Traffic Management Plan

White Rock Solar Farm

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**Contract Number**: TC 10411  
**Project Number**: TC 10411  
**Document No.**: TC-10411-TMP  
**Date**: 29 February 2016
### REVISION DESCRIPTION & DOCUMENT APPROVAL

<table>
<thead>
<tr>
<th>Rev</th>
<th>Document Title</th>
<th>Page/s</th>
<th>Author</th>
<th>Description</th>
<th>Date</th>
<th>Initials</th>
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<td>Traffic Management Plan</td>
<td>16</td>
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<td>19/02/16</td>
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<td>Traffic Management Plan</td>
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<td>Preliminary Issue for EIS</td>
<td>29/02/2016</td>
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- Quality & Compliance Manager (QC)
- Document Controller (DC)
- Project Manager (PM)
- Gold Wind
- Site Copy

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# Table of Contents

1. **Purpose and Scope**
2. **Project Site Representatives**
   2.1 **Contact Details**
3. **Area of Work**
4. **TRAFFic MOVEMENT PLAN**
5. **Emergency**
6. **Approvals**
7. **Notifications**
   7.1 Roads and Maritime Services, Glen Innes Severn Council
   7.2 Police and Emergency Services
   7.3 Public
8. **Construction Site Speed Zones**
9. **Risk Assessment and Management**
10. **SITE and laydown areas**
   10.1 Construction and Lay down Areas
   10.2 Vehicle Parking
   10.3 Project Activities – Mobile Plant and Equipment
   10.4 Towing of Equipment onsite
   10.5 Inspection and Review Process for Site
11. **Safety**
   11.1 Pedestrian Management
   11.2 Safe Driving Requirements
   11.3 Heavy Plant and Equipment Requirements
   11.4 Incident Management
12. **Environmental**
13. **Traffic Control Devices**
14. **Variations**
15. **Standards and References**
**Appendix A**
**Appendix B** – TRANSPORT CODE OF CONDUCT

Figure 1 ................................................................................................................................................ 6
Figure 2 ................................................................................................................................................ 7
Figure 3 ................................................................................................................................................ 8
1 PURPOSE AND SCOPE

This Traffic Management Plan (TMP) sets out requirements for the management of traffic around the White Rock Solar Farm (WRSF) project during construction and operation in order to optimise safe vehicle movement and transportation of people, equipment and materials.

This plan is based on the requirements as set in Australian Standard 1742.3-2002 and will be used to provide authorisation of all actions in relation to traffic management. This document and subsequent alterations will be made available to the client for the purposes of reviewing and auditing.

The aim of this Traffic Management Plan is to notify Goldwind, UGL project staff, subcontractors, site personnel and the local public of changes to traffic conditions and to guard against operations which may pose a hazard to traffic.

This Traffic Management Plan will be used to consult with relevant road authorities to establish traffic and transport arrangements for the Project, with the primary intention to ensure a safe interface between construction vehicles and other road users during the Project, particularly for the following activities:

- Construction of the White Rock Solar Farm
- Transporting UGL staff and Subcontractors to site.
- Transporting all equipment, plant and materials required for the Project to and from the site
- Entry to and exit from the Gwydir Highway
- Usage of access tracks established for WRWF construction activities
2 PROJECT SITE REPRESENTATIVES

2.1 Contact Details

Table 1: Site Contact details

<table>
<thead>
<tr>
<th>Entity</th>
<th>Contact Name</th>
<th>Contact Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UGL Engineering</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Construction Manager</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Project Engineer / Supervisor</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Project Engineer- Electrical</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Project Safety Officer</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td><strong>WRSF Pty Ltd</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>TBA</td>
<td>TBA</td>
</tr>
<tr>
<td>Project Representative</td>
<td>TBA</td>
<td>TBA</td>
</tr>
<tr>
<td><strong>Authorities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glen Innes Severn Council</td>
<td>General Enquires</td>
<td>(02) 6730 2300</td>
</tr>
<tr>
<td>Department of Planning and Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads and Maritime Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Police –</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td>000</td>
<td></td>
</tr>
</tbody>
</table>

Additional emergency contact details are included in Emergency Response and will be displayed in crib rooms and the site office.

