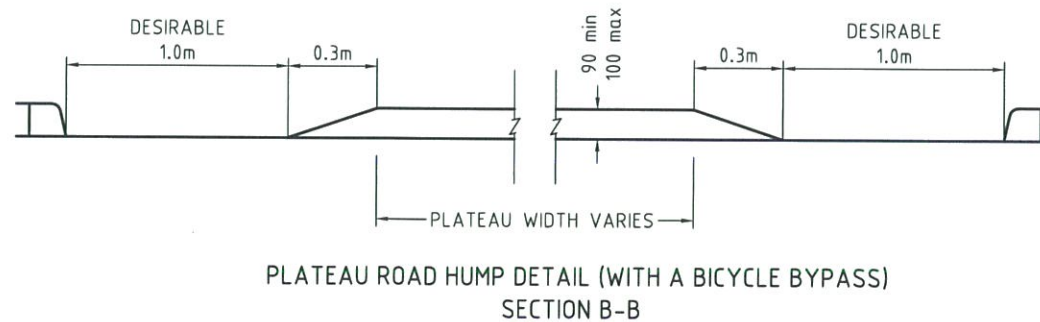
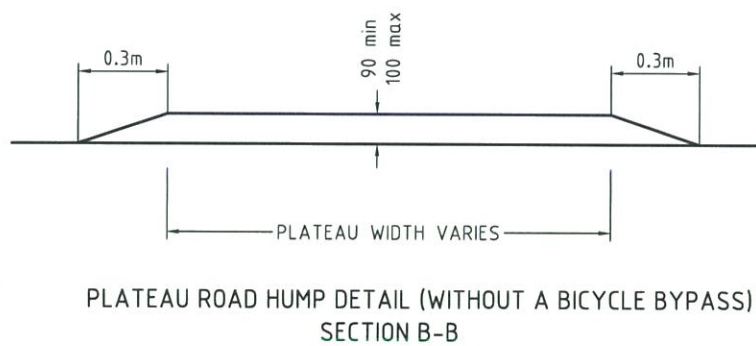
