WAKA KOTAHI NZ TRANSPORT AGENCY	RCA consent (eg CAR/WAP) and/or RCA contract reference	CAR: R840118	S2022043

TRAFFIC MANAGEMENT PLAN (TMP) – FULL FORM

Use this form for complex activities. Refer to the NZ Transport Agency's Traffic control devices manual, part 8 Code of practice for temporary traffic management (CoPTTM), section E, appendix A for a guide on how to complete each field.

<table>
<tr><td rowspan="2">Organisations /TMP reference</td><td rowspan="2">TMP reference:
FH 4855-2</td><td>Contractor (Working space):
Wellington Water</td><td colspan="3">Principal (Client):
Wellington Water</td></tr>
<tr><td>Contractor (TTM):
Wellington Water
Fulton Hogan
ATMS
PTS</td><td colspan="3">RCA:
WAKA KOTAHI NZ TRANSPORT AGENCY
SOUTH WAIRARAPA DISTRICT COUNCIL
Kia Reretahi Tātau</td></tr>
<tr><td rowspan="2">Location details and road characteristics</td><td colspan="2">Road names and suburb</td><td>House no./RPs
(from and to)</td><td>Road level</td><td>Permanent speed</td></tr>
<tr><td colspan="2">All roads and footpaths within the South Wairarapa
District Councils District.
Including SH2 and SH53 Roads, Footpaths and kerb & Channel and roadside storm water Maintenance activities

Site Specific TMP required depending on the work activities and impact. i.e. sewer blocks that involve works from a manhole at an intersection and/or in the live lane, burst water main/water leaks on the network in the carriageway/intersections that will impact traffic, hydrant/valve replacements in the carriageway that will impact traffic, water lateral replacements that involve trenching across the carriageway.</td><td>All roads within:
Urban & Rural South Wairarapa
Greytown
Featherston
Martinborough</td><td>1</td><td>50/70/100km/h</td></tr>
<tr><td>Traffic details (main route)</td><td colspan="2">AADT
Various AADTs
STMS to perform Manual Traffic Counts prior to TTM setup</td><td colspan="3">Peak flows
Times Vary
Main arterial routes will be avoided where possible
During peak times</td></tr>
<tr><td colspan="6">Description of work activity</td></tr>
</table>

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

WAKA KOTAHI NZ TRANSPORT AGENCY	RCA consent (eg CAR/WAP) and/or RCA contract reference	CAR: R840118

General Mobile Water Maintenance Works as defined in 3 Waters Contract for SWDC.

This TMP is added to a New CAR which covers the works of the OLD CAR (E791693).

Activities covered are detailed as per contract Preliminary and General specifications.

Corridor Access Requested WAP & Conditions to be on site with contractors AT ALL TIMES sites are active.

ANY STATE HIGHWAY WORKS WILL BE AT THE DISCRETION OF CAPITAL JOURNEYS TMC

All AWORKS APPROVED BY CAPITAL JOURNEYS TMC MUST THEN BE NOTIFIED TO THE TRAFFIC OPERATIONS CENTRE (TOC) PRIOR TO COMMENCEMENT AND POST WORK

WORKS ARE TO BE PLACED ON THE WEEKLY ROAD WORKS REPORT

ALL COMPLETED WORKS MUST COMPLY TO WAP CONDITIONS AND ARE TO BE REINSTATED ACCORDING TO NZTA STANDARDS

Works include sewer blocks/maintenance repairs on the wastewater network that require entry from a manhole at an intersection and/or in the live lane or excavations in the carriageway/live lane, burst water main/water leaks on the network in the carriageway/intersections that will impact traffic, hydrant/valve replacements in the carriageway that will impact traffic, water lateral replacements that involve trenching across the carriageway.

This also includes works on the Stormwater network that may have an impact on traffic.

Planned work programme							
Start date	09/03/22	**Time**	24hrs	**End date**	09/03/23	**Time**	24hrs
Consider significant stages, for example: • road closures • detours • no activity periods.	**Site Stages (not limited to):** 1. TMP Review 2. TMD Selection 3. TTM Installation 4. TTM Site Drive Through 5. Works On Site 6. TTM Disestablishment / Unattended TM Install 7. TTM Site Final Drive Through **Approved Work Times are within WAP & Conditions**						
Alternative dates if activity delayed	If Works are Postponed/Cancelled for any reason, they may be rescheduled for the next fine Day/Night if within approved TMP dates. STMS to maintain contact with the Local RCA – South Wairarapa District Council or nominated representative.						

Road aspects affected *(delete either Yes or No to show which aspects are affected)*					
Pedestrians affected?	Potentially	**Property access affected?**	Potentially	**Traffic lanes affected?**	Potentially
Cyclists affected?	Potentially	**Restricted parking affected?**	Potentially	**Delays or queuing likely?**	Potentially
Proposed traffic management methods					

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

Installation *(includes parking of plant and materials storage)*	• Full setup details to suit GTMP layout requirement. • Ramm Contractor Dispatch records GTMO numbers. • Weekly road report submitted via email to council by EOB Friday prior to work commencing. • Initial E1.8 checking process for GTMP to be completed prior to setup of each worksite. • Temporary speed limit decision matrix to be available onsite should the TSL change from the initial E1.8 checking process for GTMP. • Site installation using a LEVEL 1 Mobile operation. • Prior to arrival at site, the STMS will arrange a safe meeting point with all works personnel that will be onsite to undergo a toolbox meeting. • STMS to carry out traffic counts prior to site establishment. • Review the TMP check form. • The STMS is to identify the public and site safety hazards and how they will be managed/addressed – this will be documented on the hazard document (on-site record) • All vehicles will be equipped with the appropriate communication device. • **Static Closures** ○ Pre-install of signage on adjoining side roads to be carried out first. ○ Advanced warning followed by works end must be installed first on left hand side followed by the right then other signage follows left to right then delineation. ○ Signs are to be placed on the left-hand side of the road as required; the first sign to be erected will be an advanced warning sign. ○ Relevant delineation signage to be installed around the working space after all signage has been installed. • **Mobile Operations Where Required** ○ To install certain signs, mobile closures will need to be implemented. The TM work vehicle will enter the live lane shoulder or other suitable/safe location e.g vacant parking bays prior to the site to provide advanced warning of the closure ahead. ○ Mobiles will be undertaken for stops less than 10 minutes at a time or 5 minutes when holding traffic.
Attended (day)	• TTM: TMD to be selected and fit for purpose prior to installing closure ○ Closure that gets installed is to be note on the onsite record. ○ TMDs that have the TMC logo are to be used on a cases by case basis and approval from TMC is REQUIRED. • STMS/TC to monitor and assist pedestrians where required • STMS/TC to monitor and assist affected driveways as required • STMS to check the site prior to the start of work and document times that the site layout was started and completed. • STMS is to continuously monitor the site during work. • STMS on site at all times and will be in contact with all personnel on site.
Attended (night)	• TTM: TMD to be selected and fit for purpose prior to installing closure ○ Closure that gets installed is to be note on the onsite record. ○ TMDs that have the TMC logo are to be used on a cases by case basis and approval from TMC is REQUIRED. • STMS/TC to monitor and assist pedestrians where required • STMS/TC to monitor and assist affected driveways as required • STMS to check the site prior to the start of work and document times that the site layout was started and completed. • STMS is to continuously monitor the site during work. • STMS on site at all times and will be in contact with all personnel on site.
Unattended (day)	Unattended worksites in the form of but not limited to the following layouts: TSL deployed; Loose chip; Slippery surface; Uneven surface; Portable Traffic Signals; Detours. **Site Checks:** **Weekdays – 1 Site Check every 24hours** **Weekends – 1 Site Check every 24hours**

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Waikato District Council
25 February 2022

Unattended (night)	Unattended worksites in the form of but not limited to the following layouts: TSL deployed; Loose chip; Slippery surface; Uneven surface; Portable Traffic Signals; Detours. **Site Checks:** **Weekdays – 1 Site Check every 24hours** **Weekends – 1 Site Check every 24hours**
Detour route	Planned detour routes within each district and/or passing through each district will be reviewed as required. Detours will require the approval of TMCs. ~~Does detour route go into another RCA's roading network? Yes No *(delete either Yes or No)*~~ ~~*If Yes, has confirmation of acceptance been requested from that RCA?* Yes No *(delete either Yes or No)*~~ ~~***Note:** Confirmation of acceptance from affected RCA must be submitted prior to occupying the site.*~~
Removal	• The removal of TTM measures must be in the reverse order of establishment, ie reverse order for removal as per ○ Tapers and delineation devices must only be placed once all signs have been installed., ○ Remaining signs are placed in order from the advance warning sign until the works end sign is reached. The vehicle then makes a loop on a single direction carriageway or simply turns around on a bidirectional carriageway to make the next run. This process is continued until the sign network is complete. ○ The first sign erected must be the advance warning sign. • For level 2 roads where an AWVMS is used to replace the advance warning sign, all signs on one side of the road may be removed in a single pass.

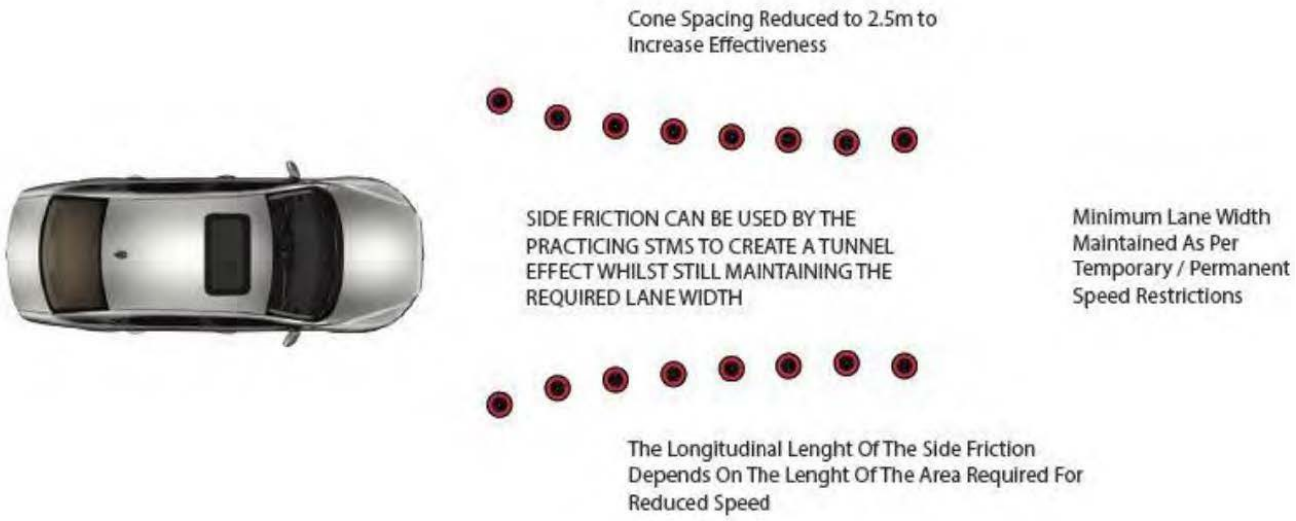
Proposed TSLs *(see TSL decision matrix for guidance)*

	TSL details as required Approval of Temporary Speed Limits (TSL) are in terms of Section 6 of Land Transport Rule: Setting of Speed Limits 2017, Rule 54001/2017 *(List speed, length and location)*	**Times** *(From and to)*	**Dates** *(Start and finish)*	**Diagram ref. no.s** *(Layout drawings or traffic management diagrams)*
Attended day/night	A temporary maximum speed limit of **30**km/h is hereby fixed for motor vehicles travelling over the length of **300**m – Location to be identified and recorded as required in Onsite Records daily. **Speed restrictions (TSL's) to be appropriate to the type of worksite activity and the condition of the road surface.** **TSL LOCATION TO BE RECORDED WITHIN CoPTTM ON SITE RECORD** **TSL matrix to be used prior to TTM installation.**	24hrs	09/03/22 to 09/03/23	Refer to TMD layouts
Unattended day/night	A temporary maximum speed limit of **30**km/h is hereby fixed for motor vehicles travelling over the length of **300**m – Location to be identified and recorded as required in Onsite Records daily. **Speed restrictions (TSL's) to be appropriate to the type of worksite activity and the condition of the road surface.** **TSL LOCATION TO BE RECORDED WITHIN CoPTTM ON SITE RECORD** **TSL matrix to be used prior to TTM installation.**	24hrs	09/03/22 to 09/03/23	Refer to TMD layouts
TSL duration	Will the TSL be required for longer than 12 months? ***If yes**, attach the completed checklist from section I-18: Guidance on TMP Monitoring Processes for TSLs to this TMP.*			No

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Waikato District Council
25 February 2022

Positive traffic management measures

- Side friction utilized
- TSLs in stalled
- Lane widths reduced
- Egress to and from site to be controlled by STMS/Traffic Controllers. Delineation to be placed to suit egress locations
- Advanced warning Utes to be utilized in high risk areas.
- Advanced warning Utes to be utilized for closures of bridges and as advance warning for sites when required.
- **No manual Stop/Go operations are to be carried out, eStops MUST be used instead.**



Contingency plans

Generic contingencies for:

- major incidents
- incidents
- pre planed detours.

Remove any options which do not apply to your job

Major Incident

A major incident is described as:

- Fatality or notifiable injury - real or potential
- Significant property damage, or
- Emergency services (police, fire, etc) require access or control of the site.

Actions

The STMS must immediately conduct the following:

- stop all activity and traffic movement
- secure the site to prevent (further) injury or damage
- contact the appropriate emergency authorities
- render first aid if competent and able to do so
- notify the RCA representative and / or the engineer
- under the guidance of the officer in charge of the site, reduce effects of TTM on the road or remove the activity if safe to do so
- re-establish TTM and traffic movements when advised by emergency authorities that it is safe to do so
- Comply with any obligation to notify WorkSafe.

	Incident An incident is described as: • excessive delays - real or potential • minor or non-inquiry accident that has the potential to affect traffic flow • structural failure of the road.	**Actions** The STMS must immediately conduct the following: • stop all activity and traffic movement if required • secure the site to prevent the prospect of injury or further damage • notify the RCA representative and / or the engineer • STMS to implement a plan to safely remove TTM and to establish normal traffic flow if safe to do so • re-establish TTM and traffic movements when it is safe to do so and when traffic volumes have reduced.
	Detour If because of the on-site activity it will not be possible to remove or reduce the effects of TTM once it is established a detour route must be designed. This is likely for: • excessive delays when using an alternating flow design for TTM • redirecting one direction of flow and / or • total road closure and redirection of traffic until such time that traffic volumes reduce and tailbacks have been cleared. The risks in the type of work being undertaken, the risks inherent in the detour, the probable duration of closure and availability and suitability of detour routes need to be considered. The detour and route must be designed including: • pre- approval form the RCA's whose roads will be used or affected by the detour route • ensure that TTM equipment for the detour - signs etc are on site and pre-installed.	**Actions** When it is necessary to implement the pre-planned detour the STMS must immediately undertake the following: • Notify the RCA and / or the engineer when the detour is to be established • Drive through the detour in both directions to check that it is stable and safe • Remove the detour as soon as it practicable and safe to do so and the traffic volumes have reduced and tailbacks have cleared • Notify the RCA and / or the engineer when the detour has been disestablished and normal traffic flows have resumed.
	Note also the requirements for no interference at an accident scene: In the event of an accident involving serious harm the STMS must ensure that nothing, including TTM equipment, is removed or disturbed and any wreckage article or thing must not be disturbed or interfered with, except to: • save a life of, prevent harm to or relieve the suffering of any person, or • make the site safe or to minimise the risk of a further accident; or • maintain the access of the general public to an essential service or utility, or • prevent serious damage to or serious loss of property, or • follow the direction of a constable acting in his or her duties or act with the permission of an inspector.	

Other contingencies to be identified by the applicant *(i.e. steel plates to quickly cover excavations)*	**Weather** Depending on the activity, works may be cancelled if raining. **Excess traffic delays (more than 5 minutes)** In the event of congestion positive measures will be implemented, ie opening lane widths, removing visual distractions from site, stopping works until congestion has eased or removal of the closure. Utilising network VMS boards to advise motorists of delays ahead. **Work running late** Hold points, milestones and 'last safe moments' will be utilised throughout the operation to ensure closure removal times are not breached. In the event of breakdown or unforeseen circumstance, the contingency of 'excess traffic delays' above will apply along with informing the RCA immediately. **Emergency Vehicle Access / Movements or On Site Emergency** Emergency vehicles given the right of way at all times and will be assisted through closure or the use of the TM vehicle if appropriate and required. Emergencies onsite or nearby will first be made safe, then if appropriate moved from any live lanes, then attended to in detail with an emergency modified TTM setup by the STMS if required. • All patches to be temp sealed if a permanent reinstatement is not possible on the day and site to be made safe before leaving the site. • Steel plates are to be used to cover all excavations if not possible to backfill on the day.

Authorisations				
Parking restriction(s) alteration authority	**Will controlled street parking be affected?**	Yes	**Has approval been granted?**	Yes
	RCA approval will be obtained as required for each Council			
Authorisation to work at permanent traffic signal sites	**Will portable traffic signals be used or permanent traffic signals be changed?**	Yes	**Has approval been granted?**	Yes
	RCA approval will be obtained as required for each Council			
Road closure authorisation(s)	**Will full carriageway closure continue for more than 5 minutes (or other RCA stipulated time)?**	Yes	**Has approval been granted?**	Yes
	RCA approval will be obtained as required for each Council			
Bus stop relocation(s) – closure(s)	**Will bus stop(s) be obstructed by the activity?**	Yes	**Has approval been granted?**	Yes
	RCA approval will be obtained as required for each Council			

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Waikato District Council
25 February 2022

Authorisation to use portable traffic signals	**Make, model and description/number**	NZ eStop – CoPPTM Certified – https://www.nzta.govt.nz/assets/resources/code-temp-traffic-management/docs/NZ-eSTOP-Service-and-Operations-Manual-2019-v7.40-with-warranty.pdf Or; Model# • 627 - 1, 627 - 2 • 628 - 1, 628 - 2 • 629 - 1, 629 - 2 • 630 - 1, 630 - 2 • 631 - 1, 631 - 2 • 632 - 1, 632 - 2
	NZTA compliant?	Yes The eSTOP™ has been tested and certified compliant in accordance with the New Zealand Transport Agency (NZTA) Technical Note – Portable Traffic Signal Systems, Version 3 : November 2015.

EED			
Is an EED applicable?	No	**EED attached?**	N/A

Delay calculations/trial plan to determine potential extent of delays

At the request of TMC.

Public notification plan

- Local Council to be advised where work will impact on their road network.
- Letter drops to surrounding businesses and residents as required
- Where works require, advance warning of works will take place. Each council to determine the media release to be issued.
- Notification to be by means of the weekly roadwork's report as advised to relevant council
- Emergency services, Bus companies to be notified where necessary

Public notification plan attached?	No

On-site monitoring plan

Attended *(day and/or night)*	Level 1 STMS on site with the relevant number of TC's to ensure correct site establishment • The Level 1 STMS may leave the site area in order to gain access to his site to conduct a full check. This time absent must not exceed 30 minutes. The assigned Level 1 STMS will not be in charge of any other closures (including active or inactive shoulder closures) as they will not be able to maintain the required supervision of those sites given the requirement to maintain 100% presence (apart from loops to do site checks) on this site.
Unattended *(day and/or night)*	**Site checks:** Weekdays – 1 every 24 hours Weekends – 1 every 24 hours **Adverse weather may require an increase in checks.**

Method for recording daily site TTM activity *(eg CoPTTM on-site record)*

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Waikato District Council
25 February 2022

- Hazard ID sheet
- QA sheet
- Tailgate
- Pre-Start
- An onsite daily record of hourly site checks

Site safety measures

- As per the SAFE, HEALTH and ENVIRONMENTAL Pre-Start Tailgate which is done by the shift foreman/ supervisor for the job.
- All personnel on site to comply with Fulton Hogan and Waka Kotahi standards.
- All personnel on site to exit the site as per the STMS instruction/ briefing
- No unauthorized personnel to be on site
- All personnel on site to wear the correct PPE and equipment.
- All vehicles will have their flashing beacons turned on when entering, leaving, installing & removing TTM closures.
- A safe evacuation location to be identified at this briefing.
- Any site visitors must be escorted at all times by a person who has completed the full induction, they are able to observe the works only.
- A TM Vehicle may be located directly behind work site
- **In the event of a closure breach (police chase, accidental breach etc.) TTM team to use RT's and notify all workers within the site to step back and get to safety ASAP.**

Temporary safety barrier system	**Will a temporary safety barrier system be used at this worksite?**	No	**If yes, has the temporary safety barrier system been designed by an installation designer and independently reviewed as being fit for purpose?**	N/A
	Statement from temporary safety barrier installation designer attached		N/A	

Other information

- Signs to be erected clear of footpaths and cycle ways with at least 0.8 meters of clear road to allow safe egress of cyclists where possible.
- Where sockets have been installed off the road to allow for temporary warning signs to be erected, these shall be used.
- Permanent signs conflicting with the TTM shall be covered for the duration of the TTM as required.
- All vehicles to travel in the direction of traffic flow.
- The minimum lane width will be maintained at all times, for traffic to pass, unless a diversion is in place.
- Variations will be covered by the Generic TMP.
- All maintenance operations will take place under Traffic Control department to this plan. A number of specific exceptions are detailed below
- Mobile Closures – no more than 10mins
- Semi Static Closures – no more than 1hr
- Gating of all Signs may not be able to be achieved due to topography of site or lane widths, where this occurs the STMS is to determine if additional signage is to be installed as advance warning or if the sign spacing can be increased to allow the signs to be installed in locations that will allow them to be gated. This is up to the discretion of the STMS.

