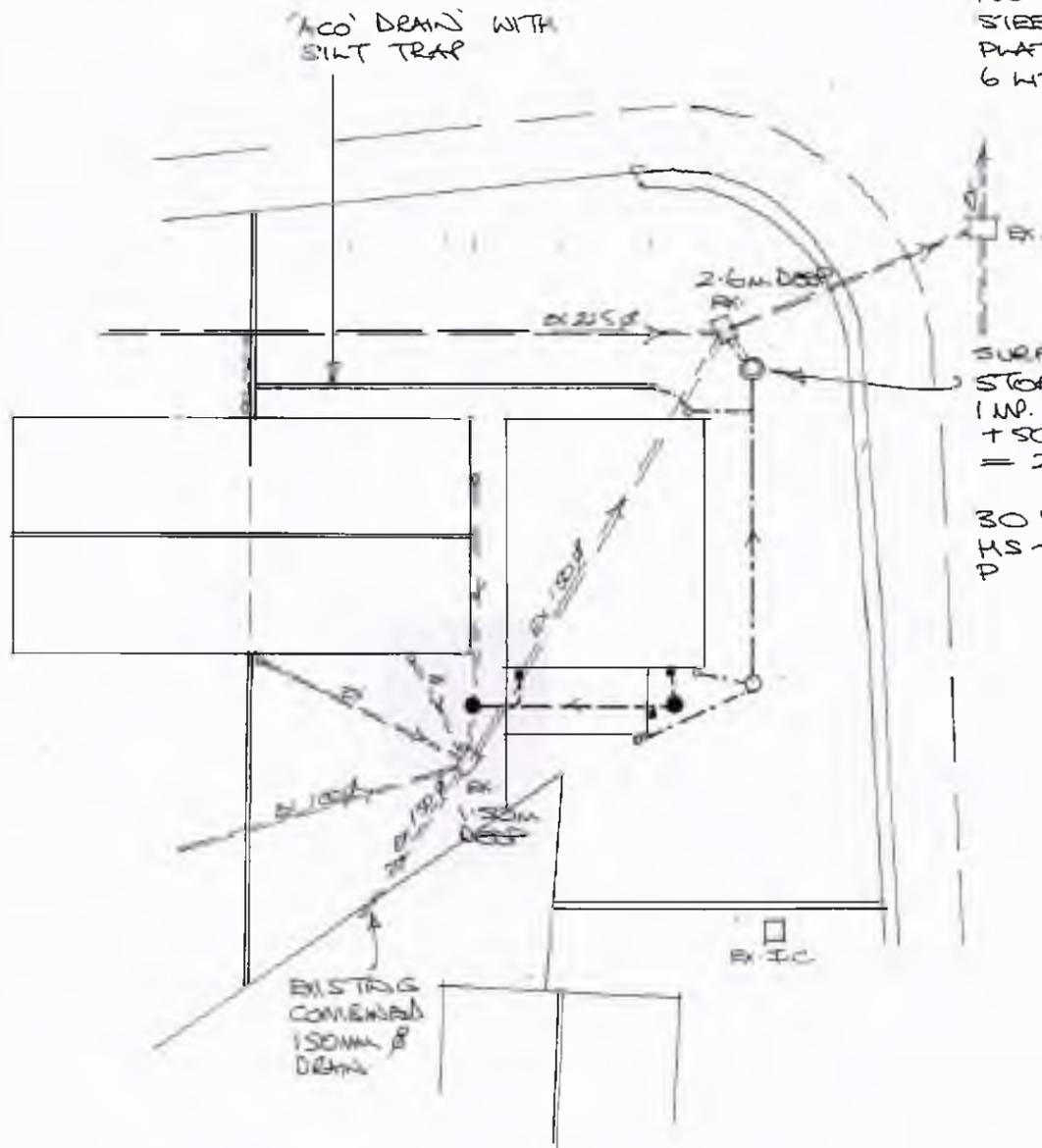


- - - - - Foul outlet and drain.
- - - - - Surface water outlet and drain.
- - - - - F. W. Inspection chamber.
- ⊥ - - - - S. W. Rodding access
- - - - - S.W. Inspection chamber