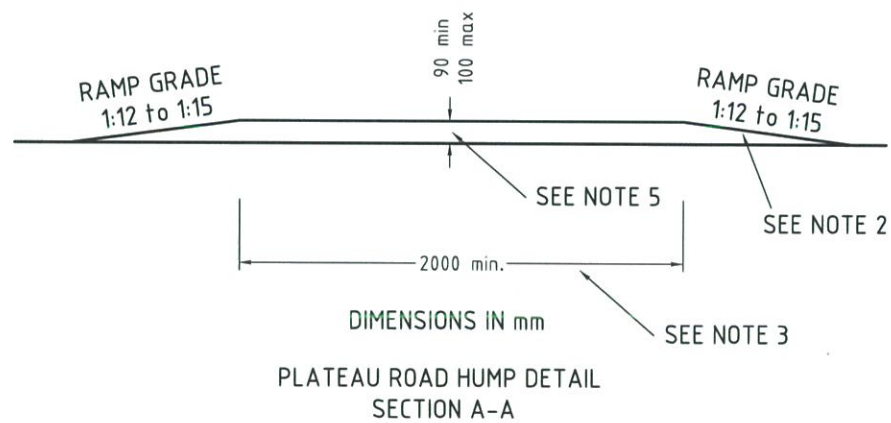
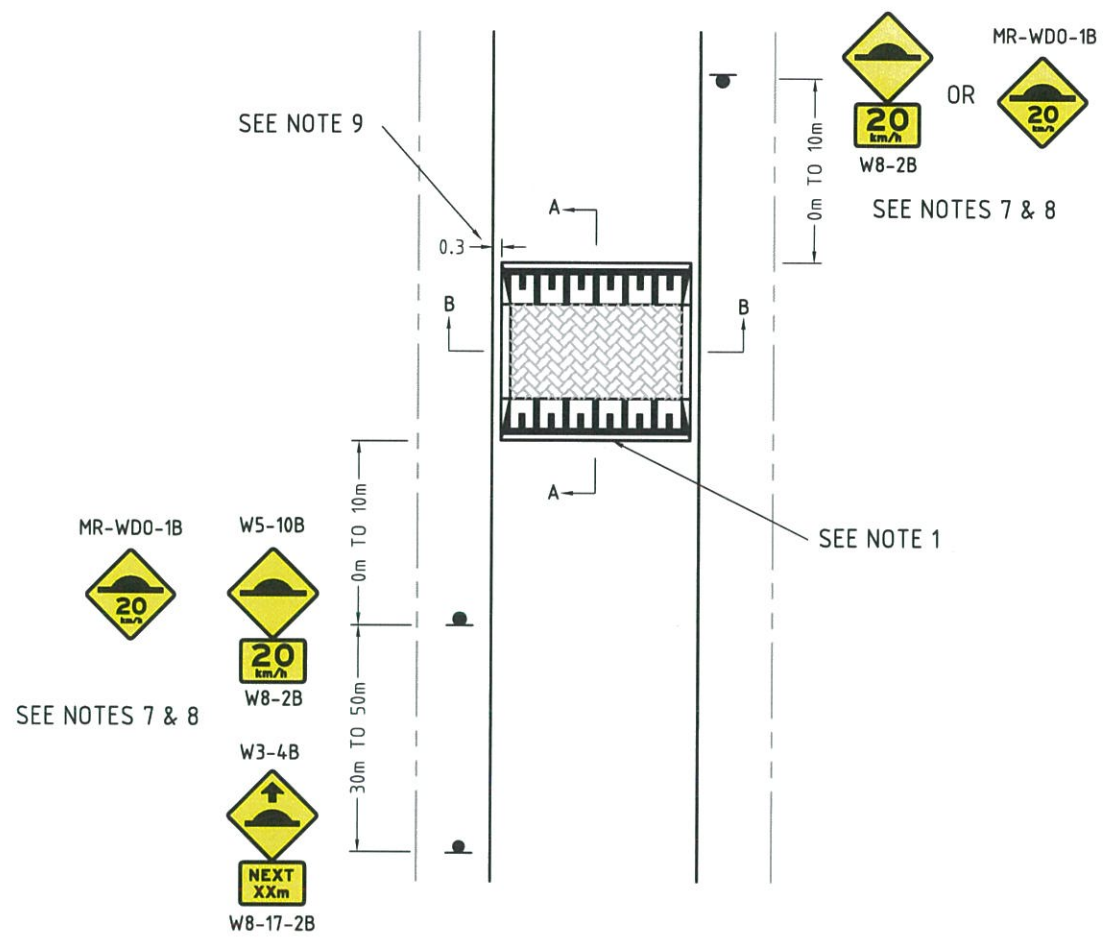


