

Road Safety Platforms (RSPs)

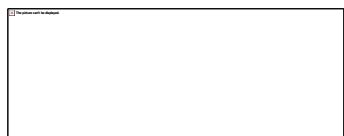
Hema Govind

**make
everyday
better.**

Introduction

- Safety initiatives and bus priority measures with the Christchurch Regeneration acceleration facility (CRAF) funding.

- Taken a safe system approach - people will continue to make mistakes, but they should not pay for this with their lives

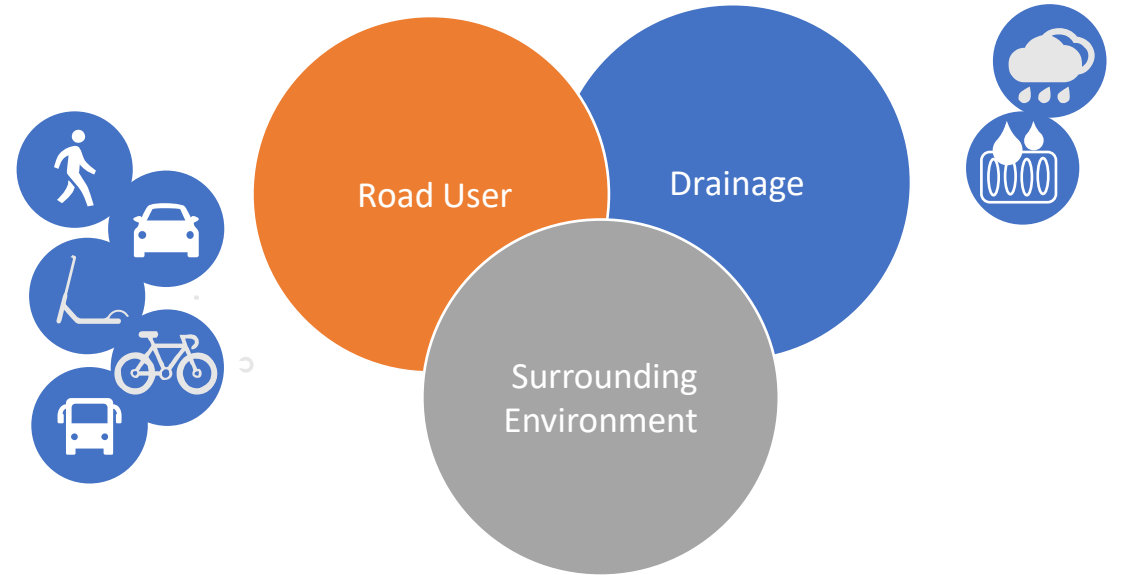
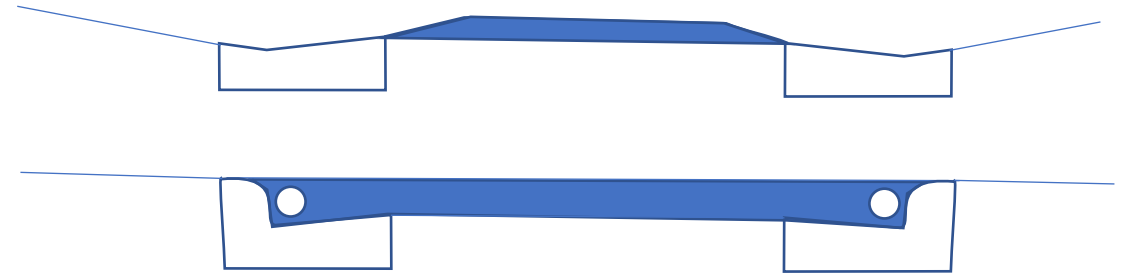


