TransGrid

Construction Traffic and Access Management Plan

SILVERTON WIND FARM CONNECTION WORKS

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ngh environmental

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TABLES

ACRONYMS AND ABBREVIATIONS

AS	Australian Standard
SWDPL	Silverton Wind Farm Developments Pty Ltd
CEMP	Construction Environmental Management Plan
CoA	Minister's Conditions of Approval
DPI	(NSW) Department of Planning and Infrastructure
EA	Environmental Assessment
EMR	Environmental Management Representative
EMS	Environmental Management System
EPA	Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979*
EPL	Environmental Protection Licence
EWMS	Environmental Work Method Statements
EWP	Elevated Working Platform
NSW	New South Wales
OEH	Office of Environment and Heritage, formerly DECCW
PESCP	Progressive Erosion and Sediment Control Plan
Project, the	Silverton Wind Farm Connection Works
RAV	Restricted Access Vehicle
RMS	Roads and Maritime Services
RTA	Roads and Transport Authority, now RMW
SoC	Statement of Commitments
SVT	Silverton Wind Farm Transmission Substation
TCP	Traffic Control Plan
TAMP	Traffic Management Plan

1 INTRODUCTION

1.1 CONTEXT

The Traffic and Access Management Plan (TAMP) forms part of Construction Environmental Management Plan (CEMP) for Silverton Wind Farm Connection Works (the project).

This TAMP has been prepared to address the requirements of the mitigation and management measures listed in the Silverton Wind Farm Environmental Assessment (EA), the Conditions of Approval (CoA) from the Planning Assessment Condition of NSW, and all applicable legislation, during the construction of the Project.

This plan includes

- details of the delivery of over-size high voltage equipment, i.e the HV transformer required for the new substation. This includes final access locations, driver code of conduct, haulage routes, RMS permits, and Council permits, consultation with RMS and BHCC.
- Details of delivery of the poles to site including transport routes, access points from public roads to the transmission line, and driver code of conduct.

1.2 BACKGROUND

The project was approved on 24th May 2009 under Part 3 A of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act). Project Approval was granted for the construction, operation and decommissioning of 282 wind turbines and associated infrastructure (identified as stage 1) including a transmission line from the existing substation in Broken Hill to the wind farm site. Since the approval in 2009, three modifications have been lodged and granted. The most recent (modification 3) has reduced the total number of turbines approved for construction to 172 and includes minor realignment of the transmission line and provision for the transmission line to be constructed separately to the wind farm itself.

TransGrid will construct;

1. A substation at the wind farm site referred as Silverton Wind Farm Transmission Substation (SVT).
2. the transmission line between the Silverton Wind Farm and the Broken Hill substations, and
3. An extension to the existing TransGrid Broken Hill Substation.

This TAMP describes the traffic and associated environmental management measures TransGrid will implement during the construction work.

1.3 ENVIRONMENTAL SYSTEMS OVERVIEW

The overall Environmental Management System (EMS) for the Project is described in the Construction Environmental Management Strategy (CEMS) Section 1.2. This TAMP is part of the Environmental Management Framework for the Project. Mitigation and management measures identified in this TAMP

will be incorporated into site or activity specific Environmental Work Statements (EWMS). Traffic Control Plans (TCPs) are to be prepared prior to works being undertaken. TCPs will implement specific controls that have been identified in this TAMP, the CEMP, and relevant guidelines. TCPs will specify the description, position, quantity applicability, behaviour, and methodology of actions on the road network (on and off-site), including speed limit alterations, road signage, junction upgrades, behaviour of drivers, control mechanisms, reporting, etc.

Used together, these plans form management guides that clearly identify required environmental management actions for reference by TransGrid personnel and contractors.

2 PURPOSE AND OBJECTIVES

2.1 PURPOSE

The purpose of this plan is to describe how traffic, transport and access impacts are minimised and within the scope permitted by the planning approval during construction of the Project.

2.2 OBJECTIVES

The key objective of the TAMP is to ensure that traffic, transport and access impacts are minimised and activities undertaken within the scope permitted by the planning approval, including;

- Complying with the CoA's and SoC's
- Minimising traffic delays;
- Maintaining satisfactory property access;
- Minimising disturbance to the receiving environment;
- Ensuring the safety of employees, contractors, the general public

2.3 TARGETS

The following targets have been established for the management of traffic and transport impacts during the Project:

- full compliance with the relevant legislative requirements
- full compliance with relevant requirements of the EA, SoC's and CoA
- full compliance with the requirements of relevant road authorities (local councils and RMS)
- Providing a safe environment for all road users
- protection to workers, visitors, agents of the principal and general public from:
  - traffic hazards
  - the potential congestion and disruption of construction

3 ENVIRONMENTAL REQUIREMENTS

3.1 CONDITIONS OF APPROVAL

Condition of Approval	Section Reference
27. Prior to the commencement of construction, the Proponent must prepare a Traffic Management Plan for the **project, in consultation with RMS, DI Lands and Broken Hill City Council, and to the satisfaction of the** **Secretary. This plan must detail the measures that would be implemented to:**	This TMP
(a) minimise the traffic safety impacts of the project and disruption to local road users during the construction and decommissioning of the project, including: • **temporary traffic controls, including detours and signage;** • **notifying the local community about project-related traffic impacts;** • **responding to any emergency repair or maintenance requirements;** • **implementing a strategy for minimising the traffic impacts associated with the use of over dimensional vehicles;**	Section 7
(b) ensure the project does not disrupt the use of any travelling stock route on site;	Section 7
(c) comply with the traffic-related conditions in this approval; and	This TMP
(d) include a drivers code of conduct that addresses: • **travelling speeds;** • **procedures to ensure that drivers adhere to the designated heavy and over-dimensional vehicle routes;** • **procedures to ensure that drivers implement safe driving practices, particularly if using roads through Broken Hill or Silverton; and** • **monitor and report on the effectiveness of these measures and the code of conduct.**	Section 6 TMP

3.2 RELEVANT LEGISLATION AND GUIDELINES

3.2.1 Legislation

Legislation relevant to traffic management includes:

- *Roads Act 1993*
- *State Environmental Planning Policy (Infrastructure) 2007*
- *Road Transport (vehicle Registration) Regulation 2007*
- *Road Transport (Mass, Loading and Access) Regulation 2005*
- *Crown Lands Act 1989*
- *Western Lands Act 1901*

Relevant provisions of the above legislation are explained in the register of legal and other requirements are included in section 3 of the CEMP.

3.2.2 Guidelines and Standards

The main guidelines, specifications and policy documents relevant to this plan include:

- *NSW RTA Heavy Vehicle Mass Limits, July 2010*
- *RTA Vehicle Standards Information: Revision 4, November 2007*
- *RTA Operating Conditions: specific permits for oversize and overmass vehicles: version 2, August 2008*
- *Austroad's Guide to Traffic Management*
- *Austroad's Guide to Road Design*
- *Austroad's Guide to road safety*
- *Austroad's Guide to Traffic Engineering Practice, Part 2 – Roadway Capacity*
- *AS 1742: Manual of Uniform Traffic Control devices*
- *AS 1743: Road Signs – Specifications*
- *AS 2890: Parking facilities*
- *RMS Guide to Traffic Control at Worksites*
- *RMS Supplements for Australian Standards*
- *RMS Supplements for Guide to Road design*
- *RMS Supplements for Guide to Road Safety*

3.2.3 Consultation

The conditions of Approval require this plan is to be developed in consultation RMS, DI lands, Broken Hill City Council, and Newcastle City Council, and to the satisfaction of the Secretary.

A program of consultation will be initiated prior to construction commencing to ensure residents are fully aware of construction activities and the program for delivery to the site. The program will include the following:

- Press releases in the local newspapers;
- Specific newsletters and individual letter drops to neighbouring residences along the access route to the site;
- Provision of a website providing details of the status of works and contact details for any complaints or enquiries;
- Signposting of the access roads with appropriate heavy vehicle and construction warning signs in consultation with Broken Hill:
    - Specific warning signs located adjacent to the entrances to the site to warn existing road users of entering and exiting traffic;
    - Day warning notices for specific construction activities;

Provision of traffic control and warning signs will be provided where particular road safety issues have been identified.

4 CONSTRUCTION TRAFFIC ACTIVITIES

The construction phase of the Project will result in a short-term increase in the volume of traffic movements to the site including the delivery of infrastructure via restricted access vehicles (RAV). The construction phase will continue for a period of approximately 18 months, with most major components arriving between one and eight months from commencement of construction.

4.1 PROPOSED DELIVERY ROUTES

The following represents the most suitable and economic path from the likely delivery port to the project area at the time of writing. Final access routes will be selected and approved during further consultation with the Broken Hill Council and RMS, including where there are variations proposed beyond the information below. The final access route will also depend upon the points of origin for infrastructure components, including the delivery ports, the selection of suitable suppliers, and the sources of local materials for construction. The delivery route for the transformer which is the key oversized delivery for the project will be developed in consultation with relevant agencies.

4.1.1 Points of Origin

The following presents the most likely option for import locations for transmission line infrastructure within Australia:

- Poles and insulators will be manufactured in China and will be delivered, stockpiled and then delivered as required.
- Concrete and aggregate will be sourced from Broken Hill local quarries
- Employees, services, and small deliveries are most likely to be sourced from New South Wales, Victoria and South Australia.
- Transformer to arrive at Newcastle and delivered through NSW road network to Silverton.

4.1.2 Proposed Route

Delivery to the site will be through Silverton Road, Barrier Highway and small unsealed roads that allow access on-site. There is some flexibility with the possibility of using a short bypass (Magazine Way) that is currently under assessment, this can be used as an alternative to the route through Broken Hill. Speed limits of between 90 and 110km/h occur along both Silverton Road (90km/h, reduced on approach) and the Barrier Highway (110km/h, reduced on approach to township). For the route for heavy and over-dimensional vehicles refer to Appendix A. A road dilapidation report will be prepared with reference to the road dilapidation report written by Catcon for the Wind Farm site.

The route for the Transformer will begin in Newcastle and travel via (Newcastle City Council roads) George Street, Selwyn Street, (RMS administered roads) Industrial Drive, Pacific Hwy, new England Hwy, John Renshaw Dr, Hunter Expressway, New England Highway, Golden Hwy, Mitchell Hwy, Barrier Hwy, and (Broken Hill City Council roads) Menindee Road, Crystal Street, Silver City Street, Gaffney Street, Creedon Street, Rakow Street, O'Farrell Street, Morgan Street, Silverton Road, as per the attached documentation.

The poles are being transported from Adelaide to the Broken Hill Substation via Barrier Highway which turns into Rakow Street, right onto Creedon St, right on Ryan St which turns into Kanandah Rd, right onto Pinnacles Road, and right into TransGrid Substation property. The routes for the poles to each site are

provided in the attached Pole Delivery Plan. The access points to the line are existing access points close to where the transmission line crosses the roads on the Barrier Highway, Silverton Road, and Daydream mine road.

4.1.3 Site delivery

A lay down area will be established at the Broken Hill substation and Silverton substation (once able to securely store equipment) for the delivery and storage of the HV equipment, line hardware and foundation bolts. The poles will be delivered via road train and stockpiled at Broken Hill Substation, and delivered to the structure location when the access is suitable. The transformer will be delivered directly to site and lifted on to the foundation or adjacent to. The building will also be delivered directly to site.

4.2 NATURE OF DELIVERY VEHICLES

4.2.1 Traffic Loads

Approximate dimensions and loads for the major components for delivery are detailed in Table 4 1.

Table 4-1 Dimensions and loads for construction deliveries

Component	Height (m)	Width (m)	Length (m)	Load (tonnes)	On-road weight (tonnes)
Main transformer	4.5	4.5	8	120	160
Transmission line poles to Broken Hill Substation.	3.2	2.8	40	28	40
Transmission line poles To site	3.2	2.8	20	14	28
Combined Secondary Systems Building & Auxiliary Systems Building (SSB &ASB)	~3.2	3.6	12.4	-	-

Likely vehicle types for the delivery of transmission and substation include low loaders, semi-trailers, concrete agitators, dump trucks, RAVs, cranes and regular trucks and light vehicles (i.e. vans or cars).

Table 4-2 provides an estimate of the number of one-way vehicle movements during the 18-month construction period, for the delivery of all required components for the construction of the transmission line, including all materials and staff movements during construction.

The typical number of vehicles traveling to and from site daily is estimated to be in the order of eight light vehicles and one truck. Plant such as cranes and EWP(Elevated Working Platforms trucks) would remain on-site and travel two and from the transmission line easement on an occasional basis. Three concrete trucks per day would be required during pouring of pole foundations. The maximum number of vehicles are expected during the concrete pouring for the foundations.

Table 4-2 Estimated vehicle movements during construction

Activity	Low loader	Semi-trailer	Truck	Concrete agitator	RAV	EWP	Crane	Light vehicle
Site set-up and de-mobilisation: delivery and removal of construction equipment including a portacabin, skip, generator, and water tank.	12	2	2		-	-	4	-
Pole and cable installation or	8	30	40	80	-	300	10	-
Overhead line: delivery of conductors, poles, and plant equipment including excavator	8	18	30	-	6	300	10	200
Substation: delivery of concrete, switch room, O&M and workshops, transformer and electrical equipment	12	16	200	60	2	10	10	200
Other: employee vehicle movements, waste collection, consumables, and miscellaneous	-	-	140	-	-	-		4000
TOTAL	**40**	**66**	**412**	**140**	**8**	**310**		**4400**

4.2.2 Timing

Traffic volumes will be spread over the 12 to 18-month construction period, although most traffic movements will occur during the six-month to twelve-month period for deliveries.

The morning peak on a daily basis at the project area would include delivery via approximately 6 light vehicles, three RAVs, and five heavy vehicles between 6.00 am and 7.00 am.

The delivery of large substation equipment is limited by restrictions places on the movements of RAVs through urban areas during designated peak hours.

