RMS Engineering and Construction

CN-9064 Smith's Gap
Traffic Management Plan

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Job Title	Smith's Gap
Job Number	CN-9064
Client Details	Department of Transport and Main Roads

RMS Traffic Management Plan (TMP)					
Rev No.	**Date**	**Prepared By**	**Reviewed By**	**Approved By**	**Comments**
A	08/06/2020	NR			
B	18/06/2020				Amendments as per TMR comments
C	14/07/2020				Additional TGS's and register amended
C-1	22/07/2020				Added TGS RMS-108-010
C-2	04/08/2020				Revised TGS RMS-108-010 Added
C-3	14/08/2020				Revised TGS RMS-108-09-C
D	31/08/2020				Added TGS 014-017 for culverts
E	16/09/2020				TGS' 018-021 added for culverts

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1. References

Abbreviations

MUTCD	Manual of Uniform Traffic Control Devices Part 3: Works on Roads (11th issue November 2019)
TGS	Traffic Guidance Scheme/s – Drawn
TMP	Traffic Management Plan
MRTS02	Main Roads Technical Standard – Provision for Traffic
TMR	Queensland Government Department of Transport and Main Roads

Other Reference Material

Workplace Health and Safety Act 2011
Workplace Health and Safety Regulations 2011
Traffic Management for Construction or Maintenance Work Code of Practice 2011
Manual Tasks Code of Practice 2010
Traffic Controller Accreditation Scheme Approved Procedure 2010
Austroads – Guide to Traffic Management

1. 2. Traffic Management Plan

This Traffic Management Plan (TMP) provides a means of managing QA and OHS aspects during traffic management activities and demonstrating to the stakeholders (owner, contractors, consultants, regulator and the general public) that traffic management complies with the projects' requirements. The TMP has been adopted from the Queensland Government Main Roads Technical Standard - Provision for Traffic (MRTS02.1).

The TMP is prepared from components covering all traffic management aspects of the site. This includes but is not limited to:

- Scope of Works
- Traffic Operations and Resource Allocation
- Signage and Devices
- Consultation and Communication
- Hazard ID, Risk Assessment and Control
- Emergency Procedures
- Safe Working Environment

2. 3. Traffic Management Subcontractor

The expected Traffic Management subcontractor for this project will be A2O Traffic Solutions - Cairns (ABN: 48133998740).

Primary TMD for this Project Nathan Elrick (RMS) has over 10 years' experience in Civil Construction and Traffic Management as a designer and auditor. Traffic Management Design accreditation completed thru Transport and Main Roads. TMD Accreditation Number OP 73.

3. 4. Traffic Management Scope of Works

4.1. Project Information

Project CN-9046 is located on the Bruce Highway, Friday Pocket between Davern Road and Friday Pocket Road.

Works will be staged over six separate work areas. Stages One to Five will be construction areas and stage 6 will all common items throughout the previous Five stages.

The scope of works includes widening of the existing formation for the construction of an overtaking lane, installation of a concrete fauna crossing point over the Bruce Highway to include concrete footings and wingwalls and installation of animal protection fencing to guide animals to the newly constructed crossing point.

4.1.2. Key Personnel

Role	Key Person	Contact Number	Contact Email
Project Manager	NR		
Project Engineer			
Works Superintendent			
Safety Officer			
Traffic Manager			

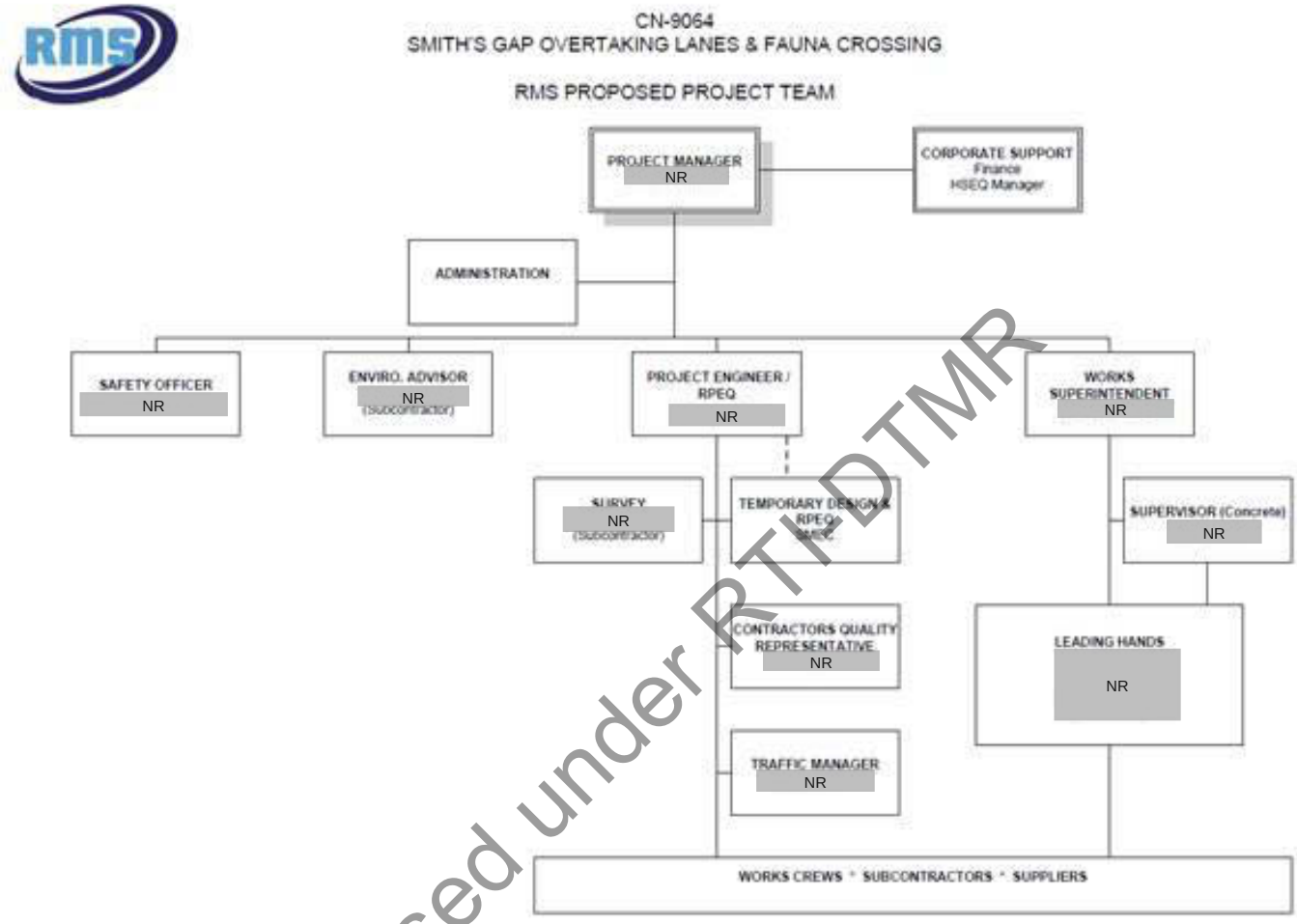
4.1.3. Emergency Contacts

Contact Name	Role	Contact Number
NR	RMS Supervisor	NR
	Operations Supervisor (A2O)	07 4430 9820
	RMS Traffic Manager	NR

Responsibility and Authority

4.1.4. Project Organisational Structure

The below structure is has been proposed for CN9064 Smith's Gap.



4.1.5. Traffic Management Structure

Position	Key Person	Contact Number	Contact Email	Responsibilities
Traffic Manager	NR			TGS design and amendments, TMP author, Site inspections, RMS representative, incident investigations
Traffic Control Supervisor	NR		TBC	Onsite traffic control operations, Management of Traffic Controllers, Site inspections, incident investigations, liaise with Traffic Manager in regard to any issues with traffic design
Safety Officer			NR	Site inspections, inductions, incident investigations
RMS Supervisor			TBC	Onsite coordinator, site inspections, liaise with Traffic Manager in regard to any issues with traffic design
Works Superintendent			NR	Works Coordinator for the project, Site inspections, incident investigations, liaise with Traffic Manager in regard to any issues with traffic design
Project Manager				Overall responsible person for project, Management of daily activities

4.1.6. Traffic Management Designer Experience

Primary TMD for this Project NR RMS) has over 10 years' experience in Civil Construction and Traffic Management as a designer and auditor. Traffic Management Design accreditation completed thru Transport and Main Roads. TMD Accreditation Number OP 73.

2016: Lead TMD, DTMR – Didgeridoo Lagoon to West Barratta Creek, Safety improvements and pavement rehabilitation in flood prone areas with works around culverts and bridge structures. Work areas surrounded by flood plains, lagoons and creeks with limited area away from highway alignment.

2017: Lead TMD, DTMR - Francis and Cattle Creek, Ingham. This project involved widening 5.8 km of road and bridge infrastructure, construction of 2 new bridges, raising the highway to improve flood immunity, upgrading several rural intersections to safer alignments, and upgrading the Frances Creek rest area. Work areas surrounded by flood plains and creeks with limited area away from highway alignment. Temporary widenings used throughout the entire project to minimise traffic disruptions.

2017: Lead TMD, DTMR - Arnot Creek Bridge, Ingham. This project included bridge infrastructure construction and flood immunity to 800m of road. Work areas surrounded by flood plains, lagoons, and creeks with limited area away from highway alignment.

2018, Lead TMD, DTMR - Elliot Springs Intersection, Townsville. Construction of signalised intersection and entry roads upgrade on the Bruce Highway for a major residential development, jointly funded by Queensland Government and Lendlease.

2018: Lead TMD, DTMR – CN7603, CN7605 and CN7610 Bruce Highway, Cardwell. Safety improvements and pavement rehabilitation in rainforest areas with undulating terrain with limited working areas due to steep batters and dense vegetation with works around culverts and bridge structures.

2019: Lead TMD, DTMR – Deep Ck to Sleeper Log Ck, Townsville. Safety improvement works on the Bruce Highway Townsville, including pavement widening, intersection improvements, installation of wide centre line treatments, culvert replacement/installation and a southbound overtaking lane. Works in a high traffic volume area with limited working area due to town water supply pipeline and residential areas. Temporary widenings used throughout the entire project to minimise traffic disruptions.

2019: Lead TMD - Townsville City Council – Southern Suburbs Rising Mains. 6.0km of utilities upgrade to existing underground services and installation of new underground services from Yolanda Drive, Annandale to Stuart Drive Oonoonba. Works in a high traffic volume area with 3 schools local to the area in residential Townsville

4.1.7. Setting out and Recovery of Devices

Before work commences, signs and devices at the approaches to and within the work area should be set out in accordance with the Traffic Guidance Scheme in the following sequence:

a) Advanced Warning and regulatory signs.
b) All intermediate advanced warning and regulatory signs and devices required in advance of the taper or start of the work area.
c) All delineating devices required to form the taper including the illuminated flashing arrow sign at the end of the taper where required.
d) Delineation of the work area.
e) All other required warning and regulatory signs including termination and end of temporary speed zone signs.

Recovery of devices at the end of the workday shall be done in reverse order using the same work method as for setting out.

4.1.8. Daily Routine and Signage Records

Onsite documents and signage records will be completed daily by way of Tablets or paper-based booklets, TGS' and any other documents required onsite will be supplied to the Traffic Controllers prior to commencement of works.

At the commencement of Daily Operations, the traffic control Team Leader will record the times and date the TGS has been implemented. This will be by the team leader documenting the approved TGS number into the Tablet or booklet and recording the time implemented, times checked, and times removed. Once the site has been set up the team leader will conduct & record regular site checks to ensure the site is compliant with the TGS and continues to be effective. Refer to Appendix A.

The site Supervisor will drive the length of the site to ensure that traffic is free flowing without hindrance or confusion and that there is no inconsistency in the traffic management they may cause uncertainty or alarm to drivers.

All records shall be signed off by the Team Leader and RMS Engineering Site Foreman at the end of each shift. Electronic copies will be sent to and filed electronically.

4.1.9. Notifying Traffic Management Centre (TMC)

If required, the TMC will be notified of any traffic management requiring Stop/Slow onsite by RMS. This will be completed by an email from RMS to the Administrator seeking approval to close a lane and is to include a copy of the TGS and timings provided for the activities planned. The Traffic Control team leader is to call and confirm opening of site and closing of the site at the completion of each shift. Records will be kept on the Traffic Control Daily Sheets of times and any information passed onto the TMC. These records will be available for viewing at the site office if required. All emails and permits will also be kept and registered at the site office.

4.1.10. Hours of Work

Hours of works will be in accordance with DTMR approved working hours of 6:30am – 5:30pm and on a roster of 10 days on 4 days off starting on Tuesday thru to Thursday the following week. Night works will be required for construction and crane lifts of the Fauna Crossing and asphalt works to reduce impact and disruption to the travelling public, with all timings presented and approved by the Administrator prior to commencement.
During the 4 day break of the roster, one inspection is to be completed every 24 hours. This inspection is to be recorded on the After hour Checklist provided by RMS.

Community & Local Environment

4.1.11. Consulting with the Community

As specified in the MRTS02.1, VMS boards will be installed at least 3 days prior to the works as an additional form of notifying the public where it is required as detailed on the TGS for each site.

Where deemed appropriate work will be completed at night to reduce any impact to the public. Any local entities that may be affected will be contacted by RMS.

At least 14 days prior to the commencement of work on any site, the Administrator will be notified of the intended wording for approval on the VMS boards.

4.1.12. Private Property Access

Private and commercial access must always be maintained, to achieve this, works will be completed to allow access and at times access widths will need to be reduced. This will be monitored by traffic controllers to ensure no more than 5-minute delays are acquired.

4.1.13. Site Vehicles, plant & equipment Access & Egress

All site traffic will always be in radio communication with the traffic controllers on site. The drivers are to radio to the traffic controller to allow enough time to move signs or devices to allow safe access and exit. If required

the traffic controllers may stop traffic to allow entry or exit safely, however this will be monitored to minimise the need to stop traffic. Traffic controllers will be positioned at various access and exit locations as determined by the client to ensure efficient use of personal.

All construction vehicle turning movements will be following the Left in, always Left out process as per the MRTS02 Provision for Traffic. At no times are vehicles to cross double solid lines to access any area of the site.

4.1.14. Emergency Services

It is the responsibility of RMS Engineering to ensure that all Emergency Services are notified of any works that could affect the routes of any vehicle under their care or control. This includes local Police, Ambulance and Fire Departments. The Project Manager (or delegate) will communicate via email or phone to notify all the above.

On a day to day scenario, in the event of an emergency vehicle requiring quick passage, traffic controllers and the Principal Contractor will assist emergency services via radio communication to a timely and safe passage through the work site.

If there is a police pursuit approaching site, traffic should be held in the opposing direction and the pursuit shall be allowed to continue through the site. Traffic control must not attempt to stop or block the pursued vehicle unless instructed to do so by Police.

4.1.15. Public Transport

Designated public transport stops are not in the area of work sites and these works will have no impact to the use of public transport. In the event non designated stops are being used in the work area, consultation will take place with the appropriate public transport provider and alternate arrangements will be agreed.

4.1.16. Oversized Vehicle & Military Convoys

Due to the location of these works Oversized vehicles and Military convoys will be expected thru site. In the event Oversize vehicles and Military convoys are to travel this route, traffic controllers on site will endeavour to give these vehicles right of way to avoid stopping or delaying them. This will be done through radio communication between Traffic Controllers and RMS Engineering using a pre-determined channel. To allow access thru site traffic control will move any delineation and act as a spotter to Oversized vehicles, giving direction of any upcoming hazards to allow safe passage of the site. RMS are to be supplied information by TMR of Oversize vehicles registered with the Excess mass and Dimension permit system within DTMR.

4.1.17. Pedestrians & Cyclists

While Traffic Controllers are on site all efforts will be given to assist pedestrians and cyclists where required. When traffic controllers are not on site, the conditions will be left to allow safe passage through for all known pedestrian routes and cyclists. Cyclists are to be provided a clear path of no less than 800mm, where this unable to be met, signage to inform of the bike lane ending shall be installed 100m prior to end point and at the point the lane finishes. In addition, signage is to be installed to notify motorists of shared zone with cyclists. Volumes of both pedestrians and cyclists are expected to be very low for this project.

4.1.18. Deviation to Approved Traffic Control Plan

In the event the Team Leader requires to adjust the approved traffic guidance scheme for a safety or another unseen issue, contact is to be made with the nominated TMD NR #OP73) or Site Foreman, changes required are to be detailed on a hard copy of the TGS, with note made to time and TMD accreditation number. The On-Site Inspector will be notified of the changes, once the electronic TGS is amended, a copy will be sent to DTMR, RMS and the Traffic Control company. Any alterations onsite will be noted, approved, signed and a copy submitted prior to the works being undertaken. Any changes to the agreed TGS are to be done by NR NR or an alternate nominated TMD in his absence.

4.1.19. Updates and Review

At specified intervals, the Traffic Management Plan and Traffic Control Measures will be reviewed to ensure their effectiveness. In the event any changes are required, a revised Traffic Management Plan will be completed and submitted for formal approval before work can continue.

4.1.20. Incident Reporting & Response

All Traffic Controllers are required to immediately inform the Team Leader of any incident where corrective action is required. In the case of an onsite emergency/incident the RMS Site Supervisor or Project Engineer are to be notified immediately. Where the incident involves traffic, the traffic control Team Leader shall also be notified ASAP. The Client representative will be notified within 24 hours of incidents onsite.

For each occurrence, an RMS incident investigation report will be completed and disseminated as required, depending on the occurrence. All incidence will be managed in accordance with RMS Safety Systems and Procedures.

Refer to the following for further information:

- RMS PR-200-005 Traffic Management Procedure
- RMS PR-200-004 Critical Incident, Emergency Evacuation & Response Procedure
- RMS FM-200-038 Incident Investigation Report

Any complaints regarding Traffic raised to RMS are to be entered into the Project Management System Register, Complaint Register for action by the delegated team member.

Overall Strategy for achieving the Specified Requirements

Works to be designed to ensure minimal disruption to normal traffic flow and keep a safe working environment for all employees within the site. This is done by ensuring where necessary, that the following occurs:

- Reduced speed limits through the site, monitored regularly and adjusted accordingly
- Appropriate barriers and end treatments are in place to protect workforce and create safe access / egress to work areas, as required
- Minimise lane closures in both number and duration
- Minimise driver confusion
- Provide safe and accessible entrances and exits to construction areas
- Schedule the works to minimise lane closures during Public Holidays, Weekends and School Holidays
- Schedule the works to minimise lane closures during daylight hours
- Minimise disturbance to existing works/activities while accessing the site
- Minimise noise disruptions during night works
- Maintain minimum lane widths as specified in MUTCD table 4.11 [<60Km/h: 3.0m lane width, 0.5m clearance to objects/delineation]

4. 5. Specific Requirements

5.1. Referencing requirements from annexure MRTS02.1 of the tender documents

All site-specific Traffic Management requirements are detailed and represented in pictorial format - Traffic Guidance Schemes (TGSs) - and are submitted for approval prior to work commencement. A TGS register will be created and supplied to all parties involved. The list of TGSs that form part of this project will be listed on page 5 under the heading of 'Traffic Management Scope of Works' on award of these works.
Notification of changes will be made through appropriate channels when required. Note that pre-tender drawing may be changed by a TMD licenced person to either be more detailed or more site specific, to be determined by the principal contractor. However, all diagrams post tender will be re submitted to DTMR for approval and a review period (hold point 1) – 14 days prior to implementation.

5.1.1. Temporary Signage

Prior to works commencement, signage shall be erected to ensure a safe workplace for all employees, clients, contactors, and visitors. Due to the duration of these works all traffic control signage will be mounted on posts

a minimum of 1m above the existing pavement height and 2m clear of all traffic lanes or if installed near a footpath signs shall be mounted a minimum of 2m above the existing pavement/footpath height.

5.1.2. Portable Traffic Signal Systems

The use of PTSS will be in line with DTMR regulations, although for this project the use of PTSS will be limited as the design is to maintain One lane in each direction and allow for turning movements. The only exception to this is when Night works are required to complete for asphalt works on the Bruce Highway. Turning movements will be restricted for short period while these works are completed. The following will still be adhered to if PTSS are deemed necessary.

Type 2 - Portable Traffic Signal Systems will be used in lieu of Traffic Controllers on all roads with a posted speed limit of 80km/h or greater and with an AADT of 1000 vehicles or more. Traffic Controllers shall complete the RMS Traffic Light Familiarisation prior to commencing any works on RMS sites.

The PTSS is always to be operated in Vehicle Trigger mode to alleviate any congestion. Traffic volumes/flow in both directions are similar and consistent volumes are expected. All sites that are operational (Work hours) will always have a minimum of One Traffic Controller onsite, located at the Master PTSS. While multiple sites are in operation an extra Traffic Controller will be employed to assist where required e.g. for site set-up and pack down, deliveries to site requiring both directions of traffic to be stopped and in the event of PTSS failure.

In the event of emergency service vehicles approaching site with lights and sirens activated, the Traffic Controller is to take control of the lights in Manual operation and activate Red lights for both directions of travel to allow unhindered travel through site. Traffic Control is to call over the Two-way to alert all workers onsite of the approaching emergency services and all vehicle/plant movements are to cease immediately. Once the Emergency service vehicle has cleared site normal operation can continue.

All PTSS must be conducted by TMR qualified staff from a safe location a minimum of 5 metres clear of all trafficable lanes. A sight distance of 160m minimum is required of approaching vehicles, with the position giving a clear view of the last vehicle and front face of the PTSS. The TC must also ensure that a clear, obstruction free escape route is maintained always.

Traffic Control/Site vehicles are not to be parked within 25 metres of the front face or 15 metres behind any PTSS. No vehicles are to be parked next to a PTSS in the exception of setting up the device.

In the event of an equipment failure a Stop/Slow bat is to be positioned at each PTSS and manual stop/slow is to be conducted until the PTSS is repaired/replaced or functioning correctly.

Traffic controllers are to keep records of battery levels, any faults shown on the Hand Controller and any other issues which will prevent the PTSS from functioning correctly. This information is to be included in the daily activity sheets by the traffic controller on duty for each shift. All faults are to be reported to the Site Supervisor as soon as they are known. Installation and operation will adhere to MUTCD- Part 3 Works on Road and MUTCD- Part 14(where applicable) and MRST254.

5.1.3 Speed Limits

The speed limit may be reduced through the construction site as per the final design (TGS). All speed changes or reductions will be in accordance with the current legislative requirements, using the Queensland TMR Manual of Uniform Traffic Control Devices Part 3: Works on Roads as a minimum standard in conjunction with MRTS02.1. The appropriate regulatory authority will be provided with notification of any proposal to change the posted speed limit. In addition, the Team leader in conjunction with the principle contractor will consistently monitor the work site to ensure that speed limits are appropriate.

The minimum posted speed while the site is active is 40 KM/H, however only when workers must be within 1.2 meters of the trafficable lane the speed will be reduced to 40 KM/H. The speed will be lifted back to 60 KM/H immediately after the risk of workers is reduced.

The minimum posted speed limit when the site is inactive will be posted at 60 KM/H.

40 KM/H speed zones required for workers safety will strictly comply with clauses 4.3 & 4.5 and Figure 4.3 of Part 3 of the Manual of Uniform Traffic Control Devices (MUTCD). 40km speed reduction is the minimum posted speed limit allowed and will be contained to within the work zone and only in the areas within the work zone where the actual work is being undertaken. This will be consistently monitored and reviewed. The minimum speed limit while the site is inactive will be posted to 60km/h.

5.1.4. Work Site Delineation

Lane closures and delineation shall be implemented by using 750mm high cones with reflective band or temporary bollards which stand 1,100mm (min) with reflective band. The distance between each cone/bollard will not exceed 12 meters for tapers and 18 meters for delineation, as specified in the MUTCD table 3.7. There is no minimum spacing between cones and the distance can be shortened at any time by any level two trained traffic controller as additional safety measures.

All delineation shall be installed to clearly identify the travelled path for motorist and must be maintained neatly to promote compliance by the public. Delineation shall be continually monitored to ensure the site is not only compliant but also visually straight where possible.

Additional delineation requirements:

- Bollards and cone installation for all areas shall be in accordance with Clause 3.9.1 of MUTCD Part 3.
- Any temporary line marking shall be to a permanent design and installation standard as per MRTS45.

5.1.5. Traffic Observation / Queued Traffic

A traffic controller's duty and responsibility shall be to control and/ or monitor the traffic. Therefore, traffic controllers shall:

- Control traffic in the approved manner, using only approved procedures
- always Monitor traffic movement through the site
- Monitor queue lengths. Record times and lengths of queues from each observation on daily sheets
- Always be alert for unexpected incidents
- Provide attention to the safety of the client's employees
- Provide attention to the safety of motorists, cyclists and pedestrians
- Monitor traffic in the vicinity of excavations. Record and report any hazards identified to Site Supervisor

If any issues are identified the Traffic Control Team Leader shall inform the Site Supervisor or Site TMD and changes made to improve the site.

5.1.6. Separation of Traffic and Excavations

The pavement design for these works in some locations will require the use of Temporary Barriers as per the MUTCD for excavations exceeding 500mm in depth, also in the interest of safety, barriers will be used where the excavation location and depth is deemed to be a hazard even if less than 500mm deep after completing a Risk Assessment. If Safety Barriers are not required, close delineation of bollards (4m spacings) and containment fencing will be installed around excavations.

5.1.7. Crane lifts near Traffic lanes

Any works involving mobile cranes, truck mounted cranes or other means of lifting near any lane of traffic will only be completed after a Risk Assessment has been conducted by RMS HSE, TMD and Site Supervisor. Lateral separation exceeding the reach and slew radius of lifting device is always to be maintained. If this is not achievable due to confined space, overhead hazards or any other reason, Traffic is to be stopped while the lift is completed. These lifts are to be scheduled outside peak times to avoid traffic disruption. Spotters will be provided by RMS only if required by the Sub Contracted Crane operator.

5.1.8. Construction Vehicle Access

Access to the Construction Site:

- All accesses are to left turn in, left turn out.
- All accesses shall meet the requirements of Austroads Guide to Road Design Parts 3 and 4a.
- All access and egress points shall be sealed, delineated with painted line marking (including continuity lines, chevrons and RRPMs, etc.) and appropriately signed including worksite access signs TC9995 associated warning signs.

The Contractor shall install controls to prevent mud, silt, rock, gravel and dirt from being tracked onto all road surfaces operating under traffic.

Construction Vehicles access will be maintained and monitored by traffic control throughout the project. This will be achieved by constant two-way radio communication (on preselected UHF channel) between traffic controller and construction vehicle. Traffic control shall man access and egress points that require general traffic interaction to ensure safe vehicle interaction.

5.1.9. Variable Message Boards

After consultation to confirm locations and wording with TMR, VMS boards will be placed at each approach to the site on the Bruce Highway and one to be placed at each end of the section under construction to assist with managing traffic. A total of four VMS boards will be supplied for this project. The VMS's supplied shall conform to the requirements of the MUTCD Clause 3.16.6.

6 Safe Working Environment

6.1 Toolbox Meetings

Before the commencement of any activity as part of a shift at a designated work-site, the Team Leader shall conduct a tool box meeting with all assigned traffic controllers and brief all relevant site-specific safety issues. The brief should include safety issues derived from, but not limited to:

- The project risk assessment and SWMS
- On-site introductions with the client or foreman / supervisor
- Site inspection/drive through

6.2 Client / Foreman Instructions

Although the MUTCD specifies that the Foreman / Supervisor is in charge of a work site, this does not authorise, justify or excuse any breach to these policies / directives. Where a Traffic Controller has been instructed to breach these policies / directives, company management shall be notified immediately.

6.3 Portable Lighting Towers

Portable lighting towers shall be installed at all traffic control points if existing lighting is not sufficient for Night Works only. Any location with a change of alignment or conditions may require the use of lighting towers to highlight any hazards to motorists.

6.4 Signage and Equipment

All signage and equipment used undergoes regular inspection and testing to ensure it complies with the relevant standards and manufacturers specifications.

Traffic Controllers shall sign up work sites using the MUTCD as the minimum standard. Signage shall be placed against existing reinforcement and / or weighted down where practicable, to prevent the sign from becoming a safety hazard.

Signage shall not be erected on any carriageway.

6.5 Clearance Area / Safety Buffer

Traffic Controllers shall establish a clearance area where practicable, between the end of the taper / transition area and the beginning of the work area of the site.

The length of the clearance area / safety buffer must be at least 20-30 metres and is to remain clear of all equipment, people, and vehicles always. The traffic controllers should not allow people to congregate or park vehicles in this area.

6.6 Traffic Island

Traffic Controllers shall not erect signage on traffic islands where the actual width of the traffic island is less than 2m. Signage erected on traffic islands shall be placed in the centre of the island and weighted down.

6.7 Traffic Observation/ Queued Traffic

A traffic controller's duty and responsibility shall be to control and/ or monitor the traffic. Therefore, traffic controllers shall:

- Control traffic in the approved manner, using only approved procedures
- always Monitor traffic movement through the site
- Monitor queue lengths. Record times and lengths of queues from each observation
- Always be alert for unexpected incidents
- Provide attention to the safety of the client's employees
- Provide attention to the safety of pedestrians
- Monitor traffic in the vicinity of excavations. Record and report any hazards identified to Site Supervisor

If any issues are identified the Traffic Control Team Leader shall inform the Site Supervisor or Site TMD and changes made to improve the site.

6.8 Standing Facing Away from Traffic

No traffic controller shall stand facing away from the traffic for any reason, which includes but is not limited to:

- Observing the client undertake their works
- Participating in unauthorised conversations

6.9 Standing between Vehicles

Under no circumstances, shall Traffic Controllers stand between any vehicles unless there is a minimum of 15m between such vehicles and at least one Traffic Controller present and constantly monitoring traffic.

6.10 Permanent Traffic Lights

Traffic Controllers shall not conduct stop / slow duties within 50m of operational traffic lights without police being on site.

6.11 Emergency Call

The Emergency Radio Call used when a life-threatening incident has occurred on a traffic control site is 'Stop, Stop, Stop'.

- No other radio traffic is to occur until the person declaring the emergency has made further communication
- Emergency vehicles with lights and sirens activated do not constitute a life-threatening incident

6.12 Unauthorised Persons

Traffic controllers shall not allow access to any unauthorised persons onto any premises or sites under the control of the company for any reasons including, but not limited to:

- Casual conversation
- Delivery of meals

Traffic Controllers shall not allow any person to congregate at the Traffic Control position.

6.13 Mobile Telephones

Mobile telephones shall be permitted for use for emergency purposes or operational requirements only. Under no circumstances are mobile telephones to be used concurrently when directing traffic.

Mobile telephone use includes sending and receiving text messages and / or downloads (photos, tones, music, etc.).

6.14 Sitting / Resting / Leaning on or In Company Vehicles

Traffic Controllers shall not be permitted to sit in / on or rest in / on or lean against a company vehicle regardless of whether on an authorised rest break / meal break, unless carrying out a duly authorised company procedure.

6.15 Rest Pauses and Meal Breaks

Where two or more Traffic Controllers are rostered to the same work site, and client personnel are working within 3m of the travelled path of the carriageway, rest pauses or meal breaks shall be alternated, in order for sufficient Traffic Controllers to remain on duty and / or monitor traffic. This is achieved by alternating duties between the traffic controllers every 2 hours for a minimum of 15 minutes.

This directive does not apply when client personnel are also on a rest pause or meal break and there is no safety related issue affecting the carriageway. Rest pauses or meal breaks shall only be conducted in a location where the opportunity for contact with traffic does not exist.

6.16 Sitting on Duty

No Traffic Controller shall sit down whilst on duty where the site-specific orders are either to be standing or patrolling. Traffic Controllers are always required to be standing in the course of their duties unless otherwise directed.

6.17 Leaving the Worksite

Traffic Controllers shall not be permitted to leave their designated post, without the authority of the company and by being relieved by a duly certified and / or authorised person.

6.18 Reading Material

No Traffic Controller shall be permitted to possess and / or read any unauthorised reading material whilst on active duty, including but not limited to:

- Newspapers, magazines, books and novels

6.19 Water and Food Consumption

All Traffic Controllers shall take and consume enough quantities of drinking water / fluids to prevent dehydration throughout their shift. All Traffic Controllers shall take and consume enough quantities of food to maintain good health and wellbeing throughout their shift.

6.20 Grooming Standards

Traffic Controllers shall conform to the following grooming standards that are directly designed for their personal safety on-site:

- Rings conforming to wedding bands design (nil bulky protruding designs)
- Minimalist necklaces or chains

- Minimalist earrings
- Nil body protruding piercings

6.21 Manual Handling

To help prevent strains when lifting or moving any heavy equipment, you should:

- Stand close to the product
- Bend your knees and lower your body
- Pick up the box, keeping your back straight
- Make sure you are well balanced before you stand up
- Lift yourself using the muscles in your legs, not your back

6.22 Prevention Measures

Some of the ways you can prevent posture problems developing is by focusing on your working posture and the site layout and furniture. Construction personnel can help prevent strains and fatigue by:

- Wearing comfortable footwear
- Varying tasks: choose tasks that offer postural changes
- Adjusting equipment and operations height to keep arms below shoulder height
- Positioning yourself to see the task with your head upright and facing forward
- Avoid standing for longer periods than is required
- Keeping your back straight when lifting objects
- Bending your knees not your back

6.23 Vehicles

Pre-start vehicle inspections are to be completed daily and are submitted with daily documentation to Management. This is then recorded in accordance with company procedures and action is taken on any safety issues.

All vehicles must be equipped with the following safety equipment as a minimum:

- First Aid Kit
- Snake Bite Kit
- In Car UHF Radio
- Rotating Flashing Lights
- Fire Extinguisher

7 Construction and Traffic Staging

Stage	Activity	Start date	Finish date	TGS number
1	Global sign installation	30/06/2020	30/06/2020	RMS-108-001
2	RHS – culverts, earthworks Ch 108525-108880	30/06/2020	26/08/2020	RMS-108-002 RMS-108-009-A RMS-108-009-B RMS-108-009-C RMS-108-016 RMS-108-017 RMS-108-018 RMS-108-019 RMS-108-020 RMS-108-021
2A	RHS Pavement works Ch 108525 - 108880	18/11/2020	03/12/2020	RMS-108-002 RMS-108-009-A RMS-108-009-B RMS-108-009-C
3	LHS – culverts, earthworks, fauna crossing prep works Ch 108525-108880	15/07/2020	17/11/2020	RMS-108-003 RMS-108-009-A RMS-108-009-B RMS-108-009-C
3A	LHS Pavement works Ch 108525 - 108880	02/11/2020	17/11/2020	RMS-108-003 RMS-108-009-A RMS-108-009-B RMS-108-009-C
4	RHS pavement works, culverts Ch 108880-109545	23/07/2020	31/08/2020	RMS-108-004 RMS-108-009-A RMS-108-009-B RMS-108-009-D
5	LHS pavement works, culverts Ch 108880-109545	01/09/2020	26/10/2020	RMS-108-005 RMS-108-009-A RMS-108-009-B RMS-108-009-D
6	Installation of Pre cast arch units, wingwalls, earthworks	30/09/2020	04/01/2021	RMS-108-006 TGS to be developed
7	Common items signs, line marking etc.	30/09/2020	04/01/2020	RMS-108-002 RMS-108-003 RMS-108-004 RMS-108-005 RMS-108-009-A RMS-108-009-B RMS-108-009-C RMS-108-009-D

8 Traffic Guidance Schemes and Register

All site-specific Traffic Management requirements are detailed and represented in pictorial format - Traffic Guidance Schemes (TGSs) - and are submitted for recording purposes prior to work commencement. Notification of changes will be made through appropriate channels when required. Although diagrams post TMP submission are not required by contract to be submitted for approval, RMS will forward TGS' to DTMR for record keeping.

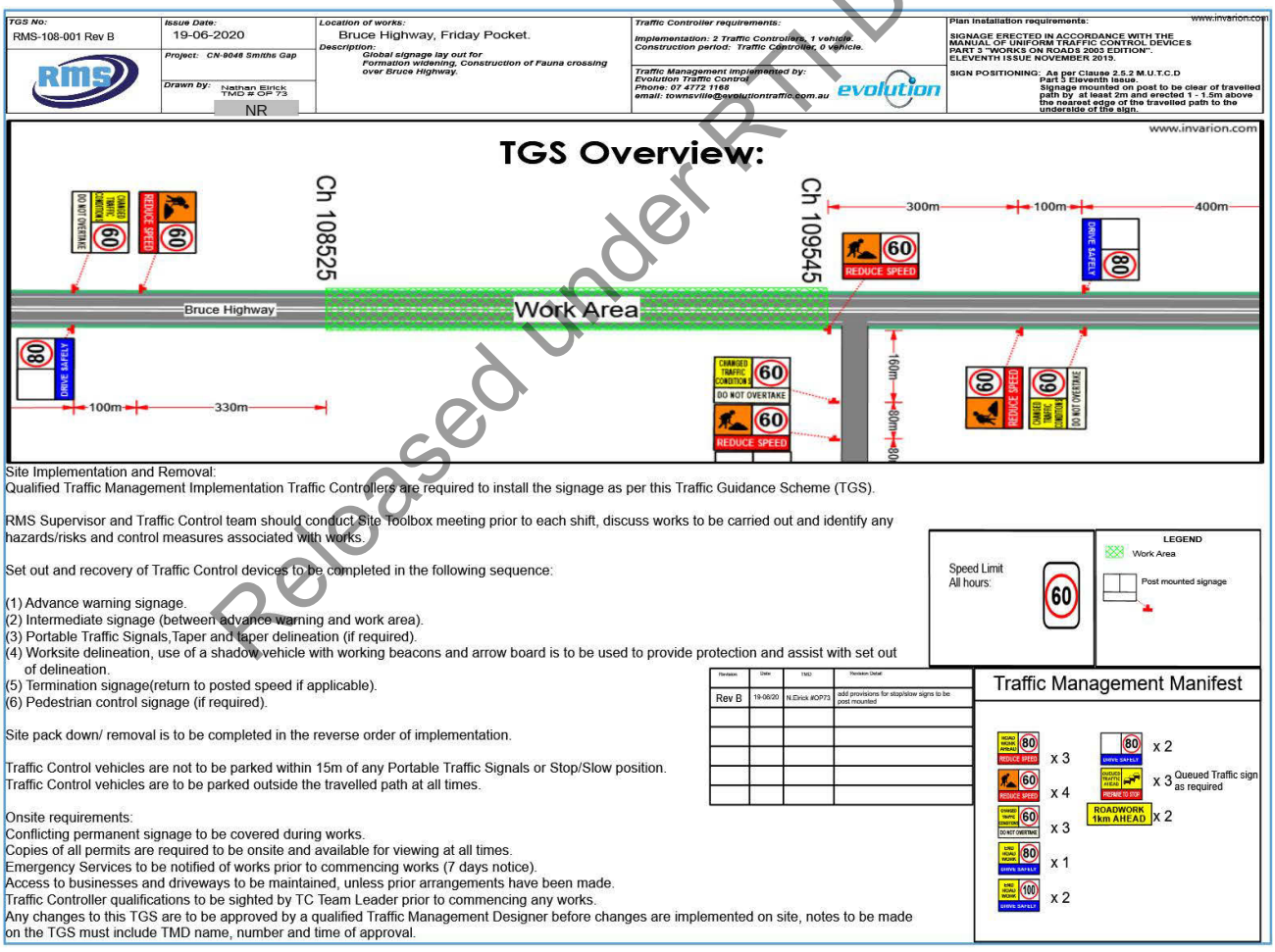
Project No.	TGS No.	Area/Stage	Description	Revision Date	Active Yes/No	TMD	Submission Date
108	RMS-108-G01	Generic	Shoulder closure		Yes	NR #OP73	17-07-2020
108	RMS-108-G02	Generic	Stop/Slow hold and release		Yes	NR #OP73	17-07-2020
108	RMS-108-G03	Generic	Workers 3-6m from trafficSignage at extents of work area		Yes	NR #OP73	17-07-2020
108	RMS-108-001 Rev B	Whole site	Global singage layout	25-06-20	Yes	NR #OP73	17-07-2020
108	RMS-108-002	Stage 2	Formation widening, culverts, Fauna crossing two-way flow on RHS		Yes	NR #OP73	17-07-2020
108	RMS-108-003	Stage 3	Formation widening, culverts, Fauna crossing two-way flow on LHS		Yes	NR #OP73	17-07-2020
108	RMS-108-004	Stage 4	Formation widening, culverts, Fauna crossing two-way flow on RHS		Yes	NR #OP73	17-07-2020
108	RMS-108-005	Stage 5	Formation widening, culverts, Fauna crossing two-way flow on LHS		Yes	NR #OP73	17-07-2020
108	RMS-108-006	Fauna Crossing	Awaiting approved design		No	NR #OP73	17-07-2020
108	RMS-108-007 Rev B	Site compound	Speed reduction at site compound, truck turning signs		Yes	NR #OP73	17-07-2020
108	RMS-108-008	Whole Site	Hold and release, clearing, imported material deliveries		Yes	NR #OP73	17-07-2020
108	RMS-108-009-A	Whole site	shuttle flow-PTSS, pavements, guardrail, culvert works, imported material deliveries		Yes	NR #OP73	17-07-2020
108	RMS-108-009-B	Whole Site	shuttle flow-PTSS, pavements, guardrail, culverts, imported material deliveries- Friday Pocket Road closed		Yes	NR #OP73	17-07-2020
108	RMS-108-009-C Rev B	Ch 108525 – 108900	shuttle flow-PTSS, pavements, guardrail, culverts, imported material deliveries- Friday Pocket Road closed	14-08-20	Yes	NR #OP73	
108	RMS-108-009-D	Ch 108700 – 109545	shuttle flow-PTSS, pavements, guardrail, culverts, imported material deliveries- Friday Pocket Road closed		Yes	NR #OP73	17-07-2020
108	RMS-108-010	CH 108525-109450	Shuttle flow with lateral shift insets		No	NR #OP73	22-07-2020
108	RMS-108-010 Rev B	Ch 108525-109545	Shuttle flow with lateral shifts and Friday Pocket Rd		Yes	NR #OP73	04-08-2020
108	RMS-108-011	Friday Pocket Rd	Closure of Friday Pocket Rd – CCRC approval recieved		Yes	NR #OP73	17-07-2020
108	RMS-108-012	Pocket produce	Driveway Signs		Yes	NR #OP73	24-08-2020
108	RMS-108-013	Pocket produce	Driveway Signs and Line marking		No	NR #OP73	
108	RMS-108-014	Culvert 2C	Shuttle flow with concrete barriers at Ch 109420 works on RHS		Yes	NR #OP73	31/08/2020
108	RMS-108-015	Culvert 2C	After hours- shuttle flow with concrete barriers		Yes	NR #OP73	31/08/2020
108	RMS-108-016	Culvert 1B	Shuttle flow with concrete barriers at Ch 108640 works on RHS		Yes	NR #OP73	31/08/2020
108	RMS-108-017	Culvert 1B	After hours – shuttle flow with concrete barriers.		Yes	NR #OP73	31/08/2020
108	RMS-108-018	Culvert 1B and 1C	Shuttle flow with concrete barriers at Ch 108640 and 108820		No	NR #OP73	17/09/2020
108	RMS-108-019	Culvert 1B and 1C	After hours – shuttle flow with concrete barriers		No	NR #OP73	17/09/2020

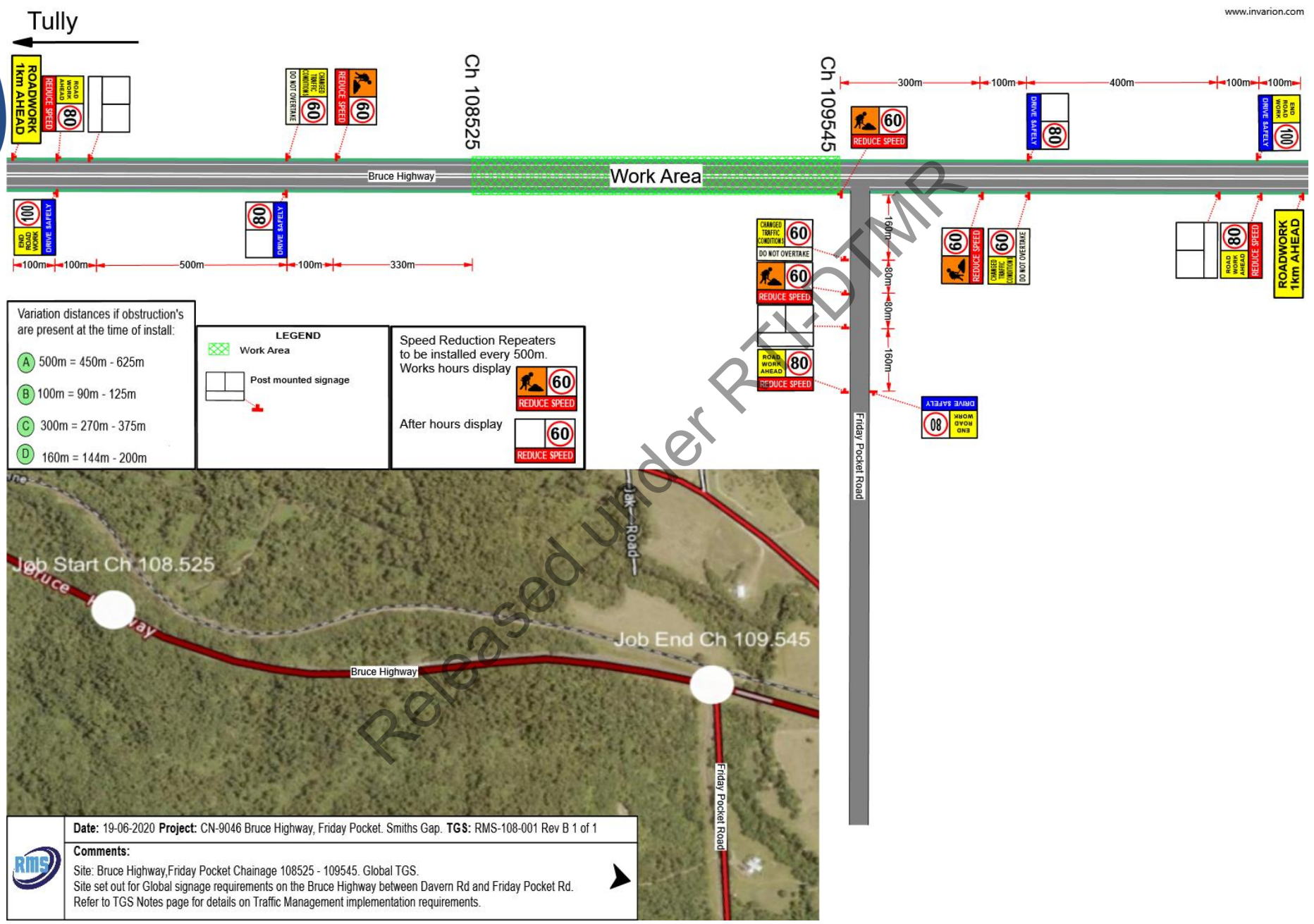
108	RMS-108-020	Culvert 1C	Shuttle flow with concrete barriers at Ch 108820		No	NR #OP73	17/09/2020
108	RMS-108-021	Culvert 1C	After hours – shuttle flow with concrete barriers		No	NR #OP73	17/09/2020

Site: Chainage 108525 - 109545 10N.
TGS RMS-108-001.

This TGS is for when the whole of the project is operational. Refer to site specific TGS for works detail/traffic management setup.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours will not be required due to location of works.	Not practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	This option is suitable for Global TGS.	Option chosen
Traffic past the site	Past site is not suitable.	Not practical

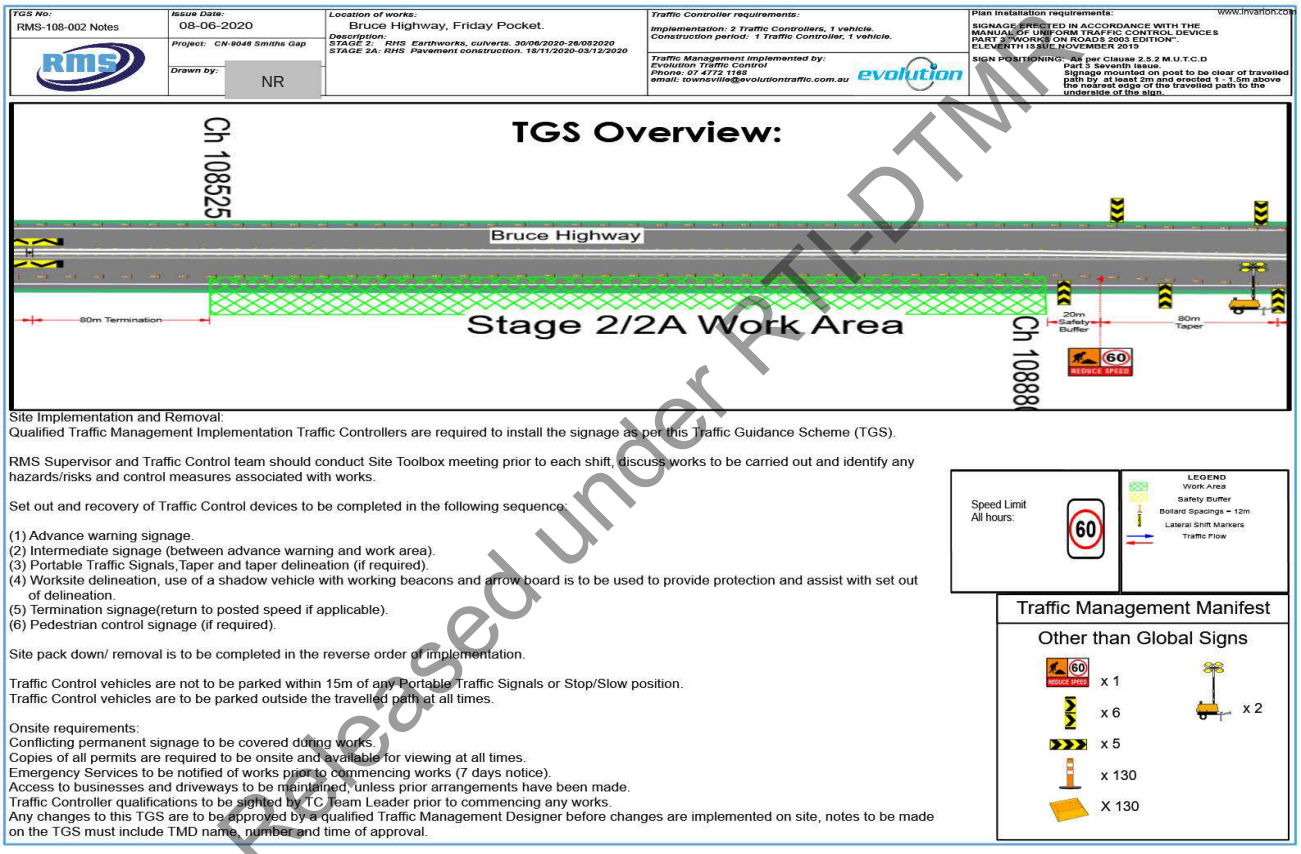


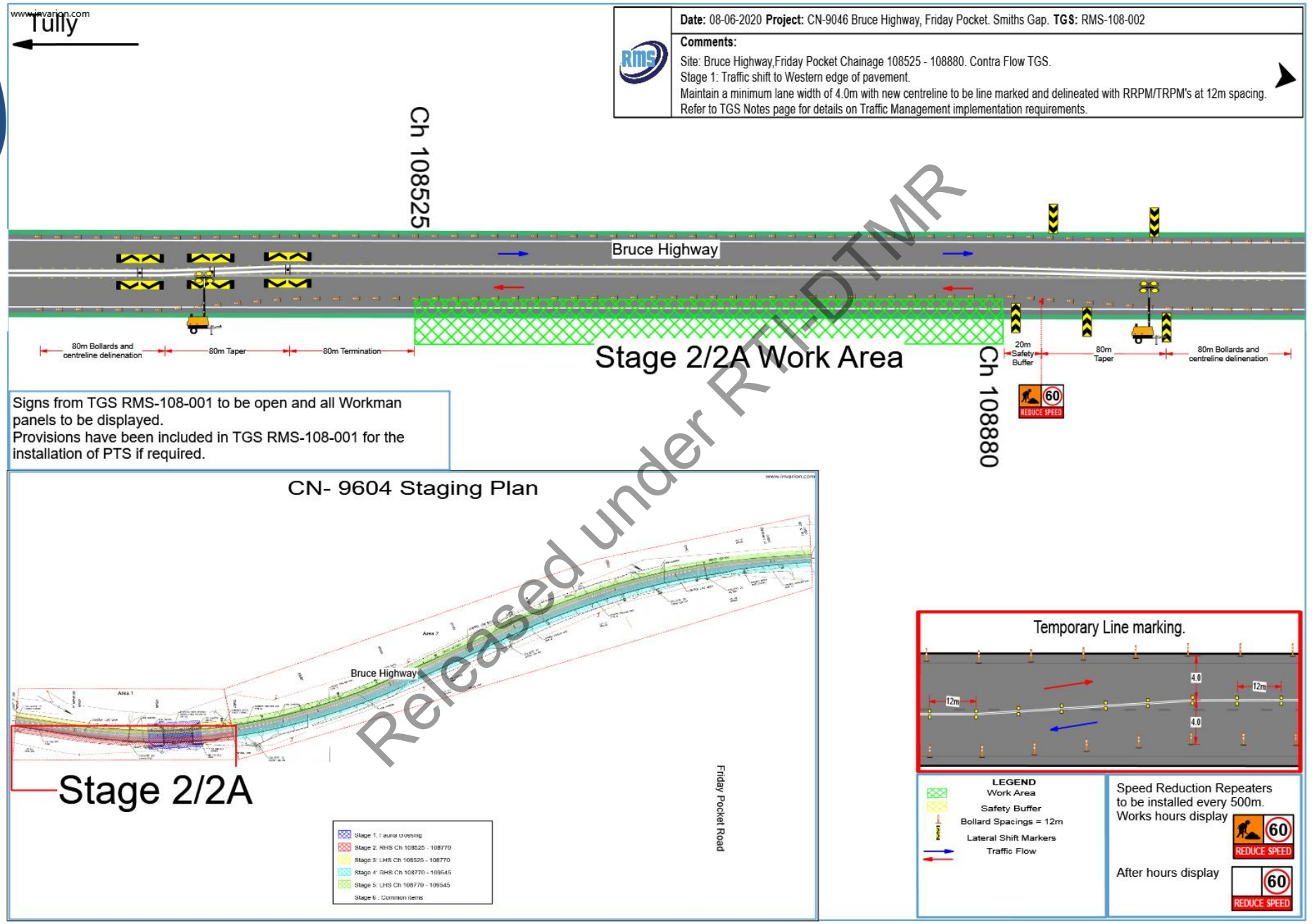


TGS RMS-108-002 Stage 2/2A Works.

