



**KEY**

- S.W. Foul
- Proposed sewer
- 1200mm dia I.C.
- Proposed Plot Level
- Existing Combined Sewer
- Proposed level
- Existing Level
- × 29.35

**BASIS FOR DRAINAGE DESIGN**

1. Site Area = 0.94 ha.  
Assumed greenfield runoff, no existing impermeable area.
2. Greenfield runoff rates from IOH 124:  
 Qbar = 6.1 l/s  
 Q1 = 5.3 l/s  
 Q30 = 10.4 l/s  
 Q100 = 12.8 l/s
3. Maximum flow rate to be 6.2 l/s for 100 year return period event (+30% climate change).
4. Flows controlled with 2 no. vortex flow control units to limit flows to 6.2 l/s @ 2.2m head (minimum adoptable 100mmØ orifice) & 6.7 l/s @ 2.2m head. Attenuation provided in underground oversized pipes.
5. Design flow rates calculated as:  
 Q1 = 5.1 l/s  
 Q30 = 5.1 l/s  
 Q100 +30% CC = 6.2 l/s
6. Surface water connection to new 150mmØ combined sewer in site access at flow rates stated above.
7. Foul / combined connection to new manhole on existing 225mmØ combined sewer in Marsh Lane. Foul flow from 37 no. units = 1.71 l/s.
8. Sewers to be offered for adoption under S104 Agreement with United Utilities.

REV.	DATE	INT.	DETAILS
001	27/06/16	RDE	Arch layout updated to Rev B & drainage amended to client's comments.

**REVISIONS**

REV.	DATE	INT.	DETAILS
A	27/06/16	RDE	Arch layout updated to Rev B & drainage amended to client's comments.

<p>North Point ↑</p> <p>Quality Ass. UKAS 005 Quality Assurance ISO 9001:2008 SGS Certificate GB0254539</p> <p><b>A1</b></p>	<p>Project <b>Marsh Lane, New Mills</b></p> <p>Client <b>Forrest</b></p> <p>Title <b>Preliminary Drainage Layout</b></p> <p>Drawn RDE</p> <p>Checked By SRG</p> <p>Date Jun 16</p> <p>Scale 1:500</p> <p>Copyright Acknowledgement ©Crown Copyright. All rights reserved. Licence No. AL100017966.</p>	<p><b>IronsideFarrar</b> Environmental Planners Engineers Architects Landscape Architects Graphic Design</p> <p>3 Worsley Court MANCHESTER M28 3NJ Tel: 0161 702 8801 Fax: 0161 703 8279 manchester@ironsidefarrar.com</p> <p>EDINBURGH BELLSHILL</p> <p>Drawing No. 30212/100 Revision A</p>
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