

21 December 2011

Merrifield West PSP

Submission for the GAA draft Precinct Structure Plans open for public comment

Bicycle Network Victoria support the provision of cycling networks in new suburban developments and welcomes the opportunity to make a submission to the draft Precinct Structure Plan process.

Bicycle Network Victoria is currently working on a three year project funded by VicHealth investigating how to overcome the low cycling rates in outer suburbs.

A key aspect of this, and a focus of the project, is the lack of consistent and appropriate planning and provision for cyclists of all ages and abilities. This has led to poor provision for potential cyclists who do not have the basic infrastructure to use their bikes for the many transport and recreational journeys/trips that can easily be done by bike. People are dependent on the car rather than having it as one of the travel options available to them. Travel and activity data from existing suburbs show that most trips to schools, friends and shops are within 1-6km – an easy distance to cycle. Trips to work and tertiary education tend to be much longer and rely upon good connections to public transport and places to leave a bicycle securely for the day.

Key deficiencies we have observed in existing suburbs are:

- Schools are not well connected to the wider path network with children expected to ride on busy connector streets with motor vehicles;
- train stations and other public transport hubs not connected to the cycle network;
- arterial roads above 60k/h with on-road bike lanes that only suit a small percentage of the population;
- lack of bicycle paths along rail reserves which would provide connections to stations for many people;
- widely spaced crossings of major barriers such as freeways and railways that mean long detours for bicycle trips; and
- a general deficiency of cycling infrastructure leading to a piecemeal, unconnected series of lane and paths that are not used (a bit like an incomplete water supply network made of a series of unconnected pipes that is expected to provide people with drinking water).

The project has developed a draft Planning Checklist for Cycling that aims to prevent these deficiencies and allow a quick assessment of whether the basic requirements for cycling have been met in development proposals. The Checklist covers the three basic criteria of:

- **Connectivity** (is it physically possible to ride to key destinations?);
- **Permeability** (encompassing directness and choice of routes –is cycling an attractive choice); and
- **Quality/Appropriateness** (does the cycling facility suit the people using it and the trip purpose?).

At **Precinct Structure Plan** level the checklist seeks to establish a finer grained network that allows access to local destinations as well as connections to surrounding areas. At PSP level there is an increased focus on the permeability and appropriateness of the bicycle network routes. Connector streets are usually shown at this level and many key destinations such as schools, community centres and Local Town Centres will be located on these streets.

Using the Planning Checklist for Cycling as an evaluation tool, Bicycle Network Victoria offers the following assessment for the draft Merrifield West Precinct Structure Plan (see attached assessment table and annotated plan):

Merrifield West

Connectivity –

Network of bicycle routes - bicycle routes (on-road lanes and/or off-road paths) are provided along connector and arterial streets and local access streets are configured to limit speeds and volumes. This provides connectivity to most destinations, including school, parks and Local Town Centres and all residences will be within 400m of a marked bicycle route.

Connections to destinations - The southern Local Town Centre is isolated due to a short section of missing path from the primary school to the western connector street and a connection to the Outer Metro Ring road path. The future Major Town Centre to the east will be isolated without connections to the off-road path network.

Permeability –

Access into Town Centres - There is choice of bicycle routes to schools and parks but poor permeability in the southern Local Town Centres and the future Major Town Centre due to the lack of separated bike paths into the Centres. There are no marked bike lanes or paths through these centres which will have to rely on advisory bike lanes on busy connector streets carrying buses.

Crossing of barriers - The Outer Metro Ring road to the west is a potential significant barrier for permeability to the west. A path is proposed along the eastern edge but there is only one crossing point indicated over 3km of length. A future crossing point is needed where the shared path along the drainage reserve meets the OMR path in the north west of the area.

Quality/Appropriateness –

Connector streets with schools, parks, community facilities – most schools, parks and community facilities will be located on connector streets. These streets are likely to carry significant motor vehicle traffic volumes at moderate speeds (50-80km/h). On-road bike lanes on these roads are unlikely to be used by school children, family groups or novice riders and separated off-road paths, with clear and unhindered crossing of minor streets, are more appropriate. They also serve to connect to the wider off road path network alongside parks and green corridors.

Connector streets with buses and bikes - Many of the connector streets have marked on-road bike lanes on potential bus routes. This may lead to conflict between buses and bikes as buses must cross

and recross the bike lane to load and unload passengers. Off-road bike paths are more appropriate on these routes as bicycles can run behind stops and high frequency bus services will not be hindered in their operation. Off –road bike paths also mean a narrower paved road width which is easier for pedestrians and potential bus passengers to cross. The western and eastern north south connector streets pass by schools, parks and activity centres which should be connected by separated off-road paths.

