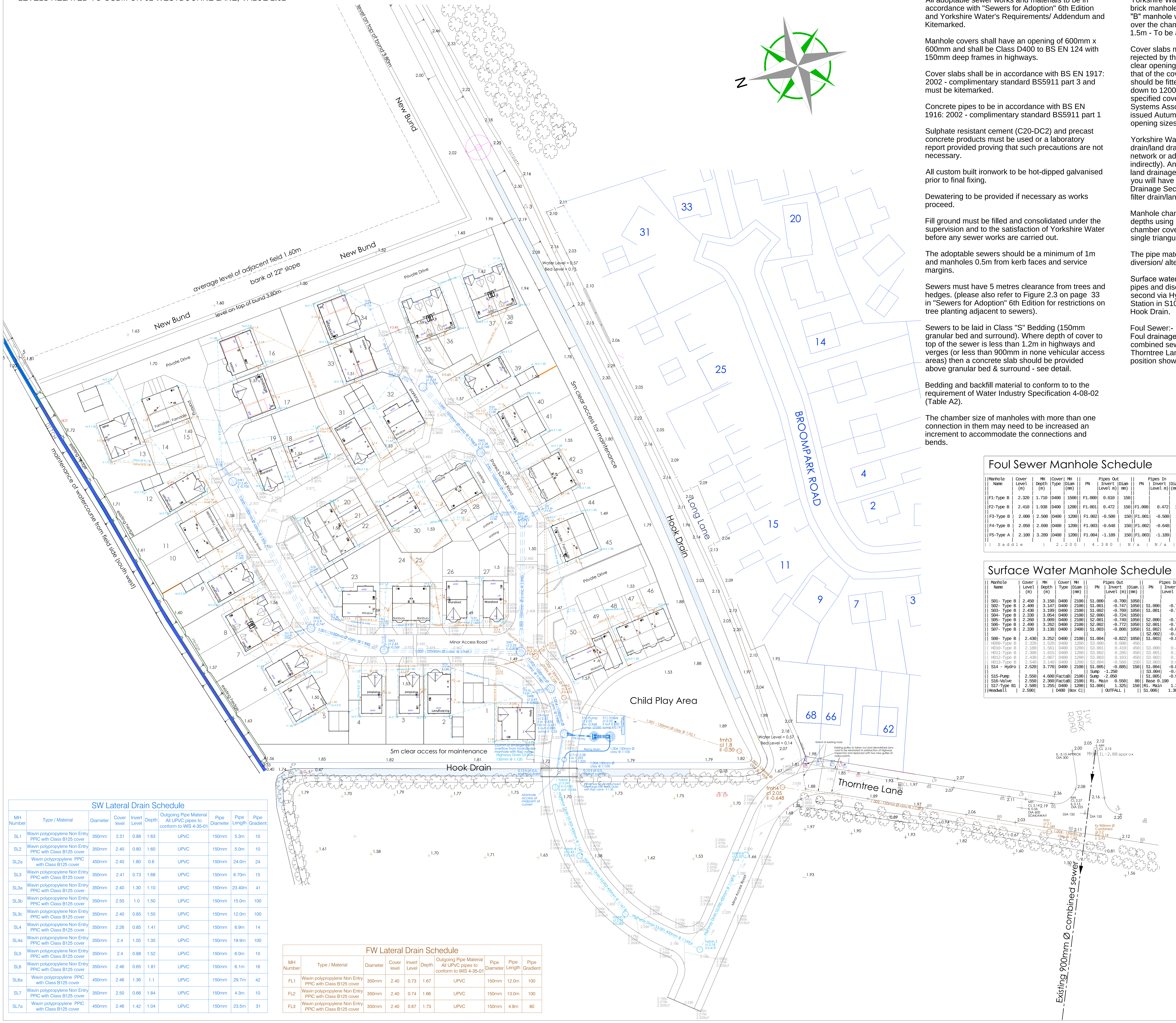
ALL SEWER WORKS TO BE CARRIED OUT IN ACCORDANCE WITH W.A.A. SEWERS FOR ADOPTION 6TH EDITION. ALL PIPE WORK TO BE IN ACCORDANCE WITH BS EN 295. ALL CONCRETE TO BE SULPHATE RESISTING. ALL LEVELS RELATED TO OSBM ON 62 WESTBOURNE LANE, VALUE 2.62



All adoptable sewer works and materials to be in accordance with "Sewers for Adoption" 6th Edition and Yorkshire Water's Requirements/ Addendum and Kitemarked.

