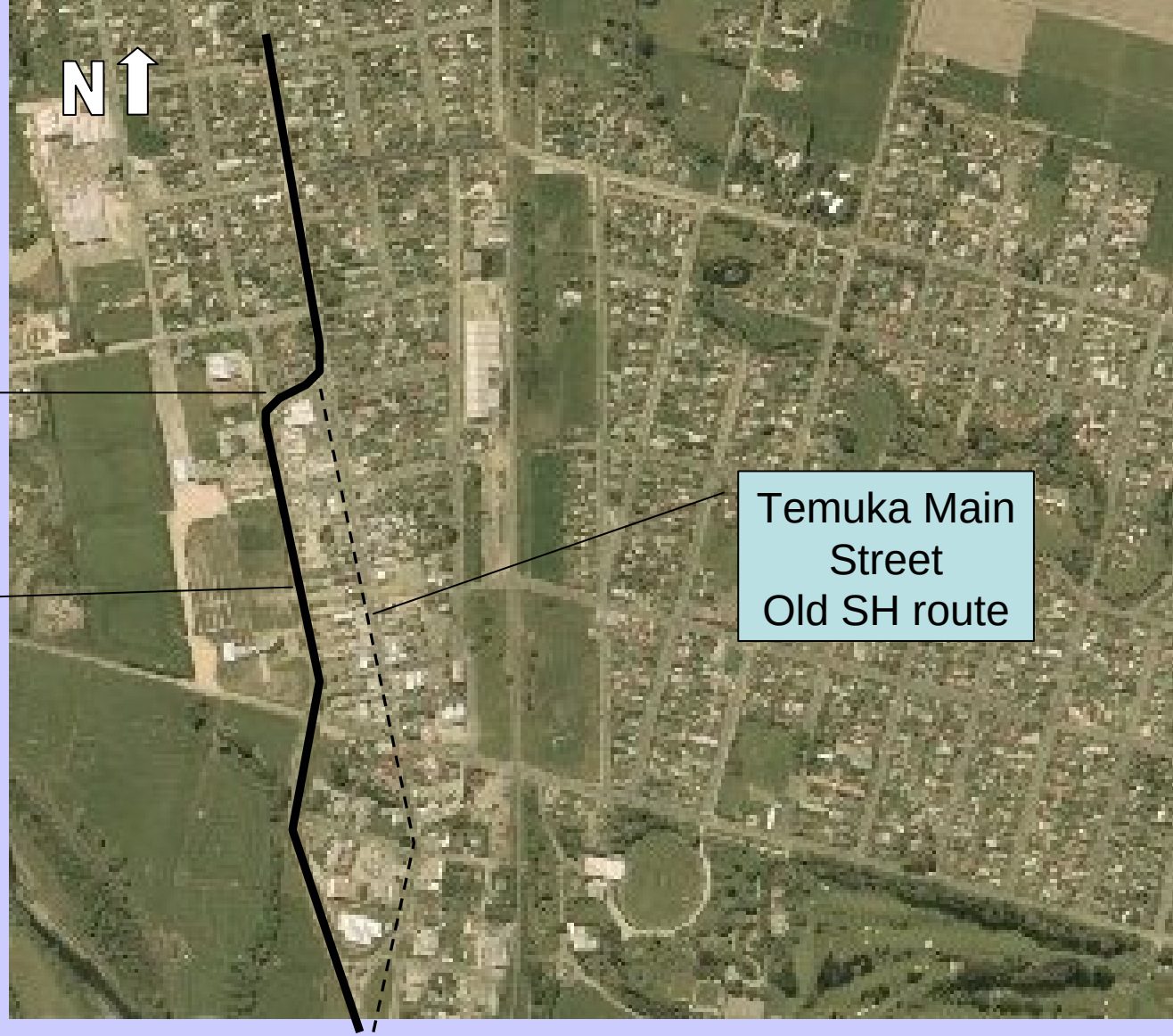
Temuka Truck Rollover (prevention) Sign

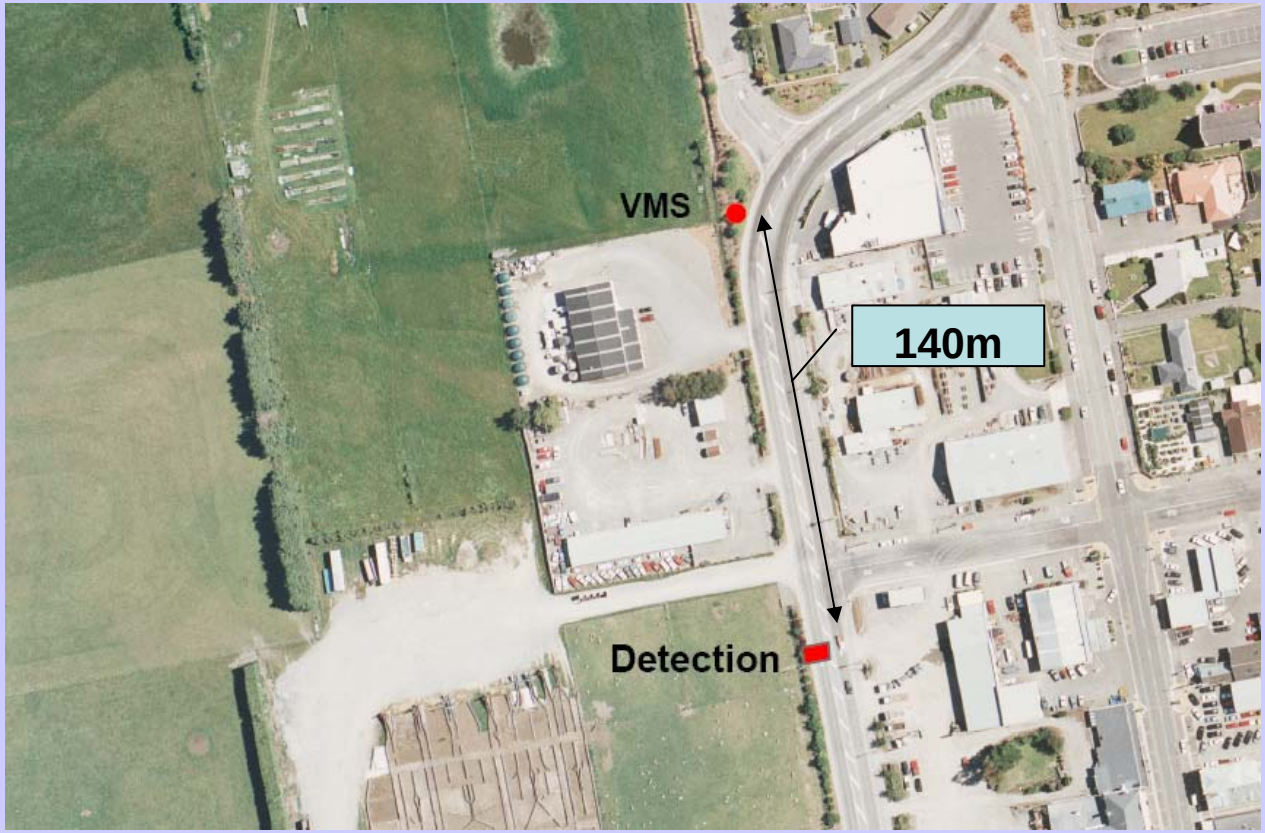
NZ TRANSPORT AGENCY
WAKA KOTAHI

TIMARU
TDC
DISTRICT COUNCIL

Fivepower Systems Ltd
12 Meremere Street
Timaru, New Zealand

"Sustainability through systems engineering"