3 AREA OF WORK

The project is located at LOT 30 on Gwydir highway, Matheson which is located approximately 22 km west of Glen Innes, NSW. It is also with the White Rock Wind Farm (WRWF) project that is being constructed during 2016 and 2017.

The following figure shows the transport routes to WRWF project. The northern access route from Glen Innes to Site Entry Point 1 will be used for the White Rock Solar Farm.
Traffic Layout Diagrams for all vehicle movements from Gwydir Highway to site.
### 4 TRAFFIC MOVEMENT PLAN

The traffic movements to the site to construct the Project are currently anticipated to be as per the following table:

<table>
<thead>
<tr>
<th>Item</th>
<th>No.</th>
<th>Duration</th>
<th>Average per day</th>
<th>Timing during build</th>
<th>Vehicle</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV Modules</td>
<td>110</td>
<td>3 weeks</td>
<td>7</td>
<td>Mid</td>
<td>15.4m articulated</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting Frame</td>
<td>70</td>
<td>3 weeks</td>
<td>5</td>
<td>Early</td>
<td>15.4m articulated</td>
<td></td>
</tr>
<tr>
<td>Cabling</td>
<td>20</td>
<td>2 weeks</td>
<td>2</td>
<td>Mid</td>
<td>15.4m articulated</td>
<td></td>
</tr>
<tr>
<td>Inverter Substations</td>
<td>9</td>
<td>1 week</td>
<td>2</td>
<td>Late</td>
<td>15.4m articulated</td>
<td></td>
</tr>
<tr>
<td>Access Tracks</td>
<td>113</td>
<td>3 weeks</td>
<td>7</td>
<td>Start &amp; Mid Build</td>
<td>10m tipper trucks</td>
<td></td>
</tr>
<tr>
<td>Dust suppression</td>
<td>30</td>
<td>As required</td>
<td>2</td>
<td>As required</td>
<td>8.8m service vehicle (water tanker)</td>
<td>Main dust creating activities would be access track construction and</td>
</tr>
</tbody>
</table>
## TRAFFIC MANAGEMENT PLAN

**White Rock Solar Farm**  
**Document No TC-10411-TMP Rev: 0**  
**Date: 29-02-16**

<table>
<thead>
<tr>
<th>Item</th>
<th>No.</th>
<th>Duration</th>
<th>Average per day</th>
<th>Timing during build</th>
<th>Vehicle</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation excavation and construction</td>
<td>10</td>
<td>1 week</td>
<td>2</td>
<td>Mid</td>
<td>10m rigid</td>
<td>piling, water tankers to be used as required to suppress any dust</td>
</tr>
<tr>
<td>Small equipment, materials and supplies</td>
<td>30</td>
<td>As required</td>
<td>2</td>
<td>As required</td>
<td>Light vehicles</td>
<td>Provision for extras and small materials, compound supplies and cleaners</td>
</tr>
<tr>
<td>Compound Setup</td>
<td>8</td>
<td>2 days</td>
<td>4</td>
<td>Start &amp; End</td>
<td>10m rigid</td>
<td>Provision if additional compound is required or if WF compound is unable to be used</td>
</tr>
<tr>
<td>Workers</td>
<td>3600</td>
<td>3 months</td>
<td>40</td>
<td>Duration</td>
<td>Light vehicles</td>
<td>Bearing in mind that site staff will peak at times, up to a max of approx. 100 staff at peak times, less at other times. Staff will be encouraged to car pool where possible.</td>
</tr>
</tbody>
</table>

During construction, to reduce the number of traffics, carpooling shall be encouraged.

### 5 EMERGENCY

In the event of an emergency the Construction Manager will be immediately advised of the event and the UGL Emergency Response Plan will be actioned. Traffic controllers will be equipped with electronic communications (mobile phones) to contact and liaise with emergency services ensuring a prompt response with one dedicated person deployed at the site entrance to stop entry of any vehicle other than emergency services. The UGL Emergency Response Plan that is specific to the site and Project will be developed and agreed prior to UGL commencing works on the site.

