NOMINAL SIZE OF PIPES (mm)	MAXIMUM PARTICLE SIZE (mm)	IMPORTED GRANULAR MATERIAL TO BS 882
100	10	10mm NOMINAL SINGLE-SIZE
OVER 100 TO 150	15	10 OR 14mm NOMINAL SINGLE-SIZE OR 14 TO 5mm GRADED
OVER 150 TO 300	20	10,14 OR 20mm NOMINAL SINGLE-SIZE OR 14 TO 5mm GRADED OR 20 TO 5mm GRADED
OVER 300 TO 600	20	14 OR 20mm NOMINAL SINGLE-SIZE OR 14 TO 5mm GRADED OR 20 TO 5mm GRADED

TRENCH WIDTHS

PIPE I.D	OVERALL TRENCH WIDTH
100	550
150	600
225	700
300	850
375	1050
450	1150
525	1200
600	1350
675	1450
750	1500
825	1600
900	1900
1050	2100
1200	2300
1350	2500
1500	2700
1800	3100

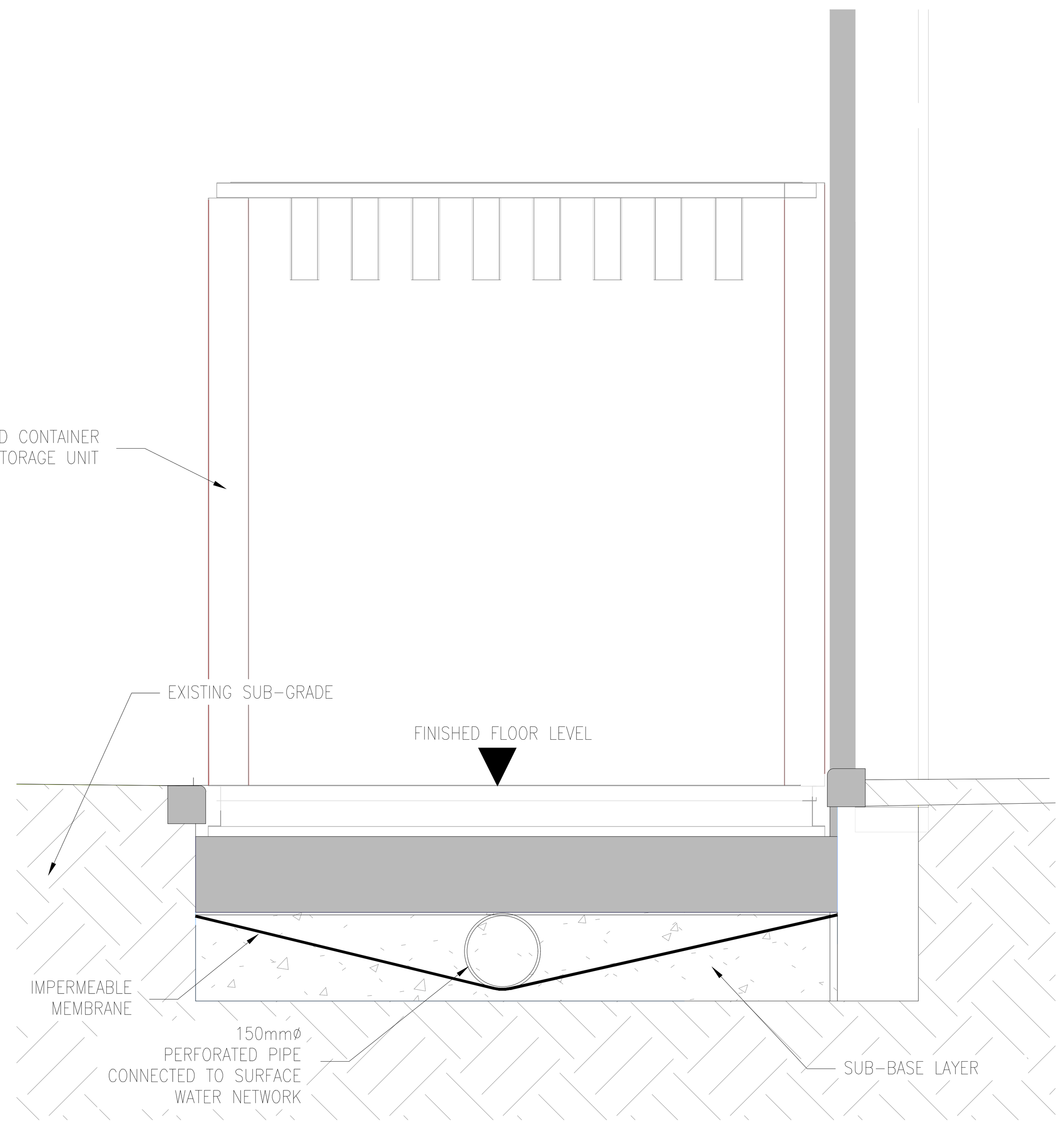
BS EN 1610:1997 ANNEX B TABLE B.15
COARSE AGGREGATE - PIPE BEDDING

SIEVE SIZE (mm)	PERCENTAGE BY MASS PASSING BS SIEVES FOR NOMINAL SIZES						
	GRADED AGGREGATE (mm)			SINGLE-SIZED AGGREGATE (mm)			
	40 to 5	20 to 5	14 to 5	40	20	14	10
50.0	100	-----	-----	100	-----	-----	-----
37.5	90 - 100	100	-----	85 - 100	100	-----	-----
