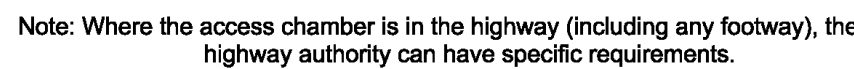
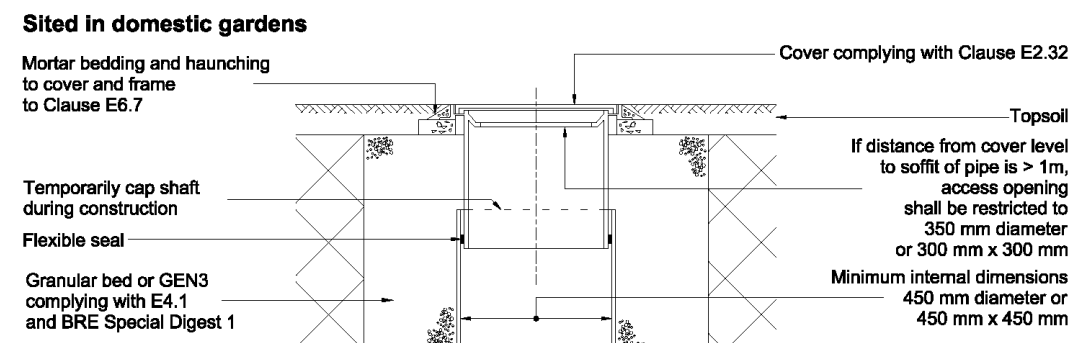


Depth from cover level to soffit of pipe up to 3 m
Flexible material construction for use in areas subject to vehicle loading



Not to scale

Flexible material construction alternative top details for use in areas of light vehicle loading or landscaped areas

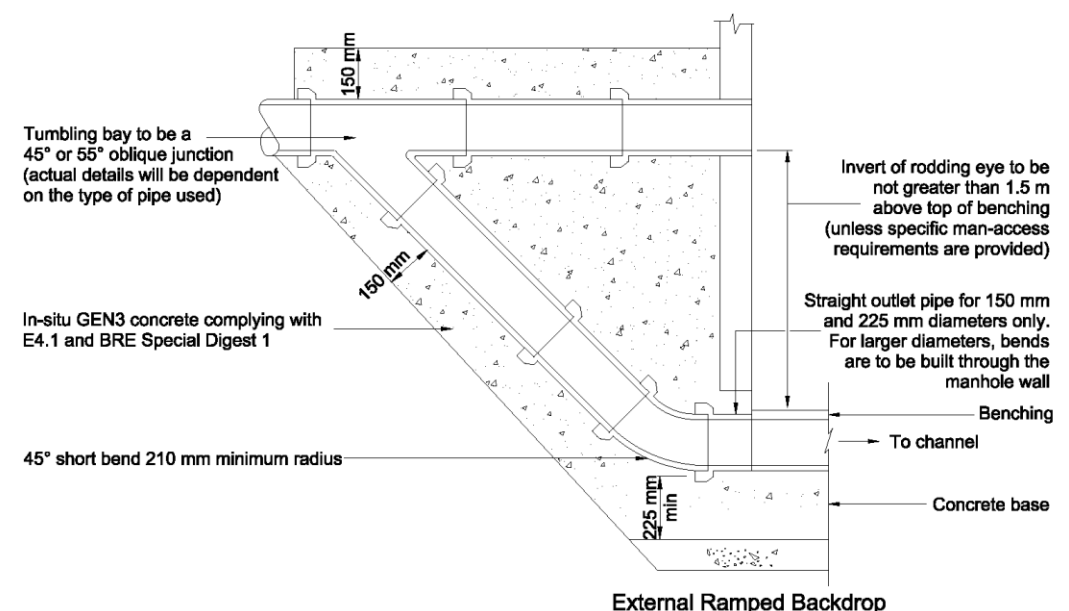


Note: Where the access chamber is in the highway (including any footway), the highway authority can have specific requirements.

