

Auckland Harbour Bridge High Winds Closure Plan

19/05/2023

Summary

- This pack summarises the closure plan for:
 - AHB Restriction Stage 3 (Reduce Lanes), and
 - AHB Restriction Stage 4 (Full Closure). Note, can be achieved by:
 - Short Term <45min – Close at base of AHB, stack traffic on mwy
 - Long Term >45min – Close at outer cordons, detour all traffic

Short Term Stage 4

- If the DE assess Stage 4 is only required for a short period, or if conditions deteriorate rapidly, the DE will make the call for the 4x Stage 3 TMA units to drop their outrigger to instantly close AHB.

Resources

- This plan requires:
 - Stage 3 – 4x TMAs (also for Full Closure Short Term)
 - Stage 4 – 10x TMAs, 2x Light Vehicles

Command & Communication

- The WK ASM Duty Engineer (DE) controls the response
- All Site Leads & DE to be on ASM Radio Channel “AHB”
- Site Leads to develop implementation plan with their team
- DE will check all leads are ready in standby locations using call signs
- DE will issue instruction to deploy Stage 3 or 4 via broadcast to all units
- Site Leads to confirm closure installed back to DE

Safety & Welfare

- CMJ crew to circulate around cordons on south side of AHB to cover breaks. Crews north of AHB to utilise Elephant House.

Transition from Stage 3 to 4

- In the event Stage 3 is deployed and conditions deteriorate requiring Stage 4 to be implemented,
 - Police or TIM Units will close Curran and Fanshawe Onramps, Northbound Throttle to remain until last vehicle before to replacing units at Curran and Fanshawe
 - Police or TIM Unit may close Onewa onramp, Southbound Throttle will remain until U-turn established before closing Onewa onramp

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Reference Page

- Stages 1 and 2 are implemented by ATOC based on recent actual winds
- Stages 3 and 4 are implemented by ASM at the DEs discretion based on actual winds, forecast winds, wind type, traffic conditions and advice from MetService.
- Table below summarises gust threshold limits (km/hr).

Restriction Stage	Action Required	Gust Wind Thresholds (from Resolve's international best practice workstream)	
		Perpendicular	Oblique
1 (Reduce Speed)	Speed Restrictions Commence	55	70
2 (Detour WVV)	Wind Vulnerable Vehicles Detoured	65	80
3 (Reduce Lanes)	Alternate Lanes Closed	75	90
4 (Full Closure)	AHB Fully Closed	90	105

Stage 3 Position Summary

Position	Call Sign	Resources	Lead Name	Phone
SH1 NBD AHB Mainline	Northbound Throttle	2x TMAs		
SH1 SBD AHB Mainline	Southbound Throttle	2x TMAs		

Stage 4 Position Summary

Position	Call Sign	Resources	Lead Name	Phone
SH1 NBD Mainline	Northbound Main	2x TMAs		
SH16 WBD Link From Port	Port	1x TMA		
SH16 EBD Link From West	Gundry	1x TMA		
SH1 Wellington St Onramp	Wellington	1x IR Truck		
SH1 Fanshawe St Onramp	Fanshawe	1x TMA 1x IR Truck		
SH1 Curran St Onramp	Curran	1x TMA		
SH1 SBD Mainline	Southbound Main	3x TMAs		
SH1 SBD Onewa Rd Onramp	Onewa	1x TMA		

Stage 3 to 4 Transition

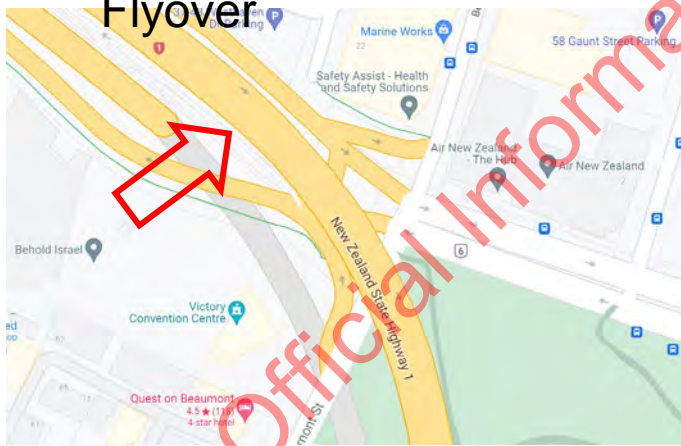
Auckland Harbour Bridge High Winds Closure Plan