20.0	35 - 70	90 - 100	100	0 - 25	85 - 100	100	-----
14.0	-----	-----	90 - 100	-----	-----	85 - 100	100
10.0	10 - 40	30 - 60	50 - 85	0 - 5	0 - 25	0 - 50	85 - 100
5.0	0 - 5	0 - 10	0 - 10	-----	0 - 5	0 - 10	0 - 25
2.36	-----	-----	-----	-----	-----	-----	0 - 5

RIGID PIPES BEDDING GRADING

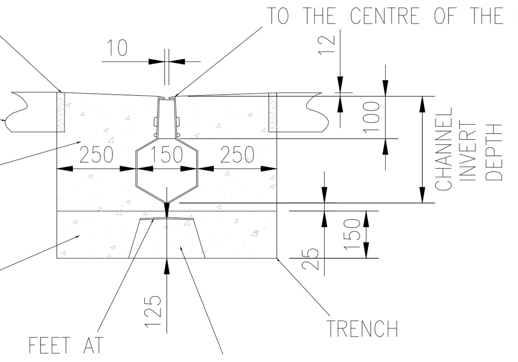
BASED ON BS EN 1610 : 1997 TABLE B.15 FOR RIGID PIPES THE BEDDING SHOULD BE SINGLE SIZE MATERIAL OR GRADED MATERIAL FROM 5mm UP TO A MAX SIZE OF 10mm FOR 100mm PIPES; 14mm FOR 150mm PIPES; 20mm FOR 225mm TO 600mm PIPES; mm FOR OVER 675mm PIPES

CHALK/LIMESTONE SHALL NOT BE USED AS BEDDING MATERIAL IN GROUND WHERE THE PH <7

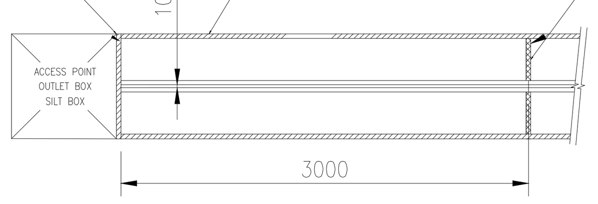


TYPICAL FILTER DRAIN DETAIL BELOW PROPOSED CONTAINERS

SCALE 1:50

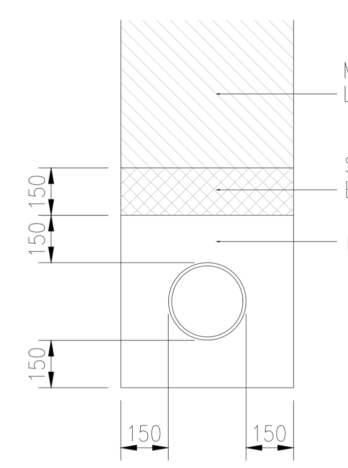


150Ø SLOT DRAIN TYPICAL DETAIL

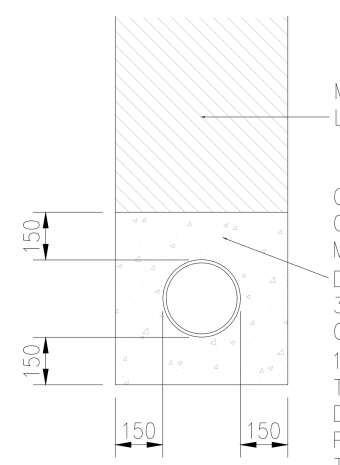


NOTE: BSI CERTIFIED TO D400 LOADING WITHOUT ADDITIONAL CONCRETE REINFORCEMENT.

