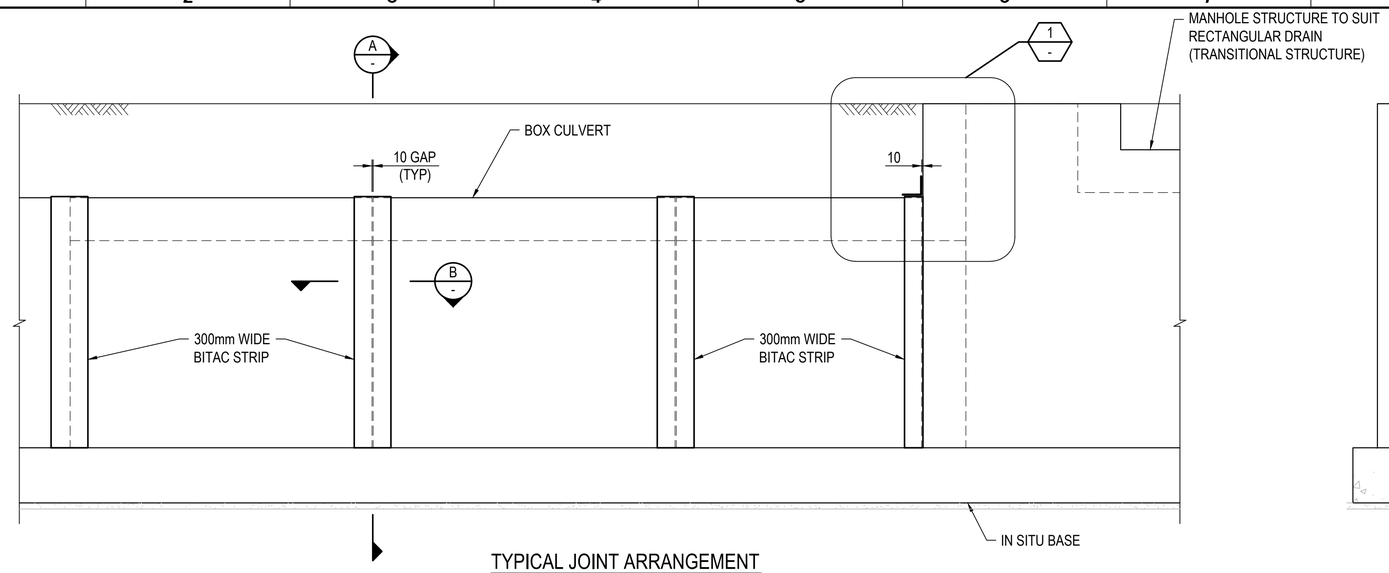
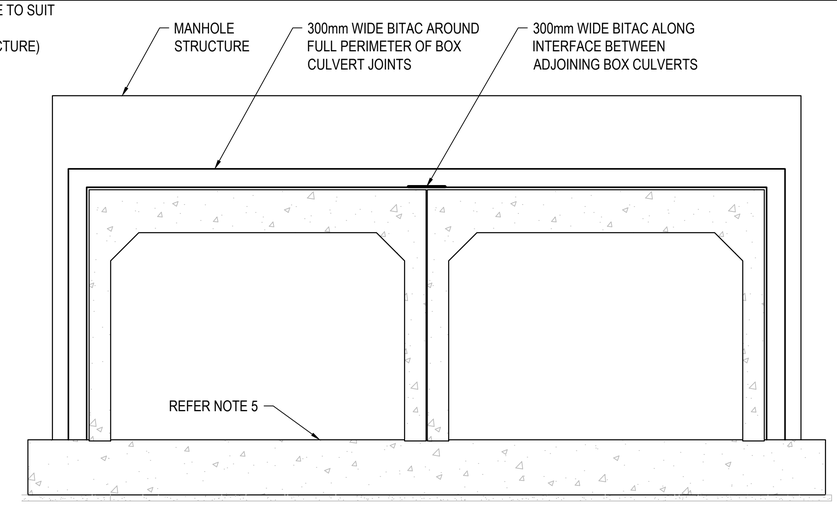
REV	MWC DRAWING NUMBER	CODE
A	7251/08/421	



TYPICAL JOINT ARRANGEMENT

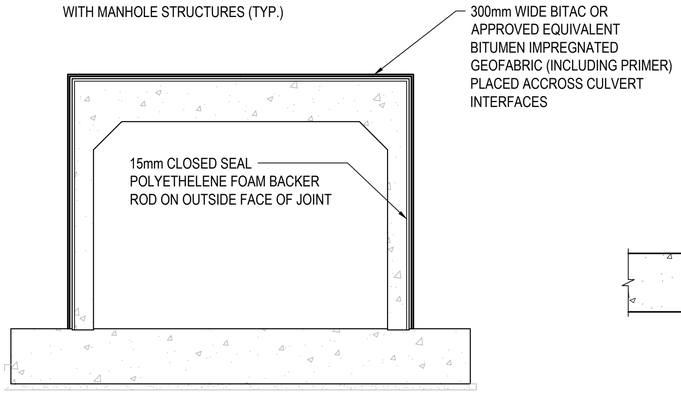


JOINT BETWEEN ADJACENT CULVERTS AND STRUCTURES

EXTERNAL JOINT SEAL DETAILS
300mm WIDE BITAC OR APPROVED EQUIVALENT BITUMEN IMPREGNATED GEOFABRIC (INCLUDING PRIMER) PLACED AROUND FULL PERIMETER OF EXTERNAL BOX CULVERT JOINTS AND INTERFACE WITH MANHOLE STRUCTURES (TYP.)