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

Cover slabs shall be in accordance with BS EN 1917: 2002 - complimentary standard BS5911 part 3 and must be kitemarked.

Concrete pipes to be in accordance with BS EN 1916: 2002 - complimentary standard BS5911 part 1

Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

All custom built ironwork to be hot-dipped galvanised prior to final fixing.

Dewatering to be provided if necessary as works proceed.

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

The 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 "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 none vehicular access areas) then a concrete slab should be provided above granular bed & surround - see detail.

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

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.

Yorkshire Water's policy is not to accept Type "C" brick manholes. Instead it is preferable to use a type "B" manhole with 1200mm Ø rings, the opening sited over the channel where depth of cover to soffit is 1 - 1.5m - To be agreed with Yorkshire Water.

Cover slabs must carry the BSI 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 load bearing slab should be fitted above the cover slab to bring the size down to 1200 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 (see attached copy).

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 Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff.

Manhole chambers to be constructed to approved depths using chamber sizes as shown. Manhole chamber cover & frames to carriageway (class d) single triangular with bs kitemark.

The pipe material and strength of the sewers diversion/ alteration should be like for like.

Surface water to be stored in 1200mm Ø concrete pipes and discharged into Hook Drain at 5 litres per second via Hydrobrake in Manhole S9 and Pump Station in S10 & S11. Discharge point in culvert of Hook Drain.

Foul Sewer:-
Foul drainage to connect to existing 900mm Ø combined sewer at the junction of Ivy Park Road and Thorntree Lane passing under Hook Drain in the position shown.

Foul Sewer Manhole Schedule

Manhole Name	Cover Level (m)	MH Depth (m)	Cover Type	MH Diam (mm)	Pipes Out PN	Pipes Out Invert Level m)	Pipes Out Diam mm)	Pipes In PN	Pipes In Invert Level m)	Pipes In Diam (mm)
F1-Type B	2.320	1.710	D400	1500	F1.000	0.610	150			
F2-Type B	2.410	1.938	D400	1200	F1.001	0.472	150	F1.000	0.472	150
F3-Type B	2.000	2.500	D400	1200	F1.002	-0.500	150	F1.001	-0.500	150
F4-Type B	2.050	2.698	D400	1200	F1.003	-0.648	150	F1.002	-0.648	150
F5-Type A	2.100	3.289	D400	1200	F1.004	-1.189	150	F1.003	-1.189	150
Saddle	2.200	4.380	N/a	N/a	Ex 900mm Ø Cmb OUTFAL			F1.004	-2.180	150

Surface Water Manhole Schedule

Manhole Name	Cover Level (m)	MH Depth (m)	Cover Type	MH Diam (mm)	Pipes Out PN	Pipes Out Invert Level (m)	Pipes Out Diam. (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diam. (mm)
S01- Type B	2.450	3.150	D400	2100	S1.000	-0.700	1050			
S02- Type B	2.400	3.147	D400	2100	S1.001	-0.747	1050	S1.000	-0.747	1050
S03- Type B	2.430	3.199	D400	2100	S1.002	-0.769	1050	S1.001	-0.769	1050
S04- Type B	2.330	3.054	D400	2100	S2.000	-0.724	1050			
S05- Type B	2.260	3.009	D400	2100	S2.001	-0.749	1050	S2.000	-0.749	1050
S06- Type B	2.490	3.262	D400	2100	S2.002	-0.772	1050	S2.001	-0.772	1050
S07- Type B	2.330	3.138	D400	2400	S1.003	-0.808	1050	S1.002	-0.808	1050
								S2.002	-0.808	1050
S08- Type B	2.430	3.252	D400	2100	S1.004	-0.822	1050	S1.003	-0.822	1050
HD09-Type B	2.320	1.520	D400	1200	S3.000	0.600	450			
HD10-Type B	2.180	1.561	D400	1200	S3.001	0.419	450	S3.000	0.419	450
HD11-Type B	2.300	1.815	D400	1200	S3.002	0.285	450	S3.001	0.285	450
HD12-Type B	2.430	2.067	D400	1200	S3.003	0.163	450	S3.002	0.163	450
HD13-Type B	2.540	3.140	D400	1200	S3.004	-0.566	150	S3.003	0.043	450
S14 - Hydro	2.520	3.770	D400	2100	S1.005	-0.885	150	S1.004	-0.835	1050
					Sump	-1.250		S3.004	-0.691	150
S15-Pump	2.550	4.600	FactaB	2100	Sump	-2.050		S1.005	-0.968	150
S16-Valve	2.550	2.360	FactaB	2100	Ri. Main	0.550	80	Base 0.190		
S17-Type B1	2.580	1.255	D400	1200	S1.006	1.325	150	Ri. Main	1.395	80
Headwall	2.590		D400	Box C		OUTFALL		S1.006	1.300	150

