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Traffic Engineering Assessment

Proposed Battery Energy Storage System (BESS)
2977 Hamilton Highway, Darlington

Prepared for
EBARE Proprietary Limited

March 2026

G37038R-01C

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1. Introduction

Traffix Group has been engaged by EBARE Proprietary Limited to undertake a Traffic Engineering Assessment for the Proposed Battery Energy Storage System (BESS) at 2977 Hamilton Highway, Darlington.

This report provides a detailed traffic engineering assessment of the vehicle access and traffic issues associated with the proposed development.

In the course of preparing this assessment, we inspected the subject site, commissioned traffic counts, reviewed development plans and background material, and assessed the vehicle access arrangements and traffic impacts of the proposal.

This report has been updated in response to the Request for Further Information (RFI) issued by Department of Transport and Planning (DTP) dated 16th January 2026, and comments provided by Moyne Shire Council.

Our assessment is as follows.

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2. Existing Conditions

2.1. Subject Site

The property is addressed as 2977 Hamilton Highway, Darlington and is also referred to as 'Stony Point'.

The site is located on the eastern side of Darlington-Terang Road in Darlington, to the south of Hamilton Highway. Existing vehicle access to the site is provided by Darlington-Terang Road, located approximately midway along the site's frontage. This connects to a gravel track that is aligned in a general east-west direction through the centre of the site.

The overall site is largely cropped and grazed land, with a dam at the south-western corner.

A locality plan and aerial photograph are provided at Figure 1 and Figure 2, respectively.



Figure 1: Locality Map

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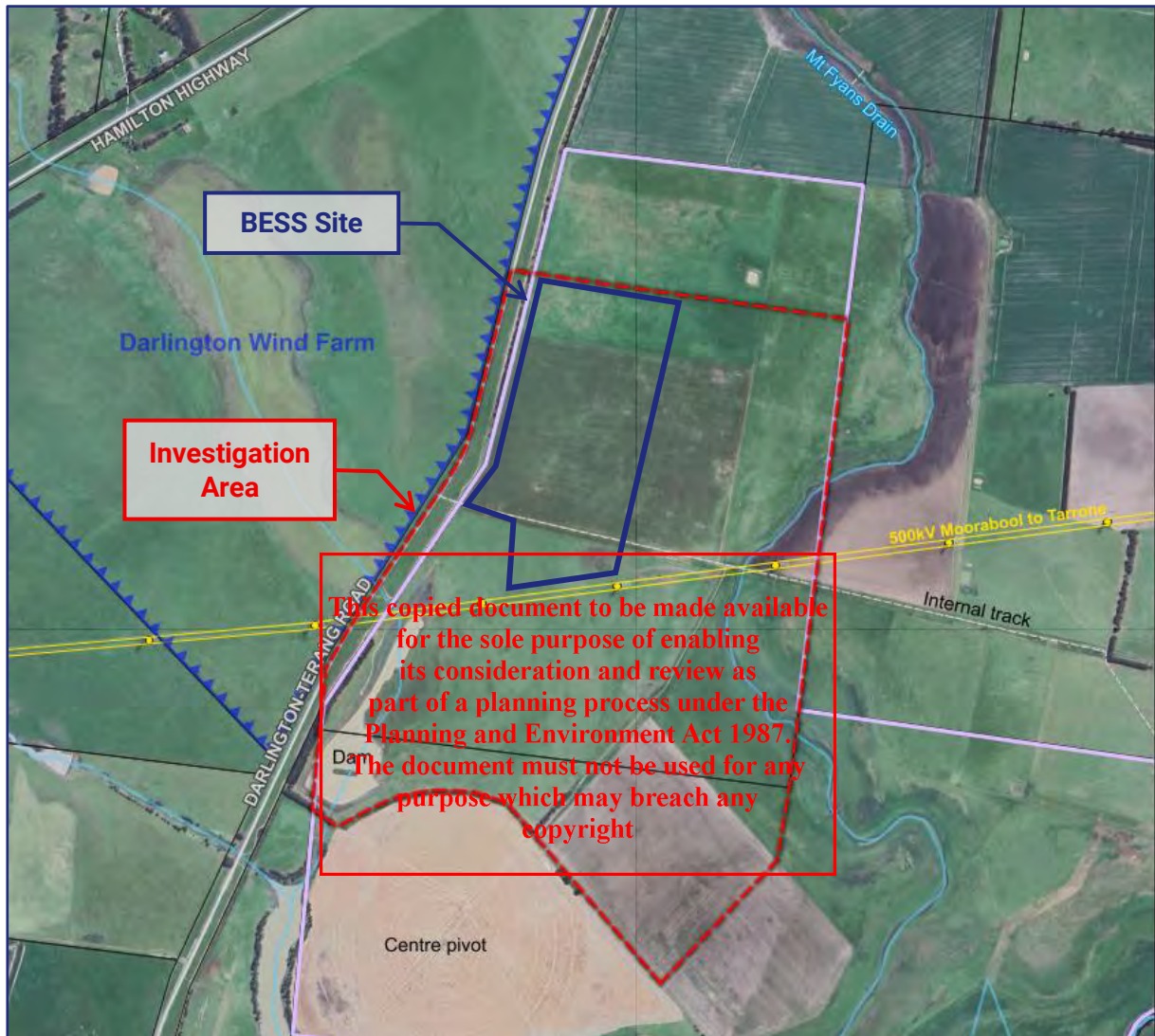


Figure 2: Aerial Photograph

Source: Site Plan prepared by Cogency

2.2. Planning Scheme Context

2.2.1. Planning Zones & Surrounding Uses

The subject site is zoned as 'Farming Zone (FZ)' under the Moyne Planning Scheme. A planning zone map is provided at Figure 3.

The Darlington Town Centre is located approximately 5 km to the north-east of the site.

Land uses in the immediate vicinity of the subject is generally farming in nature. The proposed Darlington Wind Farm is located opposite the site on the west side of Darlington-Terang Road.

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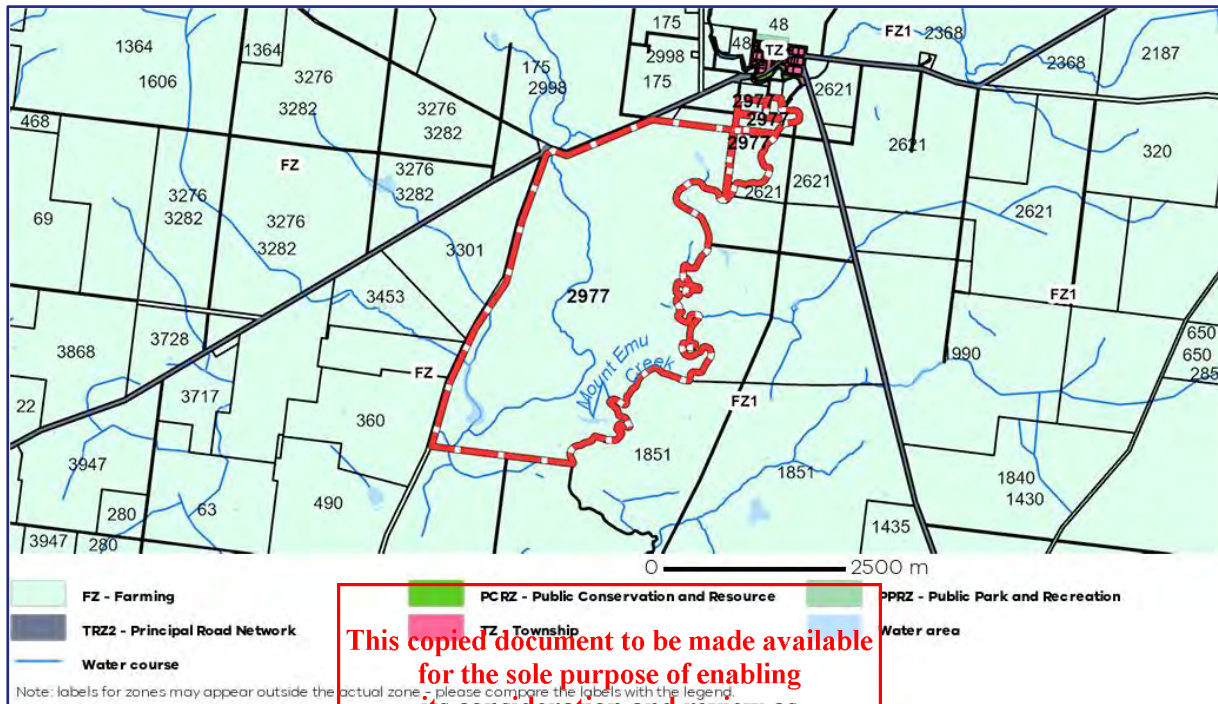


Figure 3: Planning Zone Map – Moyne

2.3. Road Network

Darlington-Terang Road is a Local Rural Road classified as a ‘Class 4 Road’ under Moyne Shire Council’s Register of *Public Roads 2025*.

Darlington-Terang Road runs between Hamilton Highway to the north and Terang-Mortlake Road to the south. In the vicinity of the subject site, Darlington-Terang Road has a carriageway width of approximately 6.5 metres which provides for a single lane of traffic in each direction and a gravel shoulder on either side.

