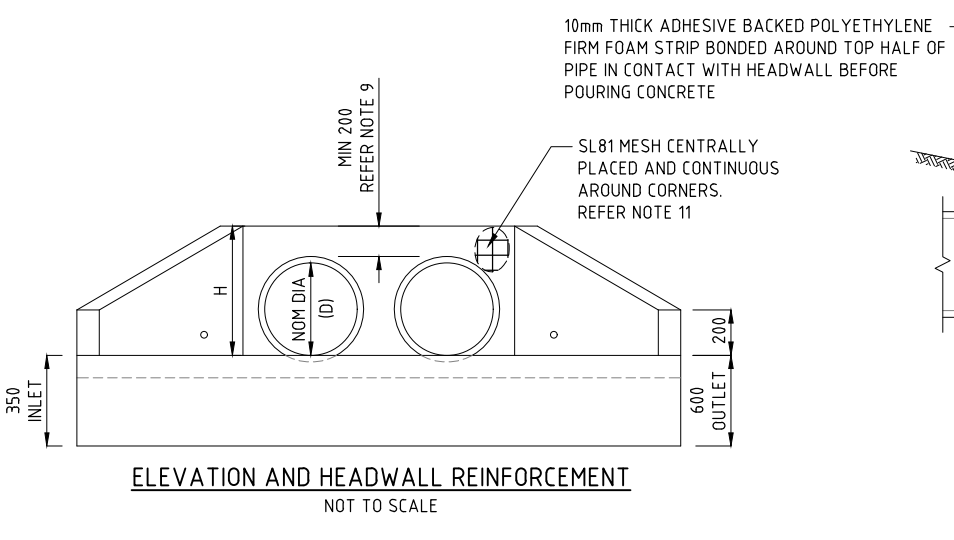
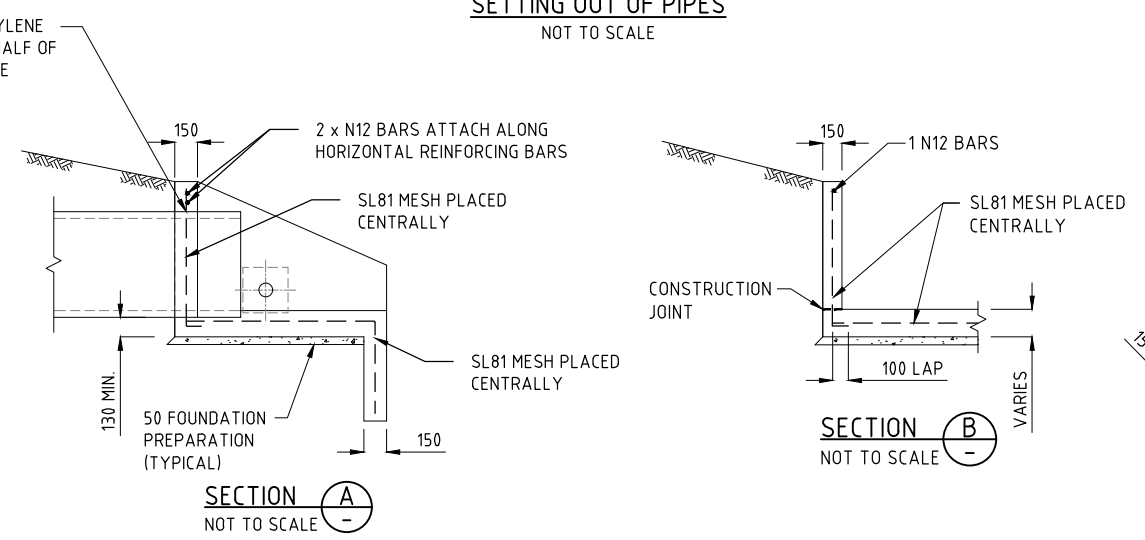


