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Tamworth Port to REZ OSOM route – development report

New England Renewable Energy Zone

September 2026

The Energy Corporation of NSW (EnergyCo)

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Published by The Energy Corporation of New South Wales

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Tamworth Port to REZ OSOM route development report

First published: September 2026

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1 Executive summary

Purpose

This report outlines the process EnergyCo has undertaken to choose and confirm the Tamworth OSOM route, including how early feedback has influenced engagement activities, route selection process and design.

Background

EnergyCo is upgrading the grid to build a reliable electricity system for NSW as coal-fired power stations retire. This involves delivering the state's five declared renewable energy zones (REZs) and coordinating enabling works through the Port to Renewable Energy Zones Program (Port to REZ Program), including road upgrades needed to safely and efficiently transport oversized equipment needed to build renewable energy projects, from ports to REZs.

The Port to REZ Program will leave improved roads for regional communities, with upgrades removing physical barriers along the Port to REZ route, like narrow corridors, sharp turns, height restrictions and infrastructure obstacles. Transport for NSW (Transport) is also currently developing a Corridor Capacity Plan to identify and prioritise the infrastructure and operational interventions that are needed to support the Port to REZ Program.

Since early 2024, EnergyCo has worked closely with local councils and Transport, the road authorities responsible for the safe operation of the road network, to identify potential routes for oversize overmass (OSOM) vehicles between Muswellbrook and the New England REZ.

EnergyCo announced the preferred Tamworth Port to REZ OSOM route (Tamworth OSOM route) in March 2026. The route bypasses the Tamworth CBD, following Whitehouse Lane, Marsden Park Road, O'Briens Lane and Nundle Road, before rejoining the New England Highway at Nemingha. It primarily follows an existing route approved by the National Heavy Vehicle Regulator for use by OSOM vehicles (comprising Whitehouse Lane, O'Briens Lane and Nundle Road).

Route selection and confirmation process

EnergyCo carried out strategic-level route investigations between 2024 and 2025 and identified four potential options for a suitable OSOM route at Tamworth, which were then presented to and reviewed by Transport and Tamworth Regional Council:

Option 1: Via Tamworth CBD

Option 2: Via Whitehouse Lane

Option 3: Via Burgmanns Lane

Option 4: Via Calala Lane

Options 1 - 3 were comparatively assessed against a range of key criteria, including alignment with the Port to REZ Program's objectives and delivery timeframes, physical and technical constraints, property impacts, environmental and social considerations, and other relevant factors. Following

feedback from Tamworth Regional Council, Option 4 was not progressed past the initial identification stage.

The assessment identified the Whitehouse Lane route option as the preferred Tamworth OSOM route.

In response to community feedback received during consultation, EnergyCo undertook additional assessments. These included:

- a supplementary route analysis (refer to section 5.2 and Appendix B) to further investigate the viability of a route via Burgmanns Lane
- traffic modelling (refer to section 5.3 and Appendix C) to investigate the implications of sealing the unsealed sections of Whitehouse Lane and Marsden Park Road
- an operational noise comparison (refer to section 5.4 and Appendix D) for residences along the Whitehouse Lane and Burgmanns Lane route options.

Given the primary objective of the Port to REZ route is to enable renewable energy equipment movements over several years, EnergyCo also commissioned a flood risk assessment to consider the potential impacts of flooding.

The findings of the additional assessments are summarised below.

Supplementary review of the Burgmanns Lane option

EnergyCo undertook a supplementary review in June 2026 to further assess the feasibility of an OSOM route via Burgmanns Lane, which has been identified by Tamworth Regional Council as part of a potential future local connector road and heavy vehicle / freight route (the Southern Access Route).

The Southern Access Route is outlined in Council's Blueprint 100 and Integrated Transport Plan, but the alignment, scope and delivery timeframe remain preliminary in nature.

The supplementary review confirmed Whitehouse Lane as the preferred Tamworth OSOM route, with the Burgmanns Lane option resulting in greater environmental impacts, higher costs and a longer delivery time frame which is inconsistent with the objectives of the Port to REZ Program.

Traffic modelling

Traffic modelling was undertaken to assess the impacts of sealing the currently unsealed sections of Whitehouse Lane and Marsden Park Road, to investigate concerns that, if fully sealed, the route could be used as an unofficial heavy vehicle detour or 'rat run'. Current traffic volumes indicate that approximately 670 vehicles travel in each direction per day along Whitehouse Lane and Marsden Park Road, of which 25% are heavy vehicles.

The modelling showed that, in a conservative worst-case scenario, a fully sealed route would offer faster, more reliable access from the New England Highway/ Whitehouse Lane intersection to the intersection of Nundle Road / New England Highway (up to six minutes quicker under unrestricted conditions in comparison to access via the Tamworth CBD).

Approximately 350 vehicles currently travel through the Tamworth CBD, between the New England Highway south of Tamworth and the New England Highway east of Tamworth, in each direction per day.

The modelling showed, in the assumed conservative worst-case scenario, that sealing Whitehouse Lane could attract these 350 vehicles, which includes a similar proportion of heavy vehicles (25%). This would result in traffic volumes of up to 1,020 vehicles in each direction per day. This assumes all existing vehicles wanting to travel from the south of Tamworth to north of Nemingha will use the sealed route and no administrative controls will be applied (e.g., signage, load limits).

Pending review by Tamworth Regional Council, there are a range of mitigation measures which could be implemented to address these potential impacts, including load limits, heavy vehicle restrictions, and working with digital mapping companies to avoid nominating the route as the preferred route for general traffic.

EnergyCo will continue to consult on the proposal to seal the Tamworth OSOM route via Whitehouse Lane.

Operational noise comparison

A noise assessment comparing the operational noise impacts along Whitehouse Lane and Burgmanns Lane predicted the Burgmanns Lane option to have the greater relative noise increase of the two options, particularly at night. The comparison revealed that noise mitigation would not be required for either option under the NSW Government's Road Noise Policy framework.

Flood modelling

A desktop flood risk assessment comparing the relative flood risk of the Whitehouse Lane and Burgmanns Lane options showed no meaningful difference in overall flood risk. The greatest flood constraint on the routes was found to be a common section which includes O'Brien's Lane and Nundle Road crossings of Goonoo Goonoo Creek.

Conclusion and next steps

EnergyCo has confirmed the Whitehouse Lane route option as the Tamworth OSOM route which will be progressed to environmental assessment.

The initial route analysis and subsequent assessments show that the Whitehouse Lane option achieves the primary objective of the Port to REZ Program (to enable the efficient and safe delivery of the equipment needed to build renewable energy zones within the required timeframes of predicted wind farm movements), while minimising property acquisition and environmental impacts, streamlining delivery and offering a more cost-effective overall solution.

EnergyCo will continue to engage with residents, schools, the Department of Primary Industries, and businesses along the Tamworth OSOM route and the broader community on proposed intersection and road upgrades. Feedback on the design, impact mitigation and construction details will be sought in Q3 2026 via the New England REZ Portal, a central online listing for all New England REZ consultation.

As part of this consultation, EnergyCo will seek feedback on the option to seal Whitehouse Lane and Marsden Park Road and will be guided by Tamworth Regional Council in its role as the relevant road authority.

Construction work on the Tamworth OSOM route is currently forecast to commence in 2027 with OSOM deliveries to the New England REZ expected from mid-2028.