RSP/Speed hump before pedestrian crossing point

RSP at pedestrian crossing point

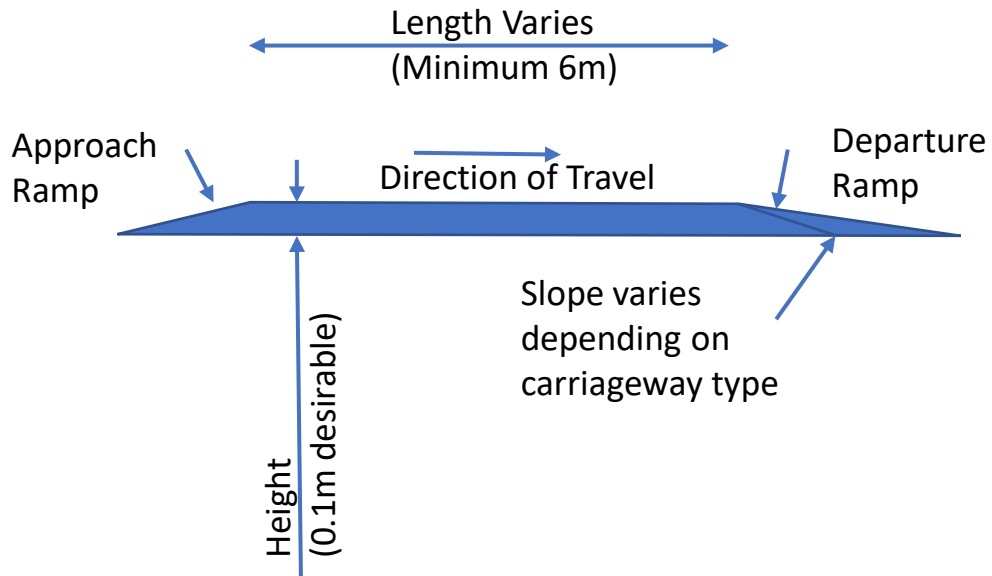
Raise the full intersection

Design Options



3 key considerations

VicRoads Guidelines

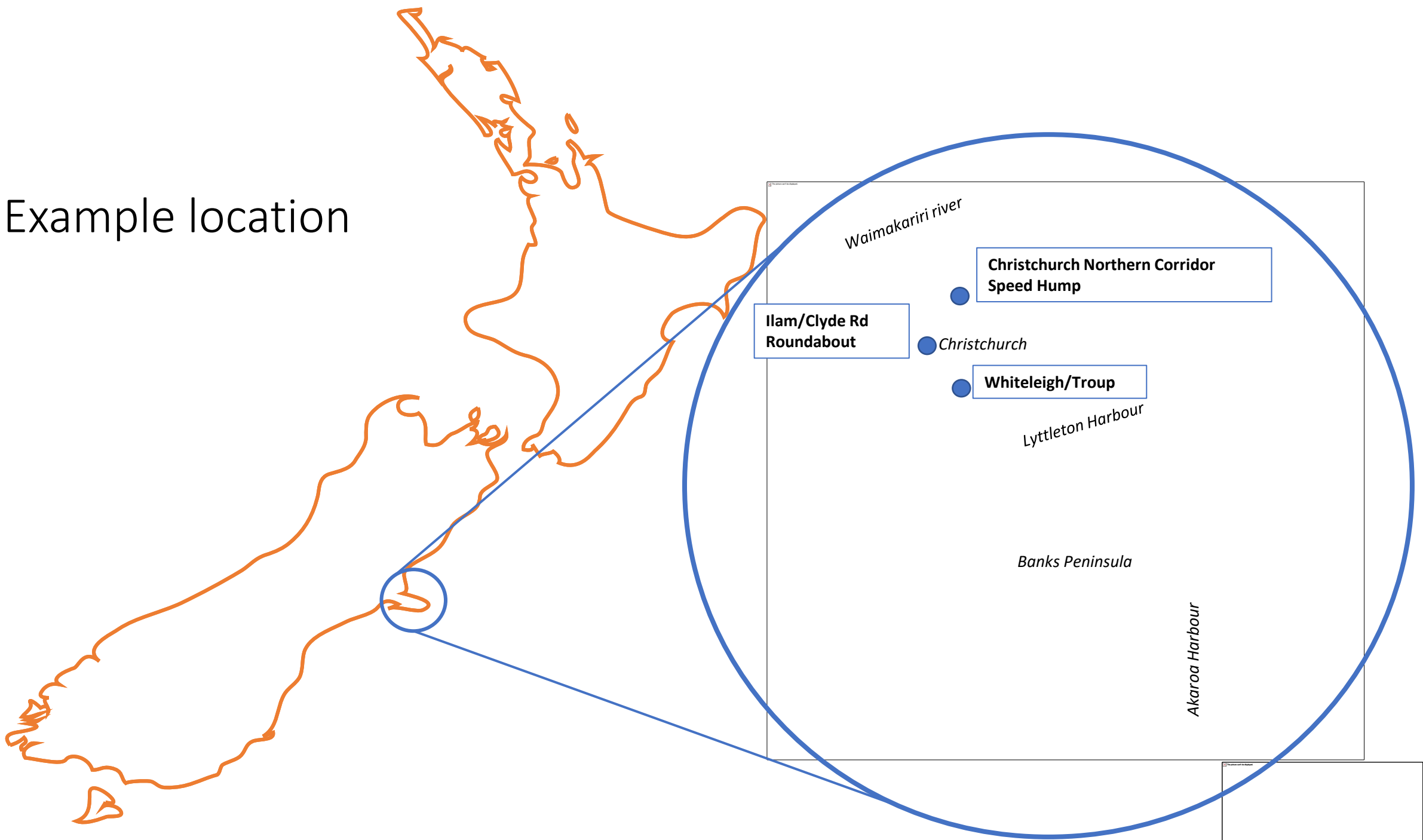


Operating Speed (km/h)	Divided Carriageway		Undivided Carriageway	
	Approach Ramp Grade	Comfortable Max. Speed (km/h)	Approach/Departure Ramp Grade	Comfortable Max. Speed (km/h)
50	1:15 (6.7%)	30	1:20 (5%)	40
60	1:20 (5%)	40	1:25 (4%)	50
70	1:25 (4%)	50	1:25 (4%)	60

AT Guidelines

Context		Profile			
Category – Future Connect	Target Speed at RSP (km/h)	Nominal Grade	Approach ramp	Top	Departure ramp
Arterial or collector	50	1:25	1900 x 75	6000	3000x75
		1:25	1900 x 75	6000	1900x75
	40	1:20	1500 x 75	6000	3000x75
		1:20	1500 x 75	6000	1500x75
	30	1:15	1150 x 75	4000	3000x75
		1:15	1150 x 75	6000	1150x75
Collector – no bus service	30	1:15	1500x100	4000	4000x100
		1:15	1500x100	6000	1500x100
Local – bus service	30	1:15	1150x75	4000	3000x75
		1:15	1150x75	6000	1150x75
Local – no bus service	30	1:15	1500x100	4000	4000x100
		1:15	1500x100	4000	1500x100
Local – no bus service	25	1:10	1000x100	4000	4000x100
		1:10	1000x100	4000	1000x100