SETTING OUT OF PIPES
NOT TO SCALE

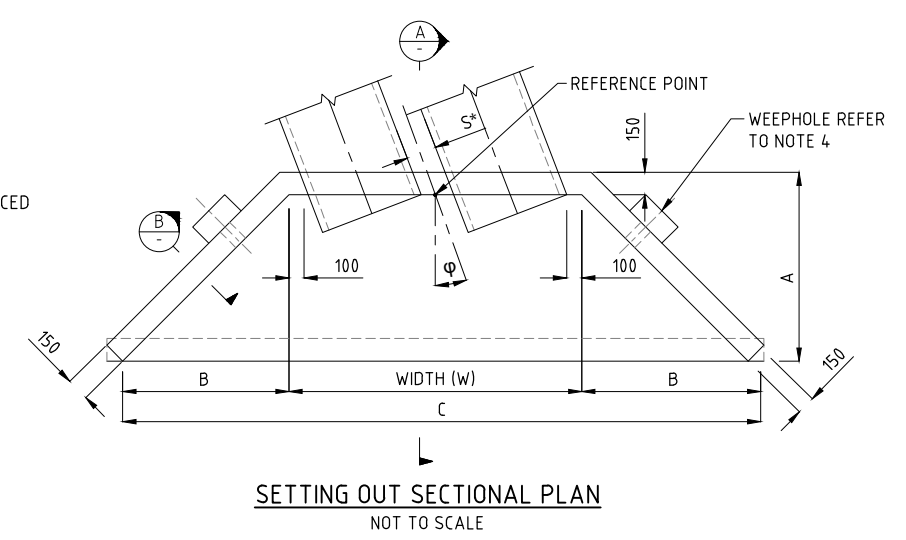


ELEVATION AND HEADWALL REINFORCEMENT
NOT TO SCALE

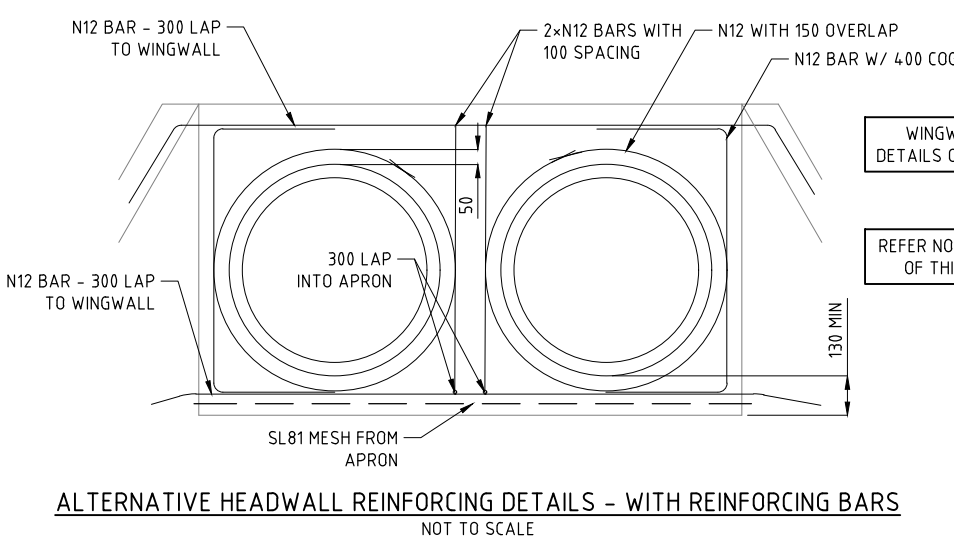


SECTION A
NOT TO SCALE

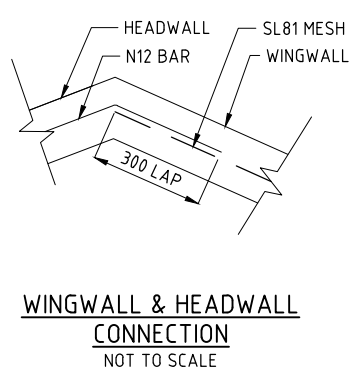
SECTION B
NOT TO SCALE



SETTING OUT SECTIONAL PLAN
NOT TO SCALE



ALTERNATIVE HEADWALL REINFORCING DETAILS - WITH REINFORCING BARS
NOT TO SCALE



WINGWALL & HEADWALL CONNECTION
NOT TO SCALE

- NOTES:**
- DESIGN LOADS ARE IN ACCORDANCE WITH AUSTRALIAN BRIDGE DESIGN CODE AS5100.
 - HEADWALLS ARE NOT DESIGNED FOR GUARDRAIL IMPACT FORCES.
 - THE SETTING OUT DIMENSIONS IN THIS DRAWINGS ARE BASED ON SET ROAD BATTER & CULVERT BATTER SLOPES BEHIND THE WINGWALLS. THESE SHALL BE A MAXIMUM OF 1V:2H
 - STANDARD DRAWING REFERENCES:
 - CS3100 - REQUIRED REINFORCEMENT COVER THICKNESS AND STRENGTH OF CONCRETE UNDER DIFFERENT EXPOSURE CLASS, UNLESS NOTED OTHERWISE.
 - CS3100 - NOTE 31 AND 32 DETAILS FOR WEEPHOLES AND APRON.
 - CS3101 - TABLE 1 FOR SPACING BETWEEN PIPES, S*
 - CS3127 - WINGWALL SETOUT DIMENSIONS & QUANTITIES [A], [B], [C], [H]
 - REINFORCING BAR SHALL BE D500N AND MESH SHALL BE D500L IN ACCORDANCE WITH AS/NZS 4671.
 - MINIMUM LAP SHALL BE 300mm FOR REINFORCING BARS AND 100mm FOR MESH.