### 6 APPROVALS

Approvals may need to be obtained from Roads and Maritime Services (RMS) or Glen Innes Severn Council (GISC) prior to the implementation of traffic controls. Notification for temporary closure of roads or expected traffic delays may need to be communicated to any affected resident or business.

Generally, it is expected approvals maybe required for the following activities:

- Delivery of oversized plant and equipment;
- Transporting of materials from gravel suppliers;
- Delivery of construction materials (using oversize vehicles) to laydown areas;
TRAFFIC MANAGEMENT PLAN
White Rock Solar Farm
Document No TC-10411-TMP Rev: 0 Date: 29-02-16

• Implementation of traffic management schemes, if needed, on public road; and

7 NOTIFICATIONS

7.1 Roads and Maritime Services, Glen Innes Severn Council

Roads and Maritime Services and Glen Innes Severn Council will be notified prior to WRSF construction commencing and prior to any oversize traffic movement in and out of the construction site. (i.e. Large Concrete Pours, Large Deliveries,) and appropriate signage posted.

7.2 Police and Emergency Services

Local Police, ambulance, firefighting and emergency services will be notified of commencement of WRSF construction and any program of oversize or over mass deliveries. This will occur when deliveries brought onto site pose a potential risk to the operation of emergency services, local traffic movement, or the local community.

7.3 Public

Correspondence to the relevant authorities (i.e. emergency services) will include expected dates of disruption to the local area required traffic measures and a contact number for further information.

8 CONSTRUCTION SITE SPEED ZONES

In areas not signposted, the following maximum speed limits will apply:

• 10km/h around UGL Lay down area / Workshop areas and Substation Construction Site;
• 100km/h on Gwydir Highway
• 50km/h along local residential roads leading into the site;
• If concerned about road conditions or work areas, contact your Supervisor and report the reason for concern;
• Drive safely to conditions;
• Speed Limit as per directions given or signposted at established traffic control points.

9 RISK ASSESSMENT AND MANAGEMENT

All foreseeable hazards and proposed controls are to be included in the Risk Assessment.

Having identified the hazards and risks associated the control measures which can be applied to reduce the risk so far as is reasonably practicable. Every effort must be made to eliminate the need to expose personnel to live traffic. Controls must be selected with priority given in accordance with the hierarchy of controls.

• Elimination - removing the Hazard or hazardous work practice from the Workplace. This is the most effective control measure;
• Substitution - substituting or replacing a Hazard or hazardous work practice with a less hazardous one;
• Isolation - isolating or separating the Hazard or hazardous work practice from people involved in the work or people in the general work areas from the Hazard. This can be done by installing screens or barriers; or marking hazardous areas;
• Engineering Control - if the Hazard cannot be eliminated, substituted or isolated, an engineering control is the next preferred measure. This may include modifications to tools or equipment, guarding of plant etc;
• **Administrative Control** - includes introducing work practices that reduce the Risk. This could include development of work instructions or the provision of training; and

• **Personal Protective Equipment** - should be considered as a last resort when other control measures are not practical or to increase protection.

Typical controls should be considered such as:

• **Elimination - No Plant/Pedestrian interface:**
  o Plan works to prevent interface between pedestrians, workers and plant.

• **Substitution - Relocate the place of works:**
  o Move the work area a safe distance from any plant
  o Perform part of the work at another site to minimise exposure (e.g. pre-assemble/maintain in workshop rather than performing the activity on site)

• **Isolation - Protect your workers from construction traffic:**
  o Create walk ways using solid barriers
  o Barricade work zones/areas where plant is operating
  o Create exclusion zones for plant such as excavators etc.

• **Engineering - Modify your work environment:**
  o Install proximity readers onto plant and personnel
  o Install height and swing restrictors to plant
  o All moving plant must be fitted with a flashing beacon, reverse alarm and where required a travel alarm.

• **Administration - Implementing procedures:**
  o Use spotters/safety observers to control traffic movement
  o Implementing safe working distances
  o Planning the direction that plant moves, so the visibility of operators is not restricted (where practicable plant should always move in a forward direction).
  o Implement speed limits on site for traffic on your worksite to 10 km/hr.
  o Site induction to advise workers of the potential hazards associated with the traffic environment Establish and maintain warning signs for traffic/pedestrians
  o Communication channels between clients, operators and traffic controllers (where applicable)
  o Hazard warning lights, signs, markers or flags

• **PPE - The last line of defence:**
  o High visibility clothing must be worn on all sites.