The delivery of the majority of equipment during the times of 6.00 am and 7.00 am will also assist in avoiding school drop-off and pick-up hours at Broken Hill.

Transformer delivery will be as per the RMS permit and TMP.

5 ROAD NETWORK IMPACTS

5.1 PUBLIC ROAD NETWORK

The major issues for traffic and transport for the Project is the movement of large and oversized vehicles, and additional volumes of traffic during construction. The following is considered relevant to the assessment of potential impacts as a result of the traffic which would be generated by the Project:

- Potential impacts to general road safety will include additional vehicle movements, large vehicle movements, congestion with other road users, and the identification of areas which may require special consideration for upgrades. Measures will be incorporated to ensure the safety of all road users for the movement of large and/or heavy infrastructure.
- The timing of vehicle movements could potentially impact upon sensitive land uses along the travel route. Vehicle movements should be coordinated to reduce the impact of construction traffic on the regional and local road network.
- Requirements including the movement of RAVs during selected hours will assist in reducing the impact of construction traffic on the regional road network.
- The movements of construction staff to and from the project area on a daily basis.
- The construction phase for the Project will have an increase on the volume of traffic on load roads. Movements of construction staff to and from the site on a daily basis will also temporarily increase the traffic volumes on local roads. The implementation of a community information and awareness program about the construction and timing will assist to manage local and regional road impacts.

In addition; TransGrid will notify the Community Consultative Committee (CCC) at the earliest convenience in relation to any movement of large or oversized vehicles that may potentially have an impact on the local road network. Any movements or delivery requiring RMS or Council permits will also be communicated to the CCC. The CCC have been notified at the recent meeting on the 19/9/17 of the Transformer delivery.

Table 5-1 sections of road impacted by the Project

Location	Issue
Silverton Road, Barrier Highway	The high speed of highway traffic and debris being deposited on the road.

In addition, there are a number of on-site watercourses which may require the construction of new culverts with inlet and outlet protection. Exiting forwards may need to be upgraded for construction due to vertical geometry suitability for delivery vehicles. All works at watercourses will be subject to sedimentation and erosion control measures.

5.2 ON-SITE ROADS

The proposed access for line construction teams will be from Broken Hill to the easement access point closest to where works are taking place. Vehicles will traverse the easement once they have exited the public road. Where this is not possible vehicles will travel to the easement via public road and where

access is required along established property tracks access will be negotiated with the land owners. Silverton sub-station access will be from Silverton Road with site access as per Appendix B. Broken Hill Substation will be accessed via Pinnacles Road (Appendix B). The new access tracks will provide for access to the transmission line within the project area, and are proposed to be 3m wide during construction and reduced to 2.4 m wide following completion of construction. Generally, the proposed access tracks are in open vegetation. The design of these tracks has also considered sight lines from access points, access parameters including grade and alignment restrictions for RAVs, consultation with land owners, site topography, and the requirements of sensitive areas including flora, fauna, and heritage. Any new accesses to Silverton Road or other roads will need prior concurrence from RMS (section 138(2) of Roads Act 1993).

It is likely that a number of water course crossings will be required. These will be installed where necessary according to erosion control measures and relevant guidelines.

5.3 ROAD DILAPIDATION REPORT

A Road Dilapidation Report will be produced prior to construction upon determining the haulage route(s) for construction vehicles associated with the Project. This will be produced in reference to the road dilapidation report produced for the windfarm site by Catcon. The Report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the Project. The report shall be submitted to the relevant road authority for review prior to the commencement of haulage.

6 TRAFFIC MANAGEMENT

6.1 TRAFFIC CONTROL PLANS

Specific to the management of traffic, Traffic Control Plans (TCPs) will be prepared prior to works which could impact on public roads and traffic. The TCPs will implement specific controls that have been identified in this TAMP, the CEMP and any associated plans. The TCPs will specify the description, position, quantity, applicability, behaviour and the methodology of actions on the road network (onsite and off), for example speed limit alterations, road signage, junction upgrades, behaviour of drivers, control mechanisms, reporting etc. As a minimum, the following TCPs would be required:

- As part of any application for a Road Occupancy Licence from RMS or council for work within the classified road reserve or within 100 metres of traffic signals.
- As part of any works that would impact on a public road.
- A driver's code of conduct including:
  - Travelling speeds
  - Procedures to ensure drivers adhere to the designated heavy and over-dimensional vehicle routes;
  - Procedures to ensure that drivers implement safe driving practices, particularly if using roads through Broken Hill or Silverton
  - Driver code of conduct for the Transformer delivery

Traffic control plans (TCP) will be developed by personnel duly qualified and certified by training in accordance with the RMS Traffic Control at worksite manual in consultation with the RMS and local councils required.

TCPs will be forwarded to RMS and BHCC as requested.

6.2 SPEED LIMITS

Following consultation with RMS and council traffic committees it is understood at this stage no changes to speed limits are proposed along any public roads. Speed limits will be considered in the preparation of TCPs.

Where speed limits are proposed to be changed, the process to undertake this will be identified in the TCP. An aspect of this process will be consultation with the relevant road authorities, safety authorities and it will be minimum requirement to ensure any changes are will communicated within the community and with all road users.

6.3 ROAD OCCUPANCY LICENCE

TransGrid will ensure that when required, Road Occupancy Licences are obtained from both local council and from RMS prior to any work commencing on relevant roads.

7 ENVIRONMENTAL CONTROL MEASURES

A range of environmental requirements and control measures are identified in the EA and CoA. Specific measures and requirements to address traffic and transport impacts are outlined in Table 7-1 .

Table 7-1 Traffic and transport management and mitigation measures

Measure / Requirement	Resources needed	When to implement	Responsibility	Reference
GENERAL				
Training will be provided to all Project personnel, including relevant sub-contractors on traffic and transport requirements from this plan through inductions, toolboxes and targeted training.	Induction package Toolbox training material Targeted training material	Pre-construction Construction Operation	TransGrid	CEMP chapter 5
Final access locations and haulage routes and driver code of conduct will be determined prior to these movements, in consultation with RMS and BHCC.		Construction	TransGrid	TAMP TCPs
TCPs will be forwarded to RMS and BHCC as requested.		Pre-construction Construction	TransGrid	TAMP TCPs
DESIGN				
The detailed design, construction, and remediation of access track routes in proximity to environmentally and heritage sensitive areas with direct involvement and guidance from relevant specialists.		Design Construction	TransGrid	TAMP
The site access from public roads will be via entrances constructed as agreed by SWDPL, the property owners, and Broken Hill Council, to ensure safe negotiation by large vehicles access and minimise disruption to local traffic. A lockable gate will be installed at a point set back from the road at each entrance point.		Design	TransGrid	TAMP
PRE-CONSTRUCTION				
As part of the CEMP for the Project, the Proponent shall prepare and implement a Construction Traffic and Access Management Plan to manage construction traffic and access impacts of the Project. The Plan shall be developed in consultation with the relevant road authority (and the agreement of the Council must be gained for any proposed transportation of concrete, cement or aggregate from the Broken Hill LGA and Unincorporated LGA) and shall include, but not necessarily be limited to:		Pre-construction	TransGrid	TAMP Design Drawings Incident Response Plan

Measure / Requirement	Resources needed	When to implement	Responsibility	Reference
• Identification of construction traffic routes and construction traffic volumes (including heavy vehicle/spoil haulage/material haulage) on these routes; • Details of vehicle movements for construction sites and site compounds including parking, dedicated vehicle turning areas, and ingress and egress points; • Identification of construction impacts that could result in disruption of traffic, public transport, pedestrian and cycle access, property access, including details of oversize load movements; • Details of management measures to minimise traffic impacts, including temporary road work traffic control measures, onsite vehicle queuing and parking areas and management measures to minimise peak time congestion, and measures to ensure safe pedestrian and cycle access; • A response plan which sets out a proposed response to any traffic, construction, or other incident; • Mechanisms for the monitoring, review, and amendment of this Plan.				
The Proponent shall commission and independent, qualified person or team to undertake the following in consultation with the relevant road authority: a) Prior to the commencement of construction, review the proposed route and existing access provisions to the site to determine whether the route and existing provisions allow for safe access of construction and operational vehicles associated with the Project (including appropriate site distances and provisions for over-mass or over-dimensional transport and safety with other road users). Where improvements or changes to the proposed route are required, the Proponent shall implement these in consultation with the relevant road authority, prior to the commencement of construction and at the full expense of the proponent; b) Assess all roads proposed to be used for over-mass and/or over-dimensional transport (including bridges, culverts, and other road features) prior to the commencement of construction to determine whether the existing road condition can accommodate the proposed over-mass and/or over-dimensional haulage. Where improvements are required, the proponent shall implement these in consultation with the relevant road authority, prior to the commencement of construction and at the full expense of the proponent. Upon determining the haulage route(s) for construction vehicles associated with the Project, and prior to construction, undertake a Road Dilapidation Report. The Report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related		Pre-construction	TransGrid (shared with Wind Farm consortium)	TAMP TCPs

Measure / Requirement	Resources needed	When to implement	Responsibility	Reference
to the construction of the Project. The report shall be submitted to the relevant road authority for review prior to the commencement of haulage. Within three months of completion of construction, a subsequent report shall be prepared to assess any damage that may have resulted from the construction of the Project (including mechanisms to restore any damage) and submitted to relevant road authority for review. Measures undertaken to restore or reinstate roads affected by the Project shall be undertaken in accordance with the reasonable requirements of the relevant road authority (including timing requirements), and at the full expense of the Proponent.		Post-construction	TransGrid (shared with Wind Farm consortium)	
Measures will be incorporated to ensure the safety of all road users, including the use of traffic control personnel, pilots, and police escort during delivery of RAV with specific control arrangements for difficult or potentially unsafe manoeuvres on public roads. Signage, flashing lights, and temporary speed restrictions may also be used.	Police escort	Pre-construction Construction	TransGrid	TAMP TCPs
Measures will be incorporated to ensure that when temporary traffic controls, including detours and associated signage are in-place that; • The local community would be notified of project-related traffic impacts; • There is capability to respond to any emergency repair or maintenance requirements, and • strategy for minimising the traffic impacts associated with the use of over- dimensional vehicles is in place.		Pre-construction Construction	TransGrid	TAMP TCPs
Measres will be incorporated to ensure the project does not disrupt the use of any travelling stock route on site.		Pre-construction Construction	TransGrid	TAMP TCPs

Measure / Requirement	Resources needed	When to implement	Responsibility	Reference
The timing of the delivery of large equipment and materials will be restricted to mitigate local impacts, including: • RAV movements will be restricted to avoid passing schools during school drop-off and pick-up periods to avoid RAV movements conflicting with school bus operations (including schools at Broken Hill) • Local deliveries to the site will be during daylight hours to mitigate safety problems on local roads and to reduce disturbance for residents near the access roads		Pre-construction Construction	TransGrid	TAMP TCPs
A route will be established and maintained to the site so that heavy vehicles do not enter noise sensitive areas for access where practicable.		Pre-construction Construction	TransGrid	TAMP TCPs
On-site access will be restricted to defined tracks. Any new accesses to Silverton Road or other roads will need prior concurrence from RMS (section 138(2) of Roads Act 1993).		Pre-construction Construction	TransGrid	TAMP TCPs
A program of consultation will be initiated prior to construction commencing to ensure residents are fully aware of construction activities and the program for delivery to the site. The program will include the following: • Press releases in the local newspapers; • Specific newsletters and individual letter drops to neighbouring residences along the access route to the site; • Provision of a website providing details of the status of works and contact details for any complaints or enquiries; • Signposting of the access roads with appropriate heavy vehicle and construction warning signs in consultation with Broken Hill: o Specific warning signs located adjacent to the entrances to the site to warn existing road users of entering and exiting traffic; o Day warning notices for specific construction activities; • Provision of traffic control and warning signs will be provided where particular road safety issues have been identified.		Pre-construction Construction	Bullet Points 1-3 AGL Bullet Points 4-5 TransGrid	TAMP
Ensure the project does not disrupt the use of any travelling stock route on site.		Pre-construction Construction	TransGrid	TCP's

Measure / Requirement	Resources needed	When to implement	Responsibility	Reference
CONSTRUCTION				
Barrier Highway - The roundabout at Galena Street gives access to Main Road 81 (to Silverton). The left turn from the Barrier Highway is of insufficient width to be negotiated by oversize vehicles in safety. Convoys of oversize vehicles would generate noise and traffic delays Road trains negotiating the left turn at O'Farrell Street (one street to the west) is available as an alternative route. Haulage contractors should consider this route in their planning Residents along the road train routes should be informed when convoys are expected via a public information program.		Construction	TransGrid	TCP's
Employ appropriate noise reduction strategies to ensure the recommendations of the NSW Environmental Noise Control Manual are met. Strategies may include the re-orientation machinery, rescheduling of noisy activities, installation of temporary noise barriers, improved vehicle noise control, reduced work times and the use of 'quiet work practices' (such as reducing or relocating idling machinery).		Construction	TransGrid	NVMP
Use appropriate and effective exhaust mufflers and compressor silencers on machinery.		Construction	TransGrid	NVMP
Respond to noise complaints in a timely manner.		Construction	TransGrid	NVMP
Care will be taken to avoid the acceleration of trucks and the use of truck engine breaks in close proximity to dwellings.		Construction	TransGrid	TAMP TCPs
Drivers will be informed of the approved route to access the site and the need to mitigate impacts through driver operation at certain locations.		Construction	TransGrid	TAMP TCPs
Communication will occur with the affected community in accordance with the provisions outlined previously.		Construction	TransGrid	TAMP
Construction traffic deliveries will be evenly dispersed as far as practical.		Construction	TransGrid	TAMP TCPs
Construction traffic will be restricted to daytime operating hours, subject to the caveats in the CEMP.		Construction	TransGrid	TAMP TCPs CEMP
An inspection and maintenance program for local road access will be established to ensure local road conditions are maintained in a safe state for heavy and RAV access.		Construction	TransGrid	TAMP

Measure / Requirement	Resources needed	When to implement	Responsibility	Reference
Road access/occupation permits will be obtained as upgrade works are required for the public road network.		Construction	TransGrid	TAMP
Establish procedures to ensure that soil is not carried onto the highway on the wheels of construction traffic.		Construction	Transgrid	TCPs
On-site speed restrictions will be implemented for the project area.		Construction	TransGrid	TAMP TCPs
Implementation of a proactive Erosions and Sediment Control Plan during the construction of new access roads, including the following: • Regular water spraying during construction to suppress dust; • At the conclusion of the construction phase, any tracks not required for subsequent operation will be restored and revegetated to the satisfaction of the landowner; • All works to watercourses will be subjected to sedimentation and erosion control measures; • The overhead line crossing of Barrier Highway and Silverton Road will be designed and constructed in accordance with applicable RMS and Council standards.		Construction	TransGrid	TAMP TCPs

8 COMPLIANCE MANAGEMENT

8.1 ROLES AND RESPONSIBILITIES

The project Team's organisation structure overall roles and responsibilities are outlined in Section 4.2 of the CEMP. Specific roles for this plan are listed below:

Works Delivery Project Manager

- Ensure resources are made available to enable works to comply with EMS and CEMP and other environmental management requirements.
- Ensure that all procedures are followed adequately.
- Ensure appropriate licences are held by waste contractors where necessary.
- Responsible for ensuring that all staff or contractors under their control are aware of environmental compliance issues and environmental controls listed in this CEMP.
- Oversee project implementation

QSE (Quality Safety Environment)

- Identifying where environmental measures are not meeting the targets and where improvements can be achieved;
- Project reporting for compliance with the CoAs describing the Project's environmental performance;
- Implementation and compliance with environmental permits and approvals – e.g. Fisheries Permit and S57 Approval;
- Monitoring compliance of works being carried out under the contract.

