# Seabrook Road Closure Shane Avenue & Seabrook Boulevard



# Contents

1	Proposal	3
2	Existing Conditions	4
2.1	Shane Avenue and Seabrook Boulevard	4
2.2	Point Cook Road	4
3	Effect of closure	5
3.1	Network capacity and operation	5
3.2	Emergency Vehicles	6
3.3	Public Transport	6
3.4	Communications and stakeholder engagement	6
3.5	Safety and operation of the proposed treatment	7
3.5.1	Prior to Road closure	7
3.5.2	During Road Closure	7
3.5.3	Operation of road closure	7
4	Conclusion	g

# 1 Proposal

The Department of Transport have received a request from Hobsons Bay City Council to consider a permanent, part-time road closure of Shane Avenue & Seabrook Boulevard in Seabrook to prohibit 'rat running' of vehicles.

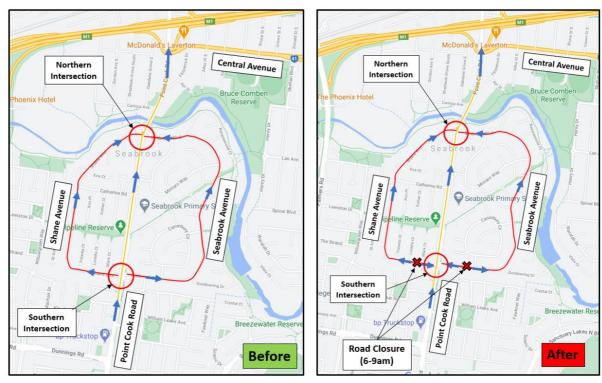


Figure 1: Proposed Road closures on Seabrook Boulevard and Shane Avenue

Council has received numerous complaints from the community about vehicles 'rat running' along Shane Avenue & Seabrook Boulevard, attempting to avoid traffic congestion along point Cook Road. The traffic congestion along Point Cook Road stems back from congestion at the roundabout with Central Avenue.

Please note that that for the purpose of this report, 'the southern intersection' and 'the northern intersection' refer to the southern and northern intersections respectively of Point Cook and Shane Avenue/Seabrook Boulevard.

The project seeks to implement part time (6am-9am) road closures at the southern end of both Shane Avenue & Seabrook Boulevard. This will result in vehicle access being restricted to each of these respective roads from the southern intersection with Point Cook Road at these times. It is intended that traffic on Seabrook Boulevard & Shane Avenue between these times will be local traffic only and will need to access Point Cook Road from the northern intersection. The proposal aims to improve safety and access for local residents in and around these two roads.

The road closures are proposed to be implemented with the installation of pneumatic bollards on raised speed humps which will automatically rise at the time of road closure and retract into the ground once the road closure finishes. The operation of the bollards is accompanied by advanced warning signs with flashing lights which will operate prior to the commencement of the road closure. Additional static signage is proposed to be included on Point Cook Road to deter vehicles entering these two roads.

Given the nature of the proposal, it is considered a permanent, part-time road closure, under Schedule 11, Cl. 9(1) of the Local Government Act 1989. Noting this, the following clauses apply:

- Cl. 9(2) A Council must not exercise this power unless it has considered a report from the Head, Transport for Victoria concerning the exercise of the power. (This Report)
- Cl. 9(3) The exercise of this power is subject to any direction of the Minister.

# 2 Existing Conditions

#### 2.1 Shane Avenue and Seabrook Boulevard

Both Shane Avenue & Seabrook Boulevard are 50km/h local roads characterised by a single carriageway with one lane in each direction. Shane Avenue is approximately 11.5m wide with parking on either side and Seabrook Boulevard 7.5m wide, with parking along the verges provided at various locations. Neither street contains any parking restrictions.

Both roads contain pedestrian sidewalks on either side of the road. Shane Avenue has two pedestrian refuges at both the northern and southern intersection with Point Cook Road. Seabrook Boulevard contains a pedestrian crossing at the southern intersection with Point Cook Road and a refuge at the northern intersection and a pedestrian crossing.

Traffic volumes for Shane Avenue and Seabrook Boulevard are shown in table 1 below.

	Expected per day (for a local road)	Actual - Morning peak weekday average (6 to 9 am)	Actual - Afternoon peak weekday average (3 to 7 pm)	Weekday average
Shane Ave*	1000 – 2000	438	488	1,636
Seabrook Blvd *	1000 – 2000	1799	458	4,095

Table 1: Peak and weekday average traffic volumes for Shane Avenue and Seabrook Boulevard

Surrounding land use is completely built up, comprising of low-density residential buildings.

In terms of Movement and Place, both roads have a P5 place value. There is a small section of Seabrook that is P4 as it is in close proximity to a shared use path along Skeleton Creek. While no movement values are available, they would likely be considered M5 given that they are local roads providing local access only.

