

07 February 2024

Clare Sykes
Commissioner (Panel Chair)
Independent Planning Commission

Dear Ms Sykes

Muswellbrook Shire Council Submission to the Independent Planning Commission in relation to the Hills of Gold Wind Farm (SSD-9679)

Muswellbrook Shire Council (Council) has reviewed the Assessment Report and Recommended Development Consent for the Hills of Gold Wind Farm (SSD-9679) (the Project), a Project that is currently under consideration by the Independent Planning Commission (IPCn).

As noted in the Assessment Report, Council has objected to the Project due to the cumulative impact of the use of local roads and bridges, that are not fit for purpose, to construct numerous large-scale renewable energy projects within and outside the New England Renewable Energy Zone (REZ); and how the social and economic costs of these transit routes will adversely affect the Muswellbrook community.

A background summary of Council's issues is provided below.

Background to Issue

Since 2021, Council has been receiving enquires from proponents of renewable energy projects in the New England REZ and the Central West-Orana REZ, requesting to use Muswellbrook Shire local roads to transport Over Size Over Mass (OSOM) components.

Current physical restrictions and limitations on the State Road network through the Shire have been identified as barriers to the movement of OSOM freight movements required for the development of the State's Renewable Energy Zones and State Significant Development (SSD).

When staff raised the matter with the NSW Department of Planning, Housing and Infrastructure (DPHI), Council was initially advised to simply assess each proposal on its individual merits and not consider the cumulative impacts of a large increase in OSOM traffic movements on the identified roads or the resultant impacts on the safety of the community.

Of additional concern held by Council is that there is no direct benefit to the ratepayers of Muswellbrook Shire for allowing these transport movements on the Shire's local road network but there are many risks. The risks include:

- Increased funding costs associated with accelerated deterioration of the local road network;
- Inconvenience of temporary road closures;
- Safety issues of encountering large numbers of OSOM vehicles on local roads at night-time;

- Amenity impacts for residents of traffic noise, flashing lights, and other unfavourable impacts as the OSOM travel through the Shire at night; and
- Significant staff time is involved in meeting with the different proponents, including EnergyCo, TfNSW, and DPHI. Significant staff time would be involved in monitoring and managing the transport of components and the impacts on the local road network, yet Council would receive no funding to cover these costs.

A more detailed list of the issues, with additional context, is provided in Attachment A.

On 3 November 2021, Council's SSD Committee resolved as follows:

(Council) Authorises staff to object to all SSD that nominates the use of local roads in the Shire for transport of components to another LGA, until EnergyCo, TfNSW and DPIE find a more strategic solution to managing transport issues that is acceptable to Council.

Throughout 2023, meetings were held with EnergyCo, TfNSW, and DPHI staff to discuss the issue of transporting OSOM components through Muswellbrook Shire using local roads. In late December 2023, Council received correspondence TfNSW, advising that TfNSW wishes to enter into discussions with Council with the aim of achieving a strategic outcome for use of local roads required to support the State's transition to renewable energy, as well as addressing critical issues regarding OSOM movements more generally.

Given the fact that the development of the renewables is expected to last beyond ten (10) years, TfNSW agrees that a coordinated approach to all OSOM movements in and around Muswellbrook Shire would provide a safer and more certain outcome for communities and will allow industries to grow and be attracted to the area.

The **Central West Orana (CWO) REZ** route requires the use of Denman Bridge on the Golden Highway. Due to the vertical height restrictions of the bridge, approximately 30% of loads will require an alternate OSOM route. Bengalla road and Wybong Road (west) have been nominated by TfNSW and Energy Co., based on these roads being used as an alternate route to the State Road Network in the event of planned/unplanned closures in this area and or for other OSOM that cannot use Denman Bridge over the Hunter River.

The **New England (NE) REZ** route would ordinarily use of the New England Highway, however there are vertical height and width restrictions at the underpass through Bridge Street, Muswellbrook, that prevent the movement of OSOM vehicles. The construction of the Muswellbrook Bypass would alleviate much of this, however completion may not occur until the end of 2027, and this does not support the New England Renewable Energy Zone program. The TfNSW proposed New England REZ route overlaps with a part of the CWO REZ route along Bengalla Link Road, and then deviating right onto Wybong Road east, Kayuga Road, Stair Street, and a private road before re-joining the New England Highway north of Muswellbrook.

