Attexó
APEM Group

# Appendix T

## Traffic Impact Assessment

**CAMBRAY CONSULTING**

TRAFFIC ENGINEERING + TRANSPORT PLANNING

# Tully BESS Project

## TRAFFIC IMPACT ASSESSMENT REPORT

*Prepared for* RWE Tully Battery Pty Ltd C/- *Attexo Group*

*1 June 2026*

# Contents



# Appendices

# 1.0 Introduction

Attexo has been engaged by RWE Tully Battery Pty Ltd (**The Proponent**) to prepare the Development Application (DA) for a Battery Energy Storage System (BESS) to be known as the Tully BESS Project (**The Project**), located approximately 4km south-west of Tully, Queensland.

The **Project Area** is located at 37-71 Sandy Creek Road, Tully. The Project Area is formally described as Lot 1 on RP735276 and Lot 1 on RP852238.

Cambray Consulting Pty Ltd (Cambray) has been engaged to prepare a Traffic Impact Assessment (TIA) Report to support the DA for consideration by Cassowary Coast Regional Council (Council) and the State Assessment and Referral Agency (SARA). A separate Heavy Vehicle Oversize / Overmass (OSOM) Concept Strategy has been prepared by Ratio Consultants and therefore please refer to the Ratio report for matters regarding the Project Transport Route.

## 1.1 Scope of Works

As part of the Development Application process, this TIA report has been prepared to consider the proposed vehicle access locations and potential traffic generation during the construction, operational and decommissioning phases to determine if upgrades may be triggered. This assessment includes the following tasks:

- Review of the proposed access to the BESS site from the Local Road Network;
- Summary of existing road features;
- Overview of the background traffic at key locations;
- Anticipated traffic generation for the construction, operational and decommissioning phases;
- Qualitative assessment of the development generated traffic impacts.

A separate Heavy Vehicle Oversize / Overmass (OSOM) Concept Strategy has been prepared by Ratio Consultants and therefore please refer to the Ratio report for matters regarding the Project Transport Route.

## 1.2 Limits of Report

This report takes into account the particular instructions and requirements of our client. Cambray Consulting has taken care in the preparation of this report, however it neither accepts liability nor responsibility whatsoever in respect of:

- Any use of this report by any third party;
- Any third party whose interests may be affected by any decision made regarding the contents of this report; and/or
- Any conclusion drawn resulting from omission or lack of full disclosure by the client, or the clients' consultants.

## 1.3 Safety in Design

Within our scope, we have identified safety in design issues and potential hazards, whenever reasonably practicable within our field of expertise. It is not considered reasonably practicable to identify all potential hazards which may occur throughout the life of a project, including during detailed design and construction activities. It is strongly recommended that safety in design issues be reviewed during all design and construction stages of the project.

## 1.4 Qualifications

This report was prepared by:

- Andrew Douglas, Director – BE Civil (Hons), MSc Env Man, FIEAust, CPEng, **RPEQ 6691**;
- Simon Nitkiewicz, Principal Transport Engineer – BE Civil (Hons), BSc Biochem, TMD 842, **RPEQ 31604**.

# 2.0 Context

## 2.1 Project Area

The Project Area is located at 37-71 Sandy Creek Road, Tully. The Project Area is formally described as Lot 1 on RP735276 and Lot 1 on RP852238. The Project Area is approximately 28.7 hectares (ha) in size.

The Project Area is located within the Cassowary Coast Regional Council (Council) Local Government Area (LGA). The Project Area is identified as Rural Zoning by Council's Planning Scheme.

## 2.2 Surrounding Road Network

The road network adjacent to the Project Area is illustrated in **Figure 2.1** and the key characteristics these roads are summarised in **Table 2.1**.

