

#### 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.

# Organisations /TMP reference: Contractor (Working space): Principal (Client): FUZEN ENTERTAINMENT Contractor (TTM): RCA: CHEVRON

	TRAFFIC SERVICES	NZ TRANSPORT  AGENCY  WAKA KOTAHI				
	Road names and suburb	House no./RPs (from and to)	Road level + Cat	Perr S		
ation details	State Highway 1, Kaiwaka	01N-0319-B 8.753 to 01N- 0319B 9.106	1, B	80		

	Road names and suburb	House no./RPs (from and to)	Road level + Cat	Permanent speed	
Location details and road	State Highway 1, Kaiwaka	01N-0319-B 8.753 to 01N- 0319B 9.106	1, B	80/100	
characteristics	Settlement Road, Kaiwaka	Full Length	1, B	70/80	
	Kaiwaka-Mangawhai Road, Kiawaka	Rp. 3.177 to Rp 7.306	1, B	80	
	Valley Road, Kaiwaka	Rp. 0.000 to 0.322	1, B	80	
	AADT	PEAK FLOWS (weekdays and non-public holidays)			
Traffic details (main route)	706 - Settlement Road	<b>Level 1</b> : 0600 – 0800 hrs. and 1700 – 1900 hrs. <b>Level 2</b> : 0600 – 0900 hrs. and 1600 – 1900 hrs.			

## **DESCRIPTION OF WORK ACTIVITY**

Welcome To The Jungle:

R18 outdoor drum and bass festival

Patrons will have the option to either camp onsite or have a day pass.

Bus Passes will also will be available

PLANNED WORK PROGRAMME									
Start date	17/02/2023	Time (hrs)	09:00	End date	20/02/2023	Time (hrs)	20:00		
Consider significant stages, for example:	<ul> <li>Road Clo</li> <li>Stop Go</li> <li>StMS to</li> <li>STMS to</li> <li>On Pack collected</li> </ul>	outside the eve on Kaiwaka-Ma text 02733442 send photo of down day a co and removed f	place from 070 ent on Settleme angawhai Road 21 upon setup the completed nfirmation text from site and si	Oam Saturday Int Road will r I will be used and pack dow OSR at the en to be sent to	17th and will be remove 18th to 12pm Sunday un from 0700am Satu on Sunday only 0700ay on on the TTM site; and of each day 19,20 of TMC to confirm all TT conditions have been at via email on the Mo	rday 18th to 020 am to 1200pm & 21 February. M hardware has returned to norr	00am 19 <sup>th</sup> s been mal. STMS		
	to take p	hotos of clear s	ite and a full re	port to be ser	nt via email on the Mo the site on Monday.				



AGENCY									
Alternative dates if activity delayed	N/A								
		ROAD ASPECTS	AFFECTED						
Pedestrians affected?	No	Property access affected?	Yes	Traffic lanes affected?	Yes				
Cyclists affected?	No	Restricted parking affected?	Yes	Delays or queuing likely?	Yes				
	PI	ROPOSED TRAFFIC MANA	GEMENT ME	THODS					
	Installation wil	be via a mobile operation with the	following methodo	ology:					
		rive through will be conducted first ks to proceed.	to confirm layout,	conditions and environment are	all appropriate				
Installation		eed warning signage will be installed fashion around the site area	d first (on the left),	followed by progressive signage	e installation in				
(includes parking of plant and materials		positioning will be as far to the left tion of each sign, with activity occur			tionary at the				
storage)	4. Once A	LL signage for the site is installed of	delineation installa	tion may commence					
		rksite delineation will be installed n		le by the working vehicle parking	inside the				
	work area and cones installed from within that closed area.  Once all delineation is installed and worksite area is available – a final full site check will be conducted (to be recorded on the on-site record) before worksite activity will commence in the working space								
	Refer to the attached TMD# 01 - 05 for attended site layout.								
	TC will always assist residents with access to their properties.								
Attended (day)	No Parking on the roads around the site, Parking will be provided on-site with overflow parking located down the road on settlement road.								
	All site checks and or changes to be recorded on the "on site record"								
	STMS to be onsite at all times as required								
	Refer to the at	tached TMD# 01 - 05 for attended s	site layout.						
	TC will always assist residents with access to their properties.								
Attended (night)	No Parking on the roads around the site, Parking will be provided on-site with overflow parking located down the road on settlement road.								
	All site checks and or changes to be recorded on the "on site record"								
	STMS to be onsite at all times as required								
	Refer to the at	tached TMD# 01 - 05 for attended s	site layout.						
	TC will always assist residents with access to their properties.								
Unattended (day)	No Parking on the roads around the site, Parking will be provided on-site with overflow parking located down the road on settlement road.								
	All site checks and or changes to be recorded on the "on site record"								
		nsite at all times as required							
	Refer to the at	tached TMD# 01 - 05 for attended s	site layout.						
	TC will always	s assist residents with access to the	ir properties.						
Unattended (night)	No Parking on road on settler	the roads around the site, Parking nent road.	will be provided o	n-site with overflow parking loca	ted down the				
		and or changes to be recorded on	the "on site record	<b>d</b> "					
	STMS to be or	nsite at all times as required							



AGENCY	
Detour route	N/A
	Does detour route go into another RCA's roading network? No  If Yes, has confirmation of acceptance been requested from that RCA? No  Note: Confirmation of acceptance from affected RCA must be submitted prior to occupying the site.
	Removal will be via a mobile operation with the following methodology:
	All work activity to be cleared prior to TTM removal commencing
Removal	<ol><li>Workspace delineation to be removed first (by either removing to the kerb for later collection or directly onto a stationary working vehicle)</li></ol>
	<ol> <li>Once all delineation is removed – sign removal may commence in a clockwise 'loop' fashion (leaving advanced warning signage in place till last)</li> </ol>
	Advanced warning signage can be removed as the final act, with a full site check being conducted prior to site departure.

			TS	

	THO COLD I	0_0		
	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)	<b>Times</b> (From and to)	<b>Dates</b> (Start and finish)	Diagram ref. no.s (Layout drawings or traffic management diagrams)
Attended day/night	A temporary maximum speed limit of 30km/h is hereby fixed for motor vehicles travelling over the length of:  4.6km situated between 314 (House no.) and 760 (House no.) on SETTLEMENT ROAD  150m situated between 707 (House no.) and 750 (House no.) on KAIWAKA MANGAWHAI ROAD	24hrs	0900 17/02/2023 To 2000 20/02/2023	02 03
Unattended day/night	A temporary maximum speed limit of 30km/h is hereby fixed for motor vehicles travelling over the length of:  4.6km situated between 314 (House no.) and 760 (House no.) on SETTLEMENT ROAD  150m situated between 707 (House no.) and 750 (House no.) on KAIWAKA MANGAWHAI ROAD	24hrs	0900 17/02/2023 To 2000 20/02/2023	02 03
TSL duration	No			

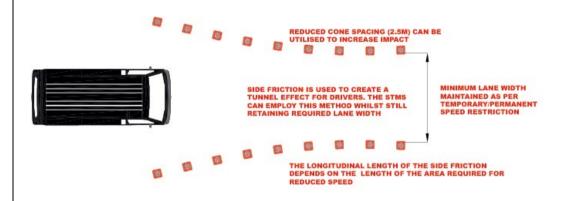
# **POSITIVE TRAFFIC MANAGEMENT MEASURES**

# RCA consent and/or contract reference (CAR/WAP)

Positive traffic management measures will be installed by the STMS in order to control vehicle speeds, increase public awareness and reduce disruption by providing 'clear and positive guidance'.

#### **Additional Delineation**

Additional cones may be placed on centerlines, edgelines or shoulders to increase impact of the activity and reduce vehicle speed. Including side friction below



#### **Further Methods**

- Staff will be positioned at strategic locations where they are visible to the driving public and pedestrians, and responsive to the changing hazards of the site.
- If there are nearby controlled intersections, ATOC may be engaged to modify traffic light phasing to suit the operation in place and minimise disruption and maximize safe driving behavior.
- If queuing or unforeseen disruption occurs, additional advanced signage may be used a further sign spacing (or more) outside the required advanced warning signage to promote awareness further from the site boundary.

Police assistance may be sought if excess speed is a significant issue and presents a real and immediate danger to the activity or the public. Work may be suspended if driver behaviour at any time presents excess risk.

#### **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.

#### Dotom

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 closured.

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 detaur 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 minimize 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.



#### RCA consent and/or contract reference (CAR/WAP)

Other contingencies to be identified by the applicant (i.e. steel plates to quickly cover excavations)

#### Weather

Sustained bad weather resulting in reduced visibility (less than clear sight distance) will result firstly in bolstering of delineation if possible, to provide better worksite visibility.

Whilst this occurs every effort will be made to remove the closure however if it is hazardous to open to road (i.e. immobile work vehicles/excavation etc. still remain) work may cease and as much cleared from the worksite as possible to reduce risk. TMO/STMS staff equipped with glow wands may also be employed from safe positions to caution approaching drivers if visibility is a concern.

If bad weather that reduces visibility or creates a hazardous environment is present at the time the closure is due to be installed, the closure may be delayed or canceled if the weather does not improve.

#### Excess traffic delays (more than 5 minutes)

Delays are unlikely however in the event of congestion; effort will be made to open additional lane space in the direction of most delay by minimising the work area and attempting to open further drivable area to the public.