2 Program objectives

2.1 The Port to REZ Program

EnergyCo is the NSW Government body upgrading the grid to build a reliable electricity system as coal-fired power stations retire. As Infrastructure Planner for renewable energy zones (REZ), EnergyCo is leading the process to ensure the right infrastructure is built in the right place, at the right time. These include the state's five declared REZs (Central-West Orana, New England, South West, Hunter Central-Coast and Illawarra), plus the Waratah Super Battery Project and Hunter Transmission Project.

Additionally, EnergyCo is coordinating other work that is required to build renewable energy zones, like road upgrades being delivered as part of the Port to Renewable Energy Zone Program (Port to REZ Program).

EnergyCo is working closely with Transport for NSW (Transport) and relevant councils to identify and upgrade key roads and intersections required to enable the safe and efficient movement of OSOM renewables components. The upgrades will remove physical barriers along the Port to REZ OSOM route, including narrow corridors, sharp turns, height restrictions and infrastructure obstacles.

OSOM components required for renewable energy projects include wind turbine blades, tower segments and transformers for generation and transmission projects. Wind turbine blades vary in size and can be up to 100 metres in length. Components will be transported from the Port of Newcastle to the New England REZ by specialised transportation companies on road freight vehicles and specialised trailers that can be up to 112 metres long, depending on the equipment being transported.

2.2 The route to the New England REZ

The Port to REZ route to the New England REZ is an extension of the Central-West Orana route, which covers the section of State-road network from the Port of Newcastle to Muswellbrook. Upgrades along the route to the Central-West Orana REZ are nearly complete, with most critical work expected to be finished by late 2026, weather permitting.

EnergyCo is finalising plans for the New England Port to REZ route, following investigations that have been underway since early 2024. While construction of renewable energy projects may be several years away, establishing the route now is essential to support future delivery and minimise community impacts.

Confirming a route which avoids regional town centres where possible, is a priority for the Port to REZ Program, as it will enable critical upgrades to be completed ahead of increasing OSOM volumes, improve safety, reduce traffic impacts and leave improved roads for the community.

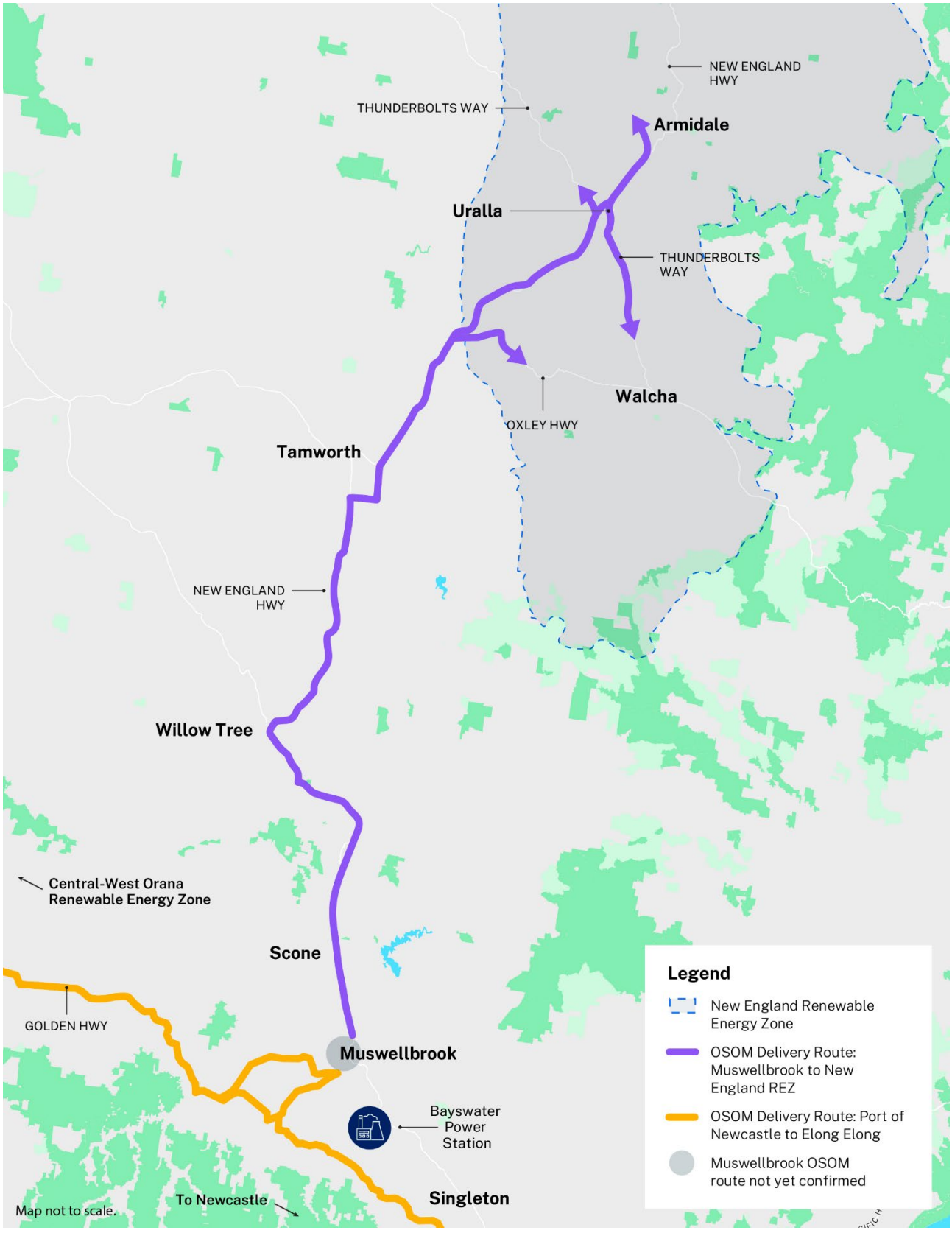

Figure 1 Port to REZ route to the New England REZ

In March 2026, EnergyCo announced a preferred Port to REZ Tamworth OSOM route (Tamworth OSOM route) that primarily follows an existing route approved by the National Heavy Vehicle Regulator (NHVR) for use by OSOM vehicles. The route follows Whitehouse Lane, Marsden Park Road, O'Brien's Lane and Nundle Road before rejoining the New England Highway at Nemingha.

Engagement history

Since early 2024, EnergyCo has worked with Tamworth Regional Council (Council) and Transport to identify potential OSOM routes from Muswellbrook to the New England REZ. EnergyCo has engaged with Council and Transport on a range of Tamworth OSOM route options since mid-2025, as well as keeping nearby residents informed about progress, seeking to understand local road use, potential impacts and community concerns.

In March 2026, EnergyCo identified and notified stakeholders of the preferred OSOM route which bypasses the Tamworth CBD at Whitehouse Lane before rejoining the New England Highway at Nemingha.

The following summary outlines how EnergyCo has engaged stakeholders throughout the route selection process, including the feedback received and how this information influenced engagement activities, the route selection process and design.

It is important to note that engagement is still underway. Design, impact mitigation and construction details are still being worked through, and feedback from residents and community on the specific road designs along the route will be sought in Q3 2026 via the New England REZ Portal, a central online listing for all New England REZ consultation.

This is in addition to the other communication and engagement pathways available to communities (including project email and phoneline and direct communication with EnergyCo staff).

Consultation activities

EnergyCo, Transport and Council worked collaboratively through regular meetings and briefings to identify the preferred OSOM route and determine required upgrades. More recently, this has included joint meetings with resident groups.

Engagement activities with landholders, businesses and schools included direct discussions, door knocks and letterbox drops to introduce the Port to REZ Program, support field investigations, understand historical landholder/generator relationships and any potential local impacts. EnergyCo Property and Place Managers were appointed to support landholders along the preferred Tamworth OSOM route in April 2025.

