TMP (Rev 0)	12 August 2021	Provision of comments on TMP (Rev 0) which have been addressed in this document.
	Discussion regarding dilapidation requirements for Lachlan Valley Way / Trucking Yard Road intersection	2 September 2021	TfNSW request laser car survey to include 300m of Lachlan Valley Way.
Yass Valley Council	Email requesting Council input and requirements for TMP.	7 December 2020	Provision of key contact for TMP related matters
	Meeting to discuss various Development related matters including the TMP	13 May 2021	Advice that traffic committee may be required to review the TMP
	Email feedback on TMP	5 August 2021	Yass Valley advised that they were satisfied with the proposed TMP.
Upper Lachlan Shire Council	Email requesting Council input and requirements for TMP.	7 December 2020	Response received via email on 8 December 2020. No additional requirements given no heavy vehicles on Council road network.

Agency	Consultation Description	Date	Agency Feedback
	Undertook a site visit with Council to: • Inspect extent of unsealed section of Cooks Hill Rd • Discuss road upgrade standards • Discuss access and intersection upgrades at Blakeney Creek Rd	13 May 2021	Geotechnical investigation of existing pavement to be undertaken. Extent of works to be limited within impact areas associated with native vegetation
	Meeting held 30 July to discuss feedback on the draft TMP (Rev 0)	30 July 2021	Advised that ULSC are in agreement with the TMP and has no objections to the any element of the plan relating to ULSC.
	Email from Upper Lachlan providing comment on the draft TMP (Rev 0)	30 July 2021	Email confirming the feedback received in the meeting.
	Meetings and correspondence regarding the standard and timing of upgrades to Cooks Hill Road	May – June 2022	Consideration of road safety, impacts to native vegetation and timing of road upgrades – agreement to move road upgrade to Stage 4 of the Road Upgrade Program.
Hilltops Council	Email requesting Council input and requirements for TMP. Meeting at Hilltops Office to discuss: • TMP review and submission process. • Works in parallel arrangement • Design review of road upgrade drawings	7 December 2020	Response received via email on 11 December 2020. No additional requirements, initial queries and concerns had been addressed previously. Re construction times: November is harvesting time and can cause increase in traffic interactions Bus shelter in Rye Park has been identified as an interface issue. Central point of contact for submission of TMP is mail@hilltops.nsw.gov.au
	Meeting held to discuss bridge assessment findings and recommended mitigation measures.	18 March 2021	Naming of Back Creek to be consistently used. NHVR permits will be used to ensure speed limits for OSOM vehicles crossing the bridges. Monthly level 1 inspections required during construction phase. Bridge mitigation measures to be included in TMP. Truck driver inductions to include speed limit requirements. TMP to be submitted to Planning Department via mail@hilltops.nsw.gov.au Quarry material delivery routes to be advised.

Agency	Consultation Description	Date	Agency Feedback
	Submission of road designs for review	17 May 2021	Comments that the level of detail shown in the concept design is inadequate for detailed assessment. Request to show extent of works, which would also assist with identifying any land acquisition issues, Query relating to A-double transport configurations. Fill batters to be 4:1 Removal of inspection requirement by Hilltops and replace with “Geotechnical Investigation”
	Meeting held to discuss the comments received in detail	17 May 2021	Comments that the level of detail shown in the concept design is inadequate for detailed assessment. Request to show extent of works, which would also assist with identifying any land acquisition issues, Query relating to A-double transport configurations. Fill batters to be 4:1 Removal of inspection requirement by Hilltops and replace with “Geotechnical Investigation”
	Regular meetings with Council and Tilt Renewables staff, discussions.	Various throughout 2021	Traffic and transport related issues and concerns. Feedback on designs of public road works and bridge/structure assessments. Feedback on sequencing of road upgrades and commencement of wind farm construction. Discussion regarding development consent compliance.
	Meeting held 30 July to discuss feedback on the draft TMP (Rev 0)	30 July 2021	Correcting references (e.g., RMS vs TfNSW and TCPs bs TGS, NHVR vs RAV etc). Definition of large vehicles in the Transport Code of Conduction in Appendix B and provide a stronger reference. Update to reflect dilapidation survey commitments made at site inspection. Clarification re use of B-doubles, further detail re longest vehicles and make sure reference to OSOM and heavy vehicles in a number of locations. Request for submission of bridge assessment reports. Addition of Hilltops traffic count data as well as TfNSW. Schools (double check school OSOM restriction times to ensure travel time

Agency	Consultation Description	Date	Agency Feedback
			accounted for returning from site, and make sure St Josephs is consulted re school bus routes). Addition of reference to two regular events (Irish Woolfest and Boroowa Football and Netball Carnival). Discussion regarding access from the north of Lachlan Valley Way, development consent does not currently allow.
	Letter from Hilltops providing comment on the draft TMP (Rev 0)	16 August 2021	Consistency review and terminology required. Make sure to cover off all other relevant conditions. Ensure maintenance to access to commercial and residential properties. Provide reference to traffic volumes. Ensure the interface with schools is adequately addressed. Provide details on construction period / schedule. Local nuances, events and environment to be addressed. Delivery hours on route. Consultation with relevant agencies.
	Various discussions and correspondence regarding the timing for the Pudman Creek culvert re-lining works (Grassy Creek Road)	May – June 2022	Agreement to delay the Pudman Creek culvert upgrades to Stage 4 of the Road Upgrade Program, provided works are complete prior to the first over-dimensional delivery.
Newcastle City Council	Various discussions and email correspondence regarding dilapidation surveys.	August 2021	Acceptance that the RJA Route Survey satisfies the pre-construction requirements of Condition 28.
M7	Various discussions, meetings and email correspondence regarding dilapidation surveys.	August 2021	Acceptance that the RJA Route Survey satisfies the pre-construction requirements of Condition 28. Advice regarding load heights and contacts for permitting process.

3.2 Community Consultation Undertaken

Relevant community organisations have been consulted with on the Development. Table 8 below outlines how each community organisation has been consulted with on the TMP, and key feedback that was received.

Table 8: Community Consultation

Community Organisation	Consultation Description	Date	Community Organisation Feedback
Community Consultative Committee (CCC)	Established in 2012 the CCC has elected representatives from the local community. Regular meetings have been held during this period	2012 to present	Extensive feedback and discussion form the meetings are included in the meeting minutes available on the Developments website.
Yass, Boorowa and Rye Park school bus operators	School bus operators have been identified and will be consulted regarding timetables and routes closer to construction.	*Ongoing*	Feedback and timing once bus timetables are known.
Rye Park Progress Association	Meetings have been held with the Rye Park Progress Association to involve them in the refinement of the road upgrades required through the village along Yass Street – particularly where they can add local knowledge around land use and traffic interactions. E.g., bus stops	February 2021 – June 2021	Interaction with bus stop on Yass St should be considered in context with road widening. Trees on eastern side of Yass St hold intrinsic value to community. Pedestrians often use the road to walk on.
Boorowa Central School	Consultation meeting to discuss traffic interaction amongst other project related topics.	June 2021	Nil to date.
Rye Park Public School	Consultation to understand discrepancies or deviations in bus schedules and student behaviours around school times and explain impact of project on traffic.	Through-out 2021 - ongoing	Discussed potential for site visit for students. Feedback on proposed pedestrian path and bus stop augmentation. Feedback on school traffic / potential interaction with construction traffic. Feedback on traffic management measures during school.
St Josephs School	Phone call, email and request for meeting to discuss the project, traffic routes, understand school bus timetables and routes and any school events	August 2021	Nil to date.
Local bus companies	Phone discussions regarding routes and bus stops.	September 2021	Details of bus routes, timing and bus stops.

4 Existing Road Network Conditions

The Original TIA and the Mod 1 TIA identified features of the existing road network relevant to the construction of the Development and specifically the transportation of wind farm components.

The following sections contain a summary of the primary road network to be utilised for the Development.

4.1 Local Road Network

With the exception of Cooks Hill Road and a section of Rye Park-Dalton Road to the south of the Development Boundary (to be used for light vehicle access only and managed by Upper Lachlan Shire Council and Yass Valley Council), all local roads proposed to be used by the Development are managed by Hilltops Council.

In accordance with Schedule 3 Condition 26 of the Development Consent, the Developer must ensure that all OSOM and heavy vehicles access the Development site via the approved preferred transport route that is accessed via the Hume Highway and Lachlan Valley Way onto Trucking Yards Road (at Boorowa) and subsequent local roads including Dillon Street and Long Street (bypassing Boorowa urban area), Rye Park Road, Grassy Creek Road, Yass Street (through Rye Park township) and Gunning Road / Dalton Road.

The Mod 1 TIA indicates that traffic volumes along the local road network are low and significantly lower than that on the major road network including Lachlan Valley Way.

The local road network along the preferred transport route varies significantly in condition and standard as well as passing through some varied road environments from semi-urban township areas to rural areas. The following sections provide an overview of the are some brief, relevant characteristics of the local road network.

Where sections of road are proposed to be upgraded as part of the Development, these road upgrades will be carried out in accordance with Schedule 3 Condition 27 of the Development Consent.

4.1.1 Trucking Yards Road / Dillon Street / Long Street

Trucking Yards Road, Dillon Street and Long Street are urban streets on the outskirts of the Boorowa urban area. They are generally in reasonable condition however have some narrow sections (approximately 5.5 m in width). As part of the Development, it's proposed some sections of road to be widened and undergo pavement strengthening to allow transportation of construction vehicles to the Development site.

Hilltops Council have undertaken recent traffic counts (dated 1 July 2021) on Trucking Yard Road, Dillion Street and Long Steet, as follows:

- Trucking Yard Road (at the intersection with Lachlan Valley Way): An average annual daily traffic count of 309 vehicles (approximately 22% heavy vehicles).
- Dillion Street (166m from Farm Street intersection): An average annual daily traffic count of 247 vehicles (approximately 15% heavy vehicles).
- Long Street (100m north of Pudman Street): An average annual daily traffic count of 252 vehicles (approximately 12% heavy vehicles).

4.1.2 Rye Park Road

Rye Park Road links Boorowa and Rye Park. The length proposed as part of the preferred transport route is approximately 19.4 km (between Long Street and Dalton Road).

Rye Park Road is sealed for its entire length and is generally of a suitable standard to allow use by OSOM vehicles on the Development. There are isolated sections where localised widening and/ or pavement strengthening is proposed as part of the Development, however it is anticipated that this would involve

minimal earthworks or disturbance.

There are numerous bridges and major culverts along this section of road which may require upgrading and/or widening to meet Council requirements. The assessment of these structures is outlined in Section 6.16 of this TMP.

Hilltops Council have undertaken recent traffic counts on Rye Park Road, as follows:

- Rye Park Road (at Kennys Creek Road): An average annual daily traffic count of 343 vehicles (approximately 18% heavy vehicles) (dated 11 January 2021).
- Rye Park Road (at Harrys Creek): An average annual daily traffic count of 223 vehicles (approximately 22% heavy vehicles) (dated 11 January 2021).
- Rye Park Road (100m from Tangmangaroo Road): An average annual daily traffic count of 196 vehicles (approximately 20% heavy vehicles) (dated 9 December 2020).

4.1.3 Yass Street / Gunning Road / Dalton Road

Yass Street / Gunning Road / Dalton Road extends from Rye Park, south to the intersection with Blakney Creek South Road, before extending predominantly east to the village of Dalton. The section of road within Rye Park township is known as Yass Street, which then changes to Gunning Road for a short distance south of Rye Park before becoming Dalton Road.

Dalton Road runs to the southern site access point for the Development and this route is entirely within the jurisdiction of Hilltops Council. Dalton Road is sealed and has a width of approximately 8 m.

There are numerous bridges, major culverts and causeways along the length of the road that may require upgrading or widening to cater for the proposed heavy and OSOM vehicle usage. The assessment of the structures is detailed in Section 9.3 of this TMP.

The road reserve is well vegetated.

Hilltops Council have undertaken recent traffic counts on Dalton Road, as follows:

- Dalton Road/Yass Street (Rye Park, near school): An average annual daily traffic count of 144 vehicles (approximately 20% heavy vehicles) (dated 5 February 2018).
- Dalton Road (at Pudman Creek): An average annual daily traffic count of 113 vehicles (approximately 19% heavy vehicles) (dated 11 December 2020).
- Dalton Road (3km north of LGA boundary): An average annual daily traffic count of 129 vehicles (approximately 23% heavy vehicles) (dated 4 September 2020).

4.1.4 Grassy Creek Road

Grassy Creek Road runs from the village of Rye Park, north toward the village of Rugby. The road is generally sealed but is narrow at approximately 5.5 m wide. The road alignment is generally meandering and there are numerous curves that would likely need realignment to meet requirements of OSOM vehicle transport.

The road reserve is well vegetated.

A summary of recommended modifications to allow OSOM vehicles to use the local road network portion of the preferred transport route is shown in Section 6.16.

Hilltops Council have undertaken recent traffic counts on Grassy Creek Road, as follows:

- Grassy Creek Road (500m north of Rye Park): An average annual daily traffic count of 137 vehicles (approximately 13% heavy vehicles) (dated 1 July 2021).

- Grassy Creek Road (450m south of Maryvale Road): An average annual daily traffic count of 82 vehicles (approximately 39% heavy vehicles) (dated 14 September 2020).

4.2 State Roads

4.2.1 Lachlan Valley Way

Lachlan Valley Way is a State Road (MR56) running from the Hume Highway in the south to Newell Highway near Forbes in the north.

Lachlan Valley Way intersects the Hume Highway at a channelised 'seagull' intersection. Lachlan Valley Way generally has an approximate 9 m wide pavement formation incorporating two travel lanes and shoulder areas with centreline and edge line pavement markings. The pavement conditions along Lachlan Valley Way are generally above average with improvement works carried out from 2017 to 2018, including new pavement and overtaking lanes.

The general road environment can be described as rolling terrain with some sharper curves and crests requiring 75 km/h and 85 km/h advisory speeds on curves within the background 100 km/h speed zone.

Traffic volumes along Lachlan Valley Way are typically moderate for a major, rural road with volumes almost doubling in Boorowa town compared to further south near the Hume Highway. Traffic count information included in the Traffic Impact Assessment from the EIS (as defined in the Development Consent) on Lachlan Valley Way was 1,600 vehicles per day - corner of Marsden and Pudman Streets in Hilltops Council, as measured in 2012.

Hilltops Council have also completed more recent traffic counts at a number of locations along Lachlan Valley Way including:

- Lachlan Valley Way (approximately 1.2km south of the intersection with Trucking Yard Road): An average annual daily traffic count of 3236 vehicles (approximately 16% heavy vehicles) (dated 1 October 2019).
- Marsden Street (near Tyre Service): An average annual daily traffic count of 3503 vehicles (approximately 11% heavy vehicles) (dated 5 November 2020).
- Marsden Street (near Courthouse Hotel): An average annual daily traffic count of 4019 vehicles (approximately 10% heavy vehicles) (dated 19 November 2020).

4.2.2 Port of Newcastle to Hume Highway

The majority of the Port of Newcastle delivery route is via the Pacific Motorway, Hume Highway to Lachlan Valley Way. These roads are major roads that carry a large volume of daily traffic. Traffic counts (per direction) on the Hume Highway near the site are as follows (TfNSW, 2019):

- 4,350 vehicles per day (41% heavy vehicles) - 0.5 km west of Yass Valley Way on Hume Highway, as measured in 2019, and
- 7,800 vehicles per day (27% heavy vehicles) - 0.58 km East of Lachlan Valley Way, as measured in 2019.

Traffic counts on the Pacific Motorway are as follows:

- 73,619 vehicles per day (16% heavy vehicles) - 240m north of Curtin Ave, as measured in 2021; and
- 64,835 vehicles per day (17% heavy vehicles) – 330m west of Peats Ridge, Rd as measured in 2021.

5 Traffic Impacts

5.1 Construction Traffic

In general, construction of the Development would include the following activities:

- transport of construction machinery and labour to the Development site,
- on-site civil works for internal access roads, crane pads, lay-down areas, wind turbine footings and cable trenching,
- road upgrade works (as required) to the public road network to allow OSOM vehicle transportation,
- transport of wind turbine infrastructure to the Development site,
- installation of wind turbines on site using cranes,
- construction of electrical substations,
- construction of site control room and operations and maintenance facilities,
- construction of electrical transmission lines, and
- restoration and revegetation of disturbed areas.

5.1.1 Construction Vehicle Types

Traffic generating activities during the works involve the movement of light and heavy vehicles, which would typically include concrete trucks, 30 tonne truck and trailers, bin trucks, single unit trucks, GML B-doubles and semi-trailers. Machinery would typically include excavators, bulldozers, scrapers, rollers, water carts, mobile and truck mounted cranes, concrete pumps and miscellaneous small machinery.

Due to the size and weight of the wind turbine components there will be deliveries using OSOM vehicles. Over-size vehicles are those over 19 metres in length, 2.5 metres in width and/or 4.3 metres in height. Over-mass vehicles are those with a gross mass greater than 42.5 tonnes.

These vehicles are regarded as restricted access vehicles (RAVs) and will require special TfNSW operating permits to allow them to travel on public roads. The operating permits for OSOM vehicles may require one or more escort vehicles to accompany them.

The fleet of vehicles engaged to deliver oversize components will likely consist of:

- Extendable blade trailers of standard semi-trailer width (2.5 m) with the ability to extend to 45 m with up to 4 rear axles, some or all of which will be steerable. The total length of this vehicle is approximately 90m and is the longest vehicle associated with the development.
- Heavy duty low loaders, with up to 10-plus rear axles and with each axle having 8 or more tyres to spread the load of the heavier WTG components. These low loaders may have the ability to carry loads up to 30 m in length and may widen up to 5 m to reduce pressures on the road surface. Depending on the extendable length of these trailers, some of the rear axles may be self-steering.
- Dolly / jinker arrangements to carry loads longer than 30 m, where permitted to do so by permits and the WTG supplier. The rear axle groups on the jinker arrangements would be steerable.
- A variety of high-power prime movers, typically rated 130 to 200 tonnes gross combination mass (GCM), as required depending on the total combination weight, i.e., WTG load + trailer + prime mover.

Appendix C provides further detail regarding the OSOM vehicle and trailer configurations. Consideration will be given to use of Performance Based Standard (PBS) vehicles where appropriate. Given the bespoke nature of the OSOM configurations detailed in Appendix C it is unlikely that PBS vehicles can be used for the

transport of wind turbine components. The final vehicles used will be approve through the NHVR permit process.

5.1.2 Construction Phase Traffic Generation

Heavy Vehicle Traffic

Traffic-generating tasks associated with the Development include:

- initial site set-up and site access construction during the pre-construction period,
- construction staff movements between the site and the local population centres,
- wind farm component deliveries (including OSOM transport),
- concrete material deliveries and other general deliveries during construction works,
- road construction materials,
- water for construction, and
- reinstatement construction activities and other miscellaneous activities.

The Original TIA and Mod 1 TIA estimated the number of one-way heavy vehicle trips to be generated by the construction of the Development. The Mod 1 TIA estimated 32,986 trips over the entire course of the construction period. This is broken down into vehicle types as outlined in Table 9 below.

Table 9: Vehicle Types and Trips

Vehicle Type	No. of Trips	Vehicle Type	No. of Trips
Truck tanker	6,513	Concrete pump	240
Flat bed	646	Franna crane	250
Low loader	1,646	Truck trailer	1,672
Truck'n'dog	21,493	Semi-trailer	107
Cement delivery	420		

The largest contributor to the volume of heavy vehicles required is the supply of quarry related materials. A sourcing strategy has been developed for the Development and centres around utilising quarries as close as possible to the Development. This strategy seeks to minimise the distance that quarry materials are required to be transported, reducing impacts:

- to community members and road users by reducing the number of interactions with Development related heavy vehicles,
- on the wear and tear of the road network,
- of fatigue of drivers/workers as less distance will be travelled, and
- to carbon emissions as result of reduced transport distances.

Several quarries have been developed by an independent quarry developer that are near or within the Development. Concerted effort will be made by the Developer, it's contractors and quarry operators to utilise these quarries in a fashion that reduces the traffic impact of the Development.

The application of the resourcing strategy is expected to reduce the number of quarry related heavy vehicles (truck and dogs) from 21,493 to 9,900.

OSOM Traffic

The wind turbine component delivery by OSOM vehicles, would result in 792 OSOM loads over the course of the construction period comprising 12 OSOM loads per wind turbine – nacelle and transformer, three blades, drive-train, hubs and spinner, power module and five tower sections.

Approximately 3 OSOM loads associated with the delivery of power transformers will be required.

Light Vehicle Traffic

For the majority of the construction period, it is anticipated that the number of construction staff would be up to 100 staff. During peak construction periods, it is anticipated that the number of construction staff would increase up to 200 staff coinciding with the turbine installation phase.

Construction staff traffic generation during both the majority and peak construction periods is estimated at 100 to 200 vehicle trips per day (i.e., two-way trips to and from the Development site). This is based on an average car occupancy of two people travelling per car and is a worst case if it is considered that the chosen contractor would be encouraged to use buses or car-pool arrangements for their staff living in Yass, Boorowa and other nearby population centres, which would have the effect of minimising traffic generation.

The workforce for the site will be encouraged to arrive by site using car-pooling from nearby centres to minimise construction and operational staff trips. There would be information provided at induction on the benefits of car-pooling.

Construction staff traffic would use the surrounding major and local road networks and not be constrained to the designated transport route approved for OSOM and heavy vehicles.

In accordance with the Development Consent, light vehicle access is permitted on Cooks Hill Road up to site access point 12. This will allow construction staff residing in Yass an efficient commute to the Development site.

Impact on local roads

The traffic volumes described above will be spread over the construction period with a peak expected in month 10.

The use of the approved preferred transport route will result in those roads seeing an increase to existing traffic volumes. The most affected roads will be:

- Boorowa Rye Park Rd;
- Yass St;
- Rye Park Dalton Rd; and
- Grassy Creek Rd.

5.2 Operations Traffic

During the operations phase of the Development, these will be approximately 10 operational / maintenance staff, likely to be based in the local area.

Operational traffic will consist of 4WD-type service vehicles travelling between individual wind turbine sites along the internal road network. Traffic generation would be approximately 10 trips per day along the local road network.

Unplanned maintenance activities may require the use of heavy and OSOM vehicles, traffic movements associated with unplanned maintenance will be managed in accordance with this document.

5.3 Decommissioning Traffic

The potential traffic impacts during the decommissioning phase, essentially mirror the construction phase impacts, although would occur over a shorter time period. For decommissioning, similar general measures would be necessary as those detailed for construction. However, this TMP will be revised to address traffic operation and volume changes in the future years during the decommissioning phase.

At the time of decommissioning, the contractors would communicate with associated landowners and title holders that may wish to retain internal roads.

6 Managing Traffic Impacts

6.1 Site Access

Site access off Grassy Creek Road (site access points 2 and 10) as well as Dalton Road (site access point 12) will be used during all phases of the Development. Each access location requires upgrade works to be undertaken as detailed in Section 6.16.

Access at site access points 2 and 10 will be restricted to / from the south for OSOM and heavy vehicles (left-in / right-out at site access point 2 and right-in / left-out for site access point 10) and unrestricted for light vehicles.

Access at site access point 12 will be restricted to / from the north for OSOM and heavy vehicles (left-in / right-out at site access point 12) and unrestricted for light vehicles.

Traffic management will be required during construction to adequately warn contra-flow traffic along Grassy Creek Road and Dalton Road of vehicles turning into and out of the site access points, particularly OSOM and heavy vehicles, to ensure safe access into and out of the wind farm site.

Detailed traffic guidance schemes (TGSs) and vehicle movement plans (VMPs) will be prepared by the chosen contractor based on the above site access movement descriptions. The TGSs and VMPs will show appropriate traffic management / traffic control devices including warning and advisory signage as well as vehicle movements during construction. The TGSs will be prepared and implemented as per relevant guidelines and standards Transport for NSW *"Traffic Control at Work Sites, Technical Manual – Issue 6.0"* (TCWS) and Standards Australia *"AS 1742.3 – 2009: Manual of uniform traffic control devices, Part 3: Traffic control for works on roads"* (AS 1742.3).

The TGSs and VMPs will be prepared by the relevant contractor, the relevant Roads Authority will review the TGS and the responsible contractor designs and authorise the TGS for the traffic control..

At the decommissioning stage, the site access points will be reinstated to their current operating conditions as a minimum.

6.2 Dirt Tracking

Site entry locations and access protocols will include measures to ensure that the tracking of dirt onto the public road network is minimised. Measures may include rumble grids, rock crossings and monitoring. Furthermore, loads entering and exiting the site will ensure that their loads are covered. The measures to be implemented will be applied on a case-by-case basis and their effectiveness reviewed throughout the life of the project.

6.3 Staff Parking and Transportation to Site

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

Staff car parking for the Development during 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.

The use of buses to transport workers during the construction phase will be considered where feasible.

During operation there will be car parking spaces at the operation and maintenance facility to cater for the 10 operational / maintenance staff.

6.4 Pedestrians and Cyclists

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

Local groups such as the Rye Park Progress Association and Community Consultative Committee will be updated on traffic controls / conditions throughout construction relating to pedestrian and bicycle activity.

6.5 Schools

There is a 40 km/h school speed zone through Rye Park township, which is the only school speed zone located along the designated OSOM and heavy vehicle transport route from Hume Highway / Lachlan Valley Way through to the site access points.

There are several school bus services that travel along the designated OSOM vehicle transport route.

To minimise interruption to school bus routes, the following rules will apply:

- no OSOM vehicles will enter Lachlan Valley Way or leave the site between the hours of 7:15 am and 8:30 am on a school day,
- no OSOM vehicle loads will leave the site accesses between the hours of 8:00am to 9:30am or 3:15 pm to 4:30 pm, and
- no OSOM vehicle loads will enter Lachlan Valley Way between the hours of 3:15 pm and 4:30 pm.

OSOM deliveries are to occur outside school hours. Layby areas along Lachlan Valley Way will be utilised to ensure OSOM vehicles do not restrict traffic flow during school bus operational periods. If no layby area is identified along Lachlan Valley Way then the Mundoonan southbound rest area off the Hume Highway would be utilised.

School bus operators will be appropriately notified of any planned works along school bus routes. Traffic management that restricts traffic flow along Lachlan Valley Way and the local road network will be avoided during the period that the school buses are operating along Lachlan Valley Way, Rye Park Road, Dalton Road, etc.

Movements by heavy vehicles through the Rye Park Public School zone during the school drop-off and pick-up periods (8:00 am to 9:30 am and 2:30 pm to 4:00 pm) on school days would be avoided where possible to prevent conflicts with school traffic and school buses. Where avoidance is not possible, heavy vehicles will travel at a reduced speed of 20km/hr. To ensure compliance with the speed constraint, one or more of the following measures may be implemented:

- Installation and maintenance of appropriate signage (e.g., Variable Message Signs);
- Supervision by project personnel;
- Vehicle escorts; and/or
- Provision of traffic control measures.

The chosen contractor will ensure appropriate notifications are provided in driver and personnel inductions and via the Transport Code of Conduct (the Code of Conduct) – refer to Appendix B: Transport Code of Conduct.

6.6 Public Transport

There are no regular public bus services in vicinity of the Development site or the general Boorowa / Rye Park region.

Regular coach services operate along the Hume Highway and stop in Bowning and Yass interchanges during the afternoons. The coach services would be unaffected by the Development.

The nearest train stations are as follows:

- Yass Junction Station, located over 50 km south of Boorowa, and
- Bowning Station, located approximately 42 km south of Boorowa and approximately 3.5 km west of Lachlan Valley Way.

Services and the road network servicing these train stations would be unaffected by the Development as they are located away from the designated transport routes and/or roadwork sites associated with the Development.

6.7 Agricultural Industry Interaction

6.7.1 Stock Movements

The designated OSOM and heavy vehicle transport routes pass Traveling Stock Reserves (TSRs) on Lachlan Valley Way, Rye Park Road and Dalton 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 allows stock to be moved over TSRs between sunrise and sunset and must be applied 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.

OSOM and heavy vehicle movements will generally occur outside of the permit hours and therefore, would avoid any potential conflicts. Notwithstanding, information on the location of TSRs will be provided to drivers within the Code of Conduct.

Drivers will be made aware of the potential to encounter livestock and adherence to safe driving practices at all times. The Code of Conduct will include a requirement for drivers to reduce their speed when encountering a stock warning sign.

6.7.2 Grain/Harvest Movements

The designated OSOM and heavy vehicle route, particularly in the vicinity of the Development is expected to be shared with heavy vehicles associated with the harvest of crops/grain. The harvest is expected to occur between October and November and runs for a short period of time, it results in increased heavy vehicle traffic on the road network.

The volumes expected, whilst higher than the day to day public road user heavy vehicle volumes, is well within the traffic volumes considered by the Development. The public road upgrades will ensure the public roads where there may be interaction with traffic associated with the Development are upgraded to allow for the wind farm traffic and hence are considered safe for a smaller increase of public road user heavy vehicles.

There may also be interactions between grain heavy vehicles and public road upgrades, where this occurs the traffic will be subject to the controls associated with the relevant TGS e.g., reduced speed limits, one way traffic etc. Given the likely short overlap, if any of these two phases, the impact is considered low and adequately dealt with.

6.8 Emergency and Police Vehicles

The Police and Emergency Services including the RFS will be informed in a timely manner of relevant construction activities. Regular updates will be provided to emergency services through emails and face to face discussions. The updates may include such information as changes to traffic control (e.g., short-term lane closures, stop / slow traffic control, etc.), changes to road conditions and worksite access locations.

Traffic will be maintained along existing public roads under traffic control throughout construction of the site access points.

The arrangements during operation will result in no change to access public roads for emergency vehicles.

Further details on the risks and controls associated with emergency management is contained in the Emergency Plan (prepared in accordance with Schedule 3, Condition 34 of the Development Consent) which is available on the Development's website.

6.9 Commercial and Residential Property Access

The impacts on existing commercial or residential properties (other than participating landowners) can be divided into two distinct time periods, during public road upgrades and post public road upgrades.

6.9.1 Access During Public Road Upgrades

Access points or driveways along the OSOM and heavy vehicle route where upgrades are planned will be carefully considered and designed to ensure the access remains as is or in a better state. This may include the addition of drainage pipes, installing road base material and strip sealing.

Whilst the works are being undertaken, access for vehicles, pedestrians and other transport uses will be maintained. Prior to the commencement of works affecting commercial and residential property access, the relevant occupant/resident will be contacted and the scope of works and timing discussed.

6.10 Special Events

In reviewing Yass Valley, Lachlan Shire and Hilltops Councils websites for special events near the Development site, the Yass Show is the largest special event and is generally held in March every year. However, the show is located in Yass and is unlikely to be affected by the Development works.

Through consultation with Hilltops Council, it is understood that there are two key events within the area that the Development will need to consider, including:

- Boroowa Irish Woolfest (located on Marsden Street Boorowa), generally held in October each year.
- Boroowa Football and Netball Carnival, generally held over two days in October each year.

There are no other listed major special events in the region that may be affected by the Development works. The Developer will continue to consult with the Councils to ensure any changes to final details / changes to these events are known and considered, as well as any other one off or new regular events.

6.11 Cumulative Impacts

Three nearby major developments or projects (wind farms) were identified as potentially resulting in cumulative impacts with the Development. The developments are the Bango Wind Farm, located approximately 8 km to the west of the Development, the Coppabella Wind Farm, located approximately 40 km to the south-west of the Development, and Flyers Creek Wind Farm, is a proposed wind farm project located approximately 110km to the north of the Development.

It is understood that the Rugby Wind Farm application has been withdrawn and a new proposal has not been submitted by the Applicant at this stage.

Construction of the Bango Wind Farm commenced in 2019 and is currently (as of July 2021) in the wind turbine assembly stage. This includes ongoing OSOM component deliveries along the approved heavy vehicle and OSOM routes including Lachlan Valley Way and the Hume Highway. The section of Lachlan Valley Way from the Hume Highway to the Bango Wind Farm access point is a shared heavy vehicle and OSOM vehicle route with Rye Park Wind Farm.

Construction of the Coppabella Wind Farm may overlap with construction of Rye Park Wind Farm. Coppabella Wind Farm shares the Hume Highway OSOM and heavy vehicle transport route with Rye Park and Bango wind farms.

Construction of Flyers Creek wind farm may overlap with the construction phase of the Development. Due to the distance and number of significant towns between the two projects, there may be some minor interaction between OSOM and heavy vehicles on the approved transport route.

Mitigation measures to reduce the impact of shared OSOM and heavy vehicle transport routes include:

- notifying Bango Wind Farm, Flyers Creek Wind Farm and Coppabella Wind Farm contractors of projected OSOM deliveries to minimise any conflict between road transport movements along common Hume Highway and Lachlan Valley Way routes,
- notifying Bango Wind Farm, Flyers Creek Wind Farm and Coppabella Wind Farm contractors of any changes to traffic control (eg. short-term lane closures, stop / slow traffic control, etc.), changes to road conditions and worksite access locations, and
- regular communication during concurrent construction activities between staff from all the wind farm projects and their respective construction / transport contractors to discuss load deliveries and plans to minimise potential traffic congestion and conflicts.

There are no road or other work sites adjacent or within the immediate area that would likely impact on the current traffic and transport network. The Developer will continue to consult with the road authorities throughout the construction phase and seek to identify any road or other projects that may interface with the Development. In the event that an interface is identified management measures will be implemented to ensure the safety of road users and reduce traffic impacts whenever feasible.

6.12 Communication

The Developer will be responsible for the dissemination of information to the community including affected residents, Councils, road users, businesses and the general public.

Management plans and other information required under Schedule 5 Condition 17 of the Development Consent will be made publicly available on the Development website. This information will be regularly updated. The EMS details how the Developer will provide the community access to information regarding the Development in accordance with the Development Consent.

Table 10 below provides the proposed communications to be implemented for this TMP.

Table 10: Communication Notifications

Notification	Communication
Community notice	Major Development milestones Expected period of OSOM deliveries, (e.g., between January 2022 and September 2022) to affected business owners, residents at significantly affected intersections, etc. Major traffic disruptions including detours and notice of expected traffic delays
Email	General Development information Direct contact with individuals that require regular updates

Notification	Communication
Community information centre	General Development information Major Development milestones Construction access locations and approved OSOM transport routes
Internet	Major Development milestones Construction access locations and approved transport routes Expected period of OSOM deliveries, (e.g., between January 2022 and September 2022) Projected component deliveries Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc.
On site briefings	As required
Press Release	Major Development milestones Long-term road closures
Community Consultative Committee	Major Development milestones Expected period of OSOM deliveries, (e.g., between January 2022 and September 2022) Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc.
Appropriate signage (e.g., variable message signs)	Major traffic disruptions including detours, notice of expected traffic delays, restricted access, etc. As required by other approvals, e.g., ROL
Advanced warning signage	Construction access locations

The Community Consultative Committee (CCC) has been established since 2011 in accordance with Schedule 5 Condition 3 of the Development Consent. The CCC will be advised of construction details including traffic delays, detours and other traffic impacts.

Note. In accordance with Schedule 2 Condition 17 of the Development Consent, a Community Enhancement Fund will be established (in accordance with Voluntary Planning Agreements (VPAs) entered into between the Proponent and each of the three Councils) that will commence when the Development starts operating. The Development will contribute the following funding each year (adjusted annually to increase in CPI):

- Hilltops Council: $162,500
- Upper Lachlan Shire Council: $40,000
- Yass Valley Council: $27,500

Independent community groups (separate to the CCC) overseen by the Yass Valley, Hilltops and Upper Lachlan Councils will administer the funds. At least 20% of the funds will be allocated to educational needs.

Further details are available on the Development's website (www.ryeparkwf.com.au).

6.13 Complaint Handling Procedure

The Development is committed to managing complaints in a transparent and professional manner. Complaints not handled correctly can incur significant cost through damage to reputation or fines by the regulatory authorities. Complaints also provide an opportunity to improve the way that the Development conducts its business.

The Development has a specific Complaints Handling Procedure which outlines how it will receive and handle complaints and disputes following the commencement of construction. All reporting, monitoring and evaluation associated with complaints management for the Development must be in accordance with this procedure.

The Complaints Management Plan is prepared to specifically address the construction and operation phase of the Development, in accordance with *Australian / New Zealand Standard AS / NZS 10002:2014 – Guidelines for complaint management in organizations* (AS/NZS 10002:2014) and to address the requirements of the Development Consent.

A copy of the Complaints Management Plan will be available on the Development's website (www.ryeparkwf.com.au).

Any enquiries, complaints and/or compliments, including those related to traffic will be directed to the Development information line, via email or telephone.

If a complaint is traffic related, then the following management measures will be considered:

- additional traffic controls (e.g., signage, safety barriers, lighting),
- alternate access routes (where permitted / approved),
- variation to construction hours (where permitted / approved), and
- additional on-site traffic management (e.g., staffed traffic controllers).

For further details on the complaints management process is contained in the EMS.

6.14 Travelling Public

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

- motoring public will be forewarned of any changes, including road closures, road changes and long-term lane closures well in advance using appropriate traffic control signage,
- appropriate signage e.g., variable message signs (VMS) will be used in advance of road closures, major detours and any expected traffic delays,
- for long-term vehicle detours, VMS will be used for advance warning and may be replaced with static signs throughout the detour period,
- pedestrians and cyclists will be provided with advance warning traffic control signs and static signage for long-term detours, and
- warning signs will be placed near each of the three site access points to inform road users that construction traffic will be exiting and entering the site and to ensure that the requirements of the Transport for NSW *"Traffic Control at Work Sites, Technical Manual – Issue 6.0"* (TCWS) are met.

6.15 Fleet Management

Heavy vehicles to be used on the Development 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 Vehicle Movement Plan(s) – refer to Appendix B: Transport Code of Conduct (including the Driver's Code of Conduct).

Fleet management measures include the following items which have been incorporated into the Code of Conduct (refer to Appendix B).