Not to scale

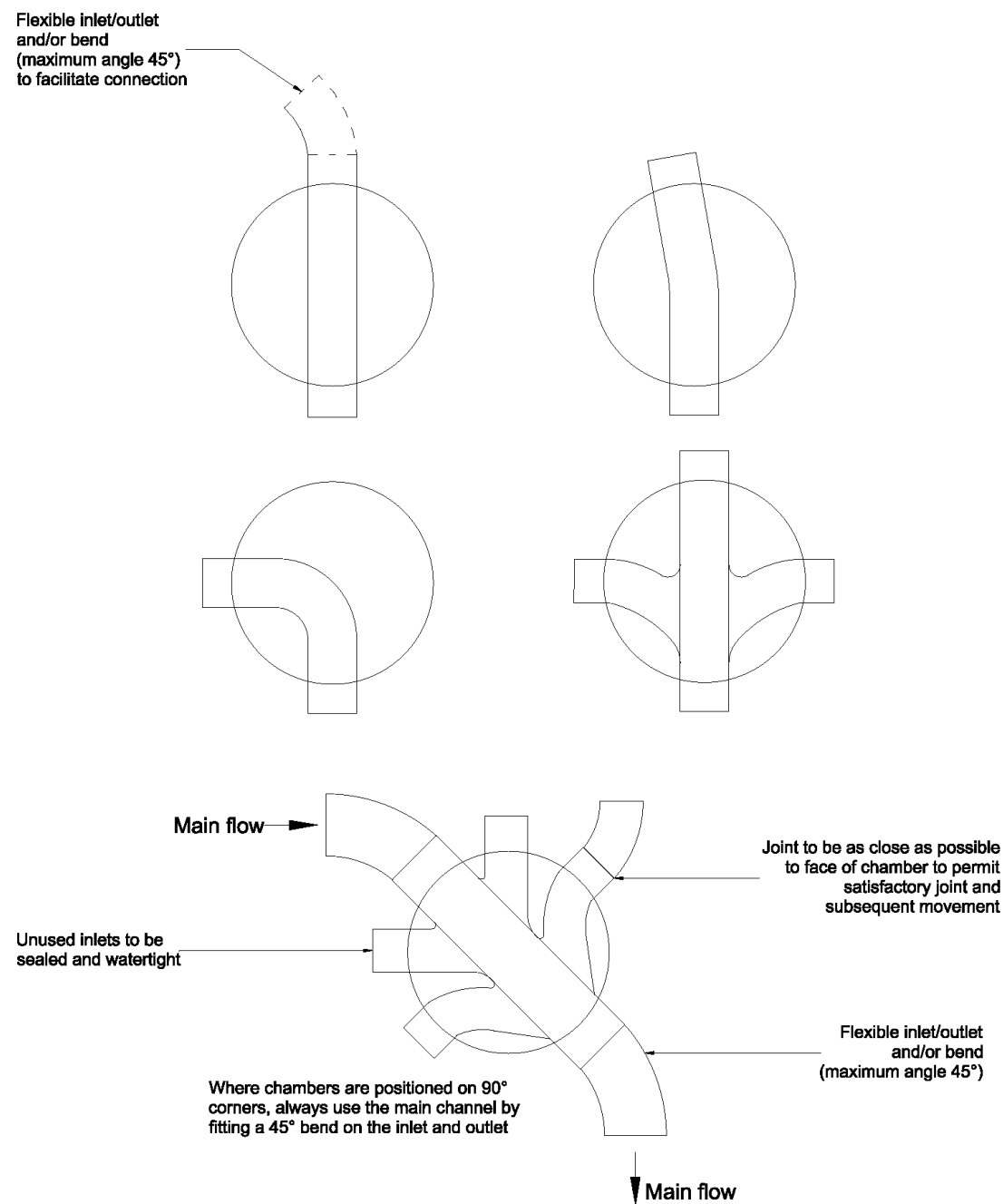
For use in manhole types A to D

Note: Steeper gradients are preferred to the use of backdrops.
Use of backdrop to be used to be agreed with the sewerage company.



Not to scale

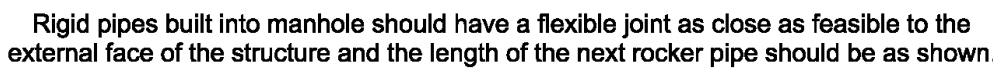
Figure B 22
Typical base layouts for Type D chambers



Note: Where a bend is used immediately outside the manhole, this may be used as the rocker pipe.

