

HAULAGE PLAN

Wollar Solar Farm Stage 2 - Northern Access Road

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2.0	01/06/2021	Draft	Table of contents added, Traffic control Plan added, Load quantities added
3.0	28/06/2021	Client review	Review of commencement date and final approval.
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1. Purpose

The purpose of this Haulage Plan is to outline the manner in which vehicular, and plant movements will be managed for the Northern Access Road Project at the Wollar Solar Farm during construction, as well as the control measures in place to manage risks associated with Project-related traffic.

A1 Earthworx acknowledges that the effective management of Project traffic and safety of operators and pedestrians is paramount to the delivery of successful day-to-day activities on site and A1 Earthworx overall Zero Harm objectives and targets for the Project. Primary objectives of this sub-plan include:

- Maximising operator and pedestrian safety.
- Minimising wherever possible adverse interfaces between Project vehicles and the public as a result of construction traffic and activities.
- Minimising impact on the local road network.
- Minimising disruption, delays, and congestion to local road users.
- Mitigating risks associated with deliveries to the Project.
- Providing clearly defined instruction and parameters cohesive with construction site traffic protocols to enable compliance to this sub-plan by all Project stakeholders (including visitors).
- Providing a safe Project environment free of hazardous interactions between vehicles, plant, people, and infrastructure; and
- Complying with legislative and contractual requirements.

By implementing this plan, A1 Earthworx Mining and Civil is committed to upholding requirements under the following legislation and standards:

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- Heavy Vehicle National Law Act 2012
- NSW Transport Operations Act 2013
- NSW Transport Operations Regulation 2013

It also undertakes to maintain compliance with council, state government and contractual requirements in accordance with conditions stipulated in the necessary approvals.

2. Document Scope.

This Plan applies to the Northern Access Road Project only, referred to as 'the Project' throughout this document.

This document applies to all aspects of the transportation of Materials, Plant and Equipment, goods, and services for the Project. The sub-plan Drivers Code of Conduct and Traffic Control Plan should be reviewed in conjunction with this Haulage Plan.

The target audience for this Plan is for A1 Earthworx and Client Project Management Team, Project Delivery Partners, and any other relevant stakeholders who may have implications on or be impacted by the requirements of this Plan.

This Plan has been prepared in accordance with Project Requirements, Scope of Work, Development Consent, EPC Contract, specific operational needs, and quantitative forecast of vehicular traffic on the Project.

3. Haulage Plan Scope.

This plan outlines the Haulage route as designated by the CoC for the transportation of plant, equipment, and construction products from the town off Mudgee to the new Wollar Solar Farm Northern Access Road entry which is located on Barigan Road at Wollar, the Northern entry access point on Barigan Road is the main entry point that all vehicles which include Light, Heavy and AV/B-double will use as the entry and exit point into the Project which is via the TransGrid Substation.

All haulage vehicles will use a forward motion wherever possible onsite and minimising reversing; where haulage vehicles are required to travel in reverse, a spotter will be used to monitor and direct movements. Prior to leaving the project, haulage truck operators will check that there is no material hung up on drawbars, wheel arches etc, Site operations will be monitored daily to ensure that all Vehicles leaving site are in a clean condition so as to prevent dirt being tracked into the sealed public road network.

It also includes the Haulage route for the 12000 tonnes of Quarry product that will be required to be placed, to construct the 1.8 kilometres of an unsealed pavement for the Northern Access Road Project. The material will be sourced from the local quarry located at 4030 Ulan Road, Ulan.

This plan is to be read in conjunction with the NGH Traffic Management Plan for the Wollar Solar Farm dated August 2020.

It should be noted that Barigan road has been Upgraded since the NGH Traffic Management Plan report was approved.

This plan has taken in the consideration of and will comply as best Practice with the below consent conditions.

- a) development does not generate more than:
 - o 26 AV/B-double vehicle movements a day during construction, upgrading and decommissioning.
 - o 46 medium and/or heavy rigid vehicle movements a day during construction, upgrading and decommissioning.
 - o 5 over-dimensional vehicle movements during construction, upgrading and decommissioning; and
 - o 7 AV/B-Double, medium and/or heavy rigid vehicle movements a day during operations; on the public road network.
- b) length of any vehicles (excluding over-dimensional vehicles) used for the development does not exceed 19 metres unless the Secretary agrees otherwise in writing.

3.1 Legend of vehicle classification proposed for associated works.

Type of Vehicle	Licence class	Definition
Light Vehicle	C	Vehicles up to 4.5 tonne Gross Vehicle Mass (GVM). Vehicles that seat up to 12 adults, including the driver. A Class C licence allows you to drive cars, utes, vans, some light trucks, car-based motor tricycles, tractors, and implements such as graders.
Light Rigid	LR	Rigid vehicles with a GVM of more than 4.5 tonnes, but not more than 8 tonnes. Any towed trailer must not weigh more than 9 tonnes. Vehicles up to 8 tonnes GVM which can carry more than 12 adults, including the driver. There are no restrictions on the number of axles for the LR licence class
Medium Ridged	MR	Rigid vehicles with 2 axles and a GVM of more than 8 tonnes. Any towed trailer must not weigh more than 9 tonnes.
Heavy Rigid	HR	Rigid vehicle with 3 or more axles and a GVM of more than 8 tonnes. Any towed trailer must not weigh more than 9 tonnes.
Heavy Combination	HC	Heavy combination vehicles such as articulated vehicles with three or more axles and tow trailer combinations with a GVM more than 9 tonne, including unladen dolly.
Multi Combination	MC	Multi combination vehicles such as B-double and float/dolly combinations (maximum B-double length of 26m and mass of 62.5t permitted on route)

3.2 Truck Details.

Dimensions of Combination including truck, dolly, and quad float.

Width: 2.5 metres
 Length: 25.270 meters
 Height: 4.7 metres max. limit
 Gross: 77.5 t Max Load

We will have 3 oversize plant to Mobilise and Demobilise from site once the task has been completed which will require front escort only.

All the plant that is to be transported will **NOT** require and additional support by means of, Police Escort Vehicles,

Dimensions of Combination including truck, and quad float.

