Traffic Management Plan (TMP)

Bringelly Business Estate Southern Lots,
Skyline Crescent, Horningsea Park

DOCUMENT INFORMATION

Issue No.	Status	Author	Date	Issued To	Prepared by
01	Draft	S. Hynes	26/03/2021	AWJ	S. Hynes
02					
03					
04					

This Traffic Management Plan complies with Australian Standard 1742.3.
All personnel dealing with traffic control, being either contractors or sub-contractors are to have the following current accreditation, for the management of each item listed below,

- WHS&E general induction certificate (White card).
- RMS Traffic Controller Card (for traffic control, performing stop/slow control).
- RMS Implement Traffic Control Plans (for implementation of signage).
- RMS Prepare Work Zone Traffic Management Plan (for selection & creation of TCP, TMP & inspection of existing traffic control plans).
- All staff must be inducted on site before commencement of works.
- Staff must carry current accreditation on them at all times whilst on site.
- Appropriate PPE as outlined in the appropriate SWMS for the works.

<u>Report Prepared By:</u>

Stephen Hynes
RMS Prepare Workzone TMP #0051771148

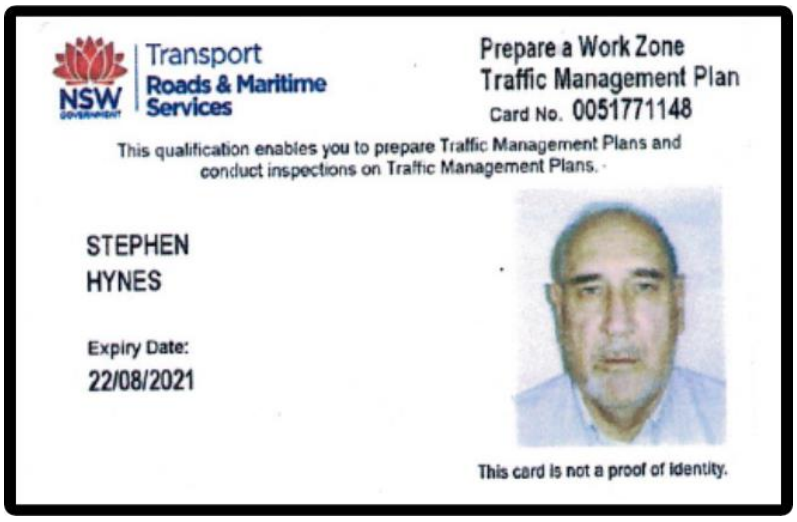


TABLE OF CONTENTS

1. INTRODUCTION

As part of the development of the Bringelly Business Estate Southern Lots, the site on Skyline Crescent will be used to deposit fill, access will be from Skyline Crescent. Due to the location of the Jemena High Pressure Gas line, a road plate is to be in position covering the line.
The purpose of this document is to provide information and methodology showing access to site.

1.1 BACKGROUND

SBS Traffic has been engaged by AWJ Civil Pty Ltd, to prepare a Traffic Management Plan (TMP) to how work vehicles will access the site from Skyline Crescent, Horningsea Park.

FIGURE 1 – LOCALITY MAP

1.2 REFERENCE DOCUMENTS

The following documents have been reviewed and referenced in this report:

- NSW Roads and Maritime Services Traffic Control at Worksites Manual V6.
- AS1742.3 Manual of Uniform Traffic Control Devices: Works on Roads.

1.3 OBJECTIVES

The primary objective of the plan is to promote the continuous, safe and efficient movement of Work vehicles needing access to and from the site with the least impact to the safety and amenity of pedestrians, cyclists and local traffic.
This document will:

- Ensure the project establishes and maintains best practice to manage traffic.
- Ensure a safe environment for road users and site personnel is maintained at all times.
- Ensure that all road users experience minimal disruptions during the work period.
- Actively monitor traffic impacts related to the vehicle movements.
- Ensure compliance with relevant specifications and the RMS's - "Traffic Control at Work Sites" (TCAWS V-6) Manual.

1.4 SCOPE

The scope of this Traffic Management Plan is limited to the following:

- Vehicle's ingress & egress from the work site.
- Vehicles delivering fill from other related work sites.

2. TIMELINE

2.1 DATES

The proposed dates for works at this site will be as shown:

- Monday April 12th, 2021 to Monday June 28th, 2021.
- Time frame may differ due to unforeseen circumstances or inclement weather.

3. ROLES AND RESPONSIBILITIES

3.1 NOMINATED KEY PERSONNEL

3.1.1 PROJECT MANAGER

Name: Anthony Faro
Mobile Phone: 0412 066 933
Email:

3.1.2 NOMINATED TRAFFIC OFFICER

Name: _____
Mobile Phone: _____
Email: _____

3.1.3 TRAFFIC CONTROL CONTRACTOR

Company: SBS Traffic Control
Name: Mike Glisic
Mobile Phone: 0401 864 492
Email: sbstraffic@outlook.com

3.2 REPONSIBILITIES

All site personnel have a responsibility to,

- Ensure a safe workplace and safe environment for all road users during works.
- Report any hazards to a supervisor immediately.
- Monitor traffic congestion and queues and advise supervisory personnel immediately of any concerns.
- Monitor road usage, pedestrian and cyclist activity and make amendments to controls as necessary to ensure the safety of all road users is maintained at all times.