TfNSW proposes to reclassify the roads, with the options to either:

- Declare regional road status with MSC provided with access to block grant funding for maintenance; or
- Declare as state managed road status with TfNSW funding the maintenance (MSC could take on routine maintenance and also the Road Maintenance Council Contract, if desired).

With respect to next steps, TfNSW has requested that from February 2024 they can convene meetings with Council staff to have more discussion on this matter and work towards a mutually satisfactory outcome.

Project Relevance

While the Project is not located within the Muswellbrook Local Government Area (LGA), it proposes the use of Council owned local roads to transport wind turbine components through the shire as OSOM loads over a period of approximately nine months. In the EIS, the Project proposed the use of the following Council local roads:

- Route 1 (~84m blades and loads over 5.2m) - Bengalla Road, Wybong Road, Kayuga Road, Invermein Street, Stair Street and Dartbrook Road; and
- Route 2 (towers, loads up to and greater than 5.2 m) - Bell Street, Victoria Street and Market Street.

Table 14 and Section 6.4.4 of the Assessment Report states:

- *'The Department notes that EnergyCo has committed to facilitating road upgrades to the State Road network between the Port of Newcastle and Bengalla Road in Muswellbrook Shire LGA. Some works relate to those required for the Central West REZ and additional works from Bengalla Road in Muswellbrook north would be required to facilitate transport to the New England REZ'.*
- *'The Department notes that the upgrades for heavy vehicles under escort in the City of Newcastle Council and the Muswellbrook Shire Council areas would form part of the route upgrades proposed to be undertaken by EnergyCo or other area of government to support the renewable energy zones'.*
- *'The Department recommends restricting the transportation of blades to the State road network and the routes proposed for upgrade by EnergyCo as far as practical'.*
- *'The Department recommends conditions restricting the movement of over-dimensional vehicles to Route 1'.*

Council is concerned that the recommended development consent conditions and Assessment Report is drafted so that the Proponent may undertake the road upgrades. This is not supported as:

- Road upgrades identified in Appendix 7 may not be correct as it is not clear how these upgrades were determined, if they will be adequate for all renewable projects likely in the New England REZ and due to this insufficient information, have not been signed off approved by Council; and
- The Proponent may not have received landowners consent from two impacted landowners, including for the use of the privately owned Dartbrook Mine Road.

Knowing that TfNSW has commenced work on a strategic approach to upgrading and managing this route for the next decade, Council requests that the development consent conditions be updated as follows:

1. New condition:

Transport of Over Size Over Mass components from the Port of Newcastle to the turn off at Lindsay's Gap Road, cannot commence until the required road upgrades have been completed by the relevant roads Authority, to enable movements required for various renewable energy projects, prior to the opening of the Muswellbrook Bypass.

2. Update Appendix 7 as follows:

- a. Remove all references to the required road upgrades on the State Road network (including local roads in Muswellbrook LGA that may be reclassified) from the Port of Newcastle to the turn off at Lindsay's Gap Road. The relevant roads authorities are still identifying the extent of required upgrades, the list provided is likely inadequate, and the technical assessment undertaken to derive the list has not been approved by the relevant roads authorities.

3. To avoid any doubt in relation to the use of Thomas Mitchell Drive, Bell Street, Victoria Street and Market Street, Council requires the following updates:

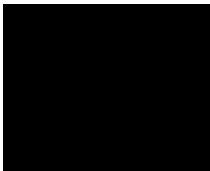
Cond B30 - *To avoid any doubt, this consent does not allow the use of Thomas Mitchell Drive, **Bell Street, Victoria Street and Market Street.***

Appendix 7 – Update the Port to Nundle figure to show OSOM Route 1 only, consistent with the Department's Assessment Report.

4. The Traffic Management Plan should be prepared in consultation with Muswellbrook Shire Council, which is currently the relevant road authority for some of the proposed transport route.

Should you need to discuss the above, or require any further information, please contact Theresa Folpp, Development Compliance Officer on 02 6549 3700 or email council@muswellbrook.nsw.gov.au.

Yours faithfully



Sharon Pope
Director Environment and Planning

Attachment A

Issues with use of Local Roads in Muswellbrook Shire for transport of OSOM

Council's State Significant Development Committee resolved on 3 November 2021:

Authorises staff to object to all State Significant Development (SSD) that nominates the use of local roads in the Shire for transport of components to another LGA, until EnergyCo, Transport for NSW and Department of Planning Industry and Environment find a more strategic solution to managing transport issues that is acceptable to Council.

