

AMENDMENTS

No.	DESCRIPTION	APPROVED & DATE
4	NOTE 3 DELETED, NOTE 1 AMENDED, REVERSE CURVE GEOMETRY AMENDED.	C.MAGRIPUS 7/6/17
5	NOTES AMENDED, LEADERS ADDED.	C.MAGRIPUS 9/11/17
6	PAINTLINES AMENDED.	C.MAGRIPUS 16/5/18
7	OPTIONS PROVIDED FOR TWO DIFFERENT DESIGN SPEED APPROACHES.	D. NICHOLLS 4/9/18
8	TITLEBLOCK AND REFERENCES UPDATED.	C. MAGRIPLIS 10/08/23
9	FONT STYLE CHANGED TO ARIAL NARROW.	C.M. 28/11/2023

NOTES

1. THIS DESIGN GUIDANCE PROVIDES FOR APPROACH DESIGN SPEEDS OF BOTH 90 km/h AND 80 km/h. IT IS ACKNOWLEDGED THAT MANY DESIGN CASES WILL NOT MATCH THE IDEAL ALIGNMENT SHOWN, HOWEVER THE DESIGNER SHOULD ATTEMPT TO ADOPT THE PRINCIPLES OF THIS GUIDANCE WITH THE EMPHASIS BEING ON ACHIEVING THE 7 m DEFLECTION.
2. DUAL LANE ROUNDABOUT SHOWN, HOWEVER THIS METHOD WORKS BEST ON SINGLE LANE APPROACHES. REFER TO MAIN ROADS SUPPLEMENT TO AUSTRROADS GRD PART 4B SECTION 4.5.2 APPROACH AND ENTRY TREATMENTS - APPROACH TREATMENTS FOR HIGH-SPEED AREAS.
3. ROUNDABOUT APPROACH CURVE RADIUS TO BE DETERMINED BY PLOTTING THE ENTRY PATH RADIUS AS SHOWN IN DRAWING 200331-0201. DECREASE IN SPEED BETWEEN SUCCESSIVE REVERSE CURVES AND ENTRY CURVE TO BE LIMITED TO 20km/h.
4. ROUNDABOUT TO BE DESIGNED GENERALLY IN ACCORDANCE WITH AUSTRROADS GRD PART 4B: ROUNDABOUTS AND THE MAIN ROADS SUPPLEMENT. REFER TO DRAWINGS 200331-0194 TO 200331-0202 FOR TYPICAL DESIGN PROCESS.
5. THIS DRAWING SHOWS PRELIMINARY LINE MARKING ONLY, REFER TO DRAWING 200331-0202 FOR COMPLETE TYPICAL LINE MARKING, SIGNING AND PEDESTRIAN RAMP DETAILS.
6. WHERE THE APPROACH POSTED SPEED IS GREATER THAN 80km/h A REDUCTION IN THE POSTED SPEED LIMIT SHOULD OCCUR NO LESS THAN 300m BEFORE ENTERING THE ROUNDABOUT.
7. REVERSE CURVE TREATMENT IS UNDESIRABLE ON DOWN HILL APPROACHES GREATER THAN 3%.
8. THE RADII GIVEN IN THE TABLE ARE MINIMUM VALUES, HOWEVER ADOPTING LARGER RADII IS NOT DESIRABLE AS THE REQUIRED SPEED REDUCTION MAY NOT BE ACHIEVED.
9. THE MINIMUM ARC LENGTHS IN THE TABLE MATCH THE DECELERATION LENGTHS BASED ON A RATE OF 2.5 ms⁻².
10. ALL CURVES WILL NEED TO CONSIDER THE REQUIREMENTS FOR CURVE WIDENING.
11. IT IS UNDESIRABLE TO HAVE ANY DRIVEWAY ACCESS POINTS WITHIN THE FULL EXTENT OF THE REVERSE CURVE TREATMENT.

LEGEND

SHARED PATH



PLANNING AND TECHNICAL SERVICES DIRECTORATE
 ROAD AND TRAFFIC ENGINEERING BRANCH
 WATERLOO CRESCENT EAST PERTH 6004
 Telephone 138 138

DRAWN	D. NICHOLLS	
DESIGNED	D. NICHOLLS	
VERIFIED	B. SNOOK	12/8/05
APPROVED	R. GROVE	15/8/05
FILE NO.	13/4331	

GUIDELINE DRAWING
 ROUNDABOUT SPEED REDUCTION
 APPROACH TREATMENTS
 REVERSE CURVES

MRWA DRAWING NUMBER
200331-0203-9

N.T.S.
A 1

ROUNDABOUT REVERSE CURVE APPROACH TREATMENT DETAILS

DESIGN SPEED REDUCTION AT CURVE 1	CURVE 1 RADIUS (m)	ARC LENGTH (MIN) CURVE 1 (m)	DESIGN SPEED REDUCTION AT CURVE 2	CURVE 2 RADIUS (m)	ARC LENGTH (MIN) CURVE 2 (m)
90 TO 70 km/h	415	49	70 TO 50 km/h	225	37
80 TO 60 km/h	280	43	60 TO 40 km/h	130	31