Example location





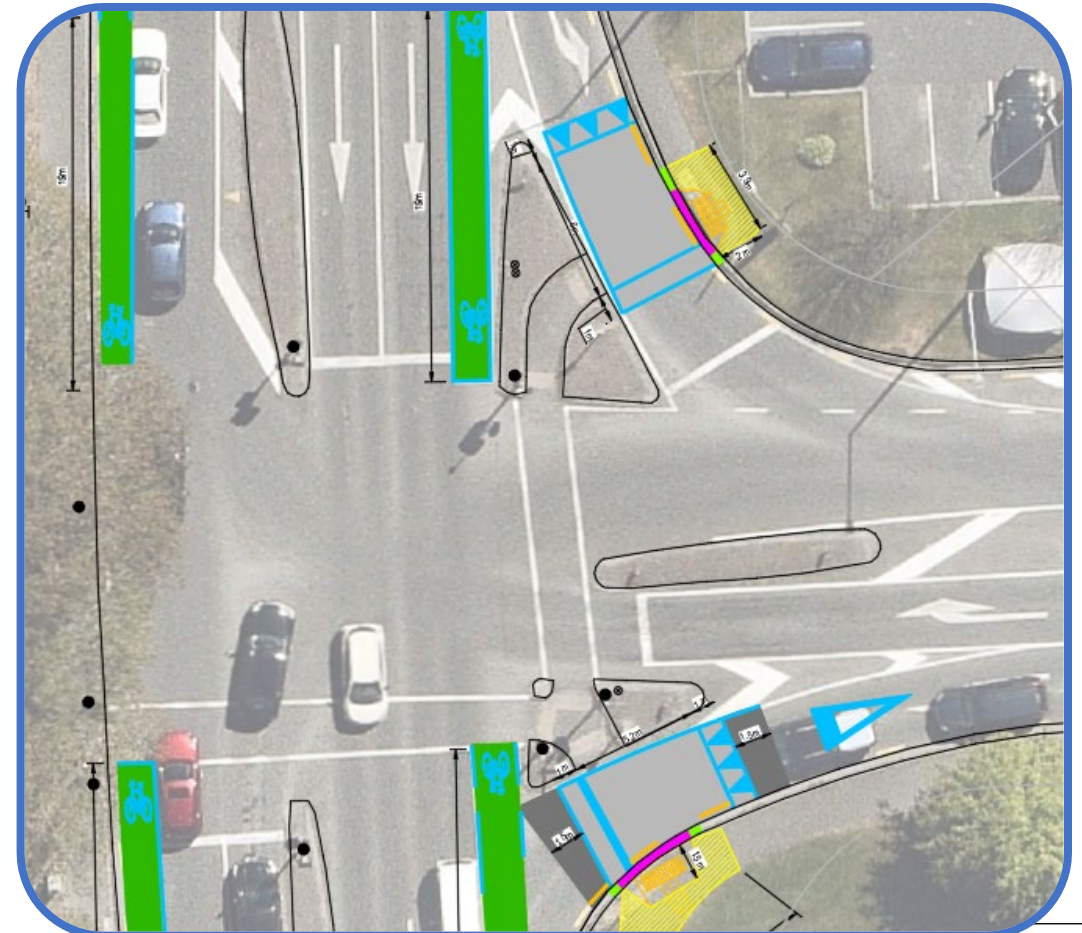
Whiteleigh/Troup Rd

RSP at crossing point
Ramp height <75mm