Background to Objection - Cumulative Impacts

1. Council has been approached by several renewable energy proponents seeking to use local roads to transport project components via the routes shown in **Figure 1**.
2. Use of Council local roads (as opposed to State roads) is a constraint caused by the Denman Road bridge crossing of the Hunter River (height limit restricted) and the Muswellbrook rail underpass on the New England Highway.
3. Currently, there are approximately 2,265 Over Size Over Mass (OSOM) (blade) movements proposed through the MSC LGA using Council local roads to access the Central West-Orana REZ.
4. There are approximately 879 OSOM blade movements proposed through the MSC LGA using Council local roads to access the New England REZ, or to access the regions surrounding the REZ.
5. While some proponents will transport batteries, transformers, and towers as OSOM through the shire on Council's local roads, for simplicity in indicating the extent of the issue, only turbine blades are included in the table below.

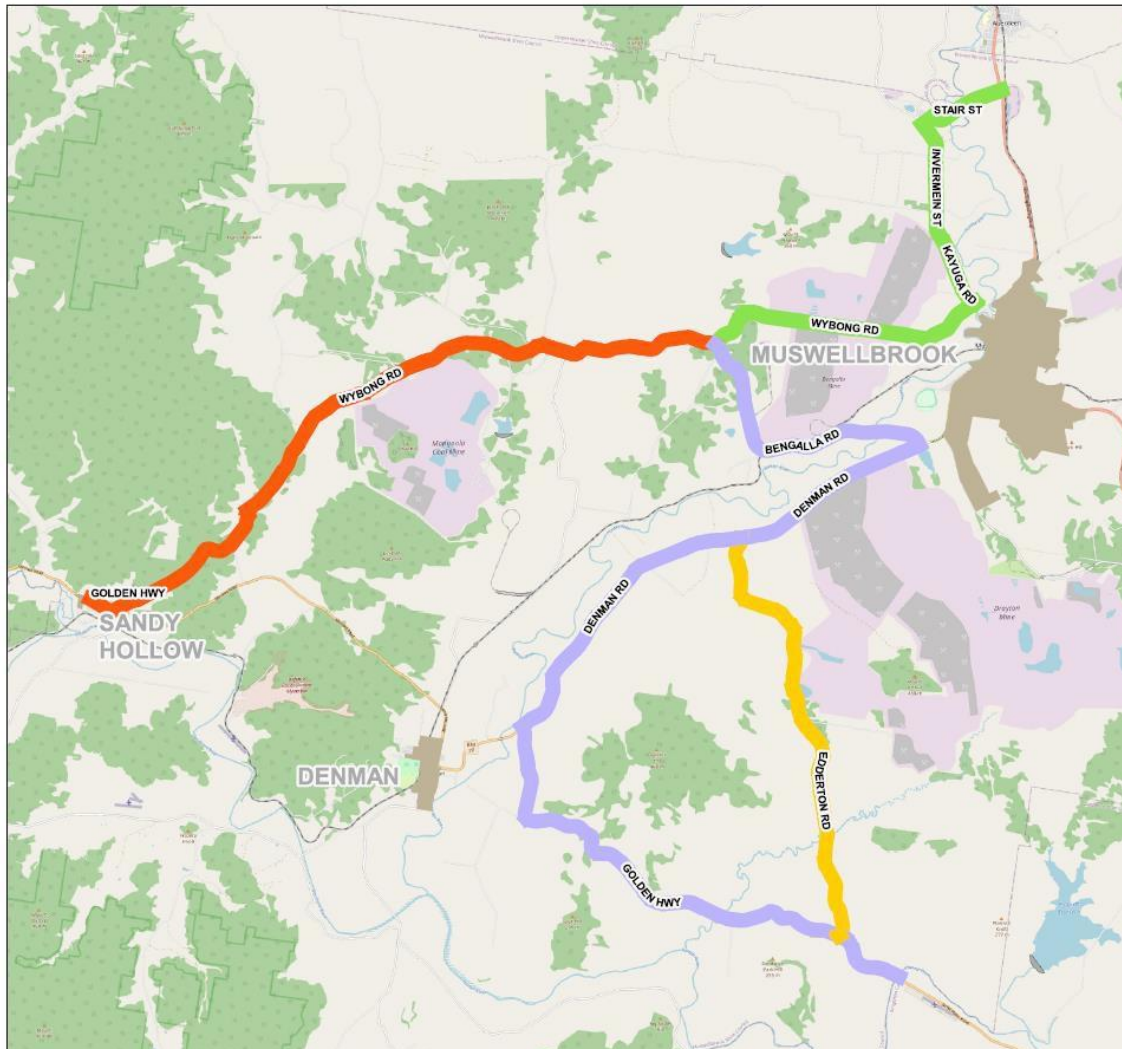
Ref	Project	Planning Status	Construction Period	Turbine Details	Turbine Port Delivery / Route	OSOM Movements (blades)*
Central West Orana Renewable Energy Zone (REZ)						
1	Barneys Reef	Prepare EIS	28 months	441 MW 63 turbines ~100m blade	Newcastle via Golden Hwy - "Initial desktop analysis indicates the transport route may be constrained".	189
2	Burrendong	Prepare EIS	24 months	650 MW 105 turbines ~85m blade	Newcastle via Golden Hwy – Denman bridge not identified as a constraint.	315
3	Spicers Creek	Prepare EIS	24 - 30 months	730 MW 122 turbines 110m blade	Newcastle via Golden Hwy, Denman Road, Bengalla Road, Wybong Road.	366