#### 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. The priority will be given to the opening of lane width as soon as safe to do so, followed by vehicle recovery, followed by TTM equipment removal.

Notification to be done to Auckland Transport (09 355 3553) and ATOC.

#### Emergency Vehicle Access / Movements or On Site Emergency

Emergency vehicles will be given the right of way at all times and will be assisted through emergency stop/go activity or the use of the onsite TTM 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.

	AUTHORISATIONS								
Parking	Will controlled street part	king be affected?	No	Has approval been granted?	N/A				
restriction(s) alteration authority	No parking signage to be installed prior to commencement of works if necessary, no vehicles will be towed.								
Authorisation to work at permanent	Will portable traffic signal permanent traffic signals		No	Has approval been granted?	N/A				
traffic signal sites	STMS to notify ATOC or SCATS on 09 927 9757 prior to commence of work to alter traffic signals, if required.								
Road closure authorisation(s)	Will full carriageway clos more than 5 minutes (or o stipulated time)?		No	Has approval been granted?	N/A				
dumonicumon(o)	Email sent to RoadNotice@	Email sent to RoadNotice@at.govt.nz							
	Will bus stop(s) be obstruactivity?	ucted by the	No	Has approval been granted?	N/A				
Bus stop relocation(s) – closure(s)									
Authorisation to use portable traffic	Make, model and description/number			N/A					
signals	NZTA compliant?		N/A						
		EED							
Is an EED applicable?	No	EED attached?		N/A					
DELAY C	ALCULATIONS/TRIAI	PLAN TO DETE	RMINE	POTENTIAL EXTENT OF DELAYS					
Will not exceed more th	an 5 minutes								
	Р	UBLIC NOTIFICA	ATION P	LAN					
Contractor should notify including site contact.	the affected businesses/res	sidents in the area thro	ugh a lette	er drop explaining the work activity and working	ng hours				
Public notification pla	n attached? No								
ON-SITE MONITORING PLAN									

STMS will always be contactable via 0800 424 387

First full site inspection to occur immediately following site establishment and be recorded on the onsite record. Subsequent site inspections to occur every 2 hours thereafter (or more frequently if degradation is a concern).

#### Category A or B Road

The STMS, TMO (or TC on Level 1 or LV roads) to whom the STMS has delegated worksite control, must be onsite at all times on an attended worksite.

During the period of delegation to a TMO or TC on Level 1 or LV roads or for unattended worksites the STMS must be within the following requirements:

Road Type	Attended worksite		
	delegated to a TMO (or TC)		
Category A & B	30 minutes travel time of each worksite		
(Level 1 & 2LS)			
Category A & B Under 500 vpd	60 minutes travel time of each worksite		
(Level L)			

Attended (day and/or night)

To ensure CoPTTM requirements are met, any attended worksite that has been delegated to a TMO or TC on Level 1 or LV roads must be inspected by the STMS:

- for worksites in place for a full day or longer the worksite must be inspected, at least on a daily basis
- where a TMO or TC on Level 1 or LV roads is in charge of static or mobile activities that move from worksite to worksite within a day the STMS must inspect one of the worksites on a daily basis.

These worksite inspections must be documented by the STMS.

#### Category C

The STMS must be present at an attended worksite at all times except during a drive through when the STMS may need to leave the worksite. In this case the STMS may be away from the worksite for up to 30 minutes.

STMS will always be contactable via 0800 424 387

The site must remain in an acceptable standard at all times. The STMS must identify the appropriate unattended site check frequency based on the following factors:

- · Weather (High winds, rain or similar)
- Traffic Flows volumes and movements
- · Pedestrian volumes and movements
- Amount of unattended equipment and its proximity to live traffic and pedestrians
- Type of Traffic Management Operation and its impact on the carriageway

# Unattended (day and/or night)

As a minimum, unattended shoulder closures will have a recorded site inspection no less frequently than once every 24 hours. The presence of multiple factors of the above list will require this frequency to be increased.

Consecutive working days will not require an overnight site check in-between, however, before leaving site, the STMS will ensure; that all open trenches/excavations are fenced, plated or backfilled, and that plant, equipment or materials are located at least 5m from the live lane (or preferably removed) wherever possible.

Before leaving the site the STMS must:

- Reduce the size of the worksite as much as possible
- · Sweep any loose material
- Check that all signs are ballasted and positioned correctly
- · Check that all cones are clean and positioned correctly

Upon leaving site the STMS is to make the final judgement on the frequency of unattended checks required if there is longer than a 24hour unattended period.

#### METHOD FOR RECORDING DAILY SITE TTM ACTIVITY

The company managing on site TTM will be responsible for:

- Complete hazard identification before setting up the site
- STMS to undertake full site inspections every 2 hours (or more frequently if degradation is a concern) and record on the onsite record
- Daily Closure sheet compiled by the STMS onsite and held as a record by Chevron Traffic Services

#### **SITE SAFETY MEASURES**



# RCA consent and/or contract reference (CAR/WAP)

- If queuing or unforeseen interruption occurs, additional advanced warning signs may be installed to provide awareness to public of the
  upcoming disruption outside of the normal site boundary.
- · Manual Traffic Controllers to be in RT contact at all times.
- All permanent signage that no longer applies during the work phase must be covered to avoid confusion.
- Advance Warning and Protection should be implemented when required.
- · Mobile vehicles will be fitted with Amber Flashing Beacons
- · Site should always be implemented in accordance with the 'Approved TMP'.
- All TTM signage and equipment used on site should be compliant with CoPTTM 4th Ed Section B.
- All TTM signage must be removed upon completion of site.
- A first aid responder is to be nominated for any medical emergency that may arise onsite.

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**

- Copy of approved TMP must always be available on-site when the worksite is attended, and be available for inspection by the RCA, Engineer, New Zealand Police or WorkSafe NZ registered inspector.
- · Pedestrian ramps must be used where applicable and be no steeper than one vertical in eight horizontal

SITE SPECIFIC LAYOUT DIAGRAMS				
Number	Title			
01	Overview and Event Direction Signage			
02	Event Phase			
03	Exit Phase			
04	No Parking			
05	Speedhumps			
06-07	Mobile Installation – Setup & Removal			

	CONTACT DETAILS								
	Name	24/7 contact number	CoPTTM ID	Qualification	Expiry date				
Principal	Etienne Marais (FUZEN ENTERTAINMENT) et@fuzen.co.nz	021 222 3666	N/A	N/A	N/A				
тмс	Wendy Campbell – Kaipara District Paul Morgan – NZTA	027 334 4221 027 241 7635	N/A	N/A	N/A				
Engineers' representative	N/A		N/A	N/A	N/A				
Contractor	Etienne Marais (FUZEN ENTERTAINMENT) et@fuzen.co.nz	021 222 3666	N/A	N/A	N/A				
	CHEVRON	0800 424 387	53299	L2/3 P	26/05/2 3				
STMS	Adam Barclay- Operations Manager	0800 424 387	68541	A/B/A P	12/06/2 4				
	Ryan Toki - Planning Manager	0800 424 387	42397	A/B P	31/08/2 4				
	Ben Whipp - Shift Manager								
тс	Actual onsite contact of the STMS & TMO will be provide	ded to the RCA on requ	lest when requ	iired					



RCA consent and/or contract reference (CAR/WAP)

Others as required

TTM Provider: **CHEVRON TRAFFIC SERVICES** 

0800 424 387

	TMP	PREPARATION	ON					
	Name (STMS qualified)	Date	Signature	ID no.	Qualification	Expiry date		
CHEVRON TRAFFIC SERVICES	William Petersen	16/11/2022	Wlpetersen	74159	TTMP	18/06/23		
This TMP meets CoP	TTM requirements		Number of di	agrams attach	ned	05		
TMP returned for	Name	Date	Signature	ID no.	Qualification	Expiry date		
correction (if required)								
	Engineer/TMC to complete following	g section when	approval or ac	ceptance requ	uired			
Temporary safety barrier system	The attached temporary road safety reviewed as being fit for purpose	barrier design h	as been indepe	endently	Not re	quired		
	Name	Date	Signature	ID no.	Qualification	Expiry date		
TMP Approved								
Acceptance by TMC (only required if	Name	Date	Signature	ID no.	Qualification	Expiry date		
TMP approved by engineer)								
	Qualifier for	engineer or TMC	approval					
Approval of this TMP a	authorises the use of any regulatory sign	s included in the T	MP or attached	traffic manage	ement diagrams	i.		
This TMP is approved	on the following basis:							
1. To the best of the a	pproving engineer's/TMC's judgment thi	s TMP conforms t	o the requireme	ents of CoPTTN	М.			
	ed on the basis that the activity, the loca curacy in the portrayal of this information				ctly represented	by the		
3. The TMP provides	so far as is reasonably practicable, a sat	e and fit for purpo	se TTM system	1.				
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								
			Date					
Type of notification to TMC required		Notification completed	Time					