Bike lanes on high speed roads – most of the higher speed arterial roads propose on-road bike lanes alongside motor vehicles travelling above 70-80km/h. Austroads Guides to Road Design (2009, 2011) recommend separated bike paths for these traffic regimes and these are much more likely to be used by less confident and novice bike riders such as children and family groups who do the majority of riding in the community via short trips to school, shops and friend and for recreation. Separated, bike only paths are more appropriate for these roads but care needs to be taken to design intersections and cross overs (driveways etc.) to provide clear and unhindered passage for bike riders. A bike path that stops and gives way at minor intersections does not properly provide or encourage bike riding. Donnybrook Rd, Aitken Blvd and the road to the east of Kalkallo Basin show bike lanes and shared paths while separate bike paths would be more appropriate.

Separated bike paths from pedestrians – where high volumes of bikes riders and pedestrians are expected, especially at peak times such as before and after school, there is the potential for conflict on shared paths. This can be seen on some of the most popular existing shared paths in Melbourne such as the Main Yarra Trail and the Inner Circle Trail where high volumes of bike riders and walkers mean both are disadvantaged. This can discourage walking and cycling; especially by the more vulnerable who may be fearful of venturing onto a busy shared space. Widening of the path only works up to a certain point and then it makes more sense to provide separated bike and pedestrian paths. Experience and modelling has shown that where peak bicycle volumes exceed 200 bikes per hour with more than 100 pedestrians per hour then separate bike and pedestrian paths are appropriate. This can occur near activity areas especially near schools such as the northern LTC and southern LTC.

Undercover bicycle parking at public transport hubs – many local trips can be made by bike but longer trips using a bicycle, especially to distant workplaces and tertiary education, rely upon connections to public transport and leaving in a secure place for the day. The current Parkiteer cages at train stations are an example of secure, undercover bicycle parking that allows people to ride to the station and leave their bike. Similar facilities should be provided where public transport connections for bike riders are expected. This may occur in the future Major Activity Centre.

Regards

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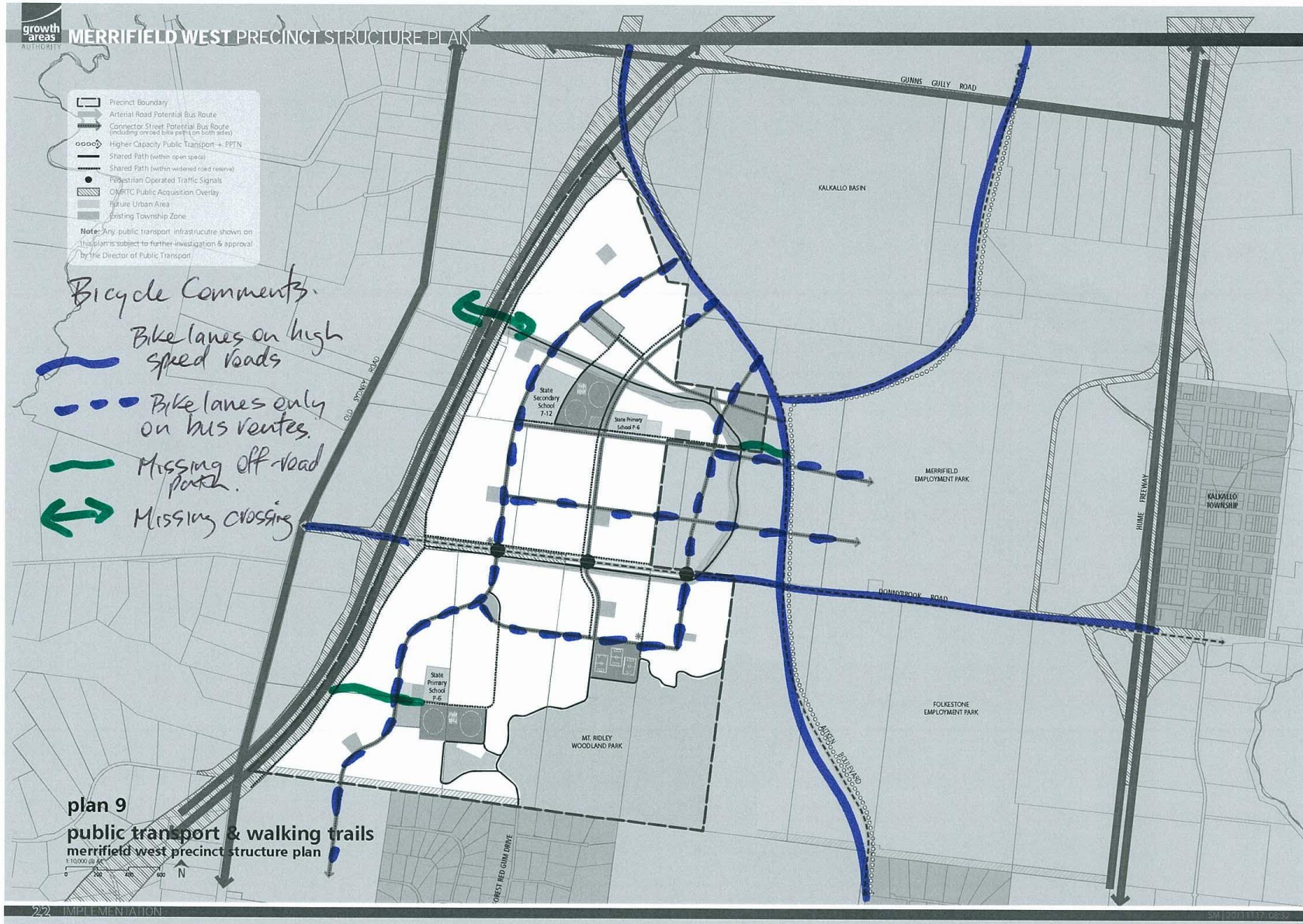


