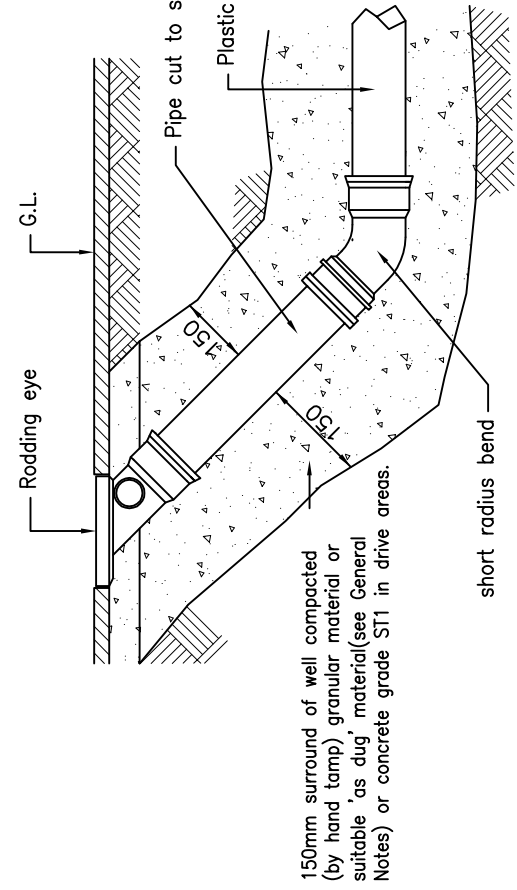
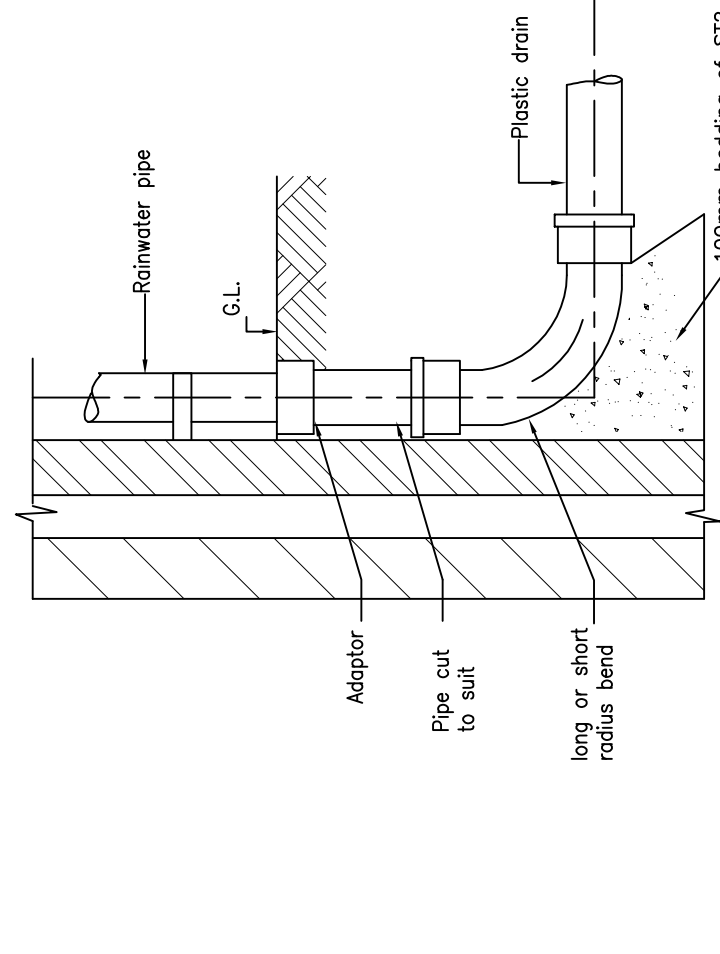
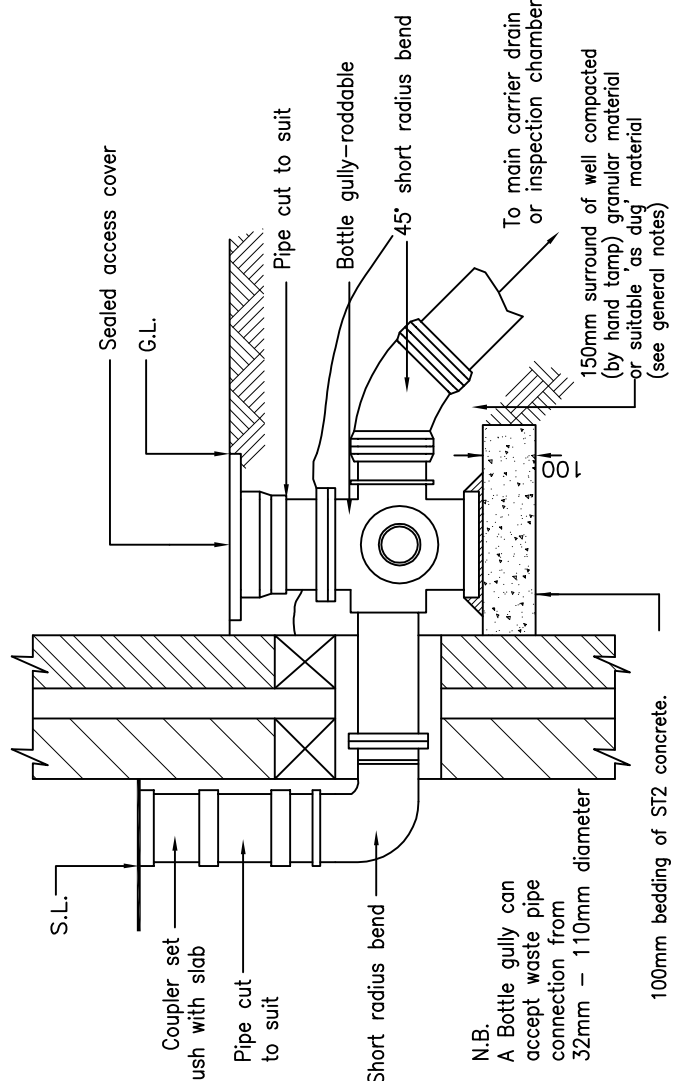




