

Transport Impact Assessment Report

821 Wallamore Road, Wallamore, NSW

Project Number 240520 Final Report 31/01/2025

Client Green Gold Energy Pty Ltd



Document control record

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Executive summary

Green Gold Energy Pty Ltd engaged Trafficworks to undertake a transport impact assessment (TIA) for the proposed solar energy facility development at **821 Wallamore Road, Wallamore, NSW.**

The table below summarises the site, the proposed development, and our conclusions and recommendations.

| Address | 821 Wallamore Road, Wallamore, NSW |
|----------------------|--|
| Zoning | RU1: Primary Production |
| Proposed development | Solar Energy Facility |
| Road network | Wallamore Road Bowlers Lane Oxley Highway |
| Traffic generation | Daily and peak hour traffic volumes of: — 52 vehicles per day (vpd) — 21 vehicles per hour (vph) |
| Car parking | 20 light vehicle parking spaces |
| Conclusion | We conclude that subject to the implementation of our recommendations, there are no traffic engineering reasons that would prevent the development from proceeding: |
| | the peak traffic generation will occur during the construction phase of the development, where 20 light vehicles (generating 40 trips per day) and 6 heavy vehicles (generating 12 trips per day) will access the subject site |
| | the car parking demand during the development's construction phase will likely be 20 spaces |
| | the proposed site plan indicates provision for 20 formal on-site car parking spaces, which will satisfy the demand |
| | the desktop assessment of the approaches to the subject site access on Wallamore Road determined the subject length had no |



| vertical alignment features or roadside vegetation that would restrict sight lines the setback of the property boundary fencing for the subject site will provide the minimum 20 m required to allow storage of a 19 m semi-trailer clear of the traffic lane on Wallamore Road due to the low development volumes and existing traffic levels on local roads, no turn treatment upgrades are considered necessary due to the proposed development. Recommendations It is recommended that: Recommendation 1: before the commencement of work, undertake an onsite inspection of the subject site access and confirm compliance with the applicable sight distance requirement of 160 m Recommendation 2: the subject site access driveway should be constructed according to Figure 7.4 in Austroads Guide to Road Design Part 4 requirements and to council's satisfaction Recommendation 3: consult with the adjoining landowners that share the existing driveway access to Wallamore Road to ensure minimal disruption to their property access Recommendation 4: widen the access track from the driveway to a 5.0 m wide all-weather access to facilitate light and heavy vehicles passing one another at low speeds Recommendation 5: implement site operation measures, like a traffic management plan, to ensure no heavy vehicles arrive and depart simultaneously Recommendation 6: truck warning signs should be displayed near the subject site access during the construction phase when heavy vehicles are making deliveries to the site. | vertical alignment features or roadside vegetation that would restrict sight lines the setback of the property boundary fencing for the subject site will provide the minimum 20 m required to allow storage of a 19 m semi-trailer clear of the traffic lane on Wallamore Road due to the low development volumes and existing traffic levels on local roads, no turn treatment upgrades are considered necessary due to the proposed development. Recommendations It is recommended that: Recommendation 1: before the commencement of work, undertake an onsite inspection of the subject site access and confirm compliance with the applicable sight distance requirement of 160 m Recommendation 2: the subject site access driveway should be constructed according to Figure 7.4 in Austroads Guide to Road Design Part 4 requirements and to council's satisfaction Recommendation 3: consult with the adjoining landowners that share the existing driveway access to Wallamore Road to ensure minimal disruption to their property access Recommendation 5: implement site operation measures, like a traffic management plan, to ensure no heavy vehicles arrive and depart simultaneously | | |
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Referenced documents

References used in the preparation of this report include the following:

- Austroads
 - Guide to Road Design
 - Part 4A Unsignalised and Signalised Intersections, for sight distance criteria and provision for turning vehicles at intersections (AGRD4)
 - Guide to Traffic Management
 - Part 6 Intersections, Interchanges and Crossings Management, for sight distance criteria and provision for turning vehicles at intersections (AGTM6)
- Australian Standards:
 - AS 2890.1-2004 Parking facilities Off-street car parking
 - AS 2890.2-2018 Parking facilities Off-street commercial vehicle facilities
- Transport for NSW (TfNSW)
 - Guide to Transport Impact Assessments (GTIA), Version 1.1, November 2024
- Tamworth Regional Council (council)
 - Development Control Plan (DCP) 2010 (currently under review)
 - Local Environmental Plan (LEP) 2010 (currently under review)



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1 Introduction

Green Gold Energy Pty Ltd engaged Trafficworks to undertake a transport impact assessment (TIA) for the proposed solar energy facility development at **821 Wallamore Road, Wallamore, NSW.**

For the details about:

- existing site conditions see section 2
- description of the proposed development see section 3
- traffic impact of the proposed development see section 3
- car parking assessment of the proposed development see section 4
- assessment of the access to the proposed development see section 5
- our conclusions and recommendations see section 6.



2 Existing conditions

2.1 Subject site

The subject site is:

- located on part of 821 Wallamore Road (Lot 1 of DP552296), approximately 10 km northwest of Tamworth, NSW
- surrounded by land currently used for farming and agricultural activities, including some rural residential properties and several intensive poultry farms.

Vehicular access to the subject site is available from Wallamore Road via an existing shared driveway with 3 adjoining properties. Figure 1 shows the subject site's location.



Figure 1: Location plan (reproduced with permission from Nearmap)

The subject site and most of the surrounding land are located within a Primary Production Zone (RU1), as per the council Local Environmental Plan (LEP). Further to the southeast is Tamworth Regional Airport and the Tamworth water treatment facility.

Figure 2 shows the zoning for the subject site and surrounding area.





Figure 2: Zoning plan (reproduced from NSW ePlanning Spatial Viewer)

2.2 Road network

The existing road network consists of:

- Wallamore Road
- Bowlers Lane
- Oxley Highway (B56)



2.2.1 Wallamore Road

Table 1 describes the features of this road.

Table 1: Wallamore Road features

| Feature | Description |
|------------------|--|
| Road type | local road managed by council |
| Access | provides access between Jewry Street to the southeast and Appleby Lane to the north |
| | The subject length from Bowlers Lane to the subject site access is part of the approved route for B-doubles. |
| Carriageway | 2-way, 2-lane road with a 7.2 m wide sealed formation bounded by open swale drains |
| Road reservation | 20 m wide |
| Speed limit | default rural speed limit of 100 km/h |

Figure 3 and Figure 4 provide further information about the road.





Figure 3: Wallamore Road facing northwest adjacent to the subject site access on the left (Source: Google July 2022)



Figure 4: Wallamore Road facing southeast adjacent to the subject site access on the right (Source: Google July 2022)



2.2.2 Bowlers Lane

Table 2 describes the features of this road.

Table 2: Bowlers Lane features

| Feature | Description |
|------------------|--|
| Road type | local road managed by council |
| Access | provides access between Oxley Highway to the southwest and Wallamore Road to the northeast, and to several poultry farms and the Oakburn Park motorsport racetrack |
| | The subject length is part of the approved route for B-doubles. |
| Carriageway | 2-way, 2-lane road with 2x 3.5 m sealed traffic lanes, with 1.0 m wide sealed shoulders bounded by open swale drains |
| Road reservation | 30 m wide |
| Speed limit | default rural speed limit of 100 km/h |

Figure 5 and Figure 6 provide further information about the road.





Figure 5: Bowlers Lane facing northeast on approach to Wallamore Road (Source: Google June 2023)



Figure 6: Bowlers Lane facing southwest on approach to Oxley Highway (Source: Google June 2023)



2.2.3 Oxley Highway (B56)

Table 3 describes the features of this road.