TMP or generic plan reference

	On-site record must be retained wi			Too	day's date			
Location details	Road names(s):	House number/RPs:			Suburb:			
		WORKING SPAC	E					
Person responsible for working space	Name		Signature					
	MS/TC is responsible for both the working	g space and TTM they s		l in the app	oropriate TTM l	box below		
		TTM						
STMS in								
charge of TTM	Name	TTM ID Number	Warrant expiry	√ date Sigr	nature		Time	
Worksite handover								
accepted by replacement	Name	ID Number	Warrant expiry	date Sign	nature		Time	
STMS	Tick to confirm handover briefing completed							
		DELEGATION						
Worksite control								
accepted by TC/STMS-NP	Name	ID Number	Warrant expiry	/ date Sigr	nature		Time	
	Tick to confirm briefing completed		<u> </u>					
		MPORARY SPEED	LIMIT					
Street/road na	ame (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of	TSL (m):	
		TSL installed TSL remains in place						
From:	To:	TSL removed						
	ame (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of	TSI (m):	
Oli Odi Toda Ti		TSL installed	Dutoi		102 0,000		· • - ().	
		TSL remains in place						
From:	To:	TSL removed						
Street/road na	ame (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 na	ame (RPs or street numbers):	TSL action	Date:	Time:	TSL speed:	Length of	TSL (m):	
		TSL installed						
_	_	TSL remains in place						
From:	То:	TSL removed						

IMP	or gene	eric bi	lan rei	terence

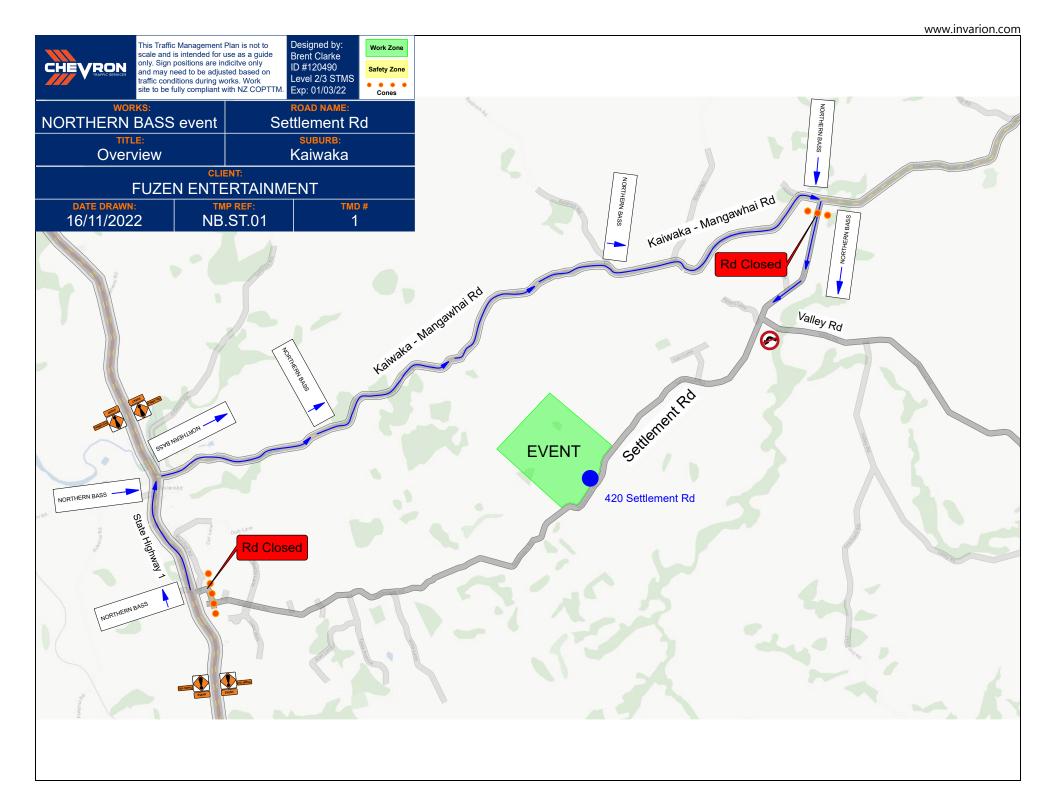
# **WORKSITE MONITORING**

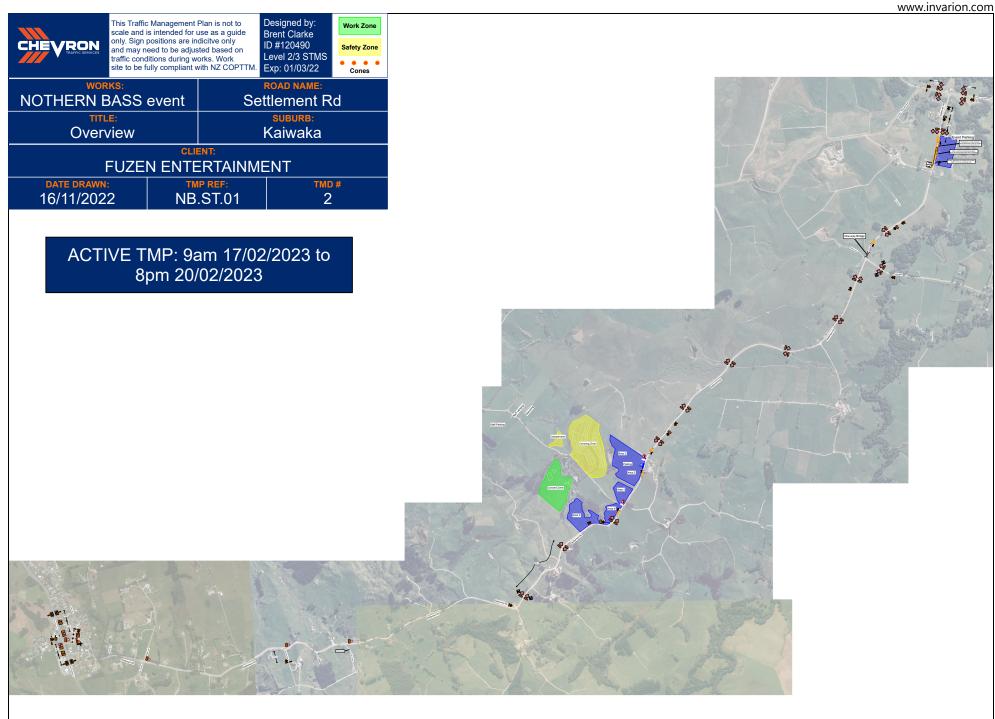
TTM to be monitored and 2 hourl	inspections documented below.
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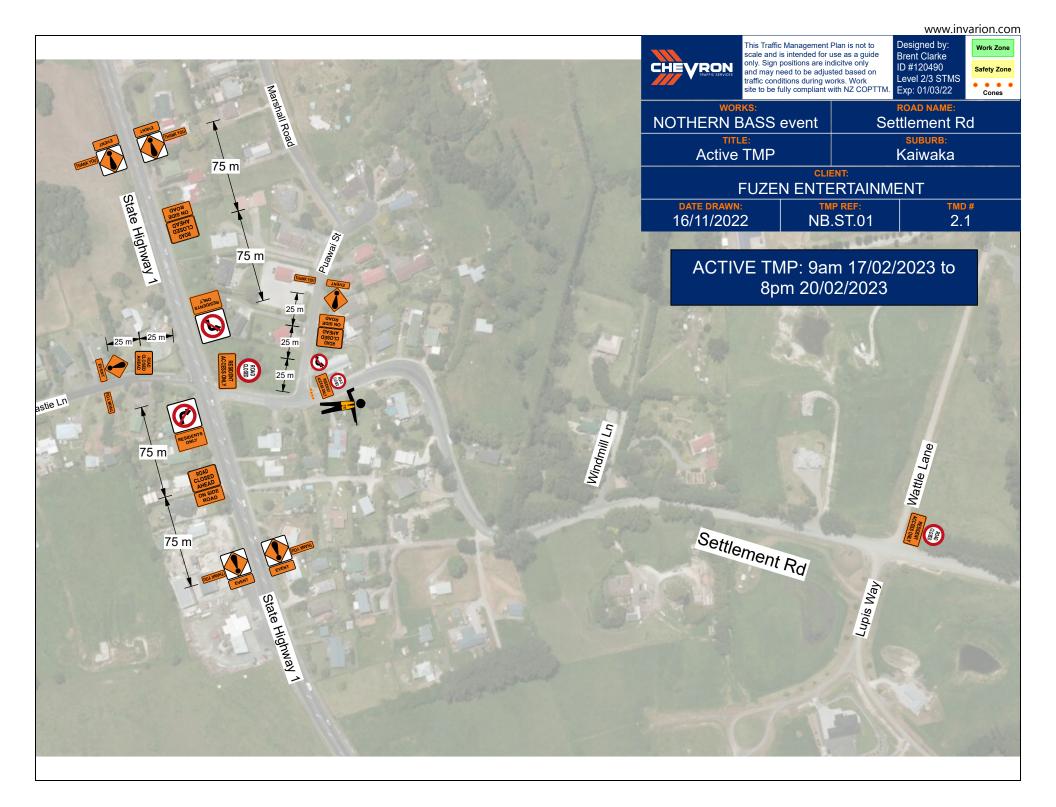
Items to be inspected	TTM set-up	2 hourly check	2 hourly check	2 hourly check	2 hourly check	2 hourly check	TTM removal
High-visibility garment worn by all?							
Signs positioned as per TMP?							
Conflicting signs covered?							
Correct delineation as per TMP?							
Lane widths appropriate?							
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:							