Works Delivery Site Construction Co-ordinator

- Responsible for the induction of staff and contractors, if required under the environmental approval.
- Responsible for all aspects of the worksite including the coordination and management of all staff and contractors.
- Ensure all works are carried out in accordance with the requirements set-out in this CEMP.
- Undertake daily site inspection during construction activities to ensure compliance with EMS and CEMP.
- Responsible for addressing corrective actions arising from Environmental Inspections.

ESR (TransGrid Environmental Site Representative)

- Preparing the environmental aspects of the site induction presentation.
- Ensuring that all staff are appropriately trained in the project's environmental requirements and responsibilities as set out in this EMS and CEMP.
- Reviewing and actioning environmental inspection and audit findings.
- Monitoring the environmental aspects of the work, particularly in relation to waste management, construction and access works, and soil management.

8.2 TRAINING

All employees, contractors and utility staff working on site will undergo site induction training relating to traffic and transport management issues. Targeted training in the form of toolbox talks or specific training in the form of toolbox talks or specific training will also be provided to personnel with a key role in traffic management. Further details regarding staff induction and training are outline in the CEMP.

8.3 MONITORING AND INSPECTION

An inspection and maintenance program for local road access will be established to ensure local road conditions are maintained in a safe state for heavy and RAV access. Inspections will be undertaken fortnightly. More frequent inspections will be required during periods of heavy rainfall. Where non-compliances/ environmental incidents occur TransGrid's standard Environmental Incident Response will be followed.

Requirements and responsibilities in relation to monitoring and inspections are documented in the CEMP.

8.4 AUDITING

Audits (both internal and external) will be undertaken to assess the effectiveness of environmental controls, compliance with this sub-plan and other relevant approvals, licenses and guidelines. Audit requirements are detailed in Section 8.3 of the CEMP.

8.5 REPORTING

A Road Dilapidation Report will be produced for the connection works prior to construction upon determining the haulage route(s) for construction vehicles associated with the Project. The report shall assess the current condition of the road(s) and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the Project. The report shall be submitted to the relevant road authority for review prior to commencement of haulage.

Within three months of completion of construction, a subsequent report shall be prepared to assess any damage that may have resulted from construction of the Project (including mechanisms to restore any damage) and submitted to relevant road authority for review.

Overall reporting requirements and responsibilities are documented in Section 8 of the CEMP. The Environmental manager is responsible for reporting requirements for the Project.

Any additional mitigation or management measures will be incorporated into chapter 7 of this plan as required.

9 REVIEW AND IMPROVEMENT

9.1 CONTINUOUS IMPROVEMENT

Continuous improvement of this plan will be achieved by the ongoing evaluation of environmental management performance against environmental, objectives and targets to identify opportunities for improvement, as detailed in Section 9 of the CEMP.

9.2 TAMP UPDATE AND AMENDEMENT

This TAMP, will need to be revised whenever the construction program, scope of work, or work methods change, whenever the work methods and control structures are found to be ineffective, or if so directed by the Principal. This will occur as needed and in accordance with the process outlined in Section 9 of the CEMP.

APPENDIX A HEAVY AND OVER-DIMENSIONAL VEHICLE ROUTES

OVERMASS/OVERSIZE PERMIT

This Class 1 permit is issued pursuant to section 122 of the *Heavy Vehicle National Law (NSW)* and exempts the vehicle described below from mass and dimension limits prescribed in Schedule 1 to the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation (NSW)* subject to the conditions set out in or attached to this permit.

Permit No:	MS 365869	Date of Issue:	22 NOV 2017	Time of Issue:	15:06

Fee:	$72.00	Receipt Number:	316359257

DATES OF TRAVEL - This permit is in force from

Start date:	22 NOV 2017	Finish date:	15 DEC 2017

ITEM TRANSPORTED or VEHICLE

This permit is valid for return trips on the permitted route listed when the vehicle is being used to carry / tow / operate as TRANSFORMER

VEHICLE REGISTERED OPERATOR

Name:	DAROMIN ENGINEERING PTY LTD

DIMENSION LIMITS AND PILOT / ESCORT REQUIREMENTS

Overall Length:	42.00	metres
Overall Width:	4.20	metres
Overall Height:	5.20	metres
Projection Forward of Steering Wheel:	n/a	metres
Rear Overhang From Centre of Rear (Axle) Group:	5.00	metres

You must contact Police for additional escort requirements	Y

DETAILS OF VEHICLES

Prime Unit

Plate:	CD34YF	State:	NSW	Type:	PM
Make:	VOLVO	GCM:	240000		
VIN/Chassis:	YV5RP90D8FD201407	GVM:	27500		

Trailing Units

Plate	State	VIN/Chassis	Type
K68208	NSW	6H9T23000V2AV5003	LLD
533QUP	QLD	6V9T25ABKC0074081	SPT
597QXT	QLD	6V9T25ABKE0074047	SPT

MASS AND ASSOCIATED DIMENSIONS

Overall gross axle weight not to exceed 230.00 tonnes.

Axle No	Number of Tyres	Distance to Next Axle (metres)	Overall Ground Contact Width of Axle (metres)	Tyre Size (mm)	Total Mass on Each Axle (tonnes)
1	2	*****	2.00	279	6.00
2	4	3.20	2.20	279	18.50
3	4	1.20	*****	279	*****
4	8	*****	4.20	190	31.00
5	8	1.20	*****	190	*****
6	8	*****	4.20	190	150.00
7	8	1.80	*****	190	*****
8	8	1.80	*****	190	*****
9	8	1.80	*****	190	*****
10	8	1.80	*****	190	*****
11	8	1.80	*****	190	*****
12	8	1.80	*****	190	*****
13	8	1.80	*****	190	*****
14	8	1.80	*****	190	*****
15	8	1.80	*****	190	*****

ROUTE DETAILS

This permit applies only when the vehicle is being used on roads along this route or in this area, for which RMS is the road manager under section 17 of the *Heavy Vehicle (Adoption of National Law) Act 2013 (NSW)*:

From:	TOMAGO	To:	SILVERTON

Via the following roads:

INDUSTRIAL DR (MR316)
PACIFIC HWY (HW10)
NEWCASTLE BYPASS (MR23)
NEWCASTLE RD / THOMAS ST / NEWCASTLE LINK RD (MR82)
HUNTER EXPRESSWAY (6011)
NEW ENGLAND HWY (HW9)
GOLDEN HWY (HW27)
NEWELL HWY (HW17)
MITCHELL HWY (HW7)
BARRIER HWY (HW8) - TRAVEL BETWEEN CREEDON ST AND MENINDEE RD AT BROKEN HILL IS NOT PERMITTED
SILVER CITY HWY (HW22)
BARRIER HWY (HW8)

SILVERTON RD
DAYDREAM MINE RD
.
ADDITIONAL CONDITIONS
* FOR ALL ROADS NOT MANAGED BY ROADS AND MARITIME SERVICES UNDER 122 OF THE HEAVY VEHICLE NATIONAL LAW, A PERMIT FROM RELEVANT ROAD MANAGERS MUST BE OBTAINED PRIOR TO TRAVEL.
DETAILS OF LOAL COUNCILS CAN BE FOUND AT - WWW.DLG.NSW.GOV.AU
THESE INCLUDE: GEORGE ST, SELWYN ST, THOMPSON ST, MENINDEE ST, CRYSTAL ST, GAFFNEY ST, CREEDON ST, RACKOW ST, O'FARRELL ST, MORGAN ST.
* ELECTRICAL CLEARANCE MUST BE CARRIED IN THE VEHICLE AT ALL TIMES WHEN OVERALL HEIGHT EXCEEDS 5.0 METRES.
* ALL ROAD NETWORK MANAGEMENT ARRANGEMENTS AS DETAILED IN THE OPERATOR'S TRANSPORT MANAGEMENT PLAN AS SUBMITTEED TO THE RMS MUST BE ADHERED TO.
* ALL RAIL INFRUSTRUCTURE MANAGEMENT (RIM) APPROVALS MUST BE OBTAINED AND CARRIED IN THE VEHICLE AT ALL TIMES DURING THE MOVEMENT.
* TOTAL GROSS MASS UNDER THIS PERMIT INCLUDES THE USE OF ONE (1) ADDITIONAL PRIME MOVER
* TOTAL COMBINATION LENGTH UNDER THIS PERMIT INCLUDES THE USE OF ONE (1) ADDITIONAL PRIME MOVER.
* THE TRAFFIC MANAGEMENT CENTRE (TMC) MUST BE CONTACT PRIOR TO THE COMMENCEMENT, AT THE CONCLUSION OF EACH STAGE OF THE MOVEMENT AND IN THE EVENT OF AN EMERGENCY OR UNPLANNED INCIDENT THAT IMPACTS THE ROAD NETWORK PH: 1800 679 782.
* UHF COMMUNICATION BETWEEN ALL VEHICLE MUST BE MAINTAINED, ANY BREAKDOWN OF COMMUNICATION WARRANTS THE LOAD TO CEASE UNTIL SUCH TIME AS FULL COMMUNICATION HAS BEEN RESTORED.
* A MINIMUM OF TWO (2) PILOT VEHICLES MUST ACCOMPANY THE COMBINATION AT ALL TIMES AND NSW POLICE MUST BE CONTACTED FOR ADDITIONAL ESCORT REQUIREMENTS.
* RMS REGIONAL OFFICE NOTIFICATION IS REQUIRED.

..... **END OF ROUTE DETAILS** .....

PERMIT CONDITIONS

This permit is issued in respect of roads in NSW specificed in this permit for which Roads and Maritime Services is the Road Manager. This permit does not authorise travel outside of NSW. The operator must comply with all of the conditions set out and all conditions referred to in this permit.
This permit is valid and in force up to and including the Finsh Date set out in the Permit Details unless cancelled or surrendered at an earlier time. This permit is not transferable.
A permit holder must comply witht the relevant Class 1 Load Carrying Vehicles Notice, Class 1 Agricultural Vehicles Notice, Class 1 Special Purpose Vehicles Notice, or any other relevant Notice, and the

”Additional Access Conditions for oversize and overmass heavy vehicles and loads” document (available at www.rms.nsw.gov.au).

.

* The consent of any relevant third parties who may be impacted by this heavy vehicle movement must be obtained, including but not limited to electricity utilities if the load exceeds 5 metres high measured from the ground, forestry agencies and rail infrastructure managers. A copy of any consent must be in the driver’s possession when travelling under this permit and produced when requested by an Authorised Officer or NSW Police. - Statement of Reason: Oversize and/or overmass vehicles and/or combinations may pose an increased risk to infrastructure due to dimensions and/or mass of the vehicle and/or combination.

* In addition to the pilot and escort requirements contained in Appendix 1 and 2 of the relevant Class 1 Notice, you must comply with the pilot and escort requirements listed in the ”Additional Access Conditions for oversize and overmass heavy vehicles and loads” document (available at www.rms.nsw.gov.au). - Statement of Reason: Pilots provide other road users with an advance warning at adequate sight distances to react and respond in a safe manner to the impact of encountering an oversize vehicle and/or combination.

* Where a condition listed in this permit requires contact with NSW Police for any additional pilot or escort requirements, the written advice received from NSW Police must be attached and carried with this permit. NSW Police Traffic and Highway Patrol Command can be contacted at trafficosom@police.nsw.gov.au or (02) 8882 1436.

A minimum of 5 working days are required for police notification letters and/or organisation of police resources.

If it is determined that Police Escort vehicles are not requried, then you must obtain and carry the written advice from NSW Police stating the pilot vehicle requirements that apply for this journey.

Failure to carry and produce the written advice on request may make you liable for prosecution and stop you from further travel until you can demonstrate compliance.