Width: 2.5 metres
 Length: 21.79 meters
 Height: 4.7 metres max. limit
 Gross: 59.5 t Max Load

Dimensions of Combination: Tilt tray

Width: 2.5 meters
 Length: 6.0 meters
 Height: 3.5 meters
 GVM: 22.5T

Dimensions of Combination: 19m side tipper

Width: 2.5 metres
 Length: 18.9 metres
 Height: 4.3 metres
 GVM: 55 tonnes

Dimensions of Combination: Truck and Dog

Width: 2.5 metres
 Length: 18.5 metres
 Height: 3.4 metres
 GVM: 48 tonnes

Dimensions of Combination: Truck and Quad Dog

Width: 2.5 metres
 Length: 19.8 metres
 Height: 3.4 metres
 GVM: 57 tonnes

Dimensions of Combination: Truck (Rigid tipper)

Width: 2.5 meters
 Length: ≤ 12.5 meters
 Height: 3.4 meters
 GVM: 23 tonnes

Dimensions of Combination: Truck and Tanker

Width: 2.5 meters
 Length: 18.5 meters
 Height: 3.4
 GVM: 42.5T

3.3 Approx. Commencement.

Approx. Commencement	Reason	Hauling	Vehicle Configuration Type	Duration
Week 1	Mobilisation	Plant & Equipment	Float	4 days
	Mobilisation	Plant & Equipment	Tilt Tray	4 days
Week 4	Pavement Materials	Stabilisation Product	Semi tanker	8 Days
Week 5	Pavement Materials	Quarry Products	Side tipper Single configuration	20 Days
	Pavement Materials	Quarry Products	Truck and dog	20 Days
	Pavement Materials	Quarry Products	Rigid Tipper	15 Days
Week 9	De-mobilisation	Plant & Equipment	Float	4 days
	De-mobilisation	Plant & Equipment	Tilt Tray	4 Days

3.4 Quantities of trucks required.

- 2 x Floats
- 1 x Tilt tray
- 4 x Truck and dogs
- 3 x 12t Tippers (only required if current OSOM restrictions apply)
- 1 x Side tipper 19m
- 1 x tanker (stabilisation) 19m
- 1 x Water tanker 19m

3.4.1 Loads Per Day: Float Movements \geq 19 meters.

With the Mobilisation and demobilisation of plant, we will have two floats hauling the required plant from Mudgee to the Project.

It is anticipated that they will do 2 loads per day each.

The below table outlines what plant will be required for the Project.

Oversize Overmass Vehicle (greater than 19 meters)							
No off	Plant item	Wheel Base	Over all	Blade width	Height	Weight Kgs	length
2	627 Scraper	3275mm	3585mm		4029mm	40913kg	14020mm
1	851 Compactor	3350mm		3761 mm	3650mm	22386kg	7157mm
1	320 Cat Excavator	2980mm			2960mm	22800kg	9530mm
1	Pavement Stabiliser	TBC			TBC	TBC	TBC
1	Grader 140M	2511mm			3308mm	18400kg	10136mm
1	Grader 140H	2511mm			3308mm	18400kg	10136mm
1	Padfoot Roller		2300mm		3011mm	6395kg	5085mm
1	Smoothdrum Roller		2300mm		3011mm	6395kg	5085mm

3.4.2 Loads Per Day: Quarry Products.

As Per the CoC there are restrictions of the number of trucks that are to travel to and from the Project that being, 26 movements of AV/B-double vehicles per day. Secretary discretion is required to use B-doubles up to 26m long and with a GVM of up to 62.5 tonnes. The truck and Dogs hauling the quarry product to the Project can only do an estimated maximum of 6 loads each per day, so they do not exceed the CoC.

If required, we will also use Rigid tippers with a GVM of 22500 tonnes for up to 46 loads per day as per the CoC.

We anticipate hauling of the road base will commence in week 5 of the program, it will consist of using 4 x truck and dogs doing up to 6 trips each per day.

3.5 Quarry Product truck movement schedule.

Running (AV) Truck and dogs at Gross Weight and Payload of 34 tonnes.

Week in program	Heavy Rigid (tippers) Daily	Heavy Rigid (tippers) Weekly	AV/B-double Daily	AV/B-double Weekly
5			26	130
6			26	130
7			25	125
			Total	385

4 Designated Haulage Routes

4.1 Route from Mudgee to Project and return.

Mudgee to Ulan via Ulan Road, turning onto Ulan-Wollar Road, Barigan Street, Maitland Street, Wollar Road, Barigan Road to the project.

Distance of movement from Mudgee to Ulan-Wollar Road 41.7 kilometres.

Distance from Ulan-Wollar Road to Barigan Street 28.8 kilometres.

Distance from Barigan street to Barigan Road (TransGrid Substation) 5.4 kilometres

There are 2 railway level crossings on consented route, these crossings have boom gates and warning signals for approaching trains.

4.2 Route from Quarry to Project and return.

Quarry at Ulan to the project will be accessed via Ulan Road, turning onto Ulan-Wollar Road, Barigan Street, Maitland Street, Wollar Road, Barigan Road to the Project.

Distance of Movement from Quarry to Ulan-Wollar Road, 2.3kilometres

Distance from Ulan-Wollar Road to Barigan Street 28.8 kilometres.

Distance from Barigan street to Barigan Road (TransGrid Substation) 5.4 kilometres

There are 2 railway level crossings on consented route, these crossings have boom gates and warning signals for approaching trains.

4.3 Dust Control

All operators must use vehicles and plant in a manner that minimises dust generation on the site, including using designated roads wherever possible and always observing speed restrictions.

As the primary means for managing dust on site, a water cart will be engaged to water access roads and work areas generating dust across the site. Additional measures will be taken if necessary.

4.4 Biosecurity

All vehicles and plant to be operated on site shall be thoroughly washed or cleaned to remove all soil, mud and plant material that may pose a weed hygiene risk to the Project site prior to arriving.

Upon arrival at site the vehicle or plant shall be visually inspected by a nominated A1EMC representative who will complete the Pre-Site Inspection. Compliant vehicles will be provided with a windscreen sticker as evidence of Weed and Seed Inspection prior to accessing Site.

Any vehicles or plant deemed non-compliant during this inspection will be required to be cleaned and re-inspected before being permitted access to the Project site.

4.5 Flora, Fauna and Wildlife

All operators and vehicle drivers should be aware of local wildlife within and outside the Project area while driving on public roads, site roads and access roads.

Drivers shall only drive vehicles on purpose made, public, and site roads to avoid unnecessary erosion and sediment issues that may harm flora, fauna, and wildlife.

Any damage, injury or death of wildlife is to be reported to the A1EMC Site Management Team

4.6 Road Works Zones

Work zones will be implanted on Barigan Road as part of the CoC, this works area will be controlled with either traffic controllers or by means of Portable traffic light system. All road users will be required to adhere to the direction of the traffic controllers' instructions and speed restrictions signage through these areas. Fig 3 shows insert of Barigan Road where Works Zones will apply. Appendix A shows Traffic Control Plan.

4.7 OSOM Permit

A heavy vehicle is a Class 1 heavy vehicle if it, together with its load, does not comply with a prescribed mass requirement or prescribed dimension requirement applying to it and is a heavy vehicle carrying, or designed for the purpose of carrying, a large indivisible item including, for example, a combination including a low loader.

Examples of OSOM vehicles include a combination of prime movers, low loaders, low loader dollies, platform trailers.

