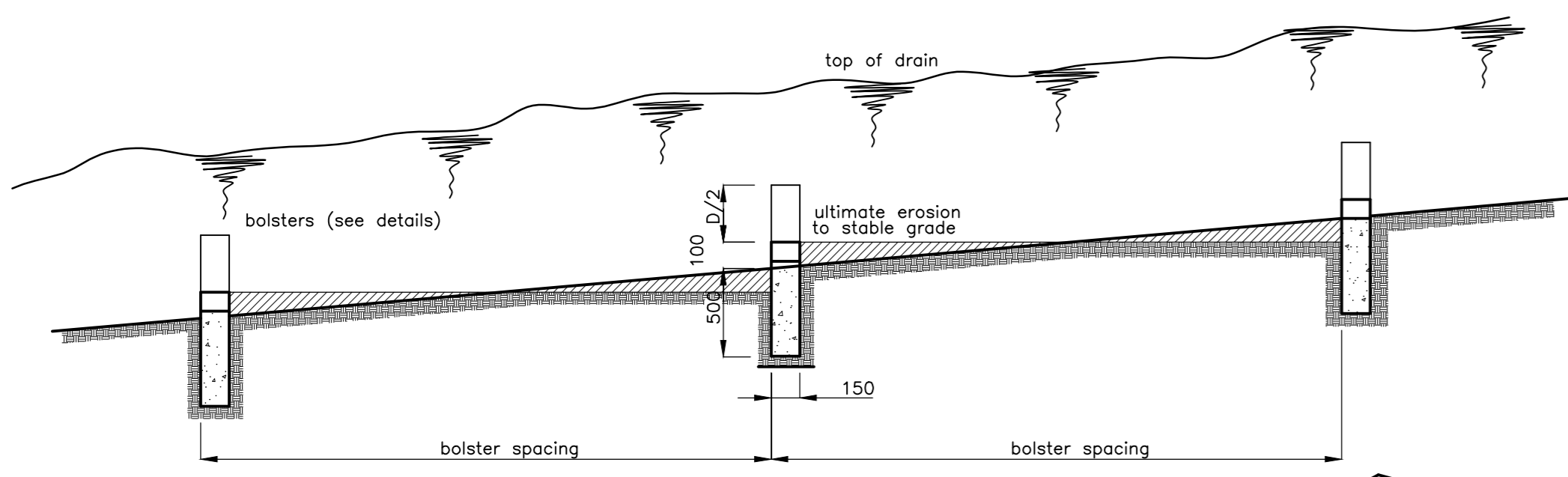
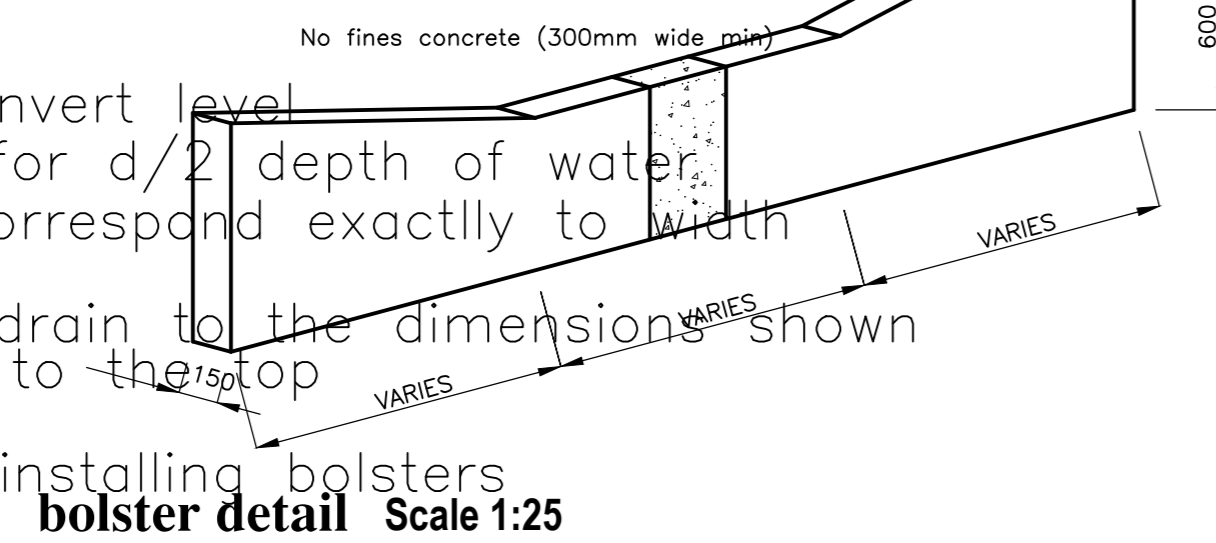