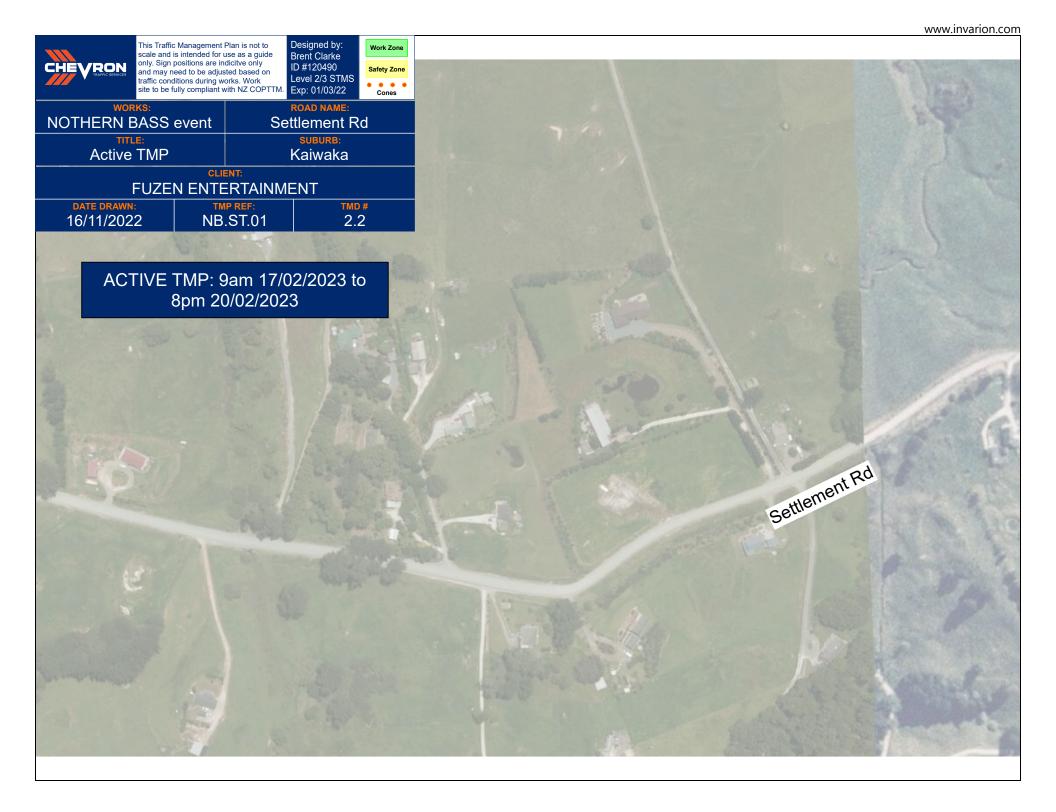
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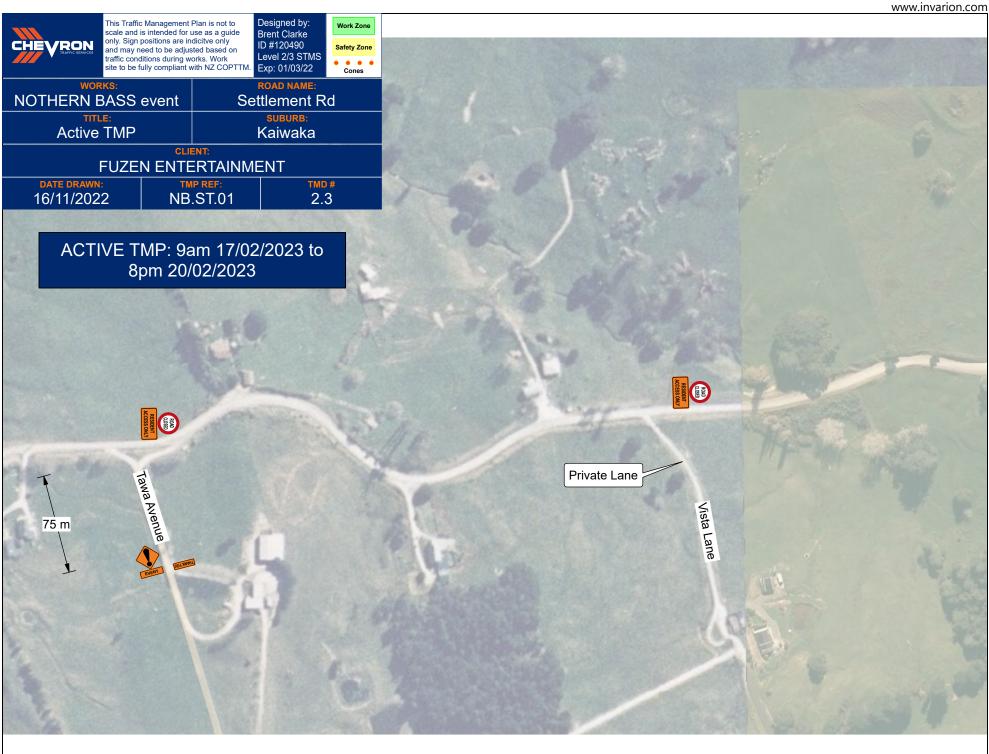
Time	Adjustment made and reason for change