Where a Class 1 OSOM vehicle does not comply with the mass or dimension limits set, A1 EMC will apply to the National Heavy Vehicle Regulator (NHVR) to obtain a Mass or Dimension Exemption Permit Approval. For permit approval see **Appendix F**.

5. Example Daily Vehicle Movements

5.1 Approximate total amount of movements per week

Time frame	Phase			Light Vehicle	Construction Minibus	Heavy Vehicle. (Rigid) Tipper/ tilt tray	AV Truck & Dog	AV ≥ 19 meters (float)	Total LV	Total HV
	Site Establishment (SE)	Construction (C)	De-mobilisation (DM)							
Week 1	SE		DM	20		8		8	20	8
Week 2	SE	C		20		2			20	2
Week 3		C	DM	25	5		4	2	30	6
Week 4	SE	C		25	5		5	2	30	7
Week 5		C		25	5		130		30	130
Week 6		C	DM	25	5		129	1	30	130
Week 7		C		25	5		130		30	130
Week 8		C	DM	25	3		125	3	28	128
Week 9		C	DM	20		10		2	20	12
Total for the Project									238	554

5.2 Estimated truck requirements per week.

Week	Phase	Purpose	Vehicle Type	Hauling	Quantity of trucks required
1	Site Establishment	Plant & Machinery	Low-Loader Float	627 Scraper	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	627 Scraper	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	851 Compactor	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	20t Excavator	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	14m Grader	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	14H Grader	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	Pad foot roller	1
1	Site Establishment	Plant & Machinery	Low-Loader Float	Smooth drum roller	1
1	Site Establishment	Plant & Machinery	Tilt tray	Tractor (sed Cont.)	1
1	Site Establishment	General	Tilt Tray	Fuel storage cell	1
1	Site Establishment	General	Tilt Tray	10 ft Container	1
1	Site Establishment	General	Tilt Tray	Site office	1
1	Site Establishment	Construction	Tilt Tray	De-Watering Pumps	1
1	Site Establishment	Construction	Heavy Ridged	Water Cart	1
1	Site Establishment	Construction	Semi-tanker	Water Tanker	1
1	Site Establishment	General	Semi-Tanker	Diesel Fuel	1
1	Demobilisation	Plant & Machinery	Tilt tray	Tractor (sed Control)	1
2	Construction	Construction	Truck and Dog	Quarry Products	1
2	Construction	Construction	Semi-Trailer	RCP Products	1
3	Demobilisation	Plant & Machinery	Low-Loader Float	627 Scraper	1
3	Demobilisation	Plant & Machinery	Low-Loader Float	627 Scraper	1
3	Construction	Construction	Semi-Trailer	RCP Products	1
3	Construction	Construction	Truck and Dog	Quarry Products	1
4	Mobilisation	Road Stabilisation	Low Loader Float	Stabiliser	1
4	Demobilisation	Plant & Machinery	Low Loader Float	851 Compactor	1
4	Construction	Road Stabilisation	Semi-trailer	Lime	5
5	Construction	Road Stabilisation	Semi-trailer	Lime	5
5	Construction	Construction	Truck n Dog	Quarry Products	4
5	Construction	Construction	Rigid Tipper	Quarry Products	3
6	Demobilisation	Plant & Machinery	Low Loader Float	Stabiliser	1
6	Construction	Construction	Truck n Dog	Quarry Products	4
6	Construction	Construction	Rigid Tipper	Quarry Products	3
7	Construction	Construction	Truck n Dog	Quarry Products	4
7	Construction	Construction	Rigid Tipper	Quarry Products	3
8	Construction	Construction	Truck n Dog	Quarry Products	4
8	Demobilisation	Plant & Machinery	Low Loader Float	20t Excavator	1
8	Demobilisation	Plant & Machinery	Low Loader Float	14H Grader	1
8	Demobilisation	Plant & Machinery	Low Loader Float	Pad foot roller	1
9	Construction	Construction	Rigid Tipper	Quarry Products	3
9	Demobilisation	Plant & Machinery	Low Loader Float	14M Grader	1
9	Demobilisation	Plant & Machinery	Low Loader Float	Smooth drum Roller	1
9	Demobilisation	General	Tilt Tray	Fuel storage cell	1
9	Demobilisation	General	Tilt Tray	10 ft Container	1
9	Demobilisation	General	Tilt Tray	Site office	1
9	Demobilisation	Construction	Tilt Tray	De-Watering Pumps	1

7. Delivery Impacts on Others

Operators of the A1 Earthworx Haulage fleet working on the WSF site will attend an on-site pre-shift brief at 6:45am on weekdays (Monday to Friday). If required to work on a Saturday pre-shift briefing will be conducted at 7:45am

Prior to each shift, the operators will conduct a prestart on their Vehicle prior to operating. Trucks will be leaving site just after 7am at staged times to travel to the quarry using the designated route to the quarry.

Restrictions:

The Haulage route has restrictions imposed by the road owner in granting conditional approval for use. The current heavy vehicle restrictions may be viewed at <https://roads-waterways.transport.nsw.gov.au/business-industry/heavy-vehicles/maps/restricted-access-vehicles-map/map/index.html>

The restrictions at the time of writing are:

Road Name: ULAN WOLLAR ROAD

Start Point: MR214 ULAN ROAD

End Point: GOULBURN ROAD, WOLLAR

Conditions: 80km/hr B-Double speed limit on sealed section. Outside school bus operation times.

Road Name: BARIGAN ROAD

Start Point: MR208 WOLLAR ROAD

End Point: TICHULAR ROAD

Conditions: A maximum speed limit of 60km/h applies.

The school bus route comprises 2.8km of the proposed haulage route, commencing at the Mogo Road intersection with the Ulan Wollar Rd and ending at the Barigan Street – Wollar Rd in Wollar village.

Mines:

We anticipate a small amount of interaction with changeover of staffing times at Wilpinjong, Moolarben and Ulan mines, however this should not impact either party.

The mines have been made aware of the Haulage Plan including estimated truck movements.

The mines will receive notice of oversize vehicle movements.

School:

It is recognised that school bus services run on Wollar Road between Wollar and Mudgee, with a 2.8km portion of the bus route on the proposed haulage route as noted above. The bus is scheduled to use this section of road between 7:30am and 7:38am weekday mornings and between 4:30pm and 4:45pm weekdays. The staging of trucks as above will ensure there is no breach of conditions.