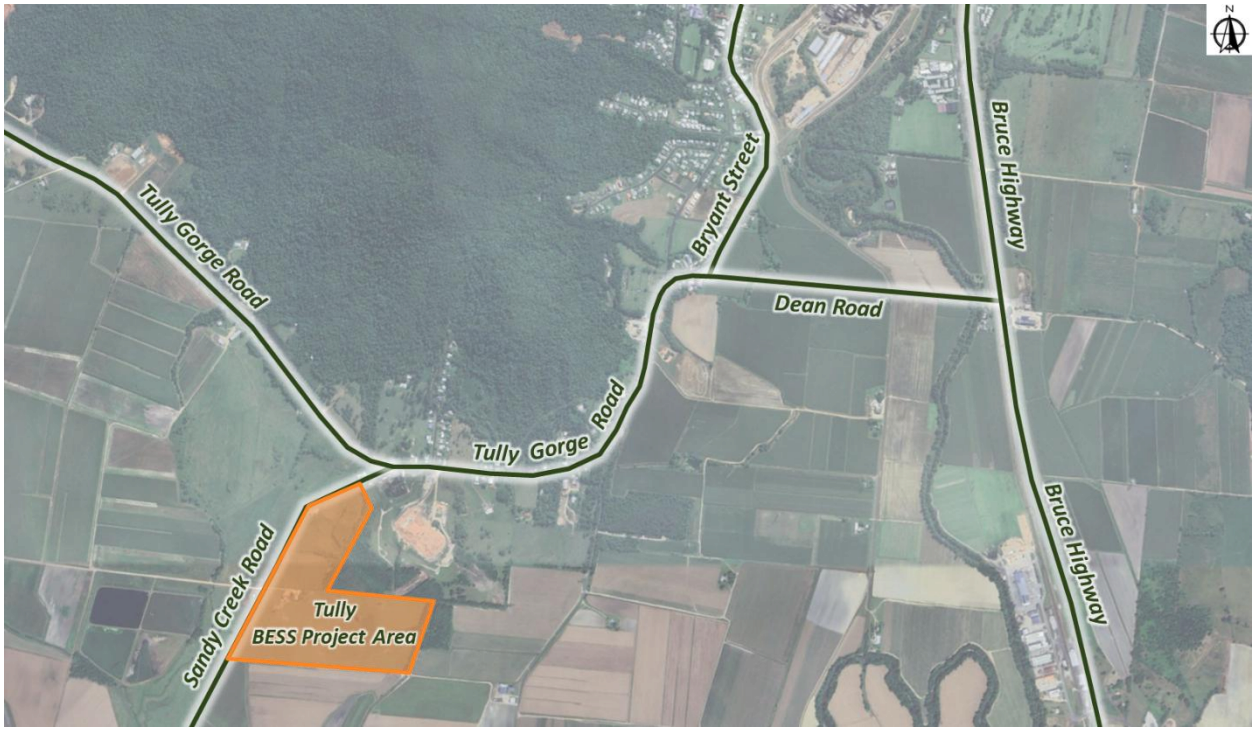



**Figure 2.1: Surrounding Road Network**

**Table 2.1: Surrounding Road Network Characteristics**

| Road | Authority | Hierarchy | Speed Limit |
|---|---|---|---|
| Sandy Creek Road | Council | Rural Road | 100km/h* |
| Tully Gorge Road | Council | Arterial | 60km/h / 70km/h |
| Dean Road | Council | Arterial | 80km/h |
| Bruce Highway | State | Highway | 80km/h / 80km/h |

**Unposted, Rural Default Speed*

# 3.0 Project Review

## 3.1 Project Overview

### 3.1.1 Overview

The Project includes the construction and operation of a 200 MW/800MWh Battery Energy Storage System (BESS) Facility. The proposed site plan is provided in **Appendix A**.

The battery units will cover an area of approximately 2.5 ha and will include up to 188 battery units, associated infrastructure, inverters, MV (Medium-Voltage) transformers, internal access roads, hardstand and security fencing.

Each battery unit is anticipated to weigh approximately 39 tonnes and be 8.6 m in length, 2.8 m in height and 1.9 m wide. Most battery units are approximately in the form of a shipping container.

The associated MV Transformers (up to 47 units are estimated, subject to final equipment selection and design) would similarly be trucked to Site and arranged onto footings or screw piles via mobile crane.

### 3.1.2 Construction Period

Construction of the Project is anticipated to begin in 2027 and is expected to take approximately 18 months. Construction will be undertaken from 6:30 am to 6:30 pm six (6) days per week.

