Client
Hexham Wind Parm Pty Ltd

Date
3 October 2025

Transport Impact Assessment Report

Hexham Wind Farm Project

Planning
Transport
Urban Design
Waste Management

ratio:

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Project
Hexham Wind Farm Project

Prepared for
Hexham Wind Parm Pty Ltd

Our reference
19790T

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Version	Date	Issue	Prepared by	Checked by
D01	6/08/2023	Work In Progress	C. Deng B. Thomson	A. Walley
F01	03/12/2024	Issue as Preliminary Final	B. Thomson	A. Walley
F02	16/12/2024	Issue as Final	B. Thomson	A. Walley
F03	29/05/2025	Issue as Final – TRG commentary	B. Thomson	A. Walley
F04	15/08/2025	Issue as Final – Amended Development Plan	B. Thomson	A. Walley
F05	10/09/2025	Issue as Final – Closure of TRG commentary and amended Swept Paths	B. Thomson	A. Walley
F06	03/10/2025	Issue as Final – Closure of TRG Commentary	B. Thomson	A. Walley

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1. Executive Summary

Ratio Consultants was engaged by Hexham Wind Farm Pty Ltd (the Proponent) to under to undertake a review of the traffic generation and access impacts associated with the development and operation of the proposed Hexham Wind Farm Project.

This report seeks to identify and assess the potential road transport impacts of the Project during the construction, operation, and decommissioning phases.

This report responds to the traffic and road elements of the September 2025 Hexham Windfarm EES Scoping Requirements.

Key aspects of the Project that frame this transport impact assessment are:

— Project traffic is most critical during the Project construction phase, with this the period of greatest activity;

— Wind Turbine Generator (WTG) components will be transported to the Project site from either the Port of Portland or Port of Geelong; and

— Construction materials will be sourced as local to the Project area as practical, with exploration into the opportunity to source most aggregate for road building on-site.

Changes to the Latest Report

— *Section 5.2 – Amended Windfarm Masterplan with revised Gate Access points (Figure 5.2)*

— *Section 5.3 – Reduction in road access points, with reduced access from Hexham-Ballangiech Road*

— *Section 5.4 - Consideration of traffic generated by external early works (ie local road upgrades) within the Project area added*

— *Section 7 – Details added of recent Stakeholder Consultation.*

— *Section 10 - Refinement of construction traffic generation assumptions (quantities, vehicle capacities etc) and Project traffic generation to reflect current best available information for wind farm project delivery within the Moyne Shire*

— *Added Section 10.4 – Cumulative Impacts*

- *Projects to be assessed subject to external project selection with Moyne Shire Council and the Department of Transport and Planning considering:*
  - *Proximity to the Hexham Wind Farm;*
  - *Project timing, and specifically likelihood of overlap with Hexham Wind Farm construction.*
- *Inclusions of references to subconsultant Impact Assessments*

— *Section 11 – Removal of Ross Lane and reduction of Hexham-Ballangeich Road impacts as a result of amended masterplan and access gates.*

Methodology

Across each Project phase, this report seeks to:

— Identify the key roads and road transport infrastructure relied on by the Project;

— Assess the traffic generation characteristics of the Project through each Project phase;

— Identify the effect and impact of Project traffic and operation on external roads;

— Identify avoidance measures, mitigating works / traffic management measures in response to the impact of Project traffic and Project activity;

— Identify any cumulative impacts of neighbouring projects on the key roads within the project area; and

— Identify and assess the residual impact of the Project following the implementation of the avoidance/mitigation response.

Existing conditions have been assessed through an initial desktop study, on-site assessment and review of relevant Department of Transport and Planning, and Council data sources.

The traffic effects of the Project have been determined by:

— An assessment of the additional Project traffic generated to external roads;

— Assessment of the Project on local roads and local access opportunity;

— Specific review of the transport of WTG components to the Project site; and

— Identification of other likely local traffic impacts during construction and decommissioning activity.

Existing Conditions

The Hexham Wind Farm Project area is located in the Moyne Shire Council local government area, approximately 43 kilometres to the north of Warrnambool and extends across both sides of Woolsthorpe-Hexham Road, between Warrnambool-Caramut Road and Hexham-Ballangeich Road.

Hamilton Highway, an arterial road, forms the northern border of the Project area. A second arterial road, Warrnambool Caramut Road is to the west of the Project area.

Local roads within the Project area include Connewarren Lane, and Hexham-Ballangeich Road. A series of other minor local rural roads extend through the Project area and typically provide access to the land within the Project area and surrounds.

Public transport routes do not extend through the Project area, but services do operate on roads that will be used by Project traffic. School buses operate on some roads around the periphery of the Project area.

Potential Impacts

The potential impacts on the operation of the road network relied on by the Project are identified as follows:

— That the standard and capacity of existing road infrastructure is appropriate to accommodate Project traffic (across all Project phases) and the potential consequence of Project generated traffic on road function and safety;

— Disruption to through traffic and regional public transport during construction phase due to Project generated traffic including OSOM transport; and

— Impacts on local access as a result of construction activity within the Project area.

Detailed descriptions of these potential impacts and associated impact pathways are outlined in Section 9.1.

Impact Mitigation

Possible avoidance and mitigation measures identified in response to these potential impacts are:

— Road upgrade and temporary infrastructure works within the Project area and along the OSOM / WTG component haulage route;

— Traffic Management Plans to manage Project traffic movements and mitigate specific short and long-term traffic impacts:

— Green Travel Plans to encourage sustainable travel and to minimise Project traffic generation;

— Road maintenance agreements to manage short-term impacts to local roads and key arterial road sections to maintain road conditions for all users during Project construction; and

— Stakeholder consultation and engagement to assist the development of appropriate traffic management measures and to communicate any road network changes required.

Impact Assessment

The assessment of potential Project traffic impacts has sought to:

— Undertake detailed analysis to qualify the likely impact generated by the Project, for both on-site and off-site materials sourcing scenarios; and

— Confirm the mitigation measures that should be employed to minimise this impact and off-set risk.

From the impact assessment, key findings are:

— Project traffic generated to external roads during construction will comprise staff vehicles, heavy vehicle traffic associated with external bulk materials haulage and OD/OSOM vehicles associated with Wind Turbine Generator (WTG) and other major component delivery. Additional traffic associated with internal Wind Farm traffic will also be generated to local sections of Woolsthorpe – Hexham Road within the Project area;

— At the time of peak construction activity, external Project traffic will add a maximum of between 870-1360 vehicle movements per day across the external road network, subject to the level of on-site materials sourcing.

— Highest increases in traffic volumes will be along Woolsthorpe – Hexham Road, with the Project generating in the order of 700-760 vehicle movements per day, subject to the level of on-site materials sourcing. Volume increases on other roads will be less.

— Against road construction standards within the Infrastructure Design Manual and Moyne Shire Council road hierarchy, Project traffic will require the upgrade of those sections of Hamiltons Lane, Keillors Road, Immigrants Lane, and Hexham-Ballangeich Road relied on by Project traffic.

— The above roads and other local roads within and around the Project area relied on by Project traffic would be maintained by the Project during the construction phase through appropriate traffic management plans and road maintenance agreements.

— The following intersections and gate locations will require right and/or left turn lane improvements works:

- Warrnambool-Caramut Road / Hamiltons Lane
- Warrnambool-Caramut Road / Keillors Road
- Warrnambool-Caramut Road / Woolsthorpe-Hexham Road
- Access points from Woolsthorpe-Hexham Road

- Access points from Hamilton Highway

— Subject to the resolution of specific traffic management requirements, the identified over dimensional vehicle route options from the Port of Portland/Geelong to the Project area for the transport for WTG and other imported major components has been assessed and are suitable for OD and OSOM transport vehicles; and

— Local traffic impacts within the Project area during all Project phases can be suitability and safely managed.

2. Introduction

2.1. Report Purpose

Ratio Consultants has been engaged by Hexham Wind Farm Pty Ltd (the Proponent) to undertake a review of the traffic and access impact associated with the development and operation of the proposed Hexham Wind Farm Project (the Project).

The Hexham Wind Farm Project (the Project) includes 106 Wind Turbine Generator (WTG) sites and associated infrastructure. WTG's are assumed to have a maximum height of 260 metres (ground to blade tip) and a maximum blade length of 93 metres.

Port of Portland is the preferred port of entry for all WTG and other major imported componentry. The Port of Geelong is identified as an alternate option for key component delivery. Other materials for Project construction will be sourced locally or from within the Project area, as far as is practicable.

This assessment includes a review of roads and, its environs and key road links relevant to the movement of materials have been inspected, plans of the wind farm and site access reviewed and relevant traffic data collected and analysed.

To further understand specific and local issues, Hexham Wind Farm will liaise with representatives of Moyne Shire Council, and the Department of Transport and Planning (DTP), as well as having regard to current DTP policy relevant to wind farm projects and requirements for over dimensional (OD) and over-size / over-mass (OSOM) transport and associated traffic management.

2.2. References

Documents reviewed and considered as part of this assessment include:

- Scoping Requirements for Hexham Wind Farm Environmental Effects Statement, September 2025
- Moyne Shire Council Municipal Road Management Plan, Version 5, 3 August 2021
- Moyne Shire Road Hierarchy Register, Amended 2021
- Planning Guidelines – Development of Wind Energy Facilities in Victoria, Department of Transport and Planning, September 2023
- Department of Transport (VicRoads) Heavy Vehicle Network Maps (www.vicroads.vic.gov.au/business-and-industry/heavy-vehicle-industry/heavy-vehicle-map-networks-in-victoria)
- Hexham Wind Farm Development Plan, July 2025.
- Other documents as referenced.

This Transport Impact Assessment addresses the scoping requirements for the project that are relevant to the Transport and Traffic impacts as part of an environment effects statement (EES), as required under the *Environment Effects Act 1978*. The report also supports the planning permit application for the project, as required under the *Planning and Environment Act 1987*.

2.3. Abbreviations

Table 2-1 Abbreviations

Abbreviation	Definition
AADT	Average Annual Daily Traffic
BESS	Battery Energy Storage System
DTP	Department of Transport and Planning
DPO	Development Plan Overlay
EES	Environment Effects Statement
HWF	Hexham Wind Farm
HML	Higher Mass Limits
HPFV	High Performance Freight Vehicle
Km	Kilometre
Km/h	Kilometres per hour
MSC	Moyne Shire Council
NHVL	National Heavy Vehicle Law
NHVR	National Heavy Vehicle Regulator
OSOM	Oversize Overmass
PTV	Public Transport Victoria
RRV	Regional Roads Victoria
SUZ	Special Use Zone
TMP	Traffic Management Plan
WTG	Wind Turbine Generator
VPD	Vehicles Per Day
VMPD	Vehicles Movements Per Day

3. EES Scoping Requirements

The September 2025 Scoping Requirements for the Hexham Wind Farm EES relevant to traffic and roads are as follows:

3.1. Traffic and Roads

Evaluation Objective

"To avoid and minimise adverse effects on roads and road users during construction, operation and decommissioning of the project."

Key Issues

R1. Managing traffic disruptions for residents, businesses and travellers during the construction of the project.
R2. Potential damage to local and regional road surfaces along transport routes and increased risk to road safety on transport routes.

Existing Environment

R3. Describe the existing road network surrounding the project area, including proposed construction transport route options, in terms of capacity, condition, accessibility, potential sensitive users and travel (including seasonal agricultural use).
R4. Describe the source and predicted volumes of construction materials for wind turbines and associated infrastructure.

Likely Effects

R5. Assess the potential effects of construction activities on existing traffic, preferred traffic routes and road conditions. This assessment should take account of amenity and accessibility impacts on adjoining residents and in nearby townships, environmental effects arising form from such works and physical impacts on the road infrastructure. Effects with and without an on-site quarry should be considered.
R6. Identify any additional road works / upgrades (including for internal access tracks) required to accommodate the project traffic during the construction stage (including having consideration of the type of vehicles) and any significant environmental effects arising from such works.
R7. Assess the potential effects to traffic and roads during operation and decommissioning of the project.

Design and Mitigation

R8. Identify the required road upgrades to accommodate construction traffic and additional road maintenance regime to address adverse impacts from project construction (including with reference to potentially limited construction windows due to projects area's climate).
R9. Describe and evaluate the proposed traffic management and safety principles to address changed traffic conditions during construction of the project, covering (where appropriate) road safety, temporary or permanent diversions, different traffic routes,

hours of use, vehicle operating speeds, types of vehicles and emergency services provisions.

R10. Describe consultation undertaken with MSC and DTP to coordinate scheduled roadworks and upgrades and additional roadworks and upgrades required for project traffic.

Performance

R11. Outline and evaluate proposed measures designed to manage and monitor residual effects on road users and describe contingency measures for responding to unexpected impacts.

In addressing the above Scoping Requirements, the evaluation objective for the development is to avoid and minimize adverse effects on roads and road users during construction, operation and decommissioning of the project.

The aspects from the scoping requirements relevant to the Traffic and Roads evaluation objectives are shown in Table 3-1, as well as located where these items have been addressed in this report.

Table 3-1: EES Scoping Requirements

Category	Requirement relevant to Traffic and Roads	Sections addressing this requirement
Key Issues	R1	9.3
	R2	10.1
Existing Environment	R3	4, 5 and 8
	R4	8.1, 8.2 and 10
Likely Effects	R5	10.2, 10.5
	R6	11.3
	R7	10.5, 11.7 & Appendix B
Design and Mitigation	R8	11.1 – 11.4
	R9	11.7
	R10	7
Performance	R11	9.3 and 11.7

4. Methodology

4.1. Methodology

This assessment has been prepared based on the following method.

Existing Conditions

— Identification of key Project traffic sources and/or destinations;

— Identification of the key road networks and viable access route options between the Project site and source locations;

— Data sourced from DTP and or MSC regarding arterial and local road networks standards and condition;

— Desktop research and assessment of route options road conditions, including traffic volumes, road characteristics and accident data;

— Operational and transport characteristics of known other projects have been sourced; and

— Physical inspection of the roads that will be relied upon around the project site, and key OD/OSOM transport routes to understand road standard, condition and current baseline performance (undertaken 14 March 2023).

Potential Impacts

Potential Project traffic impacts and impact pathways have been identified and considered as follows:

— The operational characteristics of the Project during construction, operation and decommissioning stages as advised by Hexham Wind Farm have been reviewed;

— The road transport elements of the Project during each Project stage have been identified and interrogated;

— Other road users and stakeholder requirements have been identified;

— Additional transport requirements of other major projects over the Project life have been considered; and

— Potential traffic impacts and impact pathways have been developed considering the above elements and acknowledging existing conditions.

Impact Assessment and Mitigation Measures

— Identification of the Project traffic generating elements and characteristics through each Project stage;

— Modelling of Project traffic during all stages;

— Allocation of Project traffic to identified traffic routes by stage; and

— Assessment of the traffic effects during each Project stage.

5. Hexham Project

5.1. Location

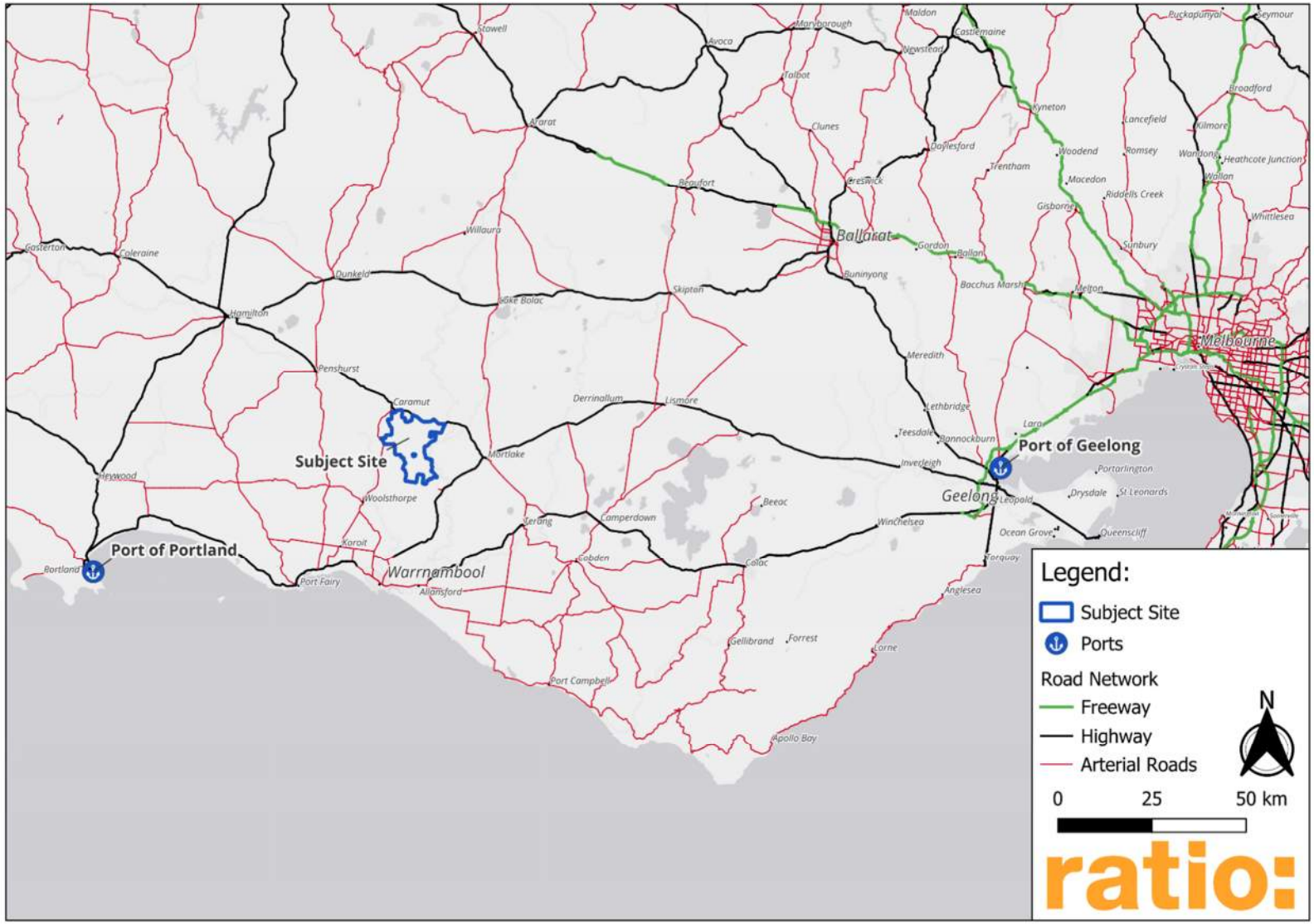
The Hexham Wind Farm site is located within the Moyne Shire Council approximately 15 kilometres west of Mortlake. The closest townships are Hexham, Caramut and Ellerslie, located approximately 3 kilometres north-east, 4 kilometres north-west and 3 kilometres south-west, respectively.

The road network that borders and runs through the project area includes Hamilton Highway to the north, Woolsthorpe-Hexham Road and Hexham-Ballangeich Road to the east, Warrnambool-Caramut Road to the west and Gordons Lane to the south.

The site extends across approximately 16,000 hectares of public and private land. The main land use within the project site is agricultural (predominately cattle and sheep grazing, along with some cropping). Much of the area has been cleared of native vegetation with remnant vegetation largely restricted to roadside reserves and along watercourses, with small, isolated areas on private load.

The location of the site in the context of the broader region is shown in Figure 5-1.

Figure 5-1: Site Location



5.2. Project Description

The project will consist of a wind energy facility comprising:

— Up to 106 WTG sites;

— Up to 5 permanent anemometry masts;

— An on-site terminal station and co-located battery energy storage facility (BESS);

— 86 km of underground and 42 km of overhead cabling; and

— 147.5 kilometres of access tracks and associated access gates (10 total) from the existing road network.

The Project will have an expected minimum operating life of 25 years following a period of up to 3 years of predevelopment (1 year) and construction activity (2 years). Pre-development would include detailed design and early works, where permitted.

WTG's will reach a maximum height to the tip of the rotor not exceeding 260 metres. The turbines will comprise of a maximum rotor diameter of up to 190 metres and minimum tip height of 40 metres. The blade has a length of up to 93 metres and the tower has a maximum tower base width of between 5 and 6 metres.

Each wind turbine would have an adjacent hardstand area of around 6,500 square metres, which equates to 70 hectares for all project wind turbines.