3.2.1 PROJECT MANAGER

The Project Manager has ultimate responsibility to,

- Promote at all times the company's policies, procedures and standards relating to health, safety and environmental management and ensure that they are complied with.
- Ensure sufficient resources are available to achieve the TMP, objectives and targets and that those resources have sufficient skills to conduct the roles competently.
- Ensuring the Project achieves compliance with the TMP.
- Providing leadership in the development and implementation of the TMP.
- Ensure that all staff and contractors engaged to work on the Project are appropriately inducted and trained in all relevant TMP issues and controls.
- Organise and coordinate construction activities in accordance with the TMP.
- Ensure that staff have been trained appropriately for the tasks that they are undertaking prior to commencing work.

3.2.2 SITE SUPERVISOR

The Site Supervisor has the responsibility to,

- Support the Project Manager in providing leadership in the implementation of the TMP.
- Conduct field surveillance of the road network, with the aim to identify unusual congestion, incidents, non-conforming traffic control and unsafe road conditions.
- Perform investigations of construction sites and temporary traffic control schemes, prepare necessary reports, as well as maintain incident records and inspections logs.
- Ensures receipt of the relevant approvals for construction activities and traffic control.
- Ensures the relevant Supervisors and workforce are familiar with the approval conditions and requirements prior to implementation.
- Ensures the Supervisors and workforce are re-familiarised in the approval conditions and requirements at regular intervals during the period of the approvals.
- Liaises with the Traffic Control Company and crews in the planning and implementation of the required traffic management arrangements.
- Conducts regular inspections (including pre-starts) of traffic controls and where necessary instructs the rectification of deficiencies.
- Allocates plant, equipment and human resources for the works including the provision of the temporary traffic control arrangements.
- Conducts and keeps records of daily and weekly (day and night) inspections of the traffic control arrangements, assist audits and where necessary rectifies deficiencies.
- Inform and assist with the management of unplanned incidents, providing initial response to make the site safe.

- Assist with the implementation of mitigation measures to address unsafe or unusual road conditions.
- Records unplanned incident details, and when traffic controls are in operation, including the installation and removal of regulatory signage.

3.2.3 NOMINATED TRAFFIC OFFICER

The Nominated Traffic Officer has the responsibility to,

- has authority to stop work on any activity if it is considered to be necessary to prevent a traffic accident, or to comply with the direction of RMS, Council or Police.
- Ensure that the approved traffic control measures are established, implemented and maintained in accordance with the approved plan.
- Carrying out regular TTM inspections and auditing (TCAWS V-6 Section 8.1.3) of the traffic control measures to ensure that they are effective and are being followed.
- Monitoring traffic conditions.
- Ensuring and monitoring conformance to time and period of operation.
- Maintaining current copies of the Traffic Management Plan, Traffic Control Plans, approvals, and their controlled distribution.
- Facilitate traffic awareness and giving toolbox talks to the site personnel.
- Managing the dedicated Traffic Control Crew in the delivery of required maintenance activities, incident and emergency support, and providing support/resources during implementation.
- Updating the TMP in response to any incidents arising from the Contractor's Works.
- Develop a strategy for the dissemination of changed traffic condition information to potentially affected stakeholders, including road users, local communities and residents.

4. EXISTING CONDITIONS

4.1 SURROUNDING ROAD NETWORK

4.1.1 KEY ROADS

The site is located in a rural area with Skyline Crescent being the key road, key linking roads for heavy vehicle routes will be Bringelly Road, Camden Valley Way, Cowpasture Road, All adjacent roads are local access.
The designated heavy vehicle route will be as follows

- Site entry will be right in only from Skyline Crescent.
- Site Exit will be Left Out only via Skyline Crescent.

4.2 EXISTING TRAFFIC CONTROLS

Key features of the existing traffic controls which apply to the road network in the vicinity of the site are:

- 50 km/h *SPEED LIMIT* which applies to Skyline Crescent;

4.3 PARKING

There is on-street parking in the vicinity of the site on Skyline Crescent, no parking within site.

4.4 PUBLIC TRANSPORT

4.4.1 BUS ROUTES

There are No bus Routes on Skyline Crescent.

4.5 PEDESTRIAN INFRASTRUCTURE

The project site will not impede any foot paths, nor impact any connectivity between paths due to no pedestrian footpath infrastructure within the vicinity of the project.

4.6 CYCLIST INFRASTRUCTURE

There are no known impacts to cyclists either on or off road due to the project as there no formal cycling infrastructure within the vicinity of the project site.

5. SITE METHODOLOGY

5.1 SITE HOURS

General site hours are limited to:

Monday to Saturday 7:00am to 5:00pm
No works on Sunday (or public Holiday) NIL

5.2 STAGING

5.2.1 STAGE 1 – INSTALLATION OF TRAFFIC CONTROL DEVICES

Stage 1 of the work will be the establishment of site and installation of long-term signage on the approaches to the site entry point.