### 3.1.3 Decommissioning Period

Decommissioning is generally of a lower traffic intensity than construction, and whilst more information will be known closer to end-of-life of the facility, it is expected to take up to approximately 42 weeks or approximately 9.5 months. Standard workdays are expected, from 6:30 am to 6:30 pm six (6) days per week.

### 3.1.4 Project Area Access

The Project Area will gain access to the local road network via two (2) accesses to Sandy Creek Road. Access arrangement will be discussed in further detail in **Section 5**.

It is understood that the project team has been advised that two (2) accesses are required to meet Queensland Fire and Emergency Services (QFES) expectations. These access points are proposed to be utilised for construction (subject to detailed design), operations (and maintenance) and decommissioning.

### 3.1.5 Car Parking Arrangements

The Project includes provision of a dedicated parking area containing seven (7) parking spaces (see **Figure 3.1**).

We also note that there is sufficient space on-site to accommodate any overflow parking within the Project Area when demand beyond this carpark is required.

**Figure 3.1 Primary Parking Area**

The proposed car parking areas should be designed generally in accordance with AS2890.1, noting the following minimum critical parking module dimensions:

- Standard parking bay dimensions of 2.6m x 5.4m;
- Person with Disability (PWD) parking bay dimensions of 2.4m x 5.4m with a shared space of 2.4m x 5.4m; and
- Parking aisle width of 6.2m.

We are of the view that the proposed parking areas can comply with these critical dimensions.

## 3.2 Project Traffic Generation

### 3.2.1 Construction Phase

The highest traffic impacts of the Project are anticipated to occur during the Construction Phase, which includes:

- Delivery of BESS components to the site via the State Controlled Road (SCR) Network;
- Delivery of HV (High-Voltage) transformers, MV (Medium-Voltage) transformers and switch rooms to the site via the SCR Network;
- Transportation of materials and plant to and from Project area; and
- Movement of construction workers between population centres and the Project area.

Maximum traffic generation is expected to be 40 light vehicles and 30 heavy vehicles travelling to and from the Project Area each day, with an average of 30 light vehicle movements daily and 15 heavy vehicle movements daily. These movements are detailed in **Table 3.1** and **Table 3.2**.

**Table 3.1 Maximum Traffic Generation During the Civil Works / Installation Phase**

| Movements | Light Vehicles | Heavy Vehicles | Total |
|---|---|---|---|
| Daily Vehicles | 40 | 30 | 70 |
| Two-way Movements | 80 | 60 | 140 |

**Table 3.2 Average Traffic Generation During the Civil Works / Installation Phase**

| Movements | Light Vehicles | Heavy Vehicles | Total |
|---|---|---|---|
| Daily Vehicles | 30 | 15 | 45 |
| Two-way Movements | 60 | 30 | 90 |

The construction workforce is expected to commute using private vehicles as no existing active or public transport networks are accessible within the Project's vicinity.

### 3.2.2 Operations Phase

The expected number of traffic movements during the operational phase is anticipated to be very low. Daily movements of light vehicles are expected to be around eight (8) vehicle trips. Service vehicles may visit the site one (1) to two (2) times a week, including occasional maintenance trucks, refuse collection vehicles and the like.

Therefore, we estimate that the Project may generate up to eight (8) trips per day and it is expected that the operational traffic will have a negligible effect on the local road network.

### 3.2.3 Decommissioning

At cessation of operations, the Project would be decommissioned in accordance with State-code 27.

Decommissioning is in some ways the reverse of construction activities, but generally is of a lower intensity and/or shorter duration.

In practical terms, decommissioning may involve:

- Removal of battery containers / enclosures;
- Removal of transformers;
- Removal of inverters, switch rooms, buildings and other plant requirement;
- Civil demolition and rehabilitation crew.

A summary estimate of average and maximum light and heavy vehicle generation during the decommissioning phase is provided in **Table 3.3** and **Table 3.4**.