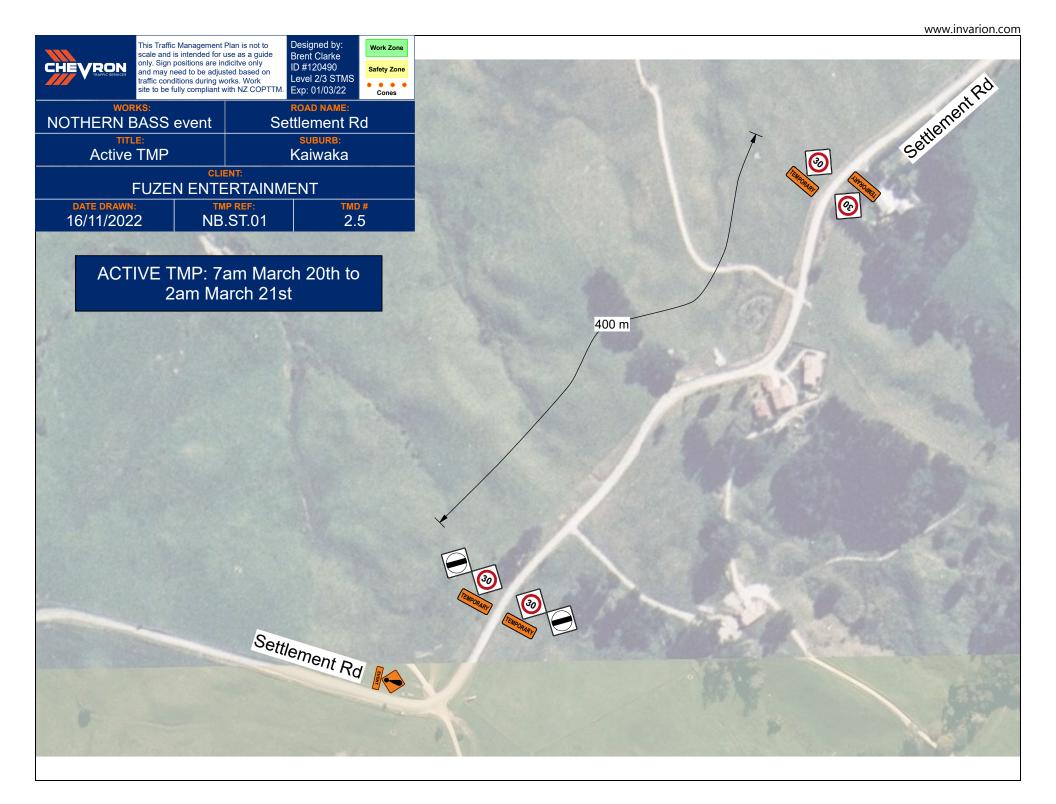




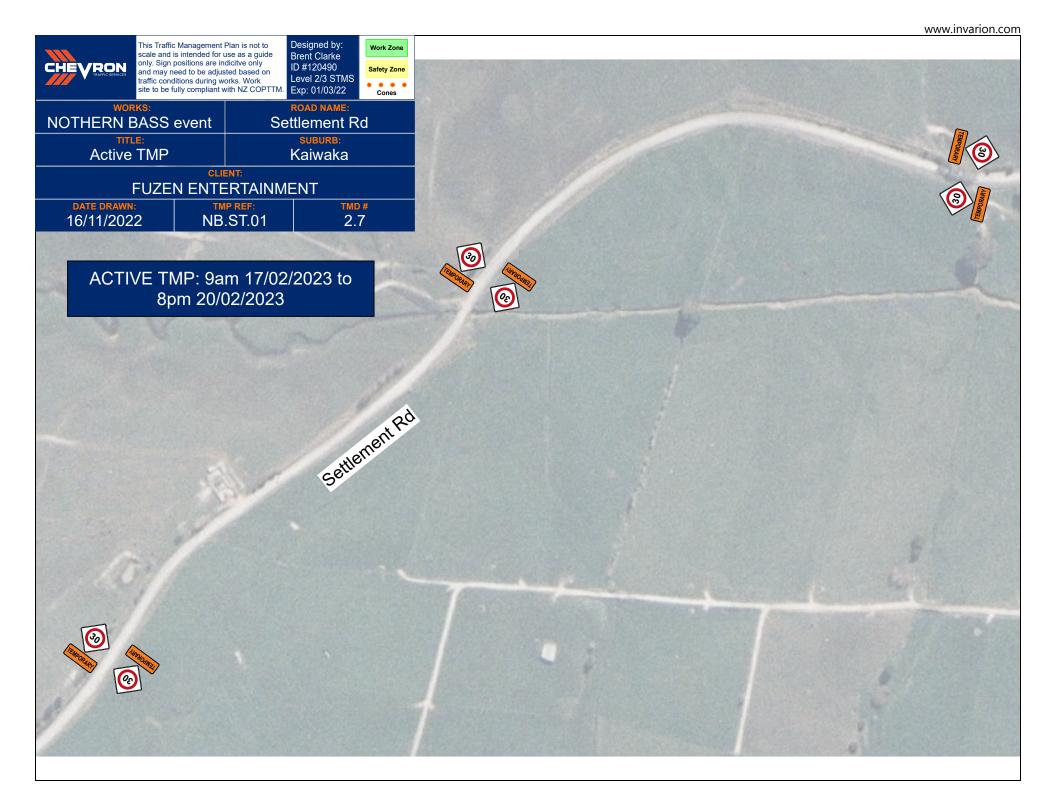




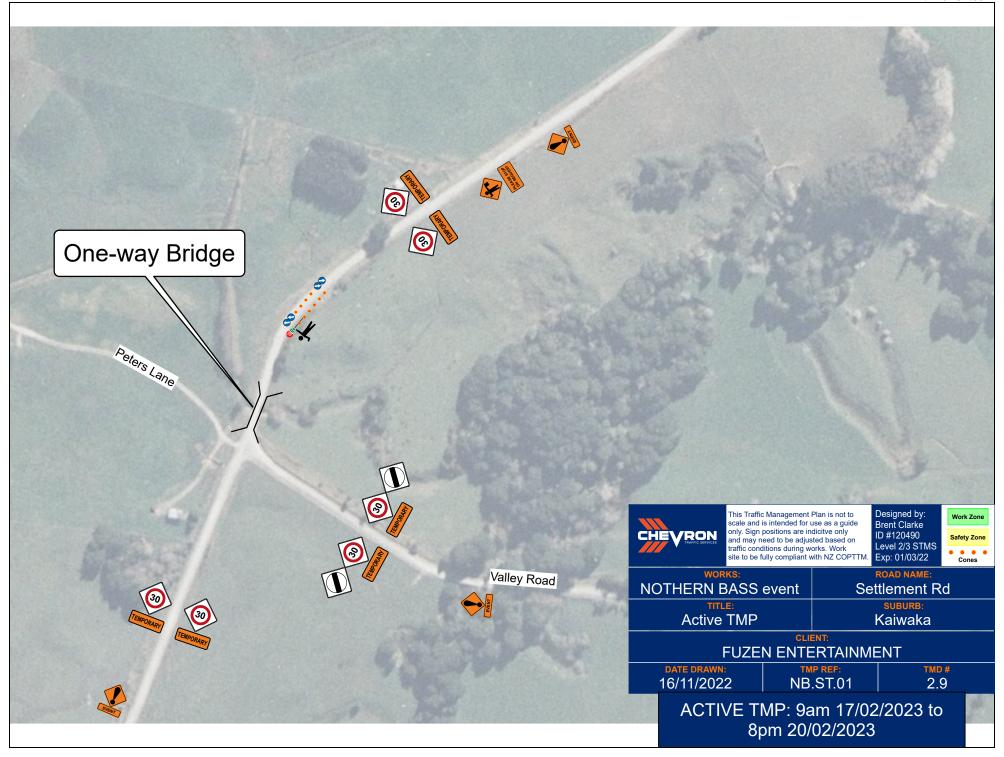


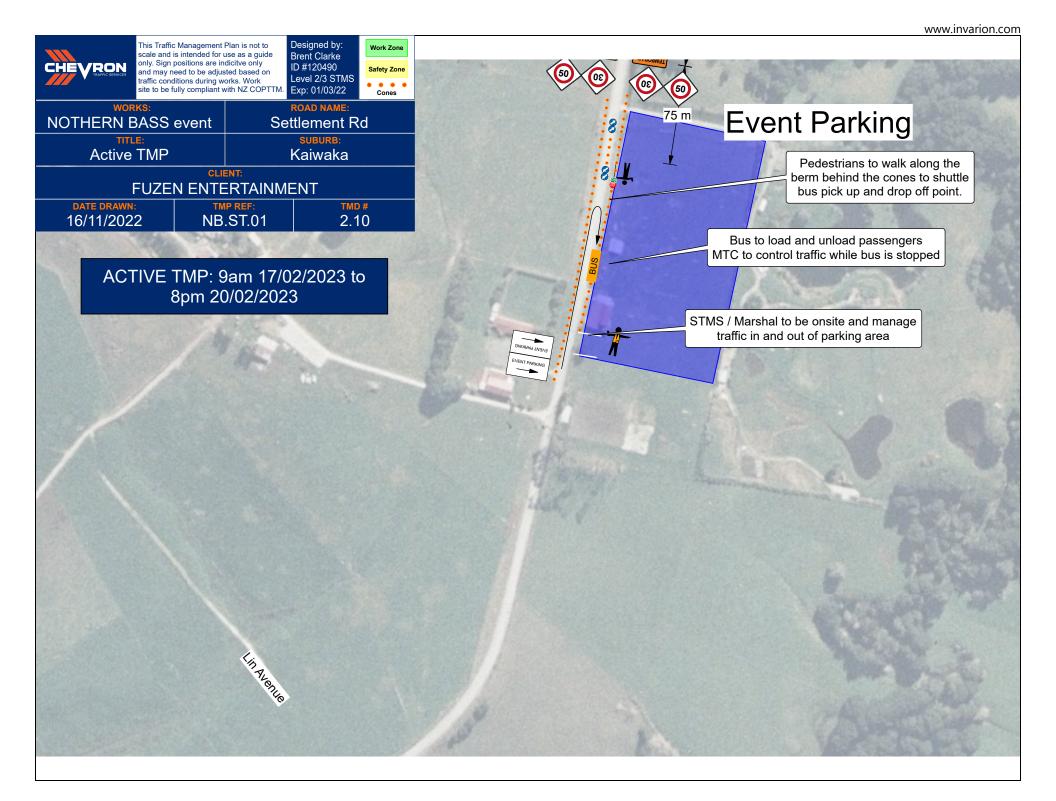


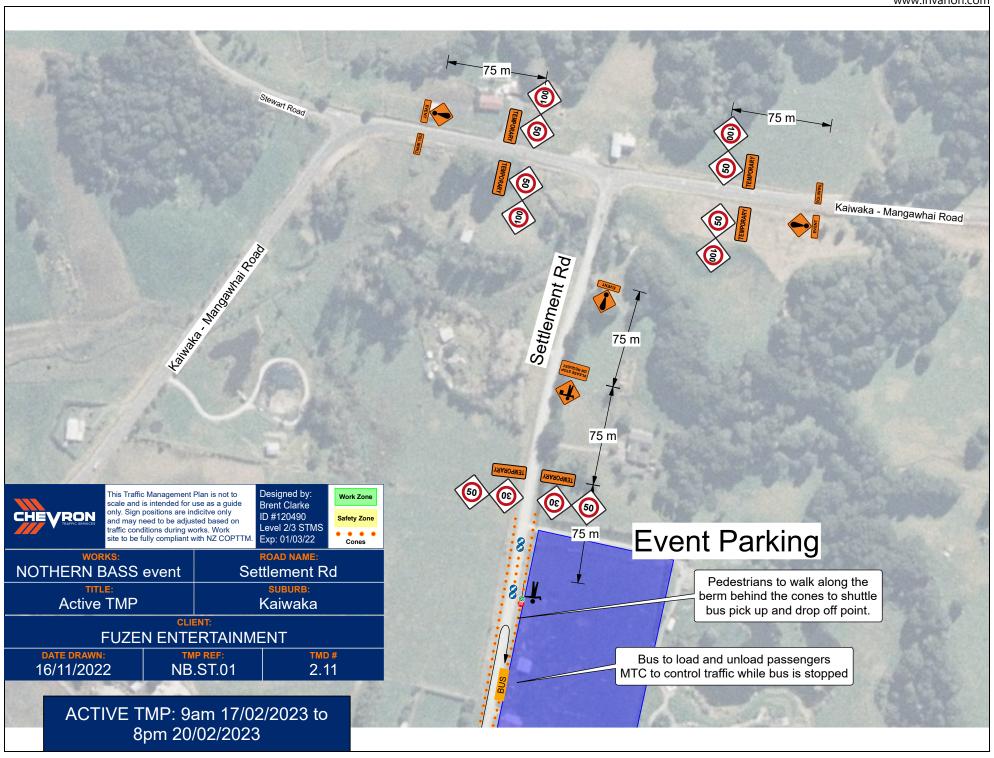
ACTIVE TMP: 9am 17/02/2023 to 8pm 20/02/2023



