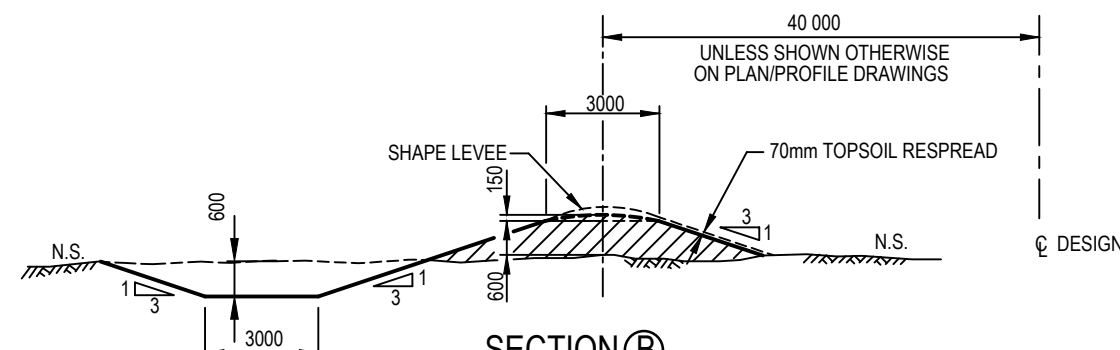
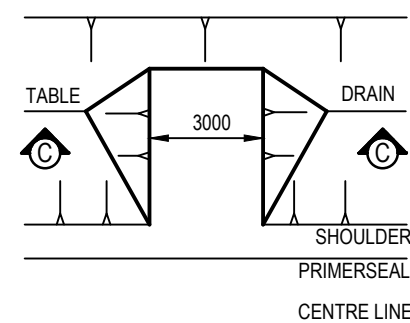


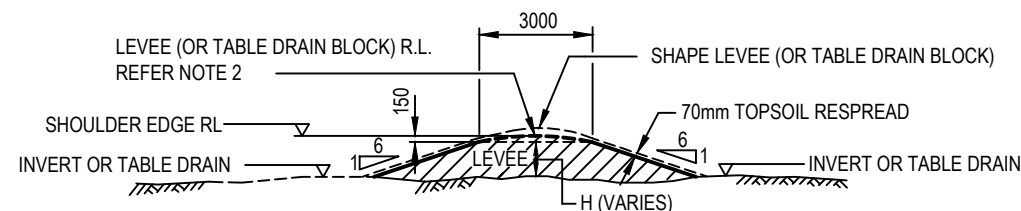
SECTION A
DRAIN TYPE 'A'
DIVERSION DRAIN (OFFSHOOT)



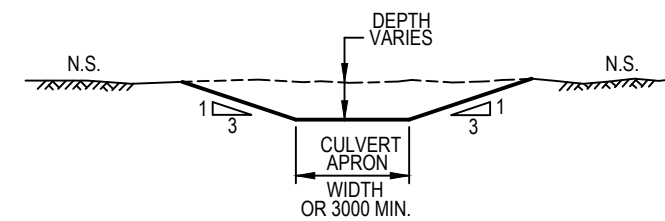
SECTION B
DRAIN TYPE 'B'
SIDE DRAIN



PLAN - TABLE DRAIN BLOCK



SECTION C
TRANSVERSE LEVEE AND TABLE DRAIN BLOCK



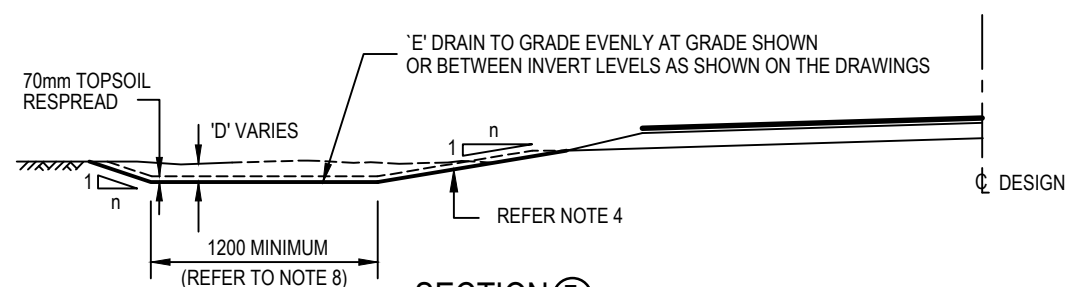
SECTION F
DRAIN TYPE 'F'
INLET OR OUTLET DRAIN

FOR CULVERT INLETS

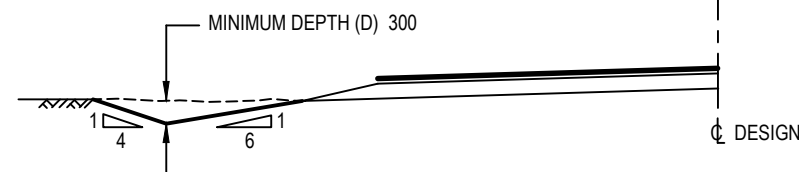
DRAIN 'F' TO GRADE EVENLY FROM CREEK LEVEL TO INLET INVERT LEVEL, OTHERWISE LENGTHS, LEVELS OR GRADE SHALL BE SHOWN ON THE PLAN AND PROFILE DRAWINGS.