Not to scale

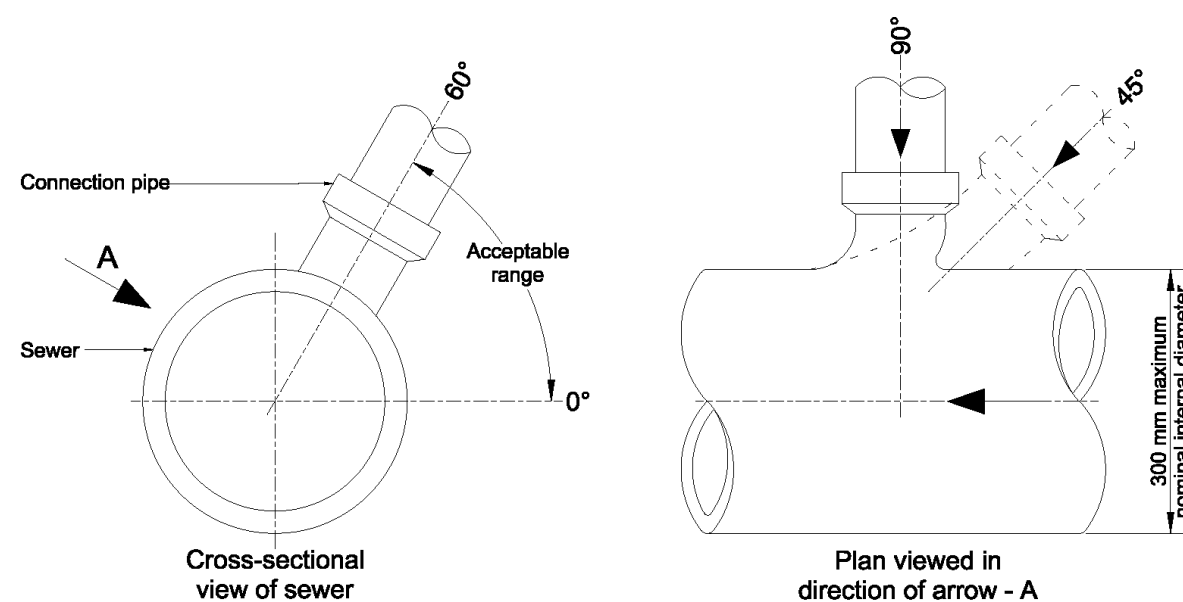
Typical arrangement of pipe junctions within manholes



Nominal diameter (mm)	Maximum effective length (m)
150 - 600	0.6
601 - 750	1.00
over 750	1.25

All pipes entering the bottom of the manhole to have soffits level.

Figure B 26
Connections to sewer



NOTES:

1. FOR GENERAL NOTES REFER TO RENAISSANCE DRAWING FS1013-REN-EX-00-D-C-5215.
2. DO NOT SCALE FROM THIS DRAWING. ANY AMBIGUITIES OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS TO BE CHECKED/ VERIFIED ON SITE.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RENAISSANCE, ARCHITECTS, LANDSCAPE ARCHITECTS AND BUILDING SERVICES ENGINEERS DRAWINGS.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNO
5. ALL BELOW GROUND DRAINAGE WORKS TO BE IN ACCORDANCE WITH RELEVANT BUILDING REGULATIONS AND SEWER SECTOR GUIDANCE APPENDIX C- DESIGN AND CONSTRUCTION GUIDANCE. IF DISCREPANCIES ARE NOTED BETWEEN SSG AND DRAWINGS THESE SHOULD BE BROUGHT TO THE ATTENTION OF RENAISSANCE FOR REVIEW.
6. THE CHAMBER SIZE OF PCC MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
7. MANHOLE COVERS ARE TO BE ACCORDANCE WITH BS EN 124 FOR THE RATING INDICATED IN THE MANHOLE SCHEDULE. THE CONTRACTOR IS TO SUBMIT DETAILS FOR THE PROPOSED MANHOLE COVERS TO THE ENGINEER AND LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION.
8. ALL INTERNAL COVERS TO BE RECESSED AND TRIPLE SEALED
9. COVER SLABS MUST CARRY THE BSI KITEMARK. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOAD BEARING REDUCING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO REQUIRED SIZE.
10. ALL SEWERS TO BE BSI KITEMARK (CERTIFIED TO WIS 4-35-01)
11. ALL CONCRETE PIPES TO BE TO BS EN 1916 CLASS 120 (45KN/m)
12. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS OF THE WATER INDUSTRY SPECIFICATION 4-08092 (TABLE A2)
13. IF PLASTIC PIPES ARE TO BE USED THEN THE FOLLOWING MUST APPLY:
A. BSI KITEMARK (CERTIFIED TO BS EN 13476-1 AND WIS 4-35-01)
B. PIPES LESS THAN OR EQUAL TO 500mm DIA.
C. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS OF THE WATER INDUSTRY SPECIFICATION 4-08092 (TABLE A2)
14. THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 1000mm DIA. 40kNm, 1500mm DIA. 40kNm, 225mm DIA. 45kNm AND 300mm DIA. 73kNm
15. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CO 20 EN 1916/BS5911-1 2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN13476.
16. SULPHATE RESISTANT CEMENT (C20-C24) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
17. CONCRETE BENCHING AND PIPE SURROUND SHALL BE PLACED IN SINGLE CONTINUOUS OPERATION FROM TOP OF BASE SLAB TO TOP OF BENCHING AND PIPESURROUND.
18. CONNECTION INTO MANHOLES SHALL BE CONSTRUCTED WITH THE SOFFITS AT THE LEVEL UNLESS DETAILED DIFFERENTLY ON CONTRACT DRAWINGS.
19. METALWORK
LADDERS, HANDRAILING AND SAFETY CHAIN REFER TO DETAILS
20. CONCRETE SURROUND TO MANHOLES
A CONCRETE SURROUND IS NOT NORMALLY REQUIRED TO UNLESS INSTALLED IN AREAS OF UNSTABLE GROUND, UNDER CONDITIONS OF FLOTATION OR WHERE SUBJECTED TO EXCEPTIONAL OR ECCENTRIC LOADS. IN WHICH CASES A 150 SURROUND OF AT LEAST 20 N/mm CONCRETE SHALL BE PROVIDED. ANY JOINTS SHOULD BE STAGGERED WITH PRECAST CONCRETE JOINTS
21. CUT ENDS OF REINFORCED CONCRETE PIPES SHALL BE TREATED WITH EPOXY RESIN PAINT/MORTAR
22. MINIMUM LENGTH OF CHANNEL (X Min)
CHAMBER DIA "X" Min
1200 950
1500 1050
1800 1150
2100 1300
2400 1450
2700 1550
3000 1700
23. DOUBLE STEPS SHALL BE PLASTIC ENCAPSULATED CARBON SEAL TO BS EN 1247-2. DOUBLE STEPS SHALL NOT BE USED WHERE COVER-TO-SOFFIT DIMENSION IS >3.0m
24. COVER AND FRAME
1500mm DEEP COVERS ARE TO BE USED IN CATEGORY 1,2,3 ROADS
1000mm DEEP COVERS ARE TO BE USED IN CATEGORY 4 ROADS.
FRAME TO BE SET AS PER SPECIFICATION
25. CONCRETE
ALL IN-SITU CONCRETE TO BE DC - 3 OR FN.D3.

P02	REVISED IN ACCORDANCE WITH CLIENT COMMENTS	14.12.23	SA	PW
P01	STAGE 4	24.11.23	SA	PW
Rev:	Description:	Date:	By:	Chkd:



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Project:

STAR RADCLIFFE ACADEMY,
BURY

Drawing Title:

TEMPORARY SCHOOL ACCOMMODATION DETAILS SHEET 1

Status:

STAGE 4

Size: A1	Date: NOV'23	Drawn by: SA	Designed by: --	Checked by: PW
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Scale:	NTS	Project No:	2303-02
Project - Originator - Volume - Level - Type - Role - Number:			Revision:

FS1013-REN-EX-XX-D-C-5310 | P02