- schedule local deliveries to site during standard work hours to mitigate safety problems on local roads

and reduce disturbance for residences,

- transport through any urban areas would generally occur during daylight periods, unless otherwise approved or as required by NHVR permits,
- all vehicles would enter and exit the site to/from the public road network in a forward direction only,
- all vehicles generated by construction staff would be accommodated within on-site parking areas,
- scheduling of transport deliveries to avoid school bus routes along Lachlan Valley Road, Rye Park Road and Dalton Road. Ensuring OSOM vehicles do not travel along the designated OSOM and heavy vehicle transport route from Lachlan Valley Way to the site access points between 8:00 am and 9:30 am and between 2:30 pm to 4:00 pm, unless in case of an emergency,
- OSOM transport routes that pass through any school zones (e.g., Rye Park township) 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 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, and
- to minimise development-related traffic on the public road network outside of standard construction hours, the following will apply:
    - scheduling of deliveries and movements to / from the Development site in construction hours,
    - operating gate controls to log vehicle movements outside of hours and take appropriate action where necessary,
    - implementing out-of-hour movements when necessary, and
    - Transport Code of Conduct to include a reference these requirements.

6.15.1 OSOM and Heavy Vehicle Transport Routes

A ‘heavy vehicle’ is termed as a vehicle that is defined under the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks and buses no more than 8 tonnes and with not more than 2 axles.

The designated transport routes for OSOM and heavy vehicles are shown in Appendix A: Designated OSOM Transport Routes.

The location and source of construction materials (water, sand, gravel, cement, etc.) will be determined by the chosen contractor prior to and during construction. Heavy vehicles are not permitted to access the approved Preferred Transport Route from north of Boorowa. In the event that the Development needs to access construction materials located to the north of Boorowa, then an application may be made to the Secretary for Planning to allow heavy (not OSOM) vehicles to access the Site.

Where civil construction materials are sourced outside the approved Preferred Transport Routes and require transport along non-approved transport routes, a separate TMP may be required to be prepared following consultation with relevant roads authorities and agreement sought from the Planning Secretary in accordance with Schedule 3 Condition 26 of the Development Consent.

6.15.2 OSOM Road Authority Approvals

A NHVR permit is required to be obtained for road access for OSOM vehicles along the major road network (National Routes or State Highways) 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 would be adopted to ensure safe passage from the public road network onto the site by OSOM vehicles to be used for wind farm 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 requirements outlined in the TfNSW publication 'Additional Access Conditions: Oversize and overmass heavy vehicles and loads' would be followed.

Transport Companies would be responsible for obtaining all required approvals and permits from TfNSW and local Councils and for complying with conditions specified in the approvals. This may include the preparation of a Transport Management Plan, including review by the relevant roads authority and authorisation for the traffic control.

The designated transport routes for wind turbine components from entry ports to the Development site are discussed in Section 2.1 above and shown in Appendix A: Designated OSOM Transport Routes. Notwithstanding, the OSOM transport routes will be inspected and any road infrastructure modification works and/or bridge strengthening works (in addition to the works already identified by the specific route assessments undertaken) would be identified and acted on.

Traffic management for OSOM vehicles will be done at the time of passing through the intersection/ / road section as per the road authority permit conditions. Temporary, short-term full road closures ('rolling' road closures as vehicles pass critical locations) will be detailed by the chosen transport contractor as part of the approvals / licensing process.

Permitted rest areas will be designated by the NHVR as part of the NHVR permit and will consider traffic, restrictions and other factors at the time of deliveries.

6.15.3 Vehicle Maintenance

All vehicles delivering equipment, materials and personnel to the site during the construction phase will be registered vehicles maintained in an appropriate manner to address the necessary emissions controls (including noise, exhaust and fluids).

Plant and equipment used on the site will be maintained and operated in a proper and efficient condition.

6.15.4 Transport Code of Conduct

All vehicle operators will be expected to operate in a safe and sensible manner. A Code of Conduct has been developed for the Development outlining the behavioural expectations for drivers travelling to, from, and within the Development site – refer to Appendix B: Transport Code of Conduct.

6.15.5 B-doubles

A B-double is defined in the Heavy Vehicle National Law (HVNL) as a combination consisting of a prime mover towing two semitrailers, with the first semitrailer being attached directly to the prime mover by a fifth wheel coupling and the second semitrailer being mounted on the rear of the first semitrailer by a fifth wheel coupling on the first semitrailer.

B-doubles are further categorised by the mass of the vehicle as general mass limit (GML) and higher mass limit (HML).

GML B-doubles associated with the Development (generally for freight and transport of electrical components) will use the applicable approved B-double routes and/or the approved OSOM delivery route.

B-double 68 tonne configurations will not be used for the development.

6.15.6 Training, Licencing and Competency

Drivers/operators will be appropriately trained, licenced and where required under the relevant safety regulations and/or legislation assessed as competent.

6.15.7 Measures to Control and Monitor Vehicle Movements

Monitoring of heavy vehicle movements will be undertaken in accordance with Section 8.1 of this TMP.

Staging Report Limits

Where heavy vehicle movements are limited in accordance with the Staging Report, the following measures will supplement the measures included in Section 8.1 to ensure compliance:

- Consolidating transport, where practicable;
- Planning/scheduling of dispatch of deliveries and heavy vehicle movements to the Site;
- Undertaking inductions in accordance with Section 8.3 (including Transport Code of Conduct, refer Appendix B) of heavy vehicle drivers and maintaining induction records;
- Monitoring of heavy vehicles entering the Site through:
    - Record keeping of heavy vehicles approved to enter the site, including recording of vehicle registrations;
    - Regular surveillance of heavy vehicles entering the Site to determine the number that have entered the Site to ensure compliance with the Staging Report limits.

      Surveillance activities will involve establishing a monitoring point at an appropriate location on the Site to identify heavy vehicles as they enter. Surveillance activities will initially be conducted daily at the commencement of Stage 2 and Stage 3 for a period of a month to ensure compliant work practices are established. After one month the frequency of surveillance activities will be undertaken one day per week until Stage 3 is complete.

Ongoing monitoring of vehicle volumes

To ensure the Development provides consideration to the criteria set out in the NSW Road Noise Policy (DECCW, 2011) and is generally in accordance with the EIS, the following measures will supplement the measures included in Section 8.1:

- Monitoring of vehicles at a location which is representative of worst-case impact (e.g., locations in close proximity to residential properties e.g., Yass Street Rye Park) for a period of one week every three months commencing following the completion of Stage 3.
- Monitoring will be undertaken primarily using automated traffic counters. Manual traffic counting may be required.
- Review of data at the end of each monitoring period to determine whether the vehicle numbers are generally in accordance with the EIS. This review will also consider the contribution of base line traffic numbers (e.g., traffic not associated with the Development) to the total volume, based on publicly available traffic data (see Section 4.1) and/or any other circumstantial considerations (e.g., local or seasonal event etc.).

Notification

If non-compliance is identified the following actions will be undertaken:

- Undertake notification to relevant authorities in accordance with the notification requirements of the Development Consent (Section 8.6).
- Undertaken investigation into non-compliance (e.g., review of site records of heavy vehicles and surveillance, and/or interviews with project personnel/drivers) and determine root cause.
- Implement corrective actions (e.g., improvements to site access instructions, communication protocols and/or reviewing planning/scheduling of vehicles movements) to ensure ongoing compliance.

6.16 Road Infrastructure Upgrades

The road infrastructure upgrades required are described in Schedule 3 Condition 27 of the Development Consent, and specifically Appendix 6: Schedule of Road Upgrades.

A significant amount of investigation and scoping has been undertaken to assess the transport route and determine the detailed upgrade specification to be designed and constructed, in consultation with the road authorities and in accordance with the upgrades described in the Development Consent (and summarised in Table 10). This included detailed topographic surveys, an OSOM route survey, geotechnical investigations and extensive site visits/inspections.

The investigation also identified additional public road infrastructure that requires upgrading/augmentation that was not described in the Development Consent. Upgrade requirements identified for the Preferred Transport Route are further detailed in Appendix C.

The detailed scope of public road upgrades (including those required by the Development Consent and additional requirements) and associated timing is presented in Table 11, with further detail provided in the Staging Report.

This has been corroborated by results from a “Preliminary Road Upgrade Investigation” report prepared by Genium Civil Engineering and incorporated into concept designs.

Table 11: Public Road Upgrades

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
Mayfield #4 berth and Selwyn Street intersection	Mayfield	-	Construct a hardstand area at the intersection to allow access for over-dimensional vehicles.	Prior to commencing the use of Mayfield #4 berth and Selwyn Street intersection for any over-dimensional or heavy traffic associated with the construction of the development.	Hardstand area at the intersection to allow access for OSOM vehicles	Prior to commencing the use of Mayfield #4 berth and Selwyn Street intersection for any over-dimensional or heavy traffic associated with the construction of the development (during Stage 4).
Selwyn Street onto Industrial Drive via George Street	Mayfield	0.1	Nil	Nil	Construct a hardstand area, relocate a traffic signal and sign and remove a pole to allow access for OSOM vehicles.	Prior to commencing the use of Selwyn Street onto Industrial Drive via George Street for any over-dimensional or heavy traffic associated with the construction of the development (during Stage 4).
Industrial Drive and Maitland Road intersection	Mayfield West	-	Upgrade as necessary within road reserve to allow access for over-dimensional vehicles.	Prior to commencing the use of Industrial Drive / Maitland Road intersection for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Nil	Prior to commencing the use of Industrial Drive / Maitland Road intersection for any over-dimensional or heavy vehicle traffic associated with the construction of the development (during Stage 4).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
M1 and Pennant Hills Road intersection	Wahroonga	-	Upgrade as necessary within road reserve to allow access for over-dimensional vehicles.	Prior to commencing the use of the M1 and Pennant Hills Road intersection for any over-dimensional or heavy traffic associated with the construction of the development.	Modification of the centre median strip to permit loads to cross over.	Prior to commencing the use of the M1 / Pennant Hills Road intersection for any over-dimensional traffic associated with the construction of the development (during Stage 4).
Right-turn from Hume Highway onto Lachlan Valley Way	-	-	Nil	Nil	Relocate some signs within the central median strip.	Prior to commencing the use of Right-turn from Hume Highway onto Lachlan Valley Way for any over-dimensional traffic associated with the construction of the development (during Stage 4).
Lachlan Valley Way / Trucking Yard Road intersection	-	-	Upgrades required to allow access for over-dimensional vehicles.	Prior to commencing the use of this junction for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Relocation of signage from the inside of the corner.	Prior to commencing the use of this junction for any over-dimensional traffic associated with the construction of the development. (during Stage 4).
Trucking Yard Road	Lachlan Valley Way to Dillon Street	0.66	Widen and strengthen pavement as necessary to proposed sealed standard.	Prior to commencing the use of Trucking Yard Road for any over-dimensional or heavy vehicle traffic associated with the	Upgrade of road and seal to 7.4m width.	Public Road Upgrade Stage 2 (see Staging Report for more details).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
			Widen causeway as necessary.	construction of the development.	Replace causeway with culverts and tie into new road.	
Dillon Street	Trucking Yards Road to Long Street	0.99	Widen and strengthen pavement as necessary to proposed sealed standard.	Prior to commencing the use of Dillon Street for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Upgrade of road and seal to 7.4m width.	Public Road Upgrade Stage 2 (see Staging Report for more details).
Dillon Street / Long Street intersection	-	-	Upgrade as necessary within road reserve to allow access for over-dimensional vehicles.	Prior to commencing the use of the Dillon Street / Long Street intersection for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Upgrade intersection and adjacent private property to accommodate OSOM vehicle configurations,	Public Road Upgrade Stage 2 (see Staging Report for more details).
Long Street	Dillon Street to Boorowa Rye Park Road	1.1	Widen and strengthen pavement as necessary to proposed sealed standard.	Prior to commencing the use of Long Street for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	0m to 400m – Upgrade road and seal to 7.4m width 400m to 650m – Nil upgrade, apply monitor and maintain controls per TMP. 650m to 1000m - Nil upgrade, apply monitor and maintain controls per TMP. 1000m to 1100m – Upgrades to safely tie in	Public Road Upgrade Stage 2 (see Staging Report for more details).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
					Long St/Rye Park-Boorowa Rd Intersection upgrade.	
Long Street / Boorowa Rye Park Road intersection	-	-	Upgrade as necessary within road reserve to allow access for over-dimensional vehicles.	Prior to commencing the use of the Long Street / Boorowa Rye Park Road intersection for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Upgrade intersection and adjacent private property to accommodate OSOM turning requirements. Services to be relocated accordingly.	Public Road Upgrade Stage 2 (see Staging Report for more details).
Boorowa Rye Park Road	Long Street to Yass Street	19.4	Widen and strengthen pavement as necessary to proposed sealed standard. Upgrade bridge over Dirthole Creek as necessary.	Prior to commencing the use of Boorowa Rye Park Road for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	0m to 300m - Upgrade of road and seal to 7.4m width. 300m to 5900m - Nil upgrade, apply monitor and maintain controls per TMP. 5900m to 6900m - Upgrade of road and seal to 7.4m width. 6900m to 7300m - Nil upgrade, apply monitor and maintain controls per TMP. 7300m to 7700m – Re-construct shoulders 7700m to 11750m - Upgrade of road and seal to 7.4m width.	Public Road Upgrade Stage 3 (see Staging Report for more details).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
					11750m to 18700m - Upgrade of road and seal to 7.4m width. 18700m to 19000m – Localised seal patching, apply monitor and maintain controls per TMP Various Minor Culverts – Tie in with upgrade to maintain serviceability, extend culverts as required for upgraded formation. Dirthole Creek Bridge – Nil upgrades. Apply control and monitoring measures per TMP.	
Boorowa Rye Park Road – Back Creek Culvert	Back Creek Culvert	-	Nil	Nil	Nil upgrades. Apply control and monitoring measures per TMP.	NA
Rye Park Road – Harry's Creek Bridge	Harry's Creek Bridge	-	Upgrades required to allow access for over-dimensional vehicles.	Prior to commencing the use of Harry's Creek Bridge for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Nil upgrades. Apply control and monitoring measures per TMP.	NA

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
Junction: Rye Park Road / Grassy Creek Road and Boorowa Rye Park Road / Grassy Creek Road Intersection and Yass Street / Boorowa Rye Park Road Intersection	-	-	Upgrade to allow access for over-dimensional vehicles. Upgrade as necessary within road reserve to allow access for one-dimensional vehicles. Upgrade as necessary to within road reserve to allow access for heavy vehicles.	Prior to commencing the use of the Rye Park Road / Grassy Creek Road / Yass Street intersection for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Upgrade intersection and adjacent private property to accommodate OSOM and heavy vehicle turning requirements. Services to be relocated accordingly.	Public Road Upgrade Stage 3 (see Staging Report for more details).
Grassy Creek Road	Yass Street to Site Access 10	6.5	Widen, re-align and strengthen pavement as necessary to proposed sealed standard. Replace concrete causeway and large culvert over Pudman Creek.	Prior to commencing the use of Grassy Creek Road for any heavy vehicle traffic associated with the construction of the development.	Upgrade of road and seal to 7.4m width. Concrete causeway to be replaced with culverts and tie into upgraded road.	Public Road Upgrade Stage 2 (see Staging Report for more details).
				Prior to commencing the use of Grassy Creek Road for any over-dimensional vehicle traffic associated with the construction of the development.	Pudman Creek culvert to be sleeved and grouted to reinforce existing structure.	Public Road Upgrade Stage 4 (see Staging Report for more details).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
Grassy Creek Road / site access point 2 junction	-	-	Nil	Nil	Construct intersection to accommodate Development related vehicles.	Public Road Upgrade Stage 1 (see Staging Report for more details).
Grassy Creek Road / site access point 10 junction	-	-	Nil	Nil	Construct intersection to accommodate Development related vehicles.	Public Road Upgrade Stage 1 (see Staging Report for more details).
Dalton Road	Bridges over Pudman Creek, Flakney Creek and Blakney Creek		Upgrade as necessary to proposed sealed standard. Upgrade bridges over Pudman Creek, Flakney Creek and Blakney Creek.	Prior to commencing the use of the relevant section of Rye Park Dalton Road for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Pudman Creek Bridge - Nil upgrades. Apply control and monitoring measures per TMP. Flakney Creek Bridge – No bridge exists. Concrete causeway to be upgraded and tie into upgraded road. Blakney Creek Bridge – No bridge exists. No crossing of Blakney Creek proposed on public road network.	Flakney Creek causeway - Public Road Upgrade Stage 3 (see Staging Report for more details).
Yass Street / Gunning Road / Dalton Road	Boorowa Rye Park Road to access point 12	14.7	Widen, reseal and re-align to proposed sealed standard. Upgrade as necessary to multiple culverts and causeways.	Prior to commencing the use of Yass St / Gunning Road / Dalton Road for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Yass St – 0m to 1100m – Upgrade of road and seal to 7.4m width. Yass St – 1100m to 1900m - Nil upgrade, apply monitor and maintain controls per TMP.	Yass St - Public Road Upgrade Stage 2 (see Staging Report for more details). Dalton Rd - Public Road Upgrade Stage 3 (see Staging Report for more details).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
					Yass St – Minor causeway at 450m to be upgraded as part of road upgrade. Dalton Rd – 1900m to 8200m - Localised seal patching, apply monitor and maintain controls per TMP Dalton Rd – 8400m to 15000m - Localised seal patching, apply monitor and maintain controls per TMP Dalton Rd – 15000m to 16450m – Apply monitor and maintain controls per TMP	
Dalton Road / site access point 12 junction	-	-	Nil	Nil	Construct intersection to accommodate Development related vehicles.	Public Road Upgrade Stage 1 (see Staging Report for more details).
Cooks Hill Road	Faulder Avenue to Rye Park Dalton Road	18.3	Upgrade 2.6 km unsealed section within Upper Lachlan Shire Council to the proposed sealed standard. Upgrade remainder of road, which is already sealed as necessary.	Prior to commencing the use of Cooks Hill Road for any traffic associated with the construction of the development.	Upgrade and seal of unsealed sections within vegetation constraints.	Public Road Upgrade Stage 4 (see Staging Report for more details).

Appendix 6 Requirements					Final Project	
Road / Intersection	**Start to End**	**Length (km)**	**Upgrade**	**Timing**	**Upgrade Scope**	**Timing**
Rye Park – Dalton Road	Cooks Hill Rd Intersection to Shire Boundary	3.6	Nil	Nil	Upgrade and seal of unsealed sections within vegetation constraints.	Public Road Upgrade Stage 2 (see Staging Report for more details).
Blakney Creek North Road Intersection	Intersection of internal access track and Blakney Creek North Road	-	Nil	Nil	Construct cross over intersection for internal wind farm access track.	Public Road Upgrade Stage 4 (see Staging Report for more details).
Rye Park bus stop and pedestrian path	Rye Park Bus stop to Rye Park Public School	700m	Nil	Nil	Augmentation/tie in of Bus Stop to road upgrade. Construction of a pedestrian path from Rye Park bus stop to the Rye Park Public School	Public Road Upgrade Stage 3 (see Staging Report for more details).
Colandel Lane, High Rock Road, Flakney Creek Road and Days Road	Within the development corridor	Within the development corridor	Upgrades required to allow access for over-dimensional vehicles.	Prior to commencing the use of the relevant road within the development corridor for any over-dimensional or heavy vehicle traffic associated with the construction of the development.	Upgrade to wind farm access track standard.	Public Road Upgrade Stage 4 (see Staging Report for more details).

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

Temporary modification works have been confirmed by the licensed transport contractor as part of their transport route assessment based on specific vehicles to be used. The temporary modification works are described in Sections 18 to 20 of Appendix C and include, for example:

- Installation of infill or hardstand areas on the inside or outside of intersections;
- Modifications to gutters, median strips and other minor structures; and
- Removal or relocation of road furniture including signage.

Once OSOM deliveries have been completed, any temporary modifications would be removed and/or reinstated to ensure the intended swept path and traffic control devices of the road for typical usage are maintained, i.e., to maintain safe operations. This could include reinstatement of temporary infill areas, landscaping works and relocation of road furniture, signage, etc.

Council Permits During Construction

The road upgrades will require Council issued permits during construction. Works that have been identified as requiring Council permits include:

- road opening permits (ROP) and Lane Occupancy Licences for any proposed works on local roads including:
  - construction of Grassy Creek Road and Dalton Road access points (located within the jurisdiction of Hilltops Council), and
  - any repair / reinstatement works.
- modifications works for OSOM transport along the approved OSOM / heavy vehicle routes and particularly at local road intersection locations

TfNSW Permit Requirements during construction

The road upgrades will require TfNSW issued permits during construction. Works that have been identified as requiring TfNSW permits include:

- Road occupancy licences for any proposed works on State or Regional roads including:
  - construction of intersections at site access points; and
  - any repair works.
- Speed Zoning Authorisation for Local and State roads.

Additionally, Works Authorisation Deed (WAD) would be required between the developer and TFNSW should the developer wish to undertake 'private financing and construction' of improvement works on classified roads.

Preliminary assessments of the intersection of Lachlan Valley Way and Trucking Yards Road show that the intersection is capable of transporting the over-dimensional loads for the Development without the need for extensive upgrade. In accordance with the upgrade requirements detailed in the Development Consent (Schedule 3 Condition 27 and Appendix 6), the requirements for this intersection includes:

'Upgrades to allow access for over-dimensional vehicles'

Should works be required to facilitate access for over-dimensional vehicles, a WAD would be required.

6.16.1 Structure Assessment and Mitigation Measures

In accordance with Schedule 3 Condition 27 of the Development Consent, several structures require

upgrading for OSOM deliveries. Detailed assessments of these structures have been undertaken in consultation with Hilltops Council, where the structures are located. A preliminary assessment (undertaken by Focus Bridge Engineering) of the route concluded that four structures associated with the local road network were required to be assessed by way of Level 2 and Level 3 assessments.

The assessments have determined that the structures can adequately handle the proposed vehicle configurations and volumes without the need for major upgrade works. Table 12 details the mitigation measures that will be implemented to ensure the structures remain serviceable during the Development construction period.

Table 12: Structures and Associated Mitigation Measures

Structures	Mitigation Measures
Harry's Creek	• Inspection by a suitably qualified person during the first OSOM deliveries • Ongoing monthly inspection by a suitably qualified person • Installation and remote monitoring of sensors to assess the composite behaviour of the structure • OSOM vehicle speed limit while crossing the structure is proposed at 10 km/h – this requirement will be included in the site induction
Dirthole Creek	• Inspection by a suitably qualified person during the first OSOM deliveries • Ongoing bi-monthly inspection by a suitably qualified person • OSOM vehicle speed limit while crossing the structure is proposed at 10 km/h – this requirement will be included in the site induction
Pudman Creek	• Inspection by a suitably qualified person during the first OSOM deliveries • Ongoing monthly inspection by a suitably qualified person • Installation and remote monitoring of sensors to assess the behaviour of the structure • OSOM vehicle speed limit while crossing the structure is proposed at 10 km/h – this requirement will be included in the site induction
Hardiman Creek (formally Back Creek)	• Inspection by a suitably qualified person during the first OSOM deliveries • Ongoing monthly inspection by a suitably qualified person • OSOM vehicle speed limit while crossing the structure is proposed at 10 km/h – this requirement will be included in the site induction

6.17 Traffic Control

TGSs will be prepared by the chosen public road upgrade contractor in accordance with TCWS and AS 1742.3. Plans will be prepared for the use of traffic control personnel, including spotters and/or signage and devices, traffic controllers, 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 and will include signage for:

- protection of workers,
- provision of adequate warning of changes in road surface condition and the presence of personnel or plant engaged in work on the road, and
- 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:

- one 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, and

- short short-term lane closures with reduced speed limits, which may result in short-term delays.

6.17.1 Traffic Guidance Scheme (TGSs)

Detailed TGSs will be prepared by the chosen contractor. Works that are anticipated to require a TGS are detailed below:

- potential adjustment of overhead power lines through Boorowa and Rye Park townships,
- intersection treatment works at the three site access points off Grassy Creek Road and Dalton Road.
- modifications works for OSOM deliveries, especially along the local road network, and
- traffic control for OSOM deliveries (where large vehicles execute problematic manoeuvres on public roads).

6.17.2 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 will 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 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, and
- 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 TCWS and following 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 7 years) of the locations, dates and times that road work speed limits are in operation.

In consultation with the relevant road authorities and in accordance with ROPs described in Section 6.16, warning and advisory signage will be installed prior to isolated curves, crests, narrow bridges and change of road conditions, where appropriate.

6.18 Working Hours and Out-of-Hours Work Protocol

In general and in accordance with Schedule 3 Condition 8 of the Development Consent, construction and decommissioning work will be limited to the following times:

- Monday to Friday, 7:00 am to 6:00 pm,
- Saturday, 8:00 am to 1:00 pm, and
- no construction on Sundays or NSW public holidays.

Construction and decommissioning 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 Port Kembla, and
- emergency work to avoid the loss of life, property and/or material harm to the environment.

  For all other construction activities, where they are required to be undertaken outside of these hours, agreement can be obtained from the Planning Secretary in accordance with Schedule 3 Condition 8.

It is anticipated that, subject to permit conditions, the bulk of the OSOM wind turbine component deliveries would be done at night with components generally arriving to site no later than 7 am. Delivery times would adhere to the provision above regarding school bus routes and school pick-up / drop-off times.

6.19 Railway Crossing

One railway crossing exists on Selwyn St near the Port of Newcastle. The crossing is a signalised crossing on the selected approved transport route (Route 1 as described in the Development Consent). The railway is a freight line connecting to the Port of Newcastle.

Crossing the railway line will require approval from the relevant authority and all vehicles will be centered on the road way when crossing.

7 Crown Road Reserves

In accordance with Schedule 3 Condition 29, the Developer must ensure any unformed Crown road reserves affected by the development are maintained for future use, unless otherwise agreed with the Department's Crown Lands Division. Relevant licenses have been sought from The NSW Department of Planning, Industry and Environment – Crown Lands (DPIE – Crown Lands) for the use of existing Crown land paper roads (Combined Licence No. RN 622918).

8 Monitoring, Reporting and Auditing

8.1 Construction Inspection 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 TCWS 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 (including consideration of the requirements set out on Section 6.15.7);
- monitoring of compliance with and effectiveness of the Transport Code of Conduct including:
    - reviewing daily plant/vehicle prestart checklists to ensure vehicles/machinery are serviceable;
    - weekly inspection of work areas to verify safe work method statements and/or job hazard analyses are implemented (where required);
    - verification and recording of drivers licences/qualifications as part of the project induction process; and
    - monitoring of traffic control issues/disruptions and reporting to site supervisors at daily prestart/debrief meetings or through incident investigations as required.
- inspection of traffic control in accordance with TCWS including:
    - daily pre-start and pre-close down inspections and surveillance of short-term traffic control
    - weekly inspections and surveillance of long-term traffic control
    - night inspections of long-term traffic control, and
    - 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.

Environmental monitoring will occur in accordance with the EMS.

Any compliance/incident issues will be recorded and raised with the relevant authorities as per the Development Consent Schedule 5 Conditions 7 as set out in Section 8.6.

8.2 Dilapidation Surveys

8.2.1 Surveys

Schedule 3 Condition 28 of the Development Consent requires that a dilapidation survey is undertaken of the designated over-dimensional and heavy vehicle routes prior to construction and decommissioning, and within 1 month of the completion of construction and decommissioning. The detailed methodology and requirements for these surveys has been developed considering the different requirements and expectations for the local and regional roads.

Local Roads

The chosen contractor/s will engage a suitably qualified person to undertake a pre-construction dilapidation survey prior to the commencement of construction, prior to the OSOM turbine component deliveries, and a post-construction dilapidation survey within 1 month of the completion of construction works. The methodology would include:

1. Pre-construction survey, which records the existing condition of the pavement and forms the basis for future comparison using a “hawkeye/laser car”.
2. Three-monthly visual inspections throughout the Developments works period to identify any project related damage that may require repair.
3. Pre-OSOM turbine component deliveries survey, using a “hawkeye/laser car”.
4. Post-construction inspection to record any observable change in the pavement condition, using “hawkeye/laser car”.
5. Repair/reinstatement of damage identified during post-construction dilapidation assessment and ongoing monitoring during warranty and defects periods for repair work.

The extent of the dilapidation surveys for regular construction traffic is proposed from the Trucking Yards Road junction along Lachlan Valley Way and then along the approved OSOM and heavy vehicle transport route along the local road network to the site access points. This also includes the Cooks Hill Road section to site access point 12 along Dalton Road (light vehicle access only).

OSOM Delivery Route Roads between the Port of Newcastle and Boorowa

A method assessment will be agreed with the relevant road authorities associated with transport routes for OSOM vehicles. The assessment will identify the roads and any measures required to mitigate dilapidation related issues.

Agreements have been made with TfNSW, Newcastle City Council and Westlink M7.

A hawkeye/laser car survey of the 300m of Lachlan Valley Way to the south of the Lachlan Valley Way / Trucking Yard Road intersection will be undertaken and the relevant report provided to TfNSW.

Within one month of the completion of construction, a post construction assessment will be undertaken in consultation with the relevant road authorities to identify any damage caused by the Development, such damage will be rectified.

Decommissioning

Dilapidation surveys will be undertaken prior to the commencement of decommissioning activities and within one month after the completion of the decommissioning activities.

The extent of the roads to be surveyed and the form of the survey will be agreed with the relevant road authorities prior to undertaking the surveys.

8.2.2 Repair Works

Any damage caused by the contractor during construction and decommissioning will be raised to the relevant roads authority representative to seek work permit approvals to allow for remediation works. Repairs and damage resulting from construction and decommissioning traffic will be undertaken as soon as practicable after the damage is identified and within 7 days. Urgent repairs, which threaten the safety of road users would be undertaken immediately in consultation with the relevant roads authority.

Repair work undertaken before the post construction/decommissioning 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 relevant roads authority representative/s would be invited to inspect works and provide signoff.

Any non-urgent repairs identified during the post construction/decommissioning dilapidation survey will be undertaken within two months of the completion of the survey, unless the relevant roads authority agrees otherwise.

8.3 Construction Traffic and Transport Training

All personnel will attend a site induction and show competence in the safety, quality and environmental requirements of the Development. The induction will include the Transport Code of Conduct and the requirements set out in this TMP covering vehicle maintenance requirements, covering of loads and site-specific conditions relating to relevant school zones. The induction will also outline the traffic related commitments set out in the Staging Report.

Operators and drivers will be required to have general construction industry induction cards and will be required to attend ongoing general Development 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.

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.

Personnel involved in traffic management would be trained in TFNSW Traffic Controller Certification policy in line with TCWS.

8.4 Incident Management

The types of emergencies / unplanned incidents that may occur include:

- motor vehicle crashes,
- bush fires,
- environmental spills,
- terrorist attacks,
- bomb threats,
- construction type incidents,
- structural catastrophic failures,
- inclement weather conditions,
- flooding,
- anti-social behaviour, and
- building fires.

In the event of an incident involving the transportation of goods or other traffic related incident then reporting will be undertaken in accordance with Schedule 5 Condition 7 of the Development Consent (see Section 8.6).

Concurrently with notification of the incident the following management measures would be implemented:

- The contractor will coordinate with TFNSW (Transport Management Centre's (TMC) Transport Operations Controller) in event of incidents or undue congestion to minimise delays and improve public

safety. The Transport Operations Controller can be reached directly via the TMC Traffic Operations Room on 1300 725 886.

- In the event of a traffic accident occurring within the construction work sites or at other locations affected by the works, the Development 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, TFNSW and WorkCover.
- The chosen transport 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, and
    - 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 Development 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, and
    - in the event of flooding or bushfire in the area, the 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.

If the New South Wales Police Service, Emergency Services, TFNSW and TMC are controlling an incident, the Developments team will:

- comply with any instruction or direction by the New South Wales Police Service, Emergency Services, TFNSW and TMC in relation to any proposed full or partial road closure,
- 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, and
- 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 contractor's work and to re-open the full or partial road closure.

Further information on incident management is provided in the EMS.

8.5 Auditing

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this sub plan and other relevant approvals, licenses and guidelines.

Traffic must be included within any major environmental audit of impacts undertaken during the construction phase.

Audit requirements must comply with the Development Consent Schedule 5 Conditions 11 to 16 as summarised in Table 13.

Table 13: Audit Requirements

Condition	Requirements
11	Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020) to the following frequency: (a) within 3 months of commencing construction; and (b) within 3 months of commencement of operations.
12	Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
13	The Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in condition 11 of Schedule 4 upon giving at least 4 weeks' notice to the Applicant of the date upon which the audit must be commenced.
14	In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), the Applicant must: (a) review and respond to each Independent Audit Report prepared under condition 11 of Schedule 4 of this consent, or condition 13 of Schedule 4 where notice is given by the Planning Secretary; (b) submit the response to the Planning Secretary; and (c) make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. unless otherwise agreed by the Planning Secretary.
15	Independent Audit Reports and the Applicant's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.
16	Notwithstanding the requirements of the Independent Audit Post Approvals Requirements (2020), the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.

8.6 Notification

Reporting requirements and responsibilities, as summarised below, will comply with the Development Consent.

Notification to the relevant Department agencies and stakeholders will occur in accordance with Schedule 2 Condition 11 and Schedule 5 Condition 4 of the Development Consent for each phase of the Development (e.g., prior to the commencement of construction, operations and/or decommissioning of the development or the cessation of operations). In accordance with the Staging Report, notification of the commencement of construction will be undertaken at the commencement of road upgrade construction, as well as the commencement of wind farm construction.

The incident reporting and non-compliance reporting requirements as per the Development Consent Schedule 5 Conditions 7 to 10 are outlined in Table 13 below. Any compliance issues will be recorded and raised with the relevant authorities in writing via the Major Projects website.

The requirements for written notification of an incident which must be followed in Appendix 8 of the Development Consent and listed below in Table 14.

Table 14: Reporting Requirements

Condition	Compliance Task	Requirements
7	Incident Reporting	The Planning Secretary must be notified in writing via the Major Projects website 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 8.
8	Non-Compliance Reporting	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.
9		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.
10		A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

Table 15: Written Incident Notification Requirements

Condition	Requirements
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 7 of Schedule 4 or, having given such notification, subsequently forms the view that an incident has not occurred.
2	Written notification of an incident must: a. identify the development and application number; 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; and h. identify a project contact for further communication regarding the incident.
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.
4	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; and d. details of any communication with other stakeholders regarding the incident.

9 TMP Review and Revision

This TMP and its implementation will be reviewed at least every six months during construction, and on an as needs basis during operations and prior to decommissioning. The review will consider the following:

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

The effectiveness of the TGSs, site implementation and the monitoring activities described in Section 8.1 will be assessed against relevant criteria. This will be reported by the contractors to the Developer during inspections, audit, incident management and compliance tracking. As appropriate, and in accordance with the EMS, reviews and updates may be made to the Development risk register, objectives and targets of the TMP.

Furthermore. as per Schedule 5 Condition 2 of the Development Consent, the TMP will be reviewed in response to:

- an incident,
- submission of an audit report, or
- modification to the conditions of the Development Consent.

Where the review results in the revision to the TMP, consultation with the TfNSW and Councils will be undertaken as relevant, and, then within four (4) weeks of the review the revised document/s will be submitted to the Secretary for approval.

Furthermore, prior to the commencement of decommissioning activities this TMP will be reviewed and updated to ensure that the measures outlined in the TMP respond to the local and regional conditions and requirements of the time.

Once approved, a copy of the revised document/s will be uploaded to the Developments website (www.ryeparkwf.com.au).