10 **SITE AND LAYDOWN AREAS**

Throughout the construction of the White Rock Solar Farm, the main offices and parking areas will be within the designated laydown areas. These areas will be controlled using internal traffic management plans, which include details of specific signs and there locations.

10.1 **Construction and Lay down Areas**

• It is currently intended for traffic access to and from lay down areas and construction areas shall be via Gwydir Highway as shown on Figure 1 and as detailed on Traffic Control Plans;

• Where practicable, a one-way traffic system shall be established within the lay down and construction area to minimise interaction issues;

10.2 **Vehicle Parking**
TRAFFIC MANAGEMENT PLAN
White Rock Solar Farm
Document No TC-10411-TMP Rev: 0 Date: 29-02-16

• Plenty of parking will be available within the new site.
• Parking area shall be adequately signed and fenced off.
• Vehicles entry and exit from the site shall be via Gwydir Highway.

10.3 Project Activities – Mobile Plant and Equipment

• Outcomes from this risk assessment shall be integrated within appropriate safe work procedures, JHA’s or other documentation;
• All heavy equipment operators shall be ticketed and have completed a verification of competency (VOC) for the particular machine they will be required to operate on site.

10.4 Towing of Equipment onsite

• A daily pre-start inspection is to be completed for this equipment. Trailers must be fitted with a secondary securing device (chain), which must be used at all times when being towed. A jockey wheel must also be attached and operational. To tow a trailer or lighting tower, a person must be assessed and deemed competent for this task and have the relevant tickets and VOC verified by the site supervisor.

10.5 Inspection and Review Process for Site

As a minimum UGL shall perform the following;

• Daily/Weekly Inspections and routine audits shall be conducted to ensure compliance to site requirements on Traffic Management;
• Any scope of work or planned works introducing traffic changes shall initiate a review of traffic control plans;

11 SAFETY

This Traffic Management Plan forms part of the overall UGL Project Safety and Environmental Management Plan. All works undertaken on this site will adhere to the Safety Management Plan.

In addition, all personnel and subcontractors shall adhere to these scopes below:

11.1 Pedestrian Management

Drivers and operators shall remain alert to the movement of pedestrians anywhere on site, particularly where personnel may be required to cross roads where there is no designated pedestrian walkway.

Pedestrians shall ensure that they:

• Adequately check for approaching vehicles prior to crossing roads;
• Have visual / verbal contact and acknowledgment with the vehicle operator before proceeding;
• Do not enter the ‘Blind Spot’ of operating mobile plant;

11.2 Safe Driving Requirements

All personnel inducted onsite shall adhere to the following at all time:
TRAFFIC MANAGEMENT PLAN
White Rock Solar Farm
Document No TC-10411-TMP Rev: 0 Date: 29-02-16

- Mobile Phones shall not be operated in moving vehicles, plant or equipment. Where mobile phones are to be used, the vehicle must be stationary and parked in a safe place
- All vehicles and mobile equipment shall be fitted with seat belts. All personnel shall wear and correctly fit and secure seatbelts provided
- A temporary re-fuelling area shall be provided in laydown area for a tanker to be parked with all required environmental control. Minimum requirements for re-fuelling are:
  1. The engine is to be shut down and ignition off, left in gear, park brake engaged,
  2. Preventative measures required for uncontrolled movement, no person is permitted in the cab while another person is fuelling,
  3. No equipment is to be left unattended while fuelling with separation from other traffic.
  4. Correct PPE is to be worn when fuelling. Hydrocarbon spill response kit available at re-fuelling areas

It is not intended to provide a gateman at Gwendir Highway, instead a competent traffic management personal shall be available at site at all the time to manage the heavy traffic. In addition, all unauthorised vehicles will not entry sites until an authorised personnel guides them to designated areas. At each entry point to laydown areas a sign will be posted with contact details of relevant contact personnel

11.3 Heavy Plant and Equipment Requirements

The following horn signals are to be given by the drivers of all heavy equipment when the vehicle is to be started and whenever it needs to be moved after it has stopped.