notes

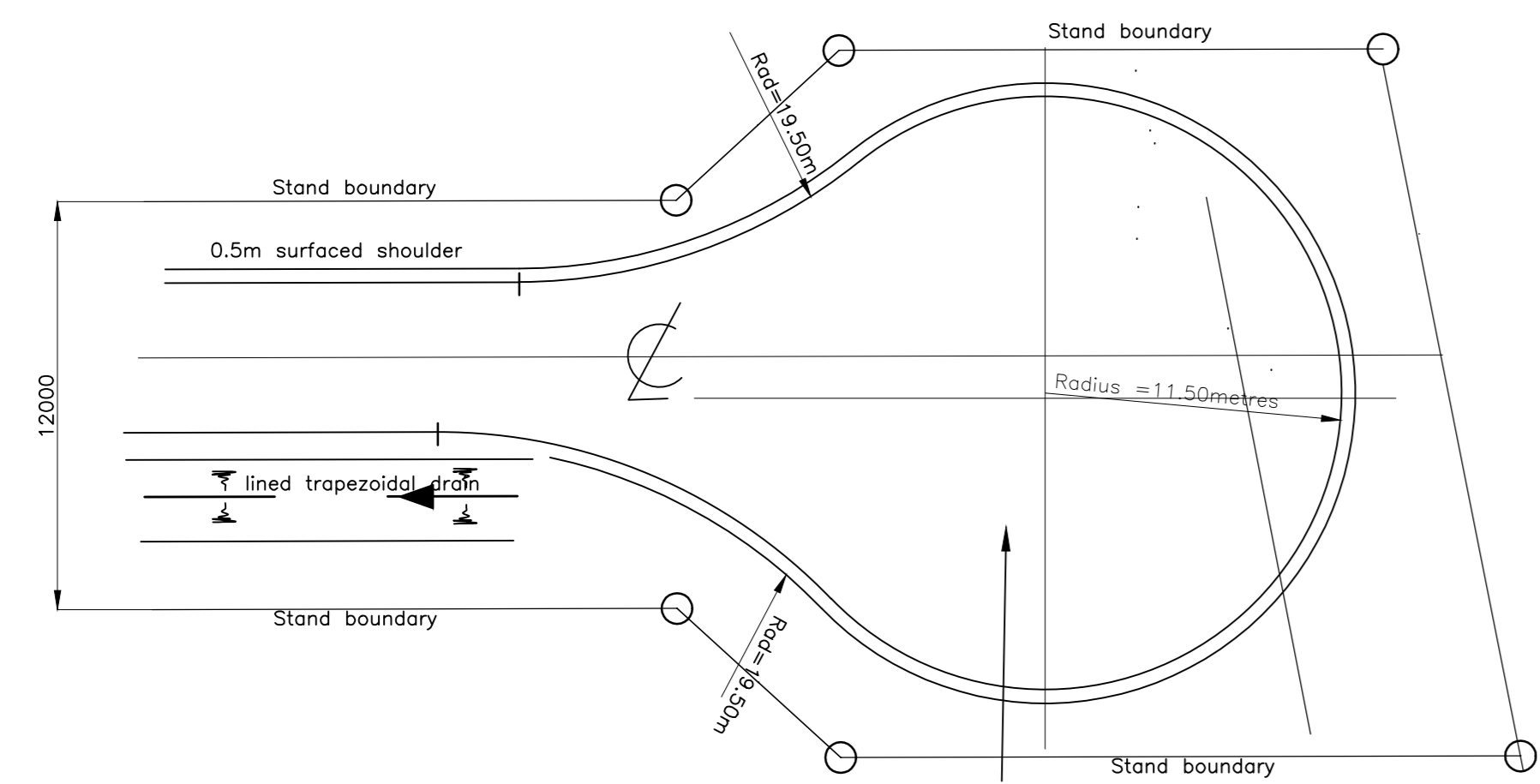
- Crest to be at 100mm above drain invert level
- Inclined sides to be built up to allow for d/2 depth of water.
- Width & side slopes of bolsters to correspond exactly to width and side slopes of longitudinal drain
- Trenches to be excavated across the drain to the dimensions shown and then filled with no fines concrete to the top
- Bolsters spacing as shown on layout
- Drains first brought to shape before installing bolsters