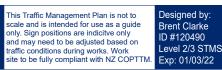












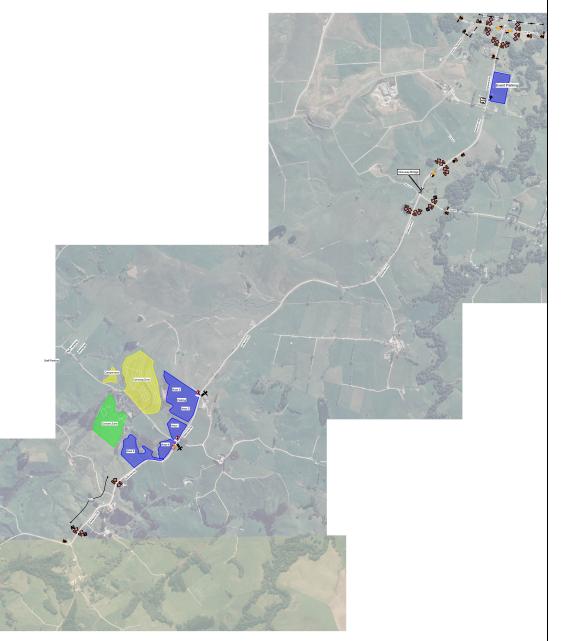
Safety Zone						
Cones						

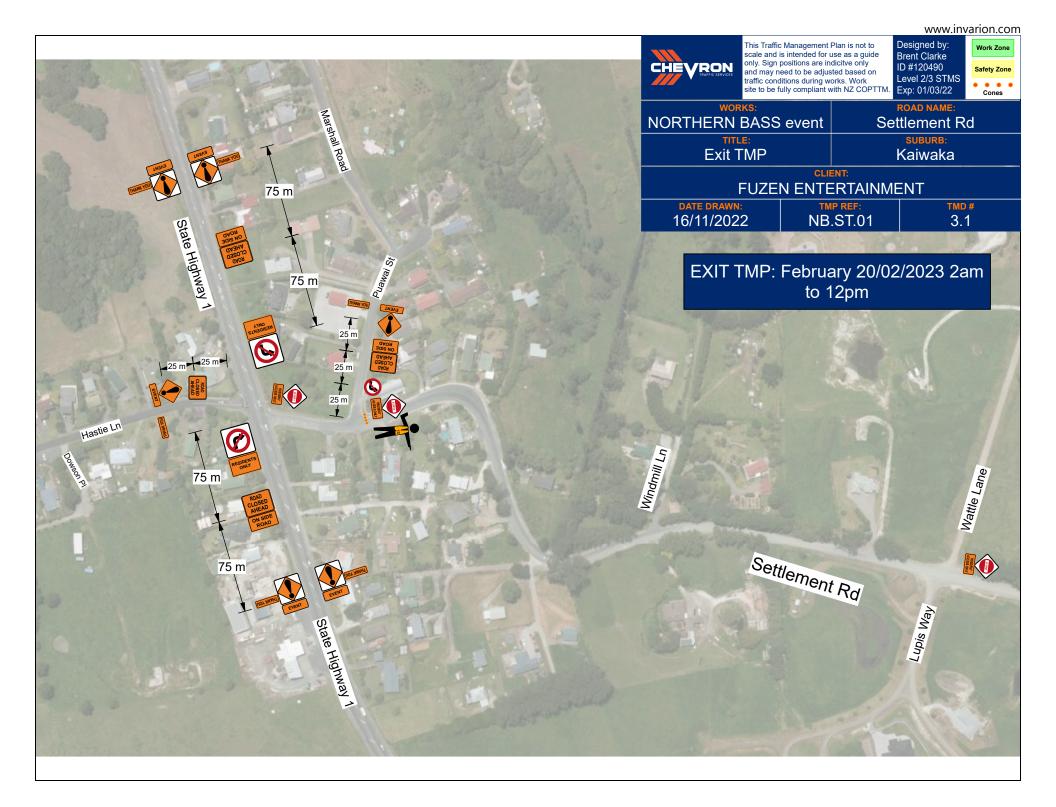
Settlement Rd suburb: Kaiwaka

# **FUZEN ENTERTAINMENT**

TMP REF: NB.ST.01 TMD# 3

EXIT TMP: February 20/02/2023 2am to 12pm

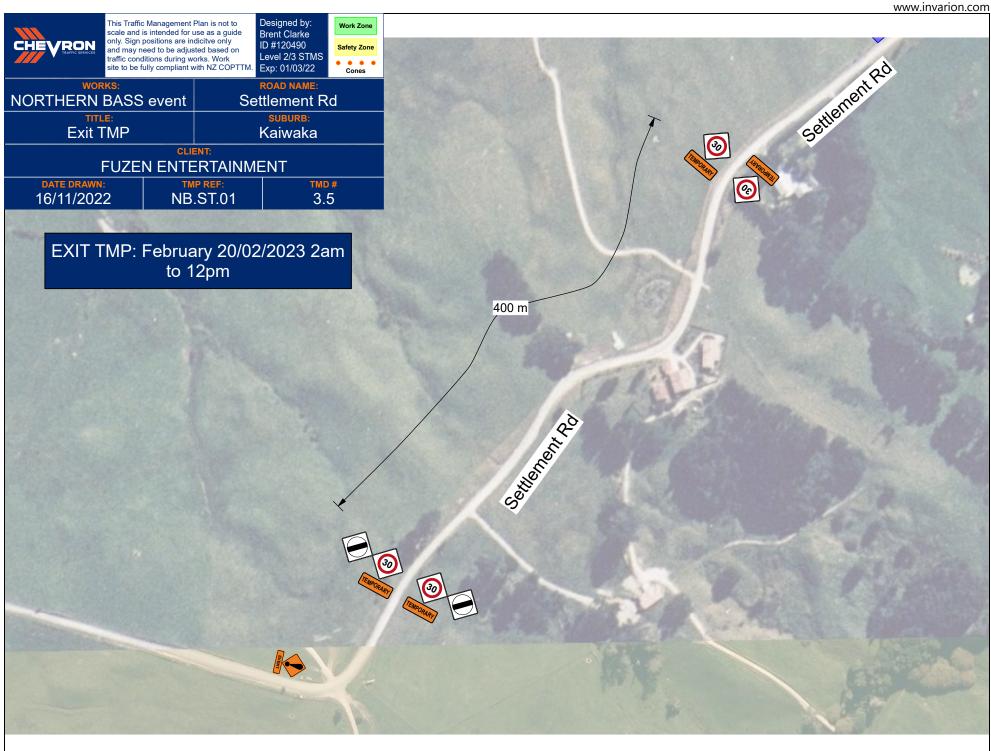


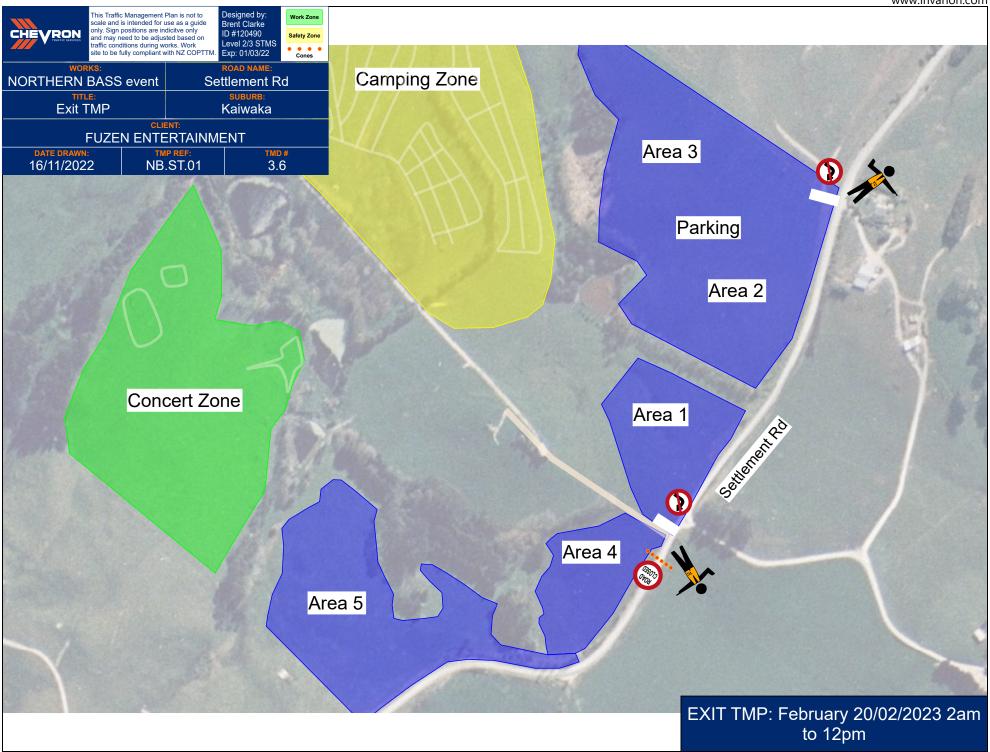


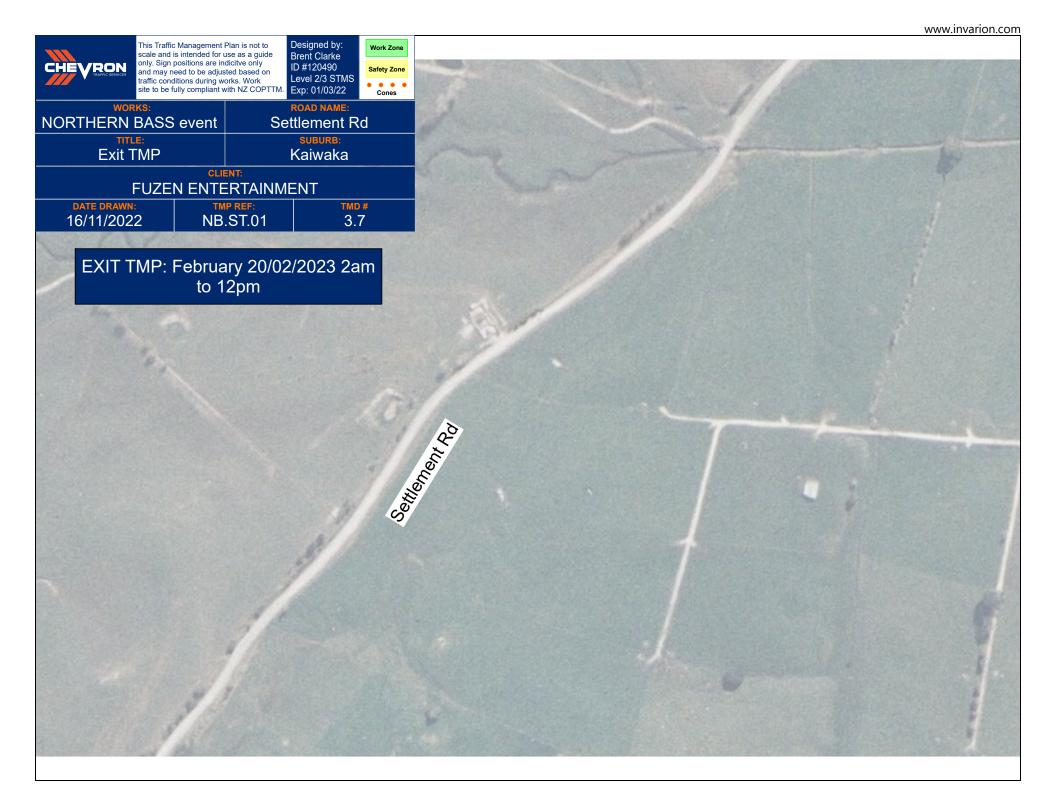








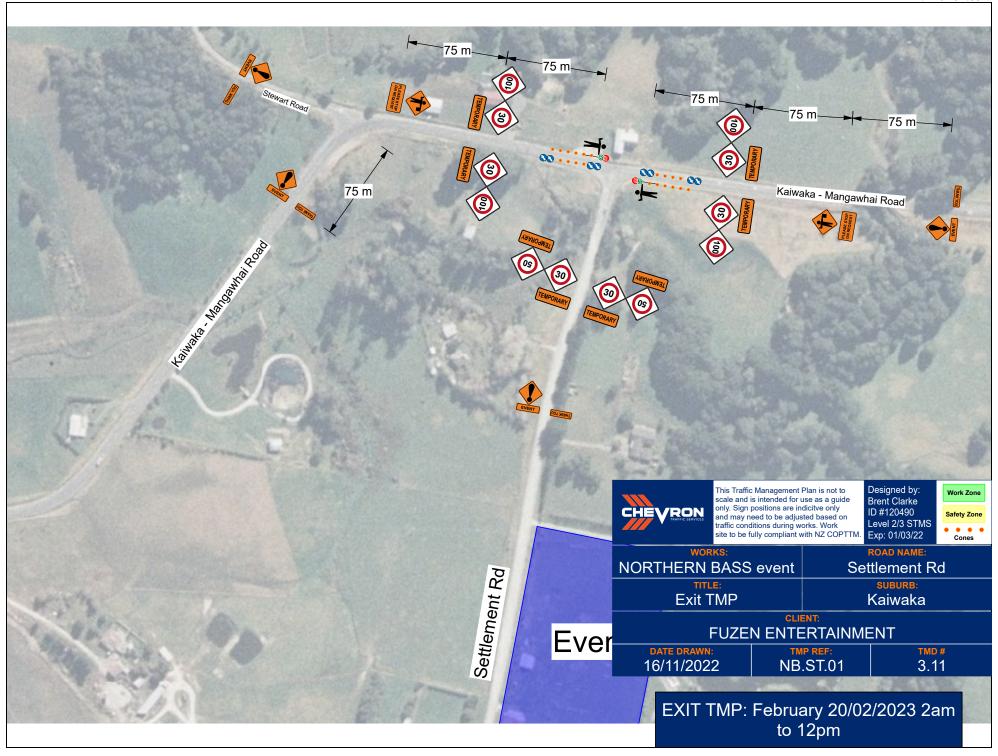


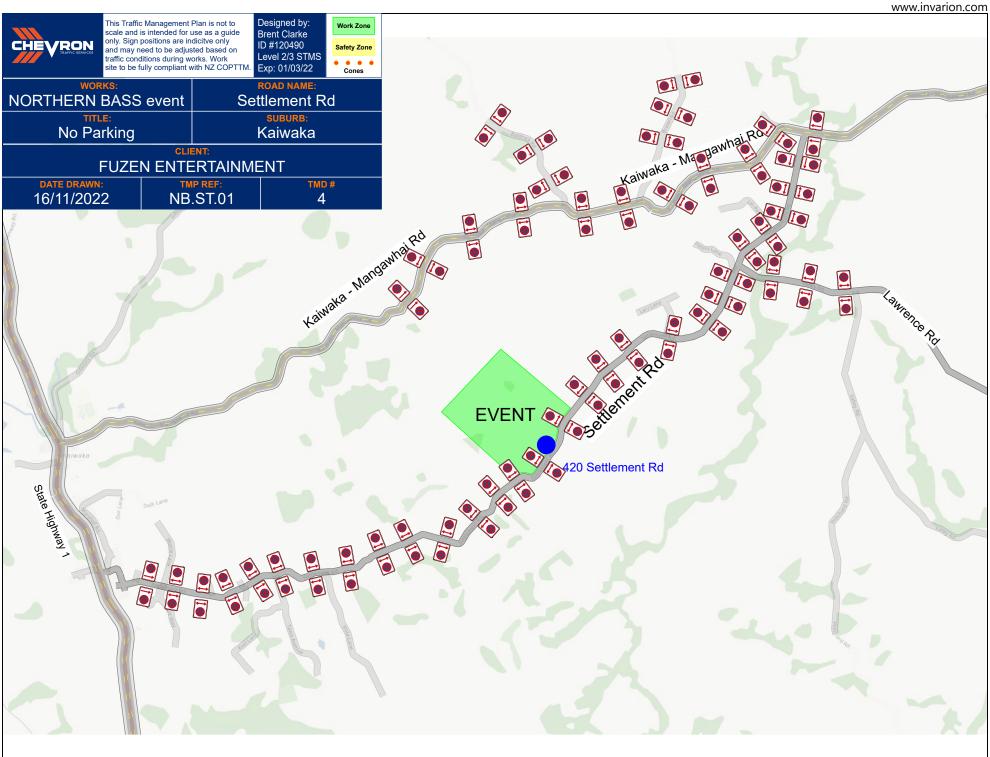


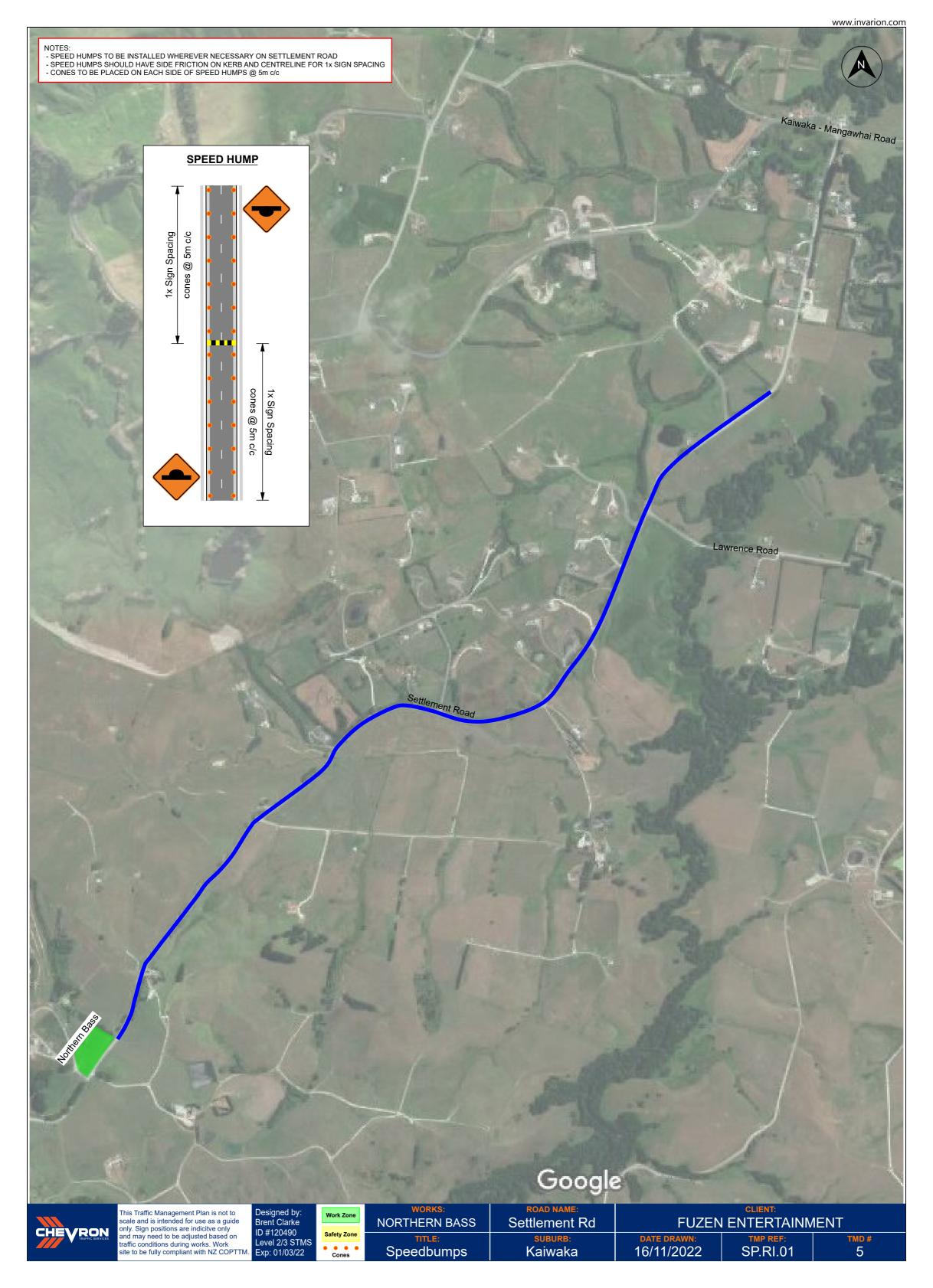












#### COMBINED LEVEL LV & LEVEL 1 LAYOUT DISTANCES TABLE

100	manent speed limit or RCA- ignated operating speed (km/h)	≤50	60	70	80	90	100
Tra	ffic signs						
Α	Sign visibility distance (m)	50	60	70	80	90	100
В	Warning distance (m)	50 or 30*	80	105	120	135	150
С	Sign spacing (m)	25 or 15*	40	50	60	70	75
Safe	ety zones						
D	Longitudinal (m)+	10 or 5*	15	30	45	55	60
E Lateral (m)+		1	1	1	1	1	1
	Lateral behind barrier installation	As specified by the Installation Designer					
Тар	ers						
G	Taper length (m)#	30	50	70	80	90	100
G	LV roads taper length (m)#	25	30	35	40	45	50
K Distance between tapers (m)		40	50	70	80	90	100
Deli	Delineation devices						
Con	e spacing in taper (m)	2.5	2.5	5	5	5	5
Con	e spacing: Working space (m)##	5	5	10	10	10	10

<sup>\*</sup> Larger minimum distances apply on all state highways and also on all multi-lane roads. The smaller minimum distances may be applied on other roads to accommodate road environment constraints.

- # 1. On non-state highways with speeds 50km/h or less, a 10m taper (with cones at 1m centres) may be used when there are road environment constraints (eg intersections and commercial accesses).
  - 2. On all roads where the shoulder width is less than 2.5m and the activity does not affect the live lane, a **10m shoulder taper** is permitted (with at least 5 cones at no greater than 2.5m centres).
