

The background of the page is a close-up photograph of a traffic signal lens. The lens is circular and contains several rows of green LED lights. The lights are arranged in a pattern that suggests a green arrow pointing to the right. The lens is set against a dark background, and the overall image has a slightly blurred, artistic quality. There are also some grey and white geometric shapes overlaid on the left side of the image.

# Traffic signal design

Section 16 – References

The traffic signal design guidelines have been developed to assist in designing traffic control signals.

The guidelines are to comprise 16 sections and 5 appendices. These are initially being released individually and in no specific order. The sections which are to be released are as follows:

<b>Part</b>	<b>Title</b>
Section 1	Investigation
Section 2	Warrants
Section 3	Design Process
Section 4	Plan Requirements
Section 5	Geometry
Section 6	Pavement Marking
Section 7	Phasing and Signal Group Display Sequence
Section 8	Lanterns
Section 9	Posts
Section 10	Signs
Section 11	Detectors
Section 12	Controller
Section 13	Provision for Future Facilities
Section 14	Signalised Mid-block Marked Footcrossings
Section 15	Special Situations
Section 16	References
Appendix A	Design Plan Checklist
Appendix B	Traffic Signal Symbols
Appendix C	Location and Function of Lanterns
Appendix D	Location and Dimensions of Components
Appendix E	Left Turn on Red

To determine which sections are currently available go to:

[www.rta.nsw.gov.au/doingbusinesswithus/downloads/technicalmanuals/trafficsignaldesign\\_dll.html](http://www.rta.nsw.gov.au/doingbusinesswithus/downloads/technicalmanuals/trafficsignaldesign_dll.html)

The information contained in the various parts is intended to be used as a guide to good practice. Discretion and judgement should be exercised in the light of the many factors that may influence the design of traffic signals at any particular site. The guidelines make reference, where relevant, to current Australian Standards and are intended to supplement and otherwise assist in their interpretation and application.

# Traffic Signal Design

## Section 16

### REFERENCES





**Roads and Traffic Authority**

[www.nsw.rta.gov.au](http://www.nsw.rta.gov.au)

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**Amendment record**

Please note that the following updates have been made to this document.

Version Number	Page	Description	Issued
1.0		Original issue	February 2008
1.1	16-1	Section 16.3, 16.4 & 16.6 updated to reflect new references	August 2008
1.2	16-2	Drawings VD018 series updated to TS-TN series	August 2009



## **16.1 INTRODUCTION**

The following references are under constant revision and the user should always ensure that these are the most up-to-date references available.

## **16.2 AUSTRALIAN STANDARDS**

AS 1742 *Manual of Uniform Traffic Control Devices*

## **16.2 AUSTRALIAN ROAD RESEARCH BOARD**

Research Report ARR 123, *Traffic Signals: Capacity and Timing Analysis*, R. Akcelik, fifth reprint, 1993.

## **16.3 AUSTRROADS**

*Guide to Traffic Engineering Practice*

*Guide to Traffic Management*

## **16.4 NSW ROAD RULES 2008**

## **16.5 ROADS AND TRAFFIC AUTHORITY INSTALLATION SPECIFICATIONS**

SI/PTCS/1 *Installation of permanent traffic counting stations*, February 1986

SI/TCS/8 *Installation and reconstruction of Traffic Light Signals*, Revision 1, August 2003 (including Appendix A and Appendix B)

## **16.6 ROADS AND TRAFFIC AUTHORITY DESIGN GUIDELINES AND USER MANUALS**

*Road Design Guide*

- Section 1 - Basic design criteria, August 1991
- Section 2 - Road geometry, March 1988
- Section 3 - Cross Section, February 2000
- Section 4 - Intersections at Grade, January 2000

*CADD Manual*

[\*Delineation\*](#)

[\*NSW Bicycle Guidelines\*](#)

[Traffic Signs Register](#)

*User Guide for Pedestrian Facilities* (in preparation)

*Traffic signal operation*, 18 October 1991 (Document No. RTA-TC-106)

NOTE The Traffic & Transport Policies & Guidelines Register on the RTA website should also be checked for any updated or interim advice. This would normally be in the form of a Technical Direction. The latest Technical Directions can be viewed at:

[http://www.rta.nsw.gov.au/trafficinformation/downloads/tmdirections\\_dll.html](http://www.rta.nsw.gov.au/trafficinformation/downloads/tmdirections_dll.html)

## **16.7 ROADS AND TRAFFIC AUTHORITY TS-TN SERIES OF DRAWINGS**

TS-TN-019 *Specification of Signal Group Operation* (Supersedes VD018-8)

TS-TN-020 *Specification of Detector Logic Operation* (Supersedes VD018-10)

TS-TN-021 *Specification of Pedestrian Movements Operation* (Supersedes VD018-11)

TS-TN-022 *Specification of Ancillary Operation* (Supersedes VD018-12)

TS-TN-026 *Standard for Single Diamond Overlap Phasing* (Supersedes VD018-5, 14)

TS-TN-027 *Standard for Double Diamond Overlap Phasing* (Supersedes VD018-6)

[http://www.rta.nsw.gov.au/doingbusinesswithus/downloads/technicalmanuals/trafficsignalspecs\\_dll.html](http://www.rta.nsw.gov.au/doingbusinesswithus/downloads/technicalmanuals/trafficsignalspecs_dll.html)

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