Table 3: Oxley Highway features

| Feature | Description |
|------------------|--|
| Road type | Classified state arterial road (B56) managed by Transport for New South Wales (TfNSW) |
| Access | rural highway linking Mitchell Highway at Nevertire to the west to Port Macquarie, on the coast to the east |
| Carriageway | 2-way, 2-lane road with 2x 3.5 m sealed traffic lanes, with 1.0 m wide sealed shoulders bounded by open swale drains |
| | At the intersection with Bowlers Lane, auxiliary lanes are provided on the southeastern approach/departure for turning vehicles. |
| Road reservation | 60 m wide |
| Speed limit | A posted speed limit of 100 km/h |

Figure 7 and Figure 8 provide further information about the road.





Figure 7: Oxley Highway facing southeast on approach to the intersection with Bowler Lane on the left (Source: Google May 2023)



Figure 8: Oxley Highway facing northwest on approach to the intersection with Bowler Lane on the right (Source: Google May 2023)



2.3 Traffic volumes

TfNSW Traffic Volume Viewer details traffic volumes for many of the arterial roads in New South Wales. Scrutiny of the records indicates that in 2024, 3,448 vehicles per day (vpd) travelled along the section of Oxley Highway located less than 2 km south of the subject site (Station Id: 6168).

The two-way traffic volumes recorded by the station indicate the following:

- a daily traffic volume of 1,783 vpd southeast bound (26% HV) and 1,712 vpd northwest bound (28% HV)
- AM commuter peak (9:00 am to 10:00 am) of 154 vehicles per hour (vph) southeast bound and 108 vph northwest bound
- PM commuter peak (3:00 pm to 4:00 pm) of 148 vehicles per hour (vph) southeast bound and 137 vph northwest bound.

The council has no recent traffic volume data for Wallamore Road and Bowlers Lane. As they service the poultry farms and rural properties, they are not expected to carry more traffic than Oxley Highway.

As a result, the average daily two-way traffic volume has been estimated for:

- Wallamore Road:
 - less than 500 vpd
 - peak-hour two-way volume of 50 vph
- Bowlers Lane:
 - less than 200 vpd
 - peak-hour two-way volume of 20 vph.

2.4 Crash history

TfNSW Centre for Road Safety website details all injury crashes throughout New South Wales and reports that 2 casualty crashes have occurred on the roads near the subject site in the last five years.

- in 2020, at the intersection of Bowlers Lane and Wallamore Road, "off end of road" (RUM 75), a T-intersection crash occurred in darkness, resulting in moderate injury
- in 2023, at the intersection of Bowlers Lane and Oxley Highway, a "cross traffic" (RUM 10) intersection crash occurred in daylight, resulting in serious injury.

Based on this, we conclude that no crash trend requires immediate investigation.



3 Traffic assessment of the proposed development

3.1 Development summary

The proposed development in Wallamore involves constructing a 5 MW solar energy facility (including a battery energy storage system (BESS)) to generate power and connect it to the local electricity grid. The facility will provide a reliable power source to the local community. The proposed development plan is provided in Appendix 1.

The proposed facility will be un-staffed, and the period that will generate the most traffic will be the construction phase. Any access to the site once in operation will be for security or maintenance purposes.

The development will have direct access to Wallamore Road via an existing access.

3.1.1 Construction

On-site construction for the proposed solar energy facility is mainly limited to the assembly and connection of components, with the typical solar panels readily transportable via 12.5 m rigid trucks.

Access to the site by a larger vehicle will only be required to deliver the inverter / transformer / power station (in a 40 ft container). This will need access to the subject site by a 19 m semi-trailer; no oversized overmass (OSOM) vehicles will be required for the proposed development.

The typical construction delivery schedule for this type of solar energy facility is shown in Table 4.

| Time period | Site Works |
|---------------|--|
| Month 1 | Civil earthworks, fencing and landscaping |
| Months 2 to 5 | Delivery of long lead materials |
| Months 2 to 5 | PV panel and LV cable installation |
| Months 5 to 8 | HV station installation, testing and commissioning |
| Month 9 | Site clean-up and demobilisation |

Table 4: Construction delivery schedule

There is a 9-month construction phase before the full operation of the facility.