FOR CULVERT OUTLETS

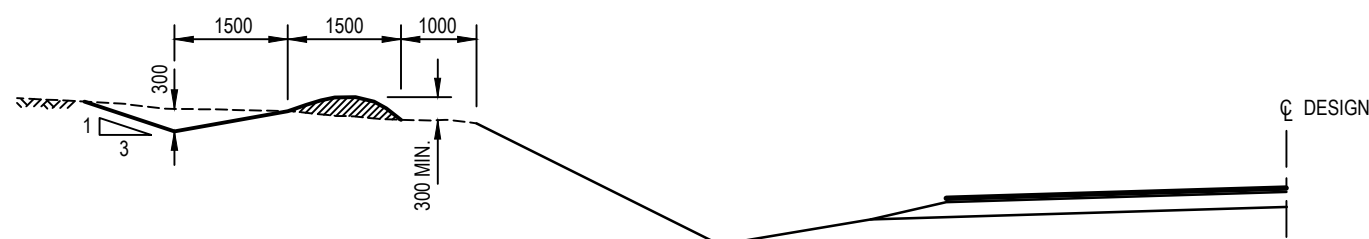
DRAIN 'F' EXTENDS FROM OUTLET OF CULVERT WITH INVERT OF DRAIN EQUAL TO INVERT OF CULVERT, GRADED AT A MAXIMUM 0.1%, UNTIL DRAIN INTERSECTS NATURAL SURFACE.



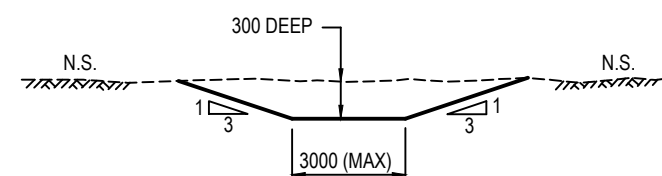
SECTION E
DRAIN TYPE 'E'
TABLE DRAIN - TRAPEZOIDAL



SECTION E₂
DRAIN TYPE 'E'



DRAIN TYPE 'G' - CATCH DRAIN ON TOP OF CUT BATTERS



SECTION M
MULGA DRAIN SECTION
NOT TO SCALE

AMENDMENTS

No.	DESCRIPTION	APPROVED & DATE
5	REFERENCE ON SECTION E AMENDED.	T. FREEMAN 2.7.10
6	SECTION M AND NOTE 5 ADDED.	T. FREEMAN 8.4.14
7	TOTAL DRAWING AMENDED.	C.M. 19/09/2025

NOTES

1. INVERT LEVEL OF DIVERSION DRAIN TYPE 'A' SHALL COMMENCE AT TOE OF BATTER OR AT TABLE DRAIN INVERT AND SHALL GRADE EVENLY TO NATURAL SURFACE.
2. TRANSVERSE LEVEE SHALL EXTEND FROM EDGE OF FORMATION WITH RL AT SAME LEVEL AS EDGE OF SHOULDER UNLESS SPECIFIED OTHERWISE.
3. DIMENSIONS MAY VARY DEPENDING ON GEOMECHANICAL PROPERTIES OF CUT/FILL MATERIALS AND VOLUME OF RUNOFF.
4. MAXIMUM FORESLOPE WITH INDICATED BACKSLOPE TO BE 1 IN 4. FOR OTHER COMBINATIONS REFER TO 'MAIN ROADS WA SUPPLEMENT TO AUSTRROADS GUIDE TO ROAD DESIGN - PART 3'.
5. MULGA DRAIN SHOULD FOLLOW CONTOUR.
6. ALL PROPOSED OFF-ROAD DRAINAGE SHALL BE ASSESSED IN ACCORDANCE WITH 'MAIN ROADS WA SUPPLEMENT GUIDE TO ROAD DESIGN - PART 6'.
7. REFER TO 'MAIN ROADS WA SUPPLEMENT TO AUSTRROADS GUIDE TO ROAD DESIGN - PART 3, SECTION 4.6.1' FOR FURTHER GUIDANCE ON ACCEPTABLE FORESLOPE, BACKSLOPE, AND BASE WIDTH FOR TABLE DRAINS.
8. CONSTRUCTABILITY AND MAINTENANCE SHOULD BE CONSIDERED WHERE THERE IS DETRIMENTAL WIDTH OF TRAPEZOIDAL DRAIN BASE.
9. FOR PLAN DETAILS REFER TO DRG. No. 9831-5497.
10. ALL UNITS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.



PLANNING AND TECHNICAL SERVICES DIRECTORATE
ROAD AND TRAFFIC ENGINEERING BRANCH
Waterloo Crescent EAST PERTH 6004
Telephone 138 138

DRAWN	RTE BRANCH
DESIGNED	RTE BRANCH
VERIFIED	T. FREEMAN 18/11/98
APPROVED	R. GROVE 18/11/98
FILE NO.	13/4331

GUIDELINE DRAWING
OFF-ROAD DRAINAGE
CROSS SECTIONS

MRWA DRAWING NUMBER AMENDMENT

9831-5498-7

0 50mm 100 150 200 250 300 350 400 450 500 550 600 650 700 750
1:10
A 3