**Table 3.3 Maximum Traffic Generation During the Civil Works / Installation Phase**

| Movements | Light Vehicles | Heavy Vehicles | Total |
|---|---|---|---|
| Daily Vehicles | 25 | 15 | 40 |
| Two-way Movements | 50 | 30 | 80 |

**Table 3.4 Average Traffic Generation During the Civil Works / Installation Phase**

| Movements | Light Vehicles | Heavy Vehicles | Total |
|---|---|---|---|
| Daily Vehicles | 15 | 10 | 25 |
| Two-way Movements | 30 | 20 | 50 |

The decommissioning workforce is expected to commute using private vehicles as no existing active or public transport networks are accessible within the Project's vicinity.

Decommissioning can also likely be completed without separate OSOM permits, as larger plant elements (such as the transformer) can be broken down for more simplified transport off-site.

While the final decommissioning methodology will be known closer to end-of-life, the below high-level information is provided for consideration.

Prior to decommissioning, a Traffic Impact Assessment Report will be undertaken determine and appropriately manage impacts on the transport network arising from removal of waste and materials from the Project area. Engagement with relevant regulatory authorities will be undertaken to determine whether any approvals are required, including:

- CCRC and other relevant local governments (if applicable) to understand concerns and requirements from decommissioning haulage on local roads;
- DTMR to discuss impacts of decommissioning traffic on state transport infrastructure (road and rail), including:
    - OSOM loads
    - Mitigation requirements
    - Any separate approvals required directly from DTMR (for example constructing upgrades or placing third-party electricity infrastructure in state-controlled roads).
- Relevant railway managers to discuss approval requirements for taking OSOM loads over railway corridors or interfering with railway corridors
- The National Heavy Vehicle Regulator regarding approvals for OSOM movements.

## 3.3 Project Transport Route

A separate Heavy Vehicle Oversize / Overmass (OSOM) Concept Strategy has been prepared by Ratio Consultants and therefore please refer to the Ratio report for matters regarding the Project Transport Route.

# 4.0 Project Area Access Review

## 4.1 Location and Configuration

The Project Area will be accessed from Sandy Creek Road via two (2) crossovers, as illustrated in **Figure 4.1**.