 - ALL EXPOSED EDGES TO BE PROVIDED WITH 20mm CHAMFERS.
 - LAY 50mm COMPACTED SAND AS FOUNDATION PREPARATION.
 - DEPTH OF HEADWALL MAY VARY, DEPENDING ON THE BATTER SLOPE. LOCALLY INCREASE HEADWALL HEIGHT TO MEET FLUSH WITH BATTER HINGE.
 - DESIRABLE HEADWALLS/WINGWALLS THICKNESS (T) IS 150mm. ANY PROJECT SPECIFIC THICKNESS SHALL DESIGN TO OBTAIN AN ADEQUATE CONCRETE COVER AS PER STANDARD DRAWING CS3100 NOTE 1.
 - ALTERNATIVE HEADWALL REINFORCEMENT USING REINFORCING BARS MAY BE ADOPTED INSTEAD OF SL81 MESH, REFER TO PROVIDED DETAIL FOR REINFORCEMENT LAYOUT.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

THIS DRAWING IS DERIVED FROM TRANSPORT SOUTH AUSTRALIA STANDARD DRAWING S-4002, SHEET 21 AND ADOPTED FOR NT CONDITIONS.

No.	DESCRIPTION	DATE	NAME	DEPT/COMPANY
2	MINOR CHANGES	JAN 2024	D.LLANO	DIPL
1	DESIGN DETAILS AMENDED	APR 2023	J. COOK	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 J.LEESON	CHECKED S.HATZI
DATE SEPT 2017	DATE SEPT 2017
DESIGNED S.A.	CHECKED S.A.
DATE	DATE
DESIGN LEADER S.HATZI	DESIGN DIRECTOR S.JACKSON
DATE 1/09/2017	DATE 1/09/2017



STANDARD DRAWINGS DRAINAGE				
RCP 375mm DIA. TO 900mm DIA. HEADWALL & WINGWALL DETAILS 0° TO 20° SKEW ANGLE				
FILE No.	ASSET No.	SHEET No.	DRAWING No.	AMEND.
-	-	2 OF 5	CS3103	2
				SHEET SIZE A1