This TGS is for when works are limited to Ch 108525 – 108880 with works on the Right-hand side.
Construction of Fauna Crossing not included in this TGS.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours will not be required due to location of works.	Not practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Use of this option is suitable for use with the global plan.	Option chosen for plan
Traffic past the site	This option is not suitable.	Not practical

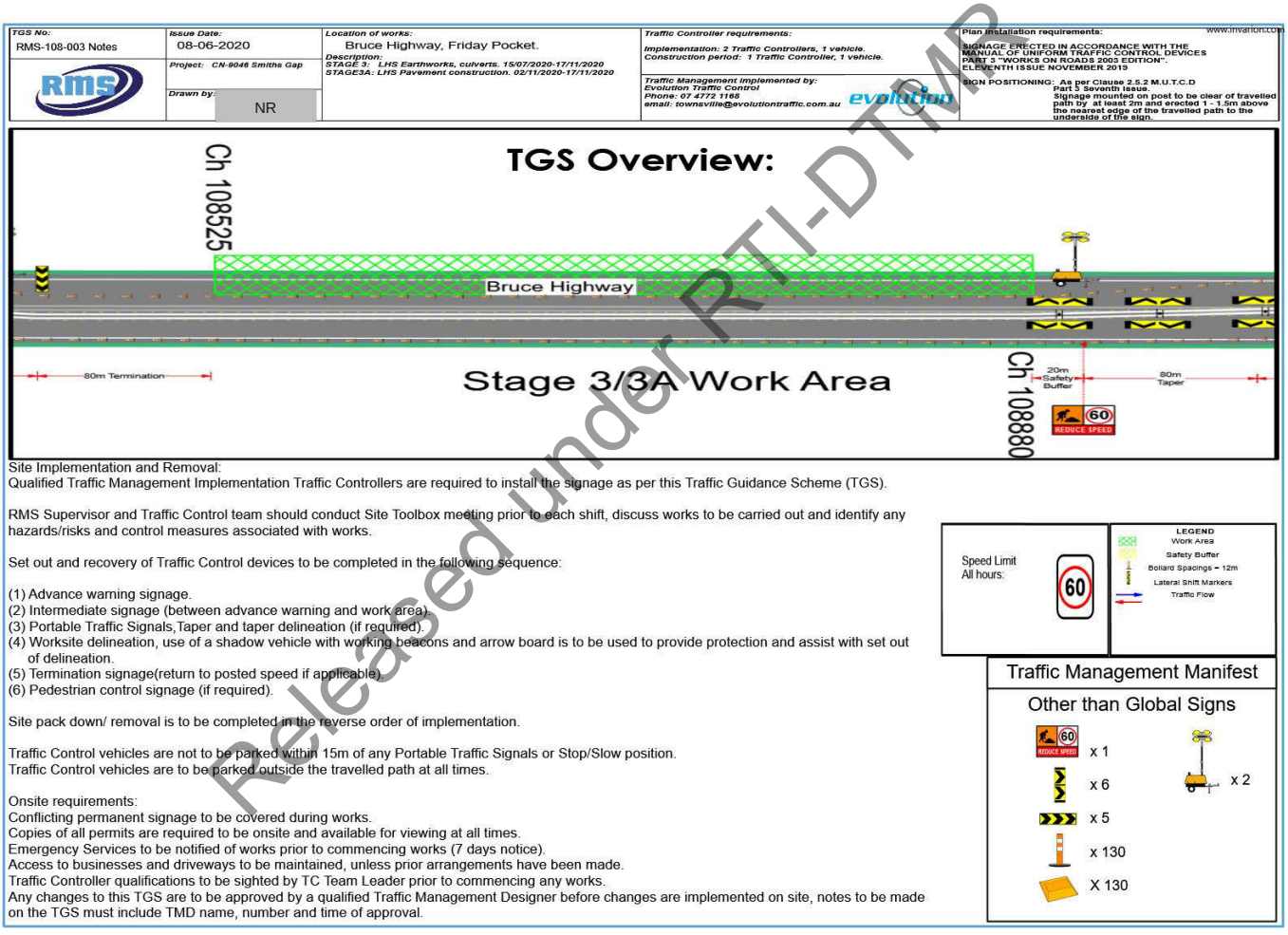


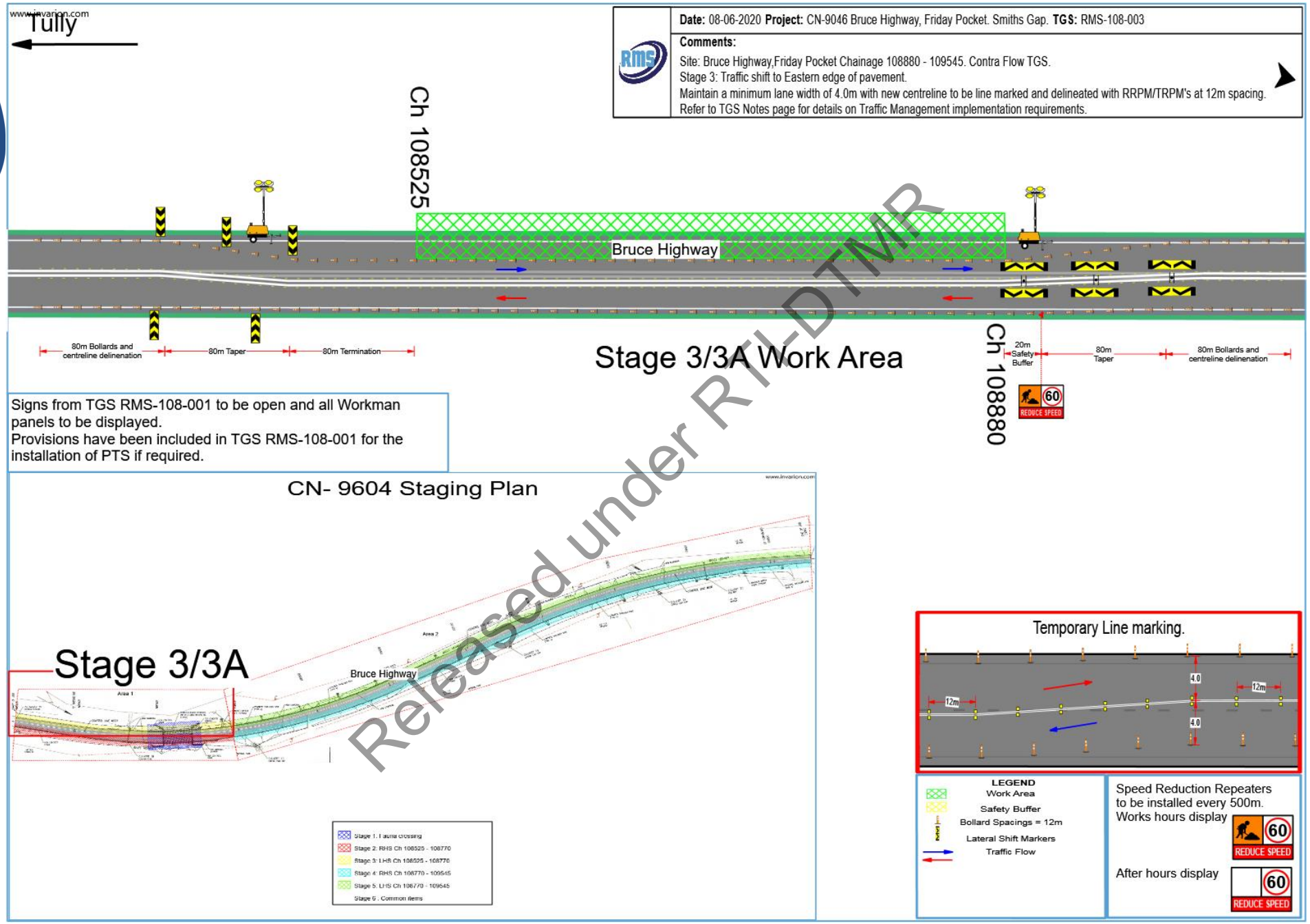


TGS RMS-108-003 Stage 3/3A works.

This TGS is for when works are limited to Ch 108525 – 108880 with works on the Left-hand side.
Construction of Fauna Crossing not included in this TGS.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours will not be required due to location of works.	Not practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Use of this option is suitable for use with the global plan.	Option chosen for this plan
Traffic past the site	This option is not suitable.	Not practical

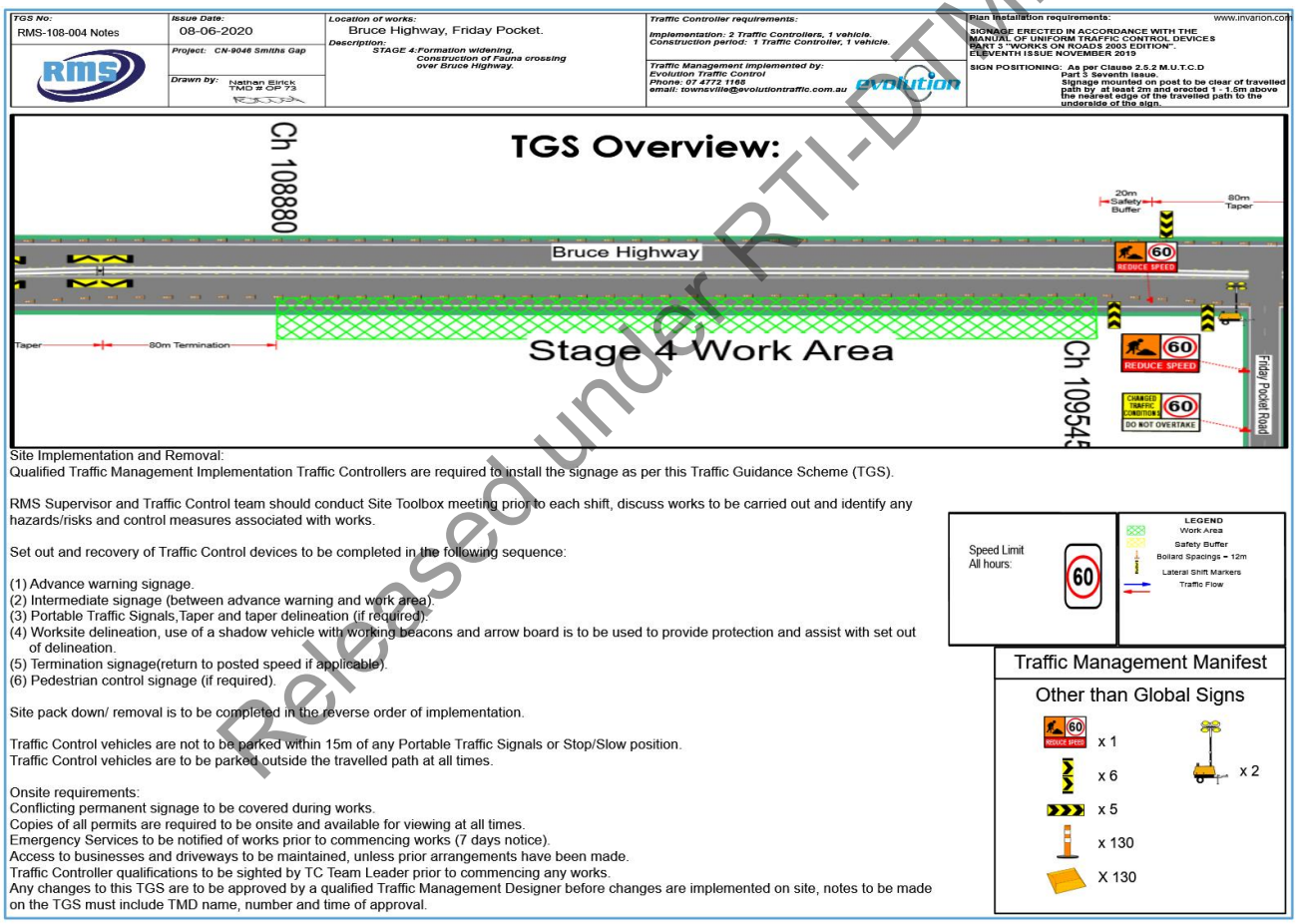


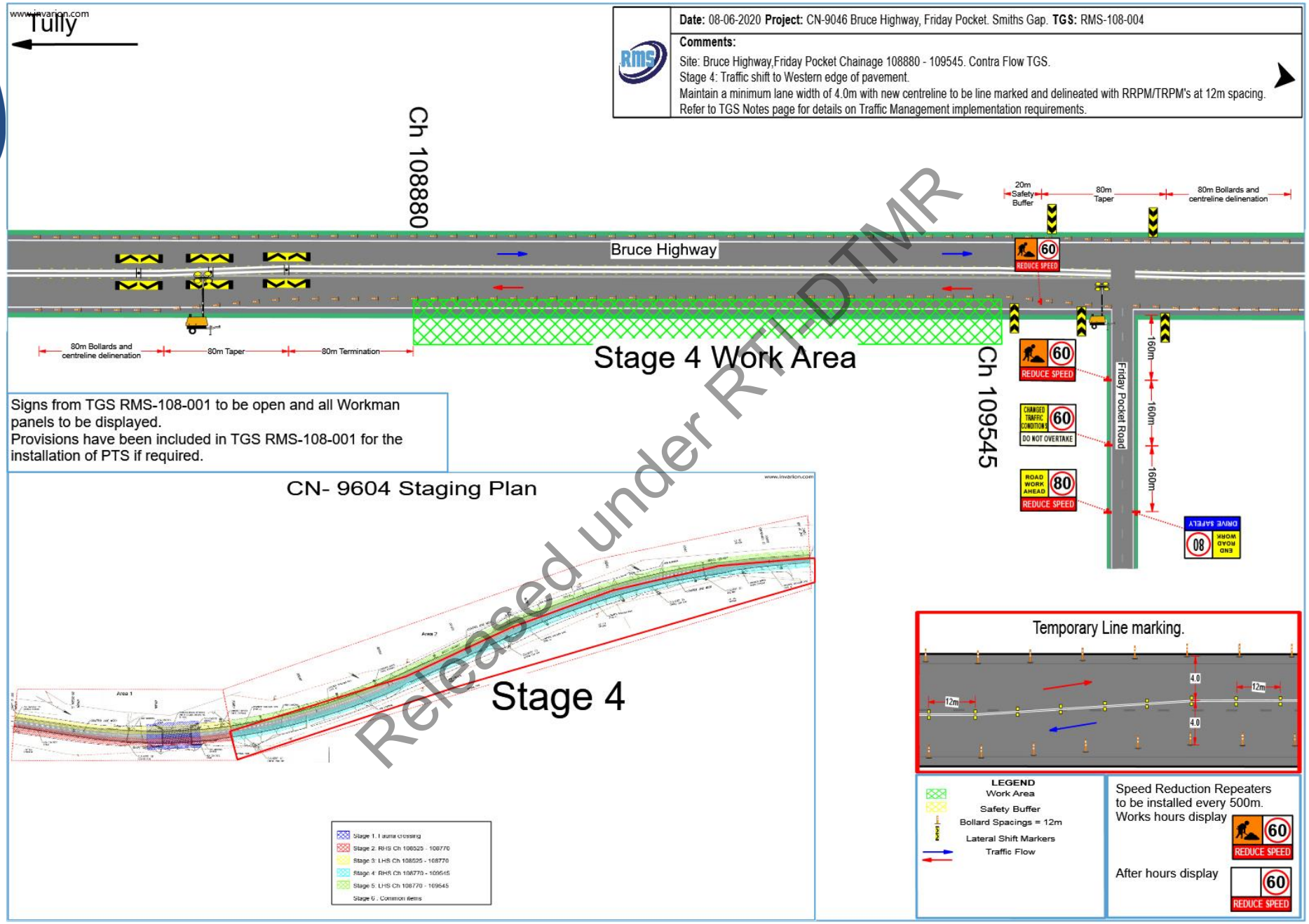


TGS RMS-108-004 Stage 4 works.

This TGS is for when works are limited to Ch 108880 – 109545 with works on the Right-hand side. Construction of Fauna Crossing not included in this TGS.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours will not be required due to location of works.	Not practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Use of this option is suitable for use with the global plan.	Option chosen for this plan
Traffic past the site	This option is not suitable.	Not practical

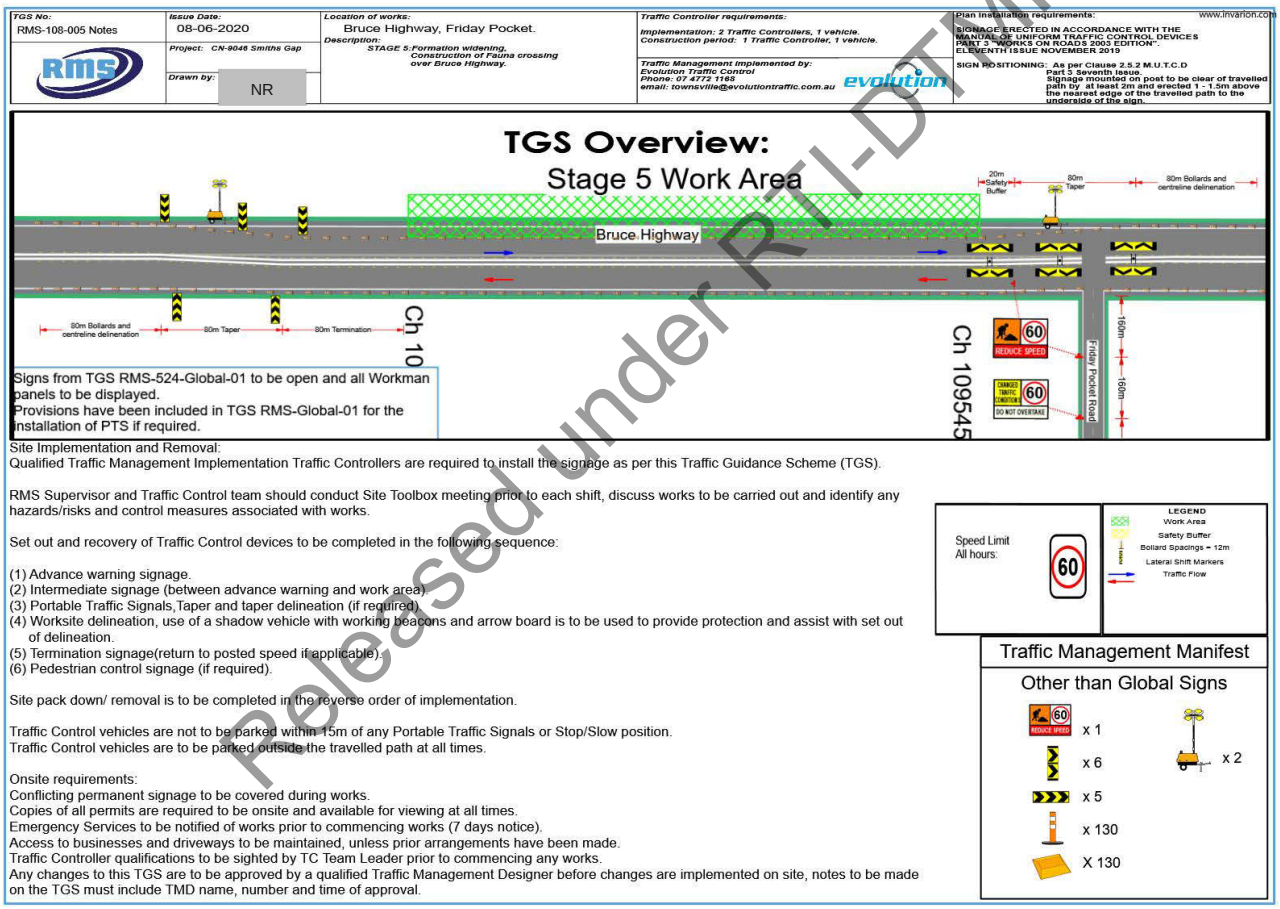


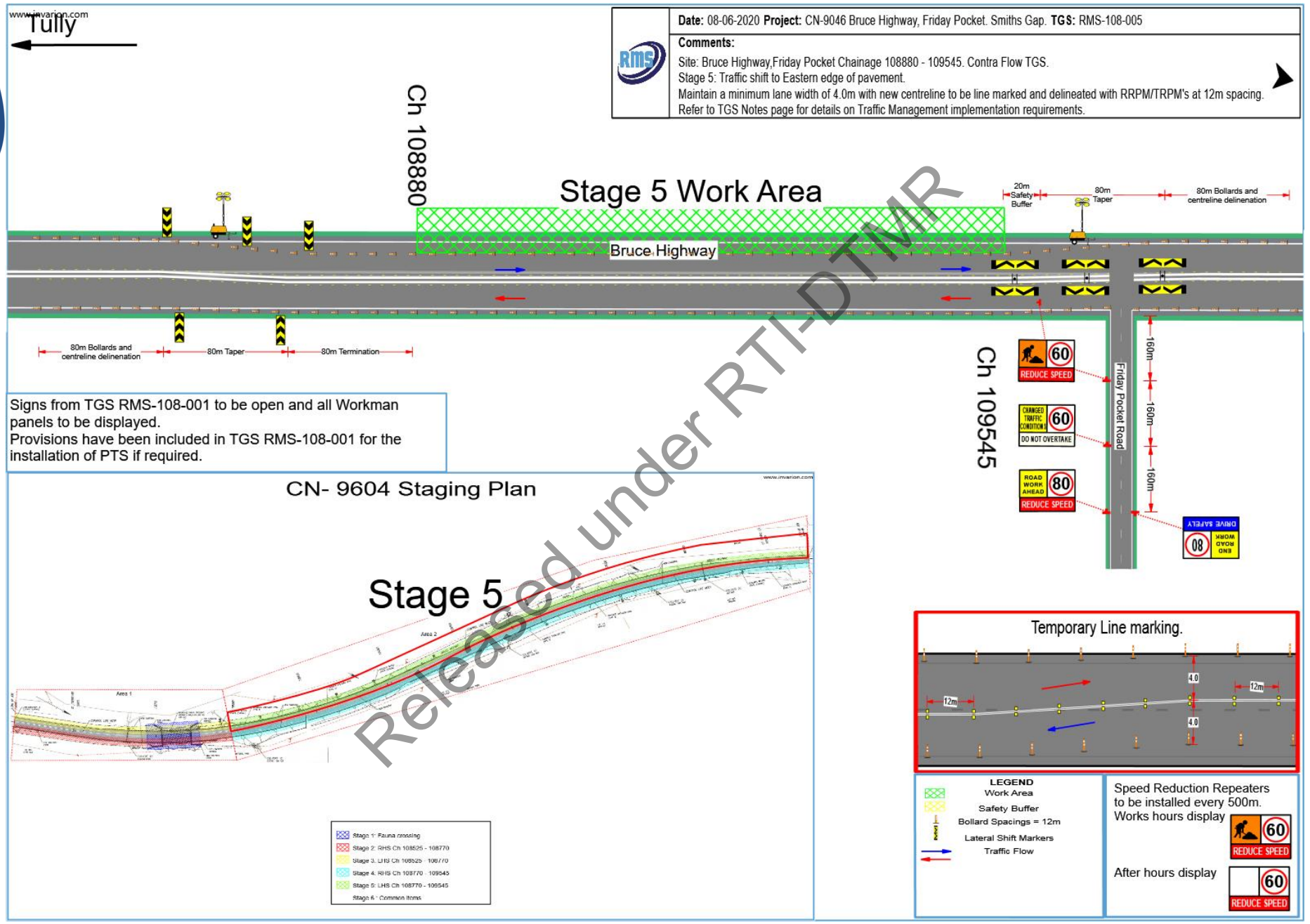


TGS RMS-108-005 Stage 5 Works.

This TGS is for when works are limited to Ch 108880 – 109545 with works on the Left-hand side. Construction of Fauna Crossing not included in this TGS.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical





TGS RMS-108-006 Fauna Crossing Works.

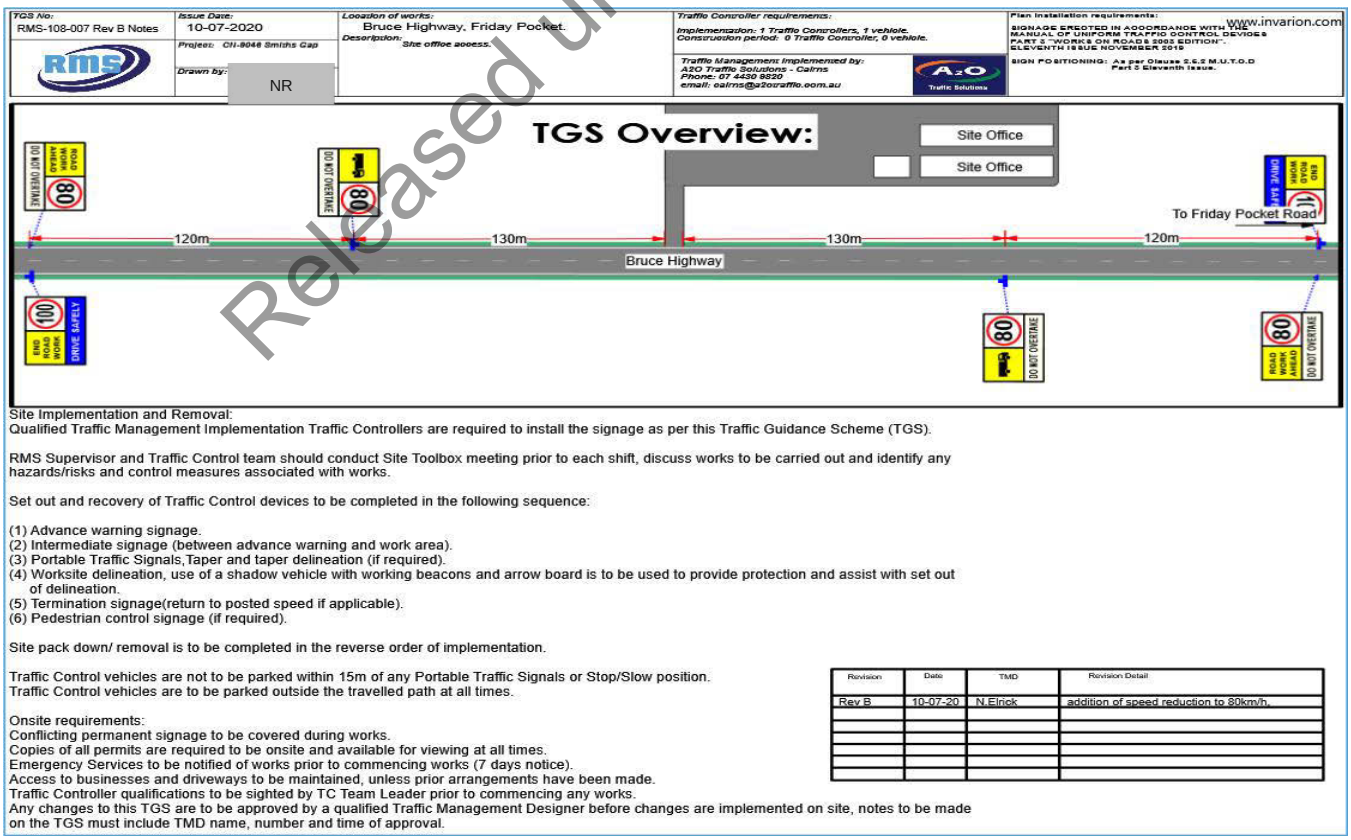
This TGS is for when works are limited to the construction of the Fauna Crossing with traffic under shuttle flow using side track. Side track details to be confirmed by RPEQ prior to creating TGS.

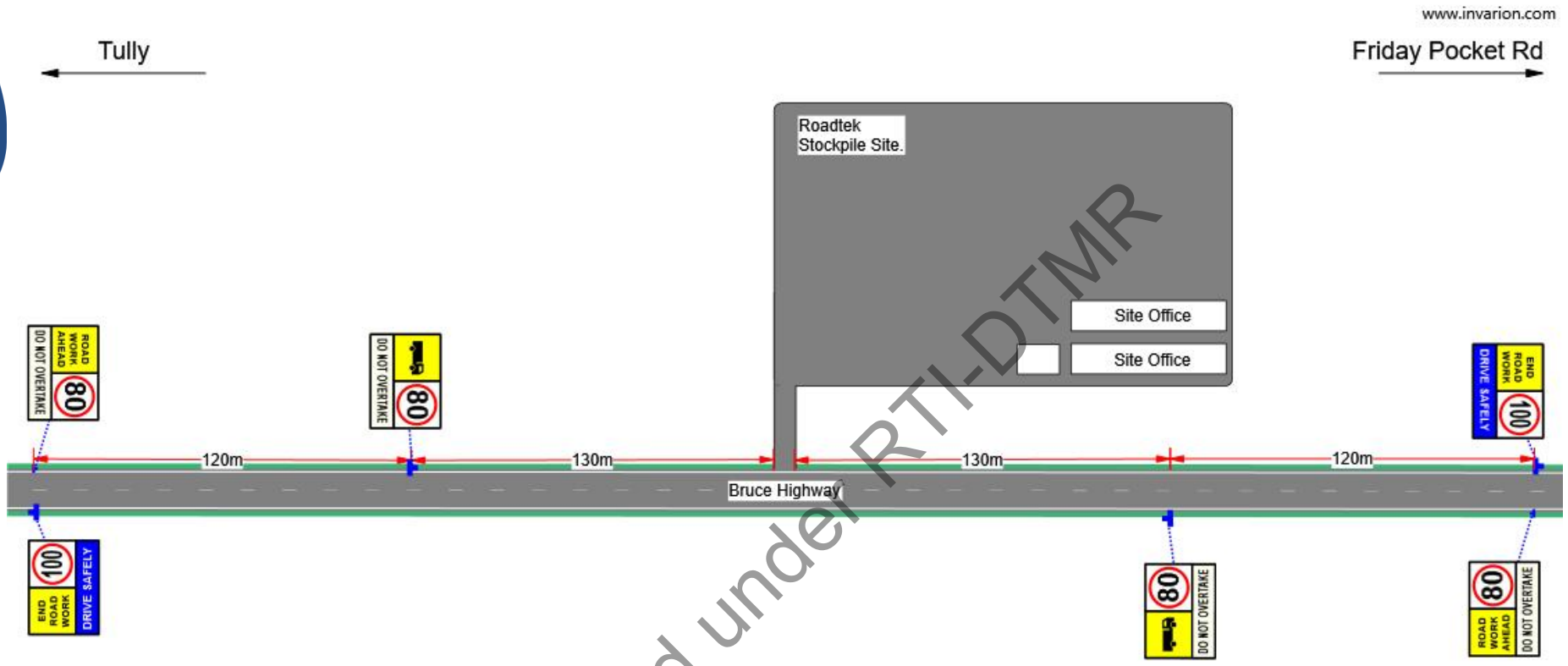
Option	Requirements	Comments
Traffic Around the site (Detour)	Detours will not be required due to location of works.	Not practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Option chosen for plan
Traffic through the site	Use of this option is suitable for use with the global plan.	Not practical
Traffic past the site	This option is not suitable.	Not practical

TGS RMS-108-007 Rev B.

This TGS is for when the whole of the project is operational, speed reduction in the area around site compound. Refer to site specific TGS for works detail/traffic management setup.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours will not be required due to location of works.	Not practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	This option is suitable for Global TGS.	Option chosen
Traffic past the site	Past site is not suitable.	Not practical





Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-007 Rev B

Comments:

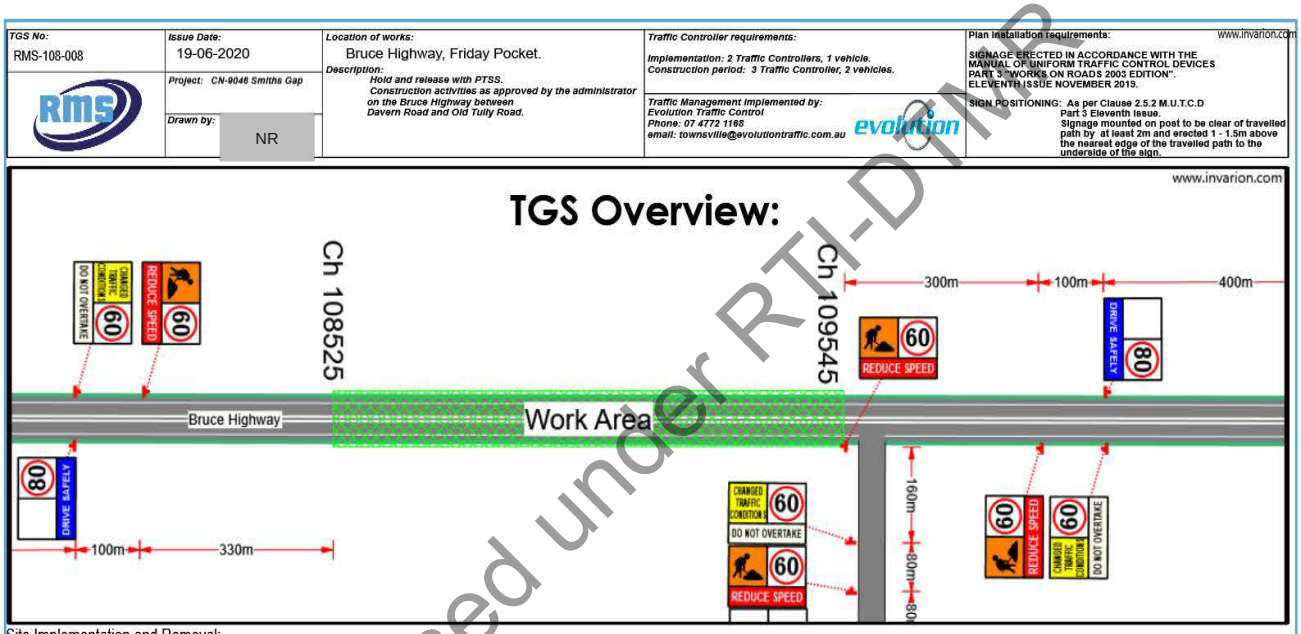
Site: Bruce Highway,Friday Pocket Chainage 107000.
Site Office access.

Refer to TGS Notes page for details on Traffic Management implementation requirements.

TGS RMS-108-008 Stop/slow hold and release.

This TGS is for when works approved by the administrator where hold and release is required eg. Plant movements, sealing works.
Construction of Fauna Crossing not included in this TGS.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

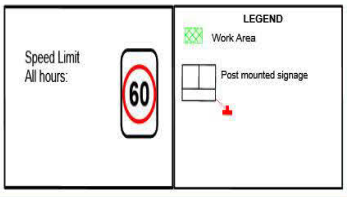
Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.



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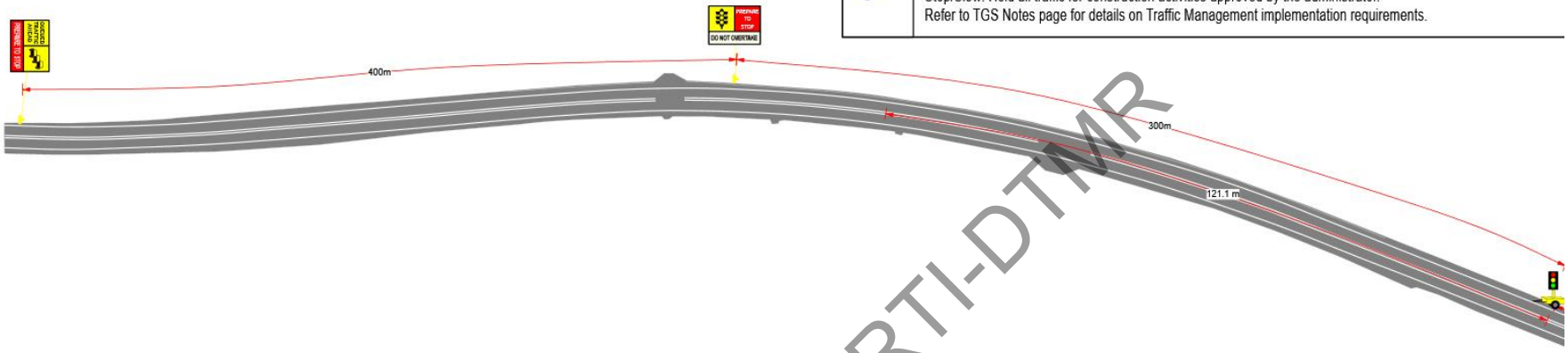
Tully

Date: 19-06-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-008 1 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Hold all traffic for construction activities approved by the administrator.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
Provisions have been included in TGS RMS-108-001 for the installation of PTS if required.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

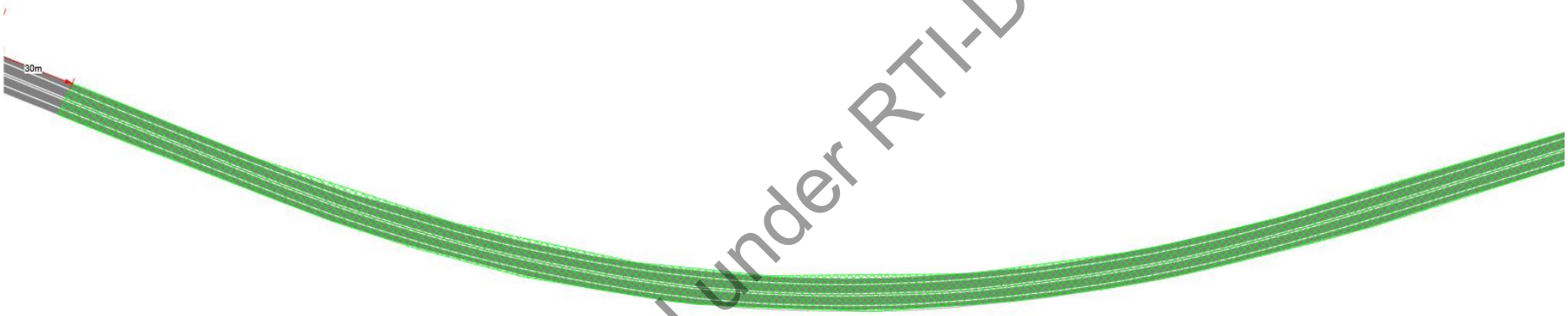
Speed Reduction Repeaters to be installed every 500m.
Works hours display
60 REDUCE SPEED
After hours display
60 REDUCE SPEED

Tully

Date: 19-06-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-008 2 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Hold all traffic for construction activities approved by the administrator.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
Provisions have been included in TGS RMS-108-001 for the installation of PTS if required.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

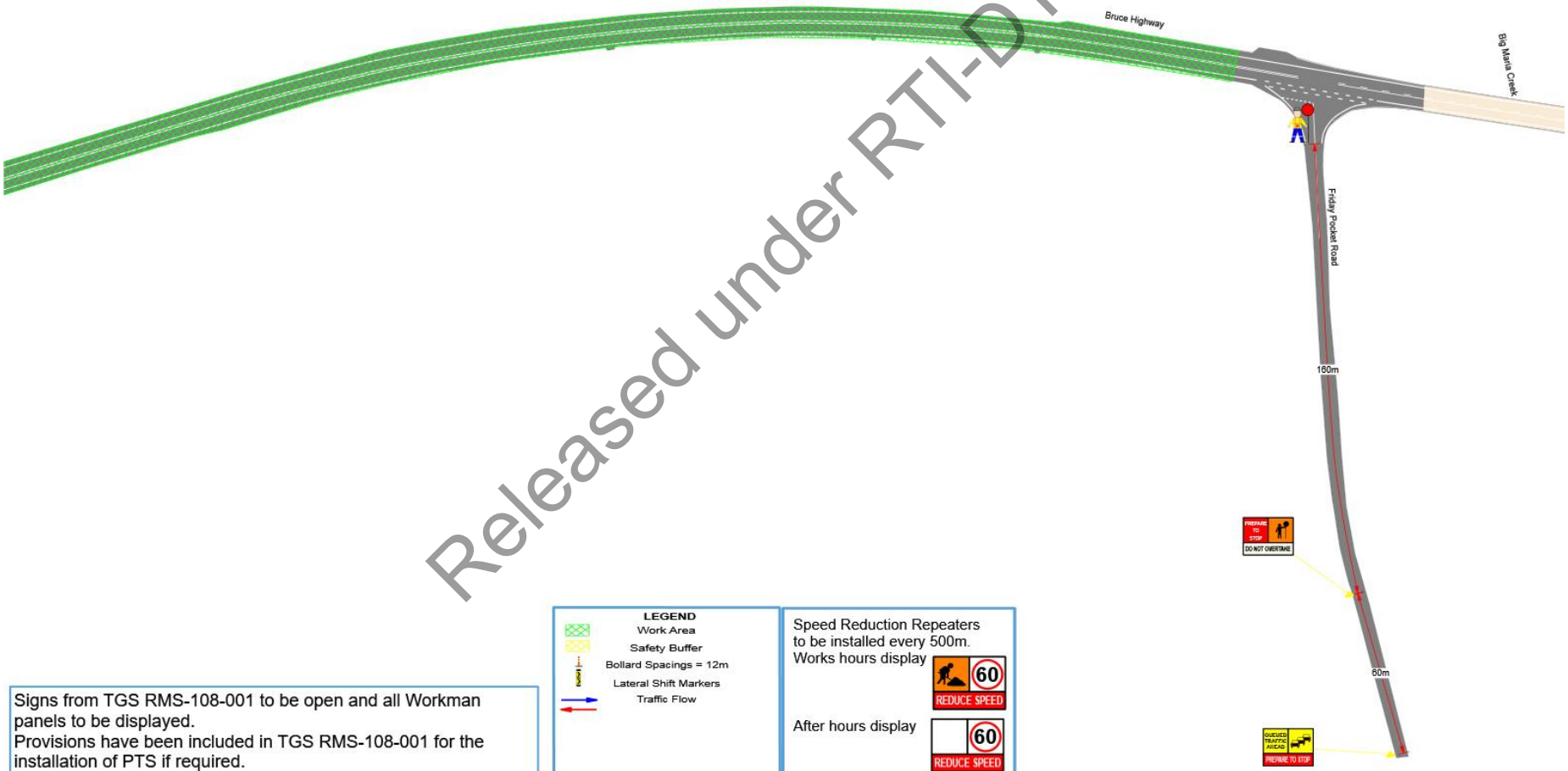
After hours display

Tully

Date: 19-06-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-008 3 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Hold all traffic for construction activities approved by the administrator.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display

Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
Provisions have been included in TGS RMS-108-001 for the installation of PTS if required.

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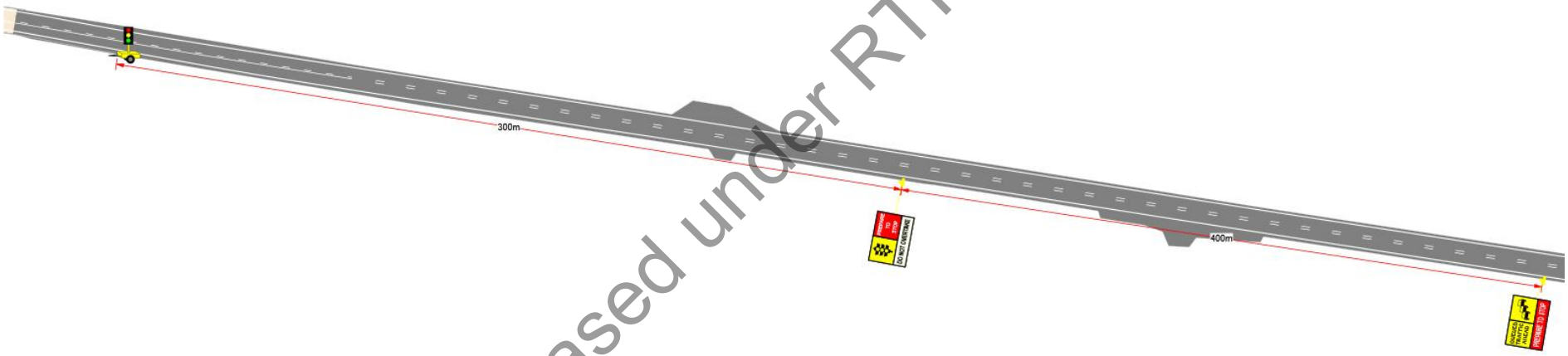
Tully

Date: 19-06-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-008 4 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Hold all traffic for construction activities approved by the administrator.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
Provisions have been included in TGS RMS-108-001 for the installation of PTS if required.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

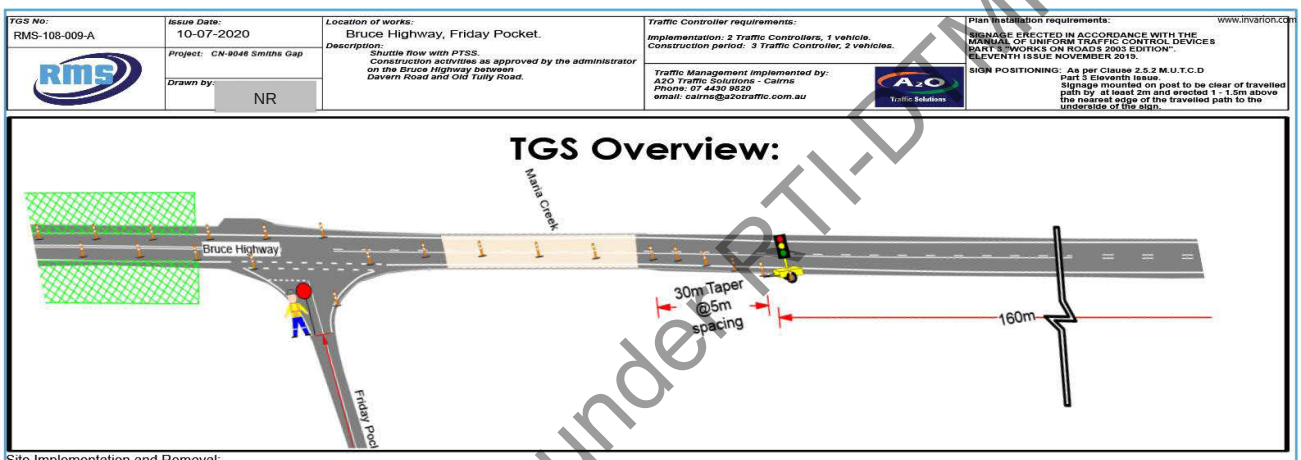
Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display

TGS RMS-108-009-A Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

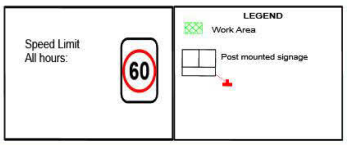
Set out and recovery of Traffic Control devices to be completed in the following sequence:

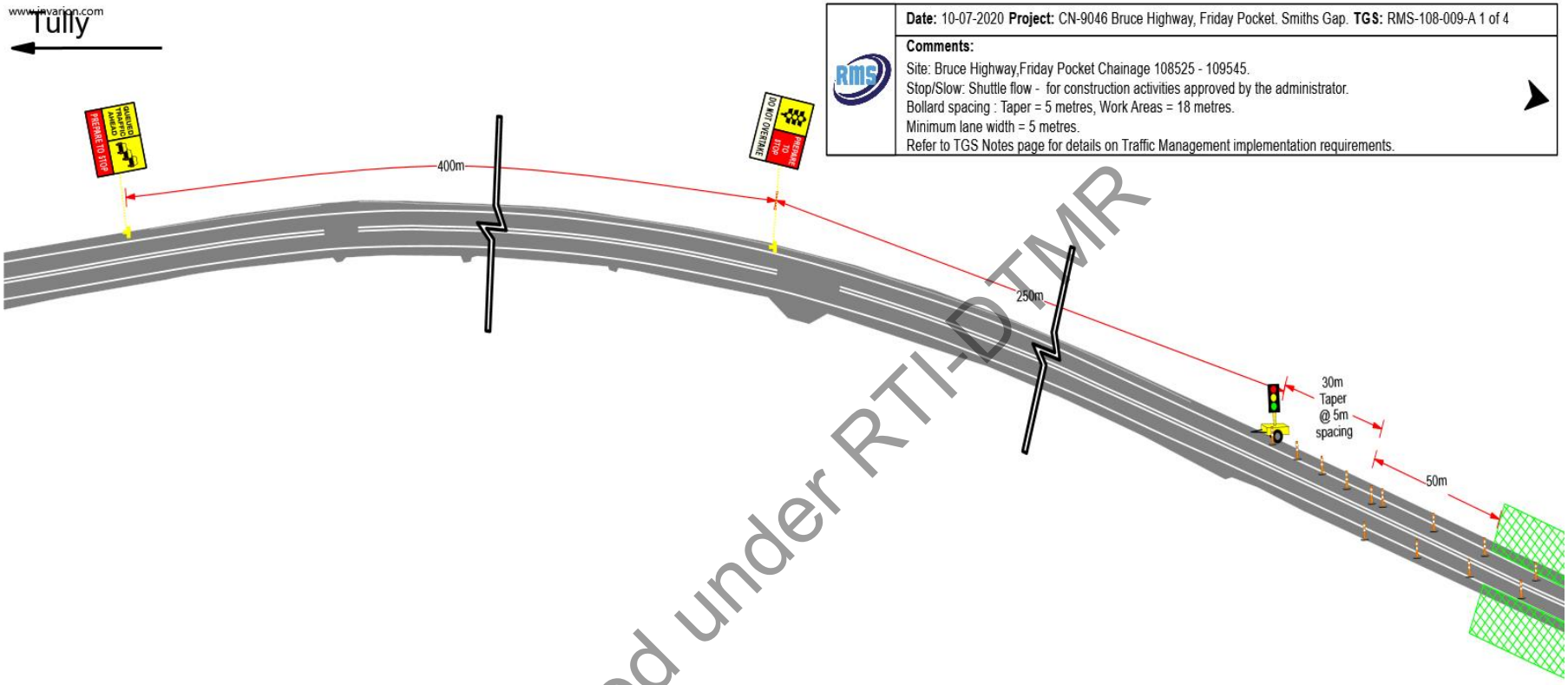
(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.





Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-A 1 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display

Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

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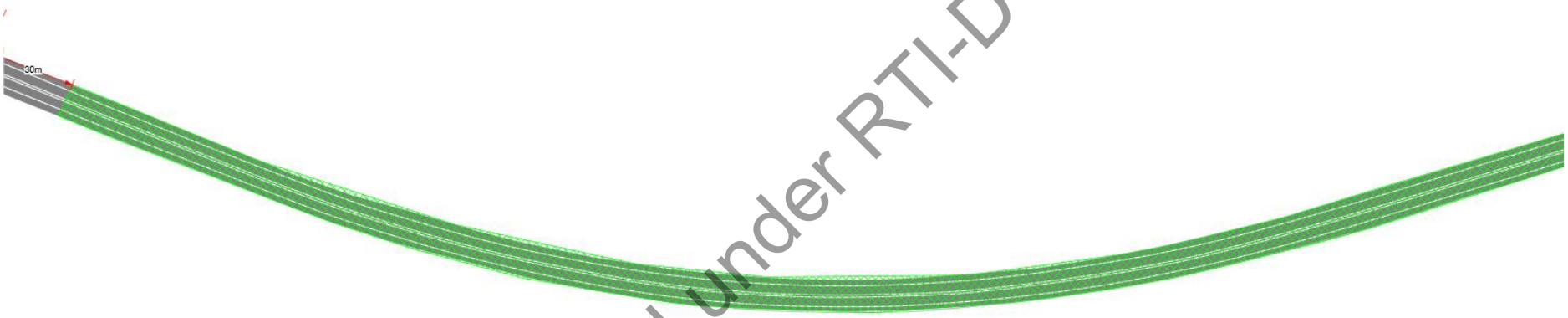
Tully

Date: 19-06-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-008 2 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Hold all traffic for construction activities approved by the administrator.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
Provisions have been included in TGS RMS-108-001 for the installation of PTS if required.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

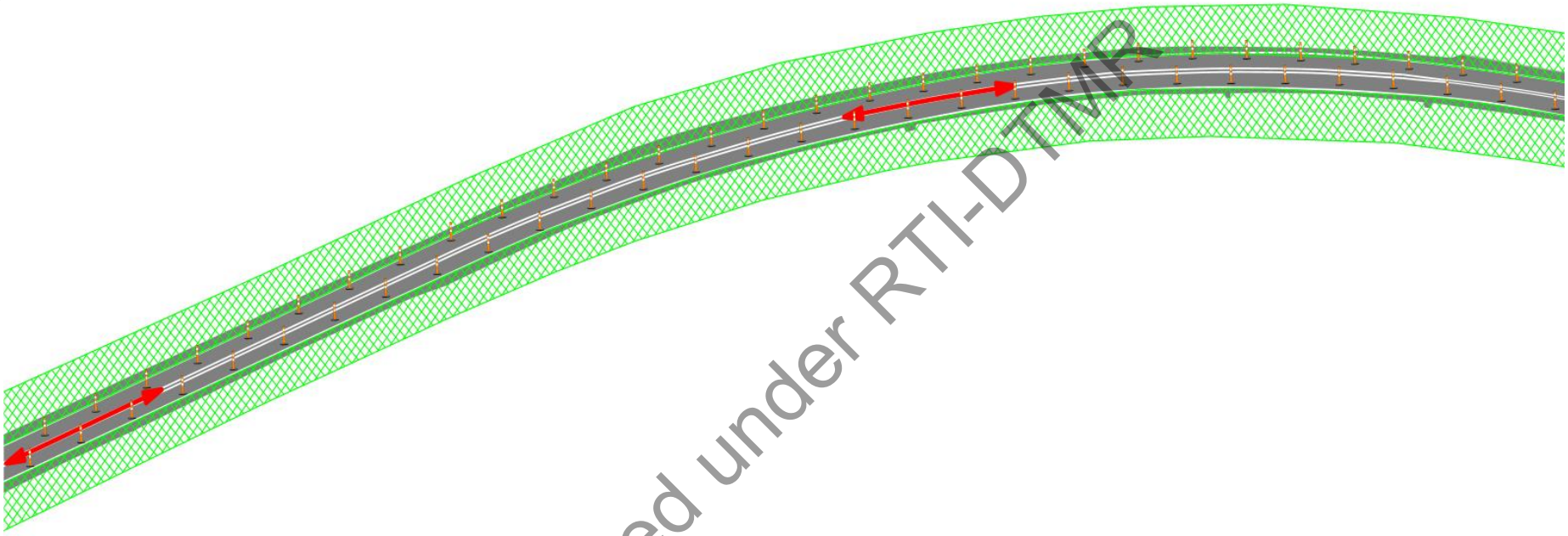
After hours display

Tully

Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-A 3 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

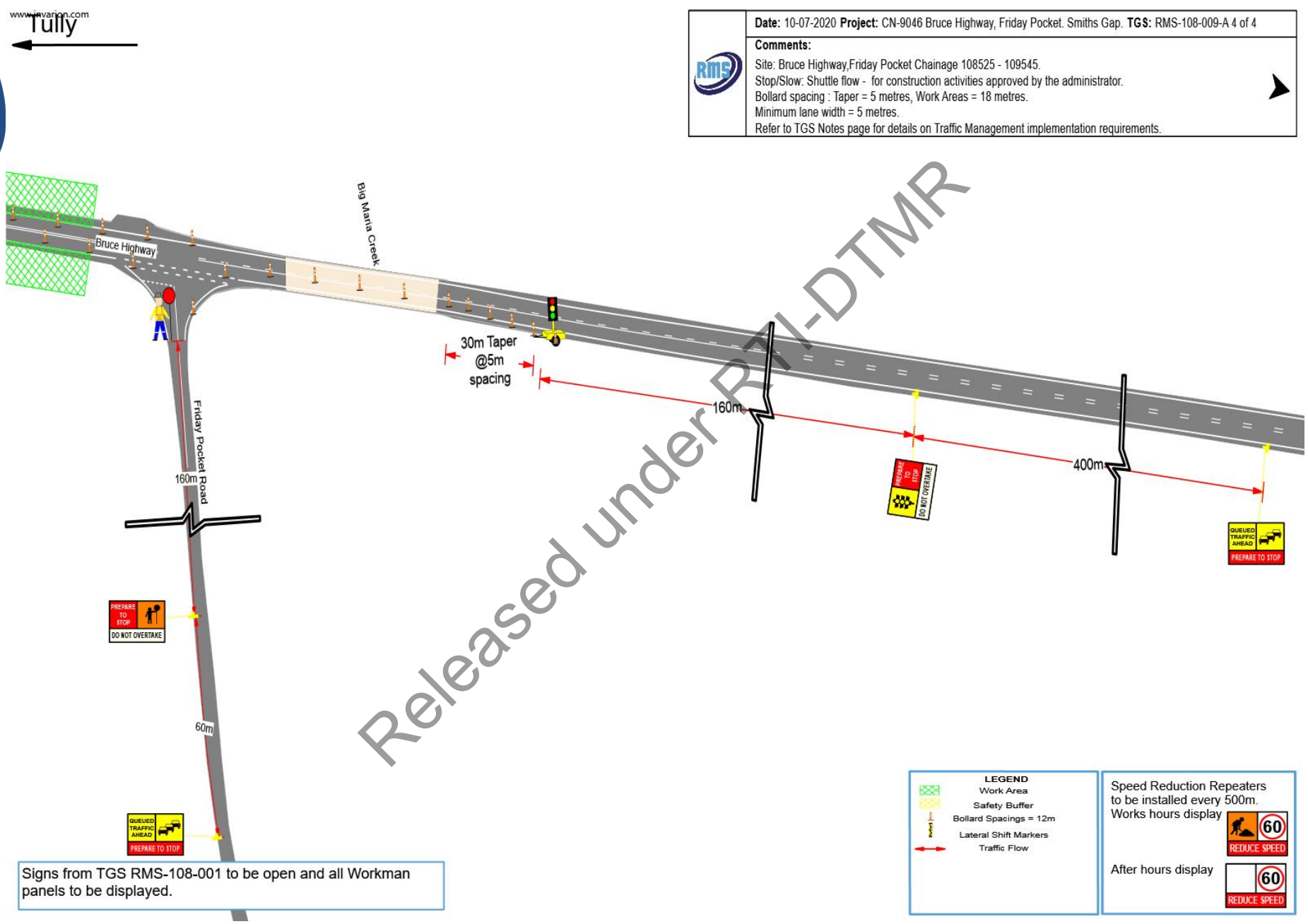


Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display



Shuttle flow TGS' with Friday Pocket Road closure.

TGS' RMS-108-009-B, RMS-108-009-C and RMS-108-009-D all have Friday Pocket Rd closed with a detour via Granadilla Road (refer to TGS RMS-108-011 for detail).
Listed below are the contributing factors in relation to closing Friday Pocket Road:

- It is necessary to close one lane as no loading can be placed within 1.5m of the top of batter. We are working on both sides of the road. Also, we need to cut into the existing road for the widening of pavements therefore decreasing the available pavement widths.
- Full width culverts are to be constructed in two halves and these span from one end of the job to the other. Must be single lane closure for work and non-work hours.
- In Principle, the administrator is comfortable with the single lane approach for the completion of the work.
- Where possible leave two way traffic, outside work hours.
- Due to the steep terrain, we have to enter multiple work zones along the length of the job. This is not safe to do so unless we have the project under single lane closure.
- Friday Pocket Rd is located right at the end of our project (approx. ch 109.570) and does not allow for a safety buffer when workers are at this end of the project.
- Closing a lane for the length of the job supports the minimising of confusion for road users. It is simple and consistent.
- Cassowary Coast Regional Council has approved the road closure.
- Minimise disruption to traffic on the Bruce Highway by only having two streams of traffic to control.

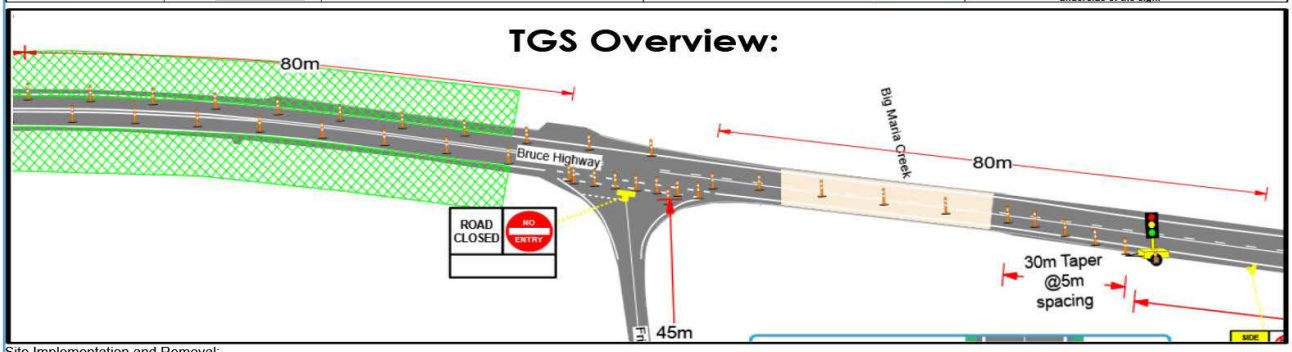
TGS RMS-108-009-B Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.
Closure of Friday Pocket Road.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

TGS No:	Issue Date:	Location of works:	Traffic Controller requirements:	Plan installation requirements:
RMS-108-009-B	10-07-2020	Bruce Highway, Friday Pocket.	Implementation: 2 Traffic Controllers, 1 vehicle. Construction period: 2 Traffic Controller, 1 vehicle.	SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2019.
	Project: CN-9046 Smiths Gap	Description: Shuttle flow with PTSS. Temporary closure of Friday Pocket Rd. Construction activities as approved by the administrator on the Bruce Highway between Davern Road and Old Tully Road.	Traffic Management implemented by: A2O Traffic Solutions - Cairns Phone: 07 4430 9820 email: cairns@a2otraffic.com.au	SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.
	Drawn by: NR			

TGS Overview:



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

Speed Limit
All hours: 60

LEGEND
Work Area
Post mounted signage

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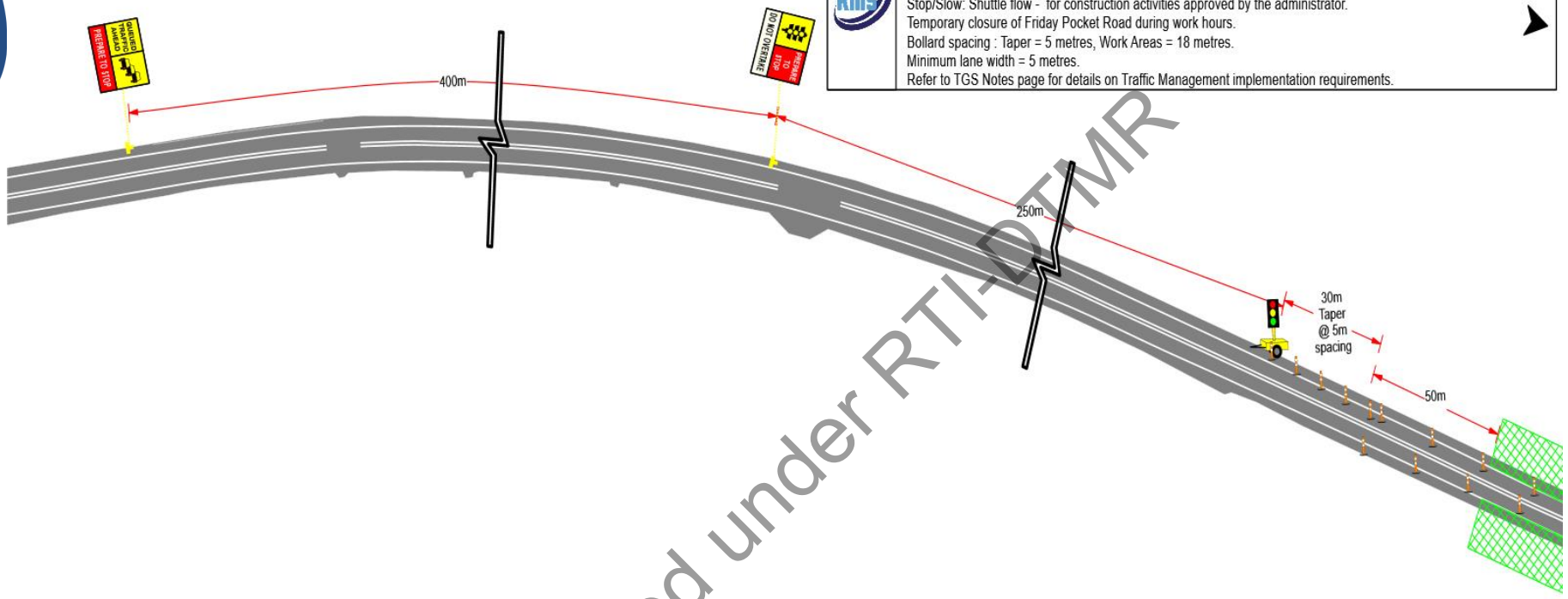
Tully

Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-B 1 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

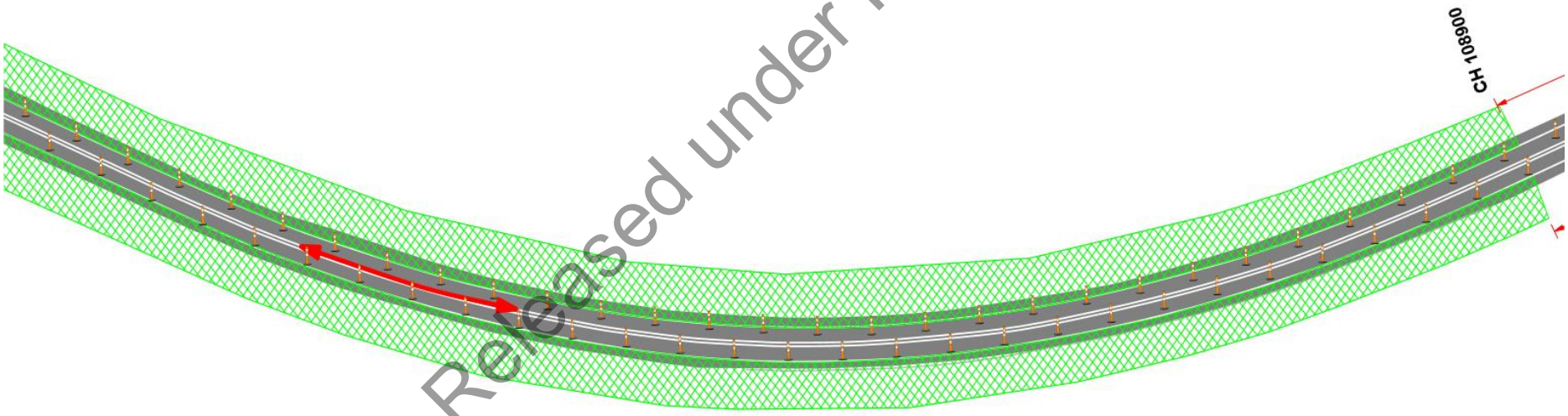
Speed Reduction Repeaters to be installed every 500m.
Works hours display
60 REDUCE SPEED
After hours display
60 REDUCE SPEED

Tully

Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-C 2 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108525-108900
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display
60 REDUCE SPEED
After hours display
60 REDUCE SPEED

Tully

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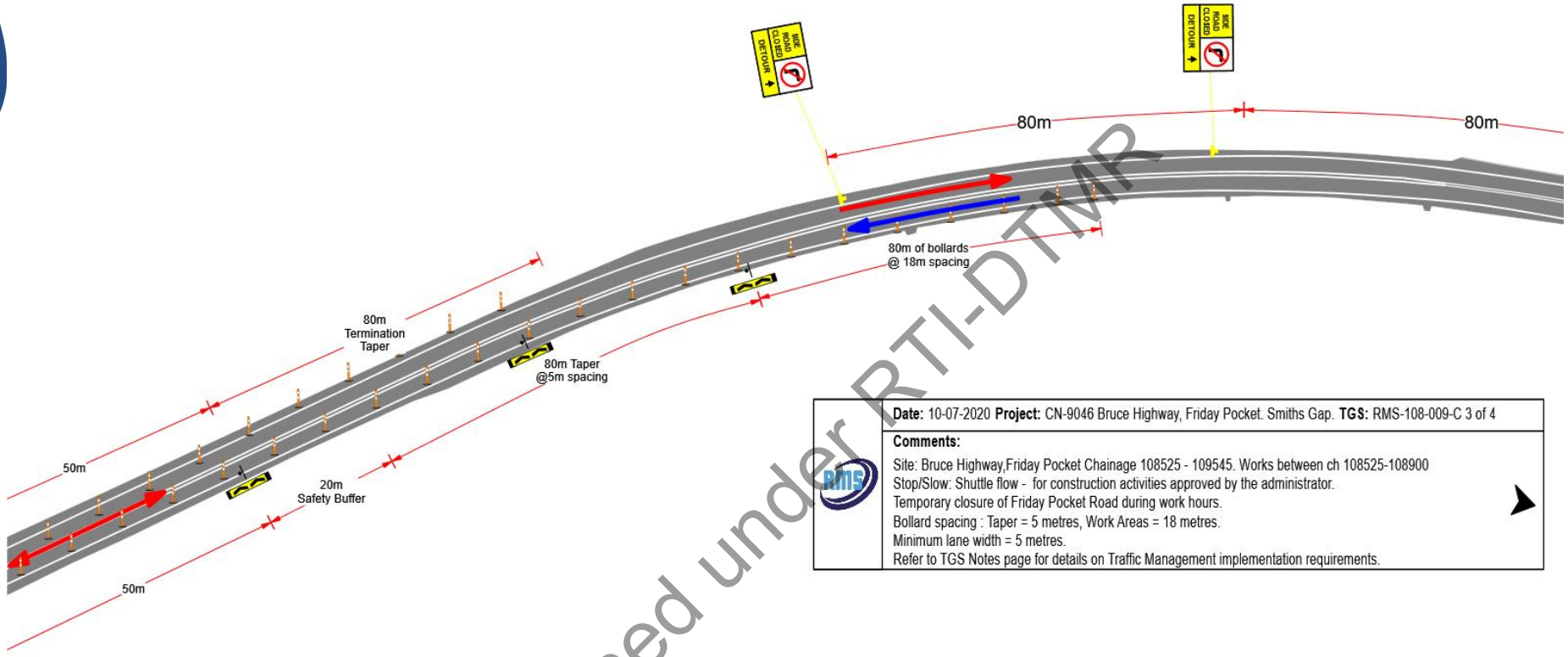


Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-C 3 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108525-108900
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display

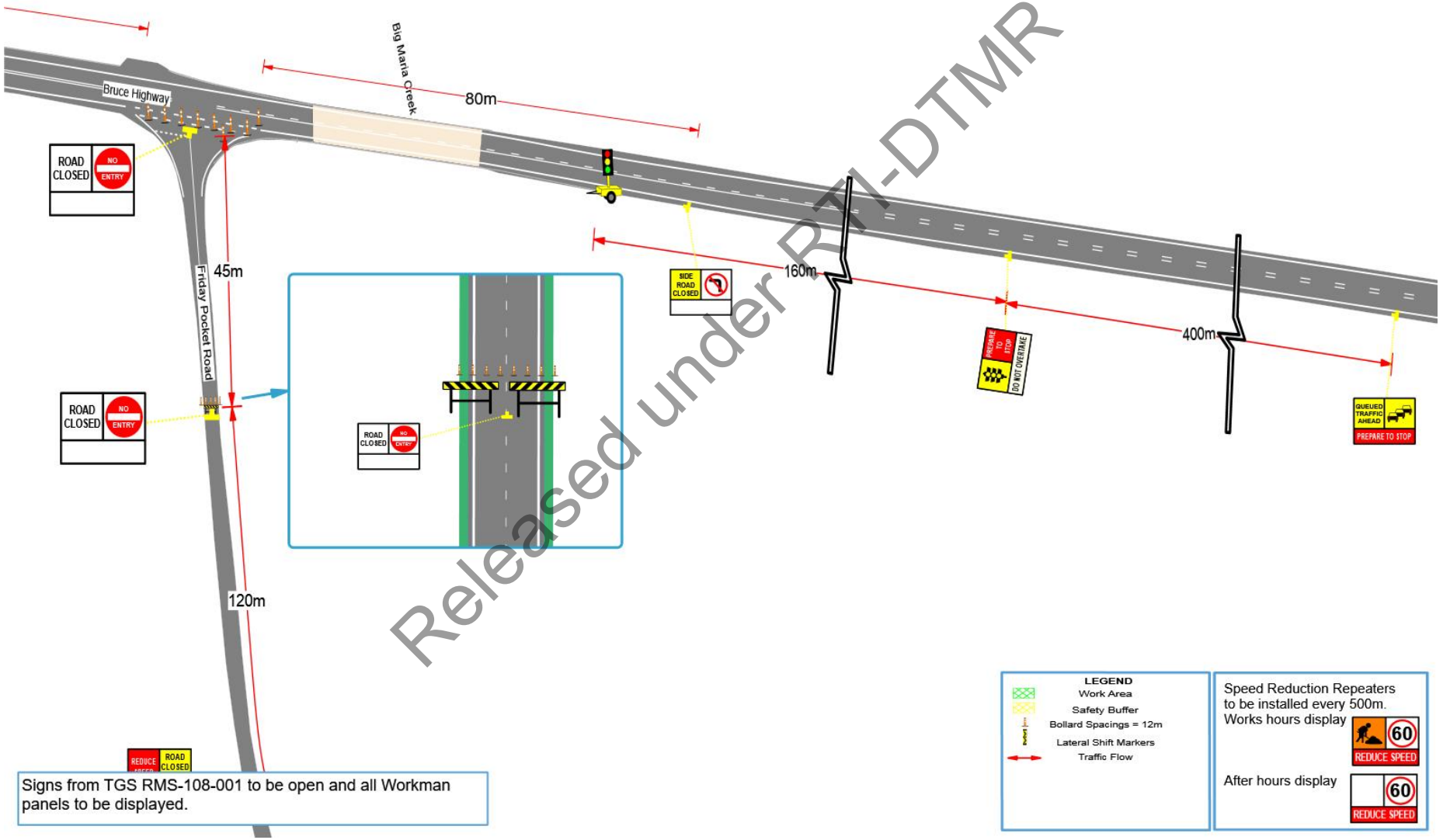
Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

Tully

Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-C 4 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108525-108900
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.

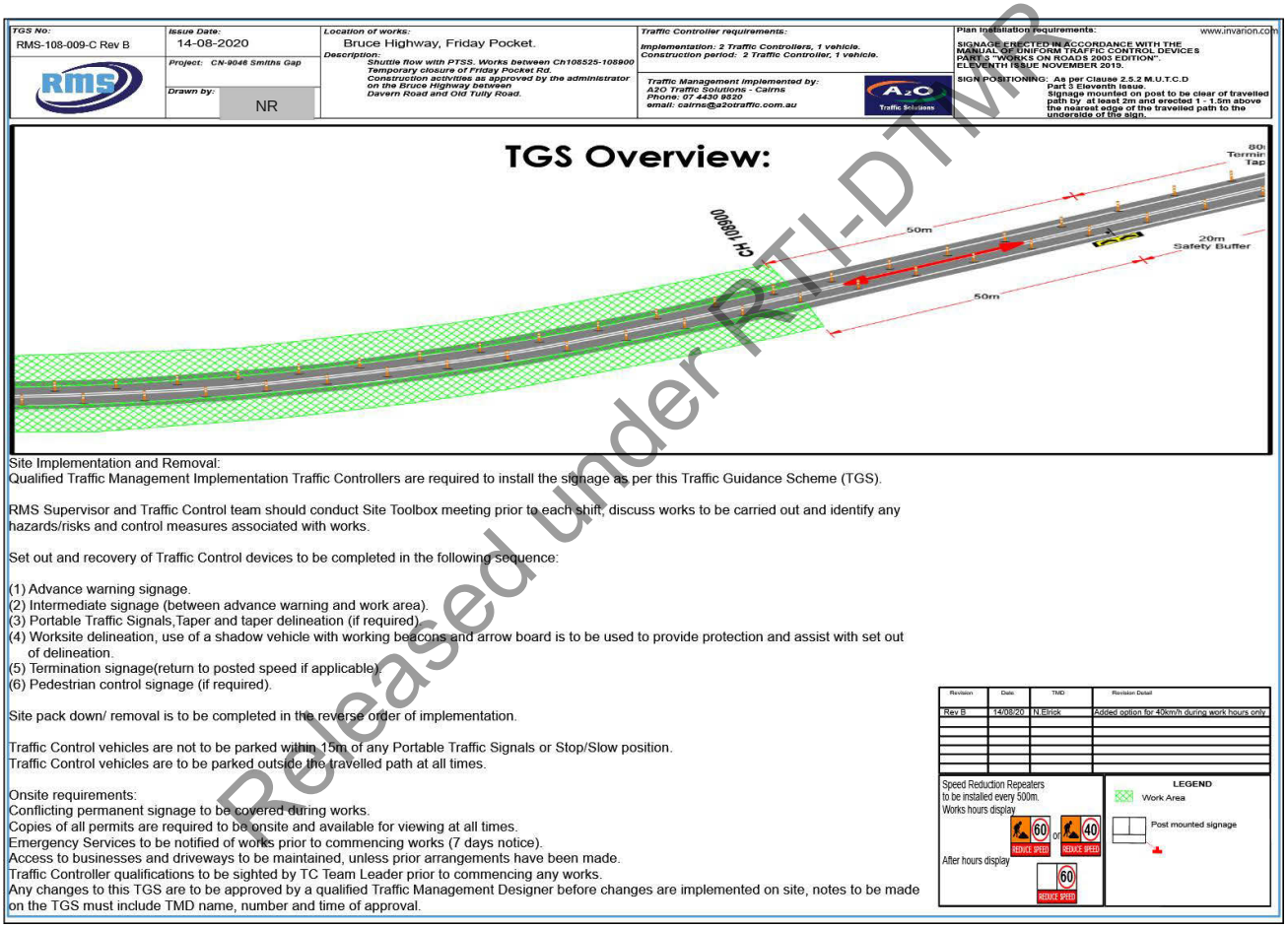
Works hours display

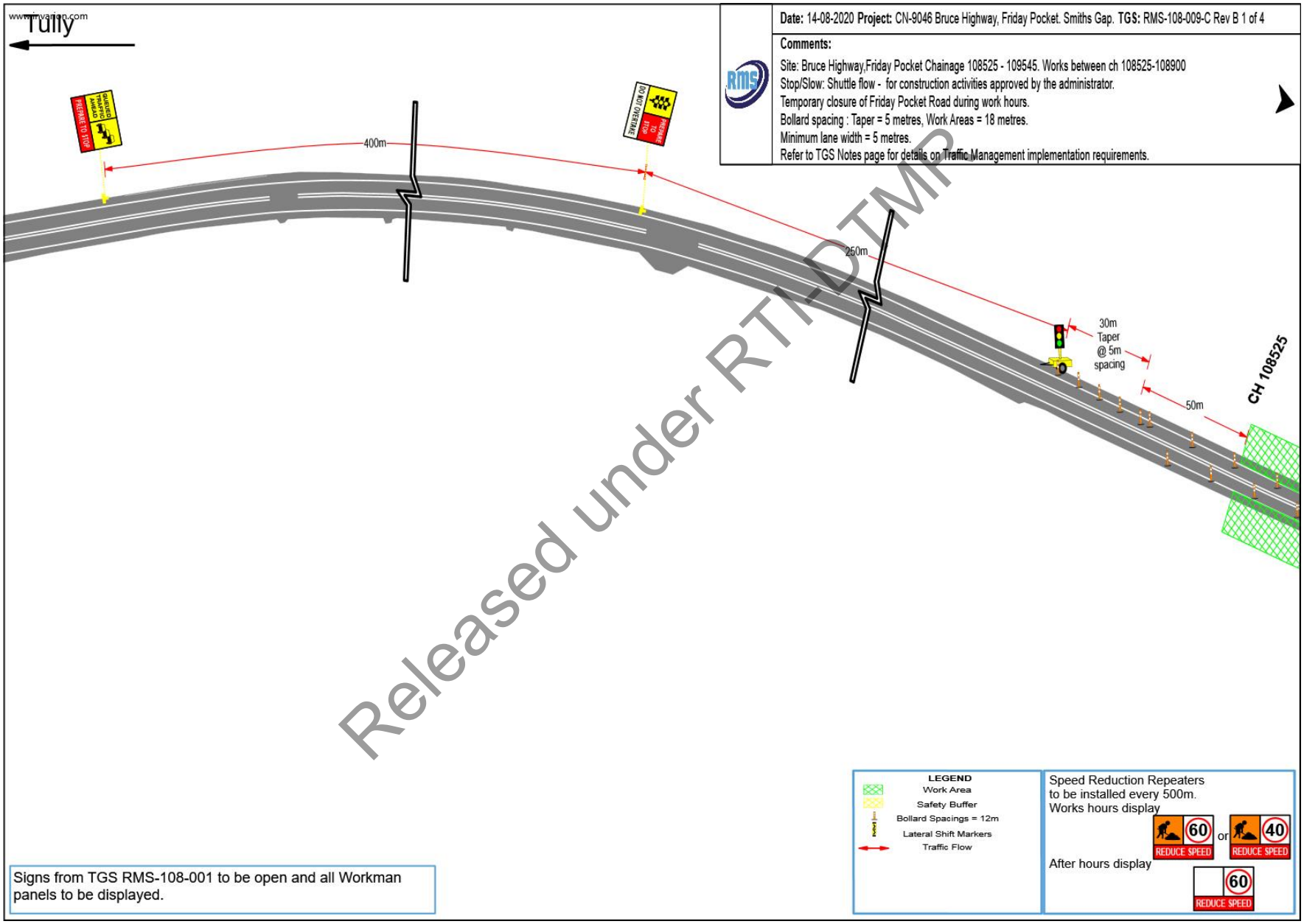
After hours display

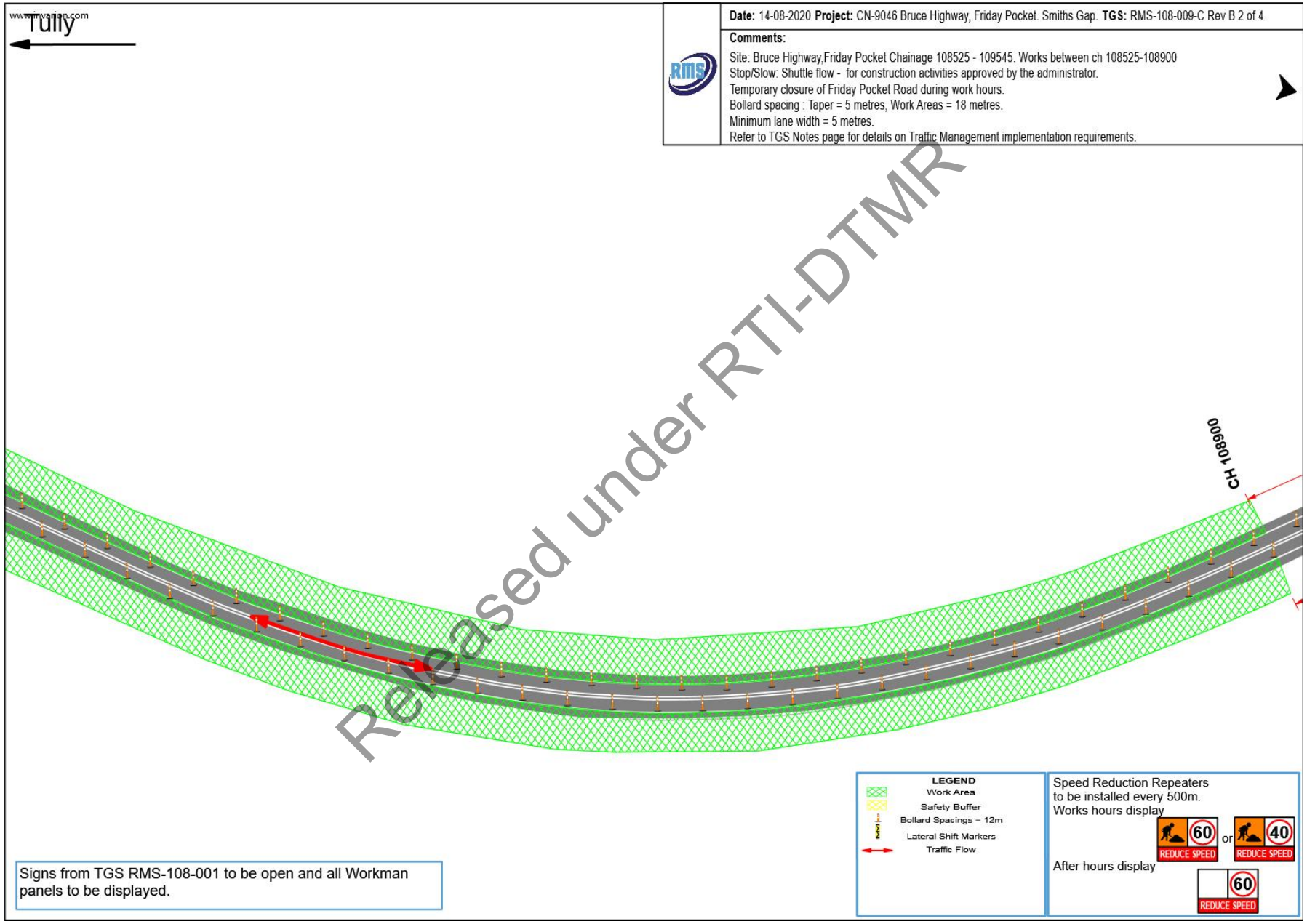
TGS RMS-108-009-C Stop/slow shuttle flow. Ch 108525-108900

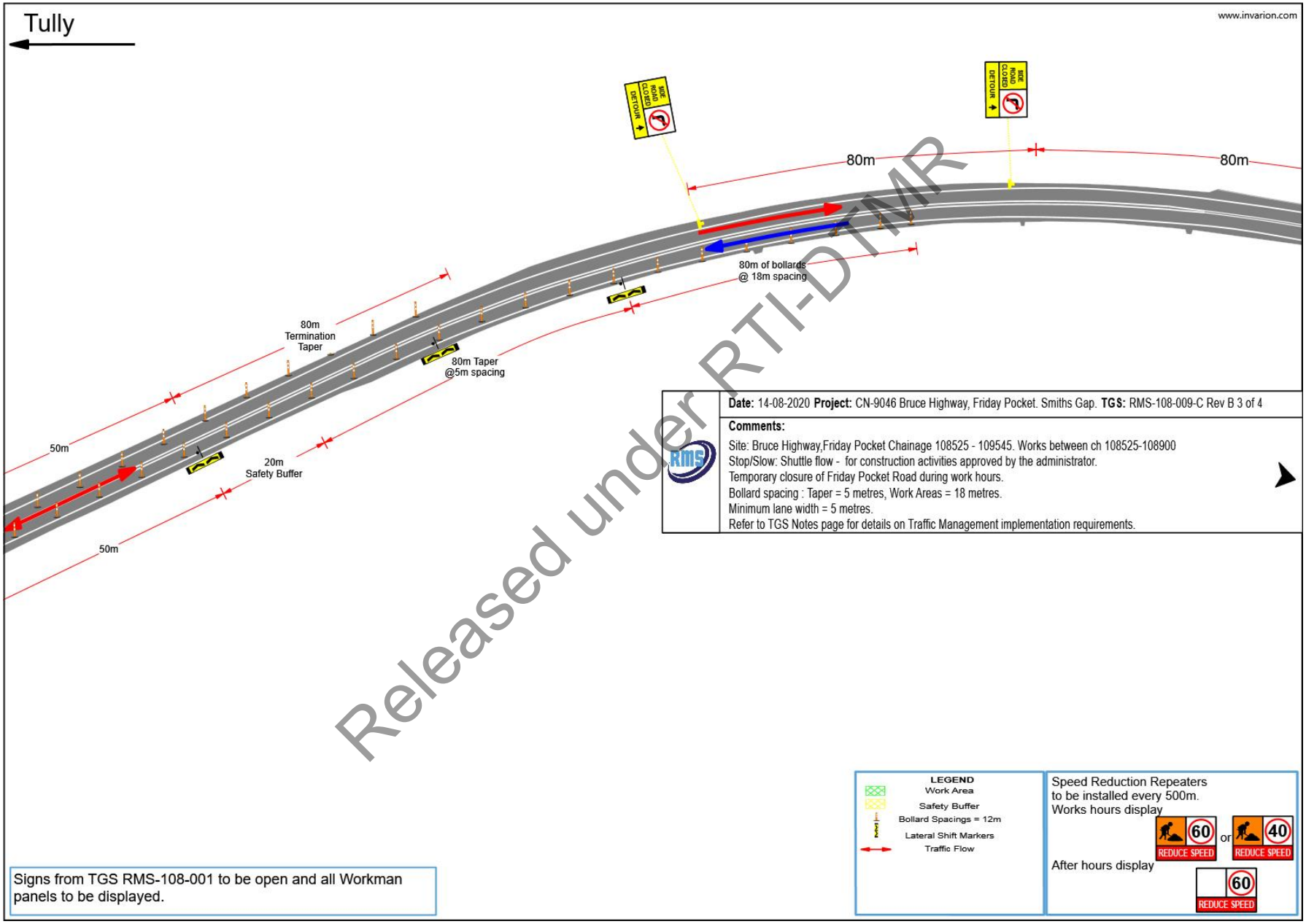
This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.
Closure of Friday Pocket Road.

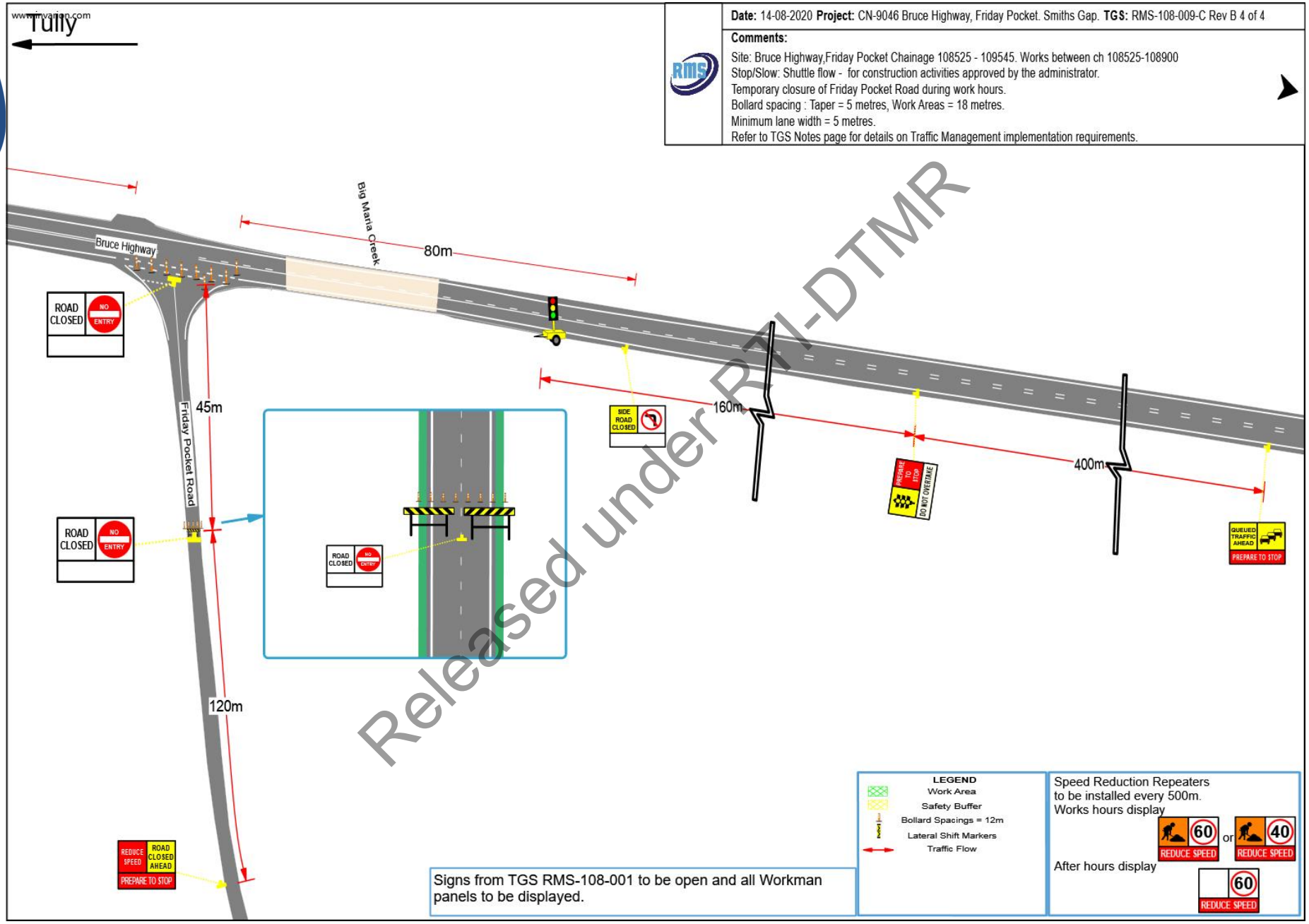
Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical







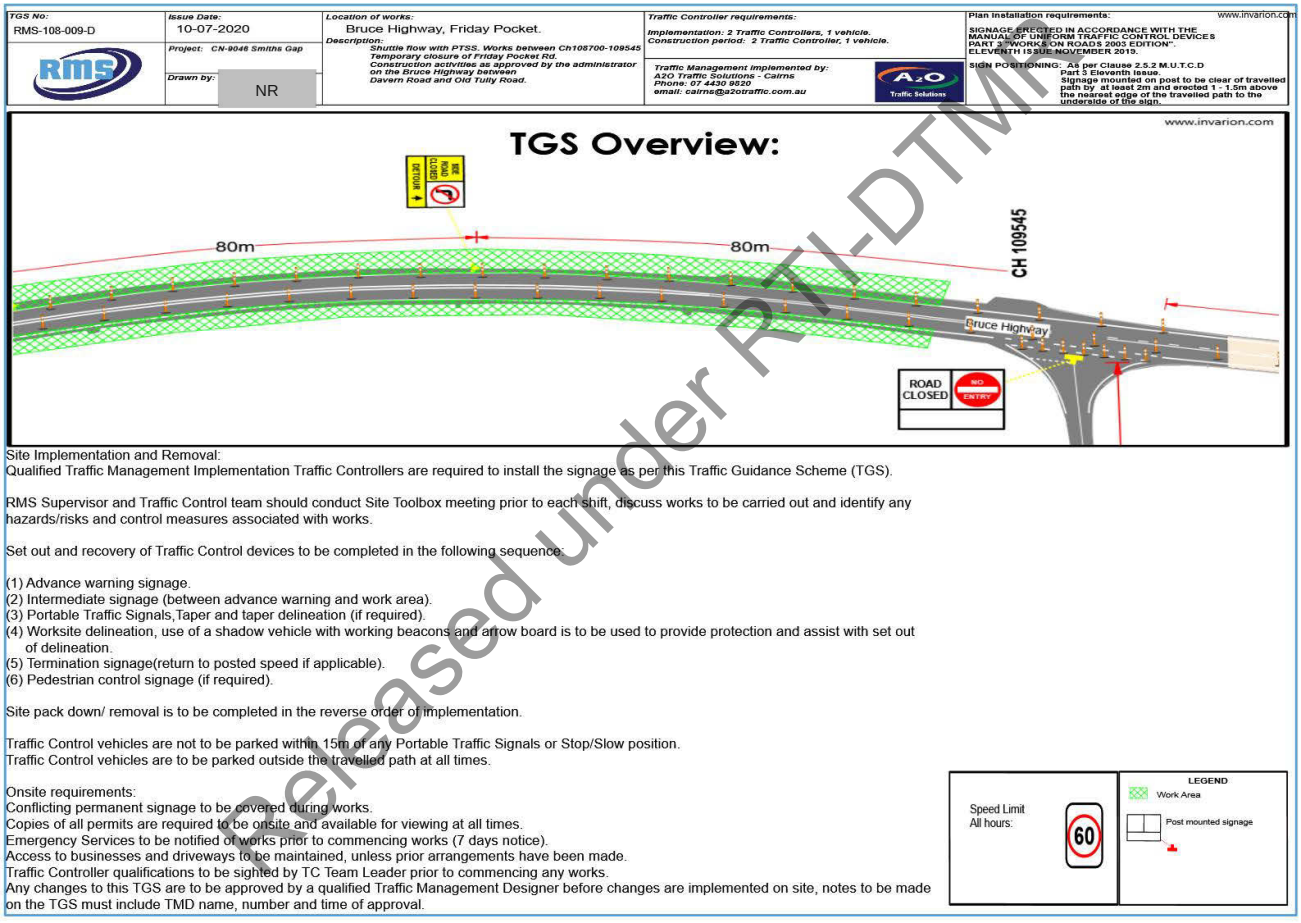




TGS RMS-108-009-D Stop/slow shuttle flow.Ch 108700-109545

This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

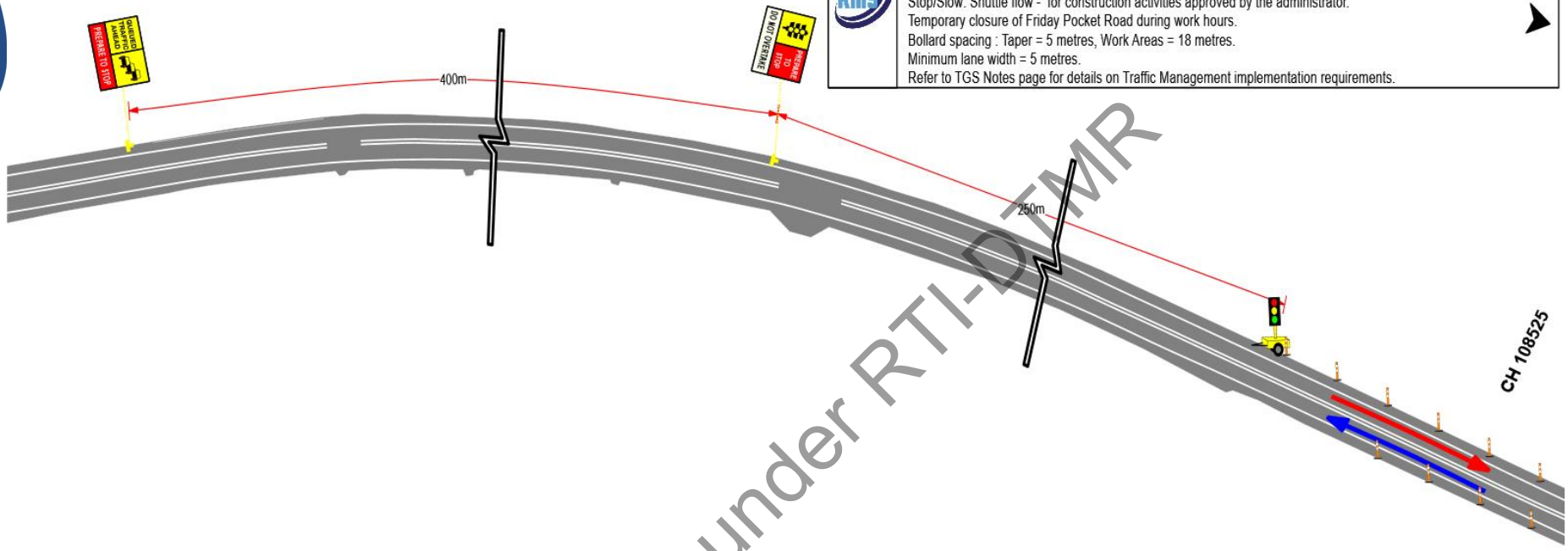


Tully

Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-D 1 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108700-109545
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.

Works hours display

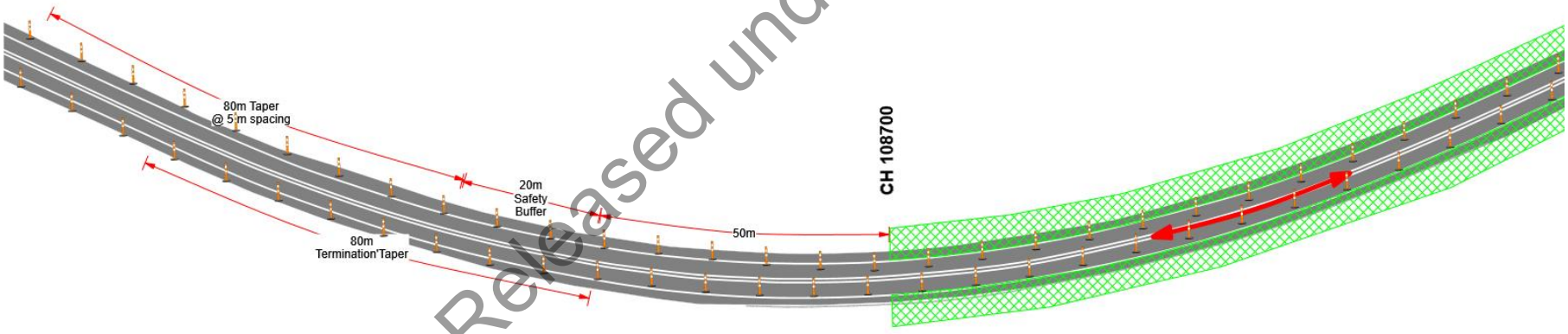
After hours display

Tully

Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-D 2 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108700-109545
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

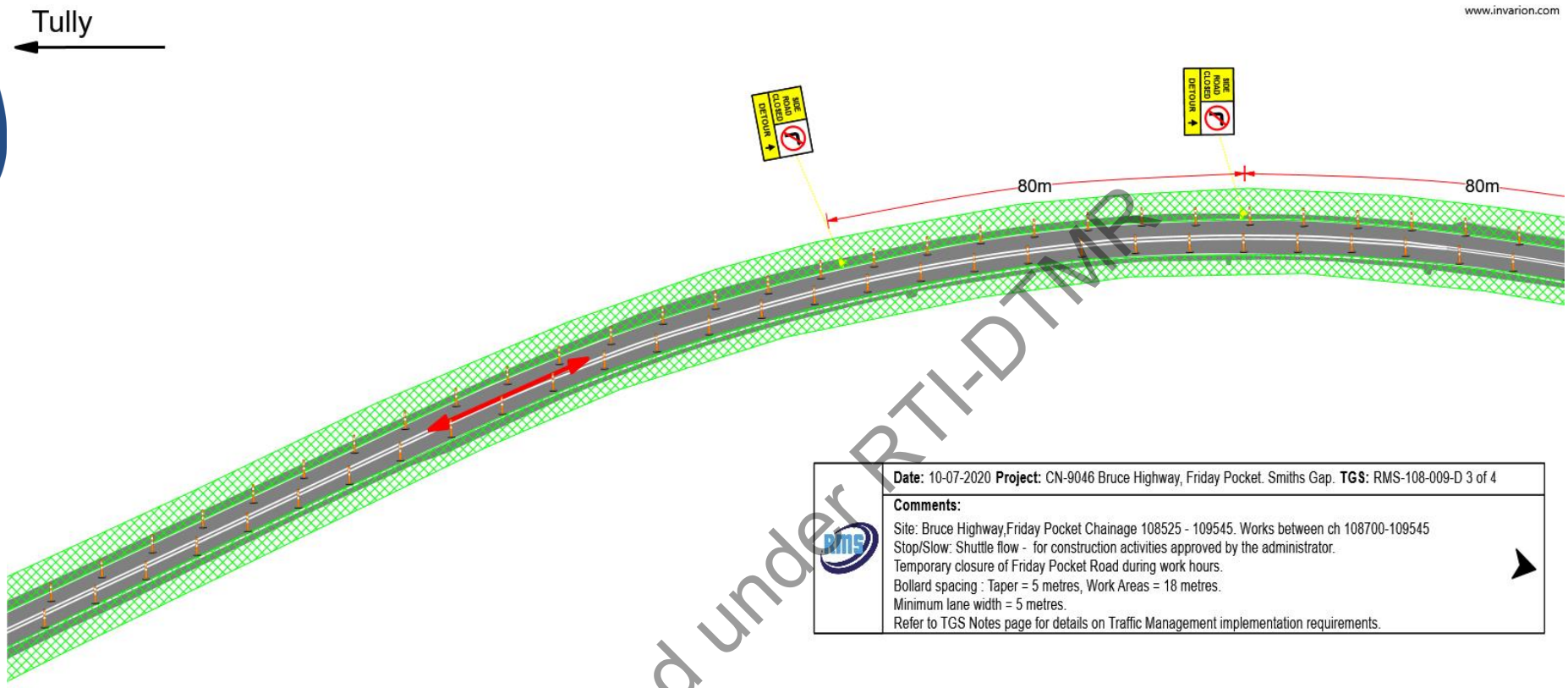


Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display



Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-D 3 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108700-109545
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

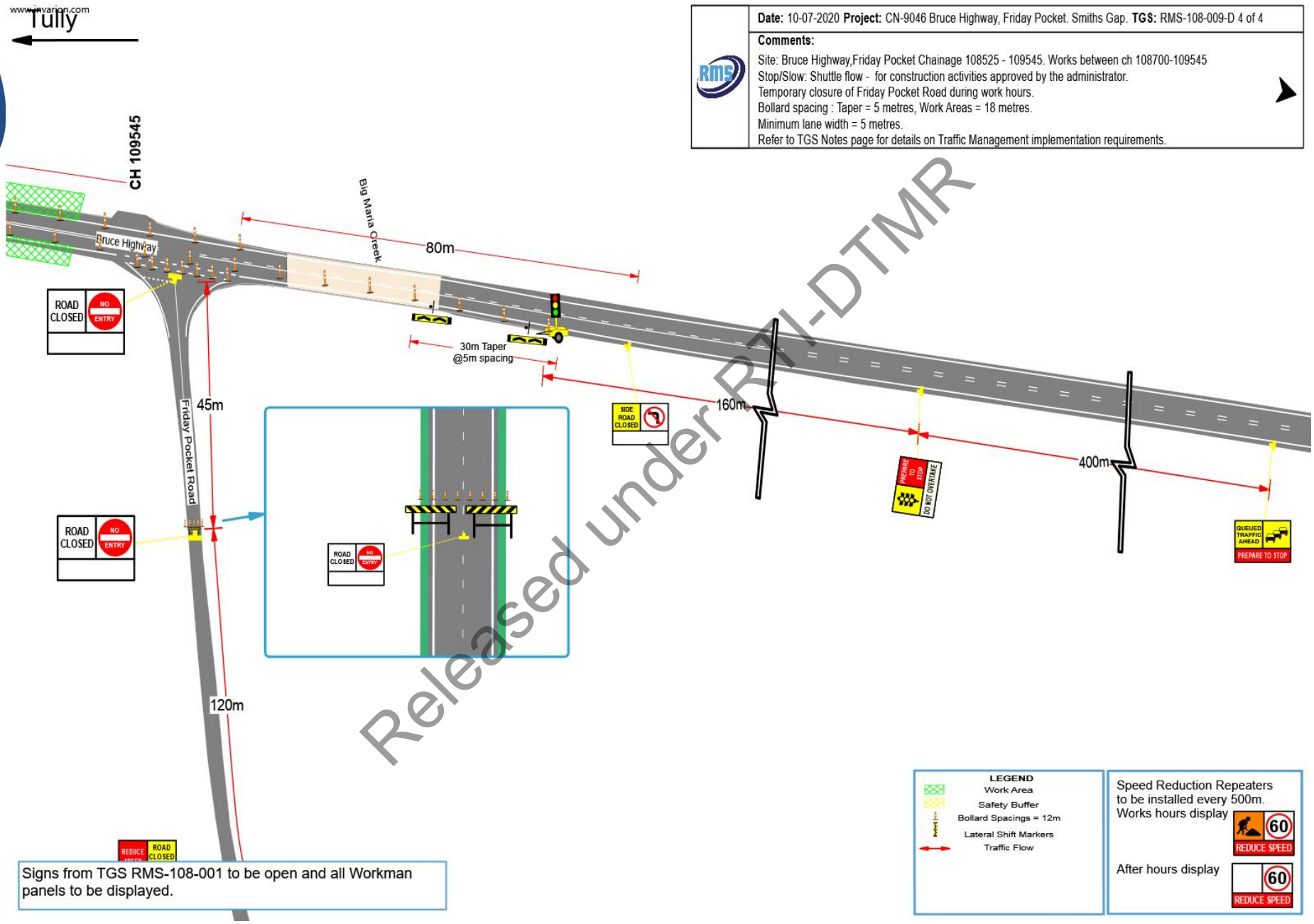
Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Speed Reduction Repeaters to be installed every 500m.
Works hours display