School buses are expected on Wollar Road between the hours of 7.30am and 8.30am to account for the below bus stop services:

- Stop A1 Araluen Road - 7:30am
- Stop A2 Wollar Service Centre - 7:38am
- Stop A3 Cnr Wollar/Cumbo Roads - 7:45am
- Stop A4 Cnr Cooyal Lane/Wollar Road - 8:00am
- Stop A5 Cnr Ulan/Wollar Road - 8:17am

The afternoon bus services will proceed along Wollar Road between 3.30pm and 4.45pm with the below bus stop noted:

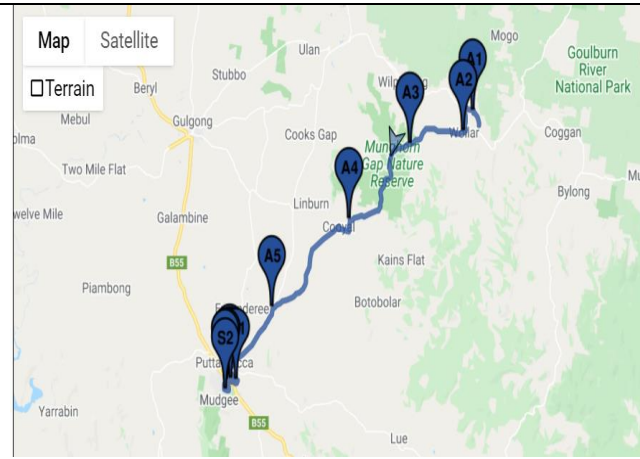
- Stop 3 Cnr Wollar/Ulan Roads - 3:45pm
- Stop A4 Cnr Wollar Road/Kurtz Lane - 4:02pm
- Stop A5 Cnr Cooyal Lane/Wollar Road - 4:12pm
- Stop B1 Cnr Wollar/Cumbo Roads – 4:25pm
- Stop B2 Wollar Service Centre - 4:30pm
- Stop B3 Araluen Road - 4:45pm

These services travel in the opposite direction of incoming site-based light vehicles. Drivers are to take care when travelling through these areas, always observing posted speed limits.

Link to the school bus timetables: <https://www.ogdenscoaches.com.au/timetables/>

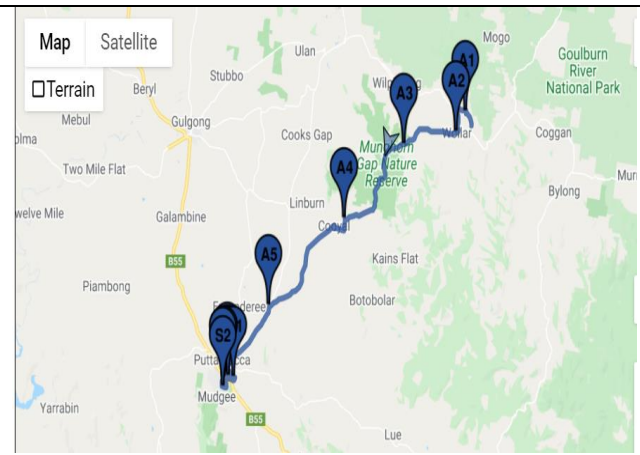
Am Timetable

School Timetable	
MA02 Wollar AM	
Monday to Friday (Except Public Holidays)	
Stop	Time
A1 Araluen Road	7:30am
A2 Wollar Service Centre	7:38am
A3 Cnr Wollar/Cumbo Roads	7:45am
A4 Cnr Cooyal Lane/Wollar Road	8:00am
A5 Cnr Ulan/Wollar Road	8:17am
B1 Cnr Mulgoa Way/Julia Court	8:27am
S1 St Matthews Catholic School	8:35am
B2 33 Lawson Street	8:37am
S2 Cudgong Valley Public School	8:40am
S3 Mudgee High School	8:43am
S4 Mudgee Public School	8:45am



PM Timetable

School Timetable	
MP02 Wollar PM	
Monday to Friday (Except Public Holidays)	
Stop	Time
S1 Cudgong Valley Public School	3:25pm
S2 Mudgee High School	3:27pm
S3 Mudgee Public School	3:28pm
S4 St Matthews Catholic School	3:32pm
A1 Cnr Mulgoa Way/Julia Court	3:34pm
A2 Cnr Mortimer/Lawson Streets	3:39pm
A3 Cnr Wollar/Ulan Roads	3:45pm
A4 Cnr Wollar Road/Kurtz Lane	4:02pm
A5 Cnr Cooyal Lane/Wollar Road	4:12pm
B1 Cnr Wollar/Cumbo Roads	4:25pm
B2 Wollar Service Centre	4:30pm
B3 Araluen Road	4:45pm



All drivers will be briefed on the school bus timetables with location routes and times of these services so avoidance of these areas can be maintained.

8. Route from Mudgee to Project and return. (Light vehicles)

A1 Earthworx will transport their employees by carpooling in Light Vehicles (4WD ute) and utilising a 12-seater minivan in peak times. Our employees are based in Mudgee, so the travel route for these vehicles required for the Project is Via Castlereagh Highway, Ulan Road, Wollar Road, Phillip Street, Maitland Street, Wollar Road, and Barigan Road.

Anticipated vehicles are 6 x light vehicles and 1 x 12-seater minivan.

Travel to site will occur between the hours of 6am to 7am Monday to Friday and travel home from 5pm to 6pm Monday to Friday.

Travel to site on Saturday's will be 7am to 8am and travel home will be from 1pm to 2pm.

9. Haulage Route diagrams

Fig 1. Quarry Location



[Haulage route Quarry to Ulan-Wollar Road](#)