- START (Engine) One (1) blast on horn and 5 second pause
- FORWARD (Move) Two (2) blasts on horn and 5 second pause
- REVERSE (Move in) Three (3) blasts on horn and 5 second pause

11.4 Incident Management

- Where safe to do so, any vehicle involved in an incident on site shall not be moved until such time as the incident has been investigated and the Goldwind / UGL Project Manager or his/her nominee has issued permission for the vehicle to be moved;
- Incidents that occur at the project site, including any incident along access roads, must be reported to the Project Manager or his/her nominee as soon as possible;
- Driver of any vehicle involved in an accident shall be required to undertake a Drug and Alcohol test;

All persons and organisations undertaking these works have a duty of care to take all reasonable measures to prevent accident or injury in and outside the project area.

12 ENVIRONMENTAL

There are specific environmental concerns associated with construction traffic and these items are addressed in the project Construction Environmental Management Plan (CEMP).

These include standard construction hours and noise criteria.

However note, introduced substances i.e. fuels, oils, dust, noise, pumped water, domestic and trade waste must be managed at all stages of project to reduce impact on Safety and Environmental issues. The low speed limit onsite is intended to minimise the disturbance and creation of dust on the site. Watering of access tracks and dust prone areas onsite will be undertaken when necessary.

13 TRAFFIC CONTROL DEVICES
Traffic control devices meeting the requirements of AS 1742 shall be installed as indicated on the Traffic Control Diagrams.

- Advance Warning signs (refer AS/NZS 1742.3-2002);
- Regulatory and other signs / devices: Workmen Ahead, Diagrammatic Traffic Controller, Diagrammatic Man Dig, Prepare to Stop, Speed Advisory, etc.
- Provision of accredited (Stop/Go) traffic controllers.

At the completion of traffic management work, the removal of the traffic control devices shall be completed in a controlled manner to minimise the risk to workers and other motorists.

14 VARIATIONS

No departures from the provisions of the standards referred to in section 13 (of this document) have been made within this Traffic Management Plan. Should onsite variations be required, such variations will be recorded upon gaining relevant approvals.