After hours display



Date: 10-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-009-D 4 of 4

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545. Works between ch 108700-109545
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Temporary closure of Friday Pocket Road during work hours.
Bollard spacing : Taper = 5 metres, Work Areas = 18 metres.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

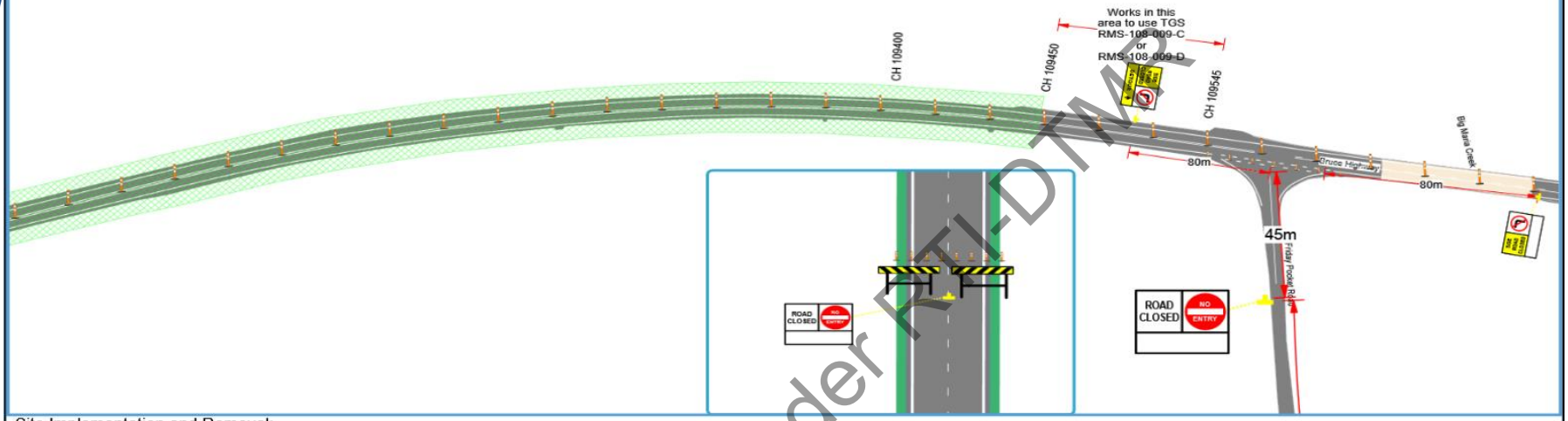
Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

TGS RMS-108-010 Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required eg. Plant movements, sealing works, clearing, grubbing, culverts and pavement works.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

Location of works: Bruce Highway, Friday Pocket	**Project:** CN-9046 Smiths Gap	**Term:** Short term / Long term. **Delineation:** Tapers 8m spacing, centre 12m spacing, edge 18m spacing.	**Client:** Dept. Transport and Main Roads	**TGS No:** www.invarion.com RMS-108-010 Rev B
Between: Davern Road and Friday Pocket Road	**Control type:** Shuttle flow, with PTSS.	**Traffic controller requirements:** **Implementation:** 2 Traffic Controllers, 1 ute **Construction period:** 2 Traffic Controller, 1 ute	**Principal Contractor:** RMS Engineering and Construction Ph: 07 4774 7211 email: rms@rmscivil.net.au	**Issue Date:** 04-08-2020
Permanent speed: 100km/h **Temporary speed:** 60km/h	**Travelled path:** Through, Past, Around-Detour, Around-Side track,	**Plan reference:** Signage erected in accordance with the Manual of Uniform Traffic Control Devices Part 3 "Traffic Control for Works on Road". Eleventh Issue November 2019.	**Traffic management company:** A2O Traffic Solutions Ph: 07 4430 9800 email: admin@a20traffic.com.au	**Drawn by:** Nathan Elrick TMD # OP 73



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).
RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

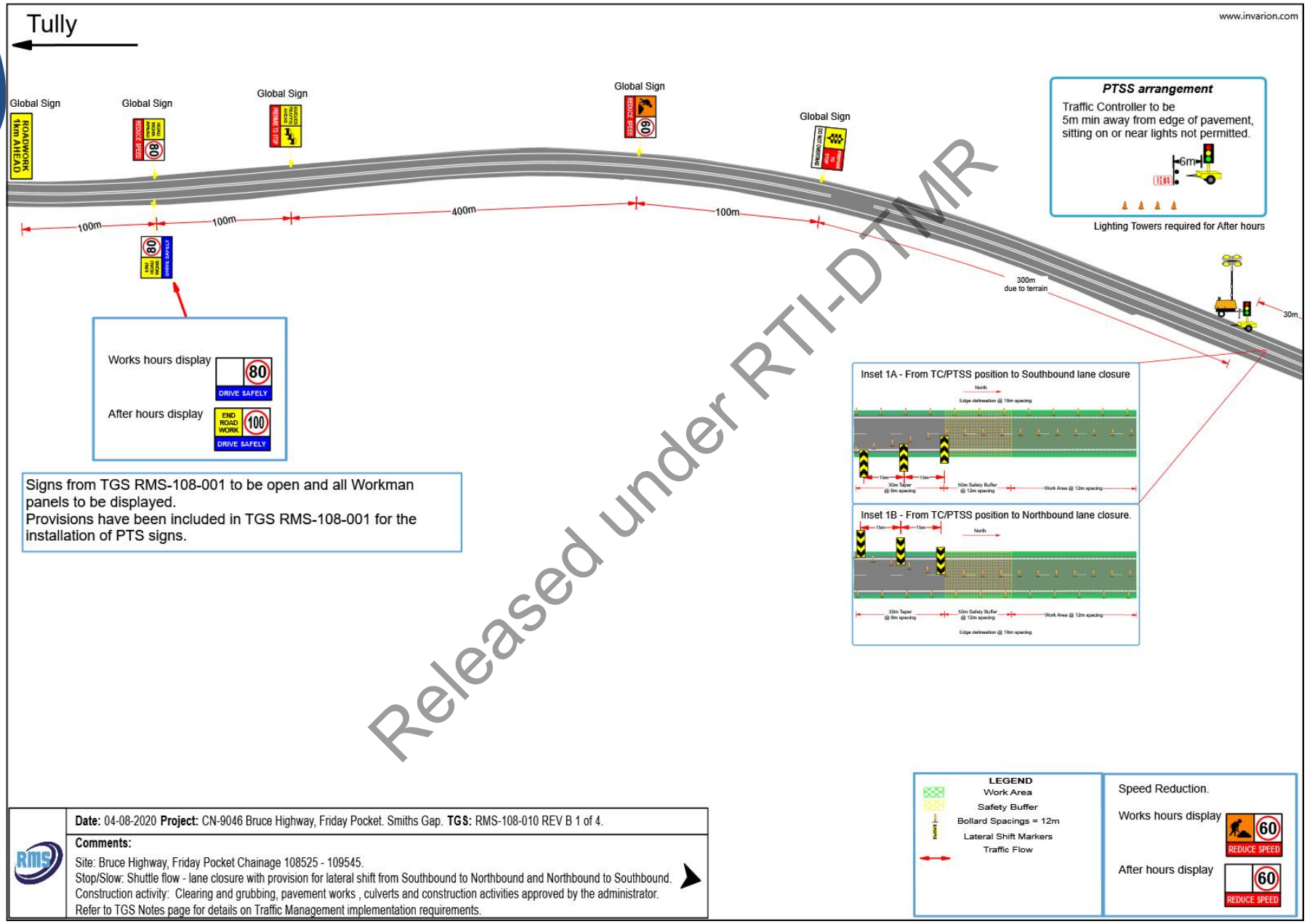
(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

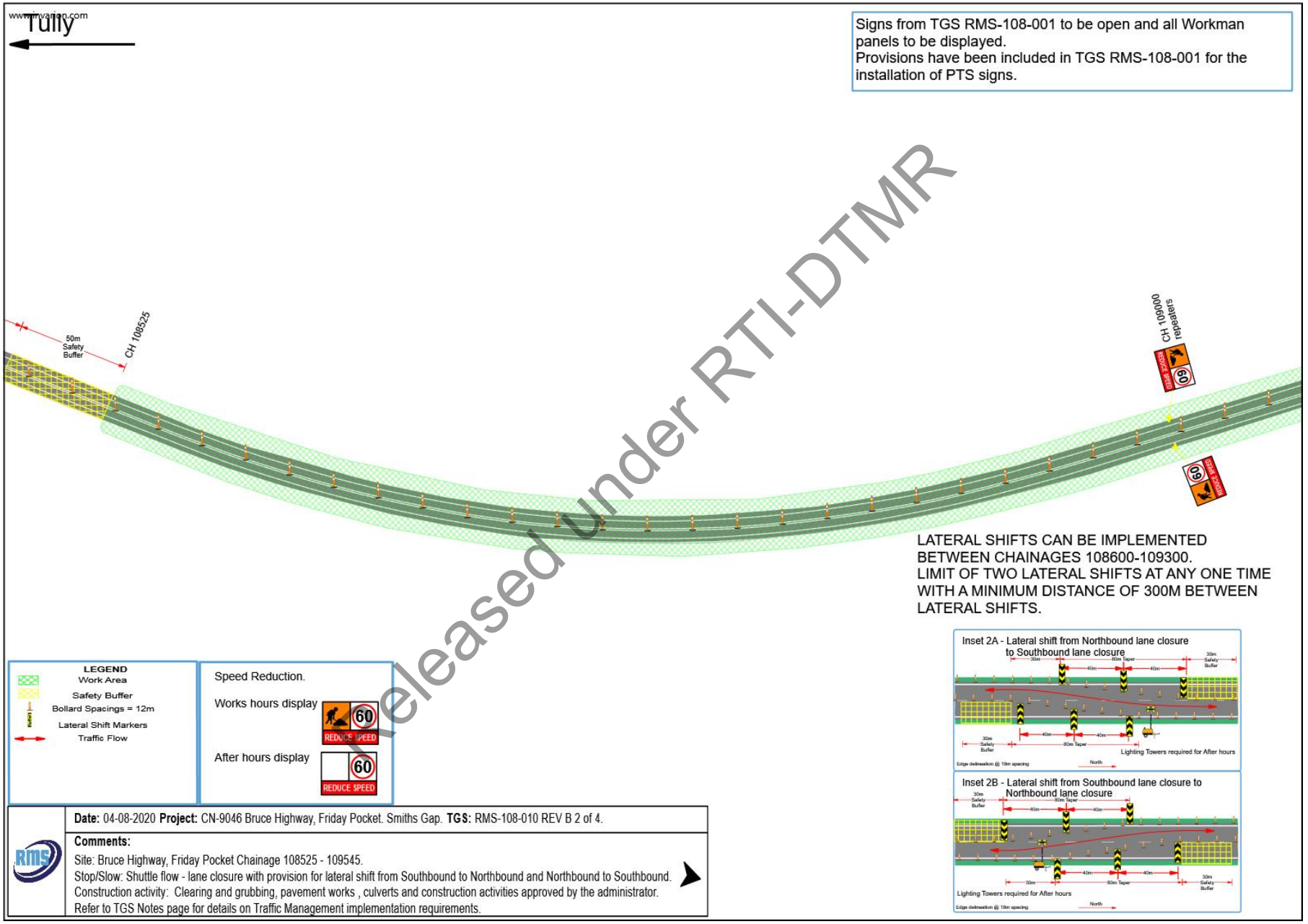
Site pack down/ removal is to be completed in the reverse order of implementation.

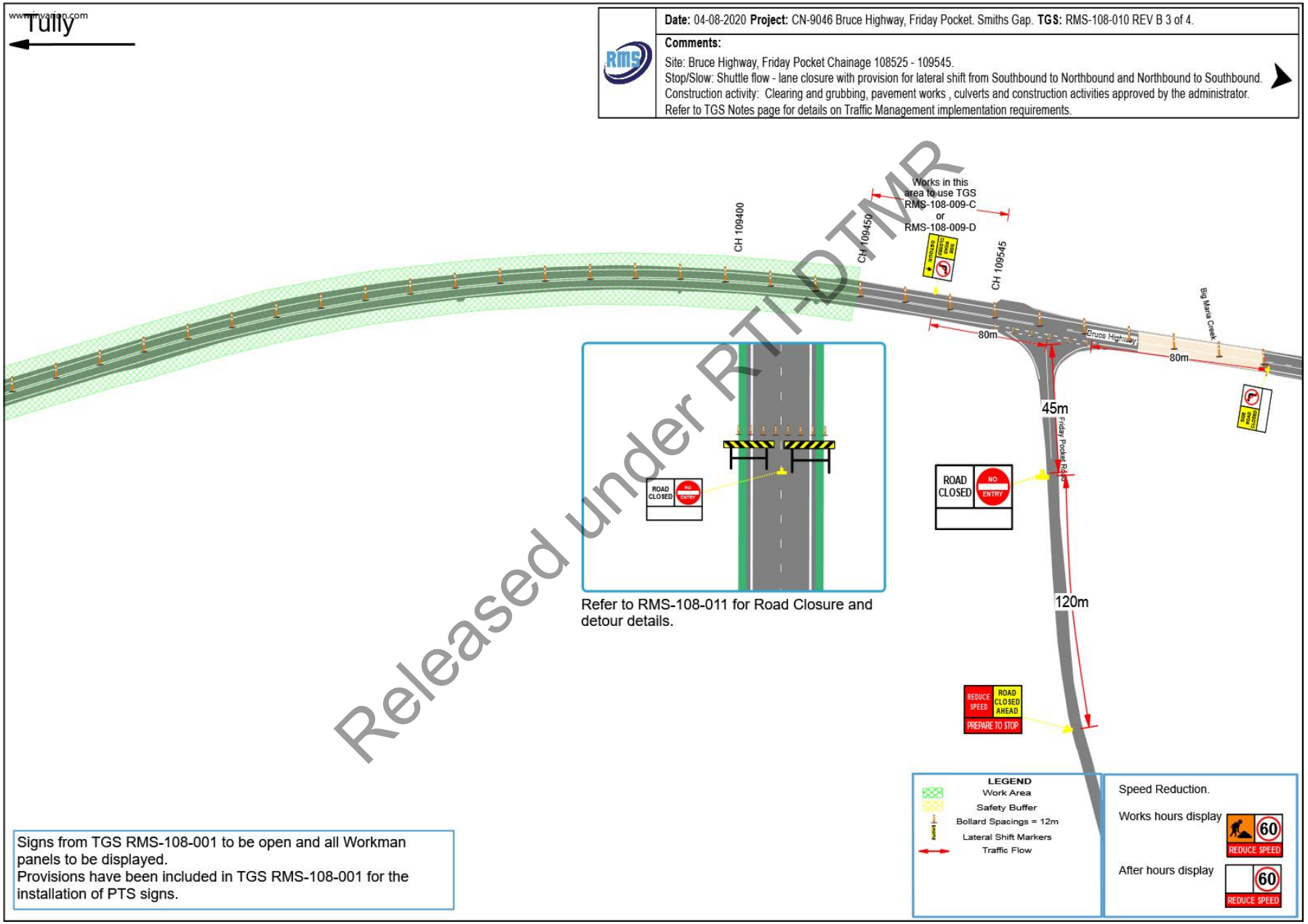
Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

Revision	Date	TMD	Revision Detail
Rev B	04/08/20	N.Elrick	Added closure of Friday Pocket Rd, After Hours allowance added including lighting towers, added all global signs.







Tully

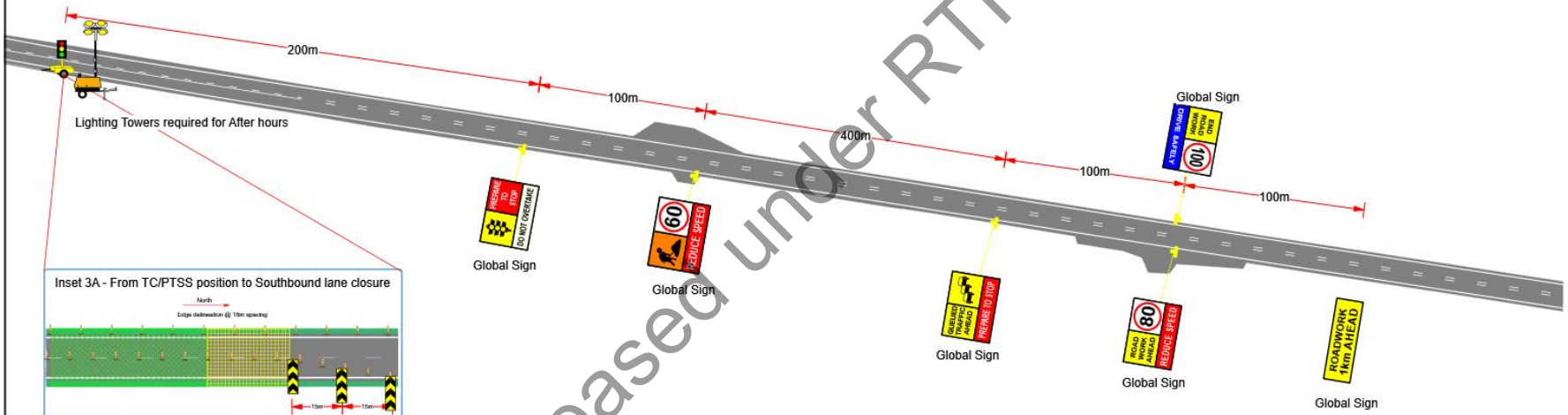
Date: 04-08-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-010 REV B 4 of 4.

Comments:

Site: Bruce Highway, Friday Pocket Chainage 108525 - 109545.
Stop/Slow: Shuttle flow - lane closure with provision for lateral shift from Southbound to Northbound and Northbound to Southbound.
Construction activity: Clearing and grubbing, pavement works , culverts and construction activities approved by the administrator.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

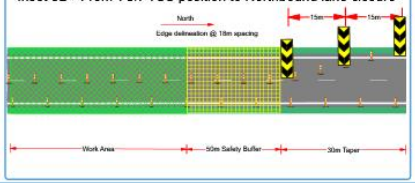
PTSS arrangement

Traffic Controller to be
5m min away from edge of pavement,
sitting on or near lights not permitted.



Inset 3A - From TC/PTSS position to Southbound lane closure

Inset 3B - From TC/PTSS position to Northbound lane closure



Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
Provisions have been included in TGS RMS-108-001 for the installation of PTS signs.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Speed Reduction.
Works hours display
After hours display

TGS RMS-108-011 Closure of Friday Pocket Road.

This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials. With works impacting on Friday Pocket Rd, closure of this road is deemed the safest option to eliminate turning movements.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Option chosen
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Not practical
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

TGS No:	Issue Date:	Location of works:	Traffic Controller requirements:	Plan installation requirements:
RMS-108-011	09-07-2020	Bruce Highway, Friday Pocket.	Implementation: 2 Traffic Controllers, 1 vehicle. Construction period: 0 Traffic Controller, 0 vehicle.	SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2015.
	Project: CN-9046 Smiths Gap	Description: Closure of Friday Pocket Road during working hours. between the Bruce Highway and Granadilla Road.	Traffic Management implemented by: A2O Traffic Solutions - Cairns Phone: 07 4430 9820 email: cairns@a2otraffic.com.au	SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.
	Drawn by: NR			

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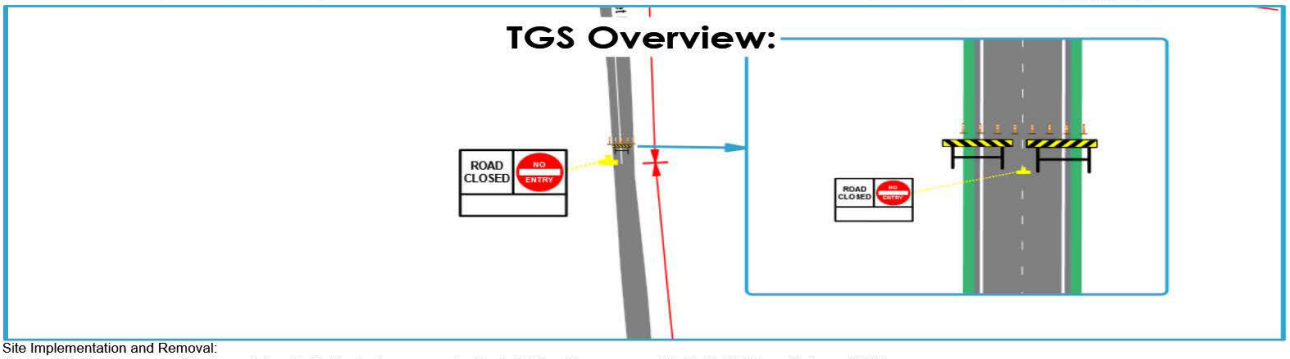


Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

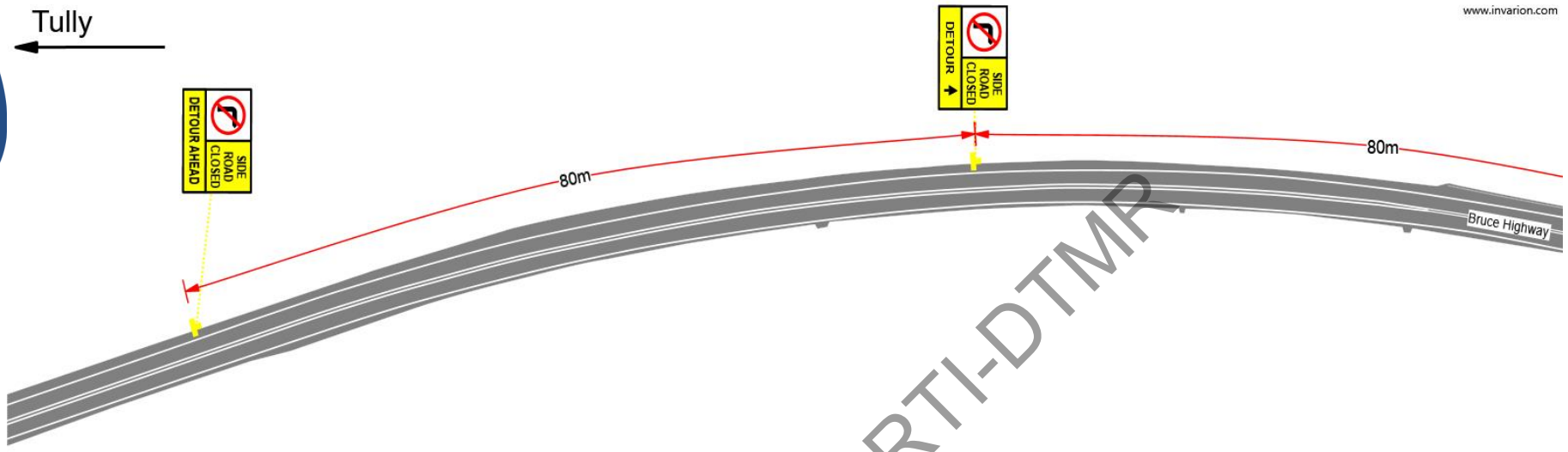
Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.



Date: 09-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-011-A 1 of 3

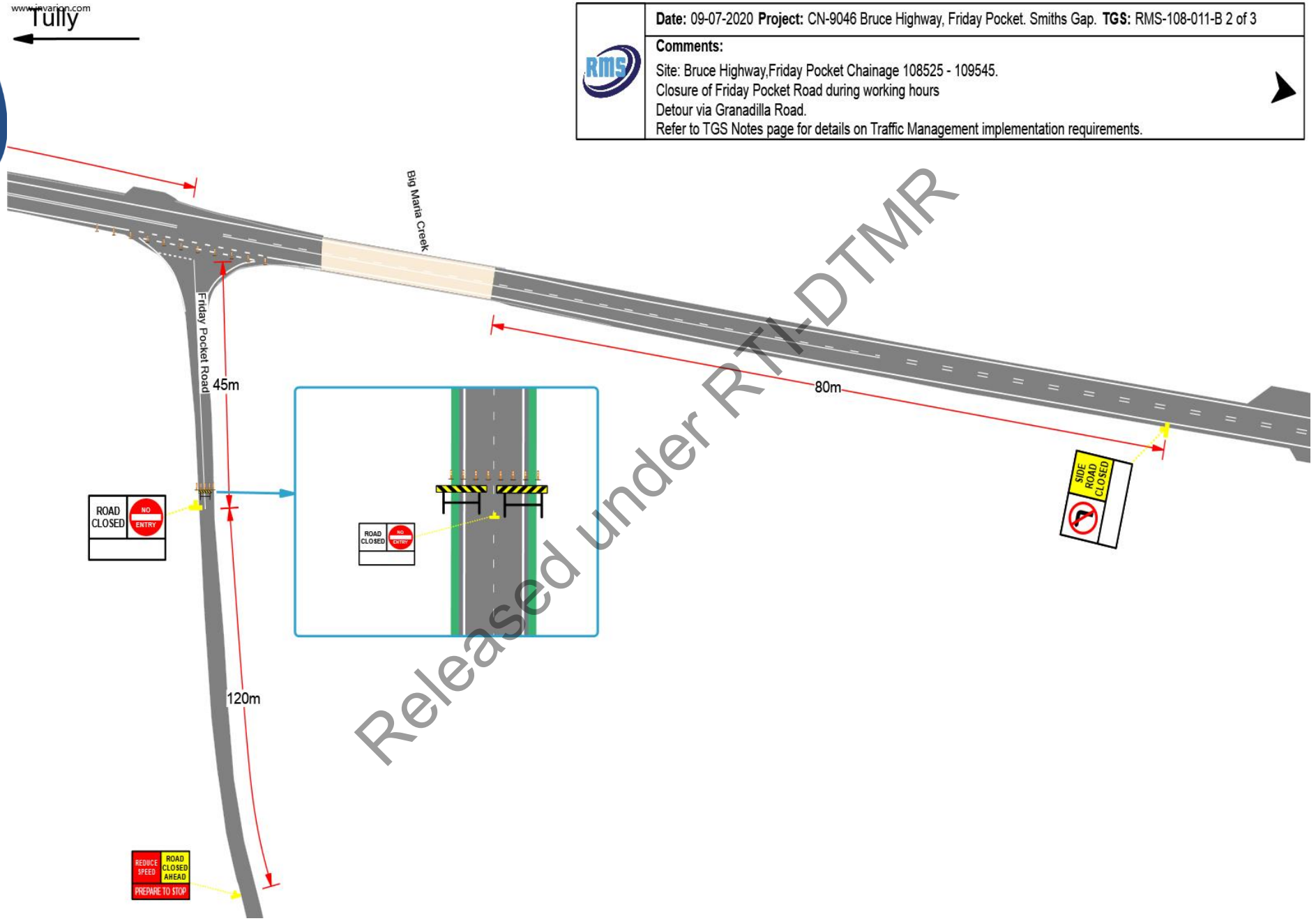
Comments:

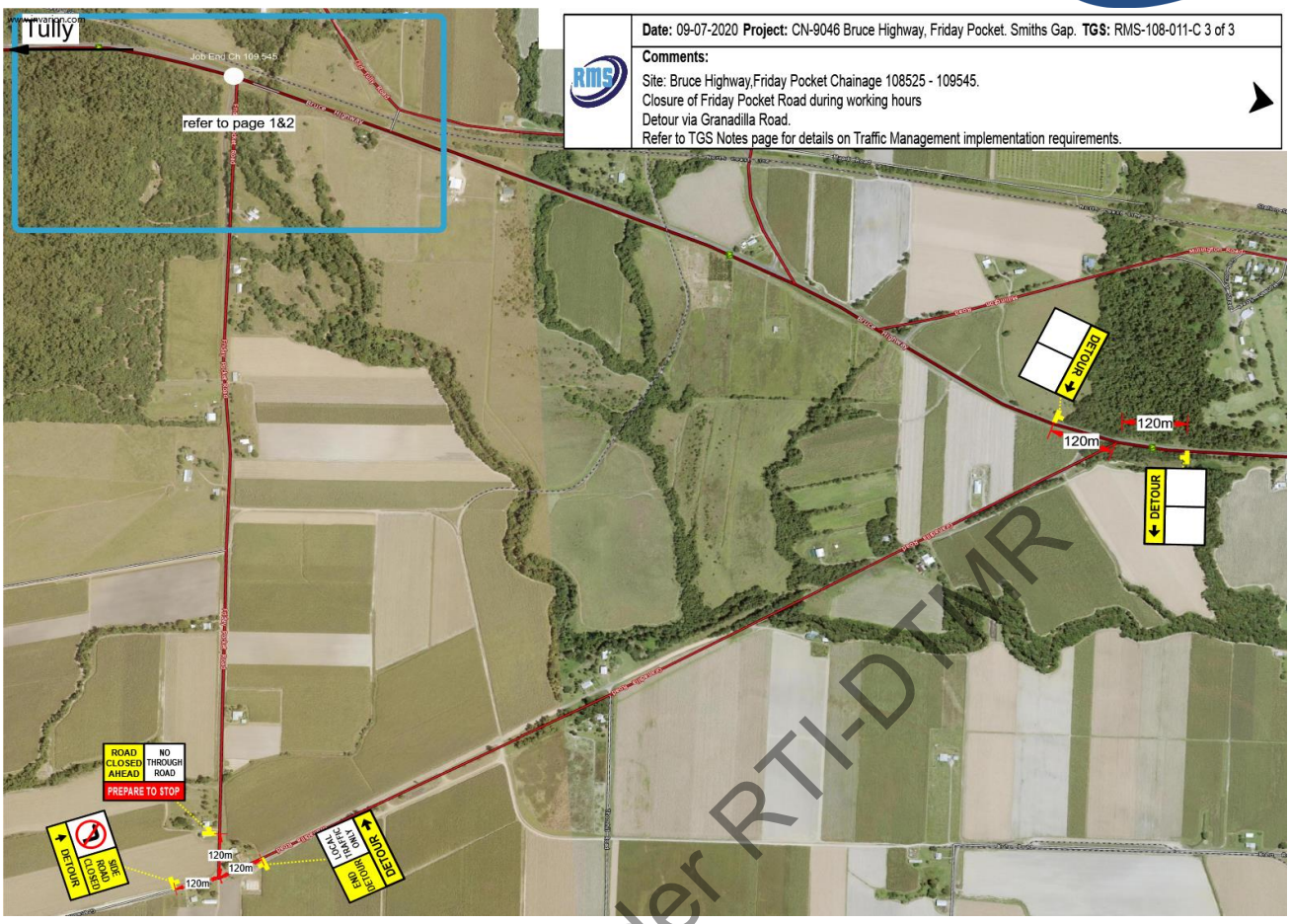
Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Closure of Friday Pocket Road during working hours
Detour via Granadilla Road.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

Date: 09-07-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-011-B 2 of 3

Comments:

Site: Bruce Highway,Friday Pocket Chainage 108525 - 109545.
Closure of Friday Pocket Road during working hours
Detour via Granadilla Road.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



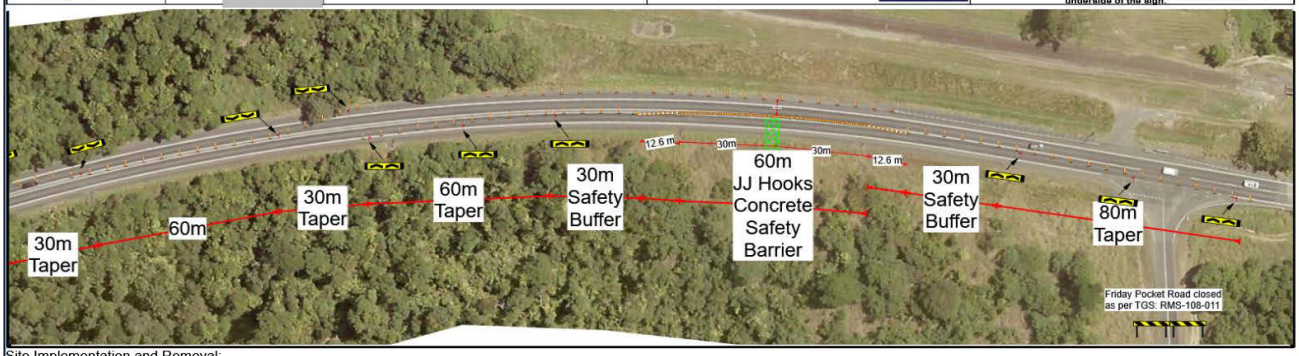


TGS RMS-108-014 Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required for the construction of Culvert 2C at chainage 109420. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

TGS No:	Issue Date:	Location of works:	Traffic Controller requirements:	Plan installation requirements:
RMS-108-014	31/08/2020	Bruce Highway, Friday Pocket.	Implementation: 2 Traffic Controllers, 1 vehicle. Construction period: 3 Traffic Controller, 2 vehicles.	www.invarion.com SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2019. SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.
Project: CN-9046 Smiths Gap	Description: Shuttle flow with PTSS for Culvert 2C construction on the Bruce Highway between Davern Road and Old Tully Road.		Traffic Management implemented by: A2O Traffic Solutions - Cairns Phone: 07 4430 9820 email: cairns@a2otraffic.com.au	
Drawn by: NR				



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.
r to commencing any works.
nagement Designer before changes are implemented on site, notes to be made

Speed Limit All hours: 60

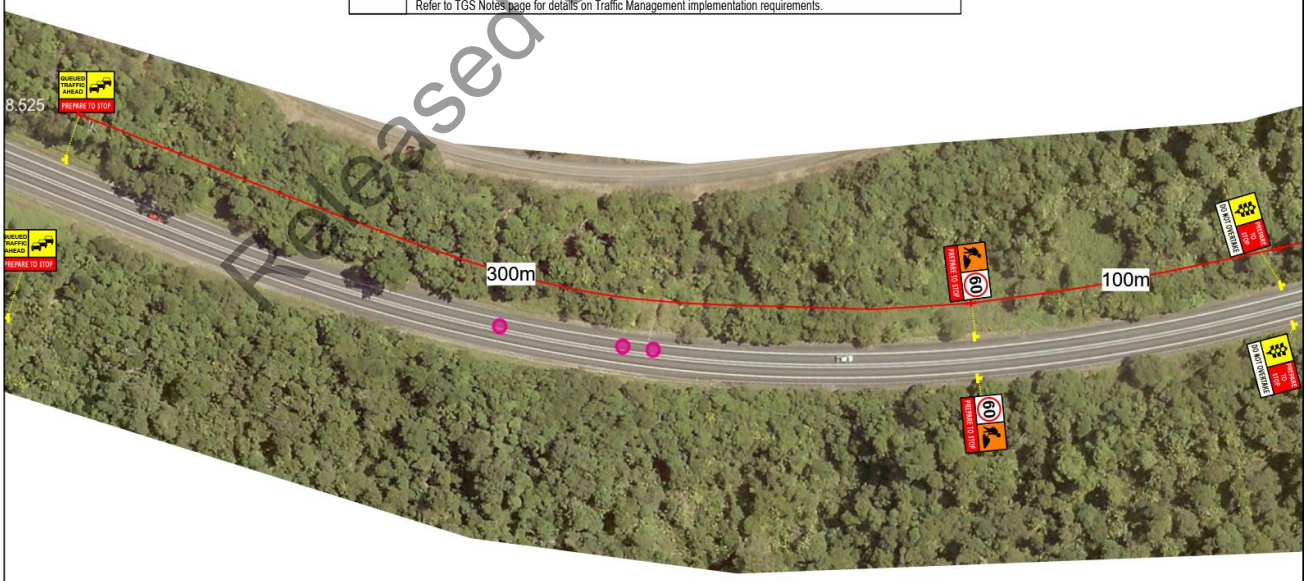
LEGEND
Work Area
Post mounted signage

Tully

www.invarion.com

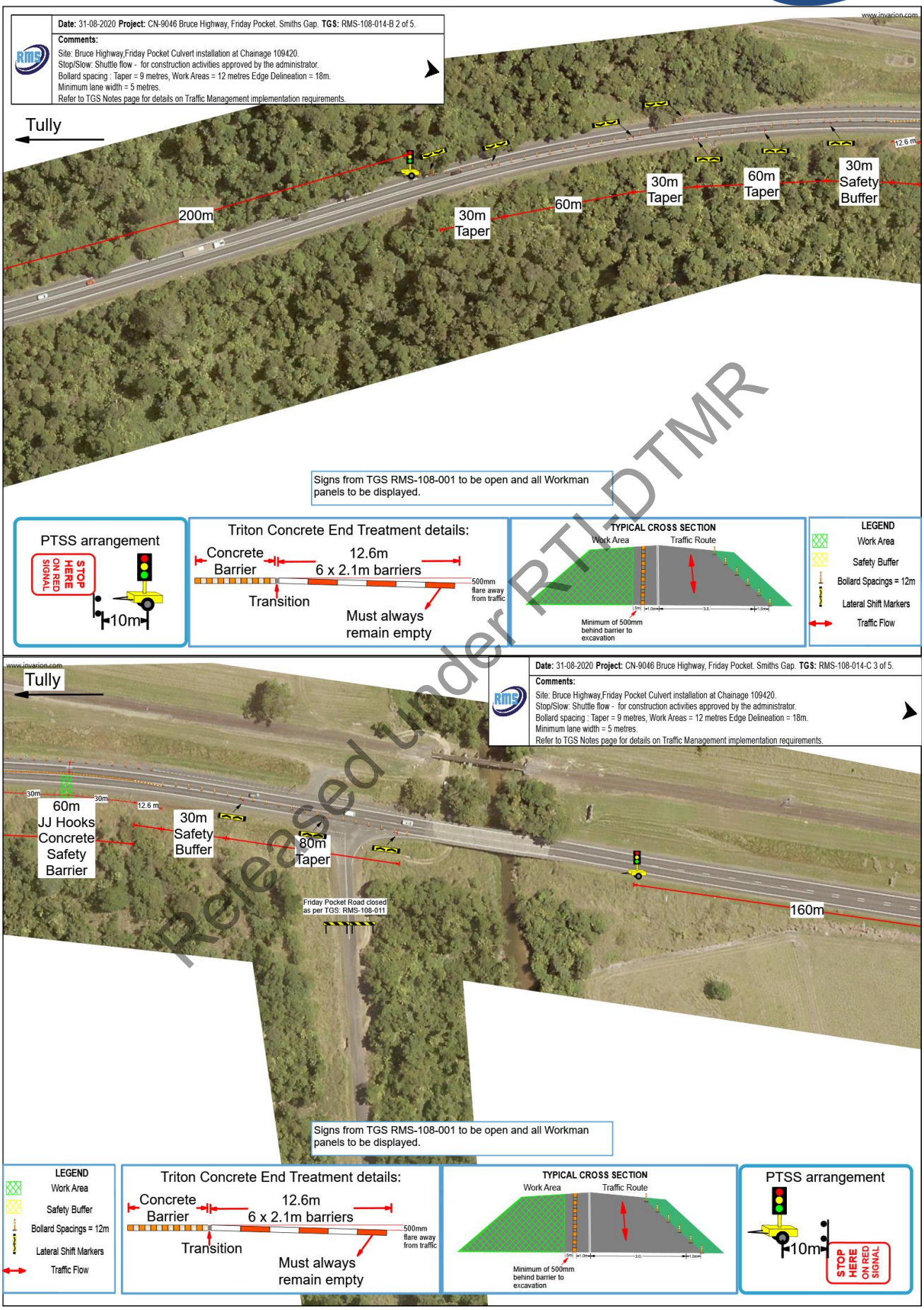
Date: 31-08-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-014-A 1 of 5.

Comments:
Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 109420.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.



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Tully

Date: 31-08-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-014-D 4 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 109420.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

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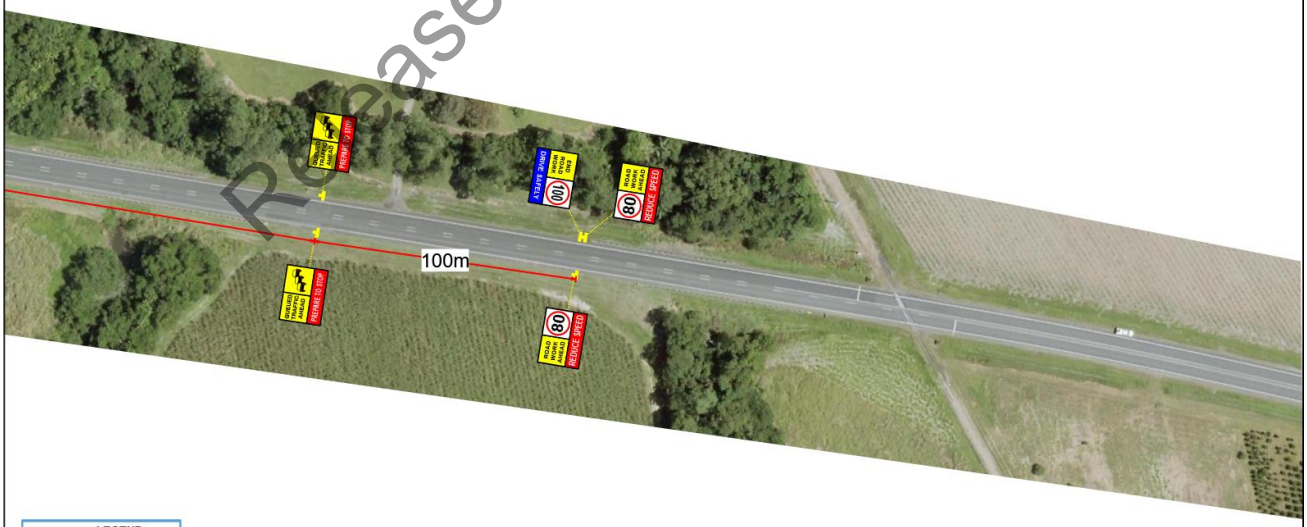
Tully

Date: 31-08-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-014-E 5 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 109420.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



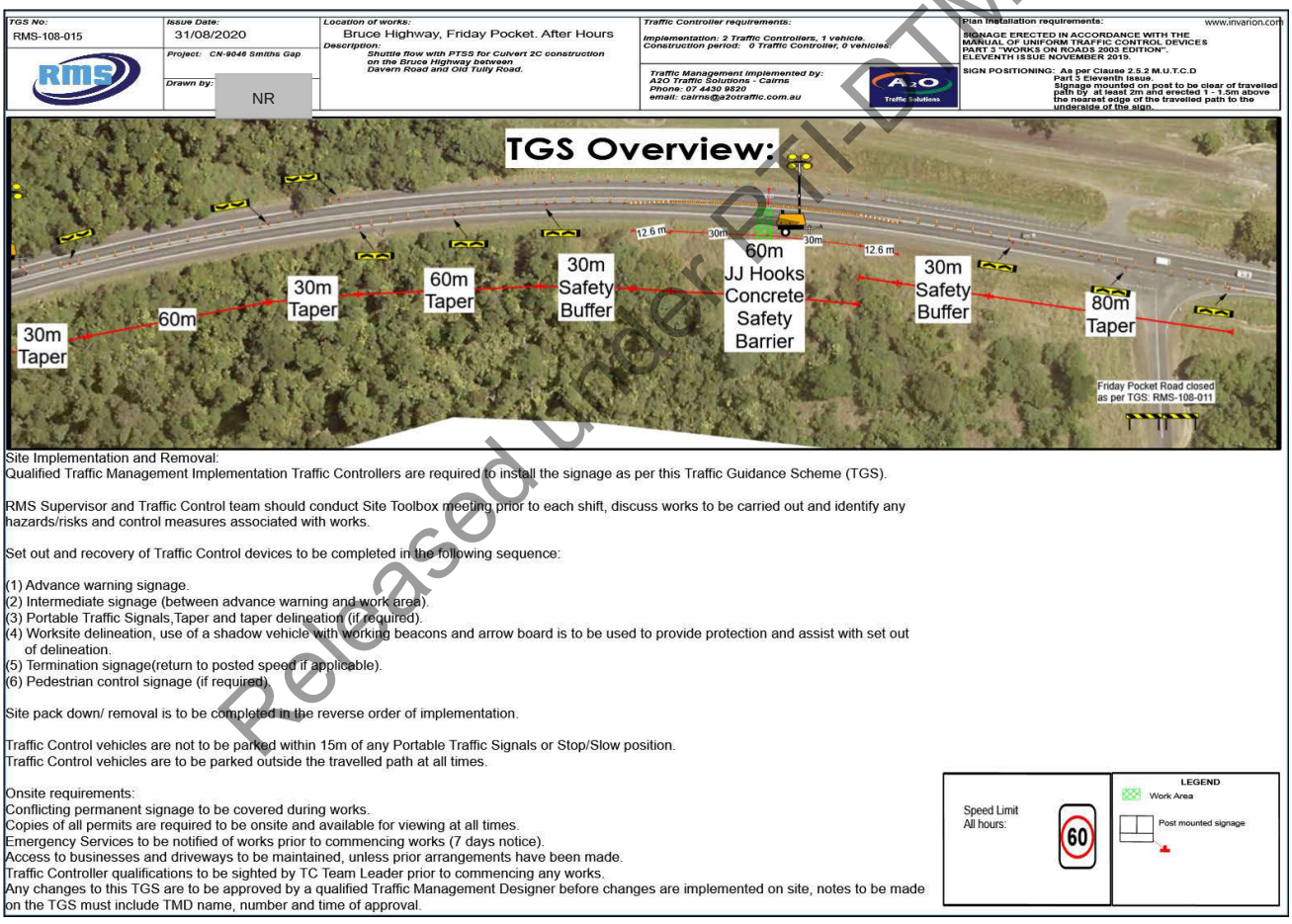
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.

TGS RMS-108-015 After hours Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required After hours for the construction of Culvert 2C at chainage 109420. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

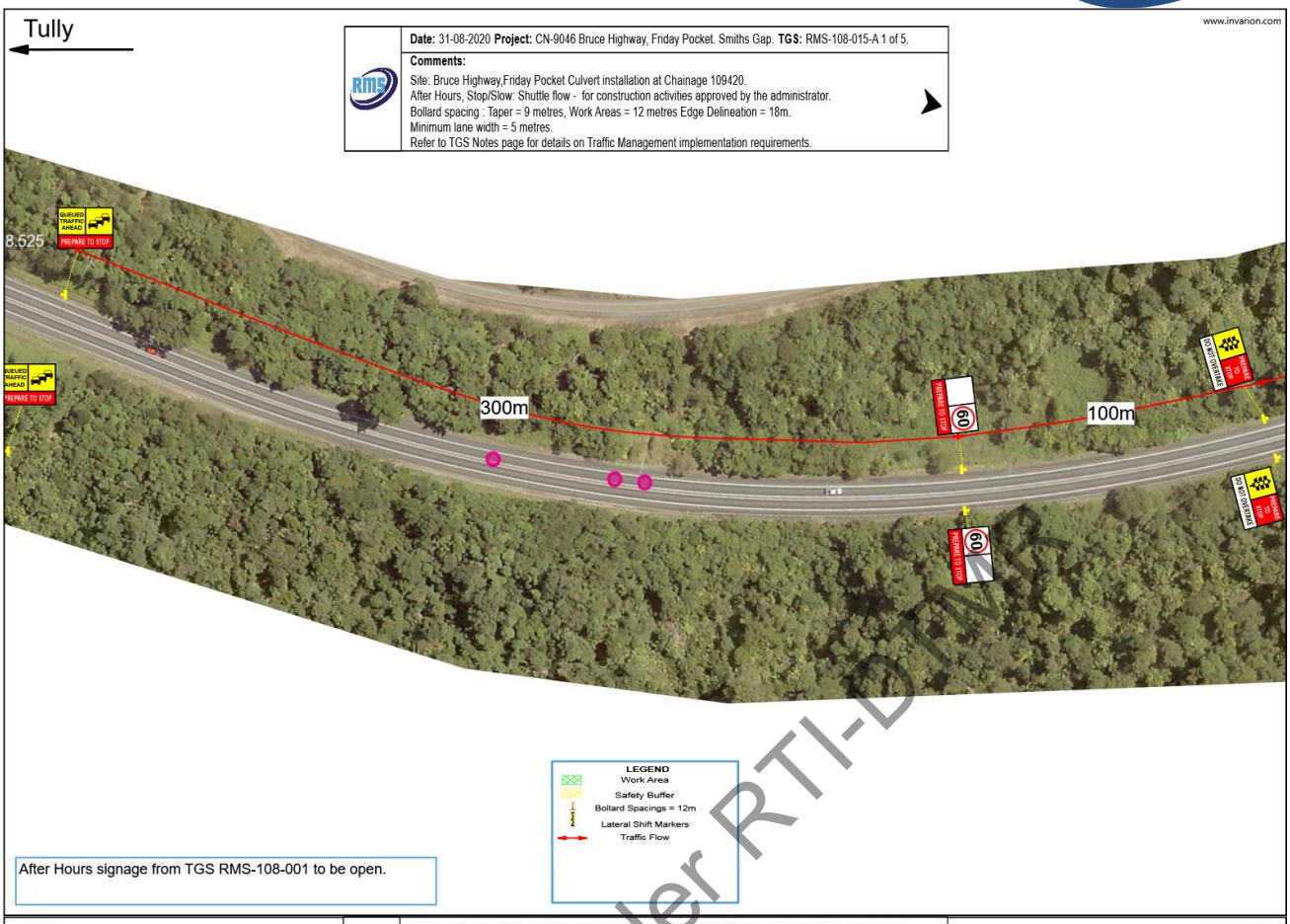
Site pack down/ removal is to be completed in the reverse order of implementation.