EnergyCo has undertaken focused consultation with the Whitehouse Lane Residents Action Group (WLRAG) since February 2026, including meetings on 19 March, 9 April, 20 May and 18 June 2026, to work through concerns.

EnergyCo presented the findings of the supplementary review into the Burgmanns Lane options to the WLRAG at a joint meeting with representatives from Transport and Tamworth Regional Council on 18 June 2026. Copies of the supplementary report were provided to the group.

What we heard

Apart from the ongoing discussions with landholders whose land is directly impacted by the proposed construction footprint and the WLRAG, minimal direct feedback has been received.

Feedback from the WLRAG showed a strong preference for the Tamworth OSOM route to use Burgmanns Lane as the offtake point from the New England Highway. Burgmanns Lane has been identified in Tamworth Regional Council's Integrated Transport Plan as forming part of a potential future road development called the Southern Access Route. Refer to section 7 for more information.

Concerns were raised about the suitability of Whitehouse Lane for OSOM vehicles, particularly in relation to safety, emergency access, school bus operations and flooding.

Tamworth Regional Council has expressed support for the Whitehouse Lane option for Port to REZ OSOM movements, while remaining committed to continuing to develop the Southern Access Route in the future. Transport has committed to continue working with Council on this matter.

Tamworth Regional Council, as the relevant road authority, has requested EnergyCo seal currently unsealed sections of the Whitehouse Lane option, for the benefit of the wider community, however the WLRAG has expressed concerns this would increase traffic volumes and permanently change local traffic patterns. Sealing Whitehouse Lane remains an outstanding issue that will be subject to further consultation. Refer to section 5.3 for more information.

Engagement outcomes

EnergyCo's consultation process has included engagement with landholders on potential OSOM route options, focused consultation with the WLRAG, and supplementary assessments into Burgmanns Lane route options. This work has improved understanding of stakeholder preferences and concerns and enabled EnergyCo to provide a more detailed explanation of why the Whitehouse Lane option was selected as the preferred Tamworth OSOM route and will be progressed to environmental assessment.

3 Planning and environmental assessment

3.1 Background

Section 2.109(1) of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* permits the development of a road or road infrastructure facilities by, or on behalf of a public authority, without consent, on any land. This is subject to certain requirements for national parks and related land.

While development consent is not required, these activities are still subject to environmental assessment under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The level of environmental assessment, including the investigation, assessment and documentation, is required to be proportionate to the nature and risk of the proposed activities.

As such, the road upgrades to deliver the Tamworth OSOM route will be assessed and determined under Part 5 of the EP&A Act. Consistent with other Port to REZ road upgrades, EnergyCo is proposing to carry out the activity and Transport for NSW will be the determining authority. Refer to section 8.1 for more information.

Given the minor scope and scale of the activity and the predicted impacts, a Minor Works Review of Environment Factors (MWREF) will be prepared for the Tamworth OSOM route. The proposed works include targeted intersection upgrades, targeted existing pavement upgrades, localised widening at pinch points, drainage improvements and relocation of utilities and signage.

3.2 Assessment of the Tamworth OSOM route

The MWREF will assess the likely environmental, social and planning impacts of the proposal, and evaluate whether proposed mitigation measures are appropriate. It will also consider the alternatives that were investigated. EnergyCo will finalise the MWREF and refer it to Transport for NSW for review and determination.

The environmental assessment process will involve the following key stages:

- **investigation and impact assessment:** design investigation work to identify likely environmental, social and economic impacts and appropriate mitigation measures
- **consultation:** targeted consultation to identify and investigate issues, ensuring the impact assessment captures community and stakeholder feedback
- **finalisation and referral:** EnergyCo finalises the MWREF, incorporating the impact assessment, mitigation measures and consultation outcomes, and refers it to Transport for NSW

- **determination:** Transport for NSW, as the determining authority, reviews the MWREF and considers the environmental, social and economic impacts, proposed mitigation measures, and consultation feedback, before deciding whether to approve the activity.

4 Route selection

4.1 Strategic assessment

EnergyCo, in consultation with Transport and local councils, carried out strategic-level route investigations between 2024 and 2025 to identify a potential OSOM corridor between Muswellbrook and the New England Renewable Energy Zone.

This work included:

- high-level transport feasibility assessments
- a preliminary engineering review
- a network connectivity assessment
- property and environmental constraints review.

EnergyCo identified four potential options for a suitable OSOM route at Tamworth:

Option 1: Via Tamworth CBD

Option 2: Via Whitehouse Lane

Option 3: Via Burgmanns Lane

Option 4: Via Calala Lane

The preferred Tamworth OSOM route was selected by assessing the potential options against Port to REZ Program objectives, other key criteria and feedback from Tamworth Regional Council. It aligns with EnergyCo's key planning pillars and principles, including maximising use of existing infrastructure, minimising property and environmental impacts and maximising delivery certainty.

Outputs of the comparative assessments are presented in Appendix A (also summarised in Table 1 below) and Appendix B.

4.2 Background on the potential routes

Option 1 (via Tamworth CBD)

Option 1 passes through the Tamworth CBD. It results in the most significant disruption to the area, particularly for general traffic and the wider community, and was not supported by Tamworth Regional Council. This route is currently approved by the NHVR for use by OSOM vehicles.

Options 2 (via Whitehouse Lane)

Option 2 follows Whitehouse Lane, Marsden Park Road, O'Brien's Lane and Nundle Road before rejoining the New England Highway at Nemingha. It primarily follows a route which is already approved by the NHVR for use by OSOM vehicles (comprising Whitehouse Lane, O'Briens Lane and Nundle Road).

Option 3 (via Burgmanns Lane)

Option 3 follows Burgmanns Lane, Marsden Park Road, O'Brien's Lane and Nundle Road before rejoining the New England Highway at Nemingha. This option would include building a new road connecting to Marsden Park Road. The common route of O'Briens Lane and Nundle Road is approved by the NHVR for use by OSOM vehicles.

Option 4 (Calala Lane)

Option 4 follows Calala Lane, O'Brien's Lane and Nundle Road before rejoining the New England Highway at Nemingha. On advice from Tamworth Regional Council about the high density of residential properties and existing constraints on the route (in particular the commemorative trees on Calala Lane), this option was not progressed past the initial identification stage.