**Fig 2. Over-dimensional and AV/B-Double, Truck & Dog vehicles
Route to Wollar**



Over-dimensional and AV/B-Double vehicles Vehicle Access Route to Wollar

Fig 3. Wollar to Site



All Vehicles Wollar to Site

Fig 4. Approved Site Map

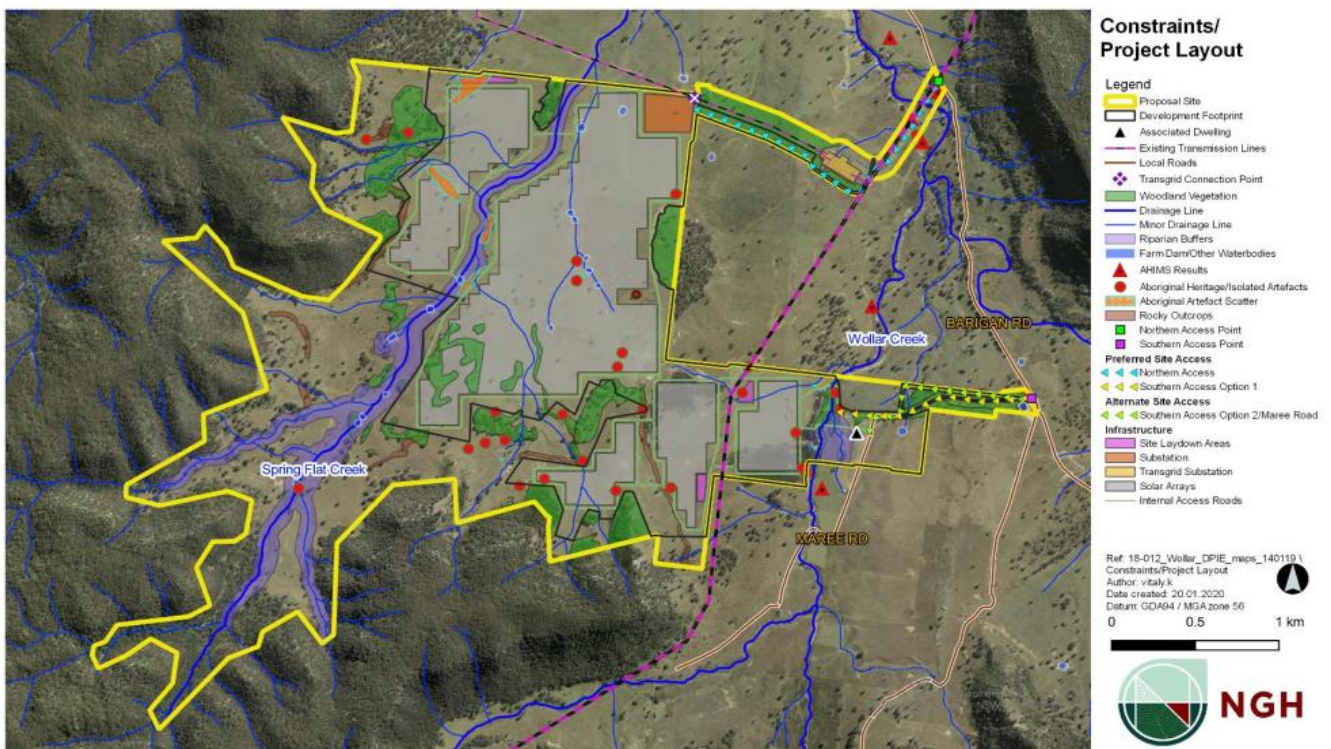
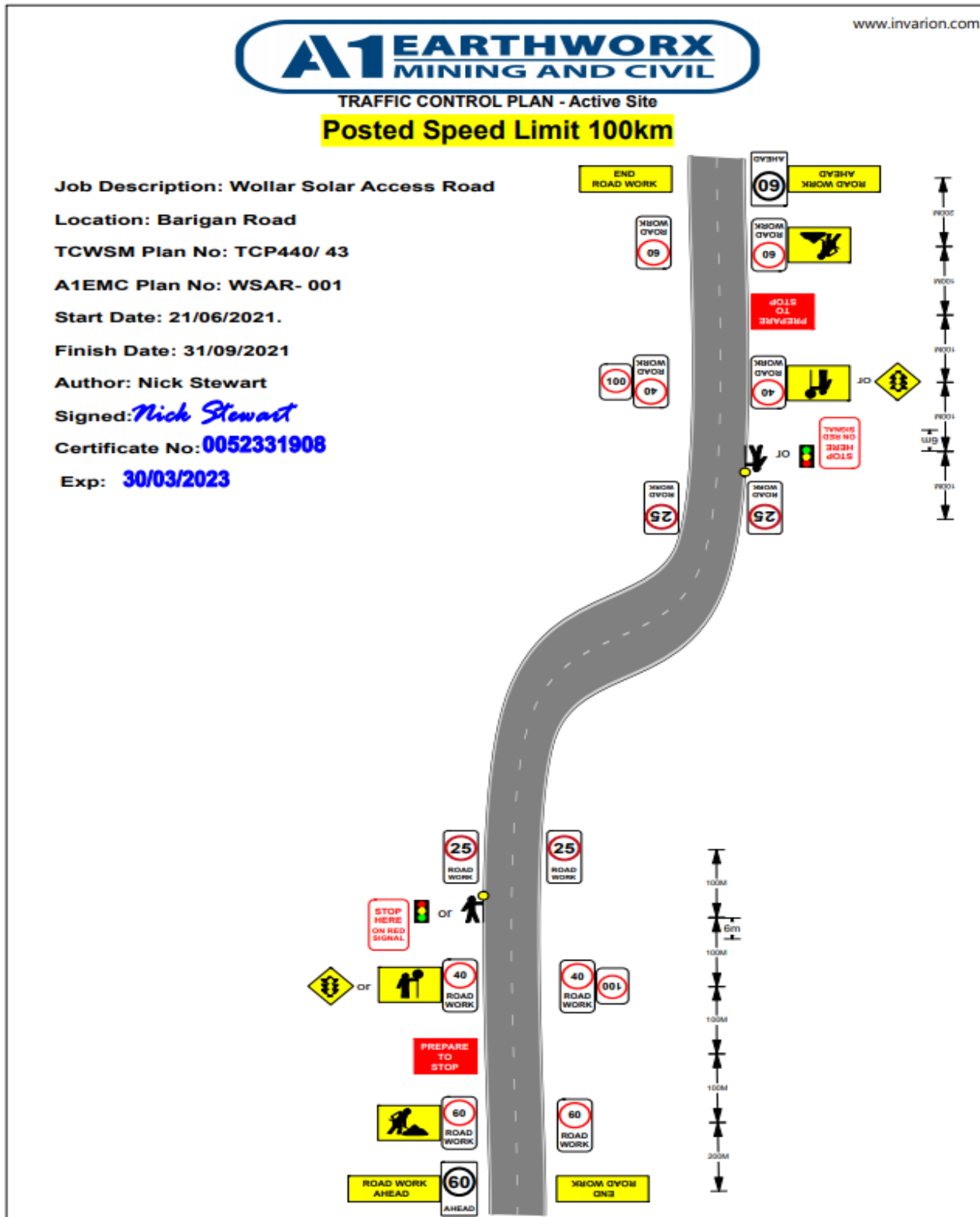


Fig 5. Light Vehicle Route to Wollar



Light Vehicle Access route to Wollar Via Wollar Road.

Appendix A - Traffic Control Diagram



Appendix B – Driver’s Code of Conduct

The contractors’ ‘Drivers Code of Conduct’ for the Project will include but is not limited to the following:

Penalties and Disciplinary Action

Failure to comply with this Driver Code of Conduct will lead to either the issue of a warning notice or disciplinary action.

Code of Conduct Induction

All contractors will be required to complete an induction of this ‘Drivers Code of Conduct’, and sign a declaration stating, they have read and understood the requirements in the document, and will comply and assist their implementation, requirements, and ongoing administration. This may be an online induction.

Safe Driving Practices

- All drivers must hold a current and valid driving licence for the class of vehicle that you operate.
- Drivers must notify their employer if they are not fit for duty prior to commencing their shift.
- Always adjust your driving to the existing road and climatic conditions.
- You should always drive in a manner that will help you to avoid an accident.
- Take regular breaks on long drives. Drivers of medium/heavy vehicles, over-dimensional vehicles and AV/B-Double vehicles must adhere to the maximum work requirements and minimum rest requirements outlined in the Heavy Vehicle (Fatigue Management) National Regulation (NSW).
- All vehicles must be maintained and operated in accordance with the vehicle manufacturers recommended standards.
- Always brake with care, remembering that the truck will react differently according to the weight of the load, weight distribution of the load and road surface condition.