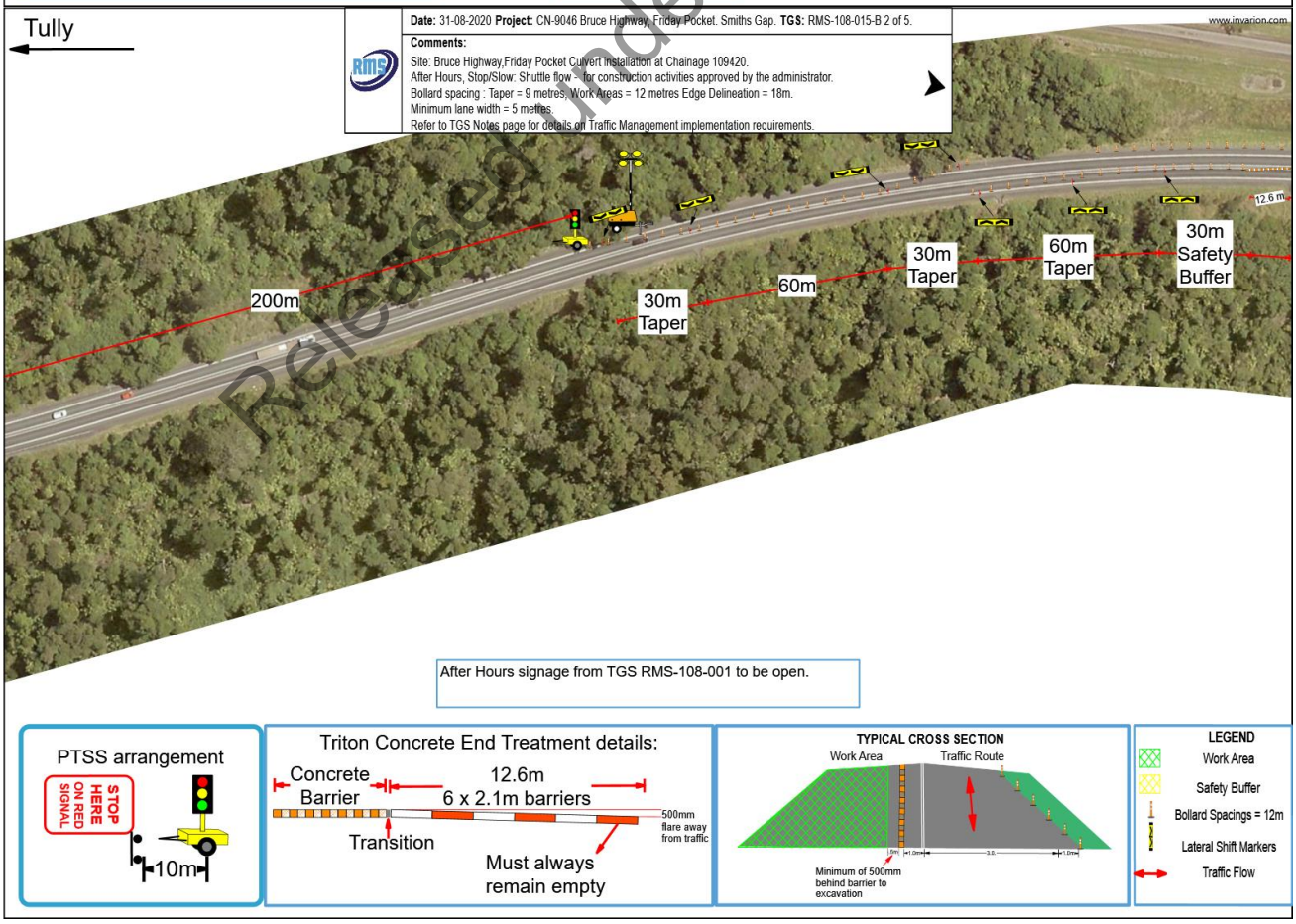
Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

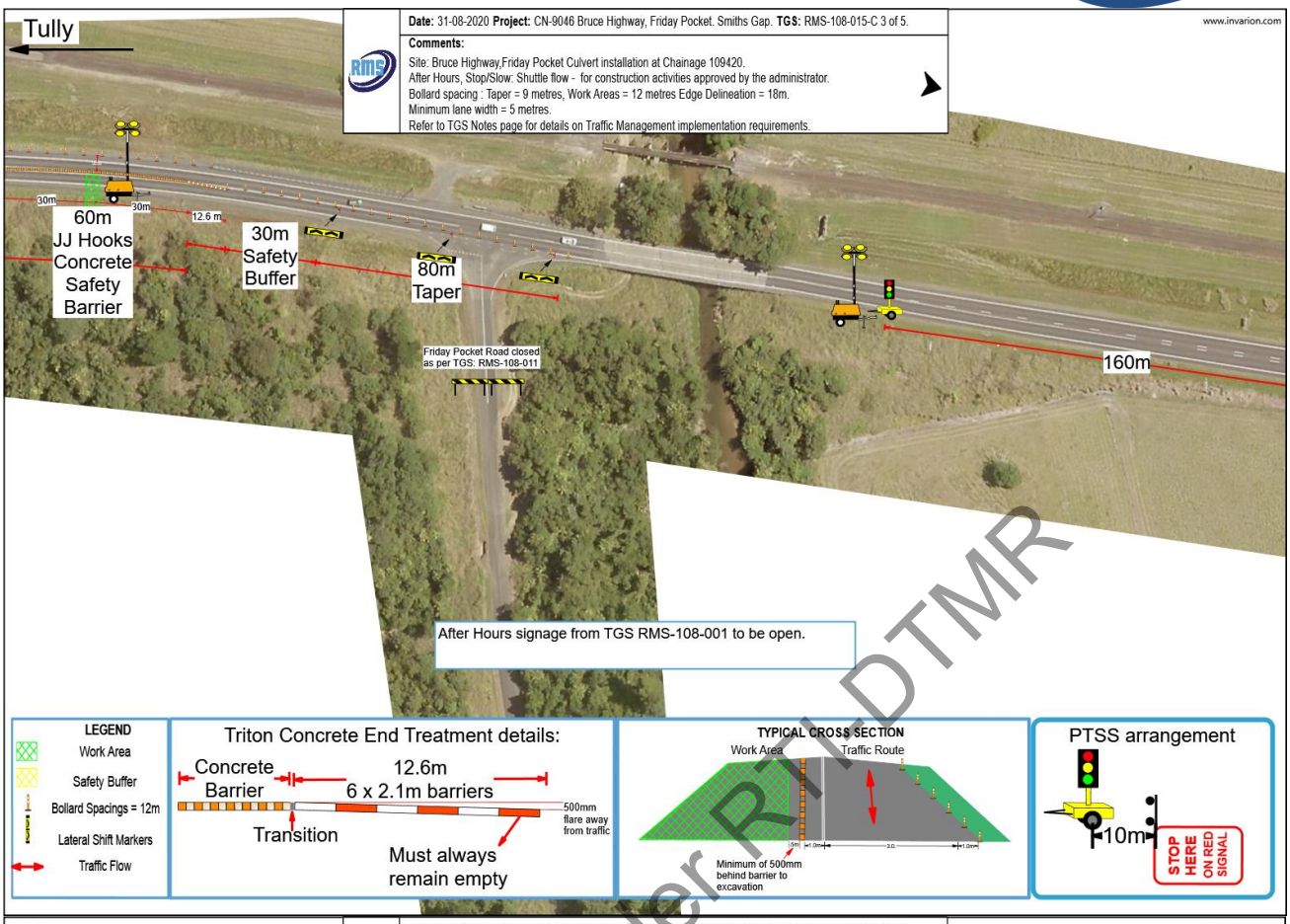
Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

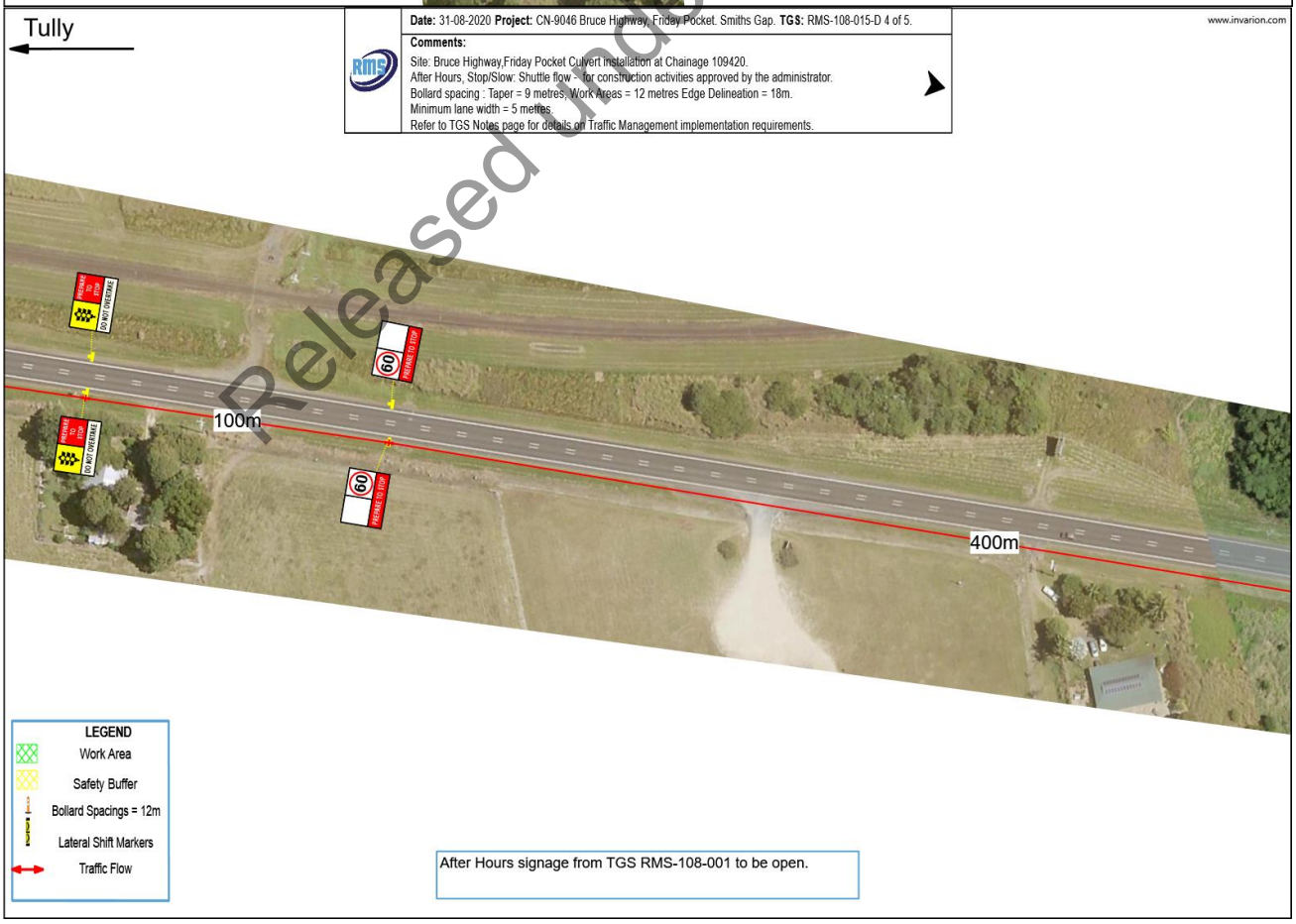
Speed Limit All hours: 60

LEGEND
Work Area
Post mounted signage







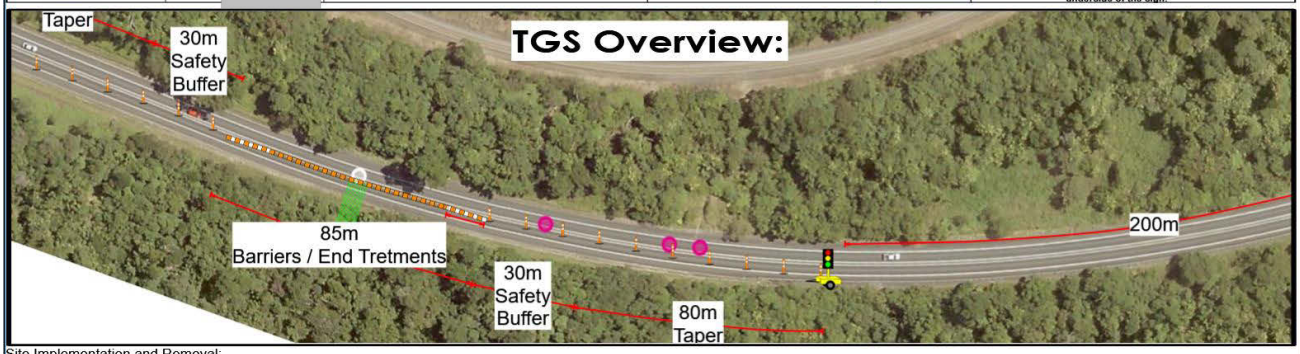


TGS RMS-108-016 Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required for the construction of Culvert 1B at chainage 108640. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

TGS No:	Issue Date:	Location of works:	Traffic Controller requirements:	Plan installation requirements:
RMS-108-016	31/08/2020	Bruce Highway, Friday Pocket.	Implementation: 2 Traffic Controllers, 1 vehicle. Construction period: 3 Traffic Controller, 1 vehicle.	www.invarion.com SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2019.
	Project: CN-9046 Smiths Gap	Description: Shuttle flow with PTSS for Culvert 1B construction on the Bruce Highway between Davern Road and Old Tully Road.	Traffic Management implemented by: A2O Traffic Solutions - Cairns Phone: 07 4430 9820 email: cairns@a2otraffic.com.au	SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.
	Drawn by: NR			



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

Speed Limit All hours: 60

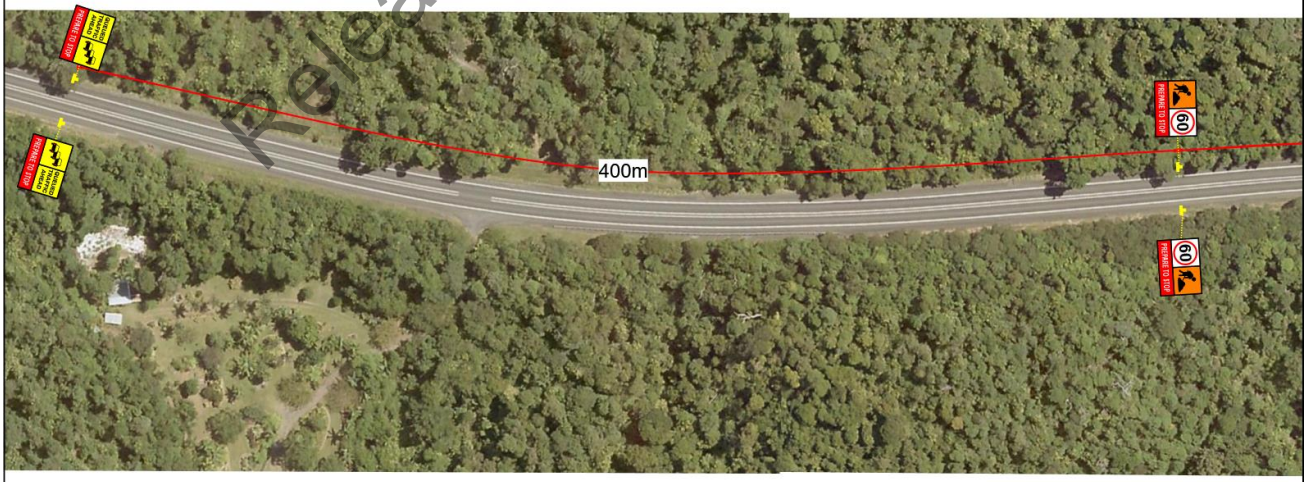
LEGEND
Work Area
Post mounted signage

www.invarion.com

Tully

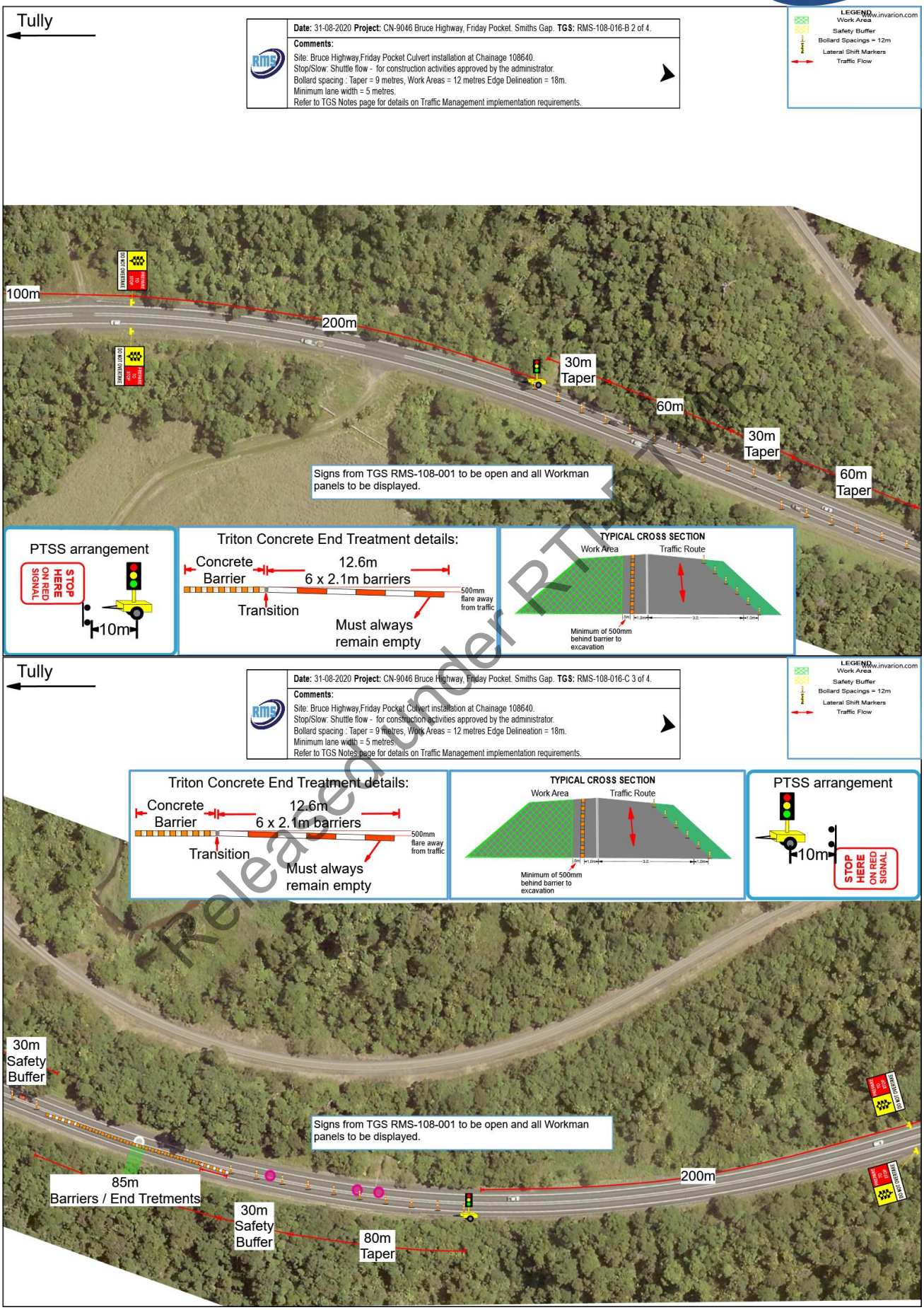
Date: 31-08-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-016-A 1 of 4.

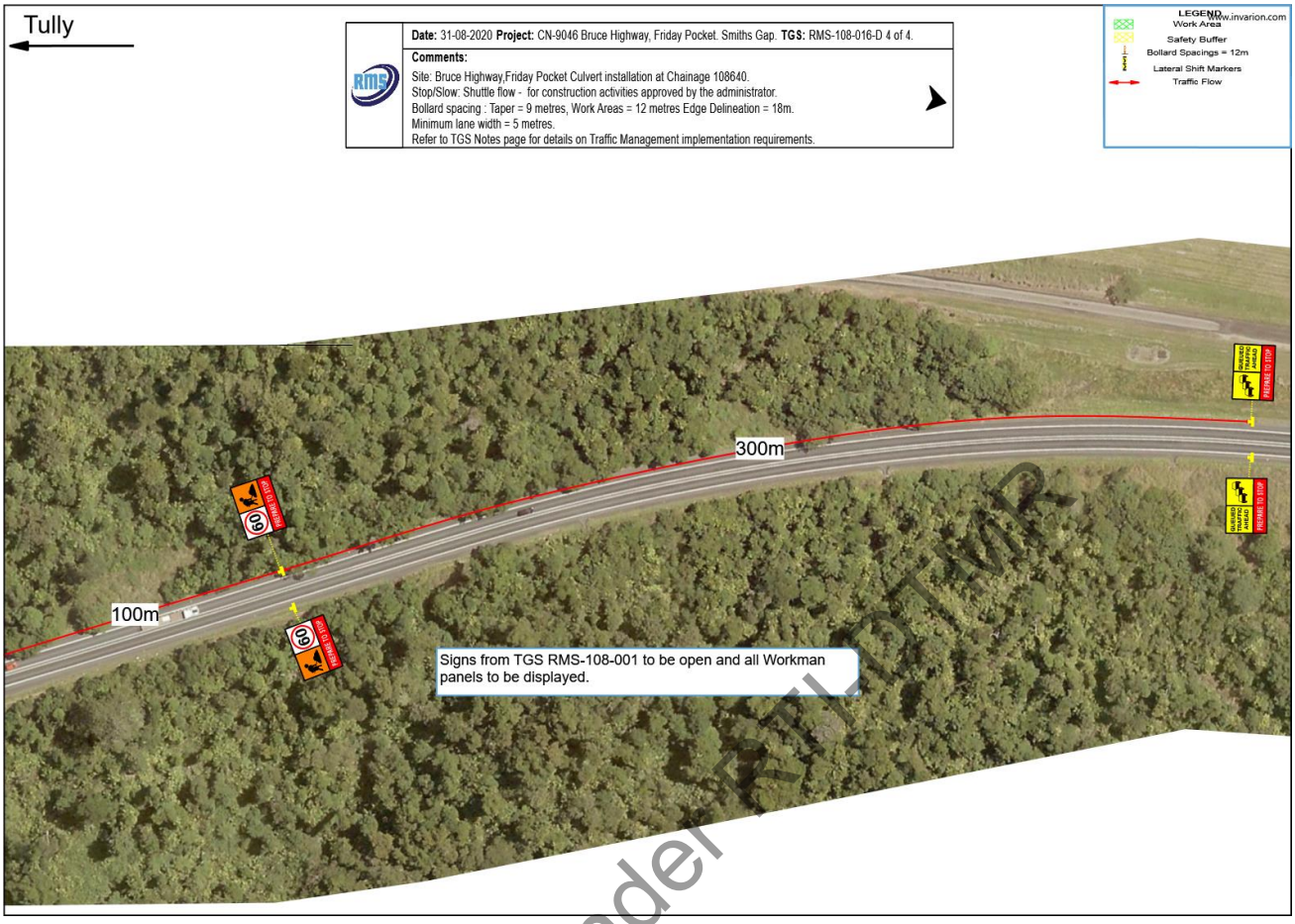
Comments:
Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Signs from TGS RMS-108-001 to be open and all Workman panels to be displayed.



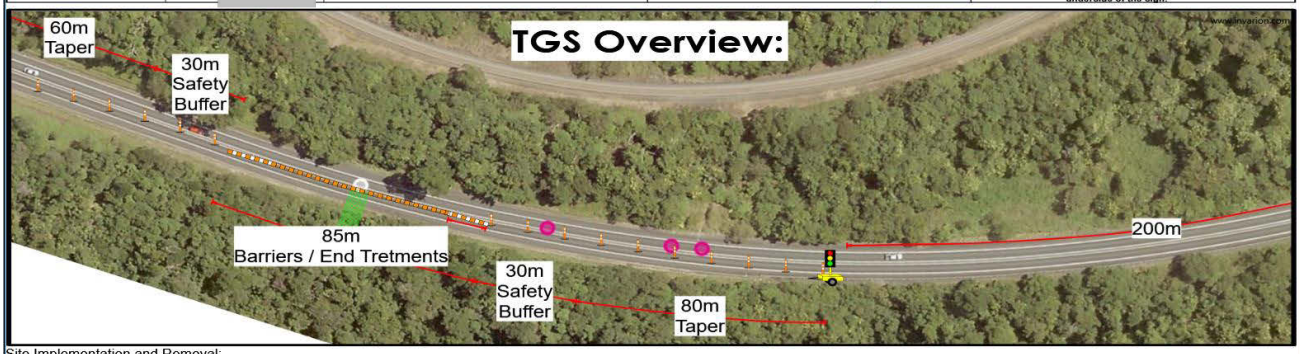


TGS RMS-108-017 After hours- Stop/slow shuttle flow.

This TGS is for when works approved by the administrator where shuttle flow is required after hours to construct Culvert 1B at chainage 108640. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

TGS No:	Issue Date:	Location of works:	Traffic Controller requirements:	Plan installation requirements:
RMS-108-017	31/08/2020	Bruce Highway, Friday Pocket. After Hours	Implementation: 2 Traffic Controllers, 1 vehicle. Construction period: 0 Traffic Controller, 0 vehicle.	SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2019.
	Project: CN-9046 Smiths Gap	Description: Shuttle flow with PTSS for Culvert 1B construction on the Bruce Highway between Davern Road and Old Tully Road.	Traffic Management implemented by: A2O Traffic Solutions - Cairns Phone: 07 4430 9820 email: cairns@a2otraffic.com.au	SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.
	Drawn by: NR			www.invarion.com



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

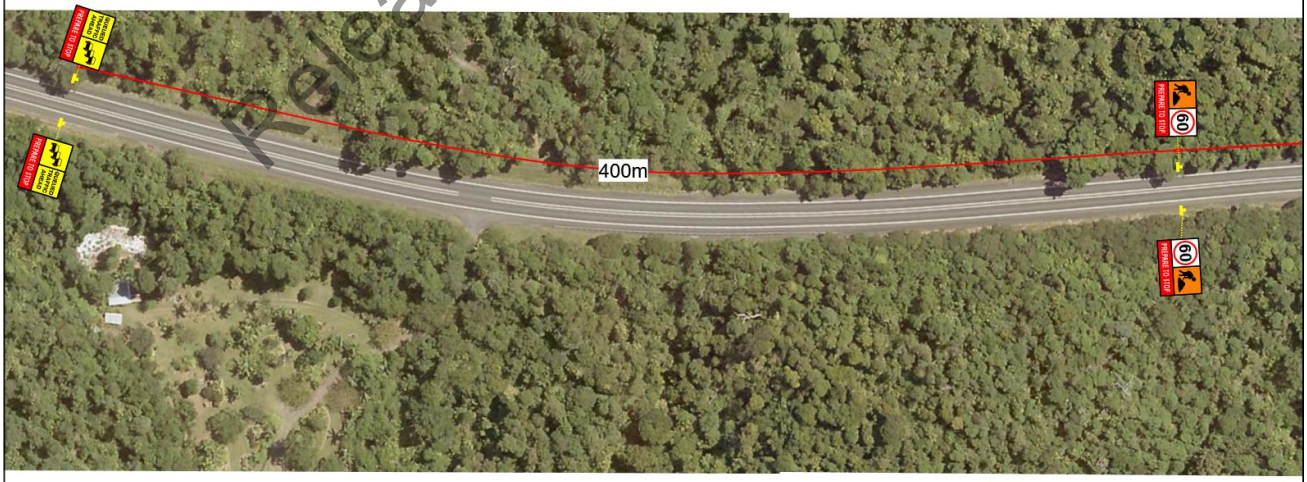
Speed Limit All hours: 60

LEGEND
Work Area
Post mounted signage

Tully

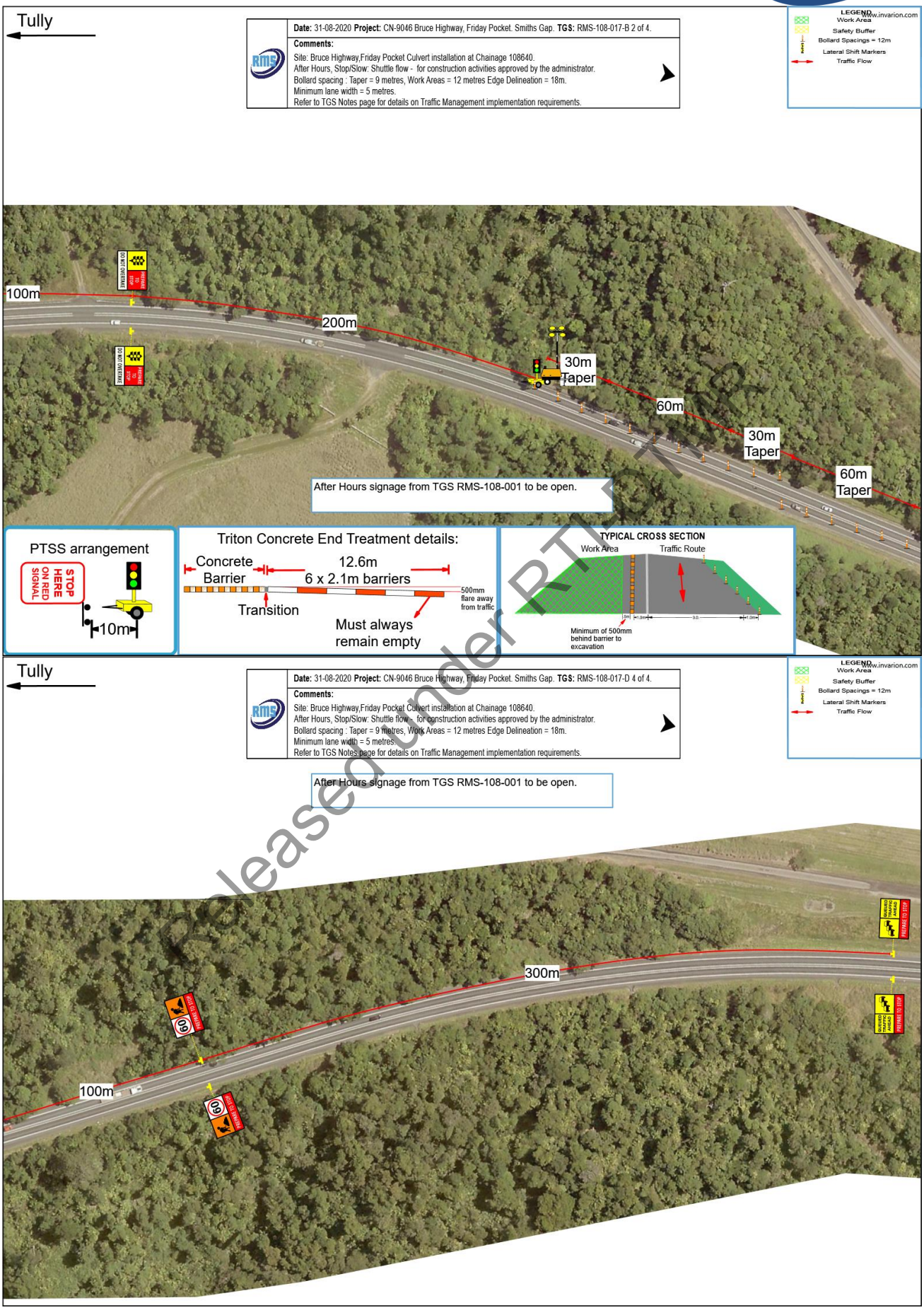
Date: 31-08-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-017-A 1 of 4.

Comments:
Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
After Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

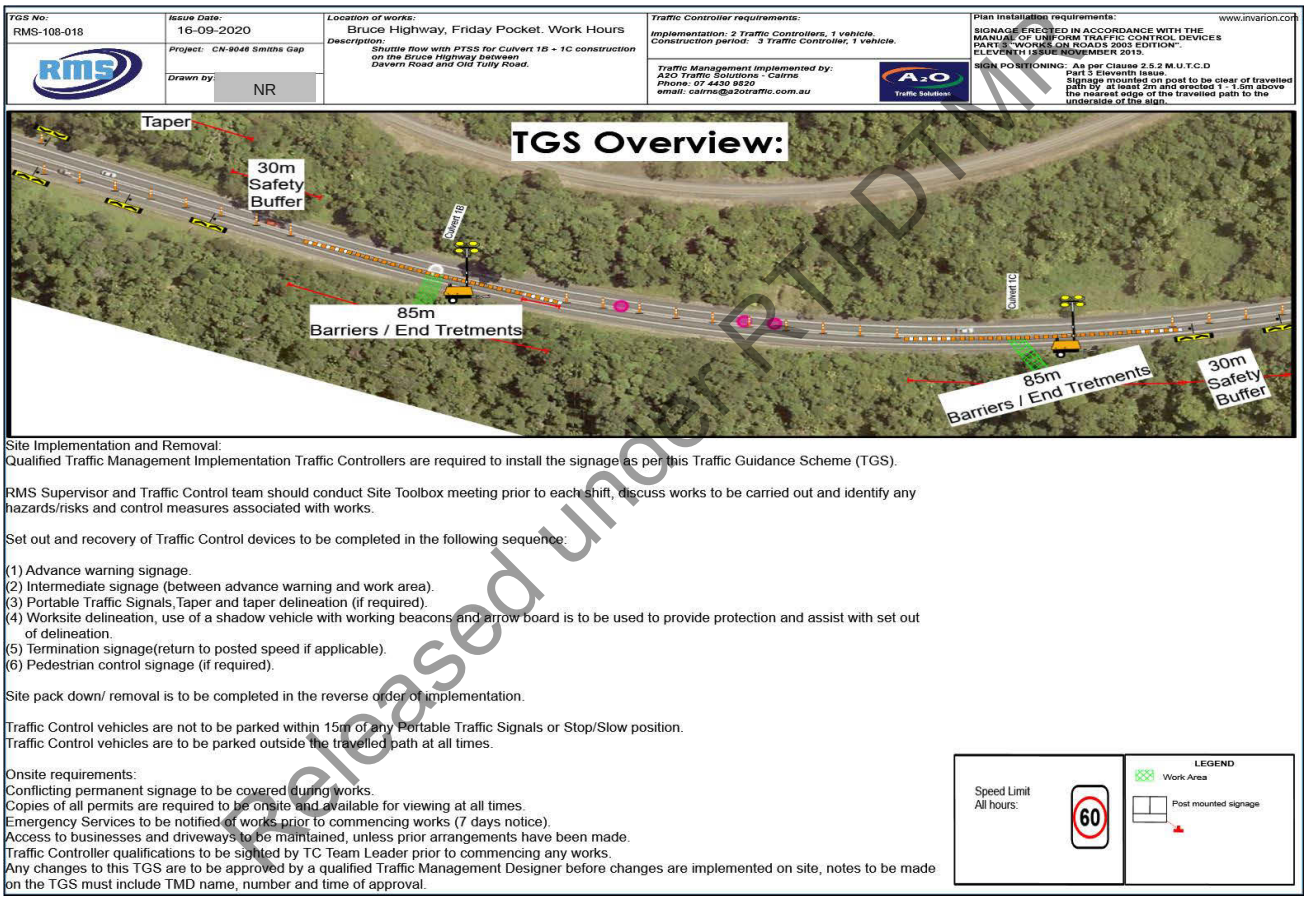
After Hours signage from TGS RMS-108-001 to be open.

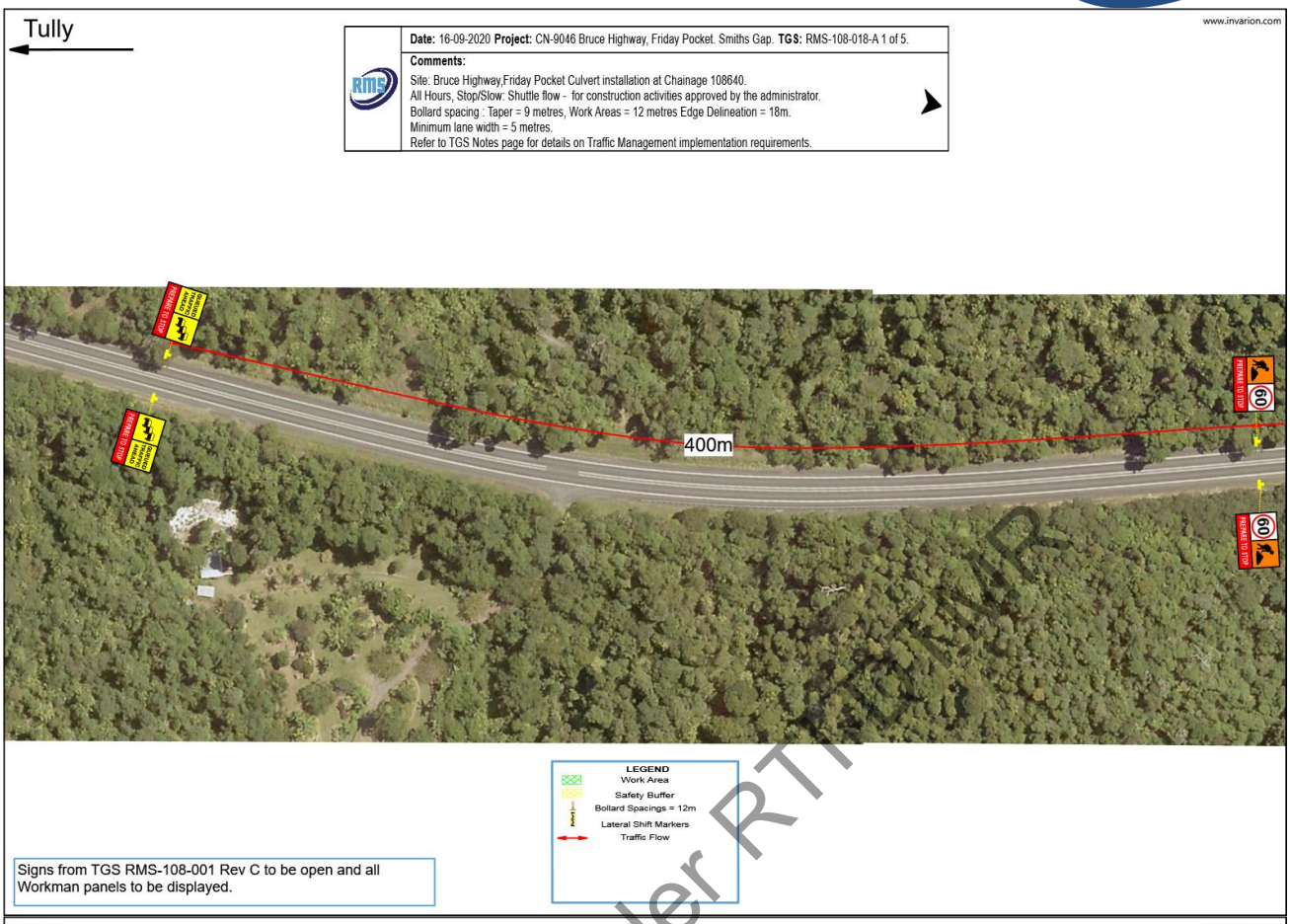


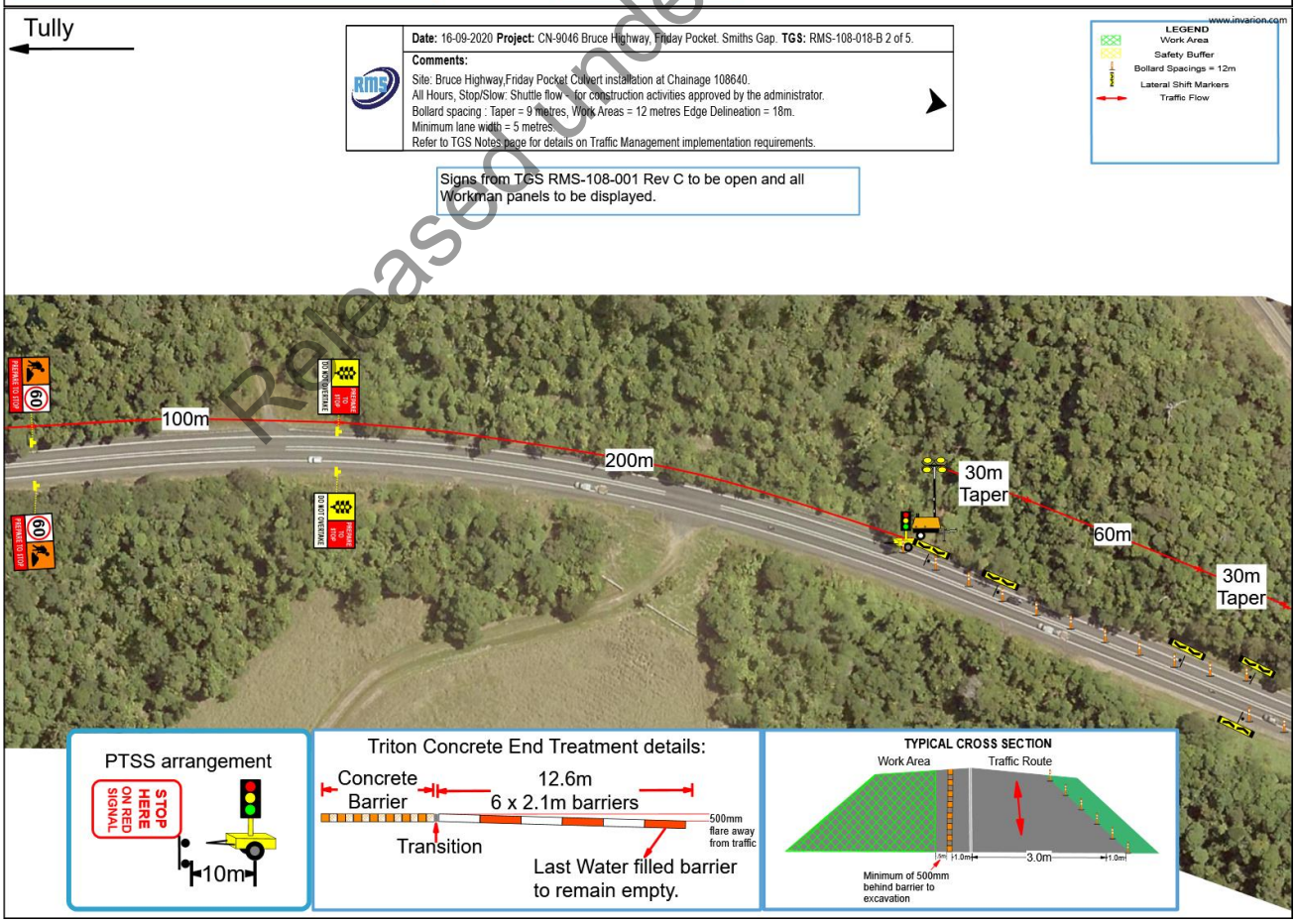
TGS RMS-108-018 Stop/slow shuttle flow Culvert 1b and 1C.

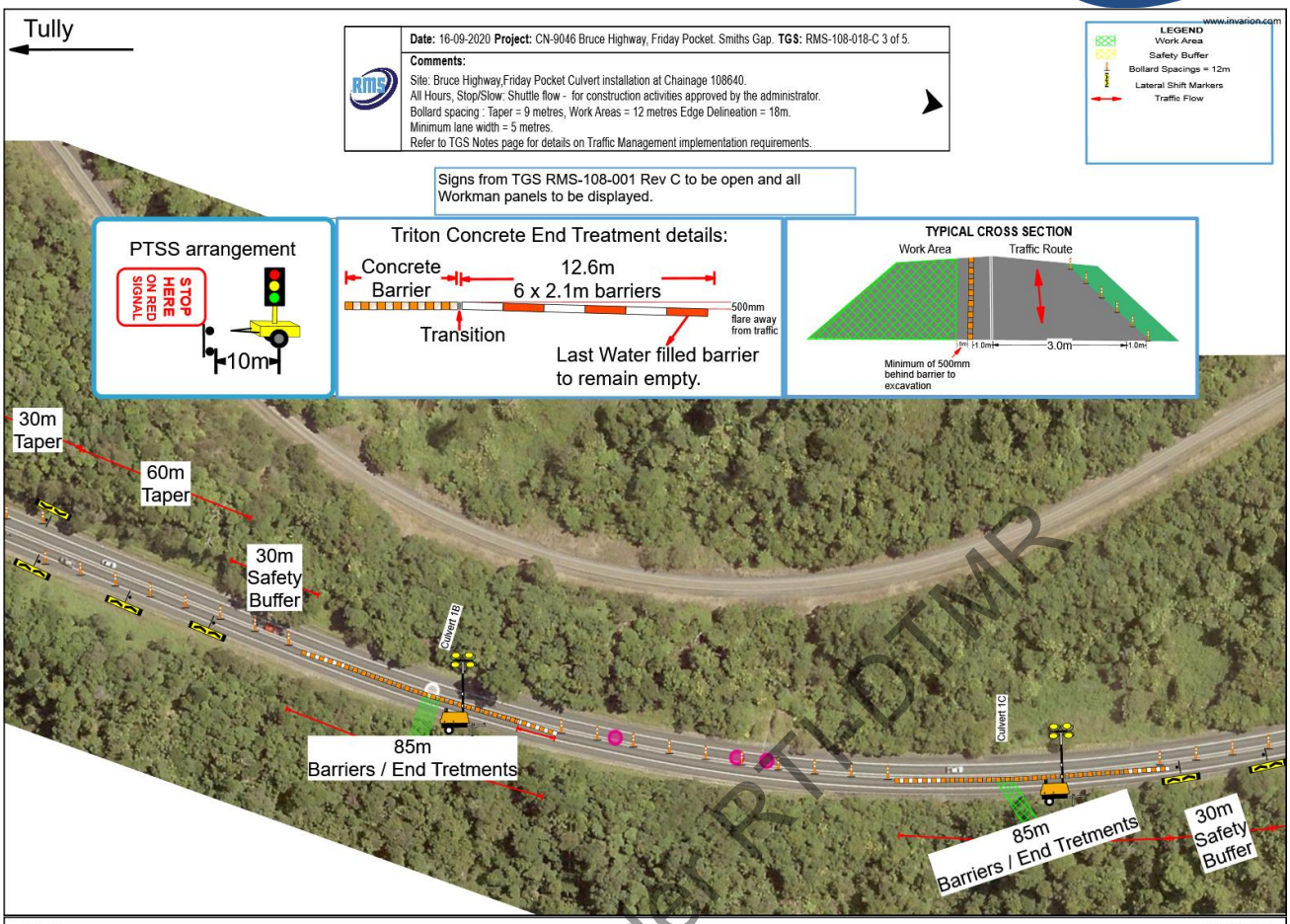
This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

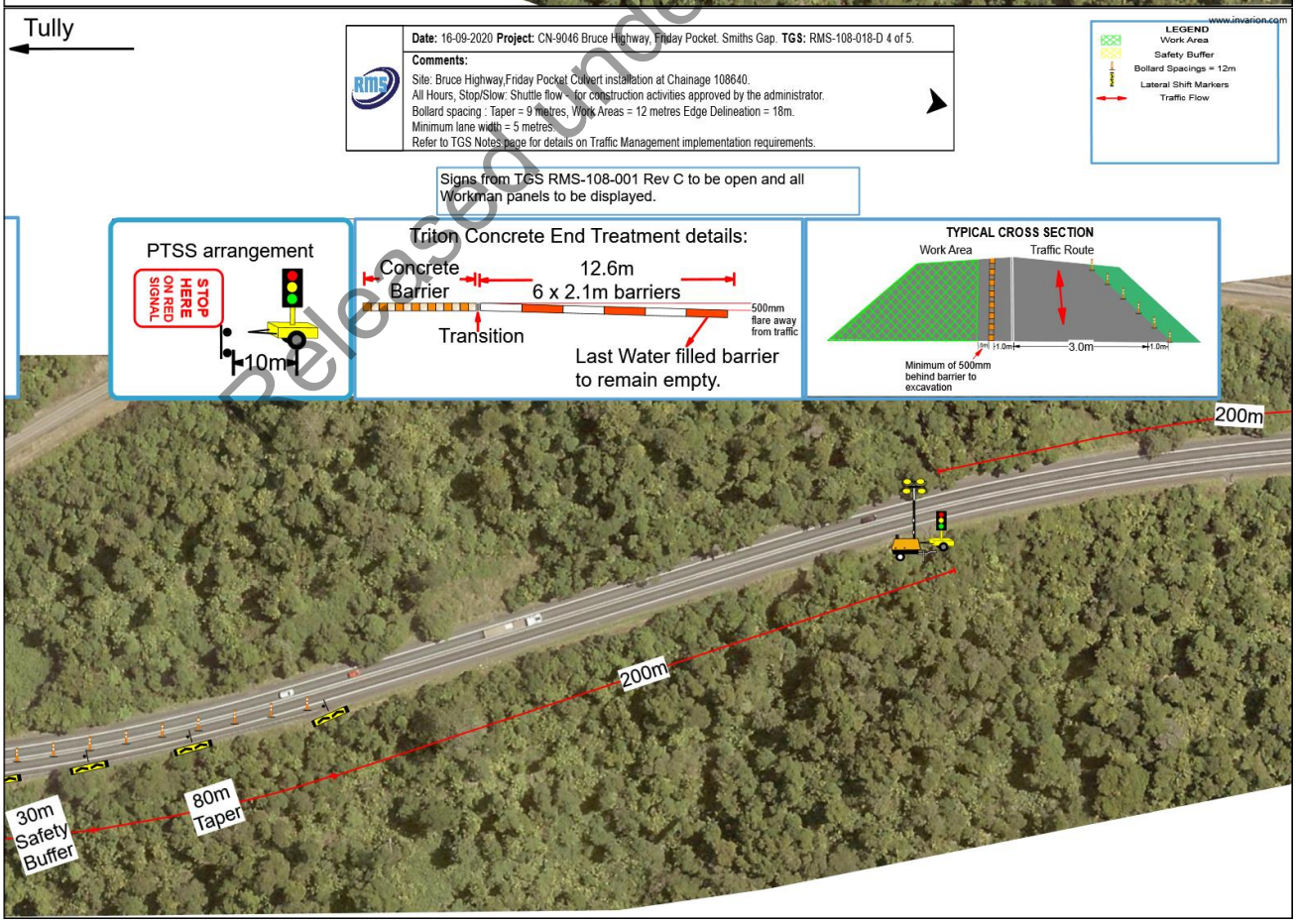
Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

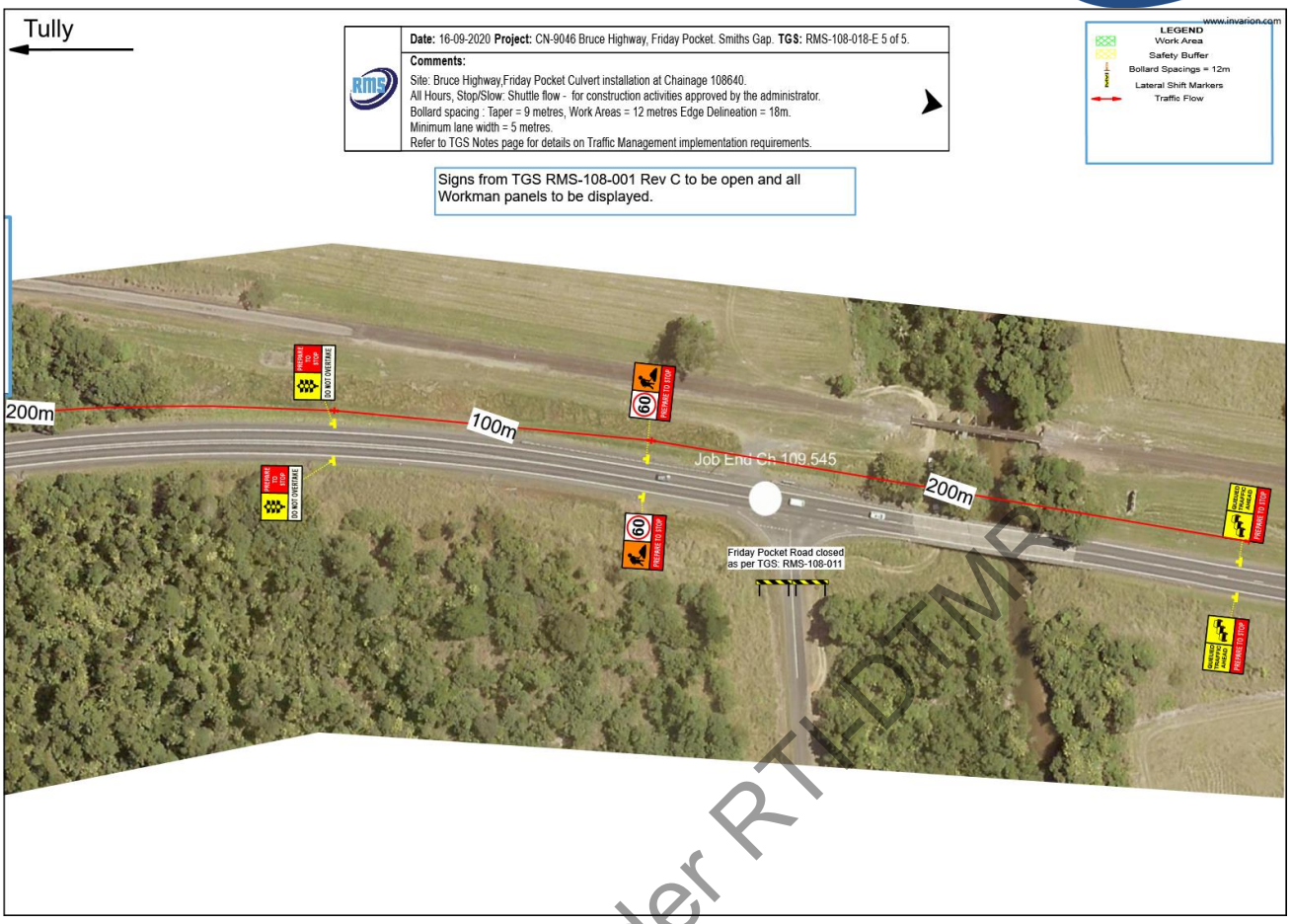








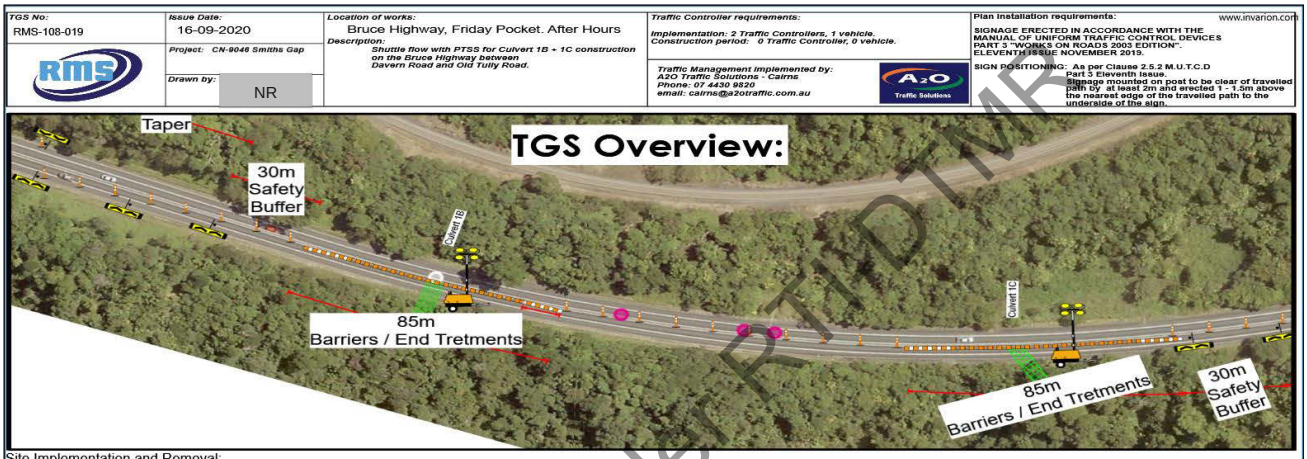




TGS RMS-108-019 After hours Stop/slow shuttle flow Culvert 1B and 1C.

