

H-?-??-???

N O T E S

- This drawing is to be read in conjunction with all relevant ARP and Architects drawings and project specifications.
- Survey related to topographical survey supplied by Miller Homes (Yorkshire) Ltd.
- Co-ordinates to be checked prior to works commencing. Any discrepancies to be brought to the immediate attention of ARP.

NETWORK 2

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Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S32	55.670 1.200		1	5.007	53.945	525	1500	C	D400
			2	Gully	53.945	150			
E. 437220.024 N. 405134.224			0	5.008	53.795	675			
S33	58.200 1.200		1		56.850	150	1200	C	D400
			0	Gully					
E. 437251.574 N. 404999.694			0	8.000	56.775	225			
S34	57.690 1.290		1	8.000	56.175	225	1200	C	D400
			0						
E. 437255.889 N. 405022.763			0	8.001	56.175	225			
S35	56.870 1.200		1	8.001	55.445	225	1500	C	D400
			2	Lateral	55.520	150			
			3	Lateral	55.520	150			
E. 437266.603 N. 405053.851			0	8.002	55.370	300			
S36	56.180 1.200		1	8.002	54.680	300	1350	Unknown	D400
			0						
E. 437267.121 N. 405078.564			0	8.003	54.605	375			
S37	55.300 1.544		1	5.008	53.081	675	2100	B	D400
			2	8.003	53.381	375			
			3	Lateral	53.606	150			
E. 437275.912 N. 405124.105			0	5.009	53.006	750			
S38	54.850 1.200		1	5.009	52.900	750	1800	C	D400
			2	Lateral	53.500	150			
E. 437327.746 N. 405114.099			0	5.010	52.900	750			
S39	55.190 1.647		1	5.010	52.793	750	1800	B	D400
			2	Lateral	53.393	150			
E. 437317.463 N. 405061.742			0	5.011	52.793	750			
S40	55.220 1.696		1	5.011	52.774	750	1800	B	D400
			0						
E. 437321.790 N. 405053.226			0	5.012	52.774	750			
S42	54.880 1.200		1	Lateral	53.530	150	1200	C	D400
			2	Gully	53.530	150			
E. 437374.766 N. 405057.338			0	9.000	53.380	300			

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S43	55.050 1.629		1	9.000	53.121	300	1800	B	D400
			2	5.012	52.671	750			
E. 437372.324 N. 405043.986			0	5.013	52.671	750			
S44	54.500 1.126		1	5.013	52.624	750	1800	Unknown	D400
			0	5.014	52.624	1000			
E. 437384.322 N. 405023.898			0						

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S45	54.300 1.200		1	Gully	52.950	150	1200	C	D400
			0	1.000	52.875	225			
E. 437326.855 N. 405125.914			0	1.000	52.875	225			
S46	53.720 1.270		1	1.000	52.225	225	1200	C	D400
			2	Gully	52.300	150			
E. 437316.257 N. 405139.707			0	1.001	52.225	225			
S47	53.850 1.439		1	1.001	52.186	225	1200	C	D400
			2	Lateral	52.261	150			
E. 437321.401 N. 405143.660			0	1.002	52.161	300			
S48	53.650		1	1.002	51.826	300	300	TANK ACCESS REFER TO MANUFACTURERS DETAILS	
			0						
E. 437322.265 N. 405148.524			0	1.003	51.826	300			
S49	53.600 1.578		1	1.003	51.722	300	300	TANK ACCESS REFER TO MANUFACTURERS DETAILS	
			0						
E. 437324.488 N. 405169.196			0	1.004	51.722	300			
S50 Flow control	53.150 1.343		1	1.004	51.707	300	2100	C	D400
			0	1.005	51.657	150			
E. 437321.697 N. 405169.697			0	1.005	51.657	150			
S51	52.825 1.176		1	1.005	51.499	150	1200	C	D400
			0						
E. 437317.928 N. 405181.789			0						

