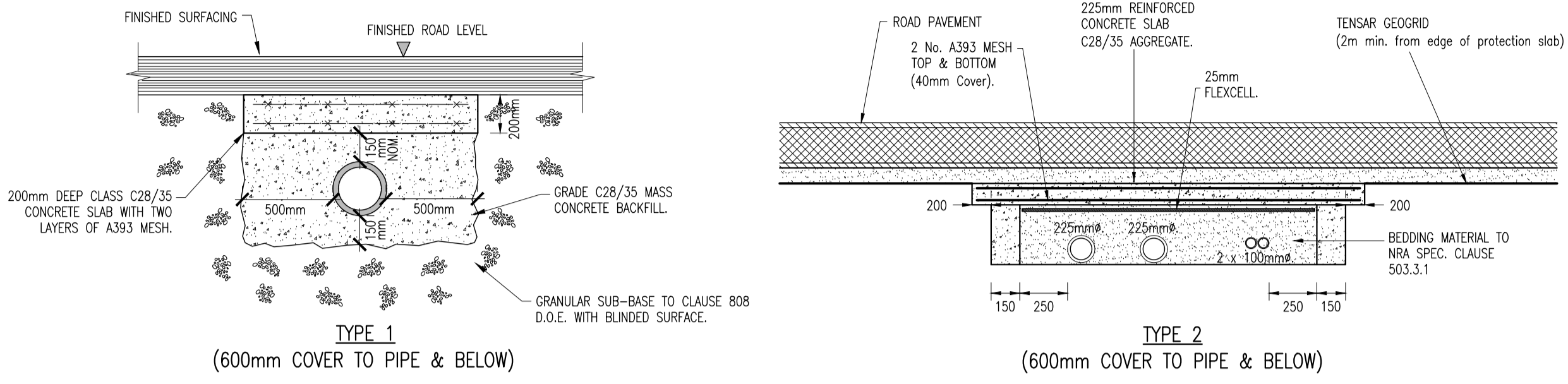
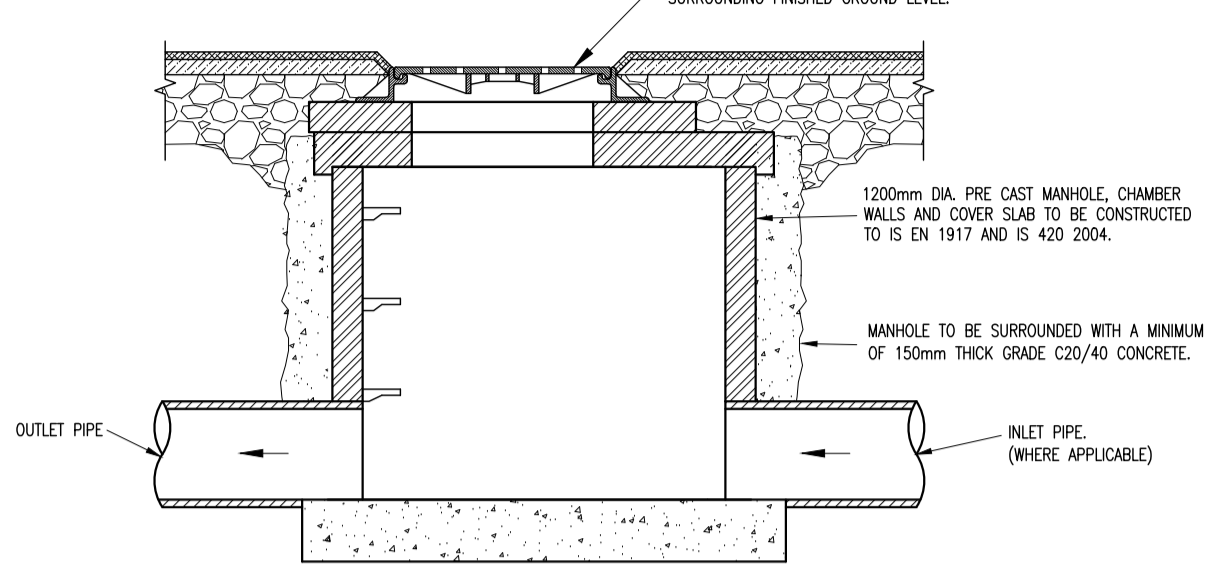