The site will include an operations and maintenance facility which will be located adjacent to the on-site terminal station and provide office, storage, and maintenance facilities with an area of 90 metres by 200 metres.

Electricity produced by the project would be fed through underground and overhead cables to a new on-site terminal station, where it would be exported to the national electricity network via the Moorabool to Heywood 500 kV transmission line.

Additional to the above, there will be other temporary infrastructure associated with the construction of the Wind Farm including:

— A main temporary construction compound, consisting of

- office facilities and amenities,
- central staff car parking,
- four additional temporary construction compounds.

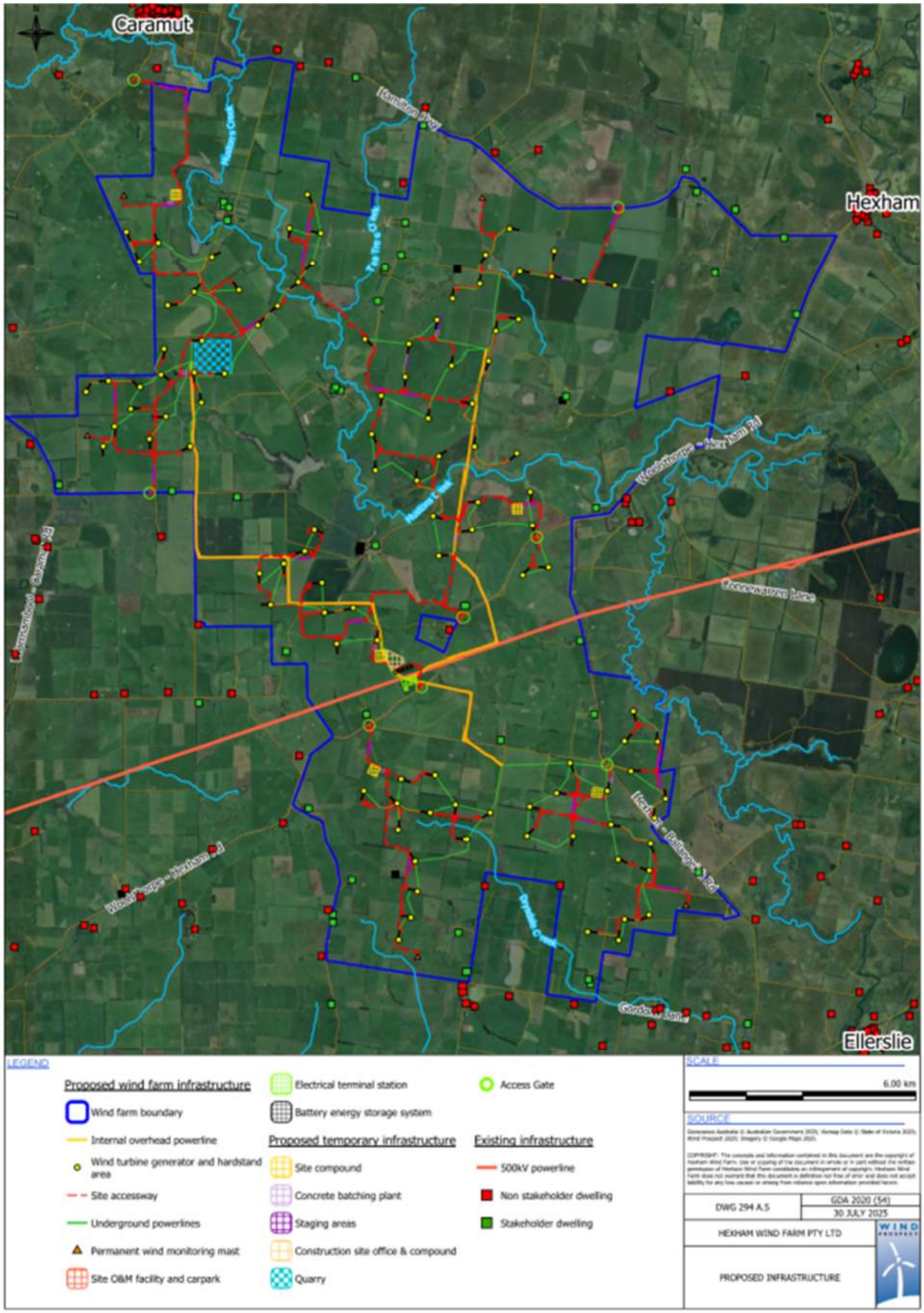
— Seven (7) concrete batch plants, and

— Staging areas for construction and deliveries.

The Project is investigating a temporary on-site quarry for the purposes of providing aggregate materials for access tracks and staging areas, and to minimise traffic movements on local roads during construction.

The proposed Project layout is shown in Figure 5-2.

Figure 5-2: Wind Farm Layout



5.3. Project Site Access

Project infrastructure will be accessed via a network of approximately 147.5 kilometres of internal access tracks of which 16.5 kilometres will be upgrades to existing access tracks.

Access tracks would be 9 metres wide, including shoulders and drainage, and have a trafficable width of 6 metres wide.. The access track network will also include a number of staging areas (26 locations) and passing lanes.

The Project will also rely on some sections of public roads within and around the Project area to move between the various areas of the Project. These roads include:

— Woolsthorpe-Hexham Road;

— Hexham-Ballangeich Road;

— Keillors Road;

— Hamilton Highway; and

— Warrnambool-Carramut Road.

Gates are proposed in 10 locations from the road network across one arterial and five local MSC roads, being:

— One location on Hamiltons Lane;

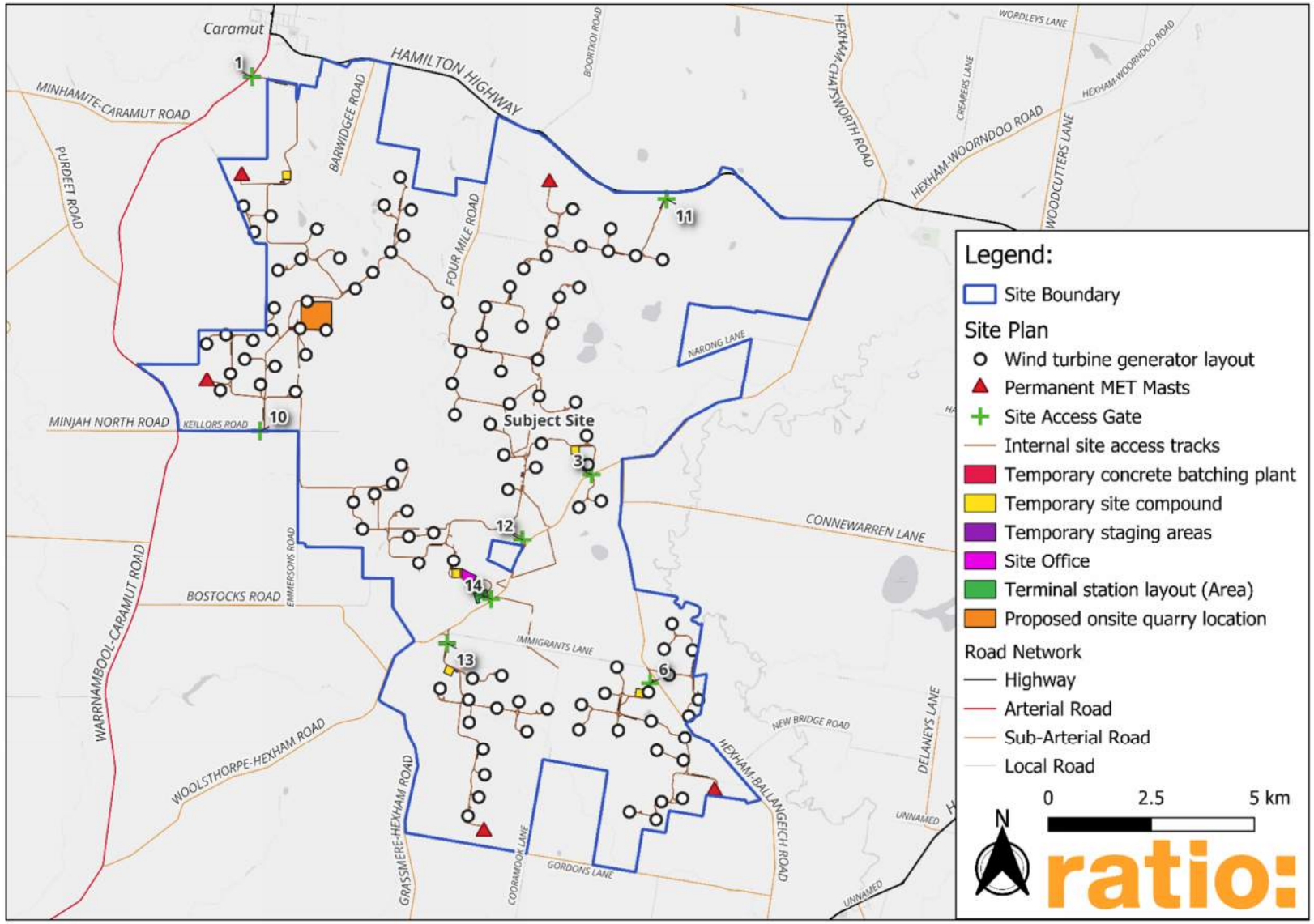
— Four locations from Woolsthorpe-Hexham Road;

— Two locations from Hexham-Ballangeich Road; and

— One location on each of Immigrants Lane, Keillors Road and Hamilton Highway.

Gates locations and internal access tracks in context with the existing road network are shown in Figure 5-3.

Figure 5-3 Wind Farm Area – Access and Road Network



5.4. Project Transport Elements

Construction

The Proponent has advised that construction and delivery of the Hexham Wind Farm will occur across a 24-month period (approximately) and will include the following key work phases and indicative tasks:

— Site Establishment – includes the establishment of the temporary concrete batching plant, delivery of key plant and construction vehicles and the construction of initial internal access tracks required for the delivery of materials and goods for further construction. Also includes the establishment of on-site quarrying and water sourcing (if pursued);

— Project area external works – includes required road and intersection upgrades, and vegetation management;

— Civil Construction Works – includes the construction of the balance of internal access tracks, WTG site hardstand areas, WTG footings, terminal station construction and internal power infrastructure;

— WTG Component Delivery – includes wind turbine blade delivery, tower section delivery and other associated WTG components; and

— WTG Erection – includes the use of mobile cranes and associated infrastructure.

Significant overlap between each work phase is expected, with site preparation, WTG component delivery and erection to be undertaken on a rolling basis.

The Project will include a centrally located construction compound that will incorporate a range of temporary infrastructure including offices/staff facilities and temporary concrete batching plant. Vehicle wash-down areas will also be placed at the construction compound to prevent mud being tracked onto sealed road surfaces and to allow for the removal of excess mud at the site.

As noted in Section 5.2, subject to further detailed investigation, on-site sourcing of coarse aggregate (for road/hardstand construction and potentially concrete production) is likely.

Additional temporary infrastructure to support this on-site sourcing would include a quarry / mobile crushing plant and water storage dam/s, with this activity undertaken as part of the site establishment works.

Decommissioning of the quarry would occur at the end of the construction stage, with plant removed from site.

PROJECT TRANSPORT ROUTES

Potential source locations for construction material for internal roads/hardstand and to WTG footings have been identified and preferred haulage routes from these locations established based on the following principles are to be applied:

— Routes rely on arterial roads approved for B-double and/or Higher Mass Limit vehicles wherever possible. Use of local roads is limited to quarry access roads from the arterial road network only;

— Routes seek to adopt the shortest travel distance/most direct via the arterial road network between the quarry site and the Project area; and

— Where an alternate route of approximately equivalent length is available, avoidance of townships and sensitive areas is considered (i.e. Koroit from Gillear Quarry).

Haulage routes for major plans/equipment and WTG components from Port of Portland and Port of Geelong rely on established OSOM routes that have previously been relied on for other wind farm projects.

Two routes have been considered from Port of Portland noting that some designated OSOM routes between Port of Portland and the Project area are not suitable for larger WTG components (blades).

A single route from Port of Geelong has been considered, with this route previously established for other wind farm projects in the Mortlake area.

A separate Biodiversity assessment has been undertaken by Nature Advisory for the haulage routes to the site. Please refer to this assessment for vegetation management.

CONSTRUCTION STAFF

The Proponent has advised that an average equivalent full time construction workforce of 200 persons is expected, with a peak construction workforce of up to 290 persons on-site during times of peak construction activity. External staff movements will be focused on the construction compounds, with staff relying on the internal road network to move throughout the Project area wherever practical.

During delivery of the project, construction staff will likely be accommodated in Warrnambool, with Koroit and Mortlake as a potential secondary accommodation location. All movements from accommodation locations will travel to/from the site using arterial roads other than on approach to and within the Project area.

Staff accommodated in Warrnambool and Koroit will likely approach from the west via Warrnambool-Caramut Road. Staff accommodated in Mortlake would approach from the east via Connewarren Lane.

LOCAL AND INTERNAL ACCESS

To avoid additional handling and heavy vehicle movements, externally sourced material for road and hardstand construction, as well as WTG components, would be delivered directly the work sites in each relevant area of the Wind Farm.

All other vehicle movements, including water haulage and the haulage of any material quarried on-site, will use the new internal Wind Farm access tracks and, where necessary sections of local roads within the Project area.

The use of external roads by internal construction traffic will be limited to the movement of construction materials not able to be stored at each work area and/or quarried aggregate (if permitted) between the central construction compound and Wind Farm areas not accessible by internal access roads.

During construction, various techniques will be used to mitigate the production of dust, including the spraying of water (potentially with wetting or binding agents added) onto road surfaces, including internal access tracks.

PROJECT AREA EXTERNAL WORKS

Within the Project Area, separate packages of works within the identified roads will need to be undertaken prior to the undertaking of major haulage during the construction on the wind farm.

The Proponent expects works associated with facilitating major haulage to the site will occur as follows:

— Road upgrades associated with the identified access points to the site;

— Widening of single-width local roads relied upon in and around the Project area;

— Maintenance of local roads in around the Project area relied on by Project traffic for the duration of construction activity;

— Temporary works on OSOM access routes to the site;

— Works to be undertaken prior to or alongside Phase 1 of the Construction Programme (i.e. before major haulage); and

— A TMP will be prepared to outline the requirements of works occurring within the external road network.

Early works packages will be subject to separate approvals with the Responsible Authority, in line with standard Works Within Road Reserve application processes.

Short-term impacts associated with external works delivery, will be captured within the TMP, typical of temporary traffic management applications for works within a road reserve.

Figure 5-4 Preferred Material Haulage Routes

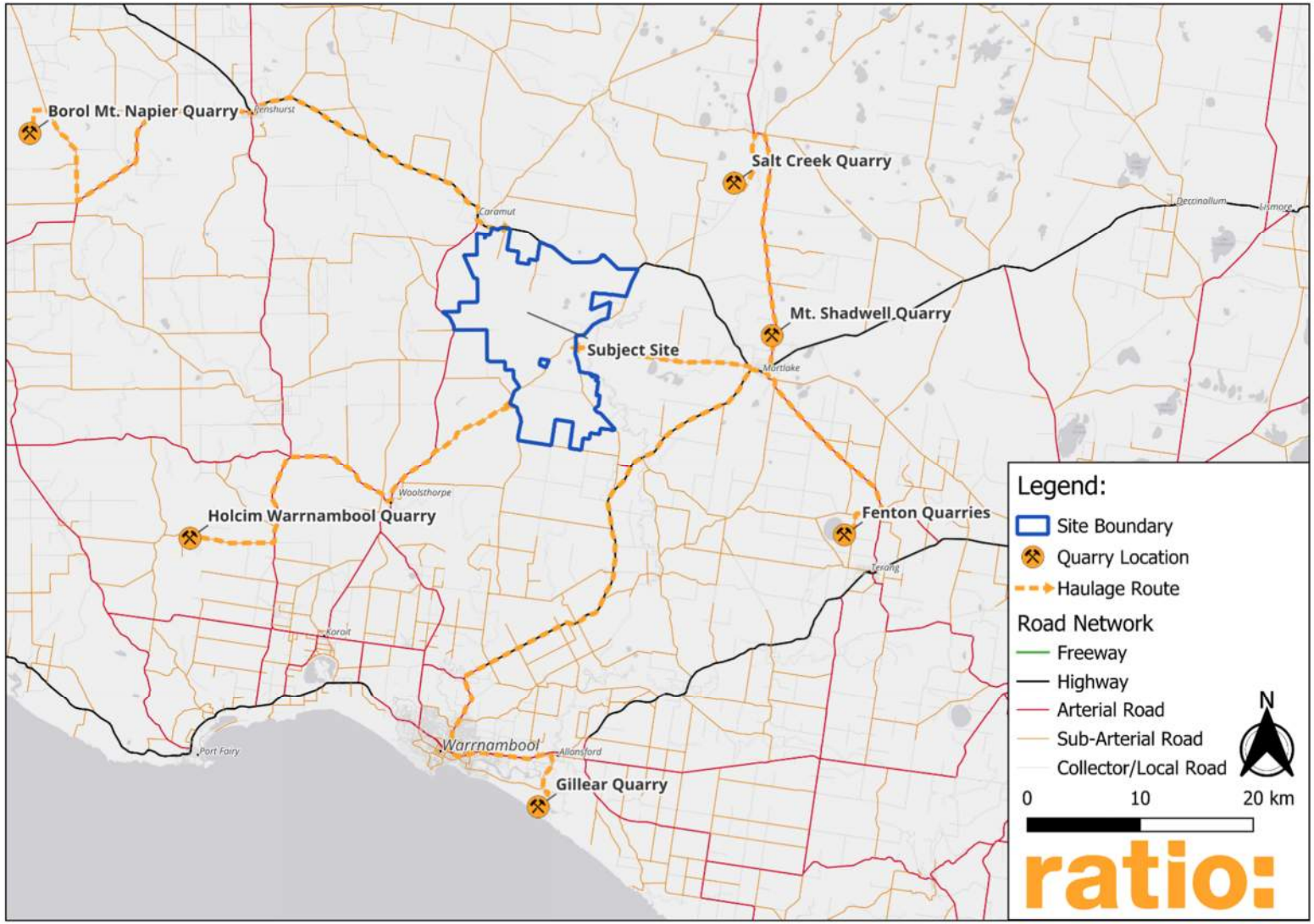
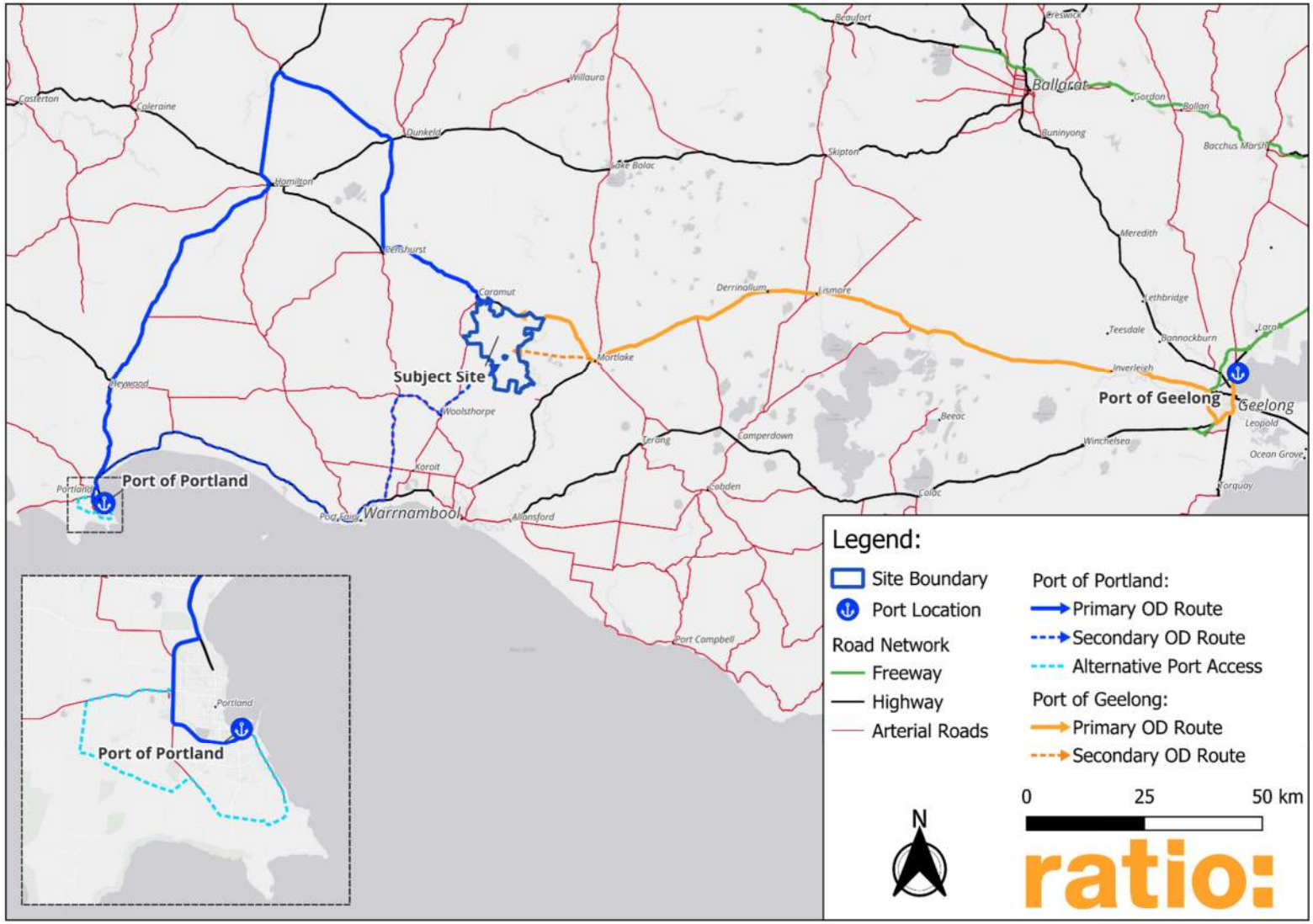


Figure 5-5: OD/OSOM Delivery Routes



Operation

The Proponent expects the following activity during operation:

— Daily routine wind turbine maintenance to be carried out by two to five people.