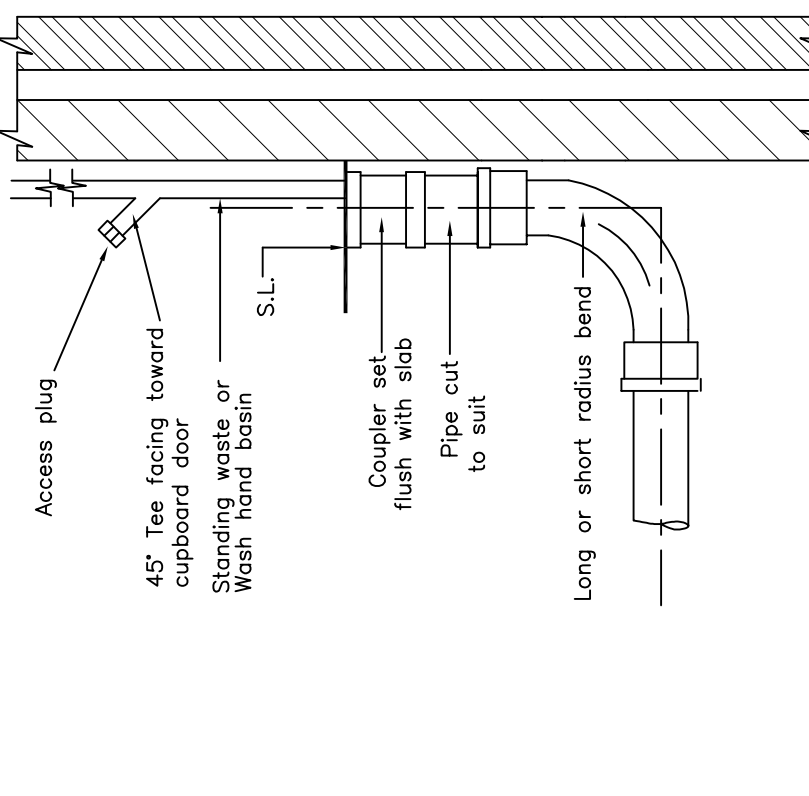
RODDING EYE



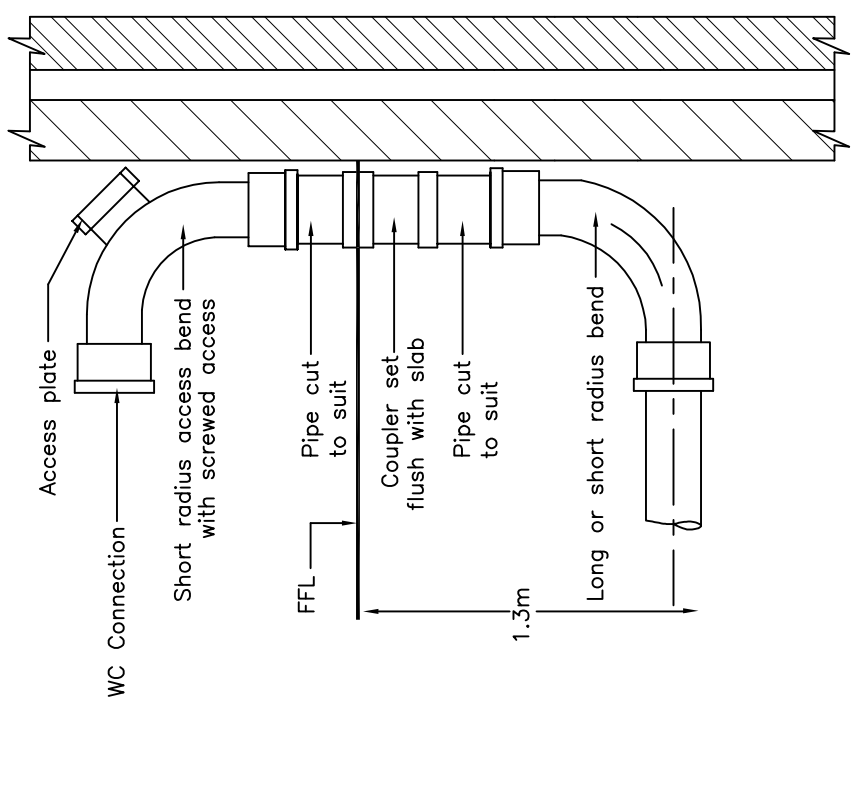
RAINWATER PIPE CONNECTION TO DRAIN



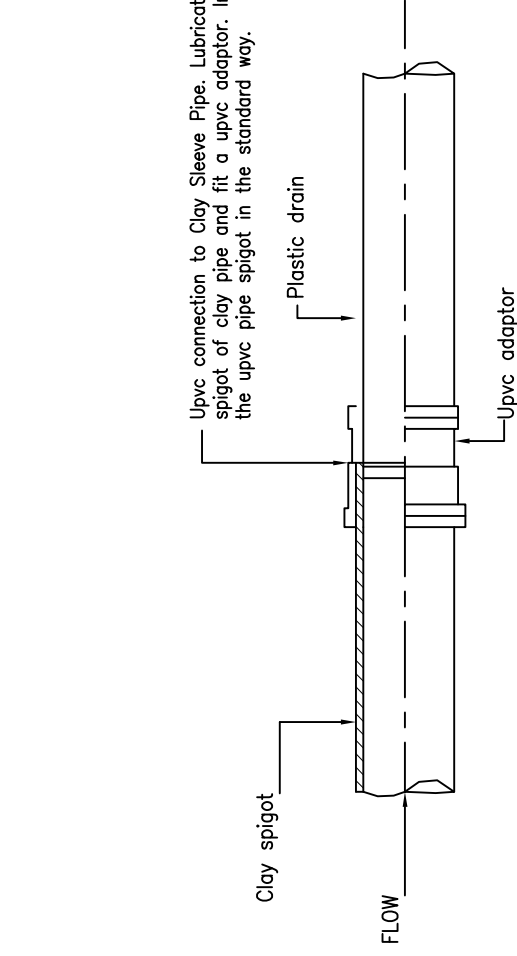
BOTTLE GULLY AS BACK INLET CONNECTION



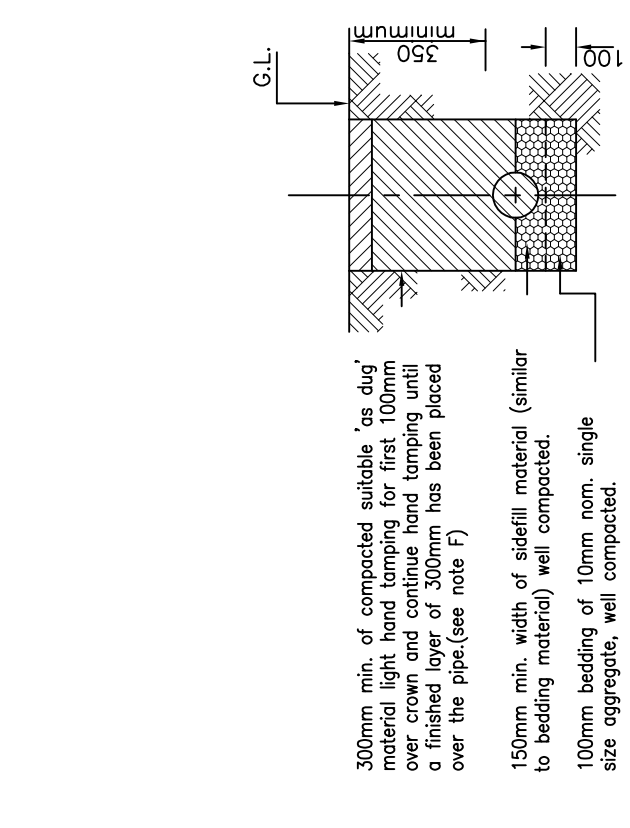
STANDING WASTE (sw) AND WASH HAND BASIN (whb) CONNECTION



