

Appendix Four – Traffic Impact Assessment

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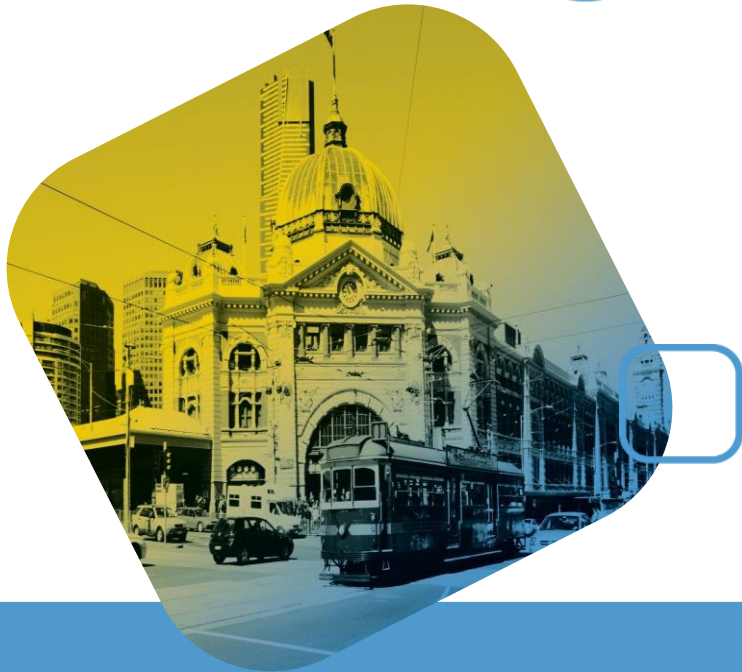
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37°47'05.3"S
141°59'16.8"E

Hamilton Solar Farm & BESS Facility: Monivae Subdivision Road



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Traffic and Transport Assessment

11 November 2021
Prepared for Tetris Energy

IMP2107053REP01F01

Impact

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Document Information

Client Tetris Energy

Report Title Hamilton Solar Farm & BESS
Facility: Monivae Subdivision
Road

Report Reference IMP2107053REP01F01

Date of Issue 11 November 2021

Approved By Will Drew

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Document Control

Version	Date	Author
FINAL 01	11 November 2021	Henry Ma

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1 IMPACT[®] Snap Shot

Development Proposition

Location	37°47'05.3"S 141°59'16.8"E	Monivae Subdivision Road, Hamilton
Use	Solar Farm & BESS Facility - 4.95 MW capacity	
Access	Primary access to the subject site will be undertaken from Monivae Subdivision Road.	

Traffic Considerations

Traffic Generation		
Construction Traffic	A total of up to 30 additional daily vehicle movements are expected during peak construction activities (5 heavy vehicles & 25 light vehicles).	
Operation & Maintenance	Up to two (2) vehicle movements are expected with routine maintenance during operations. There will also be, on occasion some additional movements associated with more thorough maintenance (to be taking place on a 2 and 3 yearly basis, i.e. transformer testing).	
Traffic Impact	The level of traffic generated from the development is not expected to have any material impact on the operation of the external road network. In addition, to reduce the impact of vehicle movements on the existing road pavement, vehicles accessing the site have been constrained towards single trailer trucks (i.e. no B-doubles).	
Design Considerations		
Access Design	We are advised that the proposal seeks provide two (2) new crossovers of which are located approximately 700m and 300m west of the subject site. We are advised that components will be delivered to the site by single trailer trucks (no B-doubles).	
Turn Treatments	Given low turning volumes (and through traffic) with sufficient sightlines for both site access locations, is it considered appropriate to utilise the full width of Monivae Subdivision Road for passing <u>if required</u> in place of a more formal BAL/BAR treatments. It is considered appropriate that temporary advanced warning signs be implemented along the site access to mitigate risks and assist with safe accessibility during the construction period.	
Sight Distances	A desktop assessment shows that there is sufficient sight distance from both site access points. It is recommended that a physical sight distance assessment be undertaken prior to construction, and trees be trimmed if required. In addition, it is recommended that traffic management devices (such as "trucks-crossing" or vehicular speed reduction signages) be implemented during the construction period.	

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Recommendations

Maintenance Plan

It is recommended that the applicant liaise with Council to form an agreement on the construction standard required to implement a gravel 'all weather' road, in addition to determining an appropriate maintenance agreement during the construction period.

Traffic Management Plan

It is recommended that a detail Traffic Management Plan (TMP) be prepared once the project design is complete and prior to commencement of the project construction, to confirm requirements for mitigation and management works.

Conclusion

— There are no traffic and transport grounds that should prohibit the issue of a permit.

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2 Introduction

2.1 Engagement

IMPACT® have been engaged by Tetris Energy to undertake a Traffic and Transport Impact Assessment for the proposed Solar Farm and Battery Energy Storage System (BESS).

2.2 Scope of Engagement

This Traffic and Transport Impact Assessment has been prepared to accompany a town planning submission for the proposed Solar Farm and BESS facility located along Monivae Subdivision Road, Hamilton.

3 Hamilton Solar Farm & BESS Facility

3.1 Location

The subject site is located on the southern side of Monivae Subdivision Road in Hamilton as illustrated in Figure 1.

