General

Austroads has released the Guide to Road Design, Part 4B: Roundabouts and all road agencies across Australasia have agreed to adopt the Austroads guides to provide a level of consistency and harmonisation across all jurisdictions. This agreement means that the new Austroads guides and the Australian Standards, which are referenced in them, will become the primary technical references for use within the Agency. This supplement is issued to clarify, add to, or modify the Austroads Guide to Road Design, Part 4B: Roundabouts.

Roads and Maritime accepts the principles in the Austroads Guide to Road Design, Part 4B: Roundabouts with variations documented in this supplement under the following categories:

- **Roads and Maritime Enhanced Practice**: Roads and Maritime practice that enhances the Austroads Guides
- **Roads and Maritime Complementary Material**: Roads and Maritime reference material that complements the Austroads Guides. These documents include Roads and Maritime Manuals, Technical Directions and/or other reference material and are to be read in conjunction with the Austroads Guides
- **Roads and Maritime Departures**: Roads and Maritime practice that departs from the Austroads Guides.
GENERAL

In the context of road design, a greenfield site is a location on which a new road is being built where there are no constraints that prevent the use of the Normal Design Domain (NDD) design values.

A brownfield site is a location where development or constraints influence the design to the extent that use of values outside the NDD may be necessary for one or more elements of the design.

The Austroads Guide to Road Design provides Normal Design Domain criteria suitable for new roads (greenfield sites). In most cases, the same criteria that is used for greenfield sites should also be used for modifications and upgrades to existing roads (brownfield sites).

The use of design parameters outside of the Normal Design Domain requires approval from an authorised person in accordance with the Roads and Maritime Services Delegations Manual.

Roads and Maritime: Complementary Material

The following documents provide additional detail of Roads and Maritime best practice. It is necessary to comply with complementary material.

- NSW Bicycle Guidelines
- Roads and Maritime Supplements to Austroads Guides
- Roads and Maritime Australian Standards Traffic Supplements
- Roads and Maritime Traffic Signal Design Guide
- Roads and Maritime Delineation Manual
- Roads and Maritime Standard Drawings
- Roads and Maritime Technical Directions.

The documents are published and can be found on the Roads and Maritime website.
2 DESIGN PRINCIPLES AND PROCEDURE

2.3 Design Principles

In NSW roundabouts are not recommended where the posted speed limit is greater than 80km/h. In areas posted greater than 80km/h consideration should be given to lowering the posted speed to 80km/h through the intersection. As a minimum greater consideration should be given to:

- Traffic volume
- Traffic mix
- Intersection visibility / readability
- Crash history
- Operating speeds

4 GEOMETRIC DESIGN

4.5.2 Approach and Entry Treatments

Reverse curve approaches are not preferred in NSW. Reverse curve approaches should only be considered when the requirements of section 4.5.3: Maximum Entry Path Radius cannot be achieved.

4.6.3 Encroachment Areas

The use of Type A encroachment area is preferred in NSW.

4.7 Exit Curves

It is important that the exit curve geometry should be maximised in accordance with Figure 4.3b.