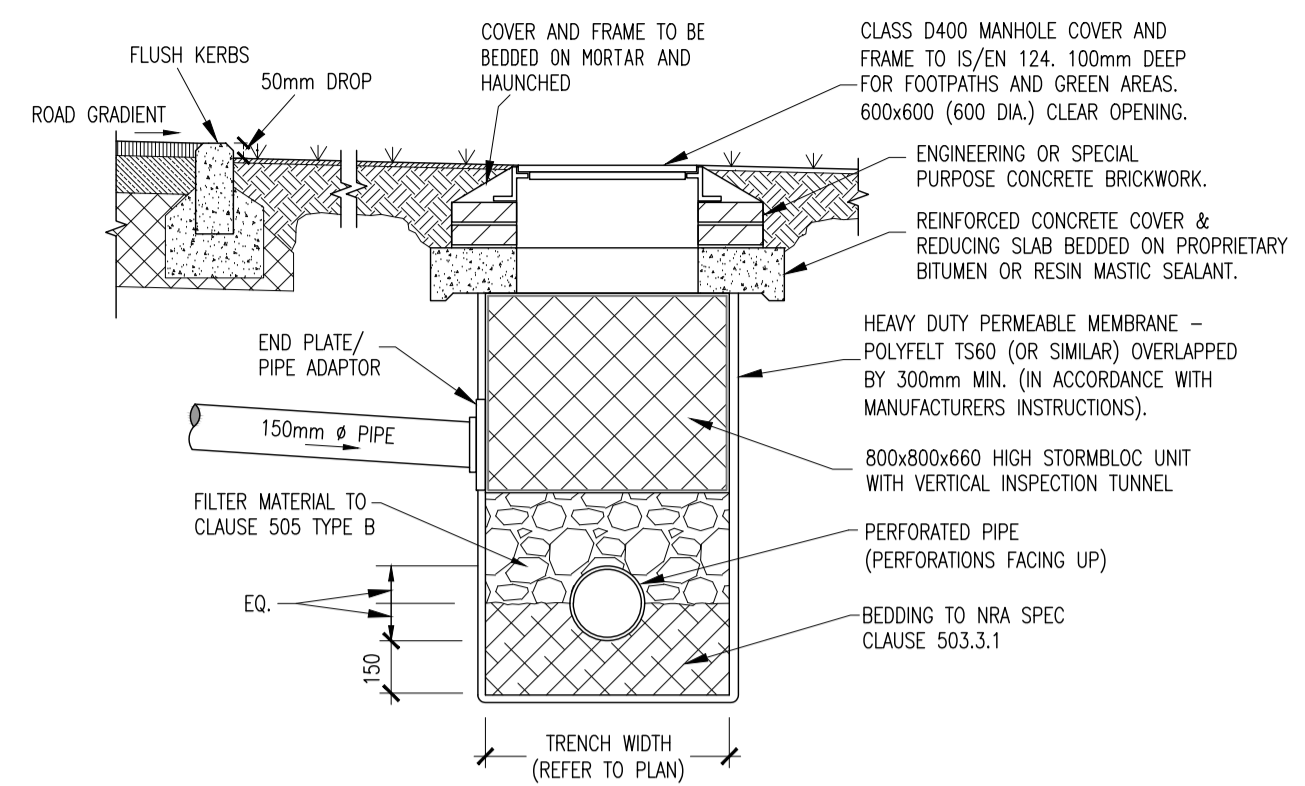
- NOTES:
- WHERE ROCKS OR OTHER HARD TRENCH BOTTOM IS ENCOUNTERED, THE FIGURE DENOTED BY * IS TO BE DOUBLED.
 - TYPE 1 GRANULAR MATERIAL : BROKEN STONE OR GRAVEL TO PASS 10mm SIEVE AND BE RETAINED ON 5mm SIEVE.
 - TYPE 2 GRANULAR MATERIAL : BROKEN STONE OR GRAVEL TO PASS 10mm - 25mm SIEVE, ACCORDING TO PIPE SIZE, (SEE TABLE) AND BE RETAINED ON 5mm SIEVE.
 - CLAUSE 601 S.R.W. BACKFILL : UNIFORM HEAVILY COMPACTED MATERIAL FREE FROM TREE ROOTS, VEGETABLE MATTER, BUILDING DEBRIS, AND FROZEN SOIL AND EXCLUDING CLAY LUMPS RETAINED ON A 75mm SIEVE AND STONES RETAINED ON A 37.5mm SIEVE.
 - RIGID PIPES SHALL MEAN CAST OR SPUN IRON, CONCRETE OR CLAY.
 - GULLY GRATINGS AND FRAMES SHALL COMPLY WITH THE REQUIREMENTS OF I.S./EN/124 1994. GULLIES SHALL BE CLASS D400.
 - GULLY WALLS SHALL BE CONSTRUCTED IN CLASS 30N/mm² PRECAST OR IN-SITU CONCRETE OR ALTERNATIVELY IN SOLID CONCRETE BLOCKS DESIGNATED S10, STRENGTH 10N/mm²
 - ALL PIPES TO BE BEDDED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS
 - SURFACE WATER SEWERS TO BE CLASS H CONCRETE TO IS EN1916 AND IS 6 2004.