References

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

Ares Transport Group “Route Survey – Port Kembla to Rye Park Wind Farm”, 28 February 2020

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

Epuron “Rye Park Wind Farm: Traffic and Transport Assessment”, April 2016

Genium Civil Engineering “Preliminary Road Upgrade Investigation”, 3 April 2020

GTA Consultants memorandum “Rye Park Wind Farm – Route Assessment Peer Review”, 12 August 2020

NSW Centre for Road Safety “NSW Speed Zoning Guidelines (Version 4.0)”, 2011

Relevant Austroads guides and TFNSW supplements

RTA “Delineation Guidelines: Parts 1 to 19 & Appendices A & B”, assorted dates

SMEC “Rye Park Wind Farm TIA Update”, 8 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

Tilt Renewables “Rye Park Wind Farm: Modification Application Report”, April 2020

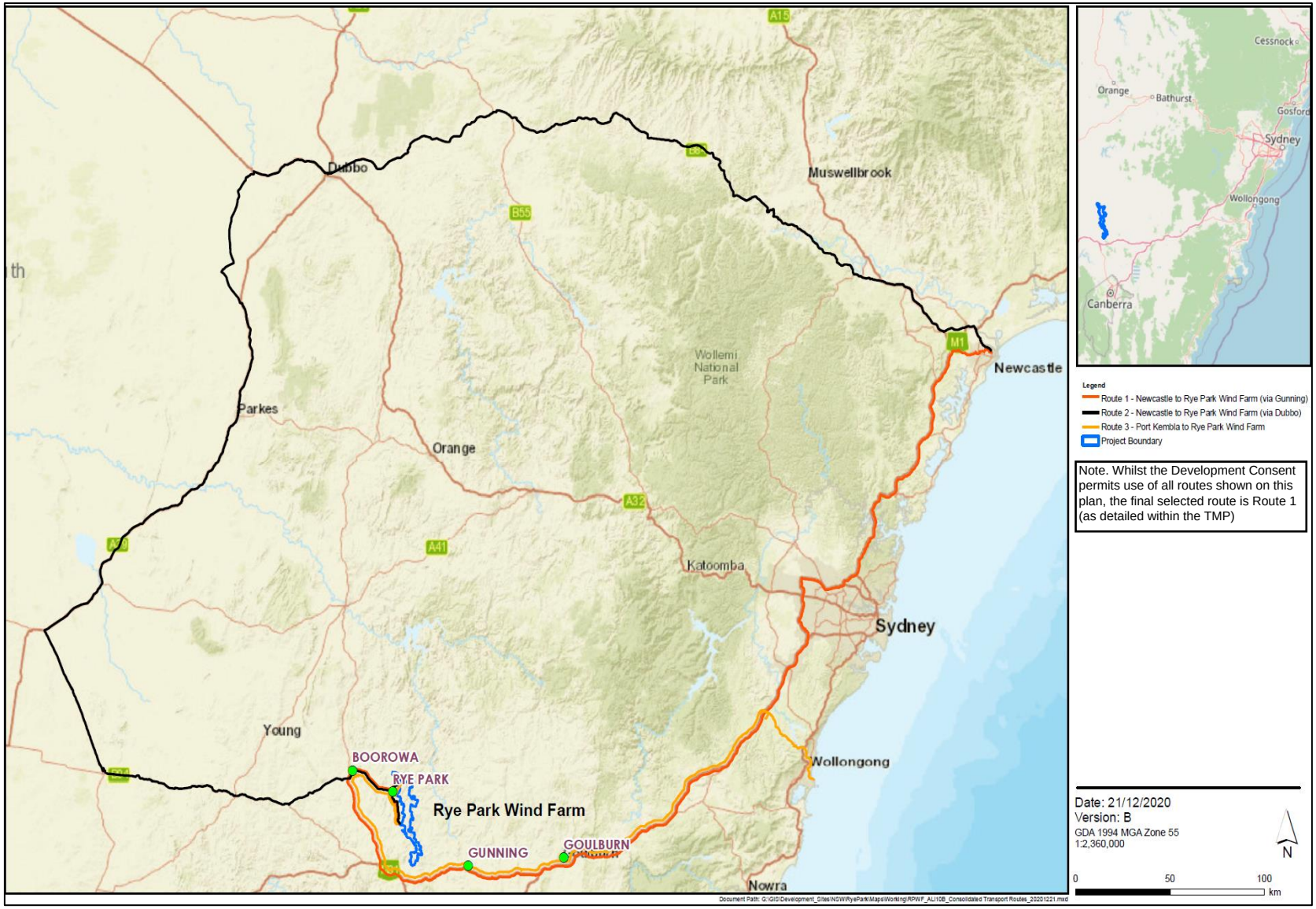
Transport Management Centre “Road Occupancy Manual”, 14 May 2015

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: Designated OSOM Transport Routes

APPENDIX A
OVER-DIMENSIONAL ACCESS ROUTES



Appendix B: Transport Code of Conduct

TRANSPORT CODE OF CONDUCT (includes Driver's Code of Conduct)

This Transport Code of Conduct (the Code of Conduct) will be applied to all traffic and transport construction activities associated with the Rye Park wind farm Development.

This Code of Conduct applies to all employees and contractors accessing or making project related deliveries to the site, with emphasis placed on the transport of over-size / over-mass (OSOM) wind turbine components and delivery vehicles during the construction phase.

Objectives

The objectives of the Code of Conduct are:

- to ensure safe and effective transport to, around and from the site
- minimise disruption to traffic networks
- minimise disruption to other transport operations, and
- minimise disruption to neighbouring properties.

Transport Routes and Timing of Transport

All Heavy Vehicles (As defined under the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks and buses no more than 8 tonnes and with not more than 2 axles), including OSOM vehicles, associated with the Development will follow the approved, designated transport routes and main roads near the Development 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 of Conduct.

Drivers must ensure that they use the appropriate transport route for their vehicle type in accordance with the Development's Conditions of 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.

Drivers will attend a site induction (Section 8.3) and show competence in the safety, quality and environmental requirements (including the transport route) of the Development.

Timing of transport will be scheduled to minimise disruption to local traffic or result in safety risks. The timing of the deliveries must meet with the requirements of the OSOM 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).

In order to mitigate impacts associated with OSOM and heavy vehicle transportation for the Development, measures such as the following would be used:

- Scheduling of deliveries and vehicle movements to minimise convoy length or platoons.
- Timing of transport activities outside of peak travel periods and school hours.
- Limiting the number of trips per day by consolidating transport, where practicable.
- Reducing traffic during school bus route / zone hours, ie. 7.30 am to 9.00 am and 2.30 pm to 4.00 pm.

In order to minimise development-related traffic on the public road network outside of standard construction hours, the following would be adopted:

- Scheduling of deliveries and movements to / from site in construction hours.
- Operating gate controls to log vehicle movements outside of hours and take action where necessary.
- Only implementing out-of-hour movements when necessary.

Driver Behaviour Requirements

The operators of all vehicles associated with the Development would maintain a high level of conduct and respect for other road users. All operators will undergo an induction prior to undertaking any transport to site and regular toolbox meetings will be held to maintain awareness of required controls.

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; and
- 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.

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; and
- 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 of Conduct); and
- a maintenance program for the heavy transport vehicles that is consistent with these safety requirements.

Managing Fatigue

Fatigue management is a very important component of the transport haulage task, in particular OSOM transport. The National Heavy Vehicle Regulator (NHVR) has set out guidelines for managing driver fatigue. 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 am to 6 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.

Maintenance Requirements

The operators of all vehicles associated with the Development would maintain a high level of maintenance. The following requirements would 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; and

- ensure their vehicles have correctly fitted mufflers to minimise noise disturbance.

Travelling Stock

Sections of Lachlan Valley Way, Rye Park Road and Dalton Road have adjacent travelling stock reserves (TSRs). When being used, the TSRs would be appropriately signposted. Drivers must be made aware of the potential to encounter livestock and adhere to safe driving practises at all times. Drivers must reduce their speed when encountering a stock warning sign.

Speed Limits

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.

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

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 three site access intersections along Grassy Creek Road and Dalton Road. In addition, there would be a 10 km/h speed limit for OSOM and heavy vehicles across bridges at Harry's Creek, Dirt Hole Creek, Pudman Creek and Back Creek.

Complaint Resolution and Disciplinary Procedure

All traffic related complaints will be managed in accordance with the Development's 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 Development.

Community Consultation for Peak Haulage Periods

Community consultation in relation to traffic and access will include on-going consultation with relevant stakeholders including, local landholders, emergency services, business owners, other major projects in the area and school bus companies.

Community engagement is to be undertaken in consultation with the Community Officer.

Liaison activities will include:

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

General

- 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.
- 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.
- 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.
- 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.
- Read and sign the toolbox when entering site.

Biosecurity

All personnel must adhere to the site biosecurity plan and the provisions of the Biosecurity Act 2015.

- Vehicles must be certified weed and seed free prior to entering the site. As a minimum, radiator airways, the underbody of track propelled machinery and the underbody of vehicle and tires must be cleaned before entry into a property, to minimise the risk of infectious material or weed seeds being carried in mud, etc., which may become dislodged / dispersed on the site.
- All vehicles must remain on formed roads unless express permission is sought from the Project Manager.
- If vehicles must traverse through areas of known weed infestation, then this can only occur when the weeds are not seeding.

Appendix C: Route Assessment

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TRANSPORT MANAGEMENT PLAN

CLIENT: VESTAS

PROJECT: RYE PARK WIND FARM

START POINT: NEWCASTLE PORT (NSW)

END POINT: RYE PARK (NSW)

28/06/2021 REV 00

Rev.	Date	Change	Responsible	Checked
00	20/01/21	Route Assessed	W Andrews	✓
00	22/06/21	Report compiled	W Andrews	✓
00	28/06/21	Report completed	W Andrews	✓

Index:

1.0 Introduction

This document describes observations and previous experience on sections of this route and explains the Transport of Wind turbine equipment from Newcastle to Rye Park wind farm.

The Route survey took place on 05-01-21.

2.0 Evaluation

1	No work required
2	Some Work required
3	Moderate amount of works required
4	Large amount of works required

(Mark below boxes with an X)

		1	2	3	4
A	Harbour		X		
B	Road Modification			X	
C	Road Furnishings			X	
D	Trees			X	
E	Site Entrance				X
F	Bridge Calculations		X		
G	Traffic Control	X			

3.0 Project data.

Date of latest Route Assessment: 05/01/2021

Survey undertaken by: (Rex J Andrews P/L)

Project name: Rye Park Windfarm

Location: Newcastle (NSW) to Rye Park (NSW)

Turbine type: 66 x Vestas V162, 119 metre H/H 5 section tower.

STAGE 1 ROUTE:

From Newcastle to Rye Park township

Distance: 508.0 kilometres

This route took us via Selwyn street, George Street, Industrial Drive, Maitland Road, New England Highway, John Renshaw Drive, M1, Pennant Hills Road, M2, M7, M5, Hume Highway, Lachlan Valley Way, Trucking Yard Road, Dillon Street, Long Street, Rye Park Road.

GPS LINK: https://goo.gl/maps/XwqHWbLtMAwPyFLFA

STAGE 2 ROUTE:

From Rye Park township to Rye Park North

Distance: 6.4 kilometres

This route took us via Rye Park Road, Grassy Creek Road.

GPS LINK: https://goo.gl/maps/bmzErhRMwMFvi83k8

STAGE 3 ROUTE:

From Rye Park township to Rye Park South,

Distance: 15.2 kilometres

This route took us via Rye Park Road, Grassy Creek Road, Yass Street, Gunning Street, Dalton Road.

GPS LINK: https://goo.gl/maps/zZBJTrKvr6meYkpY6

4.0 Transport combinations and escort requirements.

66 x Nacelles (18.1l x 4.2w x 4.35h x 86T)
Configuration. Prime mover with 4x8-4x8 extending platform trailer and block truck.
Overall dimensions: 46.0l x 4.3w x 5.3h x 146.0T.
Escort requirement: 1x NSW Police & 3 x Company pilots.

66 x Drive trains (7.5l x 2.7w x 3.0h x 97T)
Configuration. Prime mover with 10x8 Platform trailer and block truck.
Overall dimensions: 42.0l x 4.3w x 4.6h x 160.0T
Escort requirement: 1x NSW Police & 3 x Company pilots.

66 x Cooler Top (5.2l x 2.3w x 3.0h x 6.4T)
Configuration. Prime mover with semi-trailer.
Overall dimensions: 19.0l x 2.5w x 4.3h x 42.5T.
Escort requirement: Nil

66 x Hubs (5.0l x 4.4w x 4.0h x 63.0T)
Configuration. Prime mover with 2x8-4x8 low loader.
Overall dimensions: 29.0l x 4.5w x 5.0h x 97.5T.
Escort requirement: 2 x Company pilots.

198 x Blades (80.0l x 4.8w x 3.5h x 28T)
Configuration. Prime mover with 2x8 dolly, 4x4 Steerable extendable.
Overall dimensions: 90.0l x 4.9w x 5.19h x 81.5T.
Escort requirement: 2x NSW Police & 4 x Company pilots.

66 x Section 1 Towers (11.7l x 5.0 x 4.7 x 86T)
Configuration. Prime mover with 4x8-4x8 Bookend and block truck.
Overall dimension: 49.0l x 5.1w x 5.3h x 145.0T.
Escort requirement: 1x NSW Police & 3 x Company pilots.

66 x Section 2 Towers (18.8l x 4.7 x 4.5 x 85T)
Configuration. Prime mover with 4x8-4x8 Low extending platform trailer and block truck.
Overall dimension: 42.0l x 5.1w x 5.3h x 150.0T.
Escort requirement: 1x NSW Police & 3 x Company pilots.

66 x Section 3 Towers (28.0l x 4.5 x 4.5 x 90T)
Configuration. Prime mover with 4x8-5x8 Low extending platform and block truck.
Overall dimension: 49.9l x 4.6w x 5.2h x 160.0T.
Escort requirement: 1x NSW Police & 3 x Company pilots.

66 x Section 4 Towers (28.9l x 4.5 x 4.5 x 76T)
Configuration. Prime mover with 4x8-4x8 Low extending platform and block truck.
Overall dimension: 49.9l x 4.6w x 5.2h x 141.0T.
Escort requirement: 1x NSW Police & 3 x Company pilots.

66x Section 5 Towers (29.0l x 4.5 x 4.0 x 64T)
Configuration. Prime mover with 4x4 dolly and 3x8 Jinker.
Overall dimension: 39.0l x 4.5w x 5.2h x 100.0T.
Escort requirement: 3 x Company pilots.

5.0 Transport drawings.

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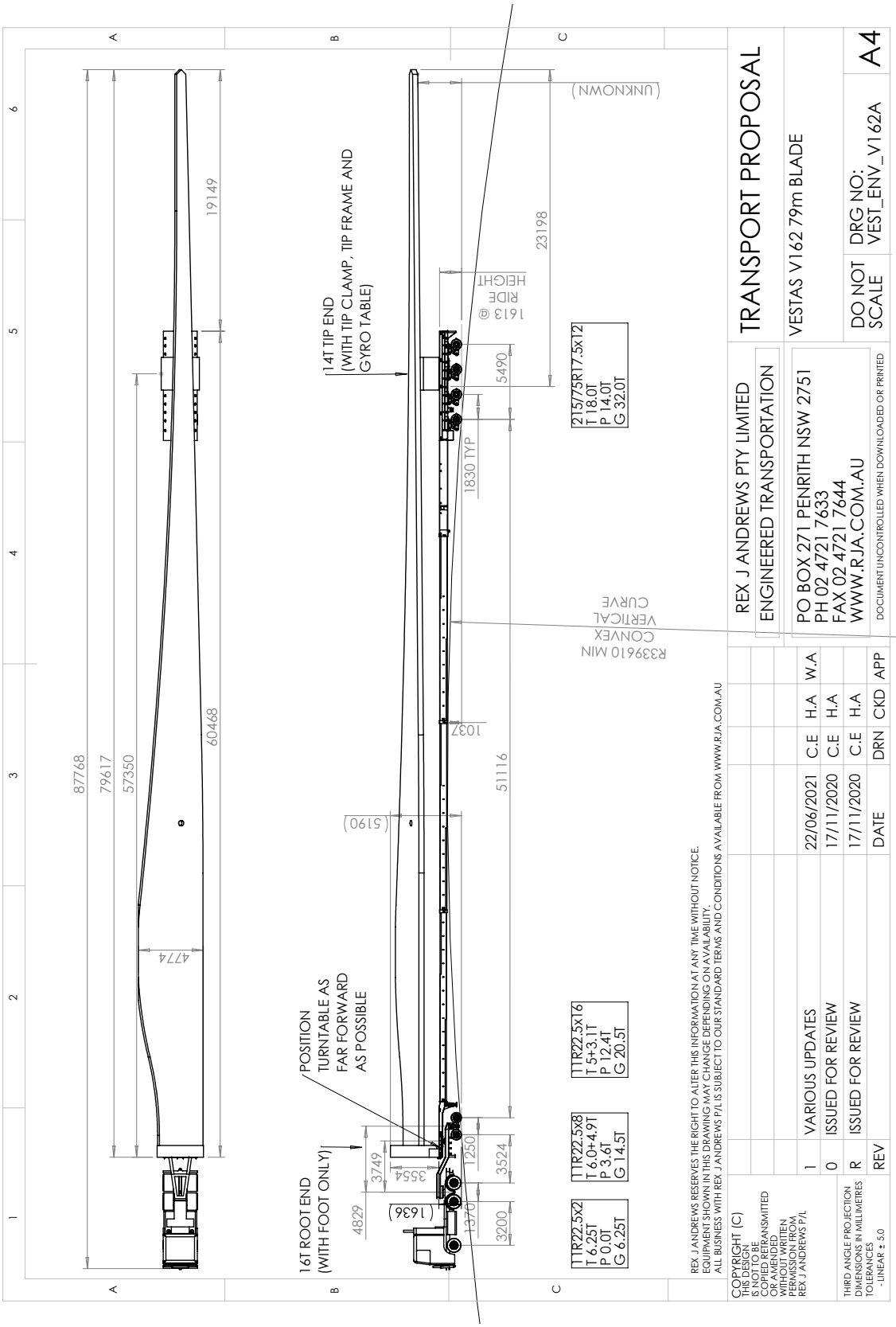

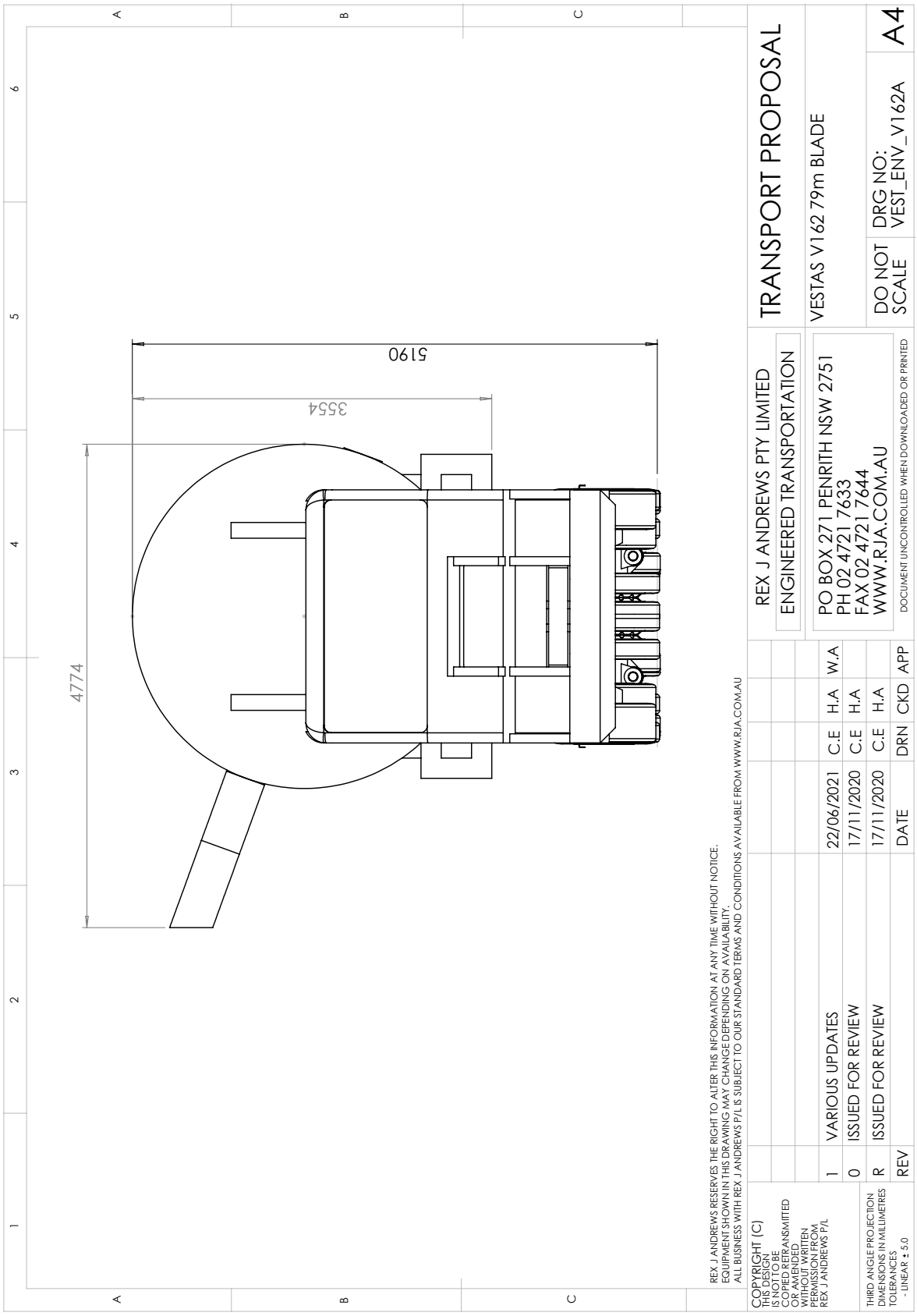

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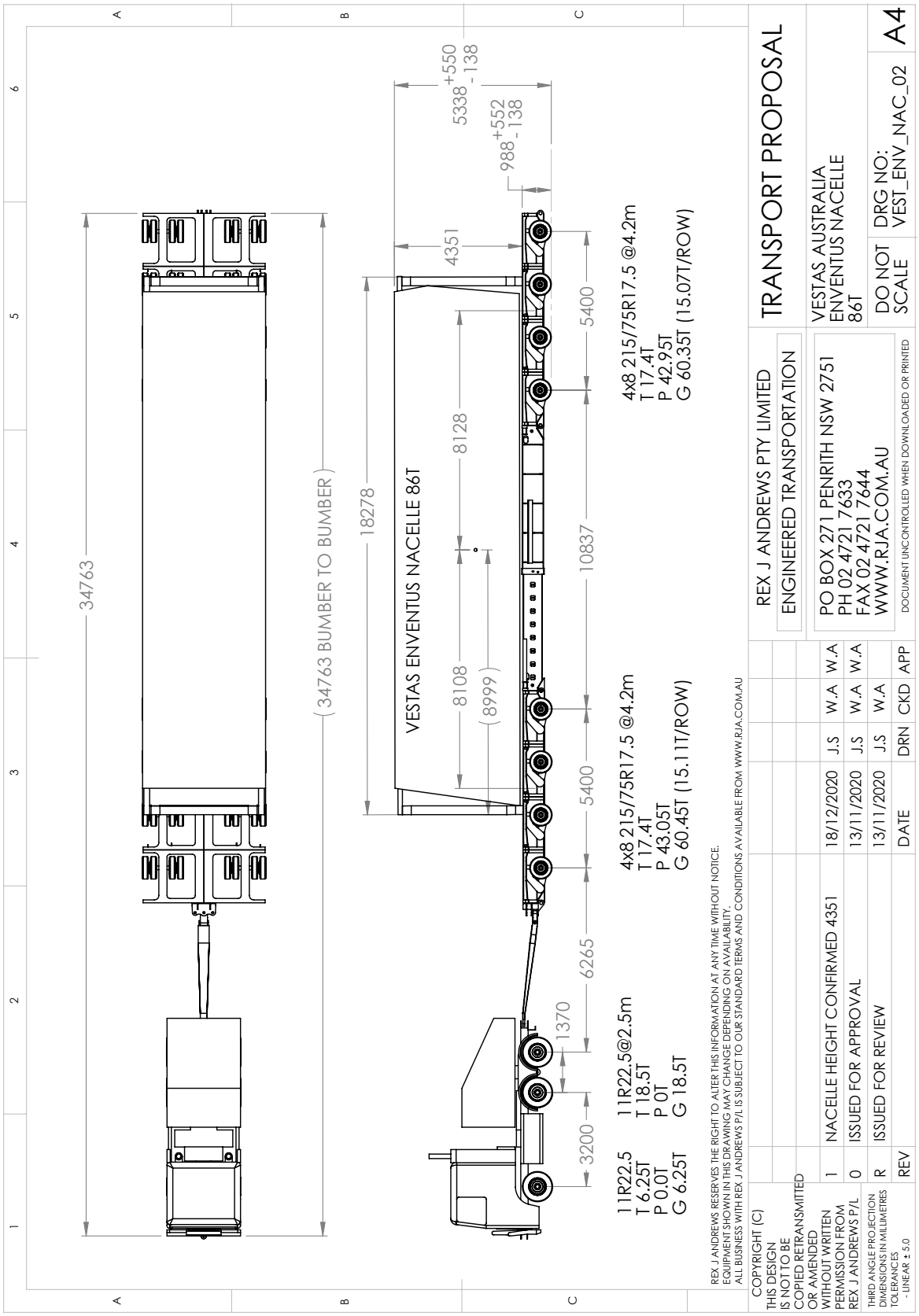
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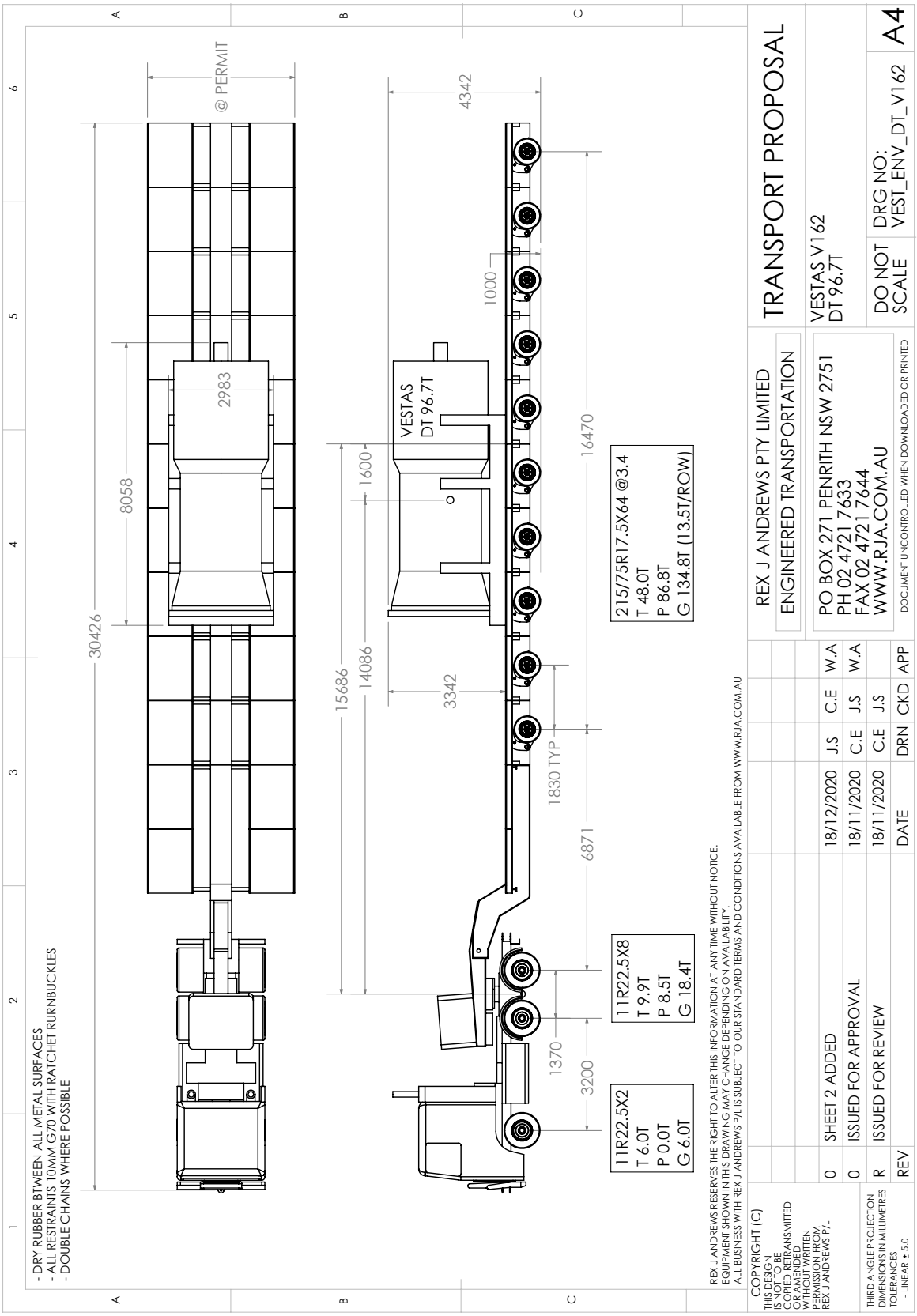
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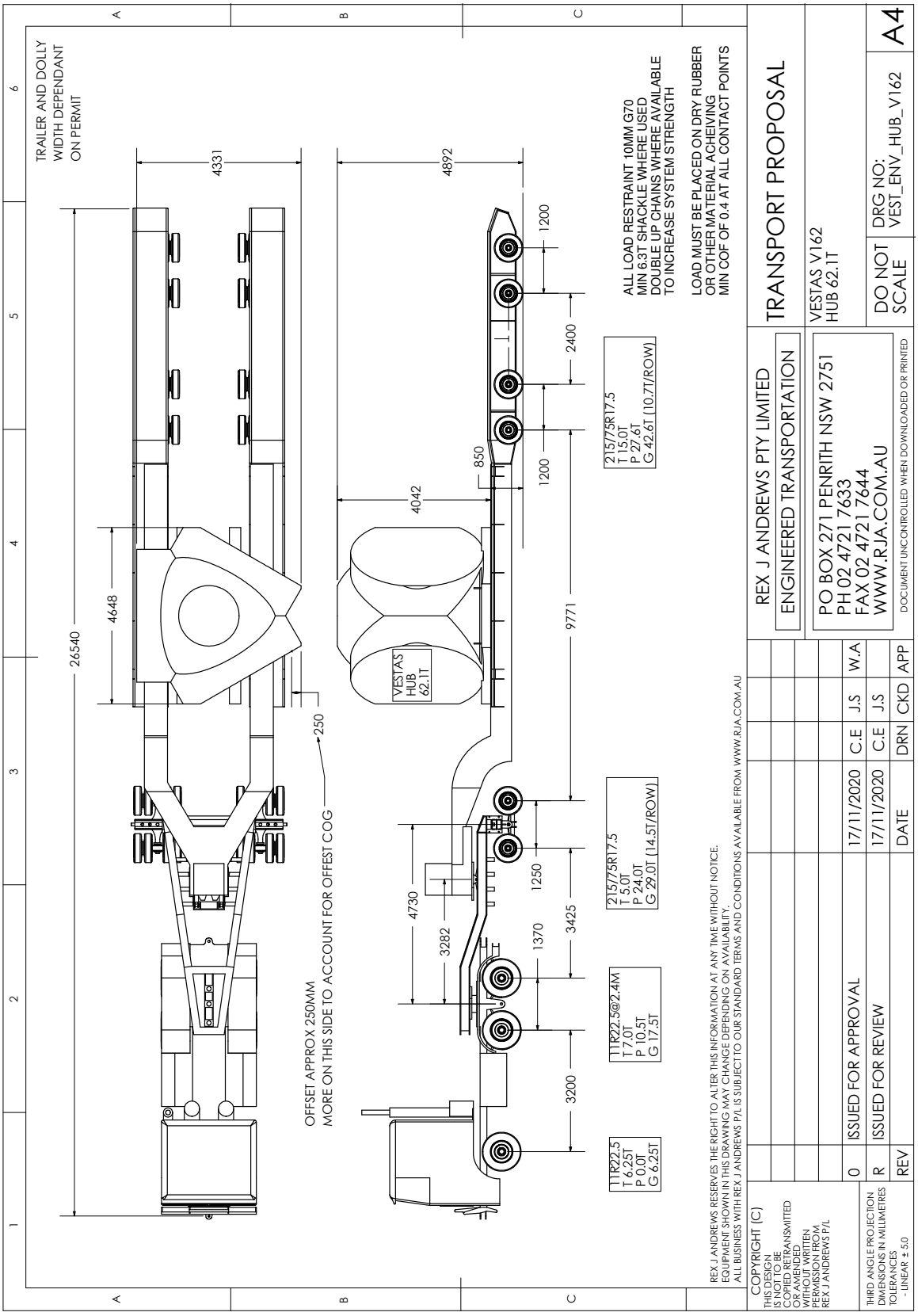
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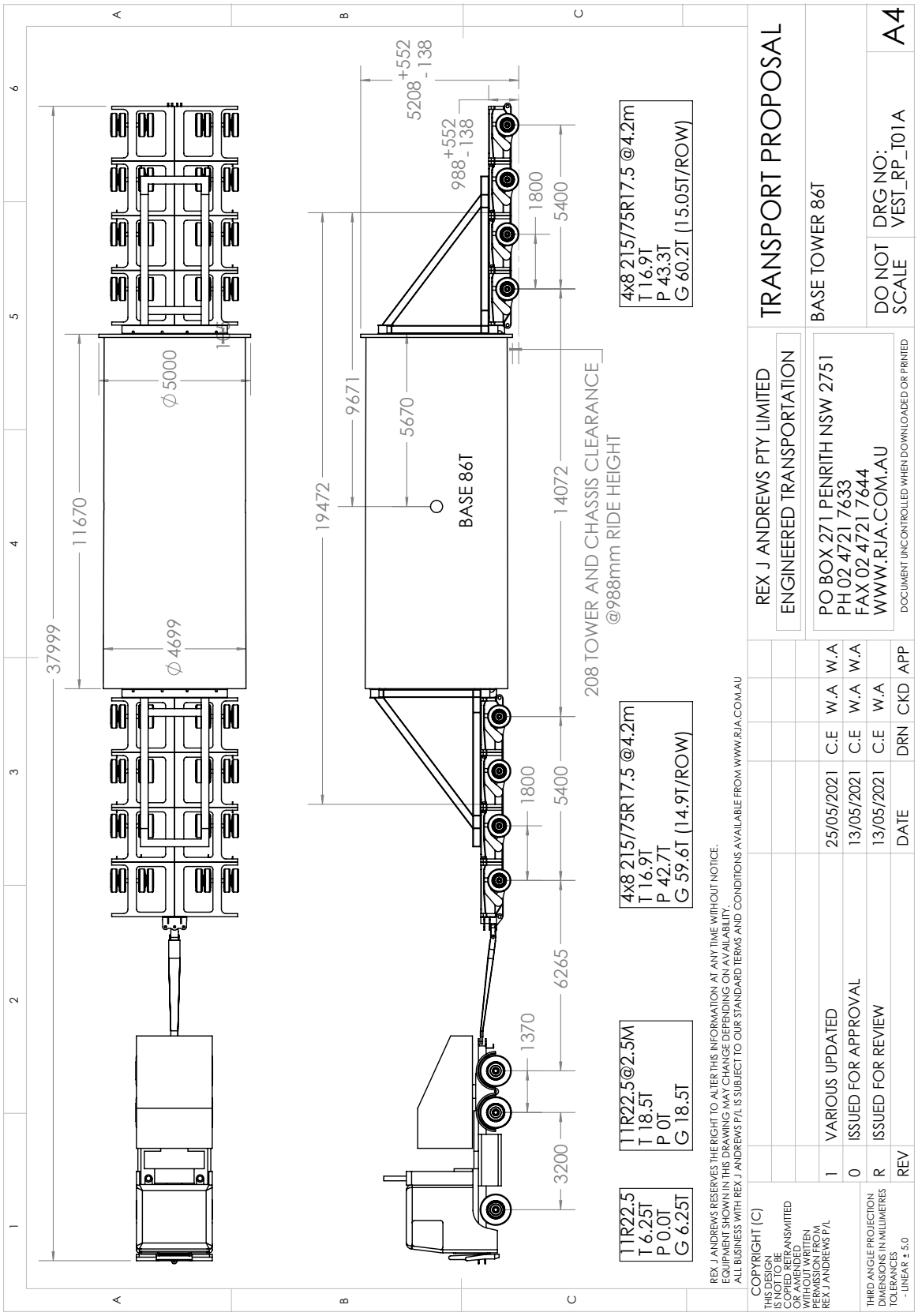
37999
11670
Ø 5000
Ø 4699
19472
9671
5670
BASE 86T
208 TOWER AND CHASSIS CLEARANCE
@988mm RIDE HEIGHT
14072
5400
1800
6265
1370
3200
5208 +552 -138
988 +552 -138
11R22.5
T 6.25T
P 0.0T
G 6.25T
11R22.5@2.5M
T 18.5T
P 0T
G 18.5T
4x8 215/75R17.5 @4.2m
T 16.9T
P 42.7T
G 59.6T (14.9T/ROW)
4x8 215/75R17.5 @4.2m
T 16.9T
P 43.3T
G 60.2T (15.05T/ROW)
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THIRD ANGLE PROJECTION
DIMENSIONS IN MILLIMETRES
TOLERANCES
- LINEAR ± 5.0
REV
DATE
DRN
CKD
APP
1 VARIOUS UPDATED 25/05/2021 C.E W.A W.A
0 ISSUED FOR APPROVAL 13/05/2021 C.E W.A W.A
R ISSUED FOR REVIEW 13/05/2021 C.E W.A
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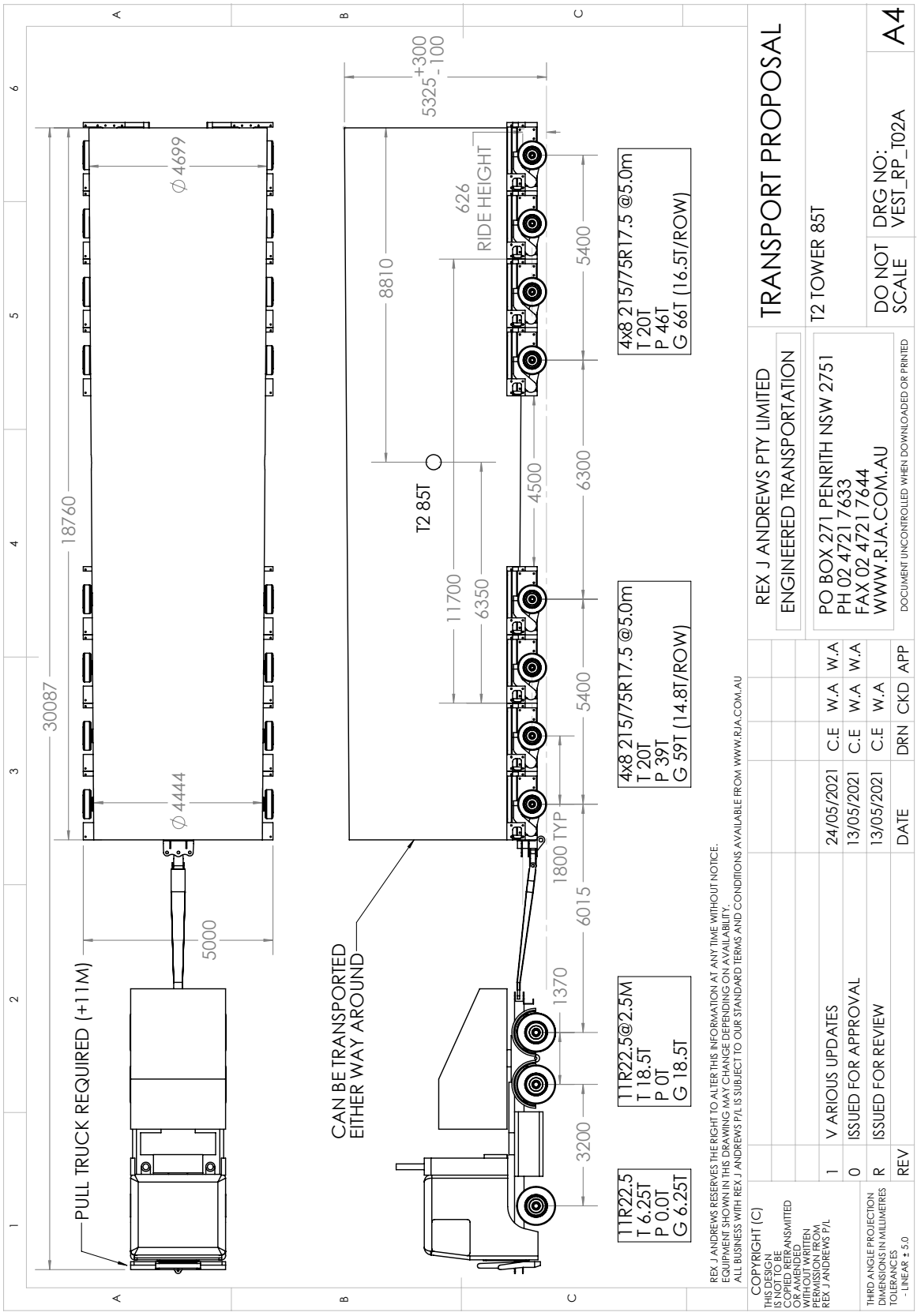
TRANSPORT PROPOSAL
BASE TOWER 86T
DO NOT SCALE
DRG NO: VEST_RP_T01A
A4

