



MH Ref.	Specification
S13	Hydrocrack Optimum Flow Control Device Ref: MD-SHE-0278-5000-2000-5000 Head=2.2m, Flow=50.0 l/s, Coeff=2.75m

- WARNING TO HOUSE-PURCHASERS**
Property Misdescriptions Act 1991
- Buyers are warned that this is a working drawing and is not intended to be treated as definitive material descriptions in relation to any particular property or development. Any of the specified matters prescribed by any Order made under the above Act. The contents of this drawing may be subject to change at any time and alterations and variations can occur during the progress of the works without revision of the drawing. Consequently the layout, form, content and dimensions of the finished construction may differ materially from those shown. No do the contents of this drawing constitute a contract, part of any contract or warranty.
- DESIGNING NOTE**
1. All adoptable drainage works have been designed and are to be constructed in accordance with 'Sewers for Adoption, 4th Edition', and 'Urban Utilities Guidelines for Sewer for Adoption 4th Edition'. Where specification conflicts, UK adoption rules prevail.
 2. All day pipe work shall be Extra Strength Clayware to BS 206 and BS 65 (SM pipe only).
 3. All present concrete pipework shall be to Class 125 in accordance with BS591 Part 1, BS EN 1916 and bear the BS mark.
 4. All adoptable drainage to be installed in Class 3 granular surround unless otherwise stated.
 5. All concrete manholes and Sootways, manholes, concrete cover slabs and Cais to be manufactured to BS EN 1917 and BS 591 Part 3.
 6. Rising Mains to be Black Polyethylene Pipes complying to BS EN 12244-2. Polyethylene fittings, including fusion joints, and electro-fusion fittings shall comply with BS EN 12244-2.
 7. All levels refer to Ordnance Datum. Contractor to ensure that the drawing is read in conjunction with the site specific Topographic Survey provided by Barratt Manchester and the Benchmark information provided.
 8. This drawing is to be read in accordance with all other relevant drawings.
 9. The contractor shall be responsible for ensuring that any existing level levels indicated on the drawings are correct before work commences.
 10. All proposed connections to the sewer shall be 150mm unless stated otherwise.
 11. All private house drainage shall be 100mm and all drop-off connections shall be 150mm at a minimum gradient of 1:80 unless otherwise stated and set in accordance with Part 8 of the Building Regulations.
 12. Runoff from paved surfaces shall not discharge across the highway. Gullies or channels shall be provided as appropriate to prevent this.
 13. Street crossings shall be provided at the inner tangent points of all junctions.
 14. Pipes shall be protected from concentrated loading by construction traffic during the construction period when surfacing cover to the road may not then be available to support.
 15. Walls CRB beds of the road formation level are to be carried out to determine the depth of pavement construction. This is to be approved by the existing authority prior to construction of the road pavements.
 16. Groundwater to ensure that pit drainage be within the curbside of the pit they serve where possible and inspection covers kept within handstanding where possible.
 17. Contractor to provide United Utilities with sufficient notice prior to commencement of Sewer works on their respective telephone number: 01 252 5000.
 18. Contractor to obtain all necessary Highway opening notices from the relevant Local Authority, obtain approval to work on United Utilities Sewerage Schemes, obtain approval to method statement from the Environment Agency for any work affecting watercourses.
 19. All manholes adopted by MDC to have a minimum 150mm 150mm concrete surround to full depth.

ENGINEERING KEY

	Adoptable S.W. Sewer & Manhole		Adoptable F.W. Sewer & Manhole
	Existing S.W. Sewer		Existing S.W. Sewer Diverted Section
	S.W. Drop-Out and Invert		F.W. Drop-Out and Invert
	Adoptable Road Gully		