4	Valley of the Winds	Submissions Report	-	800 MW 148 turbines 90m blade	Newcastle via Golden Hwy - "Alternate routes may need to be investigated to use the NEH via Scone".	444
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Ref	Project	Planning Status	Construction Period	Turbine Details	Turbine Port Delivery / Route	OSOM Movements (blades)*
5	Liverpool Range	Approved (not yet constructed)	29 months (WTG component delivery)	1,320 MW 220 turbines 90m blade	Newcastle via Golden Hwy, Denman Road, Bengalla Road, Wybong Road.	660
6	Uungula	Approved (not yet constructed)	24 - 30 months	400 MW 97 turbines ~85m blade	"Not resolved, assumed Port of Newcastle". No vehicles >5.6m in height proposed.	291
7	Bodangora	Operational	-	-		Did not use local roads
					Total CWO REZ	2,265
New England Renewable Energy Zone and nearby sites						
1	Hills of Gold	Amendment Report Exhibition	35 months	65 turbines ~84m blade	Blades – Bengalla Rd, Wybong Rd, Kayuga Rd, Invermein St Towers – Bell St, Victoria & Market St	195
2	Winterbourne	EIS Exhibition	24-30 months	119 turbines ~80m blade	Blades - Thomas Mitchell Dr, Denman, Bengalla, Wybong, Kayuga Roads, Invermein and Stair St Towers - Golden Highway, Denman, Bengalla, Wybong and Kayuga Roads, Invermein & Stair St	357
3	Doughboy	Prepare EIS	18 months	52 turbines ~81m blade	Not specified	156
4	Rangoon	Prepare EIS	18 months	25 turbines ~85m blade	New England Highway	75
5	Thunderbolt	Submissions Report	24 months	32 turbines ~90m blade**	Blades - NEH (assumes split blade and final turbine selection <height clearance) Towers - Bengalla, Wybong, Kayuga Road, Ivermein & Stair St	96
					Total NE REZ	879
Total OSOM Movements in MSC LGA (indicative)						3,144

*Values based on the number of proposed turbines. Assumes one truck movement per blade. Total includes Uungula.

** Planning documentation proposes split blade. For this submission, split blade not assumed.



Muswellbrook LGA - OSOM for Wind Farms Transport Routes

- █ the route all over dimensioned vehicles for both the New England REZ and Central West-Orana REZ would take if upgrades to the intersection of Golden Hwy and Denman Rd can be achieved
- █ an alternative option for all over dimensioned vehicles for both the New England REZ and Central West-Orana REZ to take as if upgrades to the intersection of Golden Hwy and Denman Rd cannot be achieved (this is Edderton Road)
- █ the route all over dimensioned vehicles for the New England REZ would take after Bengalla Mine (this route utilises Wybong Rd, Kayuga Rd and Dartbrook mine road)
- █ the route all over dimensioned vehicles for the Central West-Orana REZ would take after Bengalla Mine (this route utilises Wybong Rd to Sandy Hollow)