A default rural speed limit of 100km/h applies to Darlington-Terang Road.

Hamilton Highway is a Department of Transport and Planning (DTP) managed arterial highway connecting Geelong and Hamilton via Mortlake. Hamilton Highway is generally aligned in an northeast-southwest direction with a typical speed limit of 100 km/h near the site.

In the vicinity of the site, Hamilton Highway has a carriageway width of approximately 12.5 metres which provides for a single lane of traffic in each direction and an asphalt shoulder on either side.

Figure 4 and Figure 5 provide views of Darlington-Terang Road to the south and north respectively, with Figure 6 providing a view of the existing site access.

Figure 7 and Figure 8 provide views of Hamilton Highway to the east and west respectively.

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Figure 4: Darlington-Terang Road - View South



Figure 5: Darlington-Terang Road - View North



Figure 6: Darlington-Terang Road – Existing Access



Figure 7: Hamilton Highway - View Northeast

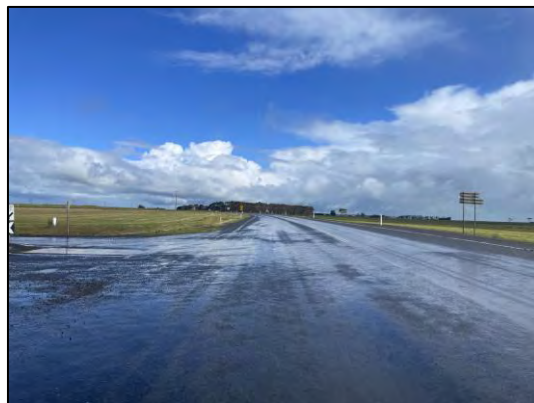


Figure 8: Hamilton Highway - View Southwest

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2.4. Existing Traffic Volumes

Traffix Group commissioned traffic volume counts on Hamilton Highway (east of Darlington-Terang Road) and Darlington-Terang Road (south of Hamilton Highway adjacent to site). The data was collected via tube count surveys which were undertaken for a 7-day period in September 2025.

The surveys identified the following peak hours:

- Darlington-Terang Road - 7-8am and 4-5pm
- Hamilton Highway - 10-11am and 2-3pm

A summary of the average weekday peak hour and daily volumes are shown in Table 1.

The traffic counts demonstrate very low traffic volumes on Darlington-Terang Road of just above 100 vehicle movements per day on average.

Table 1: Existing Traffic Volumes – Traffix Group

	Hamilton Highway				Darlington - Terang Road	
	E.B	W.B	Two-way	N.B	S.B	Two-way
AM Peak Hour (weekday average)	78	59	147	4	7	11
PM Peak Hour (weekday average)	79	67	146	9	7	16
Daily (7-day average)	813	838	1,651	53	61	114

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To supplement the traffic data collected, we requested traffic data from Moyne Council for Darlington-Terang Road and from the Department of Transport and Planning (DTP) for Hamilton Highway.

Moyne Council provided average traffic volume data for Darlington-Terang Road based on a 21 day count undertaken from 29/11/24. This data identified an average two-way volume across of 133 vehicles per day with approximately 21% heavy vehicles. This is similar to the 7 day average of 114 vehicles per day recorded during our recent traffic count.

Furthermore, Moyne Shire Council has informed the project team that there are likely higher heavy vehicle volumes expected during the peak harvest season including oversize vehicles movements associated with the harvest.

DTP informed us that do not have recent traffic volumes on Hamilton Highway in vicinity of the Darlington-Terang Road, with only year 2019 estimates available. Accordingly, for our assessment we will rely on the data from our recent traffic counts.

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2.5. Darlington Wind Farm Project

The Darlington Wind Farm is proposed on the western side of Darlington-Terang Road, opposite the subject site. This project is in the planning approval process with the current status being 'referred under Environment Effects Act'. We understand that this project is estimated to be constructed between 2026 to 2028.

The traffic and transport assessment prepared for the Darlington Wind Farm project by GHD in September 2022 states the following about pavement maintenance and upgrade on Darlington-Terang Road:

The full length of Darlington-Terang Road, between Hamilton Highway and the site access point, would require detailed pavement investigations and pavement upgrade prior to wind farm construction works commencing in order to ensure that significant deterioration of the road condition do not occur during construction. A regular program of inspection and maintenance would also be required for the construction period and any pavement condition issues rectified within a reasonable time period.

Furthermore, the traffic report for the Darlington Wind Farm project outlines that the project requires upgrade of the Hamilton Highway/Darlington-Terang Road intersection to include a short channelised right (CHR(s)) turn treatment and a basic left (BAL) turn treatment. It also states that turn treatments are to be designed to accommodate B-Double movements, with additional gravel pavement widening to suit tracking of larger over dimensional vehicles as required. We note that the haulage route for the Darlington Wind Farm project is to/from Portland which is located to the west.

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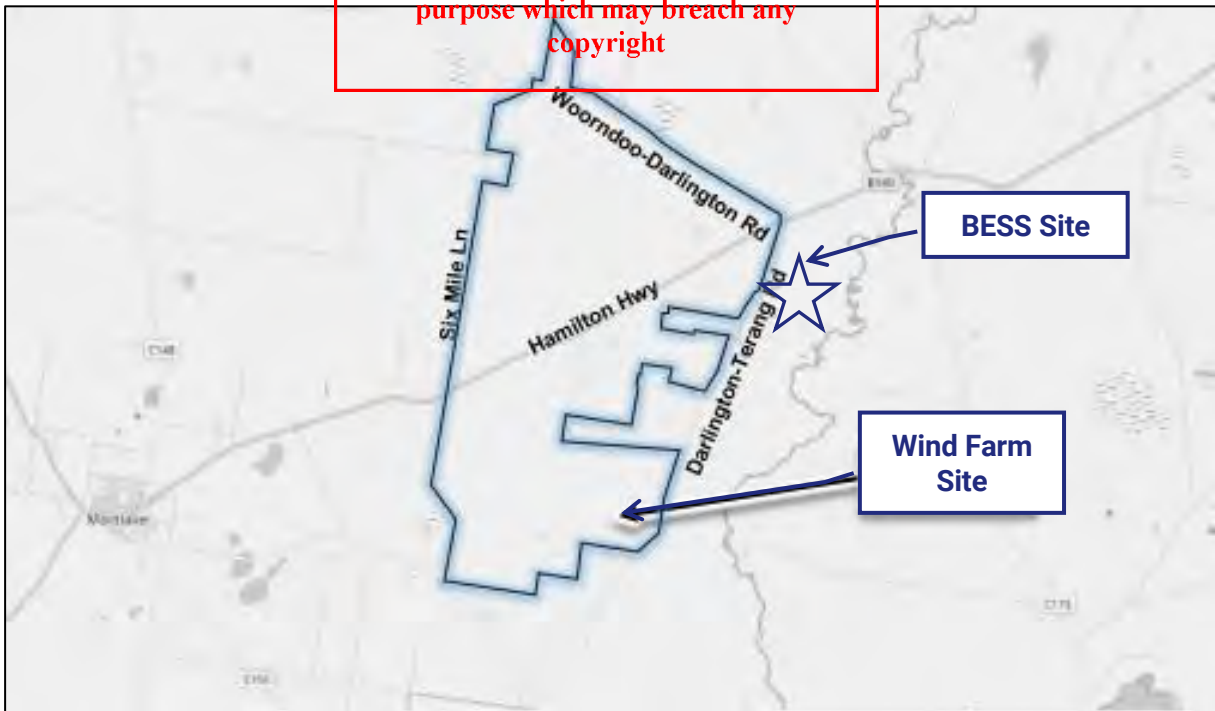


Figure 9: Darlington Wind Farm Project

3. Proposal

3.1. The Development

The application proposes to develop a utility-scale battery energy storage system (BESS) at 'Stony Point', 2977 Hamilton Highway, Darlington.

The proposed BESS will have a capacity of up to 500MW / 2,000MWh, with associated infrastructure including an on-site terminal station that will 'cut in' to the existing overhead 500kV transmission line, and associated works including access point and tracks, and operations/maintenance building.

The proposed development is to provide a new access point at the northern end of the site via Darlington-Terang Road. The proposed access will be designed to accommodate B-Double vehicle movements. This is the primary access point which will be utilised during both the construction phase and the post-construction (ongoing operation) phase for the BESS.

The existing vehicular access point on Darlington-Terang Road approximately midway along the site's frontage is to be sealed and act as an operational access for the terminal station, emergency access and farm access.

Car parking (10 spaces) is to be provided on site to accommodate the peak employee demand plus occasional visitor parking demands generated by the facility during the operation phase.

A network of internal roadways will accommodate vehicle movements around the site including boundary roads and service roadways between blocks of BESS units.

A copy of the site layout, prepared by Cogency, is attached at Appendix A.

3.2. Day to Day Operations

We have been advised by the applicant that the ongoing operations of the BESS will have approximately 6 staff on an intermittent basis as the BESS would typically be managed remotely and staffed as required during planned and unplanned maintenance periods.

We further understand that truck access during day-to-day operations will be minimal, and likely only associated with intermittent maintenance requirements. In particular, a 20 tonne truck may visit the site once a month to pick-up repairs and replace spare components.