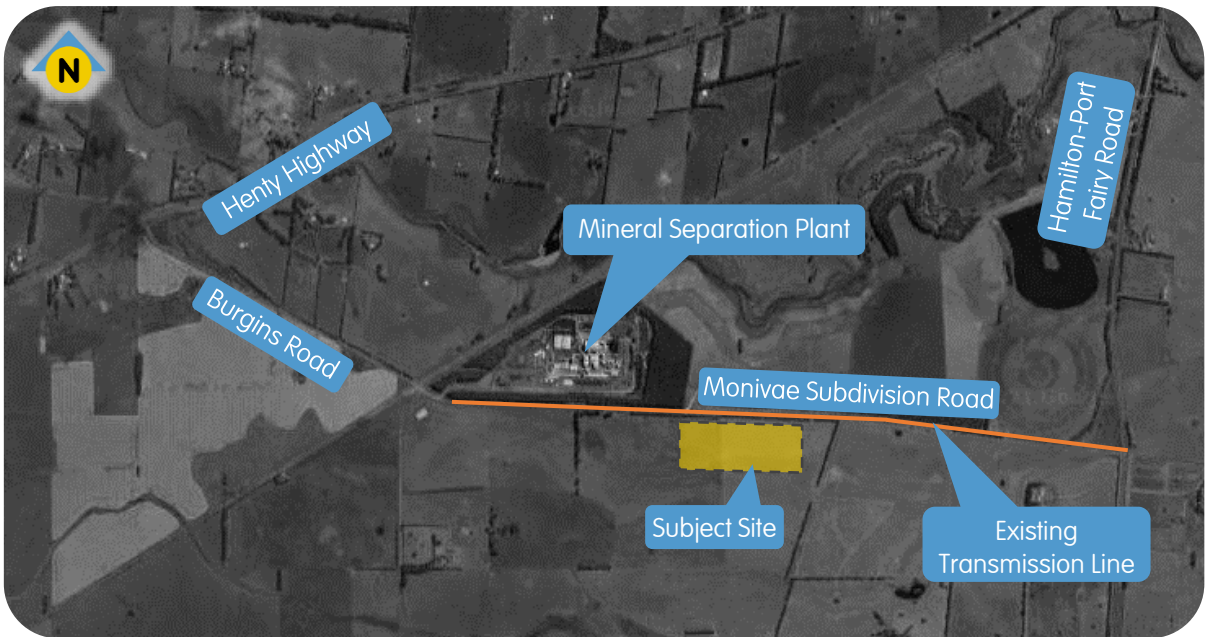


Figure 1 Location of Subject Site

The site is primarily surrounded predominately by farmland with an existing Mineral Separation Plant located approximately 500m west of the subject site.

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3.2 Site Context

The site is located approximately 7km north-east of the Hamilton township.

The site is currently vacant farmland which has primarily been used in the past for farming / grazing purposes; the surrounding land in the area is also typically farmland.

Currently, there is an existing transmission line located on the northern verge of Monivae Subdivision Road which extends towards Hamilton-Port Fairy Road to the east and Burgins Road to the west.

3.3 Planning Zone

The subject site is located within the Farming Zone (as outlined in the Southern Grampians Planning Scheme) and is illustrated in Figure 2.

No specific overlays relevant to Traffic and Transport apply to the subject site.



Figure 2 Land Use Planning Zone

3.3.1 Planning Framework

3.3.1.1 Clause 53.13 - Renewable Energy Facility

Clause 53.13 of the Victorian Planning Provisions outlines the relevant application requirements associated with the development of renewable energy facilities such as the proposed. Relevant to traffic and access matters, considerations under Clause 53.13 include:

- A design response, including a written report and assessment which addresses:
 - The effect of traffic to be generated on roads.
- The responsible authority must also consider, as appropriate:
 - Whether the proposal will require traffic management measures.

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3.4 Road Network

3.4.1 Monivae Subdivision Road

Classified as a rural access road, Monivae Subdivision Road extends in a general east-west direction for approximately 3.3 km between Burgins Road to the west and Hamilton-Port Fairy Road to the east.

A review of the aerial imagery shows that in proximity to the subject site, Monivae Subdivision Road has been constructed with an unsealed pavement with approximately 3.5 metres in width. With no posted speed limit, the default rural limit of 100 km/hr applies to this road.

Monivae Subdivision Road also provides a direct connection towards the mineral separation plant located west of the subject site. This section of pavement has been upgraded to a sealed pavement, whilst Monivae Subdivision Road (providing access to the subject site) has been constructed with a 'dry-weather only' pavement.

Monivae Subdivision Road provides direct access for the farming estate with the road predominately used by farmers and as such, it is acknowledged that traffic volumes along this road will be minimal at most. Conservatively, it is assumed that there will be up to ten (10) daily traffic movements along this section of road.

A view of Monivae Subdivision Road near the site is shown in Figure 3.



Figure 3 Views of Monivae Subdivision Road Facing West Adjacent the Subject Site

3.4.2 Burgins Road

Classified a rural living access street, Burgins Road generally extends in an east-west direction and is bounded by Monivae Subdivision Road to the east and Henty Highway to the west.

A review of the aerial imagery shows that in proximity to the subject site, Burgins Road has been constructed as a sealed road with approximately 6.4 metres (allowing for a 3.2 metre trafficable lane in each direction) plus unsealed shoulders measuring approximately 1-2 metres of each side of the carriageway. With no posted speed limit, the default rural limit of 100 km/hr applies to this road.

Historic traffic data along Burgins Road suggest that up to 400 daily vehicles are expected of which up to 10% of the daily traffic or 40 vehicles per hour is expected during the peak period of operation.

A view of Burgins Road at Monivae Subdivision Road near the site is shown in Figure 4 overleaf.

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Figure 4 Views of Burgins Road Facing East

3.4.3 Henty Highway

Classified as an arterial road, Henty Highway extends in a general north-south direction between the Branxholme Township to the south and Hamilton Township to the north.

A review of the aerial imagery shows that in proximity to the subject site, Henty Highway has been constructed as a sealed road with approximately 7.0 metres (allowing for a 3.5 metre trafficable lane in each direction) plus unsealed shoulders measuring approximately 1-2 metres of each side of the carriageway. With no posted speed limit, the default rural limit of 100 km/hr applies to this road.

Traffic data provided by VicRoads suggest that this section of Henty Highway carries up to 1,200 vehicles per day of which approximately 230 vehicles are expected during the AM Peak and 230 during the PM Peak.

A view of Henty Highway is shown in Figure 5.



Figure 5 Views of Henty Highway Facing South

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3.5 VicRoads Road Network Limits

The VicRoads pre-approved B-Double and High Performance Freight Vehicle (HPFV) network in the locality of the development are reproduced in Figure 6 and Figure 7.

These network diagrams are typically read as follows:

- Green Roads - pre-approved for haulage and typically a permit is not required
- Orange Roads - conditionally approved, haulage along these roads are subject to conditions
- Red Roads - restrict access, an assessment and permit is required for haulage along these sections
- Unhighlighted Roads - require an assessment and approval from the responsible authority.