Figure 1 - Proposed OSOM transport route for projects to the north or west of Muswellbrook Shire

6. Whilst some proponents have indicated they will utilize the older style short blades, and could technically utilize the State Road Network, Council is concerned that these projects will seek a future modification for taller towers and longer blades requiring the use of local roads for transportation through the Shire.
7. There has been no cumulative assessment of the various impacts this many OSOM movements, resulting from planned and foreseeable future renewable energy projects (Council has been advised that pumped Hydro projects have many large components as well), will have on the assets, resources and community in Muswellbrook Shire. A cumulative impact assessment would employ an explicit methodology to model plausible future scenarios, understand the pathways of interaction of cumulative impacts and determine and describe thresholds and limits for traffic impacts.
8. Many proposed development timeframes for the renewable energy projects appear to occur at the same time.
9. Council's concern is on the unsustainable use of local roads that are not fit for purpose, by numerous large-scale projects.
10. Road conditions are broadly described as a country road standard with narrow lane widths, unformed shoulders, poor pavement depths and lighting, aged-sealed surfaces, drainage structures that will not support repeated heavy loads/turning movements and road weight limits, and road gradients unsuitable for transport of long loads. Some roads have known accident history including fatalities (discussed below) and form part of local bus routes.
11. The public are at risk of traffic related impacts from multiple projects i.e., cumulative road closures and cumulative OSOM movements (flashing lights and safety considerations). These roads and intersections form part of the designated access to coal mines and horse studs, carry high volumes of traffic at peak times and disruption can cause significant issues for these businesses. Businesses include:
 - Maxwell Underground Mine;
 - Mt Arthur Mine;
 - Bengalla Mine;
 - Mt Pleasant Mine;
 - Mangoola Mine;
 - Dartbrook Underground Mine;
 - Coolmore Stud
 - Darley Woodlands Stud
 - Edenglassie Stud
 - Balmoral Stud
12. Coal mining occurs 24/7, with a change of shift every 10 to 12 hours, so any night time/early morning transport may impact shift changes.
13. Some of these roads are maintained by mining companies, and the mining operations are prohibited from using some of these roads (as terms of approvals) due to safety issues arising from poor alignment and weight limited structures.
14. There are no direct benefits to the ratepayers of Muswellbrook Shire (e.g., Employment opportunities) and yet ratepayers are at risk of:

- a. Funding costs associated with the accelerated deterioration of the local road network and staff time required to create legal agreements and monitor impacts. Escorting OSOM and repair of any damage or removal and reinstallation of road furniture will come at great cost to Council;
 - b. The inconvenience of temporary road closures. Council Officers recommend that this impact could be minimised by extra widening of corners to reduce the number of turning movements required to allow OSOM vehicles to negotiate them;
 - c. Safety issues of encountering large numbers of OSOM vehicles on local roads (see below for Coroner's recommendations relating to Wybong Road);
 - d. Amenity impacts for residents of traffic noise, flashing lights and other unfavourable impacts, particularly if night movements are proposed; and
 - e. Diversion of Police resources to escort duties.
15. The Coroner has made several recommendations following a fatal car accident on Wybong Road between a light vehicle and an escorted prime mover. Key recommendations were in relation to OSOM travelling on narrow country roads, as described below:
- *The current legislation requires wide load escorts for any load wider than 3.5 metres. Wide loads under 3.5 metres require an over mass/oversize permit, flashing warning lights, flags and signs, but does not require a pilot/escort vehicle. The current legislation does not appear to take into account wide loads which are required to travel on narrow country roads.*
 - *A review of the wide load escort requirements should be undertaken to address amendments in the legislation. The relevant legislation should be amended to reflect travel performed on narrow roads. The maximum width without pilot vehicles, on country roads, particularly on narrow roads should be altered to 3 metres.*
 - *Additional escort vehicles should be required where the total road width at any point is less than 6 metres width.*
 - *If these recommended amendments to the pilot/escort vehicle requirements had been in place than this collision may not have occurred as the pilot/escort vehicle would have provided sufficient warning of the oversize vehicle to oncoming vehicles.*
 - *An amendment to the legislation may avert any similar collisions occurring in future.*
 - *It is recommended that a formal review of the legislation, particularly in relation to pilot/escort vehicle requirement for oversize vehicles on narrow roads, be undertaken with a view of implementing the recommendations as detailed above.*
16. If approved without a Strategic approach approved by the NSW Government, every project Proponent would need to enter into a Deed of Agreement and Maintenance Agreement with Council. Significant bank guarantees would be required to enable Council to undertake maintenance work to roads in the likely scenario that none of the Proponents accepts that their transportation effort caused the damage to the roads. Muswellbrook Shire ratepayers should not pay for the staff time and resources required for this.