Restriction Stage: 3 (Reduce Lanes) W Call Sign: Northbound Throttle
Road to Close: SH1 Northbound Mainline

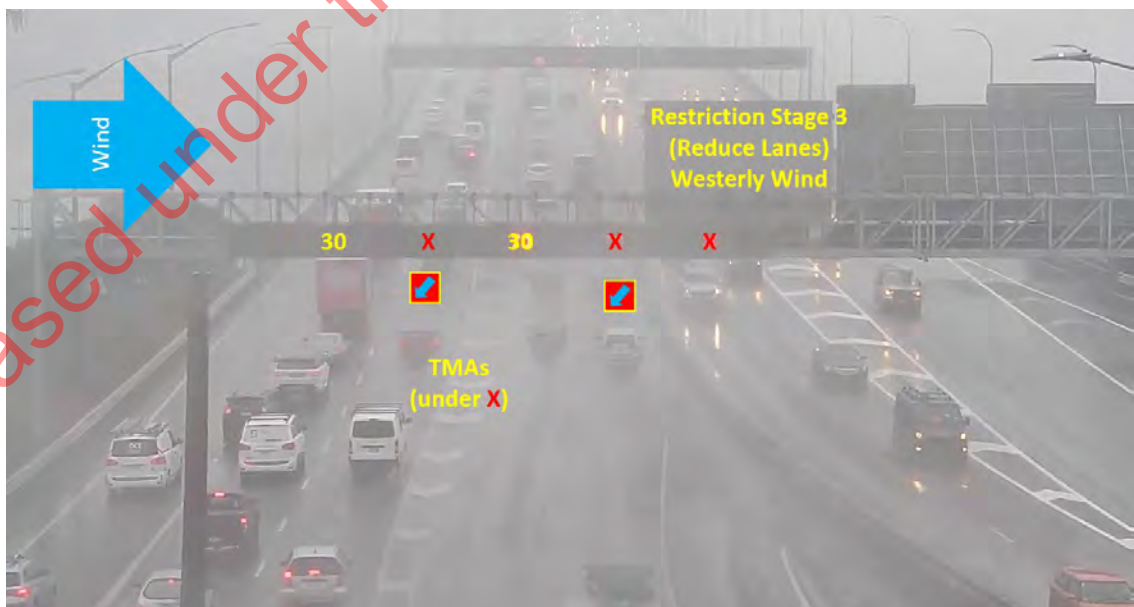
Resources: 2x TMAs

Notes: • Below for Westerly winds, for Easterly winds close alternate lanes

Standby Location: Under Vic Park Flyover



Deployment Location: Mainline Under 1st AHB Gantry



Auckland Harbour Bridge High Winds Closure Plan

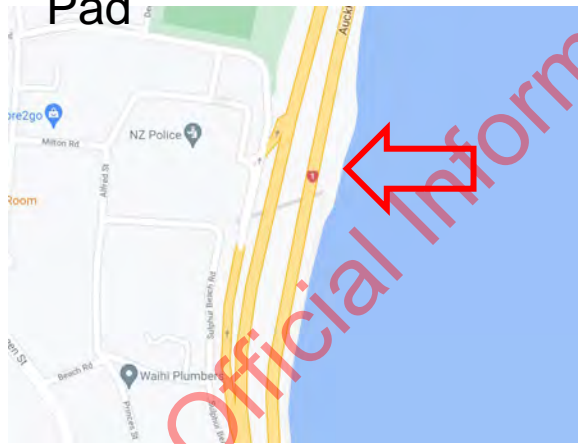
Restriction Stage: 3 (Reduce Lanes) W Call Sign: Southbound Throttle