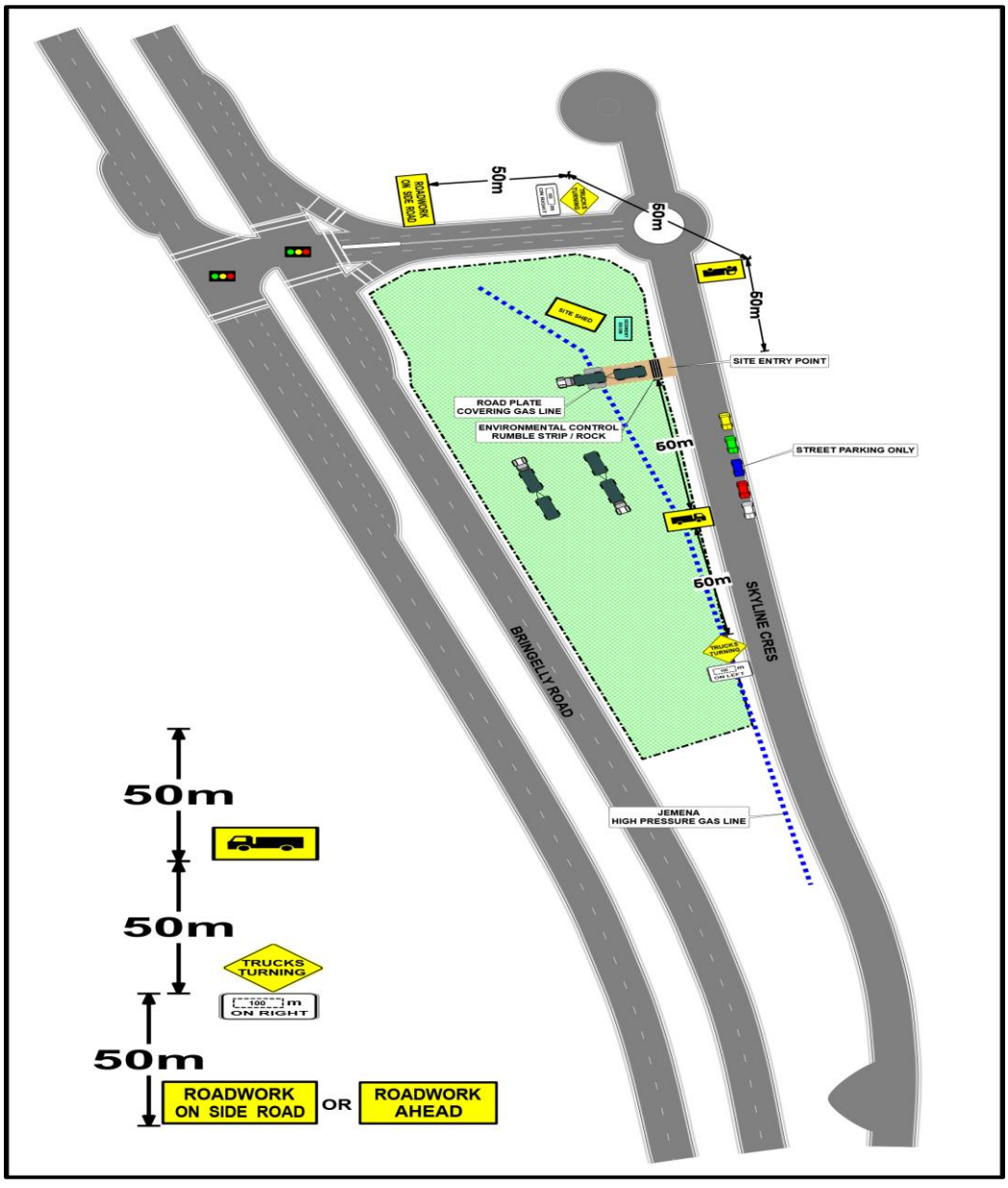


FIGURE 2 – TRAFFIC CONTROL PLAN FOR INSTALLATION OF LONG-TERM SIGNAGE

5.2.2 STAGE 2 – ACCESS TO WORKSITE

Access to the work site will be right turn into the site from Skyline Crescent & left turn out, a road plate will be in place to cover the Jemena High Pressure pipe line, all large work vehicles are to follow this route in & out of site, a rumble grid will also be placed at the site exit point.

Approximately 120 Bulk haulage vehicles will be arriving on site per day between 7:00 and 17:00 to minimise impact to traffic flow deliveries will be made via the entry point on Skyline Crescent.