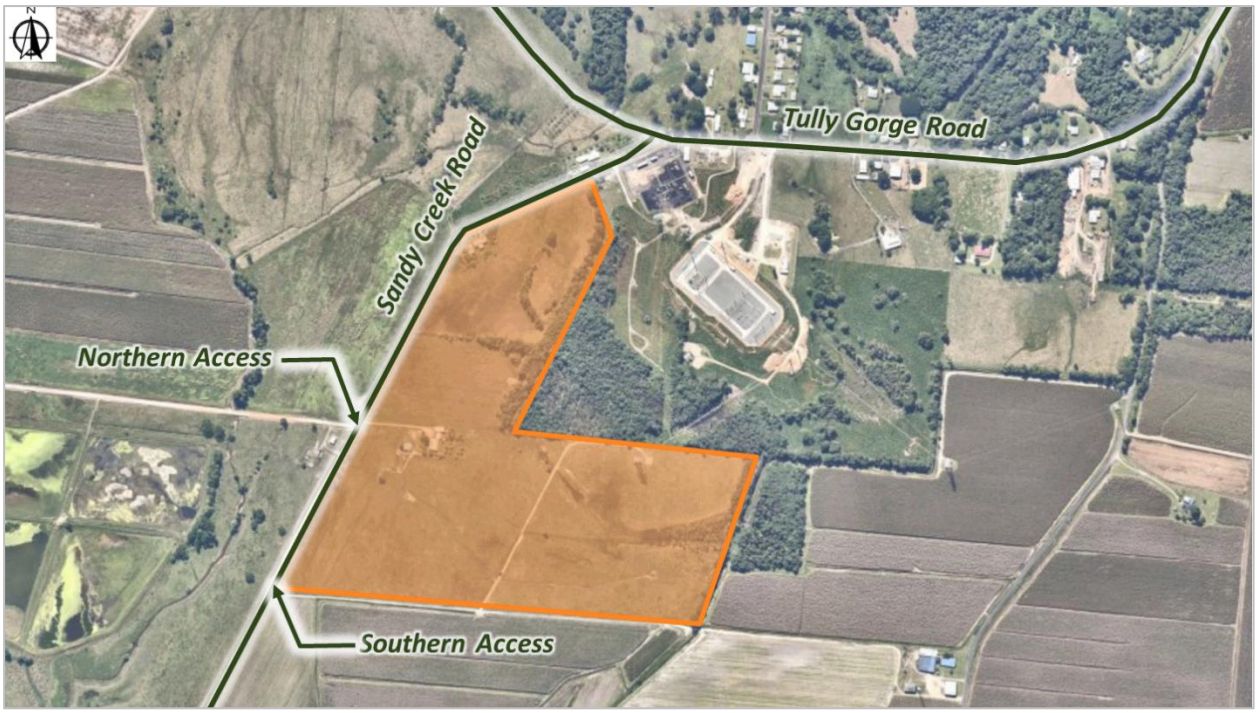



**Figure 4.1: Project Area Access Locations**

It is recommended that the access crossovers are designed to be generally in accordance with the FNQROC Standard Drawing Rural Allotment Accesses (S1105). It is also recommended that the access width at the property boundary be 10 m, to be sufficiently wide to accommodate the design heavy vehicles.

## 4.2 Sight Distance Assessment

The sight distance for the Project Area Access has been assessed in accordance with AS2890.1 and AS2890.2. The key parameters are summarised in **Table 5.1**.

**Table 5.1 AS2890 Project Area Access Sight Distance Review**

| Parameter | Speed limit (Unsigned) | Sight Distance |
|---|---|---|
| Desirable 5s Gap | 100 km/h | 139 m |

A desktop assessment has been undertaken to evaluate the available sight distance at the two (2) access points.

**Figure 4.2** and **Figure 4.3** illustrates the available sight distance at the Northern and Southern Access, respectively. The assessment suggests that the available sight distances would meet the requirements. We do note that some vegetation management may be required and it is recommended that this is confirmed onsite prior to the construction of the accesses.