SW Lateral Drain Schedule

MH Number	Type / Material	Diameter	Cover level	Invert Level	Depth	Outgoing Pipe Material All UPVC pipes to conform to WIS 4-35-01	Pipe Diameter	Pipe Length	Pipe Gradient
SL1	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.51	0.88	1.63	UPVC	150mm	5.3m	10
SL2	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.40	0.80	1.60	UPVC	150mm	5.0m	10
SL2a	Wavin polypropylene PPIC with Class B125 cover	450mm	2.40	1.80	0.6	UPVC	150mm	24.0m	24
SL3	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.41	0.73	1.68	UPVC	150mm	6.70m	15
SL3a	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.40	1.30	1.10	UPVC	150mm	23.40m	41
SL3b	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.50	1.0	1.50	UPVC	150mm	15.0m	100
SL3c	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.40	0.85	1.55	UPVC	150mm	12.0m	100
SL4	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.26	0.85	1.41	UPVC	150mm	6.9m	14
SL4a	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.4	1.05	1.35	UPVC	150mm	19.9m	100
SL5	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.4	0.88	1.52	UPVC	150mm	6.0m	10
SL6	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.46	0.65	1.81	UPVC	150mm	6.1m	16
SL6a	Wavin polypropylene PPIC with Class B125 cover	450mm	2.46	1.36	1.1	UPVC	150mm	29.7m	42
SL7	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.50	0.66	1.84	UPVC	150mm	4.3m	10
SL7a	Wavin polypropylene PPIC with Class B125 cover	450mm	2.46	1.42	1.04	UPVC	150mm	23.5m	31

FW Lateral Drain Schedule

MH Number	Type / Material	Diameter	Cover level	Invert Level	Depth	Outgoing Pipe Material All UPVC pipes to conform to WIS 4-35-01	Pipe Diameter	Pipe Length	Pipe Gradient
FL1	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.40	0.73	1.67	UPVC	150mm	12.0m	100
FL2	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.40	0.74	1.66	UPVC	150mm	13.0m	100
FL3	Wavin polypropylene Non Entry PPIC with Class B125 cover	350mm	2.40	0.67	1.73	UPVC	150mm	4.8m	80

1. Figured dimensions to be taken in preference to scaled dimensions
2. All dimensions are to be checked on site by the main contractor and any discrepancies found are to be reported to Sangwin Architects Ltd
3. This drawing is the copyright of Sangwin Architects Ltd
4. Contact details:

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Note;

1. All levels to be confirmed prior to commencement of works.

2. Existing brick manholes to be inspected by Yorkshire Water Developer Services Inspector to ascertain whether new connection can be accommodated. If necessary manholes to be re-constructed.

3. Position and invert of existing sewers to be confirmed on site prior to commencement of proposed sewers and any discrepancies notified to Sangwin Architects.

Note;

1. Position and invert of existing sewers to be confirmed on site prior to commencement of proposed sewers and any discrepancies notified to Sangwin Architects.

2. Inverts and depths of existing sewers are taken from YW plans and Roger Scott survey and should be confirmed on site prior to commencement of works.

3. All private drives to be constructed in permeable paving and not to be connected to the site drainage.

sangwin architects

PRELIMINARY

Client
Peter Ward Homes
Project Description
Whin Croft
Land North of Thorntree La.
Goole
East Yorkshire
DN14 6LW
Drawing Title
Sewer Layout

Date first drawn September 2015
Scale 1:500 @ A1
Job Number 2860/49