Use of Mobile Closures or Rolling Blocks to install static closures

Generic layout diagrams

Number	Title

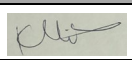
APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Waikato District Council
25 February 2022

F2.1	Footpath diverted onto berm behind working space (first preference)
F2.2	Footpath diverted onto berm between working space and carriageway (second preference)
F2.3	Footpath diverted onto carriageway (third preference)
F2.4	Footpath closed – permanent speed less than 65km/h (fourth preference)
F2.5	Shoulder and roadside activities – work on berm and/or footpath permanent speed less than 65km/h
F2.6	Shoulder and roadside activities – Work in parking lane permanent speed less than 65km/h
F2.7	Shoulder and roadside activities – shoulder closure
F2.8	Cycle lane – Traffic not crossing road centre diverted cycle lane
F2.9	Cycle lane – Traffic crossing road centre diverted cycle lane – coned lane control
F2.10	Cycle lane – Traffic not crossing road centre cycle lane closed
F2.11	Two-way two-lane traffic not crossing road centre
F2.12	Two-way two-lane Traffic not crossing road centre signs on median
F2.13	TWO-WAY TWO-LANE ROAD Traffic crossing road centre Two lane diversion
F2.14	TWO-WAY TWO-LANE ROAD Single-lane alternating flow Manual traffic control (STOP/GO or STOP/SLOW)
F2.15	TWO-WAY TWO-LANE ROAD All traffic stopped temporarily Manual traffic control (STOP/GO or STOP/SLOW)
F2.16	TWO-WAY TWO-LANE ROAD Single-lane (traffic volume less than 1000vpd - 80vph) Give way control
J2.16a	TWO-WAY TWO-LANE ROAD Short no exit road
F2.17	TWO-WAY TWO-LANE ROAD Single-lane alternating flow Portable traffic signals
F2.18	TWO-WAY TWO-LANE ROAD Work in centre of road
J2.18a	TWO-WAY TWO-LANE ROAD In centre of road with median, signs on median
F2.19	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Road works on side road after intersection - TSL on side road Traffic not crossing road centre
J2.19a	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Major obstruction close to intersection Allows shorter sign spacings and MTC operation
F2.20	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Road works on side road after intersection - TSL on main road Traffic not crossing road centre
J2.20a	TWO-WAY TWO-LANE ROAD - Intersection or roundabout After intersection - Traffic not crossing road centre
J2.20b	TWO-WAY TWO-LANE ROAD - Intersection or roundabout After intersection - Traffic crossing road centre
J2.20c	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Before intersection - Traffic not crossing road centre
J2.20d	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Before intersection - Traffic crossing road centre
J2.20e	TWO-WAY TWO-LANE ROAD - Intersection or roundabout On median near intersection
F2.21	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Work in middle of intersection
J2.21a	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Work on existing roundabout
F2.22	TWO-WAY TWO-LANE ROAD - Intersection or roundabout Closure at corner of an intersection Manual traffic control (Stop/Go or Stop/Slow)
F2.23	TWO-WAY TWO-LANE ROAD - Road closures and detours Road closure Temporary route around a hazard or workspace
F2.24	TWO-WAY TWO-LANE ROAD - Road closures and detours Road closure - detour route Example
J2.25a	TWO-WAY TWO-LANE ROAD - Road closures and detours Partial carriageway closure and detours - One way Example

Contact details

	Name	24/7 contact number	CoPTTM ID	Qualification	Expiry date

Principal	Daniel Paulo Wellington Water	021 949 871	N/A	N/A	N/A
TMC	Darren Varcoe CAPITAL JOURNEYS OPUS Fulton Hogan	027 839 5693	25161	L2/3 NP	06/09/22
TMC	Ben Turner SOUTH WAIRARAPA DISTRICT COUNCIL *Kia Reretahi Tātau*	027 582 5211	87065	STMS (AB) -NP R	23/11/24
Engineers' representative	Adam Mattsen Wellington Water	021 572 916	N/A	N/A	N/A
Contractor	Daniel Paulo Wellington Water	021 949 871	N/A	N/A	N/A
STMS	**TBC – prior to work start or on the day** Daniel Paulo (Wellington Water Alliance) Tane Te Moana-Evans (FH) as interim contact. Richard Te Aonui (FH 2nd) as interim contact. Vena Lamsam (ATMS) as interim contact. Bux Manuseuga (PTS) as interim contact.	 021 949 871 027 203 2054 027 403 9100 021 767 165 027 836 5243	 - 53875 38138 39930 -	 - 2/3 NP 2/3 P 2/3 P -	 - 05/11/22 09/04/22 11/01/22 -
TC	**Same as above STMS details**	-	-	-	-
Others as required	Emergency Services WTOC – Signals & Cameras Metlink/GWRC Bus –Services Disruptions Team	*555 or 111 0800 869 286 0800 801 700	N/A	N/A	N/A

TMP preparation						
Preparation	Kasiano Mita	23/02/22		106772	L2/3 NP	02/03/24
	Name (STMS qualified)	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*
This TMP meets CoPTTM requirements				**Number of diagrams**		34
TMP returned for correction *(if required)*						
	Name	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*
Engineer/TMC to complete following section when approval or acceptance required						

APPROVED
CAR R840118
STMS Number 87065
South Wairarapa District Council
25 February 2022

WAKA KOTAHI NZ TRANSPORT AGENCY	**RCA consent (eg CAR/WAP) and/or RCA contract reference**	CAR: R840118

Temporary safety barrier system	**The attached temporary road safety barrier design has been independently reviewed as being fit for purpose**				Yes No Not required	
TMP Approved	Ben Turner	25/2/22		87065	STMS AB np	23/11/24
	Name	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*
Acceptance by TMC *(only required if TMP approved by*						
	Name	*Date*	*Signature*	*ID no.*	*Qualification*	*Expiry date*

Qualifier for engineer or TMC approval

Approval of this TMP authorises the use of any regulatory signs included in the TMP or attached traffic management diagrams.

This TMP is approved on the following basis:

1. To the best of the approving engineer's/TMC's judgment this TMP conforms to the requirements of CoPTTM.
2. This plan is approved on the basis that the activity, the location and the road environment have been correctly represented by the applicant. Any inaccuracy in the portrayal of this information is the responsibility of the applicant.
3. The TMP provides so far as is reasonably practicable, a safe and fit for purpose TTM system.
4. The STMS for the activity is reminded that it is the STMS's duty to postpone, cancel or modify operations due to the adverse traffic, weather or other conditions that affect the safety of this site.

Notification to TMC prior to occupying worksite/Notification completed

Type of notification to TMC required	• Notification to be by means of the weekly roadwork's report as advised to relevant RCA's	**Notification completed**	Date - Time -

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Waikato District Council
25 February 2022

WAKA KOTAHI NZ TRANSPORT AGENCY

TMP or generic plan reference	

ON-SITE RECORD On-site record must be retained with TMP for 12 months.			Today's date	
Location details	Road names(s):	House number/RPs:	Suburb:	

Working space

Person responsible for working space		
	Name	*Signature*
Where the STMS/TC is responsible for both the working space and TTM they sign above and in the appropriate TTM box below		

TTM

STMS in charge of TTM					
	Name	*TTM ID Number*	*Warrant expiry date*	*Signature*	*Time*
Worksite handover accepted by replacement STMS					
	Name	*ID Number*	*Warrant expiry date*	*Signature*	*Time*
	Tick to confirm handover briefing completed				

Delegation

Worksite control accepted by TC/STMS-NP					
	Name	*ID Number*	*Warrant expiry date*	*Signature*	*Time*
	Tick to confirm briefing completed				

Temporary speed limit

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

Street/road name (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of TSL (m):
	TSL installed				
	TSL remains in place				
From: To:	TSL removed				

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

TMP or generic plan reference	

Worksite monitoring

TTM to be monitored and 2 hourly inspections documented below.

Items to be inspected	TTM set-up	2 hourly check	2 hourly check	2 hourly check	2 hourly check	2 hourly check	TTM removal
High-visibility garment worn by all?							
Signs positioned as per TMP?							
Conflicting signs covered?							
Correct delineation as per TMP?							
Lane widths appropriate?							
Appropriate positive TTM used?							
Footpath standards met?							
Cycle lane standards met?							
Traffic flows OK?							
Adequate property access?							
Barrier deflection area is clear?							
Add others as required							
Time inspection completed:							
Signature:							

Comments:

Time	Adjustment made and reason for change

FOOTPATH

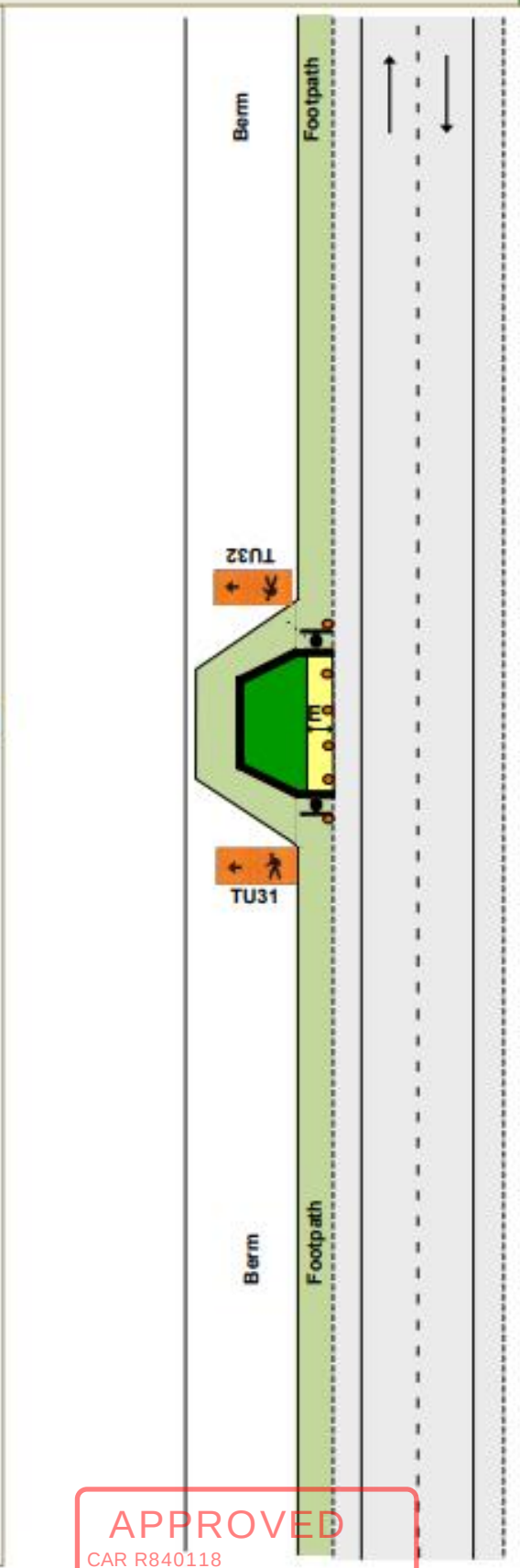
Footpath diverted onto berm behind working space
First preference

F2.1
Level 1

Notes

1. Minimum pedestrian footpath widths:
   - Residential/Rural - 0.9m
   - Suburban Centre - 1.2m
   - CBD - 2m
2. Where the length of the working space exceeds 20m, these widths may have to be increased so footpath users do not have to wait to pass
3. Temporary footpath surfaces must be suitable for footpath users
4. Use safety fence to enclose the working space, or at **attended** worksites, cones connected with cone bars can be used to enclose the working space but only for a short period of time

   Note: Cone bars are not recommended where heavy equipment (eg a digger) is being used. A safety fence is preferred in these cases
5. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane



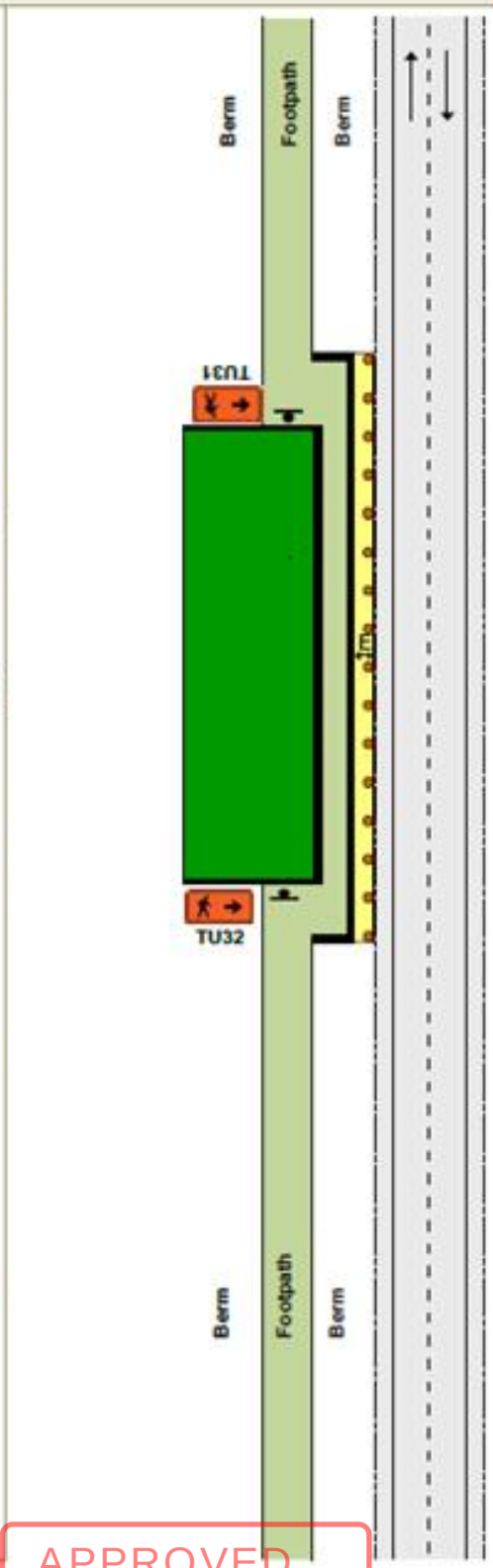
APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

FOOTPATH
Footpath diverted onto berm between working space and carriageway
Second preference

F2.2
Level 1

Notes

1. Minimum pedestrian footpath widths:
   - Residential/Rural/Suburban Centre - 1.2m
   - CBD - 2m
2. Where the length of the temporary footpath exceeds 20m, these widths may have to be increased so footpath users do not have to wait to pass
3. Temporary footpath surfaces must be suitable for footpath users
4. Use safety fence to enclose the working space, or at **attended** worksites, cones connected with cone bars can be used to enclose the working space but only for a short period of time
   Note: Cone bars are not recommended where heavy equipment (eg a digger) is being used. A safety fence is preferred in these cases
5. Use barrier or safety fence to delineate the traffic side of the footpath, or at **attended** worksites cones connected with cone bars can be used to delineate the traffic side of the footpath for a short period of time (not for use on state highways)
6. There must be a lateral safety zone between the traffic side of the footpath and the live lane:
   - **0.5m** for barrier
   - **1m** for safety fence or cone bars
7. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

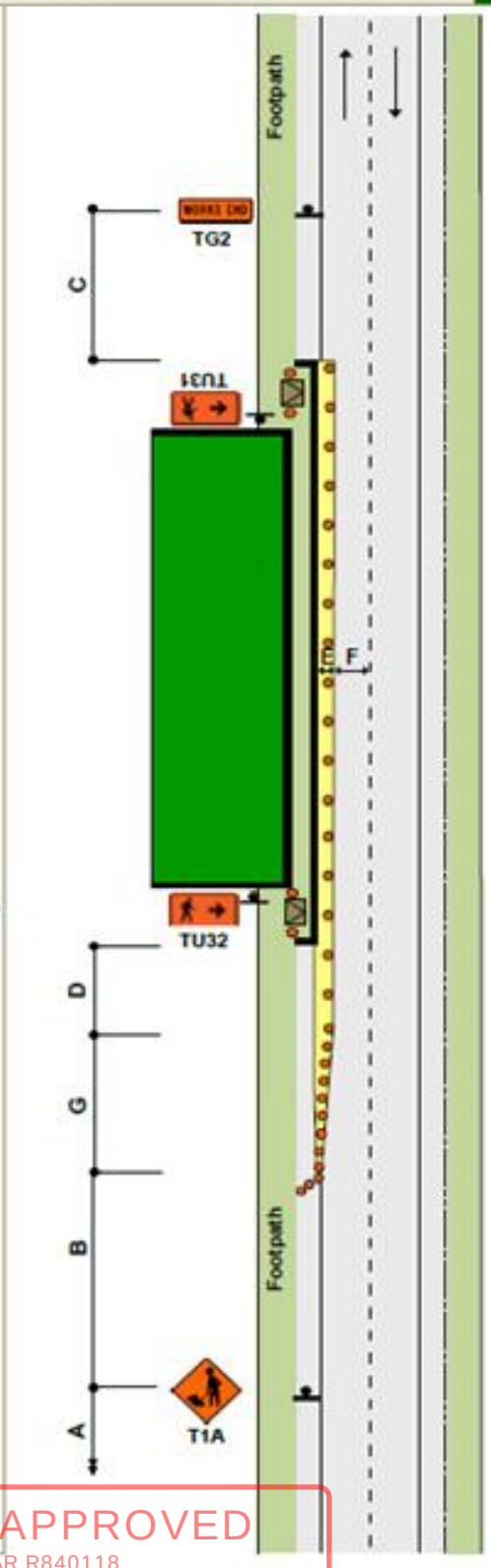
25 February 2022

FOOTPATH
Footpath diverted onto carriageway
Third preference

F2.3
Level 1

Notes

1. Minimum pedestrian footpath widths:
   - Residential/Rural/Suburban Centre - 1.2m
   - CBD - 2m
2. Where the length of the temporary footpath exceeds 20m, these widths may have to be increased so footpath users do not have to wait to pass
3. Use safety fence to enclose the working space, or at **attended** worksites, cones connected with cone bars can be used to enclose the working space but only for a short period of time
   Note: Cone bars are not recommended where heavy equipment (eg a digger) is being used. A safety fence is preferred in these cases
4. Use barrier or safety fence to delineate the traffic side of the footpath, or at **attended** worksites cones connected with cone bars can be used to delineate the traffic side of the footpath for a short period of time (not for use on state highways)
5. There must be a lateral safety zone between the traffic side of the footpath and the live lane:
   - **0.5m** for barrier
   - **1m** for safety fence or cone bars
6. Use kerb ramps to assist mobility vehicles, pushchairs, etc
7. At night-time, corners of safety fence may be illuminated with flashing amber warning lights
8. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane



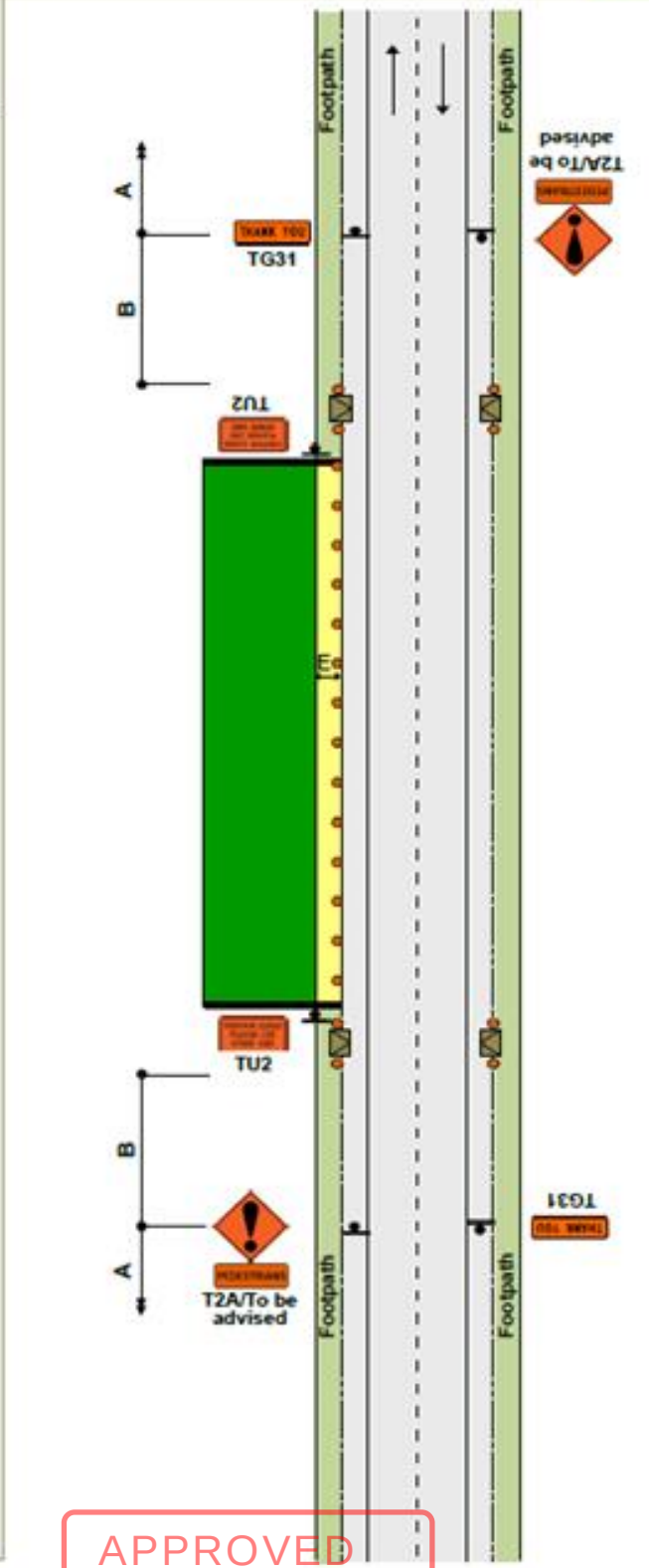
APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

FOOTPATH
Footpath closed - permanent speed less than 65km/h
Fourth preference

F2.4
Level 1

Notes

1. Use T2A and PEDESTRIANS supplementary plate to alert road users to the potential of footpath users crossing the carriageway
2. Use safety fence at each end of working space
3. Use kerb ramps
4. Use another TMD as well, where working space/safety zone encroaches on live lane
5. This TMD must be used in conjunction with appropriate TTM for any work carried out on the shoulder or in the live lane



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

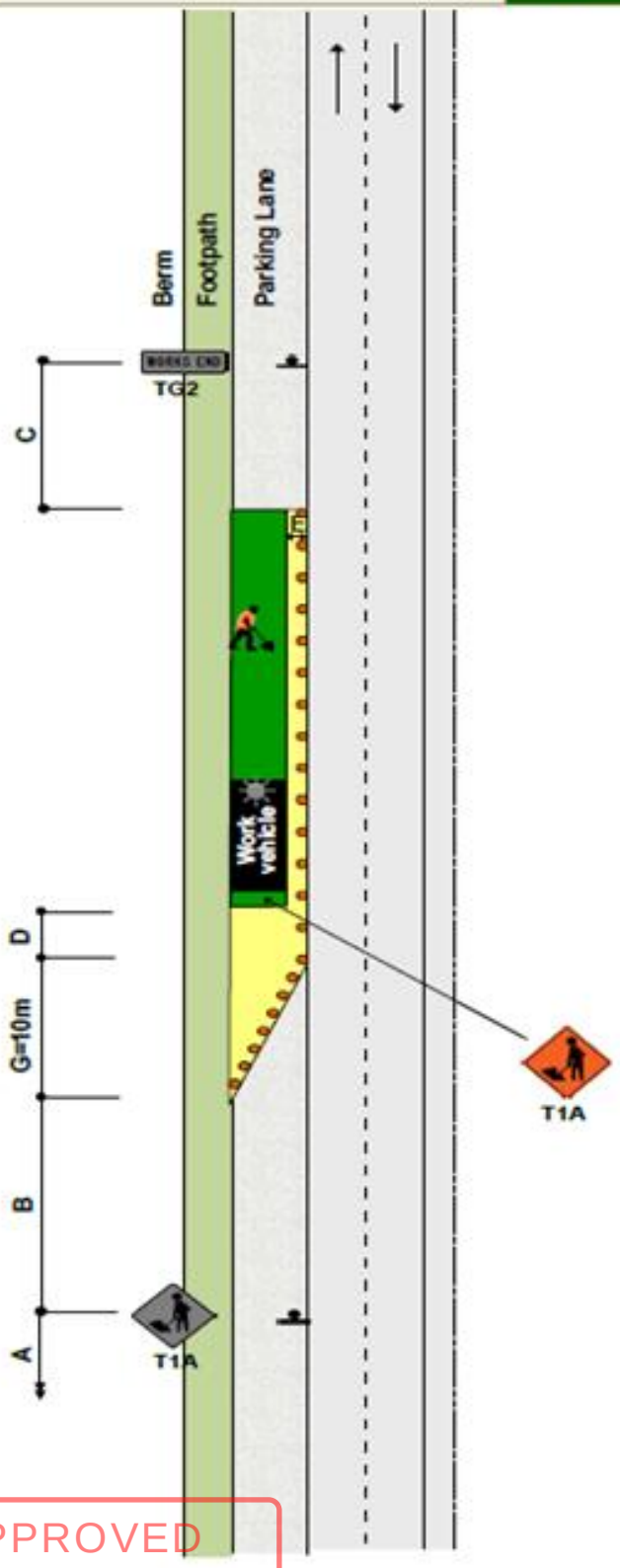
25 February 2022

SHOULDER AND ROADSIDE ACTIVITIES
Work in parking lane
Permanent speed less than 65km/h

F2.6
Level 1

Notes

1. Where work is carried out in the legal parking lane (a place where a vehicle would normally park with a footpath and/or kerb and channel alongside), the following minimum standard of TTM must be provided:
   - a 10m taper in front of the work vehicle
   - cones alongside the work vehicle and the working space
   - a longitudinal safety zone
   - a 1m lateral safety zone along the working space
   - a T1A (or other appropriate advance warning sign) mounted on the back of the work vehicle
2. T1A road works and TG2 WORKS END signs are optional
3. The work vehicle must be no larger than a light truck and may have an amber flashing beacon
4. Traffic management must be provided where footpath users or cyclists are affected
5. This layout may only be used during daylight hours
6. Large plant and machinery must not be used in this situation, a more substantial closure is required



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

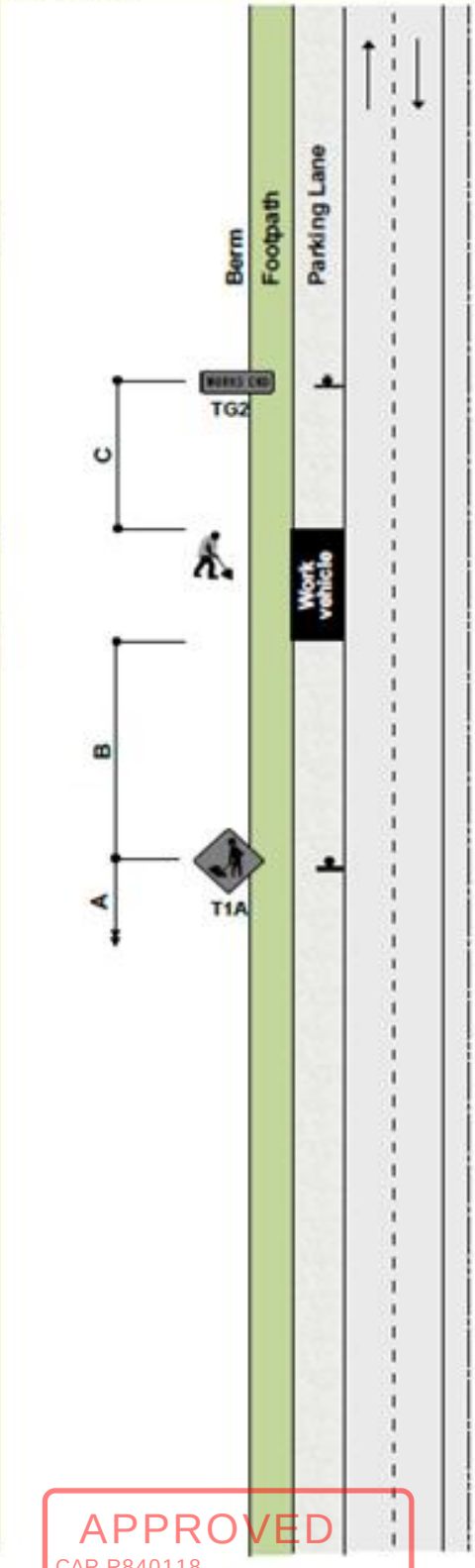
25 February 2022

SHOULDER AND ROADSIDE ACTIVITIES
Work on berm and/or footpath
Permanent speed less than 65km/h

F2.5
Level 1

Notes

1. Where work is carried out on the berm or footpath and a work vehicle is parked in a legal parallel car park, provided the vehicle is only accessed from the off traffic side, advance warning T1A road works and TG2 WORKS END are optional
2. Traffic management must be provided where footpath users or cyclists are affected
3. This layout may only be used during daylight hours
4. Large plant and machinery must not be used in this situation, a more substantial closure is required



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

SHOULDER AND ROADSIDE ACTIVITIES
Shoulder closure

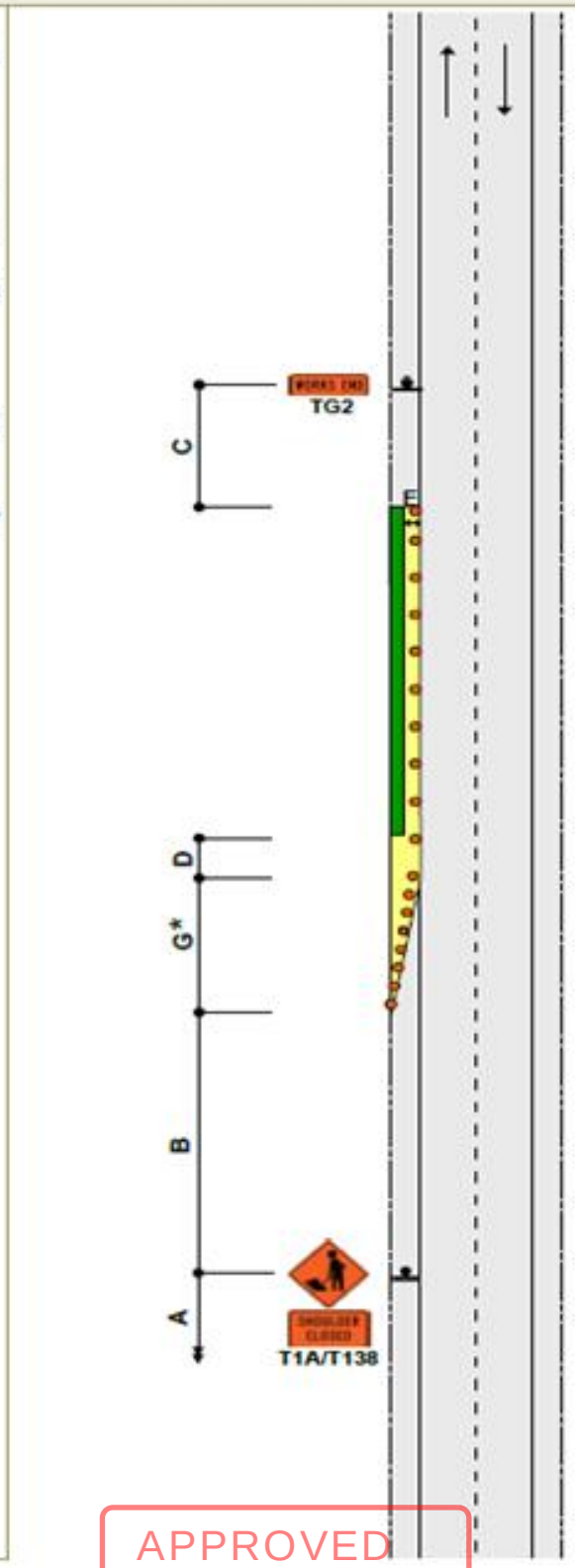
F2.7
Level 1

Notes

1. A 10m taper is allowed where shoulder width is less than 2.5m
2. *For shoulders exceeding 2.5m width, apply the following calculation; calculation of taper length for lateral shift of less than 3.5m is:

$$\frac{W \times G}{3.5}$$

W = Width of shoulder
G = Taper length in metres from the level 1 layout distance table



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

CYCLE LANE
Traffic not crossing road centre
Diverted cycle lane

F2.8
Level 1

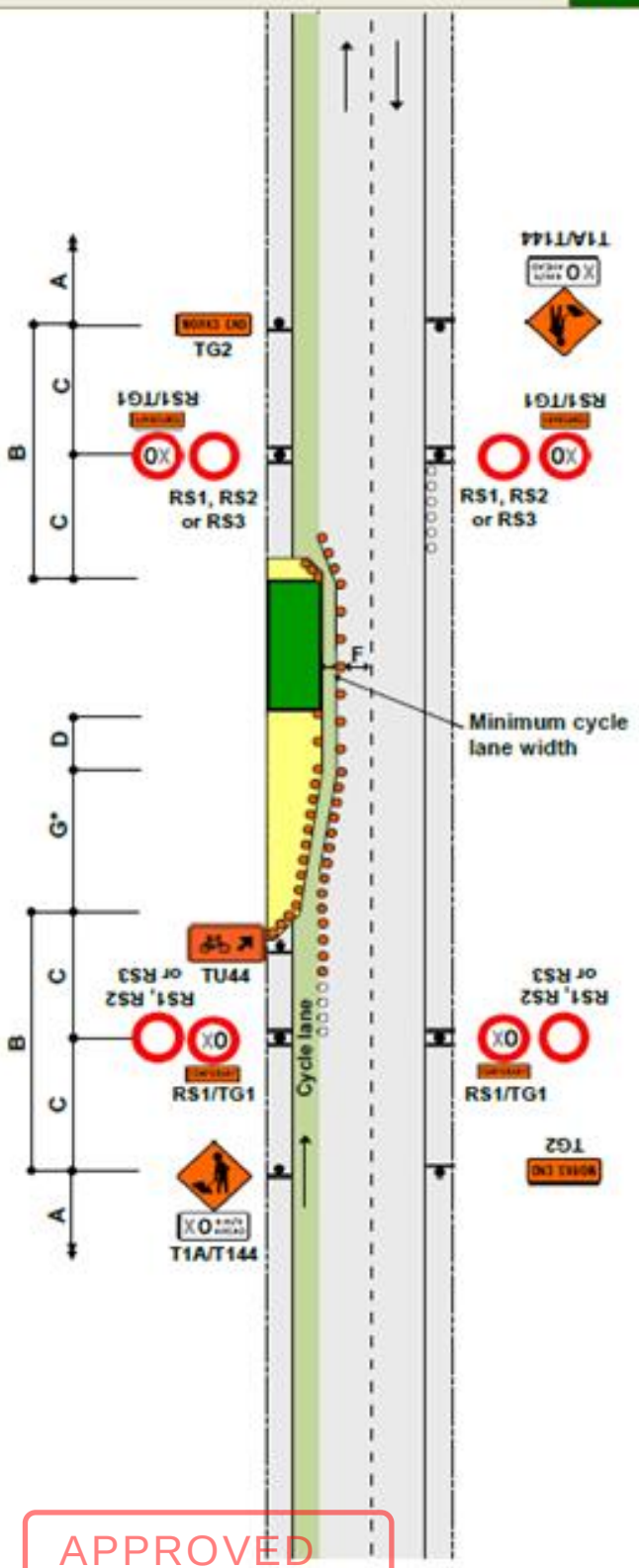
Notes

1. Minimum cycle lane width must be:
   - 1m - 50km/h or less
   - 1.5m - 60km/h or more
2. A minimum cycle lane width of 1.5m is required if the temporary cycle lane is uphill
3. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of lateral shift

   G = Taper length in metres from the level 1 layout distance table
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

CYCLE LANE
Traffic crossing road centre
Diverted cycle lane - coned lane control

F2.9
Level 1

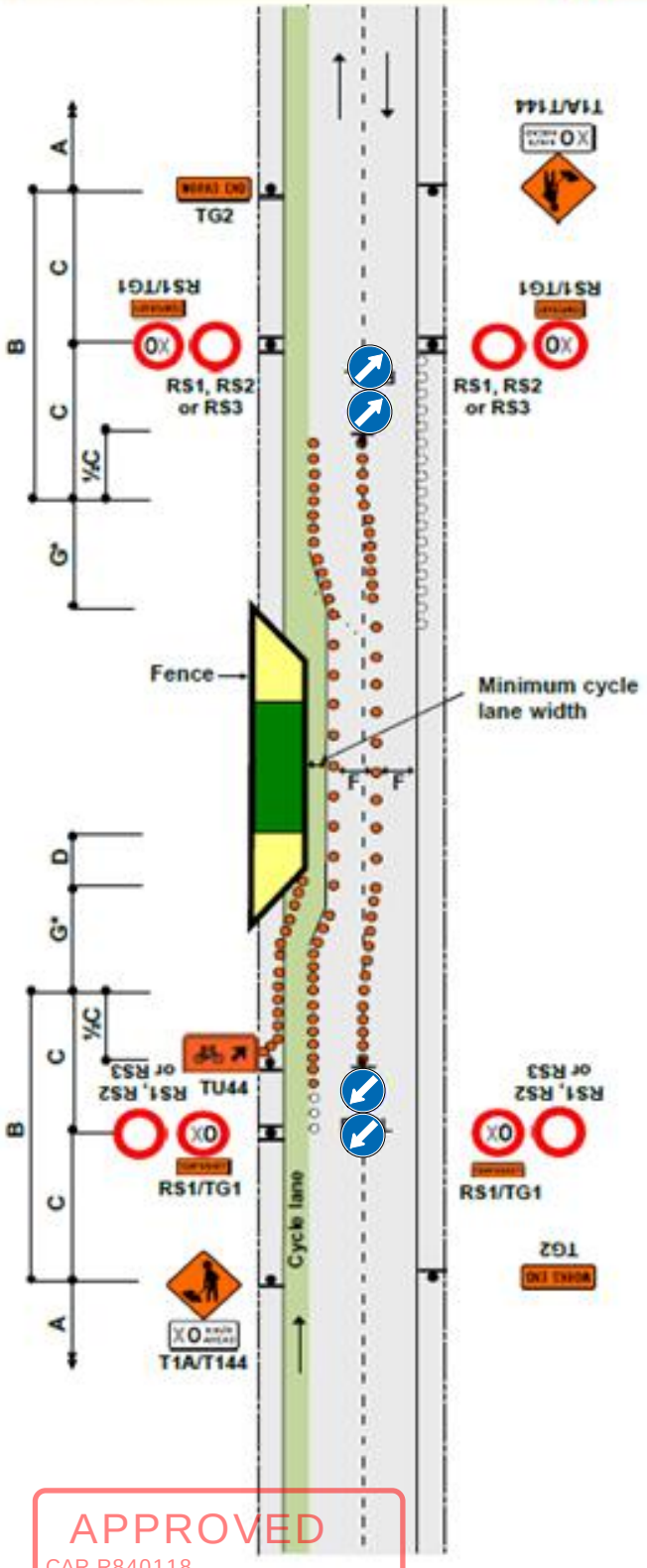
Notes

1. Minimum cycle lane width must be:
   - 1m - 50km/h or less
   - 1.5m - 60km/h or more
2. A minimum cycle lane width of 1.5m is required if the temporary cycle lane is uphill
3. *Calculation of taper length for lateral shift of less than 3.5m is:

   $$\frac{W \times G}{3.5}$$

   W = Width of lateral shift

   G = Taper length in metres from the level 1 layout distance table
4. To allow heavy vehicles to manoeuvre, cones in the channel must be offset by at least 10m where the direction changes. Refer C8.2.12
5. Use TSLs if required by TSL decision matrix
6. The T144 X0km/h AHEAD sign is optional



