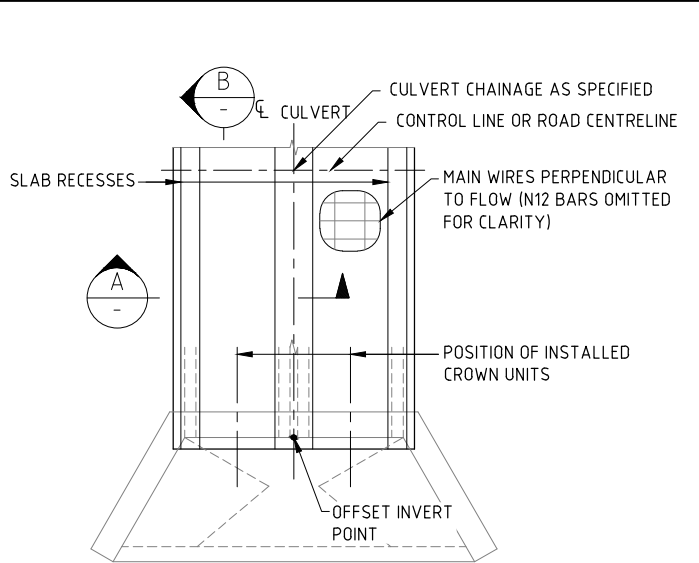
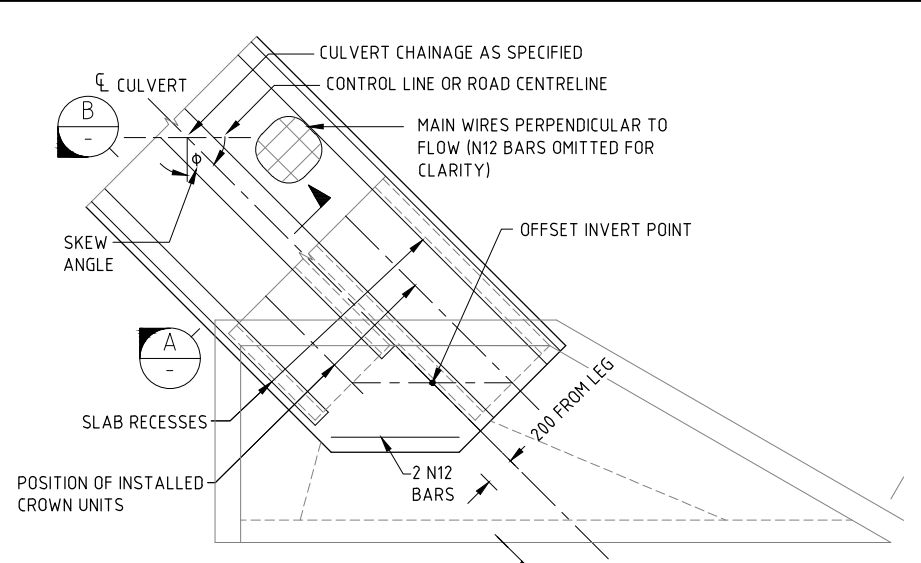


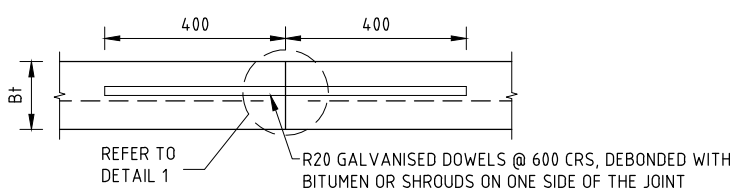
SLAB & APRON DETAILS FOR CULVERTS WITHOUT WINGWALLS
FOR HEADWALL DETAILS REFER STANDARD DRAWINGS CS3107



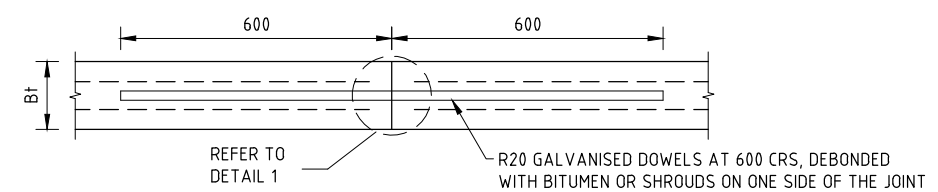
SLAB & APRON DETAILS FOR CULVERTS WITH WINGWALLS
FOR HEADWALL & WINGWALL DETAILS REFER STANDARD DRAWINGS CS3107, CS3109 & CS3110



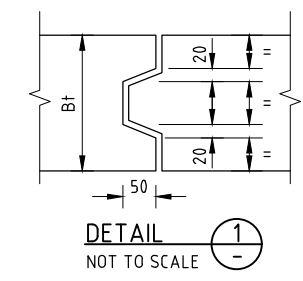
PLAN (STAGGERED CELLS)