T2 Tower:


PULL TRUCK REQUIRED (+11M)
CAN BE TRANSPORTED EITHER WAY AROUND
T2 85T
RIDE HEIGHT
626
8810
11700
30087
18760
5325 +300 -100
Ø4699
Ø4444
5000
1370
3200
6015
1800 TYP
6350
4500
5400
6300
11R22.5 T 6.25T P 0.0T G 6.25T
11R22.5@2.5M T 18.5T P 0T G 18.5T
4x8 215/75R17.5 @5.0m T 20T P 59T G 59T (14.8T/ROW)
4x8 215/75R17.5 @5.0m T 20T P 46T G 66T (16.5T/ROW)
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DIMENSIONS IN MILLIMETRES
TOLERANCES - LINEAR ± 5.0
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13/05/2021
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DO NOT SCALE
DRG NO: VEST_RP_T02A
A4

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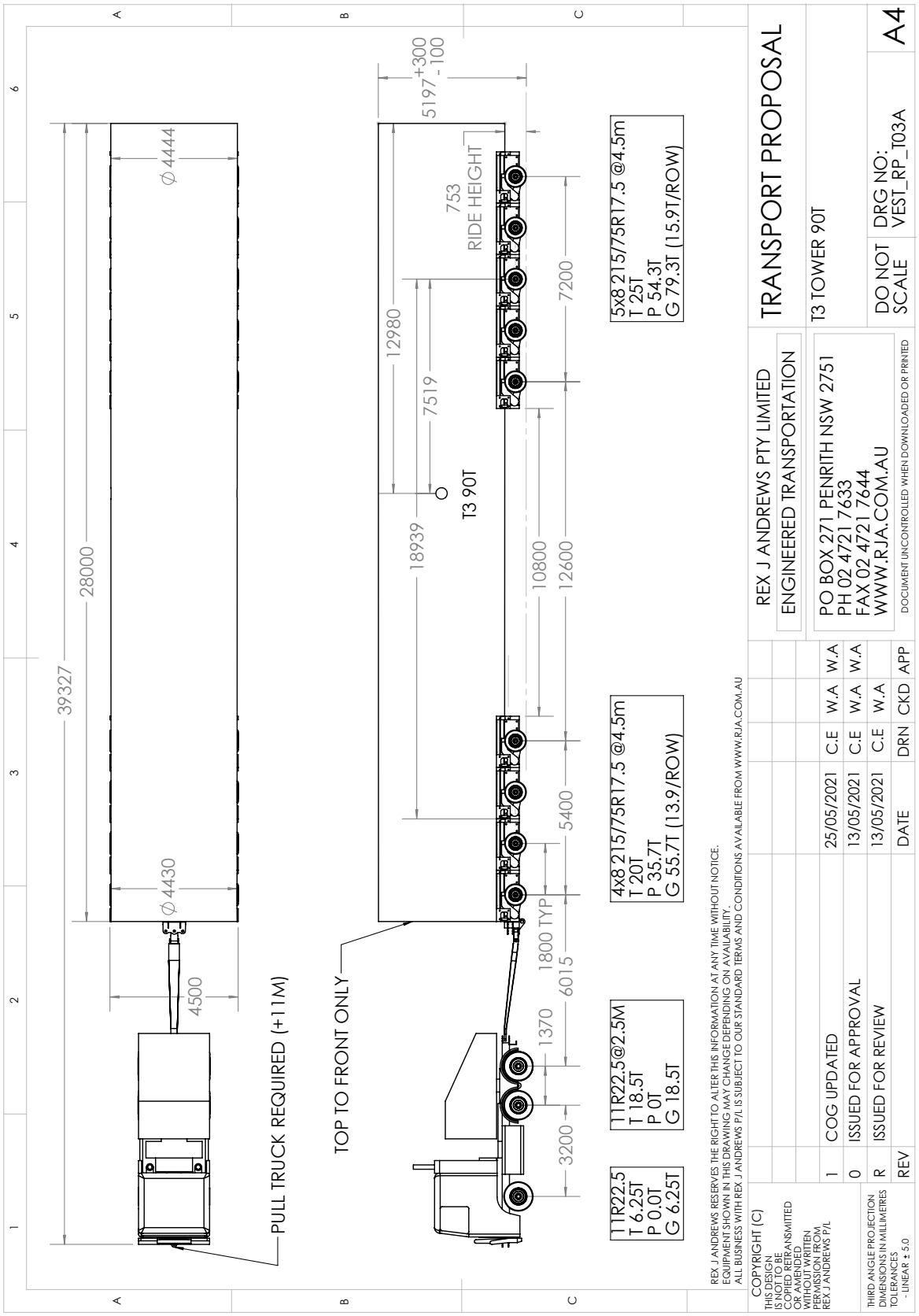
39327
28000
Ø 4444
Ø 4430
4500
PULL TRUCK REQUIRED (+11M)
TOP TO FRONT ONLY
5197 +300 -100
753
RIDE HEIGHT
12980
7519
18939
T3 90T
10800
12600
7200
5400
1800 TYP
6015
1370
3200
11R22.5
T 6.25T
P 0.0T
G 6.25T
11R22.5@2.5M
T 18.5T
P 0T
G 18.5T
4x8 215/75R17.5 @4.5m
T 20T
P 35.7T
G 55.7T (13.9/ROW)
5x8 215/75R17.5 @4.5m
T 25T
P 54.3T
G 79.3T (15.9T/ROW)
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DATE
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R ISSUED FOR REVIEW 13/05/2021 C.E W.A
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DIMENSIONS IN MILLIMETRES
TOLERANCES
- LINEAR ± 5.0
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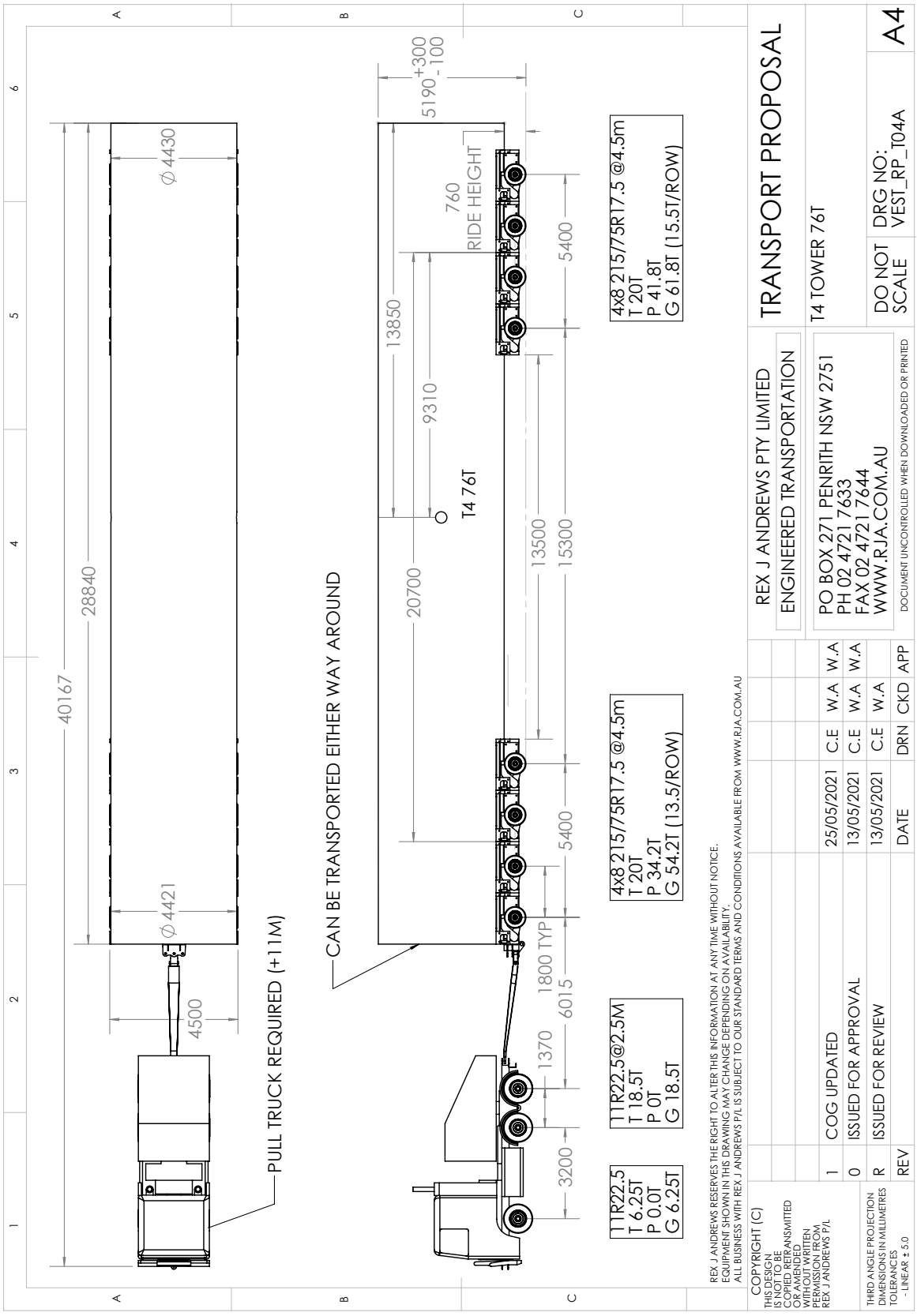
TRANSPORT PROPOSAL
T3 TOWER 90T
DO NOT SCALE
DRG NO: VEST_RP_T03A
A4

T4 Tower:


40167
28840
Ø4430
Ø4421
4500
PULL TRUCK REQUIRED (+11M)
CAN BE TRANSPORTED EITHER WAY AROUND
5190 +300 -100
760
RIDE HEIGHT
13850
9310
T4 76T
20700
13500
15300
5400
5400
1800 TYP
6015
1370
3200
11R22.5
T 6.25T
P 0.0T
G 6.25T
11R22.5@2.5M
T 18.5T
P 0T
G 18.5T
4x8 215/75R17.5 @4.5m
T 20T
P 34.2T
G 54.2T (13.5/ROW)
4x8 215/75R17.5 @4.5m
T 20T
P 41.8T
G 61.8T (15.5T/ROW)
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DIMENSIONS IN MILLIMETRES
TOLERANCES
- LINEAR ± 5.0
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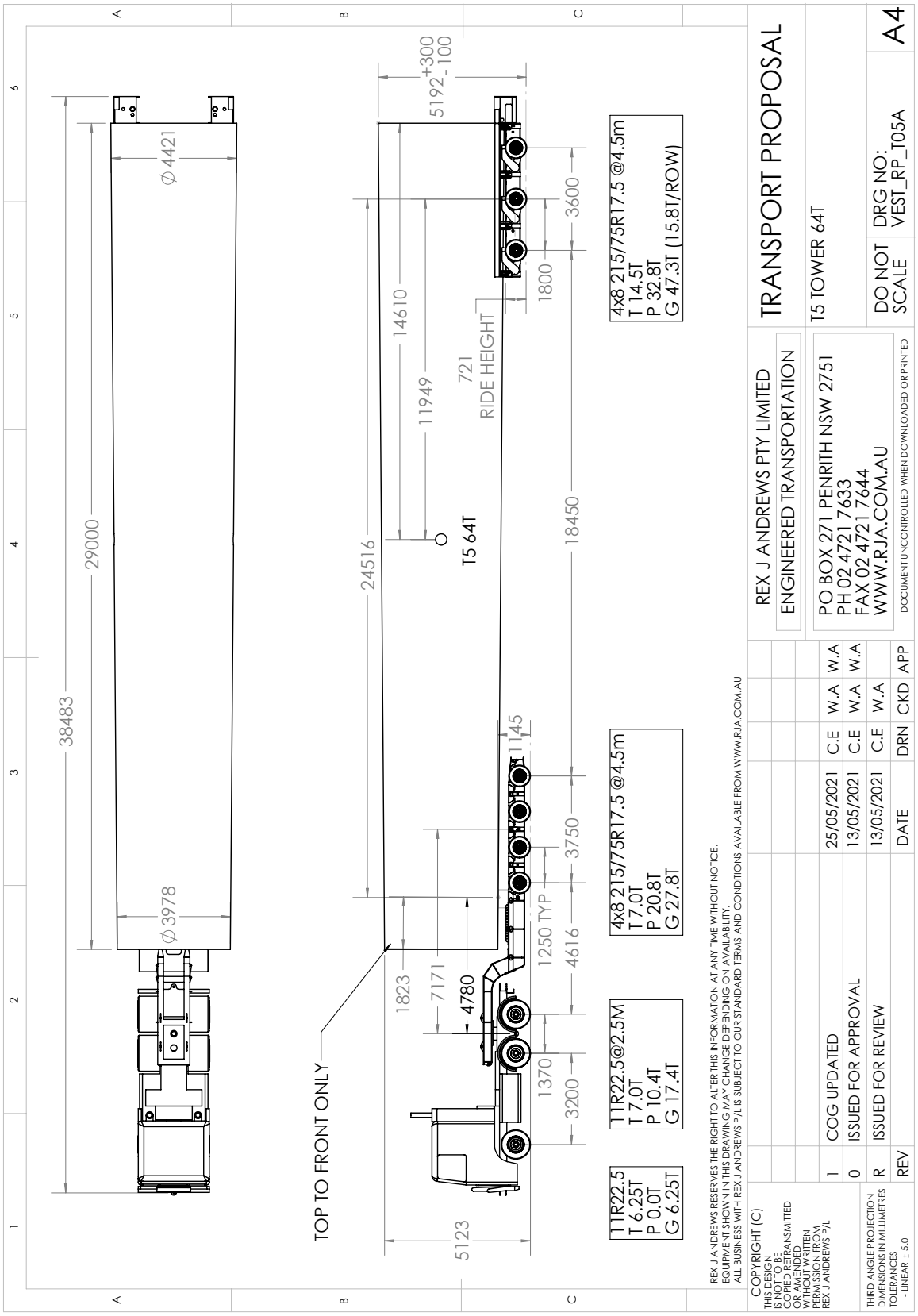
TRANSPORT PROPOSAL
T4 TOWER 76T
DO NOT SCALE
DRG NO: VEST_RP_T04A
A4

T5 Tower:


TRANSPORT PROPOSAL
T5 TOWER 64T
A4
DRG NO: VEST_RP_T05A
DO NOT SCALE
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TOLERANCES - LINEAR ± 5.0
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11R22.5 T 6.25T P 0.0T G 6.25T
11R22.5@2.5M T 7.0T P 10.4T G 17.4T
4x8 215/75R17.5 @4.5m T 7.0T P 20.8T G 27.8T
4x8 215/75R17.5 @4.5m T 14.5T P 32.8T G 47.3T (15.8T/ROW)
TOP TO FRONT ONLY
T5 64T
RIDE HEIGHT
38483
29000
Ø4421
Ø3978
24516
14610
11949
721
5192 +300 -100
3600
1800
18450
1823
7171
4780
1250 TYP
4616
3750
1145
1370
3200
5123

6.0 Port of Import.

The wind turbine equipment will be imported from various countries and will arrive on ships into the Port of Newcastle. The client may alternately source local towers. The ideal berth for these shipments is the Mayfield #4 Berth. This facility has a hardstand storage area of roughly 100,000 s/q meters, adjacent to the berth.

Access from the storage to the public roads, is via a port operated road onto Selwyn Street. There will need to be a small amount of road modifications within the port.

Image 1: Port overview.

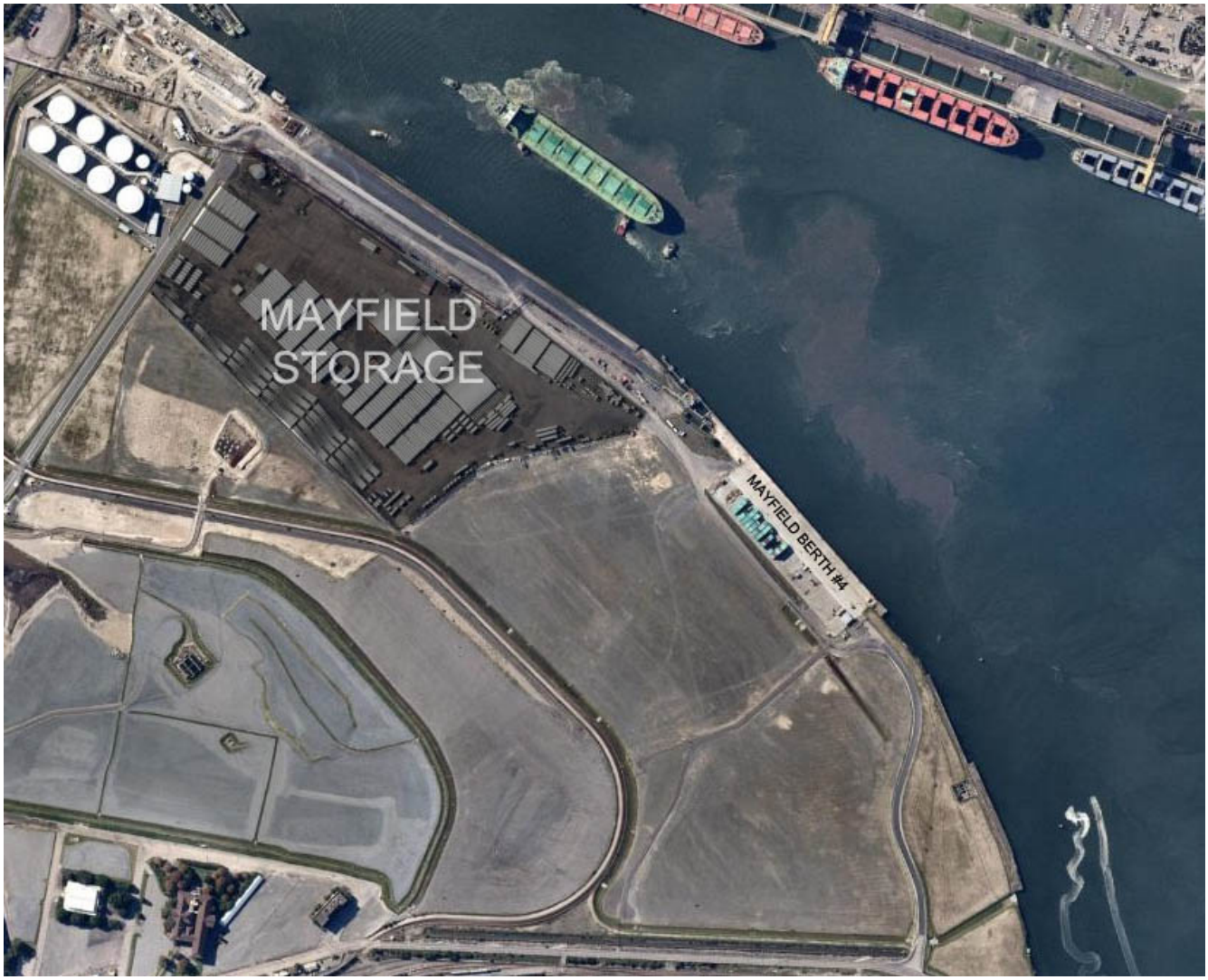
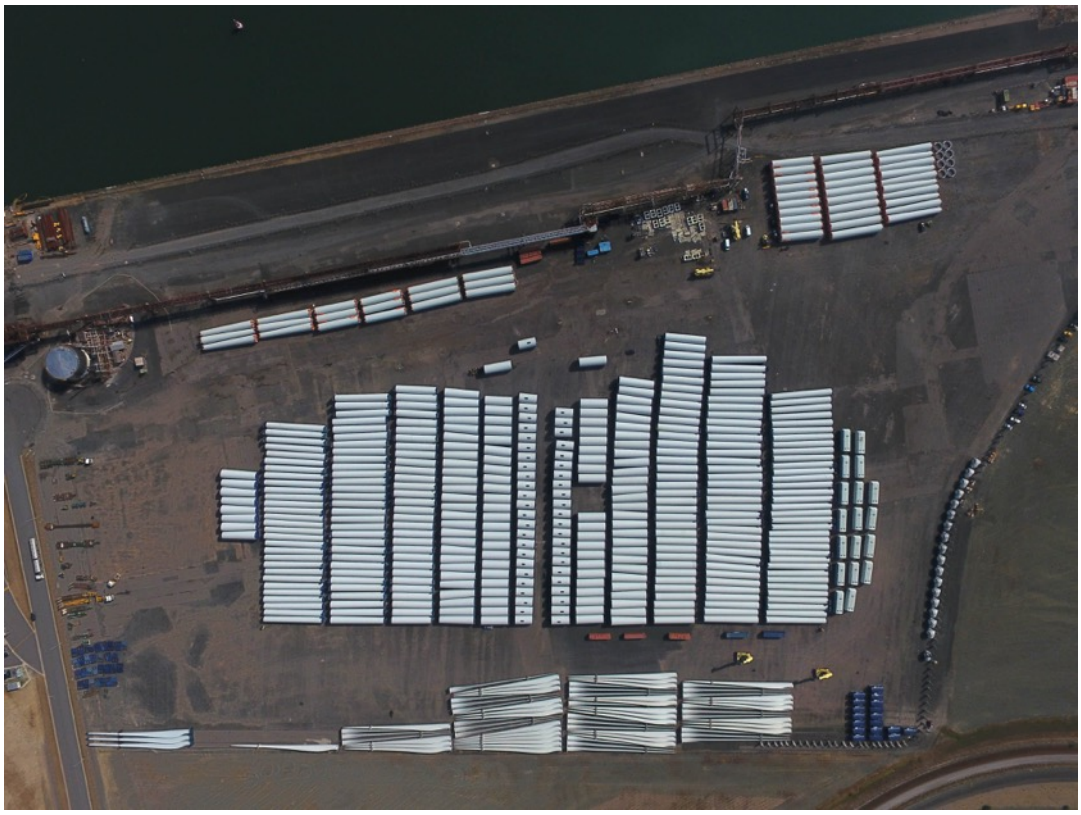
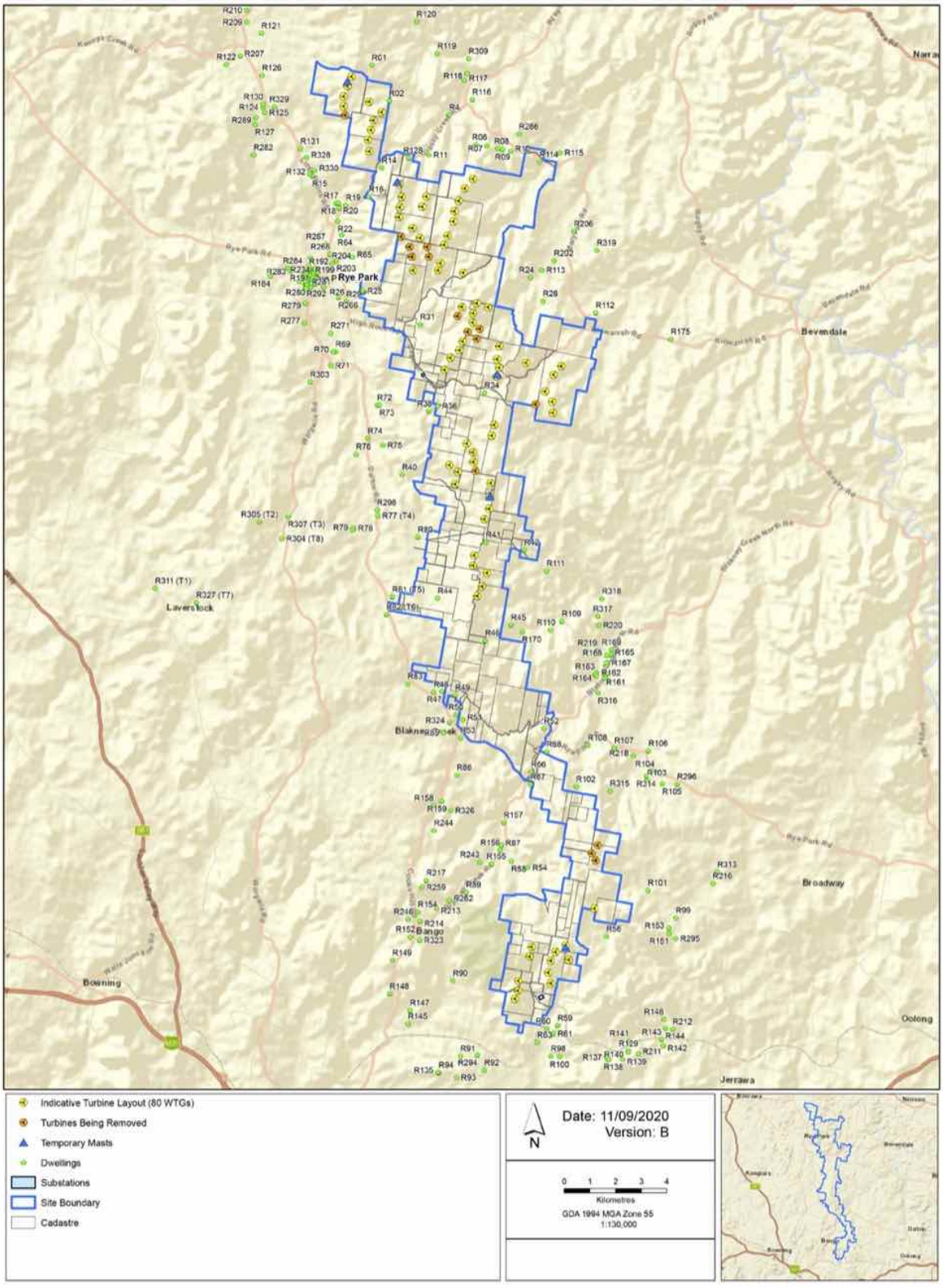


Image 2 & 3: Mayfield #4 Port storage area.



7.0 Site Location and layout.

The Rye Park Wind farm is located to the north of Yass and east of Boorowa and is 515 Kilometers by road from Newcastle.



8.0 Transport conditions

The following are the conditions for these routes:

- Request approval from RMS and NSW Police for all OSOM loads to start from Newcastle as early as 10:00pm and be through Sydney before 5:00am.
- Prior notice to be given to all road stakeholders who may have roadworks on route.
- No unnecessary noise to be made before 7.00am.
- A pre start meeting to be held between the truck driver, police & pilots before load departs.
- If for any reason communications fail between any of the pilot, escort of load vehicle occurs, the load is to cease until such time as it can be re-established.
- **NO oversize or overmass vehicles** are to travel on any section of Lachlan Valley Way during the following times on school days.
  - Between 7:15am and 8:30am
  - Between 3:15pm and 4:30pm
- Approval to be sought from rail authorities to travel across any rail crossing/structure on this route.
- Approval to be sought from motorway authorities to access their networks.
- Approval to be sought from Local councils to access their networks.
- Approval to be sought from Electrical/Communication authorities to pass under their networks.
- Site must have suitable areas available to safely park all loads once inside the windfarm boundary, if they cannot travel direct to the pads.
- All drivers and pilots are to follow procedures listed in the Transport plan including pinch point procedures and travel restrictions.
- Request for the blades to leave Newcastle at 9:30pm and travel straight through to the windfarm at night-time. This would avoid morning traffic and school buses.
- Request for blades to use the Northconnex tunnel, to avoid contraflow manoeuvres on Pennant Hills Road, and lessen the amount of time the blades will need to pass through Sydney.

9.0 Schedule of movements

PROJECT START DATE: Q2 2022 TILL Q2 2023

At this stage the project is looking at delivering up to 2 complete turbines per week. This is a total of 22 OSOM movements per week. Over a 6-day week this would average 4-5 movements per day.

RYE PARK WINDFARM TURBINE DELIVERIES

WEEK 15 TURBINE DELIVERY SCHEDULE REV00

SUNDAY 10/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES:**
MONDAY 11/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES**
BLADE (90l x 4.9w x 5.2h x 81.5T)	TBC	2 X POLICE, 4 X PILOTS	9.30PM	3.00AM	7.00AM	
BLADE (90l x 4.9w x 5.2h x 81.5T)	TBC	2 X POLICE, 4 X PILOTS	9.45PM	3.15AM	7.15AM	
S1 TOWER (49.0l x 5.1w x 5.3h x 169.5T)	TBC	1 X POLICE, 3 X PILOTS	12.00AM	7.30AM	11.00AM	
S2 TOWER (42l x 5.1w x 5.3h x 174.5T)	TBC	1 X POLICE, 3 X PILOTS	12.15AM	7.45AM	11.15AM	
TUESDAY 12/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES**
S3 TOWER (49.9l x 4.6w x 5.3h x 184.5T)	TBC	1 X POLICE, 3 X PILOTS	12.00AM	7.30AM	11.00AM	
S4 TOWER (49.9l x 4.6w x 5.3h x 165.5T)	TBC	1 X POLICE, 3 X PILOTS	12.15AM	7.45AM	11.15AM	
S5 TOWER (39.0l x 4.5w x 5.3h x 100.0T)	TBC	1 X POLICE, 3 X PILOTS	12.30AM	8.00AM	11.30AM	
HUB (29l x 4.5w x 5.0h x 97.5T)	TBC	2 X PILOTS	2.30AM	8.30AM	11.30AM	
WEDNESDAY 13/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES**
BLADE (90l x 4.9w x 5.2h x 81.5T)	TBC	2 X POLICE, 4 X PILOTS	9.30PM	3.00AM	7.00AM	
BLADE (90l x 4.9w x 5.2h x 81.5T)	TBC	2 X POLICE, 4 X PILOTS	9.45PM	3.15AM	7.15AM	
NACELLE (46.0l x 4.3w x 5.3h x 170.5T)	TBC	1 X POLICE, 3 X PILOTS	12.00AM	7.30AM	11.00AM	
DRIVE TRAIN (42l x 4.3w x 4.9h x 184.5T)	TBC	1 X POLICE, 3 X PILOTS	12.15AM	7.45AM	11.15AM	
THURSDAY 14/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES**
S1 TOWER (49.0l x 5.1w x 5.3h x 169.5T)	TBC	1 X POLICE, 3 X PILOTS	12.00AM	7.30AM	11.00AM	
S2 TOWER (42l x 5.1w x 5.3h x 174.5T)	TBC	1 X POLICE, 3 X PILOTS	12.15AM	7.45AM	11.15AM	
HUB (29l x 4.5w x 5.0h x 97.5T)	TBC	2 X PILOTS	2.30AM	8.30AM	11.30AM	
FRIDAY 15/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES**
BLADE (90l x 4.9w x 5.2h x 81.5T)	TBC	2 X POLICE, 4 X PILOTS	9.30PM	3.00AM	7.00AM	
BLADE (90l x 4.9w x 5.2h x 81.5T)	TBC	2 X POLICE, 4 X PILOTS	9.45PM	3.15AM	7.15AM	
S3 TOWER (49.9l x 4.6w x 5.3h x 184.5T)	TBC	1 X POLICE, 3 X PILOTS	12.00AM	7.30AM	11.00AM	
S4 TOWER (49.9l x 4.6w x 5.3h x 165.5T)	TBC	1 X POLICE, 3 X PILOTS	12.15AM	7.45AM	11.15AM	
S5 TOWER (39.0l x 4.5w x 5.3h x 100.0T)	TBC	1 X POLICE, 3 X PILOTS	12.30AM	8.00AM	11.30AM	
SATURDAY 16/04/22						
SECTION:	**TRUCK**	**ESCORT REQUIREMENT**	**DEPART NEWCASTLE**	**DEPART MARULAN**	**ARRIVE RYE PARK**	**NOTES**
NACELLE (46.0l x 4.3w x 5.3h x 170.5T)	TBC	1 X POLICE, 3 X PILOTS	12.00AM	7.30AM	11.00AM	
DRIVE TRAIN (42l x 4.3w x 4.9h x 184.5T)	TBC	1 X POLICE, 3 X PILOTS	12.15AM	7.45AM	11.15AM	

10.0 Fatigue scheduling:

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Newcastle
16 Yilen Close, Beresfield NSW 2322
Ph: 02 4966 1788 Fx: 02 4966 1744
Em: newcastle@rja.com.au

Trip Schedule

Schedule Details Rye Park windfarm
Blade deliveries

Sch No SCH06261
Date 29/06/2021 9:21:48 am
Written By Warrick Andrews
Consulted Mark Sciberras

Schedule Notes:
-This Schedule has been written based on values known at the time for good driving conditions and no known fatigue related issues prior to starting the trip.
- Do not drive to the schedule if you fell tired. Stop revive survive
- No attempt should be made to make up for lost time on a schedule.
- Please modify all times according to your real start time.
- You must still fill in your Logbook, exactly as the hours you have worked.

Please work with the Scheduler who wrote this to make the schedule better for all.

Start	End	Hr	Day	Km	avg	Type	Location	Notes
9:15pm	9:30pm	0.25	1	0	0	Working	Mayfield	Prestart
9:30pm	11:59pm	2.48	1	160	64	Driving	Mayfield to Sydney	Loaded travel
12:01am	2:30am	2.48	2	167	67	Driving	Sydney to Marulan	Loaded travel
2:30am	3:00am	0.50	2	0	0	Paid Rest	Marulan	30 Minute rest break
3:00am	7:00am	4.00	2	182	46	Driving	Marulan to Rye Park	Loaded travel
7:00am	7:30am	0.50	2	0	0	Paid Rest	Rye Park	30 Minute rest break
7:30am	9:30am	2.00	2	0	0	Working	Rye Park	Unloading
9:30am	11:59pm	14.48	2	0	0	Rest	Rye Park	Minimum 7 hour rest break
12:01am	4:45am	4.73	3	0	0	Rest	Rye Park	Minimum 7 hour rest break
4:45am	5:00am	0.25	3	0	0	Working	Rye Park	Prestart
5:00am	10:00am	5.00	3	350	70	Driving	Rye Park to Mooney Mooney	Empty Travel
10:00am	10:30am	0.50	3	0	0	Paid Rest	Mooney Mooney	30 Minute rest break
10:30am	1:00pm	2.50	3	158	63	Driving	Mooney Mooney to Mayfield	Empty Travel
1:00pm	2:00pm	1.00	3	0	0	Working	Mayfield	Loading
2:00pm	9:00pm	7.00	3	0	0	Rest	Mayfield	Minimum 7 hour rest break

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Em: adelaide@rja.com.au

Newcastle
16 Yilen Close, Beresfield NSW 2322
Ph: 02 4966 1788 Fx: 02 4966 1744
Em: newcastle@rja.com.au

Trip Schedule

Schedule Details Rye Park windfarm
Towers and motors

Sch No SCH06262
Date 29/06/2021 9:35:38 am
Written By Warrick Andrews
Consulted Mark Sciberras

Schedule Notes:
-This Schedule has been written based on values known at the time for good driving conditions and no known fatigue related issues prior to starting the trip.
- Do not drive to the schedule if you fell tired. Stop revive survive
- No attempt should be made to make up for lost time on a schedule.
- Please modify all times according to your real start time.
- You must still fill in your Logbook, exactly as the hours you have worked.

Please work with the Scheduler who wrote this to make the schedule better for all.