Yorkshire Water General Notes

- 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 Kitemark.
- Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
- Filled ground must be filled and consolidated under the supervision, and to the satisfaction, of Yorkshire Water before any sewer works are carried out.
- Cover slabs must carry the BS Kitemark or will be rejected by the 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 600x600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA) 'Technical Bulletin' issued autumn 2004 for Kitemarked cover slab opening sizes.
- Adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- Sewers must have 5 metres clearance from trees and hedges, (please also refer to Figure 2.3 on page 33 in 'Sewers for Adoption' 6th Edition for restrictions on tree planting adjacent to Sewers).
- Sewers to be laid in Class 'C' 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 the granular bed and surround.
- Adoptable plastic sewer pipes to be BS Kitemarked (Certified to MS 4-35-01 and BS/EN13476). Adoptable sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to be longer.
- Plastic channel sections in manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the benching.
- The chamber size of manholes with more than one connection in them may need to be increased on increment to accommodate the connections and bends.
- Yorkshire Water policy is not to accept Type 'C' brick manhole and 1050mm dia manhole rings. Instead it is preferred that you use a type 'D' manhole with 1200mm dia or 1500mm dia rings, with the opening sited over the channel where depth of cover to pipe silt is 1-1.5m.
- Surface water and foul rising mains to be provided with marker tape above the rising mains.
- If plastic pipes are to be used then the following should apply:
  - All adoptable sewers to be BS Kitemark (Certified to MS 4-35-01 and BS/EN13476).
  - Bedding and backfill material to conform to the requirements of Water Industry Specification 4-18-02 (Table A2)
- Where plastic pipes are proposed for adoptable sewers, structural calculations for the plastic pipes and a site investigation report to prove that the ground condition is suitable for the plastic pipes are to be produced.
- Where plastic pipes are installed into the ground prior to getting full technical approval, the developer must provide a CCTV survey of the prospectively adoptable sewers and a deformation test (Light-Line test) of the plastic pipes.
- Demonstration chambers to be a min. 450mm chamber for 100mm dia foul & 150mm dia surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
- Minimum depth of demonstration chamber to be 2m, where depth exceeds 2m, manhole to be constructed as type B manhole.
- Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage runoff will therefore be required and you will have to liaise with the Land Drainage Authority/Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff if required.
- Supplied existing cement (C20-C22) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- Strength of vibrated clay pipes (if used) to be 40kN/m for 1000, 400kN/m for 1500, 450kN/m for 2250 and 720kN/m for 3000. All concrete pipes to be Class 120 concrete to EN 1916/BS 5911-1:2002.
- All levels of existing drainage to be confirmed prior to work commencing on site.
- The contractor must allow for any level required for road and sewer opening permits, sewer connections and make the appropriate applications.
- All excavations in areas of high water tables and granular materials with high sand/silt contents shall be wrapped with a suitable geotextile filter membrane to prevent migration of sands/silts. Full height clay strakes across trenches and/or at manhole locations at 25m intervals to restrict water movement along the excavation shall be provided.
- Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage runoff will be required and liaison with the Land Drainage Authority with regard to the disposal of the filter drain/land drainage runoff if necessary.
- Do not scale from this drawing.

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

A	BHE	25.01.23	Revised to suit new layout Rev.V	RJ	RJ
/	JMG	16.08.22	Issued for approval	RJ	MI
Rev	By	Date	Revision	Chk	Appd.

**ARP** ARP ASSOCIATES  
Chartered Consulting Engineers

Northwest House • 5 & 6 Northwest Business Park • Servia Hill, Leeds • L5E 2QH  
0113 245 8498 • 0113 244 3864 • Leeds@arpassociates.co.uk • www.arpassociates.co.uk

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 SURFACE WATER  
MANHOLE SCHEDULES  
SHEET 2 OF 2

PROJECT BLEACHCROFT WAY

CLIENT HARRON HOMES

DRAWING STATUS PRELIMINARY

Scale	Date	Drawn
N/A	AUG 22	JMG
	Chk.	RJ

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