15 STANDARDS AND REFERENCES

- AS 1742.1 - 2003 Manual of uniform traffic control devices - General introduction and index of signs
- AS 1742.3 -2009 Manual of uniform traffic control devices - Traffic Control for Works in Roads
- ISO 31000-2009 Risk management— Principles and Guidelines
## APPENDIX A RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Ref</th>
<th>Tasks Applicable</th>
<th>Hazard</th>
<th>Un-wanted Event</th>
<th>Existing Controls</th>
<th>Inherent / Current Risk</th>
<th>Additional Controls Required</th>
<th>Target Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Traffic Volume</td>
<td>Increased volume • Increase chances of accidents occurring</td>
<td>Collision</td>
<td>• Road Rules • Road width and line markings • Existing road signage</td>
<td>C2 L3 9M</td>
<td>Major traffic movement, major deliveries to be undertaken when flow is minimal. • Engage traffic control as required as per risk assessment • Maintain speed restrictions</td>
<td>Administration C2 L5 10M</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Vehicle Speeds</td>
<td>Speeding Vehicles • Failure to slow sufficiently</td>
<td>Collision</td>
<td>• Road Rules • Posted speed signs</td>
<td>C3 L3 13M</td>
<td>• Advance warning signs • Temporary speed restrictions in place and enforced • On site speed limit 10 km/h in work areas • Compliance with speed zones</td>
<td>Administration C3 L2 10M</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Inclement Weather</td>
<td>Decreased traffic control effectiveness • Vehicles getting stuck in mud</td>
<td>Collision</td>
<td>• Road surface • Vehicle tyre condition</td>
<td>C3 L3 9M</td>
<td>• Add warning lights to advance warning signs • Increase safe work / sign distances based on road conditions • Works to be postponed if bad weather persists and risk increases • Limit wheeled vehicles to access tracks, use tracked vehicles for other areas</td>
<td>Administration C3 L2 5L</td>
</tr>
<tr>
<td>Ref</td>
<td>Tasks Applicable</td>
<td>Hazard</td>
<td>Un-wanted Event</td>
<td>Existing Controls</td>
<td>Inherent / Current Risk</td>
<td>Additional Controls Required</td>
<td>Target Risk</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>--------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>------------------------</td>
<td>-----------------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| 4   | Site Vehicle movements to and from worksite | Traffic | Collision, conflict | • Road Rules  
• Road width and line markings  
• Existing road signage  
• Ensure that blind spots are identified and traffic controllers used if necessary. | C3 L3 | 13 M | Advance warning signs (trucks turning) to be in place  
• Site vehicles and machinery to ensure compliance with SMP and CMP for the project  
• Ensure mud tracking is prevented by placing effective controls. | Administration | C3 | L2 | 10 M |
| 5   | Site machinery operation | Striking/damaging existing buried services near roadway | Damage to services  
• Damage to equipment  
• Injury to personnel | Possible existing service markers | C3 L3 | 13 M | Current dial before you dig on site.  
• Non-destructive service locations.  
• Positively identify (hand expose, vacuum truck) services near excavations prior to mechanical excavation.  
• Ground Disturbance permits prior to excavations commencing. | Engineering controls | C3 | L2 | 10 M |
<table>
<thead>
<tr>
<th>Ref</th>
<th>Tasks Applicable</th>
<th>Hazard</th>
<th>Un-wanted Event</th>
<th>Existing Controls</th>
<th>Inherent / Current Risk</th>
<th>Additional Controls Required (Improve existing controls / implement new controls)</th>
<th>Control Hierarchy</th>
</tr>
</thead>
</table>
| 6   | Transport of oversized machinery or equipment to site | Vehicle or obstacle conflict | • Striking overhead services  
• Exceeding load limit on bridge or roadway  
• Striking fixed object example - sign or traffic light | • Road rules  
• Oversize vehicle permits | C4  
L3  
18 H | • Check delivery plan prior to arrival on site  
• Delivery of machinery to be off loaded on site in suitable location.  
• Safe Lifting plan or methodology agreed  
• Ensure subcontractor has oversize vehicle permit  
• Use reputable subcontractor  
• Check for bridge load limits surrounding site  
• Ensure services have appropriate cover or protect with road plates | Administration  
C4  
L2  
14 M |
| 7   | Emergency Services | emergency incident | • Emergency vehicle delayed by site road works | • Traffic controller  
• Pilot vehicles | C3  
L3  
13 M | • All emergency vehicles must be given priority through worksite at all times and shall be guided by the competent traffic management personal.  
• Instruction for emergency services shall be provided at site entrance. | Administration  
C4  
L2  
5 L |
### 5x5 Matrix

<table>
<thead>
<tr>
<th>LIKELIHOOD</th>
<th>CONSEQUENCE</th>
<th>C1-Minor</th>
<th>C2-Moderate</th>
<th>C3-Serious</th>
<th>C4-Major</th>
<th>C5-Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>L5-Almost Certain</td>
<td>Medium</td>
<td>11</td>
<td>High</td>
<td>Extreme</td>
<td>Extreme</td>
<td>20</td>
</tr>
<tr>
<td>L4-Likely</td>
<td>Low</td>
<td>7</td>
<td>Medium</td>
<td>High</td>
<td>Extreme</td>
<td>17</td>
</tr>
<tr>
<td>L3-Possible</td>
<td>Low</td>
<td>4</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>13</td>
</tr>
<tr>
<td>L2-Unlikely</td>
<td>Low</td>
<td>2</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>10</td>
</tr>
<tr>
<td>L1-Rare</td>
<td>Low</td>
<td>1</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>8</td>
</tr>
</tbody>
</table>

### Risk Matrix

RISK MATRIX based on the AS/NZS ISO 31000 and UGL contract risk evaluation requirements. Refer to Hazard Identification and Risk Management process.

**Damage & other forms of loss**

Damage and other forms of loss include theft, fire, and damage to property to be recorded in accordance with the incident reporting requirements. All damage over $10,000 is to be reported as a significant incident (C3-Serious or greater).

