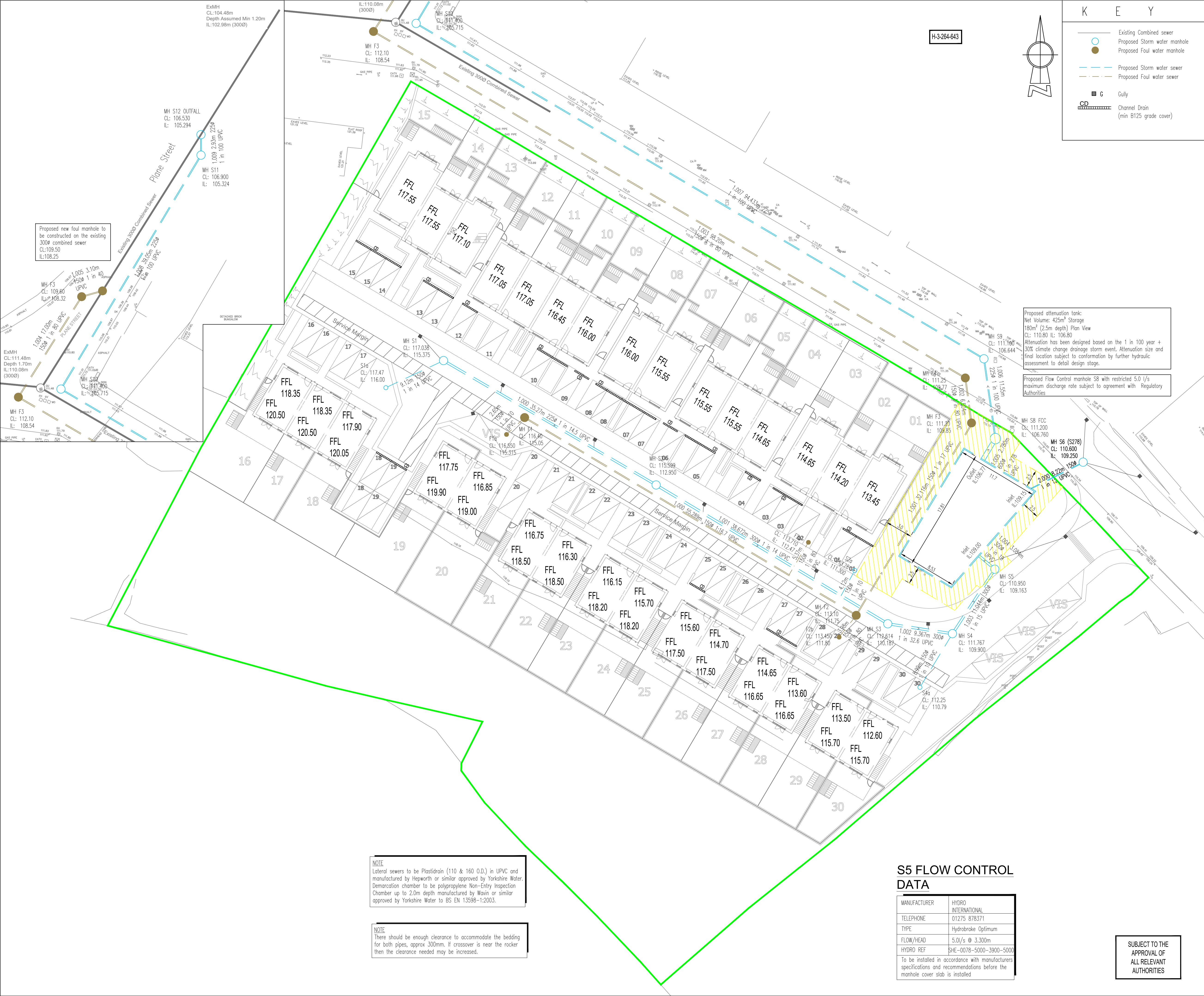




KEY

NOTES

EXISTING COMBINED SEWER

PROPOSED STORM WATER MANHOLE

PROPOSED Foul WATER MANHOLE

PROPOSED STORM WATER SEWER

PROPOSED Foul WATER SEWER

G

CD

Channel Drain (min B125 grade cover)

ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 AND THE DUTIES AND RESPONSIBILITIES CONTAINED THEREIN

1. For longitudinal sections refer to drawing 0257-05-06.

2. No services are to be sited directly over, or within 1m of, an adoptable sewer or manhole.

3. Private drainage connections to adoptable sewers to be via 45° junction.

4. Off site manholes already built must have invert levels checked prior to connection to the off site drainage.

5. Any connections to existing sewers/manholes are to be supervised by Yorkshire Water.

6. All connections to proposed public sewers to be minimum 150mmØ.

7. Any land drain or water course on site to be diverted as not to pass under proposed buildings. Diversion to be approved and inspected on site by the Local Authority.

Yorkshire Water notes:

1. All adoptable sewer works and material to be in accordance with "Code for Adoption". The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.

2. Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways

3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out

4. Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or in-directly). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage

Section with regard to the disposal of the filter drain/land drainage run-off

5. Cover slabs must carry the BSI Kitemark or will be rejected by Yorkshire Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued Autumn 2004 for Kitemarked cover slab opening sizes

6. Sulphate resistant cement (C20-DXC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

7. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.

8. Sewers must have 5 metres clearance from trees and hedges.

9. Sewers to be laid in Class "S" Bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in non vehicular access areas) then a concrete slab should be provided above granular bed and surround.

10. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).

11. The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.

12. Yorkshire Water policy is that Type "C" brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 - 1.5m.

13. Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WS 4-35-01 and BS/EN13476). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would prefer clayware channel in manholes. We have found that plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the benching.

14. The minimum crushing strength for clay pipes should be as follows : 100mm dia 40KN/m, 150mm dia 40KN/m, 225mm dia 45KN/m and 300mm dia 72KN/m. The minimum crushing strength for concrete pipes should be - (Class 120 to EN 1916/BS5911-1 2002). Plastic pipes should conform to WS 4-35-01 and BS EN13476.

15. Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.

D	RJ	07.04.22	Amended to new site layout.	MI	MI
C	RJ	01.03.22	Amended to suit section 104 comments	MI	MI
B	MB	04.11.21	Amended to suit section 104 comments	MI	MI
A	RJ	12.08.21	Attenuation tank shape amended	MI	MI
/	RJ	12.04.21	Issued for approval	MI	MI
Rev	By	Date	Revision	Chk	Apvd

ARP

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ARP Associates is a trading division of ARP Geotechnical Ltd, a company registered in England and Wales with company number 3773831, whose registered office is at 5/6 Northwest Business Park, Servia Hill, Leeds LS6 2QH

TITLE

SECTION 104 LAYOUT

PROJECT

PLANE STREET
HUDDERSFIELD

CLIENT

UNITY HOUSING ASSOCIATION

DRAWING STATUS

FOR APPROVAL

Scale

1:200 @ A1

Date

APR 21

Drawn

RJ

Chk.

RJ

Drg. No.

257/05/03

Rev

D

MANUFACTURER

HYDRO INTERNATIONAL

TELEPHONE

01275 878371

TYPE

Hydrobrake Optimum

FLOW/HEAD

5.0l/s @ 3.300m

HYDRO REF

SHE-0078-5000-3900-5000

To be installed in accordance with manufacturers specifications and recommendations before the manhole cover slab is installed

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

NOTE

Lateral sewers to be Plastidrain (110 & 160 O.D.) in UPVC and manufactured by Hepworth or similar approved by Yorkshire Water. Demarcation chamber to be polypropylene Non-Entry Inspection Chamber up to 2.0m depth manufactured by Wavin or similar approved by Yorkshire Water to BS EN 13598-1:2003.

NOTE

There should be enough clearance to accommodate the bedding for both pipes, approx 300mm. If crossover is near the rocker then the clearance needed may be increased.