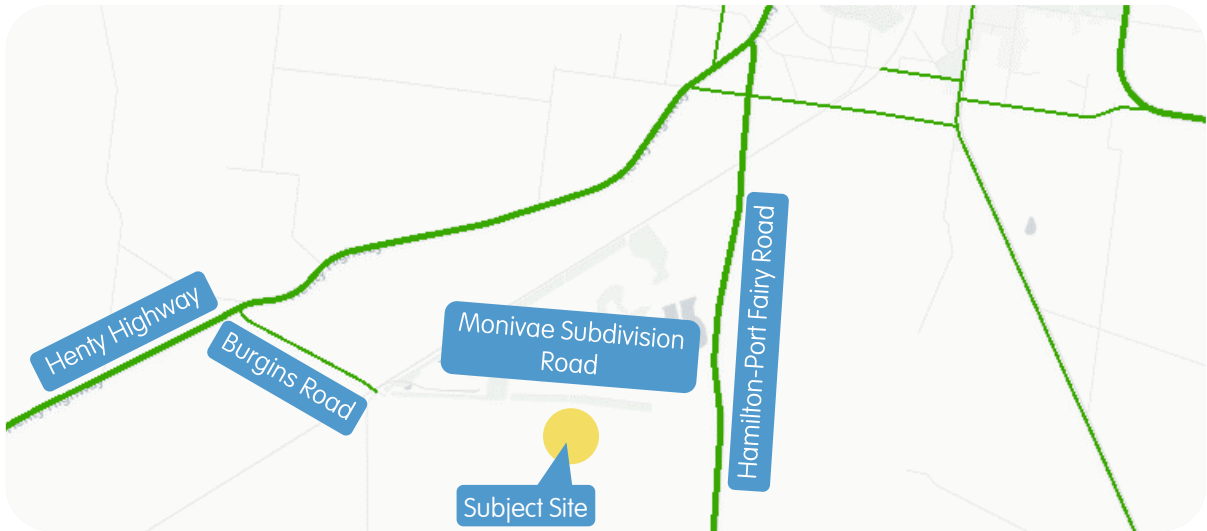


Figure 6 VicRoads Pre-Approved B-Double Haulage Network Map

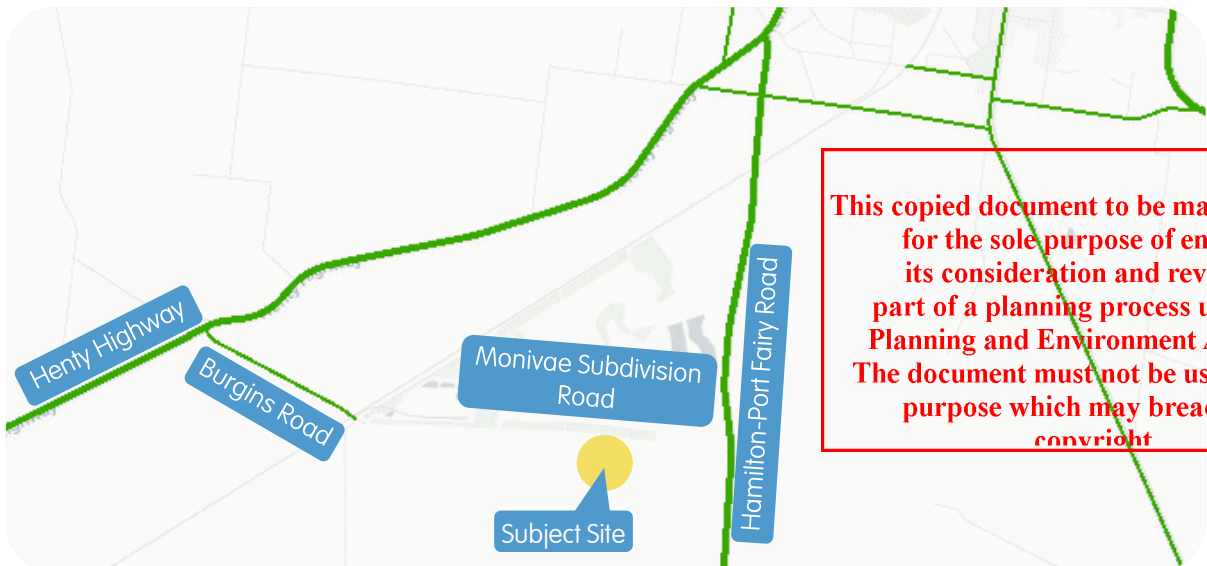


Figure 7 VicRoads Pre-Approved Higher Mass Limits (HML) Network Map

As per above, the green lines represent roads which are pre-approved for haulage and typically a permit is not required for haulage on these roads, e.g. Henty Highway and Burgins Road. Conversely, the subject site is located Monivae Subdivision Road and is not pre-approved for the haulage of B-double/HML vehicles and will require an application to be put forward to the satisfaction of Council / NHVR and the Department of Transport (DoT).

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3.6 Hamilton Solar Farm & Energy Storage Facility

IMPACT[®] have been advised that the project will consist of a solar energy facility comprising approximately of 10,770 solar panels (modules) and a capacity to generate up to 4.95 MW.

It is expected that the site will connect directly into the existing power line located along the northern boundary of the subject land.

A detailed car park / access design has not yet been determined, however **IMPACT**[®] are advised that:

- Access to the site will be provided via. two (2) proposed crossovers located approximately 400m west of the subject site. The site access point will be built to accommodate construction vehicle traffic, including vehicles of up to 19m in length (semi-trailers);
- During construction, vehicles will be stored on-site either within the designated laydown / storage locations, or where construction activities are occurring; and
- During operations, operational, and maintenance staff vehicles will be accommodated on-site within a vehicle parking area located adjacent to the site office.

The current indicative site layout is shown in Figure 8 in addition to the copy of this plan attached in Appendix A.



Figure 8 Indicative Site Layout

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4 Traffic Considerations

4.1 General

The Solar Farm access road network will typically limit internal construction traffic to internal access roads, with only deliveries and staff movements to and from the site required to travel across the external road network.

External traffic generated by the subject site will generally be split into two broad categories:

- General traffic generated by staff & couriers travelling to/from the subject site; and
- Other heavy vehicle movements (HV) which are used for the delivery of solar panel components and construction materials such as aggregate and water.

4.2 Traffic Generation

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4.2.1 Construction Traffic Volumes

Construction is expected to take approximately four (4) months to complete.

IMPACT[®] have been advised by the applicant based on history and experience in constructing Solar Farms of similar size/capacity that the following movements are likely to occur:

- Light Vehicle Movements:
 - Daily peak of up to 25 vehicle movements
- Heavy Vehicle Movements:
 - Daily peak of up to 5 vehicle movements

Accordingly, a total of up to 30 daily vehicle movements are expected.

It is expected that a maximum of 45 workers will be on-site during all stages of construction activity.

It is noted that vehicles larger than a single trailer vehicle (e.g., 26m B-doubles) will not be required during the construction phase and thus all activity will be managed to avoid using these vehicles.