3.1.2 Heavy vehicle access to the subject site

The proposed heavy vehicle route from the port in Sydney to the site during construction is via Oxley Highway from Tamworth, a right turn to Bowlers Lanes, left turn to Wallamore Road and a left turn into the subject site.



Figure 9 indicates the recommended route from Tamworth to the subject site for all heavy vehicles.



Figure 9: Recommended route to/from the subject site via Tamworth (Source: Google Maps)

3.1.3 Operation / decommissioning

If the lease is not renewed upon completion of the leasing period, the facility's operator will be obligated to decommission the facility, remove all installations, and restore the subject site to its pre-existing state.

Upon approval of this application, the responsible authority may require a decommissioning and rehabilitation plan to be submitted for endorsement.

3.2 Traffic generation

Traffic generation for new developments is typically estimated using the rates provided in the TfNSW Guide to Transport Impact Assessments (GTIA, 2024). However, there are no rates for solar energy facilities.

Therefore, an empirical assessment was undertaken to estimate the traffic generation to/from the proposed development. Traffic generation analysis was undertaken for the construction and operational phases of the development to establish peak traffic generation.



3.2.1 Construction phase traffic volumes

Based on the information provided, the peak light vehicle traffic generation will likely occur during the second month of the construction phase.

It is expected that 20 construction staff vehicles will access the subject site per day, resulting in a total daily traffic generation of 40 vpd, including:

- 20 vpd arriving at the start of the shift at approximately 7.00 am
- 20 vpd departing at the end of the shift at approximately 5.00 pm.

Assessment of the heavy vehicles accessing the subject site during the construction phase revealed that the peak traffic generation is likely to occur from the start of the second month to the end of the fifth month. During this period, 6 heavy vehicles per day will access the subject site, resulting in a total daily heavy vehicle traffic generation of 12 vpd (6 vpd arriving and 6 vpd departing).

Assuming the construction work will be undertaken during normal working hours, the 6 heavy vehicles will be expected to access the subject site outside commuter peak hours. The impact of heavy vehicles on the morning and afternoon commuter peaks is considered negligible. However, conservatively, for this assessment, it has been assumed that a single heavy vehicle will arrive / depart the subject site during the AM and PM peak hours.

The heavy vehicles accessing the subject site will be mainly 12.5 m rigid trucks, with occasional 19 m semi-trailers (i.e. no B-double trucks will require access). The trucks will access the subject site via a left turn from Wallamore Road.

3.2.2 Operational phase traffic volumes

The proposed solar energy facility will have remote monitoring in real-time, allowing for constant surveillance and monitoring without on-site staffing.

The compound will contain key infrastructure that requires a high degree of security. Upon identification of potential issues, action can be taken indirectly from the control centre or directly using chosen contractors to travel to the site. Up to 2 light vehicles will attend the subject site every 6 months during the operational phase for general maintenance.

3.2.3 Peak traffic generation

Assessment of the traffic generation volumes during the construction and operational phases of the development revealed that the peak traffic generation for the subject site would occur during the construction phase. This will see 20 light vehicles (generating 40 trips per day) and 6 heavy vehicles (generating 12 trips per day) access the subject site daily.



3.3 Traffic distribution assumptions

Our traffic distribution assumptions are the following:

- 100% of light vehicles will arrive to/from the southeast (via Tamworth)
- all heavy vehicles will arrive to/from the southeast (via Tamworth).

All heavy vehicles will arrive and depart from the state-classified road network via Bowlers Lane, connecting to the site via Wallamore Road. Light vehicles can travel from Tamworth to the subject site in several ways (including Jewry Street, Dampier Street, Evans Street and Goddard Lane, all connecting to Wallamore Road), so the impact of the generated traffic beyond the site access is expected to be negligible.

