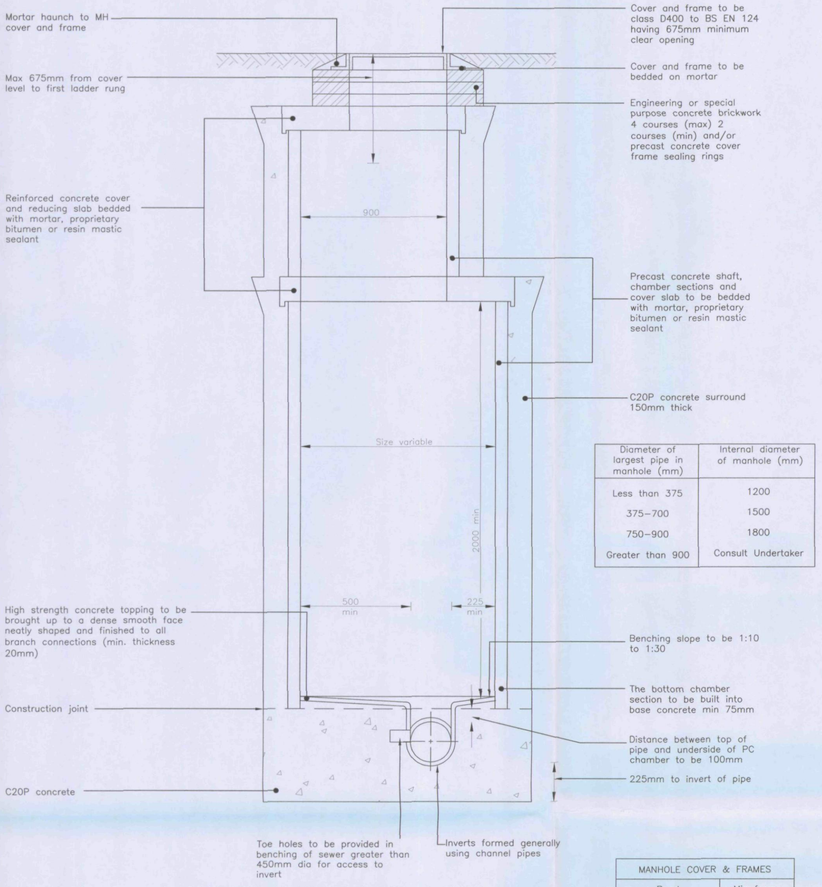
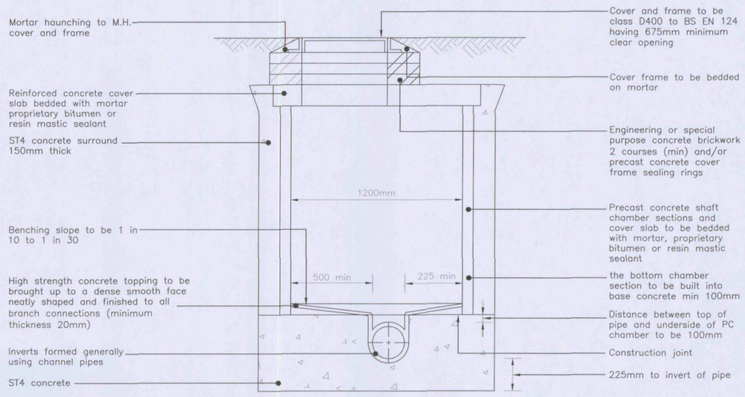
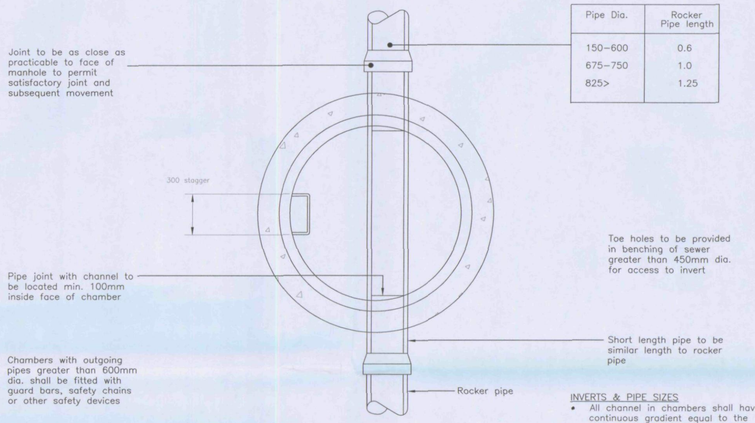