3.3. Construction Phase

Construction of the BESS is expected to commence in 2027 with completion approximately two years later.

The proposed construction works would be undertaken between 7:00am-5:00pm Monday to Saturday, in line with EPA Guidelines. Any construction outside of these times would be subject to further approval and agreement from Council and DTP.

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We have been advised that up to 33 heavy vehicles are expected per day during the construction period. In addition, up to 200 light vehicles per day is expected during the peak construction period.

Up to 200 staff are expected to be working on-site during peak construction periods, however at times this number would be significantly less depending on the works being completed.

We acknowledge that should the BESS be approved, a traffic management plan (TMP) would be prepared to provide more detail on anticipated construction traffic volumes. This document would also outline the inspection, reporting and maintenance requirements of the relevant section of Darlington-Terang Road during the construction stage.

4. Car Parking Considerations

4.1. Statutory Requirements

The proposed use falls within the land-use category of 'utility installation' under Clause 73.03 of the Planning Scheme

The car parking requirements for the proposed development are outlined under Clause 52.06 of the Planning Scheme.

Clause 52.06-5A states the following:

Where a use of land is not specified in Table 1 or where a car parking requirement is not specified for the use in another provision of the planning scheme or in a schedule to the Parking Overlay, before a new use commences or the floor area or site area of an existing use is increased, car parking spaces must be provided to the satisfaction of the responsible authority.

A 'utility installation' is not a specified land-use under Table 1 of Clause 52.06 and therefore car parking must be provided to the satisfaction of the Responsible Authority.

The car parking demands for the site are likely to be limited to staff, with only a minor level of visitor demand associated with equipment maintenance, etc.

We have been advised that up to 6 employees may be on-site at any one time for the ongoing operation of the facility. Accordingly, car parking should be provided at a rate of least one car space per employee (i.e. 6 employees car spaces) plus a small number of visitor spaces.

An informal on-site car parking area for up to 10 car spaces is proposed adjacent to the operations and maintenance building. We are satisfied that there is sufficient area available within the site to accommodate the predicted staff parking demands and occasional visitors.

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5. Loading Considerations

Clause 65.01 of the Planning Scheme states that the Responsible Authority must consider a number of matters as appropriate including:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.*

Loading activities for the proposed facility during the operations phase associated with equipment/parts transportation during maintenance are anticipated to occur relatively infrequently and will be entirely managed on-site within the internal accessways.

We are satisfied that loading and unloading for the proposal can be appropriately accommodated within the site via the network of internal service roads and temporary laydown areas.

6. Bicycle Considerations

Clause 52.34 of the Moyne Planning Scheme specifies the bicycle parking requirements for new developments.

There is no requirement to provide bicycle parking for a 'utility installation' nor would a demand for bicycle parking be expected in this rural context.

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7. Traffic Considerations

7.1. Truck Access Routes

Trucks accessing the site will primarily be generated to/from the east via Hamilton Highway towards Geelong and Melbourne to deliver BESS components.

Accordingly, truck arrivals are expected to undertake left-turn movements from Hamilton Highway to Darlington-Terang Road, and then a left-turn movement from Darlington-Terang Road into the site. Conversely, truck departures are expected to undertake right-turn movements out of the site onto Darlington-Terang Road, and then a right-turn movement from Darlington-Terang Road onto Hamilton Highway.

While the project team currently anticipates and prefers quarry material to be delivered exclusively to/from the north via Darlington-Terang Road to access Hamilton Highway, this will be further reviewed in future contracting and Construction Traffic Management Plan (TMP) work.

The proposed access route between the site and the Princes Freeway via Hamilton Highway is illustrated at Figure 10.

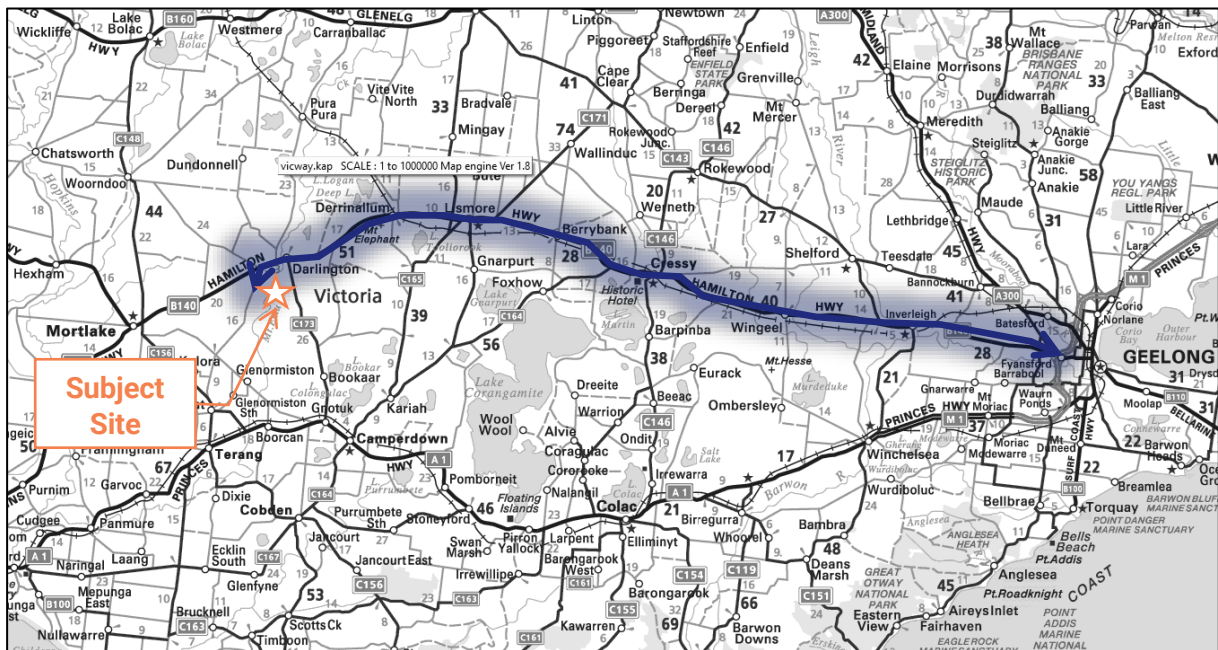


Figure 10: Primary Truck Access Route

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7.2. Traffic Generation

7.2.1. Day to Day Operations

Traffic generation during general operating hours will primarily be associated with staff arrivals and departures. If we conservatively assume that all 6 staff arrive in the AM peak hour and depart in the PM peak hours (which is unlikely), there would be no more than 6 vehicle movements generated in any one hour, and no more than 12 vehicle movements per day.

Very limited external maintenance vehicles or deliveries are to be generated by the facility during ongoing operation of with only one truck visit each month expected to pick-up repairs and replace spaces.

As demonstrated by the existing traffic volume data shown at Section 2.4, Darlington-Terang currently carries in just over 100 vehicles per day inclusive of 11 vehicles during the AM peak hour and 16 vehicles during the PM peak hour on average

When considering the additional traffic predicted to be generated by the proposal, a conservative post-development daily volume of in the order of 120 vehicles per day anticipated along Darlington-Terang Road

We are satisfied that Darlington-Terang Road can adequately accommodate the predicted post development traffic without any material impacts or mitigation works.

7.2.2. Construction Phase

Construction Staff

During the construction phase, a maximum of up to 200 staff will be on the site at any one time. This equates to 400 daily staff vehicle movements on Darlington-Terang Road.

The construction start and finish times are expected to generally occur outside the commuter peak hours, and therefore the majority of construction staff arrivals and departures will occur outside of the road network peak hours.

Based on the location of the site and for a conservative assessment, we have assumed all construction staff will drive to work in separate vehicles.

However, not all staff will arrive/depart at the same time or within the same hour.

Accordingly, for the purposes of our assessment we have assumed that 50% of construction staff will arrive/depart in the same hour which equates up to 100 vehicle movements.

Heavy Vehicles

The anticipated peak volume of vehicle deliveries to the site per day during the construction is to be approximately 33 vehicles. This equates to 66 daily truck movements on Darlington-Terang Road. During construction heavy vehicles would be used for delivery of construction equipment, removal of spoil (if required), and delivery of project components.

Heavy Vehicle arrivals and departures are expected to be generally spread throughout the day, hence we assume an average of 3 truck deliveries per hour during operation hours (7am-5pm), equating to 3 inbound movements and 3 outbounds movements per hour.

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Truck volumes associated with delivery of quarry materials would be determined at a later stage, but are expected to occur mostly in early stages of construction (i.e. civil and enabling works) and therefore not coincide with the peak stage of deliveries of BESS components.

Total Construction Stage Traffic

Traffic during the construction stage will be temporary only for a period of approximately two years, with much lower traffic volumes anticipated during the ongoing operation of the facility as discussed previously.

In total, during the construction stage there will be up to approximately 466 vehicle movements per day generated (i.e. 233 entry movements and 233 exit movements). This will result in a total average daily traffic volume of approximately 580 vehicles per day on Darlington-Terang Road during the construction period¹.

In the peak periods we expect up to 106 vehicle movements in a given peak hour, primarily made up of arrivals in the AM and departures in the PM.