Speed Restriction

Always follow the posted speed limits and advisory speed signs as they provide vital clues to road conditions and characteristics. You must apply the following rules at:

- Always reduce your speed in wet or dry and dusty conditions.
- Drive cautiously in fog or heavy rain.
- Descend hills at sign-posted truck speeds, or in the lowest gear to suit the conditions.
- Always observe the special limits that apply for road works etc.
- Always observe the special speed limits that apply to internal access roads within the construction site.
- DO NOT exceed the posted maximum speed.
- DO NOT drive at speed past schools, school buses, parks, shopping areas etc.

Designated Routes

- All vehicular traffic associated with the development must travel to and from the Project site via Wollar Road and Barigan Road and the approved site entry point.
- Trucks and heavy vehicles must not use local residential streets.

Drivers must stay on the defined routes laid down unless there are exceptional circumstances. Exceptional circumstances include:

- Normal route blocked e.g., flooded.
- A revised route agreed in writing.

Vehicle Recording

All drivers will be responsible for recording when they enter the site on the Vehicle Movement Register.

Appendix C - A1EMC cardinal rules

Below are our 'cardinal rules', we must all live by them.

1. Never work above 1.8m without appropriate fall protection
2. Always verify any isolation – test for dead
3. Never enter under suspended loads
4. Never enter no go zones
5. Never operate equipment unless authorised.
6. Never attend work under the influence of alcohol or illicit drugs. Consumption on site is prohibited.
7. Never modify a safety device without permission
8. Never enter under unsupported loads, objects, or ground
9. Always follow positive communication requirements
10. Always consider health & safety implications when planning
11. Always abide by our client's site-specific rules, policies, and procedures

Additional rules/considerations

- Site supervisors will maintain safety awareness and supervision of work practices daily to ensure employees perform all duties in accordance with documented safety procedures.
- Employees to wear required PPE and conform with mandatory safety signage.
- Employees co-operate and follow directly instruction given for the Health and Safety of themselves and others and comply with Safety advisory signs.
- All employees be instructed and made aware of all relevant Site Safety procedures, take reasonable care for their own Safety and that of other persons who may be affected by their acts.
- Electric leads shall be rated at 10amps, be suitably tested, and tagged as safe. Leads should be checked for damage prior to use.
- Work areas to be kept clean and clear.
- All power tools to be tested and tagged.
- Complete Take 5's, JSAs and SWMS (as appropriate) prior to commencing work.
- All extension and stepladders to be of good working order complete with safety shoes. The safe working height on a pair of stepladders is 1.8 metres.
- Scaffolds shall be in a fully serviceable condition and shall be erected by a licensed scaffolder where applicable.
- All gas cylinders, oxy and acetylene weld kits to be supplied with trolley, fire extinguisher & flash back arrestors. *Where bottles cannot be used in trolley, they are to be chained to prevent them from falling over.* Adequate fire protection must be used to protect areas where a fire risk exists during welding, grinding, and cutting. Welding screens and Danger signs must be used when electric welding is in progress.
- Open excavations to be barricaded, covered, or backfilled at the completion of shift.
- Lifting equipment to be of adequate size and rating to perform the duty required.
- Employees to be shown first aid and emergency evacuation locations.
- Report any potential risk areas of work, where there are no apparent safety procedures.
- Forklifts to be regularly maintained and in serviceable condition.
- Report all accidents and incidents immediately.

Appendix D - NHVR Chain Of Responsibility



May 2017

Chain of Responsibility

Schedulers

About the chain of responsibility (CoR)

Our road laws generally address the actions of drivers and operators, but breaches of these laws are often caused by other parties in the transport supply chain.

The aim of CoR for a heavy vehicle is to make sure everyone in the supply chain actively prevents breaches of the Heavy Vehicle National Law (HVNL). The CoR law also extends to preventing or reducing potential harm or loss (risks) to yourself and others. Managing (controlling) these risks ensures that you always recognise and carefully consider all potential dangers and satisfactorily reduce or avoid them before they occur.

Who has a responsibility?

Under CoR laws, if you undertake specified functions that exercise, or have the capability of exercising, control or influence over any transport task, you are part of the chain of responsibility and have an obligation to ensure compliance with the HVNL.

What if I have multiple transport tasks?

Everyone in the supply chain has a responsibility to ensure the safety of their transport tasks related to the vehicle. If you carry out *more than one task* in the supply chain, this responsibility will extend to *all* of the tasks that you carry out. You may therefore be classified by *multiple roles* in the transport supply chain under the HVNL.

Your responsibility as a scheduler

As a 'party' in the supply chain, with influence over transport activity, a scheduler has an ongoing responsibility to prevent breaches of speed and fatigue laws under the HVNL. Although schedulers should be aware of mass, dimension and loading issues, they do not have specific HVNL obligations.

As a scheduler, you also have an ongoing responsibility to prevent or reduce potential harm or loss (risks) to yourself and others, and to ensure that you don't ask, require or direct activities you know will breach the law.

Am I carrying out a scheduler's transport tasks?

Under the HVNL, you are classified as a scheduler if you plan the transport of any goods or passengers or schedule the work and rest times of a driver.

A scheduler may also include such persons also known as a planner, roster clerk, programmer, etc. You can use the *CoR checklist* to confirm whether you are classified as an operator for road transport using a heavy vehicle under the HVNL.

Your key responsibilities as a scheduler

Some key responsibilities may include ensuring that:

- journeys and routes are suitably planned with consideration of potential traffic issues and other unexpected delays
- drivers' activities, including work and rest times, are accurately recorded
- regular scheduling reviews are carried out
- there is appropriate consultation with operators, managers, contractors and drivers concerning rosters, schedules and routes
- all necessary scheduling, journey and route information is accessible
- your delivery requirements do not require or encourage drivers to
 - exceed the speed limits
 - exceed regulated driving hours
 - fail to meet the minimum rest requirements
 - drive while impaired by fatigue.





What are the possible penalties for a breach?





As a scheduler, you could be held legally liable for breaches of the HVNL even though you have no direct role in driving or operating a heavy vehicle. If your actions, inactions or demands cause or contribute to an offence, you can be held legally accountable.

Penalties and sanctions can range from formal warnings to court imposed fines and penalties relating to the commercial benefit derived from offences.

Heavy vehicle safety. It's your business.