Crossing grades okay for pedestrians

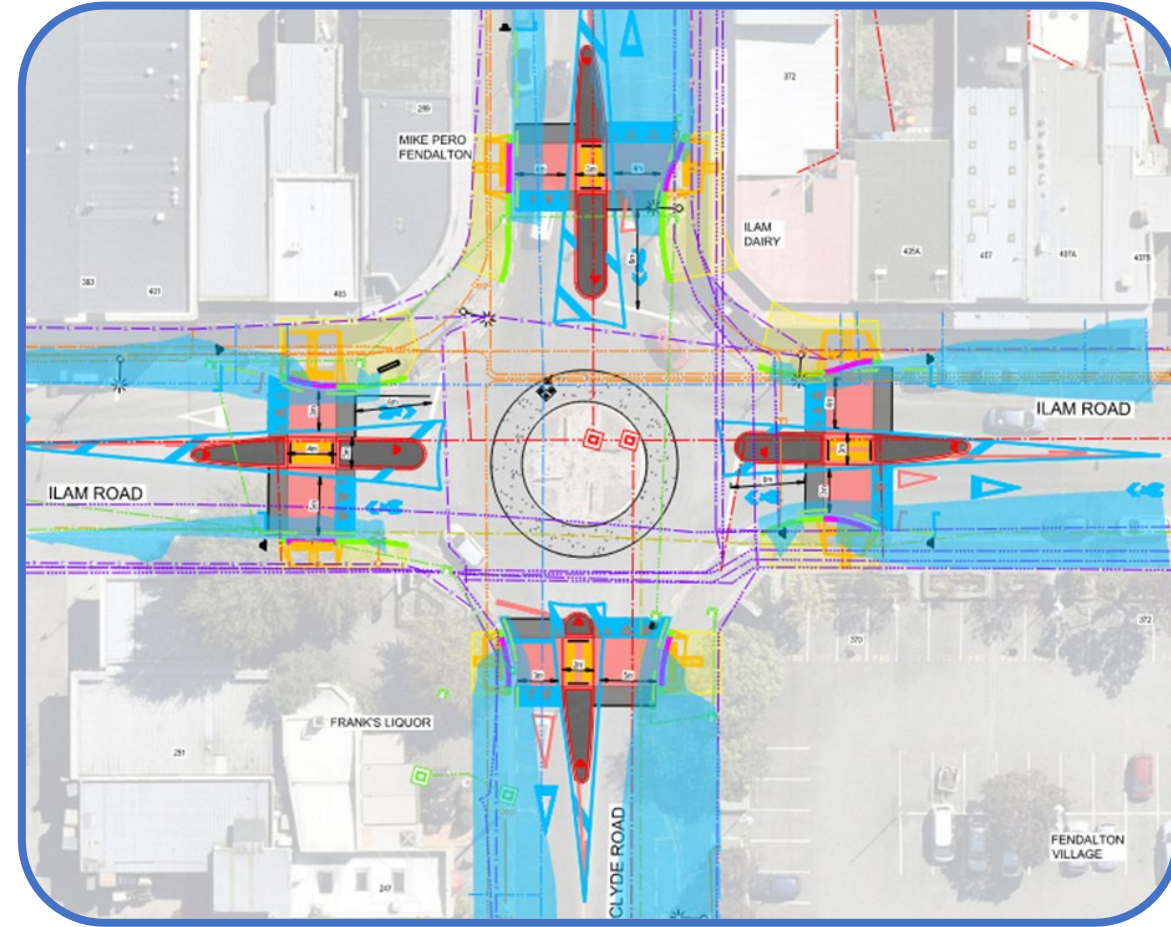
Less effective than a ramp with a greater change in level