7.3. Proposed Access Treatment

The proposed primary access to Darlington-Terang Road at the northern end of the site is designed to accommodate B-Double swept paths. The proposed access will be sealed from the carriageway of Darlington-Terang Road up to the Site's property boundary (approximately 30m) to mitigate any gravel spill onto Darlington-Terang Road. The remainder of the driveway and the internal road network within the BESS facility is to have an unsealed gravel surface.

A concept plan of the proposed primary access including swept path diagrams are attached at Appendix B.

The existing access point is to Darlington-Terang Road to be sealed to facilitate access to the existing farming use, as well as operational access for the terminal station and emergency access. This access can accommodate a Medium Rigid Vehicle (MRV) and emergency vehicles. Swept path diagrams for the existing access are attached at Appendix B.

Sufficient sight distances will be available at both the proposed main northern access point and the existing access, as Darlington-Terang Road is relatively straight and flat in the vicinity of both access points, noting there is a small curve approximately 150m north of the existing access point.

A small number of oversized and over mass vehicles (OSOM) and cranes are expected to be required to deliver large, prefabricated elements during the construction stage (e.g. onsite substation transformers and switching rooms). It is expected that the usage of OSOM vehicles would be minimal, and the majority of typical deliveries would be limited to heavy vehicles up to 26 m B-Doubles.

A separate future assessment should be conducted for any OSOM vehicles or cranes when these movements are expected by the relevant construction contractor. This assessment should consider any constraints identified on the National Heavy Vehicle Register (NHVR) network maps for the specific vehicle(s) anticipated such as bridge/culvert weight limits.

¹ The daily traffic volume estimate assumes that the construction period does not coincide with the construction period for the Darlington Wind Farm.

7.4. Turn Warrants Assessment

Based on our experience, and by having regard to existing (surveyed and obtained by Council) traffic volumes along Darlington-Terang Road, the traffic generated is assumed to arrive and depart to/from the north (via Hamilton Highway). Based on the recorded data and preceding traffic analysis, estimated peak hour traffic movements during the construction period is presented at Figure 11 for the Hamilton Highway/Darlington-Terang Road intersection and Figure 12 for the Darlington-Terang Road/Site Access.

The anticipated construction traffic peak hours do not coincide with the road network peak hours, although for the purposes of a conservative assessment they have been assumed to occur within the same hour.

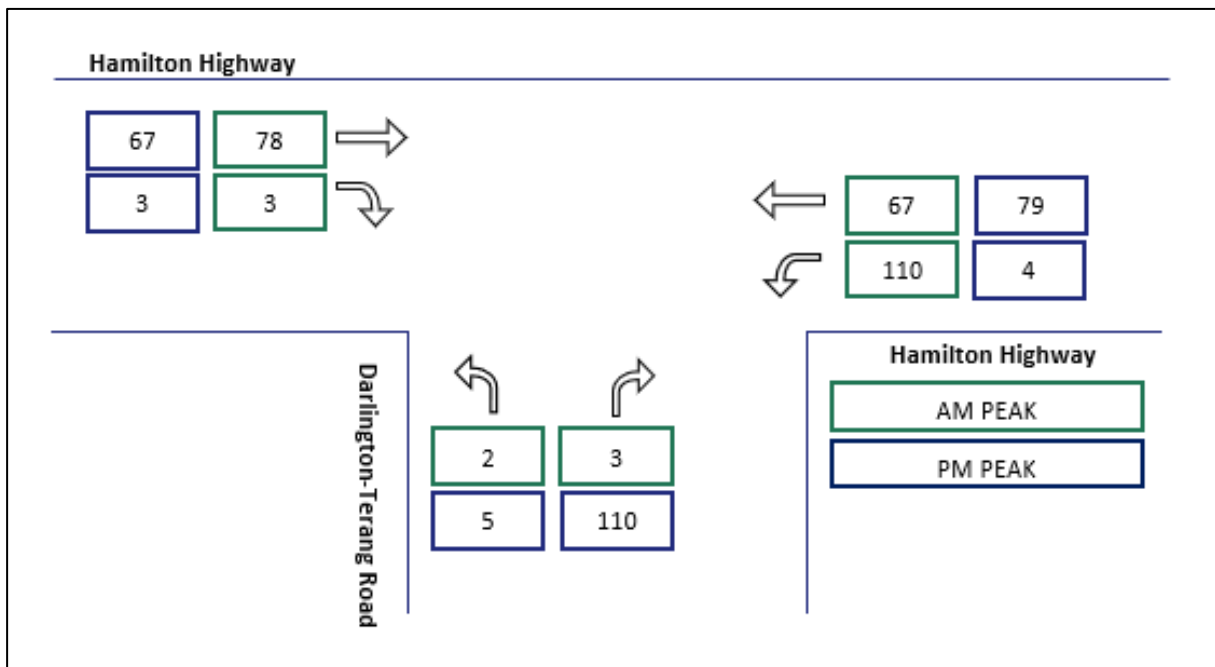


Figure 11: Hamilton Highway / Darlington-Terang Road - Predicted Traffic During Peak Construction Phase

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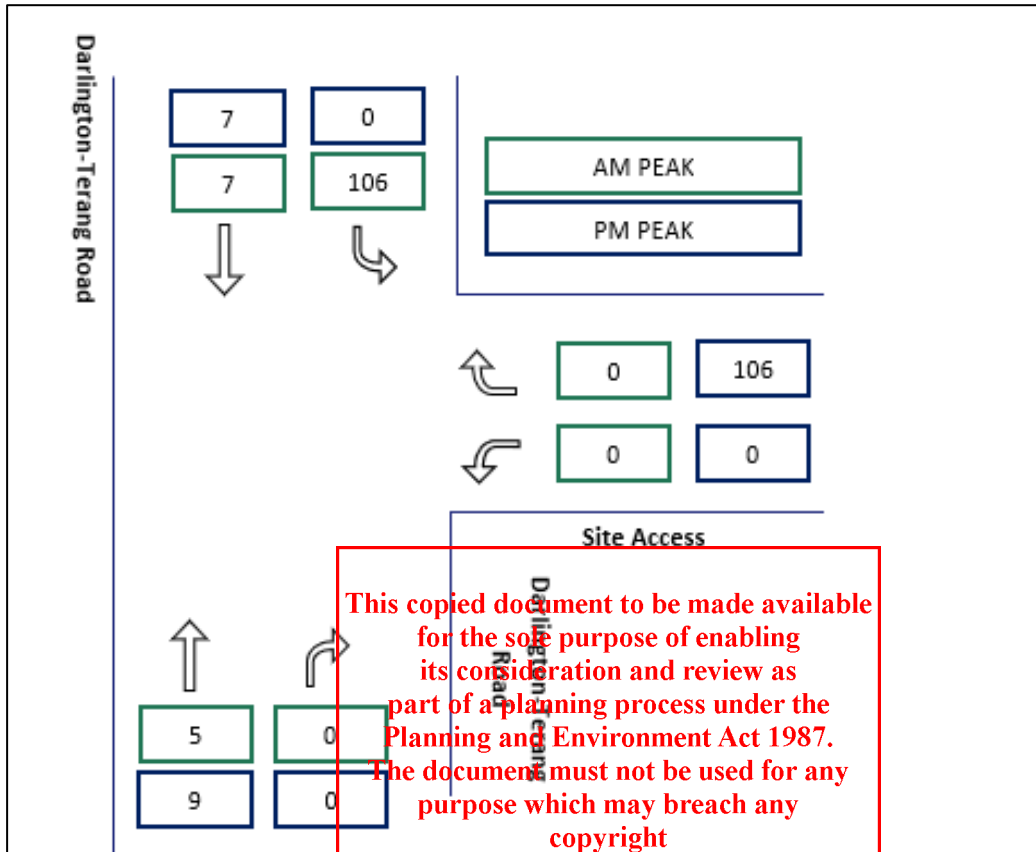


Figure 12: Site Access / Darlington-Terang Road - Predicted Traffic During Peak Construction Phase

7.4.1. Darlington-Terang Road Access

We have undertaken an assessment of the warrants for turning treatments for the Darlington-Terang Road primary access, based on the *Austrroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings* (Austrroads 2019). It is noted that this document technically applies to intersections rather than driveways and therefore provides a conservative assessment for private vehicle access connection such as proposed in this case.

Figure 2.25 at Section 2.3.6 of this document provides guidance on the preferred minimum turning treatments for major roads at unsignalised intersection. A default rural speed limit of 100km/h currently applies to Darlington-Terang Road adjacent to the site and accordingly Figure 2.25(a) of the *Austrroads Guide* is applicable which is relevant for rural roads with a speed greater or equal to 100km/h.

The warrant for a left-turn treatment is a function of the one-way through movement along the major road ($Q_M = Q_{T2}$) and the left turn movement (Q_L). The warrant for a right-turn treatment is a function of the through movements in both directions plus the left turn movement ($Q_M = Q_{T1} + Q_{T2} + Q_L$) and the right-turn movement (Q_R). We note that right-turn movements into the site are not anticipated given all vehicles will arrive via Hamilton Highway from the north. As mentioned previously, whilst the project team currently anticipates quarry material will be

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delivered exclusively to/from north, this will be further reviewed in future contracting and construction TMP work.