TYPICAL MANHOLE DETAIL – TYPE A
DEPTH TO SOFFIT 3.0m TO 6.0m

Diameter of largest pipe in manhole (mm)	Internal diameter of manhole (mm)
Less than 375	1200
375–700	1500
750–900	1800
Greater than 900	Consult Undertaker

MANHOLE COVER & FRAMES	
Road Description	Min frame depth mm
Bus Routes	150
All residential roads except cul-de-sacs	150
Residential cul-de-sacs	100



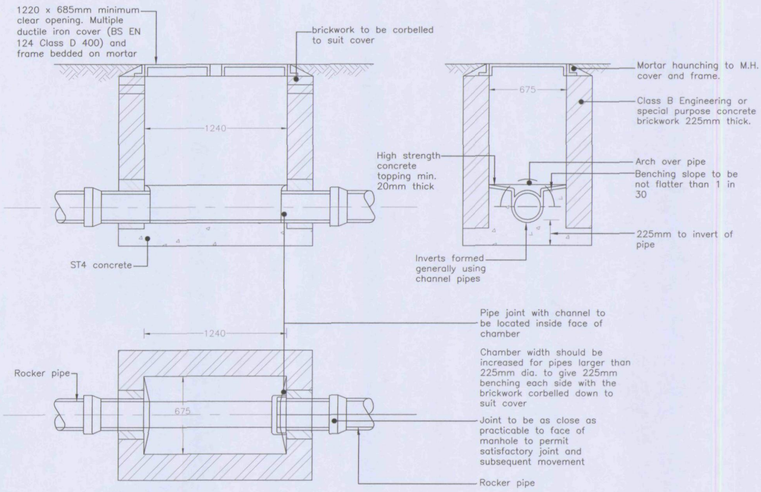


Pipe Dia.	Rocker Pipe length
150–600	0.6
675–750	1.0
825>	1.25

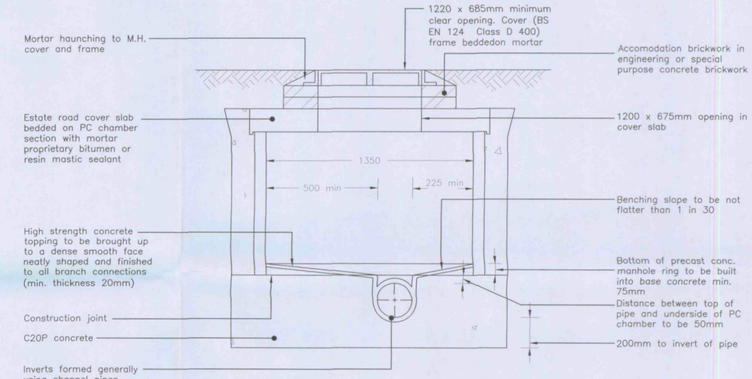
MANHOLE DETAIL – TYPE B
DEPTH TO SOFFIT 1.45 TO 3.0m

INVERTS & PIPE SIZES

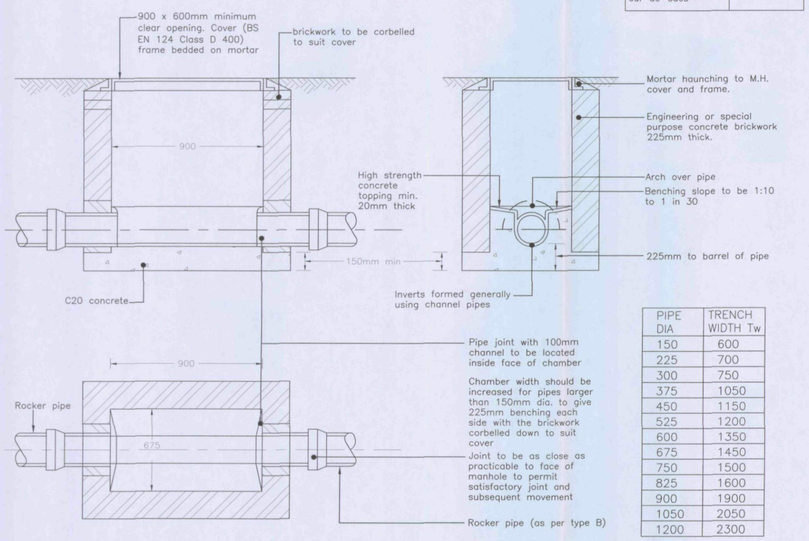
- All channel in chambers shall have a continuous gradient equal to the gradient of the incoming or outgoing pipe throughout the width of chamber.
- All pipes to be laid sofit to sofit unless otherwise specified.