— Weekly/fortnightly regular minor maintenance to be carried out by a small team. This will involve a team of no more than fifteen people attending the site, with up to four vehicles.

— Occasional maintenance will occur when components of the development need to be replaced, such as replacing a gearbox. This is expected to only occur very occasionally and will be subject to approval processes with the relevant authorities.

— Visitors to the site such as office-based staff and courier deliveries etc.

Transport activity during the operations stage will be limited to light vehicle traffic and maintenance vehicles associated with this activity. External vehicle traffic will typically originate from/to the operations compound via Woolsthorpe-Hexham Road, with Project traffic movements within the Wind Farm area relying on the internal road network as much as practicable.

Decommissioning

The eventual decommissioning of the Wind Farm site will involve the removal of any structure above ground and to a depth of one metre. This excludes the portion of foundations deeper than 1 metre and access tracks kept in agreement with landowners.

Transport requirements during this stage will be:

— The transport of plant to the site required for the dismantling of WTG's and other Project structures;

— Heavy vehicle movements associated with the removal of materials and componentry from the site; and

— OSOM movements associated with the back haulage of WTG and substation components from the site

6. Legislation and Policy Context

6.1. Legislation and Standards / Guidelines

Relevant legislation, standards and guidelines that apply to the traffic and transport elements of the Project are summarised in Table 6.1.

Table 6-1: Application Legislation, Standards and Guidelines

Document	Description	Relevance
Legislation		
Victoria Planning Provisions – 52.32 Wind Energy Facilities	The purposes of VPP planning clause 52.32 is to facilitate the establishment and expansion of wind energy facilities, in appropriate locations, with minimal impact on the amenity of the area.	C52.32-4 states that as part of the design response that access road options need to be considered. C52.32-6 states that before deciding on an application, in addition to the decision guidelines of Clause 65, the responsible authority must consider several documents and guides, as appropriate including the *Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria, September 2023*
Policy and Planning Guidelines for Development of Wind Energy Facilities in Victoria (September 2023)	The guidelines set out: - A framework to provide a consistent and balanced approach to assist the assessment of wind energy projects; - A set of consistent operation performance standards to inform the assessment and operation of a wind energy facility project; - Guidance as to how planning permit applications requirements might be met; and - A framework for the regulation of wind turbine noise.	With Regards to traffic impacts the guide states: - In Section 4.2.2 Seek Expert Advice, the document states that an application should be accompanied by a planning assessment including an assessment of the traffic impacts (amongst other impacts) of the proposal prepared by suitably qualified persons. - Model planning permit conditions for wind energy facilities are referenced within the guidelines and are available on the "wind energy facility page" at planning.vic.gov.au. These conditions reference Traffic Management and the following are to be considered as an example to local authorities: i. Vehicle access point; ii. Pre-construction public road surveys; iii. Traffic Management Plan (TMP); and

		iv. Traffic upgrade works.
Road Management Act 2004 (Vic)	The Road Management Act provides a statutory framework for the management of road networks and the coordination of road reserves.	The Road Management Act requires approval for any construction project that may impact on or change access to a controlled access road (Site access points to external roads)
Road Safety Act 1986 - Road Safety (Traffic Management) Regulations 2019	The Traffic Management Regulations set out the responsibilities in implementing traffic control devices on roads, including for traffic management at worksites.	Relevant to works within public roads to deliver the site access intersections and/or to upgrade public roads for Project use. The transport impact assessment uses this framework as a reference to prescribe traffic management requirements.
Heavy Vehicle National Law Application Act 2013	Provides for the application of NHVL to regulate the use of heavy vehicles above 4.5 tonnes within the State of Victoria and establishes the NHVR as the statutory authority to administer NHVL.	Provides a nationwide compliance framework and processes for licensing, registration, road and access management, vehicle standards dimension and mass limits and driver fatigue management.
Moyne Shire Council Municipal Road Management Plan (Version 6, 22 July 2025)	Prepared under the Road Management Act 2004 to establish a framework for the classification, management and maintenance of local roads administer by Moyne Shire Council	Provides guidance on road standard (cross section and pavement elements) against road classifications and expectations of maintenance. The TIA relies on this framework to assess Project impacts on local roads within the Project area.
Standards / Guidelines		
Austroads Guide to Road Design Part 4	The AGRD is a primary national reference for the development of safe, economical and efficient road design.	AGRD Part 4 provides guidance on intersection design such as design considerations, design process, choice of design vehicle
Austroads Guide to Traffic Management Part 3	The AGTM is a comprehensive reference for the development of safe, economical and efficient road design.	ADGT Part 3 provides a framework for transport studies and analysis methodologies
Standards Australia: AS1742.3-2019 Manual of uniform traffic control devices – traffic control for works on roads	AS1742.3 specifies the traffic control measures and devices to be used to warn, instruct and guide road users in the safe negotiation of work sites on roads and within road reserves	A Traffic Management Plan will be required for works in Hamilton Highway be submitted to Regional Roads Victoria (RRV) for review.
Austroads Guide to Temporary Traffic Management	The AGTTM is a comprehensive reference for the development of Traffic Management Plans and Traffic Guidance Schemes to warn, instruct and guide road users in the safe negotiation of works sites on and within road reserves.	A Traffic Management Plan will be required for works in Local Roads be submitted to Moyne Shire Council for review.

7. Consultation

7.1. Stakeholder Engagement

Relevant to transport and project traffic impacts, the proponent has sought initial feedback from landowners.

Stakeholder consultation on the development of the TIA for the project has occurred over a period of time, the background consultation pre-2024 will be provided to give background to how certain project proposals have developed.

Formal engagement with MSC and DTP on transport and road impact matters will be undertaken as part of further development of the EES. A summary of their respective comments is provided below in the relevant subsections.

Department of Transport and Planning

Formal comments were provided by DTP on the 24 January 2025 and have been captured within the amended report and EES response table.

Formal responses from the project were provided on the 29 May 2025.

Moyne Shire Council

A preliminary meeting with Moyne Shire Council and the project team was held on the 14th November 2024, which discussed the progression of the preliminary transport assessment and access arrangements to date. This meeting also ensured that the latest council requirements for wind farm projects were communicated to the project team ahead of document submissions to Council and DTP.

Formal comments were provided by Moyne Shire Council on the 18 December 2024 and have been captured in the amended report and EES response table.

Formal responses from the project were provided on the 29 May 2025.

TRG Engagement

Preliminary comments were provided in September 2023 and responses of the project were reviewed as part of the TRG in January 2025.

Additional comments were provided recently on the 30 June 2025, 10 July 2025, 13 August 2025 and 5 September 2025, which have been captured in this report.

7.2. Future Consultation

Ongoing stakeholder consultation and community engagement will be undertaken by the Proponent during the Project construction and operation phases which will include;

- Consultation with DTP, MSC, TRG, and local landowners during the site access approvals and construction works;
- Engagement with MSC and other relevant stakeholders during the Project construction period;
- Consultation with MSC, other LGAs, DTP and local landholders during operations to manage local road management during operations; and

— Ongoing engagement with MSC, DTP and other relevant community stakeholders during the Project decommission phase to evaluate and monitor Project traffic and materials haulage operations etc.

8. Existing Conditions

8.1. Project Area Roads

With reference to Figure 5-3, public roads within and surrounding the Project area are described below.

Pictures of key arterial and local roads are included in Appendix A.

Arterial Roads

Hamilton Highway, (B140) extends along the northern boundary of the Project area.

Hamilton Highway provides a key east-west arterial route across south-western Victoria, linking Geelong to Hamilton via numerous townships including Inverleigh and Mortlake.

Through the Project area, Hamilton Highway consists of a 7.0 metre two-lane sealed carriageway, with a 60-metre road reserve. From visual inspection, the pavement condition of the Hamilton Highway past the Project area is generally very good with recent improvement works including pavement upgrades and barrier installations.

A posted speed limit of 100 km/hr applies, reducing to 70km/hr locally at the approach to Caramut and reducing to 80km/hr at the approach to Hexham townships respectively.

Hamilton Highway forms part of the DTP gazetted B-double road network and gazetted OSOM road network.

From traffic volume information sourced from DTP, Hamilton Highway currently carries in the order of 930 vehicles per day (AADT) with 180 heavy vehicles per day.

Warrnambool – Caramut Road (C174) extends along the western boundary of the Project area between Hamilton Highway at Caramut and Princes Highway in Warrnambool.

The road carriageway consists of a two-laned sealed road of 3.5-metre wide traffic lanes within a 60-metre wide road reserve. Road shoulders are typically unsealed or grassed. From a visual inspection, the pavement condition through the Project area is good.

The road has a posted speed limit of 100km/hr, reducing to 70km/hr locally at the approach to Caramut and through the Woolsthorpe township to the south-west of the Project area.

Warrnambool -Caramut Road forms part of the DTP gazetted B-double road network.

From traffic volume information sourced from DTP, Warrnambool-Caramut Road currently carries in the order of 350 vehicles per day (AADT) with 40 heavy vehicles per day.

Table 8-1 Project Area Arterial Road Summary

Road	Section	Classification		Current Traffic Volumes (AADT)
Hamilton Highway	Woolsthorpe-Hexham Road to Warrnambool-Caramut Road [16km]	Arterial B	Sealed – Two lane	930 vpd

Warrnambool-Caramut Road	Hamilton Highway to Woolsthorpe-Hexham Road [23km]	Arterial C	Sealed – Two lane	350 vpd

Local Roads

Local roads within the Project area a mix of higher order sealed rural link and collector road as well as a number of lower order sealed and unsealed rural access road that typically provide for property access and local connections.

Descriptions of key local roads are below, with Table 8-2 summarising road classifications and current traffic volumes, as surveyed across June 2023.

Woolsthorpe – Hexham Road extends between Warrnambool-Caramut Road in the east and Hamilton Highway in the northwest.

Between Hamilton Highway and Hexham-Ballangeich Road, Woolsthorpe-Hexham Road is classified as a rural access road and typically has a sealed carriageway of 4.0 metres with gravelled shoulders.

South of Hexham-Ballangeich Road, Woolsthorpe-Hexham Road is classified as a link road and typically has a wider 7.0 metre two-lane road carriageway with grassed verges. Some segments to the south-west of the Project area remain as a 4.0 metre carriageway only, with short sections within the Project area providing a narrow two-way carriageway of between 5.5-6.0 metres.

At the intersection with Hexham-Ballangeich Road, priority is provided between Woolsthorpe – Hexham Road south and Hexham-Ballangeich Road, reflecting that these roads, along with Connewarren Lane provide a sub-regional east-west link between Mortlake and Woolsthorpe, supplementing the role of Hamilton Highway.

From visual inspection the standard of the Woolsthorpe-Hexham Road road pavement south of Hexham-Ballangeich Road is very good with some sections recently reconstructed. North of the Hexham-Ballangeich Road the standard of the road pavement is fair to good.

Woolsthorpe-Hexham Road has a default speed limit of 100 km/hr.

Hexham – Ballangeich Road extends south from Woolsthorpe-Hexham Road to Hopkins Highway.

Between Woolsthorpe-Hexham Road and Connewarren Lane, Hexham-Ballangeich Road is a link road and has a sealed carriageway of 6.0 metres with gravelled shoulders. South of Connewarren Lane, the road is classified as a rural access road has an approximate 4.0-metre-sealed carriageway with unsealed verges on either side.

The construction standard of the road is generally good noting that part of the section north of Connewarren Lane was reconstructed alongside intersection improvement works at the Hexham-Ballangeich Road / Connewarren Lane intersection.

Hexham-Ballangeich Road has a default speed limit of 100 km/hr for a rural road.

Connewarren Lane is a link road between Hexham-Ballangeich Road in the west and Hamilton Highway in the east.

The road has a sealed carriageway of approximately 7.0-metres with 0.5-metre-wide gravel shoulders on either side. Away from the Project area Connewarren Lane provides access to the Mortlake Saleyards and Mortlake Power Station.

The road has a posted speed limit of 100 km/hr.

Keillors Road is a rural access road aligned in an east-west direction, extending between Warrnambool – Caramut Road in the west and terminates approximately 4km towards the east. Keillors Road has is an unsealed carriageway with grass verges.

Immigrants Lane is a rural access road aligned in an east-west direction, extending between Hexham-Ballangeich Road in the east and Woolsthorpe-Hexham Road in the west. Immigrants Lane has is an unsealed carriageway with grass verges.

Hamiltons Lane extends east from Warrnambool – Caramut Road and terminates approximately 600 metres from Warrnambool – Caramut Road.

Hamiltons Lane is an unmade road and is utilised for local property access only.

There is a significant level change between the Warrnambool – Caramut Road carriageway and Hamilton's Lane surface immediately between the intersection, with guardrail installed along the western side of the Warrnambool – Caramut Road to the north and south of the intersection.

8.2. Heavy Vehicle Networks

Gazetted OSOM and B-double approved vehicle routes are presented in Figure 8-1 and Figure 8-2 below, with preferred haulage routes for Project OSOM and construction material haulage overlaid.

All routes identified for materials haulage during Project construction are gazetted B-double routes with the exception of the southern part of Woolsthorpe-Hexham Road between Warrnambool-Caramut Road and Hexham-Ballangeich Road within the Project area.

Where gazetted, these routes are suitable for vehicles likely to be transporting materials to the Project area. From inspection the geometry of that section of Woolsthorpe-Hexham Road to be relied on by the Project during construction is appropriate for likely materials haulage.

Roads that form part of the identified materials haulage routes are summarised in Table 8-3.

Identified haulage routes for major plant/equipment and WTG components are all gazetted OSOM routes within the exception of MSC management roads within the Project area.

We note that these routes are only pre-approved for vehicles up to 5.0 m high, 5.0 m wide and 30 m in length such that most Project related vehicles will require additional approval through NHVR and the relevant road authority.

We also note that the secondary route from Port of Portland is not suitable for blade transport due to geometric restrictions and vegetation at the intersection of Woolsthorpe-Heywood Road and Warrnambool-Caramut Road within the Woolsthorpe township and use would be limited to shorter WTG components.

Table 8-2 Wind Farm Project Area Local Road Classification and Status

Road	Section	Classification		Indicative Maximum Volumes (IDM)	Current Traffic Volumes
Woolsthorpe-Hexham Road	Hamilton Highway to Hexham-Ballangeich Road [9km]	Access - Rural	Sealed – Single lane	51 – 150 vpd	90 vpd
	Hexham-Ballangeich Road to Warrnambool-Caramut Road [16.8km]	Collector - Link	Sealed – Two lane[1]	> 150 vpd	410 vpd
Hexham-Ballangeich Road	Woolsthorpe-Hexham Road to Connewarren Lane [1km]	Collector - Link	Sealed – Single lane	> 150 vpd	400 vpd
	Connewarren Lane to Immigrants Lane [4.5km]	Access - Rural	Sealed – Single lane	51 – 150 vpd	70 vpd
Connewarren Lane	East of Hexham-Ballangeich Road	Collector - Link	Sealed – Two lane	> 150 vpd	380 vpd
Immigrants Lane	West of Hexham-Ballangeich Road	Access - Rural	Unsealed – Single lane	0-50 vpd	N/A
Hamiltons Lane	East of Warrnambool-Caramut Road	Access - Rural	Unformed	N/A	N/A

[1] Predominantly. Some narrower and single lane sections exist

Figure 8-1 Gazetted B-Double Routes

Figure 8-2 Gazetted OSOM Routes

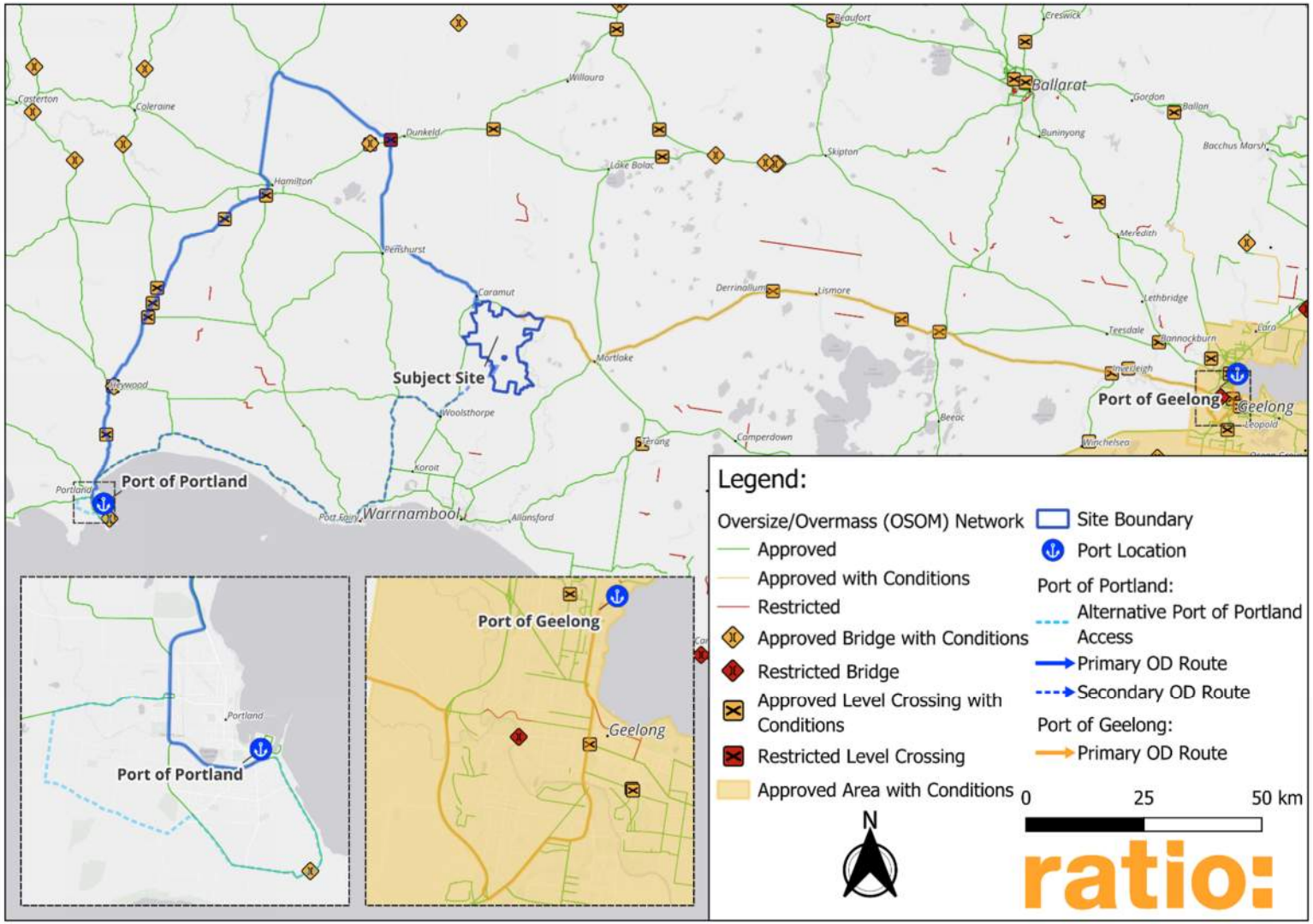


Table 8-3: Materials Haulage Route Road Segments

Material Source	Material Type	Road Authority	Road Name	Between	Length
Gillear Quarry	Lime and Sandstone	Warrnambool City Council	Buckleys Road	Gillear Quarry and Burkes Road	1.3km
			Burkes Road	Buckleys Road and Tooram Road	0.7km
			Tooram Road	Burkes Road and Ziegler Parade	3.2km
			Ziegler Parade	Tooram Road and Princes Highway	0.5km
		Department of Transport and Planning	Princes Highway	Warrnambool	8.8km
			Hopkins Highway	Warrnambool to Mortlake	48.2km
		Moyne Shire Council	Connewarren Lane	Mortlake and Site	18km
				Total Length:	**82.1km**
Mt Shadwell Quarry	Aggregate	Department of Transport and Planning	Mortlake – Ararat Road	Mt Shadwell Quarry and Hamilton Highway	2.5km
			Hamilton Highway	Mortlake	2.2km
		Moyne Shire Council	Connewarren Lane	Mortlake and Site	18km
				Total Length:	**22.3km**
Mt Napier Boral Quarry	Aggregate	Southern Grampians Shire Council	Mt Napier Road	Mt Napier Quarry and MacArthur – Penhurst Road	9.1km
		Department of Transport and Planning	MacArthur – Penhurst Road	Mt Napier Road and MacArthur	20.6km
			Hamilton Highway	Penhurst and Caramut	44.9km
			Warrnambool-Caramut Road	Caramut to Woolsthorpe-Hexham Rd	22.8km
		Moyne Shire Council	Woolsthorpe-Hexham Road	Warrnambool-Caramut Rd to Site	14.9km