The site is likely to generate a total (cumulative over the entire construction duration) number of vehicle entries to site in the order of 750 vehicles. Similarly, a total of 50 heavy vehicle entries to site are expected over the duration of the construction phase.

It is anticipated that 20 parking spaces will be provided (within the designated hardstand zone within the construction area).

4.2.2 Operation and Maintenance Traffic Volumes

For majority of the time, solar farms operate with limited staff and generate minimal traffic movements.

Accordingly, apart from the initial construction phase, the proposal is anticipated to have a negligible impact upon traffic on the load road network. It is understood that operation and maintenance vehicles will likely occur on a quarterly basis with advanced maintenance operations to be undertaken on a 2 and 3 year basis (i.e. transformer testing). The quarterly site attendance will involve a single commercial vehicle equivalent to a UTE.

To provide a basis for traffic volume estimations, the following traffic generation numbers have been provided by the applicant based on past experiences with Solar Farms of similar capacity:

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- Light Vehicle Movements:
 - Daily peak of up to 2 vehicle movements
- Heavy Vehicle Movements:
 - Daily peak of up to 0 vehicle movements

It is expected that a total of four (4) workers will be on site at any given time.

The site is likely to generate (cumulative number of vehicle entries over the duration of the operation and maintenance period) of six (6) vehicle movements. Similarly, no heavy vehicles are expected over the duration of this phase.

It is anticipated that 4 parking spaces will be provided (within the designated hardstand zone within the construction area).

In the context of construction traffic and also the existing traffic along Monivae Subdivision Road, operating traffic will be minimal.

4.3 Vehicle Access Routes

Vehicle deliveries will be split between various categories. The following sections outlines the anticipated vehicle routes for various types of delivery / construction vehicles.

4.3.1 Course Aggregate and Fine Crushed Gravel Deliveries

We understand that both coarse and fine gravel for the construction of hardstand areas and access tracks will be sourced locally.

It is expected that aggregates will be sourced from the Hamilton area and thus will leverage **Henty Highway - Burgins Road - Monivae Subdivision Road - Subject Site** to access the site.

4.3.2 Water Deliveries

We understand that water deliveries required during construction and for dust suppression will be sourced locally, either from Hamilton or the land-owner. The following route will be leveraged for water deliveries from Hamilton:

Henty Highway - Burgins Road - Monivae Subdivision Road - Subject Site

4.3.3 Solar Modules / Thermal Energy Components

IMPACT[®] are advised that due to the specialised nature of these components, these materials will be sourced / specifically manufactured from Ballarat.

It is advised that materials will be transported to the site by road. The anticipated route from is as follows:

Glenelg Highway - Cox Street - Glenelg Highway - Henty Highway - Burgins Road - Monivae Subdivision Road - Subject Site

4.3.4 Construction Staff

During the delivery of the project, it is expected that staff will typically reside in Hamilton Township. Accordingly, the majority of staff vehicle movements (bus and light vehicles) will arrive at the site via:

Henty Highway - Burgins Road - Subject Site

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4.4 Traffic Impact

4.4.1 Vehicle Access Routes

As highlighted in Section 3.5, Monivae Subdivision Road is not pre-approved for the haulage of B-double/HML vehicles and will require an application to be put forward to the satisfaction of Council / NHVR and the Department of Transport (DoT).

As mentioned previously, Monivae Subdivision Road pavement is currently sealed up to the mineral plant whilst the remaining pavement alignment remains as a 'dry weather only' gravel road. As a result, we would expect the road pavement to comfortably cater for the proposed construction traffic in dry weather only.

To avoid delays and ensure that continuous repair and maintenance is not required during the construction, we suggest / recommend that the road pavement of Monivae Subdivision Road be upgraded to an 'all weather' standard.

It is suggested that the applicant liaise with Council and agree on the construction standard required for a gravel all weather road, in addition to determining an appropriate maintenance agreement during the construction period.

4.4.2 Road Capacity

The proposed development is projected to generate up to 30 additional per day during peak construction activities.

This volume of traffic is not expected to have any material impact on the operation of these roads.

Monivae Subdivision Road

Monivae Subdivision Road is classified as a rural access road. These roads are typically expected to carry up to 50 vehicles each day.

As discussed in Section 3.4.1, Monivae Subdivision Road would likely carry in the order of ten (10) daily vehicle movements under the existing conditions.

Accordingly, during the peak construction stages of the project, this road can be expected to carry up to 40 daily vehicle movements. This level of traffic sits comfortably within the acceptable range for this classification of road.

Accordingly, during the construction stages of the project, the relevant section of Monivae Subdivision Road can be expected to carry in the order of 40 additional daily vehicles and 20 peak period movements (assuming 50% of movements occur during a 'peak' period).

This level of traffic, particularly during the peak period, e.g. 20 peak hour movements (1 vehicle movement every 3 minutes) can be comfortably accommodated by Monivae Subdivision Road without any material impact on the operational or safety of this road.

Burgins Road

Burgins Road is classified as a rural living access road. These roads are typically expected to carry up to 1,000 vehicles per day.

As discussed in Section 3.4.2, Burgins Road has historically carried up to 400 vehicles per day (or 40 vehicles during the peak hour).

During the peak construction stages of the project, this road can be expected to carry up to 430 daily vehicle movements. This level of traffic sits comfortably within the acceptable range for this classification of road.

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5 Design Considerations

5.1 Site Access Design

No detailed design for each of the site access points is available at this stage.

We are advised that vehicles accessing the site will be limited to single trailer truck vehicles (no B-doubles).

Swept paths (provided in Appendix B) have been assessed to show access via 19m semi-trailers.

Based on the aforementioned, the access point will be designed to accommodate vehicles up to 19 metres in length..

5.2 Turning Lane Assessment

Reference has been made to Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings¹ (AGTM Part 6). This document provides guidance on the warrants for various turn treatments at unsignalised intersections.

These warrants provide guidance on where a full-length deceleration lane must be used and where a shorter lane, designated Auxiliary Left Turn Lane (AUL) and Channelised Right Turn (CHR), may be acceptable based on traffic volumes.

5.2.1 Monivae Subdivision Road / Site Access

As discussed previously, Monivae Subdivision Roads is expected to carry up to ten (10) vehicles per day or in this case one (1) vehicle during the peak period (generally accepted that 10% of daily traffic occurs during the peak hour).