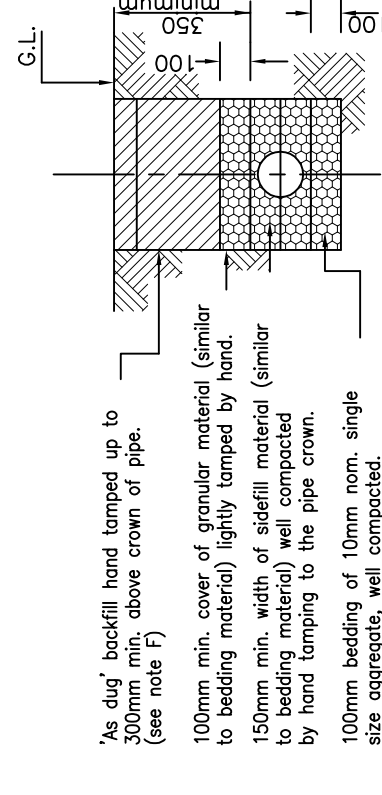
GROUND FLOOR WC CONNECTION



CONNECTION TO CLAY SLEEVE PIPE

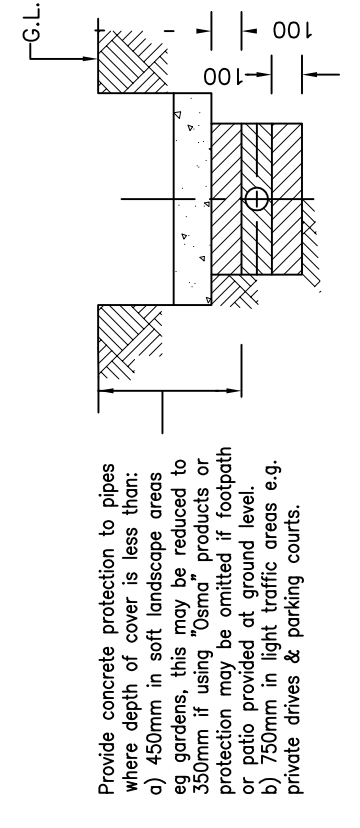


CLASS B PIPES-BEDDED IN GRANULAR MATERIAL

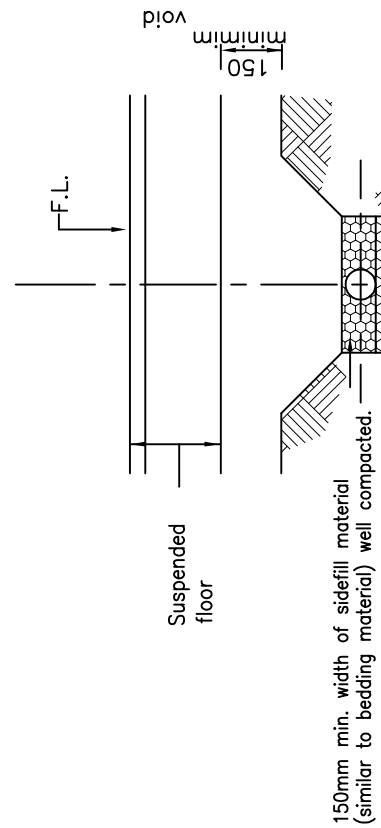


CLASS S PIPES-BEDDED AND SURROUNDED IN GRANULAR MATERIAL

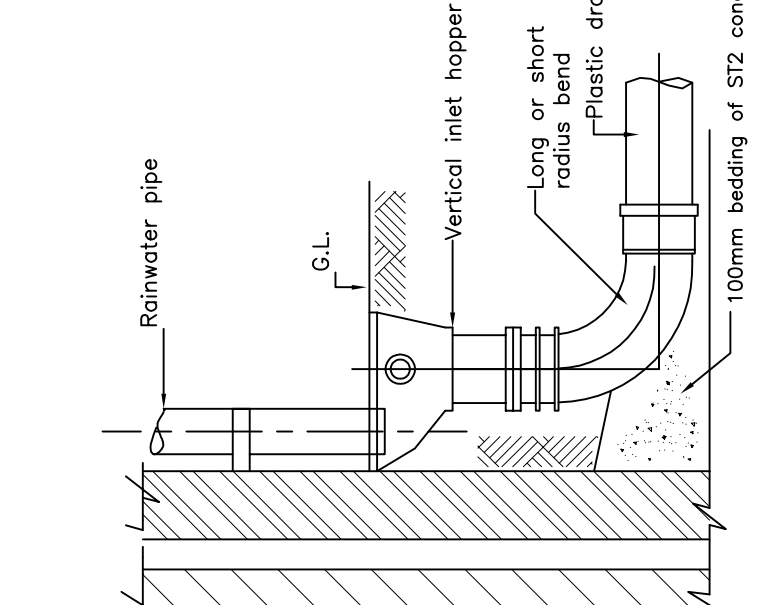
Used where 'as dug' is unsuitable (see general notes).