Road to Close: SH1 Southbound Mainline

Resources: 2x TMAs

Notes: • Below for Westerly winds, for Easterly winds close alternate lanes

Standby Location: Southbound Weigh Pad



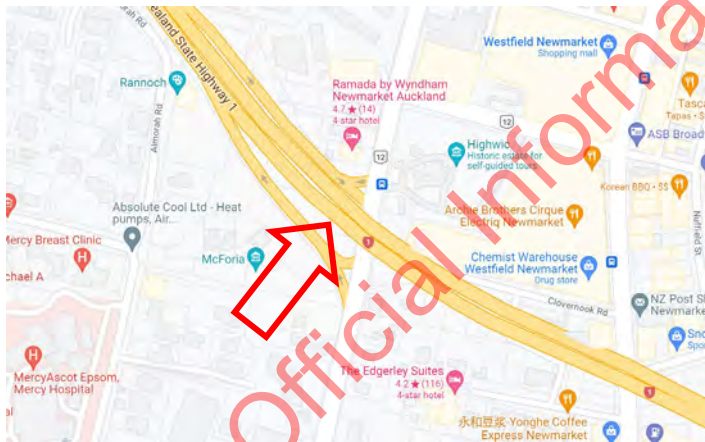
Deployment Location: Mainline Under 1st AHB Gantry



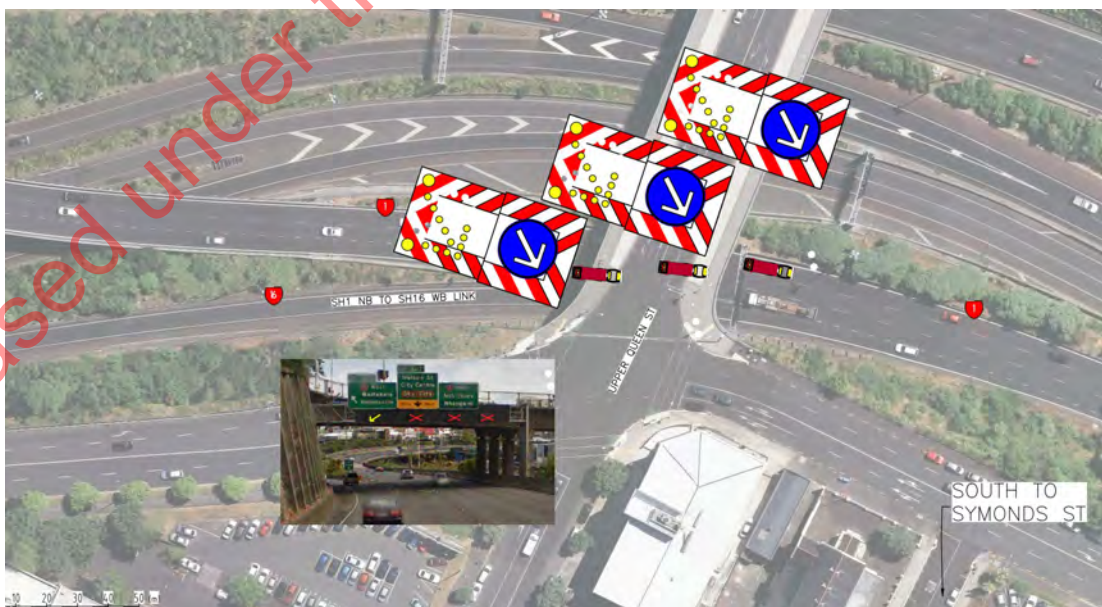
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Restriction Stage: 4 (Full Closure) Call Sign: Northbound Main
Road to Close: SH1 Northbound Mainline Main
Resources: 2x TMAs Notes: • Deploy Outriggers & Road Closed Bollards

Standby Location: Shoulder Prior to Gillies Onramp



Deployment Location: Mainline @ SH16 Westbound Link



Auckland Harbour Bridge High Winds Closure Plan

Restriction Stage: 4 (Full Closure)

Call Sign: Port

Road to Close: SH16 Westbound Link to SH1 Northbound

Resources: 1x TMA

Notes: • Deploy Outriggers & Road Closed Bollards

Standby Location: Shoulder Under Upper Queen St



Deployment Location: Mwy Link @ SH16 Mainline Diverge



Auckland Harbour Bridge High Winds Closure Plan

Restriction Stage: 4 (Full Closure)

