



- KEY**
- Proposed Foul Water Sewer
  - Proposed Surface Water Sewer
  - Indicative Routes
  - Road Gully, Omitted until further layout detail supplied
- Proposed Drainage is indicative subject to detailed layout design, although siting and strategy is unlikely to change.
- NOTES:**
1. Gully covers & frames with kerbs to be used on all adoptable manholes. All covers to be embossed with FWSW as appropriate. 150mm deep non-slip cover and frame to be used.
  2. Cover and Reducing ribs, shaft and chamber rings to be bedded with mortar proprietary bitumen or resin mastic sealant. All fitting holes to be pointed.
  3. Invert at step openings and step runs, ladders are properly aligned. At the foot of each ladder or set of step runs, a minimum of 400mm landing area should be provided from the outer edge of the step or rung. This may consist of:
    - a) a single area adjacent to the foot of the ladder or steps;
    - b) where the channel is no more than 200mm, one area of at least 225mm adjacent to the foot of the ladder or steps with the remainder on the other side of the channel.
  4. Chamber Diameters:
 

Dia. of largest pipe in M.H. (mm)	Dia. of chamber ring (mm)
Less than 375	1250
375-450	1500
450-525	1800
525-600	2100
600-750	2400
750-900	2700
900-1050	3000
1050-1200	3300
1200-1350	3600
1350-1500	3900
1500-1800	4200
  5. Above steps are minimum and may need increasing for more than one increasing plane to accommodate adequate benching.
  6. rate mix to be in accordance with the chemical analysis report for sand used for the site. High strength tapping to BS EN 12420 and PD 4681 to be brought up to a dense smooth face neatly spaced and applied to all branch connections. Benching tape to be not further than 1 in 30.
  7. Rocker/Short pipe lengths:
 

Pipe dia. (mm)	Rocker pipe length (m)
150-400	0.4
600-750	1.00
over 750	1.25

 Short length pipes to be similar length to rocker pipe. Manhole to large diameter sewers. Chambers with outlying pipes greater than 400mm dia. to be constructed as per detail. Top holes to be provided in benching of sewers greater than 400mm dia. for access to invert.
  8. Bricks to be solid type and either Class B engineering bricks complying with the relevant provisions of BS EN 771-1 or special bricks that comply with the relevant provisions of BS 5725 with sulphate-resisting Portland cement binder. Brickwork to be in English bond.
  9. Brick Manhole Walls. Chamber walls to be increased for pipes larger than 225mm dia. to give 225mm benching each side with the brickwork corbelled down to full cover.
  10. All pipes built into manhole invert should be installed with soffit level.
  11. PIPE BEDDING AND BACKFILL MATERIALS: Gravel bedding and silt-free Type A material shall be imported or selected on-site material complying with the recommendations of MHA Notes 4-98-02. Selected fill Type B shall consist of uniform, readily compactible material, free from impurities, matter, cladding, silt and frozen materials, or materials susceptible to spontaneous combustion, and excluding of liquid limit greater than 80 and/or plastic limit greater than 55 and materials of excessive high moisture content. Lumps and stones retained on 30mm and 37.5mm sieves respectively shall be excluded from the material. Pipe bedding and fill materials to rest pipes, shall not contain more than 0.35 sulphate, expressed as sulphur trioxide.
- TRENCH WIDTHS**
- | Pipe dia. (mm) | BC (mm) | 80mm |
|----------------|---------|------|
| 150            | 190     | 600  |
| 225            | 280     | 700  |
| 300            | 380     | 750  |
| 375            | 500     | 1050 |
| 450            | 580     | 1150 |
| 525            | 670     | 1200 |
| 600            | 750     | 1350 |
| 750            | 960     | 1560 |
| 900            | 1160    | 1760 |
| 1050           | 1420    | 2220 |
| 1200           | 1740    | 2340 |
| 1500           | 2090    | 2700 |
12. All Adoptable Drainage pipes to be of spigot & socket type connection.
  13. During construction all outlet manholes to be fitted with debris screen (mesh size 20mm), over the outlying pipes.
  14. All Adoptable Drainage Works shall comply with the requirements of Design and Construction Guidance for foul and surface water sewers offered for adoption under the Code for adoption agreements for water and sewerage companies operating wholly or mainly in England (The Code) Approved Version 2.0.

Rev	Description	Date
Status:		
<b>Planning</b>		
Scale : 1:500 @A0		
Date : Feb 2022	Checked: RAH	Approved: RAH
Drawn : IDL	RAH	RAH
Title:		
<b>Adoptable Drainage Layout Sheet 2</b>		
Project:		
Towcester Grange West		
Drig. No: 1113-00-13	Rev:	File Ref: 1113-00-11 Plot Ref: 1113-00-13
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