As previously outlined at Section 2.4, Darlington-Terang Road has a two-way peak hour volume of less than 20 vehicles which is very low. The predicted peak hour traffic during the peak construction phase of the project is 106 vehicles turning left into the site.

The warrants for turning treatments during the AM peak hour are shown at Figure 13, noting that this is the peak hour for arrival movements across the day. Whilst the left-turn volume is above the Y-axis of the graph, it clearly would fall below the red line.

In the PM peak the vehicle volumes will predominantly be site egress movements, so a turn warrant assessment is not required for this period, as the AM peak is the critical period to assess due to staff arrivals.

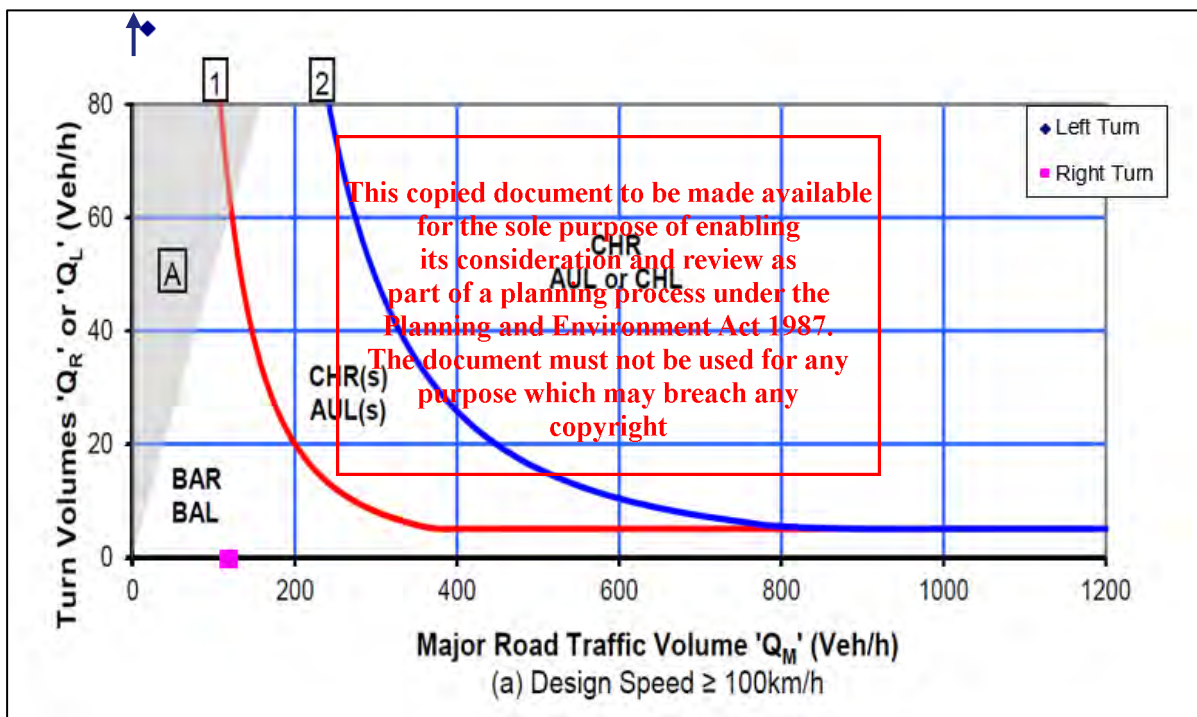


Figure 13: Darlington-Terang Rd / Site Access - Assessment

Based on the Austroads Guide Figure 2.25(a), the proposed Darlington-Terang site access meets the following warrants for the construction stage:

- Basic left-turn (BAL) treatment.
- No right-turn treatment required as no vehicles will arrive from the south along Darlington-Terang Road.

Therefore, we recommend a rural basic left-turn treatment at the primary BESS access point in line consistent with the requirements stipulated in Figure 8.2 of the Austroads Guide to Road design Part 4A as shown below. This includes a widened shoulder for left-turn movement and a radius to accommodate the relevant design vehicle which in this case should be a 26m long B-Double.

A Functional Layout Plan for the proposed access with Darlington-Terang Road has been prepared and is provided in Appendix B.

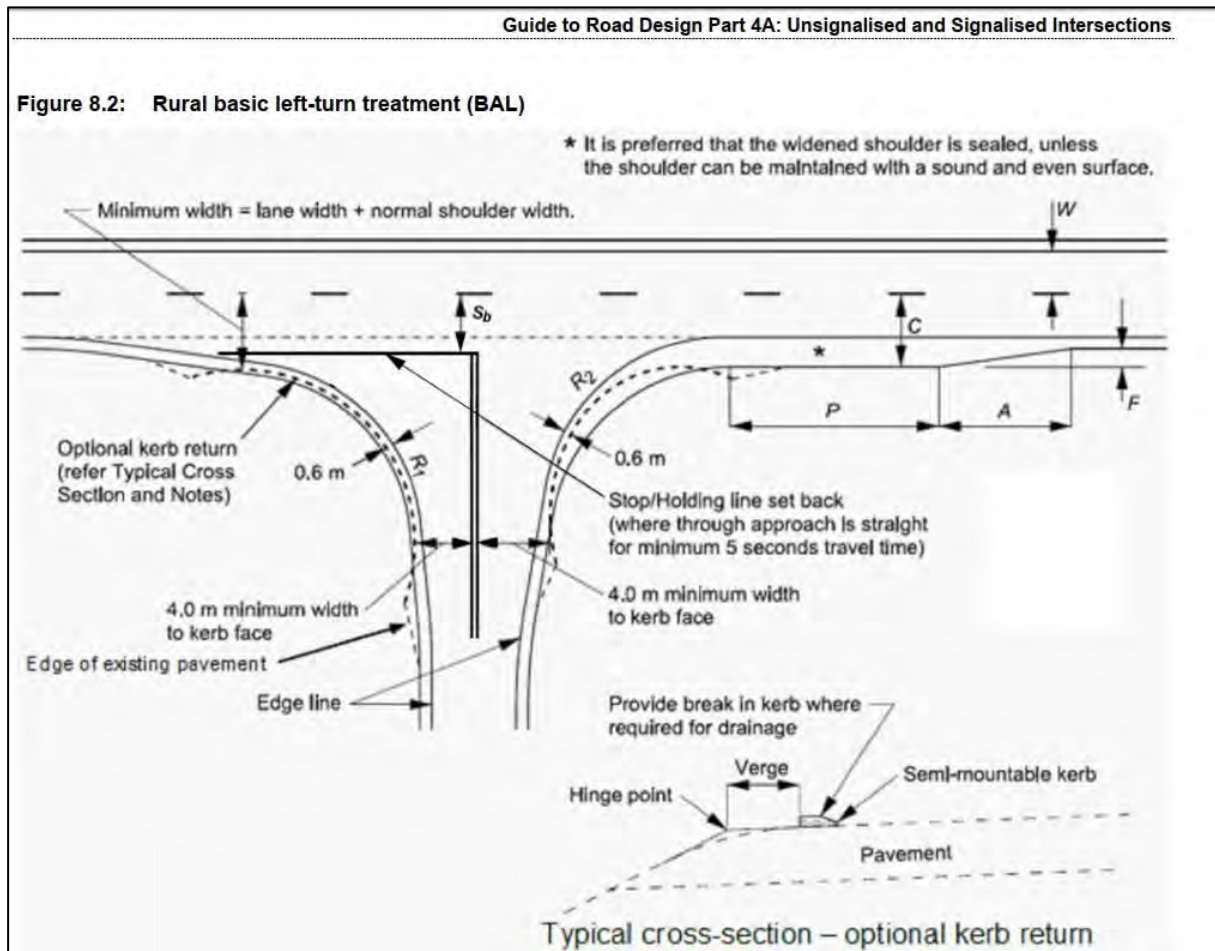


Figure 14: Austroads Guide - BAL Treatment Design

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2977 Hamilton Highway, Darlington

7.4.2. Hamilton Highway/Darlington-Terang Road Intersection

The existing geometry of the Hamilton Highway / Darlington-Terang Road intersection appears to provide basic right-turn (BAR) and basic left-turn treatments (BAL). This is shown in Figure 15 as there is greater than a 6-metre-wide lane at the intersection on Hamilton Highway in both directions, indicating that a vehicle can pass another vehicle that is slowing down to turn left (or right) in to Darlington-Terang Road.