If you need to contact NSW Police regarding escort arrangements you must advice NSW Police of all the expected measurements when you first contact them. Before commencing the journey you must take all final measurements of the vehicle and load together and record them. This record must be signed by the operator, the person who took the measurements and the driver. The signed measured record must be produced to a police officer or Authorised Officer on request. - Statement of Reason: Escorts provide other road users with an advance warning at adequate sight distances to react and respond in a safe manner to the impact of encountering an oversize vehicle and/or combination. Due to the size of the vehicle and/or combination, traffic control will be required. Only NSW Police have traffic

directing powers in NSW.
* If the registration plate of a vehicle identified on this permit changes then you must notify Roads and Maritime Services Special Permits Unit prior to the expiry of the permit. - Statement of Reason: Provides the permit holder with flexibility to change number plates.
* If a nominated trailing unit listed on this pemrit becomes unusable, an equivalent axle configuration and capacity trailing unit that is currently registered and roadworthy may be substituted for the nominated trailing unit without the need to amend this permit. - Statement of Reason: Provides the permit holder with flexibility to substitute an equivalent vehicle if required.
* A special purpose vehicle or combination, agricultural vehicle or combination, or a load carrying vehicle or combinaiton that exceeds a dimension in the relevant Class 1 Special Purpose Vehicles Notice, Class 1 Agricultural Vehicles Notice or Class 1 Load Carrying Vehicles Notice or any other relevant Notice must travel in accordance with travel restrictions contained in Appendix 2 of the relevant Class 1 Notice and the ”Additional Access Conditions for oversize and overmass heavy vehicles and loads” document (available at www.rms.nsw.gov.au) - Statement of Reason: Travel outside of the listed travel times for oversize and/or vehicles and/or combinations poses a heightend road safety risk to other road users due to higher traffic volumes and exacerbates traffic congestion during these periods.
* The total mass of a combination to which this permit applies must not exceed the lowest of the following::
(a) The sum of the axle and axle group mass limits in Table 2; or
(b) the Gross Combination Mass (GCM) limit specified by the hauling unit manufacturer; or
(c) The sum of the manufacturer’s mass limits for the hauling unit (Gross Vehicle Mass (GVM)) and the trailer Aggregate Trailer Mass (ATM) it is towing; or
(d) the maixmum mass limit listed in this permit
- Statement of Reason: This condition is required to ensure that an overmass vehicle and/or combination does not exceed lesser of the maximum mass limits contained in the permits or the manufacturer’s rating.
* Please refer to the Heavy Vehicle National Law for additional statutory requirements that you must comply with. - Statement of Reason: N/A
* MASS AND DIMENSION LIMITS - ADDITIONAL INFORMATION
Page 1 DIMENSION LIMITS - These are the maximum dimensions and MEASURED DIMENSIONS MUST BE EQUAL TO OR LESS THAN THESE VALUES
Page 2 DIMENSIONS ASSOCIATED WITH MASS - Distance to Next Axle, Overall Ground Contact and Tyre Size - These are minimum values and MEASURED VALUES MUST BE EQUAL TO OR GREATER THAN THESE VALUES.
Page 2 TOTAL MASS ON EACH AXLE - These are the maximum values and

MEASURED MASS MUST BE EQUAL TO OR LESS THAN THESE VALUES.
Statement or Reasons: N/A.
THE TRAFFIC MANAGEMENT CENTRE (TMC) MUST BE CONTACTED PRIOR TO THE COMMENCEMENT AND AT THE CONCLUSION OF EACH STAGE OF THE MOVEMENT
PH: 1800 679 782
.
UHF COMMUNICATION BETWEEN ALL VEHICLES MUST BE MAINTAINED, ANY BREAKDOWN OF COMMUNICATION WARRANTS THE LOAD THE CEASE UNTIL SUCH TIME AS FULL COMMUNICATION HAS BEEN RESTORED.
.
AT LEAST 5 (FIVE) WORKING DAYS PRIOR TO TRAVEL, YOU MUST CONTACT THE FOLLOWING RMS;
- WESTERN REGION OPERATIONS - ROL.Western@rms.nsw.gov.au
- HUNTER REGION OPERATIONS - ROL.Hunter@rms.nsw.gov.au
.
A MINIMUM OF TWO (2) PILOT VEHICLES MUST ACCOMPANY THE COMBINATION AT ALL TIMES AND POLICE MUST BE CONTACTED FOR ADDITIONAL ESCORT REQUIREMENTS.
.
THE OVERSIZE COMBINATION MUST PULL OVER ON A REGULAR BASIS USING THE PULL OVER LOCATIONS IDENTIFIED IN THE TMP TO ALLOW END OF QUEUE TRAFFIC TO PASS
.
TRAVEL IS NOT PERMITTED IN WET WEATHER WHEREAS HEAVY VEHICLES TRAVELLING IN THE OPPOSING DIRECTION ARE REQUIRED TO PULL OVER ONTO SOFT SHOULDERS OR INTO DRAINAGE AREAS
.
TRAVEL IS NOT PERMITTED ON UNSEALED ROAD SHOULDERS THAT ARE WET, OR WHEN FIRE RISK IS CATAGORIZED AS CATASTROPHIC
.
NO TRAVEL THROUGH SCHOOL ZONES WHEN IN OPERATION
.
ALL THE CONDITIONS OF THE APPROVED TRANSPORT MANAGEMENT PLAN (TMP) MUST BE ADHERED TO.

..... **END OF CONDITIONS** .....

..... **END OF PERMIT** .....

Approval Permit - Class 1 Oversize/Over mass Permit

The City of Newcastle

Permit No: / CON0139

The City of Newcastle issued this permit under the provision of Division 3, Section 122 of the Heavy Vehicle National Law Act 2012 for the operation of a Class 1 vehicle to:

Name: Chad Gordon

Company: Daracon Group

Address: 20 Kullara Close Beresfield

Vehicle Details / Registration: Volvo CD34YF

Load Description: Transformer

Proposed Route (Council Roads): From M4 to George Street and Selwyn Street, Mayfield

Period From: 9 November 2017 To: 1 December 2017 No. of Trips: 1 Return Trip

and other information attached in the Application subject to:

Road Conditions:

- Vehicle operator is responsible in ensuring loaded vehicle can negotiate all intersections and traffic control devices on the nominated route. This includes all overhead infrastructures such as power lines.
- Any damage caused to the road infrastructure or associated road furniture (including signage) must be notified and costs of repair covered by the applicant.

Travel Conditions:

- Approval is granted for two vehicle movements with the vehicle / trailer unit described in the application.
- Vehicle operator must comply with all requirements set out in the RMS Operating Conditions for Oversize/Over mass vehicles, including escort vehicles.
- Obtain NSW Police authorisation for the travel route.
- Valid only for the hours of 10pm to 6am on local roads.
- Permitted Route: George Street and Selwyn Street

Vehicle Condition:

- Must comply with all NHVR and RMS requirements.

For further enquiries, please call Dipen Nathwani on 4974 2663.

Yours faithfully,

J Cardona

Jocelyn Cardona
Traffic and Transport Coordinator
Traffic and Transport

Date: 9/11/2017

BROKEN HILL
CITY COUNCIL

OVERSIZE/OVERMASS HEAVY VEHICLE/WIDE LOAD PERMIT

This Class 1 permit is issued pursuant to section 122 of the *Heavy Vehicle National Law (NSW)* and exempts the vehicle described below from mass and dimension limits prescribed in Schedule 1 to the Heavy Vehicle (Mass, Dimension and Loading) National Regulation (NSW) subject to the conditions set out on or attached.

OFFICE USE ONLY		
Trim Reference: D17/52835		
BHCC Permit No: BHCC0493		Admin Officer: PR
Cashier Reference: 511 - ($72 per permit application /additional fee $83 for Council Escort – Allocation No W3342.6001.201)		
Date: 9/11/2017	Receipt No: 602447	Officer: JP

APPLICATION DETAILS
This permit is valid for return trips on the permitted route listed when the vehicle is being used to carry/tow/operate as:
Company Name: DAROMIN ENGINEERING
Contact Person: CHAD GORDON
Address: 20 KULLARA CLOSE, BERESFIELD
Phone: 0409 334 934
Email: chadg@daracon.com.au
Dates of Travel: This permit is valid from:
Start Date: 10/11/2017 **End Date:** 10/12/2017
Description of Cargo: (What type of machinery/load is being transported): Transformer

VEHICLE DETAILS			
PRIME UNIT:		**ADDITIONAL PRIME UNIT:**	
Plate:	CD34YF	**Plate:**	
State:	NSW	**State:**	
Vin/Chassis:	YV5RP90D8FD201407	**Vin/Chassis:**	
Type:	PM	**Type:**	
If more than two prime units are required. Please complete a separate application form			
TRAILING UNITS:			
Plate:	K68208	533OUP	597OXT
State:	NSW	OLD	OLD
Vin/Chassis:	6H9T23000V2AV5003	6V9T25ABKC0074081	6V9T25ABKE0074047
Type:	LLD	LL	LL
DIMENSIONS:			
Overall Length:	42M		
Overall Width:	4.2M		
Overall Height:	5.2M		
Total Weight:	205.5 TONNE		

ESCORTS DETAILS

Should a vehicle be greater than 4.6m in height, the High Load Coordinator at Essential Energy should be contacted on 132391.

Do you require a Council Escort for this movement?	Yes ☐	Not required ☑
Has Essential Energy been contacted to lift power lines?	Yes ☐	Not required ☑
Essential Energy Permit Number:		

Due to road safety concerns raised by NSW Police a new road condition has been applied to all defined 'High Risk' movements that require police contact for escort requirements. A minimum of five (5) working days are required for police notification letters and/or organisation of police resources.

For further information please contact the NSW Police Traffic and Highway Patrol Command Office on 02 8882 1436 or trafficosom@police.nsw.gov.au

Have the police been contacted for additional escort requirement?	Yes ☑	Not required ☐

ROUTE DETAILS

This permit applies only when the movement requires access to local roads where Broken Hill City Council is the Road Manager under section 17 of the Heavy Vehicle (Adoption of National Law) Act 2013 (NSW).

Intrastate: ☑	**From:**	**Interstate** ☐	**To:**

Proposed route though Broken Hill:

Route 1 (Sydney to Adelaide)	Barrier Highway A32, Menindee Road, Crystal Street, Silver City Hwy, Gaffney Street, Creedon Street, Barrier Highway A32	☑
Route 2 (Sydney to Wentworth)	Barrier Highway A32, Menindee Road, Holten Drive, Eyre Street Comstock Street, Patton Street, Wentworth Road	☐
Route 3 (Sydney to Menindee)	Barrier Highway A32, Menindee Road	☐
Route 4 (Adelaide to Sydney)	Barrier Highway A32, Creedon Street, Gaffney Street, Silver City Hwy, Crystal Street, Menindee Road, Barrier Highway A32	☐
Route 5 (Adelaide to Mildura)	Barrier Highway A32, Creedon Street, Gaffney Street, Silver City Hwy, Crystal Street, Menindee Road, Holten Drive, Eyre Street, Comstock Street, Patton Street, Silver City Highway	☐
Other Proposed Route:	No Left turn at Brookfield Ave/Rakow Street Roundabout, Continue through to O'Farrell Street then turn left, Continue down and turn left on to Thomas Street, continue down to Brookfield Ave then turn right and continue on to route	☐

This permit is issued in respect of Council roads within Broken Hill specified in this permit for which Broken Hill City Council is the Road Manager. This permit does NOT authorise travel on any road not specified in this permit or on any road for which Broken Hill City Council is not the Road Manager. This permit does not authorise travel outside of New South Wales.

NOTE: In NSW the National Heavy Vehicle Regulator has delegated to each Road Manager the power to issue Class 1 and Class 3 access permits for the roads for which it is Road Manager. An operator must obtain a permit from each NSW Road Manager (in its capacity as a delegate of the National Heavy Vehicle Regulator) for travel on that Road Manager's roads.

PERMIT CONDITIONS

Permits approved by the Broken Hill City Council are only valid for a period of one month from the date of the permit approval.

Council requires that prior to each movement through Broken Hill, drivers contact Council's Assets Technical Officer, Paul Bezzina on 0400 902 824 or Council's Assistant Asset Planner Mr James Druitt on 0400 365 157, so that they are aware of your arrival to Broken Hill and can be present for the movement, if required. Should any damage be sustained to Council infrastructure during the planned movement, then your company will be responsible for repair or replacement costs. Please advise Council if there are any changes to your itinerary.