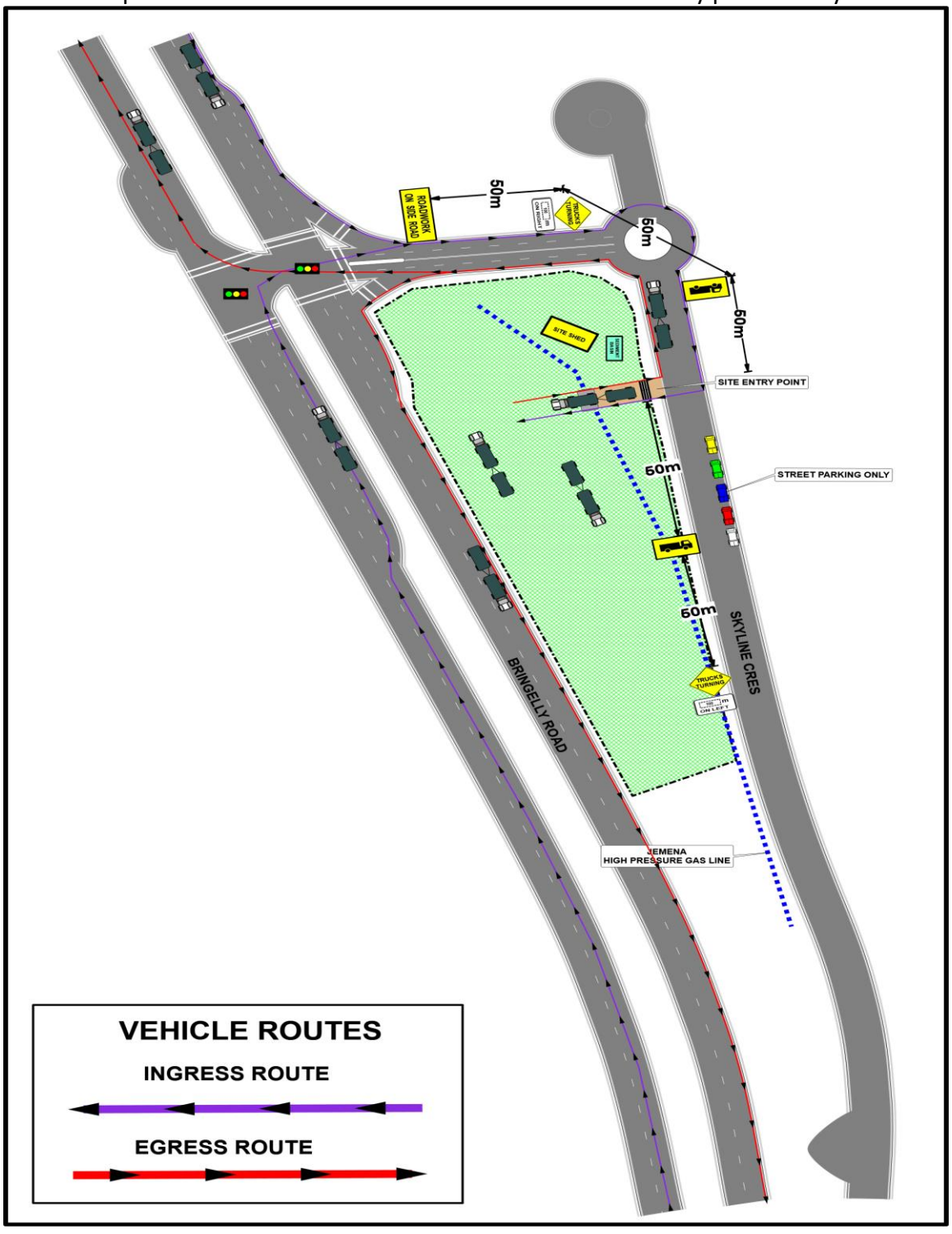


FIGURE 3 – VEHICLE MOVEMENTS: INGRESS & EGRESS ROUTES

5.3 CONSTRUCTION TRAFFIC

The following vehicles are expected as part of the project:
Table 1 – Vehicular access

Stage	Vehicle	Size
Traffic Control – 1 as required	Utility Vehicle	6m
Haulage Vehicles – 120 per day	Truck & Dog	19m

6. TRAFFIC MANAGEMENT STRATEGY

6.1 TRAFFIC MANAGEMENT OPTIONS

These are the preferred option to facilitate the works required.

- Traffic Past worksite.
- Stop / Slow Control.

6.1.1 PAST THE WORKSITE – CONTINUOUS FLOW

The site is off the road & will not disrupt traffic flow on Skyline Crescent

6.1.2 STOP, SLOW CONTROL MEASURES

This option is only to be in place in the event that traffic flow on Skyline Crescent inhibits the flow of vehicle entering or exiting the site.

6.2 PARKING AND PROPERTY ACCESS

Adjacent and nearby driveways must not be obscured or adversely impacted during the works. All haulage vehicles must park within the site and all vehicles must be completely off Skyline Crescent prior to being stopped.

6.3 PEDESTRIANS

There are no existing pedestrian facilities within the site. The rules and requirements of working in and around live traffic will be included in the site induction.

6.4 CYCLISTS

Any cyclists will be able to use the road network for on-street cycling, they will be subject to existing regulations regarding cyclists & the use of roadways.

6.5 PUBLIC TRANSPORT

Bus services are not impacted by the works.

6.6 EMERGENCY SERVICES

Access must be available at all times for emergency services to adjacent properties and to the site itself. No access will be impeded by the works or the traffic controls.

6.7 ACCESS

6.7.1 SITE LOCATION

FIGURE 4 – SITE ACCESS LOCATION

6.7.2 WORK ACTIVITY

Once traffic control devices have been installed works will commence. It is anticipated that works will be completed between Monday 12th April 2021 & Monday June 28th 2021, with the traffic control devices being removed on completion of works.

All material and plant deliveries will be via the use of the Skyline Crescent entry point which is adequate to allow for truck movements in and out of the site. To minimise impact to traffic during works this will be a right in / left out arrangement during work hours.

Noted that no lane widths will be altered during the works

7. INSPECTION, AUDITING AND REPORTING

Daily site checks of signs and devices to be undertaken prior to work commencing.

The specific requirements for safety inspection and audits will meet with the requirements of the Traffic Control at Worksite Manual V6, Traffic audits will be undertaken at a minimum frequency of 1 per month, and after every major traffic change.