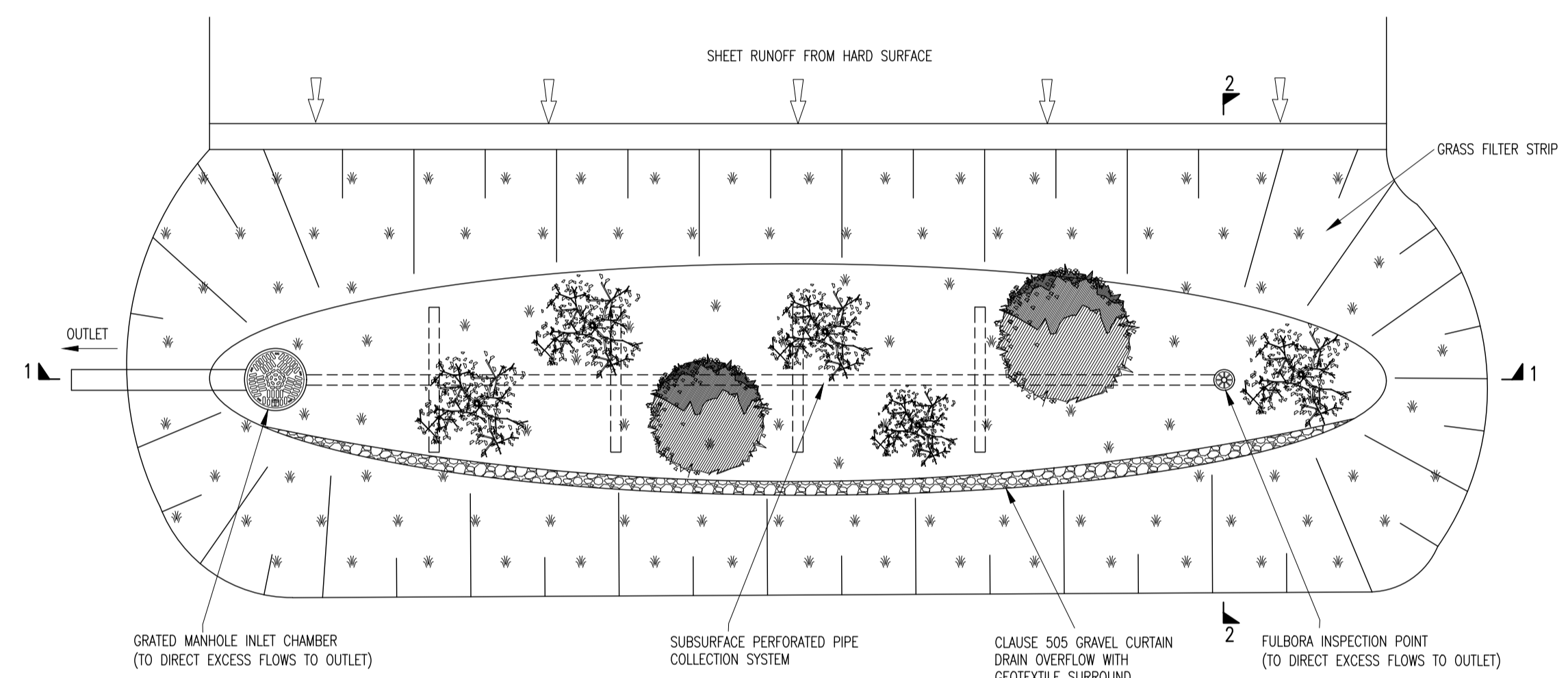
TYPICAL SERVICES PROTECTION DETAIL
SCALE 1:25