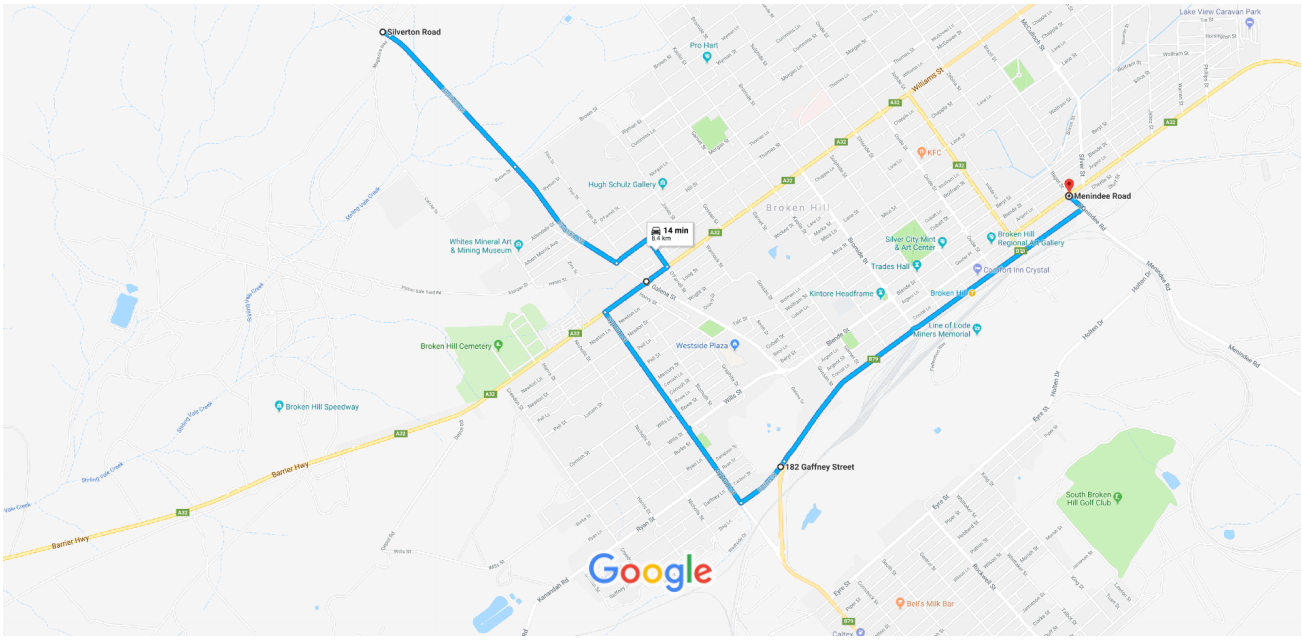
Permit Approved:

JAMES DRUITT
ASSET PLANNER TRANSPORT

Google Maps

Silverton Rd, Broken Hill NSW 2880 to Menindee Rd, Broken Hill NSW 2880

Drive 8.4 km, 14 min



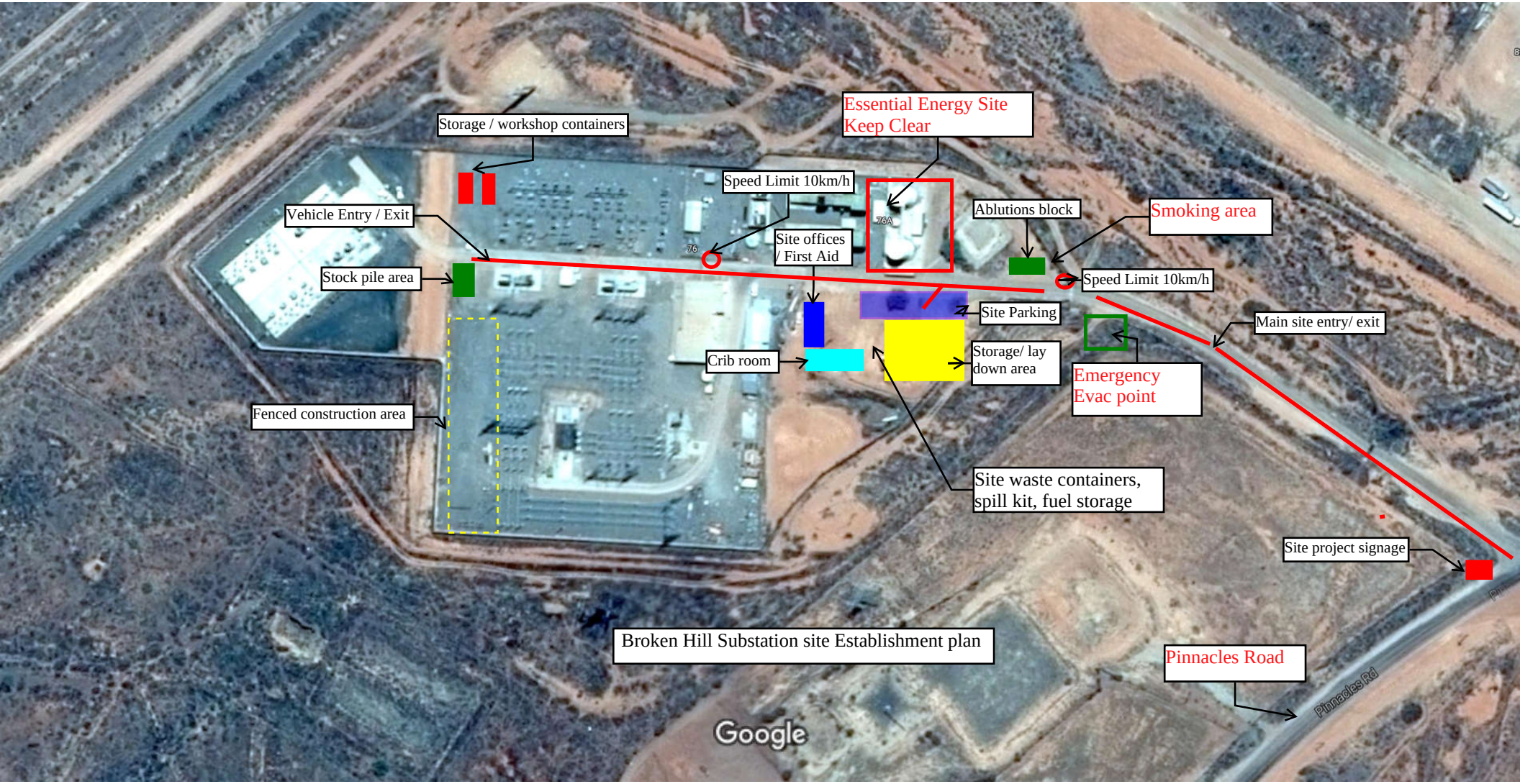
Map data ©2017 Google 200 m

via Gypsum St — 14 min

14 min without traffic — 8.4 km

APPENDIX B SUBSTATIONS SITE PLANS

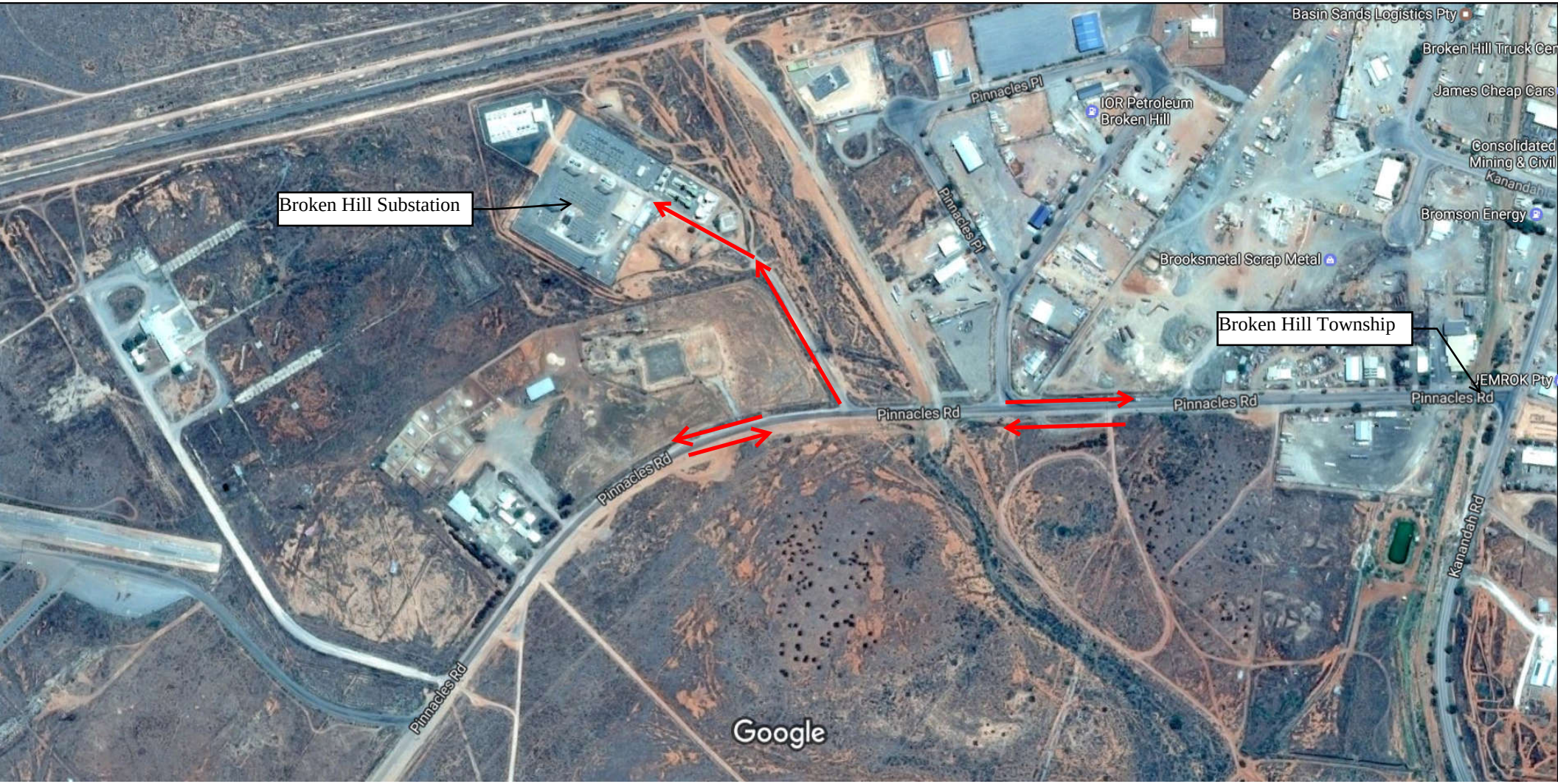
Google Maps Pinnacles Rd



Google Maps

Pinnacles Rd

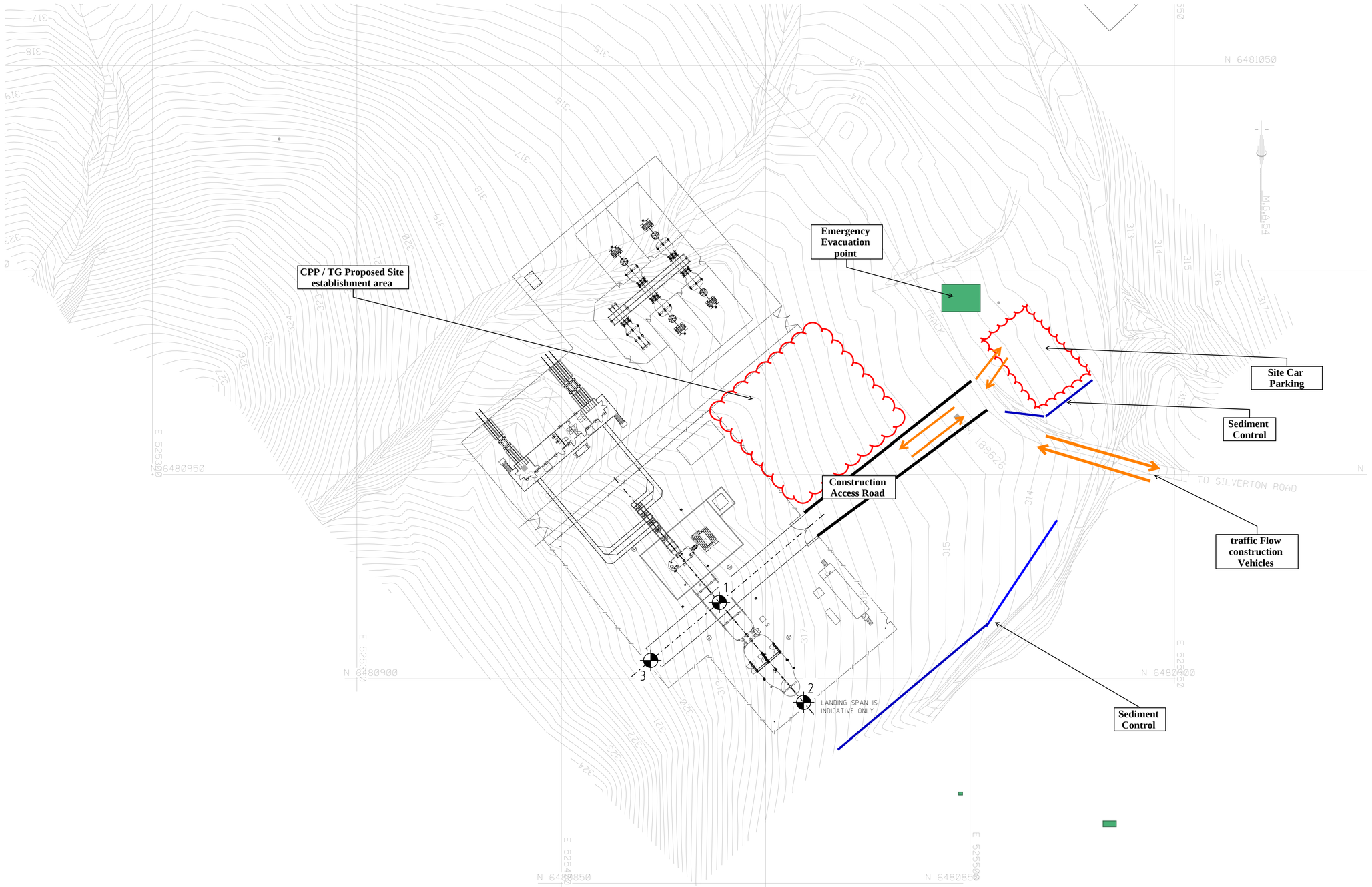
Broken Hill Substation Site



Imagery ©2017 CNES / Airbus, Map data ©2017 Google 100 m

SET-OUT LINE CO-ORDINATES

1. E: 525438.692
   N: 6480918.675
2. E: 525459.324
   N: 6480894.214
3. E: 525421.875
   N: 6480904.491



5m 25m 50m
5m 0
1:500

SILVERTON SUBSTATION SITE PLAN

AMENDMENT TEXT:		

TransGrid

SVT-100001 SINGLE LINE DIAGRAM
SVT-100102 GENERAL ARRANGEMENT

REFERENCE DRAWINGS

DRAWN	APD	
REVIEWED	ATW	05-05-2017
VERIFIED	MKP	05-05-2017
APPROVED	RY	05-05-2017

APPROVED
APPROVAL STATUS

SCALE

SILVERTON WF 220/33KV SUBSTATION
220KV INSTALLATION
220kV/33kV SWITCHYARD

SITE LAYOUT

A1 | PREFIX | NUMBER | SHEET 00 | AMDT

INDEX CLASS'N 06-09

566x801mm

PLOT ISSUE DATE 5/05/2017 12:00:24 PM

SOURCE DESIGN FILE: \\vsw08323\ics_share$\4\24817_21\SVT-100101_00.DGN

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APPENDIX C POLE DELIVERY PLAN

NJ Construction Pty Ltd - ABN 11 066 157 391
42 Hincksman Street, PO Box 1940, Queanbeyan, NSW 2620

Silverton Windfarm - Construction of 220kV Transmission Line

NJC Project Nº **M008**

POLE DELIVERY PLAN

APPROVAL AND REVISION RECORD

2	11/10/17	Minor amendments (incl. greater detail on access routes)	
1	10/10/17	Preliminary Issue for Review	
0	5/10/17	Draft	N/A
Revision Nº	**Date Revision Approved**	**Page(s) and Description of Revisions**	**Project Manager's Signature Approving Issue**

Contents

1. PROJECT BACKGROUND

1.1. INTRODUCTION

The project is called "**Silverton Windfarm – Construction of 220kV Transmission Line**" and covers the transmission line works to connect a new windfarm(known as Silverton Windfarm) to TransGrid's existing 220kV Broken Hill Substation.