Start	End	Hr	Day	Km	avg	Type	Location	Notes
12:00am	12:15am	0.25	1	0	0	Working	Mayfield	Prestart
12:15am	4:30am	4.25	1	229	54	Driving	Mayfield to Menagle	Loaded travel
4:30am	4:45am	0.25	1		0	Paid Rest	Menangle	30 minute rest break
4:45am	8:30am	3.75	1	212	57	Driving	Menagle to Yass	Loaded travel
8:30am	9:00am	0.50	1	0	0	Paid Rest	Yass	30 minute rest break
9:00am	11:00am	2.00	1	68	34	Driving	Yass to Rye Park	Loaded travel
11:00am	12:00pm	1.00	1	0	0	Working	Rye Park	Unloading
12:00pm	11:59pm	11.98	1	0	0	Rest	Rye Park	Minimum 7 hour rest break
12:01am	6:30am	6.48	2	0	0	Rest	Rye Park	Minimum 7 hour rest break
6:30am	7:00am	0.50	2	0	0	Working	Rye Park	Prestart
7:00am	11:00am	4.00	2	0	0	Working	Rye Park	Unloading
11:00am	11:30am	0.50	2	0	0	Paid Rest	Rye Park	30 minute rest break
11:30am	4:30pm	5.00	2	290	58	Driving	Rye Park to Sydney	Empty Travel
4:30pm	11:59pm	7.48	2	0	0	Rest	Sydney	Minimum 7 hour rest break

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11.0 Emergency Procedures

- In the event of an emergency situation, such as breakdown, the load will be moved to the left-hand lane/shoulder to ensure minimal traffic impacts; police and pilots (Under the direction of the police) will manage traffic flow. In such instances the TMC should be promptly advised so that all necessary warnings are made. All parties involved in the movement will have contacts for all emergency numbers required on the project.
- Where a tow is required, the trailer will be unhooked from the prime mover and a Heavy towing operator be called from the list of emergency contacts. In such instances the TMC should be promptly advised so that all necessary warnings can be made.
- If a vehicle collides with the load, the police will immediately assess the situation and call emergency services, before providing traffic control with the assistance of the pilots and enact their emergency procedures for this type of incident.
- If police decide that the movement should be suspended as a result of time or potential traffic impacts the trailer with the load will be moved to a safe parking location and TMC will be notified.
- In the event of bad weather, the driver is to notify the first point of contact before departing.
- If the road is blocked between the pickup location and drop off location, and the load is still at the port than the load is not to depart.
- If the load is in transit, and the road is blocked ahead, then the load is to find a suitable parking area until road is cleared.
- Refer to Rex J Andrews P/L “SOP_025_Emergency plan”

12.0 Emergency contacts

- Main emergency number (000)
- Rex J Andrews operations (02 47217633)
- NSW Police Traffic operations (02 88821219)
- TMC operations room (1800 679782)
- NSW Police Newcastle command (02 49290999)

ASSET OWNERS ON ROUTE:

- RMS Assets (02 66401345)
- Newcastle council infrastructure (02 49742664)
- Ausgrid Newcastle/Hunter (131388)
- Essential energy (132391)
- Telstra (1802244)
- ARTC (02 49029410)
- CRN JHG (02 40289400)
- Newcastle council (02 49742000)

HEAVY TOWING OPERATORS ON ROUTE:

- Newcastle: Oneill's Truck and Trailer Repairs, (02 49672999)
- Sydney: GRS Towing, (1300550600)
- Sydney: Westruck Towing, (1300136129)
- Goulburn: Goulburn heavy towing, (0455555656)
- Yass: Yass towing service, (0262262618)

13.0 Transport approvals required

Approvals will need to be sought from the following departments.

- NHVR
- TfNSW
- TMC
- NSW Police
- ARTC
- CRN JHG
- Newcastle council
- Hilltops council
- Motorway authorities
- Power service providers
- Telstra

14.0 Pinch Points

The following are the pinch points on these routes:

- REGULAR ROUTE ASSESMENTS: Throughout the project Rex J Andrews P/L is to keep in constant contact with the RMS and local councils regarding roadwork's and any upcoming road modifications that would take place on the route during the project. Drivers are to have full contact details and communicate regularly with these roadwork's managers while on route.

- NEWCASTLE: Blades are to travel around all corners under the guidance of a spotter. Spotter to monitor any structures/Road furnishings that may come in contact with the load and advise the driver throughout the procedure.

- MT WHITE UNDERPASS: All loads over 5.2 metres are to travel under this structure in the right-hand lane. Loads not to exceed 5.3 metres in height.

- WAHROONGA: Blades are to travel from the correct side of the M1 onto the incorrect side of Pennant Hills Road. Pilots are to warn all oncoming motorists on Pennant Hills Road approx 300 metres past the intersection. Spotter to guide the load through the intersection.

- NORMANHURST PEDESTRIAN BRIDGE: All loads over 5.1 metres are to travel under this structure in the right-hand lane. Loads not to exceed 5.3 metres in height.

- PENNANT HILLS ROAD: Blades are to travel from the correct side of Pennant Hills Road, cross the M2 Motorway overpass and onto the incorrect side of Pennant Hills Road. Blades will then reverse along the Eastbound M2 onramp and straighten up before driving onto the Western onramp and proceeding onto the M2. Pilots are to warn all oncoming motorists on all access points on the intersection. Spotter to guide the load through the intersection.

  The pinch points from the M1 onto the M2 can be avoided entirely if the blade has approval to travel through the NorthConnex tunnel. This will drastically reduce the impact on other motorists if approved.

- WILTON FARM ACCESS OVERPASS: All loads over 5.2 metres are to travel under this structure in the left-hand lane. Loads not to exceed 5.3 metres in height.

- YASS: Blades are to travel from the correct side of the Hume Highway onto the correct side of Lachlan Valley Way. Pilots are to warn all oncoming motorists on Lachlan Valley way and northbound Hume Highway approx 500 metres past the intersection. Spotter to guide the load through the intersection.

- BOOROWA and RYE PARK: There are several corners in Boorowa and Rye Park that are due to be upgraded. The initial designs look ok but will need to be checked once complete. Blades are to travel around all corners under the guidance of a spotter. Spotter to monitor any structures/Road furnishings that may come in contact with the load and advise the driver throughout the procedure.

- SITE: All drivers once onsite MUST check the current site road conditions before proceeding. From this point a call will be made whether additional pulling power is required and that the road ahead is clear ahead.

PINCHPOINT PROCEDURES

Whilst some pinch points are known along the route demonstrating a method of negotiating each individual hazard would be flawed as traffic conditions are constantly changing.

It is crucial that appropriate measures are applied to avoid impact to road users and road infrastructure, the chosen route has been assessed and the load is capable of navigating the route, however local traffic conditions can create pinch points.

A pinch point is an area identified by the lead pilot and relayed to the convoy as having the potential to interfere with the swept path of the load, pinch points can be created by road furnishings, roundabouts, narrow sections of road, road kill, corners, road works, parked vehicles, damaged pavement, this list is not exhaustive.

For the purposes of this traffic management plan identified pinch points will follow the following protocol.

The lead pilot must travel a sufficient distance in front of the load so as to survey the swept path required for the Wind turbine, this will to allow sufficient time to relay back road conditions or choke points to allow the driver to halt the load before causing congestion to other road users.

In the event of parked vehicles or local traffic conditions preventing the load from safely navigating the permitted route, the load cannot proceed until it is safe to do so.

The lead pilot will warn all oncoming traffic of the impending load, when the way forward for the transporter is established as being clear the load may proceed.

If built up queued traffic is behind the load, ensure that an opportunity to allow this traffic to pass is taken at the first safe opportunity.

The procedure for crossing bridges is reliant on only the Wind turbine being on the bridge during the crossing, this will require a concentrated effort from the escort team to ensure that all vehicular traffic both in front of and behind the load are warned of the hazard.

It is crucial that pinch points are discussed at the toolbox briefing and that all parties are aware of the protocols in place.

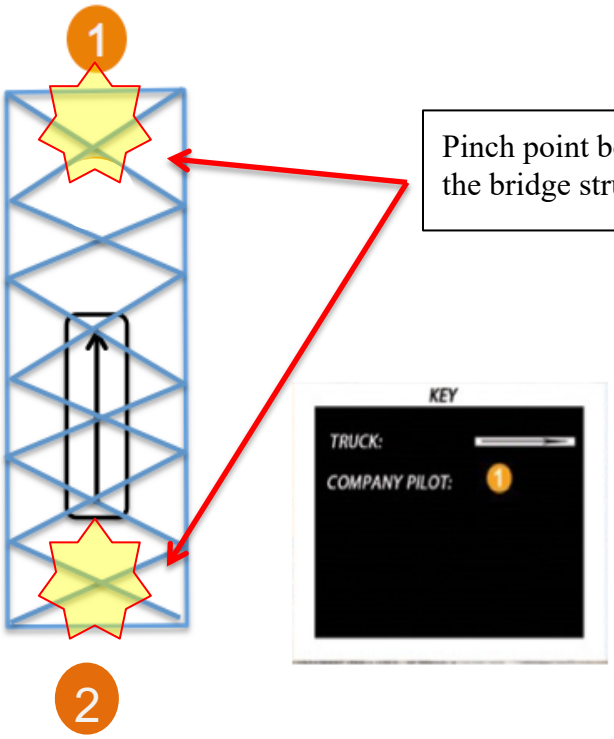
Drivers should familiarise themselves with the route including nominated bypasses for heavy vehicles along the route.

If there is any doubt as to the viability of accessing the permitted route the load must not continue until the way forward has been deemed appropriate.

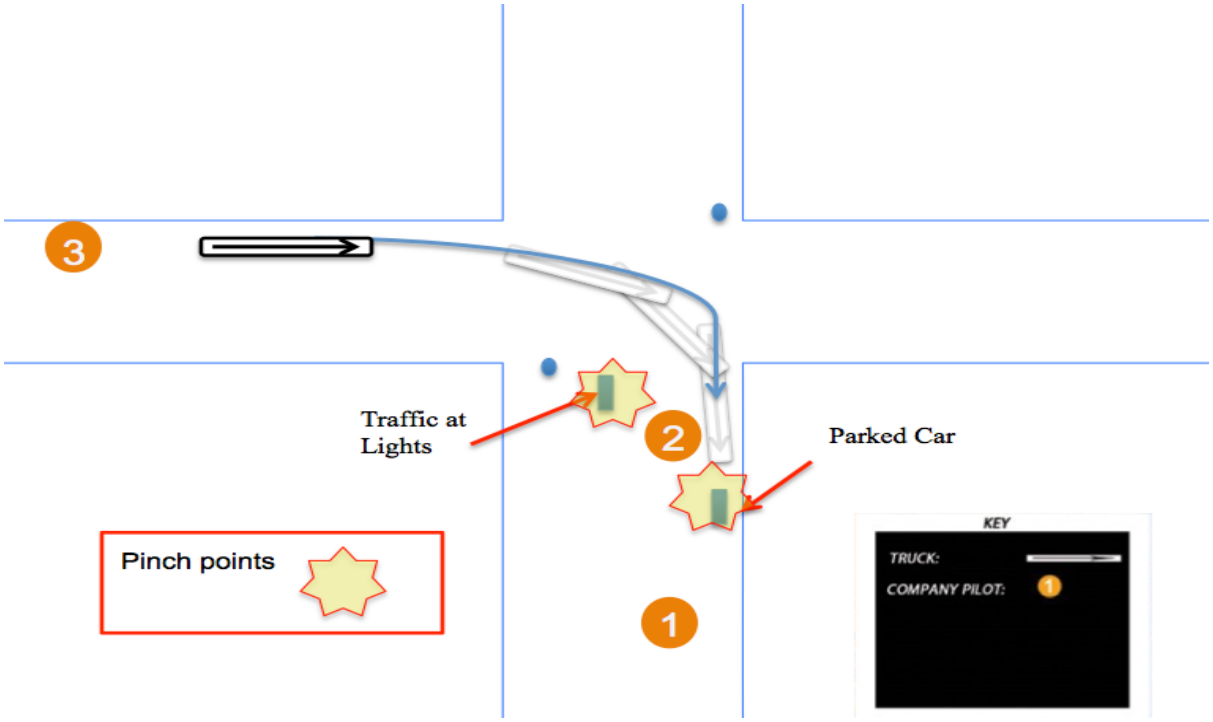
For more detail analysis of coping with roadwork refer to section 11.

Examples of pinch points:

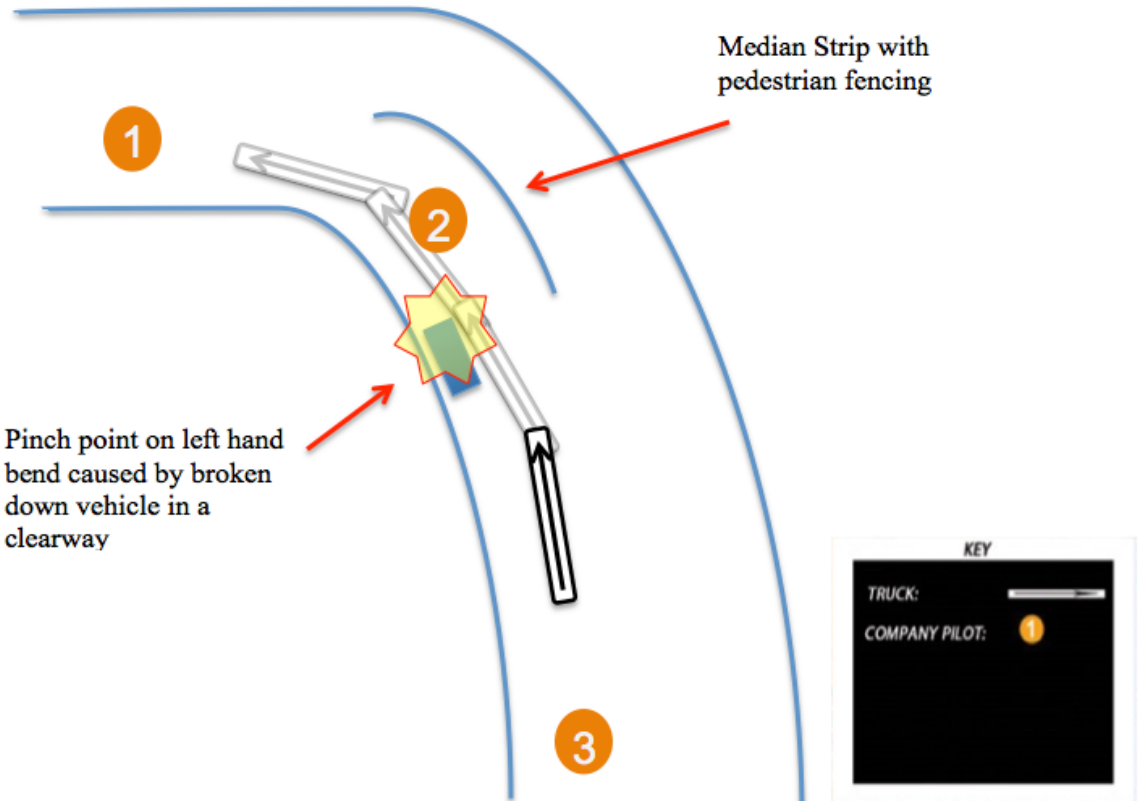
Bridge Crossings:



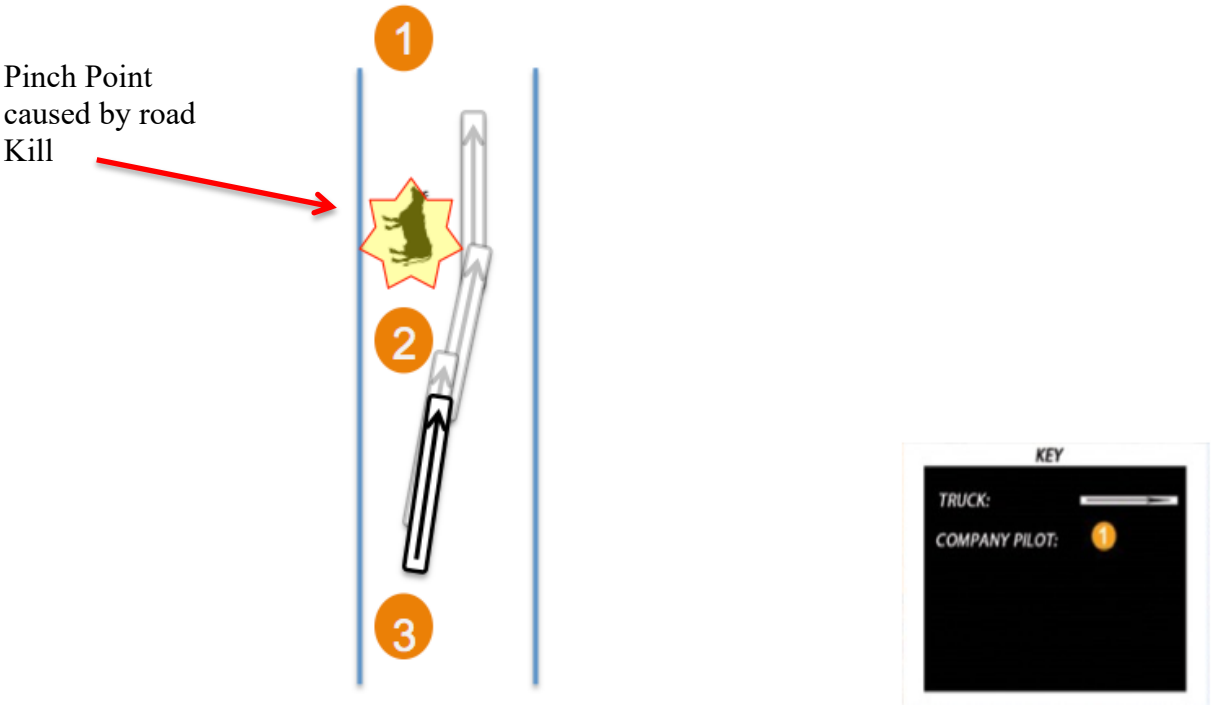
Intersections:



Bends:


Median Strip with pedestrian fencing
1
2
Pinch point on left hand bend caused by broken down vehicle in a clearway
3
KEY
TRUCK:
COMPANY PILOT:
1

Road Kill:


Pinch Point caused by road Kill
1
2
3
KEY
TRUCK:
COMPANY PILOT:
1

15.0 Managing queued traffic behind the load.

During the journey the interaction with other road users will require management of queued traffic.

The protocol to provide queued traffic an opportunity to pass the load will be reliant on the rear pilot constantly monitoring the queue of traffic and relaying this information back to the convoy, the lead pilot / Police in conjunction with the driver will identify suitable areas that allow a safe passing point for the passing vehicles.

The lead escort / Police escort will also determine safe areas to halt the load to allow backed up vehicles to pass. Safe pull over areas can include turn off into Private Roads and/or other roads, Pull over on the shoulder during over taking lanes, designated pull over/ rest stop areas or service stations, these areas will be a hardstand area, or an area wide enough for the escort to direct vehicles around the combination.

The load MUST pull over or slow to allow the backed-up vehicles to pass. Rear pilot will inform all other pilots and driver when there has been a lag from last pull over and if other cars have been following for a short distance, in this instance apply the passing protocol again, this will continue through out the journey as required to ensure queued traffic do not experience excessive delays. The driver and pilots will also allow vehicles to pass at any opportunity that allows a safe area for this vehicle and its load to pull over safely and will.

16.0 Interacting with roadwork:

There is high likelihood that there will be roadwork along the route..

Typically road crews are operating on UHF channel 29.

The lead pilot will make contact with the road crews to advise of the nature of the load, size, dimensions, to establish if the load is ok to enter the work zone.

In this instance the convoy will work with all reasonable instructions from the road crew to coordinate the safe passage of the load through the affected areas.

Pilots, Police and local traffic controllers will work together to facilitate the necessary actions required to travel through the work zone.

17.0 Emergency stopping / pulling up for rest areas:

In the event of an emergency or scheduled rest break, establish positive communications with all pilots and driver and identify the next suitable area to halt the wind turbine, rear pilot should remain 200 metres behind the load to warn approaching traffic.

Ensure the wind turbine is as far left as possible so as to not impede any traffic from passing.

If the breakdown is major and requires a mechanic to attend contact the TMC and advise them of the disruption to traffic. Minor repairs that can be rectified in a short time do not require the TMC to be advised.

In the event that road works are encountered on route lead pilot is to call in on the nominated UHF channel and advise the local traffic control of the inbound load and await approval to enter the work zone.

Follow normal traffic management procedures as out lined in: SOP_030 Traffic Management Procedures.

The suggested rest areas are an indication only and dependant on the local traffic movements and occupancy of these rest areas it may not be possible to get off the road.

In this instance the lead pilot should travel ahead to identify the next suitable area.

This methodology can also be adopted to allow built up traffic to pass by slowing the wind turbine down and easing into break down areas to allow traffic to pass before continuing on.

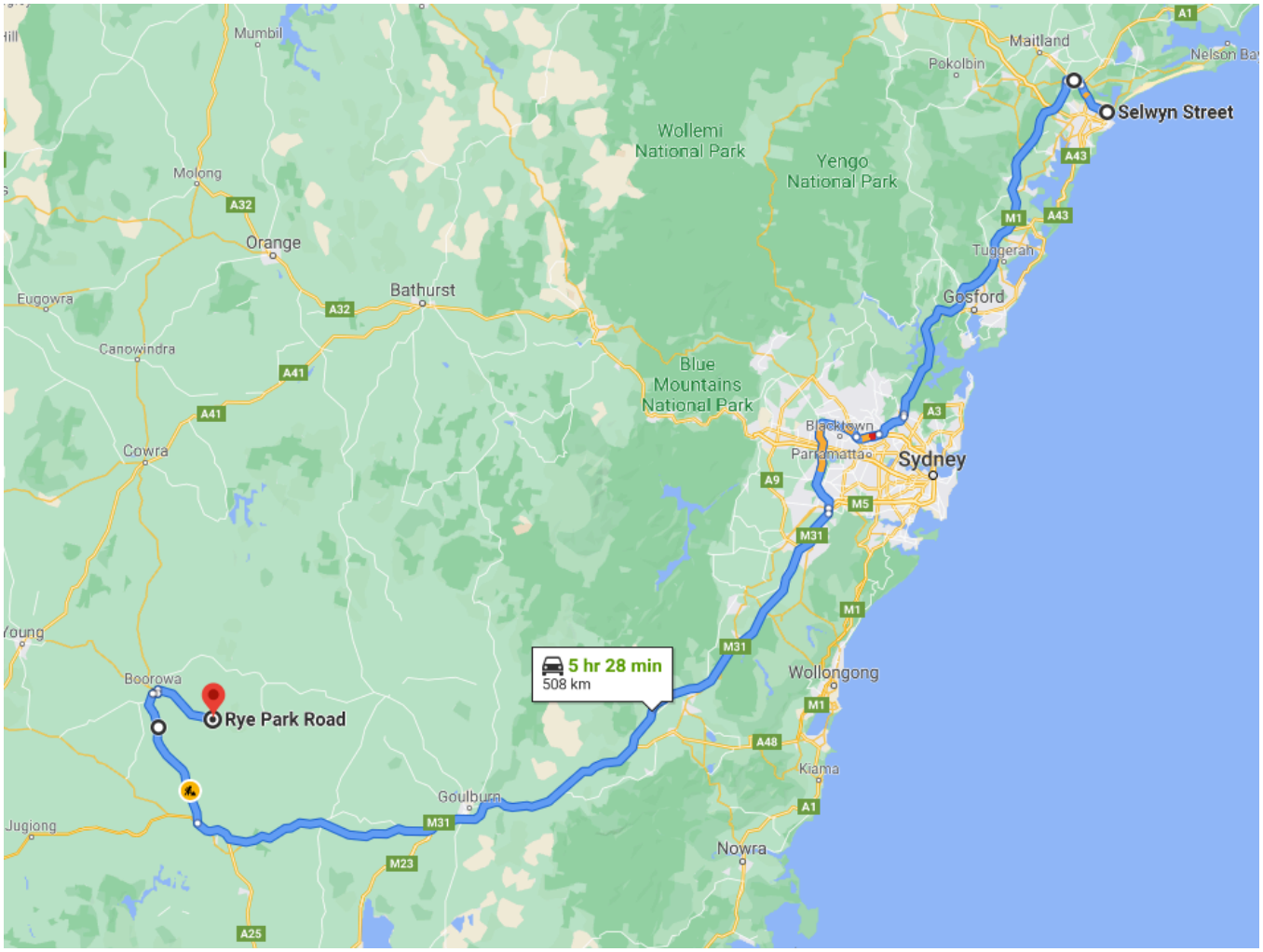
Listed in the index are Emergency parking areas on route.

18.0 Transport plan & pinch points: Stage 1 - Newcastle to Rye Park township.

We have based this study on the turbine components, and all imported towers entering Australia via the Mayfield # 4 Berth at Newcastle.

STAGE 1 ROUTE: Newcastle to Rye Park township, 508.0 kilometres:

This route took us via Selwyn street, George Street, Industrial Drive, Maitland Road, New England Highway, John Renshaw Drive, M1, Pennant Hills Road, M2, M7, M5, Hume Highway, Lachlan Valley Way, Trucking Yard Road, Dillon Street, Long Street, Rye Park Road.



GPS LINK: https://goo.gl/maps/XwqHWbLtMAwPyFLFA

KEY	
MODIFICATIONS REQUIRED	
PINCH POINT	
EMERGENCY PARKING	

KM index	Location	Section of road	Critical Measurement	Procedure	Notes
Route: Newcastle to Rye Park township					
0.0	Mayfield	Mayfield #4 berth onto Selwyn Street GPS link: https://goo.gl/maps/afLwPYKuNdm	70.0 metres clearance	Moderate right hand turn	Some hardstand will need to be added on the left entrance up to but not past the culvert, and on the left hand exit of the corner. The fence on both sides of the road and the gate will need to be relocated.
0.4	Mayfield	Selwyn Street rail crossing GPS link: https://goo.gl/maps/AmohE54hKSz	9.0 Metres wide	Travel directly ahead	Loads to travel over the crossing in the center of the road. Approval required crossing this line, likely cross with caution.
1.3	Mayfield	Selwyn Street onto Industrial Drive via George Street GPS link: https://goo.gl/maps/gXeHvBtCp4D2	70.0 metres clearance	Right hand turn	STEP 1: The prime mover is to turn into the correct side of Industrial Drive and push the jinker as far to the outside of the corner as possible. STEP 2: The trailer will reverse and straighten up. The jinker will cross onto the island on the southern side of the corner. STEP 3: The trailer will cut to the wrong side of Industrial Drive and once clear cross the medium strip to the correct side. A sign will also need to be relocated on the inside of the corner and a pole removed on the outside of the corner. A hardstand area will need to be constructed on the south side of the intersection.
5.5	Mayfield West	Industrial Drive onto Maitland Road GPS link: https://goo.gl/maps/Kn49dhWG2qG2	70.0 metres clearance	Right hand turn	Load to cross to the incorrect side of the road prior to the corner. Spotter to guide load through this pinch point. Police and pilots to control local traffic.
17.4	Tarro	New England Highway onto John Renshaw Drive GPS link: https://goo.gl/maps/SRDr5JigkBp	100.0 metres clearance	Left hand merge	No problems with this section of road.

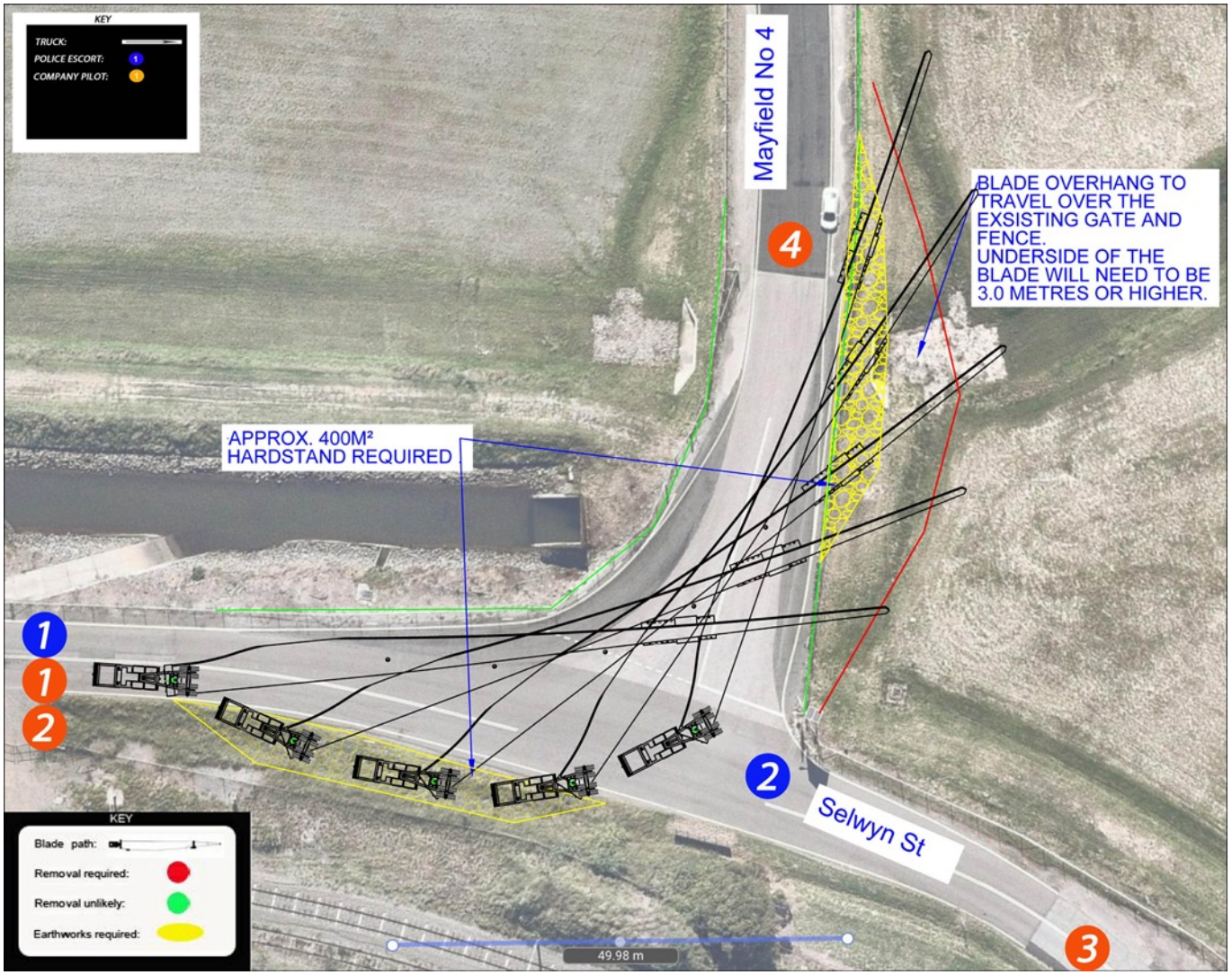
KM index	Location	Section of road	Critical Measurement	Procedure	Notes
18.5	Beresfield	John Renshaw Drive onto the M1 GPS link: https://goo.gl/maps/A34ihxCjM5wfRDdq6	100.0 metres clearance	Left hand bend	No problems with this section of road.
113.0	Mt White	M1 Motorway under Mt White overpass GPS link: https://goo.gl/maps/K3fPPe4fNx63xB3j7	Left Lane: 5.2 mtrs Centre Lane: 5.3 mtrs Right Lane: 5.4 mtrs	Travel directly ahead	Loads that exceed 5.3 metres high are not to travel under this structure. Loads over 5.2 metres high are to travel under the bridge in the far-right lane, and at a speed of no more than 5 km's per hour. Spotter to guide load through this section of road.
122.0	Hawkesbury River	M1 Motorway GPS link: https://goo.gl/maps/yDzjirEKLAbREE8B6	100.0 long x 6.0 wide	Merge to left	Large parking area
146.0	Wahroonga	M1 onto Pennant Hills Rd GPS link: https://goo.gl/maps/bskC8kD4CdW9xmwYA	75.0 metres clearance	Left hand turn	It is recommended that the centre median strip be modified to allow a suitable clearance for the truck to travel over. Blade loads are to turn from the correct side to the incorrect side of the road. The prime mover will need to turn from the far-right lane and cross onto the incorrect side of Pennant Hills Road, before returning to the correct side once the trailer has cleared the corner.
147.0	Normanhurst	Pennant Hills Road under Pedestrian overpass GPS link: https://goo.gl/maps/nYbjkf5AJ9D2xvUt7	Left Lane: 5.15 mtrs Centre Lane: 5.2 mtrs Right Lane: 5.3 mtrs	Travel directly ahead	Loads that exceed 5.3 metres high are not to travel under this structure. Loads over 5.2 metres high are to travel under the bridge in the far-right lane, and at a speed of no more than 5 km's per hour. Spotter to guide load through this section of road.
151.0	Beecroft	Pennant Hills Road under Pedestrian overpass GPS link: https://goo.gl/maps/sjnLQqYRudUSKgTQ8	Left Lane: 5.3 mtrs Centre Lane: 5.4 mtrs Right Lane: 5.5 mtrs	Travel directly ahead	Loads that exceed 5.3 metres high are not to travel under this structure. Loads over 5.2 metres high are to travel under the bridge in the centre lane, and at a speed of no more than 5 km's per hour. Spotter to guide load through this section of road.

KM index	Location	Section of road	Critical Measurement	Procedure	Notes
154.0	West Pennant Hills	Pennant Hills Rd onto M2 Motorway GPS link: https://goo.gl/maps/cCsJwSt1NsRi5cSs6	75.0 metres clearance	Right hand turn	STEP 1:Prime mover is to cross to the incorrect side of Pennant Hills Road. Once the blade tip has passed the traffic light on the left side of the intersection, then the prime mover is to stop. STEP 2:The load is to than reverse the blade tip towards the M2 citybound onramp. Once the prime mover is in line with the M2 westbound onramp the load is to stop, and prepare to move forward. STEP 3: Once the load is in line with the M2 Westbound onramp the load is to travel across the intersection and onto the M2 motorway westbound.
163.0	Winston Hills	M2 Motorway onto M7 Motorway GPS link: https://goo.gl/maps/PC96cBq2xqtW85vG7	75.0 metres clearance	Travel directly ahead	No problems with this section of road.
167.0	Kings Park	M7 Motorway GPS link: https://goo.gl/maps/T8WcbR9T84Zs7WpF7	100.0 long x 6.0 wide	Merge to left	Large parking area
201.0	Prestons	M7 Motorway onto M5 Motorway GPS link: https://goo.gl/maps/FA2mF7PxZkxrRDTR9	75.0 metres clearance	Travel directly ahead	No problems with this section of road.
229.0	Menangle	Hume Highway https://goo.gl/maps/KPMdLS1XuRWHrcyb6	200.0 long x 8.0 wide	Merge to left	Large parking area for towers and motors, no blades to enter this parking bay.
238.0	Wilton	Hume Highway under Farm access overpass GPS link: https://goo.gl/maps/2ZsVqYJ9j9qPTGqa9	Left Lane: 5.5 mtrs Centre Lane: 5.4 mtrs Right Lane: 5.3 mtrs	Travel directly ahead	Loads that exceed 5.3 metres high are not to travel under this structure. Loads over 5.2 metres high are to travel under the bridge in the left lane, and at a speed of no more than 5 km's per hour. Spotter to guide load through this section of road.
303.0	Sutton Forest	Hume Highway https://goo.gl/maps/uT1ubtSuawS2	150.0 long x 10.0 wide	Merge to left	Large parking area
352.0	Goulburn	Hume Highway https://goo.gl/maps/7HywRcjZiJv	180.0 long x 15.0 wide	Merge to left	Large parking area
375.0	Breadalbane	Hume Highway https://goo.gl/maps/PmpDm5ymjjnK7ciW8	140.0 long x 12.0 wide	Merge to left	Large parking area
388.0	Cullerin ridge	Hume Highway https://goo.gl/maps/3r7x8uzs9Fy7pVmp8	100.0 long x 10.0 wide	Merge to left	Large parking area
409.0	Oolong	Hume Highway https://goo.gl/maps/EVyT3US6dgcapAWWA	130.0 long x 15.0 wide	Merge to left	Large parking area
444.0	Bowning	Hume Highway onto Lachlan Valley Way GPS link: https://goo.gl/maps/j1Nvv5sXDonei1K99	75.0 metres clearance	Right hand turn	Some signs in the centre median strip will need to be relocated. Truck to turn from the far left lane and enter the corner as wide as possible.

KM index	Location	Section of road	Critical Measurement	Procedure	Notes
486.0	Boorowa	Lachlan Valley Way onto Trucking Yard Road GPS link: https://goo.gl/maps/oCR2CX4EADMGK3WR8	75.0 metres clearance	Right hand turn	Some signs in the inside of the corner will need to be relocated.
487.0	Boorowa	Trucking Yard Road GPS link: https://goo.gl/maps/HTJCwCnUerjtqc5z9	50.0 metres clearance	Right hand bend	The causeway will need to be widened, and hardstand added to the inside of the corner.
487.2	Boorowa	Trucking Yard Road onto Dillon Street GPS link: https://goo.gl/maps/sQFVtnE3CPvhVibS8	90.0 metres clearance	Travel directly ahead.	No Problems with this section of road.
488.0	Boorowa	Dillon Street onto Long Street GPS link: https://goo.gl/maps/mnV8spf8JGG6LsT99	50.0 metres clearance	Left hand turn	Designs are underway to travel through the inside of the corner using a landowner's boundaries and the existing road reserve.
489.5	Boorowa	Long Street onto Rye Park Road GPS link: https://goo.gl/maps/Ry5s7svqx1BDzRAMA	50.0 metres clearance	Right hand turn	Designs are underway to travel through a landowner's boundaries on the outside of the corner, as well as using the existing road reserve.
489.5 to 509.0	Boorowa to Rye Park township	Rye Park Road GPS link: https://goo.gl/maps/LGqWeQKDCERMsHQy7	90.0 metres clearance	Travel directly ahead	No problems with this section of road.
509.0	Rye park	Rye Park Road onto Grassy Creek Road GPS link: https://goo.gl/maps/LGqWeQKDCERMsHQy7		Left hand turn from Rye Park Road onto side road before turning left or right onto Grassy Creek Road.	Designs are underway to travel through the inside of the corner using a landowner's boundaries as per images 1,2 & 3. Once the initial construction and delivery phase has been completed, the modifications shown in image 1,2 & 3 will be removed, and a new access road servicing the north of the project will be installed as per image 4.

0.0 Km's: Mayfield #4 onto Selwyn Street at Mayfield.

Image 1:



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/afLwPYKuNdm

POLICE ESCORT 1: Hold all eastbound traffic on Selwyn St, 100 metres west of the intersection.

POLICE ESCORT 2: Hold all Westbound traffic on Selwyn St at the intersection.

COMPANY PILOT 1: Stay 200 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Stay 100 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 3: Warn all westbound traffic on Selwyn Street.

COMPANY PILOT 4: Stay 100 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: Right hand turn from port access road onto Selwyn Street. Spotter to watch the rear of blade as the load turns the corner. Spotter to guide load through this pinch point. Pilots to control local traffic. Over sail to travel over the port fence.