CONTRACTION JOINT - SPAN UP TO 1800
(SINGLE REINFORCEMENT LAYER) - REFER NOTE 1

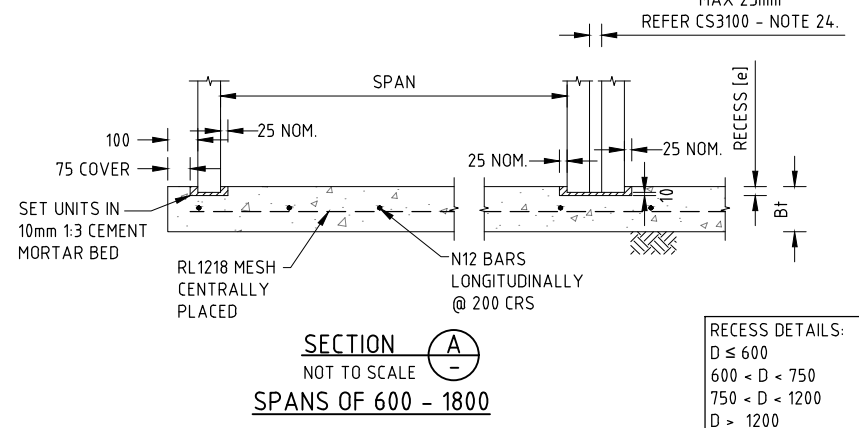
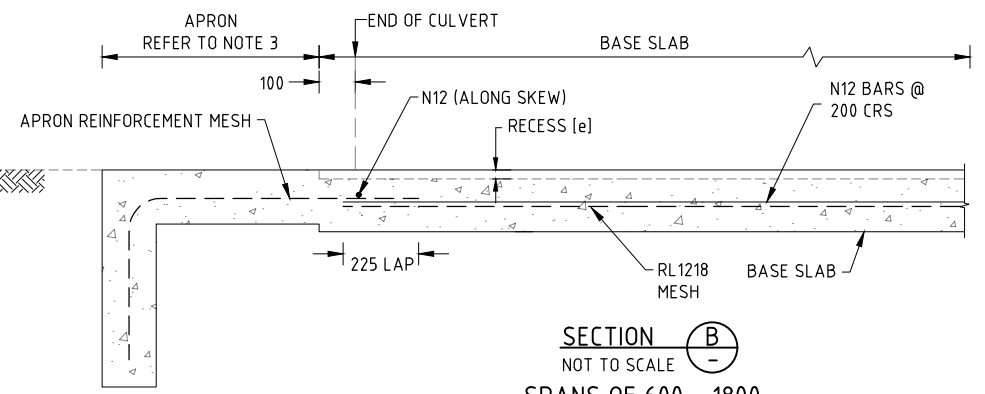


CONTRACTION JOINT - SPAN GREATER THAN 1800
(DOUBLE REINFORCEMENT LAYER) - REFER NOTE 1



NOTES:

- CONTRACTION JOINTS ARE TO BE PROVIDED WHERE
 - THE LENGTH OF THE BASE SLAB AND/OR
 - THE WIDTH OF THE BASE SLAB EXCEED 20 METRES.
 - WHEN CONTRACTION JOINTS ARE REQUIRED ACROSS THE WIDTH OF THE BASE SLAB, THEY ARE TO BE LOCATED AT 1/4 SPAN POINTS OF CROWN UNITS. CONTRACTION JOINTS ACROSS THE WIDTH OF THE BASE SLAB ARE TO BE CONTINUED ACROSS THE APRONS.
 - FOR APRON CONTRACTION JOINTS REFER TO THE DETAIL FOR SINGLE REINFORCEMENT LAYER. 24 HOURS MINIMUM IS TO BE ALLOWED BETWEEN POURS.
- FOR CULVERTS WITH A BASE > 10 METRES ALONG ROAD CENTRELINE, THIS DESIGN SHOULD NOT BE USED IN:
 - HIGHLY REACTIVE OR EXPANSIVE CLAY SOILS (LINEAR SHRINKAGE >8%)
 - WHERE LARGE DIFFERENTIAL SETTLEMENTS ARE EXPECTED TO OCCUR.
 - SPECIAL DESIGN ADVICE SHOULD BE OBTAINED IN THESE CIRCUMSTANCES.
- STANDARD DRAWING REFERENCES:
 - CS3100 - GENERAL NOTES, APRON DETAILS, DEFINITION OF SYMBOLS, CONCRETE STRENGTH, MINIMUM CONCRETE COVER THICKNESS & BASE SLAB EXTENSION DETAILS
 - CS3107 - CS3113 - SHEET 1 TO SHEET 7 OF THIS SET
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.