				Total Length:	**95.3km**
Holcim Warrnambool (Tarrone Quarry)	Aggregate / Cement	Moyne Shire Council	Tarrone Lane	Tarrone Quarry and Penhurst – Warrnambool Road	7.5km
		Department of Transport and Planning	Penhurst – Warrnambool Road	Tarrone Lane and Woolsthorpe – Heywood Road	8.5km
			Woolsthorpe – Heywood Road	Penhurst – Warrnambool Road and Woolsthorpe	10.5km
			Warrnambool-Caramut Road	Woolsthorpe to Woolsthorpe-Hexham Rd	6.2km
		Moyne Shire Council	Woolsthorpe-Hexham Road	Warrnambool-Caramut Rd to Site	14.9km
				Total Length:	**47.6km**
Fenton Quarries	Aggregate	Mortlake Council	Racecourse Road	Quarry to Sisters-Noorat Road	2.8km
			Sisters-Noorat Road	Racecourse Road to Noorat	2.3km
		Department of Transport and Planning	Terang-Mortlake Road	Noorat to Mortlake	18.3km
			Hamilton Highway	Mortlake	1.5km
		Moyne Shire Council	Connewarren Lane	Mortlake and Site	18km
				Total Length:	**41.6km**
Salt Creek Quarry	Aggregate	Moyne Shire Council	Hexham-Woorndoo Road	Quarry to Hamilton Highway	5.0km
		Department of Transport and Planning	Mortlake – Ararat Road	Mt Shadwell Quarry and Hamilton Highway	21.8km
			Hamilton Highway	Mortlake	2.2km
		Moyne Shire Council	Connewarren Lane	Mortlake and Site	18km
				Total Length:	**47km**

8.3. Public Transport

Regional bus, coach and school bus routes are generally shown in Figure 8-3 and Figure 8-4. Routes are limited to rounds on the boundaries of the Project area only, with no routes currently extending through the Project area.

Bus and coach routes are predominantly limited to higher order arterial roads. The Casterton-Melbourne service runs along both the Hamilton Highway and Warrnambool-Caramut Road, servicing Hexham, Caramut and Woolsthorpe in the immediate vicinity of the Project site. These routes, relative to the site, are shown in Figure 8-3.

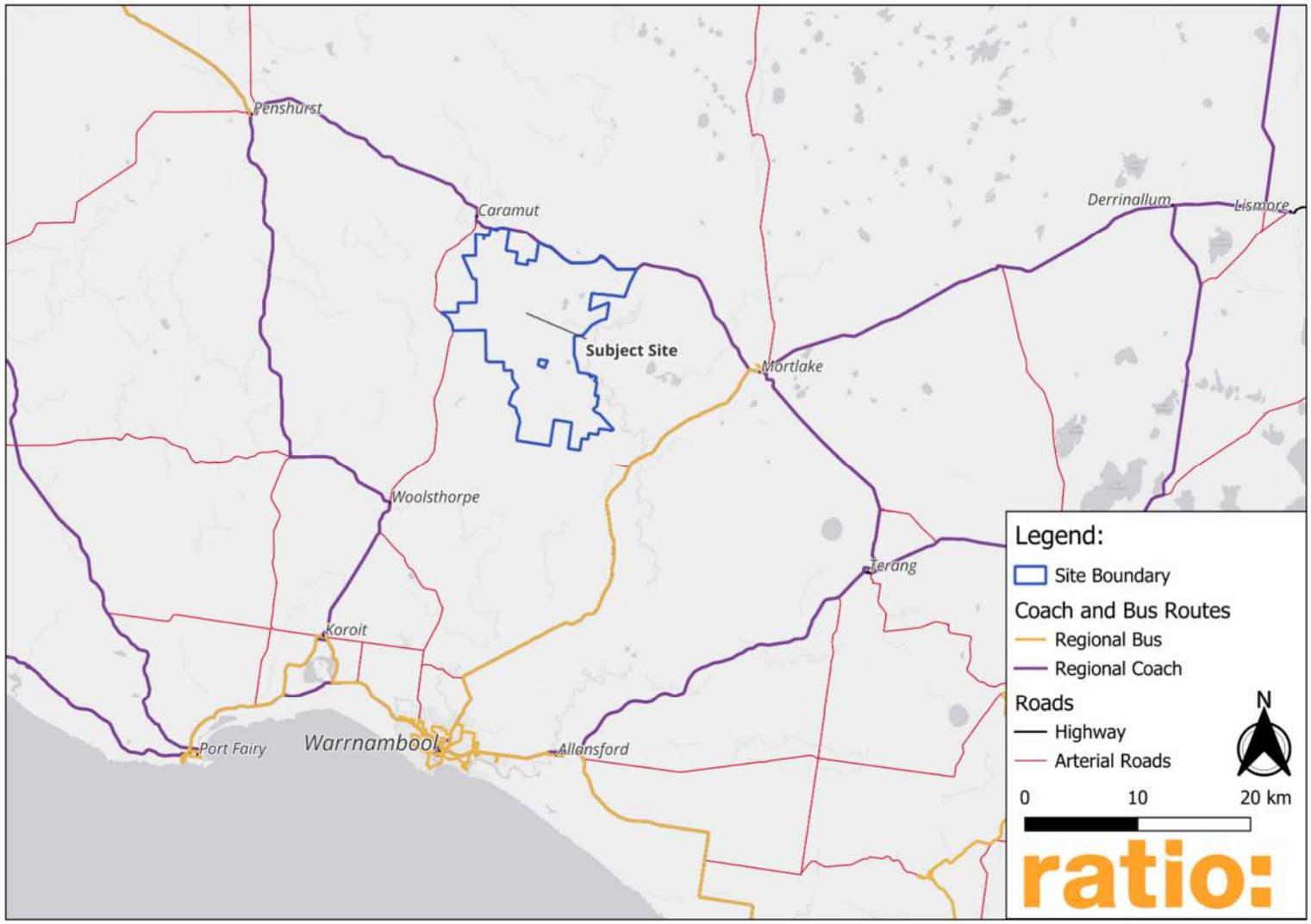
Current school bus routes extend along Woolsthorpe-Hexham Road, Hexham-Ballangeich Road and other immediate road connections within the Project area and extend along sections of all arterial route options that are identified for construction materials haulage and WTG / OSOM haulage. School Bus routes are subject to change and are generally shown in Figure 8-4, at the time of preparing this report.

8.4. Pedestrians and Cyclists

No bicycle infrastructure is provided along any of the identified roads within the Project area. Nor are bicycle lanes provided along the sections Hamilton Highway or Warrnambool-Caramut Road relied on by the Project outside of townships.

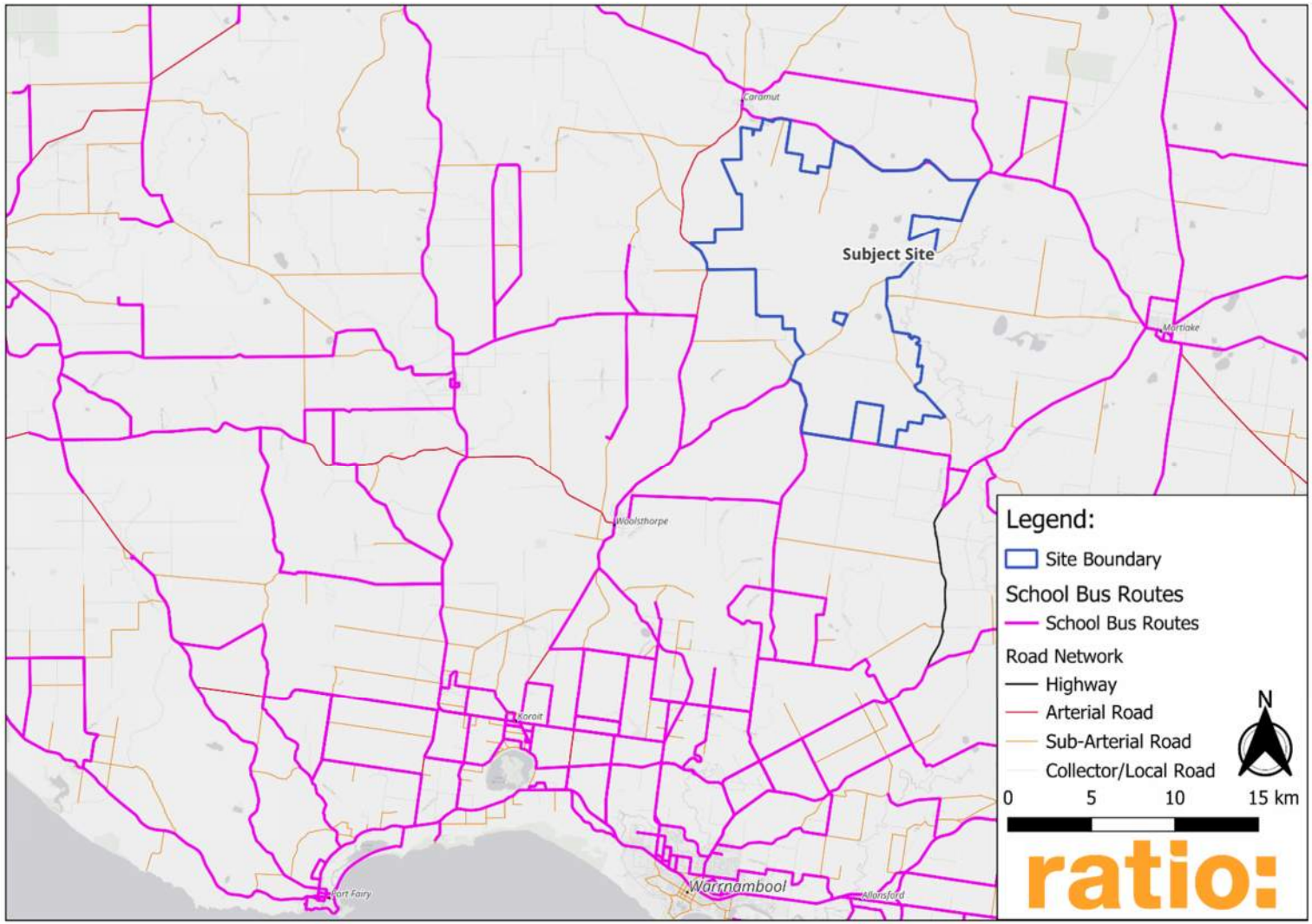
Similarly, no pedestrian infrastructure is provided along rural sections of roads relied on by the Project or along roads within the Project area.

Figure 8-3 Regional Coach and Bus Routes



Source: Transport Victoria Open Data

Figure 8-4 Current School Bus Routes



Source: DTP Supplied

9. Traffic Impact Identification

9.1. Potential Traffic Impacts

The effects of the Project on roads and road users, within and external to the Project area, have been considered across the following receptors:

— Local road users (within the Project area);

— Arterial road users (external to the Project area and Arterial Roads within the Project area); and

— Public road infrastructure relied on by Project traffic.

From initial assessment the following broad potential Project traffic impacts and impact pathways have been identified. These impacts will be refined with further stakeholder consultation:

— Additional traffic during Project construction may exceed the capacity of the road network and result in increased congestion and compromise road safety;

— External road infrastructure relied on by the Project may not be of suitable standard to cater for the expected vehicle types, compromising road function and safety;

— Works on public roads within the Project area required by the Project (such as creating access or upgrading road segments) may disrupt and/or delay through traffic;

— Slow moving WTG componentry and OSOM vehicle traffic may delay may disrupt and/or delay through traffic on the arterial road network;

— Temporary works on public roads external to the Project area to support WTG componentry and OSOM vehicle may disrupt and/or delay through traffic and may create a road safety hazard; and

— Construction works may disrupt access to land within the Project area through the closure and diversion of existing local roads.

The above potential impacts and pathways, and applicability to each Project stage, are presented in Table 9-1.

Table 9-1 Potential Traffic Impacts and Pathways

Impact Item	Project stage[2]	Potential Impact **(Description of activity/effect, pathway, receptor, potential impact)**
TI-01	C, O, D	Project operational traffic may exceed the capacity of the local road network and result in increased congestion and compromise road safety for other users.
TI-02	C, D	General Project traffic generated during construction and decommissioning may compromise road safety for other users through resultant traffic volumes exceeding road capacity, and through increased congestion and/or delay.

[2] C - Construction, O – Operation, D- Decommissioning

TI-03	C, D	Heavy vehicle traffic generated during construction and decommissioning traffic may compromise road safety for other users through resultant traffic volumes exceeding road capacity, increased congestion and/or delay, and through increased damage to road pavements (arterial and local roads).
TI-04	C, D	Works to establish Project area access to the external road network may impact traffic during construction which may result in increased congestion and compromise road safety for existing road users.
TI-05	C	OSOM / WTG component haulage may result in congestion and delay and may impact road safety for the duration of haulage activity
TI-06	C, D	Project construction and decommissioning activity may require local road closures and/or deviations that could impact public access to land within the Project area resulting in material ongoing inconvenience to road users.

9.2. Significance and Consequence of Impact

The effect of Project traffic has the potential to cause traffic impacts as identified in Table 9-1.

Consequence rating criteria have been derived to classify the effect level of each of these potential impacts and any residual impacts. These rating criteria are presented in Table 9-2.

Table 9-2 Traffic Effects Consequence Rating Criteria

Level	Qualitative Description
Negligible	Local, small-scale, easily reversible change in road user experience. Road users can easily adapt or cope with change. No detectable change in a local transport operational setting. Negligible adverse impact on traffic conditions or road safety.
Minor	Short-term recoverable change in road user experience. Road users have substantial capacity to adapt and cope with change. Short-term, reversible changes in a local transport operational setting. Detectable change in traffic conditions and minor increase in risk of collisions.
Moderate	Medium-term recoverable change in road user experience. Road users have some capacity to adapt and cope with change. Long-term but limited changes to transport operational setting that are able to be managed. Detectable change in traffic conditions and moderate increase in risk of collisions.
Major	Long-term recoverable change in in road user experience. Road users have limited capacity to adapt and cope with change. Long-term, significant changes resulting in risk to the function of the transport network beyond the Project Area. Traffic congestion and delays exceed acceptable levels and high risk of collisions.
Severe	Long-term, irreversible change in road user experience. Road users have limited capacity to adapt and cope with change. Irreversible, significant changes resulting in widespread risks to the function of the transport network at a regional scale.

	Traffic congestion and delays severely restrict accessibility and high increase in risk of collisions or an increase in number of fatalities.

The likelihood of each risk pathway has also been considered against the guide presented in Table 9-3.

Table 9-3 Likelihood Guide

Level	Qualitative Description
Rare	May occur in rare circumstances
Unlikely	Could occur but is not expected
Possible	Could occur
Likely	Will probably occur
Almost Certain	Will likely occur and/or is planned for

9.3. Mitigation Measures

Possible mitigation measures to off-set identified potential traffic impacts have been drawn from standard traffic engineering best practice and accepted traffic management tools.

Relevant to the potential traffic impacts identified in Table 9 1 the following measures have been considered:

AVOIDANCE

— Rely on arterial roads gazetted for relevant vehicles during construction wherever possible;

— Rely on internal Project roads for movements around the Project area, wherever possible;

— Identify preferred local roads/road segments to be used by Project traffic during construction and limit Project traffic to these roads.

MINIMISATION

— Temporary road infrastructure improvements to facilitate short-term Project transport effects (relevant to OSOM haulage routes and Project area external works);

— Permanent road infrastructure improvements where there is nexus with Project transport effects;

— Construction and Decommissioning Traffic Management Plans (TMP's) to manage Project traffic movements and avoid / mitigate specific short and long term traffic impacts;

— Limit OSOM haulage activity to outside times / periods of peak road network activity and adhere to NHVR and road authority guidelines;

— Green Travel Plans to encourage sustainable travel and to minimise Project traffic generation;

— Road maintenance / road management agreements to address road maintenance and reinstatement; and

STAKEHOLDER CONSULTATION AND ENGAGEMENT TO ASSIST THE DEVELOPMENT OF APPROPRIATE TRAFFIC MANAGEMENT MEASURES AND TO COMMUNICATION ANY ROAD NETWORK CHANGES REQUIRED BY THE PROJECT. REHABILITATION

— Road management agreements to rehabilitate local roads relied on by the Project at the end of the Project construction phase.

— Road management agreements to remove external redundant transport Project infrastructure at the end of the Project life.

Traffic Management Plans (TMP's) are a common tool to manage short term traffic impacts during construction and other activities that alter road conditions.

TMP's are typically prepared by the construction contractor(s) prior to the commencement of construction activities to the satisfaction of the Road Authority and identify, assess and appropriately minimise likely impacts on road operations and road safety for road users. TMP's typically address:

— Confirmation of traffic activity and haulage / access routes for construction traffic and heavy vehicles with consideration for safety;

— Consideration of the impact on road users including vehicle traffic, slower moving farm machinery, public transport, school buses, emergency services, cyclists and pedestrians;

— Consideration of stock movement within the Project Road area for minimising conflicts with construction traffic and day-to-day farm management activities;

— Identify Project traffic operation expectations and requirements (vehicle operating speeds, driver behaviour and conduct, compliance and enforcement etc);

— Identify accessibility and detour routes for local landholders, where appropriate;

— Consider impacts to travel times and accessibility for emergency services and public transport; and

— Identify monitoring and auditing to be undertaken during construction to assess impact of the TMPs and advise of remedial action to be undertaken, if warranted.

— Identify haulage routes and OSOM routes to be monitored when in use by the project, to report to DTP (through the TMP).

— Include an engagement process to ensure that external stakeholders are aware of the any proposed changes to Project traffic conditions and that the risks associated with such changes are identified and mitigated.

— Include a mechanism to capture and respond to community and external stakeholder feedback, with stakeholders to include;

- Department of Transport and Planning
- Moyne Shire Council
- Emergency service providers
- Public transport and school bus operators
- Local stakeholders and businesses
- Require annual review and require timely updates in response to:
- Internal changes to Project traffic operation; and
- External changes that impact the operation/performance of roads relied on by the Project (such as road network infrastructure upgrades, transport regulation changes, local policy changes etc).

— Provide an implementation and monitoring framework, including incident reporting and response.