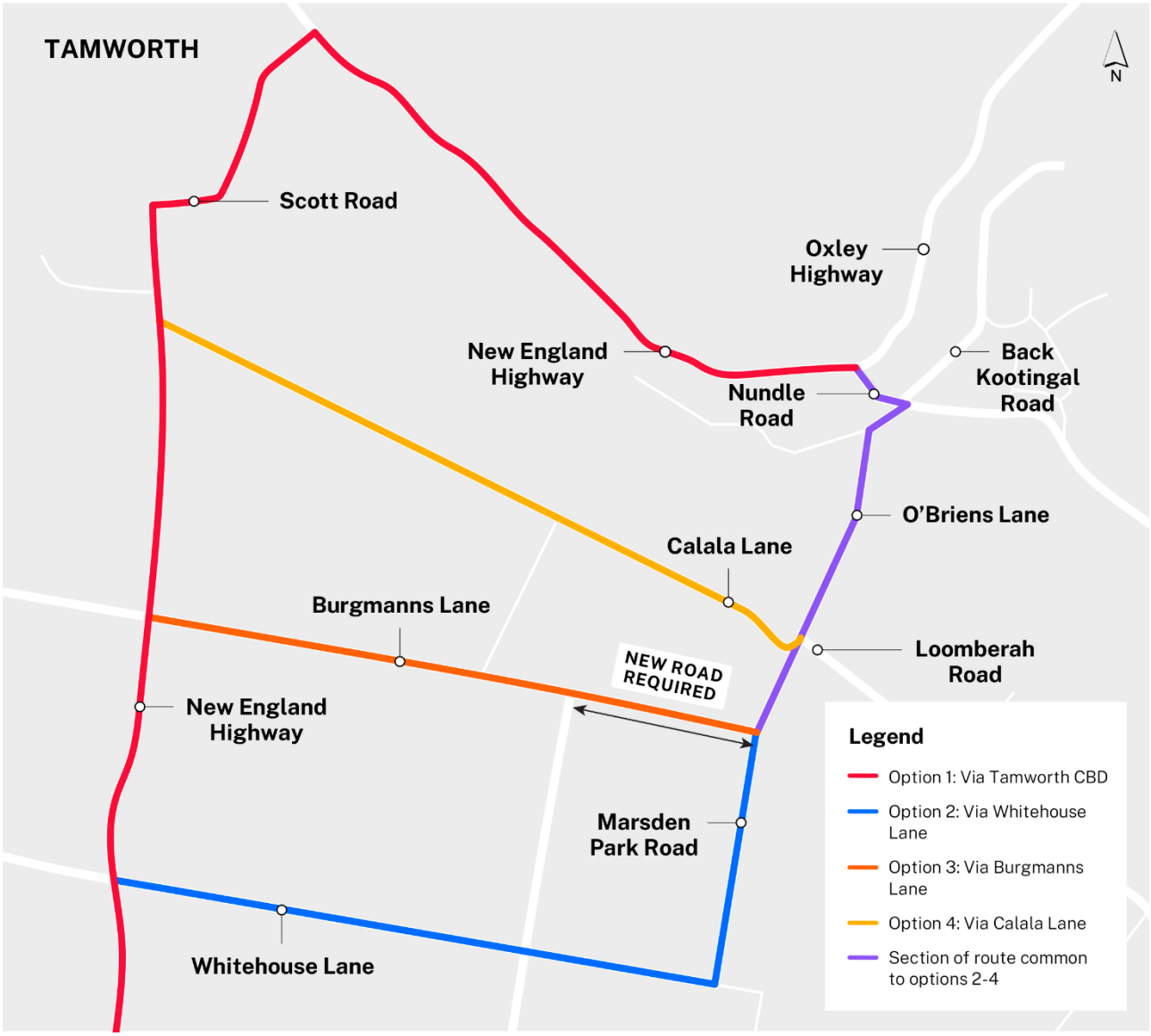

Figure 2 Map of Options 1 – 4

4.3 Comparative assessment

Options 1, 2 and 3 were comparatively assessed against a set of key criteria including physical/ technical constraints, property impacts, environmental impacts and social considerations, and other relevant criteria to identify a preferred route. Refer to Appendix A for more details on the comparison (summarised in Table 1 below). As noted above, Option 4 was not progressed past the initial identification stage.

Subsequently, additional assessments were undertaken in response to community feedback. Refer to section 5 and Appendix B for more information.

4.4 The preferred option

Compared with the alternatives, the Whitehouse Lane option was identified as the preferred Tamworth OSOM route. It was found to deliver the best overall outcome by making the greatest use of existing road infrastructure, minimising road upgrades, property acquisition, environmental impact and overall cost.

The key reasons Option 2 via Whitehouse Lane was selected as the preferred option are that it:

- can be delivered within the timeframe needed to meet Port to REZ Program milestones, including the expected commencement of OSOM deliveries from mid-2028
- requires the least amount of property acquisition
- creates the least environmental impact due to the utilisation of existing roadways
- requires the least amount of new pavement to be constructed
- does not require a new road to be constructed through a floodplain and
- reduces impacts to local traffic flow through the Tamworth CBD during construction of the New England REZ.

Since announcing the preferred Tamworth OSOM route in March 2026, EnergyCo has been carrying out field investigations along the route, including geotechnical investigations, survey work, structure assessments and biodiversity surveys. These studies are being used to better understand the route's feasibility, constraints and potential upgrade requirements.

4.5 Request for further analysis of Burgmanns Lane

In response to community feedback, EnergyCo undertook supplementary investigations to assess the feasibility of using Burgmanns Lane as part of the Tamworth OSOM route. Refer to section 5 and Appendix B to read the full review.

Table 1 Excerpt from Appendix A OSOM Report Table 11-1 *OSOM detour options comparative assessment*

Option	Description	Road upgrades	Pavement / Hardstand	Structure & utility upgrades	Bridge & culvert crossings	Vegetation impacts	Residential properties along route	Property acquisition extents	Easement acquisition extents
1 – via Tamworth CBD	New England Highway, Scott Street, Marius Street, New England Highway					Note 1		Note 2	
2 – via Whitehouse Lane	New England Highway, Whitehouse Lane, Marsden Park Road, O'Briens Lane, Nundle Road, New England Highway					Note 1			Note 3
3 – via Burgmanns Lane	New England Highway, Burgmanns Lane, O'Briens Lane, Nundle Road, New England Highway					Note 1			
4 – via Calala Lane	New England Highway, Calala Lane, O'Briens Lane, Nundle Road, New England Highway	Not assessed following feedback from Tamworth Regional Council							

Green – positive comparative assessment
Amber – moderate comparative assessment
Red – poor comparative assessment

Note 1 – Classification of 'poor' is measured against nil impact to vegetation, i.e., any vegetation impact registered as 'poor'. Refer also Section 5.2 and Appendix B
Note 2 – Classification assesses the extent (i.e. number of) rather than nature of acquisition. For Option 1, acquisition extent was low but includes several large buildings, suggesting this would actually be 'poor' when translated to cost and community impacts.
Note 3 – While Appendix B shows this item as red, subsequent assessment reduced easement extent to zero - thus amended to green in this table.

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5 Additional assessments

5.1 Background

In response to community feedback, EnergyCo carried out additional assessments of the route options. These include:

- a supplementary route analysis to further investigate the viability of a route via Burgmanns Lane
- traffic modelling to investigate the implications of sealing the unsealed sections of Whitehouse Lane and Marsden Park Road
- an operational noise comparison for residences along the Whitehouse Lane and Burgmanns Lane route options.

Given the primary objective of the Port to REZ route is to enable renewable energy equipment to be delivered over several years, EnergyCo also commissioned a flood risk assessment to consider the potential impacts of flooding.

The findings have confirmed the Whitehouse Lane option as the Tamworth OSOM route which will be progressed to environmental assessment.

5.2 Supplementary route analysis

In consultation with the WLRAG, EnergyCo commissioned a supplementary review to investigate concerns about the impacts of a Tamworth OSOM route via Whitehouse Lane and to consider the implications of updated information about the Burgmanns Lane option on the route selection outcome.

Three options were analysed in the supplementary review:

Option A: Whitehouse Lane as the base case. This is the same route described as Option 2 in the original route analysis (refer to section 4.1)

Option B1: Southern Access Route which would require a comprehensive upgrade of Burgmanns Lane, including building a new road connecting to Marsden Park Road as an arterial road suitable for OSOM use and to be used also as a public local road. This would be in line with Tamworth Regional Councils' Blueprint 100 plans.

Option B2: Which would upgrade Burgmanns Lane, including building a new road connecting to Marsden Park Road, for OSOM vehicles only. This is the same route described as Option 3 in the original route analysis, with a reduced scope to suit only OSOM access.