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

CYCLE LANE
Traffic not crossing road centre
Cycle lane closed

F2.10
Level 1

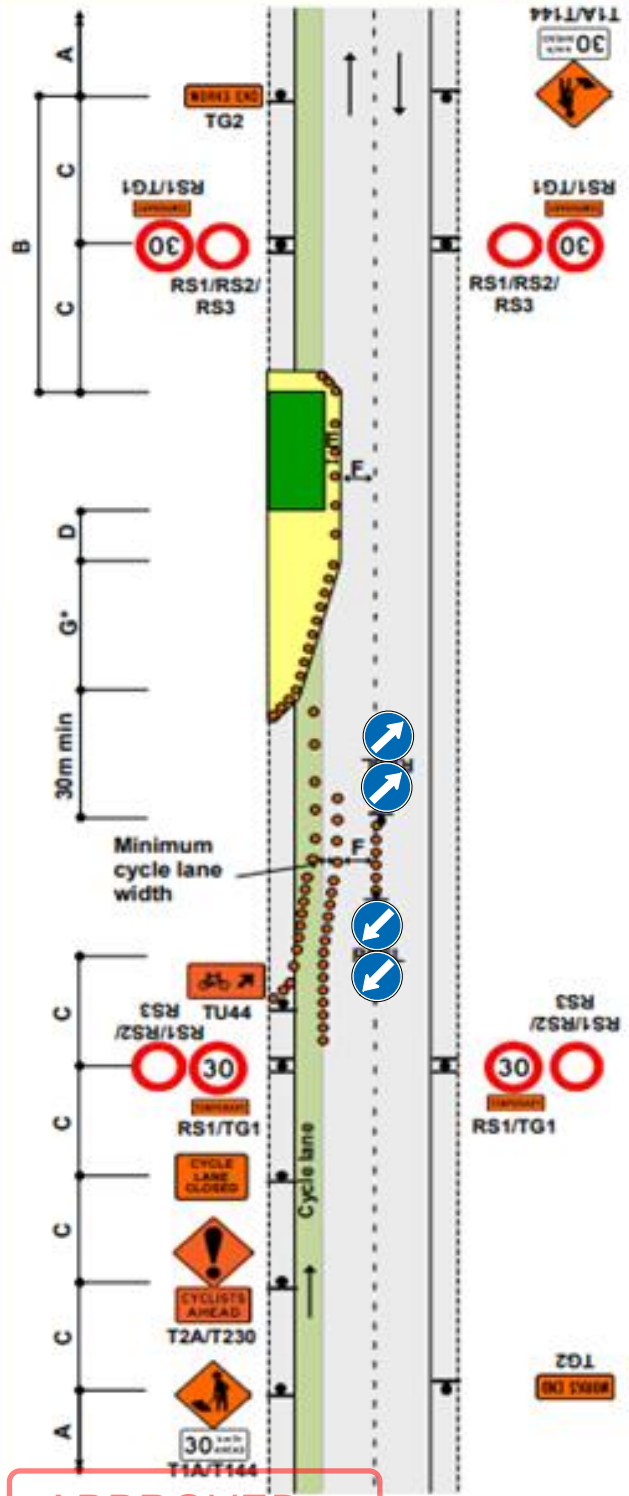
Notes

1. Only use this TMD if there is insufficient width to fit a replacement cycle lane
2. Minimum cycle lane width must be:
   - 1m - 50km/h or less
   - 1.5m - 60km/h or more
3. A minimum cycle lane width of 1.5m is required if the temporary cycle lane is uphill
4. Merge of cycle lane with live lane must be delineated
5. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of lateral shift

   G = Taper length in metres from the level 1 layout distance table
6. The T144 30km/h AHEAD sign is optional



TMC

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

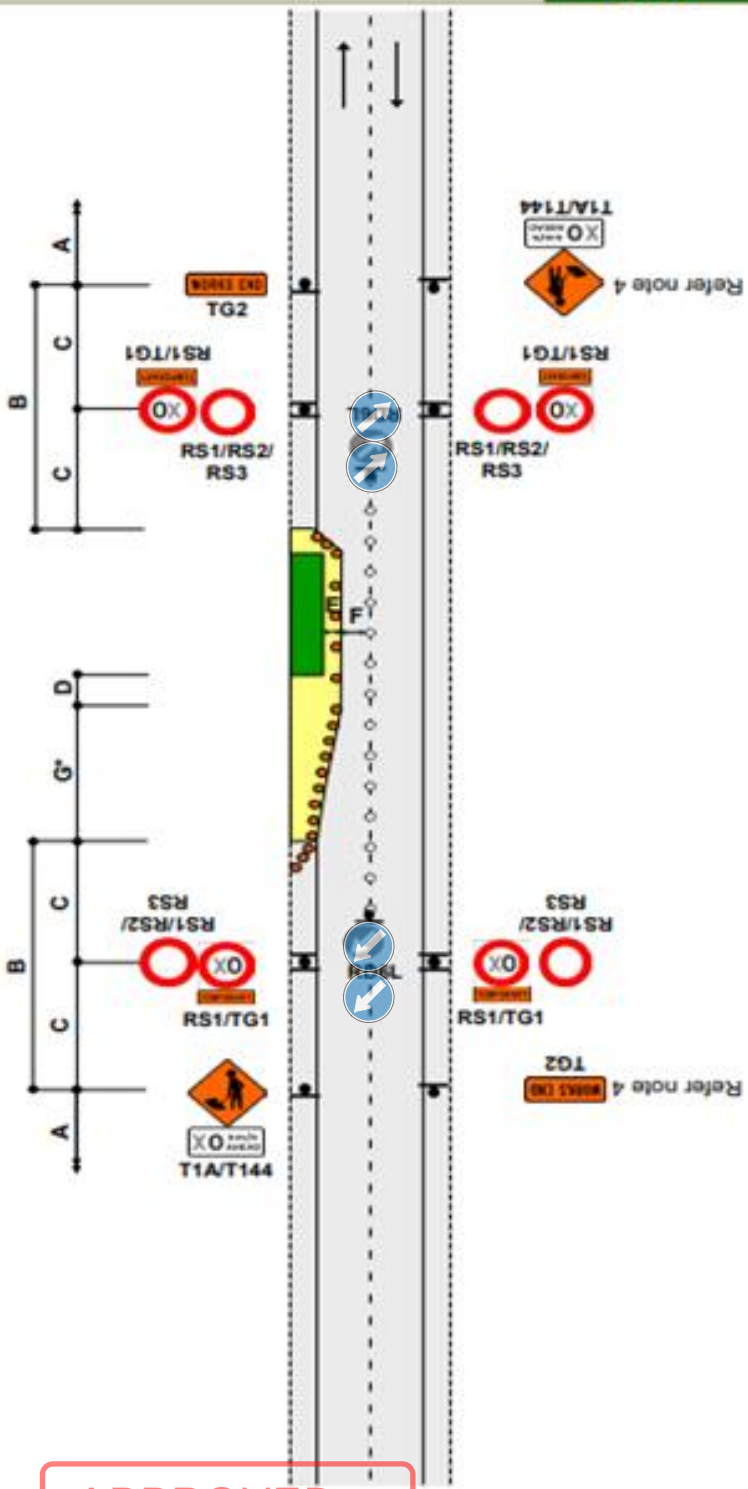
25 February 2022

TWO-WAY TWO-LANE ROAD
Traffic not crossing road centre

F2.11
Level 1

Notes

1. *Calculation of taper length for lateral shift of less than 3.5m is:
   W x G
   3.5
   W = Width of lateral shift
   G = Taper length in metres from the level 1 layout distance table
2. If traffic likely to cross the centreline, place cones on the centreline with RD6L signs at each end
3. Use TSLs if required by TSL decision matrix
4. If TSLs not required, the T1A and TG2 signs on the right hand side of the road are also not required
5. The T144 X0km/h AHEAD sign is optional



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD
Traffic not crossing road centre
Signs on median

F2.12
Level 1

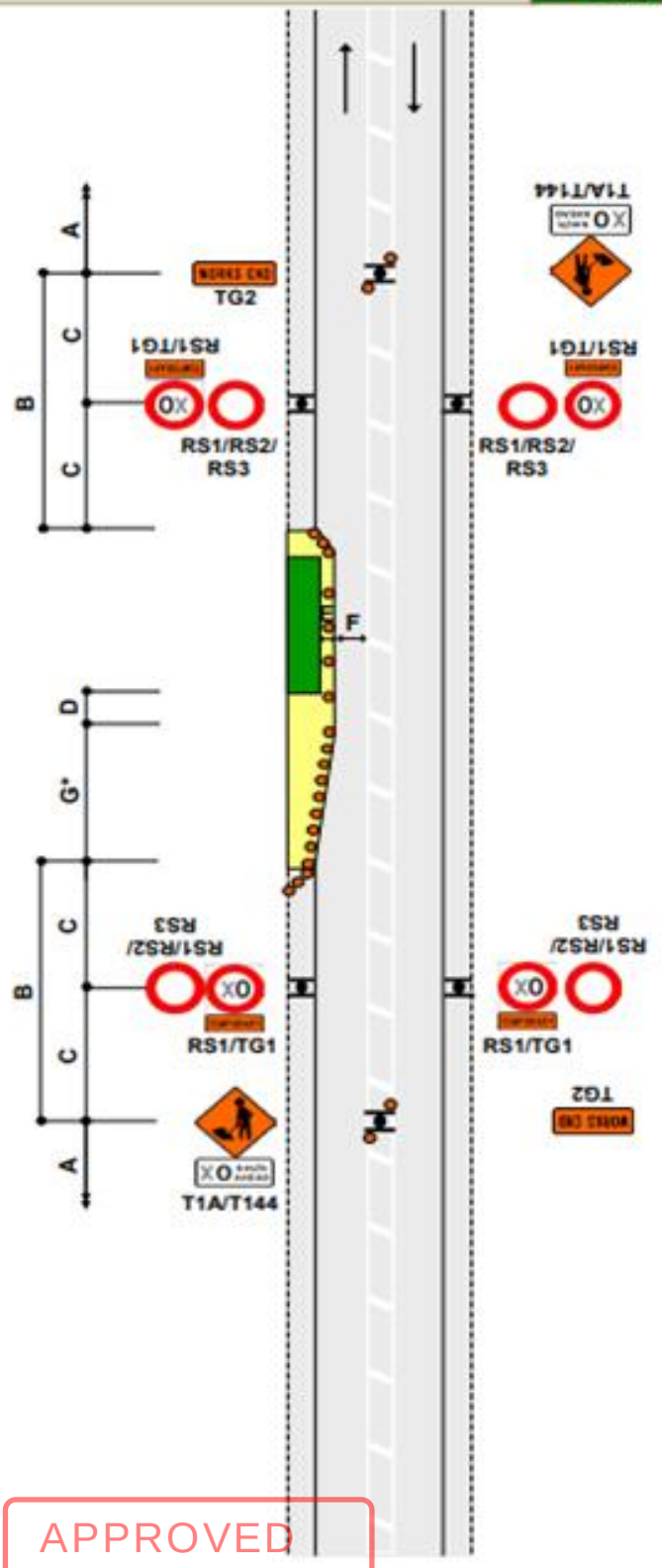
Notes

1. Use this diagram if signs will not be visible on left-hand side of road, or if it is safer to place signs on median and this will not interfere with turning traffic movements
2. Where a median exists which is more than 2m wide, the signs may be positioned on the median. Signs must be placed back-to-back unless on a solid median
3. Where there is a solid median, signs are not required in the opposing direction
4. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of lateral shift

   G = Taper length in metres from the level 1 layout distance table
5. Use TSLs if required by TSL decision matrix
6. The T144 X0km/h AHEAD sign is optional



TMC

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD

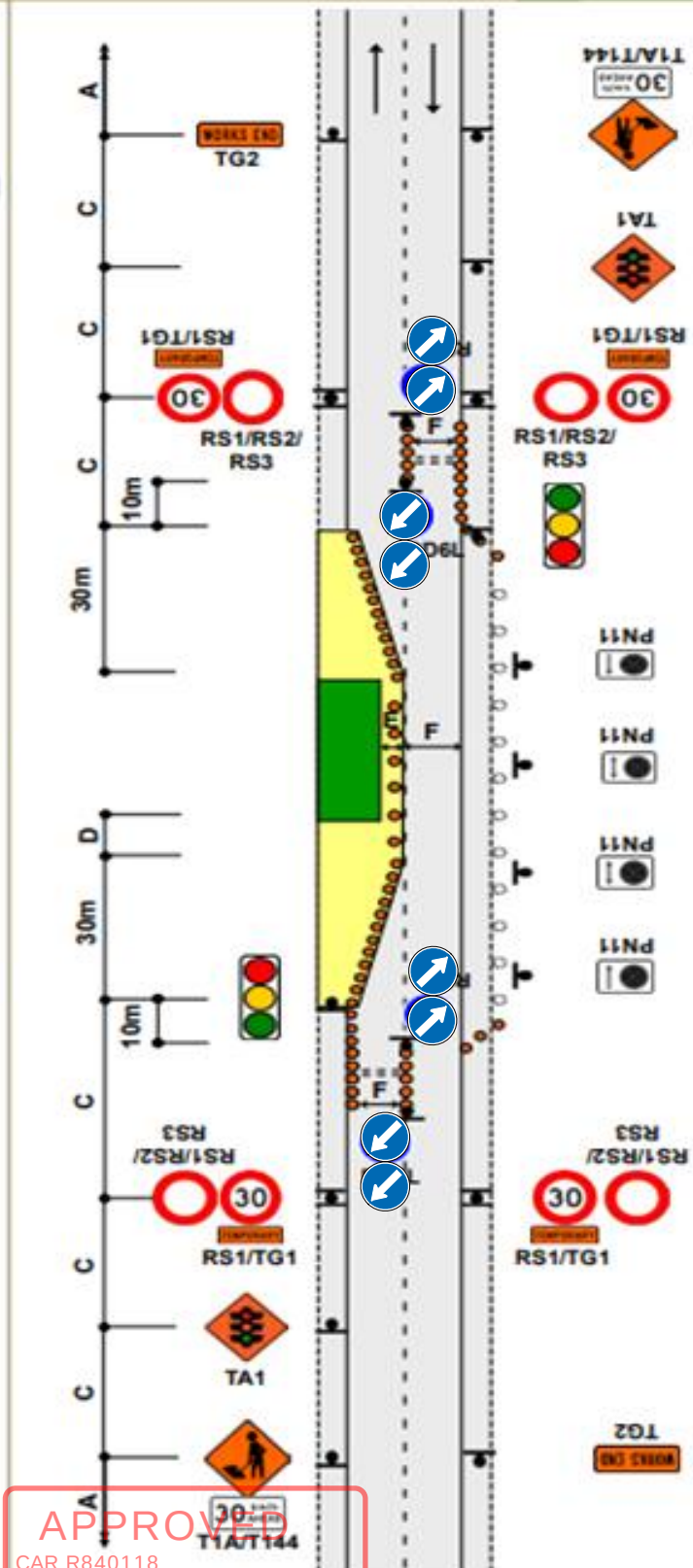
Single-lane alternating flow
Portable traffic signals

F2.17
Level 1

Notes

1. Provide details of make and model of portable traffic signals in the TMP
2. Install temporary limit lines (must be able to be removed upon completion) or use RP61/RP62 signs

3. Approved temporary speed humps may also be used. Consider use of MTC while speed humps are installed
4. A 30m return taper at the end of the closure is mandatory
5. Cones are required on edge of the temporary lane opposite closure if road is not well defined
6. Extend or place extra advance warning signs towards on-coming traffic beyond any expected traffic queues
7. Use PN11 No Stopping signs, if necessary
8. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
9. The T144 30km/h AHEAD sign is optional



TMC

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD
Traffic crossing road centre
Two lane diversion

F2.13
Level 1

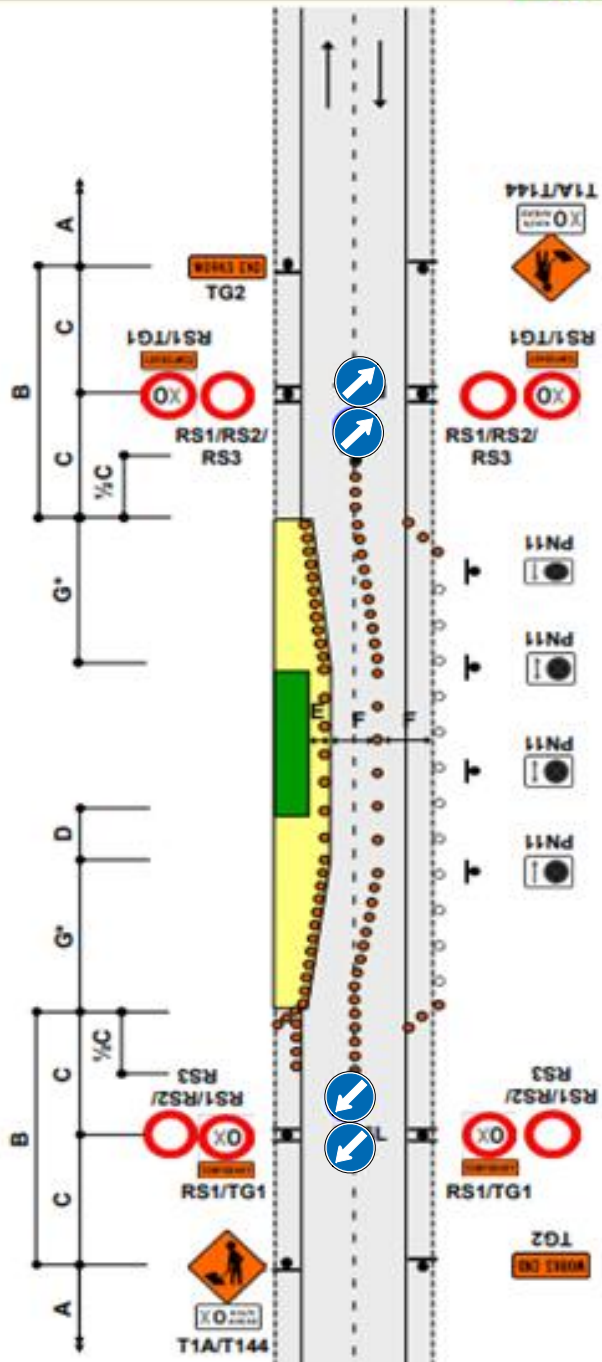
Notes

1. Cones are required on edge of the temporary lane opposite closure if road is not well defined
2. Return taper at end of closure may be shortened
3. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of lateral shift

   G = Taper length in metres from the level 1 layout distance table
4. To allow heavy vehicles to manoeuvre, cones in the channel must be offset by at least 10m where the direction changes. Refer C8.2.12
5. Use PN11 No Stopping signs, if necessary
6. Use TSLs if required by TSL decision matrix
7. The T144 X0km/h AHEAD sign is optional