NOTES:

- 1) PIANO MARKINGS ARE TO BE APPLIED ONTO THE RAMP AND NOT ONTO THE PRECEDING ASPHALT. (FOR FURTHER DETAILS REFER TO AS1742.13). THE RAMP SHOULD NOT BE CONSTRUCTED FROM BRICK PAVING SINCE THIS HAS POOR ADHESION FOR ROAD MARKINGS. PIANO MARKINGS SHOULD EXTEND ACROSS THE FULL HUMPS WIDTH.
- 2) RAMP GRADES SHOWN ARE NOT SUITABLE FOR USE ON BUS ROUTES. IF IT IS REQUIRED TO USE A PLATEAU ON A BUS ROUTE A RAMP GRADE OF 1:20 SHOULD BE ADOPTED. ON CYCLE ROUTES A GRADE OF 1:20 IS MORE SUITABLE.
- 3) PLATEAU LENGTH SHOWN IS NOT MANDATORY. IF IT IS NECESSARY TO USE A PLATEAU ON A BUS ROUTE, PLATEAU LENGTH SHOULD BE DESIGNED TO AVOID BUSES BOTTOMING OUT WHILE ON THE DEVICE. TRANSPERTH SUGGESTS PLATEAU LENGTHS OF 7.0m FOR RIGID BUSES AND 10.0m FOR ARTICULATED BUSES TO AVOID THIS.
- 4) ROAD HUMPS SHALL NOT BE USED AT PEDESTRIAN CROSSING POINTS UNLESS PEDESTRIAN CROSSING WARRANTS ARE MET AND ALL APPROPRIATE CROSSWALK MARKINGS (WOMBAT CROSSING) ARE INSTALLED. (REFER TO DRAWING NUMBER 200631-0001)
- 5) PLATEAU HEIGHTS SPECIFIED ARE DESIRABLE HOWEVER NOT MANDATORY. THE SPECIFIED PLATEAU HEIGHT IS NOT SUITABLE FOR USE ON A BUS ROUTE. PLATEAU HEIGHTS ON A BUS ROUTE SHOULD BE IN THE ORDER OF 65mm UP TO MAXIMUM OF 75mm.
- 6) ALL STREET LIGHTING SHOULD BE DESIGNED AND INSTALLED IN ACCORDANCE WITH AS1158.
- 7) USE MR-WDO-1 IF POSTED SPEED  $\leq 50$  km/h. USE W5-10/W8-2 IF POSTED SPEED  $\geq 60$  km/h. SIGN ASSEMBLIES W5-10/W8-2 OR MR-WDO-1 AND W3-4/W8-17-2 ARE GENERALLY NOT REQUIRED WHEN THE DEVICE IS (a) PART OF AN AREA WIDE SCHEME, (b) ARE IN SPEED ZONES  $\leq 30$  km/h, OR (c) IF THE SPEED DIFFERENTIAL BETWEEN THE POSTED SPEED AND THE COMFORTABLE TRAVERSABLE SPEED OF THE HUMPS  $\leq 15$  km/h. SIGN ASSEMBLIES ARE REQUIRED AT ANY HUMPS THAT IS MORE THAN 120m FROM THE PREVIOUS HUMPS OR IS NOT CLEARLY VISIBLE FROM THE PREVIOUS HUMPS. THE 20 km/h ADVISORY SPEED MAY NOT BE APPROPRIATE IF A DIFFERENT RAMP GRADE AND/OR RAMP LENGTH IS USED.
- 8) SIGN ASSEMBLY W3-4/W8-17-2 IS USED IN ADVANCE OF THE FIRST HUMPS IN A SERIES. MR-WDO-1 OR W5-10/W8-2 MAY BE OMITTED IF THERE ARE NO SIDE ROADS OR IF THE SIDE ROADS HAVE SIGNAGE INSTALLED INDICATING THAT THERE ARE HUMPS ON THE INTERSECTING ROAD.
- 9) ON FLAT GRADES A 0.3m DRAINAGE CHANNEL MAY BE REQUIRED. ON BICYCLE ROUTES A "BYPASS" MAY BE REQUIRED.
- 10) THIS DRAWING SUPERSEDES DRAWING NUMBER 8620-161.



No.	DESCRIPTION	APPROVED & DATE	No.	DESCRIPTION	APPROVED & DATE
5	NOTE 7 AMENDED, SIGNS COLOURED.				
4	NOTE 11 DELETED, NOTES 1 & 4 AMENDED.	D. LANDMARK 24.9.10			
3	PIANO MARKINGS EXTENDED, NOTE 1 AMENDED.	D. LANDMARK 4.12.09			
2	SIGN NUMBERS CORRECTED.	D. LANDMARK 21.08.07			
1	NOTE 10 REMOVED, NOTE 1 & SIGN DETAIL AMENDED. NOTE 11 AND TABLE ADDED.	D. LANDMARK 14.06.07			

Government of Western Australia  
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TYPICAL TREATMENT FOR ROAD HUMPS  
**ROAD HUMP - FLAT TOP PLATEAU**  
 LOCAL AUTHORITY

DESIGNED D. LANDMARK	04/04	VERIFIED D. SULLIVAN	11/5/04
DRAWN N. PANGGABEAN	06/04/2004	APPROVED R. GROVE	1/5/04
FILE NUMBER	67-08-69		
DRAWING NUMBER	200331-129-5		

SCALE N.T.S.  
 MODEL DATE  
**A3**