ROAD MODIFICATIONS: Yes, moderate amounts of work are required.

0.4 Km's: Rail crossing over Selwyn Street at Mayfield.

GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/864FhMSaF9P2

PINCHPOINT PROCEDURE: Travel directly ahead over the crossing. Large width clearance and good ground clearance over this crossing.

Police and escorts to control local traffic either side of the crossing. ARTC approval will need to be obtained to travel over this crossing. Likely to cross with caution, no escort required. Pilots to control local traffic.

ROAD MODIFICATIONS: No works required.

1.3 Km's: Selwyn Street onto Industrial Drive, via George Street at Mayfield.

Image 1:

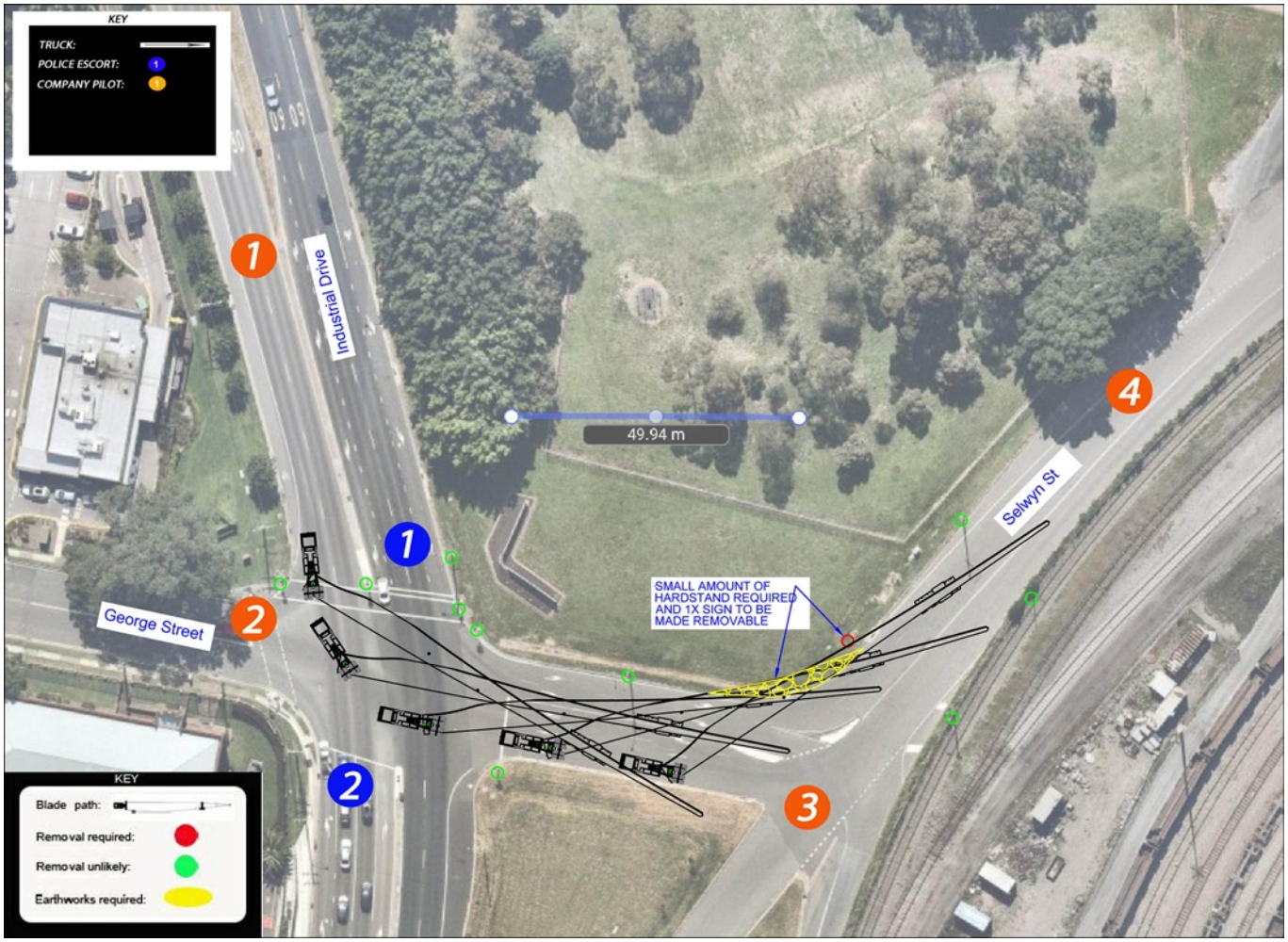


Image 2:

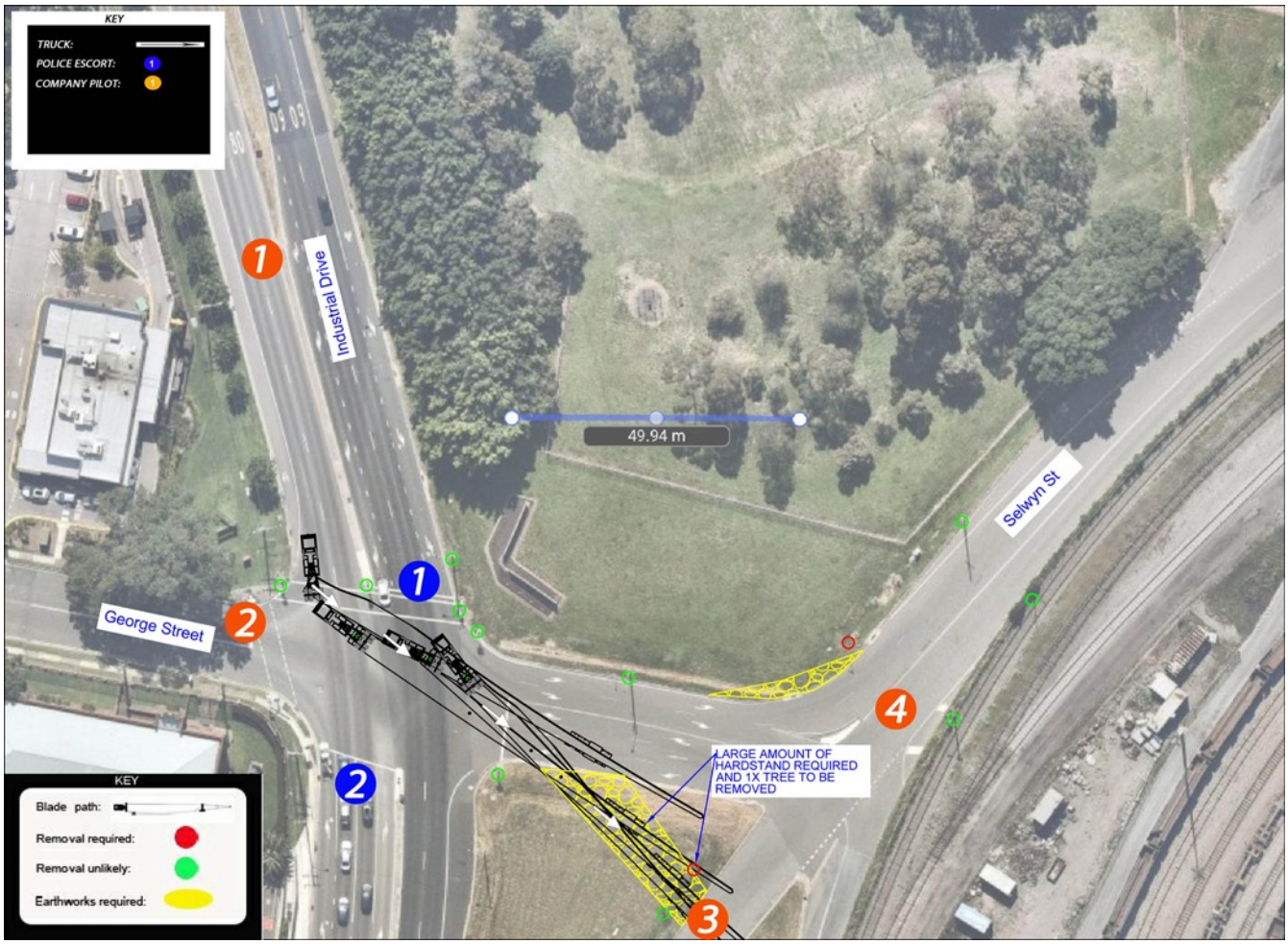
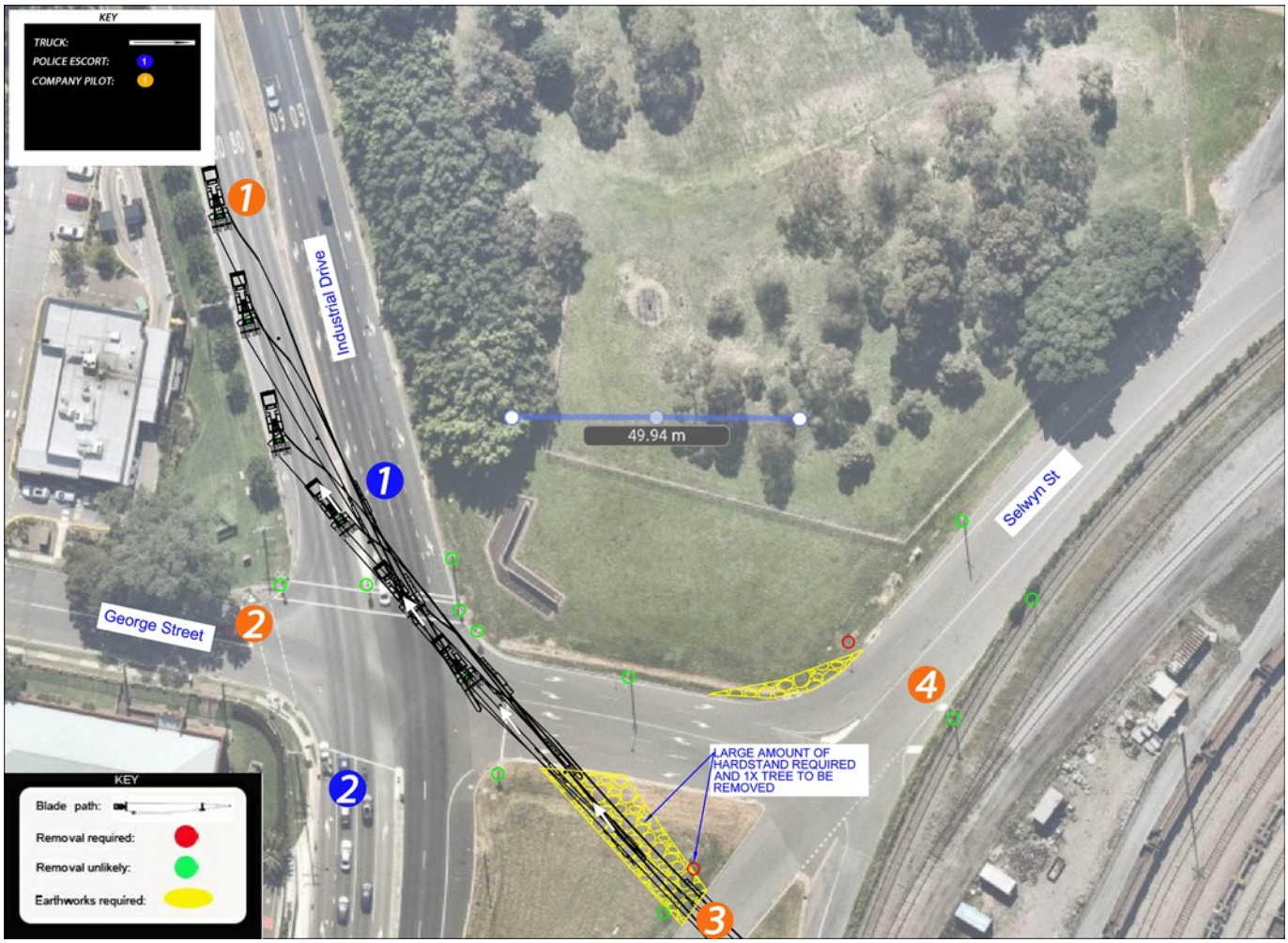

KEY
TRUCK:
POLICE ESCORT:
COMPANY PILOT:
Industrial Drive
49.94 m
Selwyn St
George Street
LARGE AMOUNT OF HARDSTAND REQUIRED AND 1X TREE TO BE REMOVED
KEY
Blade path:
Removal required:
Removal unlikely:
Earthworks required:

Image 3:



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/brPRAckLr572

POLICE ESCORT 1: Hold all southbound traffic on Industrial Drive, 50 metres north of the intersection.

POLICE ESCORT 2: Hold all northbound traffic on Industrial Drive, at the intersection.

COMPANY PILOT 1: Stay 200 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Warn all traffic entering the intersection from the south and the west.

COMPANY PILOT 3: Warn all traffic in the side road.

COMPANY PILOT 4: Stay 50 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: STEP 1: The prime mover is to turn into the correct side of Industrial Drive and push the jinker as far to the outside of the corner as possible.

STEP 2: The trailer will reverse and straighten up. The jinker will cross onto the island on the southern side of the corner.

STEP 3: The trailer will cut to the wrong side of Industrial Drive and once clear cross the medium strip to the correct side.

ROAD MODIFICATIONS: Yes, Moderate amounts of works are required.

5.5 Km's: Industrial Drive onto Maitland Road at Mayfield West.

Image 1:

GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/Kn49dhWG2qG2

POLICE ESCORT 1: Hold all southbound traffic on Maitland Road outside of Jaycar.

POLICE ESCORT 2: Hold all Northbound traffic on Maitland Road at the intersection.

COMPANY PILOT 1: Stay 200 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Warn all northbound traffic on Maitland Road.

COMPANY PILOT 3: Stay 150 metres behind the load on the correct side of Industrial Drive to warn all traffic approaching Northbound.

COMPANY PILOT 4: Stay 150 metres behind the load and warn all traffic..

PINCHPOINT PROCEDURE: Right hand turn from Industrial Drive onto Maitland Road. The loads will need to cross to the incorrect side of the road 150 metres prior to the corner, before crossing back over 200 metres after the corner.

Spotter to keep the driver informed throughout the procedure. Pilots to control local traffic.

ROAD MODIFICATIONS: No works required.

18.5 Km's: Intersection of John Renshaw Drive and M1 at Beresfield.

Image 1:

GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/A34ihxCjM5wfRDdq6

POLICE ESCORT 1: Merge all southbound traffic on the M1 into the right-hand lane.

POLICE ESCORT 2: Hold all traffic 100 metres behind the load.

COMPANY PILOT 1: Stay 200 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Warn all southbound traffic on the M1.

COMPANY PILOT 3: Stay 100 metres behind the load and warn all traffic.

COMPANY PILOT 4: Stay 150 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: Merge to the left and travel around a left hand bend before merging to the right onto the M1 Motorway. Spotter to guide the load through the corner. Pilots to control local traffic.

ROAD MODIFICATIONS: No works required.

146.0 Km's: M1 Motorway onto Pennant Hills Road at Wahroonga.

Image 1:

GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/bskC8kD4CdW9xmwYA

POLICE ESCORT 1: Hold all Northbound traffic on PHR at the intersection.

POLICE ESCORT 2: Hold all Southbound traffic on PHR at the intersection.

COMPANY PILOT 1: Stay 300 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Stay 100 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 3: Stay 50 metres behind the load and warn all traffic.

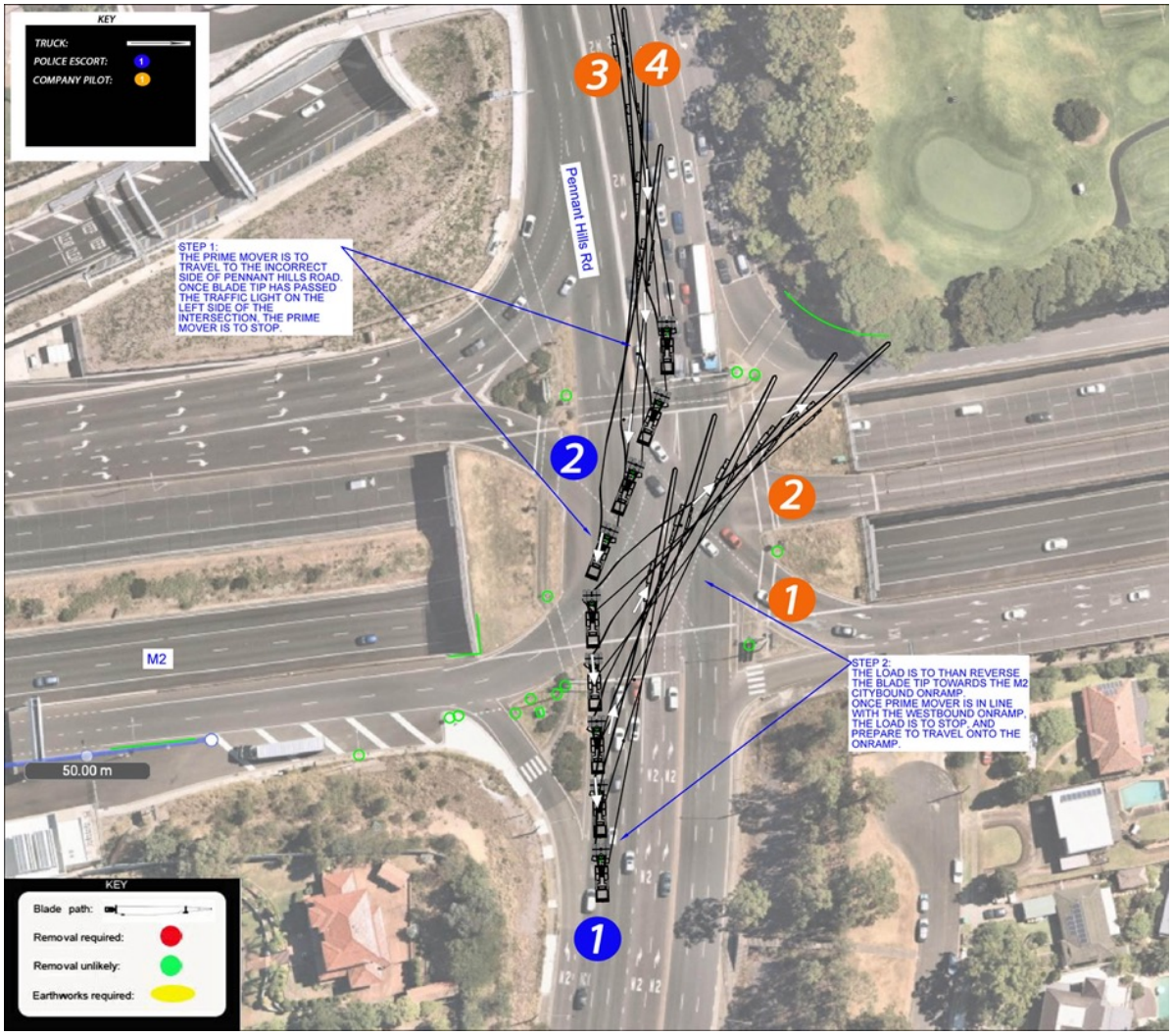
COMPANY PILOT 4: Stay 150 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: Left hand turn from the M1 Motorway onto Pennant Hills Road. Blade loads are to turn from the correct side to the incorrect side of the road. The prime mover will need to travel over the centre median strip on Pennant Hills Road before crossing back to the correct side approx. 30 metres south of the intersection. Spotter to guide the load through the corner. Pilots to control local traffic.

ROAD MODIFICATIONS: No works required.

154.0 Km's: Pennant Hills Road onto the M2 Motorway at West Pennant Hills.

Image 1: Step 1 & 2



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/cCsJwSt1NsRi5cSs6

POLICE ESCORT 1: Hold all traffic on Pennant Hills Road.

POLICE ESCORT 2: Hold all eastbound traffic exiting the M2 onto Pennant Hills Road.

COMPANY PILOT 1: Stay 200 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Warn all northbound traffic on Pennant Hills Road.

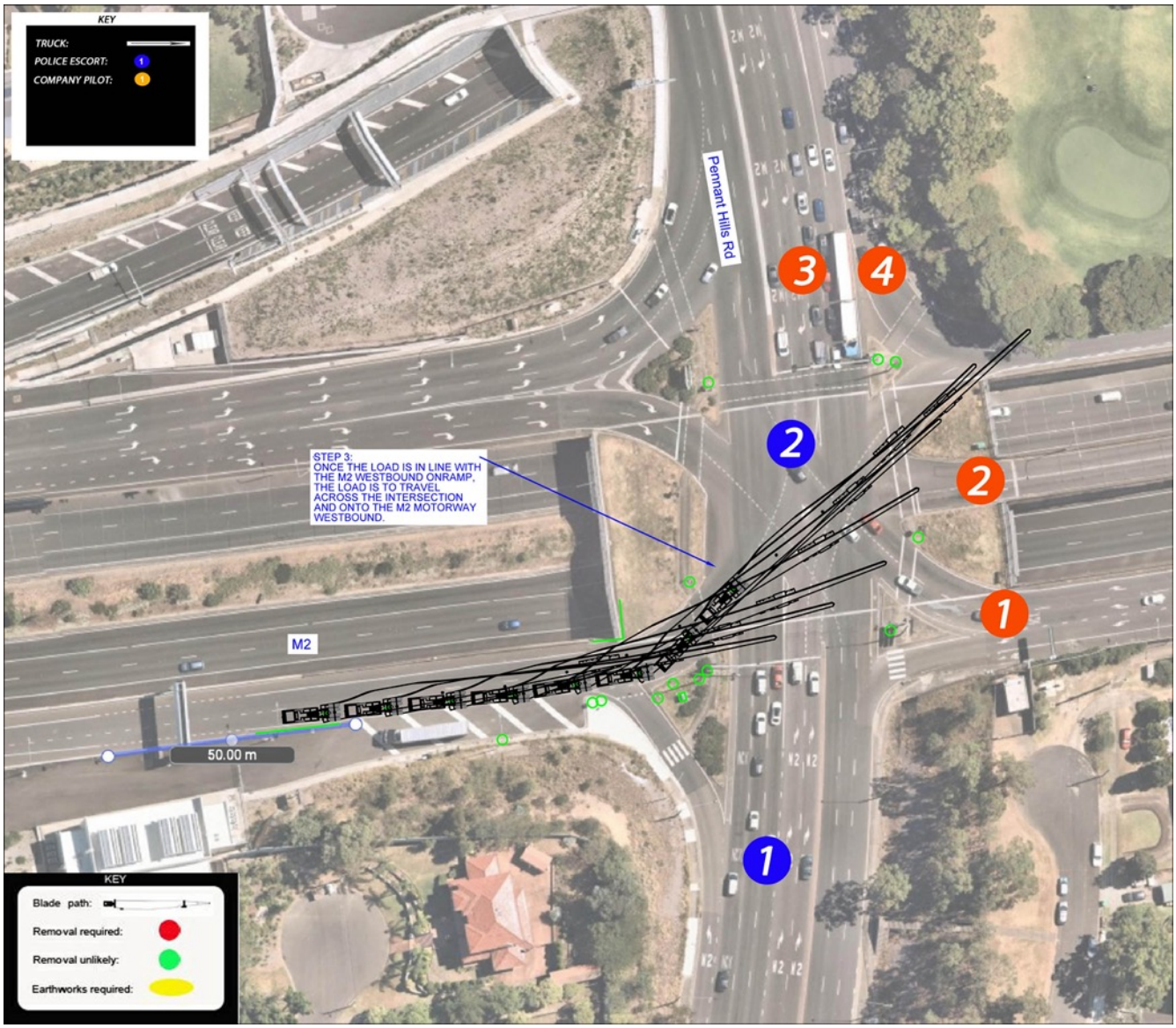
COMPANY PILOT 3: Warn all westbound traffic exiting the M2 onto Pennant Hills Road.

COMPANY PILOT 4: Stay 150 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: STEP 1: Prime mover is to cross to the incorrect side of Pennant Hills Road. Once the blade tip has passed the traffic light on the left side of the intersection, then the prime mover is to stop. STEP 2: The load is to than reverse the blade tip towards the M2 citybound onramp. Once the prime mover is in line with the M2 westbound onramp the load is to stop and prepare to move forward.

ROAD MODIFICATIONS: No works required.

Image 1: Step 3



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/cCsJwSt1NsRi5cSs6

POLICE ESCORT 1: Hold all traffic on Pennant Hills Road.

POLICE ESCORT 2: Hold all eastbound traffic exiting the M2 onto Pennant Hills Road.

COMPANY PILOT 1: Stay 200 metres in front of the load and warn all oncoming traffic.

COMPANY PILOT 2: Warn all northbound traffic on Pennant Hills Road.

COMPANY PILOT 3: Warn all westbound traffic exiting the M2 onto Pennant Hills Road.

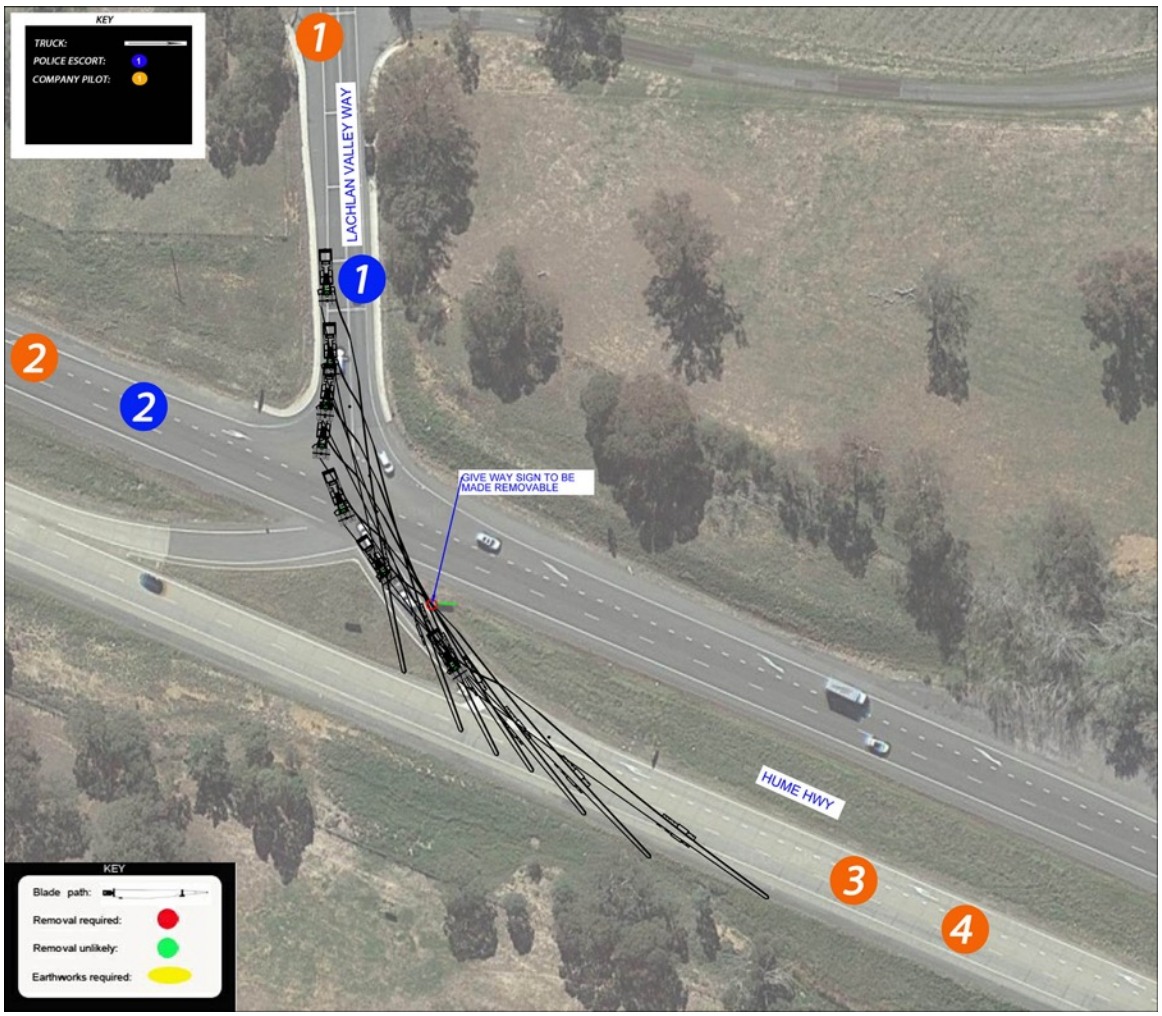
COMPANY PILOT 4: Stay 150 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: STEP 3: Once the load is in line with the M2 Westbound onramp the load is to travel across the intersection and onto the M2 motorway westbound.

ROAD MODIFICATIONS: No works required.

418.0 Km's: Hume Highway onto Lachlan Valley Highway at Yass.

Image 1:



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/j1Nvy5sXDonei1K99

POLICE ESCORT 1: Hold all southbound traffic on Lachlan Valley Highway, 100 metres north of the intersection.

POLICE ESCORT 2: Hold all northbound traffic on the Hume Highway, 100 metres south of the intersection.

COMPANY PILOT 1: Warn all eastbound traffic on Lachlan Valley Highway.

COMPANY PILOT 2: Warn all northbound traffic on the Hume Highway.

COMPANY PILOT 3: Stay 50 metres behind the load and warn all traffic.

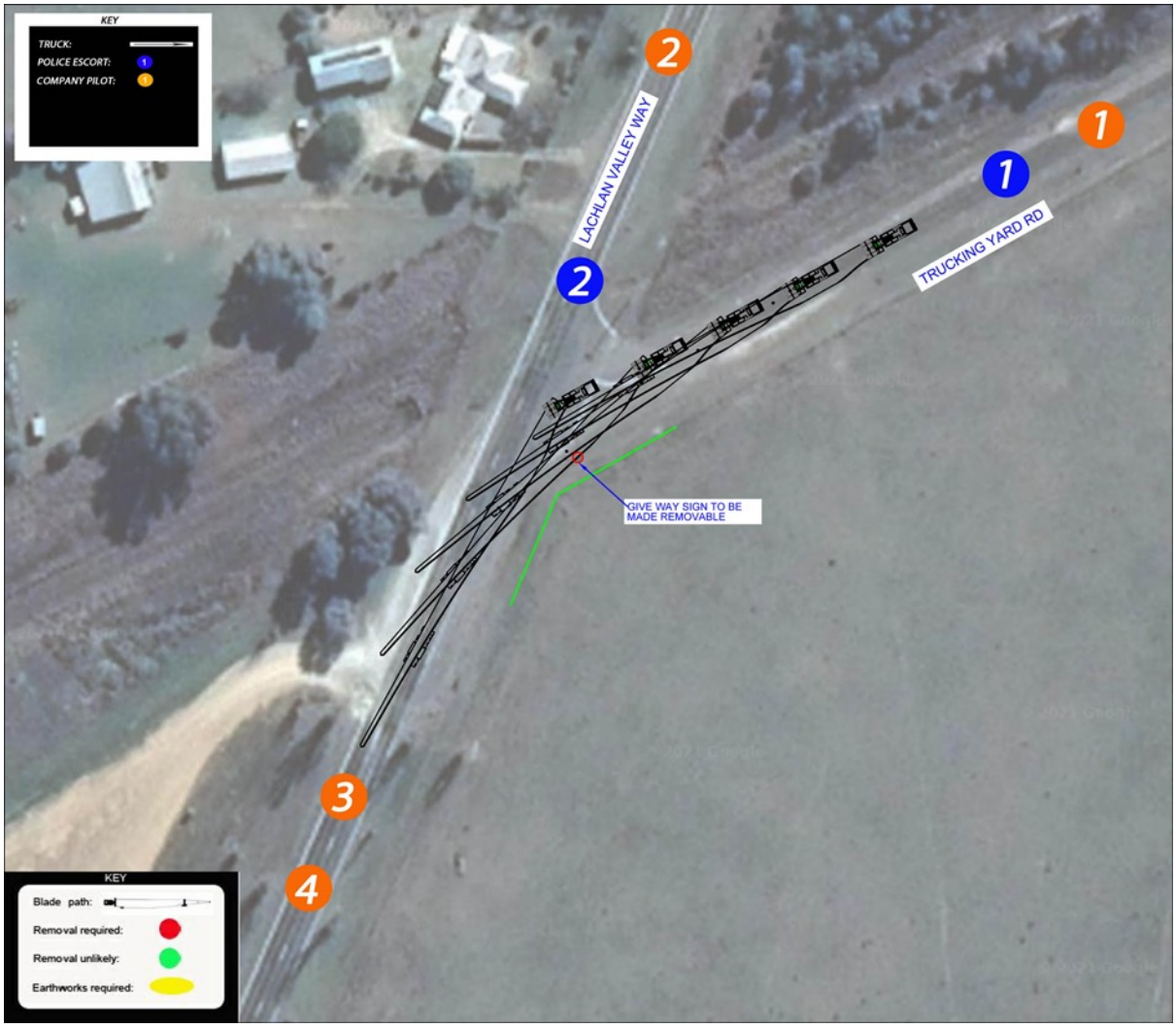
COMPANY PILOT 4: Stay 200 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: Right hand turn from Hume Highway off-ramp onto Lachlan Valley way. Load to turn from the far left lanes onto the correct side of the Lachlan Valley Way. Spotter to guide the load through the corner. Pilots to control local traffic.

ROAD MODIFICATIONS: Small amounts of works are required on this section of road. 1x Give Way sign will need to be relocated or made removable in the centre median strip.

486.0 Km's: Lachlan Valley way onto Trucking Yard Road at Boorowa.

Image 1:



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/qCR2CX4EADMGK3WR8

POLICE ESCORT 1: Hold all westbound traffic on Trucking Yard Rd

POLICE ESCORT 2: Hold all southbound traffic on Lachlan Valley Highway, 100 metres north of the intersection.

COMPANY PILOT 1: Warn all westbound traffic on Trucking Yard Rd.

COMPANY PILOT 2: Warn all southbound traffic on Lachlan Valley Highway

COMPANY PILOT 3: Stay 50 metres behind the load and warn all traffic.

COMPANY PILOT 4: Stay 200 metres behind the load and warn all traffic.

PINCHPOINT PROCEDURE: Right hand turn from Lachlan Valley Way onto Trucking Yard Road.

ROAD MODIFICATIONS: Small amounts of works are required on this section of road. 1x give way sign will need to be moved or made removable.

487.0 Km's: Trucking Yard Road at Boorowa

Image 1:

Image 2:

GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/HTJCwCnUerjtgc5z9

PROCEDURE: Right-hand bend on Trucking Yard Road.

COMMENTS: Designs are underway to upgrade this section. The causeway will need to be widened, and hardstand added to the inside of the corner.

ROAD MODIFICATIONS: Large amounts of works are required on this section of road.