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

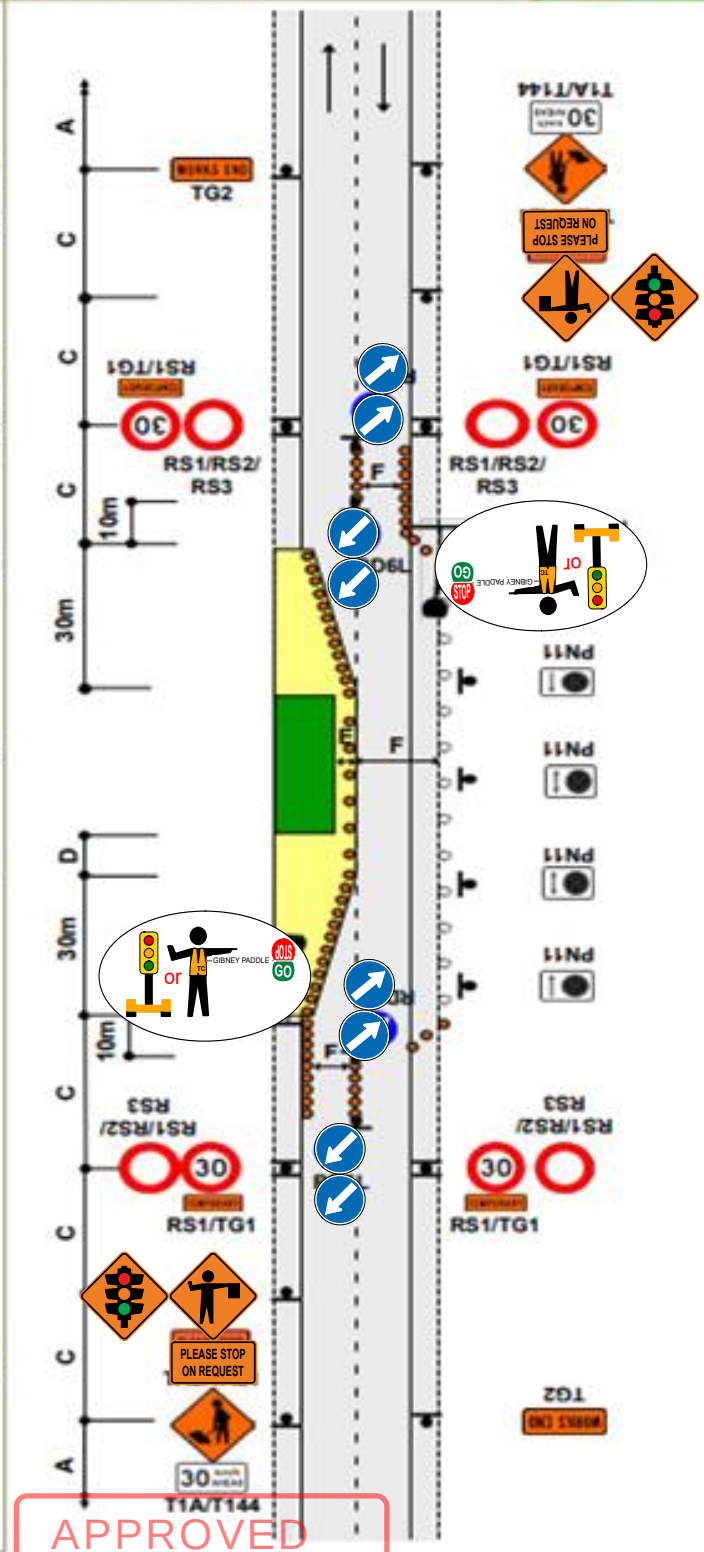
25 February 2022

TWO-WAY TWO-LANE ROAD
Single-lane alternating flow
Manual traffic control (STOP/GO or STOP/SLOW)

F2.14
Level 1

Notes

1. Extend or place extra advance warning signs towards on-coming traffic beyond any expected traffic queues
2. A 30m return taper at the end of the closure is mandatory
3. Cones are required on edge of the temporary lane opposite closure if road is not well defined
4. To allow heavy vehicles to manoeuvre, cones in the channel must be offset by at least 10m where the direction changes. Refer C8.2.12
5. Use PN11 no stopping signs, if necessary
6. MTC with RP4/RP41 STOP/GO or RP4/RP42 STOP/SLOW paddle on road shoulder located between 1st and 2nd cone in the cone threshold closest to the working space
7. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
8. Refer to C10.2.3 MTC essentials for further information
9. Delays cannot exceed the time approved by the RCA (normally 5 to 10 minutes)
10. The T144 30km/h AHEAD sign is optional



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

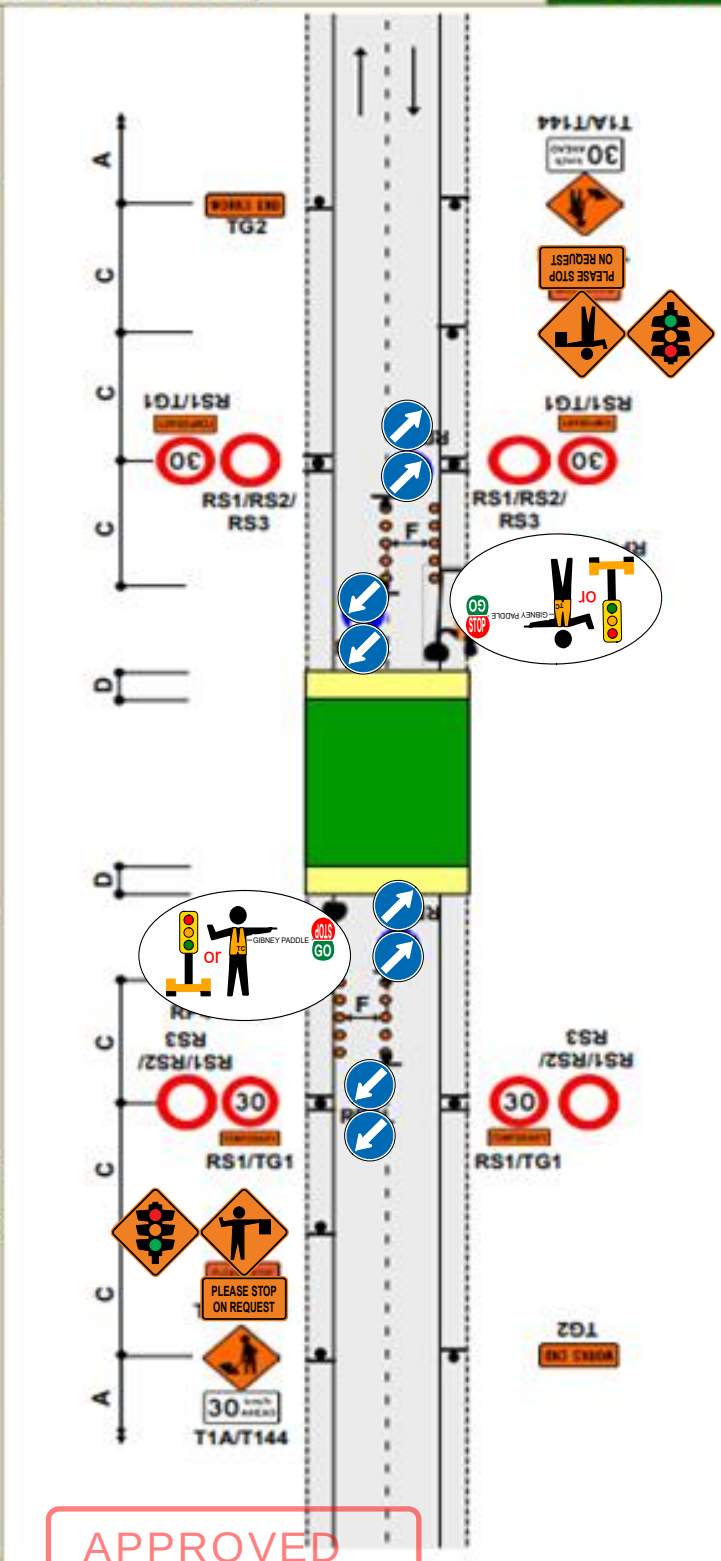
25 February 2022

TWO-WAY TWO-LANE ROAD
All traffic stopped temporarily
Manual traffic control (STOP/GO or STOP/SLOW)

F2.15
Level 1

Notes

1. Closure period not to exceed the limit set or approved by the RCA
2. Extend advance warning signs towards on-coming traffic beyond any expected traffic queues
3. MTC with RP4/RP41 STOP/GO or RP4/RP42 STOP/SLOW paddle on road shoulder located between 1st and 2nd cone in the cone threshold closest to the working space
4. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
5. MTCs must show same message to oncoming traffic (eg STOP/STOP or GO/GO)
6. Refer to C10.2.3 MTC essentials for further information
7. When road users are passing the working space in alternating flow, all construction equipment must be stopped on same side of the road if there is no separation from the live lane
8. Where damage is likely to occur to passing traffic eg during sealing, traffic must be stopped in both directions
9. The T144 X0km/h AHEAD sign is optional

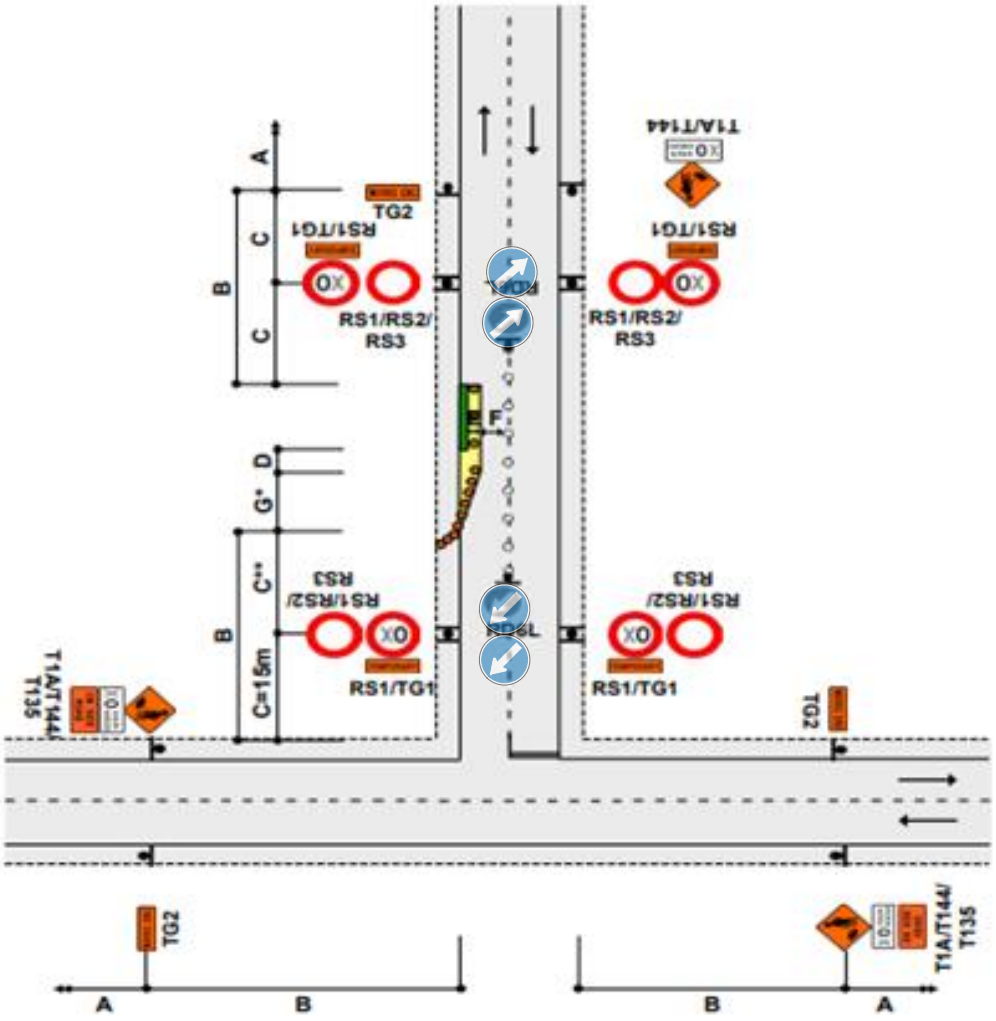


APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Road works on side road after intersection - TSL on side road
Traffic not crossing road centre

F2.19
Level 1



Notes

1. Sign spacing of TSL at the intersection can be reduced as per the table shown below
2. Where minimum dimensions cannot be achieved TMD F2.20 is to be used
3. *Calculation of taper length for lateral shift of less than 3.5m is:
   $\frac{W \times G}{3.5}$ W = Width of lateral shift
   G = Taper length in metres from the level 1 layout distance table
4. If traffic likely to cross the centreline, place cones on the centreline with RD6L signs at each end
5. Use TSLs as required by TSL decision matrix
6. The T144 30km/h AHEAD sign is optional

Speed (PSL)	Intersection to TSL	C** TSL to taper	Total
<50km/h	15m	15m	30m
60km/h	15m	25m	40m
>70km/h	15m	40m	55m

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD
In centre of road with median, signs on median

J2.18a
Level 1

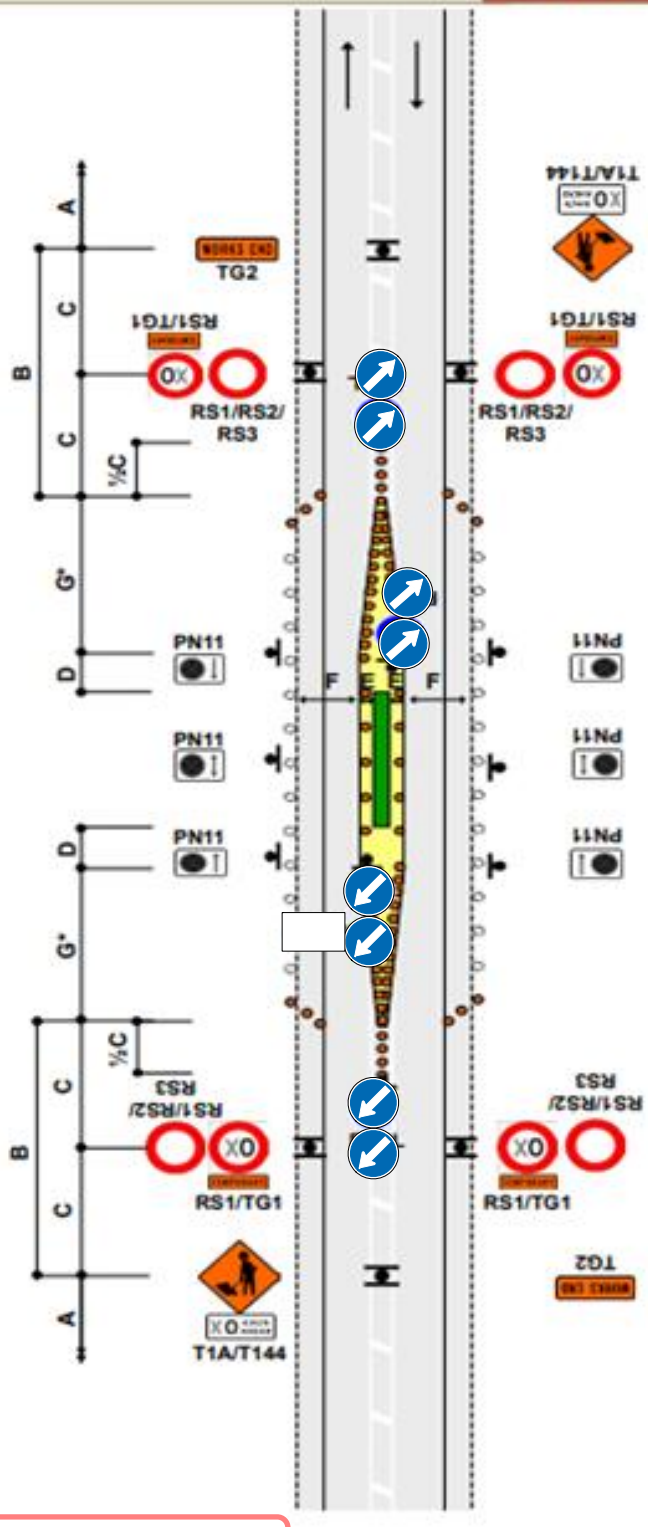
Notes

1. Use this diagram if signs will not be visible on left-hand side of road, or if it is safer to place signs on median and this will not interfere with turning traffic movements
2. Where a median exists which is more than 1.5m wide, the signs may be positioned on the median. Signs must be placed back-to-back unless on a solid median
3. Where there is a solid median, signs are not required in the opposing direction
4. Cones are required on edge of the temporary lane opposite closure if road is not well defined
5. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of lane

   G = Taper length in metres from the level 1 layout distance table
6. Use PN11 No Stopping signs, if necessary
7. Use TSLs if required by TSL decision matrix
8. The T144 X0km/h AHEAD sign is optional



TMC

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD
Work in centre of road

F2.18
Level 1

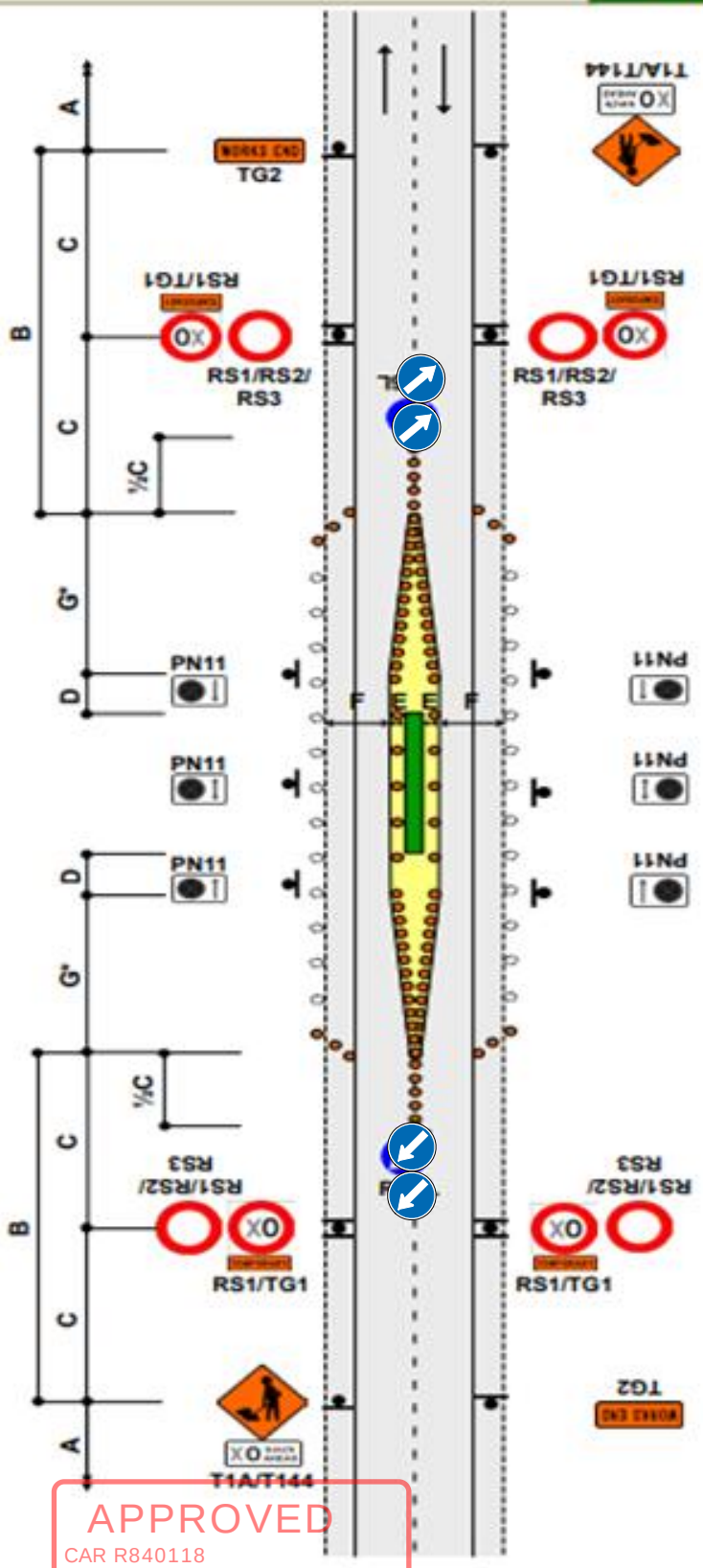
Notes

1. Cones are required on edge of the temporary lane opposite closure if road is not well defined
2. *Calculation of taper length for lateral shift of less than 3.5m is:

   $$\frac{W \times G}{3.5}$$

   W = Width of lateral shift

   G = Taper length in metres from the level 1 layout distance table
3. Use PN11 no stopping signs, if necessary
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional

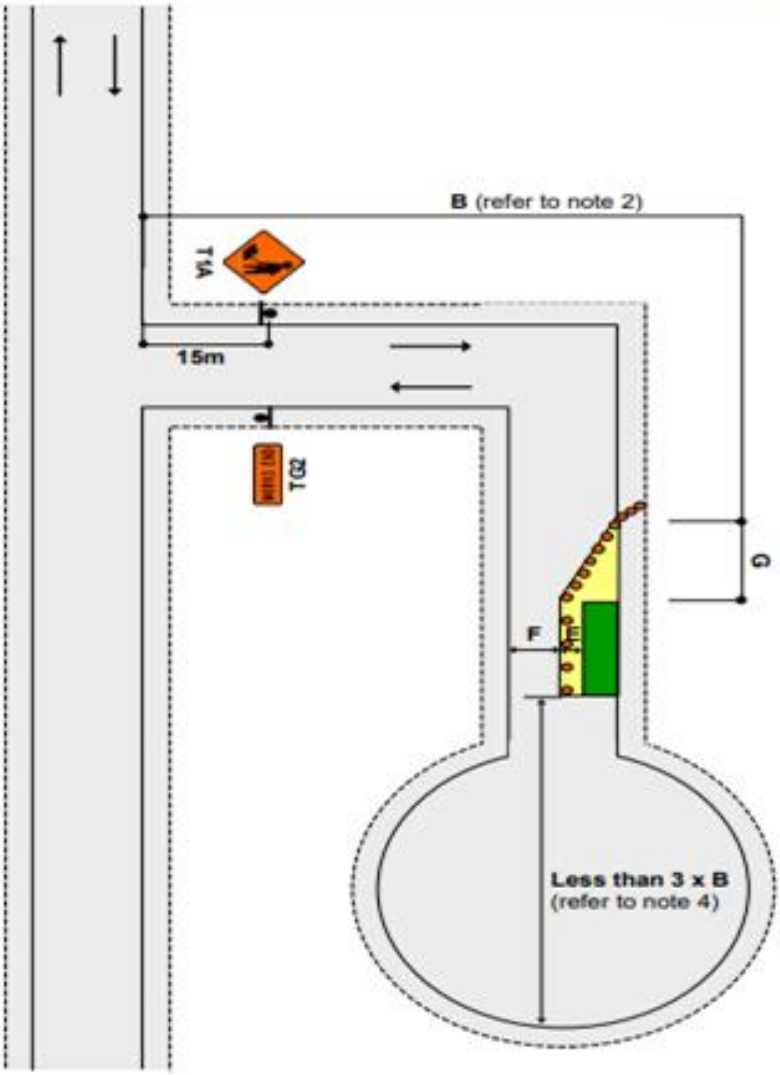


APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD
Short no exit road

J2.16a
Level 1



Notes

1. T1A sign to be placed at least 15m from the intersection
2. Where less than B, T1A/T135 and TG2 signs required on main road
3. Working space to be less than 100m
4. Signage is not required past the worksite where there is less than 3 x B from the end of the working space to the end of the road

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

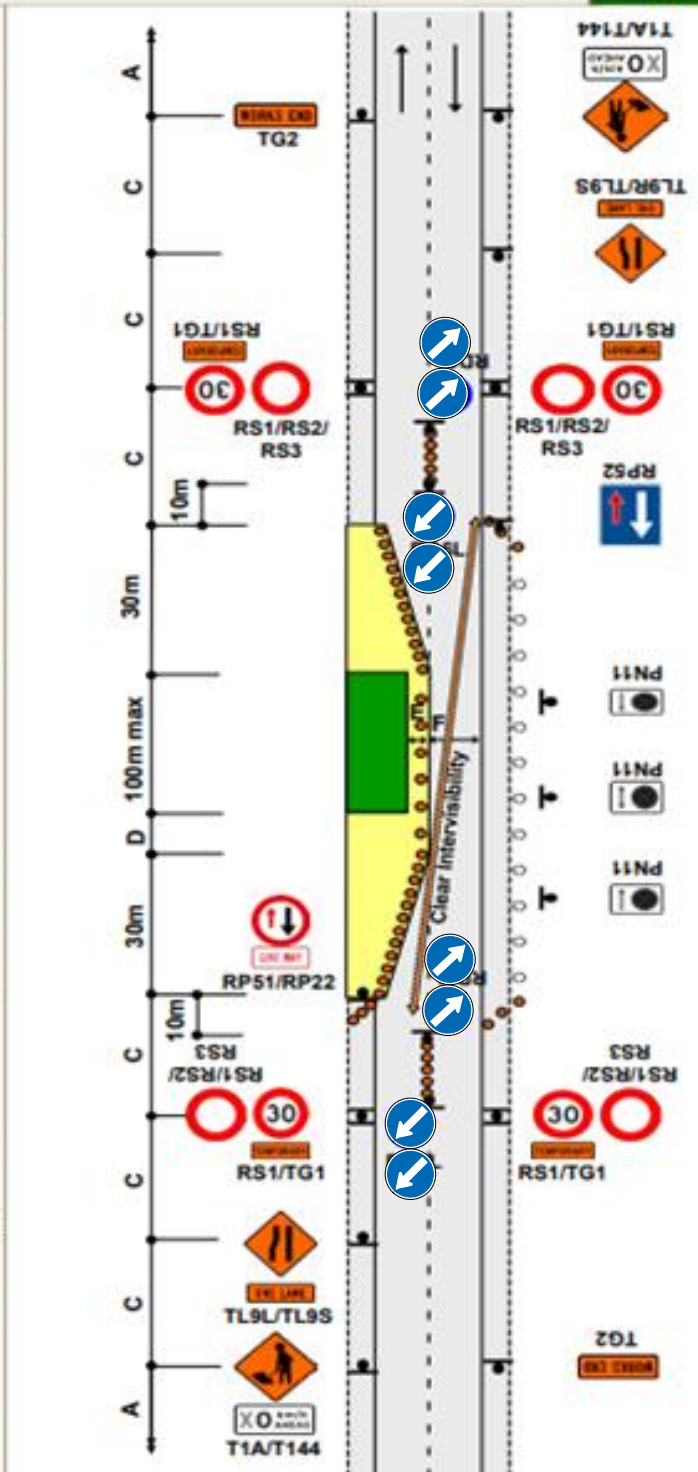
25 February 2022

TWO-WAY TWO-LANE ROAD
Single-lane (traffic volume less than 1000vpd - 80vph)
Give way control

F2.16
Level 1

Notes

1. The RP51/RP22 and RP52 controls must be placed in the following priority order:
   - downhill traffic must give way to uphill traffic
   - traffic that has to cross into the opposing lane gives way, however where visibility for this vehicle is marginal the contractor may require the other vehicle with better visibility to give way
2. Intervisibility is required as indicated on diagram. This means that a vehicle at one sign is able to see whether the way ahead is clear
3. A 30m return taper at the end of the closure is mandatory
4. Use PN11 No Stopping signs, if necessary
5. Cones are required on edge of the temporary lane opposite closure if road is not well defined
6. The T144 X0km/h AHEAD sign is optional

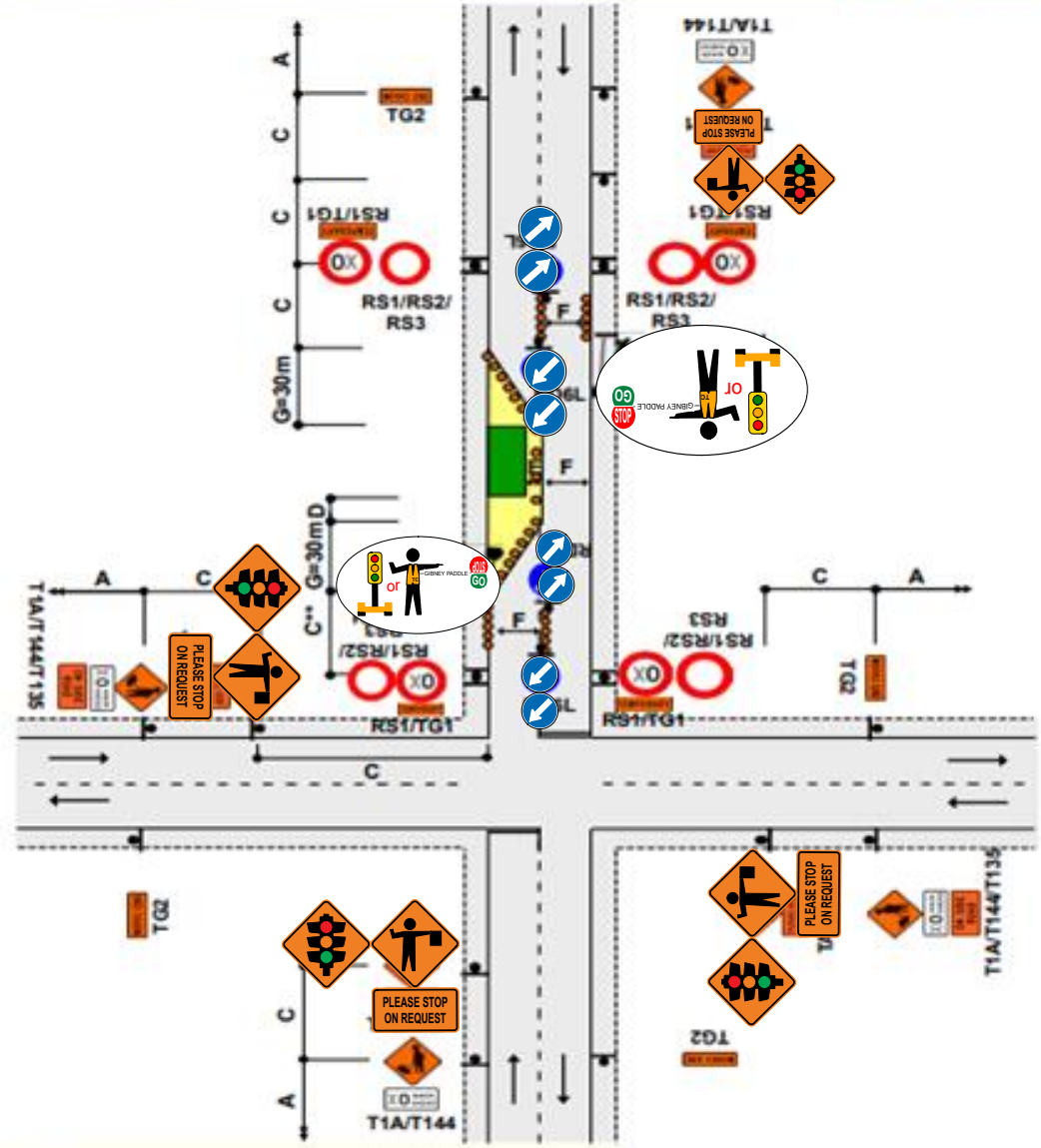


APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Major obstruction close to intersection
Allows shorter sign spacings and MTC operation

J2.19a
Level 1



Notes

1. Sign spacing of TSL at the intersection can be reduced as per the table shown
2. This diagram may be used at a T intersection by removing any one of the roads
3. MTC at intersection to be in charge of MTC operation
4. Use TSLs as required by TSL decision matrix
5. The T144 30km/h AHEAD sign is optional

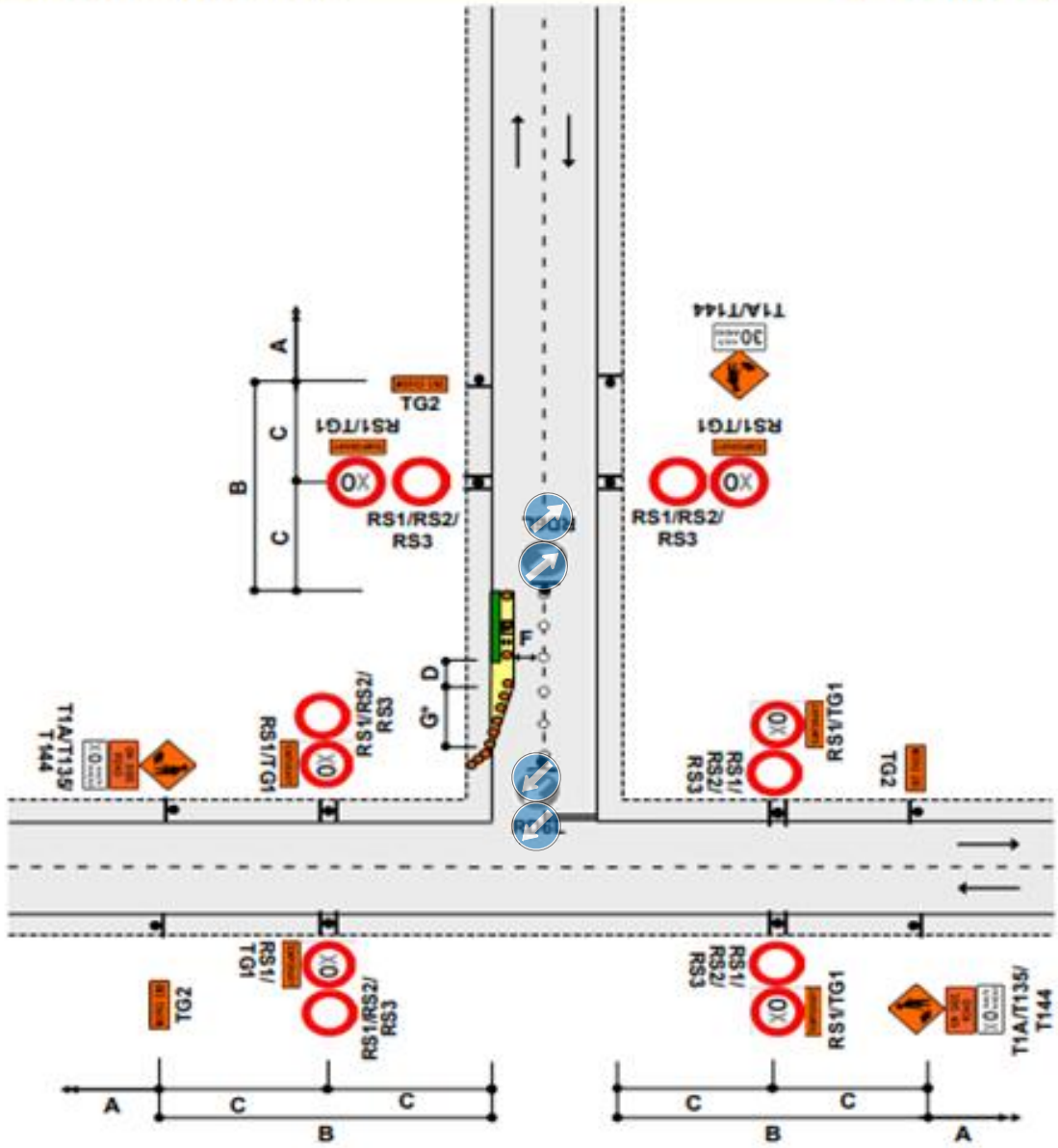
C**	DISTANCE		
Speed (PSL)	Intersection to TSL	TSL to taper	Total
<50km/h	15m	15m	30m
60km/h	15m	25m	40m
>70km/h	15m	40m	55m

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Road works on side road after intersection - TSL on main road
Traffic not crossing road centre

F2.20
Level 1



Notes

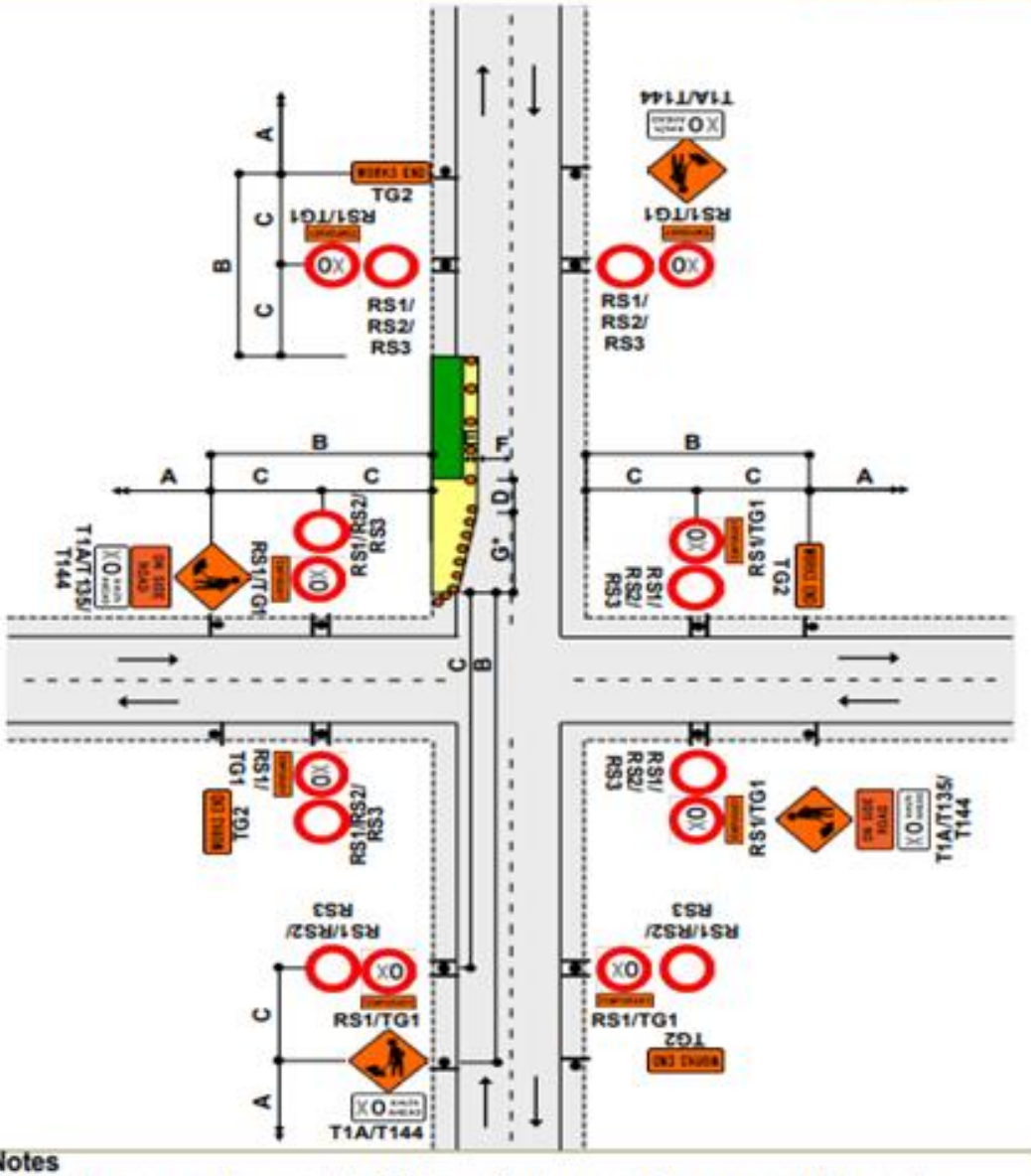
1. *Calculation of taper length for lateral shift of less than 3.5m is:
   $\frac{W \times G}{3.5}$ W = Width of lateral shift
   G = Taper length in metres from the level 1 layout distance table
2. If traffic likely to cross the centreline, place cones on the centreline with RD6L signs at each end
3. Use TSLs as required by TSL decision matrix
4. The T144 X0km/h AHEAD sign is optional

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
After intersection - Traffic not crossing road centre

J2.20a
Level 1



Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. Taper length may be reduced by adding a RD6R sign
3. *Calculation of taper length for lateral shift of less than 3.5m is:

$$\frac{W \times G}{3.5}$$

W = Width of Shoulder G = Taper length in metres from the level 1 layout distance table