Figure 1: Annotated plan with bicycle comments

Table 1: Planning Checklist assessment

Precinct Structure Plan		Merrifield West Precinct Structure Plan		
		Yes	No	Response
Item 1	Corridor routes			
Connectivity				
	Are separated, continuous paths provided alongside all freeways, railway reserves and other green corridors?	1		Shown along OMR, shared paths along major roads and drainage reserves
	Are bicycle routes provided along major roads (Principal Bicycle Network routes and other major roads)?	1		Plan 9 seems to show shared paths along Aitken Blvd, Donnybrook Rd though Plan 9 unclear.
	Are paths provided along all Metropolitan Trail Network Paths (MTN)?	1		No MTN paths in area
Item 2	Local destinations			
Connectivity				
	Are bicycle routes provided along all connector streets?	1		Mostly on-road lanes
	Are bicycle routes provided to parks, shops, schools and community services etc.?		1	All but southern LTC which is shown with no bike route through centre
Item 3	Residence connections			
Connectivity				
	Are all residents within 400m of a marked bicycle route?	1		Through mixture of off road paths and on-road lanes.
Item 4	Choice of routes - activity centres			
Permeability				
	Is there a choice of bicycle routes into and through activity centres to suit a range of trip types and purposes?		1	Relies upon on-road lane for access. No off road paths provided.
	Are there connections to minor and major destinations within the activity centre?		1	As above
Item 5	Choice of route - separate paths			
Permeability				
	Have direct routes for transport cycling been provided that are not shared with other path users on foot?	1		Though one road in SW has shared path only. All other shared paths have direct alternatives
Item 6	Barriers and crossings			
Permeability				
	Are crossing points at barriers provided at least every 800m?		1	Inside of OMR, yes. But no crossing of OMR provided in NW section for approx. 1800m for off-road path.

Precinct Structure Plan

Merrifield West Precinct Structure Plan

		Yes	No	Response
Item 7	Topography			
Permeability	Does the planned bicycle network take account of topography and avoid hills where possible?	1		Paths follow drainage and skirt Mt Ridley
Item 8	Separation and volumes			
Quality	Are separated cycling and walking facilities provided on off road paths where cycling numbers are expected to exceed 200 bikes per hour and pedestrian numbers 100 per hour in peak periods?		1	Not specified. Could be needed around Local Town Centres and Major Town Centre especially near schools.
	Are local streets configured to allow shared use by bikes and motor vehicles (speeds <40km/h and volumes of <3-5000vpd)?	1		Local access streets narrow enough to minimise speed and volume
	Are marked bicycle lanes or off –road paths provided for connector or arterial roads up to 60km/h and volumes < 5000vpd?	1		
	Are separated paths provided for arterial roads (speeds over 60km/h and volumes above 5000vpd) and on connector streets with schools?		1	School connector streets all have shared paths. On-road lanes on higher speed arterials are inappropriate.
Item 9	Off-road paths			
Quality	Are all off road paths at least 2.5m wide with 1m clearance each side?	1		Table 3 specifies 3m wide paths for open space
	Are all schools and sporting grounds connected directly to the off road path network via a cycling facility that provides separation from motor vehicle traffic (usually off-road path)?	1		All have shared paths connected to wider off road network
	Are off-road paths provided on the side of the road or barrier that provides the best connections to destinations?	1		Yes and crossing points provided
Item 10	Bikes and public transport			
Quality	Have interactions with the on road public transport network (buses and trams) been catered for?		1	On-road lanes shown on most connector streets with bus lanes which could bring buses and bikes into conflict.
	Is secure parking (undercover locked cage with multiple rails inside) provided at railway stations and major bus interchanges?		1	Only "Bicycle parking facilities are to be provided by development proponents in convenient locations at key destinations such as parks and activity centres."