

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

Yorkshire Water 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 Kitemarked.
 - Manhole covers shall/must 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.
 - 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 regarding the disposal of the filter drain/land drainage run-off.
 - 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 or the width of the canopy of mature height.
 - 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 nonvehicular access areas) then a concrete slab should be provided above granular bed and surround.
 - Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
 - Yorkshire Water policy is that Type "C" brick manholes and 1050mm diameter manhole rings are not preferred. Instead, it is preferred that you use a type "B" manhole with 1200mm diameter or 1500mm diameter rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 - 1.5m.
 - Adoptable plastic sewer pipes to be BS Kitemarked (certified to WS 4-35-01 and BS EN 13476). 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 require clay ware channel in manholes.
 - 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 1316/BS5911-1 2002). Plastic pipes should conform to WS 4-35-01 and BS EN 13476.
 - 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.
 - There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm +/- if crossover is near the rocker then the clearance needed may need to be increased.
- General Notes**
- Precast concrete manhole units shall comply with the relevant provisions of BS EN 1917 and BS 5911-3 and shall be manufactured from concrete with a Design Chemical Class DC-4 unless the sewerage company can be satisfied that a lower class will resist attack from soils and groundwater. Units which bed into bases shall be manufactured so that imposed vertical loads are transmitted directly via the full wall thickness of the unit. The profiles of joints between units and the underside of slabs shall be capable of withstanding applied loadings from such slabs and spigot-ended sections shall only be used where the soffit of the slab is recessed to receive them.
 - All levels of existing drainage to be confirmed prior to work commencing on site.
 - The contractor must allow for any fees required for road and sewer opening permits, sewer connections and make the appropriate applications.

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

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TITLE
**MANHOLE SCHEDULE
SURFACE WATER**

PROJECT
**COCKLEY HILL,
KIRKHEATON**

CLIENT
GLEESON HOMES

DRAWING STATUS
FOR APPROVAL

Scale	Date	Drawn	IC
NTS	NOV 25	Chk.	MI
Dwg. No.	2298/03/11.01	Rev	/

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S13	127.317		1	1.010	124.150	375	1500	Type B	D400
	Depth To Soffit		2	1.011	124.075	450			
	Coordinates		Code	Inverts	Diams				
E.	418229.110	2.792	1	1.011	123.950	450	1500	Type B	D400
N.	418012.252	0	1.011	124.250	150				
		0	1.012	123.950	450				
S14	127.337		1	1.011	123.950	450	1500	Type B	D400
	Depth To Soffit		2	1.011	124.250	150			
	Coordinates		Code	Inverts	Diams				
E.	418248.171	2.937	1	1.011	123.950	450	1500	Type B	D400
N.	417980.119	0	1.012	123.950	450				
		0	1.012	123.841	450				
S15	127.883		1	1.012	123.841	450	1500	Type A	D400
	Depth To Soffit		2	1.013	123.790	450			
	Coordinates		Code	Inverts	Diams				
E.	418274.589	3.592	1	1.013	123.790	450	1500	Type A	D400
N.	417960.968	0	1.013	123.841	450				
		0	1.014	123.790	450				
S16	127.901		1	1.013	123.790	450	1500	Type A	D400
	Depth To Soffit		2	1.014	123.790	150			
	Coordinates		Code	Inverts	Diams				
E.	418282.527	3.661	1	1.014	123.790	450	1500	Type A	D400
N.	417947.976	0	1.014	123.790	450				
		0	1.015	122.696	450				
S17	124.398		1	1.014	122.696	450	1500	Type C	D400
	Depth To Soffit		2	1.015	122.696	450			
	Coordinates		Code	Inverts	Diams				
E.	418287.966	1.252	1	1.015	122.696	450	1500	Type C	D400
N.	417891.361	0	1.015	122.696	450				
		0	1.015	122.196	450				
S18	123.920		1	1.015	122.196	450	1500	Type C	D400
	Depth To Soffit		2	1.016	122.196	450			
	Coordinates		Code	Inverts	Diams				
E.	418285.689	1.274	1	1.016	122.196	450	1500	Type C	D400
N.	417884.067	0	1.016	122.196	450				
		0	1.016	122.196	450				