488.0 Km's: Dillon Street onto Long Street at Boorowa

Image 1: Intersection plan

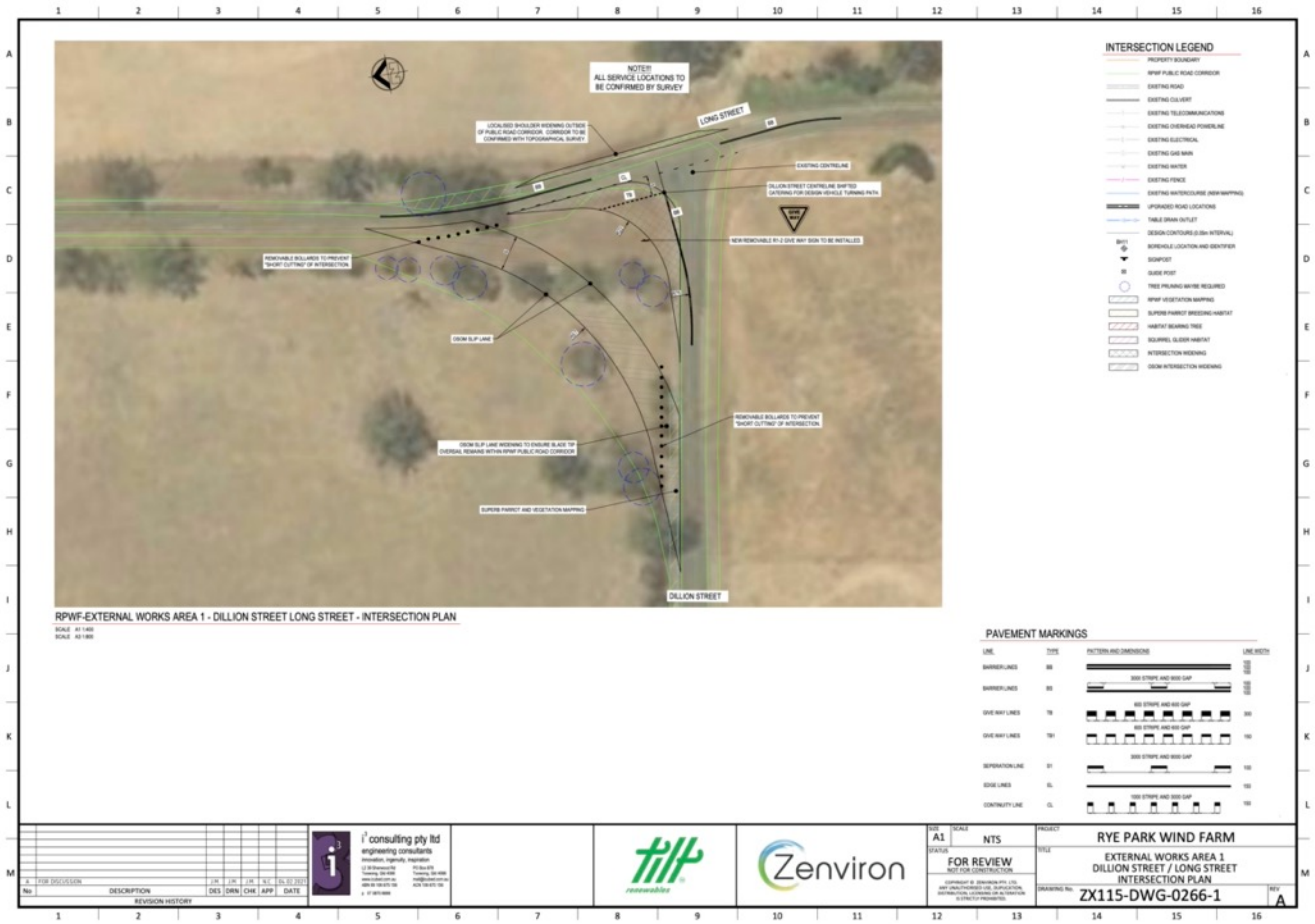


Image 2: Turning paths blades

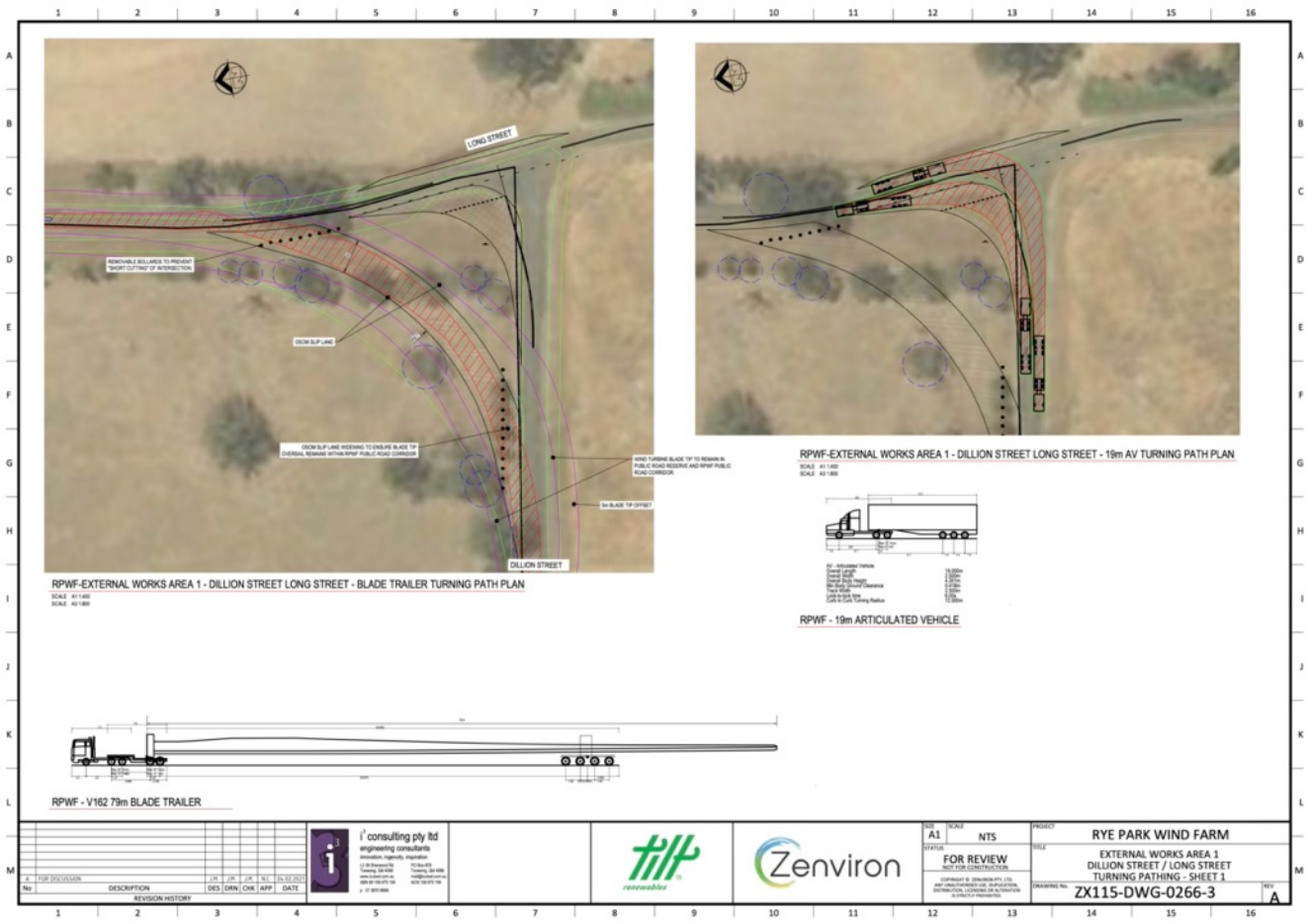
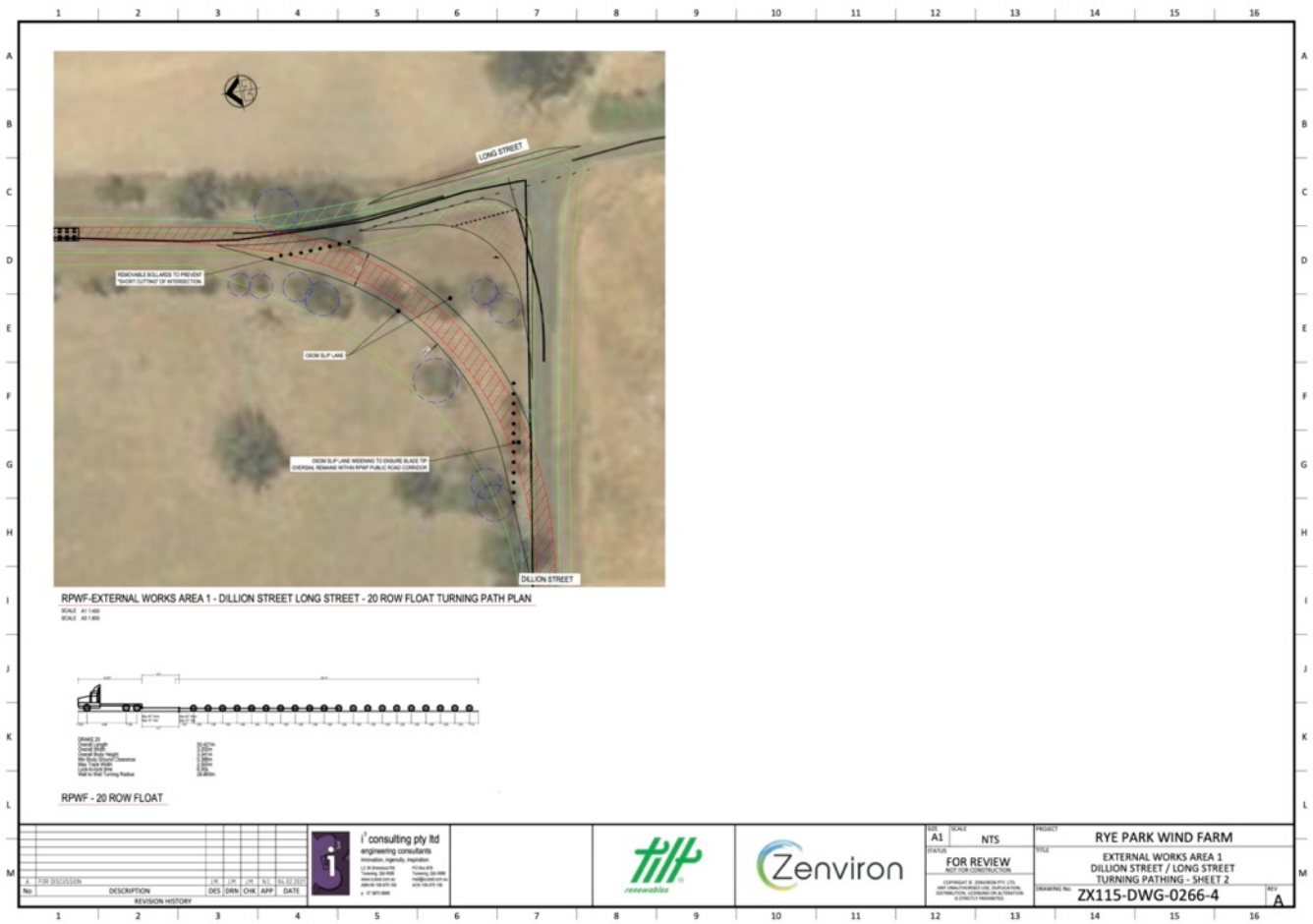


Image 3: Turning paths towers



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/mnV8spf8JGG6LsT99

PROCEDURE: Left-hand turn from Dillon Street onto Long Street.

COMMENTS: Designs are underway to travel through the inside of the corner using a landowner's boundaries and the existing road reserve.

ROAD MODIFICATIONS: Large amounts of works are required on this section of road.

489.5 Km's: Long Street onto Rye Park Road at Boorowa

Image 1: Intersection plan

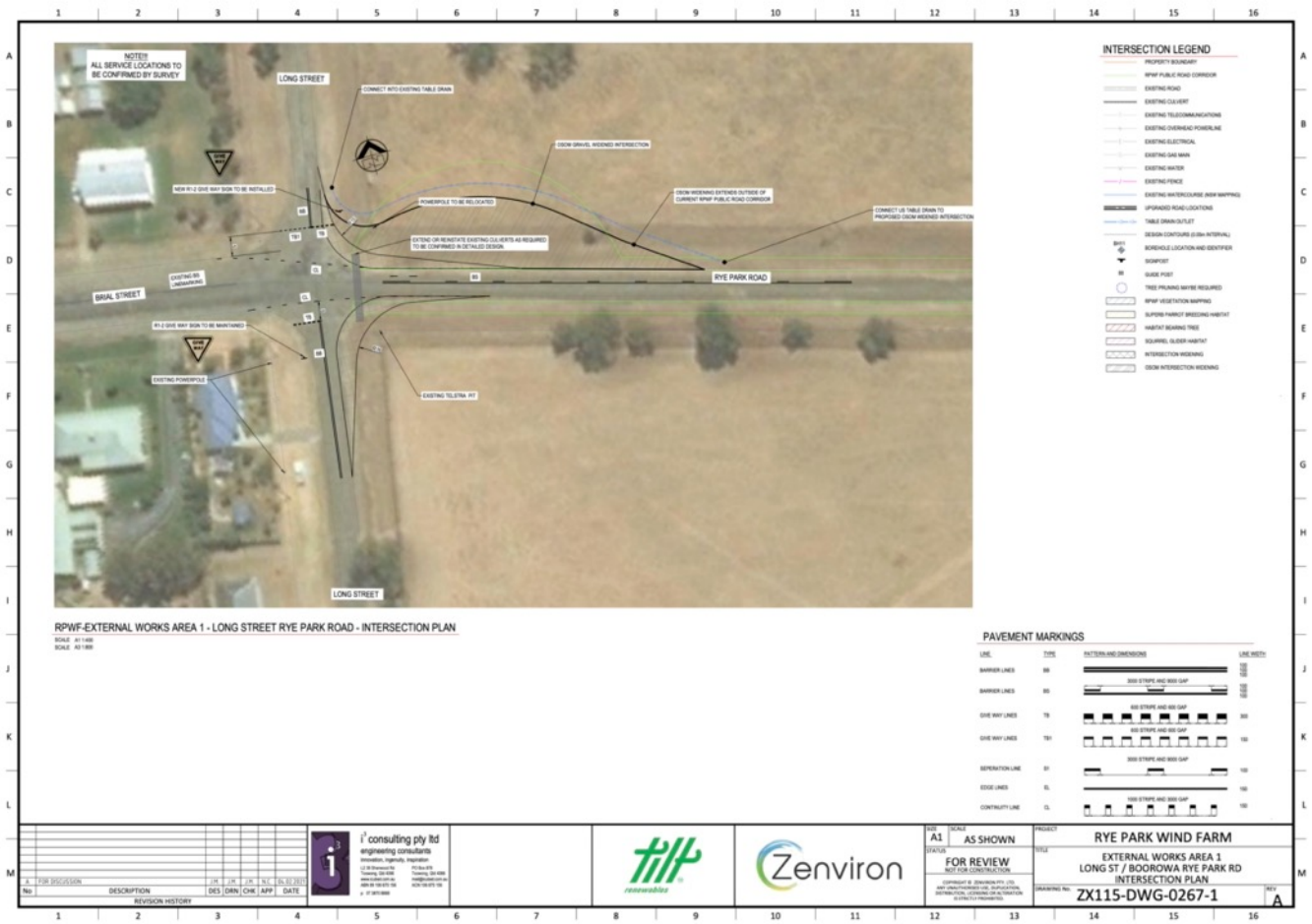


Image 2: Turning paths blades

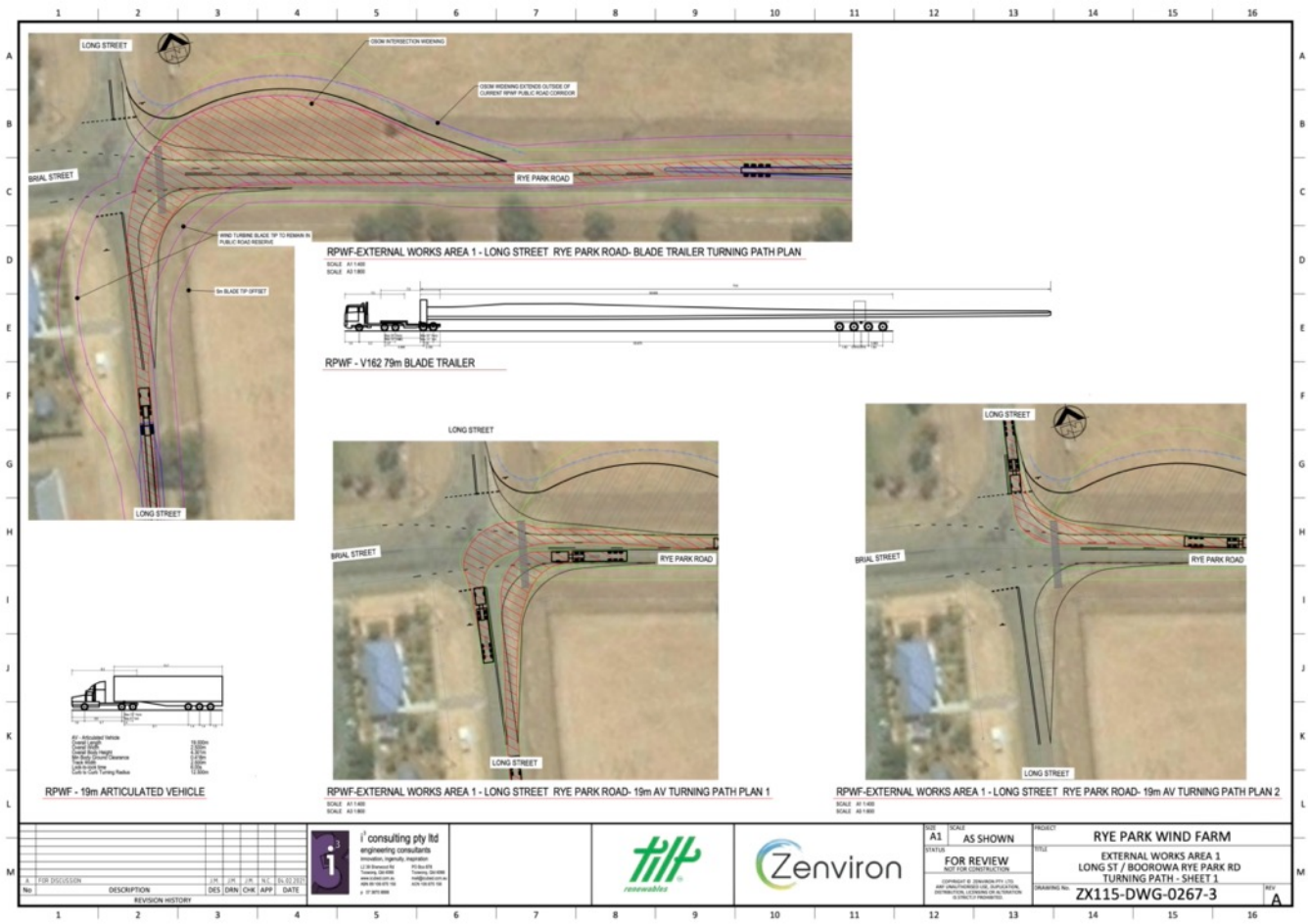
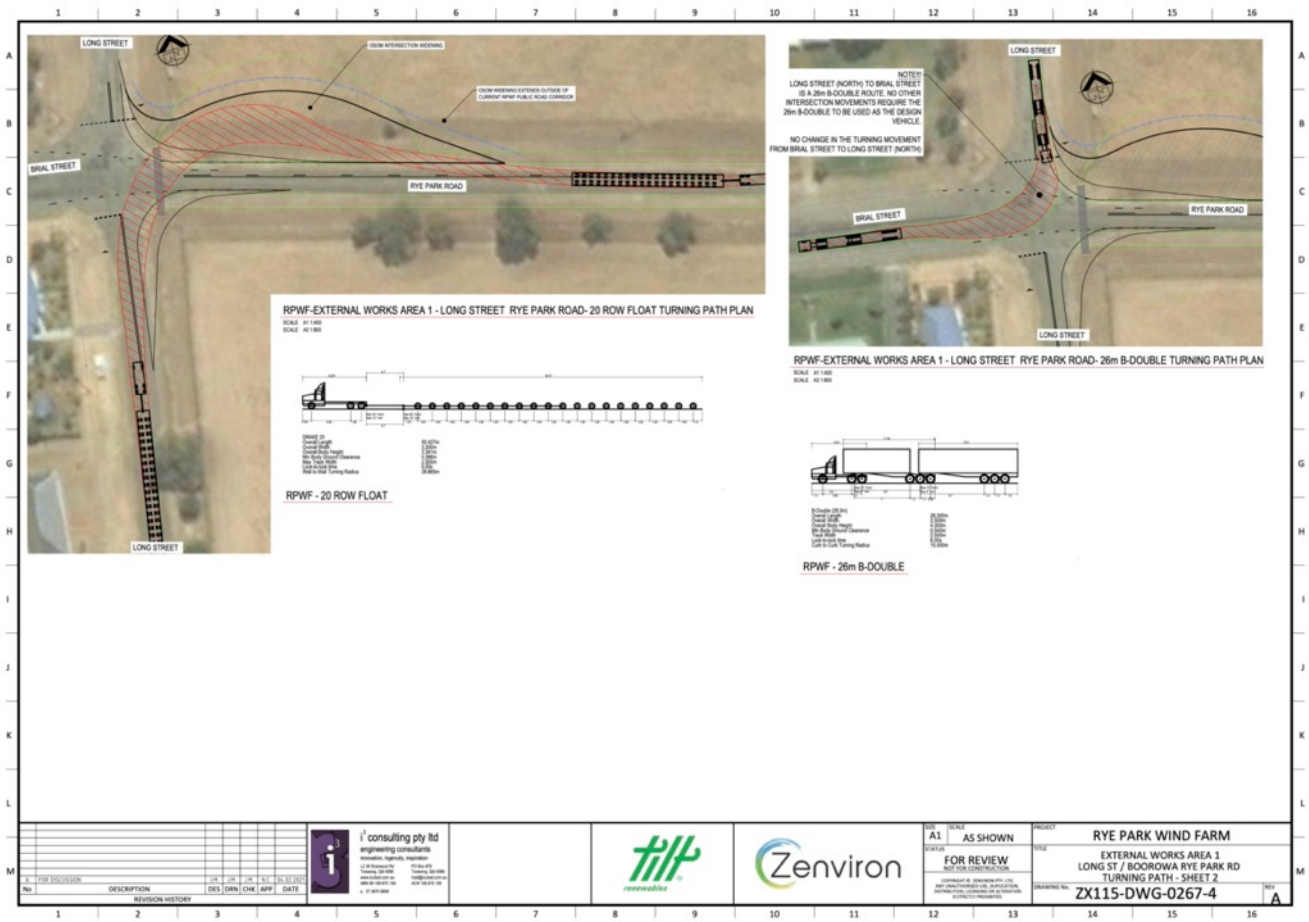


Image 3: Turning paths towers



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/Ry5s7svgx1BDzRAMA

PROCEDURE: Right-hand turn from Long Street onto Rye Park Road.

COMMENTS: Designs are underway to travel through a landowner's boundaries on the outside of the corner, as well as using the existing road reserve.

ROAD MODIFICATIONS: Large amounts of works are required on this section of road.

509.0 Km's: Rye Park Road onto Grassy Creek Road at Rye Park

Image 1: Intersection plan

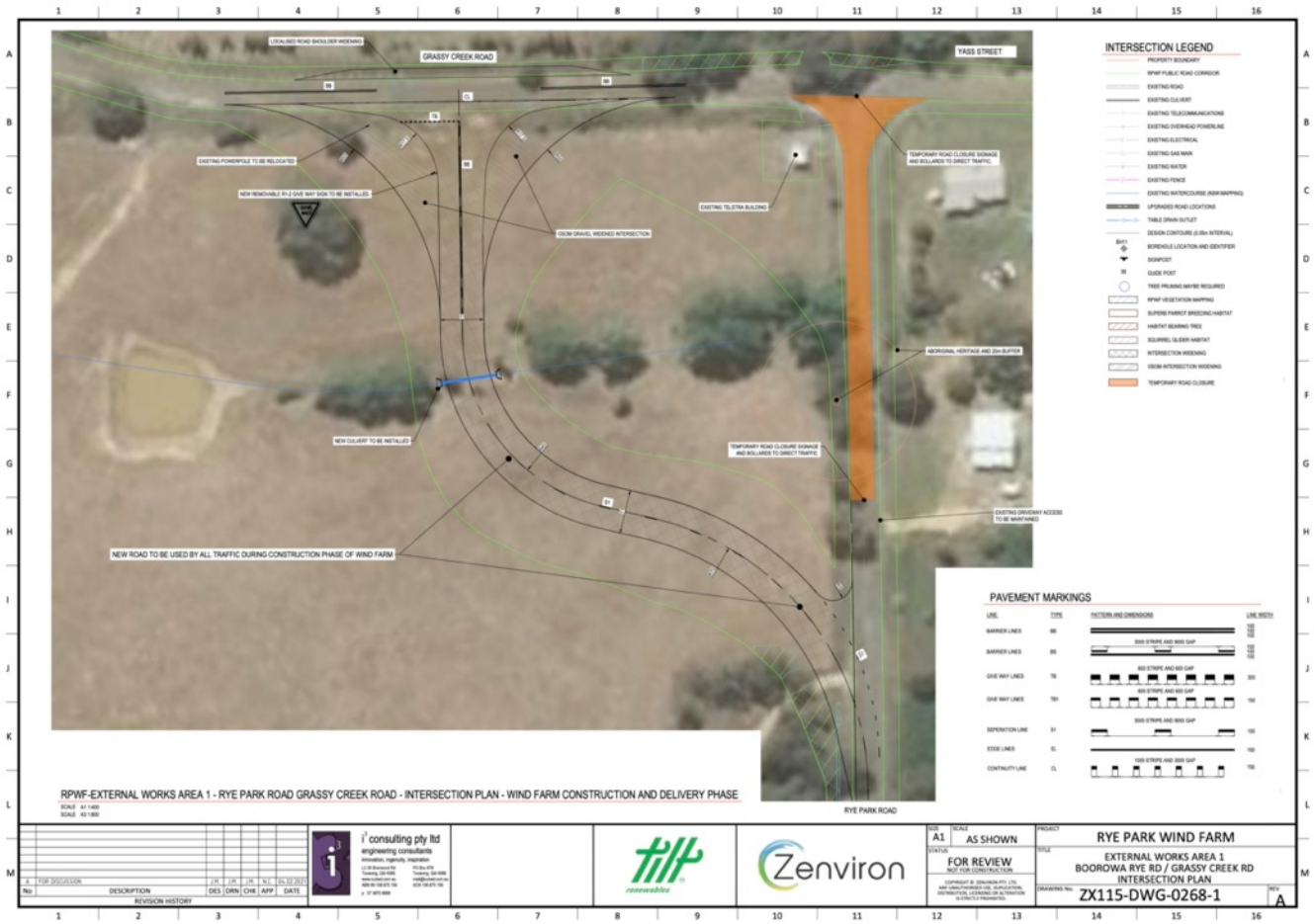


Image 2: Turning paths blades

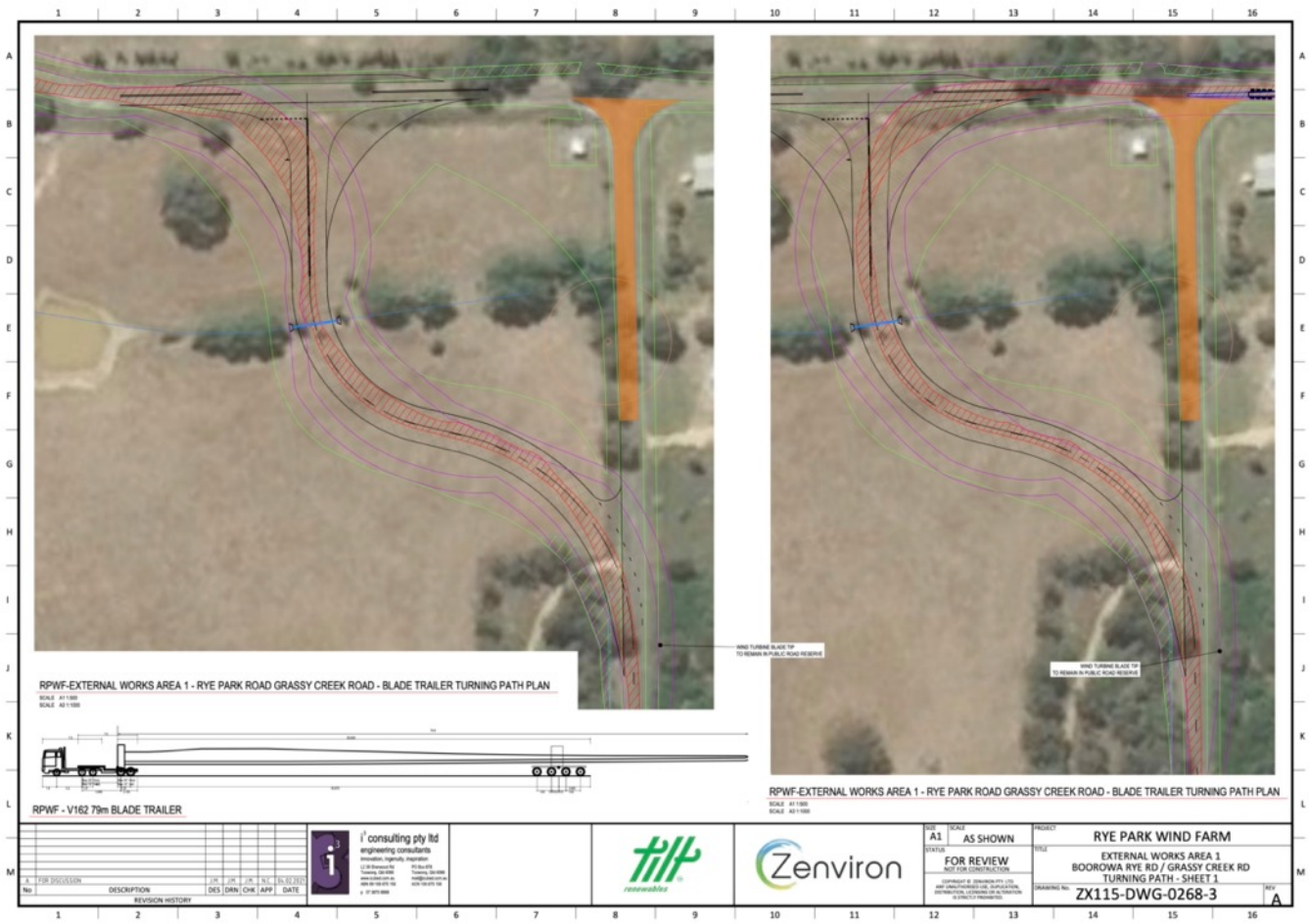


Image 3: Turning paths towers

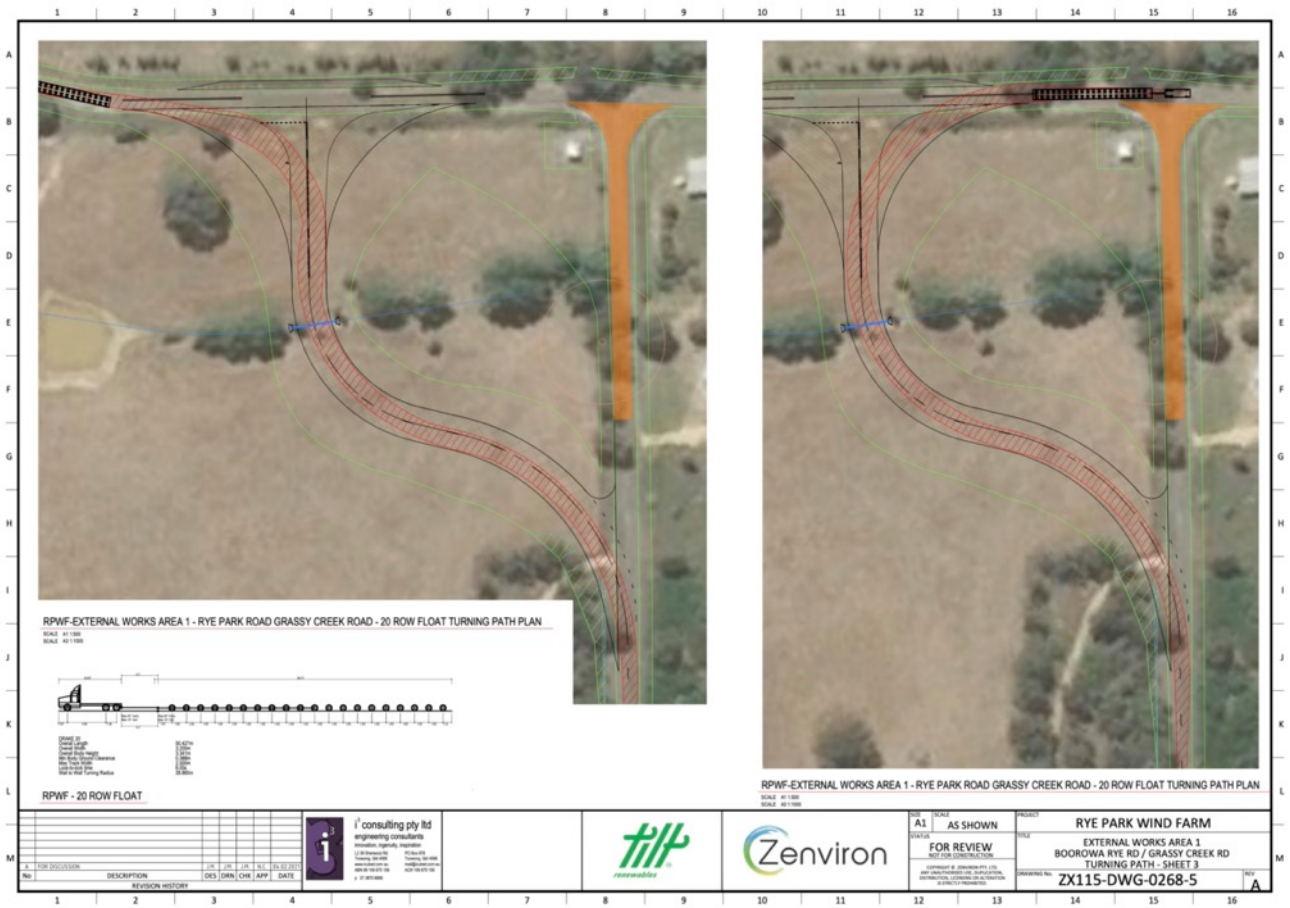
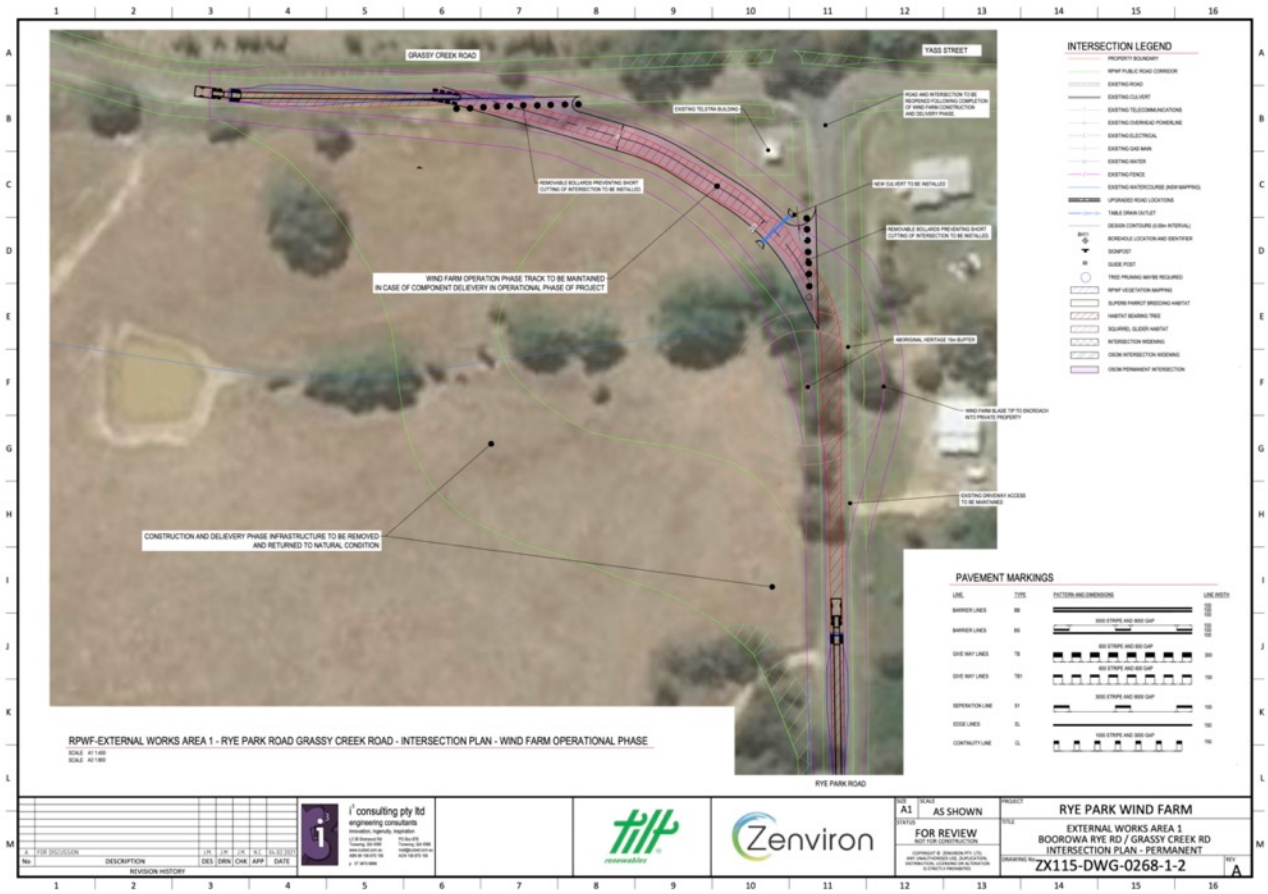


Image 4: New corner design after construction and delivery phase



GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/LGgWeQKDCERMsHQy7

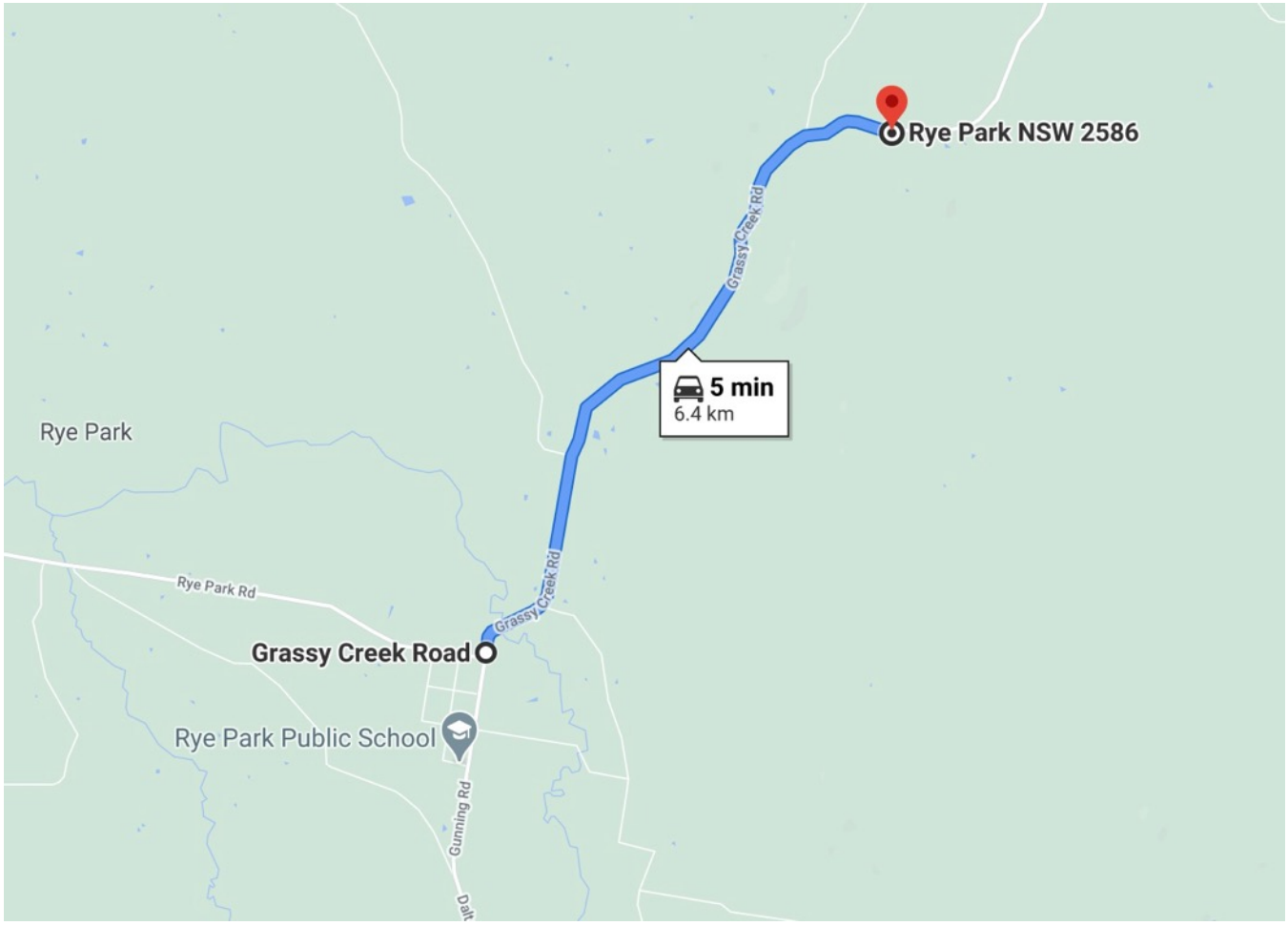
PROCEDURE: Left hand turn from Rye Park Road onto side road before turning left or right onto Grassy Creek Road.