This proposal is projected to generate in the order of 30 daily vehicle movements during the peak construction period, of which 15 are expected to be inbound vehicle movements. Conservatively, it is assumed that 50% of these inbound movements will occur during the external road peak period, equating to approximately 7 vehicles going to site.

Figure 9 illustrates the turning lane treatments for unsignalised intersections.

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¹ Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings, Austroads 2017 Edition)

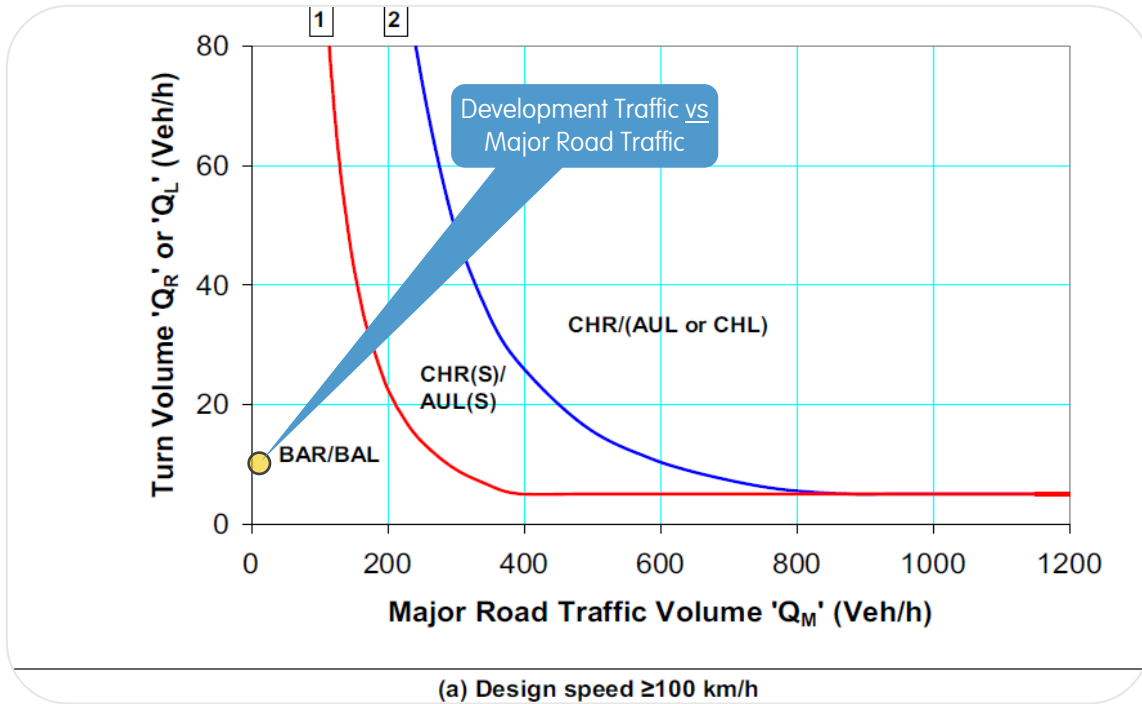


Figure 9 Warrants for Turn Treatments at Unsignalised Intersections

Based on the foregoing, this intersection triggers a warrant for a basic left-turn treatment (BAL) and right turn (BAR) treatment.

Due to the short-term nature of the construction period (4-month construction period) and the low construction volumes, it is recommended to utilise the full width for passing if required in place of a more formal BAL and BAR treatment.

It is also recommended to implement traffic management principles / advanced warning signages at the proposed site access during the construction period to assist with vehicle access.

5.3 Sight Distance Assessment

A desktop assessment of the sight distance available from the site access points has been undertaken using aerial imagery, Google Street View (where available) and based on site inspections. We note that an on-site assessment should be undertaken to validate the following assessment prior to construction.

5.3.1 Available / Assessed Sight Distances

5.3.1.1 Monivae Subdivision Road & Site Distance

Site Access Location 1 (approximately 700m west of the Subject Site)

The western-most site access location along Monivae Subdivision Road is relatively straight and flat. In addition, the trees at the proposed access are set back from the road carriageway as to not impede on sight distances.

By virtue of these conditions, sightlines to and from the western-most access are relatively unrestricted.

The desktop assessment indicates that vehicles can achieve sight distances in the order of 350 metres in this direction.

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Site Access Location 2 (approximately 300m west of the Subject Site)

Site Access Location 2 located along Monivae Subdivision Road is relatively straight and flat. In addition, the trees at the proposed access are set back from the road carriageway as to not impede on sight distances.

By virtue of these conditions, sightlines to and from this access point is relatively unrestricted.

The desktop assessment indicates that vehicles can achieve sight distances in the order of 350 metres in this direction.

Note: An unposted 100 km/hr speed limit applies for vehicles travelling from this direction.

5.3.2 Sight Distance Requirements

Austrroads Guide to Road Design - Part 4A: Unsignalised Intersections set out the sight distance requirements for unsignalised intersections, including:

- Approach Sight Distance
- Safe Intersections Sight Distance (SISD); and
- Minimum Gap Sight Distance

The guide recommends that Safe Intersection Sight Distances (SISD) is the minimum distance that should be provided on the Major Road at any intersection.

SISD is measured as shown in Figure 10.

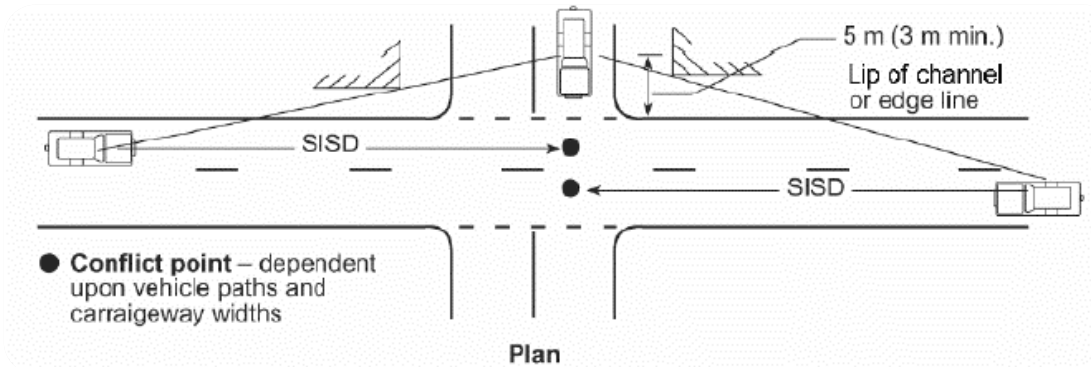


Figure 10 Guide to measuring SISD for unsignalised intersections

The Austrroads Guide provides SISD values for commuter vehicles at varying design speeds. For heavy vehicles the SISD values are calculated using the following formulae:

$$SISD = \frac{D_T \times V}{3.6} + \frac{V^2}{254 \times (d + 0.01 \times a)}$$

where

- SISD = safe intersection sight distance (m)
- D_T = decision time (sec) = observation time (3 sec) + reaction time (sec) – refer to *AGRD Part 3* (Austrroads 2016b) for a guide to values
- V = operating (85th percentile) speed (km/h)
- d = coefficient of deceleration – refer to Table 3.3 and *AGRD Part 3* for a guide to values
- a = longitudinal grade in % (in direction of travel: positive for uphill grade, negative for downhill grade)