Appendix E - Potential Pinch Points on Ulan-Wollar Road

Pinch Points	Drivers Awareness
<p>Railway crossings on Ulan-Wollar Road near Wilpinjong entrance Road</p> 	<ul style="list-style-type: none"> • Trains frequently use these crossings, • Boom gates are activated when train approaches • Speeds to be reduced when approaching crossings.
<p>Railway crossing on Ulan-Wollar Road</p> 	<ul style="list-style-type: none"> • Trains frequently use these crossings, • Boom gates are activated when train approaches • Speeds to be reduced when approaching crossings.
<p>Ulan-Wollar Road – Mine Blasting</p> 	<ul style="list-style-type: none"> • Wilpinjong mine may at times close the road due to onsite blasting. • Road signs are established, and drivers to adhere to traffic controllers at times when blasting occurs
<p>Ulan-Wollar Road, narrow bridge</p> 	<ul style="list-style-type: none"> • Road narrowing in this area • Caution in this section of road, width of road reduces for 5.6 kilometers

Pinch Points	Drivers Awareness
<p>Ulan-Wollar Road, road narrowing Wollar and Wilpenjong mine</p> 	<ul style="list-style-type: none"> • Road narrowing in this area • Caution in this section of road, width of road reduces for 5.6 kilometers
<p>Wollar School Zone on Barigan Street</p> 	<ul style="list-style-type: none"> • Speed signs have been covered up. • Even though this school is inoperable speed zones should adhere to at 40km in this zone • Speed zone of 50km is sign posted for the length Barigan Street
<p>Maitland Street to Wollar Road</p> 	<ul style="list-style-type: none"> • Caution traffic may turn out of Barnett street which is on the bend near the Wollar General store • Speed is still 50km
<p>Wollar Road over Wollar Creek</p> 	<ul style="list-style-type: none"> • Bridge narrowing in this location, speed zone is still 50Kms • Truck drivers will need to ensure they stay within their lane. • Give way to oncoming Vehicles where necessary. • Potential blind corner for oncoming traffic.

Appendix F – NHVR – OVERSIZE OVER MASS PERMIT



Permit number

480049V1

Oversize and/or Overmass (OSOM) Mass or Dimension Exemption Permit

Heavy Vehicle National Law

This Permit is issued under the provisions of Section 122 of the Heavy Vehicle National Law for the operation of a Class 1 vehicle (as defined in this Permit) subject to the conditions set out in this Permit and any attachments.

Permit details

This Permit is issued to

A1 EARTHWORX MINING & CIVIL PTY LTD

Address

176 WILBERTREE RD
MENA, NSW 2850

Vehicle configuration and description

Prime mover towing OS/OM/OSOM load
Prime Mover, Dolly and Low Loader

Permit type

Oversize and Overmass (OSOM)

Permit period

Start date

01-Jun-2021

End date

23-May-2024

Period or fixed trips

Period Permit

Vehicle details

Prime mover

Registration	State of Registration	VIN	GVM (t)	GTM (t)
AIT909	NSW	6F500000DA450340	26.5t	n/a

Trailer Registration Numbers

Trailer/s must be registered

GCM must not exceed manufacturer's specifications

Loaded axle mass and spacings

Axle group	Axle group mass	Axle #	No. Tyres	Minimum distance from previous axle	Tyre size	Steerable	Minimum ground contact width	Load sharing
Prime mover 1-2 axle								
Steer	6t	1	2	n/a	295mm	Yes	2.4m	No
Drive	18.5t	1	4	5.17m	279mm	No	2.4m	Yes
		2	4	1.32m	279mm	No	2.4m	Yes
Lowloader dolly 2 axle								
Dolly	18t	1	4	3.47m	279mm	No	2.48m	Yes
		2	4	1.23m	279mm	No	2.48m	Yes
Lowloader 4 axle spread								
Lowloader Front	17.5t	1	4	7.1m	279mm	No	3.42m	Yes
		2	4	1.2m	279mm	No	3.42m	Yes
Lowloader Rear	17.5t	1	4	2.4m	279mm	No	3.42m	Yes
		2	4	1.2m	279mm	No	3.42m	Yes

Unladen dimensions

Unladen width (metres)

2.5m

Unladen length (metres)

25.27m

Unladen height (metres)

3.4m

Tare mass (tonnes)

29.54t

Laden dimensions

Width (metres)

3.7m

Length (metres)

25.27m

Height (metres)

5m

Total mass (tonnes)

70.54t

Forward projection (metres)

n/a

Rear overhang (metres)

n/a

Load type

Indivisible

Description of load

Various Mobile Plant - 627K Scraper - 815 Compactor - 20T Excavators

Authorised Routes

Turn by turn description

480049r1v1 - Single Route

Start: Approved OSOM Network, Castlereagh Hwy, Mudgee NSW
Short St, Mudgee
Douro St, Mudgee
Short St, Mudgee
Ulan Rd, [Mudgee - Ulan]
Ulan-Wollar Rd, [Ulan - Wollar]
Barigan St, Wollar
Maitland St, Wollar
Barigan Rd, Wollar
End: Barigan Rd, Wollar NSW (Approx. 0.50km from Wollar Rd)
Laden return via reversal of route

Road conditions

Mid-Western Regional Council

(1) LEDD01 - Heavy Vehicle Movement - Assessing routes for potential disruptions and damage including advanced notification

- (1) Before the heavy vehicle is driven along the approved route, the driver and operator must be satisfied that the vehicle can be driven along it without contravening subsection 2, 3 or 4
- (2) The driver and operator must be satisfied that there is no impediment to the requested movement by ensuring that relevant affected parties such as residence or industry are notified in writing of the movement no less than 24 hours prior to the movement schedule.
- (3) The heavy vehicle must not be driven along a route if to do so would be likely to cause;
 - (a) disruption to telecommunication, electricity, rail, gas, water or sewage services (relevant services) or
 - (b) damage to road side furniture, roads (including a bridge), structure, rail crossing or tree (relevant property).
- (4) Subsection (3) does not apply if the entity responsible for the relevant services or relevant property has given permission for the vehicle to travel along the route, and the vehicle is driven in accordance with the permission.

(2) RI10 - Heavy vehicle movement - Report of Damage

In the event that the permitted heavy vehicle damages assets or infrastructure, contact must be made with Mid-Western Regional Council of Works Department via 0263782858 with receipt of the advised damage from the road manager.

A written statement of the damage must be recorded and provided in writing to the road manager prior to repairs of the damaged infrastructure or asset.

Regulator

(1) GO03 -

You may be required under another law to obtain consent or approval from a Third Party entity.