Call Sign: Gundry

Road to Close: SH16 Eastbound Link to SH1 Northbound

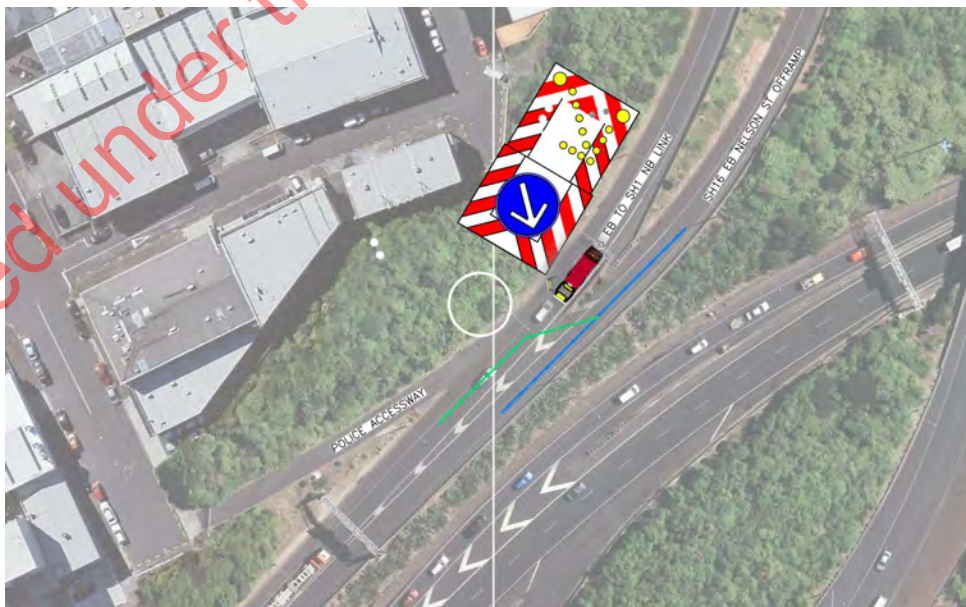
Resources: 1x TMA

- Notes:
- Deploy Outriggers & Road Closed Bollards
 - Call/Radio to ATOC to open Gundry St Gate

Standby Location: Gundry St Ramp



Deployment Location: Mwy Link @ Nelson Offramp Diverge



Auckland Harbour Bridge High Winds Closure Plan

Restriction Stage: 4 (Full Closure) Call Sign: Wellington

Road to Close: SH1 Wellington St Northbound Onramp

Resources: 1x IR Truck Notes: • Cone off left and right turn lanes

Standby Location: CMJ Yard

• Deploy Road Closed Bollards



Deployment Location: Onramp @ Commencement



Auckland Harbour Bridge High Winds Closure Plan

Restriction Stage: 4 (Full Closure) Call Sign: Fanshawe

Road to Close: SH1 Fanshawe St Northbound Onramp

Resources: 1x TMA
1x IR Truck

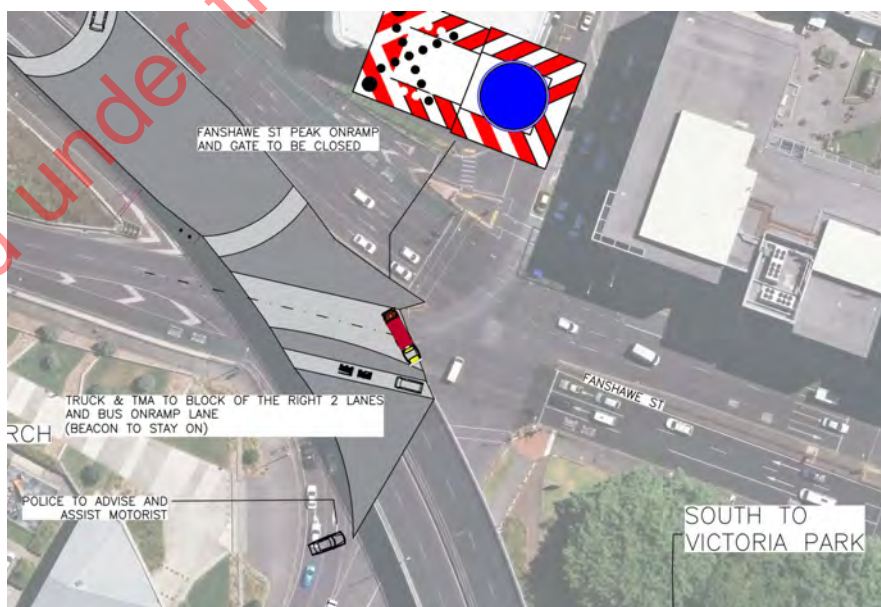
Notes: • Cone dedicated left turn, right turn and straight lanes on approaches