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Based on the formula above, the minimum SISD requirements can be determined for the following operating speeds:

- 100 km/hr design speed
 - Minimum SISD of 317 metres for heavy vehicles

5.3.3 Sight Distance - Conclusion

Based on the foregoing, it can be concluded that adequate sight lines are available for vehicles travelling to / from both proposed site access locations. These are summarised as follows:

- To / from Site Access Location 1
 - 317 metres required;
 - 350 metres available;
- To / from Site Access Location 2
 - 317 metres required;
 - 350 metres available;

As discussed above, prior to construction, we recommend that an on-site assessment be undertaken to confirm that there is no vegetation impeding on the integrity of the available SISD's (minor trimming could be undertaken if required).

We recommend adopting traffic management devices, such as 'trucks crossing' and temporary speed reductions which could be used to supplement the lack of sight lines (to / from the south).

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6 Traffic Management Plan

Subject to the appointment of a supplier / construction contractor and other considerations, aspects of the Hamilton Solar Farm and BESS Facility (the project) may be subject to review.

In addition, construction / work programs for the project will not be fully resolved until closer to the project commencement. As such, subject to commencement timeframes, there is potential for changes to the existing road conditions and Solar Farm haulage assumptions as considered within this report.

Based on the foregoing, and our experience with similar projects, we expect that a detailed Traffic Management Plan (TMP) will need to be prepared prior to the commencement of the construction of the project to confirm any mitigation measures and management works required at that time.

The TMP would be implemented as a condition of any Development Consent issued for the Solar Farm and would be developed in consultation with Council, VicRoads, and any other relevant stakeholders to provide a more accurate indication of traffic impacts and generally identify responsibilities for road maintenance and upgrades throughout the construction period.

In general, the TMP should include:

- Confirmation of the Solar Farm construction timeframe and work stages.
- Confirmation of expected traffic volumes generated by the solar farm for all work stages.
- Identification of all HV and OD vehicle haulage routes for all work stages.
- A mechanism to review identified haulage route road conditions prior to the commencement of works.
- Mechanisms/agreements (if deemed necessary) to maintain haulage route roads and road infrastructure, including local public roads used by site traffic, during construction works and to reinstate roads to at least pre-construction conditions.
- Qualify any requirement for specific work stage construction traffic management plans.
- Qualify and identify any relevant mechanisms for OD vehicle permits and traffic management requirements.
- Confirm on-site the adequacy of available sight distances along Holden Road from the site access.

Note that this is not an exhaustive list, and that the final TMP requirements will be as per those outlined in the Development Consent.

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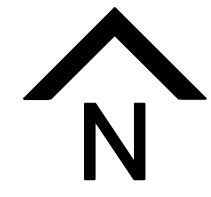
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APPENDIX A

Site Layout Plan

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GENERAL NOTES:

1. PARCEL BOUNDARY IS BASED ON VICPLAN.
2. THIS LAYOUT IS A PRELIMINARY DESIGN.
3. TRACKER DIMENSION IS APPROXIMATE ONLY. ACTUAL DIMENSION SHALL BE CONFIRMED WITH TRACKING SUPPLIER.
4. STRING CONFIGURATION IS ASSUMED TO BE 30 MODULES PER STRING. THIS IS SUBJECT TO ELECTRICAL SPECIFICATION OF THE SELECTED PV MODULE AND SHALL BE CONFIRMED DURING DETAILED DESIGN.

PROJECT SPECIFICATIONS

AC CAPACITY AT POINT OF CONNECTION	4.95	MW ac
INSTALLED AC CAPACITY	4.95	MW ac
DC CAPACITY AT STC	7.00	MW dc
DC:AC RATIO	1.41	
BATTERY STORAGE	4/8	MW/M Wh
TRACKER CONFIGURATION	1P	
2-STRING TRACKER DIMENSIONS (60-MODULE)	83.2 x 2.385	m
1-STRING TRACKER DIMENSIONS (30-MODULE)	42 x 2.385	m
TRACKER PITCH	5.5	m
TRACKER AZIMUTH	0	-
INVERTER CAPACITY	4.95	MVA
MODULE TYPE	Mono PERC Bi-Facial	
MODULE POWER	650	W
MODULES PER STRING	30	
MODULES PER TRACKER	30 / 60	
TOTAL PCU WITH 2 INVERTER	1	
TOTAL INVERTERS	2	
TOTAL TRACKERS (60 MODULE)	175	
TOTAL TRACKERS (30 MODULE)	9	
TOTAL MODULES	10,770	
SITE AREA	10.7	Ha
SITE PERIMETER	1,466	m

LEGEND:

	GATE
	ACCESS ROAD
	SWITCH ROOM
	INVERTER AND BATTERY CONTAINER
	POINT OF CONNECTION
	PROPOSED FENCE
	OH POWERLINE
	PARCEL BOUNDARY
	2-STRING TRACKERS
	1-STRING TRACKERS
	3m WIDE LANDSCAPING
	ABORIGINAL CULTURAL HERITAGE

C	ADJUSTED GAS EASEMENT	PC	15/07/21
B	PRELIMINARY DESIGN	PC	12/07/21
A	PRELIMINARY DESIGN	PC	12/07/21
REV:	DESCRIPTION:	BY:	DATE:

STATUS: **CONCEPT DESIGN**
NOT FOR CONSTRUCTION

CLIENT: TETRIS ENERGY

DESIGNER: PCC ENGINEERING

SITE: HAMILTON SOLAR PROJECT

TITLE: **OVERALL SITE LAYOUT**

SCALE AT A1: 1:2000(m)	DATE: 15/07/21	DRAWN: PC	AUTHORISED: PC
PROJECT NO: P21-0007	DRAWING NO: P20-0007-01	REVISION: C	

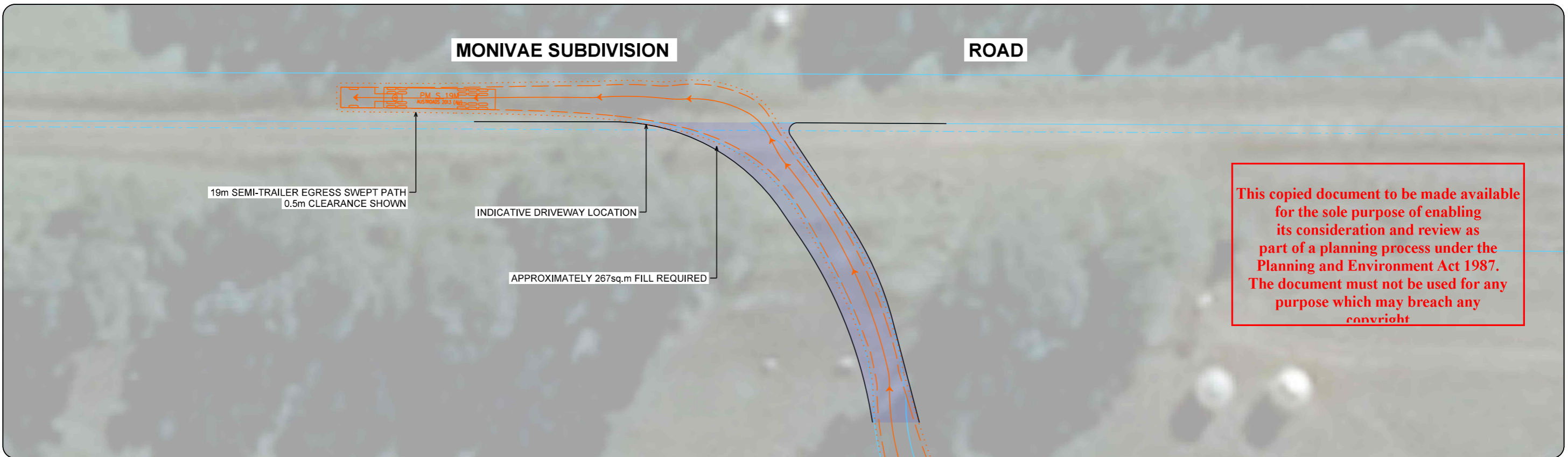
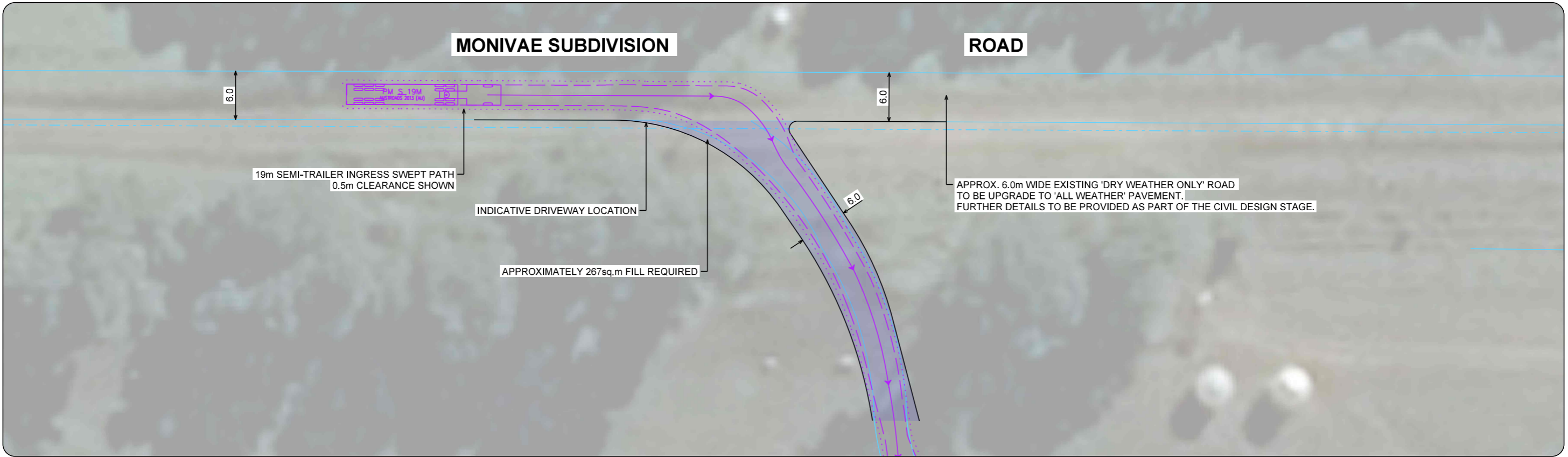
APPENDIX B