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S7	136.052		1	1.004	134.015	300	1350	Type B	D400
	Depth To Soffit		2	1.005	135.000	150			
	Coordinates		Code	Inverts	Diams				
E.	418303.968	1.737	1	1.005	134.015	300	1350	Type B	D400
N.	418011.229	0	1.005	134.015	300				
		0	1.005	133.237	300				
S8	135.147		1	1.005	133.237	300	1350	Type B	D400
	Depth To Soffit		2	1.006	133.387	150			
	Coordinates		Code	Inverts	Diams				
E.	418294.867	1.610	1	1.006	133.237	300	1350	Type B	D400
N.	418021.862	0	1.006	133.237	300				
		0	1.006	130.487	300				
S9	132.945		1	1.006	130.487	300	1500	Type B	D400
	Depth To Soffit		2	1.007	130.637	150			
	Coordinates		Code	Inverts	Diams				
E.	418277.863	2.158	1	1.007	130.487	300	1500	Type B	D400
N.	418050.145	0	1.007	130.487	300				
		0	1.007	128.447	300				
S10	131.446		1	1.007	128.447	300	1350	Type B	D400
	Depth To Soffit		2	1.008	129.947	150			
	Coordinates		Code	Inverts	Diams				
E.	418259.098	2.699	1	1.008	128.447	300	1350	Type B	D400
N.	418069.300	0	1.008	128.447	300				
		0	1.008	126.548	300				
S11	129.363		1	1.008	126.548	300	1500	Type B	D400
	Depth To Soffit		2	1.009	127.773	150			
	Coordinates		Code	Inverts	Diams				
E.	418231.071	2.515	1	1.008	126.548	300	1500	Type B	D400
N.	418040.941	0	1.009	126.473	375				
		0	1.009	125.516	375				
S12	128.306		1	1.009	125.516	375	1500	Type B	D400
	Depth To Soffit		2	1.010	127.016	150			
	Coordinates		Code	Inverts	Diams				
E.	418226.317	2.415	1	1.009	125.516	375	1500	Type B	D400
N.	418026.385	0	1.010	125.516	375				
		0	1.010	125.516	375				

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S1	140.433		1	GULLY	139.050	150	1350	Type C	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418357.699	1.233	1	GULLY	139.050	150	1350	Type C	D400
N.	418047.582	0	1.000	139.050	150				
		0	1.000	139.050	150				
S2	139.683		1	1.000	138.276	150	1350	Type C	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418345.815	1.257	1	1.000	138.276	150	1350	Type C	D400
N.	418036.497	0	1.001	138.276	150				
		0	1.001	137.331	150				
S3	138.728		1	1.001	137.331	150	1350	Type C	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418338.413	1.247	1	1.001	137.331	150	1350	Type C	D400
N.	418023.852	0	1.002	137.331	150				
		0	1.002	137.331	150				
S4	136.211		1	Lateral S1a	134.725	150	1500	Type C	D400
	Depth To Soffit		2	Gully	134.725	150			
	Coordinates		Code	Inverts	Diams				
E.	418348.295	1.336	2	Gully	134.725	150	1500	Type C	D400
N.	417958.518	0	2.000	134.650	225				
		0	2.000	134.650	225				
S5	137.594		1	2.000	134.319	225	1500	Type A	D400
	Depth To Soffit		2	1.002	135.744	150			
	Coordinates		Code	Inverts	Diams				
E.	418337.344	3.050	1	2.000	134.319	225	1500	Type A	D400
N.	418006.989	0	1.003	134.244	300				
		0	1.003	134.244	300				
S6	136.944		1	1.003	134.122	300	1200	Type B	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418319.039	2.522	1	1.003	134.122	300	1200	Type B	D400
N.	418005.682	0	1.004	134.122	300				
		0	1.004	134.122	300				

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types		
			Code	Inverts	Diams		Manhole	Cover	
S25	112.265		1	1.020	110.237	225	1200	Type B	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418151.838	1.803	1	1.020	110.237	225	1200	Type B	D400
N.	417848.151	0	1.021	110.237	225				
		0	1.021	105.546	225				
S26	107.770		1	1.021	105.546	225	1200	Type B	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418113.264	1.999	1	1.021	105.546	225	1200	Type B	D400
N.	417821.459	0	1.022	105.546	225				
		0	1.022	103.782	225				
S27	106.583		1	1.022	103.782	225	1200	Type B	D400
	Depth To Soffit		Code	Inverts	Diams				
	Coordinates		Code	Inverts	Diams				
E.	418095.712	2.576	1	1.022	103.782	225	1200	Type B	D400
N.	417823.236	0	1.023	103.782	225				
		0	1.023	99.300	225				
S28	100.650(T.B.C.)		1	1.023	99.300	225	1350	Type C	