Darwin Shared Path & Bicycle Lane Technical Notes

12. Shared Path & Bicycle Lane Widths – Minimum and Desirable

Objective

The objective of the *Darwin Shared Path & Bicycle Lane Technical Notes* is to provide direction and guidance for the planning and delivery of cycling facilities within the City of Darwin area. These technical notes are also intended to provide information for other stakeholders including the NT Government, cycling groups and the community.

References

Throughout this document, references have been made to the following technical standards and guidelines:

- AS1742.9-2000 *Manual of Uniform Traffic Control Devices Part 9: Bicycle Facilities*
- Austroads *Guide to Road Design Part 3: Geometric Design* (2016)
- Austroads *Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* (2009)

The technical note should be read in conjunction with these documents.

Introduction

This technical note provides direction and guidance on path width requirements. The information is compiled from multiple sources detailing good design practices and the minimum and desirable requirements adopted throughout Australia.

The path width requirements are a collation of best practice guidelines regarding the recommended and desirable widths for the various types of cycling lanes commonly seen throughout Australia. Determining the appropriate width required for a cycling lane is critical in providing the best possible design to accommodate for a range of cyclists users.

General width requirements for cycling paths

Shared paths

Shared paths are the most common form of off-road path in Australia where cyclists and pedestrians sharing the same path. Shared paths need to be built wide enough to cater for the existing and future cycling volumes.

Depending on the level of path use, the desirable minimum path widths are between 2.5m and 3.5m wide, as outlined in the table below from Austroads *Guide to Road Design Part 6A*: *Pedestrian and Cyclist Paths*.

In very low use situations, or at very constrained locations, a minimum width of 2.0m may be acceptable, however careful consideration needs to be given to the likely mix of users and the speed of cyclists at the location.

	Path width (m)		
	Local access path	**Commuter path**	**Recreational path**
Desired minimum width	2.5	3	3.5
Minimum with – typical maximum	2.5-3.0	2.5-4.0	3.0-4.0

SOURCE: AUSTROADS GUIDE TO ROAD DESIGN PART 6A: PEDESTRIAN AND CYCLIST PATHS

Segregated bicycle lanes

Segregated bicycle lanes generally construct in high traffic, high speed roads to improve the safety for cyclists by providing separation from other motor traffic whilst maintaining directness of travel and priority at intersection.

Austroads *Guide to Road Design Part 6A: Pedestrian and Cyclist Paths* recommends that segregated bicycle lanes should be considered when there is a significant volume of cyclists (more than 50 users per hour).

	Path width (m)	
	One way bicycle path	**Two way bicycle path**
Desired minimum width	1.5 – 2.0	2.5
Minimum with – typical maximum	1.2-2.0	2.0-3.0

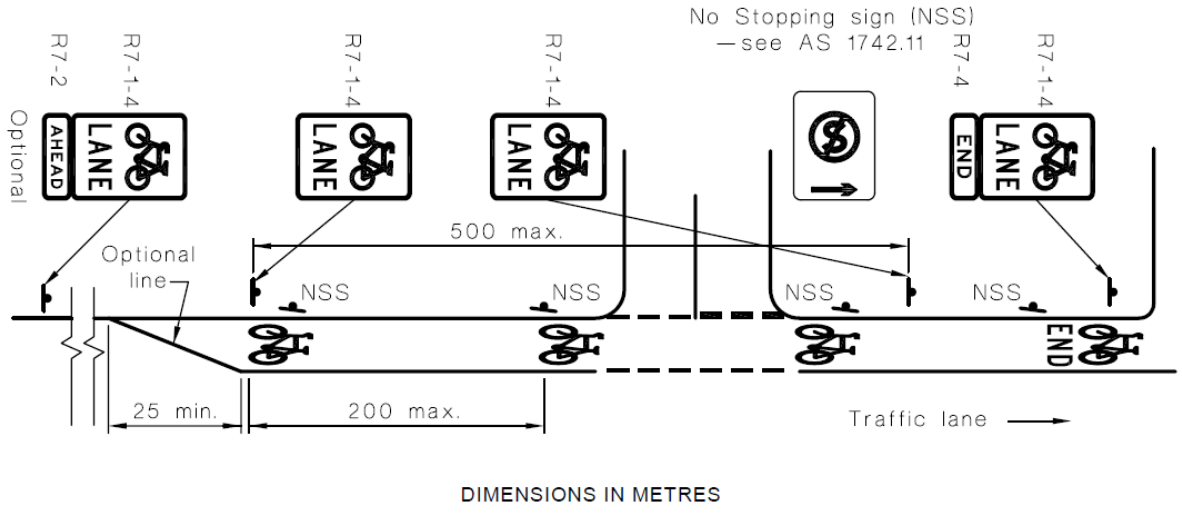
SOURCE: AUSTROADS GUIDE TO ROAD DESIGN PART 6A: PEDESTRIAN AND CYCLIST PATHS

It is noted that the recommended path width may include the width of the channel (in kerb and channel).

Exclusive bicycle lanes

An exclusive bicycle lane is a type of lane on a road for cyclists only and requires the bicycle lane sign. Drivers must not drive, park or stop within the lane. An on-road facility without such signage is a seal shoulder and there are no restrictions on driving, stopping and parking within the shoulder. The desirable width of the exclusive bicycle lane depends on the speed limits of the road. The acceptable range for exclusive bicycle lane widths is presented in the table below in accordance with Austroads *Guide to Road Design Part 3: Geometric Design*.

Exclusive bicycle lanes should be considered on roads carrying more than 3,000 vehicles per day. AS1742.9 provides recommendations for signage and it is replicated below.



DIMENSIONS IN METRES

FIGURE 2.4 EXCLUSIVE BICYCLE LANE (FULL-TIME) ADJACENT TO KERB

SOURCE: AS1742.9 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES PART 9: BICYCLE FACILITIES

Speed limit (km/h)	**Lane width (m)**		
	60	**80**	**100**
Desirable	1.5 – 2.0	2.0	2.5
Acceptable range	1.2-2.5	1.8-2.7	2.0-3.0

SOURCE: AUSTROAD GUIDE TO ROAD DESIGN PART 3: GEOMETRIC DESIGN

It is noted that the recommended lane width may include the width of the channel (in kerb and channel).

Wide kerbside lanes

On roads carrying less than 3,000 vehicles per day, motorists and bicycle riders can generally share the road by widening the kerbside lanes, which allow cyclists to travel beside the main traffic stream and to permit motorists to overtake cyclists without having to effectively change lanes. This mixed traffic lanes is generally appropriate in speed zone of 70km/h or less.

The recommended paths widths from Austroads *Guide to Road Design Part 3: Geometric Design* has been summarised in the table below.

Road posted speed limit (km/h)	**Lane Width (m)**	
	60	**80**
Desirable minimum	4.2	4.5
Acceptable range	3.7-4.5	4.3-5.0

SOURCE: AUSTROADS GUIDE TO ROAD DESIGN PART 3: GEOMETRIC DESIGN

It is noted that the recommended lane width may include the width of the channel (in kerb and channel).