RECESS DETAILS:

D ≤ 600	- [e] = 0, NO RECESSES
600 < D < 750	- [e] = 20mm
750 < D < 1200	- [e] = 30mm
D > 1200	- [e] = 40mm

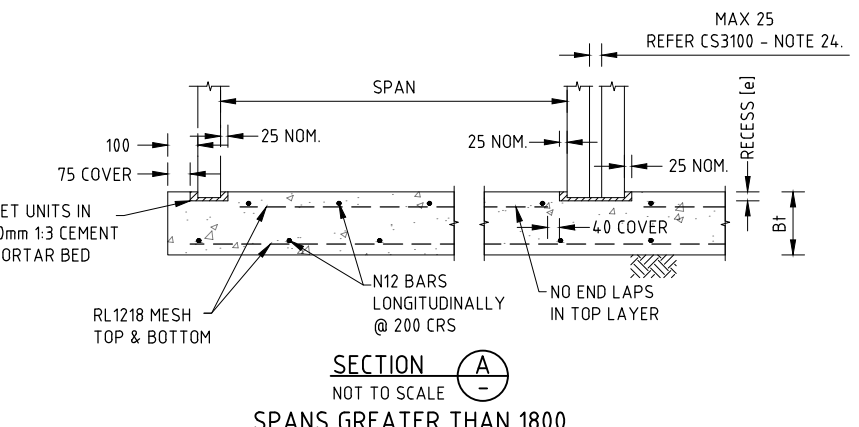
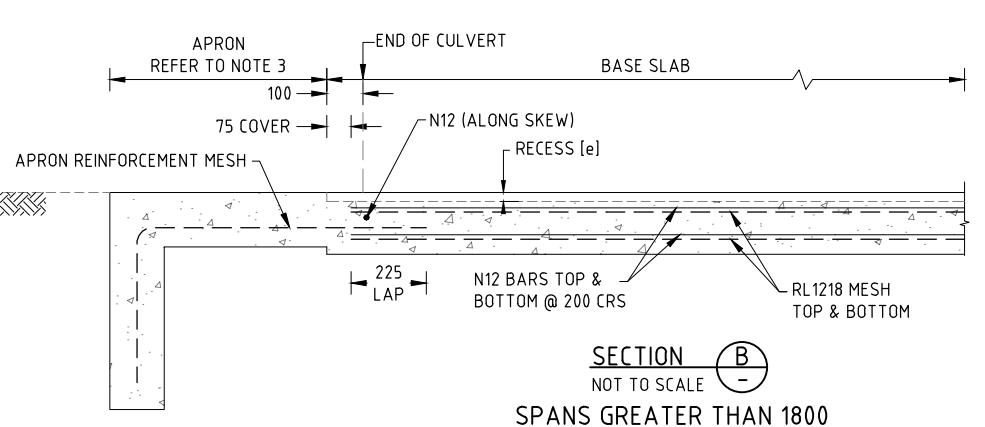


TABLE 1 - BASE SLAB DETAILS

SPAN OF CROWN UNIT	THICKNESS OF BASE SLAB (Bt)	PRIMARY REINFORCEMENT	SECONDARY REINFORCEMENT
600 - 1800	200	RL1218 MESH CENTRALLY PLACED MAIN WIRES PERPENDICULAR TO FLOW	N12 BARS @ 200 CRS
>1800	250	RL1218 MESH TOP & BOTTOM MAIN WIRES PERPENDICULAR TO FLOW	N12 BARS @ 200 CRS TOP & BOTTOM

THIS DRAWING IS DERIVED FROM QUEENSLAND MAIN ROADS STANDARD DRAWING 1250 AND ADOPTED FOR THE NT CONDITIONS.

No.	DESCRIPTION	DATE	NAME	DEPT/COMPANY
2	DESIGN DETAILS AMENDED	APR 2023	J. COOK	TCS / DIPL
1	MINOR AMENDMENT	OCT 2022	N.V	TCS/DIPL
0	ISSUED AS A STANDARD DRAWING	SEPT 2017	J.LEESON	EES/DIPL
AMENDMENTS				

WARNING
BEWARE OF UNDERGROUND SERVICES.
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DRAWN	A.R	CHECKED	L.Mc
DATE	DEC 2012	DATE	DEC 2012
DESIGNED	QLD	CHECKED	QLD
DATE		DATE	
DESIGN LEADER	S.HATZI	DESIGN DIRECTOR	S.JACKSON
DATE	1/09/2017	DATE	1/09/2017



STANDARD DRAWINGS DRAINAGE				
REINFORCED CONCRETE BOX CULVERT (RCBC) CONSTRUCTION OF BASES WITH RECESSES & APRONS				
FILE No.	ASSET No.	SHEET No.	DRAWING No.	AMEND.
-	-	6 OF 7	CS3112	2
				SHEET SIZE A1