### Type of Potential Event (Incidents)

<table>
<thead>
<tr>
<th>CONSEQUENCE</th>
<th>Type of Event</th>
<th>Impact on Environment &amp; Community</th>
<th>Impact on Damage &amp; Other Forms of Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5-Severe</td>
<td>Fatality or significant permanent disability. Life threatening event</td>
<td>Highly significant irreversible impact, reportable to regulators, potential company officer prosecution. Loss of community confidence.</td>
<td>Damage or other property damage greater than $10,000. Reported as significant event (UGL)</td>
</tr>
<tr>
<td>C4-Major</td>
<td>Reported as LT1 (lost days duration 4 days or more, potential for permanent disability), Potential life threatening event, Potential for OHS prosecution</td>
<td>Highly significant reversible impact, reportable to regulators, potential regulatory action. Significant community impact.</td>
<td>Damage or other property damage greater than $10,000. Reported as significant event (UGL)</td>
</tr>
<tr>
<td>C3-Serious</td>
<td>Injury reported Lost Time Injury (LTI) for 1-3 days; Injury as defined for MTI with restricted duties, Injury with potential for Lost Time Injury</td>
<td>Significant impact, reportable to regulator. On-going community impact. Reported as significant event (UGL)</td>
<td>Between $1000 to $10,000 loss</td>
</tr>
<tr>
<td>C2-Moderate</td>
<td>Injury reported as Medical Treatment Injury (MTI) with no restricted duties; Technical breach/infringement of OHS Regulation</td>
<td>Minor impact requiring immediate containment and control isolated community impact.</td>
<td>Less than $1000 loss</td>
</tr>
<tr>
<td>C1-Minor</td>
<td>Injury reported as First Aid Case (FAC), minor illness</td>
<td>Negligible impact or temporary inconvenience.</td>
<td></td>
</tr>
</tbody>
</table>

### Likelihood - Probability

<table>
<thead>
<tr>
<th>LIKELIHOOD</th>
<th>Frequency of an Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>L5-Almost Certain</td>
<td>Common or repeating occurrence, most likely</td>
</tr>
<tr>
<td>L4-Likely</td>
<td>Known to occur, or “it has happened”</td>
</tr>
<tr>
<td>L3-Possible</td>
<td>Could occur</td>
</tr>
<tr>
<td>L2-Unlikely</td>
<td>Not likely to occur/remote</td>
</tr>
<tr>
<td>L1-Rare</td>
<td>Practically impossible/rare occurrence</td>
</tr>
</tbody>
</table>

### Management Response

<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Actions to be taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25</td>
<td>Extreme</td>
</tr>
<tr>
<td>16-19</td>
<td>High</td>
</tr>
<tr>
<td>9-15</td>
<td>Medium</td>
</tr>
<tr>
<td>1-8</td>
<td>Low</td>
</tr>
</tbody>
</table>

Stop - Further planning and treatment investigation required, including business HSSE executive. Final methodology & risk to be accepted by Group President. Closely monitor progress & compliance.

Further planning and treatment investigation required. Detailed Job Hazard Analysis (if similar) documented with person or work crew undertaking task understand the requirements & Implement controls. Risk acceptance by business CEO.

Supervisor to ensure a documented Job Hazard Analysis (JHA or similar) is prepared, understood and implemented prior to starting work. Risk acceptance by Project Manager and notify 1st line manager.
APPENDIX B – TRANSPORT CODE OF CONDUCT

A.1 Transport Code of Conduct

A Transport Code of Conduct will be applied to all traffic and transport construction activities associated with the WRSF Project, with particular emphasis placed on the transport of oversize/overmass vehicles during the construction phase. This draft will form the basis for the Transport Code of Conduct to be finalised prior to construction. The final Code of Conduct will be reviewed and endorsed by the Project Manager prior to implementation.

A.1.1 Haulage Routes and timing of transport

All large vehicles associated with the Project will follow the designated haulage route and main roads near the Project area to minimise impact to local roadways and road users. A map of the primary haulage routes highlighting critical locations will be attached to the Final Transport Code of Conduct. Any School Zones and school bus routes corresponding to the transport routes will be marked on the route maps. Timing of transport will be scheduled to minimise disruption to local traffic or result in safety risks.