3.4 Anticipated traffic volumes

From the information provided in Section 3.2.1, the AM and PM development peaks along Wallamore Road will occur when construction staff arrive / depart the subject site, as they generate the most traffic. As a result, the development peaks are expected to occur between:

- 6:00 am 8:00 am
- 4:00 pm 6:00 pm

Based on the periods listed, the development peak will generally occur outside the commuter peak. Table 5 shows the anticipated peak hour traffic volumes at the proposed access to the development.

| Period | Туре | Left In | Right In | Left Out | Right Out | Total |
|---------|-------|---------|----------|----------|------------------|-------|
| AM Peak | Light | 20 | 0 | 0 | 0 | 20 |
| | Heavy | 1 | 0 | 0 | 0 | 1 |
| | TOTAL | 21 | 0 | 0 | 0 | 21 |
| PM Peak | Light | 0 | 0 | 0 | 20 | 20 |
| | Heavy | 0 | 0 | 0 | 1 | 1 |
| | TOTAL | 0 | 0 | 0 | 21 | 21 |

Table 5: Anticipated peak hour construction traffic volumes at the proposed access to the development



4 Car parking assessment of the proposed development

4.1 Planning scheme car parking assessment

The GTIA provides car parking rates for new developments. However, no rate is provided for solar energy storage facilities. Therefore, an empirical assessment was undertaken to estimate the proposed development's parking demand.

Section 3.2.1 outlined that up to 20 light vehicles will access the subject site during the development's construction phase, generating a demand for 20 car parking spaces.

The proposed site plan indicates a provision for 20 formal on-site car parking spaces, which will satisfy the demand.



5 Access to the site

5.1 Site access – Access driveway ESD requirement

Section 3.2.4 in AS/NZS 2980.1 Parking Facilities – Part 1: Off-street car parking sets out the entering sight distance (ESD) criteria for a driver exiting an access driveway to traffic on the frontage road.

Un-signalised access driveways shall be located so the intersection sight distance available to drivers leaving the driveway along the frontage road is at least that shown in Figure 3.2 of AS/NZS 2890.1 (reproduced in Figure 10).



Figure 10: Sight distance requirements at driveways (Source: Figure 3.2 from AS/NZS 2890.1)



The proposed site access to the development along Wallamore Road is subject to an expected operating speed of 100 km/h. The corresponding minimum stopping sight distance (SSD) is 160 m.

The desktop assessment of the approaches to the subject site access on Wallamore Road determined that the subject length had no vertical alignment features (crests / dips) or roadside vegetation (like trees) that would restrict sight lines.

Recommendation 1: before the commencement of work, undertake an onsite inspection of the subject site access to Wallamore Road and confirm compliance with the applicable sight distance requirement of 160 m.

5.2 Access location and operation

The subject site access driveway is recommended to be constructed per Figure 7.4 in Austroads Guide to Road Design Part 4: Intersections and Crossings requirements and to the council's satisfaction (refer to Figure 11). It should provide sufficient width to facilitate the movements of a 19 m semi-trailer accessing the subject site.



Figure 11: Rural property access designed for an articulated vehicle

Recommendation 2: the subject site access driveway should be constructed according to Figure 7.4 in Austroads Guide to Road Design Part 4 requirements and to council's satisfaction.

As the existing access is a shared driveway, any work should be completed in consultation with the adjoining farm, dwelling, and stockfeed facility to ensure minimal disruption to their property access.

Recommendation 3: consult with the adjoining landowners that share the existing driveway access to Wallamore Road to ensure minimal disruption to their property access.

The development proposes upgrades/maintenance works to the existing access road within the subject site. Any works should consider widening the access road to 5.0 m wide. This would facilitate light and heavy vehicles passing one another at low speeds. This access road should be constructed as an all-weather access to enable the passage of vehicles during inclement weather or an emergency.

Recommendation 4: widen the access track from the driveway to a 5.0 m wide all-weather access to facilitate light and heavy vehicles passing one another at low speeds.