TransGrid is the Principal for the contract and Consolidated Power Projects (CPP) is the Principal Contractor. NJ Construction Pty Ltd is a subcontractor to CPP.

The project will involve delivery 79 poles to site, typical broken into 2/3 sections. This plan aims at managing the delivery process.

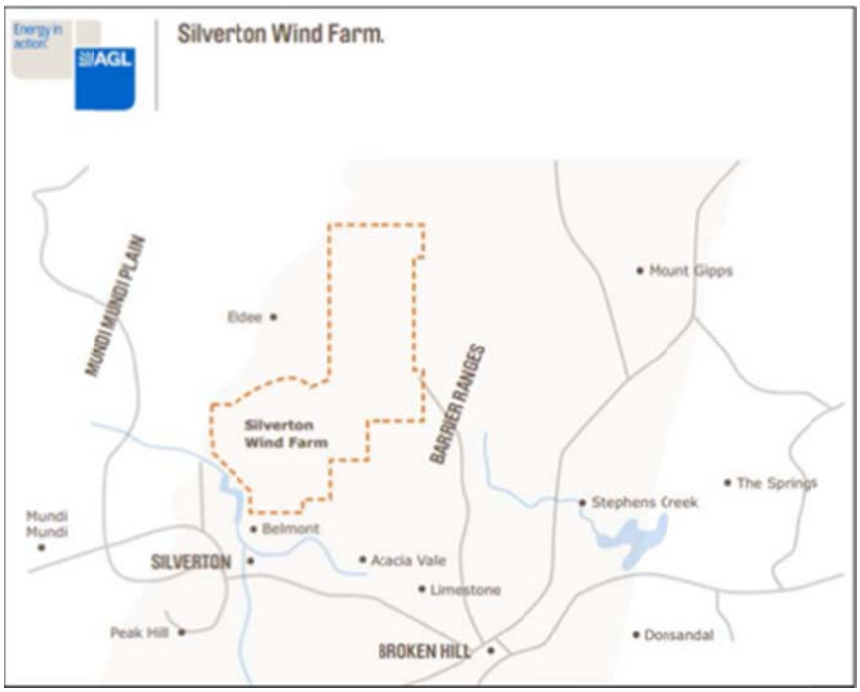
1.2. PROJECT DESCRIPTION

AGL Energy Ltd is developing a 200MW windfarm in Silverton, NSW. Transgrid have engaged CPP as the Principal Contractor for the development of a Silverton Windfarm 220/33kV substation and associated transmission line works to connect the new windfarm(known as Silverton Windfarm) to TransGrid's existing 220kV Broken Hill Substation.

CPP have engaged NJ Construction Pty Ltd as a subcontractor for the construction of the associated transmission line works.

The project is to be carried out in the jurisdiction of NSW.

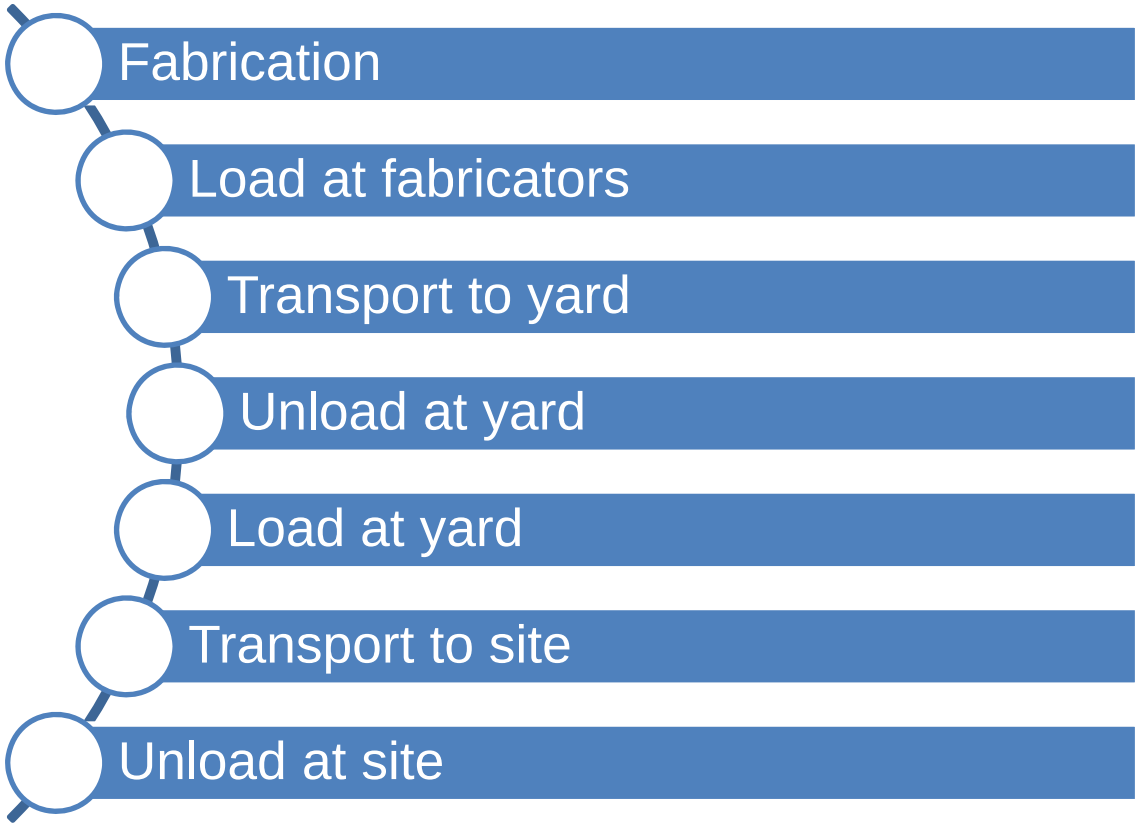
The scope of the transmission line works includes construction, testing and commissioning of the 25km 220kV transmission line including establishment of communications links to the new substation via new OPGW between Broken Hill 220/22kV Substation and Silverton 220/33kV - see map below.



2. POLE DELIVERY

2.1. PROCESS SUMMARY

For simplicity, pole delivery can be broken down into the following steps of a process:



2.2. FABRICATION

The pole sections, will be fabricated by INGAL EPS, as per drawings and specifications. This step in the process will not involve NJ Construction Pty Ltd.

2.3. LOAD AT FABRICATORS

This step in the process will not involve NJ Construction Pty Ltd, and will likely be completed by a contractor or the fabricator.

2.4. TRANSPORT TO YARD

This may involve multiple stages of travel (including sea, rail or road). This step in the process will not involve NJ Construction Pty Ltd, and will be completed by a contractor.

2.5. UNLOAD AT YARD

A third party contractor will be used to unload poles at the yard, and this step in the process will not involve NJ Construction Pty Ltd. Note that the yard in question is also owned by a third party, namely Mengy Transport yard, and poles shall be laid in a manor that will allow for easing attachment of rigging equipment.

2.6. LOAD AT YARD

Prior to set-up for the lift, the operator shall prepare a lift study / plan, as per Attachment 1: Form F84 – General Lift Plan. This shall be adhered to, with any amendments analysed and discussed before continuing. Tag lines, operated by suitably qualified doggers/riggers, shall be installed prior to the lift to assist in the movement of pole sections.

Prior to loading, ensure that the chosen truck is legally and practically capable of supporting the load. The truck should be loaded in order to maximise stability, preferably through a lower and centralised centre of gravity. Once loaded, the vehicle shall be checked for effects from additional stresses, such as tyre pressure and weight distribution between axles.

Further information on lifting these sections has been supplied by the manufacturer, and is available in Attachment 2: INGAL Lifting Guidelines.

2.7. TRANSPORT TO SITE

Loads shall be securely fastened, using correctly rated equipment, by a qualified and experienced dogger in conjunction with the truck driver.

Delivery trucks shall be chosen to ensure they are capable of driving to site conditions. A suitably experienced driver shall be employed to perform the delivery. The chosen driver shall drive the route in a light vehicle, prior to delivery, in order to familiarise themselves with the route and expected track conditions, as well as potential overhead hazards. A light vehicle shall escort the truck, and advise of any hazards or issues with the load. Both driver and LV shall maintain communications via radio.

Delivery drivers shall load poles, and once the load is secure, shall exit the yard onto Pinnacles Rd. The driver will then turn left onto Kanandah Rd. Prior to turning left onto Creedon St, Kanandah Rd turns into Ryan St, and continue until its end. Once here, delivery drivers shall follow the below access guidelines, dependent upon final destination:

From	To	Access Guideline
CN2	CN14	Right onto Rakow St, then left onto Brookfield Ave. Brookfield Ave will turn into Horsington Dr, which will turn into Silverton Rd. Access from Catcon track as per track diagram.
CN15	CN20	Right onto Rakow St, then left onto Brookfield Ave. Brookfield Ave will turn into Horsington Dr, which will turn into Silverton Rd. East along Daydream Mine Rd and exit north to easement and drop to peg.
CN21	CN29	Right onto Rakow St, then left onto Brookfield Ave. Brookfield Ave will turn into Horsington Dr, which will turn into Silverton Rd. East along Daydream Mine Rd and exit south to existing gate (as shown on track diagram and dropped to peg).
CN30	CN40	Right onto Rakow St, then left onto Brookfield Ave. Brookfield Ave will turn into Horsington Dr, which will turn into Silverton Rd. West along Siverton Rd and exit north to existing gate (as shown on track diagram) and dropped to peg.
CN41	CN54	Right onto Rakow St, then left onto Brookfield Ave. Brookfield Ave will turn into Horsington Dr, which will turn into Silverton Rd. West along Silverton Rd and exit south to existing gate and dropped to peg.
CN55	CN69	Left onto Rakow St, which will turn into Barrier Hwy. West along Barrier Hwy and exit north to existing gate (as shown on track diagram) and dropped to peg.
CN70	CN76	Left onto Rakow St, which will turn into Barrier Hwy. West along Barrier Hwy and exit south to existing track and dropped at peg.

Vehicles delivering poles to site will follow guidelines/routes set out in Attachment 3: Access Tracks. The delivery vehicle shall stop on a flat and stable surface for unloading, ensuring ample space for crane access. Temporary signage shall be set up to advise road users of trucks turning.

2.8. UNLOAD AT SITE

The unloading location for each pole shall be confirmed by the supervisor, on a site by site basis. Prior to accessing the site with heavy vehicles, NJ Construction shall assess the stability of surrounding surfaces. Should the ground be found to be insufficient, additional control measures shall be put in place until considered safe by both the operator and supervisor.

Prior to site entry, the operator shall prepare a lift study / plan. This shall be adhered to, with any amendments analysed and discussed before continuing. Tag lines, operated by suitably qualified doggers/riggers, shall be installed prior to the lift to assist in the movement of pole sections.

Once laid in a suitable location, each pole shall be chocked to ensure no further movement. Chocking shall be complete prior to loosening or detaching of any rigging equipment.

As per SWMS in Attachment 5: SWM505 – Load and Unload Steel Poles.

3. RISK MANAGEMENT

3.1. RELEVANT LEGISLATION, AUSTRALIAN STANDARDS & CODES OF PRACTICE

Relevant legislation include:

- NSW Work Health and Safety Act 2011
- NSW Work Health and Safety Regulation 2017
- NSW Workers Compensation Act 1987
- NSW Protection of the Environmental Operations Act 1997

Relevant Australian Standards include:

- AS/NZS ISO 9001:2015 – Quality management systems – requirements
- AS/NZS 4801:2001 – Occupational health and safety management systems
- AS/NZS ISO 14001:2015 – Environmental management systems
- AS 31000:2009 - Risk management – Principles and guidelines
- AS1418.5 – Cranes, hoists and winches – Part 5: Cranes Mobile
- AS2550-10 – Cranes Safe Use – Part 10: Elevating Work Platforms

Relevant Codes of Practice

- NSW Code of Practice – Moving Plant on Construction Sites
- NSW Code of Practice – Work Near Overhead Power Lines
- NSW Code of Practice – How to Manage Work Health and Safety Risks
- NSW Code of Practice – Hazardous Manual Tasks
- National Code of Practice – Induction for Construction Work

3.2. TRAVEL IN RURAL AUSTRALIA

The following Table documents the identified risks that are associated with NJ Construction's site-based work and travel in Australia. This risk analysis includes all foreseeable risks associated with vehicle travel and site work, but should not be considered an exhaustive registry of risks. The risk assessment should be reviewed periodically and, if necessary, should be adapted for any location or site-specific risks that are not adequately addressed by the generic hazard assessment presented below.