FLOW CONTROL DETAILS

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- STREET LIGHTING KEY**
- 1. 10M TUBULAR STREET LIGHTING COLUMN WITH GLASS EPXY ROOF TREATMENT. SINGLE ARM BRACKET (1.5M OUTREACH @ 5°) TO BE ENCASED AS PART OF SECTION 278.
 - 2. 10M TUBULAR STREET LIGHTING COLUMN WITH GLASS EPXY ROOF TREATMENT. COLUMN TO BE FITTED WITH 1x60 POST-MOUNTED ZG LIGHTING CHITRE. 2x800 LAMPS TO BE FITTED WITH A ZORION SSS1A PROTECTOR 20 LEX SWITCHING.
 - 3. 10M TUBULAR STREET LIGHTING COLUMN WITH GLASS EPXY ROOF TREATMENT. COLUMN TO BE FITTED WITH 1x60 POST-MOUNTED ZG LIGHTING CHITRE. 2x800 LAMPS TO BE FITTED WITH A ZORION SSS1A PROTECTOR 20 LEX SWITCHING.
 - 4. 10M TUBULAR STREET LIGHTING COLUMN WITH GLASS EPXY ROOF TREATMENT. COLUMN TO BE FITTED WITH 1x60 POST-MOUNTED ZG LIGHTING CHITRE. 2x800 LAMPS TO BE FITTED WITH A ZORION SSS1A PROTECTOR 20 LEX SWITCHING.
- LC01 COLUMN IDENTIFICATION NUMBER.

- STREET LIGHTING NOTES**
1. Foster pillar shall be factory supplied and include a compliance test certificate. Lighting Special Details are specified on sheets N2, N4 and N5. If required, maximum cable size with hater pillars shall be '10mm' conductor size.
 2. No 'N' series for Lighting Special Details shall be used in conjunction with this drawing.
 3. All new lighting columns and brackets lighting column specifications shall be in accordance with N2. A numbering schedule shall be obtained for all new columns from Lancashire County Council (01772 53100) upon completion. Sites that require a numbered (aluminum) schedule of an 'N' pillar.
 4. The regional electric company is Electricity North West. Use An Independent Connections Provider can use within the UK and for other power connections, however, this is not advised.
 5. All supply cables to new or existing lighting columns shall be enclosed in 50/100mm internal diameter orange, medium/high density polyethylene service duct, unless otherwise stated.
 6. All street lighting equipment shall be set with the specified adjustable footpath or verge. Lighting columns shall be sited at the back of the highway with the clear facing across the road.

REV	DESCRIPTION	DATE	DRAWN
K	1 IN 200 YEAR WATER LEVEL NOTE ADDED TO POND. RISING MAIN SIZE REVISED, AND REDUCED DOWN TO ONE.	06.02.17	CD
L	1 POND WATER LEVEL AND TOP BANK LEVEL REDUCED; RISING MAIN ROUTE AND SIZE REVISED; F44 INVERT LEVEL REVISED	05.01.17	CD
V	F44'S UPDATED TO SUIT EXTERNAL LEVELS. PRIVATE DRAINAGE ALSO UPDATED.	07.12.16	FB
H	FOUL GRADIENTS REVISED; F43-F49 PIPE REVISED TO OVAL; OTHER AMENDMENTS IN LINE WITH COMMENTS.	21.11.16	FB
G	PRIVATE DRAINAGE ADDED.	24.10.16	FB
F	F44'S UPDATED TO SUIT EXTERNAL LEVELS.	20.10.16	FB
E	SECOND RISING MAIN & DAMMETERS ADDED; INCOMING INVERT REVISED.	18.10.16	FB
D	F44X REVISED; NAME PLATES, TACTILE CROSSINGS AND STREET LIGHTS ADDED; F40 REMOVED; F39-F42 REVISED; DIVERSION ROUTE REVISED.	07.10.16	FB/CD
C	REVISED IN LINE WITH NEW 1:20 MANHOLE SCHEDULES.	11.08.16	FB
B	FOUL ON-LINE STORAGE ADDED; DIVERSION LEVELS ADDED.	06.04.16	CD
A	FULL DRAINAGE DESIGN DUE TO OUTFALL CHANGES & POND PUT IN.	24.03.16	CD
A	FULL DRAINAGE DESIGN DUE TO FLOW RATE CHANGES & POND REMOVED.	24.03.16	CD

BARRATT HOMES MANCHESTER
Barratt Homes Manchester
(A division of BDM Trading Ltd)
4 Brindley Road
City Park
Manchester
M16 9HQ
Tel: 0161 872 0161
Fax: 0161 855 2828

Job: Chipping Lane Longridge
Title: Engineering Layout

Design By: CD	Date: Feb 2016	Drawing Number: 459/ED/02	Rev: L
CAD By: CD	Scale: 1:500 @ AD		