drain longitudinal section showing bolster positions Scale 1:25



bolster detail Scale 1:25

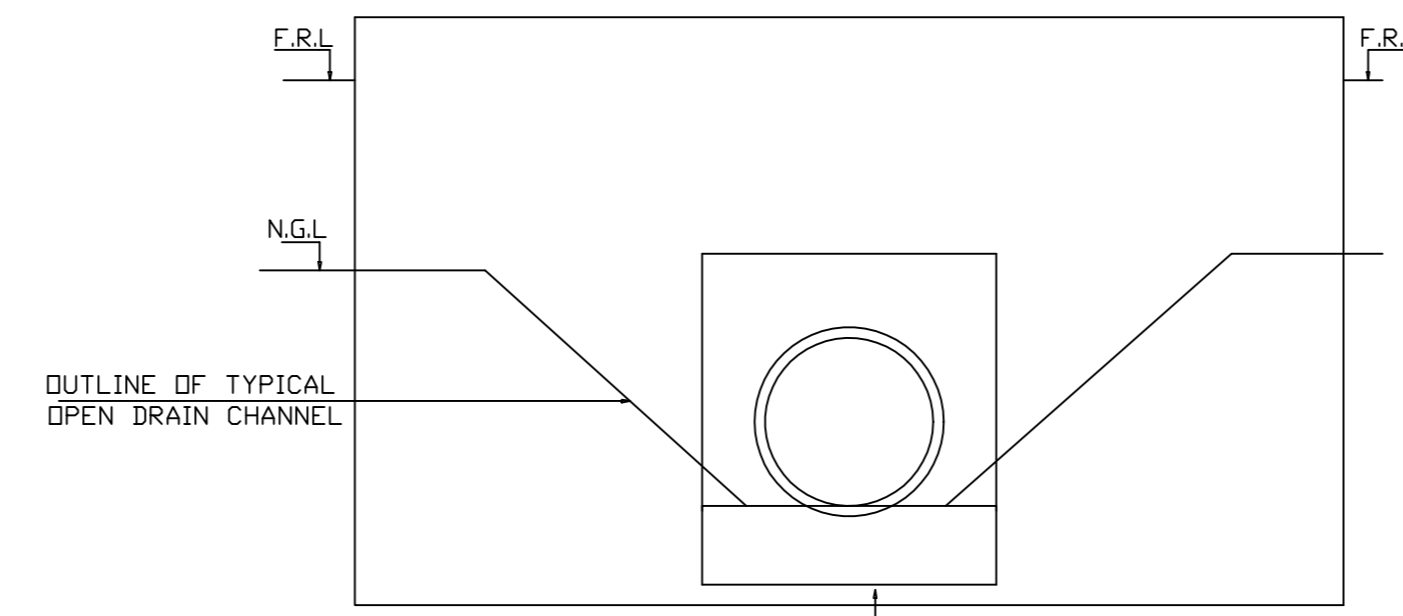


Typical cul-de sac detail (12.00m ROAD RESERVE)

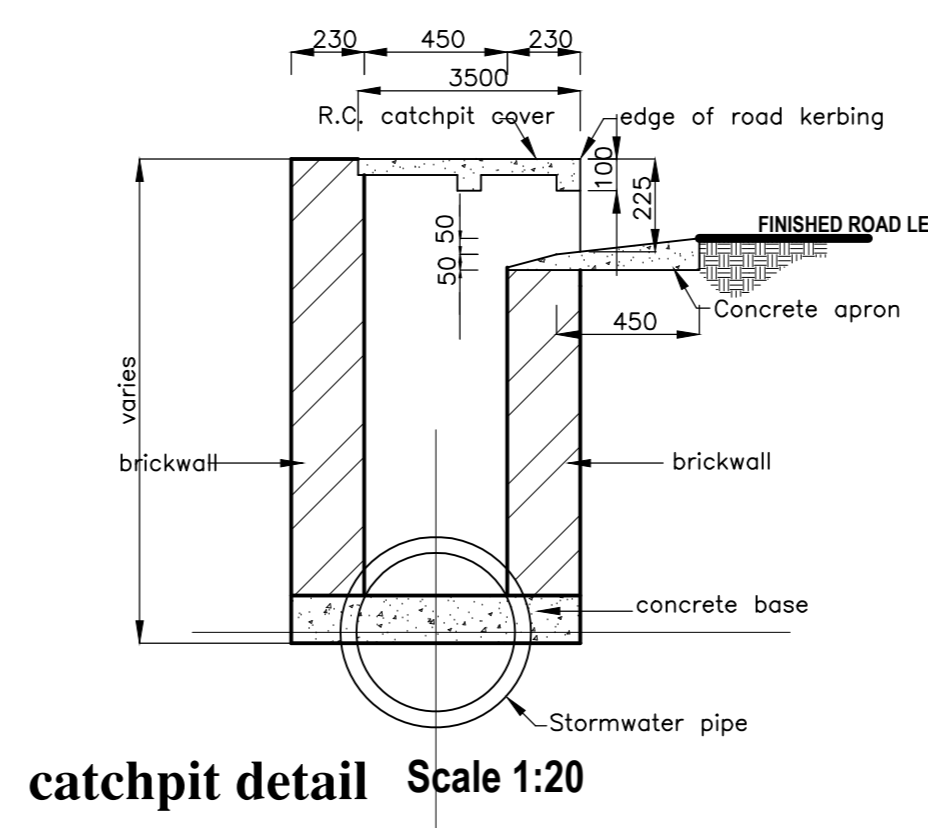
JUNCTION TYPE	RADIUS (R)	POSITION OF CULVERT	LENGTH OF CULVERT
30/30	15.00m	15.00m	12.50m
30/20	15.00m	15.00m	12.50m
30/15	15.00m	15.00m	12.50m
30/12	7.50m	12.00m	7.50m
20/20	15.00m	15.00m	12.50m
20/18	15.00m	13.75m	12.50m
20/15	11.00m	9.25m	12.50m
20/12	7.50m	9.25m	9.75m
18/18	15.00m	13.75m	12.50m
18/15	11.00m	9.25m	12.50m
18/12	7.50m	9.25m	9.75m
15/15	11.00m	9.00m	9.75m
15/12	7.50m	9.00m	9.75m
12/12	7.50m	8.50m	9.75m