Additional considerations

The supplementary route analysis considered the following additional information:

- a development application for a service station to be built at the corner of Burgmanns Lane and New England Highway
- progressive environmental impact statement (EIS) approvals of multiple BESS projects located along Burgmanns Lane
- recent road upgrades to the existing Burgmanns Lane completed by Tamworth Regional Council
- land ownership along the unconstructed section between Burgmanns Lane and Marsden Park Road classed as Council land
- feedback regarding flood impacts to Whitehouse Lane and Burgmanns Lane
- school bus activity along Whitehouse Lane and Marsden Park Road.

Constraints

Some of the constraints associated with developing a Tamworth OSOM route via Burgmanns Lane, to a specification that would meet the objectives of the Southern Access Route (Option B1), were also considered and are outlined below:

- acquisition of an average 8m strip alongside the full length of existing Burgmanns Lane (3.9km) to achieve the required road corridor for an arterial road suitable for use as a connector road. This would impact multiple properties, affecting their existing frontage.
- significant upgrades required along the existing Burgmanns Lane unsealed road to suit an arterial public road arrangement
- additional acquisition (6m x 1.8km) along the undeveloped section of Burgmanns Lane (between Burgmanns Lane and Marsden Park Road in addition to the land which has already been allocated to Tamworth Regional Council)
- significant cost and time for the construction of a suitable arterial road along the undeveloped route from existing Burgmanns Lane to Marsden Park Road which would not be aligned with Port to REZ Program milestones
- modification of a development application by the developers of a proposed service station which is currently being assessed by Tamworth Regional Council. Partial land acquisition of the proposed business site would also be required.
- significant and complicated utility relocation works required for overhead powerlines (high voltage and 66KVA sub transmission) on either side of Burgmanns Lane which connect to the existing electrical substation at Burgmanns Lane
- requirement to widen recently upgraded bridges along Burgmanns Lane to comply with the needs of an arterial road
- assessment of potential flood impacts of building an arterial road through a flood plain and mitigation for surrounding properties.

Developing a Tamworth OSOM route via Burgmanns Lane to a lower specification for temporary OSOM use (Option B2 and Option 3 in the original analysis), is also inconsistent with Port to REZ

Program objectives (refer to section 4) and could ultimately delay Tamworth Regional Council's opportunity to develop the Southern Access Route at that site until the bulk of New England REZ OSOM components have been delivered.

Outcome

The findings of the supplementary review confirmed Whitehouse Lane (Option A) as the best overall option as it:

- meets the delivery time frame required to accommodate OSOM loads required to build generation and storage projects in the New England REZ from mid-2028
- requires the least partial property acquisition- corner cuttings of properties to construct slip lanes.
- has the least environmental impacts due to the use of existing roads and associated infrastructure
- utilises existing approved OSOM route segments with the lowest initial cost estimate for required upgrades
- provides safe and suitable access for OSOM loads
- does not require modifications for surrounding development applications.

The greater time and cost needed to build Option B1 Southern Access Route is inconsistent with the objectives of the Port to REZ Program and is not considered viable.

While this route would align with part of Tamworth Regional Council's long-term Southern Access Route proposal, it is considered less suitable than the preferred Whitehouse Lane option due to the significant infrastructure, time and cost required to make the route operational. Delivering this option would require construction of a new 1.8km road and a bridge through floodplain to connect Burgmanns Lane to Marsden Park Road, resulting in more extensive environmental impacts and private property acquisition impacts, both in terms of land area required and the number of properties affected.

The option is also less compatible with Port to REZ Program milestones due to the significantly longer timeframe needed to design and construct the more complex bridge and road infrastructure to the Southern Access Route standard, obtain environmental approvals and complete additional property negotiations.

5.3 Road sealing

EnergyCo's initial technical assessment indicated that sealing the currently unsealed sections of Whitehouse Lane and Marsden Park Road was not critical to support OSOM vehicles, however leaving it unsealed might increase the frequency of road maintenance with increased dust impacts to adjacent residents.

At the request of Tamworth Regional Council, EnergyCo has included sealing the unsealed sections of Whitehouse Lane and Marsden Park Road as a design option in the current Tamworth OSOM route design, to provide benefits for the wider community.

EnergyCo undertook additional traffic modelling to investigate the benefits and implications of sealing the unsealed sections of Whitehouse Lane and Marsden Park Road, in response to concerns raised by the WLRAG that it could increase traffic volumes and change local driving patterns. Current traffic volumes indicate a daily traffic volume of 670 vehicles heading in each direction, of which 25% are heavy vehicles.

Results were shared with Tamworth Regional Council on 17 September 2025.

Model outcomes

The modelling indicated that sealing Whitehouse Lane would offer faster, more reliable travel from the New England Highway/Whitehouse Lane intersection to the intersection of Nundle Road/New England Highway (reducing travel time by up to 6 minutes in unrestricted conditions compared to access via the Tamworth CBD) and reduce traffic travelling through Tamworth CBD. However, the additional traffic may result in marginal increases in delays for lower priority traffic movements at key intersections along the route including New England Highway/Whitehouse Lane and Nundle Road/New England Highway. Refer to Appendix C for more information.

Approximately 350 vehicles currently travel through the Tamworth CBD, between the New England Highway south of Tamworth and the New England Highway east of Tamworth, in each direction per day.

The modelling showed, in the assumed conservative worst-case scenario, that sealing Whitehouse Lane could attract these 350 vehicles, which includes a similar proportion of heavy vehicles (25%). This would result in traffic volumes of up to 1020 vehicles in each direction per day. This assumes all existing vehicles wanting to travel from the south of Tamworth to north of Nemingha will use the sealed route and no administrative controls will be applied (e.g signage, load limits).

However, an administrative control is currently in place in the form of a load limit at Nemingha, which EnergyCo is not proposing to remove (see below). The existing load limit discourages heavy vehicles (excluding OSOM) from using the existing NHVR approved OSOM route via Whitehouse Lane to rejoin the New England Highway. OSOM loads are excluded from the load limit but must apply to the NHVR for a permit to utilise the route. For clarity, the administrative control would have no bearing on light vehicles.

Mitigation measures

Pending review by Tamworth Regional Council, there are a range of mitigation measures which could be implemented to address potential impacts, including load limits, heavy vehicle restrictions and working with digital mapping companies to avoid nominating the route as the preferred route for general traffic.

Future consultation

While the current design proposes to seal the currently unsealed sections of Whitehouse Lane and Marsden Park Road, feedback indicates the interests of the broader community and residents along the Tamworth OSOM route may conflict on this issue, and further consultation is required.

This will be completed as part of the 'Have Your Say' consultation on the proposed road and intersection upgrades of the Tamworth OSOM route. This consultation is planned for Q3 2026.

EnergyCo's decision on whether to seal Whitehouse Lane and Marsden Park Road will be guided by the advice of Tamworth Regional Council, as the delegated road authority.

5.4 Operational noise comparison

In response to community feedback, EnergyCo carried out a comparison of potential operational traffic noise impacts for the Whitehouse Lane and Burgmanns Lane route options. Operational traffic noise refers to the ongoing noise generated by vehicles using a road once upgrade works are complete, separate from temporary construction noise impact.

Assessment criteria

Noise impacts were assessed in accordance with the NSW Government's Road Noise Policy (RNP). The RNP is applied across NSW and is intended to provide the most effective and equitable outcomes, where reasonable and feasible, to address noise impacts from road projects in NSW. The RNP sets two measures to assess noise impacts from road projects.