COMMENTS: Designs are underway to travel through the inside of the corner using a landowner's boundaries as per images 1,2 & 3.
Once the initial construction and delivery phase has been completed, the modifications shown in image 1,2 & 3 will be removed, and a new access road servicing the north of the project will be installed as per image 4.

ROAD MODIFICATIONS: Large amounts of works are required on this section of road.

19.0 Transport plan & pinch points: Stage 2 - Rye Park Township to Rye Park North

STAGE 2 ROUTE: Rye Park township to Rye Park North, 6.4 kilometres:
This route took us via Grassy Creek Road.



GPS LINK: https://goo.gl/maps/bmzErhRMwMFvi83k8

KEY	
MODIFICATIONS REQUIRED	
PINCH POINT	
EMERGENCY PARKING	

KM index	Location	Section of road	Critical Measurement	Procedure	Notes
Route: Rye Park Township to Rye Park Windfarm North					
0.0 to 6.4	Rye Park	Grassy Creek Road GPS link: https://goo.gl/maps/NC1AQuTTZPJHDDfk9	Width: 4.5 metres	Travel directly ahead	Grassy Creek road is generally 4.5 metres of width with no shoulder. The pavement is in fair condition but may show wear with the volume of heavy traffic. Some trees will need to be trimmed and removed on sections of this road. The floodway has an adequate swept path.
5.2	Rye park	Grassy Creek Road into site entry # 2 https://goo.gl/maps/thVG7UnrPyWyZcpU6		Left turn	Site entrance to be made suitable for the swept path of the largest loads.
6.4	Rye park	Grassy Creek Road into site entry # 10 https://goo.gl/maps/N9fMwAjKKcpYBkv77		Right turn	Site entrance to be made suitable for the swept path of the largest loads.

0.0 to 6.4 Km's: Grassy Creek Rd.

Image 1:

Image 2:

PROCEDURE: Travel directly ahead on Grassy Creek Road.

COMMENTS: Grassy Creek Road is generally 4.5 metres of width with no shoulder. The pavement is in fair condition but may show wear with the volume of heavy traffic. Some trees will need to be trimmed and removed on sections of this road. The floodway has an adequate swept path.

ROAD MODIFICATIONS: Moderate amounts of works are required on this section of road.

GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/Aw2n6KdNtLz

5.2 Km's: Grassy Creek Rd into site entry # 2 at Rye Park

Image 1: Intersection plan

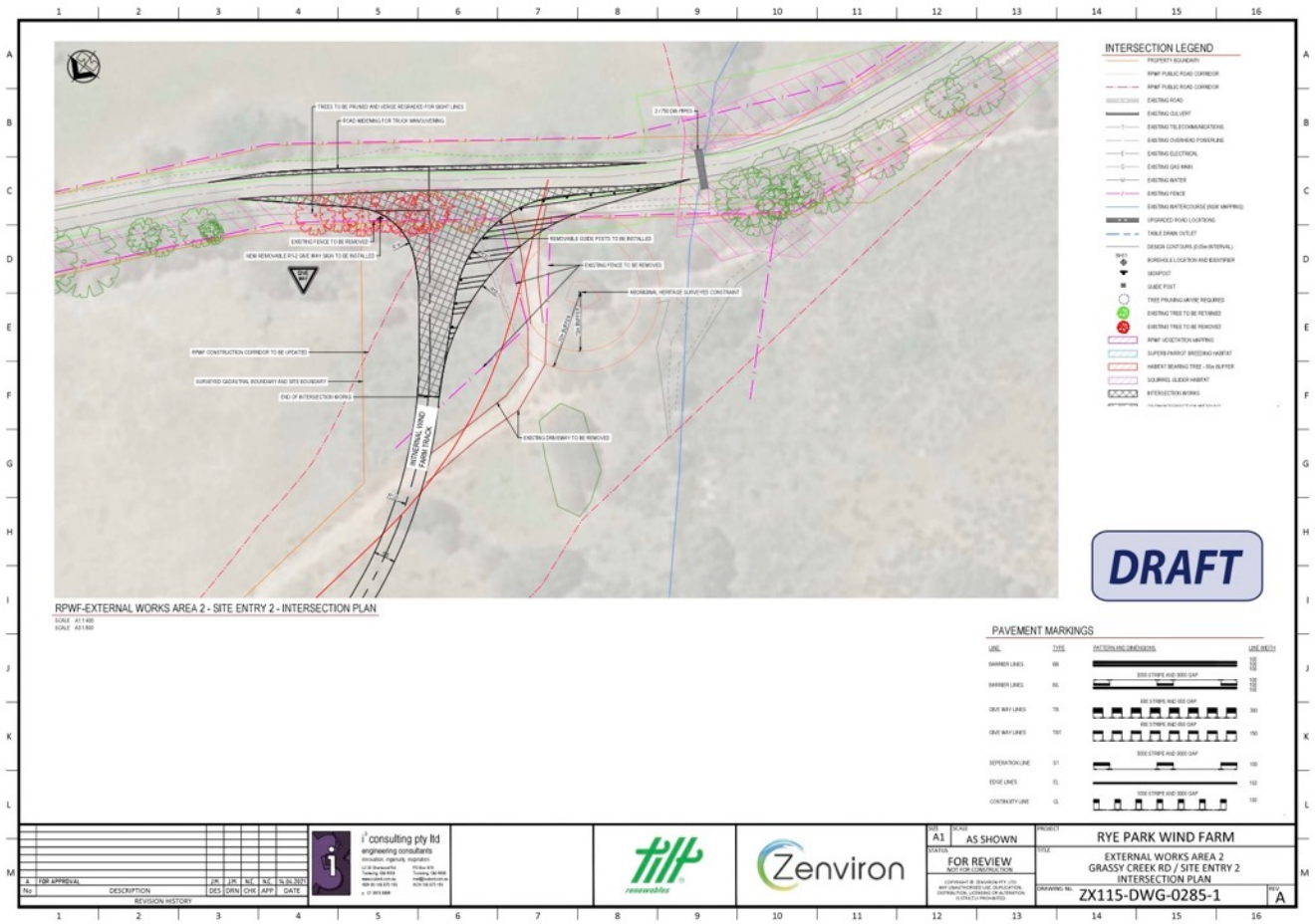
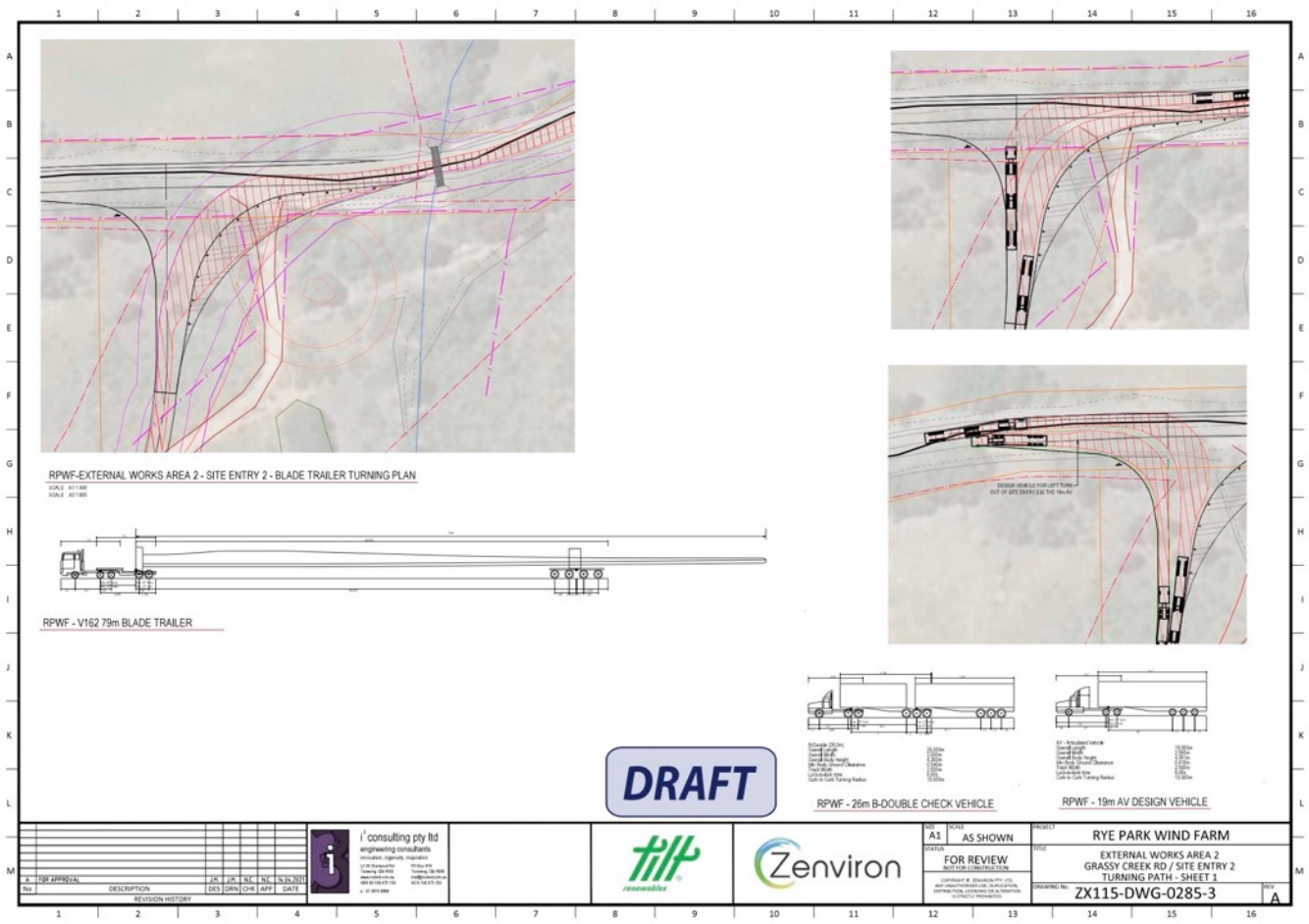


Image 2: Turning paths



PROCEDURE: Loads to turn left off Grassy Creek Road into site entry 2.
COMMENTS: Designs are underway to construct a suitable site entry.
ROAD MODIFICATIONS: Client to provide a suitable swept path for the largest loads.
GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/thVG7UnrPyWyZcpU6

6.4 Km's: Grassy Creek Rd into site entry # 10 at Rye Park

Image 1:

Intersection plan

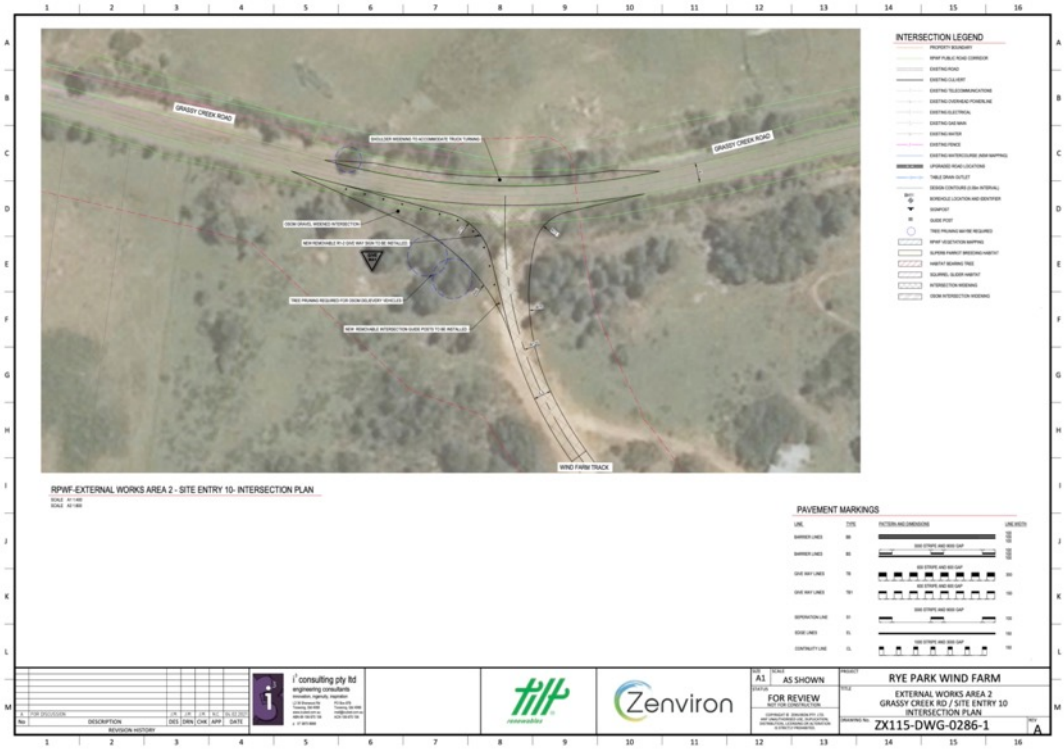


Image 2: Turning paths blades

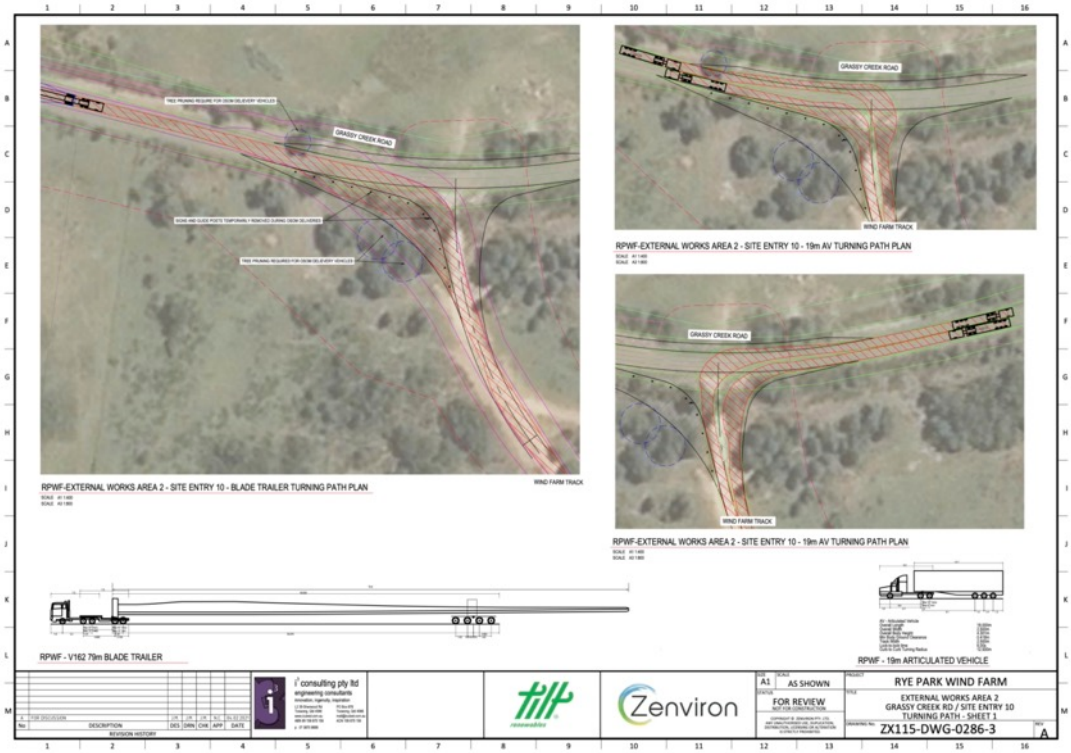
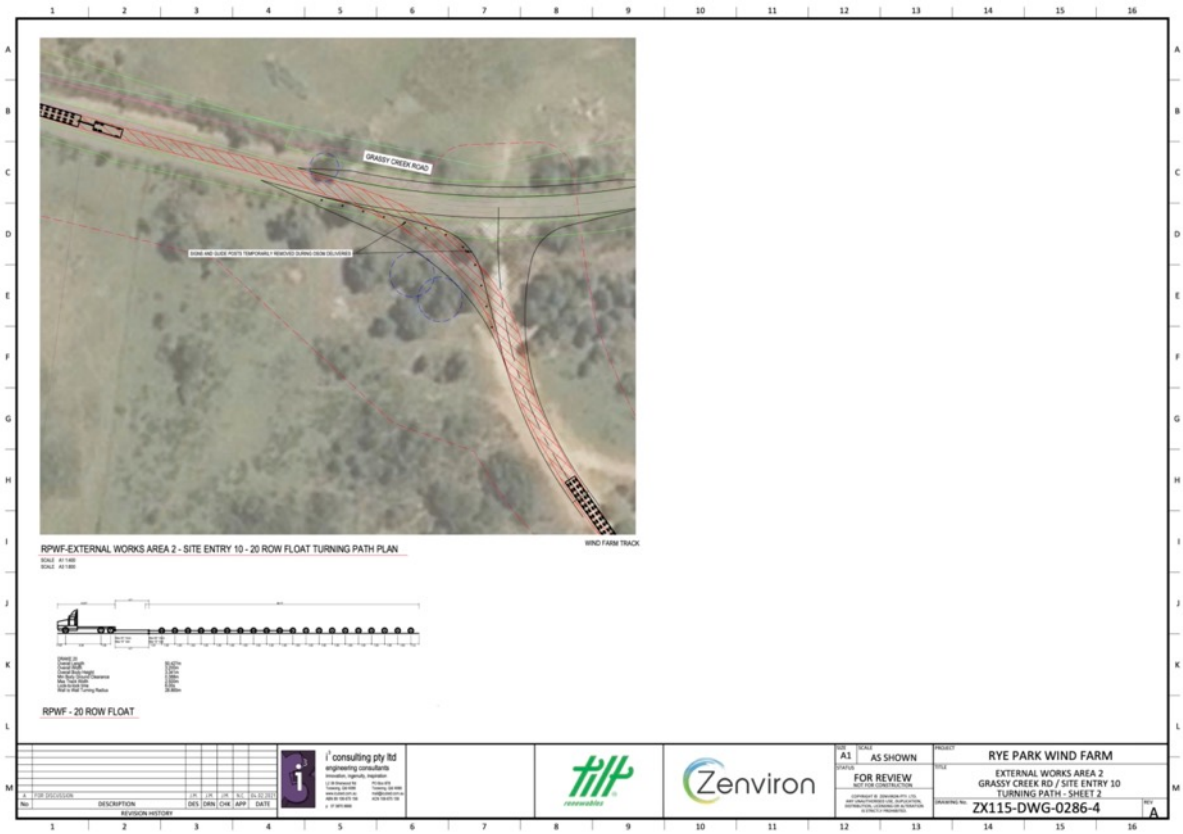


Image 3: Turning paths towers

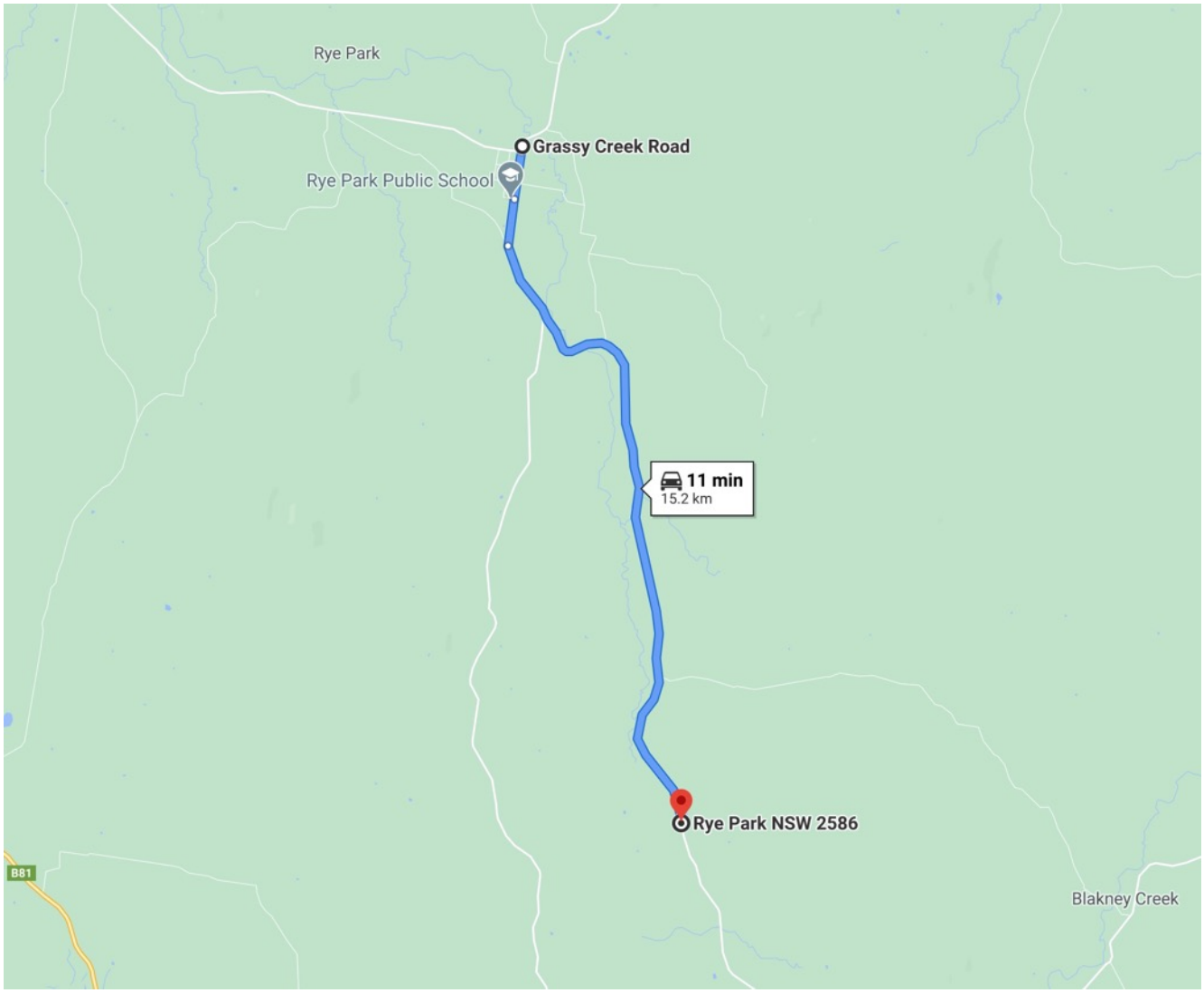


PROCEDURE: Loads to turn right off Grassy Creek Road into site entry 10.
COMMENTS: Designs are underway to construct a suitable site entry.
ROAD MODIFICATIONS: Client to provide a suitable swept path for the largest loads.
GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/N9fMwAjKKepYBkv77

20.0 Transport plan & pinch points: Stage 3 - Rye Park Township to Rye Park South.

STAGE 3 ROUTE: Rye Park township to Rye Park South, 15.2 kilometres:

This route took us via Grassy Creek Road, Yass Street, Gunning Street, Dalton Road.



GPS LINK: https://goo.gl/maps/zZBJTrKvr6meYkpY6

KEY	
MODIFICATIONS REQUIRED	
PINCH POINT	
EMERGENCY PARKING	

KM index	Location	Section of road	Critical Measurement	Procedure	Notes
Route: Rye Park Township to Rye Park Windfarm South					
0.0 to 15.2	Rye Park	Grassy Creek Road through to Site entrance #12 https://goo.gl/maps/oKj4perWMsfGmWNm6	4.5 Metres width clearance	Travel directly ahead	This section of road will need to be checked for swept path and vertical curve of the largest loads. Some sections of this road will require upgrades. Sections of this road have trees that may need to be trimmed/removed.
1.0	Rye Park	Yass Street onto Gunning Road https://goo.gl/maps/LLydmFC4TMxwjSzH7	5.5 Metres width clearance	Travel directly ahead	No problem with this section of road.
2.0	Rye Park	Gunning Road onto Dalton Road https://goo.gl/maps/zC4FNES8z1B1iJYk7	5.5 Metres width clearance	Travel directly ahead	No problems with this section of road.
15.2	Rye Park	Dalton Road into Site Entry 12 GPS link: https://goo.gl/maps/S8SafdMZ5XVm2aG46	30.0 metres clearance	Left turn	Site entrance to be made suitable for the swept path of the largest loads.

15.2 Km's: Dalton Rd into site entry # 12 at Rye Park

Image 1: Intersection plan

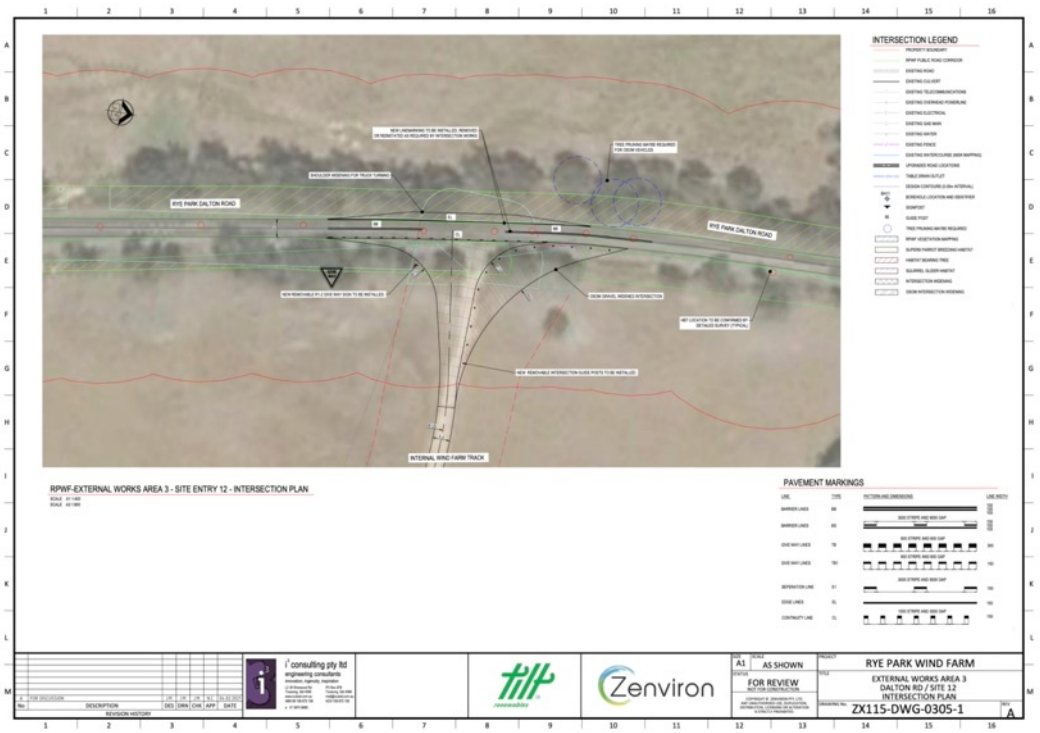


Image 2: Turning paths blades

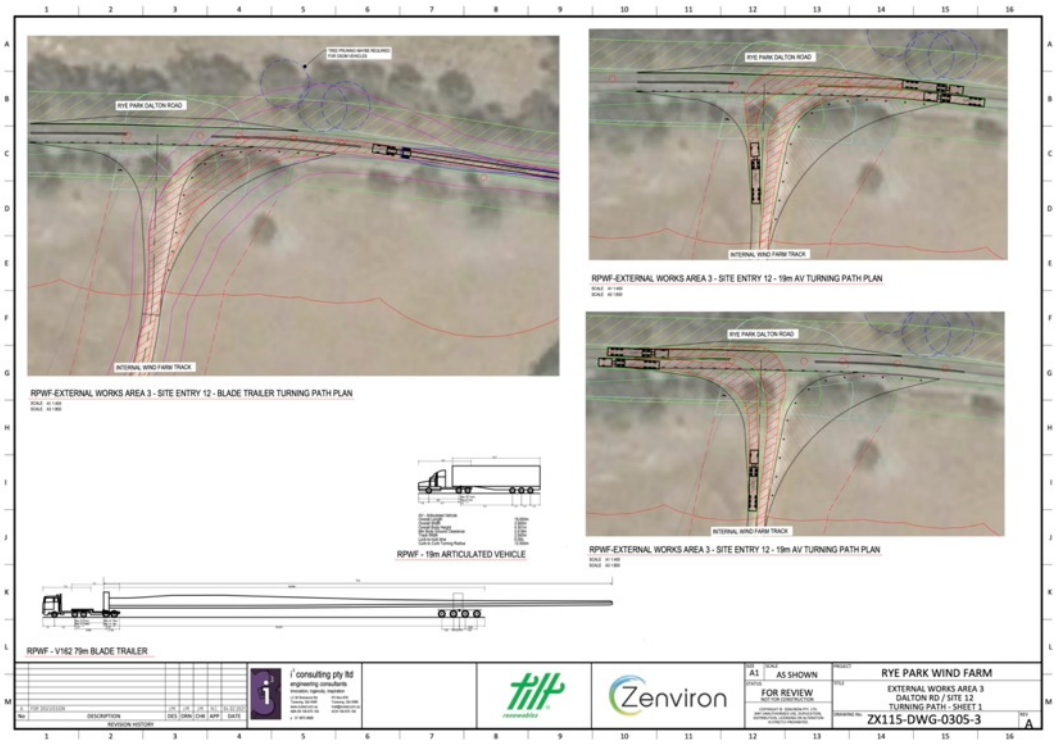
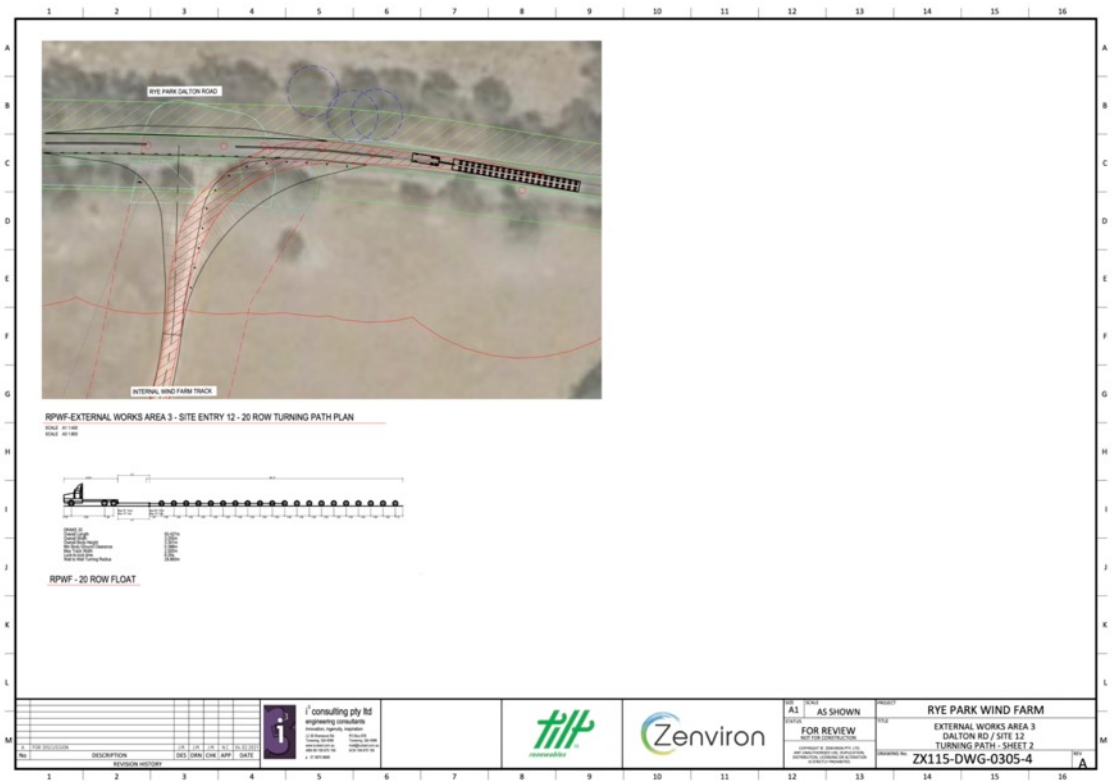


Image 3: Turning paths towers



PROCEDURE: Loads to turn left off Dalton Road into site entry 12.
COMMENTS: Designs are underway to construct a suitable site entry.
ROAD MODIFICATIONS: Client to provide a suitable swept path for the largest loads.
GPS LINK FOR SECTION OF ROAD: https://goo.gl/maps/S8SafdMZ5XVm2aG46

21.0 Conclusion (Stage 1,2 & 3)

After studying all options and undertaking a route survey, this route in its current condition will require a large number of upgrades before it could be deemed suitable for transporting the proposed components.

The following are the key points that need to be taken into consideration, if the project moves forward with this route.

BRIDGES:

- There are a number of bridges on route that will require bridge assessments. The route up to the turnoff of the Hume Highway is likely to be okay.

OVERHEAD STRUCTURES: (5.3 Maximum loaded height)

- There are a large number of overhead structures between Newcastle and Rye Park. The lowest of these structures is the pedestrian bridge over Pennant Hills Road at Normanhurst. There are a number of other structures noted as pinch points in the survey. Each of these pinch points will show the height clearance in each lane.

OVERHEAD UTILITIES:

- This route will need to be checked by an authorised scoping company. It is likely that a route of at least 5.3 metres is required for each route.

OVERHEAD TREES:

- The route up until Boorowa is clear of vegetation. All roads from this point through to site will need to be checked for a clear passage of at least 5.3 metres for overhead branches. Some trimming/removal is likely from this point onwards.

WIDTH:

- The route up until Rye Park is suitable for a width of up to 5.6 metres. From Rye Park through to each site entrance there are sections that will require widening.
- Site entrance #10 through to Site entrance #12 has a number of sections that will need some widening. Grassy Creek road is particularly tight in some sections.

FLOODWAYS:

- All floodways on the local roads need to be checked. These floodways should be checked for axle loadings and width as well as the vertical curve of the trailers.

PAVEMENT:

- The route up until Boorowa is of Highway standard. From this point on the pavement varies from 5.0 metres in width with a good surface in some sections to patchy thin asphalt with poor surface in others as well as some gravel roads. There is likely to be some wear during the deliveries on these lesser roads.

ROADWORKS:

- The project will need to start discussions with government authorities at least 18 months prior to turbine transport to understand if the project would conflict with any upcoming roadworks. Once a TMP has been approved for the transport of the turbines, then the exact movement dates need to be communicated with transport NSW to make all road stakeholders aware of the movements.

NEWCASTLE:

- Two intersections will need modifications to allow the blades a suitable swept path around these corners. This will include relocation of a traffic signal and several signs. Additionally, some hardstand is required on both of these corners.

SYDNEY:

- The turn from the M1 Motorway onto Pennant Hills Road requires no work although the trailer will need to cross a medium strip.
- The turn from Pennant Hills Road onto the M2 Motorway will not require any modifications if a 3-point turn is approved.

YASS:

- 1x sign needs to be relocated or made removable on the turnoff from the Hume Highway onto Lachlan Valley way.

BOOROWA:

- Several intersections will need to be upgraded to allow a suitable swept path. Two of these corners will travel through a landowner's boundaries.

RYE PARK:

- A detour is proposed through a private landowners' boundaries, this will allow access to both the north and south windfarm entrances for the swept path of the largest loads.
- Grassy Creek Road and Dalton road will require some tree pruning/Removal; however, the swept path seems to be suitable in its current form on both sections of road.

- Site entrances off Grassy Creek Road and Dalton Road will need to be made suitable for the swept path of the largest loads.

EMPTY RETURN:

- Return via loaded route, with a possible option of returning empty via Dalton Road, Rye Park Road and Cooks Hill Road.

22.0 References:

Australian Load Restraint Guide
Rex J Andrews P/L Drawings
Rex J Andrews route survey # 271REV00
CWP Renewables
Vestas
Google Earth/Maps
Nearmaps
NHVR (OSOM)
NHVAS Maintenance Management (NHVAS21193)
NHVAS Basic Fatigue Management (NHVAS21193)

Disclaimer: This route study is a guide only; government approvals would be required before these routes could be deemed suitable for transporting the components over the listed routes.

This study was undertaken using data supplied by Rex J Andrews P/L. Equipment and swept paths might vary if using transport methodology other than the data supplied by Rex J Andrews.

23.0 TMP Review:

Final Review	Name	Signature	Date
TMP Checked by:	Warrick Andrews		
	Charles Ewin		

Sign On: **I confirm that I have received a hard copy of this TMP, I have read and understood the contents; by signing this document I acknowledge that I am now familiar with the identified pinch points, the route and the conditions relating to time of travel. I understand that prior to travel a supervisor may ask me questions specific to this TMP, in the event that I can not demonstrate awareness of the conditions of the TMP I must delay my departure until I have reviewed its content.**

Name	Role	Signature	Date	Company