It should be noted that while the main access is along Point Cook Road, Seabrook Boulevard also provides access to Seabrook Primary School. Council has reported that access to the school via the local road network is common as parents try to avoid traffic congestion along Point Cook Road.

#### 2.2 Point Cook Road

Point Cook Road between the northern and southern intersections with Shane avenue and Seabrook Boulevard is a 60 km/h arterial road, characterised by a 13.0m wide carriageway, divided by a painted centre island and containing 1.3m bike lanes on each side.

A service lane extends along the majority of the western side of the road with two smaller roads providing access to houses along the eastern side of the road.

While parking is permitted along the service lanes & side roads, parking is not permitted on any section of the main carriage way.

Traffic volumes are consistent with two-way weekday volumes approximately 23,000, increasing slightly to 23,500 on the weekends.

In terms of Movement and Place, this section of Point Cook Road has a M3 movement value with a mix between a P4 place value around Seabrook Primary School and nearby small commercial lots and P5 on the remaining.

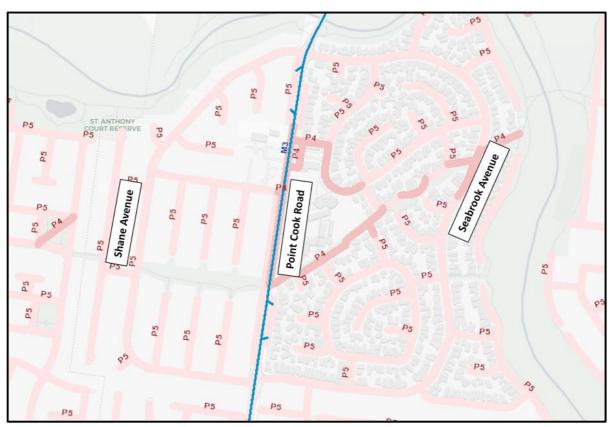


Figure 2: Movement and Place values

# 3 Effect of closure

## 3.1 Network capacity and operation

The traffic congestion issues along Point Cook Road are well documented. Capacity constraints at the roundabout that forms the intersection between Central Ave and Point Cook Road has been identified to present a number of issues, namely an inability to efficiently regulate flows from the traffic on Central Avenue, coming from Altona Meadows to the West and the traffic coming from Seabrook and Point Cook in the south. The result being the development of significant queues of traffic stemming south along Point Cook Road from Central Avenue.

Being that the stated purpose of the road closure is to contain through traffic to the arterial road network and seclude through traffic from using Shane Avenue and Seabrook Boulevard as a 'rat running' route to 'queue jump' this section of Point Cook Road, it can safely be assumed that there will be no overall increase to the traffic volumes beyond the northern intersection. This will likely result in greater volumes on Point Cook Road between the southern and northern intersections with Shane

Avenue and Seabrook Boulevard, however as this is through traffic, this aligns with the intended function of the road.

In response to the capacity constraints of the Point Cook Road and Central Avenue intersection, DoT has recently completed a duplication of Dunning's Road between Point Cook Road and Palmers Road with the intention to divert greater volumes of traffic from Point Cook Road to Princes Freeway via Dunning's Road and Palmers Road. DoT are currently undertaking further investigations in the development of additional improvement projects that further encourage traffic to divert away from the section of Point Cook Road north of Dunning's Road. The Dunning Road and Palmers Road proposal is likely to ease congestion on Point Cook Road and thus reducing the volume of vehicles that intend to 'rat run' through local streets.

## 3.2 Emergency Vehicles

The proposed road closure is likely to increase travel time for emergency services to access the area. To date no information has been provided by Council about the impact to emergency vehicles as a result of the proposed road closures. Emergency Services must be consulted on the proposed closure.

## 3.3 Public Transport

As there are no public transport services along either Shane Avenue or Seabrook Boulevard, no direct impacts are expected. While the traffic volumes along Point Cook Road between the northern and southern intersections may increase as a result of the reduction in rat running, it is expected that traffic flow on Shane Avenue and Seabrook Boulevard will improve due to the reduction in vehicles queue jumping the congestion at the northern intersection.

## 3.4 Communications and stakeholder engagement

Council have undertaken extensive community consultation to gauge an understanding of the issues experienced and the support for various treatments.

The community was engaged to explore various treatment options. The subsequent review of this process landed on four treatment options that were then put to the community for a preference vote. The subsequent treatment options and community preference is detailed in table 2 below.