The first is a road traffic noise assessment criterion that varies between different road categories, and day or nighttime periods. The second is a relative increase criterion which requires noise impacts from an increase in traffic at existing residences to be considered as part of the assessment process.

The assessment process includes consideration of noise mitigation measures where both the relevant noise criteria are exceeded and the increase in noise level is greater than 2 dB (decibel) (an increase of up to 2 dB is considered a minor impact that is considered barely perceptible to the average person).

Comparative desktop assessment

The RNP recognises that some industries require heavy vehicles to access remote sites via local public roads, as is the case for Port to REZ OSOM vehicles. Where this occurs, the RNP describes the local road corridor used for this purpose as a "principal haulage route."

On this basis, Whitehouse Lane and Burgmanns Lane were assessed comparatively as principal haulage routes. Principal haulage routes are subject to the same absolute noise criteria as arterial and sub-arterial roads: **60 dB(A)** during the day and **55 dB(A)** at night, measured at the nearest façade of the affected residence.

NOTE: dB stands for decibel and is a unit of sound measurement. This unit measures the loudness of a sound. Although dB is commonly used when referring to measuring sound, humans do not hear all frequencies equally. For this reason, sound levels in the low frequency end of the spectrum are reduced as the human ear is less sensitive at low audio frequencies than at high audio frequencies.

To account for this, different weightings have been created to give a loudness measurement that takes into account how the human ear actually perceives sound. The most common of these weightings is the "A" weighting. Values that have been corrected using the "A" weighting system are shown using units of dBA. Values not corrected to account for human hearing are written using units of dB.

A comparative desktop noise assessment was completed for both the Whitehouse Lane and Burgmanns Lane options using a conservative estimate of additional OSOM vehicles and additional traffic associated with sealing the routes, applied to both day and night traffic. The assessment used aerial mapping to identify the nearest residential dwellings and their distance from the road.

Outcome

The assessment predicted operational noise levels would remain below the RNP's absolute noise criteria of 60 dB(A) during the day or 55 dB(A) at night, in both existing and future scenarios, on both routes, as the nearest dwellings are sufficiently set back from the road.

The assessment predicted an increase in traffic noise at the nearest dwelling of 0.8 dB (day) and 2.1 dB (night) on the Whitehouse Lane option and 1.0 dB (day) and 3.6 dB (night) on the Burgmanns Lane option. The Burgmanns Lane option is therefore predicted to have the greater relative noise increase of the two options, particularly at night.

No noise mitigation would be required for either option under the RNP framework.

Refer to Appendix D for the comparative desktop assessment.

5.5 Flooding

Given the primary objective of the Port to REZ route is to enable renewable energy equipment deliveries over several years, EnergyCo also commissioned a flood risk assessment to consider the potential impacts of flooding.

EnergyCo commissioned a desktop flood risk assessment comparing the relative flood exposure of the Whitehouse Lane (Option A) and Burgmanns Lane (Option B) options. The assessment, compared historical flooding extents and hazard classifications along each option, using available flood mapping, LiDAR and hydraulic modelling data.

Assessment method

The assessment compared the two options, at the points where each alignment crosses existing waterways and floodplains.

Flood extents and levels were derived from 2022 LiDAR survey, the Tamworth Floodplain Risk Management Study and Plan (2025), 1% Annual Exceedance Probability (AEP) flood contours supplied by Tamworth Regional Council, Aurecon's EIS hydraulic model, and design drawings for the Goonoo Goonoo Creek bridge and culvert replacement.

Flood hazard was assessed for the 10% and 1% AEP events and grouped, for comparison purposes, into H1 (low hazard – generally safe for vehicles, people and buildings), H2 (medium hazard – unsafe for small vehicles) and H3–H6 (higher hazard – unsafe for vehicles and/or people).

As a desktop assessment, the review considered existing flood conditions only and did not model the hydraulic impact of constructing either option – for example, the effect of new fill, culverts or bridges on upstream flood behaviour.

> Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. So a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year. Similarly, a 10% AEP flood has a 1 in 10 chance of being reached or exceeded in any given year.

Comparative desktop assessment

The results of the assessment for the 1% AEP event are summarised in Table 2. Considering only the sections unique to each option, the Whitehouse Lane option (Option A) has 5 flood affected crossings totalling approximately 1716m of flooded road, compared with 7 flood-affected crossings totalling approximately 1410m for the Burgmanns Lane option (Option B). Burgmanns Lane also has a marginally shorter length classified as higher hazard (H3–H6) – 713m compared with 793m for Whitehouse Lane, but a slightly greater maximum flood depth (2.7m compared with 2.4m).

Table 2 Comparison of flood assessment results for the sections unique to each option (1% AEP event)

Parameter	Whitehouse Lane (Option A)	Burgmanns Lane (Option B)
Number of crossings	5	7
Total flooded length of crossings (m)	1716	1410
Total H1 (low hazard) length (m)	712	632
Total H2 (medium hazard) length (m)	211	65
Total H3–H6 (higher hazard) length (m)	793	713
Maximum flood depth at any crossing (m)	2.4	2.7
Total length with flood depth > 0.5 m (m)	749	632

Note: Figures exclude the crossings on sections of route common to both options. The common O'Brien's/Nundle Road crossing of Goonoo Goonoo Creek has a total length of 1806m, of which 1771m is classified as higher hazard (H3–H6).

On this basis, considering only the sections unique to each option, Burgmanns Lane is assessed as a marginally better performing option from a flood risk perspective. However, both options share a common section of road including the O'Brien's Lane/Nundle Road crossing of Goonoo Goonoo Creek, which was found to be the most severe flood constraint on the route, with the widest flood

extent of any crossing assessed (approximately 1806m) and the greatest length classified as higher hazard (1771m).

As this common section is unaffected by the choice between Whitehouse Lane and Burgmanns Lane, there is no meaningful difference in overall flood risk between the two options once the whole route is considered. Flooding was therefore not considered a differentiating factor in EnergyCo's decision to retain Whitehouse Lane as the preferred Tamworth OSOM route.

6 Cost considerations

6.1 Comparative assessment of route options

The three route options considered in the supplementary review (refer to section 5 and Appendix B) were assessed using the Whitehouse Lane option as the reference point (base case). Option B1 and B2 were compared to the base case to identify the additional costs or savings of each option.

Noting the procurement of a contractor to deliver this work is yet to commence, and will be subject to a competitive tender process, budget amounts cannot be disclosed.

The cost of upgrading intersections on the routes was consistent across the options, however the cost of widening and sealing existing pavements[1] and building new pavement, were substantially higher for the two Burgmanns Lane options. It was estimated that option B1 would cost four times (x4) more than the Whitehouse Lane option, and option B2 would cost twice as much (x2).

The Burgmanns Lane options cost varied significantly from the Whitehouse Lane option due to the increased amount of property acquisition, significantly more complicated utility upgrades and additional flood mitigations measures required (this could include a culvert or bridge infrastructure).

The Burgmanns Lane options also require new pavement over and above that required to upgrade intersections, and in the case of option B1, which would see Burgmanns Lane built to the design standard of an arterial road, additional widening and sealing of existing pavement.