Typical junction Table of Details

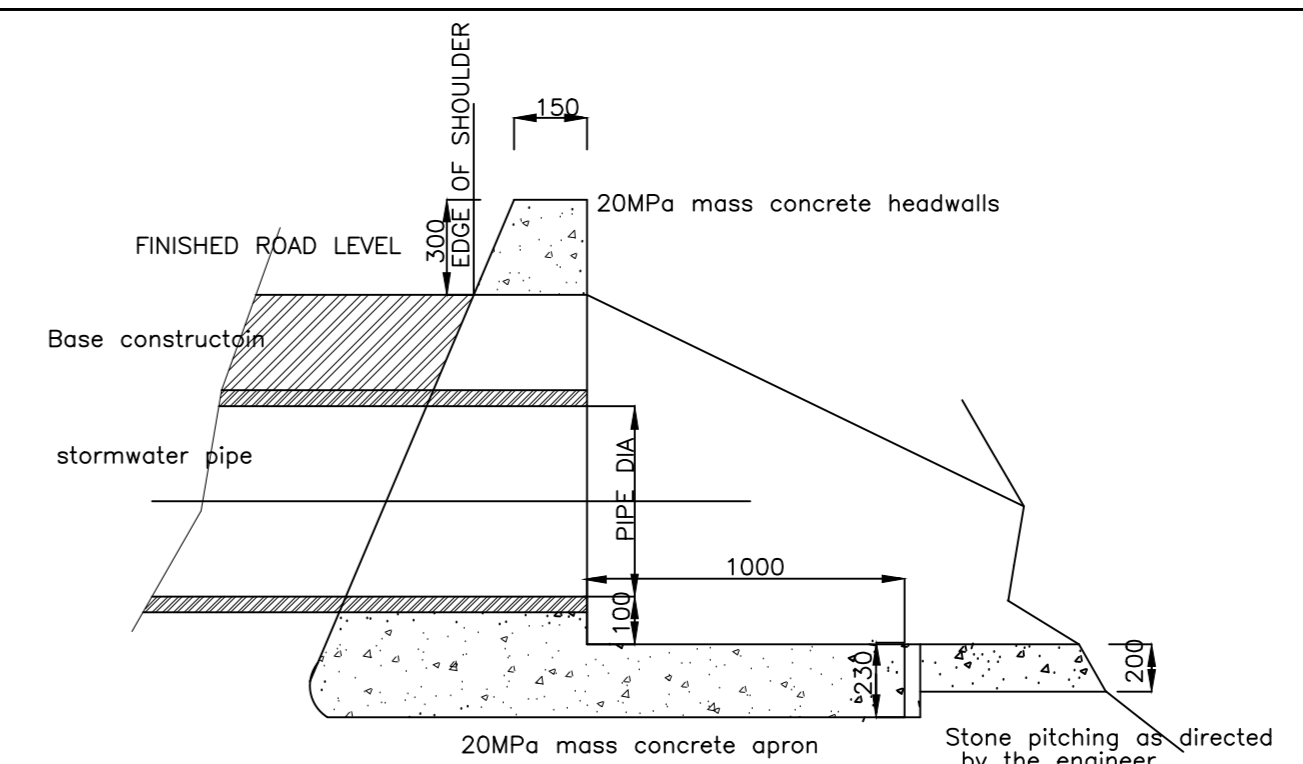
		BOLSTER SPACING, d(m)										
DRAIN INVERT MATERIAL	SAND		25	20	15	10	10					
	SAND/CLAY	As required	25	20	15	10	10		At 10m spacing			
	CLAY		30	25	20	10	10		or drain to be lined			
	GRAVEL		30	25	20	10	10		or stabilised			
	DEC. ROCK		30	40	30	15	15					
	SOFT ROCK				40	20	20					
HARD ROCK												
DRAIN INVERT GRADE %		0.5	1	2	3	4	5	6	7	8	9	10