Option	Votes	Percentage
Option 1: Removable Bollards	213	31%
Option 2: No right / left hand turn	189	27%
Option 5: Take no action and keep existing conditions	139	20%
Option 4: Full road closures	108	16%
Option 3: Permanent restrictions	42	6%
Total	691	100

Table 2: Treatment options and community voting results

Of particular note from the survey were:

- 9% of respondents noting the congestion Point Cook Road to be the key issue;
- 9% of respondents believed the options unfairly disadvantaged residents in Seabrook Boulevard, Shane Avenue & surrounding locals streets;
- 7% of respondents believe Point Cook Road should be widened; and
- 5% of respondents believe traffic lights should be installed.

Based on the results of the community engagement survey, Council have opted to pursue development of Option 1: Removable Bollards.

Please refer to the following link for the treatment option report

### 3.5 Safety and operation of the proposed treatment

The proposed treatment option that utilises pneumatic retractable bollards positioned in the middle of the traffic lane on raised speed humps present several safety and operational concerns.

#### 3.5.1 Prior to Road closure

The road closure process involves warning provided by advanced warning signs with flashing lights. It is proposed that the advanced warning signs will begin flashing 10s prior to the bollards rising from the ground providing road users with advanced warning. As has been highlighted in the RSA (Item 7.5), there are concerns that impatient drivers will attempt to beat the road closure and pass prior to the bollards rising. While it has been noted that the design will incorporate vehicle loops designed to prohibit the bollards rising should a vehicle be detected, this does not negate the risk of collision should a vehicle attempt to pass while the bollards have already begun to rise. Council response to issue raised does not reflect adequate consideration or mitigation of this risk.

#### 3.5.2 During Road Closure

While it is acknowledged that vehicles will have prior warning in the form of static signs on Point Cook Road, advanced flashing signs 50m prior to bollards and the flashing lights on the bollards themselves, there still exists risk of collision with bollards if drivers are inattentive or unfamiliar with the road closure arrangement as highlighted in the RSA (Item 7.7). This issue would be exacerbated in poor visibility such as early morning or bad weather.

It has been noted by council that design speeds of the speed hump of 20 km/h would reduce this risk, however it cannot be guaranteed that vehicles are not travelling at a greater speed. Furthermore, for the vehicles trying to 'beat' the road closure, increased speeds are a higher likelihood.

It is noted that Council are proposing to use a <u>High Security Retractable - Energy Absorbing Bollard</u> supplied by Impact Absorbing Systems (IAS) Pty Ltd, noted to comply with Australian Crash Barrier Standard 3845:1999 (60km.h). However, AS 3845:1999 has since been superseded by AS3845.1:2015 & AS3845.2:2017 to reflect the shift to the MASH safety barrier testing method. No mention of compliance with the latest standard is noted on the available product information

Furthermore, it should be noted that the use of retractable bollards in this manner is non-standard and presents inherent risks due to the unfamiliarity of the arrangement. Generally, retractable bollards are used at the interface between road and pedestrian environments where it is important to protect pedestrians from errant or hostile vehicles.

The use of retractable bollards in this instance is not for the purpose of protecting pedestrians but rather for increased enforcement of a road closure. While it is recognised that the road closure will result in safety improvements for the surrounding local road network, the risk of injury to vehicle occupants versus the benefit gained from the road closure is harder to justify. Furthermore, the risk of collision is greatly increased given that the bollard is placed in the middle of the carriageway rather than on the side of the road or on entrance to a pedestrian area in addition to the part-time nature of the road closure whereby drivers will be accustomed to being able to freely travel through this section of road outside of the hours of road closure.

Additionally, as highlighted in the RSA (Item 7.4), there exists increased risk of collision for vehicles that approach the road closure from side roads (Andrew Chirnside, Mark Court) as they will not have the benefit of the advanced warning signs.

#### 3.5.3 Operation of road closure

Given the location of the road closure, there is the likelihood of difficulty for vehicles to turn around (make a U-turn) should they enter Shane Avenue or Seabrook Boulevard during the road closure. This would particularly be an issue for larger vehicles or vehicles with a trailer. The need for vehicles

to turn around or reverse would likely lead to operational and safety issues for road users unfamiliar with the traffic arrangement or as road users become familiar with the arrangement.

## 4 Conclusion

Citing the safety and operational concerns noted in this report, DoT does not support the closure proposal in its current form. i.e. The use of retractable bollards in the road space for the purpose of part-time road closure.

However, DoT acknowledges the issues underpinning the proposal and will continue to work with Council and the local community in seeking alternative improvements.

If you wish to discuss the matter further, Mr Matthew Poole – Acting Senior Movement and Safety Engineer (Tel: 03 9881 8020) would be pleased to assist.

Yours sincerely,

**MANAWA HERATH** 

A/TEAM LEADER MOVEMENT & SAFETY CENTRAL (ROADS)

19/ 02/ 2021