Due to the low volumes of heavy vehicles generated by the development, it is unlikely that two heavy vehicles would need to pass one another along the access road. However, it is recommended that measures be implemented, like a traffic management plan for site operation, to ensure no heavy vehicles arrive and depart simultaneously.

Recommendation 5: implement site operation measures, like a traffic management plan, to ensure no heavy vehicles arrive and depart simultaneously.

5.3 Site security

The proposed development will likely include installing site security to restrict access to authorised vehicles only. This will involve installing security gates at the access to the development compound.

The distance from Wallamore Road to the site compound security gate is approximately 1.5 km. Furthermore, the property boundary is more than 50 m from the edge of the traffic lane on Wallamore Road.

Therefore, there is sufficient distance for any heavy vehicle delivery to clear and not obstruct traffic on Wallamore Road on arrival.

5.4 Turn provisions impact

Traffic turning from major roads into minor roads should not impede through traffic. Typically, turn treatments at sign-controlled intersections from major to minor roads are implemented to ensure the safe and efficient operation of the intersection.

The additional traffic generated by the development will only occur during the construction phase and will mostly be:

- right-turning movements from Oxley Highway to Bowler Lane, where there is an existing auxiliary turn lane
- left-turning movements from Bowler Lane to Wallamore Road and from Wallamore Road to the subject site.

There are several routes for light vehicles from Tamworth to the site, and the local roads have relatively low traffic volumes. As a result, providing turn treatments at the site access or the ends of Bowler Lane (intersection with Wallamore Road and Oxley Highway) is deemed unnecessary.

Truck warning signs should be displayed near the subject site access during the construction phase when heavy vehicles are making deliveries to the site.

Recommendation 6: truck warning signs should be displayed near the subject site access during the construction phase when heavy vehicles are making deliveries to the site.

6 Conclusions and recommendations

We conclude there are no traffic engineering reasons that would prevent the development from proceeding, as outlined below:

- the peak traffic generation will occur during the construction phase of the development, where 20 light vehicles (generating 40 trips per day) and 6 heavy vehicles (generating 12 trips per day) will access the subject site
- the car parking demand during the development's construction phase will likely be 20 spaces
- the proposed site plan indicates provision for 20 formal on-site car parking spaces, which will satisfy the demand
- the desktop assessment of the approaches to the subject site access on Wallamore Road determined the subject length had no vertical alignment features or roadside vegetation that would restrict sight lines
- the setback of the property boundary fencing for the subject site will provide the minimum 20 m required to allow storage of a 19 m semi-trailer clear of the traffic lane on Wallamore Road
- due to the low development volumes and existing traffic levels on local roads, no turn treatment upgrades are considered necessary due to the proposed development.

However, this TIA has identified several recommendations that need to be addressed:

- Recommendation 1: before the commencement of work, undertake an onsite inspection of the subject site access and confirm compliance with the applicable sight distance requirement of 160 m
- Recommendation 2: the subject site access driveway should be constructed according to Figure 7.4 in Austroads Guide to Road Design Part 4 requirements and to council's satisfaction
- Recommendation 3: consult with the adjoining landowners that share the existing driveway access to Wallamore Road to ensure minimal disruption to their property access
- Recommendation 4: widen the access track from the driveway to a 5.0 m wide all-weather access to facilitate light and heavy vehicles passing one another at low speeds
- Recommendation 5: implement site operation measures, like a traffic management plan, to ensure no heavy vehicles arrive and depart simultaneously
- Recommendation 6: truck warning signs should be displayed near the subject site access during the construction phase when heavy vehicles are making deliveries to the site.