This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

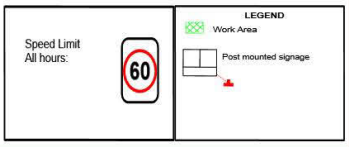
Set out and recovery of Traffic Control devices to be completed in the following sequence:

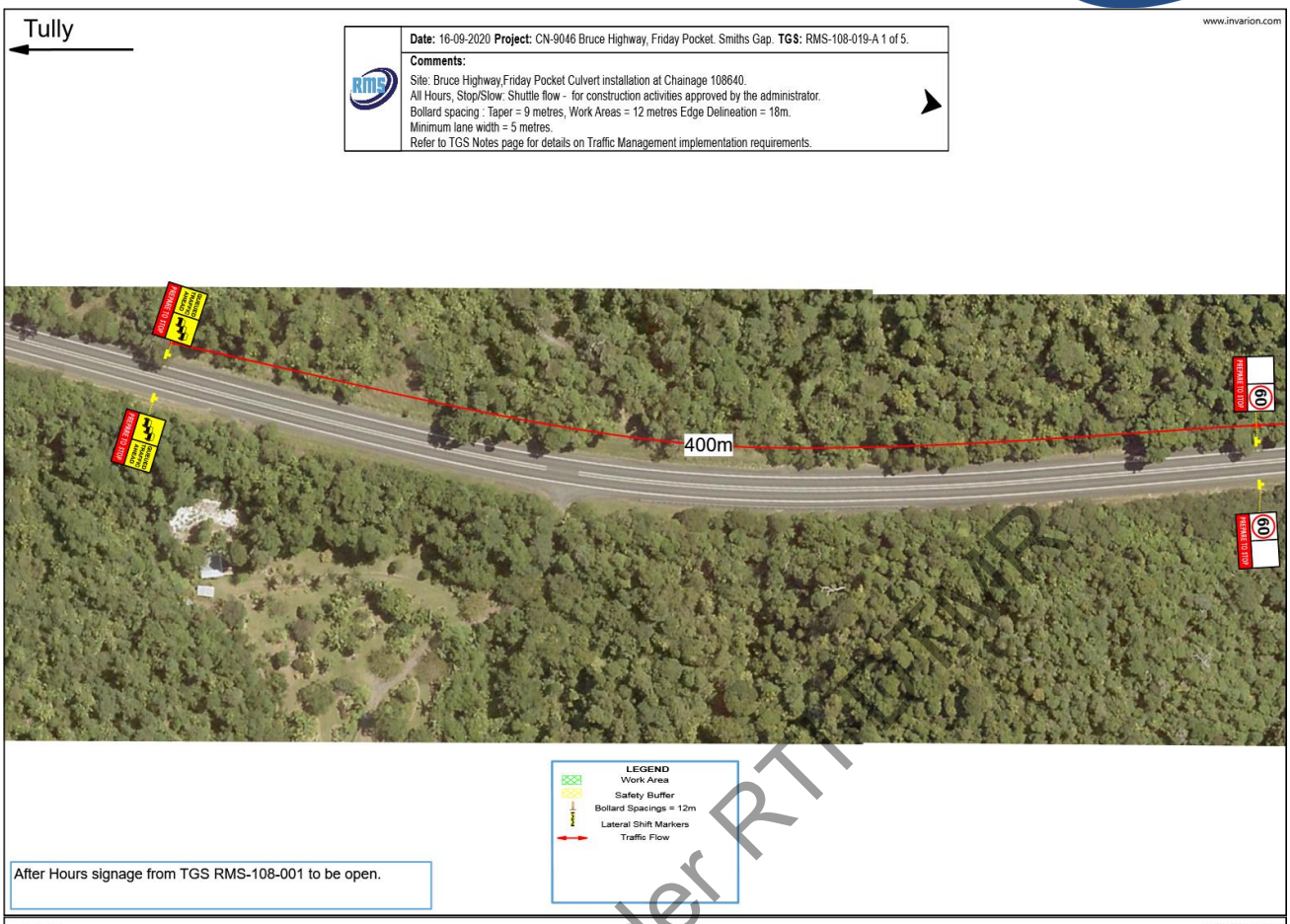
(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

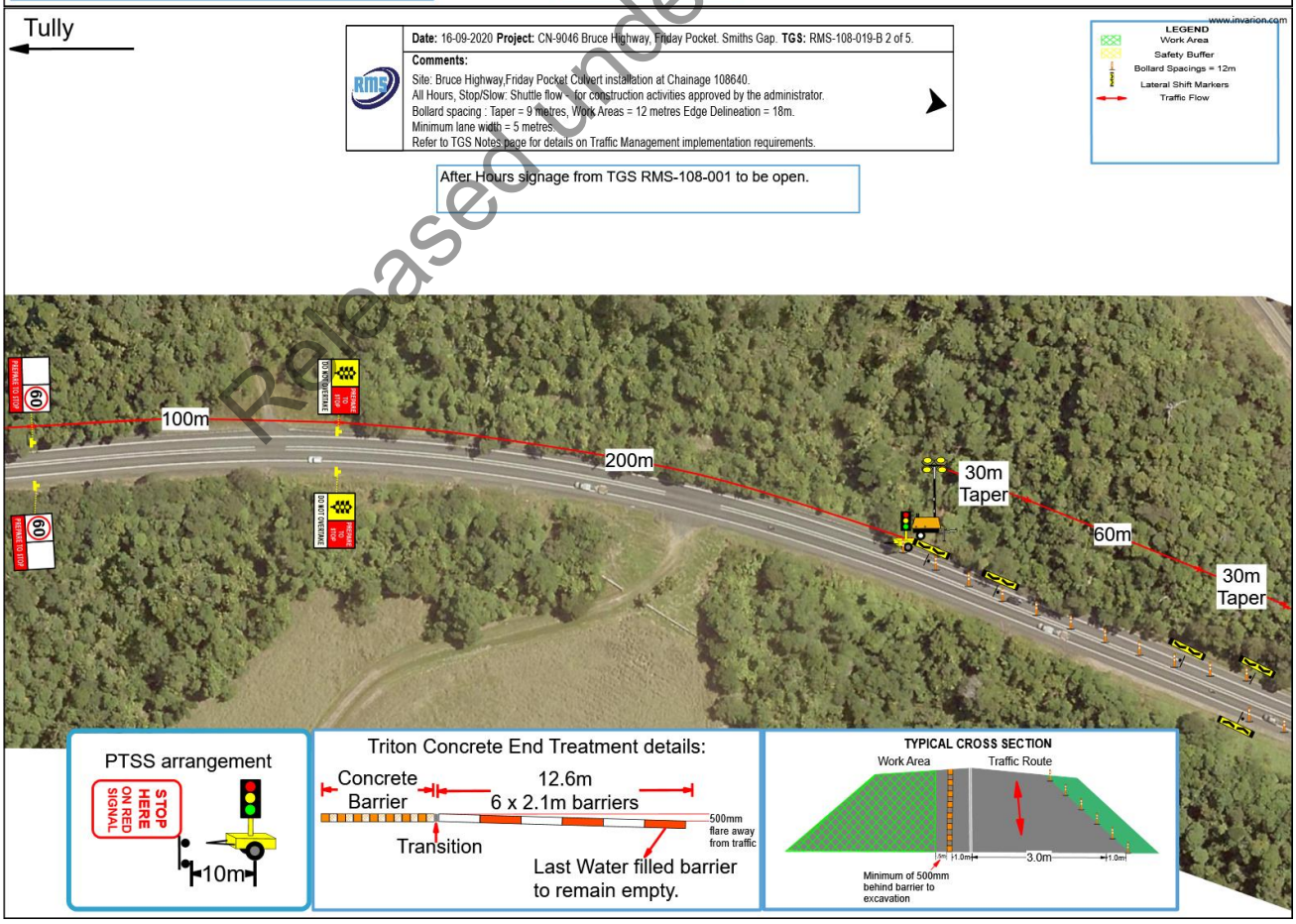
Site pack down/ removal is to be completed in the reverse order of implementation.

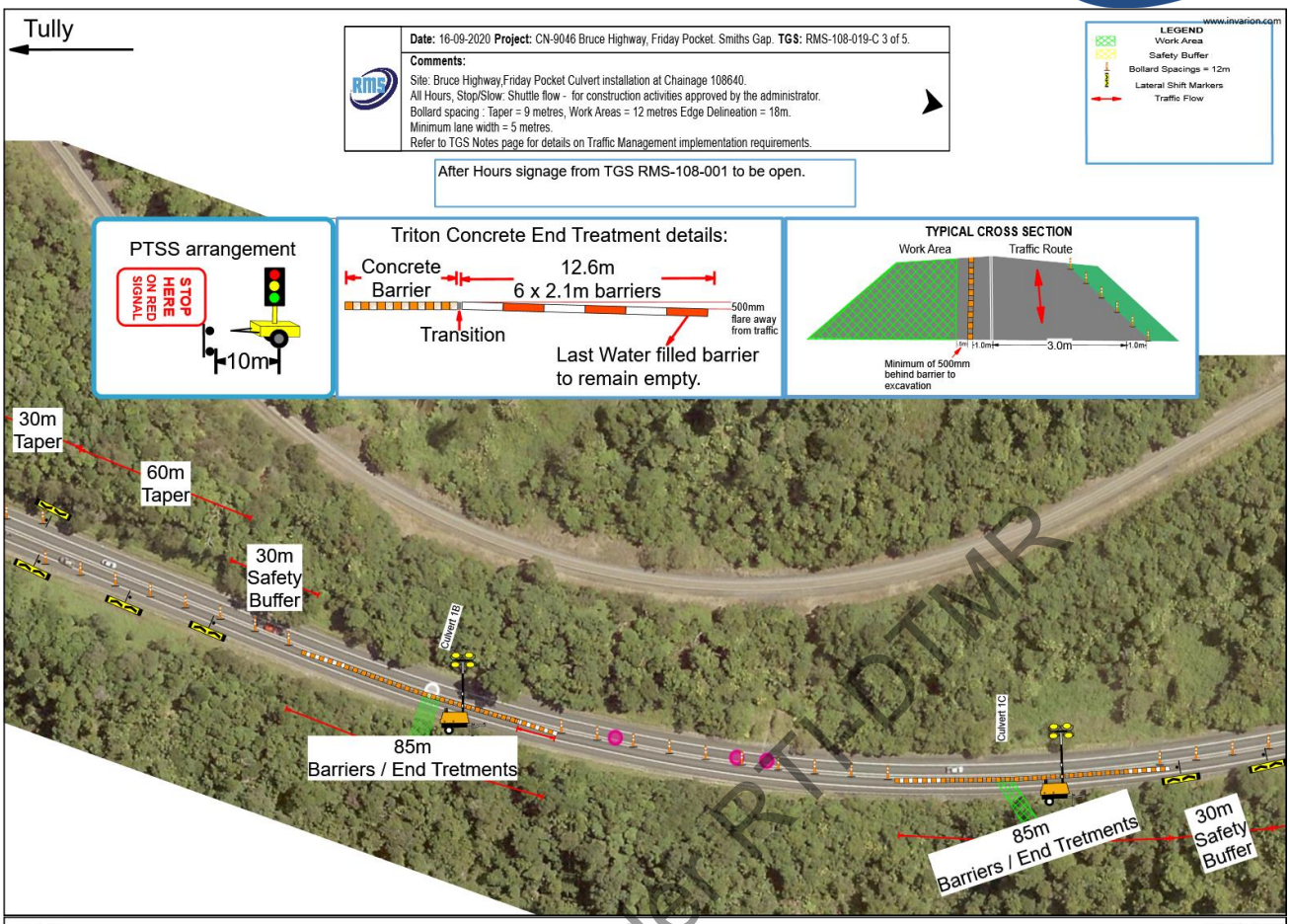
Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

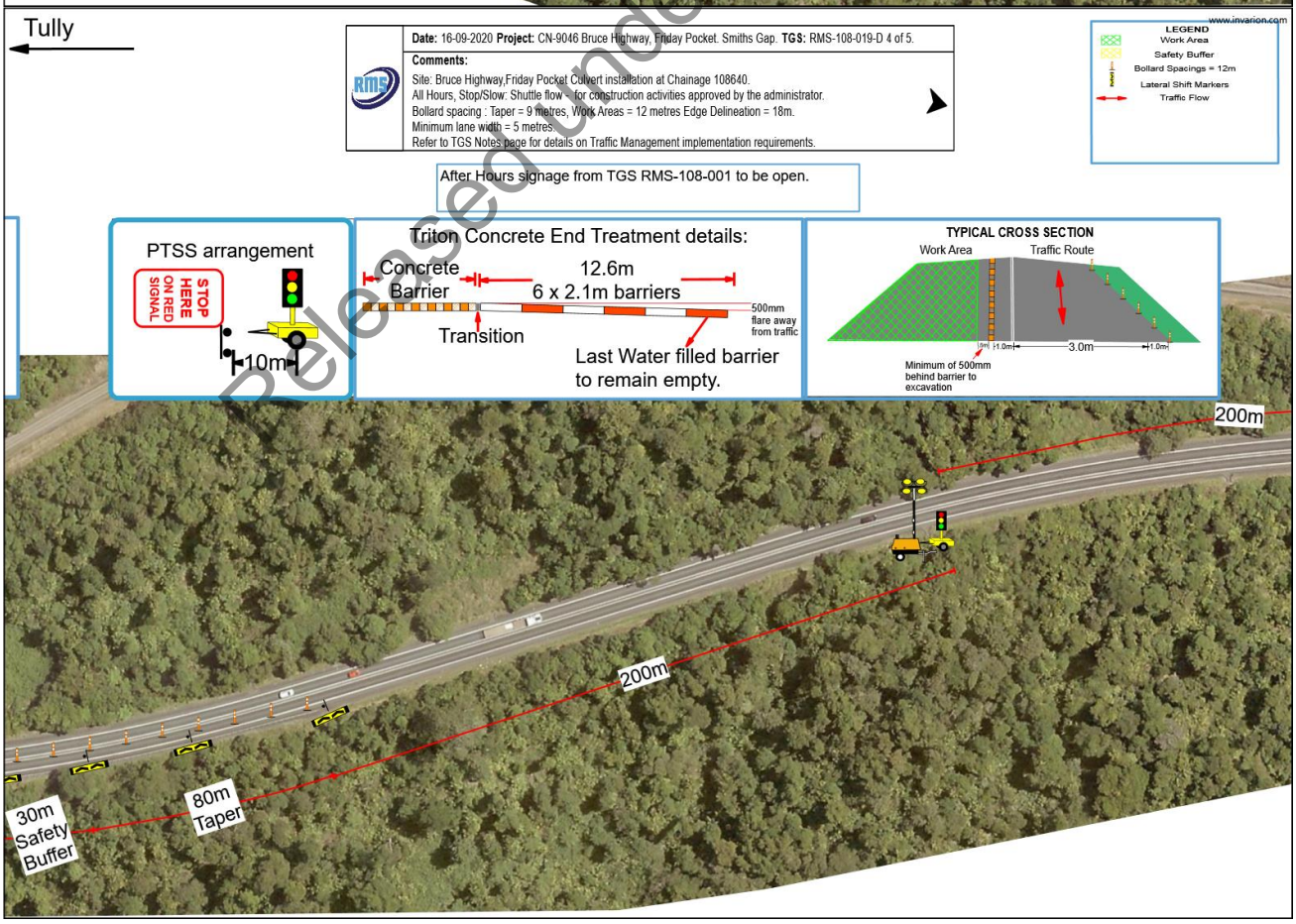
Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

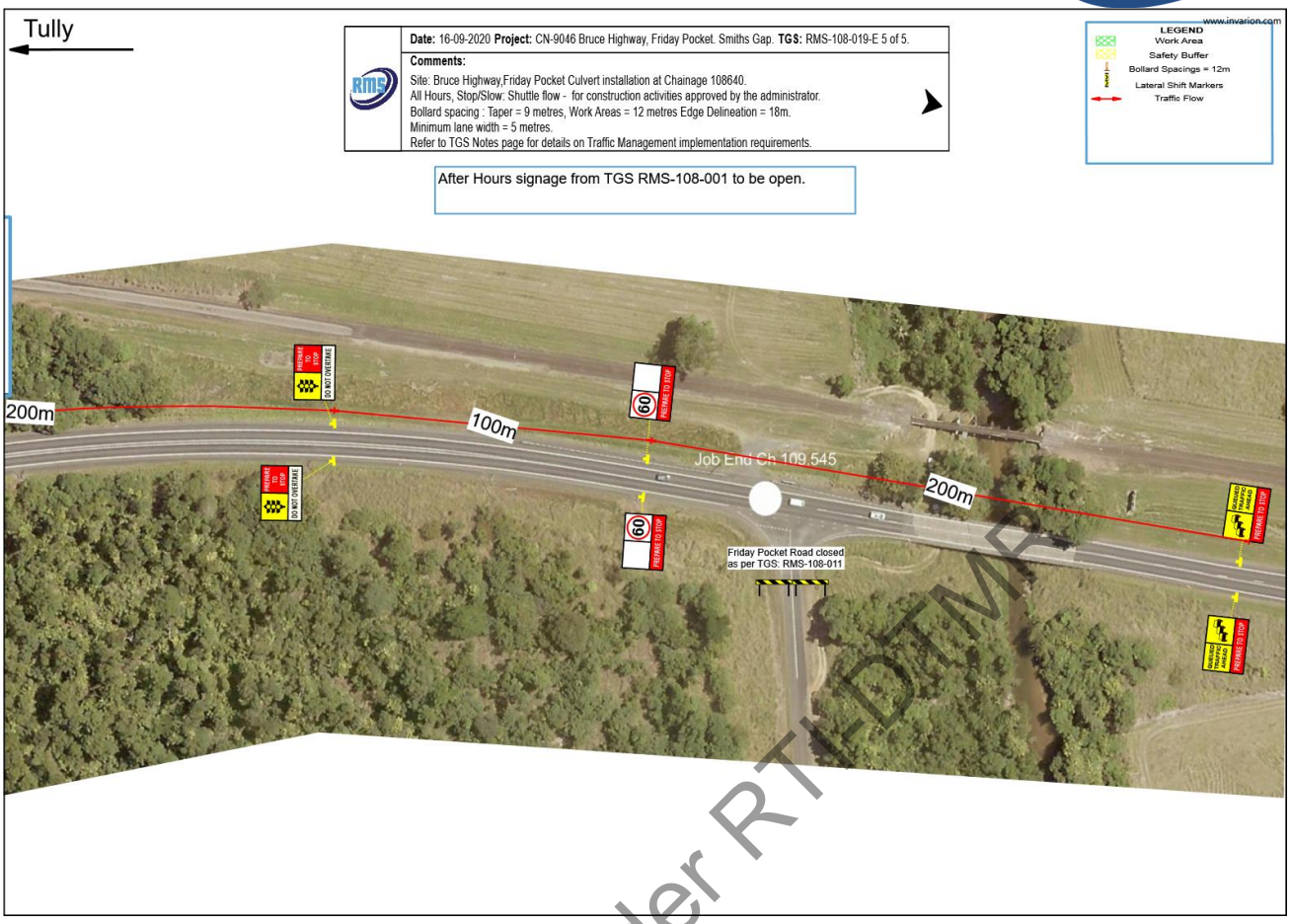








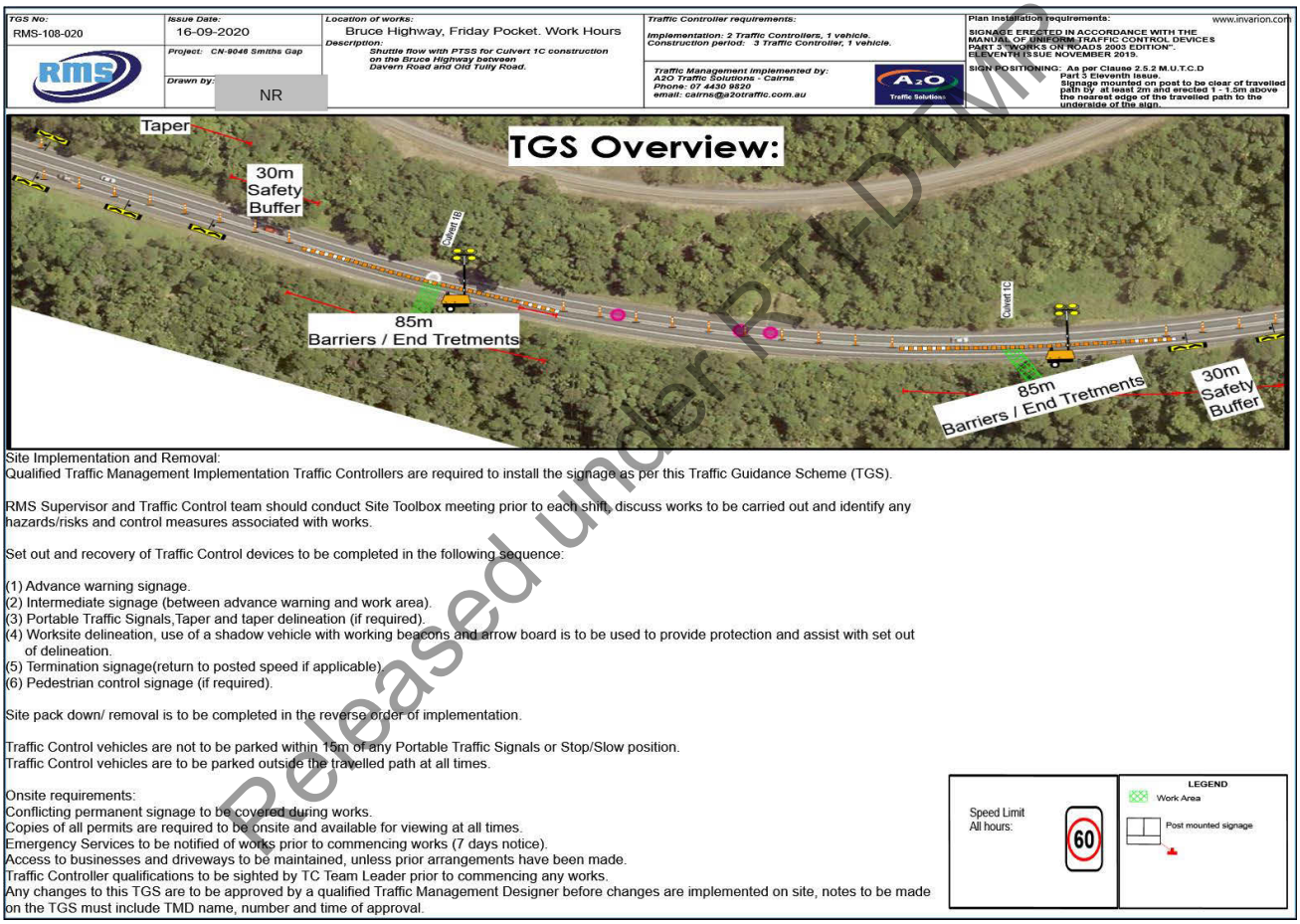


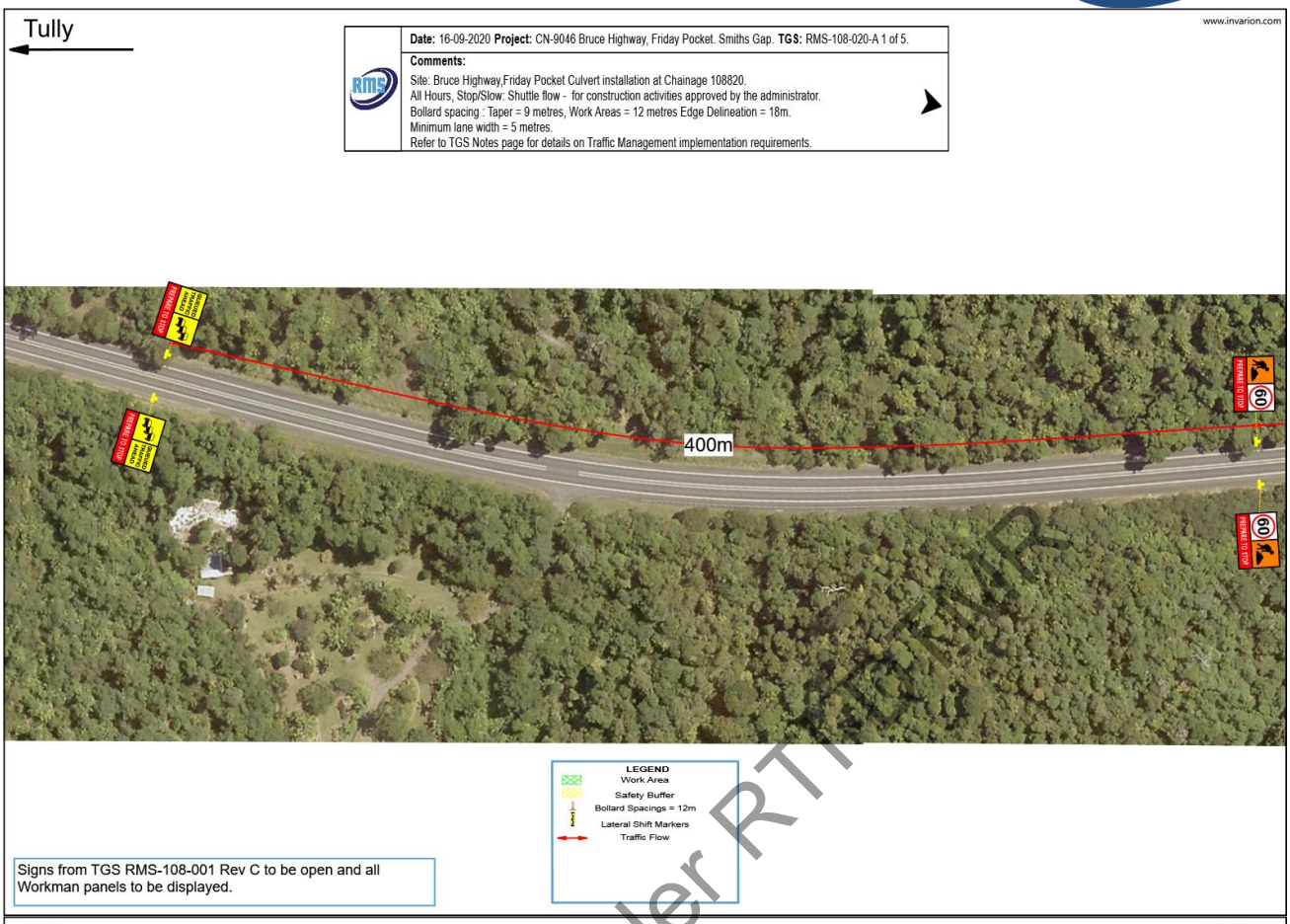


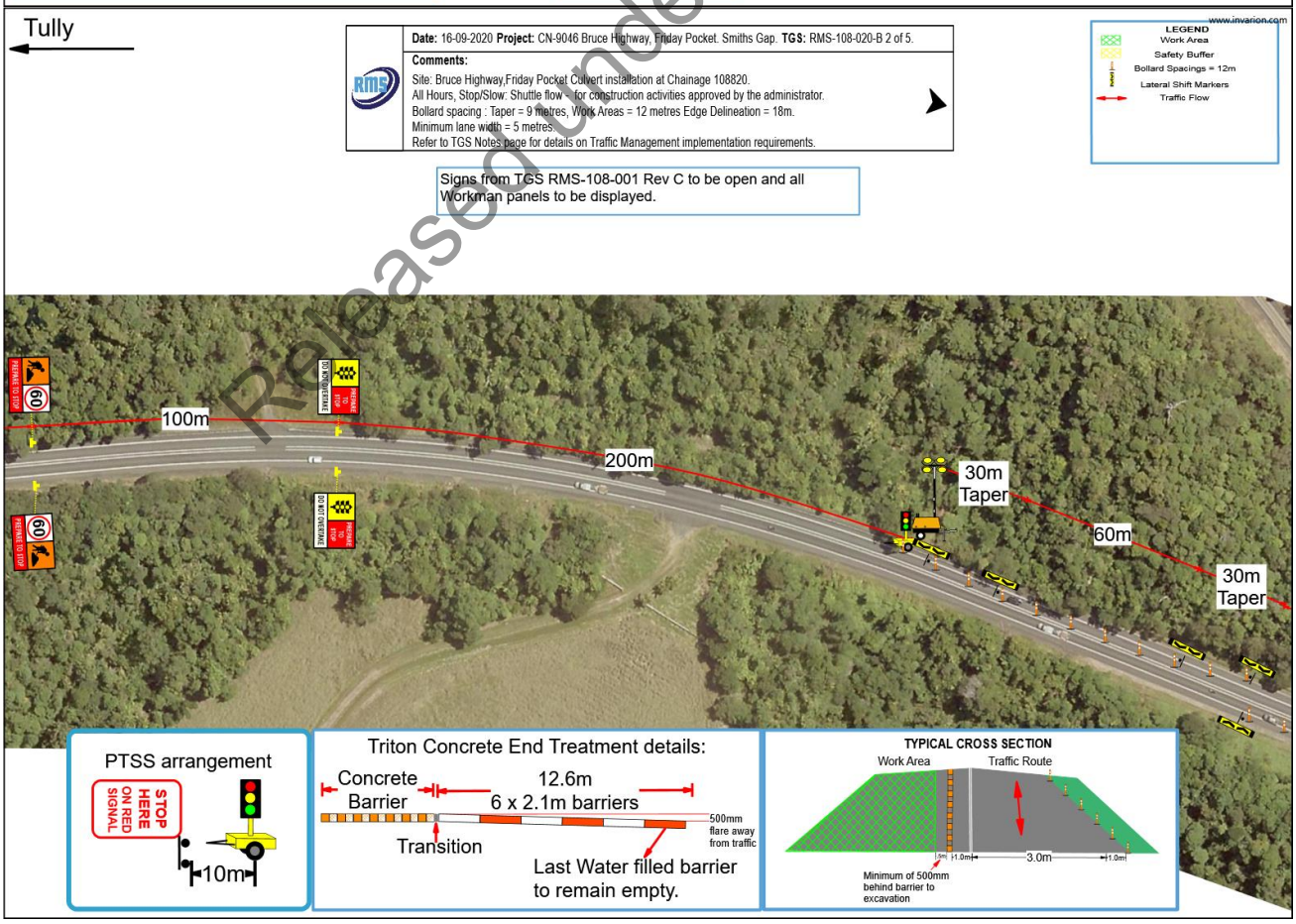
TGS RMS-108-020 Stop/slow shuttle flow Culvert 1C.

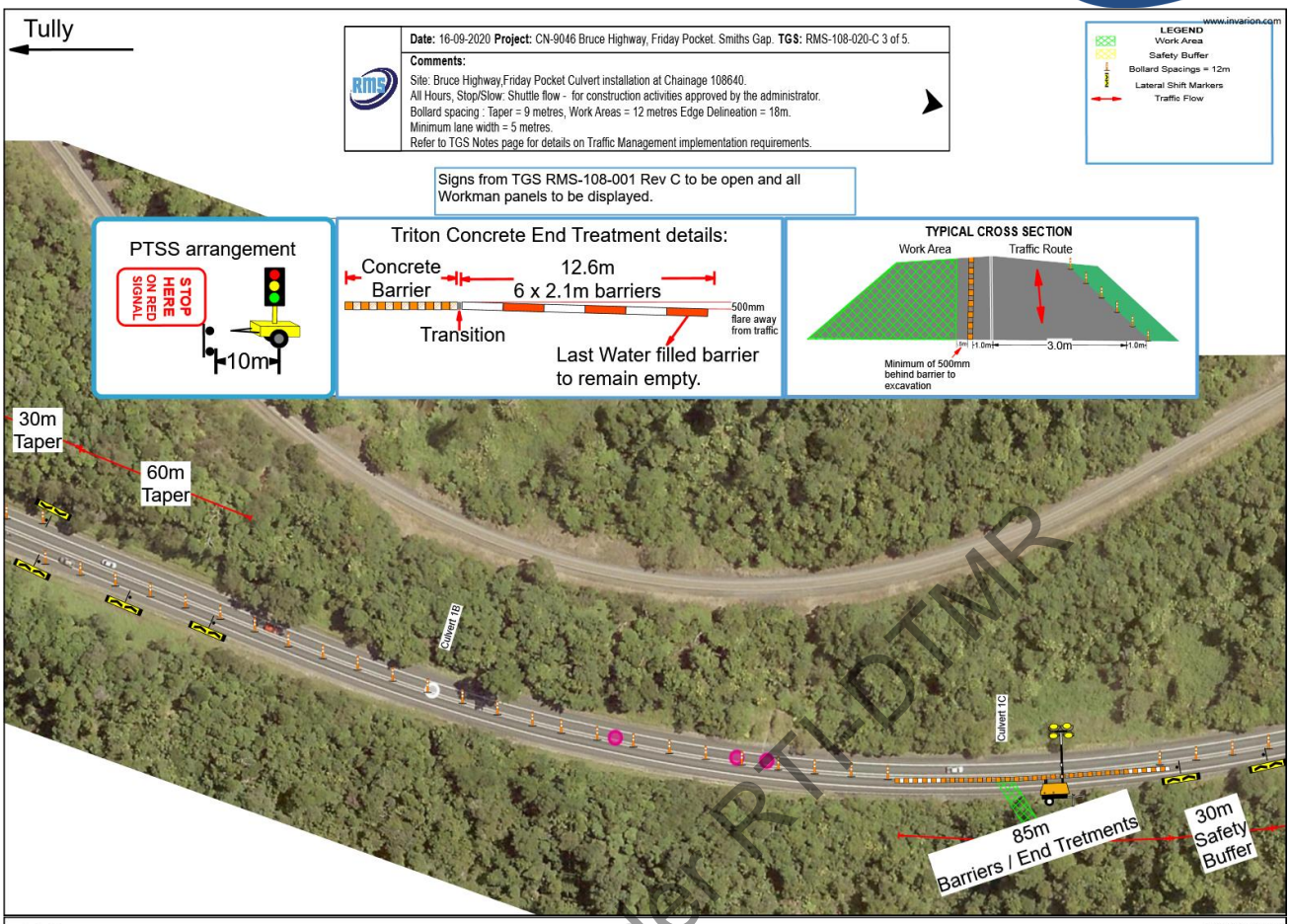
This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

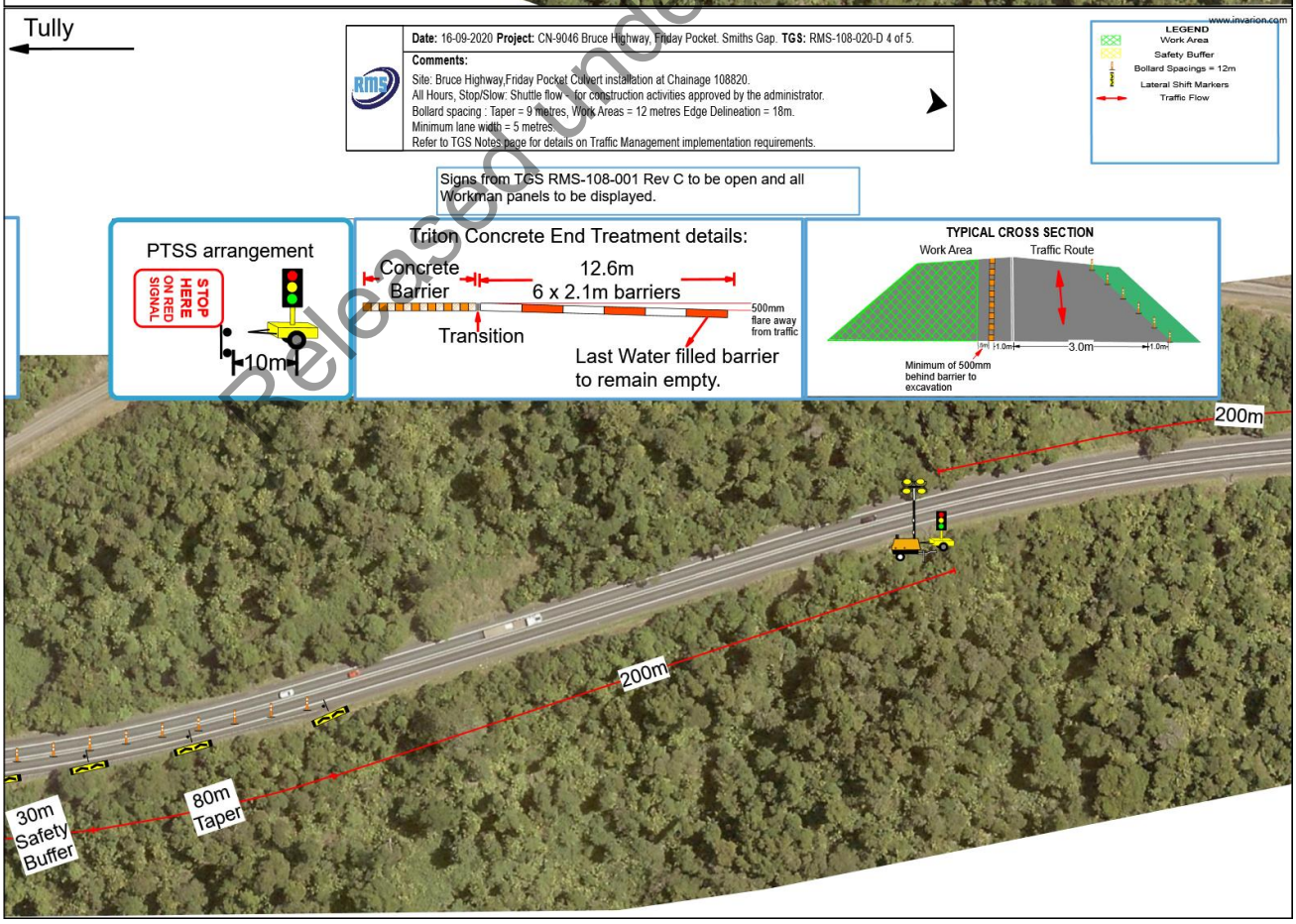
Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical

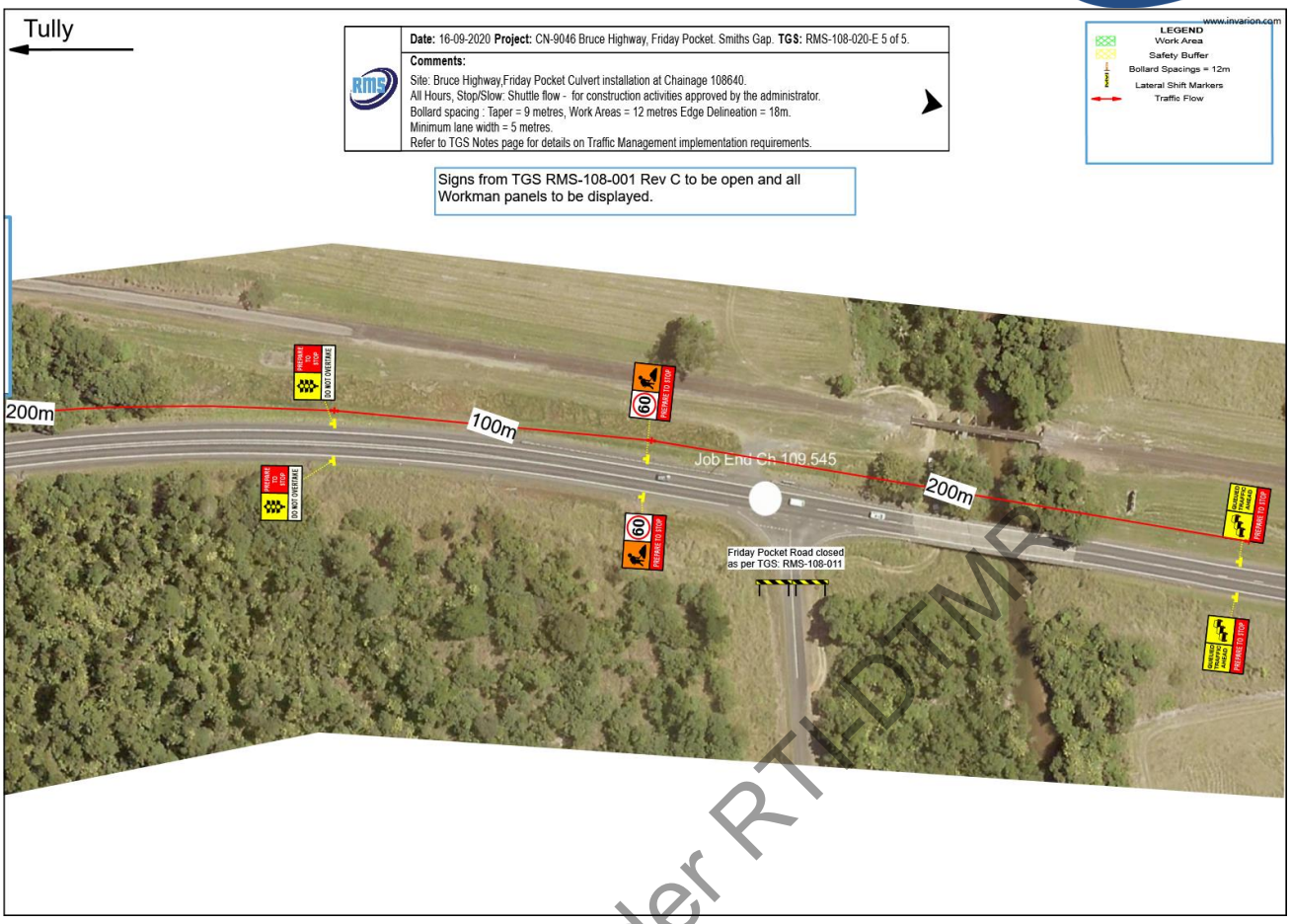








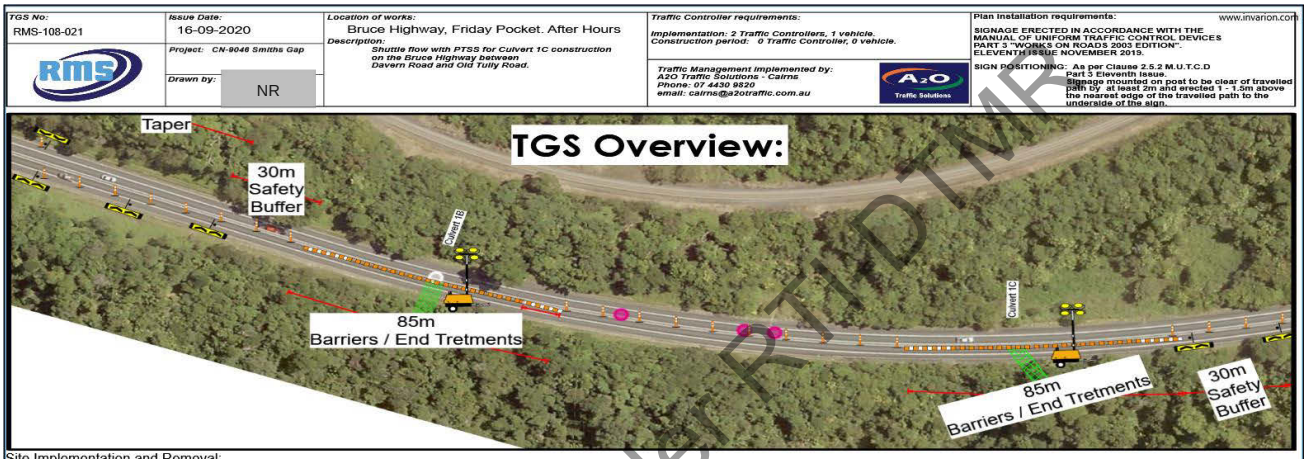




TGS RMS-108-021After hours Stop/slow shuttle flow Culvert 1C.

This TGS is for when works approved by the administrator where shuttle flow is required. Works to include pavement construction, culvert works, guardrail works and deliveries of imported materials.

Option	Requirements	Comments
Traffic Around the site (Detour)	Detours around site is chosen for these works.	Not Practical
Traffic around the site (side-track)	Side-track is not required due to works location.	Not practical
Traffic through the site	Through site is not practical due to the type of work involved.	Option chosen
Traffic past the site	Traffic past site is not suitable for these works.	Not practical



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
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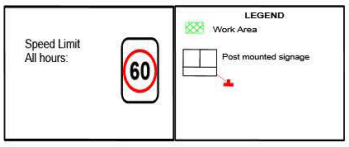
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.



Tully

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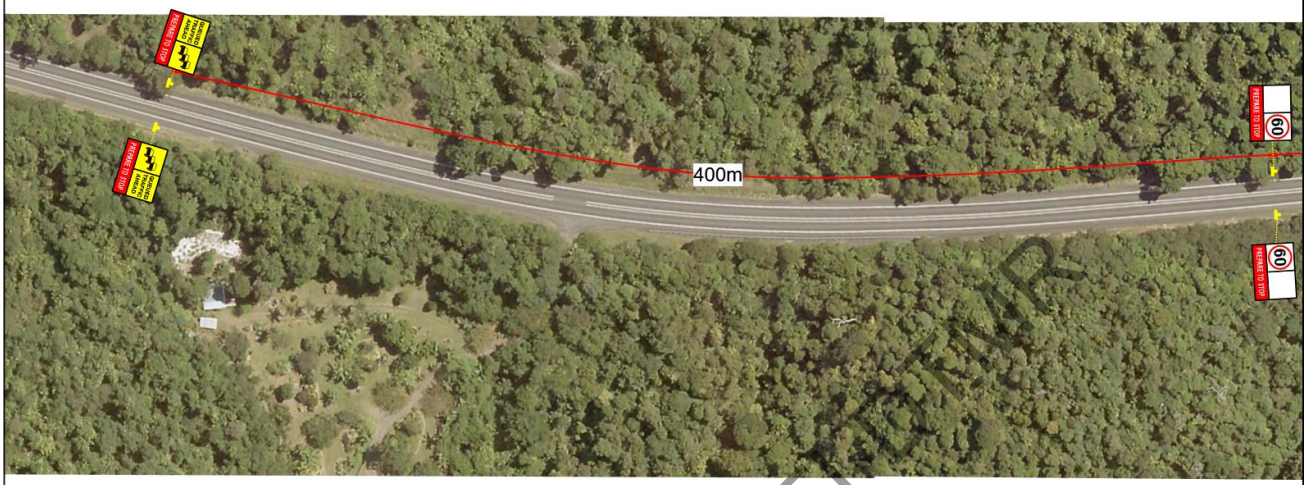
Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-021-A 1 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108820.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

After Hours signage from TGS RMS-108-001 to be open.

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-021-B 2 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108820.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

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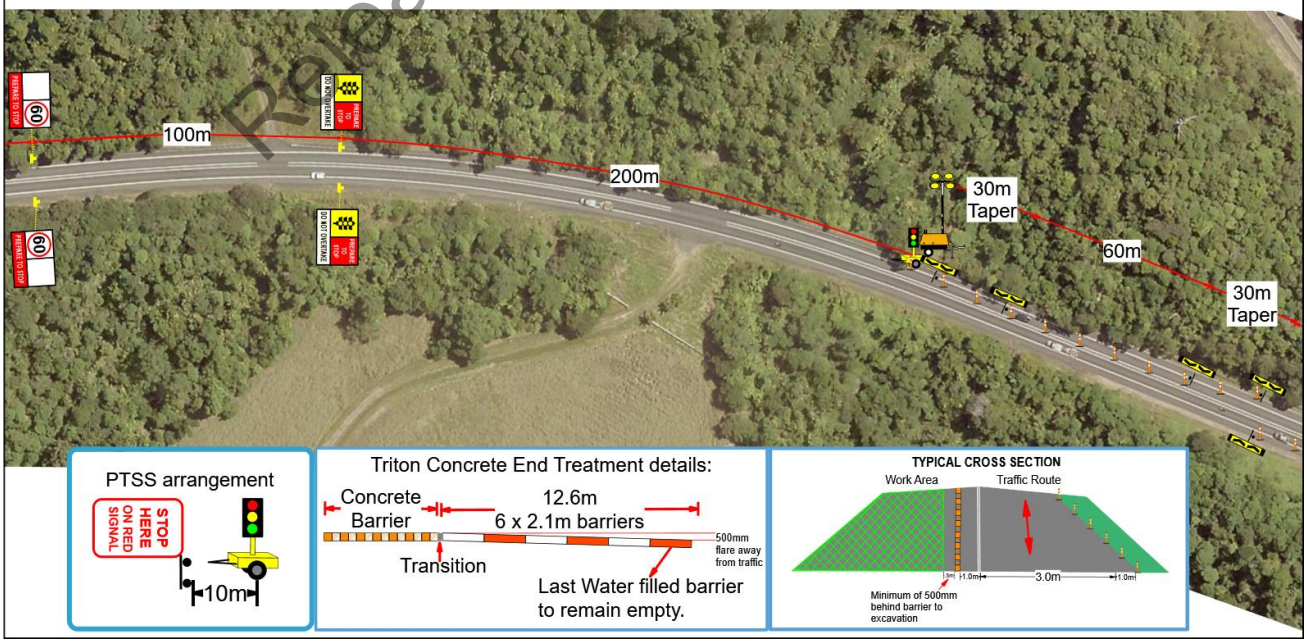
LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

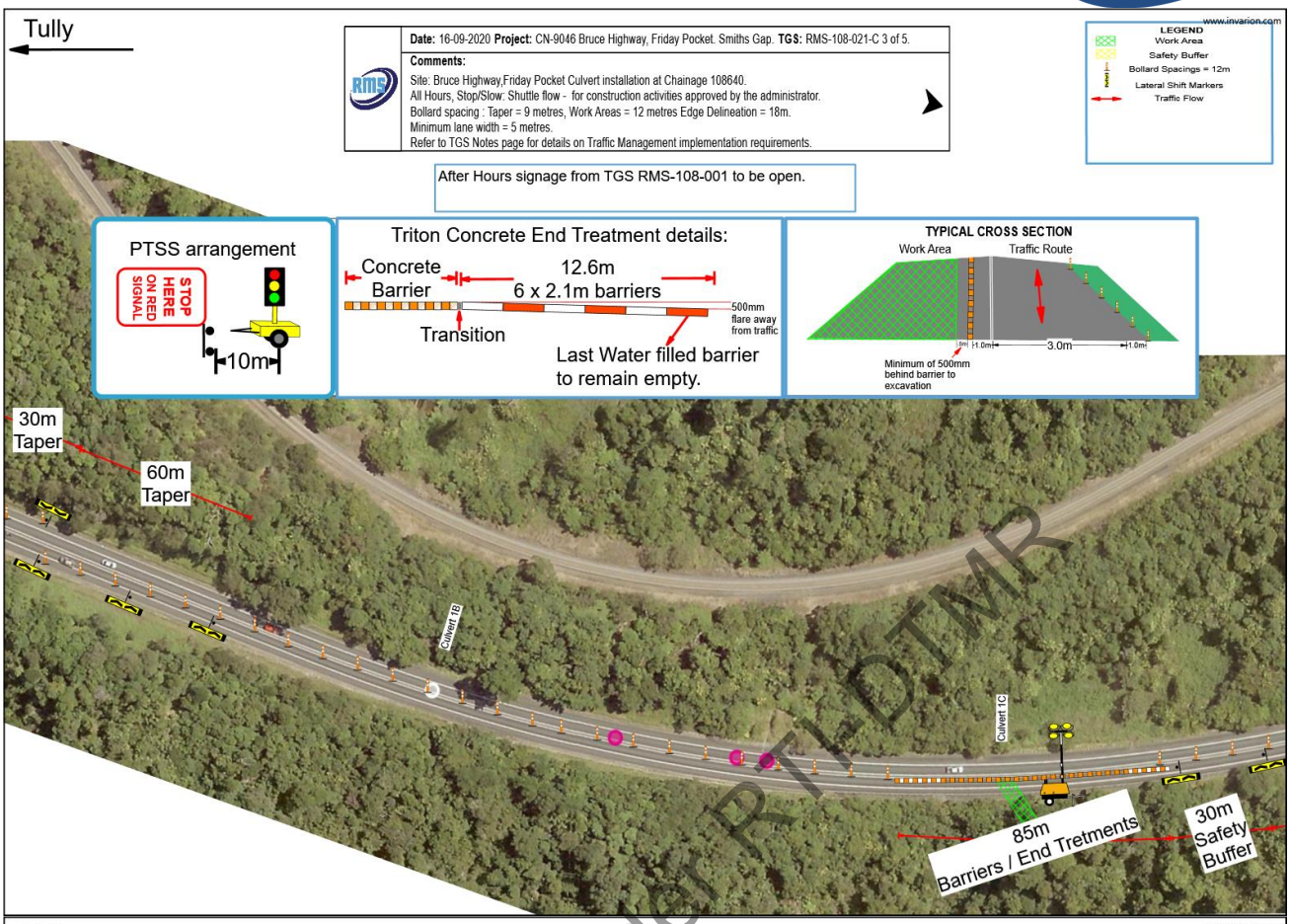
After Hours signage from TGS RMS-108-001 to be open.