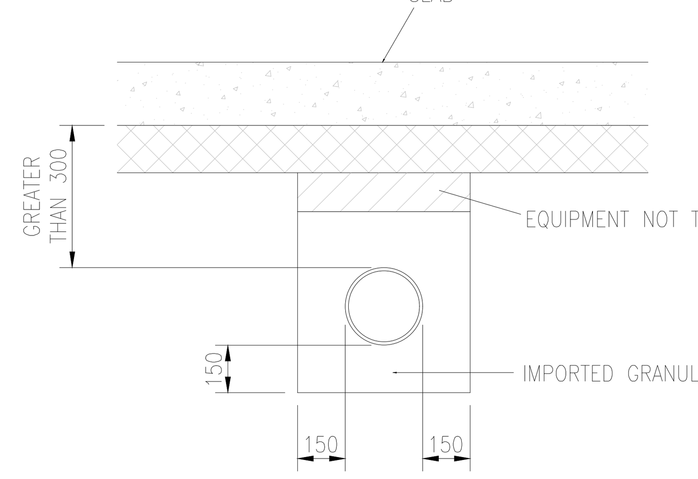
150Ø SLOT DRAIN TYPICAL PLAN DETAIL



GRANULAR SURROUND WHERE COVER EXCEEDS 1200mm TYPE "S"

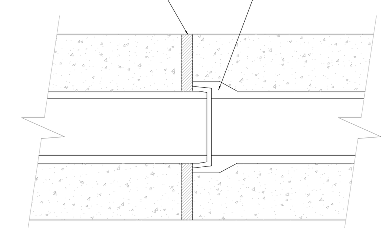


CONCRETE SURROUND WHERE COVER IS LESS THAN 1200 TYPE "Z"



PIPE BELOW SLAB

COMPRESSIBLE BOARD OR PREFORMED JOINT FILLER FOR FULL THICKNESS OF CONCRETE BED OR SURROUND



Pipe ø	Joint thickness
< 450	18mm
450-1200	36mm
1200 >	54mm

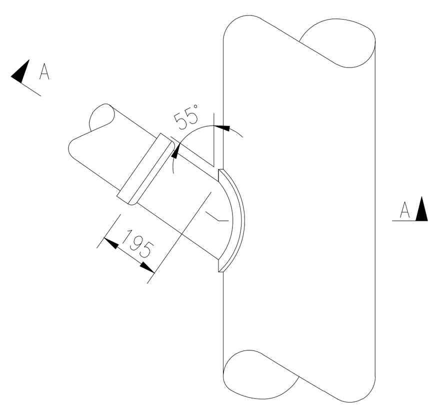
COMPRESSIBLE FILLER TABLE

(BITUMEN IMPREGNATED INSULATING BOARD TO BS 1142: PART 3)

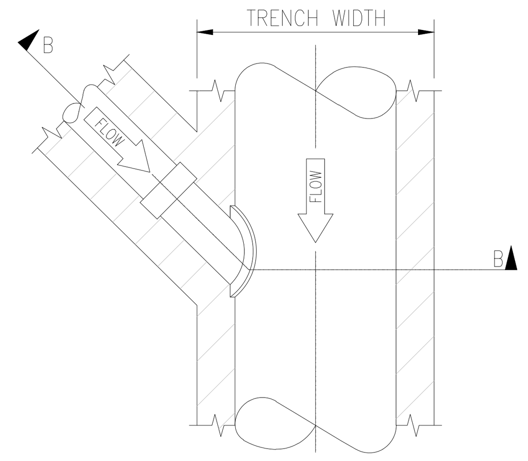
JOINTS FOR CONCRETE SURROUND TO PIPES

(TO OCCUR AT EACH PIPE JOINT)