Appendix 1 – Development Plans

| 5 | 6 | 7 | 8 | 9 | |
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| SS | | | | | |
| SITE ARRANGMENT | | | | | |
| SITE PLAN | | | | GREEN GOLD | DATE:12/04 |
| DESCRIPTION | NUMBER | | TITLE | - ENERGY | PROJ No |
| | | REFERENCE DRAW | VINGS | | |
| 5 6 | | 7 | 8 | 9 | |

| 10 | 11 | 12 | |
|----|----|----|--|
| | | | |

LOCALITY WITHIN 1KM

<u>NOTES</u>

DEMAND.

 ACTUAL DIMENSIONS AND CLEARANCES MAY VARY SUBJECT TO SITE CONDITIONS. 2. DIMENSIONS OF ELECTRICAL EQUIPMENT ARE INDICATIVE ONLY. ACTUAL DIMENSIONS TO BE CONFIRMED. 3. EXISTING ESSENTIAL ENERGY 11kV POLE IS FOR ILLUSTRATION ONLY. ACTUAL POSITION IS SUBJECT TO THE ACTUAL MEASUREMENT ON SITE. 4. TWO NEW POLES WILL BE INSTALLED TO CARRY OVERHEAD

DISTRIBUTION LINES AND CONNECT TO ESSENTIAL ENERGY NETWORK. 5. EXISTING ESSENTIAL ENERGY DISTRIBUTION LINES QUINCE NEED TO BE UPGRADED TO MEET EXPORT CAPACITY. 6. SITE STORAGE AND AMENITY FACILITIES TO BE ON SITE ONLY DURING

CONSTRUCTION PHASE. NO PERMANENT BUILDINGS TO BE KEPT ON SITE AFTER CONSTRUCTION COMPLETED. 7. FENCE SET BACK 9M FROM LEASE BOUNDARY TO ALLOW 6M LANDSCAPING BUFFER AND 3M MAINTENANCE TRACK. 8. THE DEFAULT NUMBER OF BATTERY IS 2 AND IS SUBJECT TO

SYSTEM SPECIFICATIONS

| DC | 5.83 | MW | TOTAL MODULES | 10044 |
|------------------------|------------------|-----|-----------------------|--------------------|
| MODULE CAPACITY | 580 | W | MODULES PER STRING | 27 |
| NUMBER OF INVERTERS | 1 | - | NUMBER OF STRINGS | 372 |
| INVERTER MODEL | SG4950-HV -MV | - | MODULE MODEL | LR5-72HPH- 580M |
| BATTERY CAPACITY | 5.5 | MWh | BATTERY MODEL | ST-2752UX |

G

FOR INFORMATION

| OT 1, 821 WALLAMORE ROAD, WALLAMORE, NSW 2340 MVA PV EXPORT & BATTERY ENERGY STORAGE SYSTEM SITE PLAN | | | | | | Н | | | |
|---|-----------|------|------|------|------|----------|--------|----------|---|
| 4/24 | DRN: M.G. | CHK: | M.G. | ENG: | M.G. | Q.A: ACE | SCALE: | 1:1500 | |
| | DRG No | | | | | | | rev D | |
| 1 | 0 | | 1 | 1 | | | 12 | A1SHEET | - |

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Appendix 2 – Acronyms and terms

| Acronyms / terms | Definition |
|------------------|--|
| AGRD4 | Austroads Guide to Road Design Part 4 – Intersections and crossings |
| AGRD4A | Austroads Guide to Road Design Part 4A – Unsignalised and signalised intersections |
| AGTM6 | Austroads Guide to Traffic Management Part 6 – Intersections, interchanges and crossings management |
| AGTM8 | Austroads Guide to Traffic Management Part 8 – Local street management |
| AS/NZS2890.1 | Australian Standard / New Zealand Standard 2890.1 Parking facilities Part 1: Off-street car parking |
| DPE | Department of Planning and Environment |
| ESD | Entering site distance |
| SIDRA | SIDRA intersection – micro analytical traffic engineering software to model the performance of intersections |
| SISD | safe intersection sight distance |
| TIA | transport impact assessment |
| TfNSW | Transport for New South Wales (NSW) |
| vpd | vehicles per day |
| vph | vehicles per hour |