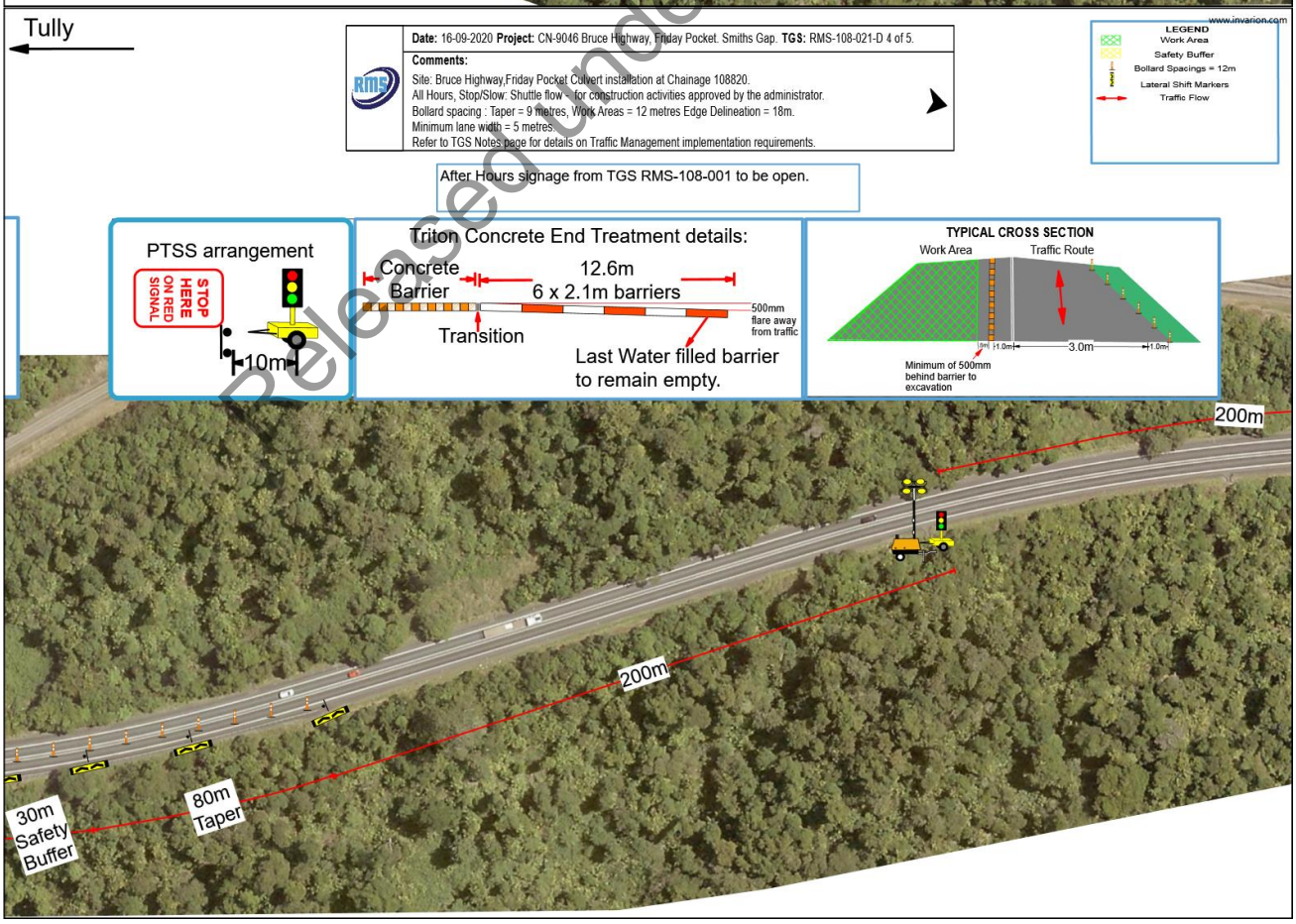


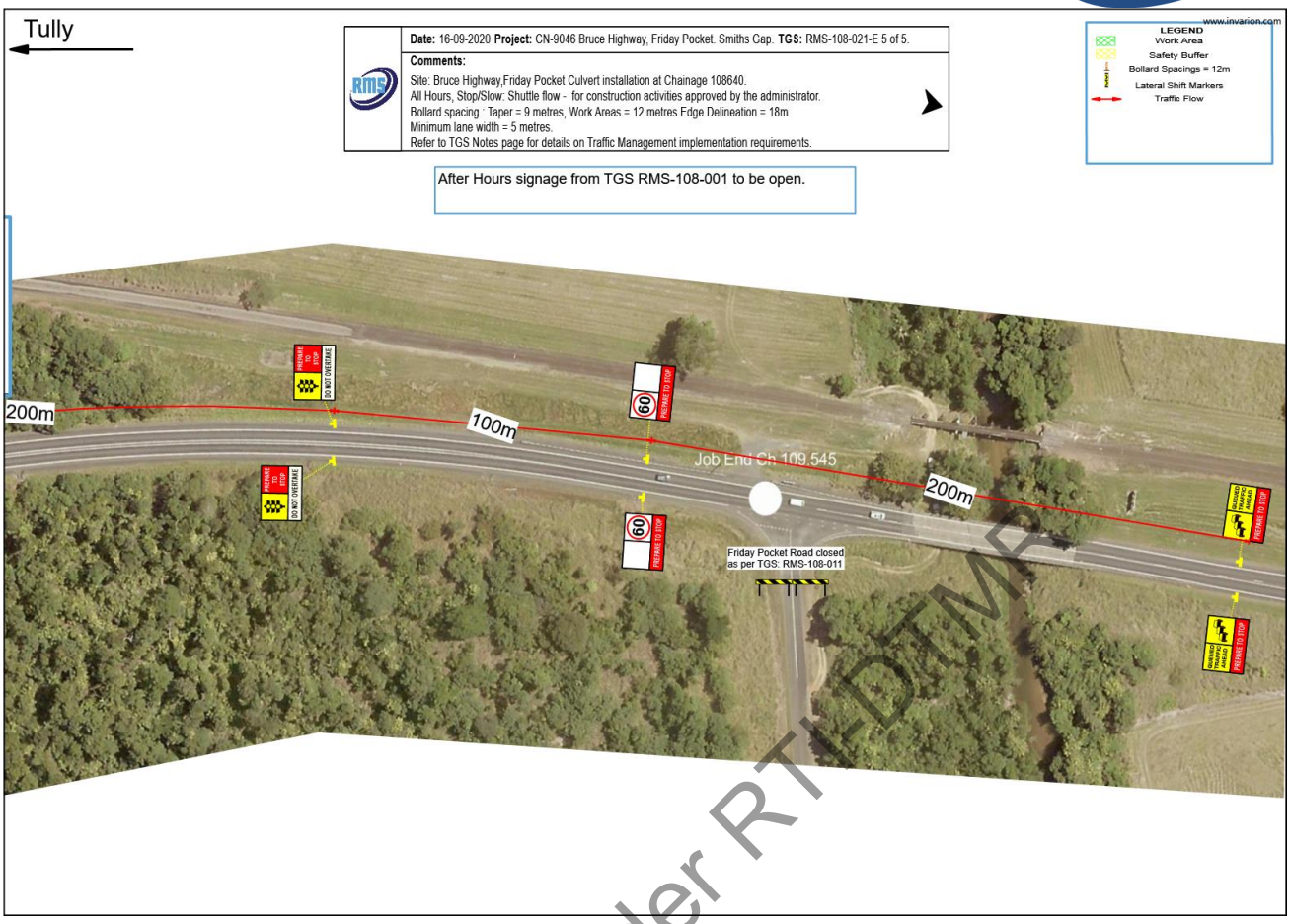
PTSS arrangement

Triton Concrete End Treatment details:

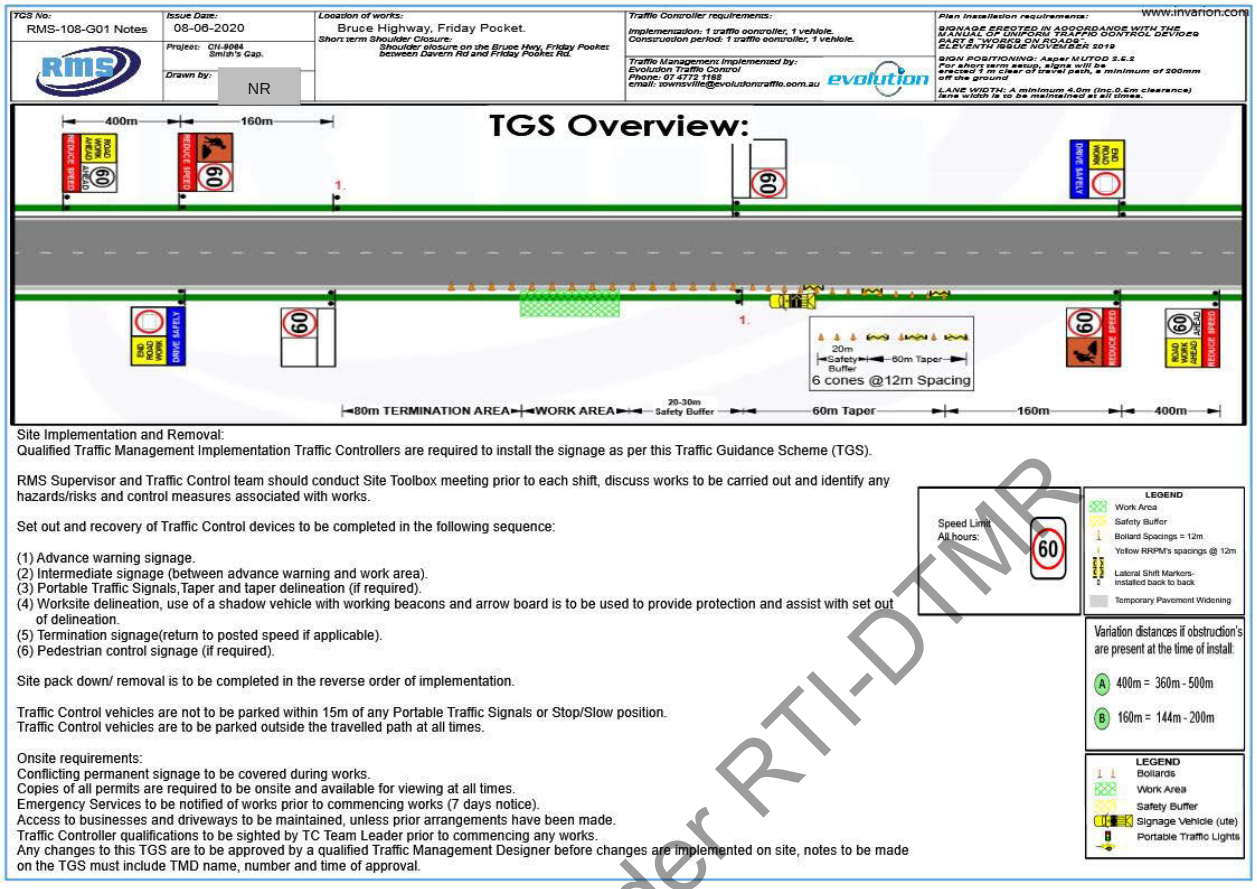
TYPICAL CROSS SECTION

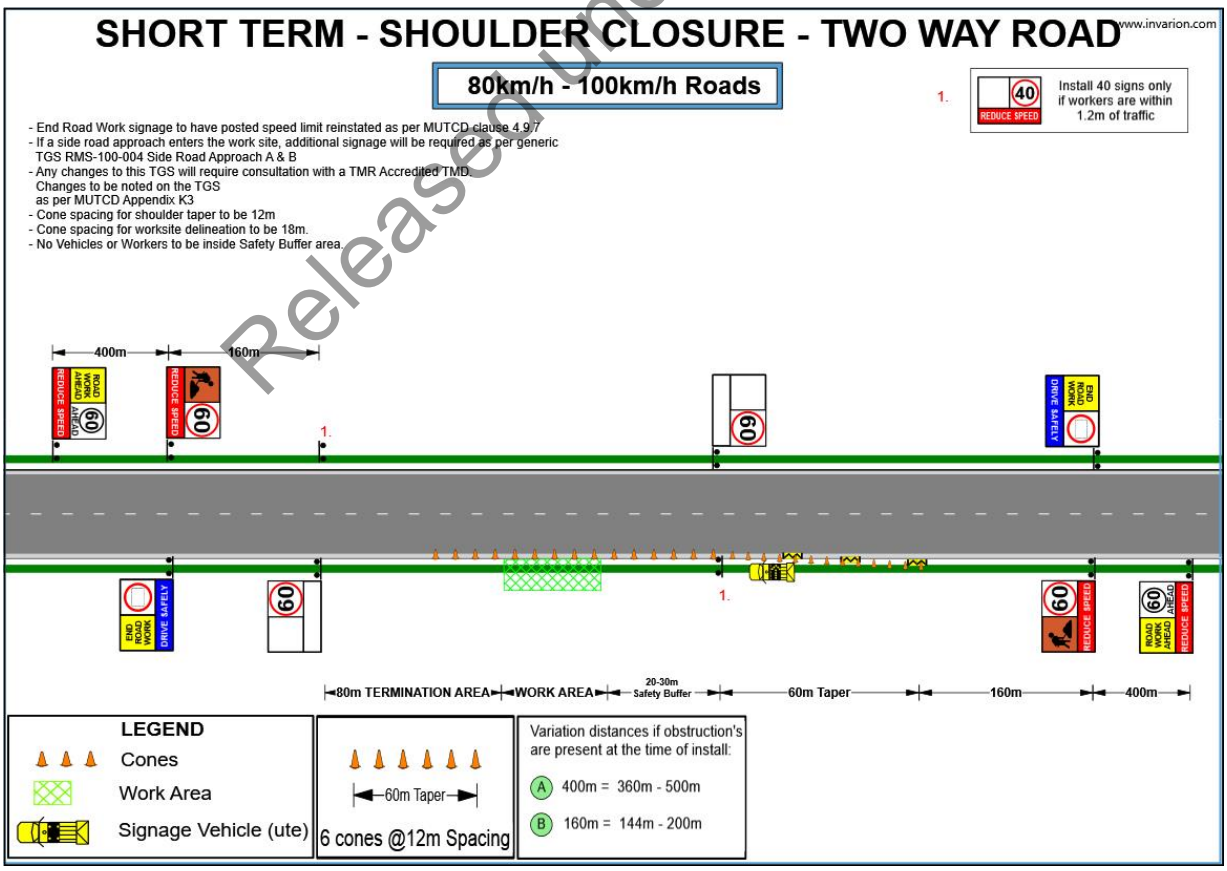


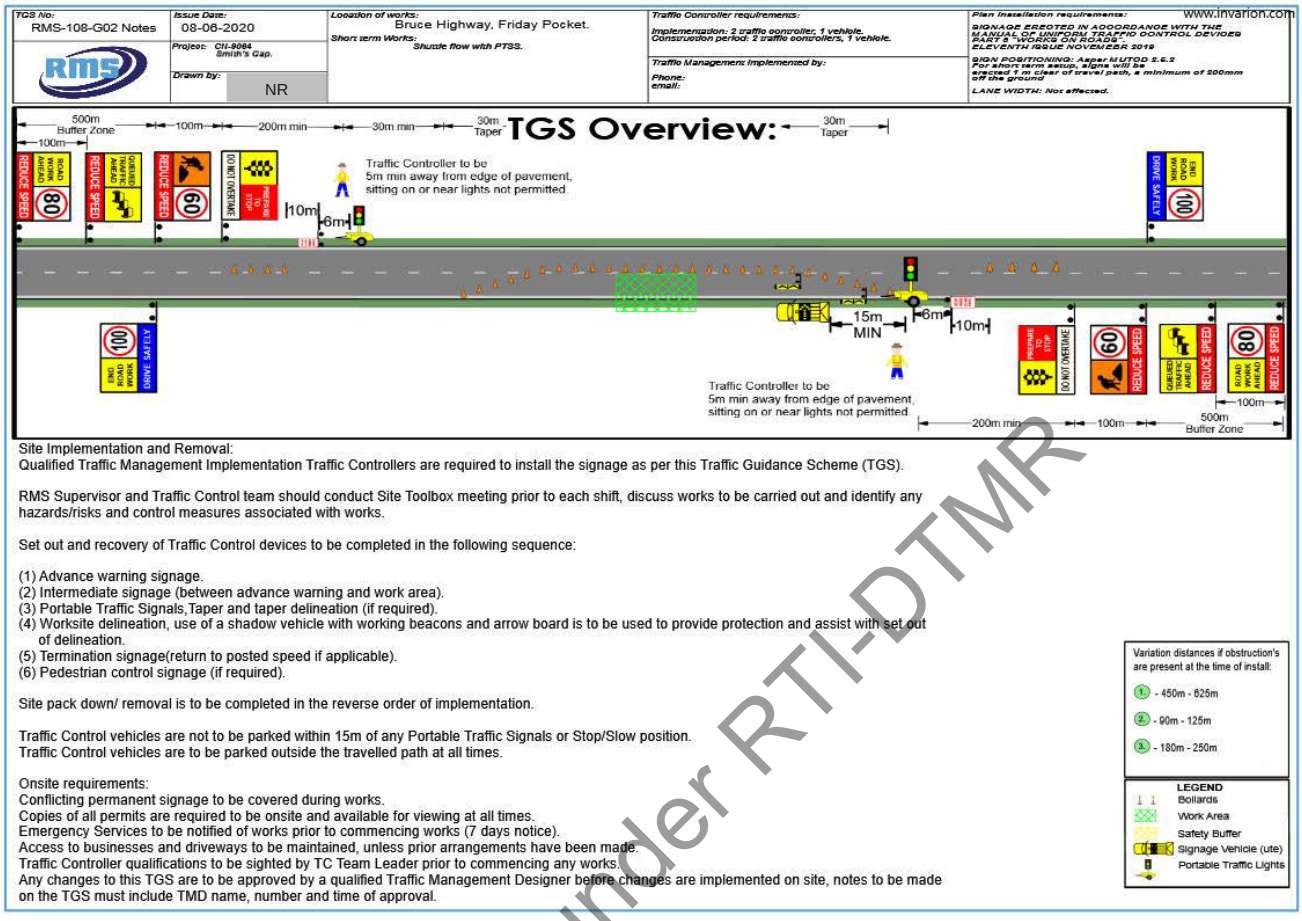




Generic Traffic Guidance Schemes.







Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

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(1) Advance warning signage.
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(5) Termination signage(return to posted speed if applicable).
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Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

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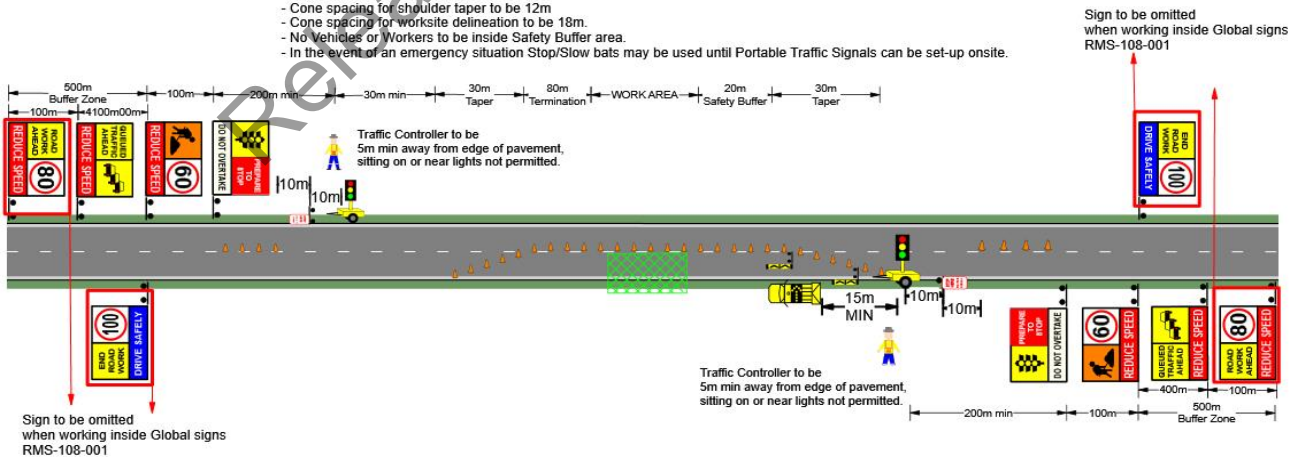
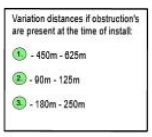
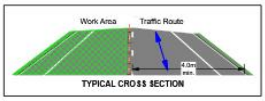
SHORT TERM
STOP / SLOW CLOSURE - TWO WAY ROAD

- End Road Work signage to have posted speed limit reinstated as per MUTCD clause 4.9.7
- If a side road approach enters the work site, additional signage will be required as per generic Side Road Approach A & B
- Any changes to this TGS will require consultation with a TMR Accredited TMD. Changes to be noted on the TGS as per MUTCD Appendix K3
- Cone spacing for shoulder taper to be 12m
- Cone spacing for worksite delineation to be 18m.
- No Vehicles or Workers to be inside Safety Buffer area.
- In the event of an emergency situation Stop/Slow bats may be used until Portable Traffic Signals can be set-up onsite.







TGS No:	Issue Date:	Location of works:	Traffic Controller requirements:	Plan installation requirements:
RMS-108-G03 Notes	08-06-2020	Bruce Highway, Friday Pocket.	Implementation: 1 traffic controller, 1 vehicle. Construction period: 1 traffic controllers, 1 vehicle.	SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 2 "WORKS ON ROADS" ELEVENTH ISSUE NOVEMBER 2019
	Project: QN-9084 Smith's Gap.	Short term Works off Shoulder. Works off shoulder 3-6m.	Traffic Management implemented by:	SIGN POSITIONING: As per MUTCD 2.6.2 For short term setup, signs will be erected 1 m clear of travel path, a minimum of 200mm off the ground
	Drawn by: NR		Phone: email:	LANE WIDTH: Not effected.

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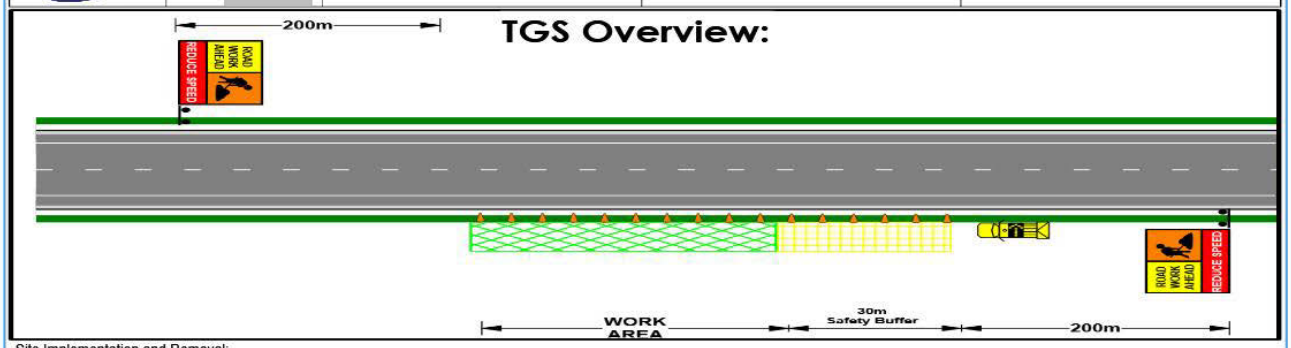
TGS Overview:



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

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Site pack down/ removal is to be completed in the reverse order of implementation.

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Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

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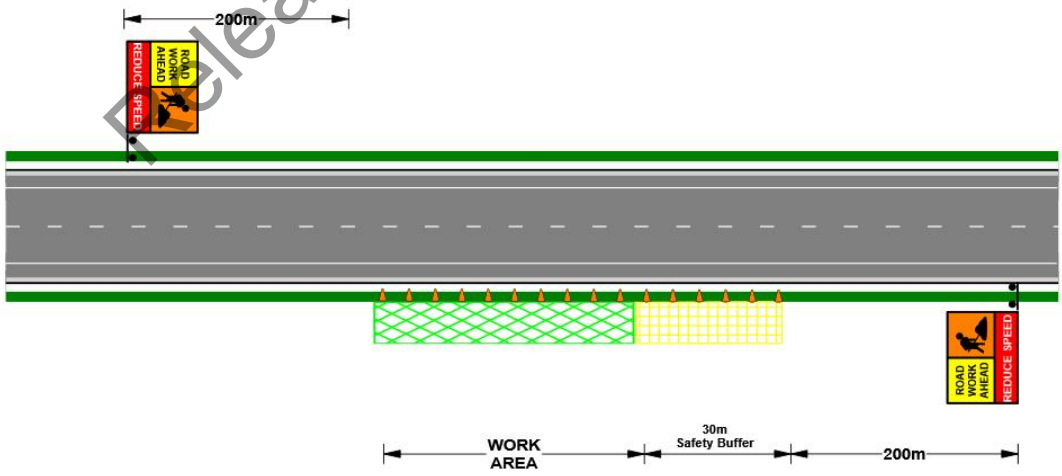
SHORT TERM - Works off Traffic Lane 3m - 6m. - TWO WAY ROAD

70-110 km/h Roads

- End Road Work signage to have posted speed limit reinstated as per MUTCD clause 4.9.7
- If a side road approach enters the work site, additional signage will be required as per generic TGS RMS-100-004 Side Road Approach A & B
- Any changes to this TGS will require consultation with a TMR Accredited TMD. Changes to be noted on the TGS as per MUTCD Appendix K3
- Cone spacing for shoulder taper to be 12m
- Cone spacing for worksite delineation to be 18m.
- No Vehicles or Workers to be inside Safety Buffer area.



Variation distances if obstruction's are present at the time of install:

(A) 200m = 180m - 250m

9 Speed Management

9.1 Project Specific Information

The existing posted speed limits for the area between chainage 108525 to 109545 on the Bruce Highway between Tully and El Arish is 100km/h.
For this project, a temporary speed limit will be introduced for the safety of workers and the travelling public. During work hours the minimum speed limit displayed will be 40km/h with the option to allow a 60km/h speed limit thru site if conditions allow.
Due to location and environment of these works it is anticipated 60km/h will be displayed most of the working hours. The terrain in this section of road has poor visibility due to the undulating terrain and dense vegetation along the road corridor edge, hence the need to reduce the travelling public down to 60km/h from 100km/h. Provision will be added to any TGS in the event a further speed reduction to 40km is required.
After hours, the speed limit will be set at 60km/h.

Temporary speed limits are to be implemented by way of post mounted signage as per TGS RMS-108-001 Global, which includes repeater signs every 500m as a minimum.

The following table outlines the minimum speed requirements in proportion to workers and machinery distance to the traffic lanes.

Description	Distance to traffic lanes	Speed requirements
Workers and machinery	Within 1.2 metres of traffic lane	Speed reduced to 40km/h
Workers and machinery	1.2-3 metres from traffic lane	Speed reduced to 60km/h
Workers and machinery	3- 6 metres from traffic lane	Speed reduced to 80km/h
Workers and machinery	Greater than 6 metres from traffic lane	No speed reduction

9.1.2. Traffic Monitoring

As part of the daily routine, speeds will be monitored onsite by way of manual speed checks.
These can be completed by three methods.

Method 1. Visual monitoring.
The least effective of the three methods, monitor the traffic flows to gauge the approximate speed. If available use a site vehicle to travel through the area at the posted temporary speed and reference the following vehicles from the site vehicle speed.

Method 2. Pacing.
Using a vehicles speedometer to determine a vehicles speed, pace (follow) vehicles travelling into site, While maintaining a consistent distance from the lead vehicle, check the speed travelled while the distance is maintained.
This technique will be less effective on this project due to the ascent, descent and corners, which are typical of this terrain.

Method 3. Speed vs Distance travelled.
Utilising a relative straight and flat section of roadway within the temporary speed limit, measure out a minimum distance of 50m. Mark the start and end points with a traffic cone, bollard, or any other distinguishable item. Start and end markers are to be behind the trafficable lane and must not interfere with the traffic flows.
Using the tables below record the time taken to travel the distance marked.

Distance	Time to travel	Temporary speed	10% over temporary speed
50 metres	3 seconds	60km/h	2.7 seconds
100 metres	6 seconds	60km/h	5.4 seconds
150 metres	9 seconds	60km/h	8.1 seconds

200 metres	12 seconds	60km/h	10.8 seconds
250 metres	15 seconds	60km/h	13.5 seconds
300 metres	18 seconds	60km/h	16.2

Distance	Time to travel	Temporary speed	10% over temporary speed
50 metres	4.5 seconds	40km/h	4.1 seconds
100 metres	9 seconds	40km/h	8.1 seconds
150 metres	13.5 seconds	40km/h	12.3 seconds
200 metres	18 seconds	40km/h	16.2 seconds
250 metres	22.5 seconds	40km/h	20.5 seconds
300 metres	27 seconds	40km/h	24.5seconds

Upon completion of traffic monitoring if required, further measures will need to be actioned. Actions to reduce speeds through the site are detailed below.

As a minimum, consultation between the nominated TMD, Traffic Control team leader and site supervisor shall be carried out to determine a suitable speed reduction action.

9.1.3. Speed Reduction Actions

Engineering actions should be implemented prior to engaging Police Enforcement. Prior to implementing any actions on site, a Risk Assessment is to be completed.

Available options for Engineering Actions are as follow:

- Changes to work practices. Reduce disruption during peak hours and remove workers from areas of concern and potentially increase the speed limit if a Risk assessment is favourable, reduce works during early morning and late afternoon if sun light/glare hinders vision of drivers.
- Additional signage, duplicate signs leading into works, ensure position of signs are clearly visible and not obstructed,
- Traffic controllers to display slow bats and draw attention to the bat by moving as vehicles approach. A safe location is to be available for traffic control with a clear area for escape route.
- Implement Stop/slow and introduce a pilot vehicle to escort vehicles through the site at the posted speed limit.
- Rumble strips, install two sets of three strips at least 50m apart with appropriate signage. If used after hours lighting towers are to be placed at each location
- Install safety barriers for worker safety.
- Increase delineation and reduce lane widths.
- Use VMS boards equipped with speed detection and display to alert drivers to their speed.

The final option available is to engage Queensland Police Service to conduct radar duties and issue infringement notices to speeding vehicles. This will only be effective whilst QPS are onsite and the same issues will generally arise once QPS have left site.

All changes introduced will require a risk assessment and sign off by the nominated TMD or if new initiatives outside the MUTCD are adopted, approval would be required by an RPEQ.

5. 10 Appendix A
Traffic Inspection Recording

RMS-200-004 Traffic Management Checklist.

RMS ENGINEERING AND CONSTRUCTION PTY LTD

TRAFFIC MANAGEMENT CHECKLIST

Checklist Completed By:		**Date:**	**Time:**
Client Name:	**Project:**	**Type of Works:**	
Activity Being Undertaken:			
TGS number:			
Traffic Control Type:	Signs only / Afterhours / Reversible flow / Mobile		
Current Weather:	Sunny / Overcast / Rain / Fog / Night / Windy		
Road Type:	Intersection / Straight / Bend / Crest / Dip / Rural / Residential / Busy / Narrow		
Road Condition:	Gravel / Sealed / Rough / Loose		

Work Area / Location	**Employee Distance to Traffic:** (Metres)	**Signed Traffic Speed in Work Area:** (Km/h)	**Estimated Traffic Speed in Work Area:** (Km/h)

Is the Road Surface:		
Slippery	(YES / NO), are 'slippery surface' signs [T3-3] in place	(YES / NO)
Rough	(YES / NO), are 'rough surface' signs [T3-7] in place	(YES / NO)
Loose stones	(YES / NO), are 'loose stones' signs [T3-9] in place	(YES / NO)
Unmarked	(YES / NO), are 'no lines' signs [T3-11 or T3-12] in place	(YES / NO)

Items for Inspection	**Yes**	**No**	**N/A**
Do all traffic controllers hold current certifications for the work being performed and has this certification been sighted?			
Are all traffic controllers inducted and have reviewed and signed the SWMS?			
Is a relevant, accurate and approved TGS being used and a copy is available?			
Does the TGS fit the environment/location and road conditions?			
Are the traffic controls set up as per the TGS?			
Are any changes to, or deviations from, the TGS noted on the TGS and signed?			
Are road occupancy permits approved, current and available for inspection?			
Are weather conditions suitable for the work being performed? (That is, no hazards such as: Poor visibility, strong winds, etc.)If yes, comment below.			

Traffic Management Checklist Rev 2 Page 1 of 2

RMS ENGINEERING AND CONSTRUCTION PTY LTD

TRAFFIC MANAGEMENT CHECKLIST

If work is to occur at night, are light towers and other controls available, working and in place to mitigate the hazards? Comment below if required			
Do traffic controllers have an escape route? If the escape route is blocked by any obstacle or steep/unsafe then it is not suitable.			
Are all traffic controllers in positions where they are clearly visible and able to face oncoming traffic?			
Is delineation clearly defined so as to prevent confusion to drivers, pedestrians, cyclists and other road users?			
Pedestrians, Cyclists and disabled needs been considered? Comment Below			
Are all traffic controllers wearing PPE in compliance with MUTCD requirements?			
Are all workers wearing high visibility clothing?			
Are all workers and hazards separated from traffic with an appropriate distance, barricades or barriers?			
Is a shadow vehicle or warning lights being used while setting up or packing up signs?			
Are any contradictory, distracting or misleading signs covered up or removed?			
Are traffic controllers receiving breaks? At least15 minutes of rest or other activities every 2 hours.			
Is the communication in use effective and clear? Details: (eg UHF 21)			
Are all personnel familiar with the emergency response procedure? If emergency is called 3 times, all traffic to go on hold and await further instructions.			
Are all signs clean, clear and in good condition?			
Are traffic control positions clear of plant and machinery movements?			
Comments Section: Note any issues or problems in this section also:			

IF **NO** FOR ANY ANSWER – CONSULT WITH SUPERVISOR

Checked By:
Sign: Date: / /

Reviewed By:
Sign: Date: / /

Traffic Management Checklist Rev 2 Page 2 of 2

6. 11 Appendix B
Site Specific Risk Assessments
Global Signage

Risk Assessment - CN 9064 Smith's Gap Implementation of Global Signage.

REGISTER

Project Name: CN 9064 - Smiths Gap Project No: 108

Completed / Updated By: NR Date Last Updated: 8/06/2020

Number	Hazard	Activity / potential	Category	Impact to Project (Y / N)	Likelihood	Consequence	Pre-Control Risk	Controls	Likelihood	Consequence	Post Control Risk
1	Workers/Traffic Control being struck by by vehicle	Installation of permanently mounted global signage		Y	D	4	12H	Distance from work area to traffic lane: sign placement is 2m from nearest pavement edge, average shoulder width = 1m. Expected minimum lateral clearance 2m.	E	2	23L
				Y	D	4	12H	Advance warning signs implemented to reduce speed to 60km/h	E	2	23L
				Y	D	4	12H	Spotter in place, facing oncoming traffic.	E	2	23L
				Y	B	4	12H	Traffic Control vehicle fitted with and activated flashing lights and arrowboard in advance of work area.	E	2	23L
2	Permanent mounted signage impacted by vehicle	Permanent mounted signage becoming a hazard		Y	E	3	20M	DTMR approved retroreflective sign panels used.	E	1	25L
				Y	E	3	20M	post nearest to traffic lane delineated by bollard placed over post.	E	1	25L
				Y	E	3	20m	Lateral seperation of 2 metres minimum.	E	1	25L
3	Vehicles not obeying site signage/ speed reduction.	Signage ineffective due to condition or placement		Y	E	3	20M	Check sign location prior to installing, condition of sign panels to be inspected prior to installation.	E	1	25L

Risk Assessment - CN9064 Smith's Gap Short term implementation of Site Specific TGS'.

REGISTER

Project Name: CN9064 - Smith's Gap **Project No:** 108

Completed / Updated By: NR **Date Last Updated:** 8/06/2020

Number	Hazard	Activity / potential	Category	Impact to Project (Y / N)	Likelihood	Consequence	Pre-Control Risk	Controls	Likelihood	Consequence	Post Control Risk
1	Workers/Traffic Control being struck by by vehicle	Installation of short term signage		Y	D	4	12H	Distance from work area to traffic lane: sign placement is 2m from nearest pavement edge, average shoulder width = 1m. Expected minimum lateral clearance 2m.	E	2	23L
				Y	D	4	12H	Advance warning signs implemented to reduce speed to 60km/h	E	2	23L
				Y	D	4	12H	Spotter in place, facing oncoming traffic.	E	2	23L
				Y	B	4	12H	Traffic Control vehicle fitted with and activated flashing lights and arrowboard in advance of work area.	E	2	23L
2	Short term mounted signage impacted by vehicle	Short term mounted signage becoming a hazard		Y	E	3	20M	DTMR approved retroreflective sign panels used.	E	1	25L
				Y	E	3	20M	Sign frames to be weighted down to prevent movement from wind.	E	1	25L
				Y	E	3	20m	Lateral seperation of 2 metres minimum.	E	1	25L
3	Vehicles not obeying site signage/ speed reduction.	Signage ineffective due to condition or placement		Y	E	3	20M	Check sign location prior to installing, condition of sign panels to be inspected prior to installation.	E	1	25L

Risk Assessmenet - CN9064 - Smith's Gap Shuttle flow

REGISTER

Project Name: CN9064 - Smith's Gap **Project No:** 108

Completed / Updated By: NR **Date Last Updated:** 43990

Number	Hazard	Activity / potential	Category	Impact to Project (Y / N)	Likelihood	Consequence	Pre-Control Risk	Controls	Likelihood	Consequence	Post Control Risk
1	Workers/Traffic Controllers being struck by vehicle	Implementing and changing traffic conditions		Y	B	4	4E	Follow TGS implementation procedures in accordance with MUTCD Part 3.	E	4	23L
				Y	B	4	4E	Speed reduction during work hours to 60km/h	E	4	23L
				Y	B	4	4E	Maintain minimum lateral clearance of 1.2m	E	4	23L
2	Site vehicle and member of public uncontrolled interaction/collision	Site vehicles entering and exiting work site.		Y	B	4	4E	Positive communication between TC and site vehicles	E	2	23L
				Y	B	4	4E	Traffic Control to stop all traffic while site vehicles enter/exit.			23L
				Y	B	4	4E	Spotters to be used for all site movements where entering public roads.	E	2	23L
3	Queued traffic rear end collisons	Stop/slow on the Bruce Highway		Y	C	3	13H	Queued traffic ahead sign placed 400m prior to Prepare to Stop signs	E	2	23L
				Y	C	3	13H	200m between TC position and PTS location	E	2	23L
				Y	C	3	13H	Monitor queue lengths and relocate Queued Tarffic signs further from Traffic control position	E	2	23L
4	Use of Portable traffic signals	Lights failing during operation		Y	E	3	20M	Stop/Slow bats to be at each PTSS unit, if lights fail use manual Stop/Slow unitl PTSS is repaired/operational	D	2	21L
5	Emergency Services Vehicles being delayed through site	Emergency Services vehicles two way traffic flow		Y	C	4	8H	Minimal use of shuttle flow, allowing two way traffic for a majority of the project duration	E	2	23L
6	Vehicle following trucks into work areas.	Delivery of materials into lane closure		Y	D	3	17M	TC's to Stop traffic once truck has passed TC/PTS position. TC to use hand gestures to stop and alert MOP to stop.	D	2	21L
7	Uneven surfaces creating hazard to motorcycles and MOP travelling through area	Construction staging creating uneven surfaces.		Y	D	3	17M	Construction program created to exclude traffic from work areas.	E	1	25L

Risk Assessmenet - CN9064 - Smith's Gap Contra Flow

REGISTER

Project Name: CN9064 - Smith's Gap **Project No:** 108

Completed / Updated By: NR **Date Last Updated:** 08-06-2020

Number	Hazard	Activity / potential	Category	Impact to Project (Y / N)	Likelihood	Consequence	Pre-Control Risk	Controls	Likelihood	Consequence	Post Control Risk
1	Workers/Traffic Controllers being struck by vehicle	Implementing and changing traffic conditions		Y	B	4	4E	Follow TGS implementation procedures in accordance with MUTCD Part 3.	E	4	23L
				Y	B	4	4E	Speed reduction during work hours to 60km/h	E	4	23L
				Y	B	4	4E	Maintain minimum lateral clearance of 1.2m	E	4	23L
2	Site vehicle and member of public uncontrolled interaction/collision	Site vehicles entering and exiting work site.		Y	B	4	4E	Positive communication between TC and site vehicles	E	2	23L
				Y	B	4	4E	Use designated access/egress points. Follow left in left out only.	E	2	23L
				Y	B	5	4E	No right turns to access/egress from work area.	E	2	23L
				Y	B	4	4E	Spotters to be used for all site movements when entering public roads.	E	2	23L
3	Vehicles entering Contra Flow	MOP vehicles entering work area at contra flow extents		Y	C	3	13H	Safety buffer between taper and work area	E	2	23L
				Y	C	3	13H	Delineation of tapers monitored and replaced as bollards become damged	E	2	23L
				Y	C	3	13H	Monitor signage and delineation efficiency, consult among Traffic Manangement group for actions.	E	2	23L
4	Use of Portable traffic signals	Lights failing during operation		Y	E	3	20M	Stop/Slow bats to be at each PTSS unit, if lights fail use manual Stop/Slow unitl PTSS is repaired/operational	D	2	21L
5	Emergency Services Vehicles being delayed through site	Emergency Services vehicles two way traffic flow		Y	C	4	8H	Minimal use of shuttle flow, allowing two way traffic for a majority of the project duration	E	2	23L
6	Vehicle following trucks into work areas.	Delivery of materials into lane closure		Y	D	3	17M	TC's to Stop traffic once truck has passed TC/PTS position. TC to use hand gestures to stop and alert MOP to stop.	D	2	21L
				Y	D	3	4E	Use designated access/egress points. Follow left in left out only.	E	2	23L
7	Uneven surfaces creating hazard to motorcycles and MOP travelling through area	Construction staging creating uneven surfaces.		Y	D	3	17M	Construction program created to exclude traffic from work areas.	E	1	25L

Risk Assessment - CN9064 Smith's Gap After Hours

REGISTER

Project Name: CN9064 - Smith's Gap **Project No:** 108

Completed / Updated By: NR **Date Last Updated:** 8/06/2020

Number	Hazard	Activity / potential	Category	Impact to Project (Y / N)	Likelihood	Consequence	Pre-Control Risk Ranking	Controls	Likelihood	Consequence	Post Control Risk Ranking
1	Signage damaged or missing	Work Site left unattended over night or weekends		Y	E	3	20M	Work Days: site inspection at completion of shift.	E	1	25L
				Y	E	3	20M	Weekend site checks completed at a minimum of once every 24 hours.	E	2	23L
				Y	E	3	20M	Contact details provided to DTMR. Signs installed providing Project contact details.	E	2	23L

Melissa R Rogers

From: Stephen L Skinner
Sent: Friday, 6 November 2020 9:00 AM
To: Prasenjit Bhattacharyya
Cc: Lemaki M Curulala; CN-9064
Subject: CN-9064 Traffic Accident 05-11-2020

Report Traffic Accident 50-11-2020

At approximately 15:00 hours on the 05-11-20 RMS safety officer informed me of site accident involving multiply vehicles.

Please see below report:

Injury's
Driver of the silver Toyota Duel Cab Landcruiser sustained a head injury and suffering shock, driver transported to Innisfail hospital.

Emergence Services Onsite

- Police X 2
- Ambulance X 2
- Fire Rescue X2

Vehicles involved

- Isuzu tipper truck and trailer with excavator on trailer and bobcat in tipper.
- Toyota Landcruiser dual cab tray back.
- Toyota duel cab ute with camper trailer.
- Toyota duel cab work ute with tool trailer.

Damage to Vehicles

- Isuzu truck server damage towed from site to RMS stock pile site south of work area , no damage appeared to equipment being carried on trailer .
- Toyota Landcruiser server damage transported to Innisfail towing company yard.
- Toyota duel cab and camper minor damage. Ute was drivable ,campervan transported to RMS office compound.
- Toyota duel cab ute and tool trailer minor damage. Ute was drivable , tool trailer transported to RMS office compound.

RMS & TMR Personal on site .

- Rob Barker RMS Supervisor coordinated accident.
- Mick Kreutzer RMS Superintendent Coordinating work site.
- Troy Riesenweber Leading hand Coordinating work site.
- RMS labourers assisting with accident.
- TMR Inspector assisting with accident.

Other Incident.

Red Toyota Landcruiser ute, Registration BMT-09 proceed to overtake multiple stationary vehicles at high speed, being controlled by traffic controller at the southern end of accident, driver proceeded to drive through the stop signal and continue to accident site and into oncoming traffic.

Vehicle was intercepted by Supervisor NR and TMR Inspector, when asked why he had disobeyed traffic directions he informed us he was on his phone and didn't see the traffic controller.
Traffic controller confirmed the driver was indeed on his phone when he went through the stop sign.
All information regarding this incident will be forwarded on to the relevant authority's along with witness statements.

Summary:
Traffic was stationary queued at the southern end of the works and it appears for some reason the driver of the Isuzu truck failed to see the stationary vehicles resulting in the multiple vehicle rear end pileup.
Traffic speed signage for this section of works is 60 K's per hour, considering the damage to other vehicles it would appear the Isuzu was in excess of this speed.
RMS TGS was checked and found to be as per TGS.
The road conditions were dry weather hot clear.
TMC notified of the accident and job number allocated to incident is 1676i. At 19:18 TMC contacted and informed road was cleared and to close out job.

All measures in my opinion have been put in place by RMS to avoid any accidents of this nature and this appears to have be caused by driver error. RMS will be undertaking a full review of the incident and will forward all reports to TMR as per contractual requirements.

One noticeable absence onsite was RMS Safety Officer, Safety Officer never attended the accident at any time, when asked by Inspector why he didn't attend he informed me he was recording the accident from the office.

After the road was cleared and all involved returned to RMS compound, it was noted that all RMS office personal had left site other than Site Engineer NR

Further update will be made as more information becomes available.

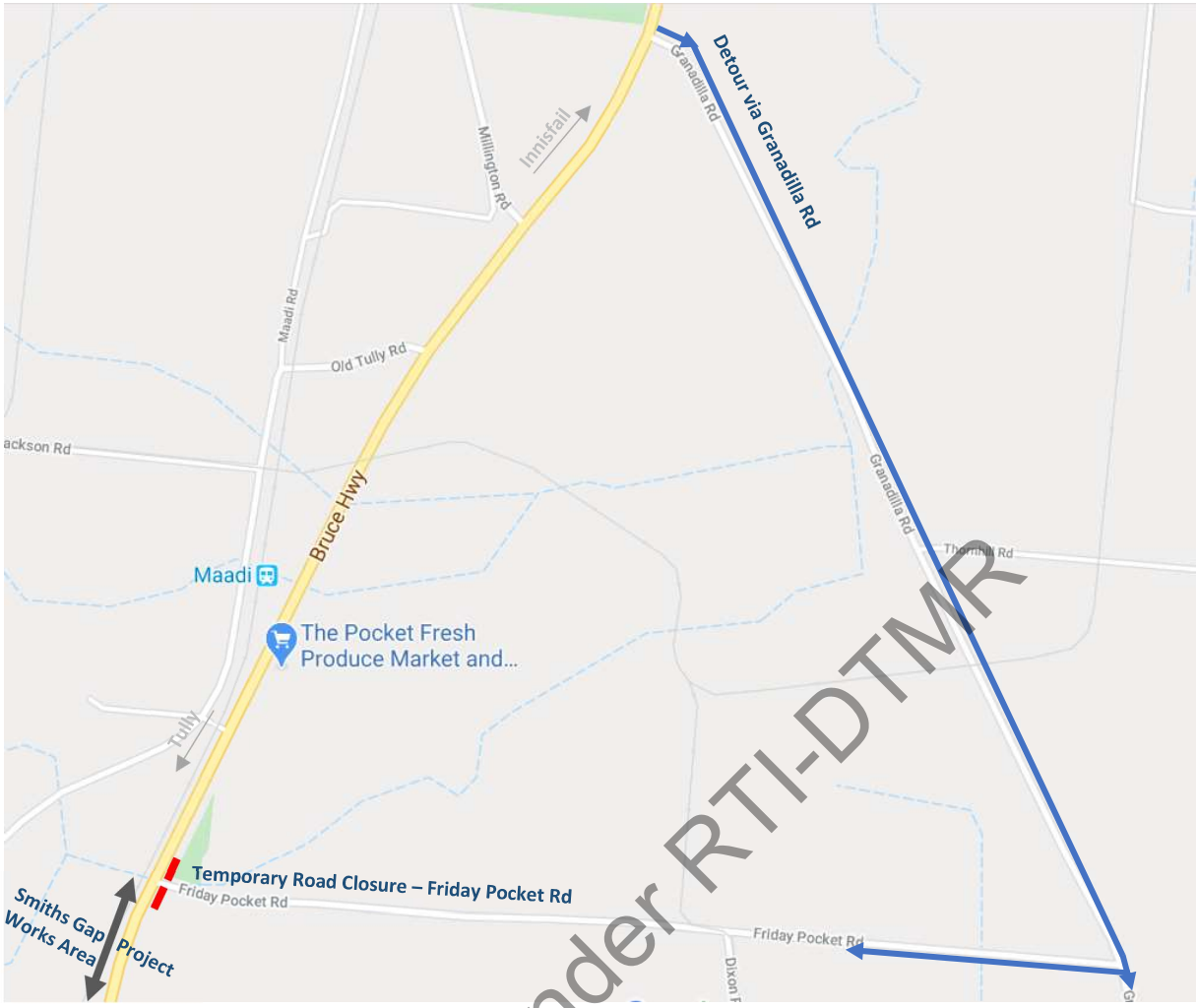
Link below to Project file photos of accident
G:\CAID\ENHANCEMENT DELIVERY\Contracts\TIC\9351 Smiths GAP\04 Inspector\Traffic Accident 05-11-20

If any further information is required please call

Regards

Stephen.I.Skinner
Project Inspector/ Supervisor | Far North District, Cairns Office
Program Delivery and Operations Branch | Department of Transport and Main Roads

Level 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
P: (07) 4045 7005 | F: (07) 4045 7250
M: NR
E: stephen.l.skinner@tmr.qld.gov.au
W: www.tmr.qld.gov.au



Melissa R Rogers

From: Carol A Fitzgerald
Sent: Tuesday, 14 December 2021 10:29 AM
To: Richard P Sheedy; Jeremy A Wienert
Cc: Carol A Fitzgerald
Subject: FW: Roadworks enquiry - our ref: 211213090347mrr - RTI Request

Morning Richard / Jeremy

I need to know who I can ask for assistance in getting information regarding Friday Pocket Road – Smiths Gap - and an incident that happened on 5 November.

This is an RTI request and there is a time limit to this.

It would have been Pras / Lemaki – who can I go to now for info?? Is there information saved on G:\ Drive??

Carol Fitzgerald
Advisor (Administration & Governance) | Far North District
Program Delivery & Operations | Department of Transport and Main Roads

Floor 4 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
P: (07) 40457004 | Mobile: NR
E: carol.a.fitzgerald@tmr.qld.gov.au
W: www.tmr.qld.gov.au

Paper-Lite 2020

From: Melissa R Rogers <Melissa.R.Rogers@tmr.qld.gov.au>
Sent: Monday, 13 December 2021 9:29 AM
To: CAID_RTI <CAID_RTI@tmr.qld.gov.au>
Subject: Roadworks enquiry - our ref: 211213090347mrr

Good morning up in North QLD 😊

I have received an email from a member of the public who is looking for roadworks documents relating to the following

- Roadworks on the Bruce Highway, Friday Pocket during November 2020.
- A traffic incident occurred on 5 November 2020 at 3pm with the driver travelling southbound.

Before I get him to lodge an RTI application, can you please advise whether your area or roadtek would hold these documents and if not where I can direct the customer to.

Thank you – please give me a call if you require any further information.

Kind regards

Melissa Rogers
Advisor (RTI & Privacy) | RTI, Privacy and Complaints Management
Governance Branch | Corporate Division | Department of Transport and Main Roads

Floor 8 | 61 Mary Street | Brisbane Qld 4000
GPO Box 1549 | Brisbane Qld 4001
(07) 3338 4275
melissa.r.rogers@tmr.qld.gov.au
www.tmr.qld.gov.au

Work Health and Safety Act 2011

Incident Notification Report Summary

Date: 05-November-2020 15:50, Ref 76708

Queensland Government

Person submitting the report

Name: **MR LEMAKI CURULALA** Contact Phone Number: NR

Email: **LEMAKI.M.CURULALA@TMR.QLD.GOV.AU**

Position at Workplace: **MANAGEMENT REPRESENTATIVE FOR PERSON WITH MANAGEMENT OR CONTROL OF A WORKPLACE**

Incident Details

Location: **BRUCE HIGHWAY INTERSECTING WITH FRIDAY POCKET ROAD**
FRIDAY POCKET ROAD
FRIDAY POCKET 4855

Date and Time: **05-NOVEMBER-2020 15:00**

Location Description: **HIGHWAY NORTH BOUND LANE**

Notified as a result of: **An injury or illness requiring a person to have immediate treatment as an in-patient in a hospital**
Involving:

Has the site been secured?: **Yes**

Details: **delineation on the road, traffic controllers station and temp line marking, warning sign, spd lmt**

Workplace is a Major Hazard Facility?: **No**

Incident resulted in injury to person(s): **No**

Incident Description: **traffic accident**
5 vehicle accident approaching the worksite just south of temporary traffic light as they were queueing 5 cars collided (rear end). 1 person has been taken to hospital but ambulance is still on site to assess other injured persons. All 5 vehicles are regular motorists. No construction staff or machinery was involved.

At this stage it is estimated that 3 people are injured. Details are being collected by TMR and Contractor working for TMR.
Advised as full details are not available, documents and additional information if requested by WHSQ inspectorate unit can be emailed to:
whsq.aaa@oir.qld.gov.au
Quoting ref number

Business or Undertaking Notifying of the Incident

Legal Name:

Trading Name: **RMS CONSTRUCTION AND ENGINEERING**

Location: **1/31 JAY STREET**
BOHLE 4818 QLD
AUSTRALIA

ABN: **74128352250** ACN:

Phone: **0747747211** Mobile: NR

Email:

Industry Sector: **CONSTRUCTION**

Main Business: **CONSTRUCTION (ON SITE MANAGER:** NR

Actions Taken to Prevent Reoccurrence: **measures in place were put to slow down vehicles**
contractor will assess situation

Long Term Action to Prevent Reoccurrence: **see above**

Injured Person(s)

	Name	Address	Occupation	Injury	Treatment Details

WorkCover QUEENSLAND

Incident Notification Report Summary

Incident details	
Date and time :	05-Nov-2020 3:00 PM
Incident location :	BRUCE HIGHWAY INTERSECTING WITH FRIDAY POCKET ROAD FRIDAY POCKET Road, FRIDAY POCKET 4855 Queensland Australia
Incident location description :	highway north bound lane
Description of incident :	traffic accident 5 vehicle accident approaching the worksite just south of temporary traffic light as they were queueing 5 cars collided (rear end). 1 person has been taken to hospital but ambulance is still on site to assess other injured persons. All 5 vehicles are regular motorists. No construction staff or machinery was involved. At this stage it is estimated that 3 people are injured. Details are being collected by TMR and Contractor working for TMR. Advised as full details are not available, documents and additional information if requested by WHSQ inspectorate unit can be emailed to: whsq.aaa@oir.qld.gov.au Quoting ref number
Notified as a result of :	An injury or illness requiring a person to have immediate treatment as an in-patient in a hospital
Involving :	
Incident involved licenced work?	No
Workplace is a major hazard facility?	No
Secured site?	Yes - delineation on the road, traffic controllers station and temp line marking, warning sign, spd lmt
Actions taken to prevent reoccurrence :	measures in place were put to slow down vehicles contractor will assess situation
Long term action taken to prevent reoccurrence :	see above
How many people were injured?	0

Employer details	
WorkcCover policy number :	
Legal name :	
Trading name :	RMS Construction and Engineering
ABN :	74128352250
ACN :	
Telephone :	0747747211
Mobile :	NR
Fax :	
Email :	
Main business activity :	construction (On site manager: NR
Industry sector :	CONSTRUCTION
Business address :	1/31 JAY Street, BOHLE 4818 Queensland Australia

Your contact details	
Name :	Mr LEMAKI CURULALA
Telephone/mobile :	NR
Email :	LEMAKI.M.CURULALA@TMR.QLD.GOV.AU
Relationship to this incident notification :	MANAGEMENT REPRESENTATIVE FOR PERSON WITH MANAGEMENT OR CONTROL OF A WORKPLACE

Office of Industrial Relations privacy statement

The Office of Industrial Relations Queensland respects your privacy and is committed to protecting your personal information. The information provided on this form is for the purpose of advising Workplace Health and Safety Queensland and/or the Electrical Safety Office of a reportable incident under the *Work Health and Safety Act 2011, Electrical Safety Regulation 2002 or Safety in Recreational Water Activities Act 2011*. This information will be managed within the requirements of the current state government privacy regime. The Department may be required to disclose your personal information to other regulatory agencies such as the Queensland Police Service, WorkCover, Q-Comp and other agencies in accordance with other law enforcement activities which may be conducted as part of an investigation. Further information on our privacy policy is available at www.worksafe.qld.gov.au.

Melissa R Rogers

From: Lemaki M Curulala
Sent: Friday, 6 November 2020 11:04 AM
To: NR Stephen L Skinner; CN-9064; Prasenjit Bhattacharyya
Cc: NR
Subject: RE: Incident Notification
Attachments: I-76708 - Incident Notification Record.pdf; JAG_Incident.PDF

NR

Thank you for sending this information through.

Thank you to all who assisted in helping with this incident, managing the clean-up and reinstating the traffic flows.

I would like to note, in future if similar incidents occur it is vital the RMS Safety Officer is present at the scene to effectively coordinate with the emergency services and QLD Police. Also to undertake a thorough investigation to ensure all relevant data/information is provided to TMR and any other relevant parties. This is in line with RMS's *Safety Management Plan* and ensures role and responsibilities for a contract are followed.

Fyi, yesterday's incident has been reported to QLD Work Cover and a representative may attend site to undertake an investigation, attached is a copies of the incident notification report.