Inspection of traffic control devices for short term and long-term traffic management will be completed on weekly basis by qualified minimum RMS implement traffic control plan. Reporting will be in the format provided in the Traffic Control at Worksite Manual. Inspection and Control of Traffic Management and uploaded into the web-based document management system on completion.

7.1 TMP UPDATES AND AMENDMENTS

Update of this plan will occur as necessary and reasons for update of the plan may include the following,

- Consideration of monitoring, inspection and audit results.
- Consideration of incidents and any lessons learnt.
- Consideration of any new regulatory issues.
- A review of the effectiveness of traffic management controls.
- Consideration of changes in operational needs such as resourcing.
- Feedback from management reviews.
- At the request of the Principal or their representative.

A copy of the updated plan and changes will be distributed to all relevant stakeholders in accordance with the approved document control procedure.

8. CONSULTATION AND COMMUNICATION

For properties impacted by the works, a letterbox drop providing details of the works and the timing will be provided at least 7 days in advance of any changes to traffic conditions.
No major adverse impacts are expected, however if any delays are planned for more than 5 minutes affecting any adjacent property, then at least 24 hours' notice is to be provided to the affected properties by a letter box drop.

8.1 SITE CONTACT DETAILS

The site shall be clearly posted with a sign erected in a prominent position on the site perimeter, it is to be maintained & removed at the completion of works. The sign must contain the following information,

- Name, address, contractor licence number and telephone number of the *principal contractor*, including a telephone number at which the person may be contacted outside working hours, or *owner-builder* permit details.
- Name, address and telephone number of the *Principal Certifying Authority*
- A statement stating that 'unauthorised entry to the work site is prohibited".
- A notice with contact names and mobile phone numbers of site supervisors be displayed at the entrance to the site for community to make contacts regarding work activities.

8.2 COMMUNICATION DETAILS

UHF channel 13 is to be used & posted at site entry, all vehicles entering site are to communicate with the traffic marshal on approach to site.