Construction TMP's are typically prepared by the construction contractor(s) prior to the commencement of construction activities to the satisfaction of the Road Authority and identify, assess and appropriately minimise likely impacts on road operations and road safety for road

users. These will be utilised where construction activities for infrastructure occur outside the private boundaries of the Project site.

Specific items identified to be addressed within this TMP's to be prepared for the Project are (noting that this is not an exhaustive list):

— The configuration and treatment of site access points from Hamilton Highway or local roads that require intersection assessments for Project site access, such as Hamiltons Lane (in consultation with MSC);

— Confirmation of the arterial road OSOM route to be used and expected associated traffic volumes (as Average Annual Daily Traffic [AADT]); and

— Confirmation of arterial heavy vehicle haulage routes to be used and expected associated traffic volumes (as AADT).

— Review and confirmation of existing local road conditions and use (surface condition, traffic management, school bus routes etc.) prior to the commencement of works;

— Expected traffic volumes to be generated on local roads relied on during construction, for each relevant works stage;

— For each relevant works stage, details of:

- Any signage/line marking requirements used to manage traffic movements and inform external road users;
- Expected haulage hours, including identification of non-activity periods during school bus times; and
- The recognition and management of stock crossing points on haulage routes.

Green Travel Plans are an on-going management tool that seek to promote sustainable transport initiatives with the intent to minimise private vehicle use. In the context of the Project, a GTP would focus on staff activity with the intent to encourage carpooling and/or rely on Project provided transit services. The GTP would be prepared by Hexham Windfarm Pty Ltd in consultation with MSC and would include:

— Sustainable transport initiatives and associated incentives;

— Travel mode targets and timeframes; and

— Mechanisms to monitor, review and amend the GTP, where required.

Road maintenance and management agreements to outline Hexham Windfarm Pty Ltd obligations with regard to local roads within the Project area and/or relied on by Project traffic would be developed with MSC.

In addition to local roads, Woolsthorpe-Heywood Road has been identified as an arterial road that would undertake a road maintenance and management agreement with DTP for OSOM haulage, if the route is relied upon.

Such agreements would typically outline:

— Existing road conditions prior to the commencement of works;

— Maintenance responsibility, triggers and standard for roads within the Project area and/or relined on by Project traffic;

— Regular inspection and independent audit of road conditions;

— An appropriate on-site contact for the reporting of road maintenance issues identified outside of regular inspections;

— Timeframes and procedures for rectification of identified issues; and

— Dispute resolution processes.

As resolved through stakeholder engagement with DTP and MSC, these agreements would be:

— Limited to construction and decommissioning Project phases only and linked to TMP's prepared for works during these phases (DTP and MSC);

— Apply to all local roads within the Project area and relied on by Project traffic during construction and decommissioning (MSC); and

— Any local roads external to the Project area identified as a Project access route (MSC).

Project mitigation measures discussed above are summarised in Table 9-4.

Table 9-4: Identified Mitigation Measures

Mitigation Measure	Item	Summary
Avoid	MM01	Materials haulage routes to rely on higher order roads and/or routes gazetted as appropriate to cater for the types of traffic generated by the Project. Lower order roads were avoided.
	MM02	A reduction in access points has been achieved through visual assessment of access gates on site, avoiding the need to redesign access tracks and internal road networks during the delivery stage of the project.
	MM03	Deliver a connected internal Project area track network to allow Project traffic to rely on internal tracks in preference to public roads
Minimise	MM04	Construction Traffic Management Plans will be established to manage construction and operation traffic and mitigate impacts associated with all phases of the Project construction and decommissioning works
	MM05	Green Travel Plan will be established to encourage sustainable travel and to minimize Project traffic generation throughout the construction, operation, and decommissioning
	MM06	Infrastructure improvements works at Project area access locations
	MM07	Temporary infrastructure works on the OSOM route
	MM08	Condition monitoring for all roads relied on by Project traffic during construction. Road maintenance and management agreements will be established with the MSC for local roads that are relied on by Project during construction
	MM09	A community engagement strategy will be established to identify and consult affected and interested stakeholders.
Rehabilitate	MM10	Road management agreements to rehabilitate local roads relied on by the Project at the end of the Project construction phase
	MM11	Road management agreements to remove external redundant transport Project infrastructure

10. Project Traffic Generation

10.1. Wind Farm Construction

Traffic generated by the Wind Farm during construction will consist of:

— General traffic generated by staff travelling to/from the site (i.e. utes, vans and private cars);

— OD vehicles used for the delivery of large WTG components; and

— Other heavy vehicles (HV) which are used for the delivery of the smaller WTG components and importing construction materials such as aggregate and cement for the concrete.

Construction Timeframes

With the exception of site establishment works, work phases will overlap and will be undertaken in tandem, with WTG component delivery and WTG erection to commence reasonably soon after the completion of the initial site footing and access works. Based on advice from Hexham Wind Farm, the following indicative timeframes for each work phase have been adopted. assumed.

— Site Establishment Weeks 1 – 6

— Civil Construction Works Weeks 7 – 70

— WTG Component Build Weeks 21 - 99

— Site Disbandment Weeks 100 - 104

Construction Materials Assumptions

INTERNAL ROAD AND HARDSTAND

The proponent is investigating the ability to source aggregate from an on-site quarry. However, the on-site quarry is subject to a separate approvals process.

Therefore, for the purposes of this assessment, the traffic impact has been assessed to include two options for traffic generation:

— Scenario 1: 100% of all aggregate for the construction of internal tracks and hardstand areas sourced within the on-site quarry.

— Scenario 2: All construction material will be sourced off site.

Subject to resolving the establishment on an on-site quarry, unsealed internal access roads, hardstand areas and the upgrade/upkeep of local external roads used for Project construction traffic will be constructed from material sourced on-site.

Prior to the establishment of the on-site quarry, or in the event that on-site materials sourcing is not possible, material for road and hardstand construction will be sourced externally from one or more of the quarries identified in Figure 5-4.

Access roads and hardstand area works will comprise of:

— Approximately 147.5 kilometres of internal access roads with typical pavement widths of 6.0 metres, and depth of 0.6 metres;

— Upgrades to approximately 16.5 kilometres of existing tracks/roads within the Project area to an equivalent standard as new internal access roads;

— 106 WTG site hardstands of 80 metres by 80 metres and with a pavement depth of 0.5 metres;

— 26 staging hardstand area of up to 300 metres by 15 metres;

— 4 temporary construction compounds of 200 metres by 200 metres; and

— 7 temporary construction compound hardstand areas of 100 metre by 50 metre with a pavement depth of 0.5 metres.

Where sourced from the on-site quarry (if provided) access road and hardstand material will be transported using internal access tracks in preference to external roads. Woolsthorpe – Hexham Road will be the primary road to be used to transfer material between the various Project areas as required.

Where material is sourced externally, the material would be delivered directly to work sites in each relevant area of the Wind Farm.

WTG FOOTINGS

Concrete for WTG footings will be produced internally within the on-site concrete batching plant(s) from externally sourced aggregate, cement, and water.

Each WTG footing will require approximately 650 cubic metres of concrete plus 50 tonnes of reinforcing steel. It is assumed that cement required for concrete will be sourced from nearby townships, most likely Portland and/or Warrnambool.

Concrete aggregate will likely be sourced from one or more of the external quarries identified.

WTG COMPONENTS

Each of the 106 WTG's will comprise the following components:

— Three blades (up to 93 metres);

— A hub and nacelle;

— An internal or external transformer; and

— WTG steel tower sections.

Blade and hub/nacelle WTG components will be delivered by OD/OSOM vehicles. The steel sections will be delivered in two forms for the five portions of the WTG tower. The bottom two sections will be delivered in multiple segments, with up to four steel segments per tower subject to the final WTG model specification. The remaining three sections of tower will be delivered in single full-diameter segments to the site. Each steel tower section would be approximately 30 metres in length.

VEHICLE CAPACITY

The following assumptions have been made for the capacity of the Heavy Vehicle (HV) vehicles that will deliver the majority of bulk materials for construction:

— Water Tanker: 27.0 kL per HV

— Aggregate (Rock/Sand/Cement): 13.0 cubic metres per HV

— Reinforcement: 23 tonnes per HV

OTHER CONSIDERATIONS

Other materials delivery required for the construction of the Wind Farm will include:

— Electrical cabling and other materials/equipment for the internal distribution network:

— The substation transformer;

— Construction equipment and plant;

— Site offices/sheds and amenities;

— Waste disposal;

— Meteorological masts; and

— Plant fuel and other miscellaneous items.

Construction Traffic Volumes

The establishment of an on-site quarry would cater all internal access track and hardstand construction material. If an on-site quarry is not established, all materials for access tracks and hardstand areas will be imported.

The TIA assessment assumes multiple sources for external material sourcing and includes assessment scenarios for all materials being sourced externally and for hardstand/access track construction material being sourced on-site.

Assessment scenarios assume no more than 60 per cent of external construction material would be from east of the Project area (including Mt Shadwell).

Through consultation with Moyne, we have revised traffic modelling and material quantities assumptions based on advice and data from the Hawkesdale Wind Farm project (now incorporated within project traffic volumes presented in Tables 10.1 and 10.2)

On this basis, and considering estimated Project construction timeframes, expected external material and component sourcing, and typical vehicle types to be used across the Project, estimated external daily vehicle movements across the various stages of the Project construction are summarised in Table 10-1.

Adopted staff movements conservatively assume that all staff will access the Wind Farm site by private vehicle with an average occupancy of 1.8 persons per vehicle.

Staff movements to and from the Wind Farm site would be substantially reduced should communal transport be provided.

Table 10-1 External Daily Vehicle Movements – HWF (On-site Materials Sourcing)

Phase	Staff		OD Vehicles		Heavy Vehicles		Total	
	Ave. Vehicles / Day	Ave. Vehicle Movements / Day	Ave. Vehicles / Day	Ave. Vehicle Movements / Day	Ave. Vehicles / Day	Ave. Vehicle Movements / Day	Ave. Vehicles /Day	Ave. Vehicle Movements / Day
Weeks 1-6	62	124	1	2	200	400	**263**	**526**
Weeks 7-21	102	204	1	2	203	406	**306**	**612**
Weeks 21-70	284	568	8	16	243	485	**534**	**1069**
Weeks 71-99	182	364	7	14	39	79	**228**	**457**
Weeks 100-104	102	204	-	-	14	28	**116**	**232**

Should on-site materials sourcing not be possible, estimated external daily traffic volumes are presented in Table 10-2, with the significant difference being an increase in heavy vehicles per day during the peak construction period.

Table 10-2 External Daily Vehicle Movements – HWF (No On-site Materials Sourcing)

Phase	Staff		OD Vehicles		Heavy Vehicles		Total	
	Ave. Vehicles / Day	Ave. Vehicle Movements / Day	Ave. Vehicles / Day	Ave. Vehicle Movements / Day	Ave. Vehicles / Day	Ave. Vehicle Movements / Day	Ave. Vehicles /Day	Ave. Vehicle Movements / Day
Weeks 1-6	62	124	1	2	200	400	**263**	**526**
Weeks 7-21	102	204	1	2	536	1072	**639**	**1,278**
Weeks 21-70	284	568	8	16	575	1151	**867**	**1,735**
Weeks 71-99	182	364	7	14	39	79	**228**	**457**
Weeks 100-104	102	204	-	-	19	38	**116**	**232**

From Table 10-1 and Table 10-2, sourcing of access track and hardstand construction material on-site will have a substantive impact on Project generated traffic to the external road network, with 666 fewer movements per day expected during the peak construction period of weeks 7-70.

On-site sourcing of material on-site would also noticeably impact the mix of Project traffic generated to external roads, with staff related traffic the greatest component of vehicle

movements where materials are sourced on-site and heavy vehicle traffic the greatest proportion of vehicle movements where materials are sourced off-site.

Construction Traffic Distribution

Project traffic distribution to the external road network will reflect:

— The location of the Project site gates to external roads;

— The number of WTG sites nominally accessed via each gate, noting that there is interconnection between gates through the internal track network in locations;

— The location of material sources relative to the Project area and the quantity of material sourced from any one location;

— The location and distribution of staff accommodation;

— Local roads within and around the Project area to be used for the movement of externally sourced construction materials from the arterial road network; and

— Local roads within and around the Project area to be used by Project traffic moving between different areas of the Project.

For the purposes of assigning traffic to the external road network, the Project area has been divided in five (5) access zones as shown in Figure 10-1 with the following principles / assumptions applied:

— The quantity of external materials and WTG components delivered to each zone broadly reflects the number of WTG sites within each zone;

— No more than 60 per cent of construction materials will be sourced from areas east of the Project area and will approach the site via Hamilton Highway and Connewarren Lane;

— Conversely, 40 per cent of construction materials will be sourced from areas west of the Project area and will approach the site via Hamilton Highway, Warrnambool-Caramut Road and Woolsthorpe-Hexham Road;

— All WTG components are delivered through Port of Portland via the preferred OSOM haulage route;

— All staff will access the Project area will initially move to the main site office and compound from Woolsthorpe-Hexham Road, with 15 percent of staff approaching from the east via Connewarren Lane and the balance from the south west via Woolsthorpe-Hexham Road; and

— Allowance is made for additional general traffic movements on public roads within Project area to account for internal staff movements and other similar activities.

Specific to each zone:

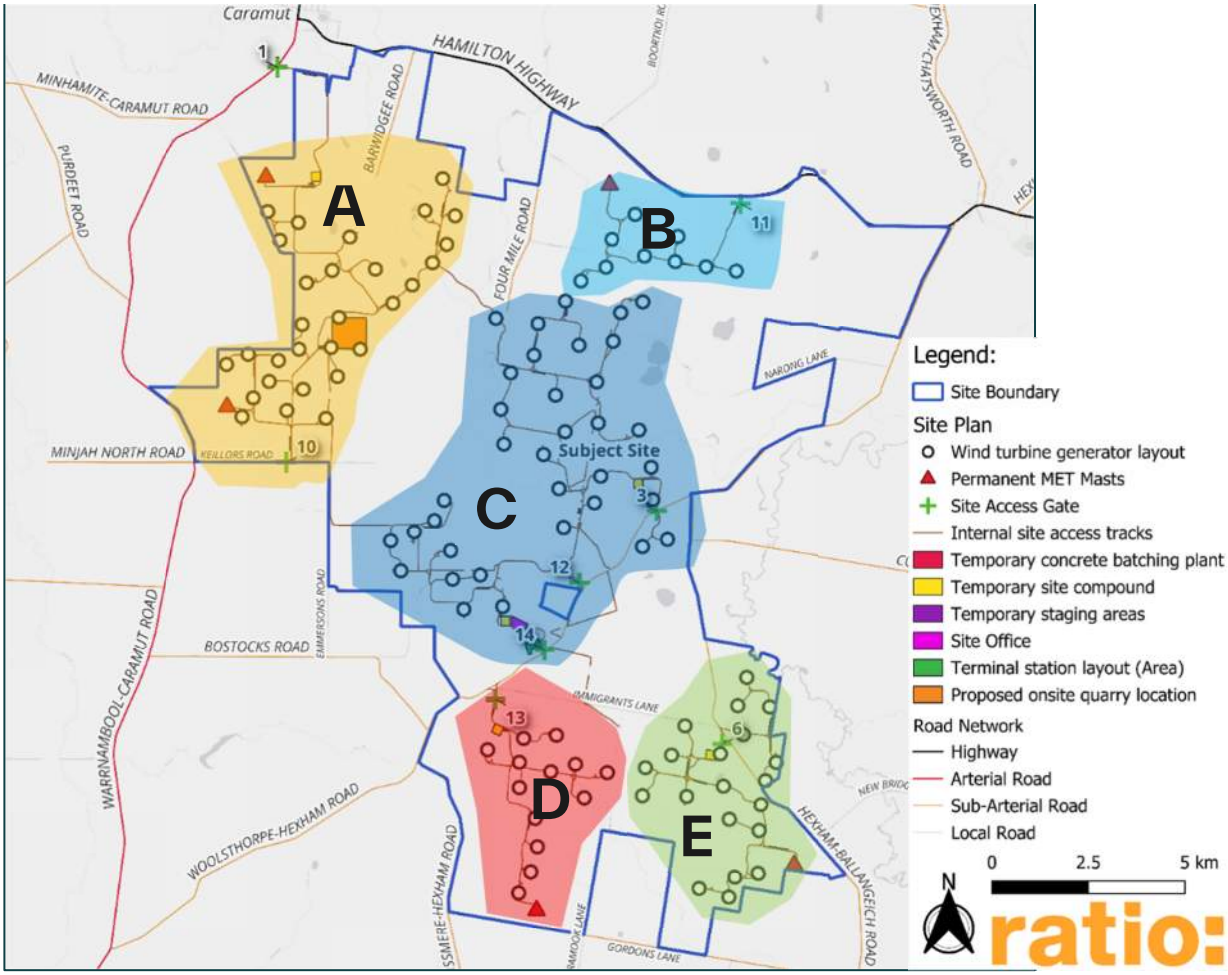
— Zone A will rely on Hamiltons Lane and Keillors Road from Warrnambool-Caramut Road;

— Zone B will rely on direct access to Hamilton Highway;

— Zone C & D access will be from Woolsthorpe-Hexham Road, via Warrnambool-Caramut Road to the west or Connewarren Lane to the east; and

— Access to Zone E will be as Zone C and then relying on Hexham-Ballangeich Road near Immigrants Lane.

Figure 10-1 Project Area Access Zones



Project Construction Peak Road Network Volumes

Assessment of the Project traffic based on the distribution above has been undertaken for the peak construction phase (weeks 21 through 70).

Project generated traffic volumes to roads within the Project area relied on by Project generated traffic for each materials sourcing scenario are presented in Table 10.3 and 10.4. Resultant traffic volumes on these roads, and assessment against IDM volume threshold for associated categories, are presented in Tables 10.5 and 10.6.

From these tables:

— At the time of peak construction activity, external Project traffic will add a maximum of between 1,070-1,740 vehicle movements per day across the external road network, subject to the level of on-site materials sourcing;

— Highest increases in traffic volumes will be along Woolsthorpe – Hexham Road, with the Project generating in the order of 600-750 vehicle movements per day, subject to the level of on-site materials sourcing. Total volumes remain within the target capacity for the existing road cross-section within the IDM and MSC road hierarchy; and

— Traffic volumes along Connewarren Lane will increase substantially, with the Project adding an additional 340-680 vehicle movements to subject to the level of on-site materials sourcing. As with Woolsthorpe-Hexham Road, total volumes remain within the target capacity for the existing road cross-section within the IDM and MSC road hierarchy; and

— Against road construction standards within the IDM and MSC road hierarchy, traffic volumes on those sections of Hamiltons Lane, Keillors Road, Immigrants Lane, and Hexham-Ballangeich Road will exceed the current target capacity of these roads for both materials sourcing scenarios.