Table 3 Comparison to Whitehouse Lane

Category	Burgmanns option B1	Burgmanns option B2
New pavement m²	17000m²/ 285% more than the Whitehouse Lane option.	10500m²/ 175% more than the Whitehouse Lane option.
Widening and sealing of existing pavement m²	5500m²/ 18% more than the Whitehouse option- assumes unsealed sections of Whitehouse Lane and Marsden Park Road are sealed.	9500m²/ 31% less than the Whitehouse option - assumes unsealed sections of Whitehouse Lane and Marsden Park Road are sealed.
Structure construction	Existing bridge on the existing Burgmanns Lane may require widening to suit required width. Additional bridge/ culvert structure required along the	Additional bridge/ culvert structure required along the unbuilt section of Burgmanns Lane.

[1] Pavement refers to the surface and supporting layers that vehicles drive, rather than the road which can include shoulders, drainage, kerbs and footpaths.

Category	Burgmanns option B1	Burgmanns option B2
	unbuilt section of Burgmanns Lane.	
Utility impacts	Significant additional high voltage transmission line relocation works compared to the Whitehouse Lane option.	Similar scope of relocation works to the Whitehouse Lane option.
Private property acquisition area (m^2)	52000m^2/866% additional private property acquisition required compared to the Whitehouse Lane option.	5000m^2/ 83% additional private property acquisition required compared to the Whitehouse Lane option.

The comparison confirms the Whitehouse Lane option provides the highest cost efficiency as it uses existing road infrastructure, has less property impacts requiring acquisition and requires less sealing and widening.

The cost comparison does not include upgrades to the existing pavement on Whitehouse Lane as its condition has been visually assessed as suitable for OSOM loads, with only small, isolated sections requiring treatment. EnergyCo is currently carrying out further geotechnical assessment of the existing pavement along Whitehouse Lane to verify the visual assessment. Notwithstanding, if any large-scale upgrades were required, the anticipated increased scope is still not expected to exceed the anticipated cost of either of the Burgmanns Lane options.

6.2 Ongoing road maintenance

As the road authority for much of the Tamworth OSOM route, Tamworth Regional Council will be responsible for ongoing road maintenance along the route.

The frequency of maintenance along the route is expected to increase as a result of additional Port to REZ OSOM traffic. EnergyCo and Tamworth Regional Council will continue to work together to develop a suitable funding arrangement with respect to the additional maintenance costs.

While the road is not required to be sealed to achieve the objectives of the Port to REZ Program, sealing Whitehouse Lane and Marsden Park Road would likely offer improvements in both increased durability, dust reduction generation and decreased ongoing maintenance costs. Tamworth Regional Council has confirmed its preference for sealing the road.

Due to the similar length of the Whitehouse Lane and Burgmanns Lane options, it is anticipated that the ongoing road maintenance cost would be similar for both options.

7 Interface with the Southern Access Route

7.1 Background

A Southern Access Route along Burgmanns Lane has been proposed in Tamworth Regional Council's Blueprint 100 and Integrated Transport Plan, to connect Tamworth's proposed Western Freight Link to Nemingha. This project is currently in the investigative stage with no committed funding from Tamworth Regional Council or Transport. The proposed designated route has also not been confirmed. The lack of certainty and the expected long lead time to progress the Southern Access route development does not meet the requirements of the Port to REZ Program.

A Southern Access Route would connect South Tamworth to Nemingha, diverting OSOM and heavy vehicles around the Tamworth CBD and moving local traffic from local roads onto a major arterial road (known as a collector road).

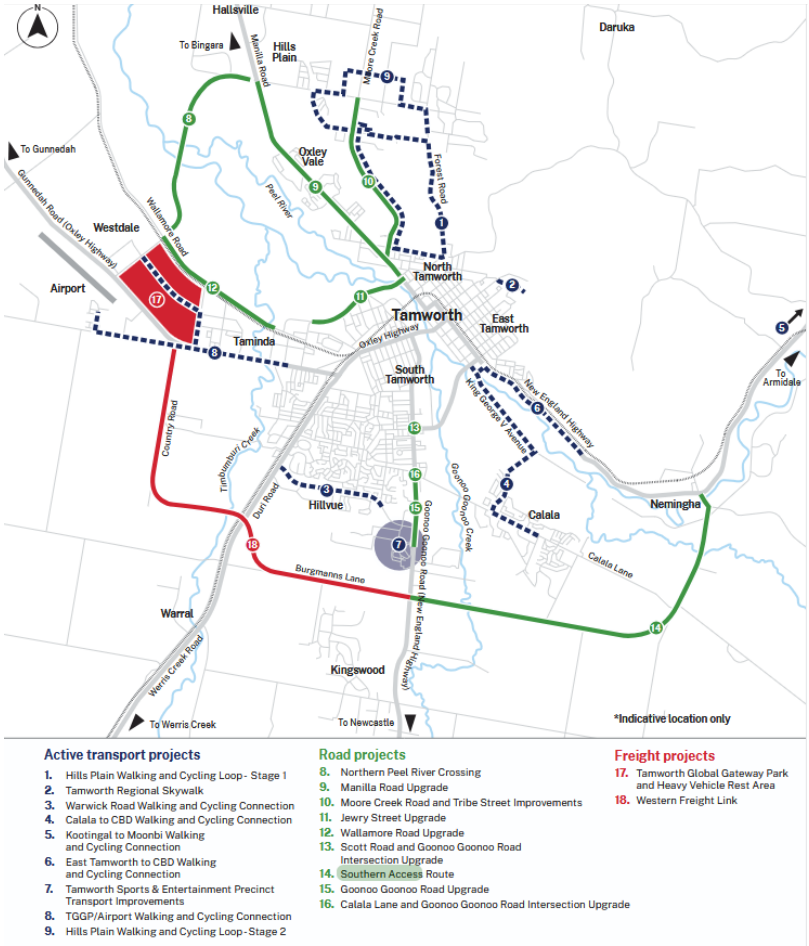

Figure 3 Priority projects in Tamworth Regional Council's Integrated Transport Plan

EnergyCo has investigated several options to use Burgmanns Lane as part of the Tamworth OSOM route, but it is not the preferred option. The early planning and unconfirmed funding status of the Southern Access Route, together with the expanded scope of work required to meet the Southern Access Route's objective, and associated cost and longer delivery times, are not consistent with the Port to REZ Program milestones or budget.

7.2 Future development

If the Southern Access Route proceeds to detailed development in the future, EnergyCo would commit to working with Transport and Council to incorporate Port to REZ Program requirements into the Southern Access Route design. Until that commitment is formalised, Whitehouse Lane will remain the New England Highway offtake point for the Tamworth OSOM route.

The development of the Tamworth OSOM route via Whitehouse Lane will not preclude Tamworth Regional Council from developing a Southern Access Route in the future or affect route options. Transport has confirmed it will continue to engage with Council on its planning for the Southern Access Route as part of the wider network planning process.

8 Role of Transport for NSW

8.1 The determining authority

The road upgrades associated with the Tamworth OSOM route will be assessed through a MWREF under Part 5 of the EP&A Act. Transport for NSW, as the determining authority, will need to be satisfied that all relevant impacts have been assessed before approving the works.

Under the *Roads Act 1993*, Tamworth Regional Council is the road authority for all council-managed local roads. This means Tamworth Regional Council is responsible for the management, maintenance and control of the local roads forming the Tamworth OSOM route, and EnergyCo will work with Council in relation to any proposed works.

As the Tamworth OSOM route includes sections of state and local roads, both Transport and Tamworth Council have been regularly consulted in the route option analysis and selection process. Ongoing design reviews have also been undertaken by both Transport and Tamworth Regional Council in the development of road and intersection designs.

Roads upgraded as part of the Port to REZ Program will be handed to the relevant road authority on completion, being Transport for the State-road network and the relevant council for local roads.