STORAGE MANHOLE  
1500mm Ø

FLOW CONTROL 75mm Ø  
STEEL ORAFICE  
PLATE GIVING  
6 WT./SEC. OUTFLOW

SURFACE WATER  
STORAGE MANHOLE  
1m<sup>2</sup> AREA 170m<sup>2</sup>  
+ 50m<sup>2</sup> TURNING  
= 220m<sup>2</sup>

30 YEAR PROTECTION  
HS-60 20  
D 0.4

Table 11 Minimum dimensions for access fittings and inspection chambers

Type	Depth to invert from cover level (m)	Internal sizes		Cover sizes	
		Length x width (mm x mm)	Circular (mm)	Length x width (mm x mm)	Circular (mm)
Rodding eye		As drain but min 100		Same size as pipework <sup>1</sup>	
Access fitting					
small	150 diam	0.6 or less, except where situated in a chamber	150 x 100	150	150 x 100 <sup>1</sup>
large	225 x 100		225 x 100	225	225 x 100 <sup>1</sup>
Inspection chamber					
shallow	0.6 or less	225 x 100	190		190
	1.2 or less	450 x 450	450	Min 430 x 430	430
deep	> 1.2	450 x 450	450	max 300 x 300 <sup>2</sup>	Access restricted to max 350

Notes:

- <sup>1</sup> The clear opening may be reduced by 20 mm in order to provide proper support for the cover and frame.
- <sup>2</sup> Drains up to 150mm.
- <sup>3</sup> A larger clear opening cover may be used in conjunction with a restricted access. The size is restricted for health and safety reasons to deter entry.

Table 12 Minimum dimensions for manholes

Type	Size of largest pipe (DN)	Min internal dimensions <sup>1</sup>	Min clear opening size <sup>1</sup>	
			Rectangular length and width	Circular diameter
Manhole	< 1.5m deep to soffit	≤ 150	750 x 675 <sup>1</sup>	1000 <sup>1</sup>
		225	1200 x 675	1200
		300	1200 x 750	1200
		>300	1800 x (DN+450)	The larger of 1800 or (DN+450)
>1.5m deep to soffit	≤ 225	1200 x 1000	1200	750 x 675 <sup>1</sup>
	300	1200 x 1075	1200	1200 x 675 <sup>1</sup>
	375-450	1350 x 1225	1200	
	>450	1800 x (DN+775)	The larger of 1800 or (DN+775)	
	Manhole shaft <sup>4</sup>	> 3.0m deep to soffit of pipe		
	Steps <sup>5</sup>	1050 x 800	1050	600 x 600
	Ladder <sup>6</sup>	1200 x 800	1200	600 x 600
	Winch <sup>7</sup>	900 x 800	900	600 x 600

Notes:

- <sup>1</sup> Larger sizes may be required for manholes on bends or where there are junctions.
- <sup>2</sup> May be reduced to 600 by 600 where required by highway loading considerations, subject to a safe system of work being specified.
- <sup>3</sup> Not applicable due to working space needed.
- <sup>4</sup> Minimum height of chamber in shafted manhole 2m from benching to underside of reducing slab. Min clear space between ladder or steps and the opposite face of the shaft should be approximately 900mm.
- <sup>5</sup> Winch only - no steps or ladders, permanent or removable.
- <sup>6</sup> The minimum size of any manhole serving a sewer (i.e any drain serving more than one property) should be 1200 mm x 675 mm rectangular or 1200 mm diameter.

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Project: Detached Dwelling  
 Client: Mr. Ian Goulding  
 Title: Drainage Layout  
 Address: adj. 60 Coronation Drive, Birdwell, Barnsley, S70 5RL  
 Drawn by: [Signature]  
 Scale: 1:200 @ A3 DATE: AUG 25  
 Drawing No: 517-02

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Rev	Notes	Date