17. Every load would need to be escorted by Council staff and regular dilapidation reports sought so that damage is identified within an appropriate timeframe and able to be apportioned to a particular Proponent.
18. Widened intersections would need to be designed in a way to avoid other road users “cutting corners” and speeding excessively through newly widened areas.
19. As significant upgrades will be required to these roads, their asset value will change, and Council maintenance costs will increase to reflect the new standard e.g. 8m wide road compared to a 5.5m wide road. Furthermore, the newly upgraded roads may encourage use by motorists who would normally access the shire via the State Road network (e.g., a short cut between Sandy Hollow and Scone).
20. The Mining Industry and other land owners along the route have indicated they do not support a project-by-project approach where each Proponent seeks individual landholder agreements (mining companies own a significant amount of land on the transport route).
21. Some areas of land are under long term lease agreements between mining companies and landowners. The proposed transport route will mean a permanent resumption of land as access would be required not only for the project construction period, but also if blades needed to be replaced or more turbines are added in a staged development.

Planning Issues

22. A strategic solution to the transport of over-dimensional equipment on local roads has not yet been proposed to ensure all issues are being captured and a practical and workable solution for Council, community, wind farm proponents, mining companies and other landowners is identified.
23. A strategic approach would benefit the community by improving safety, reducing the number of consultations/negotiations for access over private land and by undertaking upgrade works once, not several times depending on the component size of each wind farm.
24. Council Officers have consulted with EnergyCo, Transport for NSW and Department of Planning and Environment (DPE) regarding Council’s concerns for more than 2 years, the most recent correspondence received from DPE on 15 February 2022, on behalf of the Minister of Energy and Environment, stated:

“EnergyCo is committed to working with Council to ensure impacts on the road network throughout the Muswellbrook LGA are appropriately managed and a coordinated approach to this issue is developed.

EnergyCo and Transport for NSW have already commissioned a road access study to identify the constraints on the road network between Newcastle and the Central West-Orana and New England REZs.

The study will be completed in the near future and... the consultant has been asked to consider impacts on local road networks and include recommendations for addressing these issues.

EnergyCo will seek to engage further with Council on these important matters once the study has progressed.

25. EnergyCo briefed Council's SSD Committee on 21 November 2022 and held a meeting with Council Officers on 28 November 2022 and again on 08 May 2023 to discuss Council's objection. Both meeting's indicated work is underway to identify possible solutions but is not finalised.
26. In late December 2023, Council received correspondence from TfNSW, advising that TfNSW wishes to enter into discussions with Council with the aim of achieving a strategic outcome for use of local roads. On 23 January 2024, Council approved Staff to commence negotiations with TfNSW regarding the reclassification and upgrading of identified local roads.
27. It is Council's preference that Renewable Energy projects have continuous State Road access from the Port of Newcastle to the 'last mile' before the project destination.
28. Council's preference is also for single route option utilising a limited number of roads for all blade and tower and other OSOM components rather than impacting a greater number of roads including roads through residential areas:
 - To the north via the planned Muswellbrook Bypass. Until this is constructed, Council Officers would prefer Golden Highway, Denman Road, Bengalla Link Road, Wybong Road East and Kayuga Road.
 - To the west via the Golden Highway with an upgrade to the bridge over the Hunter River near Denman. Until this is constructed, Council Officers would prefer Golden Highway, Denman Road, Bengalla Link Road, Wybong Road East and Golden Hwy.
29. It is Council's preference that if local roads are used, that roads are upgraded to minimise maintenance costs over the long term.
30. It is Council's preference that management include real-time tracking of loads during transit, and to reduce the impact on the local police, the introduction of accreditation for escorts with blue and red flashing lights.
31. It should be noted that Council is not opposed to renewable energy development.

Road Works

32. Bengalla Mine have closed one lane of Bengalla Road for roadworks planned to be completed by approximately Q4 2023. They are also proposing to construct a new section of Bengalla Link Rd in 2025 to allow mining through the current road.