Swept Path Analysis

Design Vehicle
— 19m Semi-Trailers

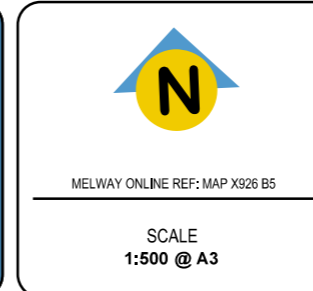
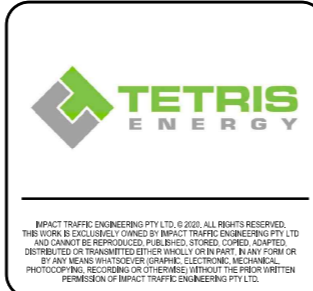
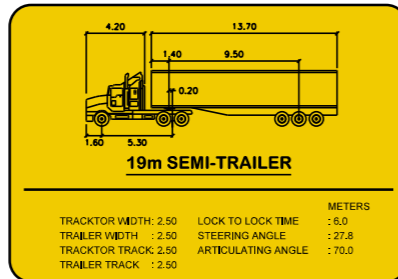
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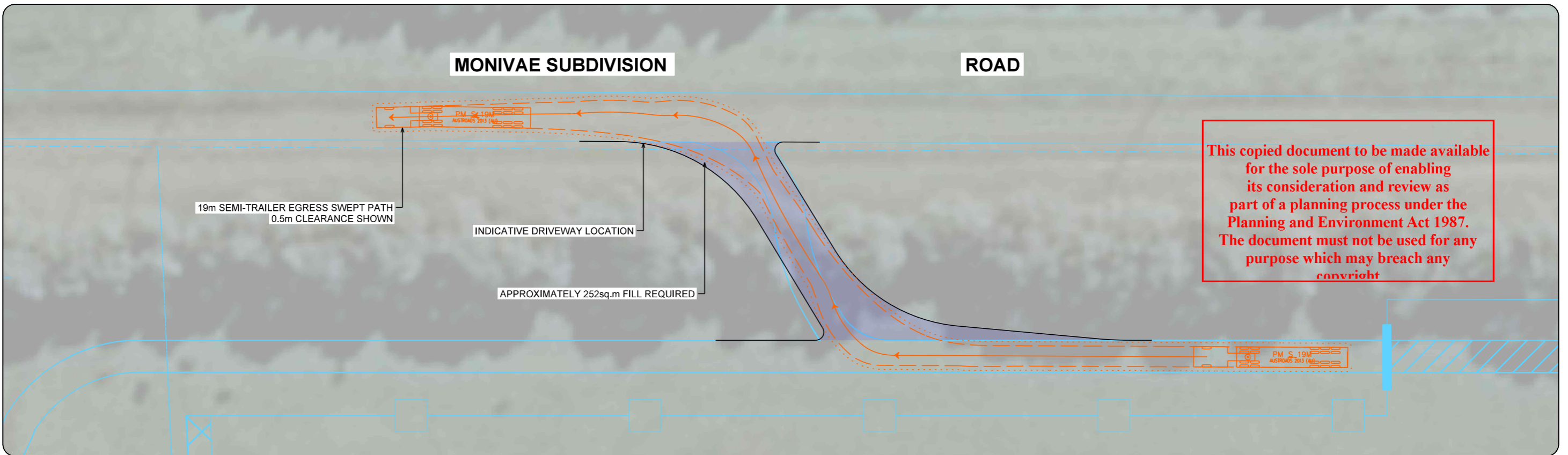
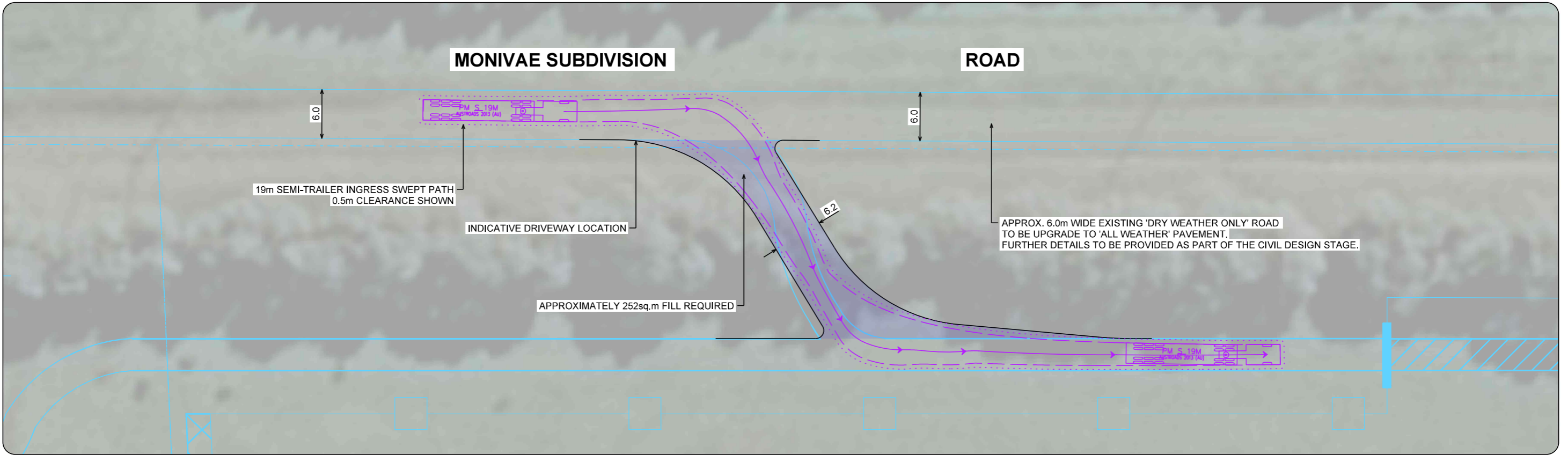


- GENERAL NOTES:
- ALL DIMENSIONS ARE TO FACE OF KERB AND CHANNEL UNLESS NOTED OTHERWISE.
 - LOCAL ROADS
- MONIVAE SUBDIVISION ROAD (SPEED ZONE 80KM/H).
 - BASE INFORMATION FROM BING MAPS AERIAL AND PCC ENGINEERING P21-0007-01 [C].pdf DATED 05.08.2021

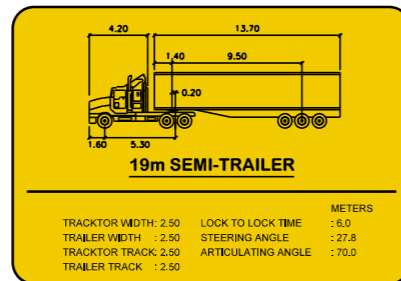
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PLAN**



Client TETRIS ENERGY	Status PRELIMINARY
Project HAMILTON SOLAR AND STORAGE FACILITY MONIVAE SUBDIVISION ROAD, HAMILTON SOUTHERN GRAMPIANS SHIRE	Revision Description ISSUED FOR INFORMATION
Date 2021-11-11 Drawn / Approved SGM / HM	Revision
Title PROPOSED ACCESS LOCATION 1 SWEEP PATH ANALYSIS 19m SEMI-TRAILER	Drawing Number IMP2107053 - DG-02-01
	B



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MELWAY ONLINE REF: MAP X926 B5

SCALE
1:500 @ A3

Client
TETRIS ENERGY

Project
HAMILTON SOLAR AND STORAGE FACILITY
MONIVAE SUBDIVISION ROAD, HAMILTON
SOUTHERN GRAMPIANS SHIRE

Title
**PROPOSED ACCESS LOCATION 2
SWEEP PATH ANALYSIS
19m SEMI-TRAILER**

Date
2021-11-11
Drawn / Approved
SGM / HM

Drawing Number
IMP2107053 - DG-02-02

Status
PRELIMINARY

Revision Description
ISSUED FOR INFORMATION

Revision
B

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Simplexity