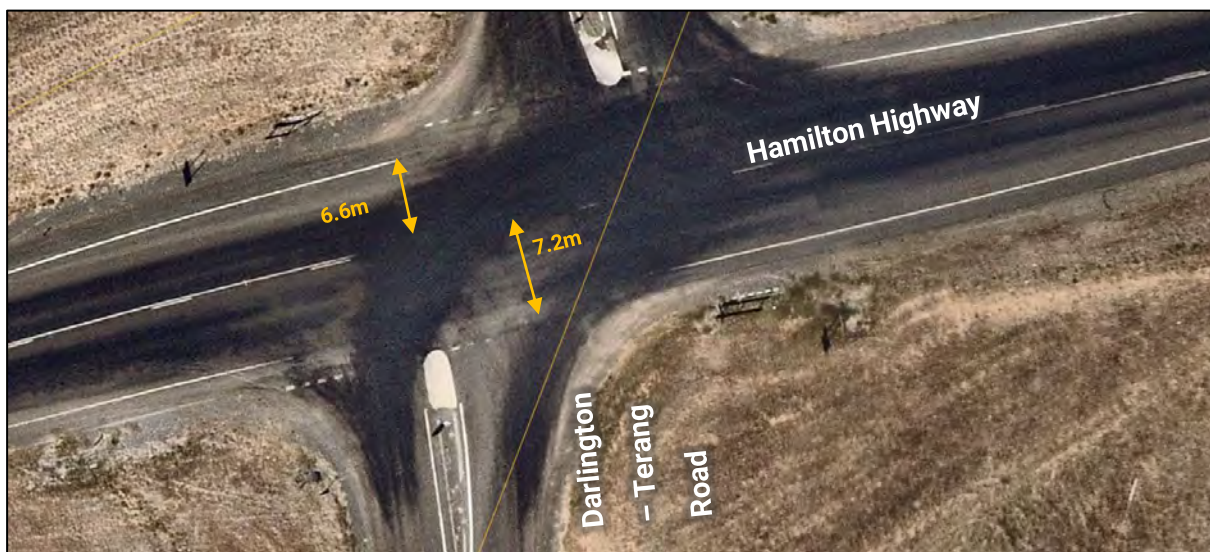


Figure 15: Darlington-Terang Rd / Hamilton Highway – Aerial

As outlined previously, the traffic and transport assessment prepared by GHD for the Darlington Wind Farm development outlines that the project requires upgrade of the Hamilton Highway/Darlington-Terang Road intersection to include a short channelised right-turn treatment (CHR(s)) and a basic left-turn (BAL) treatment.

However, for the purposes of our assessment we will conservatively assume that this project has not yet proceeded and completed any upgrade of the intersection.

Accordingly, we will assess the existing the existing intersection geometry and proposed traffic movements generated during the peak construction phase by the Murchs Corner BESS project.

The warrants for turning treatments during the AM peak hour are shown at Figure 13, noting that this is the peak hour for arrival movements across the day. Whilst the left-turn volume is above the Y-axis of the graph, it clearly would fall below the red line.

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Traffic Engineering Assessment

2977 Hamilton Highway, Darlington

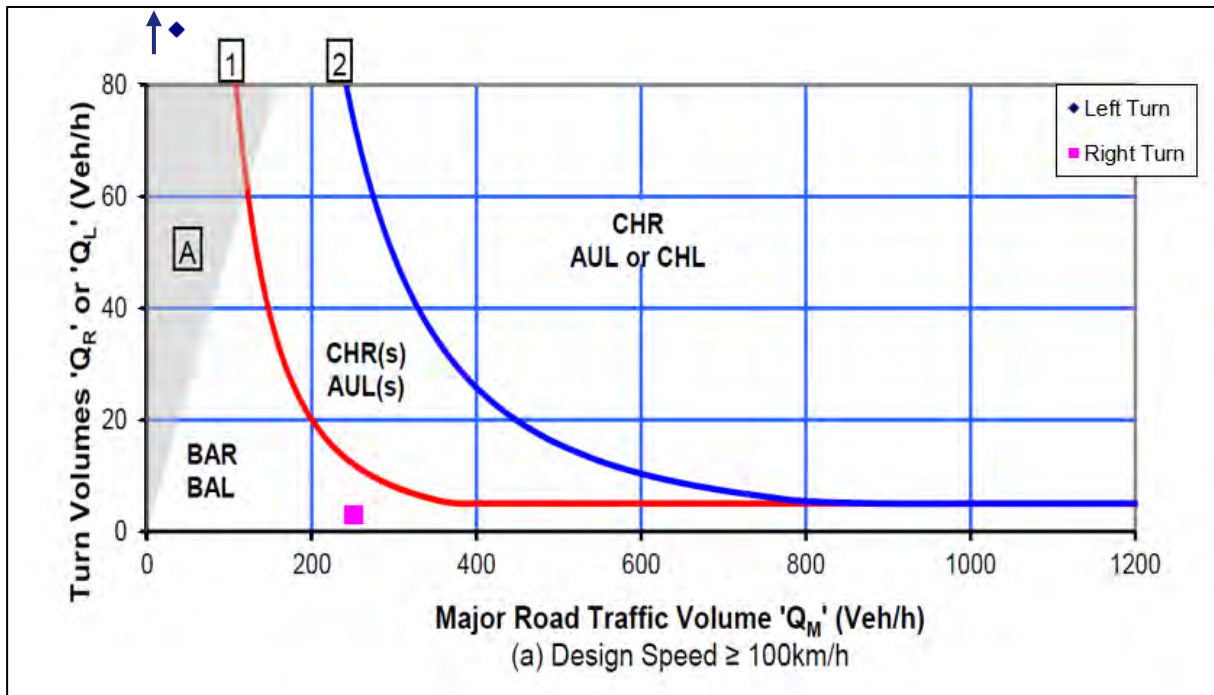


Figure 16: Hamilton Highway / Darlington-Terang Rd - Assessment

Based on the warrants assessment under the Austroads Guide Figure 2.25(a), the Hamilton Highway/Darlington-Terang and intersection requires the following during the peak construction phase of the Murchs Corner BESS project:

- Basic left-turn (BAL) treatment.
- Basic right-turn (BAR) treatment.

As discussed previously and shown in the aerial at Figure 15, the existing geometry of the intersection already provides BAL and BAR turning treatments. Accordingly, we are satisfied with the existing intersection arrangement is satisfactory and no upgrade is necessary as part of the Murchs Corner BESS project.

We have also reviewed the swept paths for the relevant turning movements at the existing intersection and found that it adequately accommodates a 26m B-Double, as shown in Figure 17 below. We note that the left-turn movement from Hamilton Highway to Darlington-Terang Road by a B-Double is expected to make use of the gravel shoulder on the corner which is appropriate and consistent with existing truck movements.

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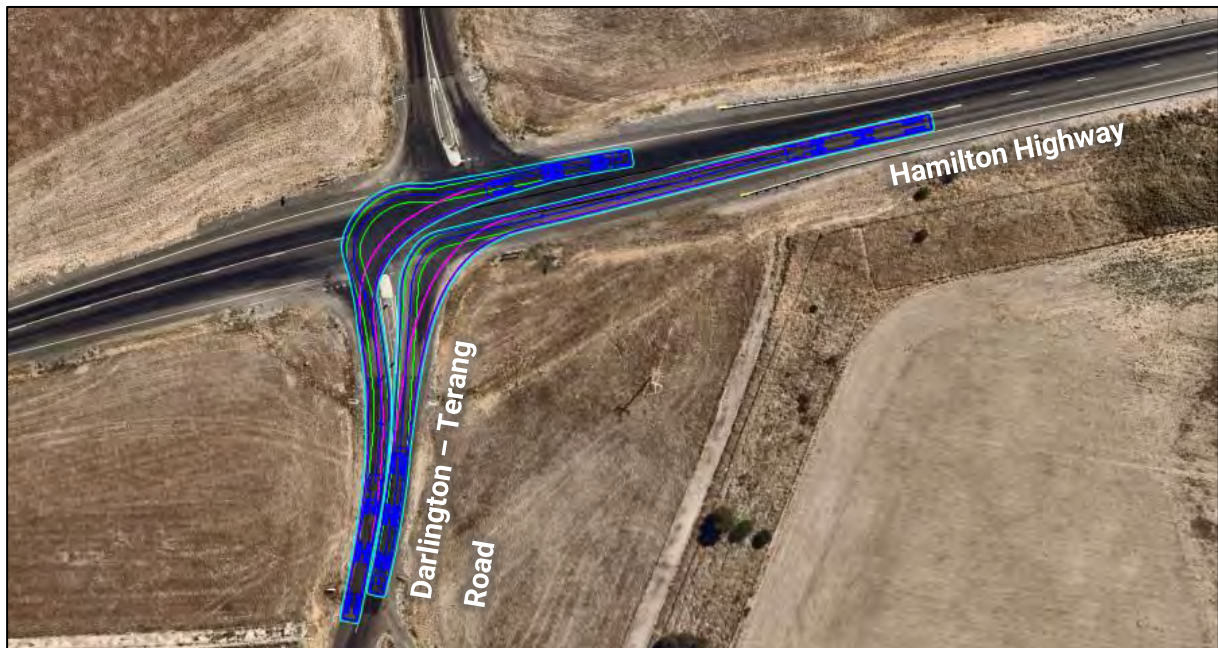


Figure 17: 26m B-Double Swept Path

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8. Request for Further Information

The following table provides our responses to traffic engineering related items in DTP’s RFI letter.