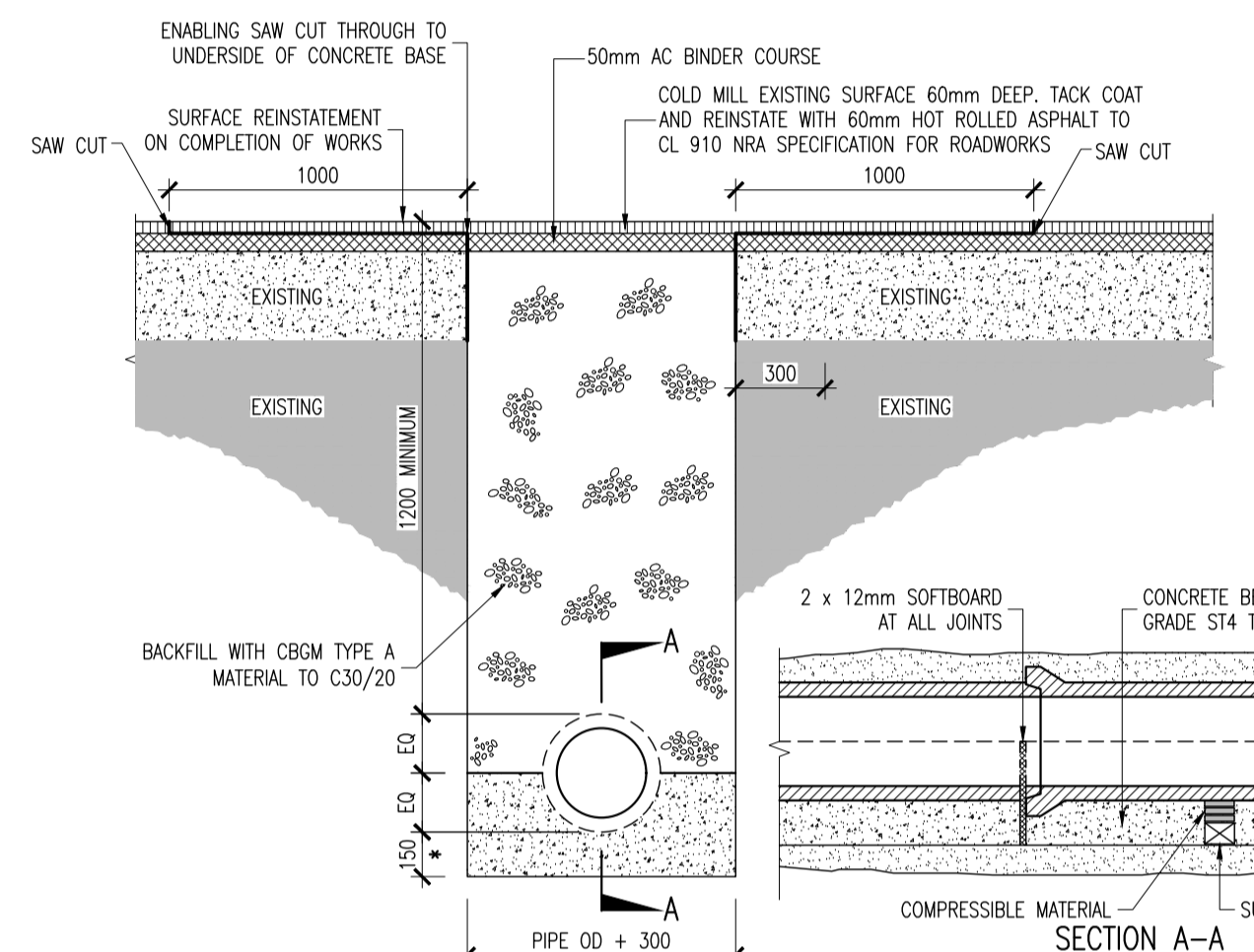
GRATED MANHOLE INLET CHAMBER - CROSS-SECTION
SCALE: N.T.S.