Regards,

Lemaki Curulala
Project Manager | Far North District | Cairns Office
Program Delivery & Operations Branch | Department of Transport and Main RoadsFloor 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
P: (07) 40457330 | F: (07) 40457138 | M: NR
E: lemaki.m.curulala@tmr.qld.gov.au
W: www.tmr.qld.gov.au

From NR
Sent: Thursday, 5 November 2020 6:06 PM
To: Lemaki M Curulala ; Stephen L Skinner ; CN-9064 ; Prasenjit Bhattacharyya
Cc: NR
Subject: Fwd: Incident Notification

Hi Lemaki,

Please find initial incident report for today's incident.

Cheers

NR

Sent from my iPhone

Begin forwarded message:

From: NR @rmscivil.net.au>
Date: 5 November 2020 at 5:30:32 pm AEST
To NR @rmscivil.net.au>, NR @rmscivil.net.au>
Subject: Incident Notification

Initial Incident Notification			
Project Number / Location	P108 Smiths Gap OTL		
Incident Date	5/11/2020	Incident Time	1449
Incident Type	RO	Reported Date	5/11/2020
Incident Title	Multi Vehicle RTC		
Incident Details	at 1448 on 5/11/2020, a Member of public travelling north bound failed to stop at queued Northbound traffic and collided with the rear of a second vehicle pushing it into a third and subsequent vehicles. . One driver injured and treated by RMS First Aid No project personnel or equipment damaged		
Immediate Actions Taken	Incident declared. TMR Inspector and PM on site Notifications per emergency response plan Emergency Services called MOP Transported to Innisfail Hospital- Facial Injuries		
Photos	To Follow		

DEFINITION of INJURY / INCIDENT

RO **= a** report only incident is one that does not qualify for any other category however has potential to worsen with time

FAI = a first aid incident is a minor injury usually undertaken by first aid personnel using a trauma kit onsite

MTI = a medical treatment incident is the use of a medical practitioner, specialist or professional

RWC = a restricted work case is restrictions applied by a medical practitioner to a employees normal work duty

LTI = a lost time incident is when a medical practitioner certifies an employee is unable to attend work due to a work related injury

ENV = a environmental incident is the uncontrolled release of a substance or product on/into the air, land or water**(Notifiable Incidents Only)**

PDI = a plant damage incident is a loss of production to a process or damage to mobile plant or equipment

NM+A1:E28 = a near miss incident is an event or occurrence that could have or nearly resulted in one or more types of an incident

personal information
HSEQ Advisor

Mobile: NR
Email: personal information rmscivil.net.au

RMS Engineering & Construction Pty Ltd
ABN: 74 128 352 250
Phone: (07) 4774 7211
Address: 1/31 Jay Street, Bohle, Qld, 4818
Mail: PO Box 8259, Garbutt, Qld, 4814
Web: www.rmscivil.net.au

Melissa R Rogers

From: NR @rmscivil.net.au>
Sent: Friday, 6 November 2020 11:32 AM
To: Lemaki M Curulala; Stephen L Skinner; CN-9064; Prasenjit Bhattacharyya
Cc: NR NR
Subject: RE: Incident Notification

Thanks Lemaki.

Your comments are noted and understood.

RMS would like to make special mention for contribution of the TMR Inspector, Steve, made yesterday. It was good to work as one team in times of an emergency.

Cheers

NR
General Manager

Mobile: NR
Email: NR @rmscivil.net.au

RMS Engineering & Construction Pty Ltd
ABN: 74 128 352 250
Phone: (07) 4774 7211
Address: 1/31 Jay Street, Bohle, Qld, 4818
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Regards,

Lemaki Curulala
Project Manager | Far North District | Cairns Office
Program Delivery & Operations Branch | Department of Transport and Main RoadsFloor 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
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P: (07) 40457330 | F: (07) 40457138 | M: NR
E: lemaki.m.curulala@tmr.qld.gov.au
W: www.tmr.qld.gov.au

From NR rmscivil.net.au>
Sent: Thursday, 5 November 2020 6:06 PM
To: Lemaki M Curulala <Lemaki.M.Curulala@tmr.qld.gov.au>; Stephen L Skinner <Stephen.L.Skinner@tmr.qld.gov.au>; CN-9064 <CN-9064@tmr.qld.gov.au>; Prasenjit Bhattacharyya <prasenjit.z.bhattacharyya@tmr.qld.gov.au>
Cc: NR @rmscivil.net.au>; NR @rmscivil.net.au>; NR @rmscivil.net.au>
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NR

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NM+A1:E28 = a near miss incident is an event or occurrence that could have or nearly resulted in one or more types of an incident

NR
HSEQ Advisor

Mobile NR
Email: NR @rmscivil.net.au

RMS Engineering & Construction Pty Ltd
ABN: 74 128 352 250
Phone: (07) 4774 7211
Address: 1/31 Jay Street, Bohle, Qld, 4818
Mail: PO Box 8259, Garbutt, Qld, 4814
Web: www.rmscivil.net.au

Melissa R Rogers

From: Prasenjit Bhattacharyya
Sent: Thursday, 5 November 2020 3:58 PM
To: Ross V Hodgman
Cc: Michael Z Ringer; CN-9064; CAID_TMC; Stephen L Skinner; Lemaki M Curulala
Subject: RE: Incident on Smiths Gap Project

In attention of a young driver pulling a trailer.

I will review the incident report from the contractor and investigation provided by the police.

Signage is as per the TMD, we can advise the contractor to improve the TGS but can't force them to.

The only other incident on site was a car roll over due to reasons which has we have not been advised of.

There has been no queued incident recorded on site or any other accident.

I think what you are referring to in queueing is the property owner of the business complaining of missing out on business.

I will keep you updated.

Regards

Pras Bhattacharyya
Principal Engineer (Far North) | North Queensland Region
Program Delivery & Operations Branch | Infrastructure Management and Delivery Division | Department of Transport and Main Roads
_____
Floor 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
(07) 40457288 | M: NR
pzbhatt@tmr.qld.gov.au
www.tmr.qld.gov.au

From: Ross V Hodgman
Sent: Thursday, 5 November 2020 3:30 PM
To: Prasenjit Bhattacharyya
Cc: Michael Z Ringer ; CN-9064 ; CAID_TMC ; Stephen L Skinner
Subject: Re: Incident on Smiths Gap Project

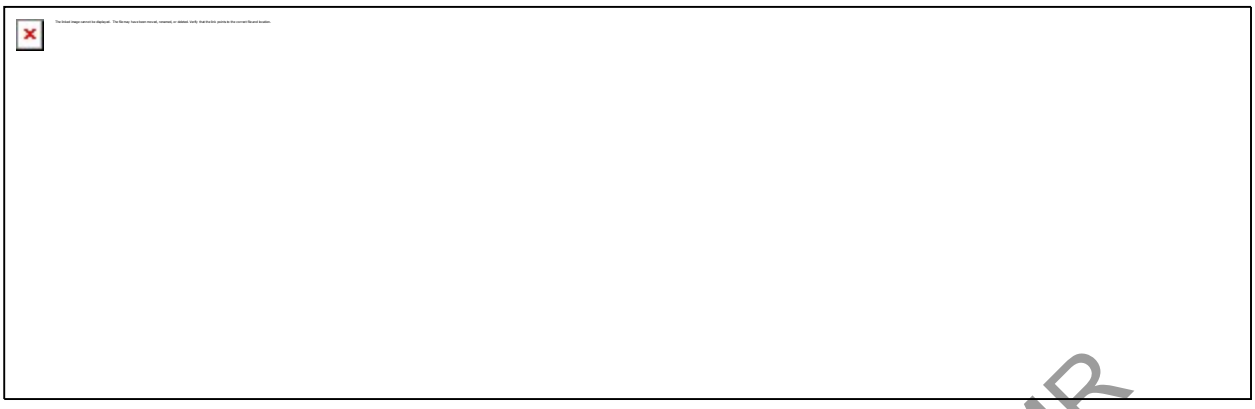
Hi Pras

Thanks for sending this through. As there have been a couple of accidents at this site involving queued vehicles now, can I please get advice on what the contractor is doing about this. Multiple accidents could be a systemic issue and will need to be addressed and monitored.

Regards

Ross Hodgman
District Director (Far North) | North Queensland Region
Program Delivery & Operations | Infrastructure Management and Delivery | Department of Transport and Main Roads

Cairns Corporate Tower 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
P: (07) 4045 7097 M: NR
cairns.office@tmr.qld.gov.au
www.tmr.qld.gov.au



On 5 Nov 2020, at 3:25 pm, Prasenjit Bhattacharyya <prasenjit.z.bhattacharyya@tmr.qld.gov.au> wrote:

Hi Ross and Michael

Another incident just happened now at Smiths Gap.

4 car pile up.

Photos attached.

One person injured who has been attended to, ambulance/Police are on site.

Single Lane reversible flow traffic till the site is cleared.

Will send in report once received from contractor.

Reported to WHS connect.

Regards

Pras Bhattacharyya
Principal Engineer (Far North) | North Queensland Region
Program Delivery & Operations Branch | Infrastructure Management and Delivery Division | Department of Transport and Main Roads

Floor 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
(07) 40457288 | M NR
pzbhatt@tmr.qld.gov.au
www.tmr.qld.gov.au

Melissa R Rogers

From: NR @rmscivil.net.au>
Sent: Wednesday, 15 July 2020 9:27 AM
To: NR
Cc: NR a2otraffic.com.au
Subject: FW: Cassowary Coast Regional Council_DSN2829613_Temporary Road Closure @ Intersection of Bruce Highway & Friday Pocket Road
Attachments: 20200715090421676.pdf

FYI

Regards,
NR
Traffic Manager

Email: NR @rmscivil.net.au
Mobile: NR

RMS Engineering & Construction Pty Ltd
ABN: 74 128 352 250
Phone: (07) 4774 7211
Web: www.rmscivil.net.au
Mail: PO Box 8259, Garbutt, Qld, 4814
1/31 Jay Street, Bohle, Qld, 4818

From: How Kee, Sue
Sent: Wednesday, 15 July 2020 9:25 AM
To: NR
Cc: 'Williamson.PeterR[NR]'
Subject: Cassowary Coast Regional Council_DSN2829613_Temporary Road Closure @ Intersection of Bruce Highway & Friday Pocket Road

Good morning, NR

Please find attached letter of approval for temporary road closure at the intersection of the Bruce Highway & Friday Pocket Roads between 15 July 2020 and 26 September 2020 from 6.30 am to 5.00 pm for purpose of DTMR project on Smith's Gap CN-9064 between Davern Road and Friday Pocket Road for works including fauna crossing archway, road widening, drainage structures and guardrail installation.

Should you have any further queries please don't hesitate to contact Council on 1300 763 903.

Sue How Kee
Senior Administration Officer I Cassowary Coast Regional Council
P: 1300 763 903 | Ext 2211
E: Zena.HowKee@ccrc.qld.gov.au | W: www.cassowarycoast.qld.gov.au
PO Box 887, Innisfail QLD 4860

Cassowary Coast Regional Council respectfully acknowledges the Traditional Owners and First People of the land on which we stand and pays respect to Elders past, present and future.

Privacy and Confidentiality Notice

The information contained in this email is intended for the named recipients only and may contain privileged and confidential information. If you are not the named intended recipient, you must not copy, distribute or take any action in reliance on it. If you have received this email in error, please notify us immediately by telephone on **1300 763 903** or email as listed above.

This email has been scanned for viruses and malware by Mimecast.

OUR REF: DSN2829613:shk

ENQUIRIES TO: NR (07) 4030 2211

15 July 2020

Mr NR
Traffic Manager
RMS Engineering and Construction
PO Box 8259
GARBUTT Q 4814

Dear NR

Temporary Road Closure at the Intersection of Bruce Highway and Friday Pocket Road between 15 July 2020 and 26 September 2020 from 6.30 am to 5.00 pm

I refer to your application dated 10 July 2020 for the temporary road closure of the intersection of Bruce Highway and Friday Pocket Road between 15 July 2020 and 26 September 2020 from 6.30 am to 5.00 pm. Council has no objection to the request for the temporary road closure for works as part of the DTMR project on Smith's Gap CN-9064 between Davern Road and Friday Pocket Road for works including fauna crossing archway, road widening, drainage structures and guardrail installation, and are subject to the following conditions: -

a) All works carried out within Local Government controlled road reserves shall comply with: -

- ***Work Health and Safety Act 2011***;
- ***The Manual of Uniform Traffic Control Devices (MUTCD)***;
- ***The Environmental Protection Act***; *and*
- *Any other Act, Law or Local Law requirement which may be relevant to these works.*

b) The Traffic Management Scheme provided is approved and must be implemented by a registered traffic control service provider. It shall comply with the ***Manual of Uniform Traffic Control Devices***, Part 3.

c) All property owners in the area of the road closure who may be affected by the temporary road closure shall be notified prior to the works by letter drop. Serious resistance from any owner should be brought to the attention of CCRC.

d) CCRC does not permit the use of star pickets for the purposes of erecting advisory signs on its roads.

e) As Council is discharging the responsibilities of Trustee to the Crown for public roads Council may be considered the 'owner' of the work site. Accordingly Council hereby notifies you that you shall be considered the Principal Contractor under the provisions of the ***Work Health & Safety Act 2011*** and shall be required to discharge all duties attached to that nomination for the duration of your working within the public area;

f) The applicant and/or subcontractors are responsible for liaison with all other Service Authorities;

g) You must ensure all work areas comply with good engineering practice and are reinstated, at the applicant's expense, to the satisfaction of the Director Infrastructure Services or his delegated representative;

h) Any damage caused to the road formation as a result of the proposed activity shall be repaired, at the applicant's expense, to the satisfaction of the Director Infrastructure Services or his delegated representative;

i) Indemnification: You must indemnify the CCRC against all liability directly or indirectly associated with the activity;

j) Insurance: You must hold a current public liability insurance policy for an amount of not less than **TWENTY MILLION DOLLARS** ($20,000,000.00);

k) All directions above and beyond these conditions, as required by the Queensland Police Service, shall be adhered to; and

l) The closure of the road shall be advertised in the appropriate local newspaper prior to the date of road closure.

Yours faithfully

NR

NR

MANAGER ASSET MAINTENANCE

C/c: NR
Innisfail Police Headquarters

For your information

From: Mitch McMullen
To: Lemaki M Curulala
Cc: CN-9064; Stephen L Skinner; Ashley
Subject: RE: CN-9064 | Traffic Management Inspection Requirements
Date: Monday, 20 July 2020 12:58:51 PM
Attachments: image001.png
image002.png
FW Cassowary Coast Regional Council_DSN2829613_Temporary Road Closure @ Intersection of Bruce Highway Friday Pocket Road.msg

---

Hi Lemaki,

We have approval to close Friday Pocket Rd from 6:30am - 5:00am. Please see attached.

Cheers

From: Lemaki M Curulala <Lemaki.M.Curulala@tmr.qld.gov.au>
Sent: Monday, 20 July 2020 12:41 PM
To: NR @rmscivil.net.au>
Cc: CN-9064 <CN-9064@tmr.qld.gov.au>; Prasenjit Bhattacharyya <prasenjit.z.bhattacharyya@tmr.qld.gov.au>; Stephen L Skinner <Stephen.L.Skinner@tmr.qld.gov.au>; NR @rmscivil.net.au>; NR NR @rmscivil.net.au>
Subject: RE: CN-9064 | Traffic Management Inspection Requirements

Hi Mitch,

You're correct, no requirement to action last email.

Regards,

Lemaki Curulala
Project Manager | Far North District | Cairns Office
Program Delivery & Operations Branch | Department of Transport and Main RoadsFloor 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
P: (07) 40457330 | F: (07) 40457138 | M: NR
E: lemaki.m.curulala@tmr.qld.gov.au
W: www.tmr.qld.gov.au

From: NR @rmscivil.net.au>
Sent: Monday, 20 July 2020 12:24 PM
To: Lemaki M Curulala <Lemaki.M.Curulala@tmr.qld.gov.au>
Cc: CN-9064 <CN-9064@tmr.qld.gov.au>; Prasenjit Bhattacharyya <prasenjit.z.bhattacharyya@tmr.qld.gov.au>; Stephen L Skinner <Stephen.L.Skinner@tmr.qld.gov.au>; NR @rmscivil.net.au>; NR NR @rmscivil.net.au>
Subject: RE: CN-9064 | Traffic Management Inspection Requirements

Hi Lemaki,

Please find attached document from NTT 01.

Please not clause 7.1 states no requirement for the independent review.

Can you please provide approval for the TMP so that we can commence the single Lane closure for the full length as planned. We are looking at the Construction of Culverts across the road at present.

If you still direct us to get an independent review of the TGS's/TMP it would be reasonable to suggest that this will be a Variation to the contract and this may delay our critical activities.

The Management of traffic on this project doesn't seem complex and we are quite mindful of the impact on the road users. I would be happy to meet with your TMD to discuss this onsite on Wednesday and work together to ensure that DTMR and RMS are happy with the approach.

Please call if you have any queries.

Cheers

From: Lemaki M Curulala <Lemaki.M.Curulala@tmr.qld.gov.au>
Sent: Monday, 20 July 2020 10:09 AM
To NR @rmscivil.net.au>
Cc: CN-9064 <CN-9064@tmr.qld.gov.au>; Prasenjit Bhattacharyya

<prasenjit.z.bhattacharyya@tmr.qld.gov.au>; Stephen L Skinner <Stephen.L.Skinner@tmr.qld.gov.au>; NR @rmscivil.net.au>; NR NR @rmscivil.net.au>

Subject: CN-9064 | Traffic Management Inspection Requirements
Importance: High

Hi NR

Please undertake an independent review of the TMP and TGSs, in accordance with **item 7.1** of *the Annexure MRTS02.1 Provision for Traffic*.

Requirements of the independent reviewer are outlined in **Clause 7** of the *Technical Specification MRTS02 Provision for Traffic.*
Regards,

Lemaki Curulala
Project Manager | Far North District | Cairns Office
Program Delivery & Operations Branch | Department of Transport and Main RoadsFloor 7 | Cairns Corporate Tower | 15 Lake Street | Cairns Qld 4870
PO Box 6185 | Cairns Qld 4870
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E: lemaki.m.curulala@tmr.qld.gov.au
W: www.tmr.qld.gov.au

Report Traffic Accident 05-11-2020

At approximately 15:00 hours on the 05-11-20 RMS safety officer informed me of site accident involving multiply vehicles.

Please see below report:

Injury's
Driver of the silver Toyota Duel Cab Landcruiser sustained a head injury and suffering shock, driver transported to Innisfail hospital.

Emergence Services Onsite

- Police X 2
- Ambulance X 2
- Fire Rescue X2

Vehicles involved

- Isuzu tipper truck and trailer with excavator on trailer and bobcat in tipper.
- Toyota Landcruiser dual cab tray back.
- Toyota duel cab ute with camper trailer.
- Toyota duel cab work ute with tool trailer.

Damage to Vehicles

- Isuzu truck server damage towed from site to RMS stock pile site south of work area , no damage appeared to equipment being carried on trailer .
- Toyota Landcruiser server damage transported to Innisfail towing company yard.
- Toyota duel cab and camper minor damage. Ute was drivable ,campervan transported to RMS office compound.
- Toyota duel cab ute and tool trailer minor damage. Ute was drivable , tool trailer transported to RMS office compound.

RMS & TMR Personal on site .

- NR RMS Supervisor coordinated accident.
- NR RMS Superintendent Coordinating work site.
- NR Leading hand Coordinating work site.
- RMS labourers assisting with accident.
- TMR Inspector assisting with accident.

Other Incident.

Red Toyota Landcruiser ute, Registration BMT-09 proceed to overtake multiple stationary vehicles at high speed, being controlled by traffic controller at the southern end of accident, driver proceeded to drive through the stop signal and continue to accident site and into oncoming traffic.
Vehicle was intercepted by Supervisor NR and TMR Inspector, when asked why he had disobeyed traffic directions he informed us he was on his phone and didn't see the traffic controller.
Traffic controller confirmed the driver was indeed on his phone when he went through the stop sign.
All information regarding this incident will be forwarded on to the relevant authority's along with witness statements.

Summary:

Traffic was stationary queued at the southern end of the works and it appears for some reason the driver of the Isuzu truck failed to see the stationary vehicles resulting in the multiple vehicle rear end pileup.
Traffic speed signage for this section of works is 60 K's per hour, considering the damage to other vehicles it would appear the Isuzu was in excess of this speed.
RMS TGS was checked and found to be as per TGS.
The road conditions were dry weather hot clear.
TMC notified of the accident and job number allocated to incident is 1676i. At 19:18 TMC contacted and informed road was cleared and to close out job.

All measures in my opinion have been put in place by RMS to avoid any accidents of this nature and this appears to have be caused by driver error. RMS will be undertaking a full review of the incident and will forward all reports to TMR as per contractual requirements.

One noticeable absence onsite was RMS Safety Officer, Safety Officer never attended the accident at any time, when asked by Inspector why he didn't attend he informed me he was recording the accident from the office.

After the road was cleared and all involved returned to RMS compound, it was noted that all RMS office personal had left site other than Site Engineer NR

Further update will be made as more information becomes available.

Link below to Project file photos of accident
G:\CAID\ENHANCEMENT DELIVERY\Contracts\TIC\9351 Smiths GAP\04 Inspector\Traffic Accident 05-11-20

If any further information is required please call

TGS No: RMS-108-018

Issue Date: 16-09-2020

Project: CN-9046 Smiths Gap

Drawn by: NR

Location of works:
Bruce Highway, Friday Pocket. Work Hours

Description:
Shuttle flow with PTSS for Culvert 1B + 1C construction on the Bruce Highway between Davern Road and Old Tully Road.

Traffic Controller requirements:

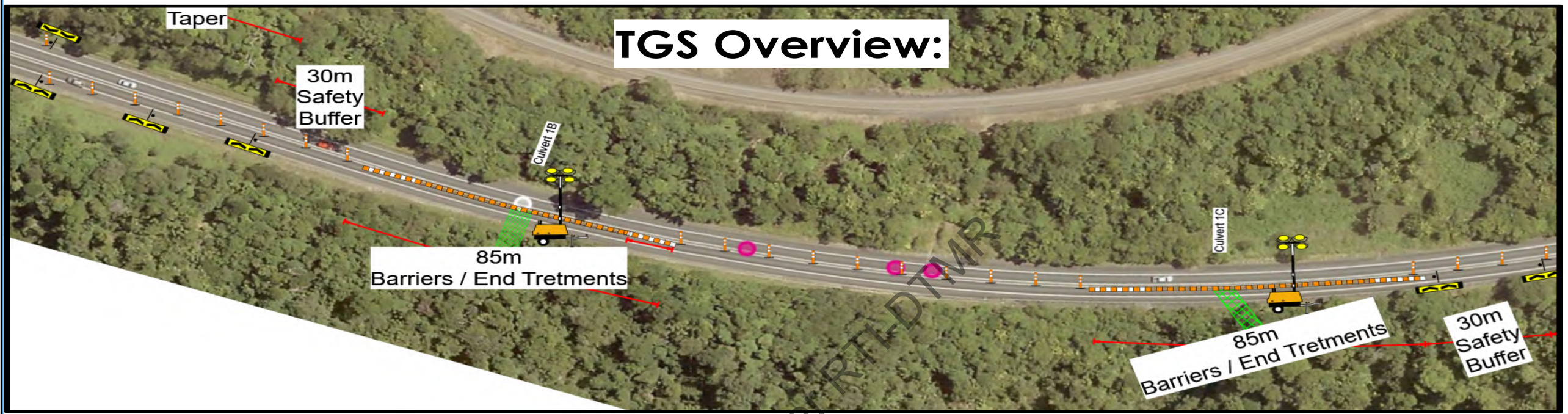
Implementation: 2 Traffic Controllers, 1 vehicle.
Construction period: 3 Traffic Controller, 1 vehicle.

Traffic Management implemented by:
A2O Traffic Solutions - Cairns
Phone: 07 4430 9820
email: cairns@a2otraffic.com.au

Plan installation requirements: www.invarion.com

SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2019.

SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

Speed Limit
All hours: 60

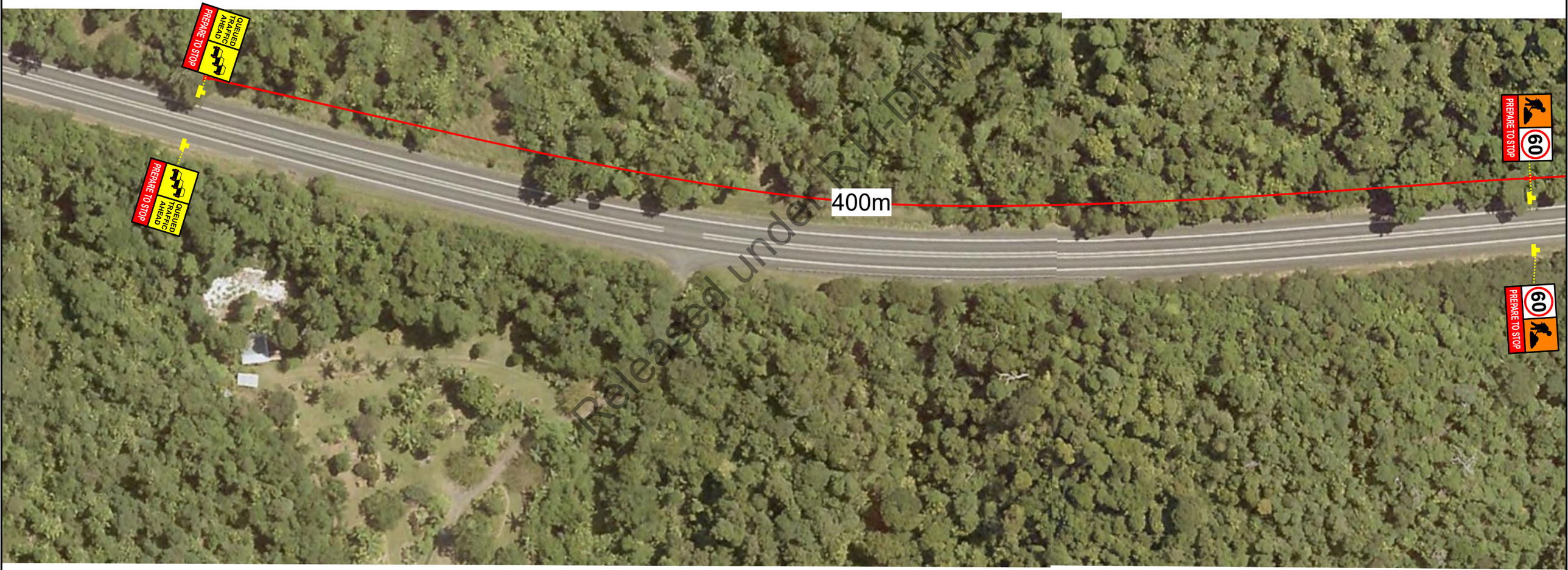
LEGEND
Work Area
Post mounted signage

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-018-A 1 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.



LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Signs from TGS RMS-108-001 Rev C to be open and all Workman panels to be displayed.

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-018-B 2 of 5.

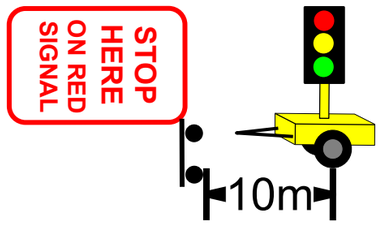
Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

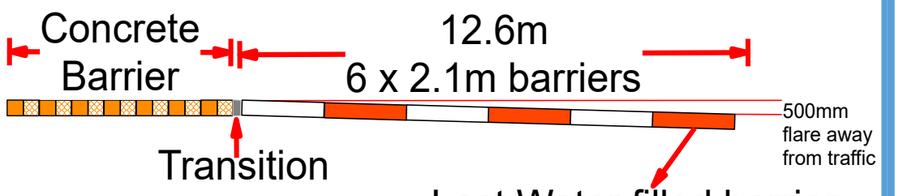
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Signs from TGS RMS-108-001 Rev C to be open and all Workman panels to be displayed.

PTSS arrangement



Triton Concrete End Treatment details:



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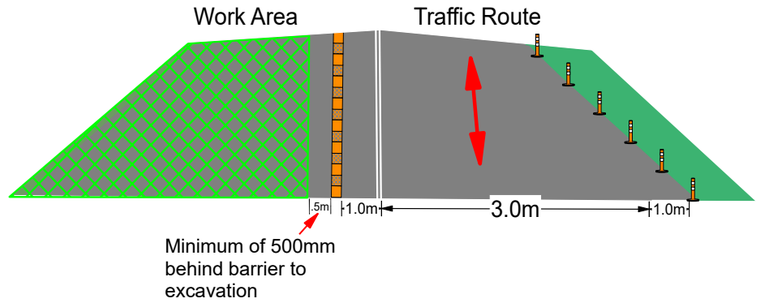


Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-018-C 3 of 5.

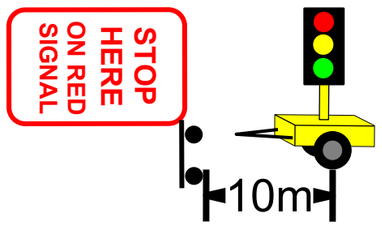
Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

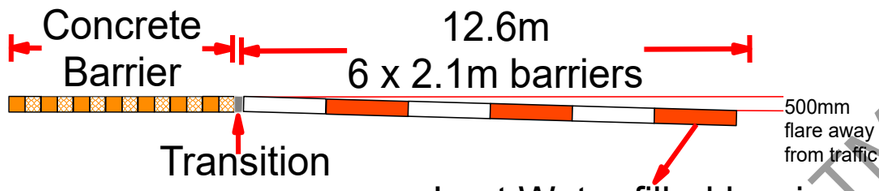
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Signs from TGS RMS-108-001 Rev C to be open and all Workman panels to be displayed.

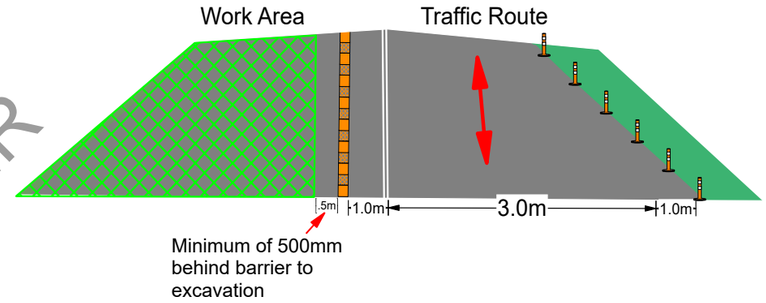
PTSS arrangement



Triton Concrete End Treatment details:



TYPICAL CROSS SECTION



30m Taper

60m Taper

30m Safety Buffer

Culvert 1B

85m Barriers / End Tretments

Culvert 1C

85m Barriers / End Tretments

30m Safety Buffer

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-018-D 4 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
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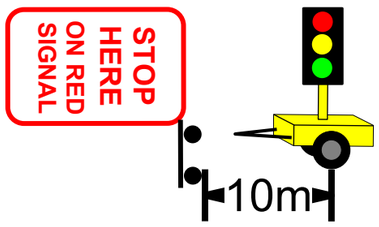
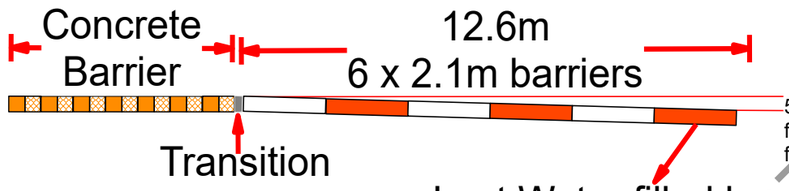
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

Signs from TGS RMS-108-001 Rev C to be open and all Workman panels to be displayed.

PTSS arrangement



Triton Concrete End Treatment details:



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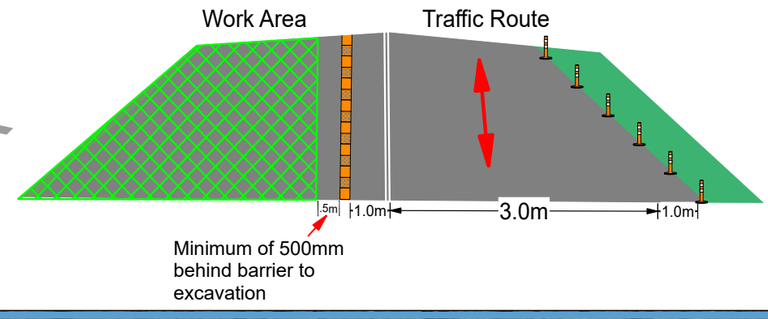


Tully

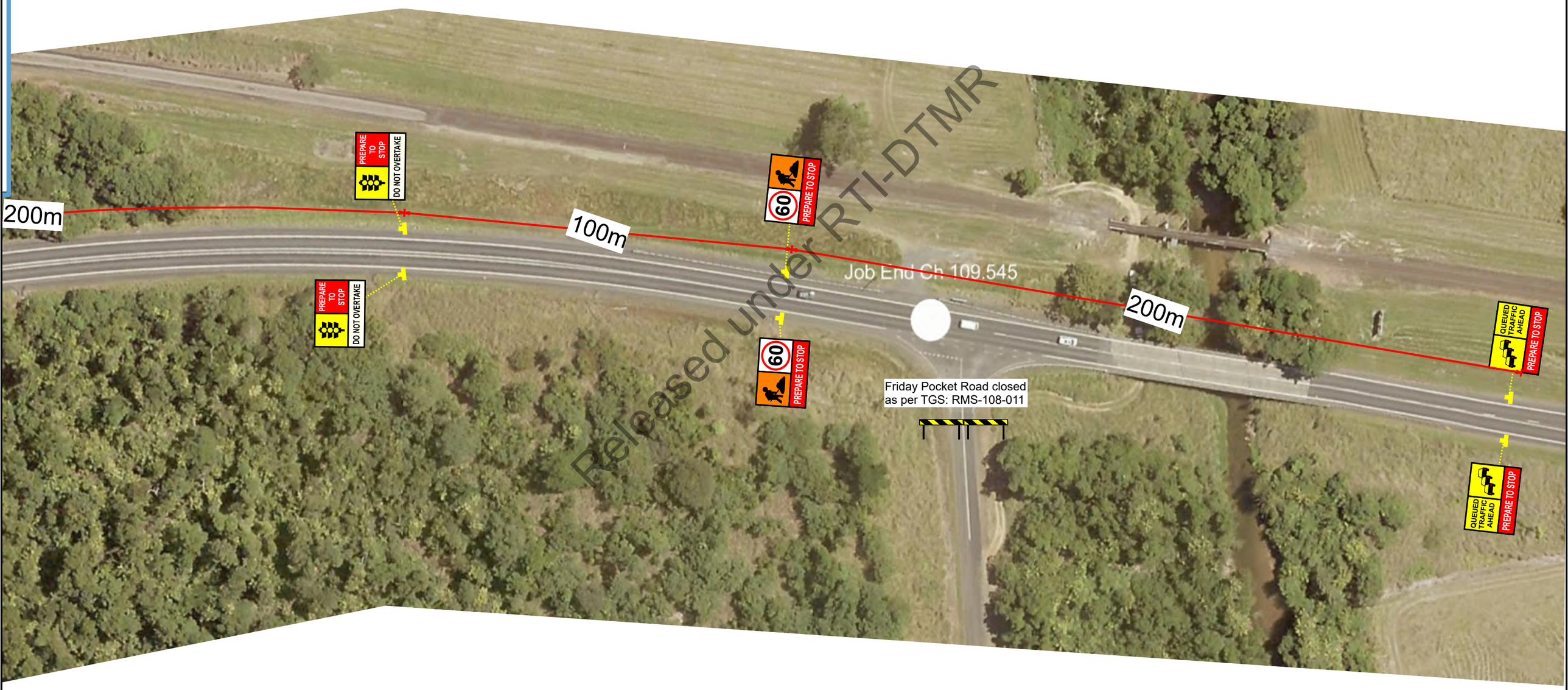
Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-018-E 5 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
Bollard spacing : Taper = 9 metres, Work Areas = 12 metres Edge Delineation = 18m.
Minimum lane width = 5 metres.
Refer to TGS Notes page for details on Traffic Management implementation requirements.

LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

Signs from TGS RMS-108-001 Rev C to be open and all Workman panels to be displayed.



TGS No: RMS-108-019

Issue Date: 16-09-2020

Project: CN-9046 Smiths Gap

Drawn by: NR

Location of works:
Bruce Highway, Friday Pocket. After Hours

Description:
Shuttle flow with PTSS for Culvert 1B + 1C construction on the Bruce Highway between Davern Road and Old Tully Road.

Traffic Controller requirements:

Implementation: 2 Traffic Controllers, 1 vehicle.
Construction period: 0 Traffic Controller, 0 vehicle.

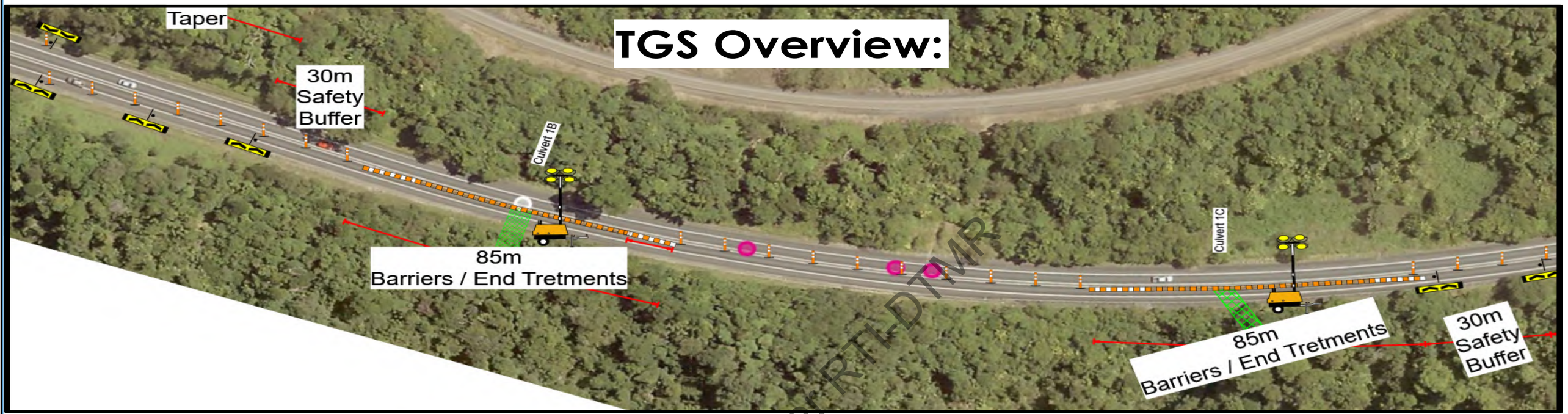
Traffic Management implemented by:
A2O Traffic Solutions - Cairns
Phone: 07 4430 9820
email: cairns@a2otraffic.com.au

A2O Traffic Solutions

Plan installation requirements: www.invarion.com

SIGNAGE ERECTED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 3 "WORKS ON ROADS 2003 EDITION". ELEVENTH ISSUE NOVEMBER 2019.

SIGN POSITIONING: As per Clause 2.5.2 M.U.T.C.D Part 3 Eleventh Issue. Signage mounted on post to be clear of travelled path by at least 2m and erected 1 - 1.5m above the nearest edge of the travelled path to the underside of the sign.



Site Implementation and Removal:
Qualified Traffic Management Implementation Traffic Controllers are required to install the signage as per this Traffic Guidance Scheme (TGS).

RMS Supervisor and Traffic Control team should conduct Site Toolbox meeting prior to each shift, discuss works to be carried out and identify any hazards/risks and control measures associated with works.

Set out and recovery of Traffic Control devices to be completed in the following sequence:

(1) Advance warning signage.
(2) Intermediate signage (between advance warning and work area).
(3) Portable Traffic Signals,Taper and taper delineation (if required).
(4) Worksite delineation, use of a shadow vehicle with working beacons and arrow board is to be used to provide protection and assist with set out of delineation.
(5) Termination signage(return to posted speed if applicable).
(6) Pedestrian control signage (if required).

Site pack down/ removal is to be completed in the reverse order of implementation.

Traffic Control vehicles are not to be parked within 15m of any Portable Traffic Signals or Stop/Slow position.
Traffic Control vehicles are to be parked outside the travelled path at all times.

Onsite requirements:
Conflicting permanent signage to be covered during works.
Copies of all permits are required to be onsite and available for viewing at all times.
Emergency Services to be notified of works prior to commencing works (7 days notice).
Access to businesses and driveways to be maintained, unless prior arrangements have been made.
Traffic Controller qualifications to be sighted by TC Team Leader prior to commencing any works.
Any changes to this TGS are to be approved by a qualified Traffic Management Designer before changes are implemented on site, notes to be made on the TGS must include TMD name, number and time of approval.

Speed Limit
All hours: 60

LEGEND
Work Area
Post mounted signage

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-019-A 1 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
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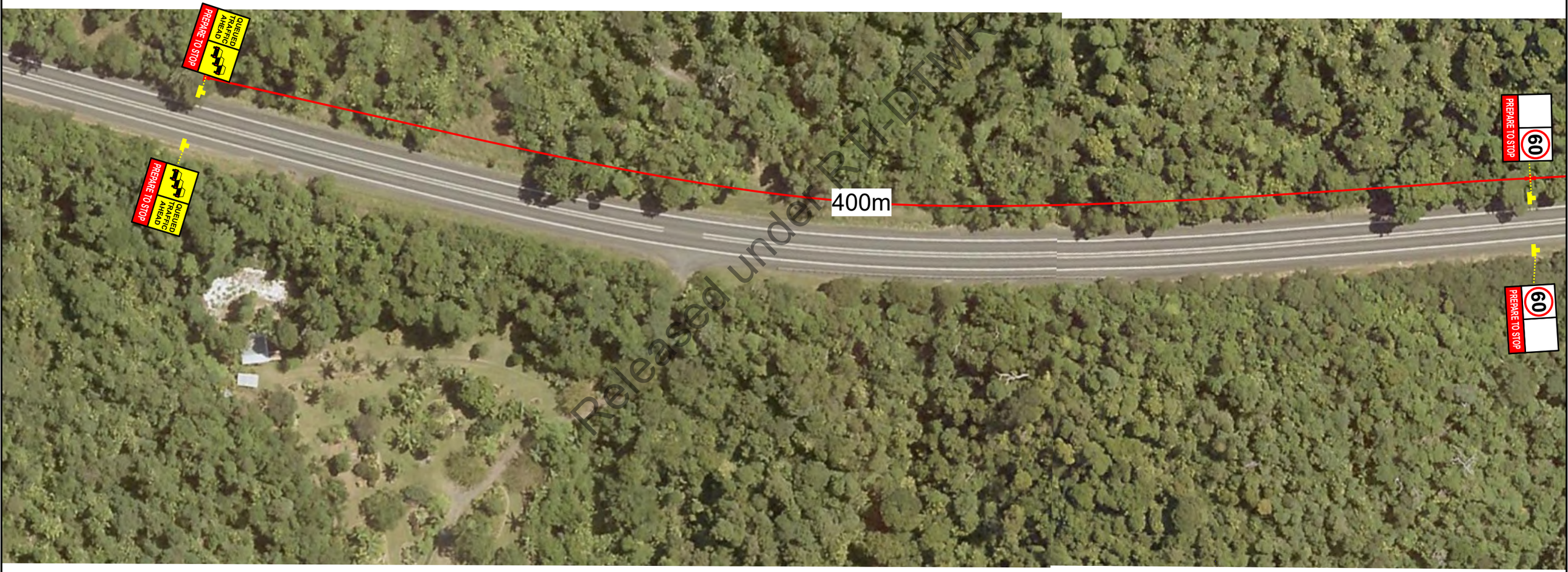

LEGEND

- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

After Hours signage from TGS RMS-108-001 to be open.

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-019-B 2 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
All Hours, Stop/Slow: Shuttle flow - for construction activities approved by the administrator.
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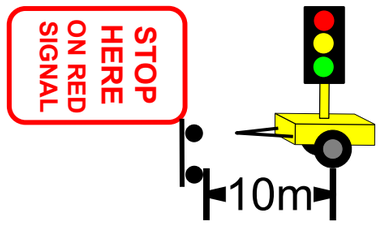
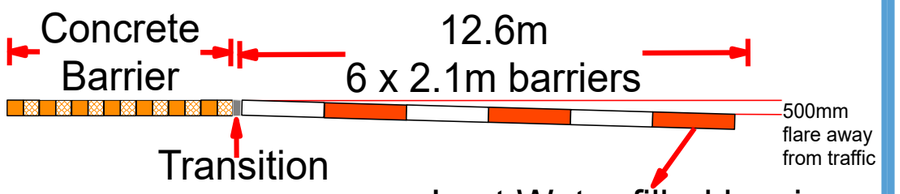
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

After Hours signage from TGS RMS-108-001 to be open.

PTSS arrangement



Triton Concrete End Treatment details:



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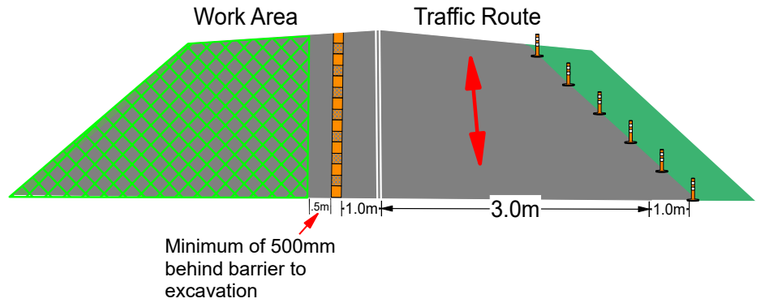

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-019-C 3 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
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Minimum lane width = 5 metres.
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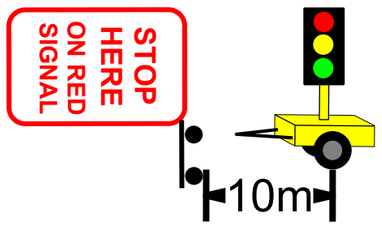
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

After Hours signage from TGS RMS-108-001 to be open.

PTSS arrangement



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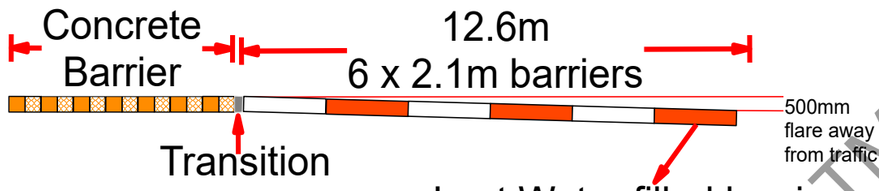

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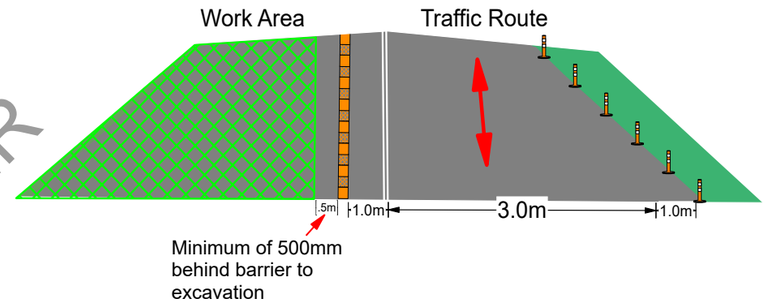

Tully

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-019-D 4 of 5.

Comments:

Site: Bruce Highway,Friday Pocket Culvert installation at Chainage 108640.
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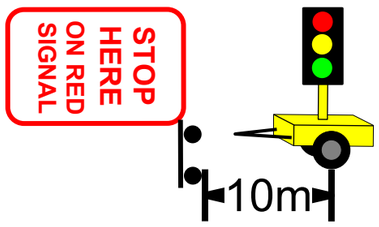
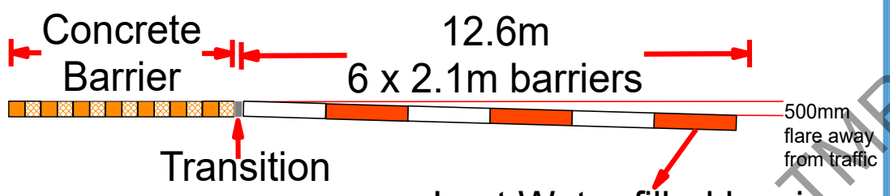
LEGEND
- Work Area
- Safety Buffer
- Bollard Spacings = 12m
- Lateral Shift Markers
- Traffic Flow

After Hours signage from TGS RMS-108-001 to be open.

PTSS arrangement



Triton Concrete End Treatment details:



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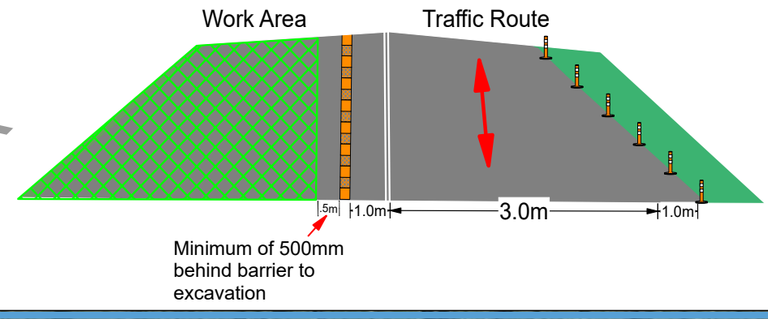

Tully

www.invarion.com

Date: 16-09-2020 **Project:** CN-9046 Bruce Highway, Friday Pocket. Smiths Gap. **TGS:** RMS-108-019-E 5 of 5.

Comments:

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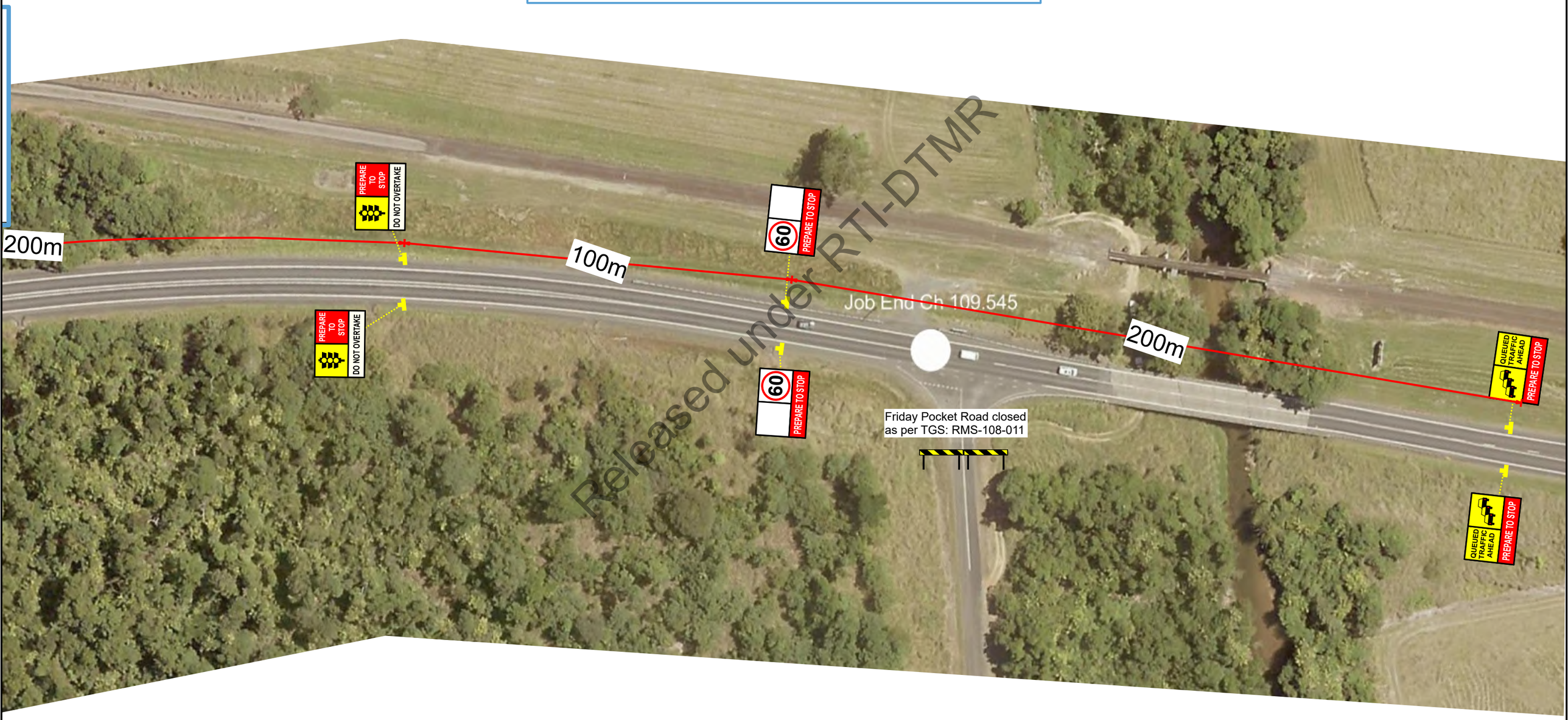
LEGEND
Work Area
Safety Buffer
Bollard Spacings = 12m
Lateral Shift Markers
Traffic Flow

After Hours signage from TGS RMS-108-001 to be open.




Released under RTI-DTMR
PM 5:35 NOV/ 5/2020

PM 5:35 NOV/ 5/2020

PM 5:35 NOV/ 5/2020


NR
Released under RTI-DTMR
PM 5:42 NOV/ 5/2020


NR
NR
Released under RTI DTMR
PM 5:45 NOV/ 5/2020


Released under RTI-DTMR
PM 5:53 NOV/ 5/2020


NR
NR
Released under RTI-DTMR
PM 5:53 NOV/ 5/2020

PM 3:11 NOV/ 5/2020


NR
QUEENSLAND
Released under RTI-DTMR
PM 3:29 NOV/ 5/2020


NR
NR
QUEENSLAND FIRE AND RESCUE
Released Under RTI-DTMR
PM 3:30 NOV/ 5/2020


NR
Released under RTI-DTMR
PM 3:31 NOV/ 5/2020


Released under RTI-DTMR
PM 3:33 NOV/ 5/2020

PM 4:52 NOV/ 5/2020

PM 5:03 NOV/ 5/2020


NR
NR
Released under RTI-DTMR
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NR
NR
Released under RTI-DTMR
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