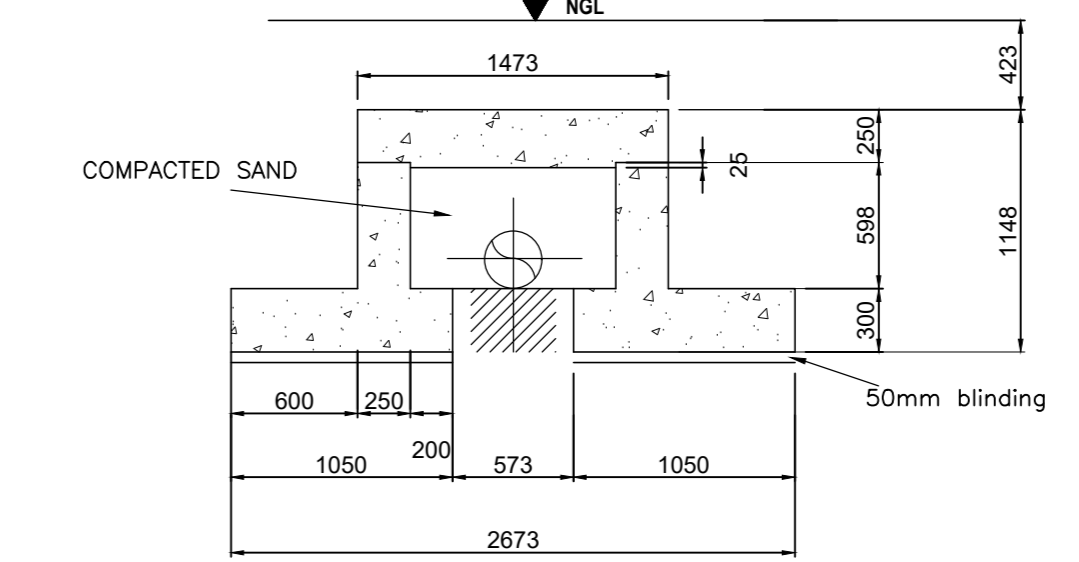
ACCESS CULVERTS AND HEADWALLS



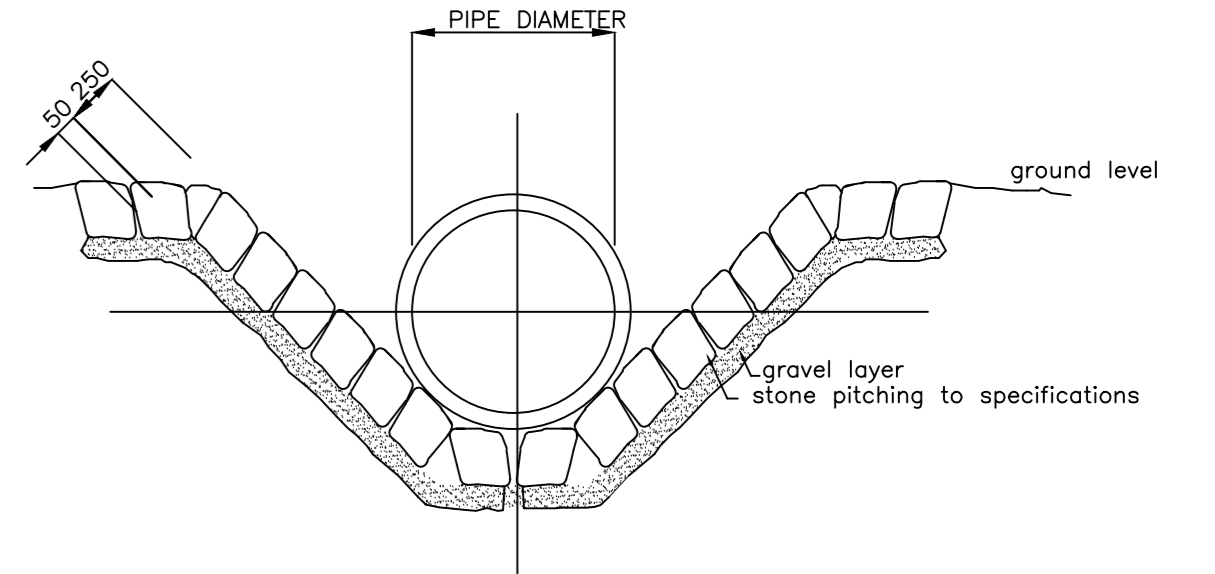
catchpit detail Scale 1:20



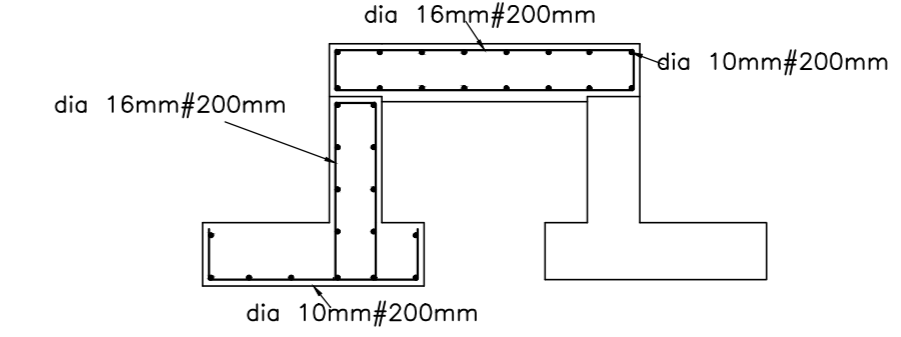
Typical pipe culvert/headwall section Scale 1:20



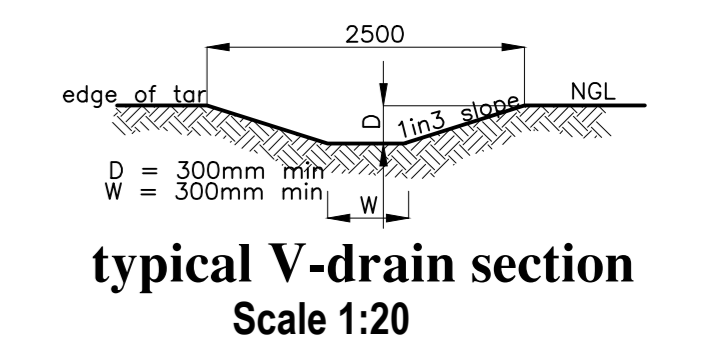
FUEL PIPELINE ROAD CROSSING DETAIL



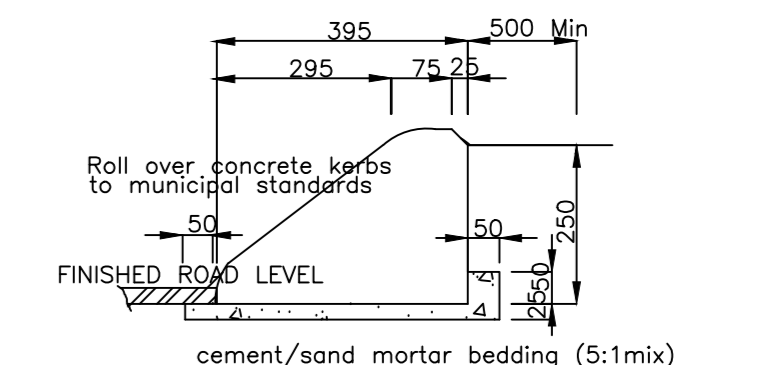
Inlet/outlet stone pitching detail Scale 1:20