Drainage not impacted



Clyde/Ilam

RSP at crossing point
Ramp height 75mm



If primary drainage blocks, stormwater may flow onto the footpath and into the adjacent property.

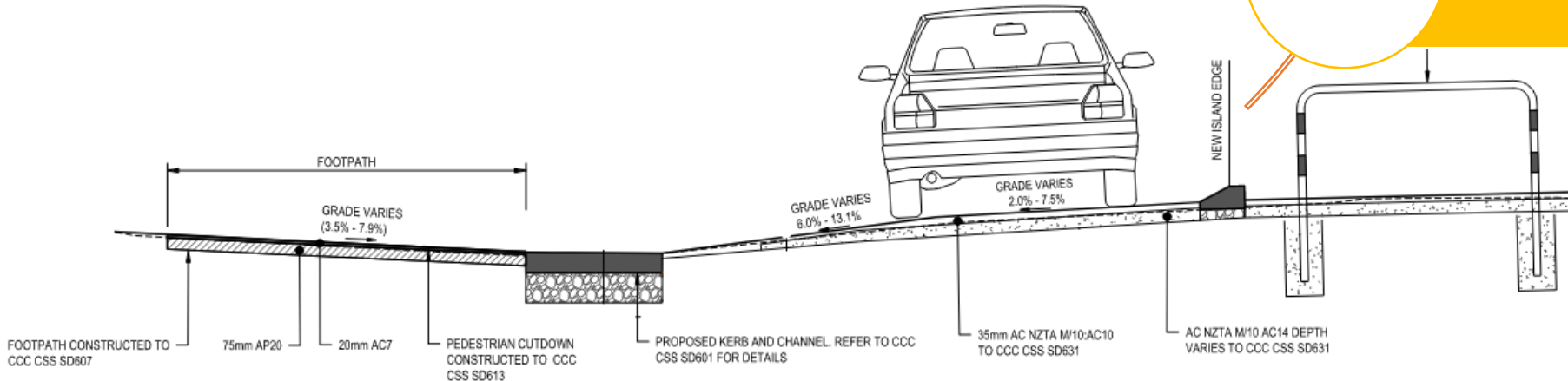


Clyde/Ilam

RSP at crossing point
Ramp height 50mm

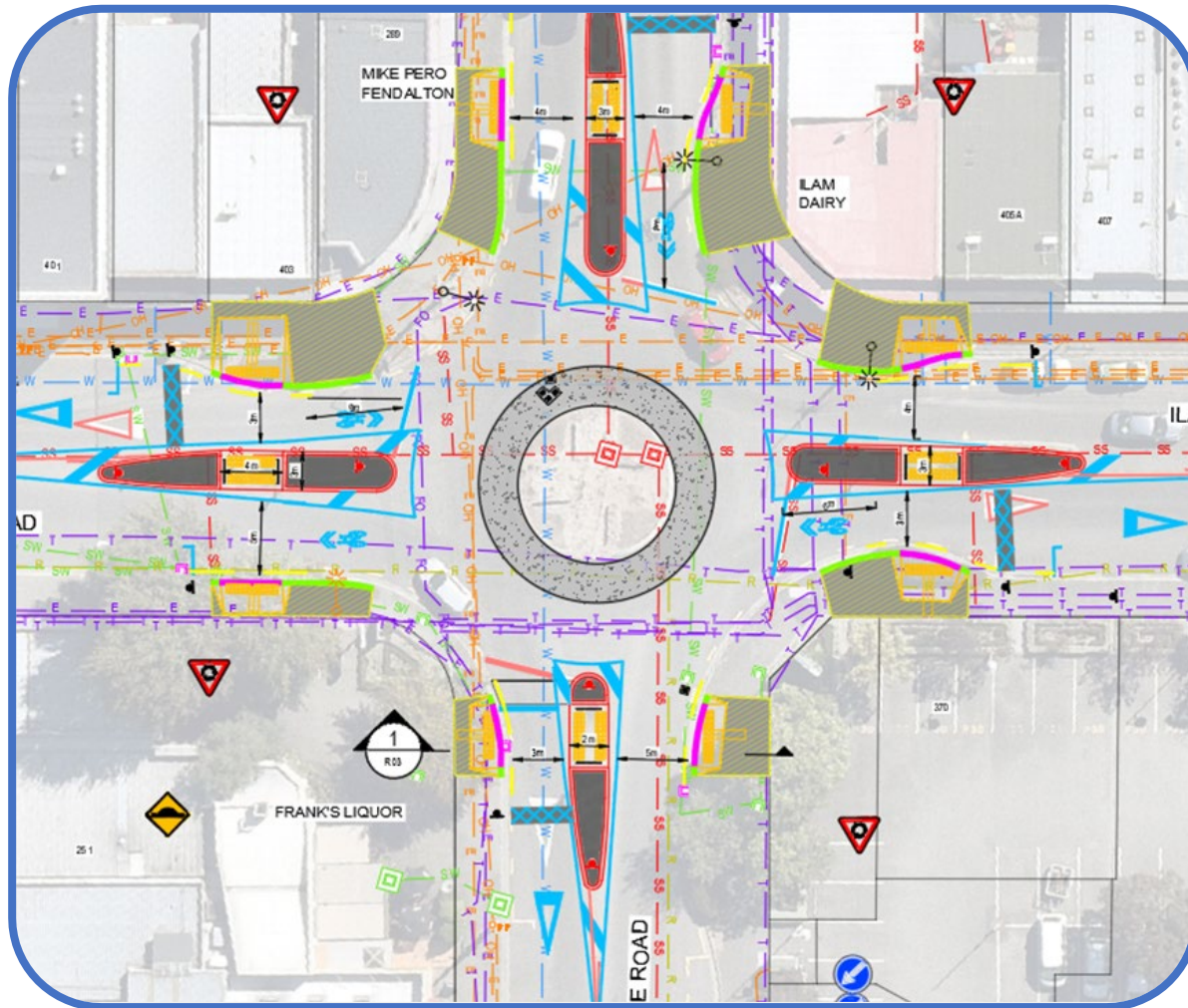


- Crossing grades steep for pedestrians, smoother grades preferable for busses
- Shops surrounding intersection
- Drainage not impacted