Hazard Assessment	Likelihood	Consequence	Risk	Mitigation
Driving				
Vehicle breakdown: Unable to undertake road-site repairs results in being stranded with no transport, or receive an injury whilst working on the vehicle.	Rare	Insignificant	Low	• Only hire vehicles from reputable companies • Check tyre pressure, spare tyre and equipment before departing • Call hire company for road-side assistance should repairs be required • Stay inside the vehicle [with doors locked] until assistance arrives
Road traffic accident: A crash or animal/pedestrian strike resulting in injury (self or others) and damage to the vehicle.	Rare	Extreme	Medium	• Avoid driving at night-time where possible • Drive with extra caution in heavy traffic, in areas where stock, game or pedestrians may be present and on dirt roads • Do not use cell phones whilst driving • Carry a first aid kit in the vehicle
Hijacking: Armed attack of vehicle and personnel resulting in robbery, potential injury and being stranded.	Rare	Extreme	Medium	• It is not considered necessary to mitigate this highly unlikely risk in Australia

Hazard Assessment	Likelihood	Consequence	Risk	Mitigation
Driver fatigue: Driving long distances or driving at night causes driver to fall-sleep at the wheel or lose concentration, resulting in an accident.	Rare	Extreme	Medium	• Avoid driving for longer than 2 hours without a break • Take breaks of at least 10 minutes every two hours • Do not drink ANY alcoholic beverages before or whilst driving • Plan trips to avoid long drives (break with an overnight stay if necessary) • Share driving with a colleague wherever possible
Off-Road Driving (in addition to the above)				
Getting lost: Lose way off-road.	Rare	Extreme	Medium	• On first site visits the landowner should accompany and preferably drive or direct • Tracked GPS routes should be loaded into GIS system particularly for extremely remote sites such as Kennedy • Ask a passenger to navigate • Use a GPS device (loaded with maps and routes) • Carry a SatPhone for sites with no cell coverage
Off-road vehicle becomes stuck: Vehicle becomes stuck in sand, mud or water, receive injury whilst trying to release or become stranded with no transport.	Rare	Insignificant	Low	• Plan your route before you drive, review topography maps and previous GPS tracks • Ask for advice from the landowner before setting off to confirm areas that are impassable • Let someone (e.g. a landowner) know where you are planning to go • Assess levels of cell phone coverage and take a satellite phone if necessary • Wait for assistance if you become stranded or stuck
Off-road vehicle accident: Driving on rough or steep terrain results in a crash; vehicle damage, injury and stranding.	Rare	Extreme	Medium	• Plan your route before you drive and review topography maps • Ask for advice from the landowner before setting off to confirm areas that are impassable • Let someone (e.g. a landowner) know where you are planning to go • Assess levels of cell phone coverage and take a satellite phone if necessary • Drive slowly and carefully; undertake off-road driving trailing where necessary
Crime				
Car or accommodation break-in: Loss of equipment and belongings, unable to communicate if phone or money is stolen.	Rare	Insignificant	Low	• Keep all valuables out of sight • Use a safe in accommodation if there is one • Do not leave any valuables in a car • Consider leaving your laptop in the office if not required for the trip • Use off-street parking where available
Pick-pocketing or mugging: Loss of equipment and belongings, unable to communicate if phone or money is stolen, injury.	Rare	Moderate	Medium	• Keep all valuables out of sight • Stay alert and be aware of your surroundings at all times • Avoid walking on the streets at night-time if possible • Consider storing important phone numbers and some money separately from your phone and wallet
Exposure				
Changing weather conditions: Not prepared for the condition resulting in implications listed above.	Possible	Moderate	Medium	• Be aware that weather conditions can change rapidly – be prepared for all situations • Check the weather forecast before leaving for site work

Hazard Assessment	Likelihood	Consequence	Risk	Mitigation
Cold, wet and windy weather: Hypothermia, frost-bite, wind burn.	Rare	Moderate	Low	• Remember to pack and use appropriate PPE as required (warm clothes, waterproof clothes, hats and gloves) • Remember that sunburn can also occur in cold conditions • Stop work if signs of exposure become apparent
Hot and sunny weather: Dehydration, sun stroke, sunburn, heat exhaustion.	Possible	Moderate	Medium	• Remember to pack and use appropriate PPE as required (sun hat, sun block, adequate water, cool clothing etc.) • Avoid drinking alcohol and soft drinks • Seek shade and take regular breaks if working outdoors • Ensure hire car comes with air-conditioning • Stop work if signs of exposure become apparent
Inadequate supplies: Run out of water or food, resulting dehydration and exhaustion.	Possible	Moderate	Medium	• Carry adequate water and food in the car, especially when working in remote areas
Hiking / Walking on Site				
Uneven ground: Slip, trip or fall resulting in injury and possibly becoming stranded.	Possible	Moderate	Medium	• Wear suitable footwear such as hiking boots • Pay attention and look where you are walking • Carry a cell phone/satellite phone and suitable clothing in case you become stranded • Carry a first aid kit
Fences and gates: Fall when climbing or cuts/scratches, possible tetanus risk, infections.	Possible	Moderate	Medium	• Be aware of sharp wire on fences and take care when opening gates/climbing fences • Use gates rather than climbing fences where possible • Carry a first aid kit
Vegetation and wildlife: Cuts/scratches, blisters from poisonous plants, stings, bites (ticks, snakes, spiders, reaction to biting insects), attack by large fauna (such as kangaroo).	Possible	Moderate	Medium	• Wear long pants and shirts to avoid contact with vegetation/thorns • Do not pick vegetation • Avoid walking through dense vegetation where possible • Use insect repellent • Tuck pants and shirts in when walking in thick vegetation • Check for ticks at the end of each day • Do not approach/feed/touch kangaroos, goats or emu • Do not put your hands in cavities or pick up logs. Watch where you are walking and be aware of snakes that may be sun-bathing in the path. If you see a snake move away slowly • Carry a cell phone/satellite phone and first aid kit
Water: Working by rivers and dams; drowning and getting wet, water-borne diseases/infections.	Rare	Moderate	Medium	• Avoid walking close to the banks or a river or dam • Do not swim
Domestic animal encounter: Attack by cattle, dog bites.	Rare	Moderate	Medium	• Stay away from stray dogs, do not run if they chase you but slowly move away and seek refuge in a vehicle • Avoid walking through large herds of cattle. If in a vehicle, do not sound the horn, move slowly or wait for the herd to move away • Ask the landowner for advice if there may be herd of young or particularly boisterous cattle in the paddocks • Carry a first aid kit and seek medical advice if bitten

Hazard Assessment	Likelihood	Consequence	Risk	Mitigation
Wildfire: Caught/trapped by an uncontrolled fire whilst away from a vehicle.	Rare	Extreme	Medium	• Assess the risk of wildfires before going into the field, review forecast fire conditions • DO NOT undertake site visits when fire risk is EXTREME or CATASTROPHIC • Only hire diesel vehicles for site work • Do not use any naked flames in the field and avoid activities that can create sparks • The landowner and Rural Fire Service should be first point of contact in any fire situation
Getting lost in the bush: Lose way and cannot find way back to the vehicle.	Rare	Extreme	Medium	• Take a GPS with waypoints and/or maps and a compass • Carry a cell phone/satellite phone at all times • If travelling alone and undertaking detailed site work you MUST lodge your detailed GPS based itinerary and regularly check-in with office at pre-arranged times • Plan to be back at your vehicle well before dark
Road Traffic Accident: Hit by a vehicle when working near roads.	Rare	Extreme	Medium	• Wear a high-viability vest when working near roads (or railways) • Avoid working next to roads (or railways) where possible
Public Relations				
Aggressive situations: Angry landowners or members of public are aggressive or attack.	Rare	Moderate	Medium	• Take all steps to avoid situations where people may become aggressive, use a professional facilitator if you consider that a meeting may become heated • Do not continue a discussion if you see that the other party is becoming overly heated, rather politely end the conversation
High noise levels: Damage to hearing.	Rare	Moderate	Medium	• Remember to pack and wear ear protection if working with heavy machinery or in noisy situations
Working with tools: Cuts, pinches, foreign object in eyes and trapped limbs.	Possible	Moderate	Medium	• Remember to pack and wear appropriate PPE (protective glasses, gloves etc.) • Carry a first aid kit • Take particular care when working with tools or machinery

With reference to the above table, the company OH&S Policy states the following actions for identified hazards.

- **Low Risk** – Proceed, but ensure workers are aware of the hazard, and what to do if the hazard is encountered.
- **Medium Risk** – Proceed, but only after risk mitigation is in place.
- **High Risk** – Risk reduction method must be put in place, and approved by management.

3.3. LOADING & UNLOADING POLES

Safe Work Method Statements have been developed in order to correctly assess and control the risks associated with the acts of loading and unloading these poles.

See Attachment 4 – SWM505 – Load and Unload Steel Poles.

4. DRIVER CODE OF CONDUCT

4.1. INTRODUCTION

This driver code of conduct applies to all NJ Construction personnel, and all persons subcontracting to NJ Construction. All persons working on NJ Construction sites are expected to comply with all the relevant legal requirements and accepted community standards whilst conducting business.

As a driver, you are required to know and comply with all road rules pertaining to your vehicle, and hold a current and valid driving license (appropriate to the class of vehicle you are operating). The vehicle shall be maintained and operated in accordance with the vehicle manufacturers recommendations.

While on the road, your behaviour reflects upon the reputation of NJ Construction within the community, and for this reason we ask for full compliance with this Driver Code of Conduct.

4.2. DISCIPLINARY ACTION

Failure to comply with this document will lead to warnings, and potentially disciplinary action. For subcontractors, this may include re-induction or even removal from site. The following are potential reasons for warnings or disciplinary actions:

- Driving at excessive speed
- Failure to observe site speed restrictions
- Failure to report incidents / accidents
- Abuse of road users or customers
- Operating a vehicle while under the influence of drugs or alcohol
- If charged or found guilty of serious motor vehicle offence

4.3. DRIVING PRACTICES

The following, which shall be adopted by those following this code of conduct, are commonly accepted driving practices:

- Highway courtesy is a company obligation, requiring you to show courtesy and restraint towards other drivers.
- Driving shall be adjusted to suit the conditions:
    - Reduce speed in wet conditions
    - Do not exceed sign-posted maximum speeds
    - Do not exceed sign-posted speeds displayed around schools & shopping centres
    - Alsways adhere to specified road work speed limits
    - Drive cautiously in heavy rain or fog
- Drive in a manor that assists in the evasion of accidents, adjusting for poor driving conditions or less capable drivers.
- Choose routes that follow well formed roads, where possible, to find the safest route.
- Maintain appropriate distance to the vehicle in front of you, taking into account the stopping distance of your vehicle.
- Avoid overtaking in awkward or inappropriate situations, particularly on narrow roads, on or near curves in the road and when your vision is restricted.

5. ATTACHMENTS

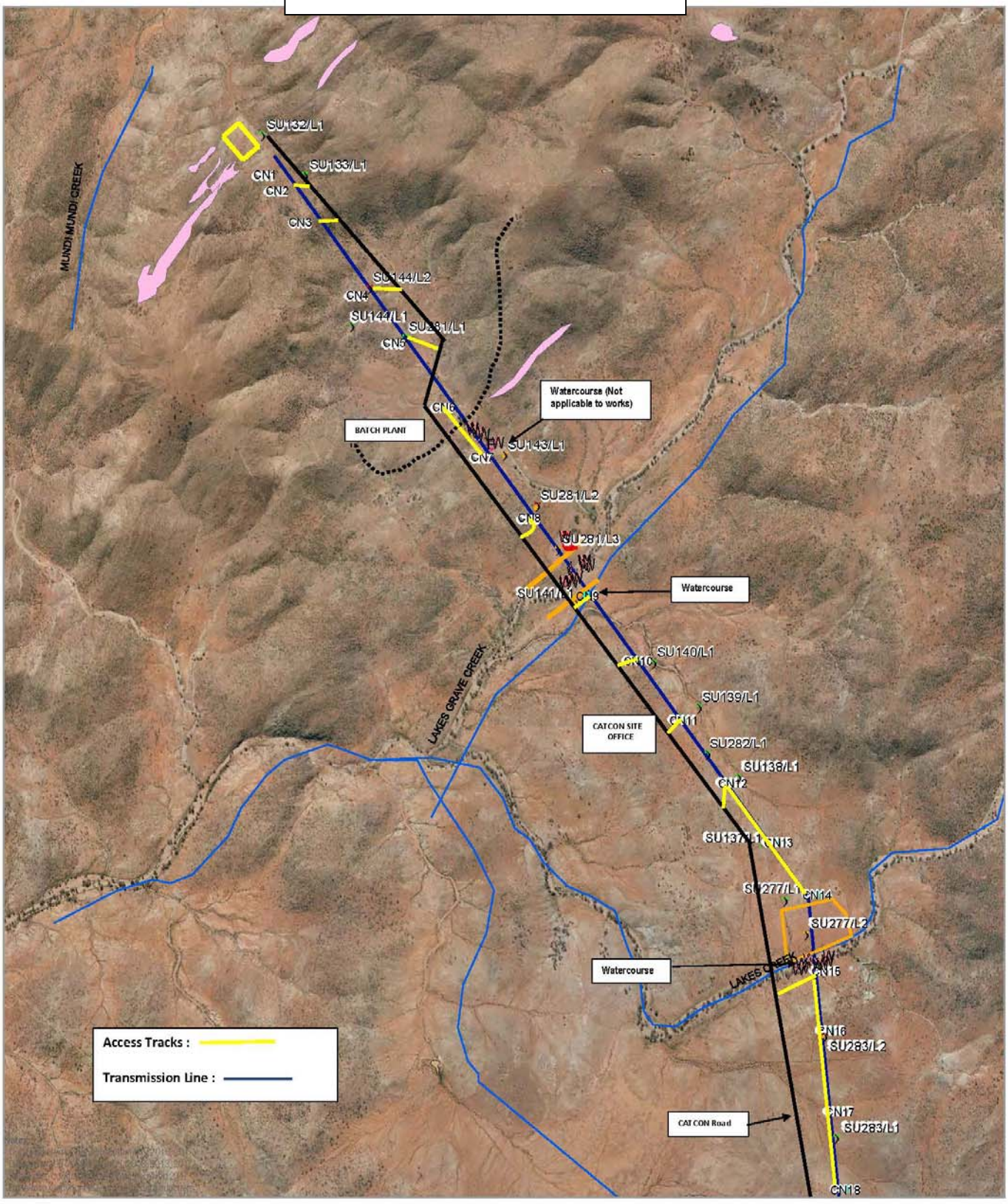
5.1. ATTACHMENT 1: FORM F84 – GENERAL LIFT PLAN