**Figure 4.2 Desktop Sight Distance Assessment at Northern Access**

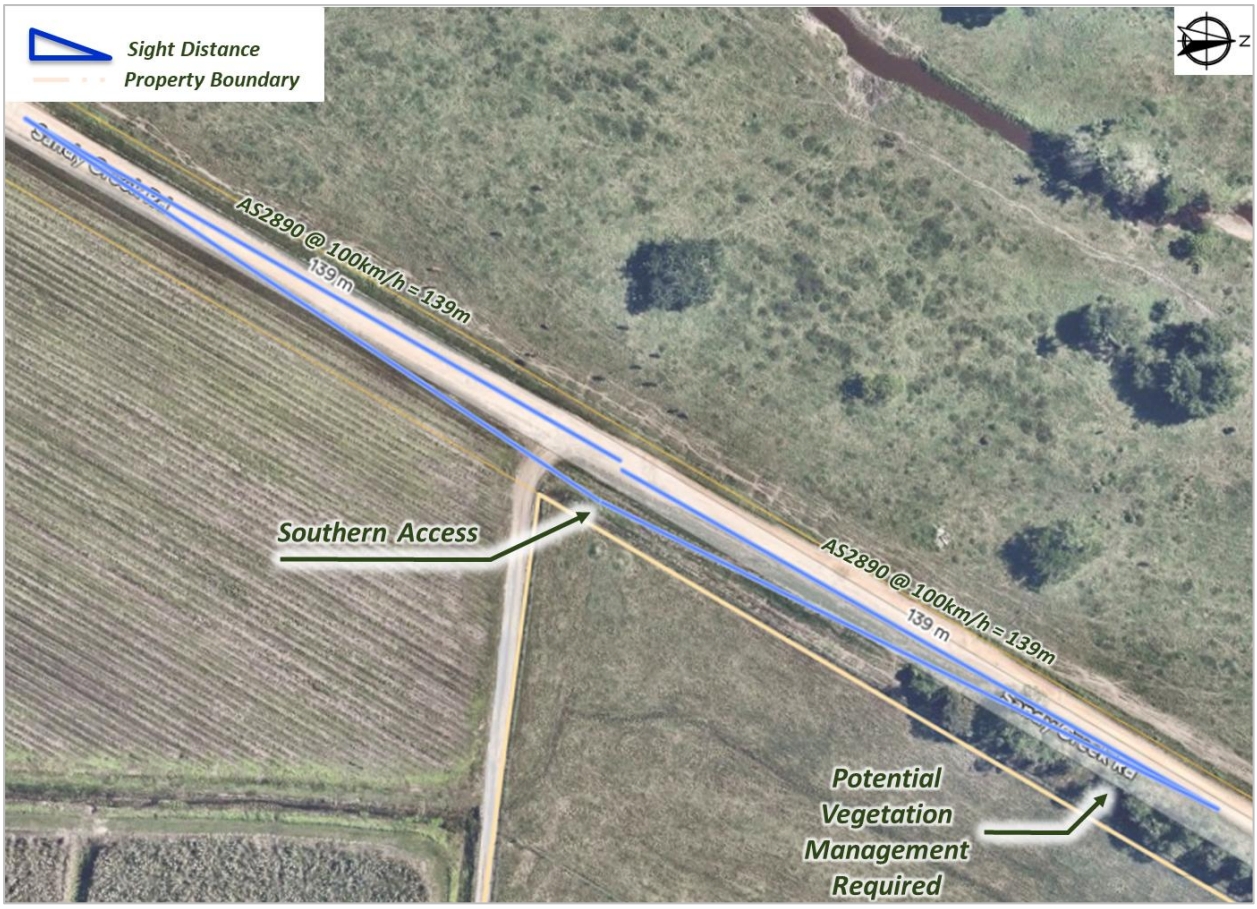



**Figure 4.3 Desktop Sight Distance Assessment at Southern Access**

It is also recommended that an in-person sight distance assessment is conducted prior to the construction of the accesses to confirm the vertical components of the available sight distances. We are of the view that an in-person sight distance assessment could be reasonably conditioned prior to the commencement of construction activities.

# 5.0 Traffic Generation and Distribution

## 5.1 Overview

We have conducted a review of the Project's traffic impacts on the existing transport network surrounding the site over the course of the six (6) day working week during the 18-month Construction Phase. The Construction Phase consists of the following stages:

- Civil Works;
- Installation;
- Commissioning; and
- Operation.

The Construction Phase traffic is generated by the following vehicle types and uses:

- Light vehicles associated with workforce accessing the Project Area;
- Heavy Vehicles which include;
    - Medium and Heavy Rigid Vehicles delivering materials and smaller plant equipment;
    - Truck and Dog vehicles for earthworks and material movement;
    - Class vehicles i.e. mobile cranes;
    - Up to 26m B-double vehicles for the delivery of materials, components and the transportation of larger plant equipment to the development site; and
    - A limited number of OSOM movements required the movement of Sub-station, Transformers and switch rooms.

The inputs which form the basis of our review are outlined in the following sections.

It is noted that the construction phase is critical compared to the operations (and maintenance) and decommissioning phase. Further detail of these phases is provided in **Section 3.2.2** for the operations phase and **Section 3.2.3** for the decommissioning phase.

## 5.2 Project Traffic Volumes

High-level traffic generation estimates for the construction phase of the development have been estimated based on similar developments. These volumes include both the anticipated light and heavy vehicle movements.

**Table 5.1 Maximum Daily Traffic Generation During the Civil Works / Installation Phase**

| Movements | Light Vehicles | Heavy Vehicles | Total |
|---|---|---|---|
| Daily Vehicles | 40 | 30 | 70 |
| Two-way Movements | 80 | 60 | 140 |

**Table 5.2 Average Daily Traffic Generation During the Civil Works / Installation Phase**

| Movements | Light Vehicles | Heavy Vehicles | Total |
|---|---|---|---|
| Daily Vehicles | 30 | 15 | 45 |
| Two-way Movements | 60 | 30 | 90 |

As summarised above, the maximum number of daily trips is in the order of 140 trips per day, and the average daily trips is 90 trips per day.

A traffic distribution split of Heavy and light Vehicle traffic arriving during the AM and PM peak periods is summarised in **Table 6.3.**

**Table 6.3 Adopted Directional Traffic Distribution Splits**

| Traffic Type | AM Peak | | PM Peak | |
|---|---|---|---|---|
| | In | Out | In | Out |
| Material and Equipment Deliveries | 10% | 10% | 10% | 10% |
| Light Vehicle (Workforce) | 80% | 0% | 0% | 80% |

Based on **Table 6.2** and **Table 6.3**, **Table 6.4** provides a summary of the traffic generated during the AM and PM peak periods accessing and egressing the development during the Civil Works and Installation Phase.