Standby Location: Fanshawe or Beaumont St

• Deploy Road Closed Bollards/Signs



Deployment Location: Onramp @ Westhaven Dr



Auckland Harbour Bridge High Winds Closure Plan

Restriction Stage: 4 (Full Closure)

Call Sign: Curran

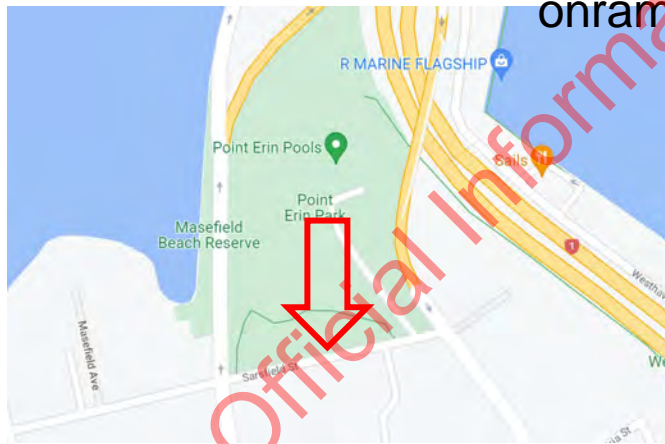
Road to Close: SH1 Curran St Northbound Onramp

Resources: 1x TMA

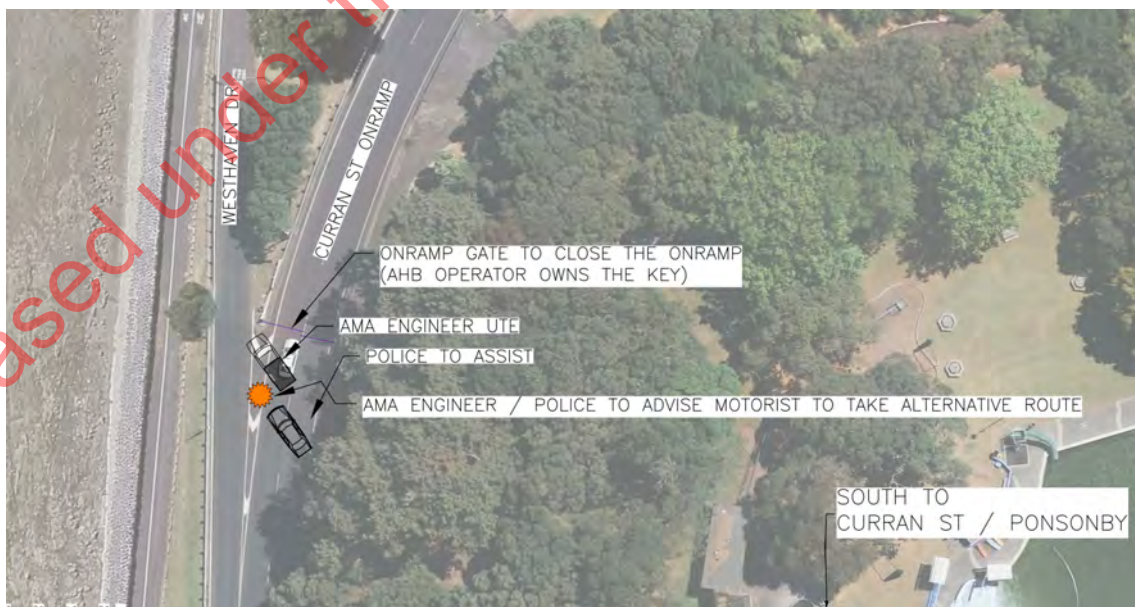
Notes: • Deploy Outriggers & Road Closed Bollards