5.2. ATTACHMENT 2: INGAL LIFTING GUIDELINES

5.3. ATTACHMENT 3: ACCESS TRACKS

5.4. ATTACHMENT 4: SWM505 – LOAD AND UNLOAD STEEL POLES

Attachment 3 – Access tracks



Constraints Map A

Silverton Wind Farm Connection Works

- Proposed pole locations
- Proposed substation
- Proposed transmission line

Biodiversity
- W Hollow Bearing Tree
- W Mature tree (not HBT)
- Chenopod Mallee
- Rock outcrops
- Watercourses and drainage lines

Noxious species
- African Boxthorn
- Mexican Poppy

Management of Aboriginal sites
- No constraints
- Salvage
- Avoid
- Extent of site
- PAD areas requiring validation

Management of European Sites
- Minimise impacts
- Avoid

0 125 250 500 Meters

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Author: CJ

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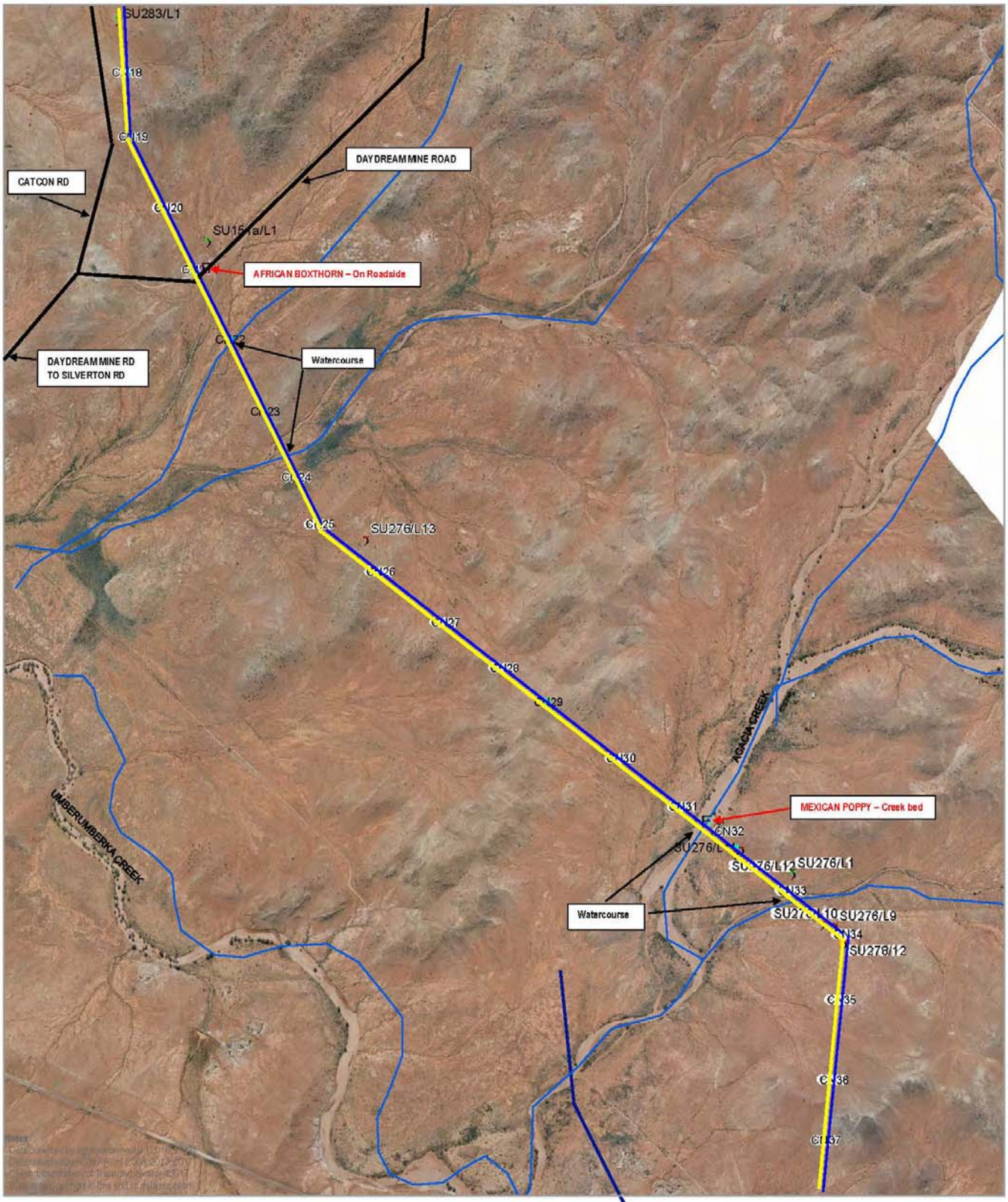

Constraints Map B

Silverton Wind Farm Connection Works

- Proposed pole locations
- Proposed substation
- Proposed transmission line

Biodiversity
- Hollow Bearing Tree
- Mature tree (not HBT)
- Chenopod Mallee
- Rock outcrops
- Watercourses and drainage lines

Noxious species
- African Boxthorn
- Mexican Poppy

Management of Aboriginal sites
- No constraints
- Salvage
- Avoid
- Extent of site
- PAD areas requiring validation

Management of European Sites
- Minimise impacts
- Avoid

0 125 250 500 Metres

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Author: CJ

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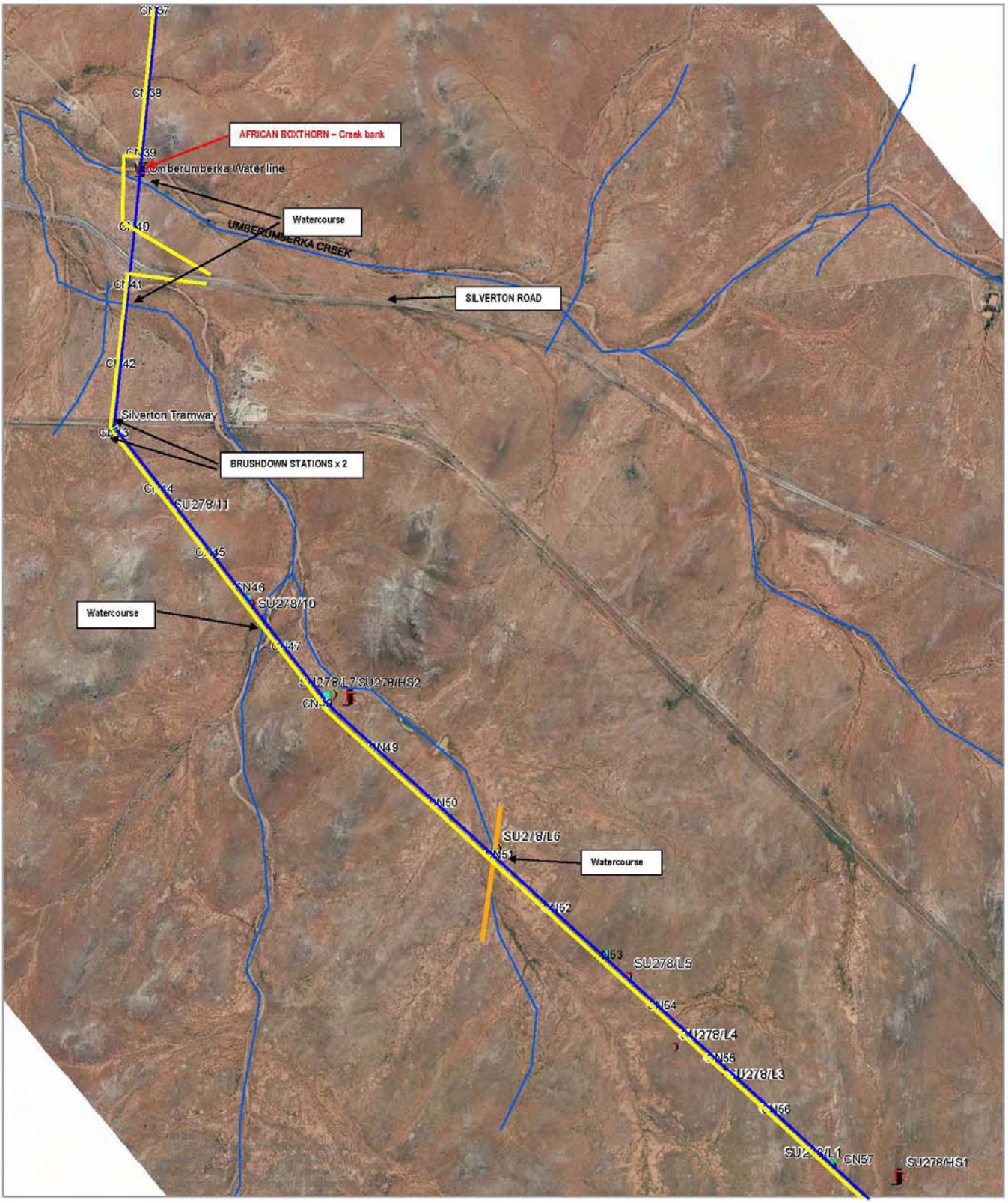

Constraints Map C

Silverton Wind Farm Connection Works

- Proposed pole locations
- Proposed substation
- Proposed transmission line

Biodiversity

- Hollow Bearing Tree
- Mature tree (not HBT)
- Chenopod Mallee
- Rock outcrops
- Watercourses and drainage lines

Noxious species

- African Boxthorn
- Mexican Poppy

Management of Aboriginal sites

- No constraints
- Salvage
- Avoid
- Extent of site
- PAD areas requiring validation

Management of European Sites

- Minimise impacts
- Avoid

0 125 250 500 Meters

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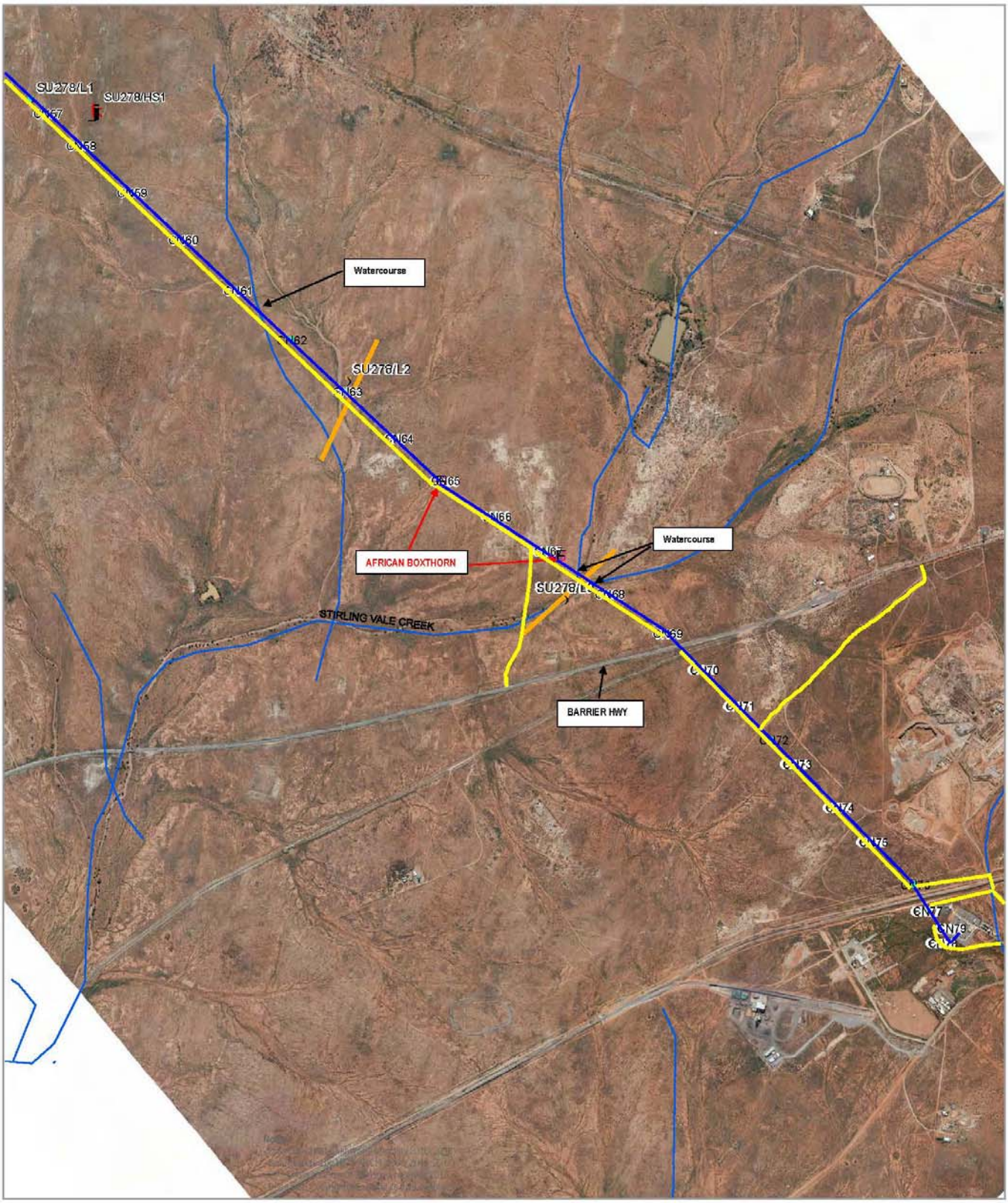

Constraints Map C

Silverton Wind Farm Connection Works

- Proposed pole locations
- Proposed substation
- Proposed transmission line

Biodiversity
- Hollow Bearing Tree
- Mature tree (not HBT)
- Chenopod Mallee
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