Clyde/Ilam

Speed hump/platform before pedestrian crossing

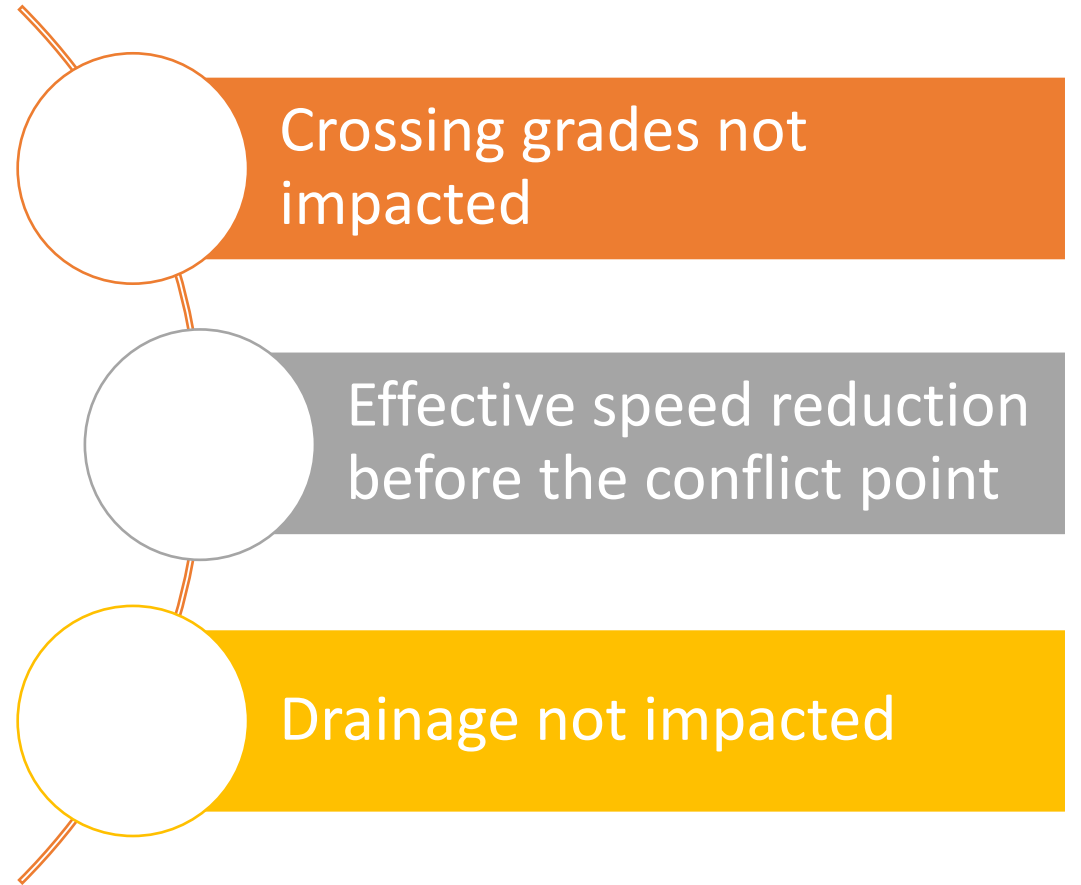
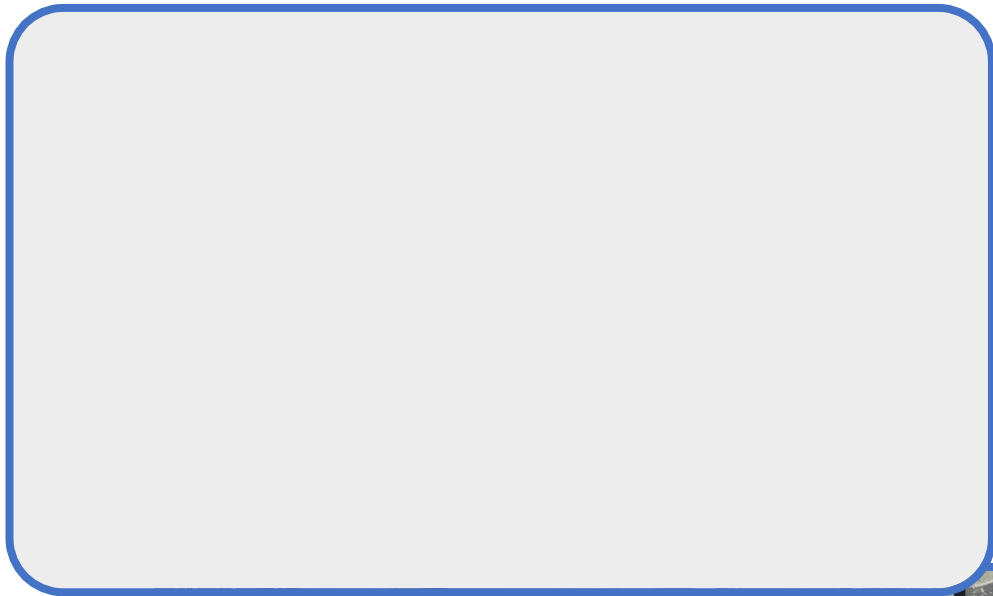


- Crossing grades ok for pedestrians. Modified ramp smoother for busses
- Effective speed reduction
- Drainage not impacted



Christchurch Northern Corridor

Speed hump before pedestrian/cyclist crossing



Drainage options



All require ongoing Maintenance!