DTP Comments	Traffix Group Response
<p><i>2 Amend development plans to scale to show the following: c. dimensions and materials of the proposed and existing crossovers, internal accessways and car parking area</i></p>	<p>Traffix Group has prepared concept plans with dimensions of the proposed northern access point and existing southern access point as attached at Appendix B.</p>
<p><i>2d. identify the proposed and existing crossovers as either primary or secondary access points (Note: There is a discrepancy with the Traffic Report and what is depicted on submitted plans.)</i></p>	<p>The northern access is for primary construction access and operational access for the BESS. The southern access is for operational access for the terminal station, emergency access and farm access. This traffic report and the site plan prepared by Cogency (attached at Appendix A) have been updated accordingly to be consistent.</p>
<p><i>5. Amend Traffic Assessment to address the following: a. dimensions of the proposed vehicle crossover</i></p>	<p>Vehicle crossover dimensions are shown in the concept plan are attached at Appendix B.</p>
<p><i>b. provide swept path analysis of the proposed vehicle crossover to accommodate B-Double vehicles</i></p>	<p>Swept path diagrams demonstrating B-Double movements at the proposed northern access point are attached at Appendix B.</p>

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9. Conclusions

Having undertaken a detailed traffic engineering assessment of the Proposed Battery Energy Storage System (BESS) development at 2977 Hamilton Highway, Darlington, we are of the opinion that:

- a. The 10 car parking spaces is appropriate and will suitably accommodate predicted staff parking demands and occasional visitors.
- b. Loading activities can be appropriately accommodated within the site via the network of internal service roadways.
- c. Construction vehicles can be accommodated within the temporary laydown areas to support additional parking/loading activities from heavy vehicles.
- d. There is no statutory requirement to provide bicycle parking.
- e. The proposed primary access with Darlington-Terang Road is appropriate for the proposed development during the construction phase and ongoing BESS operation, and is to be provided with a rural basic left-turn treatment (BAL). The existing southern access is to be sealed and provide operational access for the terminal station, emergency access and farm access.
- f. During the construction phase and ongoing operations, the existing configuration of Darlington-Terang Road will sufficiently accommodate site generated traffic and there is no need for mitigating works.
- g. The existing geometry of the Hamilton Highway/Darlington-Terang Road intersection is adequate to accommodate the peak level of traffic anticipated during the construction phase of the project and suitably accommodates B-Double vehicle movements. Accordingly, it is not necessary for any upgrade works at the intersection as part of the project.
- h. The level of traffic generated as a result of this proposal during the construction and operation phases is acceptable and will not have a detrimental impact on the surrounding road network.
- a. There are no traffic engineering reasons why a planning permit for the Proposed Battery Energy Storage System (BESS) at 2977 Hamilton Highway, Darlington, should be refused, subject to appropriate conditions.

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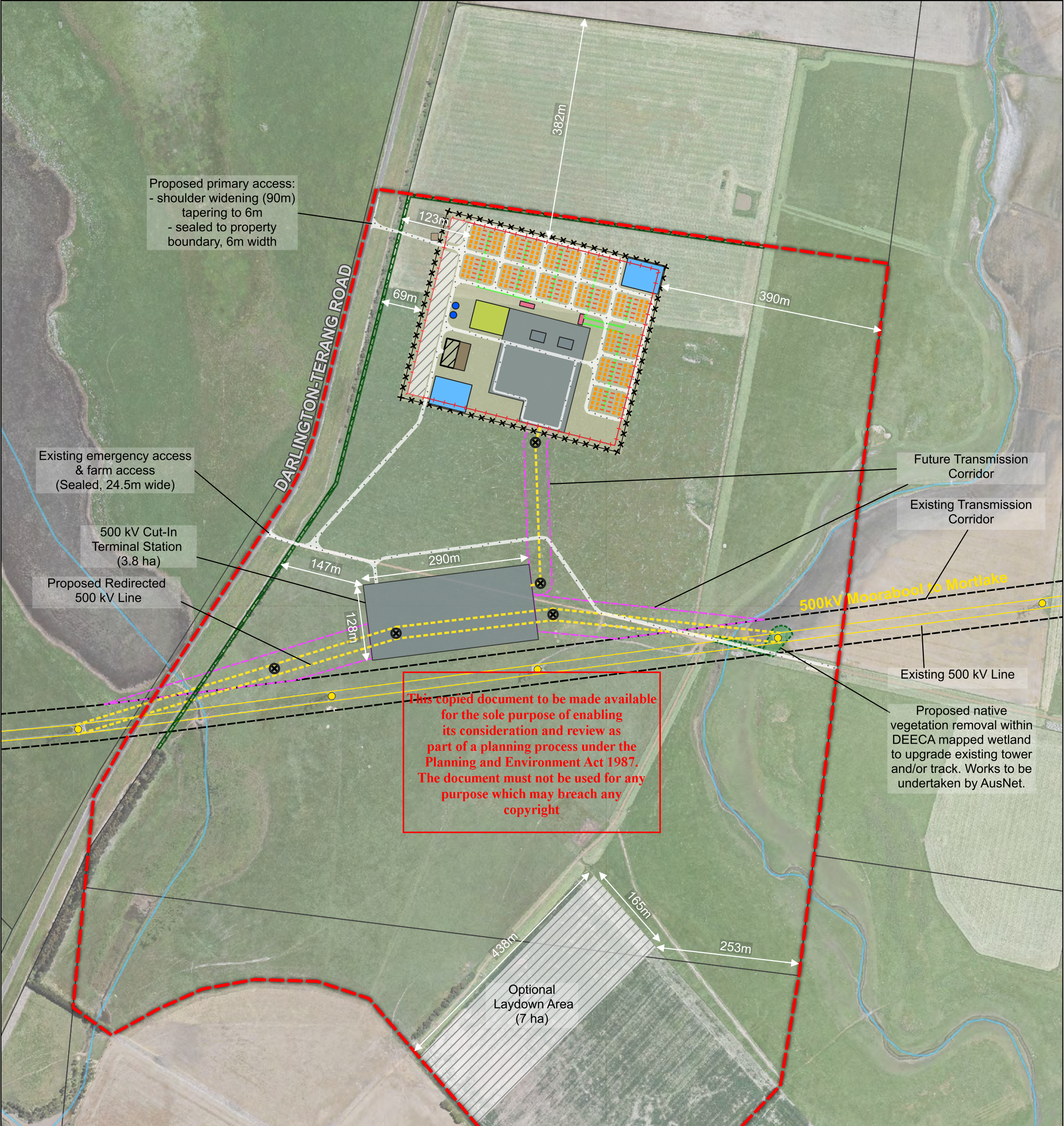


Appendix A

Site Layout

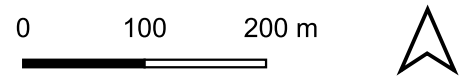
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Concept Layout Plan

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2511 - Murchs Corner BESS

- | | | |
|---|-----------------------------|-----------------------------------|
| Project Area | Proposed signage | Asset Protection Zone (10m) |
| Cadastre | Stormwater Attenuation Pond | Existing 500 kV Transmission Line |
| Battery Unit | Water Tanks | Proposed Redirected 500 kV Line |
| Power Conversion Unit (inverter, 33/0.69 kV transformer, MV switchgear and control equipment) | Hardstand Area | 33kV Feeder Cables |
| Terminal Station/Substation | Access Road | Future Transmission Corridor |
| Switching Room | Car Parking (1140 sqm) | Existing Transmission Corridor |
| Harmonic Filter Area | Laydown Area | New Transmission Tower |
| | Perimeter Screening | Existing Transmission Tower |

Version: 1.2
Date: 16/02/2026
Disclaimer: This plan is preliminary and subject to detailed studies and approval.



Concept Layout Plan

2511 - Murchs Corner BESS



- Project Area
- Cadastre
- Battery Unit
- Power Conversion Unit (inverter, 33/0.69 kV transformer, MV switchgear and control equipment)
- Substation
- Switching Room
- Harmonic Filter Area
- Operations & Maintenance Building
- Water Tanks
- Stormwater Attenuation Pond
- Car Parking (1140 sqm)
- Access Road
- Laydown Area
- Perimeter Screening
- Fence
- Proposed Redirected 500 kV Line
- Asset Protection Zone (10m)
- Future Transmission Corridor
- 33kV Feeder Cables
- New Transmission Tower