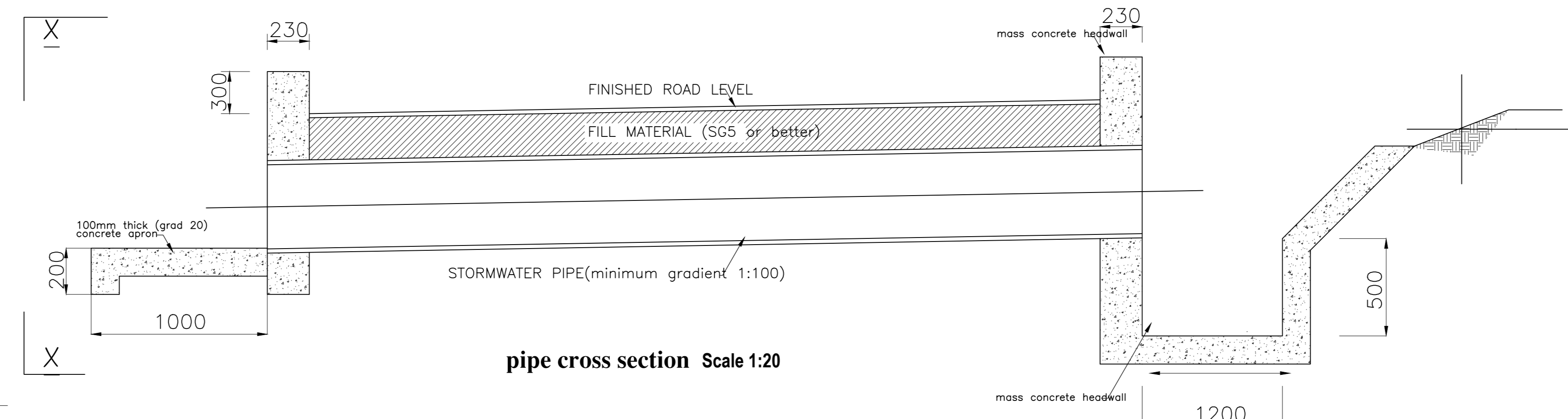
TYPICAL REINFORCEMENT



typical V-drain section Scale 1:20



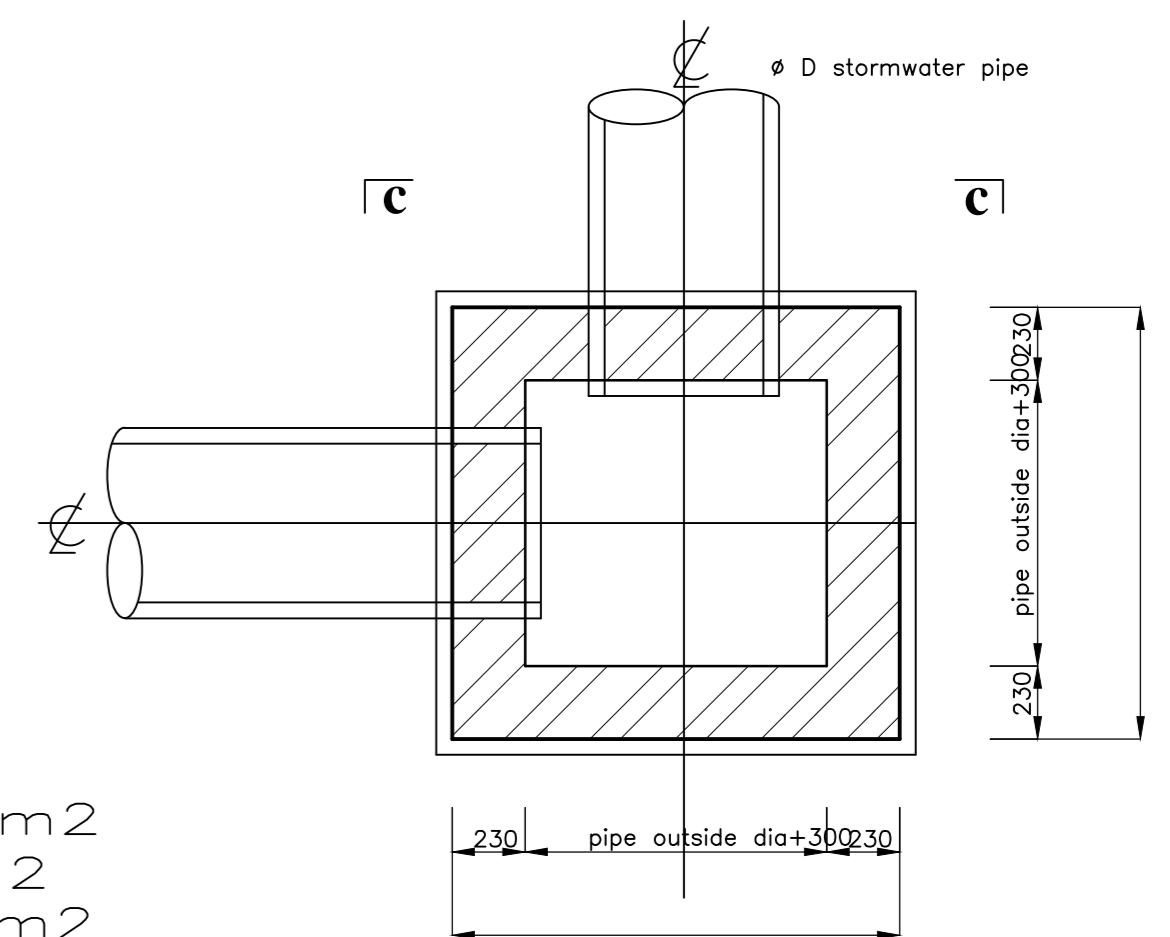
mountable kerb detail Scale 1:20



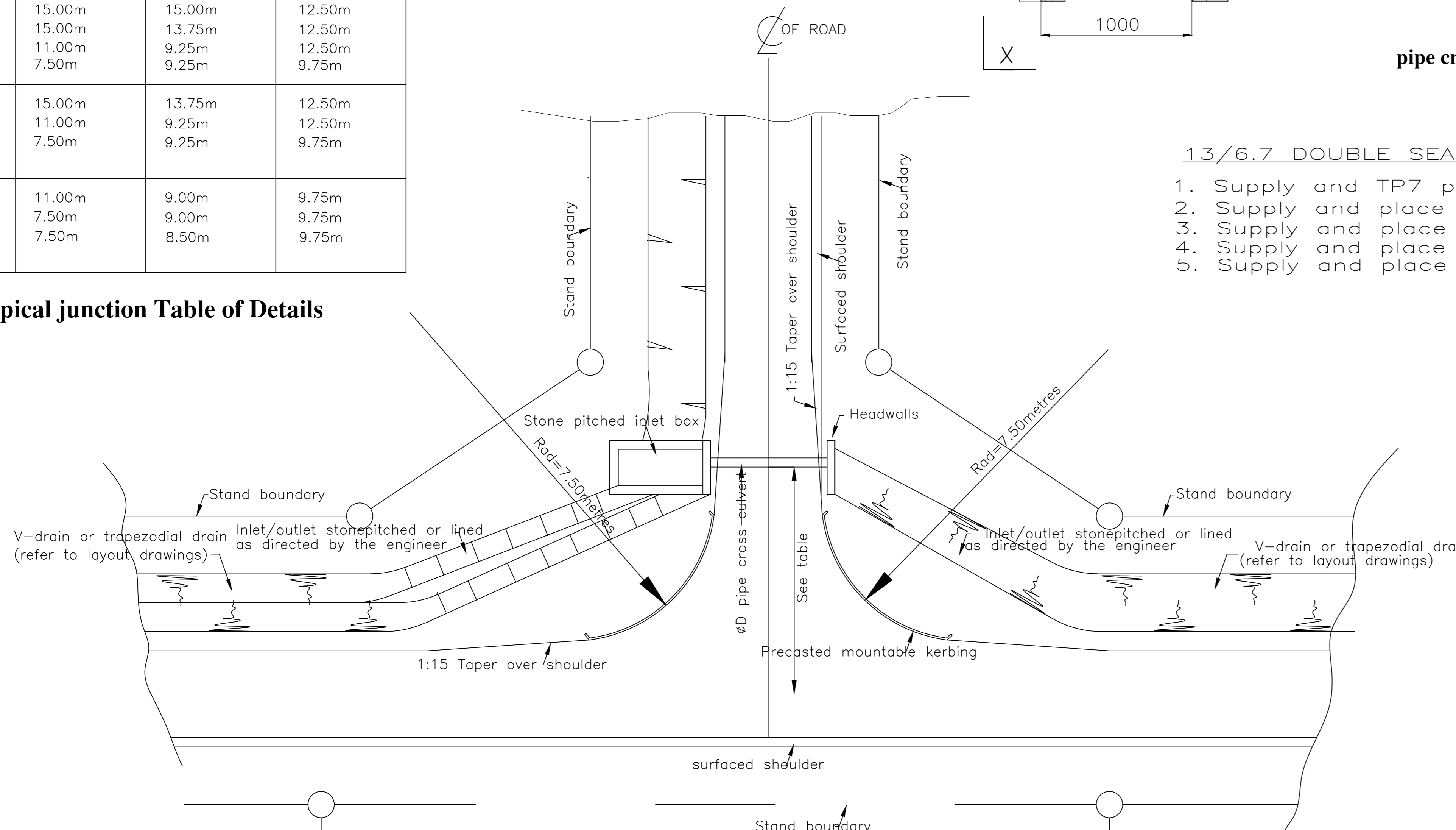
pipe cross section Scale 1:20

13/6.7 DOUBLE SEAL SPRAY AND CHEAP

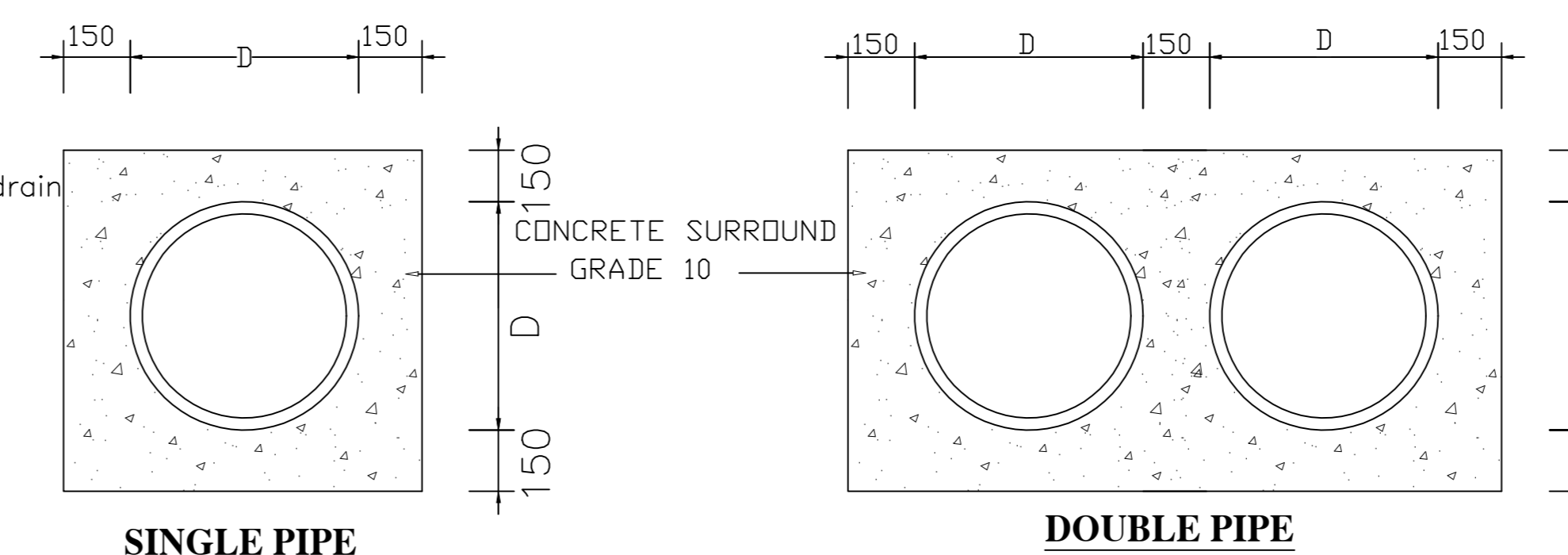
- Supply and TP7 prime at 0.8l/m²
- Supply and place 80/100 tested and approved bitumen binder for tack coat @ 1.3l/m²
- Supply and place 13mm tested and approved aggregate for tack coat @ 0.009m³/m²