Standby Location: Sarsfield St

• Cone off approach lanes and close onramp gate



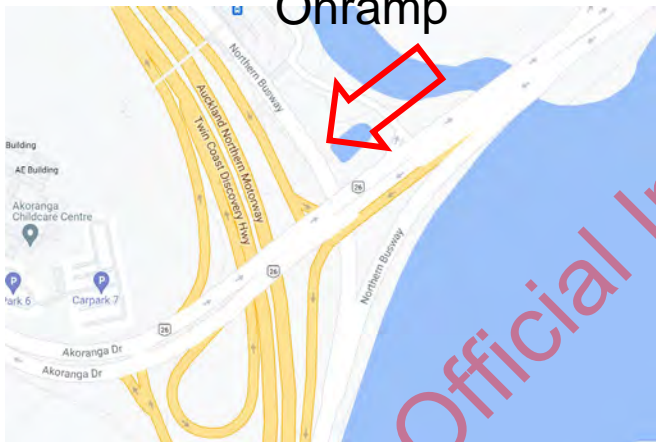
Deployment Location: Onramp @ Westhaven Dr



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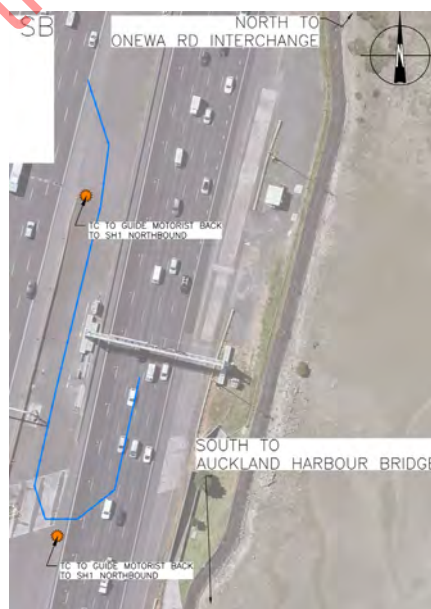
Restriction Stage: 4 (Full Closure) Call Sign: Southbound Main
Road to Close: SH1 Southbound Mainline Main
Resources: 3x TMAs Notes:

Standby Location: Akoranga Bus Onramp



- Reduce SH1 to single left lane before Elephant House
- Deploy outriggers, road closed bollards and cones to U-turn traffic through centre median
- Commence U-turns only after approval from DE after last northbound vehicles have passed

Deployment Location: Mainline @ Elephant House



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Restriction Stage: 4 (Full Closure)

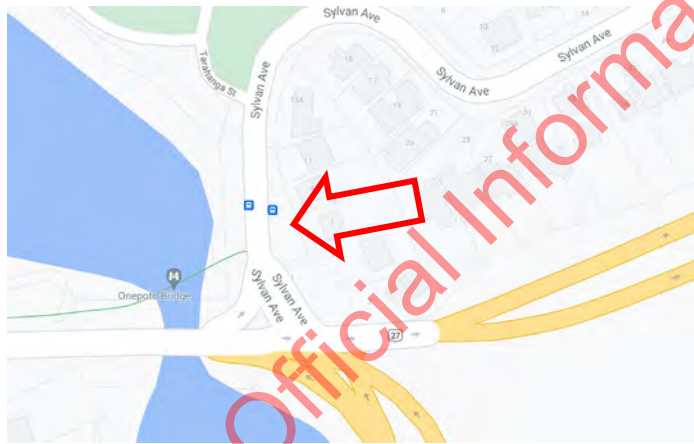
Call Sign: Onewa

Road to Close: SH1 Onewa Southbound Onramp

Resources: 1x TMA

Notes: • Deploy Outriggers & Road Closed Bollards

Standby Location: Sylvan Ave



Deployment Location: Onramp @ NB/SB Diverge