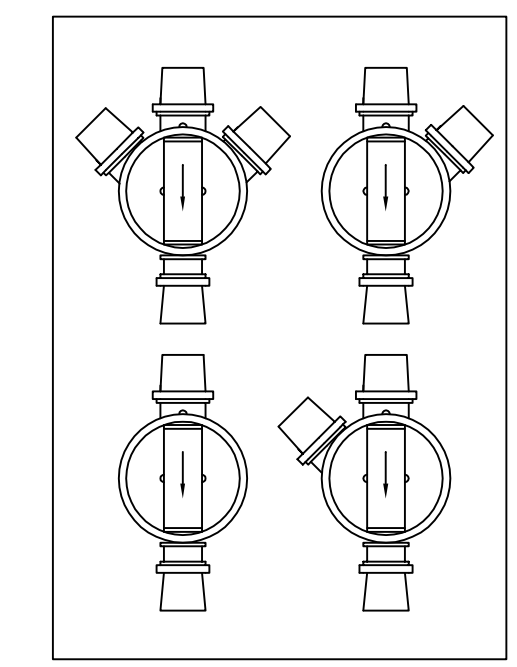
PIPES PROTECTED FROM SURFACE LOAD



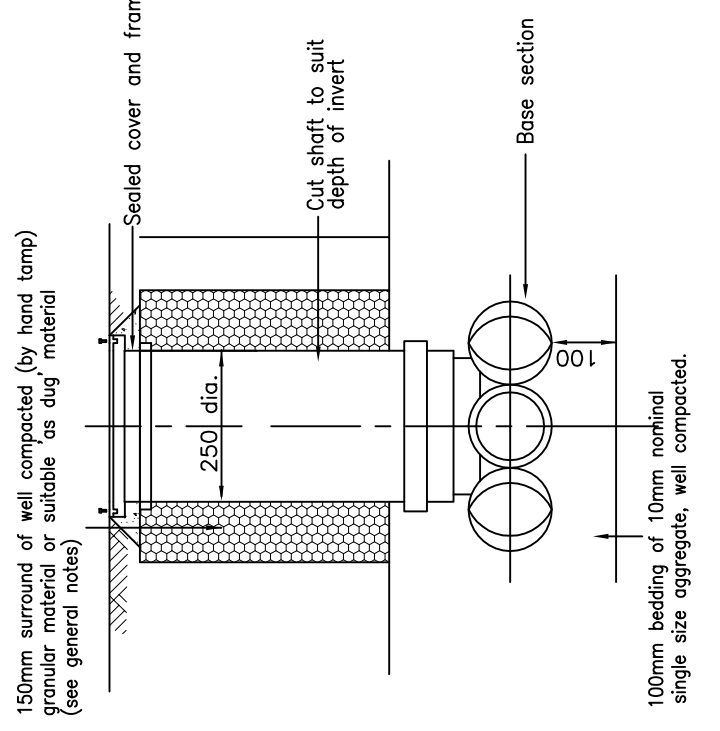
PIPES BENEATH CONCRETE SUSPENDED FLOORS



UNIVERSAL GULLY WITH VERTICAL INLET

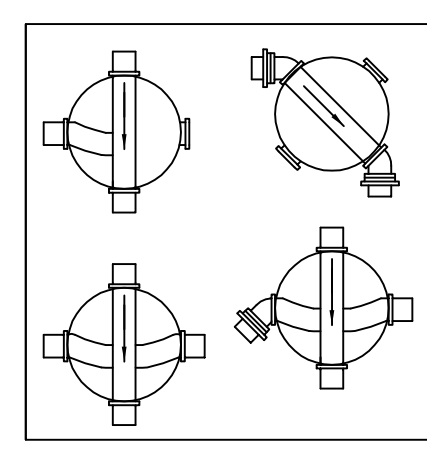


ALTERNATIVE BASE SECTIONS CONFIGURATIONS

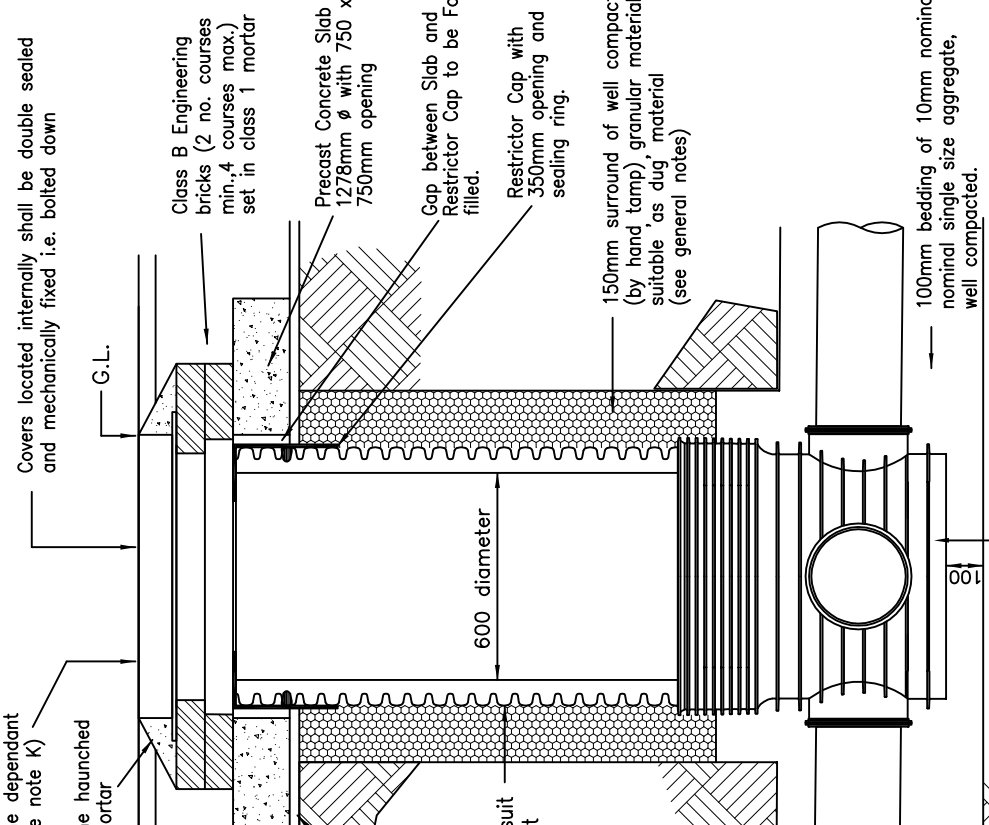