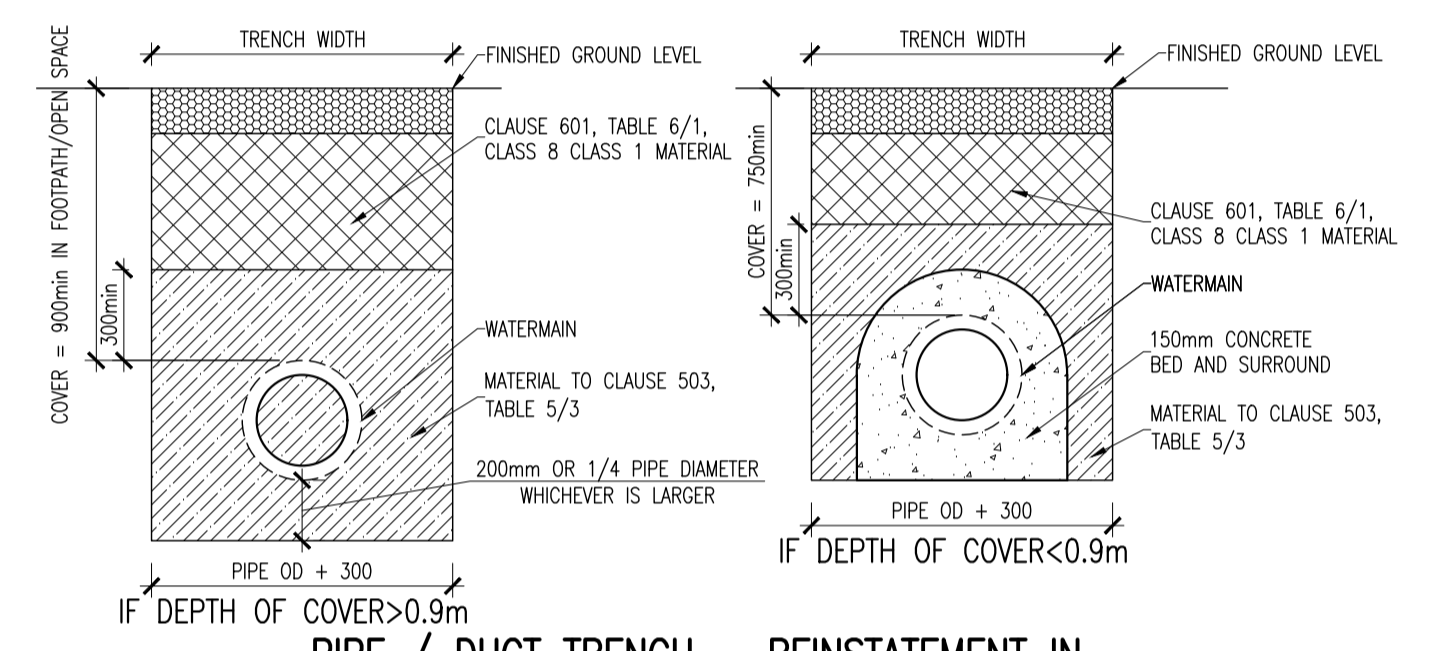
GULLY CONNECTION TO FILTER DRAIN
SCALE: N.T.S.