Kerb Inlet



Grated Drain



Tie ramp into
channel



Beany block



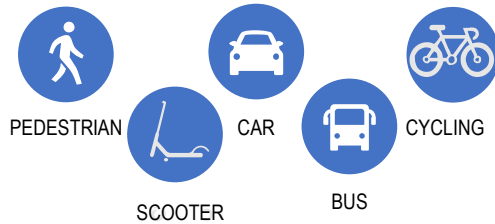
Steel Plates

Drainage Option	Pros	Cons
Retain Channel	Easy for drainage	Issues with accessibility
Full 100mm height RSP	Can use a drain and have good level surface for pedestrians	Issues with secondary flow path
50mm height	Can retain channel for secondary flow	Less effective speed control

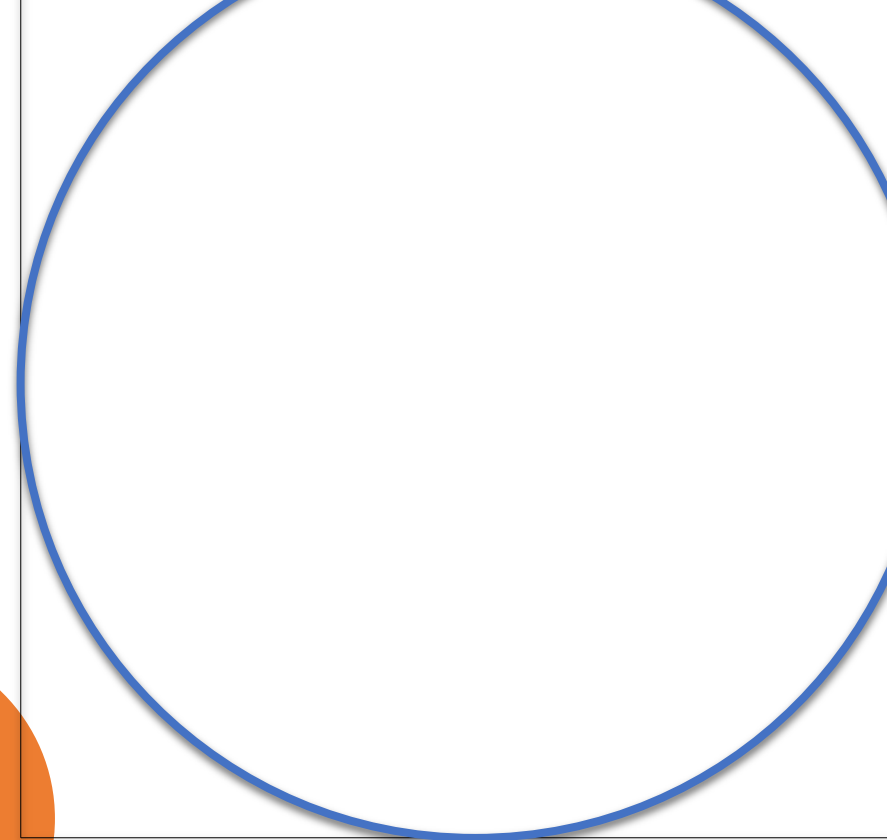
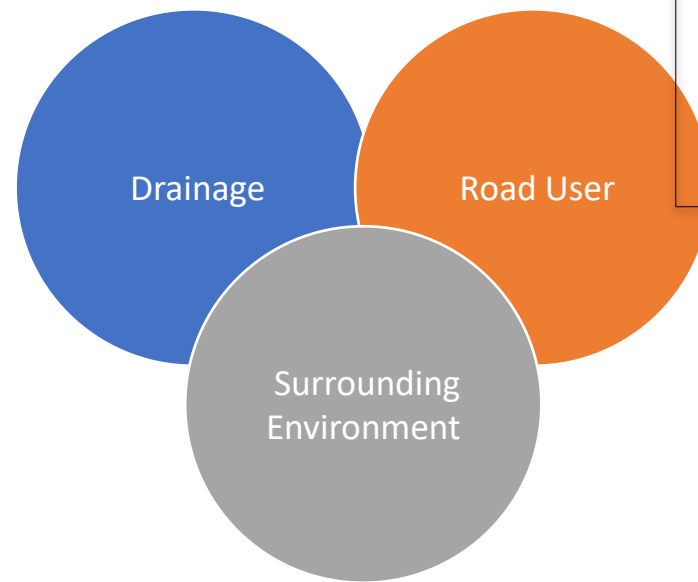
Conclusion

- RSP force users to slow down to a safe speed environment
- Not as simple to design
- Consider:

- Road users



- Surrounding environment
- Drainage



Questions?