  - 3. A **taper of 30m** (with cones at 2.5m centres) **must** be used where manual traffic control (stop/go), portable traffic signals or priority give way are employed.

<sup>##</sup> LV roads: double the cone spacing alongside working space (eg 5 = 10, 10 = 20).

Lane widths (based on permanent speed or TSL if applied)									
Speed (km/h)         30         40         50         60         70         80         90				100					
F	Lane width (m)	2.75	2.75	3.0	3.0	3.25	3.25	3.5	3.5

Except for delineation device spacings, which are maximum values, the distances specified in the above tables are minimum values.

#### LV/low-risk roads (less than 250vpd - less than 20 vehicles per hour)

When on the shoulder:

- If CSD not available: Advance warning sign and base to be installed with sign visibility distance and warning distance in place
- If CSD available: Advance warning sign may be attached to the rear of a work vehicle which has an amber flashing beacon(s) and is visible to approaching road users from the rear.

When the activity encroaches onto a live lane consider alternating flow controls.

If the above requirements cannot be achieved, the operation must be modified to comply with the appropriate level LV or level 1 requirements.

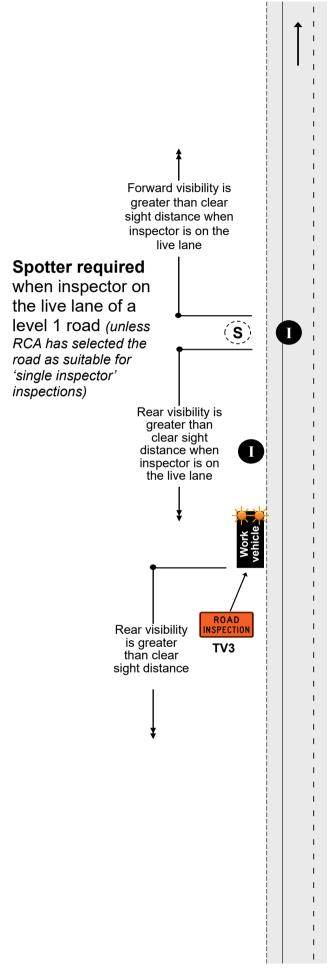
<sup>\*</sup> On LV roads the longitudinal and lateral safety zones may be reduced, or eliminated, in order to retain a single lane width. Positive traffic management and an appropriate TSL must be used.

# INSPECTION ACTIVITIES AND NON-INVASIVE WORKS On shoulder and on the live lane This TMD may also be applied on level LV roads

F4.10 Level 1

#### Notes

- Inspectors must move from live lanes to avoid traffic. They must not expect traffic to drive slowly or drive around them
- 2.On level LV and level 1 roads, a person completing an inspection or non-invasive works cannot be on a live lane for more than 5 minutes