These approvals must be carried and produced on request by an authorised officer. In this section Third Party entity usually include the following -

- (a) police especially with respect to the movement of vehicles which exceed dimension

<p>requirements due to the potential risks to other road users and possible need for police assistance to control traffic</p> <ul style="list-style-type: none">(b) rail infrastructure managers the movement of oversize/overmass heavy vehicles across level crossings or restricted access vehicles near rail infrastructure may create risks that need to be managed(c) utilities restricted access vehicles may have adverse effects on utilities infrastructure with over height vehicles and telecommunications/power lines being a common concern(d) private road owners allowing public access toll roads, ports, airports, hospitals and private estates are potential examples where those road owners, who may not be road managers for the purpose of the HVNL, also need to grant consent to the use of restricted access vehicles(e) forestry agencies roads owned by governmental agencies can possess different characteristics that may pose risks not found on typical roads and if the government agency is not a road manager for the purpose of the HVNL may require special consideration to manage risks arising from the use of restricted access vehicles on these roads. <p>(2) LEMS1 -</p> <p>Should a Road Manager not indicate or express a minimum requirement of Pilots or Escorts within the permitted roads/areas/routes, the corresponding requirement shall be applied in accordance with the Multi-State Class 1 Load Carrying Vehicles Dimension Exemption Notice including the associated schedule/s and amendment notices.</p> <p>Should a permitted dimension be in excess of the dimensions indicated within the Multi-State Class 1 Load Carrying Vehicles Dimension Exemption Notice including the associated schedule/s and amendment notices, the maximum Pilot and Escort vehicle requirements shall be applied.</p> <p>(3) LEMS2 - Conditions of Access - Multi-State Class 1 Load Carrying Vehicle Mass and/or Dimension Exemption Notice</p> <p>All conditions of access, including but not limited to pilot/escort requirements and areas/routes of access as per the Multi-State Class 1 Load Carrying Vehicle Mass and/or Dimension Exemption Notice including any amendments and associated schedules of operation for the eligible class 1 vehicle combination.</p>

Travel conditions

N/A

Vehicle conditions

<p>Regulator</p> <ul style="list-style-type: none">(1) LE14 - A class 1 heavy vehicle operating under this permit must comply with the conditions stated within Divisions 1, 2 and 5 of Schedule 8 of the Heavy Vehicle National (Mass, Dimension and Loading) Regulation, unless otherwise expressly exempted by a stated condition in this permit.(2) LEOL - Other Laws and Legislation <p>Nothing within this permit exempts the driver or operator of the permitted heavy vehicle from complying with legislation regulating the use of heavy vehicle. This includes but is not limited to conditions applied within the vehicles registration, compliance with sign posted restrictions, traffic law or compliance with lawful directions of authorised officer.</p>
--



Permit number

480049V1

The driver of the heavy vehicle who is driving a vehicle that is subject to a permit issued under the HVNL must keep a copy of the permit for the exemption in the driver's possession.

The driver or operator of a heavy vehicle being used on a road that is subject to a permit issued under the HVNL must not contravene a condition of the permit.

The driver or operator must comply with the provisions of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation unless anything contrary is applied within this permit.

It is an offence to operate a vehicle at a mass limit greater than indicated by an official traffic sign.

Declaration

Signed:



NHVR Delegate

Dated: 01-Jun-2021

Associated documents

N/A

Disclaimer:

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NHVR accepts no liability for the information provided within the authorised route as part of this exemption/authorisation. The operator must ensure prior to travel that the roads/areas/networks listed in the authorised route are still current and accessible as the approved network is subject to change at any given time.

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END OF DOCUMENT

Appendix G – Council Consultation

From: [Julie Robertson](#)
To: [Duncan Upton](#)
Subject: RE: Wollar Solar Farm - Stage 2 Haulage plan
Date: Tuesday, 13 July 2021 12:25:56 PM

Thanks Duncan. Our operations team has confirmed the amendments are acceptable. Kind regards,
Julie

From: Duncan Upton <duncan.upton@bjceaustalia.com>
Sent: Monday, 12 July 2021 4:06 PM
To: Julie Robertson <Julie.Robertson@midwestern.nsw.gov.au>
Subject: RE: Wollar Solar Farm - Stage 2 Haulage plan

Hi Julie,

Apologies for the miscommunication, but the pre-shift meeting is only for Wollar Solar Farm contractors and will occur on-site at the Wollar Solar Farm.

The mines have not requested daily briefings.

The mines have already been informed of expected truck schedules for Stage 2 of the project. The mines will receive prior notice of oversize vehicles as per the TMP.

I have changed the wording to better reflect this intention.

Can you please provide acceptance of the Haulage Plan?

Kind Regards,
Duncan

From: Julie Robertson <Julie.Robertson@midwestern.nsw.gov.au>
Sent: Monday, 12 July 2021 11:04 AM
To: Duncan Upton <duncan.upton@bjceaustalia.com>

Subject: RE: Wollar Solar Farm - Stage 2 Haulage

planHi Duncan,

I have received feedback from Council's Operations team in relation to the proposed Stage 2 haulage plan.

Overall, the plans provided is considered acceptable subject to the following:

1. All works are undertaken in accordance with the conditions of Development Consent, and if there is any inconsistency between the haulage plan and the conditions of consent, the conditions of consent prevail.
2. Delivery impact on others – page 12, Section 7 of the report outlines the potential impacts on the Mines which operate in the local vicinity of the project. Based on previous experience, it is unlikely that A1 Earthworx will attend pre-shift briefing at the mine site at 6.45am each day. It is therefore recommended that this requirement is reviewed and amended to include as a minimum, that prior to the pre-shift briefings, A1 Earthworx must provide written notification to the mines of the daily work activities and truck movements. This will allow the relevant information to be captured and included in the Mines pre-shift briefs should A1 Earthworx not be able to attend briefings at the mine site each day.

If you have any questions in relation to the above, please let me

know. Kind regards,

Julie

From: Duncan Upton <duncan.upton@bjceaustalia.com>

Sent: Friday, 9 July 2021 3:44 PM

To: Julie Robertson <Julie.Robertson@midwestern.nsw.gov.au>

Subject: RE: Wollar Solar Farm - Stage 2 Haulage plan

Hi Julie,

I tried calling and left a message.

Can you please confirm acceptance of the Haulage plan?

Cheers,
Duncan

From: Duncan Upton

Sent: Thursday, 1 July 2021 5:29 PM

To: Julie Robertson <Julie.Robertson@midwestern.nsw.gov.au>

Subject: Wollar Solar Farm - Stage 2 Haulage plan

Hi Julie,

Please see attached Haulage plan for Wollar Solar Farm stage 2 northern access road.

This has already been submitted to DPIE as per our requirement in the Traffic Management Plan.

We will be using the approved haulage routes. The contractor is local and plant will be coming from Mudgee. The local quarry in Ulan will be utilised for material.

Do you agree to the haulage plan? We are planning to start haulage in approximately 2 weeks.

Cheers,

Duncan



Beijing Jingneng Clean Energy (Australia)

Suite 3, Level 21, 1 York Street, Sydney NSW 2000 Australia

Phone: 02 8066 6032

Mobile: 0499 770 768

Email: Duncan.Upton@bjceaustalia.com

www.bjceaustalia.com

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