N
‘S’ Bends
SH1
Bypass
Temuka Main
Street
Old SH route



Northbound approach to S bends

45km/hr curve advisory

1-2 truck rollover crashes / year

Project Team 2006-07

Ray Cook, Murray Russell, Colin Hey and David van der Plas: Transit NZ

Ahmed Hikmet: HMI Technologies Ltd

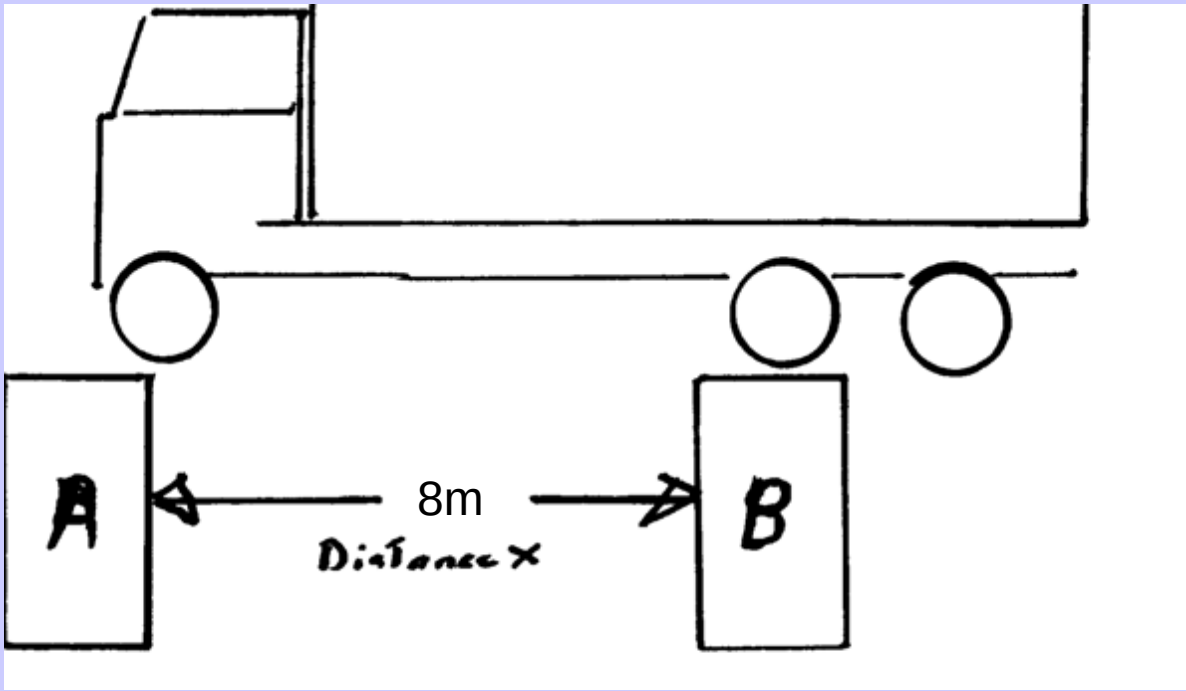
Alan Shaw: Alan Shaw Electrical Ltd

Brian Ward: Timaru District Council

Two rectangular detector loops

Two conditions must exist to send signal to turn sign on:

1. **Both loops are occupied at the same time**
2. **Period between loop B hit and Loop A hit less than that set in the timer (equates to 52km/hr - adjustable)**

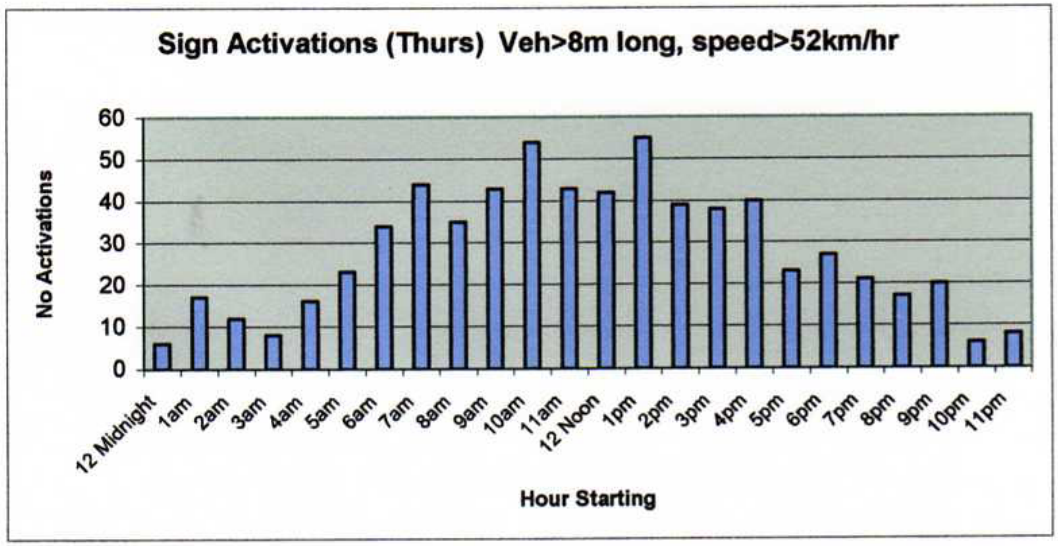


Weekly traffic volumes veh>8m long

Pre-Sign	<50km/hr	>50	Total
Monday	408	163	571
Tuesday	408	185	593
Wednesday	416	161	577
Thursday	387	155	542
Friday	426	197	623
Saturday	158	69	227
Sunday	122	43	165
		973	3298

Post Sign	<50km/hr	>50	Total
Monday	484	90	574
Tuesday	487	139	626
Wednesday	486	138	624
Thursday	458	160	618
Friday	410	121	531
Saturday	173	89	262
Sunday	175	66	241
		803	3476

17% overall reduction in vehicles travelling over 50km/hr



Features

- VMS Sign powered by streetlight circuit to battery
- Could be solar powered

- No truck rollovers since installation in 2007
- Cost about $30,000

- Limit to faster trucks to retain effectiveness
- Use where problems exist that have no realistic alternative solutions or as interim solution
- Could adapt for route application

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