A.1.2 Behavioural Requirements

The operators of all vehicles associated with the Project would maintain a high level of conduct and respect for other road users. All operators will undergo an induction prior to undertaking any transport to site and regular toolbox meetings will be held maintain awareness of required controls. Details of the traffic and access training and induction will focus on:

- objectives of the TMP;
- performance goals;
- mitigation measures required to be implemented;
- traffic and access monitoring and reporting requirements; and
- incident investigation and response.

Training is to be provided prior to start-up of any traffic and access related management tasks and updated if task, equipment or procedures are expected to, or have changed. The following requirements would be exercised at all times:

- obey all the laws and regulations;
- not drive whilst under the influence of alcohol, drugs, nor any medication which may affect their ability to drive;
- be medically fit to drive at all times and must inform site co-ordinators if they have any medical condition which may affect their ability to drive;
- drive in a considerate manner at all times and respect the rights of others to use and share the road space;
• report all vehicle defects to their employer. Serious defects must be corrected immediately or an alternative vehicle supplied;

• report any vehicle accident resulting in injury/or damage to property must be reported to the police;

• report any near misses;

• only drive in the construction hours when conducting Project works (unless permission to conduct Project works has been provided);

• securely fasten and cover loads, as appropriate; and

• keep their vehicle clean and in good mechanical condition to reduce the environmental impact.

The transport contractor is to develop and implement

• safety initiatives for haulage through residential areas and/or school zones; and

• a maintenance program for the heavy transport vehicles that is consistent with these safety requirements.

A.1.3 Safety Initiatives for haulage through residential areas and/or school zones

Safety initiatives for haulage through residential areas and/or school zones will developed in consultation with RMS, Glen Innes Severn Council and other stakeholders and be incorporated in the final Transport Code of Conduct.

A.1.4 Maintenance Requirements

The operators of all vehicles associated with the Project would maintain a high level of maintenance. The following requirements would be exercised at all times:

• ensure their vehicle complies with relevant State legislation in relation to roadworthiness and modifications;

• undergo regular vehicle checks and maintenance; and

• ensure their vehicles have correctly fitted mufflers to minimise noise disturbance.

A.1.5 Speed Limits

All vehicles associated with the Project are required to travel within the posted speed limits on public roads. In situations where drivers visibility and traffic safety on public roads is affected by weather related conditions such as heavy rainfall or fog, construction vehicles should reduce their speed limit until visibility and traffic safety has improved. Appropriate speed limits (less than 40 km/h) on site should be implemented, providing for a safe workplace. Monitoring systems will be implemented to ensure speed limits are complied with at the Project site.
A.1.6  Complaint resolution and disciplinary procedure

All traffic related complaints will be managed in accordance with the WRSF Complaints Management System described in the Project Stakeholder and Community Engagement Plan. Complaints will be investigated and a report prepared on the circumstances of the complaints, risks arising and any non-compliance with project procedures. Failure to comply with any procedures for safe transport may result in dismissal of specific operator(s) from the project.

A.1.7  Community consultation for peak haulage periods

WRSF community consultation in relation to traffic and access will include on-going consultation with relevant stakeholders including, local landholders, emergency services, business owners, school bus companies in relation to haulage including:

- procedures to consult with local land owners and school bus routes and timetables;
- procedures to inform vehicle drivers and business owners in Glen Innes of the traffic routes to be used by heavy vehicles associated with the Project (range of media, radio, newspapers, newsletters, website);
- operators to provide feedback on any risks or issues arising for the transport;
- construction traffic routes and any potential impacts; and
- provision of a dedicated telephone contacts list to enable any issues or concerns to be rapidly identified and addressed.

Specific stakeholders and contact details will be identified for traffic and access consultation purposes.

Attachment A - Transport Code of Conduct Primary Haulage Routes

Map(s) of primary haulage routes highlighting critical locations are to be added on finalisation of logistics contract and confirmation of port of origin for turbine components.