MANHOLE DETAIL – TYPE C
DEPTH TO SOFFIT 1.0 TO 1.45m

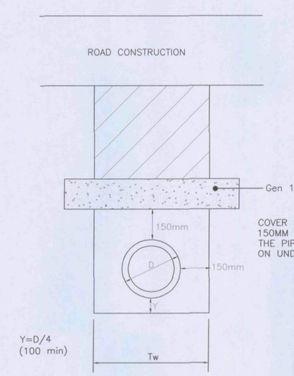


MANHOLE DETAIL – TYPE E
DEPTH TO SOFFIT 1.0 TO 1.45m

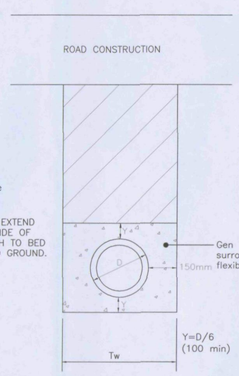


PIPE DIA	TRENCH WIDTH Tw
150	600
225	700
300	750
375	1050
450	1150
525	1200
600	1350
675	1450
750	1500
825	1600
900	1900
1050	2050
1200	2300

MANHOLE DETAIL – TYPE D
DEPTH TO SOFFIT < 1.0m



TYPE S WITH CONCRETE COVER SLAB



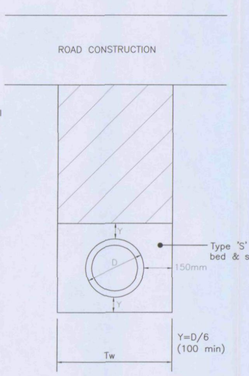
CONCRETE SURROUND

GRANULAR BEDDING & SURROUND

Granualr bedding for pipes shall comply with Cl 2.88 of CESWI, sized in accordance with the following table:

Nominal Bore of Pipe (mm)	Alternative Aggregate Sizes (mm)		CF Value Max
	Single-Sized	Graded	
100–150	10	–	0.2
225–300	10 or 14	14 to 5	0.2
375–525	10,14 or 20 14 or 20	14 to 5 or 20 to 5	0.2
Exceeding	14,20 or 40	14 to 5 or 20 to 5	0.15
		14 to 5, 20 to 5 or 40 to 5	0.5

PIPE BEDDING DETAILS



TYPE S

GENERAL NOTES:

1. This drawing to be read in conjunction with all other engineering details.
2. All Section 104 work shall be in accordance with the document 'Sewers for Adoption' 6th Edition as published by WRc plc, The Civil Engineering Specification to the Water Industry and the Water Authorities requirements.
3. All adoptable works to be checked by the Water Authority inspector.

Southern Water Notes

Adoptable pipework specification:
DN150 – DN300 shall be Ultra Fortis as manufactured by Uponor Ltd or similar approved to satisfy the following Southern Water specification:

- Systems that are resistant to a jetting pressure of 4000psi
- Systems that minimise the number of joints in the system, by using 3 meter pipe length
- Systems that do not have lip seal joints, hence preventing root ingress.

Pipe sizes greater than DN300 shall be Class H concrete.

HAVANT BOROUGH COUNCIL
02 SEP 2010
RECEIVED

PRELIMINARY

REV. No.	DATE	DESCRIPTION	INITIALS
A	18.06.10	Southern water notes amended.	TC

Client: BARRATT SOUTHAMPTON

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Project	Scale	Date	Drawing No.	Rev
Purbrook Caravan Sales Widley	1:20@A1	Feb '10	4422:21	A
Title: Adoptable Sewer Details	Checked: TC	Drawn: WSR		

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