9 DRIVER CODE OF CONDUCT

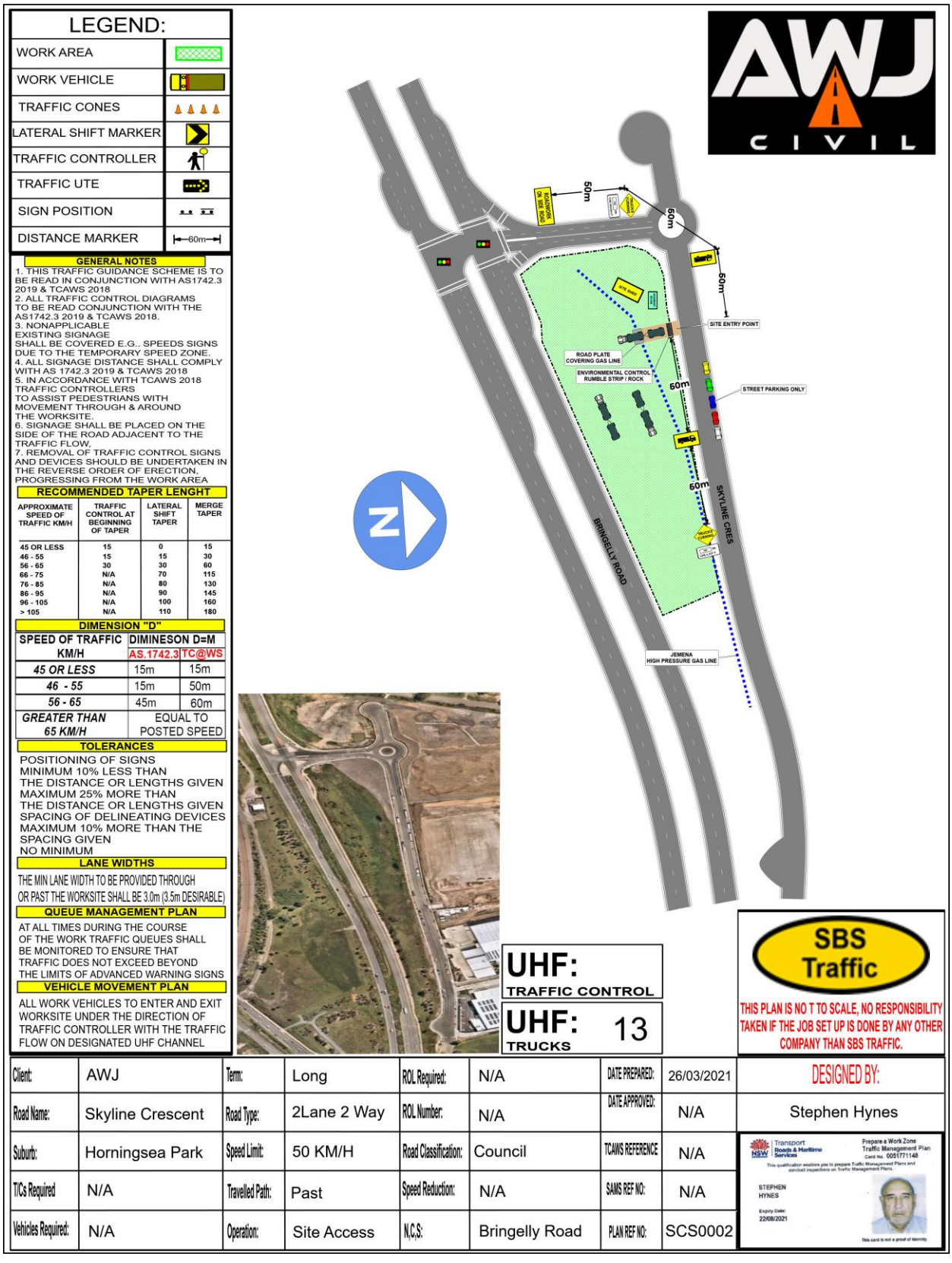
9.1 CODE OF CONDUCT

- Drivers are to be professional at all times whilst working on this site & abide by all road rules & regulations relating to the operation of large & oversize vehicles on the public road reserve.
- Be aware of best practice to minimise the impacts of the development on the local and regional road network.
- Drivers are to be proactive & minimise conflicts with other road users.
- Ensure all drivers are instructed & provided with the correct information regarding the specified routes relating to site ingress & egress.
- Drivers are to be provided with the current UHF channel prior to commencement of works, if the channel is changed all workers are to be notified immediately.

APPENDIX A

TRAFFIC CONTROL PLANS

A 1.1 – LONG TERM SIGNAGE



Client:	AWJ	Term:	Long	ROL Required:	N/A	DATE PREPARED:	26/03/2021	DESIGNED BY:
Road Name:	Skyline Crescent	Road Type:	2Lane 2 Way	ROL Number:	N/A	DATE APPROVED:	N/A	Stephen Hynes
Suburb:	Horningsea Park	Speed Limit:	50 KM/H	Road Classification:	Council	TCAWS REFERENCE	N/A	
TICs Required	N/A	Travelled Path:	Past	Speed Reduction:	N/A	SAMS REF NO:	N/A	
Vehicles Required:	N/A	Operation:	Site Access	N,C,S:	Bringelly Road	PLAN REF NO:	SCS0002	

A 1.2 – OPERATION OF TRAFFIC CONTROL STOP / SLOW CONTROL (AS REQUIRED)

LEGEND:	
WORK AREA	
WORK VEHICLE	
TRAFFIC CONES	
LATERAL SHIFT MARKER	
TRAFFIC CONTROLLER	
TRAFFIC UTE	
SIGN POSITION	
DISTANCE MARKER	60m

GENERAL NOTES

1. THIS TRAFFIC GUIDANCE SCHEME IS TO BE READ IN CONJUNCTION WITH AS1742.3 2019 & TCAWS 2018
2. ALL TRAFFIC CONTROL DIAGRAMS TO BE READ CONJUNCTION WITH THE AS1742.3 2019 & TCAWS 2018.
3. NONAPPLICABLE EXISTING SIGNAGE SHALL BE COVERED E.G., SPEEDS SIGNS DUE TO THE TEMPORARY SPEED ZONE.
4. ALL SIGNAGE DISTANCE SHALL COMPLY WITH AS 1742.3 2019 & TCAWS 2018
5. IN ACCORDANCE WITH TCAWS 2018 TRAFFIC CONTROLLERS TO ASSIST PEDESTRIANS WITH MOVEMENT THROUGH & AROUND THE WORKSITE.
6. SIGNAGE SHALL BE PLACED ON THE SIDE OF THE ROAD ADJACENT TO THE TRAFFIC FLOW.
7. REMOVAL OF TRAFFIC CONTROL SIGNS AND DEVICES SHOULD BE UNDERTAKEN IN THE REVERSE ORDER OF ERECTION, PROGRESSING FROM THE WORK AREA

RECOMMENDED TAPER LENGHT

APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
> 105	N/A	110	180

DIMENSION "D"

SPEED OF TRAFFIC KM/H	DIMINESON D=M AS.1742.3	DIMINESON D=M TC@WS
45 OR LESS	15m	15m
46 - 55	15m	50m
56 - 65	45m	60m
GREATER THAN 65 KM/H	EQUAL TO POSTED SPEED	

TOLERANCES

POSITIONING OF SIGNS
MINIMUM 10% LESS THAN
THE DISTANCE OR LENGTHS GIVEN
MAXIMUM 25% MORE THAN
THE DISTANCE OR LENGTHS GIVEN
SPACING OF DELINEATING DEVICES
MAXIMUM 10% MORE THAN THE
SPACING GIVEN
NO MINIMUM

