

Memo

TO: Haig Poulson (City of Melbourne)

CC: Gary Whytcross, Peter Kelly

FROM: Andrew Walsh

DATE: 28 Feb 2008

RE: Queens Bridge Street Proposed Clearway

The West Gate Alliance has been asked to investigate options for cyclist accessibility along Queensbridge Street, with particular regard to the temporal impact of the proposed Clearway. Initially, the standard VicRoads design is discussed, and then four possible options are explored further.

Figures 1 & 2 below show a typical VicRoads standard design of bicycle facilities along Clearways.¹

Figure 1 shows a typical layout during Clearway times. It shows two traffic lanes with a designated bicycle lane on the left side. This lane is marked with the Bicycle Pavement Logo with accompanying signs. On Queensbridge Street, a Clearway is proposed and is expected to operate in the southbound direction between the hours of 4pm and 7pm weekdays.

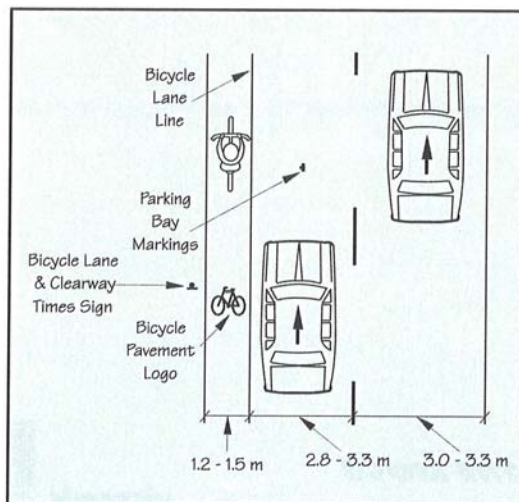


Figure 1: During Clearway times

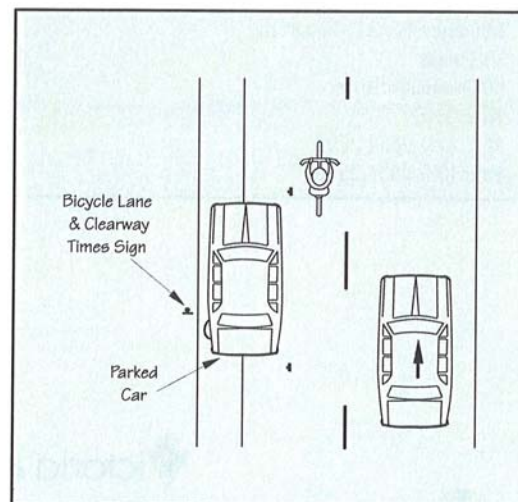


Figure 2: Outside Clearway times

¹ VicRoads Cycle Notes No. 4 on Clearway Bicycle Lane

Figure 2 shows the typical layout outside Clearway hours. During this time, kerbside parking is allowed which consequently impacts the kerbside bicycle lane. The left-side traffic lane is reduced in width due to the kerbside parking and is no longer trafficable as a separate through lane, resulting in a single through lane during non-Clearway hours. The remnant lane width becomes a 'de facto' bicycle lane/parking lane. The 'de facto' bicycle lane does not have a Bicycle Pavement Logo. This design is used in many municipalities in urban areas around Greater Melbourne.

The proposal also includes a sign that is located at the start of the bicycle lane near the intersection of Queensbridge Street and Power Street which indicates when the bicycle path is operational (i.e. during the Clearway times of 4pm to 7pm). This sign is represented in Figure 3 below.



Figure 3: Sign to be placed at start of bicycle lane

The photographs below show the typical design in use within Greater Melbourne.



Photograph 1 Brunswick Street, Fitzroy



Photograph 2 Mt Alexander Road, Ascot Vale

Four alternative options have also been explored and these are as follows:

- **Option 1**

In the standard layout described above, the lane between the kerbside parked vehicles and the traffic lane becomes a 'de facto' bicycle lane outside Clearway times. Option 1 involves the placing of a Bicycle Pavement Logo on the 'de facto' bicycle lane. This makes the cycle lane clear to both cyclists and motorists outside Clearway times. However during Clearway times this logo would cause confusion to motorists and cyclists. Motorists drive over this logo as it is in the second trafficable lane which could cause them to believe that they are driving across a permanent bicycle lane. Cyclists see two Bicycle Pavement Logos; one at the kerbside and the other to the right hand side of the left trafficable lane thus creating uncertainty in which bicycle lane to travel on during Clearway times.

This option is not recommended.

- **Option 2**

Option 2 is similar to Option 1. A Bicycle Pavement Logo is also placed on the 'de facto' bicycle lane. However this logo is hatched giving the appearance that it is used only during certain periods of time (i.e. outside Clearway times). As stated in option 1 above, the same confusion issues could exist for both motorists and cyclists during Clearway times.

This option is not recommended.

- **Option 3**

Option 3 involves the placing of small Bicycle Pavement Logos on the 'de facto' bicycle lane. This logo is the same size to those on off-road bicycle paths (800x490mm). This will make it clear for cyclists that the priority bicycle lane is next to the kerbside when available during Clearway times. This logo, due to its small size, could be difficult for motorists to see. This could cause safety issues as motorists are distracted from driving by trying to focus on reading the small Bicycle Pavement Logo.

This option is not recommended.

- **Option 4**

Option 4 involves the placing of lights in the shape of the Bicycle Pavement Logo on the 'de facto' bicycle lane. This lit-up logo is approximately the same size as the standard white painted logo (1800x1100mm). Outside Clearway times these lights are switched on. During Clearway times these lights are switched off and the kerbside bicycle lane is utilised. The kerbside bicycle lane has a Bicycle Pavement Logo which is marked with white paint as standard. If bicycle road marking is necessary during Clearway times, Option 4 offers the best solution as these road markings can be made visible during 'de facto' bicycle lane's operational times only.

This option is possible, but is likely to be very expensive to implement and maintain.

Conclusion

Options 1, 2 & 3 are expected to operate effectively outside Clearway times. However, during Clearway times both motorist and cyclists could be confused as to which lane is the appropriate bicycle lane. This confusion could lead to safety issues.

Option 4 is expected to alleviate the possible confusion caused by Options 1, 2 & 3. This option is, however, likely to be expensive and this expense could be difficult to justify.

The typical design shown in Figures 1 & 2 is the recommended VicRoads design and is also used widely within Greater Melbourne in Clearway zones. Cyclists and motorists are accustomed to the operation of such a layout.

Queensbridge Street is expected to increase in traffic volumes particularly during the PM peak hours with the upgrade of the West Gate Freeway. The proposed Clearway provides for this increase in traffic but also provides for the needs of cyclists at all times.

Regards

Andrew Walsh