

SECTION C-C

PLAN AND SECTION ON TYPICAL SHAFT ACCESS

PLAN D-D

TYPICAL SECTION THROUGH
ALTERNATIVE 1200 DIA SHAFT ACCESS

SECTION A-A

PLAN B-B

TYPICAL DETAIL I
SEGMENTAL SHAFT DETAILS
DEPTH TO BENCHING NOT EXCEEDING 6m

Formerly Drg No 0000/256/W108

SECTION G-G ON TYPICAL
SHAFT BOTTOM

PLAN E-E

SECTION F-F

PARTIAL SECTION H-H ON TYPICAL
SHAFT BOTTOM

TYPICAL DETAIL J
SEGMENTAL SHAFT DETAILS
DEPTH TO BENCHING NOT EXCEEDING 6m

Formerly Drg No 0000/256/W109

1. This drawing is to read in conjunction with:
Pipe embedment details.
Standard Manhole Access (Drg No STND/01/002)
Standard Invert Access (Drg No STND/01/002)

2. Details shown are typical only. Additional specific requirements are detailed in specification documents /drawings. This information shall include:

SHAFT SPECIFIC FEATURES (s.f.)

A	Shaft Reference	Unique Letter/number
B	Internal Diameter	State Size
C	Levels	Cover Level Top of Permanent Rings Underside of Permanent Rings
D	Permanent Rings	Type: Number:
E	Pipes	Sizes Invert Levels Materials
F	Backdrops	Levels Materials
G	Secondary Lining	Levels Thickness Reinforcement/Concrete Details
H	Access See Std manhole Access Drg No 010256.0002	Number (ie Ladder/Ladder feature) Size Orientation

3. Concrete benching & pipe surrounds to be placed in a single continuous operation from top of base slab to top of benching & pipe surround unless otherwise approved by the Engineer.
4. Cut ends of pipe shall be sealed with epoxy resin/paint/mortar approved by the Engineer.
5. Where hydrostatic heads are anticipated a joint sealant/cord/cord and sealant application shall be bonded to the segment joint face prior to erection
6. Guard rings,temporary rings or other means of ground support, cutting rings & concrete plugs to be used shall not show.
7. All segmental joints shall be packed using a proprietary bituminous jointing strip.
8. Gaskets or sealant shall be caulked with asbestos-free caulking compound or equivalent approved by the Engineer unless insitu concrete is to be cast against the joint.
9. Maintenance access openings to be provided with stainless steel safety grille within brickwork below the cover & frame.
- 10.Details to apply to all segmented & 'one-pass' type shaft construction;
- 11.In addition to the requirements of the Spec. Class B engineering bricks shall not contain iron nails.
- 12.Designated mk references FND3, FND4A & FND4B to be used in soil conditions with sulphate classes 3, 4 & 4B respectively (refer to specification clause 4.3.1).
- 13.150mm deep covers are to be used in Category 1, 2 & 3
- 14.300mm deep covers are to be used in Category 4 covers.

VARIABLE FEATURES RELATED TO PIPE DIAMETERS (VF)

		225	300	DIAMETER OF LARGER PIPE				750	8 PI
		375	450	525	600	675	750	8 PI	
B	Benching width	MIN. 600			MIN. 750		MIN. 1'		
C	Benching Railings		NOT REQUIRED			REQUIRED			
D	Sewer Safety Chains		NOT REQUIRED			REQUIRED			
E	Invert Access Steps	NOT REQUIRED		REQUIRED WITH	DOUBLE STEPS				

CURRENT ISSUE INFORMATION

Amendments to comply with BS EN 752-3 requirements.

[illegible]

30/05/02	JL	DHA	MR	B	FOR INFORMATION
15/03/01	PH	DHA	MJR	A	APPROVED
DATE	DRWN	CHKD	REVD	ISSUE	



UNITED UTILITIES PLC

STANDARD DETAILS

NETWORKS

TYPICAL DETAILS I AND J SEGMENTAL SHAFTS

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SCALE N.T.S.	MASTER SIZE A1
DRAWING NO. STND/01/006	ISSUE B