LANE WIDTHS

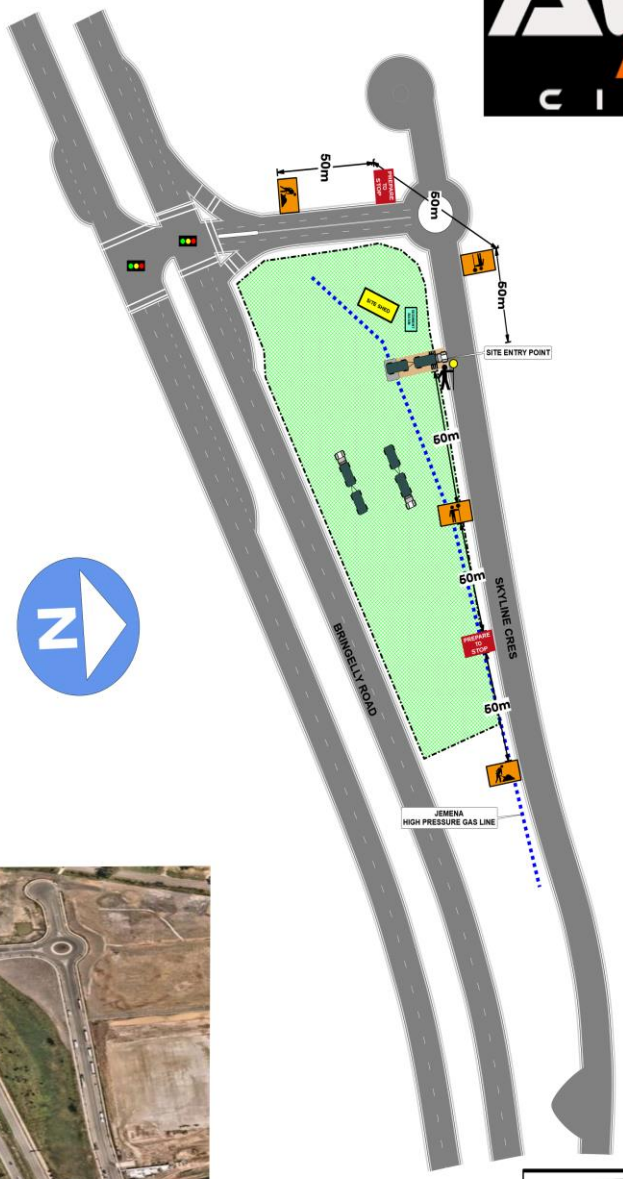
THE MIN LANE WIDTH TO BE PROVIDED THROUGH OR PAST THE WORKSITE SHALL BE 3.0m (3.5m DESIRABLE)

QUEUE MANAGEMENT PLAN

AT ALL TIMES DURING THE COURSE OF THE WORK TRAFFIC QUEUES SHALL BE MONITORED TO ENSURE THAT TRAFFIC DOES NOT EXCEED BEYOND THE LIMITS OF ADVANCED WARNING SIGNS

VEHICLE MOVEMENT PLAN

ALL WORK VEHICLES TO ENTER AND EXIT WORKSITE UNDER THE DIRECTION OF TRAFFIC CONTROLLER WITH THE TRAFFIC FLOW ON DESIGNATED UHF CHANNEL



UHF: TRAFFIC CONTROL

UHF: 13 TRUCKS

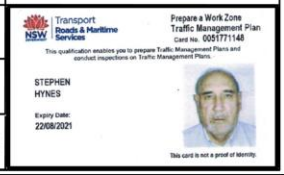
SBS Traffic

THIS PLAN IS NO T TO SCALE, NO RESPONSIBILITY TAKEN IF THE JOB SET UP IS DONE BY ANY OTHER COMPANY THAN SBS TRAFFIC.

Client:	AWJ	Term:	Short	ROL Required:	N/A	DATE PREPARED:	26/03/2021
Road Name:	Skyline Crescent	Road Type:	2Lane 2 Way	ROL Number:	N/A	DATE APPROVED:	N/A
Suburb:	Horningsea Park	Speed Limit:	50 KM/H	Road Classification:	Council	TCAWS REFERENCE	N/A
TICs Required	N/A	Travelled Path:	Past	Speed Reduction:	N/A	SAMS REF NO:	N/A
Vehicles Required:	N/A	Operation:	Stop/Slow Control	N,C,S:	Bringelly Road	PLAN REF NO:	SCS0002C

DESIGNED BY:

Stephen Hynes



A 1.3 – VEHICLE MOVEMENT PLAN

LEGEND:	
WORK AREA	
WORK VEHICLE	
TRAFFIC CONES	
LATERAL SHIFT MARKER	
TRAFFIC CONTROLLER	
TRAFFIC UTE	
SIGN POSITION	
DISTANCE MARKER	60m

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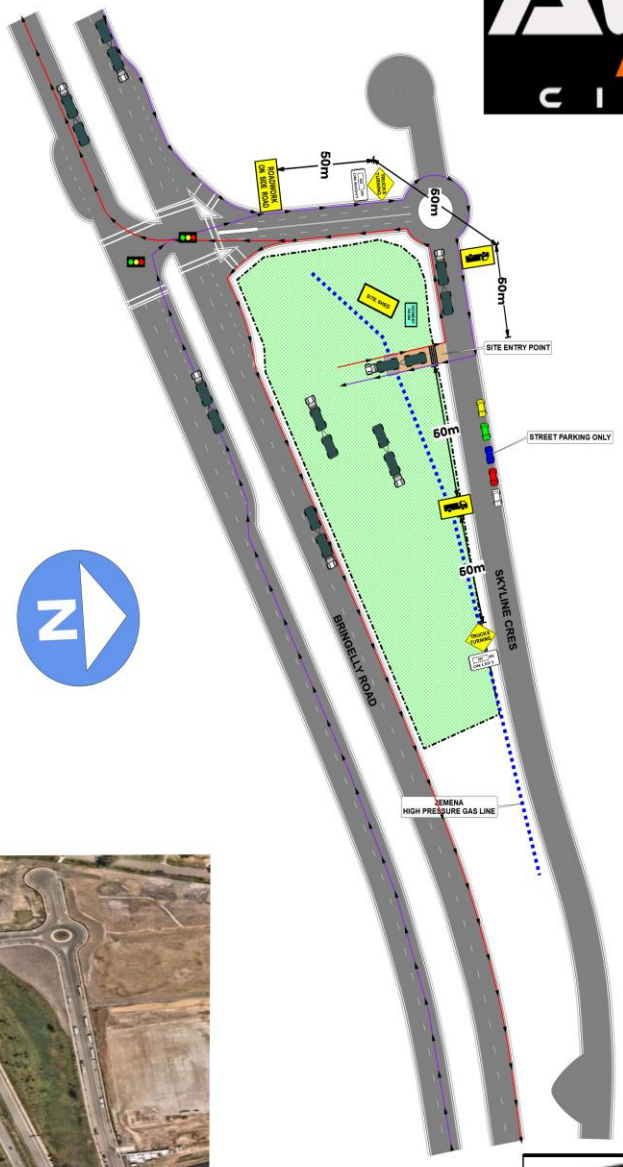