Table 10-3 Peak External Daily Vehicle Movements (No On-Site Materials Sourcing)

Road		Staff		OD Vehicles		Heavy Vehicles		Total	
		Ave. VPD	Ave. VMPD	Ave. VPD	Ave. VMPD	Ave. VPD	Ave. VMPD	Ave. VPD	Ave. VMPD
Woolsthorpe-Hexham Road	Hexham-Ballangeich Rd to Gate 12	83	165	2	4	261	521	**345**	**690**
	Gate 12 to Grassmere-Hexham Road	241	483	4	9	125	250	**370**	**741**
	Grassmere-Hexham Road to Warrnambool-Caramut Rd	286	573	5	11	0	0	**291**	**583**
Hamilton Highway	East of Gate 11	15	30	0	0	34	68	**49**	**98**
	West of Gate 11	10	20	1	2	15	29	**25**	**51**
Hamiltons Lane		25	50	1	3	81	163	**108**	**215**
Keillors Road		20	40	1	3	76	152	**97**	**194**
Hexham-Ballangeich Road	North of Connewarren Lane	83	165	0	0	369	738	**369**	**738**
Hexham-Ballangeich Road	Connewarren Lane to New Bridge Road	40	80	1	3	109	217	**150**	**300**
Immigrants Lane (W)	At intersection with Woolsthorpe-Hexham Road	20	40	1	2	70	141	**92**	**183**
Connewarren Lane		43	85	0	0	299	597	**341**	**682**

Table 10-4 Peak External Daily Vehicle Movements (On-Site Materials Sourcing)

Road		Staff		OD Vehicles		Heavy Vehicles		Total	
		Ave. VPD	Ave. VMPD	Ave. VPD	Ave. VMPD	Ave. VPD	Ave. VMPD	Ave. VPD	Ave. VMPD
Woolsthorpe-Hexham Road	Hexham-Ballangeich Rd to Gate 12	83	165	2	4	110	220	**194**	**388**
	Gate 12 to Grassmere-Hexham Road	241	483	4	9	53	105	**298**	**596**
	Grassmere-Hexham Road to Warrnambool-Caramut Rad	286	573	5	11	0	0	**291**	**583**
Hamilton Highway	East of Gate 11	15	30	0	0	14	29	**29**	**59**
	West of Gate 11	10	20	1	2	6	12	**17**	**34**
Hamiltons Lane		25	50	1	3	34	69	**60**	**121**
Keillors Road		20	40	1	3	32	64	**53**	**106**
Hexham-Ballangeich Road	North of Connewarren Lane	83	165	0	0	156	311	**238**	**476**
Hexham-Ballangeich Road	Connewarren Lane to New Bridge Road	40	80	1	3	46	92	**87**	**175**
Immigrants Lane (W)	At intersection with Woolsthorpe-Hexham Road	20	40	1	2	30	59	**51**	**101**
Connewarren Lane		43	85	0	0	126	252	**168**	**337**

Table 10-5 Project Area Peak Road Daily Movements (No On-site Material Sourcing)

Road		Project Traffic	Existing Volumes	Total Volumes	Capacity	Existing Daily Volumes within Daily Capacity	Total Daily Volumes within Daily Capacity
		Ave. Vehicle Movements / Day				Y/N	Y/N
Woolsthorpe-Hexham Road	Hexham-Ballangeich Rd to Gate 12	690	410	1100	> 150	Yes	Yes[3]
	Gate 12 to Grassmere-Hexham Road	741	410	1151	> 150	Yes	Yes
	Grassmere-Hexham Road to Warrnambool-Caramut Rad	583	410	993	> 150	Yes	Yes[1]
Hamilton Highway	East of Gate 11	98	930	1028	-	Yes	Yes
	West of Gate 11	51	930	981	-	Yes	Yes
Hamiltons Lane		215	---	215	0 – 50	Yes	No
Keillors Road		194	11	205	0 – 50	Yes	No
Hexham-Ballangeich Road	North of Connewarren Lane	738	400	1138	> 150	Yes	Yes[1]
	Connewarren Lane to New Bridge Road	300	70	370	50 – 150	Yes	No
Immigrants Lane (W)	At intersection with Woolsthorpe-Hexham Road	183	---	183	0 – 50	Yes	No
Connewarren Lane		682	380	1062	> 150	Yes	Yes

[3] Based on MSC Road Hierarchy classification, but noting includes some single lane sections

Table 10-6 Project Area Peak Road Daily Movements (On-Site Material Sourcing)

Road		Project Traffic	Existing Volumes	Total Volumes	Capacity	Existing Daily Volumes within Daily Capacity	Total Daily Volumes within Daily Capacity
		Ave. Vehicle Movements / Day				Y/N	Y/N
Woolsthorpe-Hexham Road	Hexham-Ballangeich Rd to Gate 12	388	410	798	> 150	Yes	Yes[4]
	Gate 12 to Grassmere-Hexham Road	596	410	1006	> 150	Yes	Yes
	Grassmere-Hexham Road to Warrnambool-Caramut Rad	583	410	993	> 150	Yes	Yes[1]
Hamilton Highway	East of Gate 11	59	930	989	-	Yes	Yes
	West of Gate 11	34	930	964	-	Yes	Yes
Hamiltons Lane		121	---	121	0 – 50	Yes	No
Keillors Road		106	11	117	0 – 50	Yes	No
Hexham-Ballangeich Road	North of Connewarren Lane	476	400	575	> 150	Yes	Yes[1]
	Connewarren Lane to New Bridge Road	175	70	245	50 – 150	Yes	No
Immigrants Lane (W)	At intersection with Woolsthorpe-Hexham Road	101	---	101	0 – 50	Yes	No
Connewarren Lane		337	380	717	> 150	Yes	Yes

[4] Based on MSC Road Hierarchy classification, but noting includes some single lane sections

10.2. Wind Farm Operation

Details of likely traffic generation during the Project operation are as follows:

— Daily routine maintenance to be carried out by three to five people. Daily traffic generation is not expected to exceed four vehicle movements per day to the external road network, with all other movements being internal to the site.

— Weekly/fortnightly regular minor maintenance to be carried out by a small team. This will involve a team of no more than fifteen people attending the site, with up to five vehicles. This is expected to increase the daily traffic generation of the site up to a maximum of approximately 10 vehicle movements. Again, the majority of movements will be internal to the site and will not affect the surrounding road network.

— Occasional maintenance will occur when components of the development need to be replaced, such as replacing a gearbox. This is expected to only occur very occasionally and will be subject to approval processes with the relevant authorities.

— Visitors to the site such as office-based staff and courier deliveries etc.

10.3. Wind Farm Decommissioning

The eventual decommissioning of the Wind Farm site will involve the removal of any structure above ground and to a depth of one metre. This excludes the portion of foundations deeper than 1 metre and access tracks kept in agreement with landowners.

In comparison to the construction period, the traffic generated during decommissioning of the site will be significantly less but will include the use of OD and OSOM vehicles to remove WTG and other major components.

10.4. Cumulative Traffic

The Hexham Wind Farm Project is in proximity to a number of approved and proposed wind farm projects that, subject to timing of development, may also contribute traffic to roads relied on by the Hexham Wind Farm. These include:

— Proposed:

- Mt Fyans (approval stage)[5]
- Willatook (approval stage)
- Darlington
- Tarrone
- Bushy Creek
- Swansons Lane

— Pre-Construction:

- Woolsthorpe

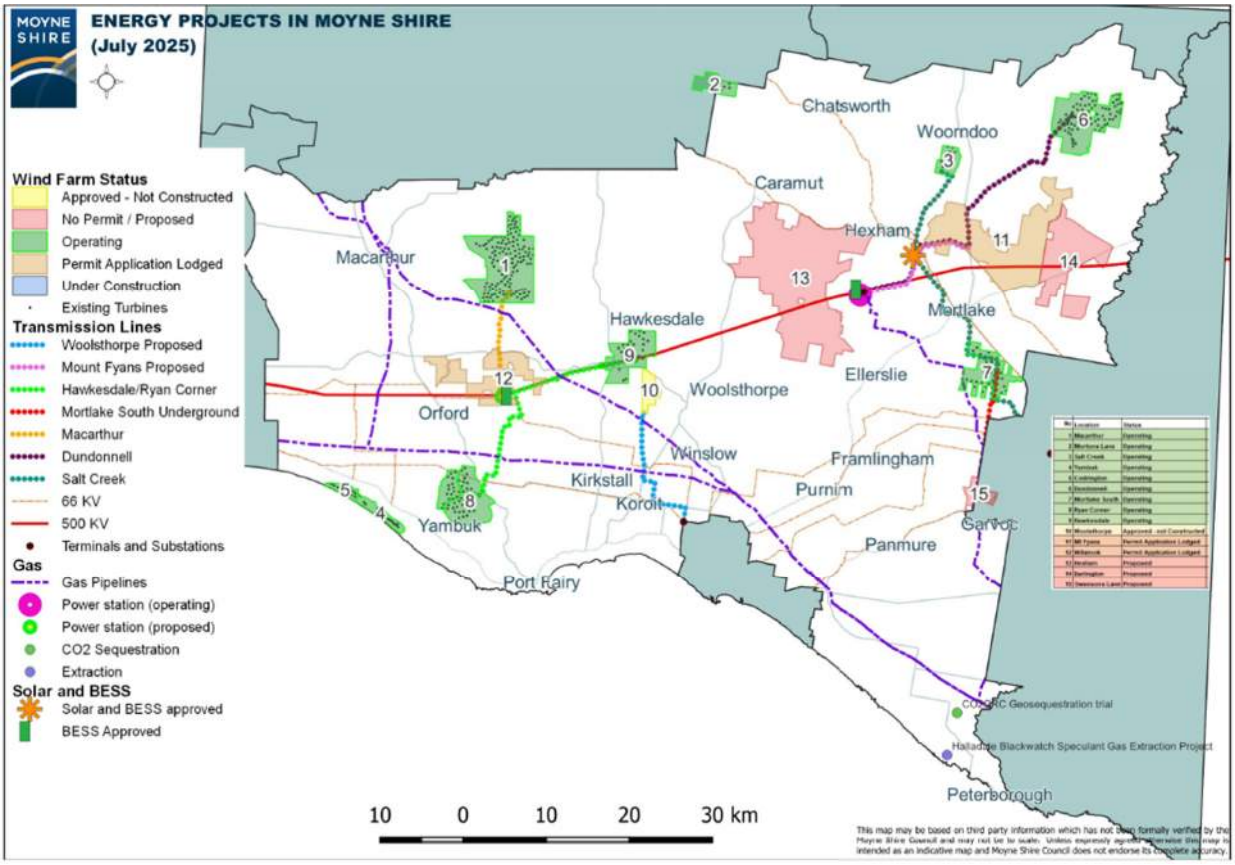
— Under Construction:

- Hawkesdale

Figure 10-2 shows the location of the above projects that are within the Moyne Shire area in relation to the Hexham Wind Farm (marked as Number 13).

[5] Mt Fyans Wind Farm approved permit was announced by the Victorian Government on 30 August 2025.

Figure 10-2 Moyne Shire Wind Farm Projects



source: www.moyne.vic.gov.au/Our-services/Energy-projects/

As of July 2025, the status of projects is as follows:

No.	Location	Status	No.	Location	Status
1	Macarthur	Operating	9	Hawkesdale	Operating
2	Mortons Lane	Operating	10	Woolsthorpe	Approved – Not Constructed
3	Salt Creek	Operating	11	My Fyans	Permit Application Lodged*
4	Yambuk	Operating	12	Willatook	Permit Application Lodged
5	Codrington	Operating	13	Hexham (this site)	Proposed
6	Dundonnell	Operating	14	Darlington	Proposed
7	Mortlake South	Operating	15	Swansons Lane	Proposed
8	Ryan Corner	Operating			

*Mt Fyans Permit has been announced by the Victorian Government on 30 August 2025.

Cumulative impacts are relevant to the overlap of construction periods, and specifically where concurrent projects would rely on equivalent or overlapping material haulage and OSOM routes during the construction period.

At the time of preparing this report, it is understood that the Woolsthorpe Windfarm Project and the Mortlake Energy Hub are approved and will be starting construction in 2025.

Based on typical construction periods and publicly available dates, it is anticipated that both will be completed by 2027. This will be prior to the commencement of the Hexham project such that there is no expectation of construction traffic overlap.

Mt Fyans Wind Farm was approved in September 2025, with the permit application for Willatook Wind Farm in progress. As such both are more advanced than Hexham. On the basis that timeframes for pre-construction and construction of both projects would be similar to Hexham, we would expect significant materials haulage associated with construction for Mt Fyans and Willatook projects to have been completed prior to the commencement of any substantive construction works for the Hexham project.

On this basis, should the Mt Fyans or Willatook projects overlap with the Hexham project:

— Some potential crossover of light vehicle traffic (staff) may occur across the arterial road network; and

— Subject to materials source locations there may be some overlap of heavy vehicle traffic. The extent of this would be subject to:

- The overlap of key construction phases, acknowledging that materials haulage traffic volumes vary across the construction period of each project; and
- The quantum of construction material sourced on site across each project.

Insufficient information is available to determine the above at this time. However, we note that monitoring of roads (local and arterial) used by Hexham project during Project construction will capture any change in road condition from all traffic, including and generated Mt Fyans and Willatook projects.

The traffic modelling undertaken for the subject site's anticipated generation has been relied upon by other disciplines for their cumulative impact assessments. A summary of these reports can be found in Table 11.2 of this report.

11. Impact Assessment

11.1. Project Area Local Roads

As outlined in Section 10, the Project will generate substantial traffic volumes across local roads within and around the Project area during construction and will result in volumes on a number of these roads exceeding target capacities against existing classification and construction standard.

Against predicted volume and classifications, local roads that will require upgrade include:

— Hexham-Ballangeich Road, south of Connewarren Lane;

— Keillors Road;

— Hamiltons Lane; and

— Immigrants Lane at its intersection with Woolsthorpe-Hexham Road.

Whilst traffic generated by the Project on Woolsthorpe-Hexham Road and Hexham-Ballangeich Road, north of Connewarren Lane are within the targets for these roads based on classification, segments of these roads currently present as single lanes or narrow two-lane roads. To support Project generated traffic and mitigate traffic impacts, these road segments should also be upgraded

Road upgrades would only be required for the extend of these roads relied on by Project traffic. Project traffic will not be permitted to use other sections of these roads.

In general, the recommended standard of road upgrades should reflect the relevant road classification within the IDM based on the assessed volume of traffic as per Tables 10.3 and 10.4.

The exception to the above could be Hamiltons Lane which could be construction/maintained as unsealed rural access standard roads acknowledging that these roads do not provide any through connectivity within the wider road network and will predominately revert to local property access only post Project construction.

All local roads within and surrounding the Project area that are relied on by Project traffic should be maintained by Hexham Windfarm Pty Ltd during construction and decommissioning phases through agreement with MSC.

Recommended upgrades to these roads are summarised in Table 11-1 and illustrated in Figure 11-1.

11.2. Project Area Arterial Roads

Both Hamilton Highway and Warrnambool-Caramut Road are gazetted B-double routes and are all declared main roads managed by DTP.

Under the Road Management Act, the classification and status of these roads requires that the road manager ensure these roads are “fit for purpose” in that:

— Road geometry, cross section and typology is appropriate for the road classification and function;

— Intersections relied on by permitted vehicles be of appropriate standard to safely cater for these vehicles and other road users; and

— The condition of roads and roadside infrastructure is maintained to a suitable standard.

Under the Road Management Act onus for maintenance and upkeep of these roads also is the responsibility of the relevant Road Authority.

From visual inspection these roads:

— Are of appropriate standard / cross section to cater for Project vehicles (noting use by OSOM vehicles is subject to a separate consent); and

— Have pavement surfaces that are in good physical condition.

As such the use of these roads in their current form by Project traffic is considered appropriate.

11.3. Project Area Intersections

Project generated traffic will contribute to additional turning movements through a number of local/arterial and local/local road network intersections as well as at Project gate locations.

The extent of upgrades to support turning traffic and minimise impacts on existing road uses is subject to hourly turning volumes as per the warrants outlined in AustRoads Guide to Traffic Management Part 6.

Against these warrants, the following intersections and gate locations will require right and/or left turn lane improvements works are:

— Road Intersections

- Warrnambool-Caramut Road / Hamiltons Lane
- Warrnambool-Caramut Road / Keillors Road
- Warrnambool-Caramut Road / Woolsthorpe-Hexham Road

— Project Gates

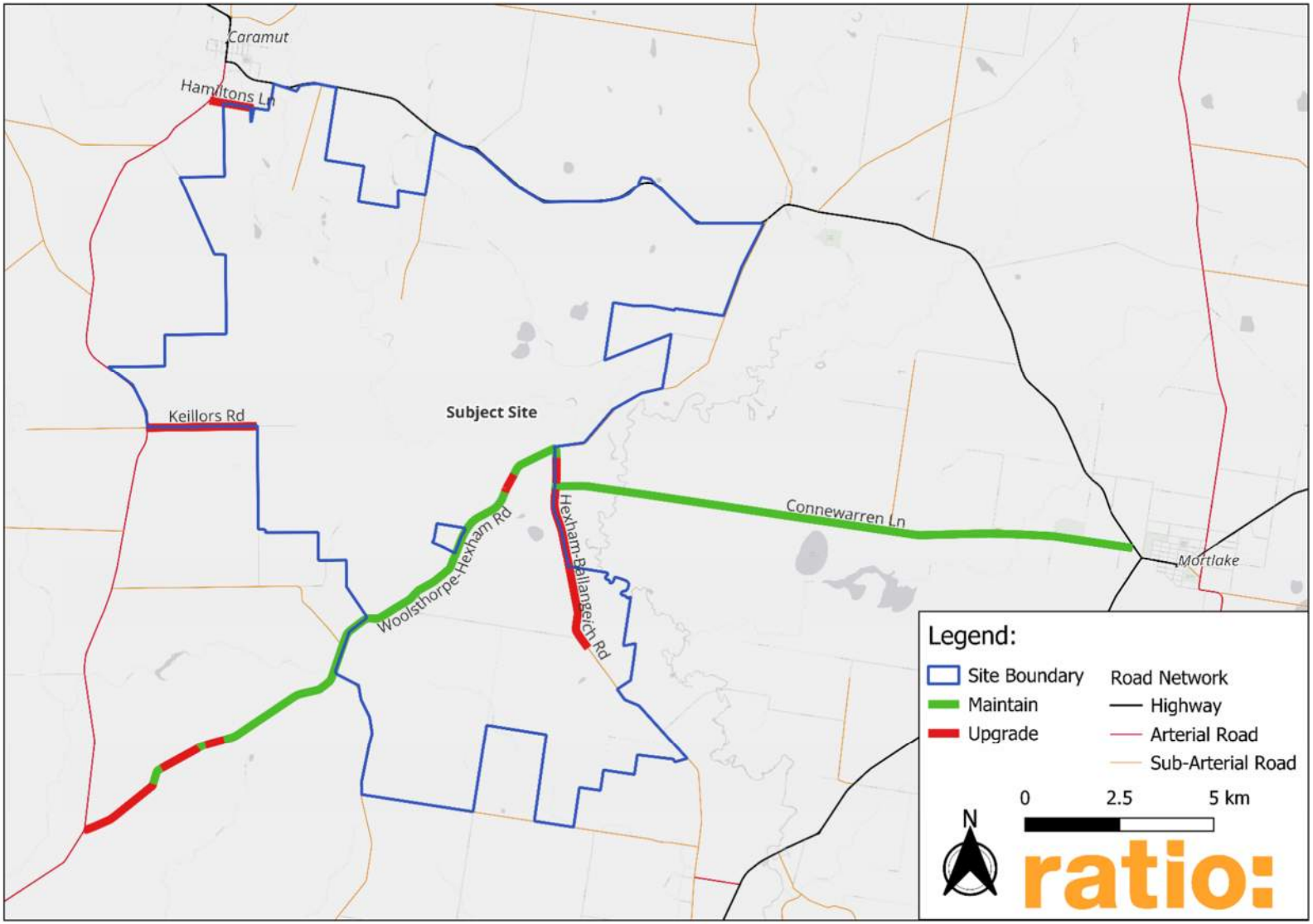
- Woolsthorpe-Hexham Road
- Immigrants Lane
- Hamilton Highway

These works are separate to temporary works at intersection and gate locations that may be needed to support OSOM vehicle movements and access during construction.

Table 11-1 Project Area Local Road Upgrades

Road	Section	Existing Classification	Proposed Classification	Notes
Woolsthorpe-Hexham Road	Hexham-Ballangeich Road to Warrnambool-Caramut Road [16.8km]	Collector - Link	Collector - Link	Project to upgrade single lane / narrow sealed segments to 6.2 metre wide sealed road [4.2km]
Hexham-Ballangeich Road	Woolsthorpe-Hexham Road to Connewarren Lane [1km]	Collector - Link	Collector - Link	Widen single lane sealed segment to 6.2 metre wide sealed road
	Connewarren Lane to Immigrants Lane [4.5km]	Access – Rural	Collector – Rural	Widen to 6.2 metre wide sealed road
Keillors Road	East of Warrnambool-Caramut Road [2.9km]	Access - Rural	Collector - Rural	Widen to 6.2 metre wide sealed road
Immigrants Lane	Intersection with Woolsthorpe-Hexham Road	Access - Rural	Access - Rural	Intersection improvement works to support access to site gate
Hamiltons Lane	East of Warrnambool-Caramut Road [1.1km]	Access - Rural	Access - Rural	Construct as 4.0m gravel carriageway plus minimum shoulders

Figure 11-1 Project Area Roads – Project Upgraded and Maintained



11.4. Construction Materials Haulage Routes

With the exception of the local roads within and around the Project area, construction materials haulage from external sources relies on:

— Arterial roads; and

— Local roads already in use to access the identified external quarry sites.

Arterial roads relied upon are all gazetted B-double routes. Arterial roads relied upon are all declared main roads managed by DTP (RRV).