8.2 Capacity planning

A Corridor Capacity Plan is currently being developed by Transport to identify and prioritise the infrastructure and operational interventions required to support delivery of the Port to REZ Program. With the large geographical distance required to be travelled and the large number of OSOM expected, it is vital to coordinate this in a wholistic, network-wide manner.

Considerations in the development of the Corridor Capacity Plan include:

- the safe and efficient transportation of OSOM loads
- minimising impacts to residents, bus routes, freight movements
- consideration of emergency access
- constraints management (including curfew timings)
- enabling infrastructure upgrades such as additional pullover bays, marshalling areas, road widenings.

In line with current OSOM transportation legislation, all high-risk OSOM require either police escort and/or pilot vehicles to support safe transportation. In the event of an emergency, it is anticipated that the police escorts would be notified in advance and arrangements would be made to ensure minimal delays are incurred by emergency services. A level of service assessment would also be carried along the detour to ascertain if strategically placed widened shoulders could be constructed to allow an emergency vehicle to get around an OSOM load.

8.3 Managing OSOM movements

As part of the development of the Corridor Capacity Plan, Transport is engaging with stakeholders regarding constraint identification and management, along with examining the potential timing of OSOM movements along various parts of the road network. Before any OSOM movements can occur in NSW, a permit must be obtained from the NHVR.

As part of this process, the proposed vehicle dimensions, weight and route must be assessed to ensure the movement can be carried out safely. Where a movement is considered higher risk, a detailed Transport Management Plan is required. This includes route surveys, swept path modelling, traffic management arrangements, stakeholder consultation and risk mitigation measures. Information on this process can be found on the Transport for New South Wales website.

In addition, each large-scale renewable energy generation project proposing to transport OSOM components to the New England REZ will prepare its own EIS, including a traffic and transport assessment specific to that project, as part of the planning approval process. These traffic and transport assessments include the identification of key constraints, risks and mitigation measures to address impact both during the construction and operational phases.

EnergyCo will continue to work closely with Transport to keep the community informed of how OSOM movements are being considered.

9 Next steps

The Tamworth OSOM route via Whitehouse Lane will now progress to the environmental assessment phase. In late September / early October 2026, EnergyCo will carry out a 'Have your Say' for the local community to provide feedback on the proposed road and intersection upgrades (including the proposal to seal the unsealed sections of Whitehouse Lane and Marsden Park Road).

Feedback will be summarised in a MWREF environmental assessment application to Transport which will be assessed under Part 5 of the Environmental Planning and Assessment Act 1979.

Subject to approval, construction is proposed to start from 2027 with the first OSOM deliveries expected to start from mid-2028.

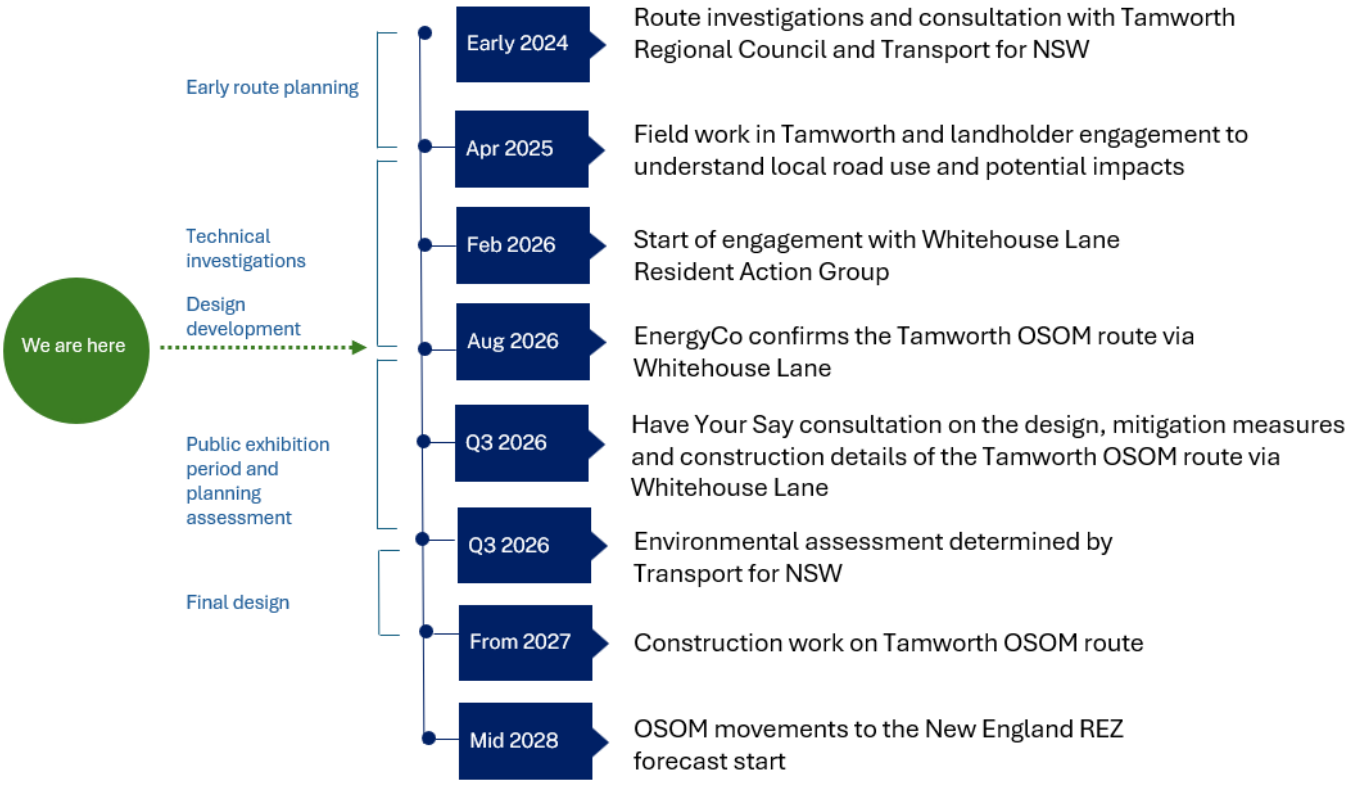

Figure 4 Planning pathway

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10 Conclusion

EnergyCo has concluded the route selection process for the Tamworth OSOM route following strategic route investigations, consultation with Transport, Tamworth Regional Council and local stakeholders, and supplementary assessments.

The Tamworth OSOM route will follow Whitehouse Lane, Marsden Park Road, O'Briens Lane and Nundle Road, before rejoining the New England Highway at Nemingha.

Supplementary assessments have confirmed that a Tamworth OSOM route via Whitehouse Lane will provide the best overall outcome measured against the objectives of the Port to REZ Program, including delivery certainty, environmental impacts, property acquisition, cost and construction timeframes.

While Burgmanns Lane may form part of a potential future Southern Access Route, as part of Tamworth Regional Council's long term road network planning, its current planning status and delivery timeframe do not align with the requirements of the Port to REZ Program. The Tamworth OSOM route does not replace the Southern Access Route, nor prevent it from being developed and delivered.

Accordingly, EnergyCo will progress the Whitehouse Lane option as the Tamworth OSOM route to environmental assessment. Future consultation will focus on design, impact mitigation and construction details. As part of this consultation, EnergyCo will seek feedback on the option to seal Whitehouse Lane and Marsden Park Road and will be guided by Tamworth Regional Council in its role as the relevant road authority.

11 Appendices

Appendix A – OSOM report

Appendix B – Supplementary review

Appendix C – Road sealing memo

Appendix D – Comparative noise assessment

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