SHALLOW INSPECTION CHAMBER (Type A & B)

For invert depths up to 600mm MAX.
NB: Not to be used in drives or areas subjected to vehicle loadings

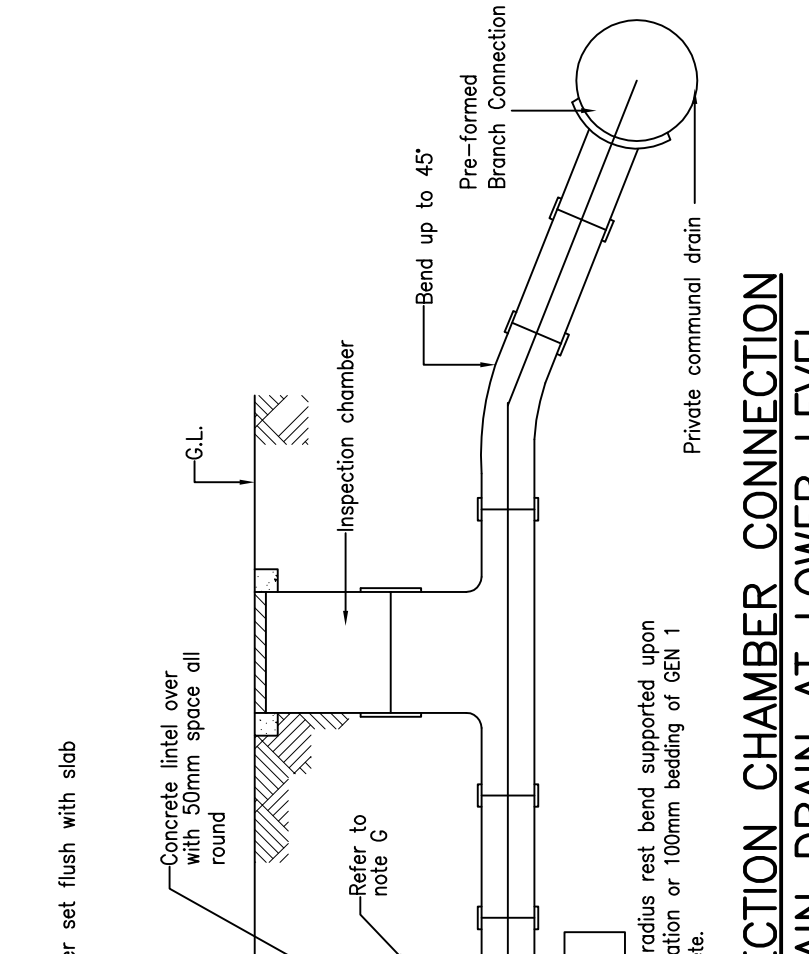


ALTERNATIVE CONNECTIONS

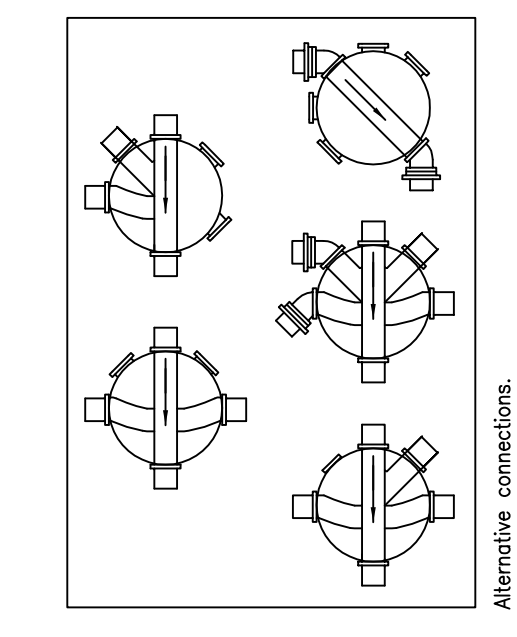


INSPECTION CHAMBER (Type J)