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Version: 1.3

Date: 10/03/2026

0 30 60 m



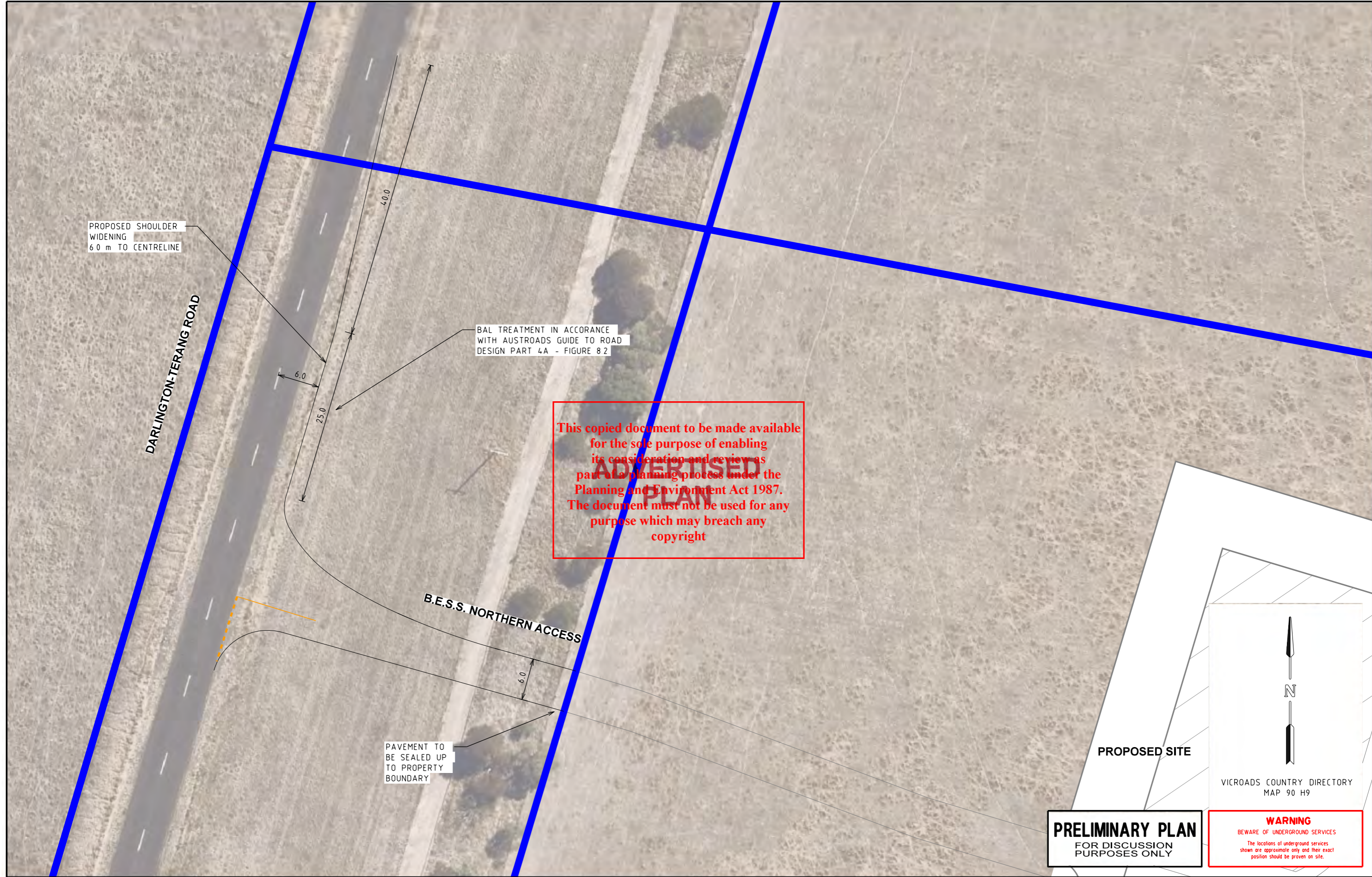


Appendix B

Concept Access Plans and Swept Paths

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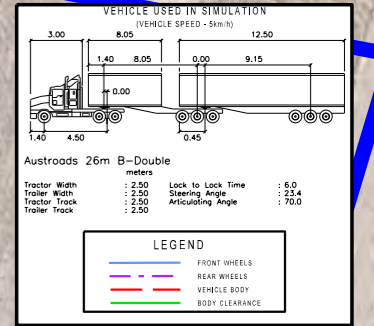
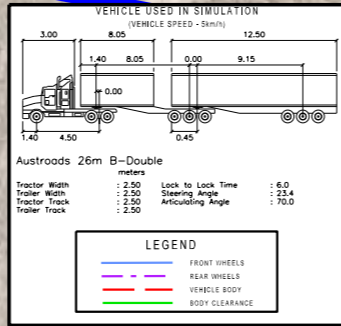
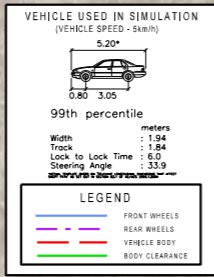
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MURCHS CORNER B.E.S.S. NORTHERN ACCESS
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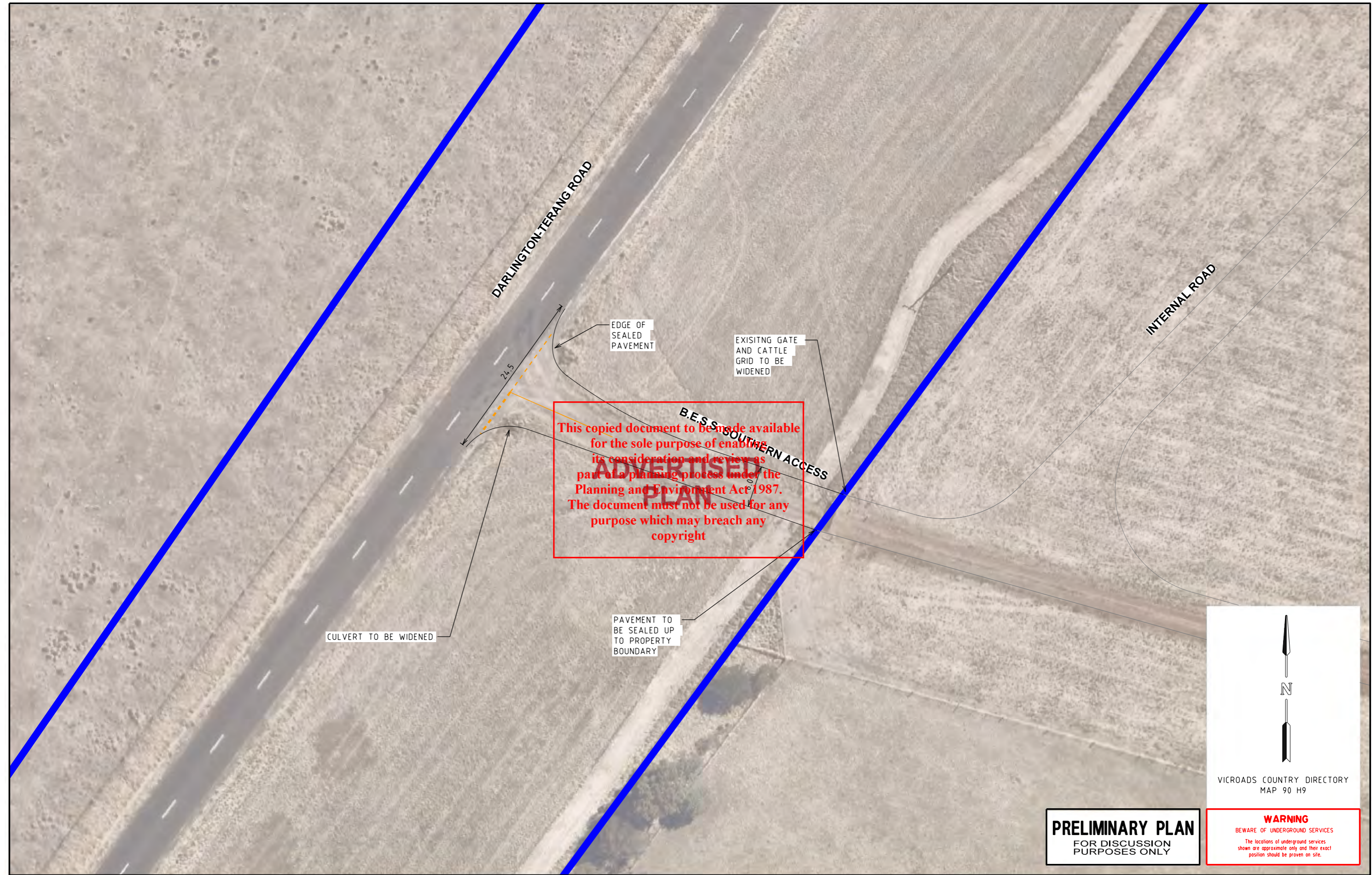
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VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)
5.20*

99th percentile

Width : 1.94 meters
Track : 1.84 meters
Lock to Lock Time : 6.0
Steering Angle : 33.9

LEGEND
FRONT WHEELS
REAR WHEELS
VEHICLE BODY
BODY CLEARANCE

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)
8.80

8.8m MRV

Width : 2.50 meters
Track : 2.50 meters
Lock to Lock Time : 6.0
Steering Angle : 34.0

LEGEND
FRONT WHEELS
REAR WHEELS
VEHICLE BODY
BODY CLEARANCE

VEHICLE USED IN SIMULATION
(VEHICLE SPEED - 5km/h)
5.20*

99th percentile

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BODY CLEARANCE

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(VEHICLE SPEED - 5km/h)
8.80

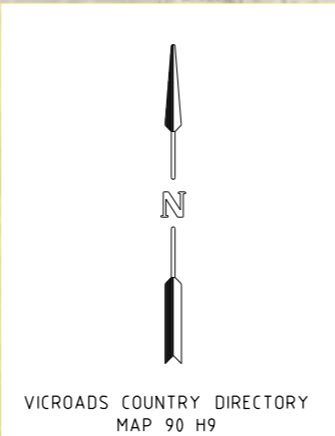
8.8m MRV

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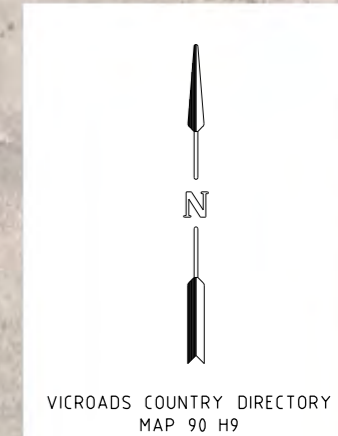
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