Under the Road Management Act, the classification and status of these roads requires that the road manager ensure these roads are "fit for purpose" in that:

— Road geometry, cross section and typology is appropriate for the road classification and function;

— Intersections relied on by permitted vehicles be of appropriate standard to safely cater for these vehicles and other road users; and

— The condition of roads and roadside infrastructure is maintained to a suitable standard.

From visual inspection these roads:

— Have pavement surfaces that are in good physical condition; and

— Are of appropriate standard / cross section to cater for Project traffic.

11.5. OSOM Haulage Route

Vehicle routes and the use of arterial roads by OSOM vehicles is managed through a permit system administered by the National Heavy Vehicle Regulator subject to state and local authority requirements. Approval will be required to manage the transit of such vehicles independent of the EES process.

In the context of the above, the suitability of road infrastructure beyond the Project area has only been assessed to identify locations where temporary works/infrastructure may be required to support Project related OSOM vehicles, with the WTG blade transport vehicles adopted as the largest single OSOM vehicle.

Intersections reviewed by along each OSOM route are below:

Port of Portland – Preferred Route

— Henty Highway / New Street, Portland

— Princes Highway / Henty Highway, Portland

— Henty Highway / Mt Baimbridge Road, Hamilton

— Mt Baimbridge Road / Coleraine, Hamilton

— Coleraine Road / Henty Highway, Hamilton

— Scott Street / Dunkeld-Cavendish Road, Cavendish

— Dunkeld-Cavendish Road / Penhurst-Dunkeld Road / Glenelg Highway, Dunkeld

— Penhurst-Dunkeld Road / Hamilton Highway, Penshurst

— Warrnambool-Caramut Road / Hamilton Highway, Caramut

Port of Portland – Secondary Route

— Henty Highway / New Street, Portland

— Princes Highway / Henty Highway, Portland

— Princes Highway / Penshurst-Port Fairy Road, Killarney

— Penshurst-Port Fairy Road / Woolsthorpe-Heywood Road

— Woolsthorpe-Heywood Road / Warrnambool-Caramut Road

Port of Geelong Route – Preferred Route

— Princes Highway / Geelong Ring Road onramp, Waurn Ponds

— Geelong Ring Road / Hamilton Highway, Fyansford

— Hamilton Highway, Hexham

Port of Geelong Route – Secondary Route

— Princes Highway / Geelong Ring Road onramp, Waurn Ponds

— Geelong Ring Road / Hamilton Highway, Fyansford

— Hamilton Highway / Connewarren Lane, Mortlake

For most intersections, works required are limited to the temporary removal of signage and some roadside furniture as well as the addition of temporary hardstand within verges to allow OSOM vehicles to vehicles to swing wide of road carriages and take advantage of available road reserve widths. In addition:

— Trimming of trees may be required at the Henty Highway / Mt Baimbridge Road intersection in Hamilton;

— The relocation of a domestic power supply pole and possible tree removal is likely required at the Penhurst-Dunkeld Road / Hamilton Highway, Penshurst

For roads within and around the Project area a combination of signage removal, temporary hardstand and some vegetation removal is required at the intersections of:

— Hamilton Lane, Keillors Road and Woolsthorpe-Hexham Road with Warrnambool-Caramut Road;

— Hexham-Ballangeich Road with Immigrants Lane; and

— At all Project gate locations.

Detailed findings of this review, along with swept path diagrams included as Appendix B.

11.6. Other Impacts

PUBLIC TRANSPORT

Public transport services operate along Hamilton Highway and Warrnambool-Caramut Road adjacent to the Project area, as well as extend along identified materials haulage and OSOM / WTG component haulage routes.

TMP's prepared to manage these movements will require engagement with DTP (PTV) and the relevant bus operator in development and implementation to ensure that haulage activity does not unreasonably delay services. Impacts to public transport services should be measured against established PTV punctuality targets for regional bus services.

Construction/decommissioning stage TMP's can include provision to limit heavy vehicle movement during school bus times.

LOCAL ROAD IMPROVEMENTS

In addition to the increase in traffic volumes as a result of Project generated traffic during Project construction, road and intersection upgrade works as identified in Section 11.1 and 11.3 will result in short term disruption to road users as these improvement works are undertaken.

These upgrade works will require the preparation of construction TMP's (CTMP) during the Project establishment phase.

Such CTMP's should:

- Demonstrate how construction works will be staged to avoid road closures at service times;
- Demonstrates how lane closures would be managed to minimise disruption to through traffic;
- Identify local roads / road sections to be closed and the duration of each road closure (where relevant) and identify detour routes around the works areas for through traffic;
- Demonstrate how local access to impacted property within the Project area will be maintained for all relevant users;
- Demonstrate how the interaction of public and Project traffic will be safely managed;
- Includes measures to minimise travel time disruptions and prioritize movements for public transport through the works area (where relevant);
- Include a communications strategy to inform of the community and local landowners of road closures and changes to local access;
- Provide for community feedback and response during the CTMP implementation; and
- Include a reporting and review mechanism with MSC and DTP to monitor impacts and make amendments to the CTMP as necessary.

OTHER MATTERS

Acknowledging that the traffic generation associated with the proposed development influences environmental impacts outside of the road network, a summary of the reports undertaken for the EES and the relevant sections is referenced in Table 11-2.

Table 11-2 Impact Assessment Reference List – Traffic and Environmental

Impact Assessment	How traffic impacts this study	Report reference
Biodiversity	Swept paths and/or road upgrades that potentially impact areas of native vegetation.	Appendix D – Biodiversity, Nature Advisory, September 2025
Noise and Vibration	Noise levels due to increased traffic volumes during construction.	Appendix E1 – Noise and Vibration, MDA, August 2025
Economic and Social	Impacts of increased traffic volumes/large vehicles on travel times, bus routes and risks to commuting school children	Appendix I – Socio Economic, Umwelt, August 2025
Air Quality	Pollution generated by dust from increased traffic volumes	Appendix L1 – Air Quality, Jacobs, September 2025
Greenhouse Gas	Emissions created by increased traffic volumes	Appendix L2 – Greenhouse Gas, Jacobs, September 2025

11.7. Summary of Traffic Impacts and Mitigation

Project traffic impacts discussed above have been assessed against the likelihood and consequence criteria identified in Section 9.2. Mitigation measures identified in Section 9.3 have been applied and residual impacts post the adoption of these mitigation measures further assessed.

The summary of impacts and mitigation measures and residual impacts is presented in Table 11-2, with residual impacts all deemed to be minor or negligible.

Table 11-3: Summary of Traffic Impacts and Control Measures

Impact Item	Project stage[6]	Potential Impact **(Description of activity/effect, pathway, receptor, potential impact)**	Likelihood / Consequence	Mitigation Measures	Residual Impact **(Description of residual impact)**
TI-01	O,	Project operational traffic may exceed the capacity of the local road network and result in increased congestion and compromise road safety for other users.	Rare / Minor	MM02 / MM04	Project operational traffic volumes are low and able to be safely accommodated within existing roads. Internal tracks will be used to move throughout the Project area.
TI-02	C, D	General Project traffic during construction and decommissioning may exceed the capacity of the arterial road network and result in increased congestion and compromise road safety for other users.	Possible / Moderate	MM02 / MM03 / / MM04 / MM05	General traffic accessing the Project site during construction and decommissioning can be accommodated within the existing arterial road network. With mitigation measures in place the residual impacts are expected to be minor
TI-03	C, D	Heavy vehicle traffic generated during construction and decommissioning traffic may compromise road safety for other users through resultant traffic volumes exceeding road capacity, increased congestion and/or delay, and through increased damage to road pavements (arterial and local roads).	Possible / Moderate	MM01 / MM02 / MM03 / MM04 / MM05 / MM07 / MM08 / MM09	Subject to materials sourcing locations, heavy vehicle traffic accessing the Project site during construction and decommissioning may warrant widening of sections of Keillors Road within the Project area. Outside of the Project area, arterial roads are of suitable standard to cater for this traffic. With mitigation measures in place the residual impacts are expected to be minor
TI-04	C, D	Works to establish Project area access to the external road network may impact traffic during construction which may result in increased congestion and compromise road safety for existing road users.	Almost certain / Moderate	MM01 / MM02 / MM03 / MM04 / MM05 / MM07 / MM08 / MM09	Roadworks to construct Project site access may cause temporary delays for road users. With mitigation measures in place the residual impacts are expected to be minor.
TI-05	C	OSOM / WTG component haulage may result in congestion and delay and may	Almost certain / Moderate	MM03 / MM04 / MM05 / MM06 /	The installation and removal of temporary intersection works and road maintenance

[6] C - Construction, O – Operation, D- Decommissioning

		impact road safety for the duration of haulage activity		MM07 / MM08 / MM09 / MM10	works to cater for OSOM vehicles may cause temporary delays for road users. OSOM haulage activity may also cause delays to following through traffic on arterial roads. With mitigation measures in place the residual impacts are expected to be minor.
TI-06	C, D	Project construction and decommissioning activity may require local road closures and/or deviations that could impact public access to land within the Project area resulting in material ongoing inconvenience to road users.	Possible / Moderate	MM03 / MM09	Construction activity may require local road closures at times and the provision of alternate access for landowners. With mitigation measures in place the residual impacts are expected to be negligible.

12. Conclusion

The preceding transport impact assessment has been undertaken to determine the potential impacts of the Project on key intersections, roads, and transport network and to identify recommended management and mitigation options where appropriate in order to reduce potential risks of the Hexham Wind Farm Project.

The assessment has considered the impact of Project generated traffic during the Project construction, operation, and decommissioning phases. Traffic effects and impacts have been assessed against the current road network infrastructure.

The potential impacts on the operation of the road network relied on by the Project are identified as follows:

— That the standard and capacity of existing road infrastructure is appropriate to accommodate Project traffic (across all Project phases) and the potential consequence of Project generated traffic on road function and safety;

— Disruption to through traffic and regional public transport during construction phase due to Project generated traffic including OSOM transport; and

— Impacts on local access as a result of construction activity within the Project area.

Mitigation measures identified in response to these potential impacts are:

— Site access, road upgrade and temporary infrastructure works within the Project area and along the OSOM / WTG component haulage route;

— Traffic Management Plans to manage Project traffic movements and mitigate specific short- and long-term traffic impacts:

— Green Travel Plans to encourage sustainable travel and to minimise Project traffic generation;

— Road maintenance agreements to manage short-term impacts to local roads and key arterial road sections to maintain road conditions for all users during Project construction;

— Stakeholder consultation and engagement to assist the development of appropriate traffic management measures and to communicate any road network changes required.

From the impact assessment, key findings are:

— Project traffic generated to external roads during construction will comprise staff vehicles, heavy vehicle traffic associated with external bulk materials haulage and OD/OSOM vehicles associated with Wind Turbine Generator (WTG) and other major component delivery. Additional traffic associated with internal Wind Farm traffic will also be generated to local sections of Woolsthorpe – Hexham Road within the Project area;

— At the time of peak construction activity, external Project traffic will add a maximum of between 1,070-1,740 vehicle movements per day across the external road network, subject to the level of on-site materials sourcing;

— Highest increases in traffic volumes will be along Woolsthorpe – Hexham Road, with the Project generating in the order of 600-750 vehicle movements per day, subject to the level of on-site materials sourcing. Volume increases on other roads will be less.

— Against road construction standards within the Infrastructure Design Manual and Moyne Shire Council road hierarchy, Project traffic will require the upgrade of those sections of Hamiltons Lane, Keillors Road, Immigrants Lane, Hexham-Ballangeich Road relied on by Project traffic. The Project would also upgrade single lane or narrow two-lane roads segments of Woolsthorpe-Hexham Road and Hexham-Ballangeich Road, north of Connewarren Lane.

— The above roads and other local roads within and around the Project area relied on by Project traffic would be maintained by the Project during the construction phase through appropriate traffic management plans and road maintenance agreements.

— The following intersections and gate locations will require right and/or left turn lane improvements works:

- Warrnambool-Caramut Road / Hamiltons Lane
- Warrnambool-Caramut Road / Keillors Road
- Warrnambool-Caramut Road / Woolsthorpe-Hexham Road
- Access points to Woolsthorpe-Hexham Road
- Access to Immigrants Lane
- Access to Hamilton Highway

— Subject to the resolution of specific traffic management requirements, the identified over dimensional vehicle route options from the Port of Portland/Geelong to the Project area for the transport for WTG and other imported major components has been assessed and are suitable for OD and OSOM transport vehicles; and

— Local traffic impacts within the Project area during all Project phases can be suitability and safely managed.

Appendix A : Project Area Roads

Hexham-Ballangeich Road near Immigrants Lane

Hexham-Ballangeich Road at Connewarren Lane

Connewarren Lane at Hexham-Ballangeich Road

Woolsthorpe- Hexham Road approximately 2.5km south from Hexham-Ballangeich Road

Woolsthorpe- Hexham Road approximately 1.5km north of Immigrants Lane

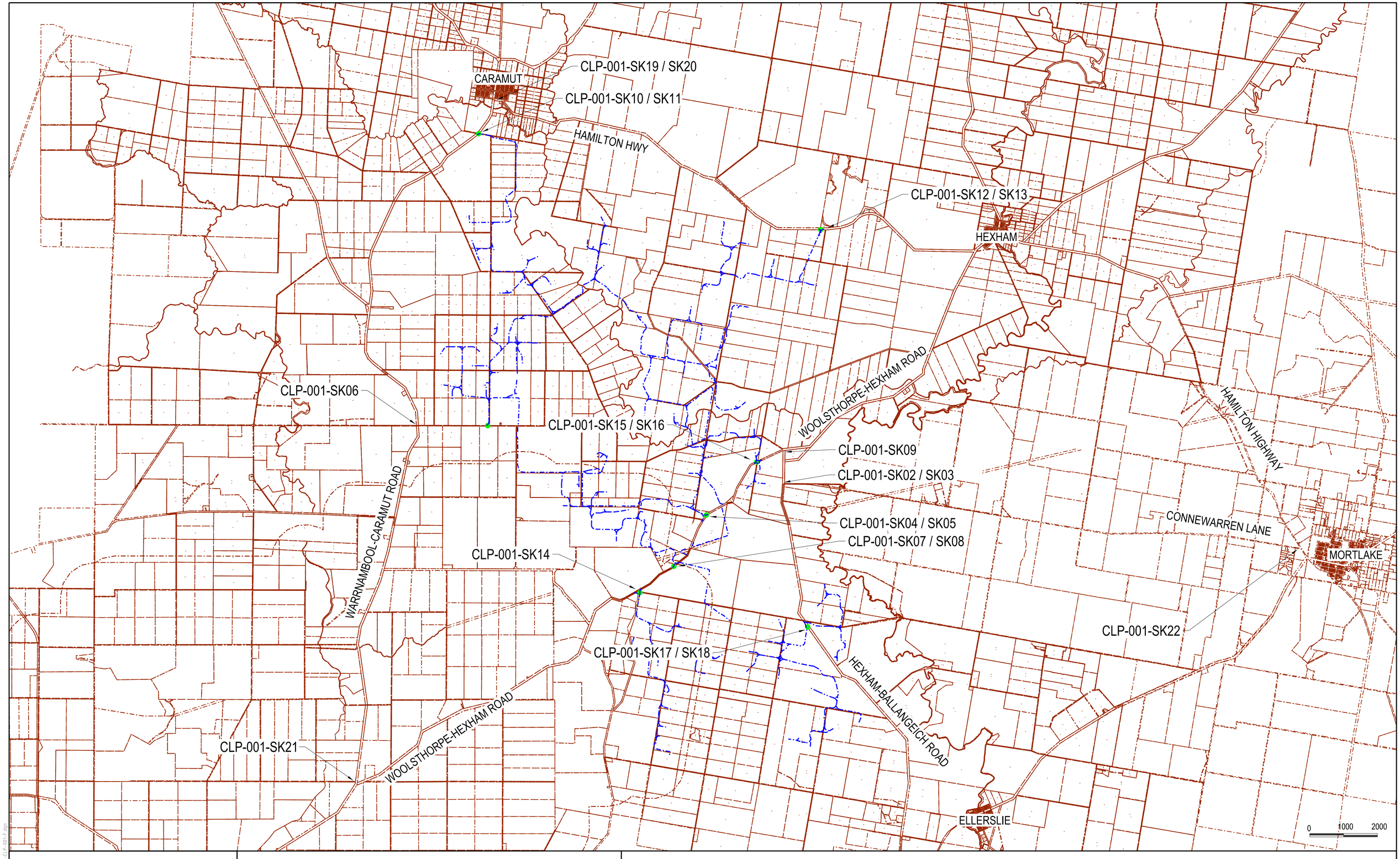
Hamiltons Lane

Keillor Road near Warrnambool-Carramut Road

Appendix B : OSOM Vehicle Review

Port of Portland Preferred OSOM Route – Key Locations for Traffic Management

Intersection	Movement	Traffic Management
Henty Highway / New Street, Portland	Vehicles approaching from the west will require the full width of Henty Highway on approach to intersection during left turn.	Temporary closure of right and left turns from Henty Highway (north) and New Street during transit.
Princes Highway / Henty Highway, Portland	To avoid street lighting and power poles, vehicles will cross median and median islands during right turn from Henty Highway to Princes Highway. There are two options which can facilitate this movement	Temporary removal of signage. Infill within Henty Highway centre median swale (impact on drainage to be considered). Temporary closure of Henty Highway southbound and Princes Highway southbound during transit.
Henty Highway / Mt Baimbridge Road, Hamilton	Vehicles turning left from Henty Highway to Mt Bainbridge Road will rely on the full road width plus areas of road verges on both sides of	Temporary removal of signage. Potential vegetation removal. Infill within road verges on Henty Highway and Mt Bainbridge Road. Temporary closure of the intersection during transit.
Mt Baimbridge Road / Coleraine, Hamilton	Vehicles turning left from Mt Baimbridge Road will rely on the full road width plus areas of road verges and likely track across part the roundabout island	Temporary removal of signage. Infill within road verges on Mt Bainbridge Road. Infill across part of the roundabout centre island. Temporary closure of the intersection during transit.
Penhurst-Dunkeld Road / Hamilton Highway, Dunkeld	Vehicles turning from north to east will swing wide within the road reserve to avoid a HV power pole and associated stays on the inside corner of the intersection	Temporary removal of signage. Likely tree removal. Dwelling power supply pole to be relocated. Infill within road verges on Penhurst-Dunkeld Road and Hamilton Highway. Temporary closure of the intersection during transit.
Warrnambool-Caramut Road / Woolsthorpe-Hexham Road, Woolsthorpe	Vehicles turning from north to east will swing wide within the road reserve.	Temporary removal of signage. Potential vegetation removal. Infill within road verges on Warrnambool-Caramut Road and Woolsthorpe-Hexham Road. Temporary closure of the intersection during transit.