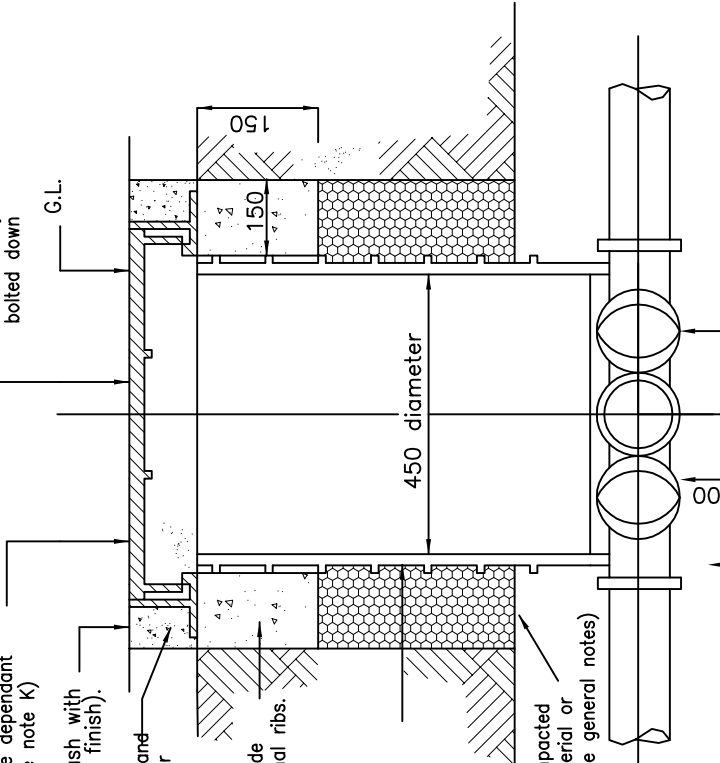
For invert depths up to 3.0m MAX.
For pipe sizes 100-300mm



INSPECTION CHAMBER CONNECTION TO MAIN DRAIN AT LOWER LEVEL

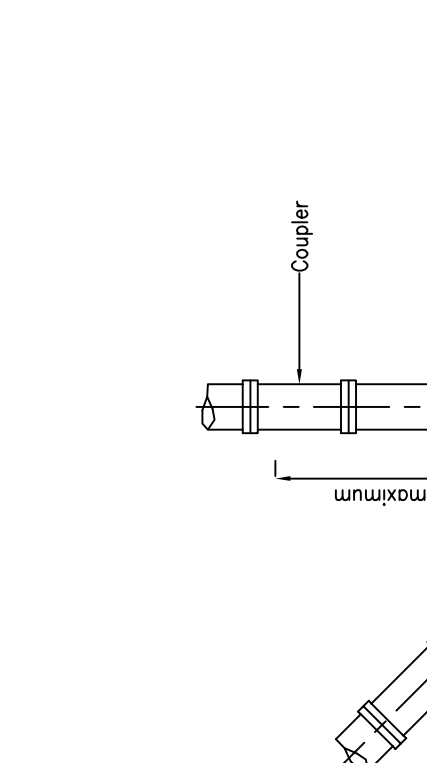


ALTERNATIVE CONNECTIONS

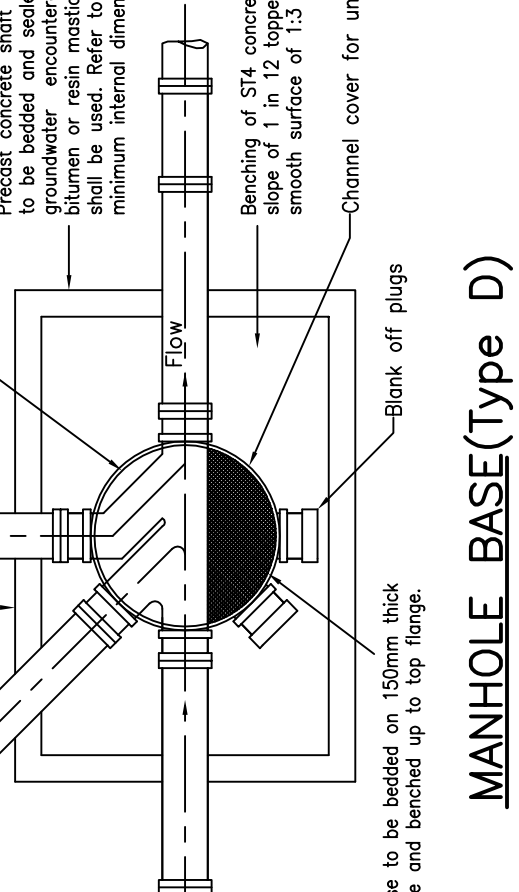


UNIVERSAL INSPECTION CHAMBER (Type C)

For invert depths up to 1.2m MAX.