**Table 6.4 Civil Works / Installation Phase Peak Period Traffic Generation**

| Traffic Type | AM Peak | | PM Peak | |
|---|---|---|---|---|
| | In | Out | In | Out |
| Material and Equipment Deliveries | 3 | 3 | 3 | 3 |
| Light Vehicle (Workforce) | 32 | 0 | 0 | 32 |
| **Total** | **35** | **3** | **3** | **35** |

We are of the opinion that the net increase in traffic demands as a result of the proposed development will be very low, and as such, a detailed Traffic Impact Assessment (SIDRA) was not warranted in this instance.

This equates to less than one (1) trip per minute and is considered negligible in the context of the broader road network. On this basis, the proposed development is expected to have a negligible traffic impact on the surrounding road network and is acceptable from a traffic impact viewpoint.

Development traffic is anticipated to reduce significantly after completion of the Construction Phase. Continued operation will consist primarily of inspection and maintenance activities, with primary operation of the project to be undertaken from a remote operations control centre.

Traffic generation during decommissioning is also anticipated to be materially less than during construction. For example where construction is anticipated to generate 35 trips during peak hours, decommissioning is anticipated to generate in the order of 20 trips during peak hours. That is, from a traffic assessment perspective decommissioning is non-critical compared to construction.

# 6.0 Summary and Recommendations.

## 6.1 Summary

The Proponent seeks to develop a 200MW/800MWh Battery Energy Storage System (BESS) Facility in Tully, Queensland, located approximately 23km south-west of Mission Beach.

Key findings of the Traffic Impact Assessment are, as follows:

- Available sight distances at the proposed access locations appear to be reasonable based on an 100km/h speed limit in accordance with AS2890.1 and AS2890.2;
- The access configurations can be provided generally in accordance with the Far North Queensland Regional Organisation of Councils (FNQROC) Development Manual;
- Internal access tracks are intended to be utilised for the project and improvements to the existing flat site may be undertaken for set down and car parking arrangements;
- The Civil Works Phase (construction phase) is anticipated to increase traffic by approximately 38 trips during peak hours for 18-months. The impact of this traffic is negligible on the surrounding road network being equal to less than one (1) new trip per minute. Consequently, no specific capacity upgrades are considered to be required;
- The operations phase is anticipated to increase traffic by approximately eight (8) trips per day. This is insignificant in the context of the broader network. Consequently, no specific capacity upgrades are considered to be required;
- The decommissioning phase is anticipated to increase traffic by approximately 20 trips during peak hours for approximately 42 weeks (approx. 9.5 months). Compared to construction this is a non-critical phase from a traffic perspective;
- A separate Heavy Vehicle Oversize / Overmass (OSOM) Concept Strategy has been prepared by Ratio Consultants and therefore please refer to the Ratio report for matters regarding the Project Transport Route.

## 6.2 Recommendation

In light of the above, we recommend that the development be approved with reasonable and relevant conditions.