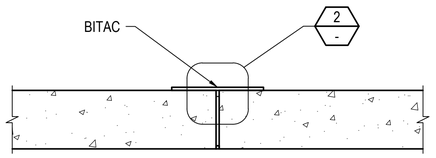
INTERNAL JOINT FILLER
15mm DIAMETER CLOSED CELL POLYETHYLENE FILLER ON OUTSIDE OF JOINT TO SUPPORT BITAC GEO FABRIC.

GAPS BETWEEN BOX CULVERTS
THE DESIGN LAYOUT HAS ASSUMED A 10mm GAP BETWEEN EACH BOX CULVERT AND A 10mm GAP TO ADJOINING MANHOLE STRUCTURES.



A SECTION
-

TYPICAL JOINT BETWEEN CULVERTS



B SECTION
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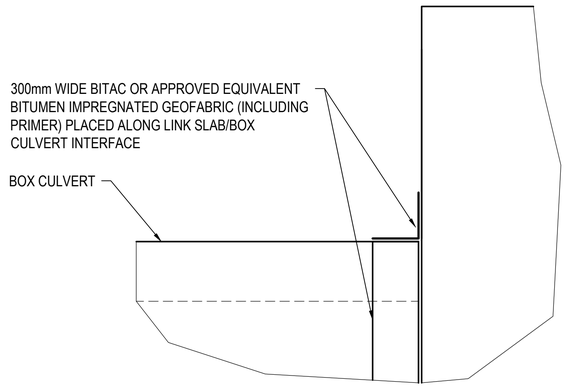
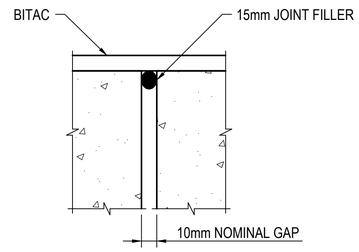


1 DETAIL
-



2 DETAIL
-

NOTES:

1. WHERE BOX CULVERTS / RECTANGULAR CONDUITS ARE DESIGNED TO OPERATE UNDER PRESSURISED FLOW CONDITION (i.e. HYDRAULIC GRADE LINE ABOVE SOFFIT), JOINTS ARE TO BE ENCASED IN CONCRETE OR SIMILAR TO PREVENT INFILTRATION OF SURROUNDING SOIL/BACKFILL.
2. REFER DRG 7251/08/419 FOR TYPICAL BEDDING AND BACKFILL DETAILS.
3. THE BITUMINOUS GEOFABRIC BETWEEN THE PRECAST UNITS IS TO STOP SOIL INFILTRATION INTO THE DRAIN.
4. DESIGNER TO ENSURE TRANSITIONAL STRUCTURES AT EACH END OF THE RECTANGULAR CONDUIT IS DESIGNED TO MINIMISE HYDRAULIC LOSES.
5. IT IS ANTICIPATED THAT THE BOX CULVERTS AND THE IN SITU REINFORCED CONCRETE BASE SLAB, SHALL BE DESIGNED BY A QUALIFIED STRUCTURAL ENGINEER. SEEK APPROVAL FROM MELBOURNE WATER FOR ANY VARIATION FROM THE ABOVE DETAILS.
6. IT IS THE DESIGNER'S RESPONSIBILITY TO ENSURE THAT THE NOMINATED MELBOURNE WATER STANDARD DRAWINGS ARE SUITABLE FOR PROJECT USE.
7. DESIGN ENGINEER TO CARRY OUT SAFETY IN DESIGN RISK ASSESSMENT FOR ANY DESIGN INCORPORATING MELBOURNE WATER STANDARD DRAWINGS.
8. THIS DRAWING IS APPLICABLE TO MELBOURNE WATER BOX CULVERTS ONLY.

REV	DESCRIPTION	COMPANY	PROJECT OR WO NUMBER	DRAWN	ENG. CHECK	PR. MAN. APP'D	DATE
A	FIRST REVISION			RD	VY	RM	25.11.15

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Melbourne Water
DRAINAGE STANDARD DRAWINGS

DRAFTER	DESIGNER	DESIGN MANAGER APPROVAL	PROJECT MANAGER APPROVAL
RD	GT	RM	VY
DRAFTING CHECK	ENGINEERING REVIEW		
BS	VY		

TITLE **RECTANGULAR CONDUITS - TYPICAL JOINT ARRANGEMENTS**

PROJECT DATUM	Original Size	MELBOURNE WATER CORPORATION	
SCALE NTS	A1	7251/08/421	A
		CODE / MWC DRAWING NUMBER	REV