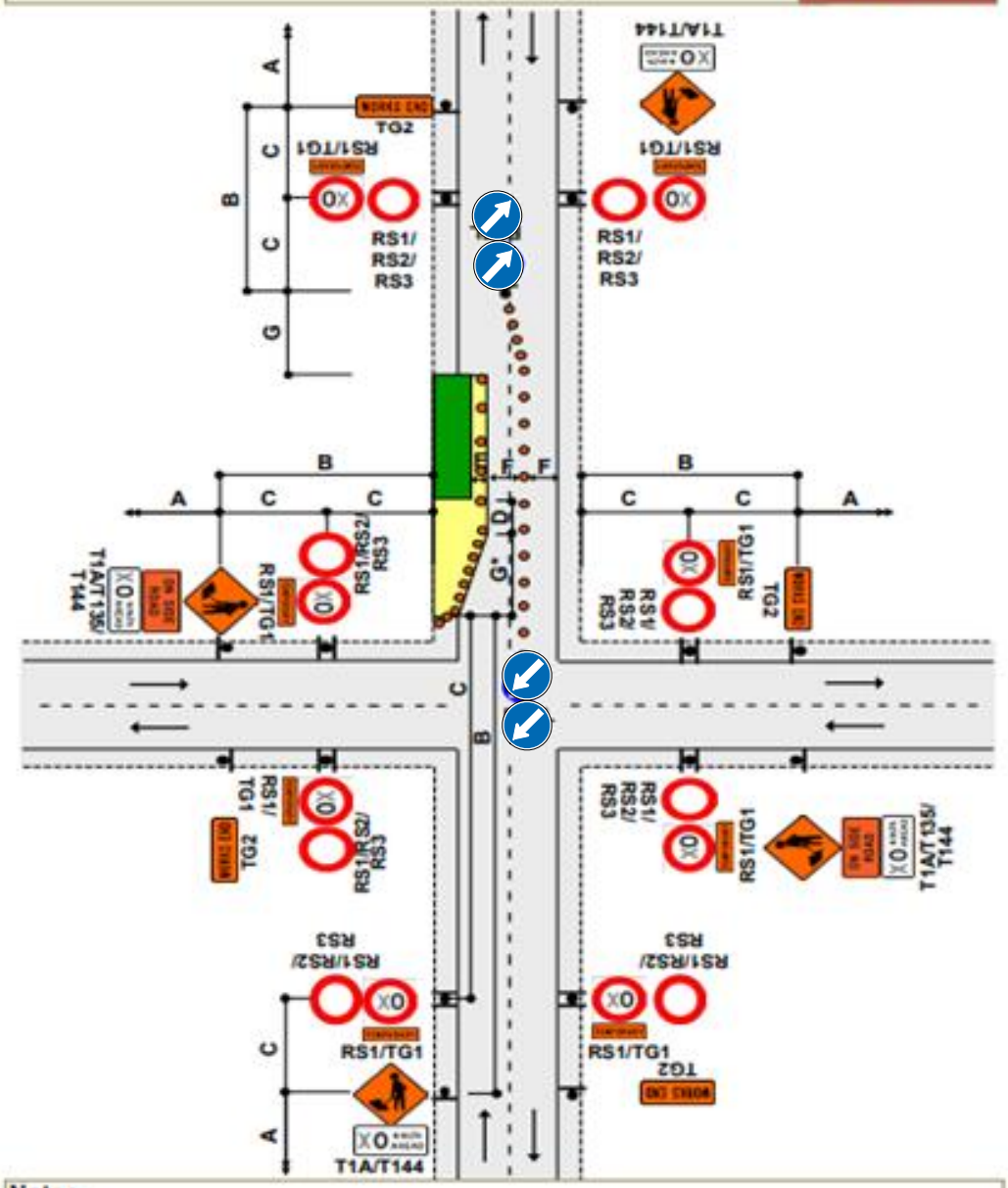
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
After intersection - Traffic crossing road centre

J2.20b
Level 1

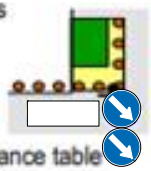


Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. Taper length may be reduced by adding a RD6R sign
3. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of Shoulder G = Taper length in metres from the level 1 layout distance table
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional



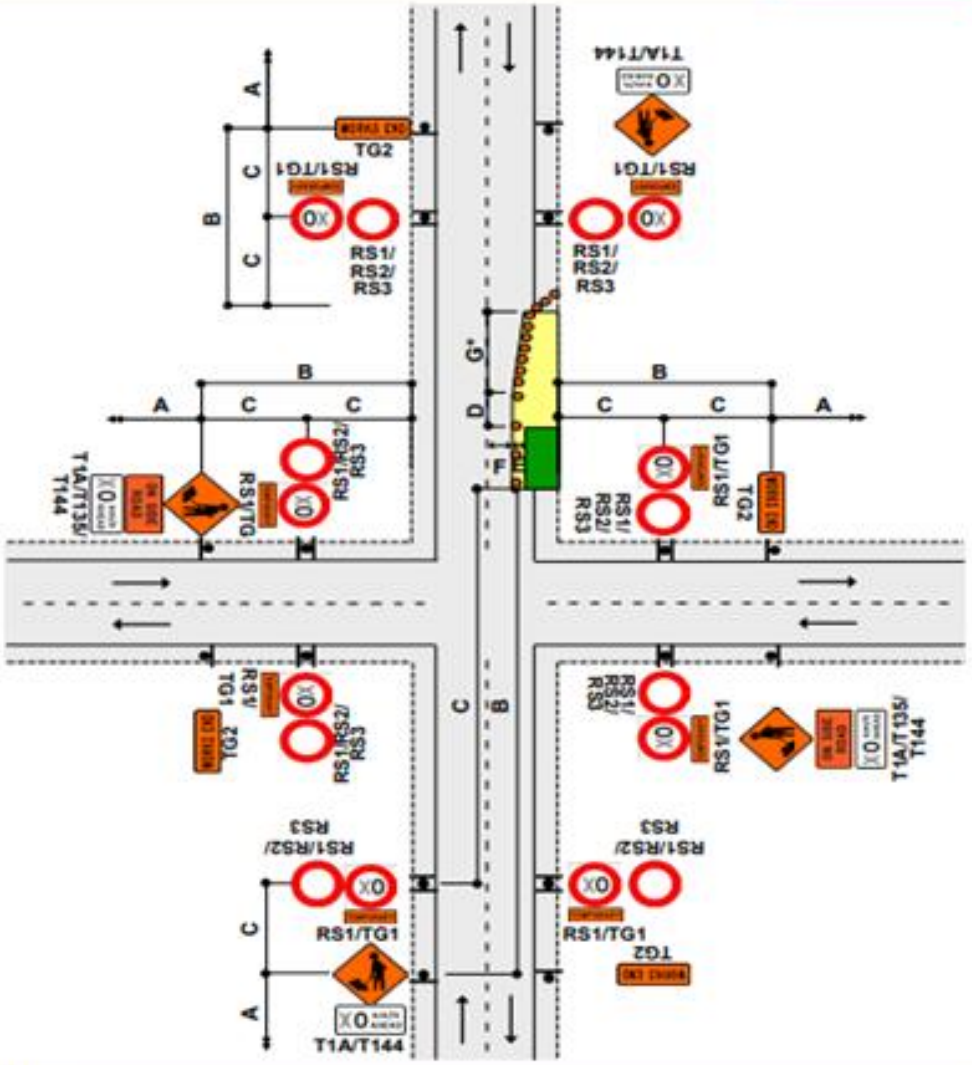
APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

STATIC OPERATIONS

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Before intersection - Traffic not crossing road centre

J2.20c
Level 1

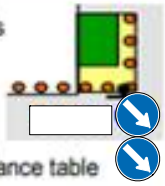


Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. Taper length may be reduced by adding a RD6R sign
3. *Calculation of taper length for lateral shift of less than 3.5m is:

   $\frac{W \times G}{3.5}$

   W = Width of Shoulder G = Taper length in metres from the level 1 layout distance table
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional

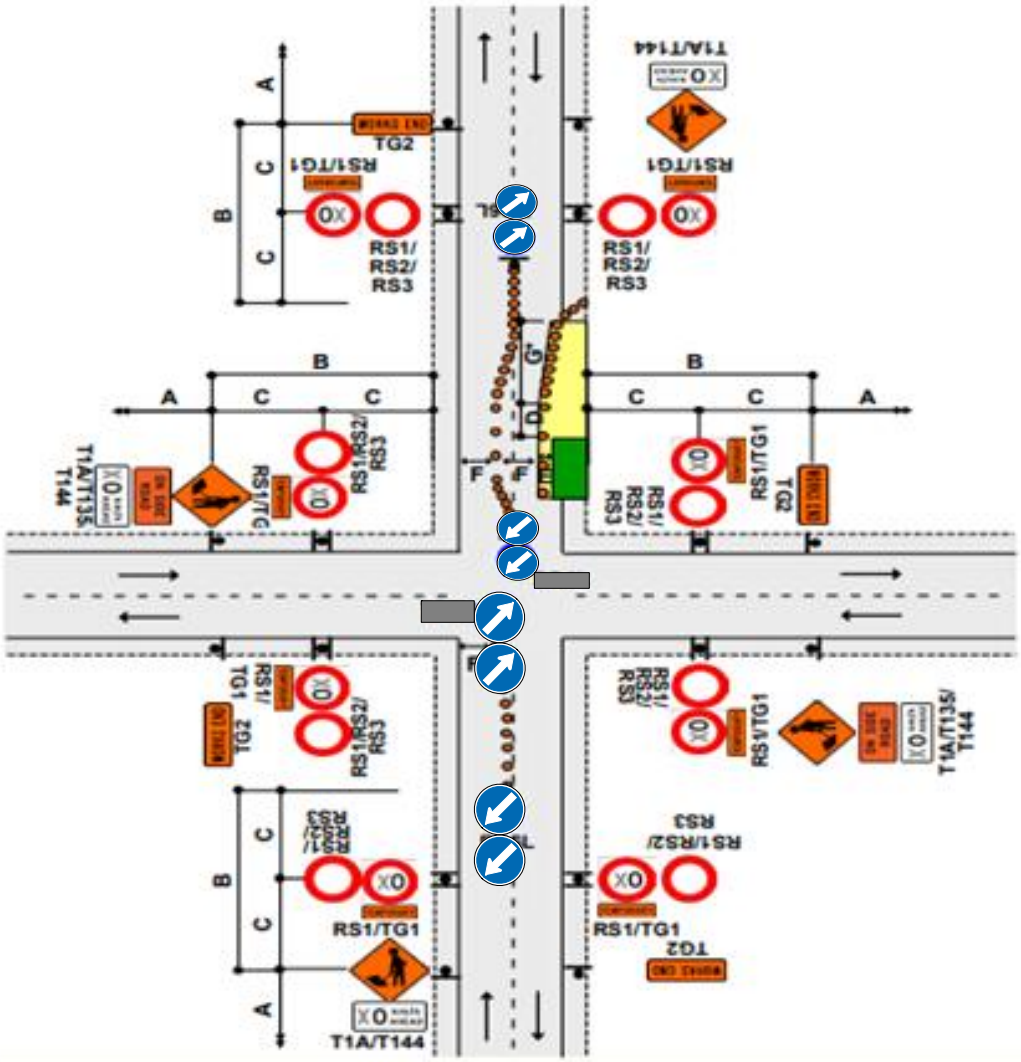


APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Before intersection - Traffic crossing road centre

J2.20d
Level 1



Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. *Calculation of taper length for lateral shift of less than 3.5m is:

   $$\frac{W \times G}{3.5}$$

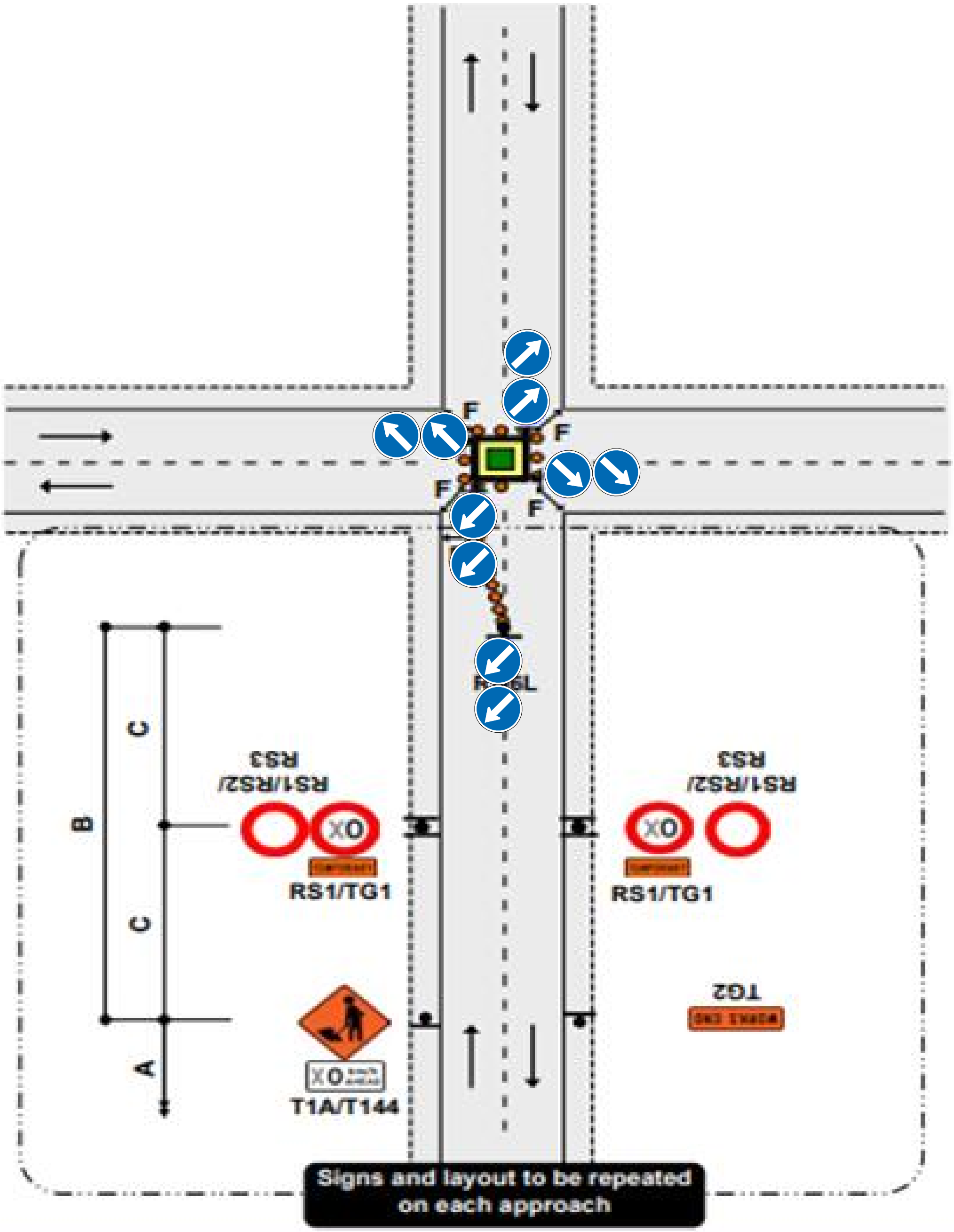
   W = Width of lane G = Taper length in metres from the level 1 layout distance table
3. Install shifting taper to move road users into the new alignment
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Work in middle of intersection

F2.21
Level 1



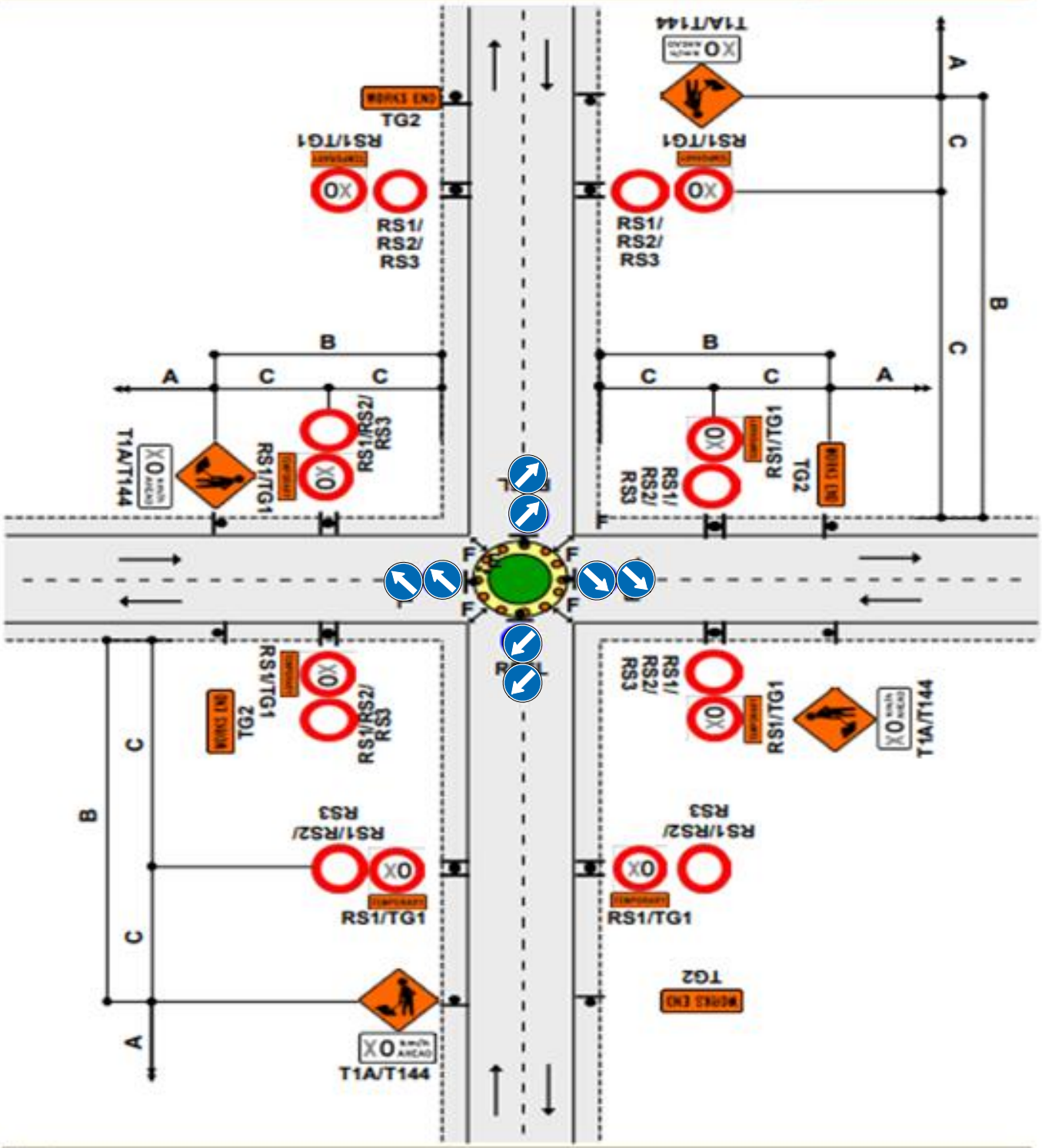
Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. Signs and layout shown in the box at the bottom of the diagram is to be repeated on each approach
3. RD6L signs are not required at an existing roundabout
4. Cone tapers are optional at existing roundabouts
5. Lane widths, F, may need to be increased to allow for turning movements of larger vehicles
6. Use TSLs if required by TSL decision matrix
7. The T144 X0km/h AHEAD sign is optional

APPROVED
STMS Number 87065
South Wairarapa District Council
25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Work on existing roundabout

J2.21a
Level 1



Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. RD6L signs not required at an existing roundabout which already has RD6Ls
3. Lane widths, F, may need to be increased to allow for turning movements of larger vehicles
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional

TWO-WAY TWO-LANE ROAD - Road closures and detours

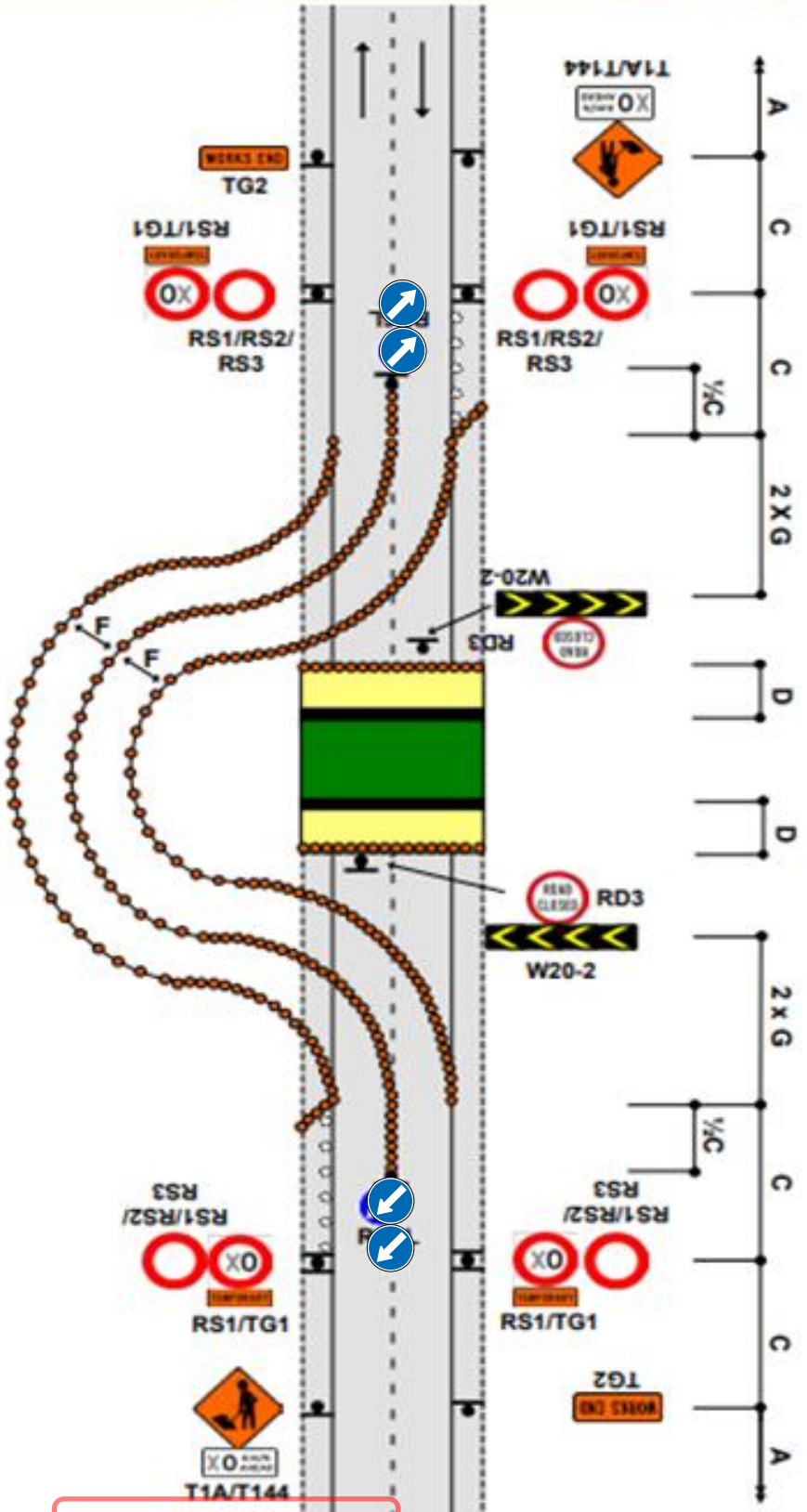
Road closure

Temporary route around a hazard or workspace

F2.23
Level 1

Notes

1. Use TSLs if required by TSL decision matrix
2. To allow heavy vehicles to manoeuvre, cones in the channel must be offset by at least 10m where the direction changes. Refer C8.2.12
3. On roads with a permanent speed limit of 100km/h, cones are required from the TSL to the taper if the speed is reduced by more than 30km/h
4. The T144 X0km/h AHEAD sign is optional



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

Call SWDC to approve before use

TWO-WAY TWO-LANE ROAD - Road closures and detours

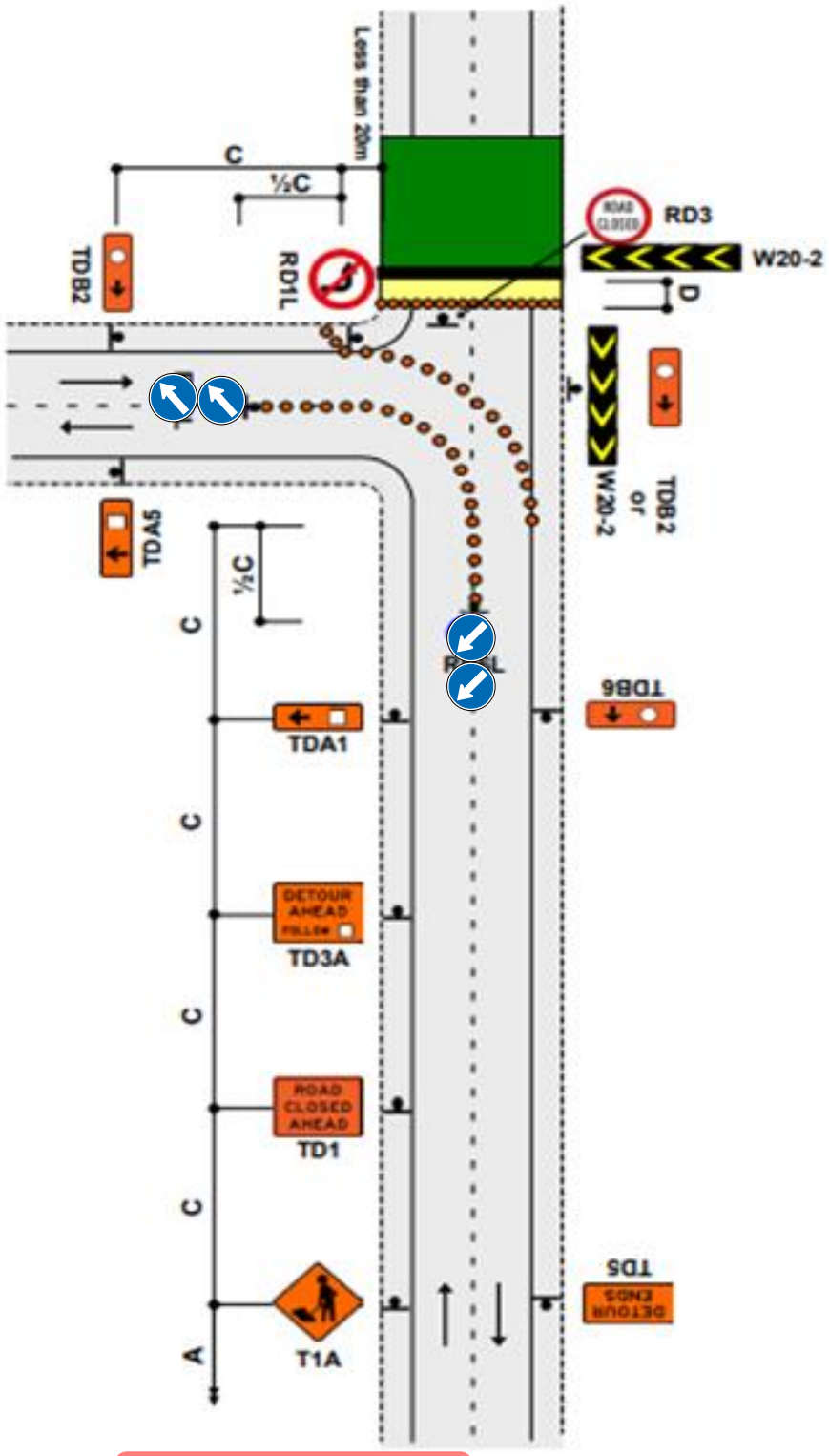
Road closure - detour route

Example

F2.24
Level 1

Notes

1. Block access to road with barricade
2. If a longer term site, use chevron sight board to direct traffic



APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

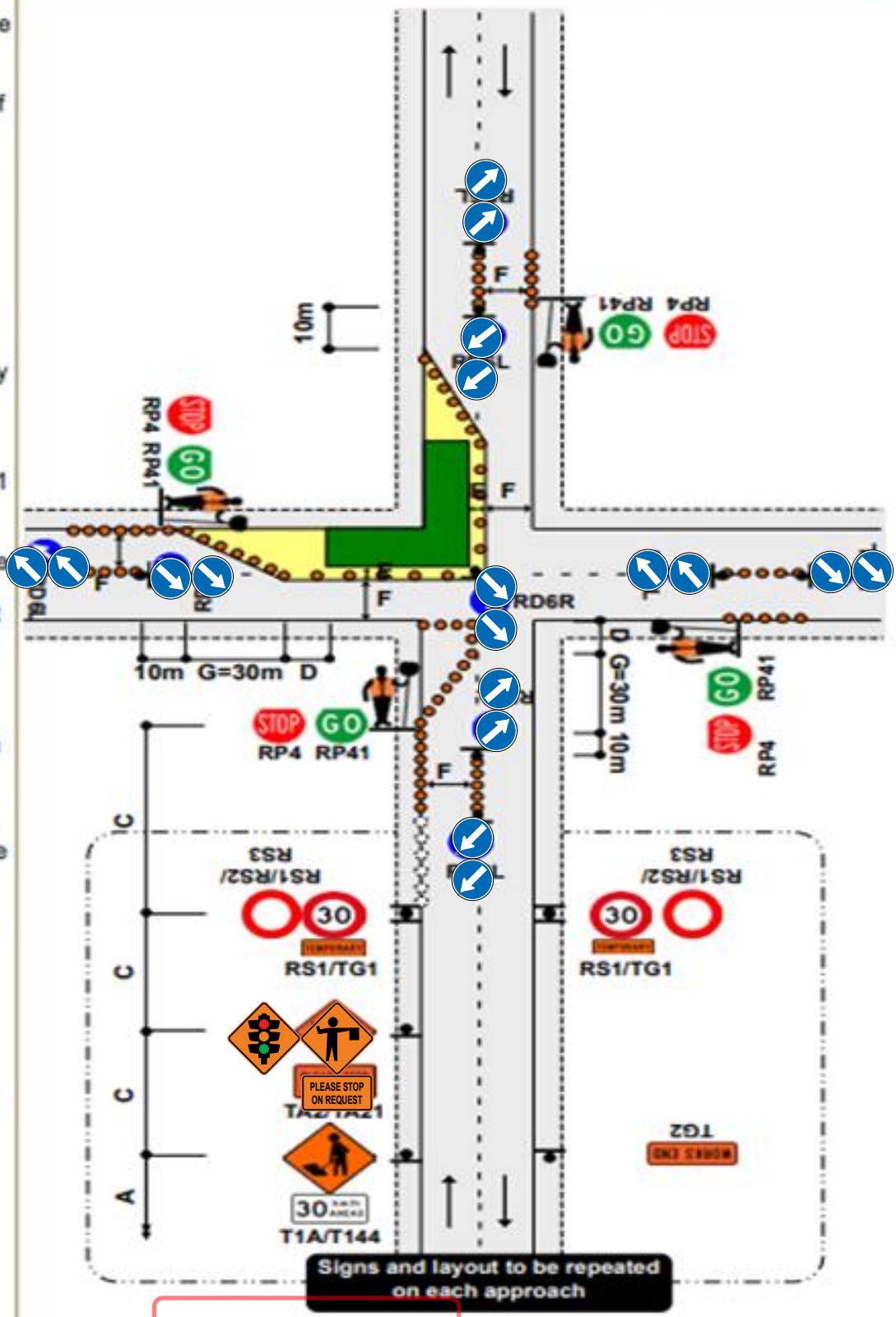
Call SWDC to approve before use

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
Closure at corner of an intersection
Manual traffic control (Stop/Go or Stop/Slow)

F2.22
Level 1

Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. Signs and layout shown in the box at the bottom of the diagram is to be repeated on each approach
3. A 30m return taper at the end of the closure is mandatory
4. Use PN11 no stopping signs, if necessary
5. MTC with RP4/RP41 STOP/GO or RP4/RP42 STOP/SLOW paddle on road shoulder located between 1st and 2nd cone in the cone threshold closest to the working space
6. Minimum 5 cones in cone threshold at:
   - 2.5m centres - less than 65km/h
   - 5m centres - more than 65km/h
7. Refer to C10.2.3 MTC essentials for further information
8. On roads with a permanent speed limit of 100km/h, cones are required from the TSL to the taper if the speed is reduced by more than 30km/h
9. The T144 30km/h AHEAD sign is optional



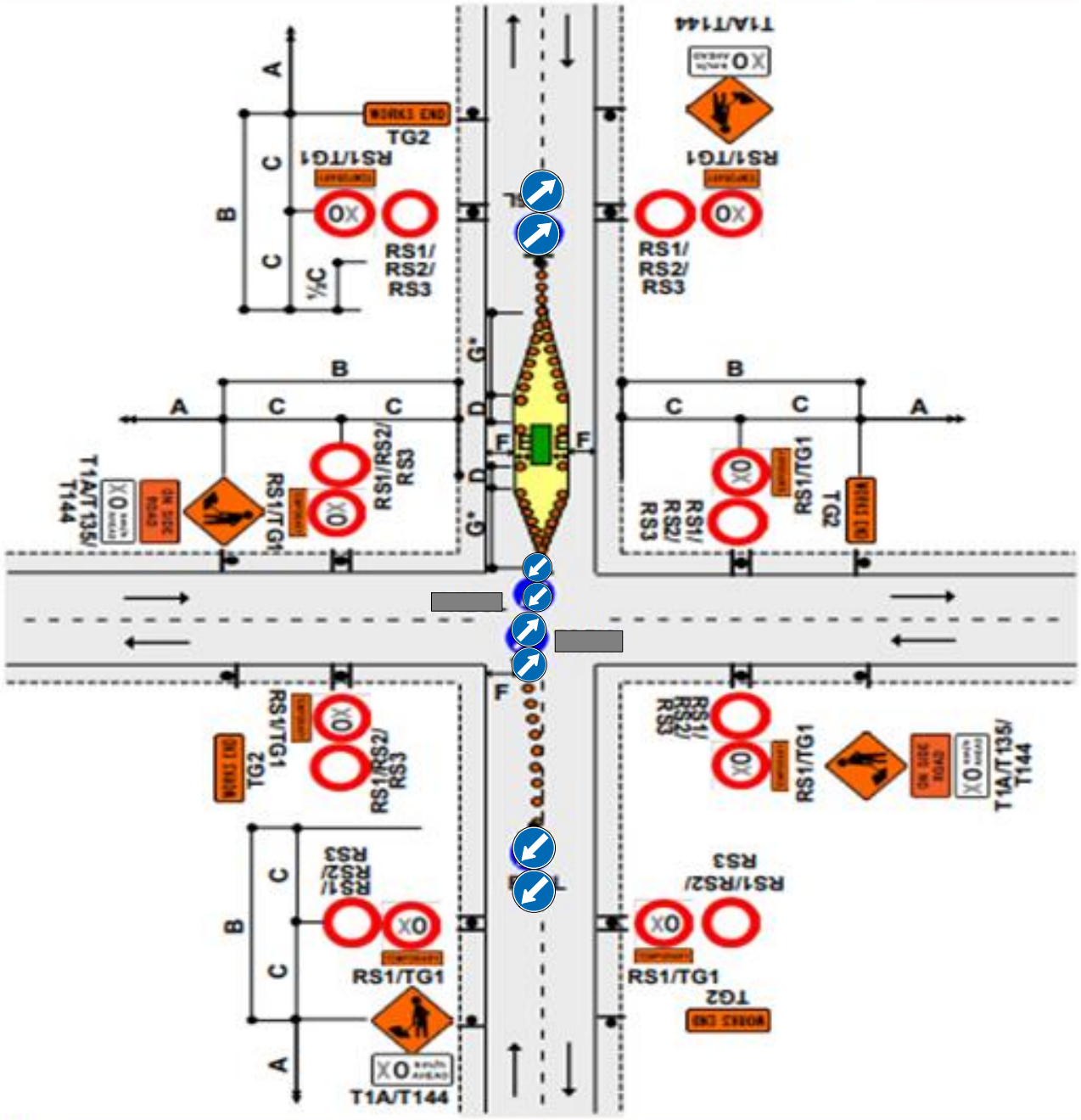
TMC

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022

TWO-WAY TWO-LANE ROAD - Intersection or roundabout
On median near intersection

J2.20e
Level 1



Notes

1. This diagram may be used at a T intersection by removing any one of the roads
2. *Calculation of taper length for lateral shift of less than 3.5m is:

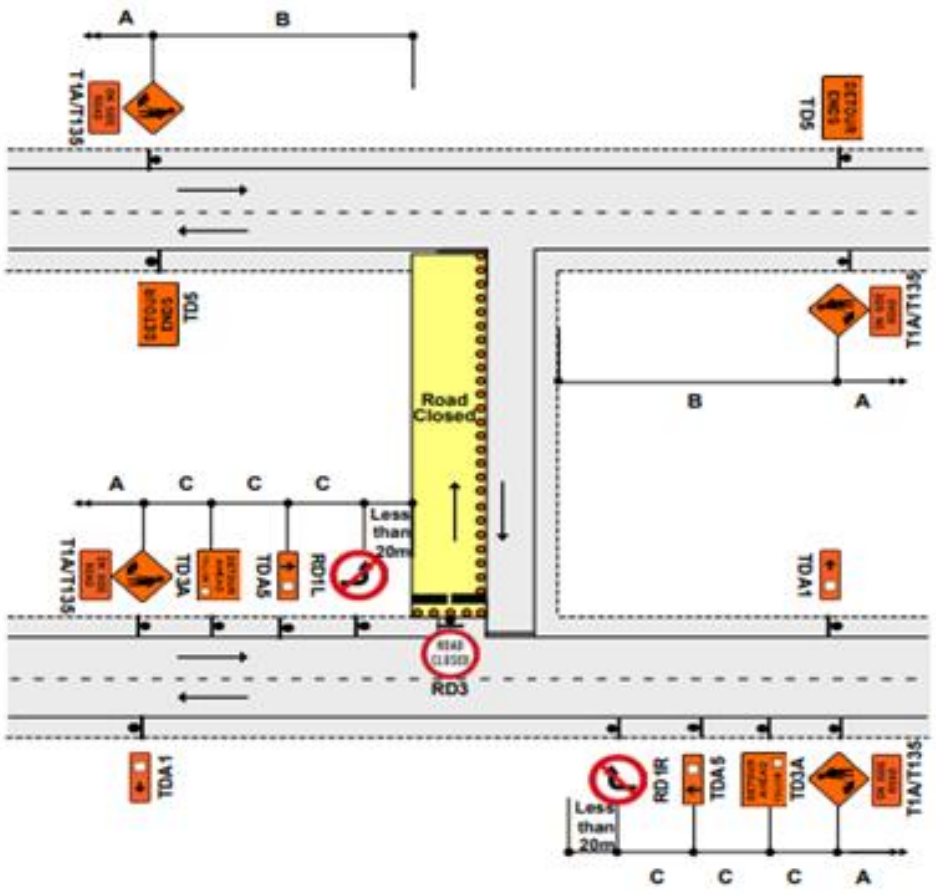
$$\frac{W \times G}{3.5}$$

   W = Width of lane G = Taper length in metres from the level 1 layout distance table
3. Install shifting taper to move road users into the new alignment
4. Use TSLs if required by TSL decision matrix
5. The T144 X0km/h AHEAD sign is optional

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council
25 February 2022

TWO-WAY TWO-LANE ROAD - Road closures and detours
Partial carriageway closure and detours - One way
Example

J2.25a
Level 1



Notes

1. Signpost all intersections to return diverted traffic back to normal/intended route:
   - Use TD3A, B, C route signs to indicate detour ahead
   - Use appropriate TD(A, B, C) 1, 2, 3, 4, 5, 6 route signs before each intersection
   - Use TD5 signs to advise end of detour
2. Detour route plan required with this layout

TMC

APPROVED
CAR R840118
Ben Turner
STMS Number 87065
South Wairarapa District Council

25 February 2022