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LEGEND

- INTERNAL SITE ACCESS TRACKS
- SITE ACCESS GATES

Hexham Wind Farm
Site Key Plan

NOTE:

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PROPERTY OUTSIDE OF PROJECT

CONNEWARREN LANE

PROPERTY WITHIN PROJECT

EXISTING TREES MAY REQUIRE REMOVAL

PROPERTY OUTSIDE OF PROJECT

HEXHAM - BALLANGEICH ROAD

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

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Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Hexham-Ballangeich Road / Connewarren Lane, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

PROPERTY WITHIN PROJECT

EXISTING GATE TO BE EXPANDED TO FACILITATE ACCESS TO PADDOCK

WOOLSTHORPE - HEXHAM ROAD

EXISTING TREE MAY REQUIRE TRIMMING

PROPERTY WITHIN PROJECT

EXISTING PROPERTY FENCELINES

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Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

PROPERTY WITHIN PROJECT

PROPERTY WITHIN PROJECT

EXISTING GATE TO BE EXPANDED TO FACILITATE ACCESS TO PADDOCK

WOOLSTHORPE - HEXHAM ROAD

WOOLSTHORPE - HEXHAM ROAD

PROPERTY WITHIN PROJECT

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Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

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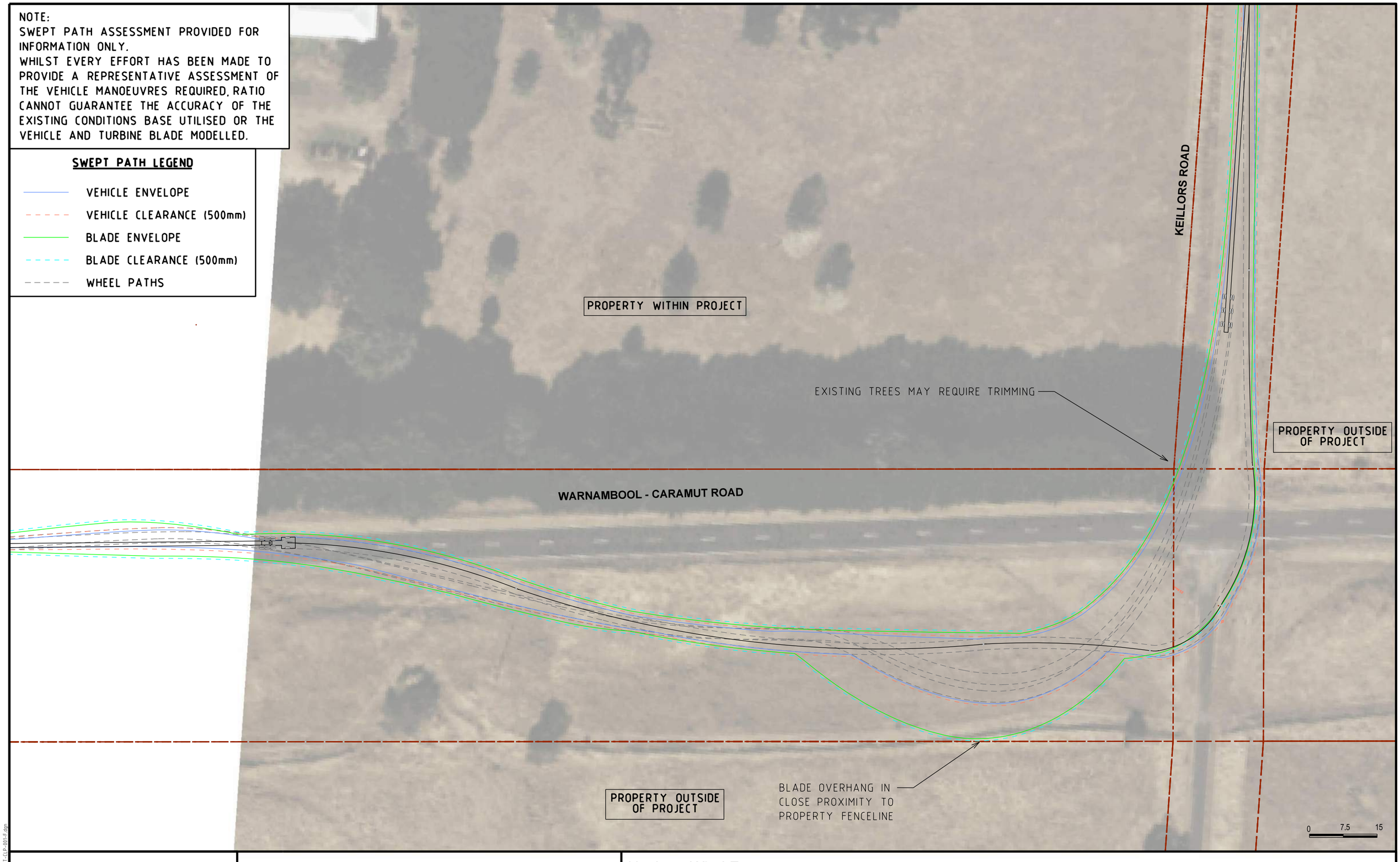
SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS



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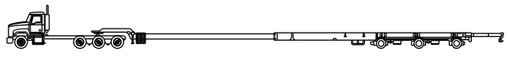

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First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Warnambool-Caramut Road / Keillors Road, Minjah
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

PROPERTY WITHIN PROJECT

NEW GATE TO BE PROVIDED
FOR ACCESS TO PADDOCK

WOOLSTHORPE - HEXHAM ROAD

0 7.5 15

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First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road, Ellerslie
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NEW GATE TO BE PROVIDED FOR ACCESS TO PADDOCK

WOOLSTHORPE - HEXHAM ROAD

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Blade Transporter – 93.0m Blade

meters

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First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road, Ellerslie
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

EXISTING SIGNS TO BE REMOVED

EXISTING SIGNS TO BE REMOVED

WOOLSTHORPE-HEXHAM ROAD

HEXHAM - BALLANGEICH ROAD

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Blade Transporter – 93.0m Blade

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Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

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Hexham Wind Farm
Woolsthorpe-Hexham Road / Hexham-Ballangeich Road, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

WARRNAMBOOL-CARAMUT ROAD

REMOVE BARRIER AND INFILL BEHIND WITHIN ROAD RESERVE IF REQUIRED. TEMPORARY CULVERTS UNDER FILL WILL BE REQUIRED

POTENTIAL CLASH (OVREHANG ONLY) WITH PROPERTY FENCE

HAMILTONS LANE

0 7.5 15

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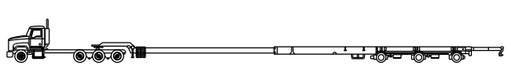

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Trailer Track	: 2.44		

Hexham Wind Farm
Warrnambool Caramut Road / Hamiltons Lane, Caramut
Swept Path Assessment (Preferred Haulage Route)

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK10-F	10 of 22	B.K.	1:750 @A3	08/06/2023

REMOVE BARRIER AND INFILL BEHIND WITHIN ROAD RESERVE IF REQUIRED. TEMPORARY CULVERTS UNDER FILL WILL BE REQUIRED

HAMILTONS LANE

WARRNAMBOOL-CARAMUT ROAD

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

0 7.5 15

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Warrnambool Caramut Road / Hamiltons Lane, Caramut
Swept Path Assessment (Secondary Haulage Route)

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK11-F	11 of 22	B.K.	1:750 @A3	08/06/2023

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26/08/2025

TEMPORARY CULVERT REQUIRED

EXISTING GUARD RAIL TO BE RETAINED

HAMILTON HIGHWAY

0 7.5 15

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

ratio:
RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Hamilton Highway, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK12-F	12 of 22	B.K.	1:750 @A3	08/06/2023

26/08/2025 12:49:48 PM 19790T-CLP-001-F.dgn

HAMILTON HIGHWAY

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

0 7.5 15

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Hamilton Highway, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK13-F	13 of 22	B.K.	1:750 @A3	08/06/2023

19790T-CLP-001-F.dgn
26/08/2025 12:49:49 PM

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

WOOLSTHORPE-HEXHAM ROAD

IMMIGRANTS LANE

0 10 20

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road / Immigrants Lane, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

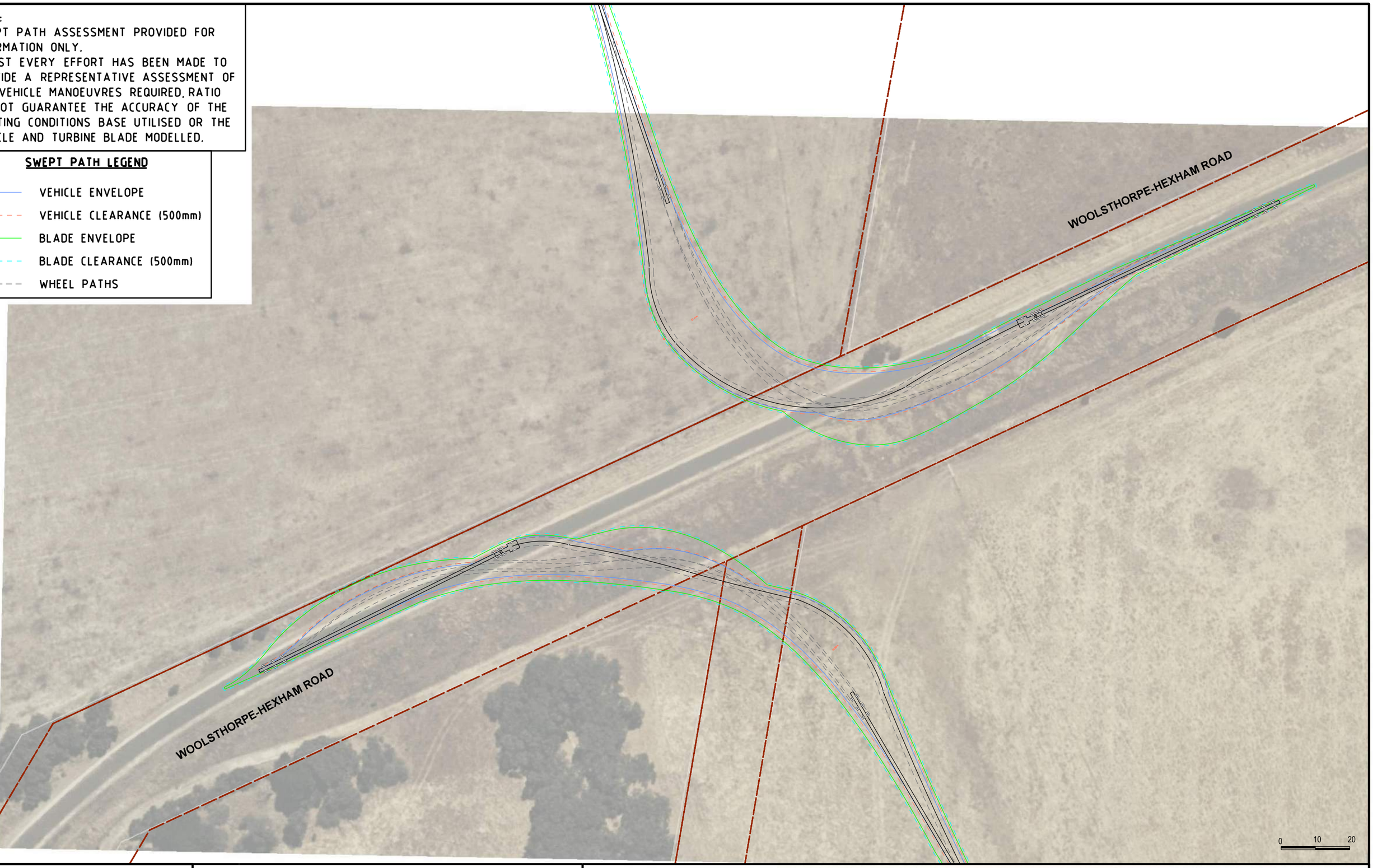
RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK14-F	14 of 22	B.K.	1:1000 @A3	08/06/2023

26/08/2025 12:49:50 PM 19790T-CLP-001-F.dgn

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS



ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

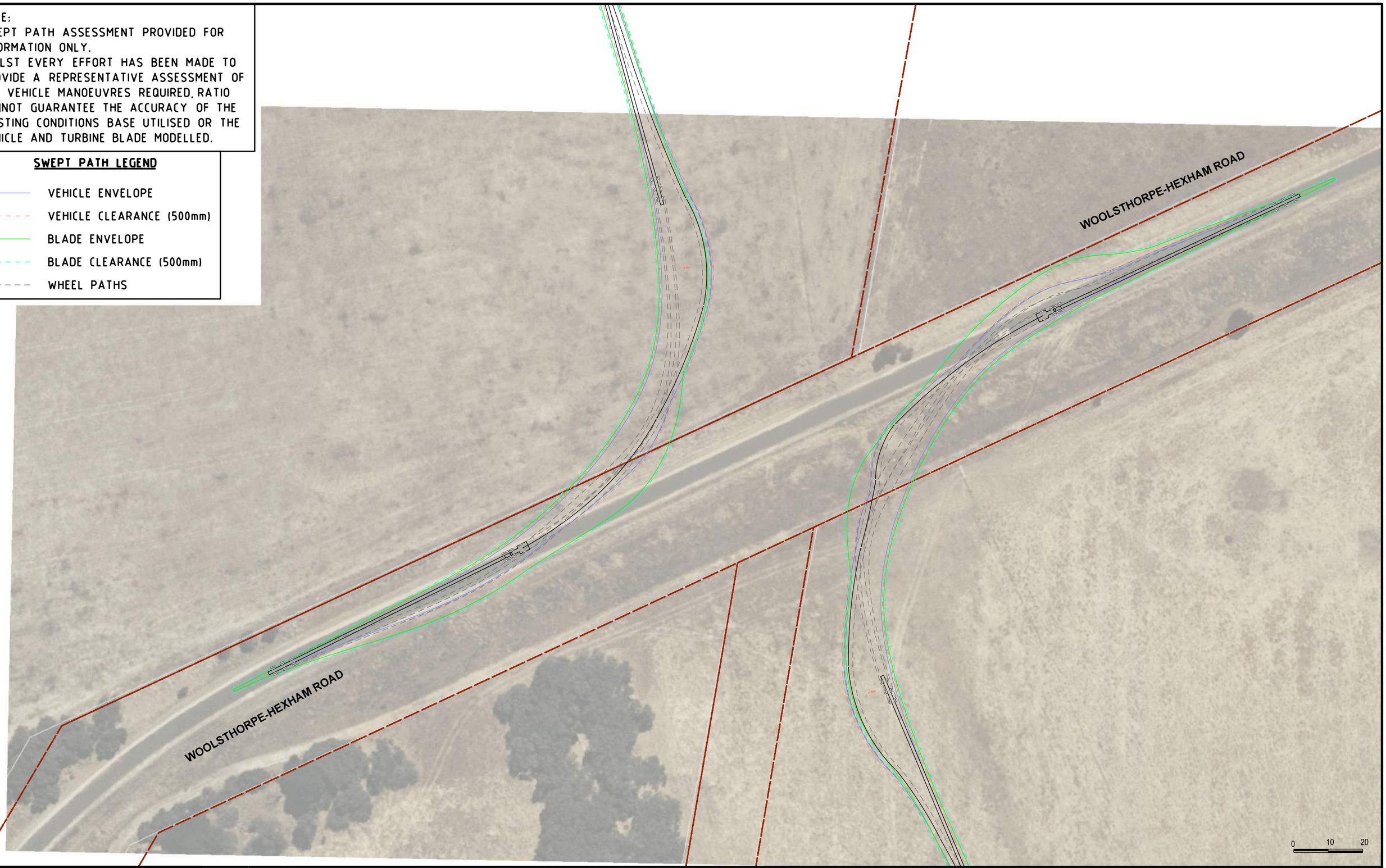
RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK15-F	15 of 22	B.K.	1:1000 @A3	08/06/2023

19790T-CLP-001-F.dgn 12:49:51 PM 26/08/2025

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS



ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Woolsthorpe-Hexham Road, Hexham
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK16-F	16 of 22	B.K.	1:1000 @A3	08/06/2023

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

HEXHAM-BALLANGEICH ROAD

0 7.5 15

ratio:
RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Hexham-Ballangeich Road, Ellerslie
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK17-F	17 of 22	B.K.	1:750 @A3	08/06/2023

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SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

HEXHAM-BALLANGEICH ROAD

0 7.5 15

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Hexham-Ballangeich Road, Ellerslie
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK18-F	18 of 22	B.K.	1:750 @A3	08/06/2023

26/08/2025 12:49:54 PM 19790T-CLP-001-F.dgn

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

BROWN STREET

WARRNAMBOOL-CARAMUT ROAD

HAMILTON HIGHWAY

0 7.5 15

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ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Warrnambool Caramut Road / Hamilton Highway, Caramut
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK19-F	19 of 22	B.K.	1:750 @A3	08/06/2023

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

HAMILTON HIGHWAY

WARRNAMBOOL-CARAMUT ROAD

0 7.5 15

ratio:
RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Warrnambool Caramut Road / Hamilton Highway, Caramut
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK20-F	20 of 22	B.K.	1:750 @A3	08/06/2023

26/08/2025 12:49:55 PM 19790T-CLP-001-F.dgn

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

WARRNAMBOOL-CARAMUT ROAD

WARRNAMBOOL-CARAMUT ROAD

93.0m Blade

0 7.5 15

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ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Warrnambool Caramut Road / Woolsthorpe Hexham Road, Woolsthorpe
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK21-F	21 of 22	B.K.	1:750 @A3	08/06/2023

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

CONNEWARREN LANE

HAMILTON HIGHWAY

0 7.5 15

ratio:
RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Hamilton Highway / Connewarren Lane, Mortlake
Swept Path Assessment

NOTE:
1) Aerial Image from Google Earth database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-001-SK22-F	22 of 22	B.K.	1:750 @A3	08/06/2023

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NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

GLENELG HIGHWAY

DUNKELD-CAVENDISH ROAD

PENSHURST-DUNKELD ROAD

EXISTING RAIL WARNING SIGN POLES TO BE PROTECTED

0 7.5 15

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

meters

First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Dunkeld-Cavendish Road / Gelenelg Highway, Dunkeld
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-002-SK01-B	01 of 05	B.K.	1:750 @A3	18/08/2023

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28/05/2025 10.00.52 PM

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

Mt BAIMBRIDGE ROAD (HENTY HIGHWAY)

EXISTING CONCRETE LIGHT POLE MAY REQUIRE RELOCATION / REMOVAL

SWEPT PATH IN CLOSE PROXIMITY TO PROPERTY FENCELINE

HENTY HIGHWAY

EXISTING TREES MAY BE IMPACTED BY SWEPT PATH

SCORESBY STREET

BLADE OVERHANG IN CLOSE PROXIMITY TO PROPERTY FENCELINE

EXISTING TIMBER LIGHT POLE AND OVERHEAD ELECTRICAL CONNECTION TO BE REMOVED

0 7.5 15

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ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Henty Highway / Mt Baimbridge Road, Hamilton
Swept Path Assessment

NOTE:
1) Aerial Image from Nearmap database (Dated 22/12/2023)
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-002-SK02-B	02 of 04	B.K.	1:750 @A3	18/08/2023

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

KENNY STREET

COLERAINE ROAD

MOUNT BAIMBRIDGE ROAD (HENTY HIGHWAY)

EXISTING TREES MAY REQUIRE TRIMMING

0 7.5 15

19790T-CLP-002-2.5-B.dgn
28/05/2025 10:00:55 PM

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Mt Baimbridge Road / Coleraine Road, Hamilton
Swept Path Assessment

NOTE:
1) Aerial Image from Nearmap database (Dated 10/01/2025)
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-002-SK03-B	03 of 05	B.K.	1:750 @A3	18/08/2023

BLADE OVERHANG IN CLOSE PROXIMITY TO PROPERTY FENCELINE

SCOTT STREET

SCOTT STREET

DUNKELD - CAVENDISH ROAD

0 7.5 15

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

ratio:

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/

Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Scott Street / Dunkeld-Cavendish Road, Cavendish
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-002-SK04-B	04 of 05	B.K.	1:750 @A3	18/08/2023

19790T-CLP-002-2.5-B.dgn
28/05/2025 10:00:56 PM

SWEPT PATH LEGEND

- VEHICLE ENVELOPE
- VEHICLE CLEARANCE (500mm)
- BLADE ENVELOPE
- BLADE CLEARANCE (500mm)
- WHEEL PATHS

PENSHURST-DUNKELD ROAD

HAMILTON HIGHWAY

EXISTING TIMBER ELECTRICITY SUPPLY POLE TO BE RELOCATED / REMOVED

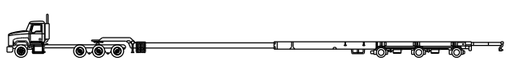
EXISTING ELECTRICAL POLE STAY TO BE PROTECTED

EXISTING TREE MAY REQUIRE REMOVAL

0 5 10

NOTE:
SWEPT PATH ASSESSMENT PROVIDED FOR INFORMATION ONLY.
WHILST EVERY EFFORT HAS BEEN MADE TO PROVIDE A REPRESENTATIVE ASSESSMENT OF THE VEHICLE MANOEUVRES REQUIRED, RATIO CANNOT GUARANTEE THE ACCURACY OF THE EXISTING CONDITIONS BASE UTILISED OR THE VEHICLE AND TURBINE BLADE MODELLED.

RATIO CONSULTANTS PTY LTD
https://ratio.com.au/



Blade Transporter – 93.0m Blade

	meters		
First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 0.91	Steering Angle	: 40.0
First Unit Track	: 2.50	Articulating Angle	: 90.0
Trailer Track	: 2.44		

Hexham Wind Farm
Penshurst-Dunkeld Road / Hamilton Highway, Penshurst
Swept Path Assessment

NOTE:
1) Aerial Image from Landchecker database
2) Swept Path Design Speed 5km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
19790T-CLP-002-SK05-B	05 of 05	B.K.	1:500 @A3	18/08/2023

19790T-CLP-002-2.5-B.dgn
10.00.56 PM
28/05/2025