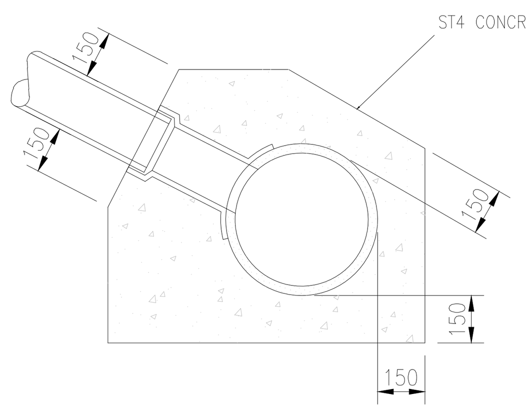
PIPE BEDDING DETAILS



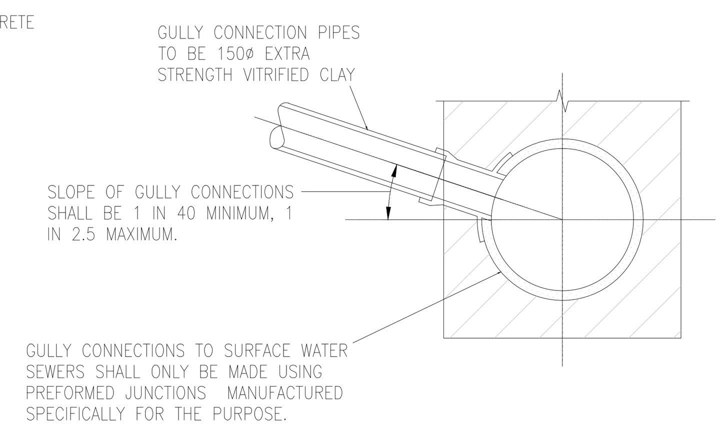
PLAN



PLAN

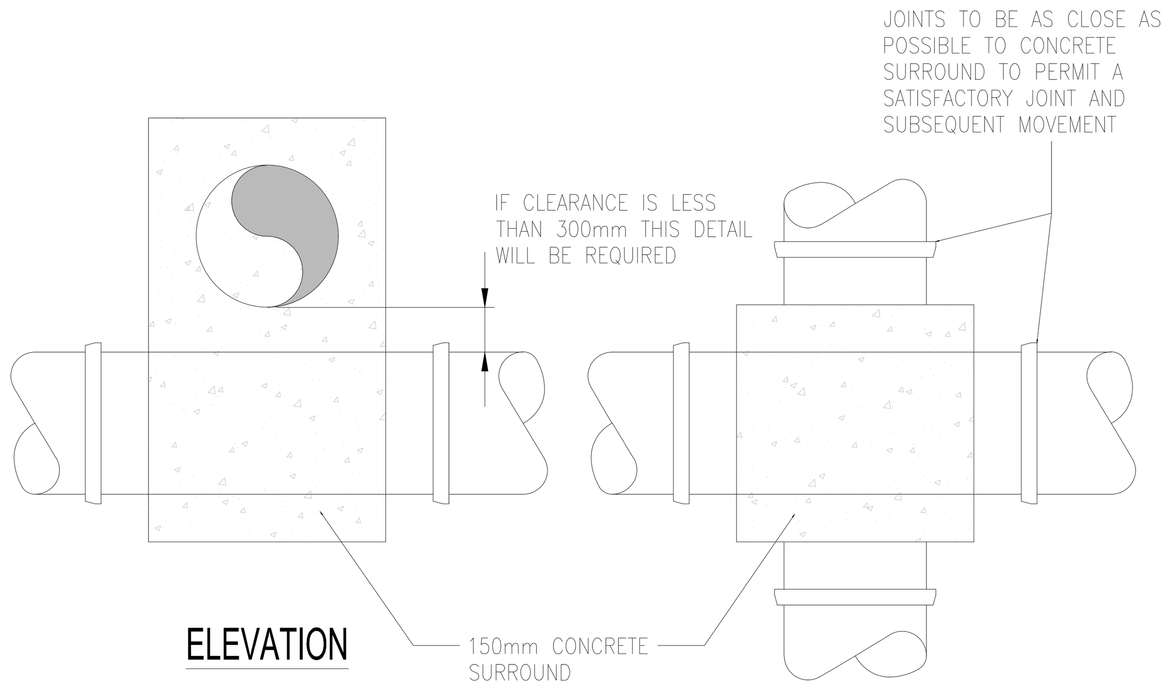


SECTION A-A
CONCRETE SURROUND



SECTION B-B
GRANULAR SURROUND

GULLY CONNECTIONS

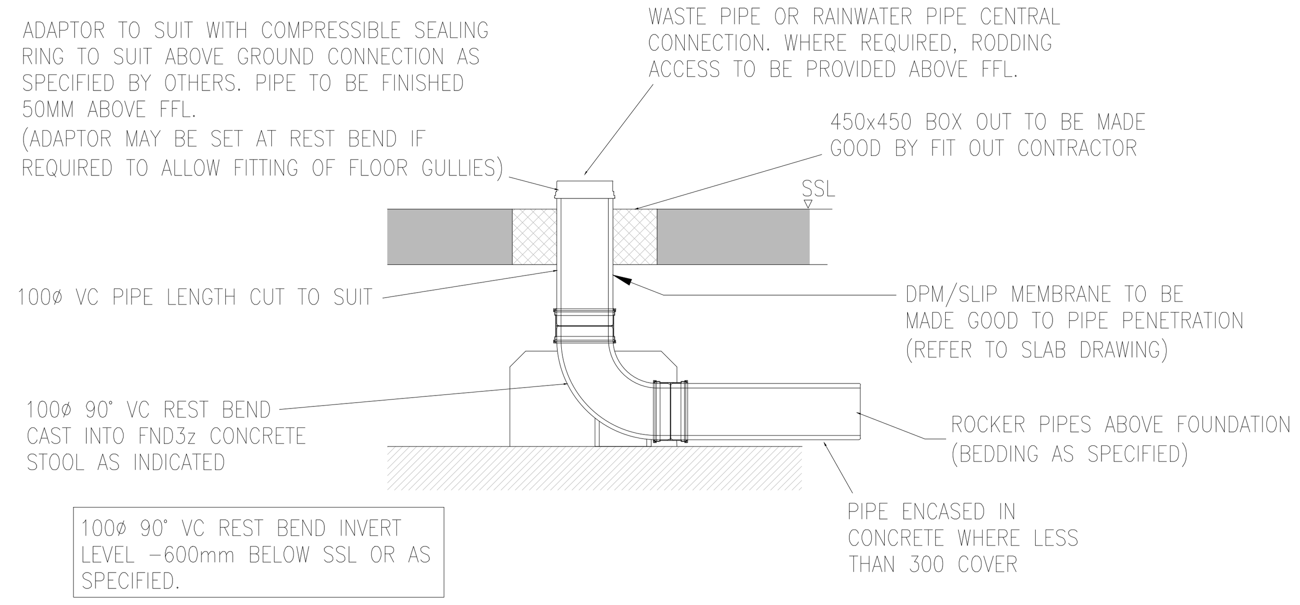


ELEVATION

PLAN

SPECIAL PIPE CROSSOVER DETAIL

REQUIRED IF CLEARANCE BETWEEN PIPES CROSSING EACH OTHER IS LESS THAN 300MM



100Ø BELOW GROUND PIPE CONNECTION

NOTE: 100ø 90° VC REST BEND INVERT LEVELS AS SPECIFIED.
BRANCH CONNECTIONS OFF FOUNDATIONS MAY BE SET DEEPER TO ALLOW FOR CONNECTION TO MAIN DRAIN RUN.
ALTERNATIVELY, THE 100ø 90° VC REST BEND MAY BE REPLACED BY 45°/30°/15° BENDS TO ALLOW FOR STEEP BRANCH CONNECTIONS.

Do not scale from this drawing.
Use written dimensions only.
If in doubt ask.

Notes

GENERAL

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS AND DATUMS IN METRES UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS, LEVELS AND DATUMS TO BE CONFIRMED ON SITE, PRIOR TO FABRICATION AND CONSTRUCTION.
4. ALL BUILDING WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDING REGULATIONS AND THE CIVIL, STRUCTURAL AND ARCHITECTURAL SPECIFICATIONS.
5. ALL EXTERNAL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATION FOR HIGHWAY WORKS.

Revision	Drawn	Checked	Approved	Modifications
C01	AJ 20.08.25	IR 20.08.25	MH 20.08.25	FIRST ISSUE

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Kirklees COUNCIL

Project
HUDDERSFIELD MARKET

Title
DRAINAGE STANDARD DETAILS SHEET 2 OF 3

Scale	Revision	Status Code	Original Size
AS SHOWN	C01	A3	A1

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