ALTERNATIVE CONNECTIONS



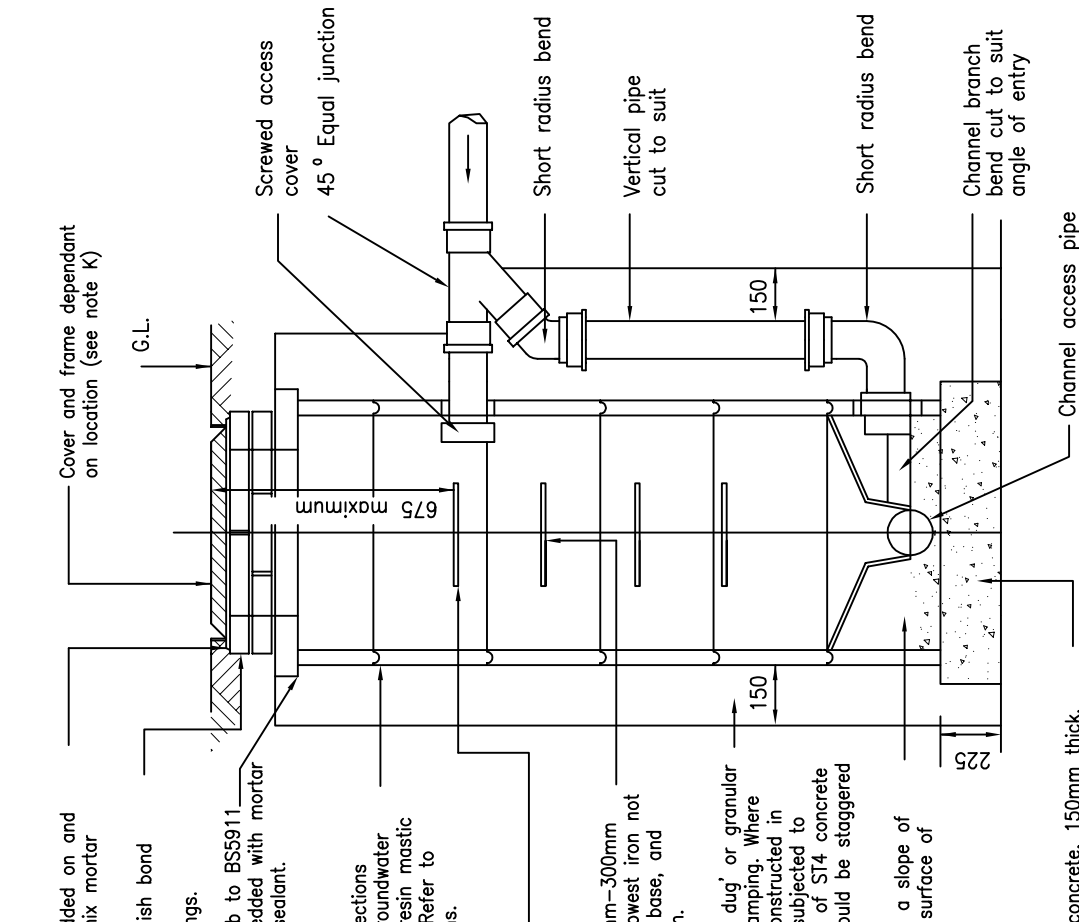
MANHOLE BASE (Type D)

Manhole base to be bedded on 150mm thick ST4 concrete and benched up to top flange.



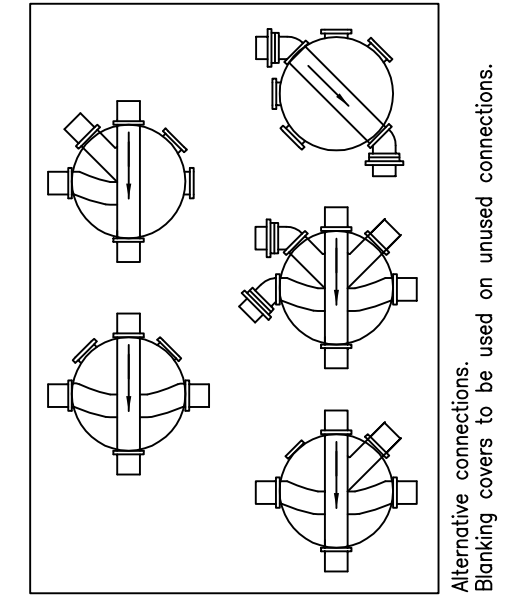
OPEN CHANNEL MANHOLES (Type D)

With stepped invert branch entries
Using 450mm dia. Universal Inspection Chamber Base

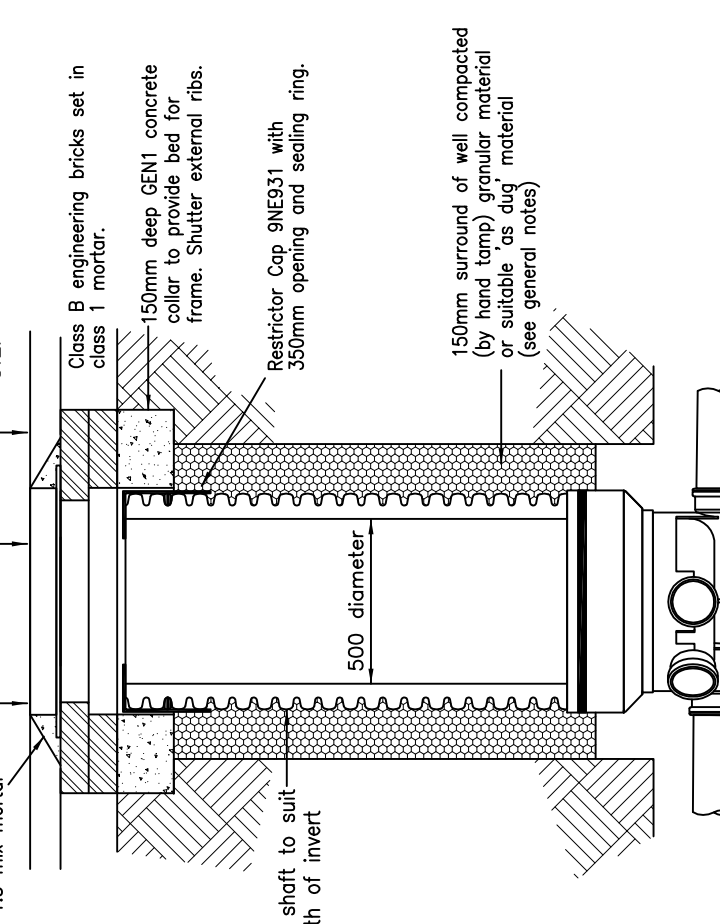


MANHOLE DETAIL (Type D)

