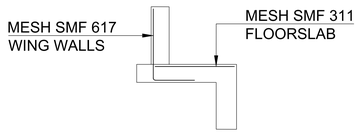
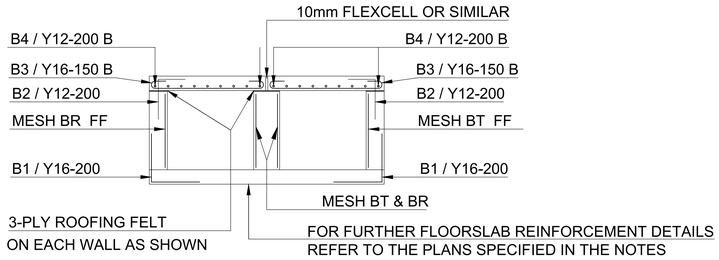
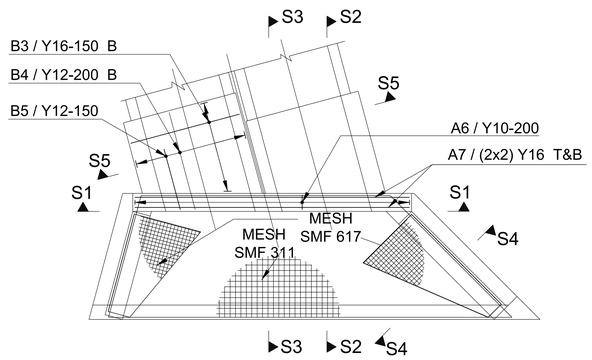
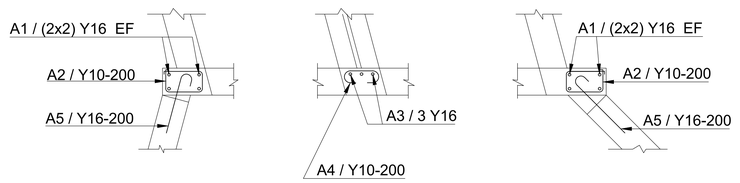


NOTE:
MESH REINFORCEMENT ONLY
FOR CULVERTS WHERE
VERTICAL OPENING, JA > 900









NOTES FOR INLET / OUTLET WING WALLS:

1. DESIGN CRITERIA

1.01 THE WING WALLS ARE DESIGNED AS CANTILEVERS FIXED TO THE BASE AND SUPPORTED BY THE HEADWALL.
1.02 THE WING WALLS ARE DESIGNED FOR A SURCHARGE OF 750mm AND A MAXIMUM SLOPE OF 1:1,5 FOR ANY FILL HEIGHT.
1.03 THE DENSITY OF SOIL = 20 kN/m.
1.04 SOIL PRESSURES DETERMINED USING RANKINE'S THEORY.
1.05 CONCRETE: WING WALL INSITU BARREL
CHARACTERISTIC STRENGTH (MPa) 30 30
CLASS CONCRETE C25/30-20 C25/30-20
1.06 REINFORCEMENT ACCORDING TO SABS 920 - LATEST REVISION.
CHARACTERISTIC STRENGTH OF HIGH TENSILE STEEL = 450 MPa.
CHARACTERISTIC STRENGTH OF HIGH TENSILE STEEL MESH = 450 MPa.
1.07 A LINEAR SOIL PRESSURE DISTRIBUTION IS ASSUMED.
1.08 THE INSITU BARREL IS DESIGNED FOR SNABC TRAFFIC LOADING IN ACCORDANCE WITH TMH 7 PARTS 1,2&3 (AS AMENDED 1988) "CODE OF PRACTICE FOR THE DESIGN OF HIGHWAY BRIDGES AND CULVERTS IN SOUTH AFRICA".

2. GENERAL

2.01 THE REQUIRED CLASS OF SURFACE FINISH IS F2 FOR ALL VISIBLE SURFACES.
2.02 ALL VISIBLE CORNERS MUST HAVE A 25 x 25 mm CHAMFER.
2.03 TWO 150 mm LAYERS OF APPROVED MATERIAL, COMPACTED TO 93% MAXIMUM DRY DENSITY, ARE REQUIRED UNDER THE INLETS AND OUTLETS.
2.04 MINIMUM CONCRETE COVER TO REINFORCEMENT IS 40mm.
2.05 FURTHER INFORMATION REGARDING SPECIFIC CULVERTS APPEAR ON THE DRAINAGE SCHEDULES, OF THE ROAD.
2.06 THE INLET AND OUTLET UNITS ARE DESIGNED TO ACT AS INDEPENDENT UNITS WHEN USED TOGETHER WITH PIPES, PRECAST BARRELS, AS WELL AS INSITU BARREL UNITS.
2.07 REINFORCEMENT DETAILS OF THE FLOOR SLAB SUPPORTING THE CULVERT BARRELS APPEAR ON THE TYPICAL PLAN FOR PRECAST PORTAL CULVERTS BASE SLABS.
2.08 THE HEADWALLS MUST BE ALIGNED PARALLEL TO THE ROAD SHOULDER.

FOR TENDER ONLY

No.	DATE	REVISION	CONSULT. ENG.
T01	29/10/2024	ISSUED FOR RETENDER	
T00	28/02/2022	ISSUE FOR TENDER	

CONSTRUCTION RECORD (AS-BUILT)
WORKS CONTRACT ENGINEER
Name :
Prof. Reg. No. :
Date :
SANRAL PROJECT MANAGER
Name :
Date :

DESIGNED BY
NAME
Prof. Reg. No.
CHECKED BY
NAME
Prof. Reg. No.
DRAWN BY
NAME

CONSULTANT APPROVAL
Name :
Prof. Reg. No. :
Date :

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South Africa

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SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
Reg No. 1998/009884/30
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

NORTHERN REGION
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Private Bag X17
Lynnwood Ridge
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Tel: (012) 426 6200

ACCEPTANCE
THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING
for the SA NATIONAL ROADS AGENCY SOC LTD.
Date:

PROJECT DESCRIPTION
FOR TRAINING AND CONSTRUCTION MANAGEMENT SERVICES FOR A COMMUNITY DEVELOPMENT PROJECT TO UPGRADE ACCESS ROADS IN AND NEAR KWAMHLANGA TOWNSHIP – MPUMALANGA PROVINCE

DRAWING DESCRIPTION
PRECAST CULVERT WING WALLS REINFORCEMENT

SCALE : AS SHOWN SHEET 2 OF 2

PROJECT NUMBER	C.002-053-2023/1	
DRAWING LOCATION DATA	START	END
ROUTE	-	-
SECTION	-	-
DRAWING km DISTANCE	-	-
DRAWING TYPE	TYPICAL DRAWING - DRAINAGE	
BRIDGE/STRUCTURE No.		
CONSULTANT DRAWING No.	60487450-4-1-C-DA-109-T-01	VER T01
SANRAL DOCUMENT #		

SANRAL TITLE BLOCK #164823H(DWG/PDF) VERSION V11.1