PLAN

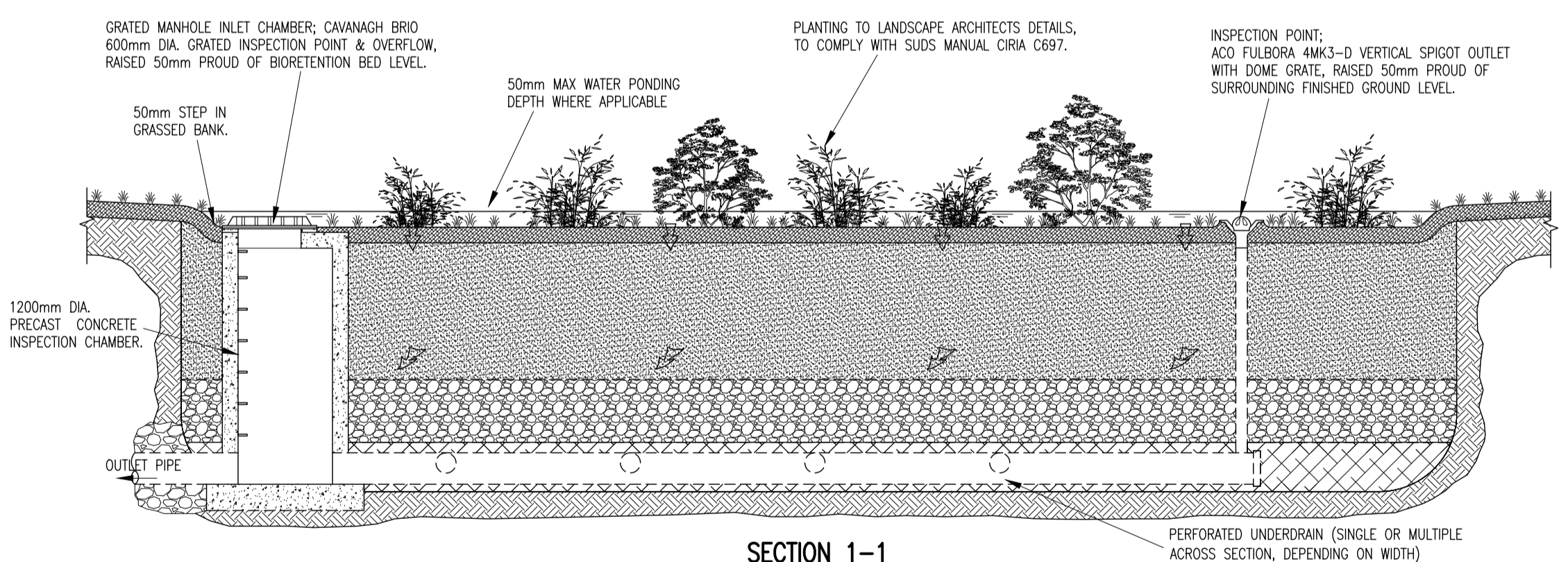


PIPE / DUCT TRENCH - REINSTATEMENT IN EXISTING PUBLIC ROAD
SCALE 1:25

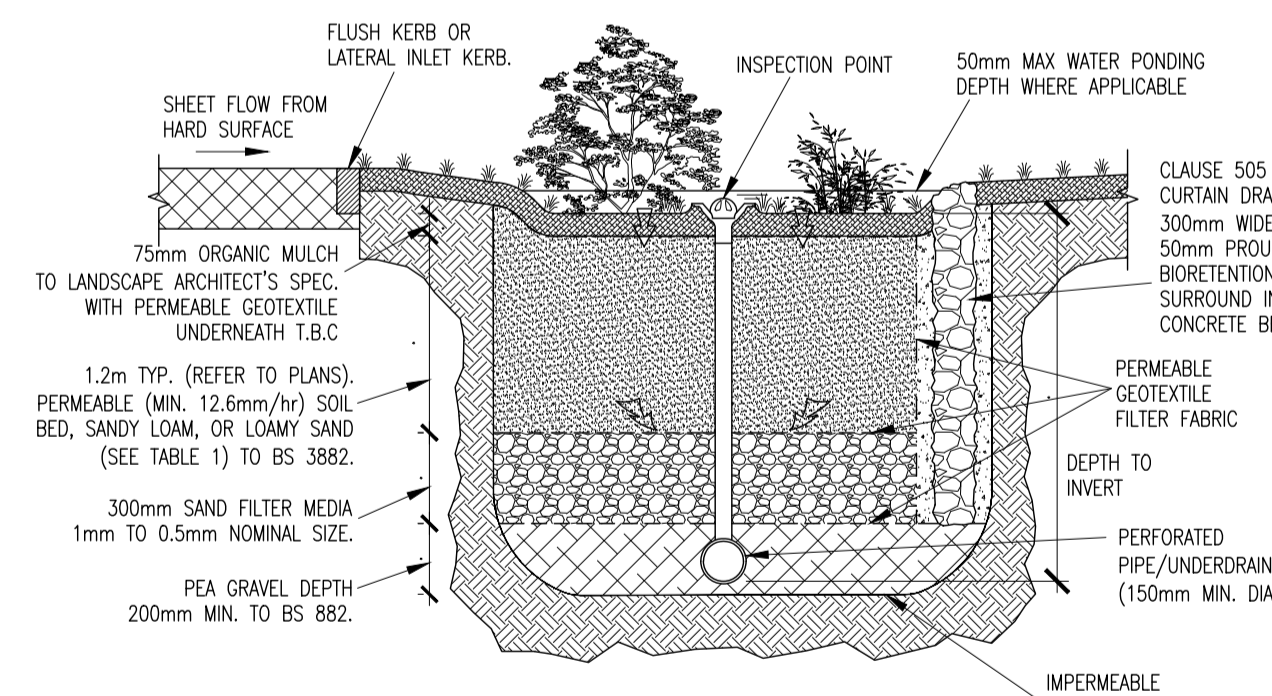


PIPE / DUCT TRENCH - REINSTATEMENT IN EXISTING PUBLIC FOOTPATH / OPEN SPACES
SCALE 1:25

TABLE 1	
COMPONENT	PERCENTAGE MIXTURE
SAND	35-60%
SILT	30-50%
CLAY	10-25%
ORGANIC MATTER	0-4%
TOP SOIL	-

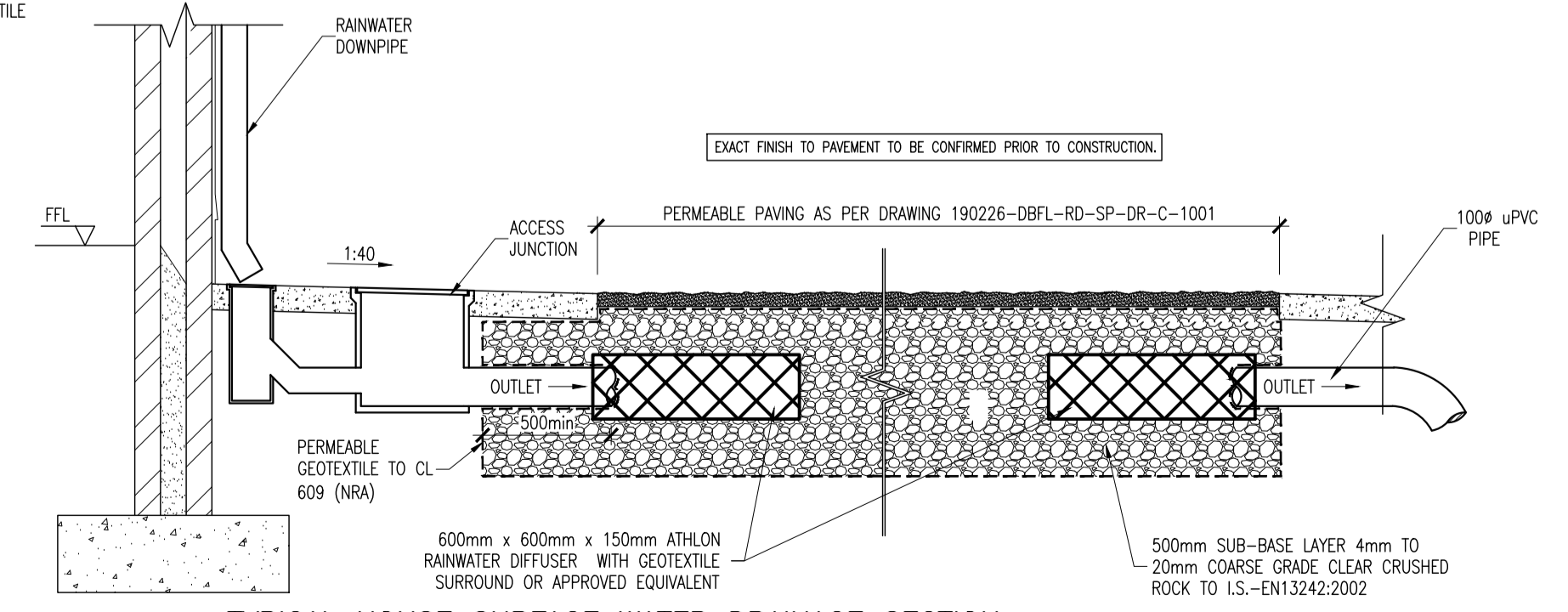


SECTION 1-1



SECTION 2-2

BIORETENTION AREA - SCHEMATIC LAYOUT
SCALE: N.T.S.



TYPICAL HOUSE SURFACE WATER DRAINAGE SECTION

P01	25-08-21	PLANNING		RMC	EDA
rev	date	description		by	chkd.
		A - Approved			
		B - Approved with comments			
		C - Do not use			
client approval					
suitability		issue purpose			
S2 - INFORMATION		PLANNING			
DBFL Consulting Engineers Civil, Structural & Transportation Engineering www.dbfl.ie					
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project ref.					
SANDFORD ROAD, MILLTOWN					
drawing title					
DRAINAGE TYPICAL DETAILS SHEET 3					
client					
SANDFORD LIVING LIMITED					
designed by	author	scale	AS NOTED	sheet size	A1
BK	ICD				
drawing no.	190226-DBFL-CS-SP-DR-C-5003				revision
					P01