Indicating backdrop connection for depth to invert in excess of 1.5m

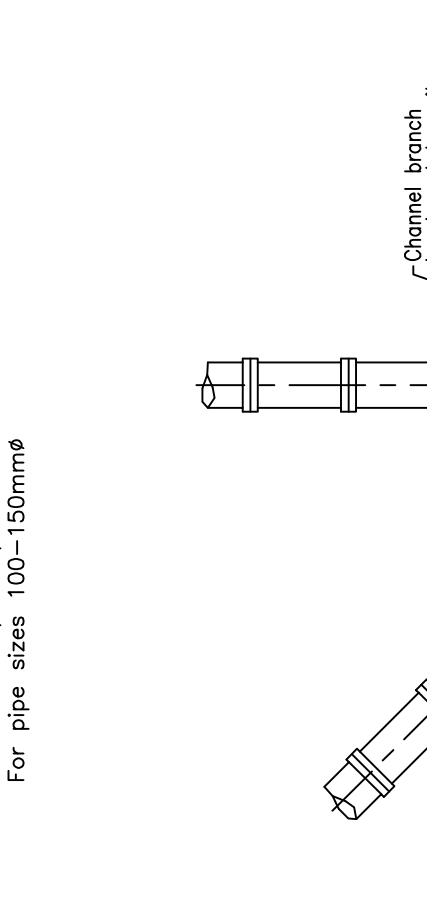


ALTERNATIVE CONNECTIONS

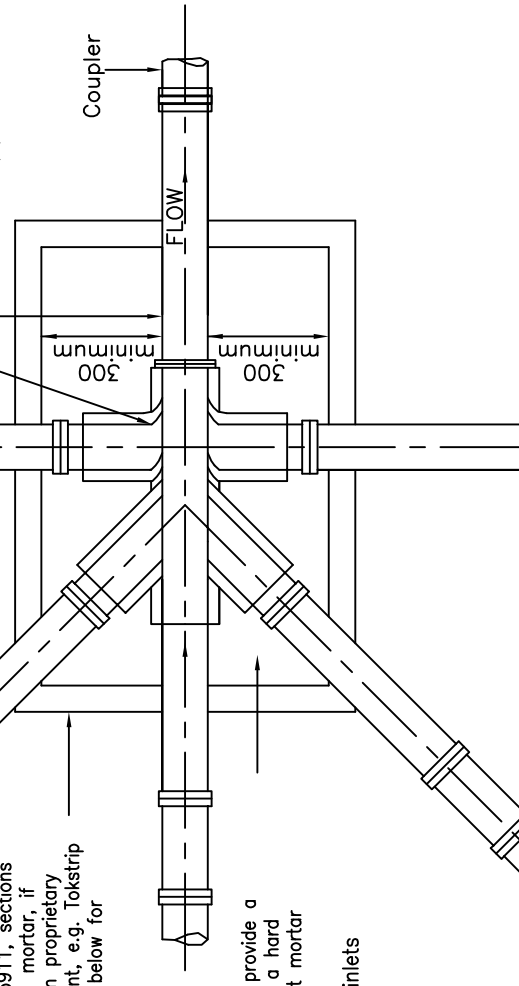


INSPECTION CHAMBER (Type H)

For invert depths up to 3.0m MAX.
For pipe sizes 100-150mm



ALTERNATIVE CONNECTIONS



General Notes

- All house drainage is to comply and be laid in accordance with current part H of Building Regulations BS5301 and BS5955.
- Only Polypipe upvc products complying with A. above are to be used unless stated otherwise.
- Cover and frames to manholes/inspection chambers to comply with BS EN124.
- Suitable 'as dug' material to comply with Appendix A of BS5955. The maximum particle size should not exceed 20mm and be free from stones exceeding 40mm. The presence of an appreciable quantity of such particles is only a very small fraction of the whole, but shall not be allowed within the material shall be rejected.
- Granular material shall comply with Table 2 of BS5955, e.g. 10mm nominal single size aggregate for 100mm diameter pipes.
- Backfill should be placed in layers not exceeding 300mm uncompacted thickness, each layer being well compacted. Where a drain runs through a wall or foundation, there shall be a minimum of 450mm of compacted material above the crown of the pipe.
- Where a drain run passes through a wall or foundation it is necessary to:
 - form an opening using a concrete lintel with at least 50mm clearance all around the pipe and the openings filled with high strength sheet material to prevent entry of fill or vermin, or;
 - build in a length of pipe with its joints as close as possible to the wall faces (150mm maximum) and connected on each side to 600mm long rocker pipes with flexible joints.
- All materials shall comply to the BS Kitemark Certification Scheme and shall be marked with the BS1 Kitemark (the Kitemark) or the containers of such materials.
- Where ground slopes towards a building, an open vertical inlet gully is to be provided at the foot of any rainwater pipe (w/p).
- Cover and frames to be Class B122 to BS EN124 where vehicle loading anticipated, otherwise to manufacturers spec.
- A drain serving solely a wash hand basin can be connected via a Y junction under the building. Refer to engineering layout for locations of Y connections.

INSPECTION CHAMBER & MANHOLE REFERENCE

TYPE	MINIMUM INTERNAL DIMENSIONS
A	Rectangular length & width
B	Rectangular length & width
C	Rectangular length & width
D	Rectangular length & width
E	Rectangular length & width
F	Rectangular length & width
G	Rectangular length & width
H	Rectangular length & width
I	Rectangular length & width
J	Rectangular length & width

Minimum dimensions for inspection chambers and manholes (taken from BS5301)

Type of Access	Depth to invert (m)	Minimum internal dimensions	Remarks	
Inspection Chamber	<0.6	225 x 100	190	(a)
	0.6-1.2	450 x 450	450	
Manholes	1.0-1.5	750 x 675	750 x 675	(d)
	>1.5	1200 x 1000	1200 x 600	
Manhole access shaft (b)	>2.7	1050 x 800	1050 x 600	(c)

(a) In the case of clayware and plastic inspection chambers, the clear opening may be reduced to 430mm in order to provide proper support for the cover and frame.

(b) Minimum height of chamber in access shaft manhole is 2.0m from crown of pipe to underside of reducing slab.

(c) Manholes to be constructed in accordance with the current publication of BS5955.

(d) Man's Range 500/600 in MPDE may be used as an alternative for Type D manholes up to 1.5m deep.

BOVIS HOMES

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SITE

HAMPTON PARK
LITTLEHAMPTON, WEST SUSSEX

DRAWING TITLE

TYPICAL UPVC HOUSE
DRAINAGE DETAILS

DRAWN BY: NM

DATE: NOV 15

SCALE: AS SHOWN

CHECKED/DATE: LITL-509

DRAWING NO. REV