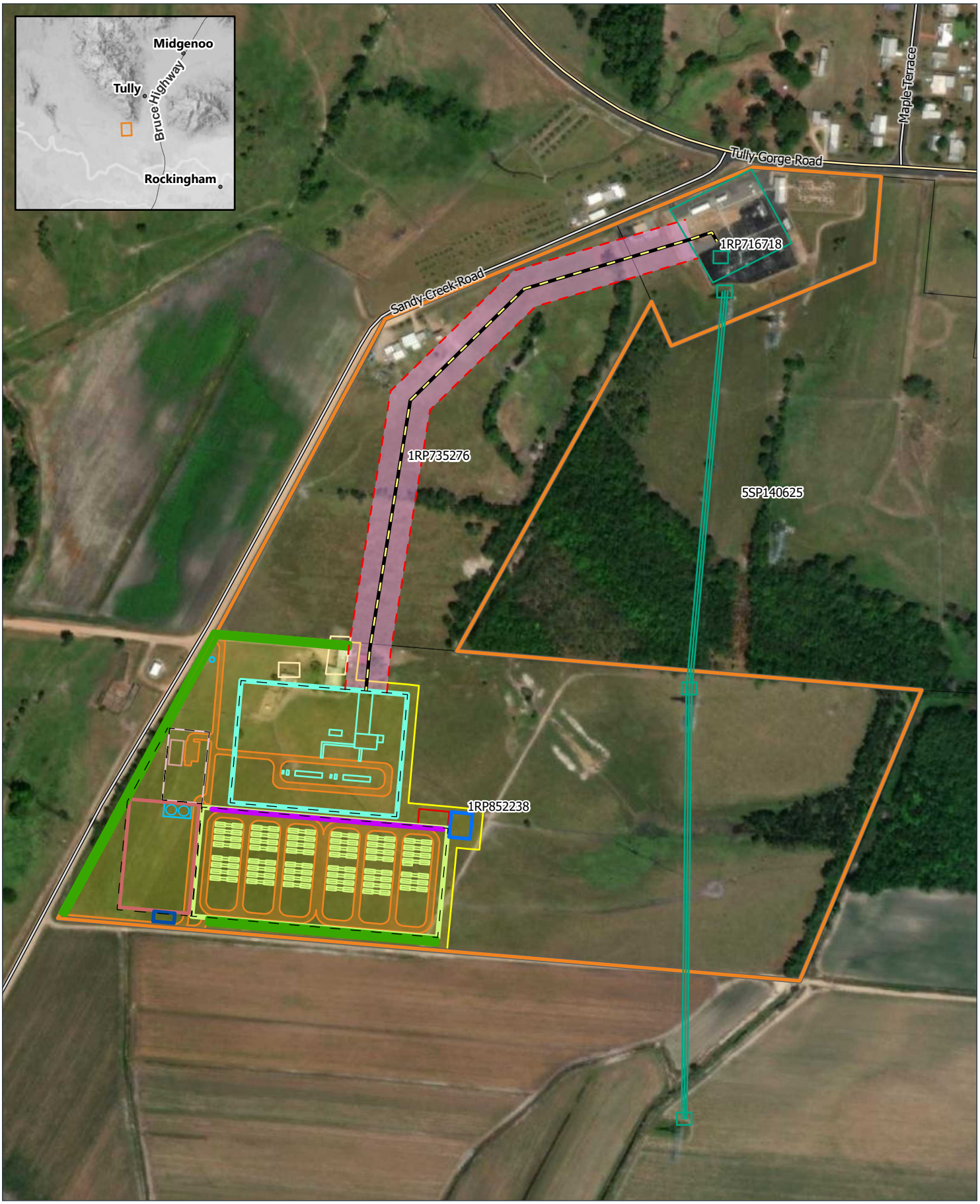
Please do not hesitate to contact the undersigned on 07 3221 3503 if you have any queries regarding the above.

Yours faithfully,

**Andrew Douglas**
Director | Cambray Consulting Pty Ltd
BECivil (Hons) |MSc Env Man
FIEAust | CPEng | RPEQ 6691

# APPENDIX A

Project Area Site Plan




# Project Layout Plan

**DWG No:** RWE-002-014 [D]
**DATE:** 7/05/2026
**DRAWN:** KB,JM
**REVIEWED** EJ
**SCALE (A4):** 1:5,000

N

0 Meters 100

GDA2020

- Project Area
- Development Footprint
- Proposed Access Track Footprint
- Proposed Transmission Line Corridor
- Proposed Transmission Line
- 20m Exclusion Zone
- Substation Area
- BESS Area
- Bioretention Basin A
- Bioretention Basin B
- Construction Laydown Area
- Noise Wall
- Landscaping Area
- Existing 132kV Line
- Existing Dwellings
- Water Storage
- O&M Building
- O&M Area
- Emergency Containment Storage
- Fence
- Main Road
- Local Road
- Cadastral Parcels

**CAMBRAY CONSULTING PTY LTD**
Suite 2601 | 21 Mary Street
Brisbane QLD 4000
07 3221 3503
contact@cambray.com.au
cambray.com.au