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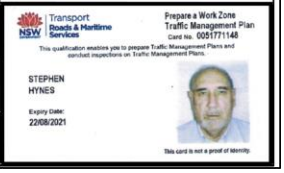
TICs Required	N/A	Travelled Path:	Into Site	Speed Reduction:	N/A	SAMS REF NO:	N/A	
Vehicles Required:	N/A	Operation:	Vehicle Movements	N,C,S:	Bringelly Road	PLAN REF NO:	SCS0002B	



APPENDIX B

B 1.1 – RISK ASSESSMENT

Risks	Rate	Potential consequences	Evaluate	Proposed risk treatment
long term works, may cause disruption to traffic	2 M	Traffic delays causing frustration to drivers & potential traffic accidents	1 L	• Consider methods to reflect the needs of drivers & the community during works, to reduce delay times therefore reducing the impact on traffic & the risk of accidents
Work vehicles Truck & dog, large vehicles, moving in & out of site	2M	Traffic accidents, unfamiliarity with area	1 L	• Site will require appropriate signs at entry & exit points, all drivers to be given written directions on entry & exit procedures. • UHF communication on channel 13 with traffic marshal on approach to site
Access to site for Haulage Vehicles	2 M	Traffic disruption or interference, Incidents due to unfamiliarity within site	1 L	• Regular check of Traffic Management Plan implementation • Have procedures in place for rapid recovery.
Pedestrian access	1 L	Potential disruption to progress causing pedestrians to not comply with pedestrian provisions.	1 L	• Liaise closely with the relevant bodies from an early stage to ensure pedestrian access provisions are adequately addressed, well established and maintained.
Damage to roads due to heavy vehicle movements	2 M	Vehicle damage & potential incidents.	1 L	• Allow for heavy vehicle movements in staging & planning to ensure existing, temporary alignment & paving are suitable during work period. • Carry out Road Dilapidation Surveys.
Access for emergency services restricted	3 H	Emergency vehicles & personnel unable to attend to an emergency situation	1 L	• Make emergency services in the local area aware of the works & provide them with a copy of the Vehicle Movement Plan (VMP).

Step 1: Determine Likelihood What is the possibility that the effect will occur?		
	Criteria	Description
Almost certain	Expected in most circumstances.	Effect is a common result
Likely	Will probably occur in most circumstances	Effect is known to have occurred at this site or it has happened
Possible	Might occur at some time	Effect could occur at the site or I've heard of it happening
Unlikely	Could occur at some time	Effect is not likely to occur at the site or I have not heard of it happening
Rare	May occur only in exceptional circumstances	Effect is practically impossible

Step 2: Determine Consequence What will be the expected effect?	
Level of Effect:	Example of each level:
Insignificant/Acceptable	No effect – or so minor that effect is acceptable
Minor	First Aid treatment only; no lost time injury
Moderate	Medical treatment; serious injuries, temporary partial disability; lost time injury < 7 days
Major	Hospital admittance; extensive injuries; lost time injury > 7 days; Permanent Total Disability injury; death
Catastrophic	Permanent Total Disability; Loss of life

Step 3 Determine the risk score					
Consequence					
Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	3 High	3 High	4 Acute	4 Acute	4 Acute
Likely	2 Moderate	3 High	3 High	4 Acute	4 Acute
Possible	1 Low	2 Moderate	3 High	4 Acute	4 Acute
Unlikely	1 Low	1 Low	2 Moderate	3 High	4 Acute

Step 4 Record risk score on worksheet (Note – Risk scores have no absolute value and should only be used for comparison and to engender discussion.)	
Score	Action
4 A: Acute	DO NOT PROCEED. Requires immediate attention. Introduce further high level controls to lower the risk level. Re-assess before proceeding.
3 H: High	Review before commencing work. Introduce new controls and/or maintain high level controls to lower the risk level. Monitor frequently to ensure control measures are working.
2 M: Moderate	Maintain control measures. Proceed with work. Monitor and review regularly, and if any equipment/people/materials/work processes or procedures change.
1 L: Low	Record and monitor. Proceed with work. Review regularly, and if any equipment/people/materials/work processes or procedures change.

APPENDIX C

C 1.1 – EXISTING SITE

Skyline Crescent Site

Skyline Crescent North from Bringelly Road

Skyline Crescent East Bound

Skyline Crescent West Bound

Skyline Crescent Site Access Point

APPENDIX D

D.1.1 PERMITS