- Supply and place 80/100 tested and approved bitumen binder for seal coat @ 0.9l/m²
- Supply and place 6.7mm tested and approved aggregate for seal coat @ 0.007m³/m²



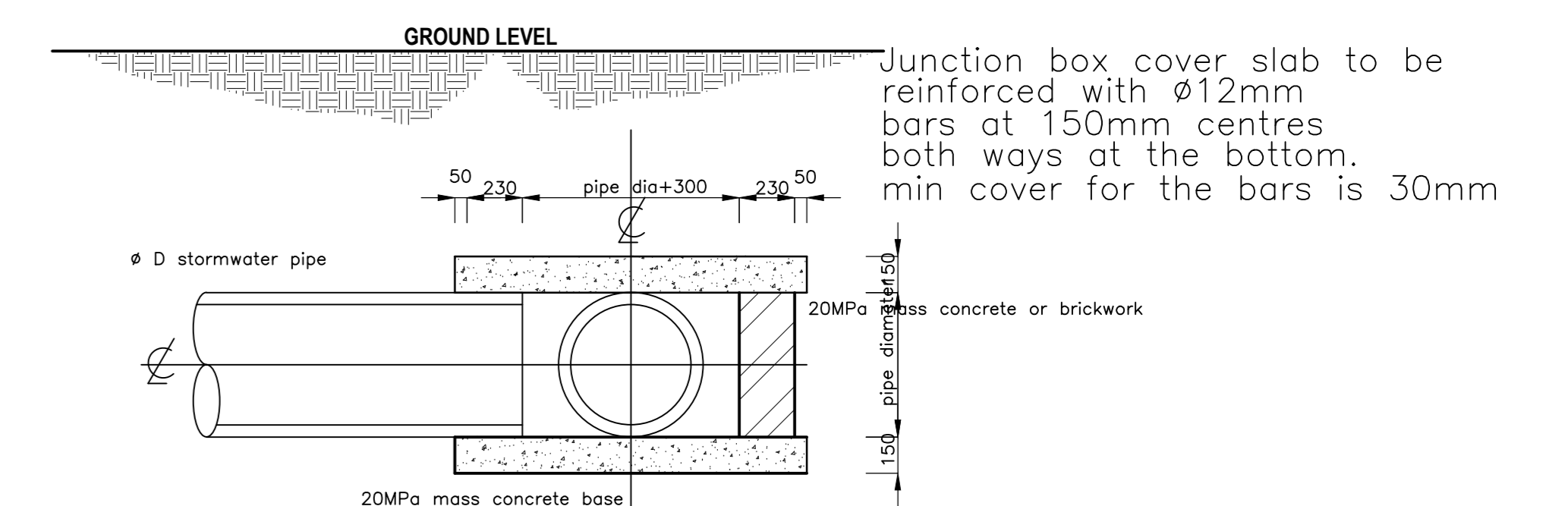
Typical junction box with buried cover Scale 1:20



Typical road intersection detail Scale 1:10



CULVERT BEDDING DETAILS



section c - c

NOTES
1) Depth of excavations for the removal of topsoil and type of lined stormwater drains can be altered by the ENGINEER depending on the ground conditions.

AMENDMENT			Description :
Ltr	date	Init	
			CONSTRUCTION DRAWING
Micro-film			



Ministry of Local Government,
Public Works and National Housing
P.Bag 7755, Causeway
Zimbabwe

Engineer	A.MAISIRI	Director Engr	H. Hungwe
Designed	A.MAISIRI	Approved Branch Head	E.NJOMA
Drawn	A.MAISIRI	Scale	NTS
Checked	E.MURIMI	Date	DECEMBER 2019
Telephone	04 700811	File Ref	

Ministry		Centre	
FINANCE-ZIMRA		Forbes Boarder Post	
Title			
PROPOSED HEAVY VEHICLES PARKING			
Description			
ROAD STANDARD DETAILS			
Stock Drwg No	G.P. No	Proj No	
		FORBES/SD/01	