- 3.Unless otherwise approved by the RCA, all inspections on the live lane of level 1 roads require a spotter. The RCA may provide a list of roads, times and/or activities suitable for inspection by a single inspector
- 4. There must be CSD to the inspector when on the live lane. If this cannot be achieved, a spotter must be placed in a position where CSD can be attained and verbal instructions be given to the inspector. If this is not possible, a static or mobile operation is required.
- 5.A spotter is not required for inspections and non-invasive works on level LV roads or working off the live lane of a level 1 road
- 6.Where an unaccompanied inspector is not able to maintain adequate attention (eg due to work tasks or poor visibility), a spotter will be required or another type of traffic management operation used
- 7.For inspection activities that are carried out by a TC on level LV and level 1 roads the STMS must be immediately contactable but does not have to be within 30 minutes travel time of the worksite
- 8.An unaccompanied inspector may walk across a level LV or level 1 road
- 9.A vehicle is not required on a level LV or level 1 road with a permanent speed of less than 65km/h if the inspector remains on a footpath
- 10.On roads with a permanent speed of less than 65km/h an amber flashing beacon is not required on the vehicle if the inspector or non-invasive works is on an unsealed shoulder (or further away from the carriageway including a footpath)

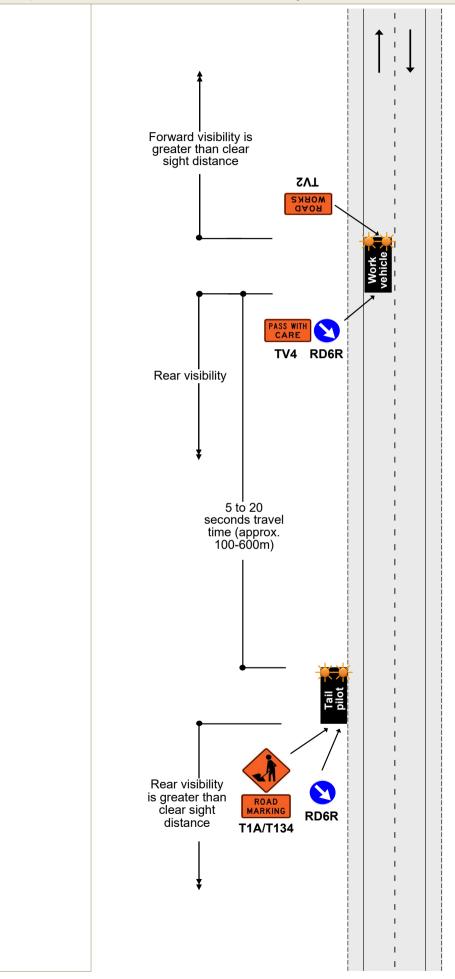


# **TWO-WAY TWO-LANE ROAD**

Work vehicle is in a lane

Permanent speed over 65km/h - CSD forward visibility to work vehicle

**D1.1**Level 1



## TWO-WAY TWO-LANE ROAD

## Work vehicle is in a lane

# Permanent speed over 65km/h - no CSD to work vehicle

**D1.2** Level 1

## **Notes**

1.Both forward and rear visibility is less than the clear sight distance continuously for 1km to the work vehicle

