



Haigh Huddleston & Associates

Civil & Structural Engineering Consultants

Firth Buildings, 99 - 101 Leeds Road, Dewsbury, WF12 7BU

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E20/7738/HH/001

4 November 2020

FAO Marcus Walsh

Martin Walsh Architectural
Firth Buildings
99-103 Leeds Road
Dewsbury
WF12 7BU

Dear Marcus,

Re: Development at Heaton Grange, Hanging Heaton for Wharfedale Ltd.

Please find attached a copy of proposed drainage feasibility and Surface Water calculations designed in accordance with the following criteria:

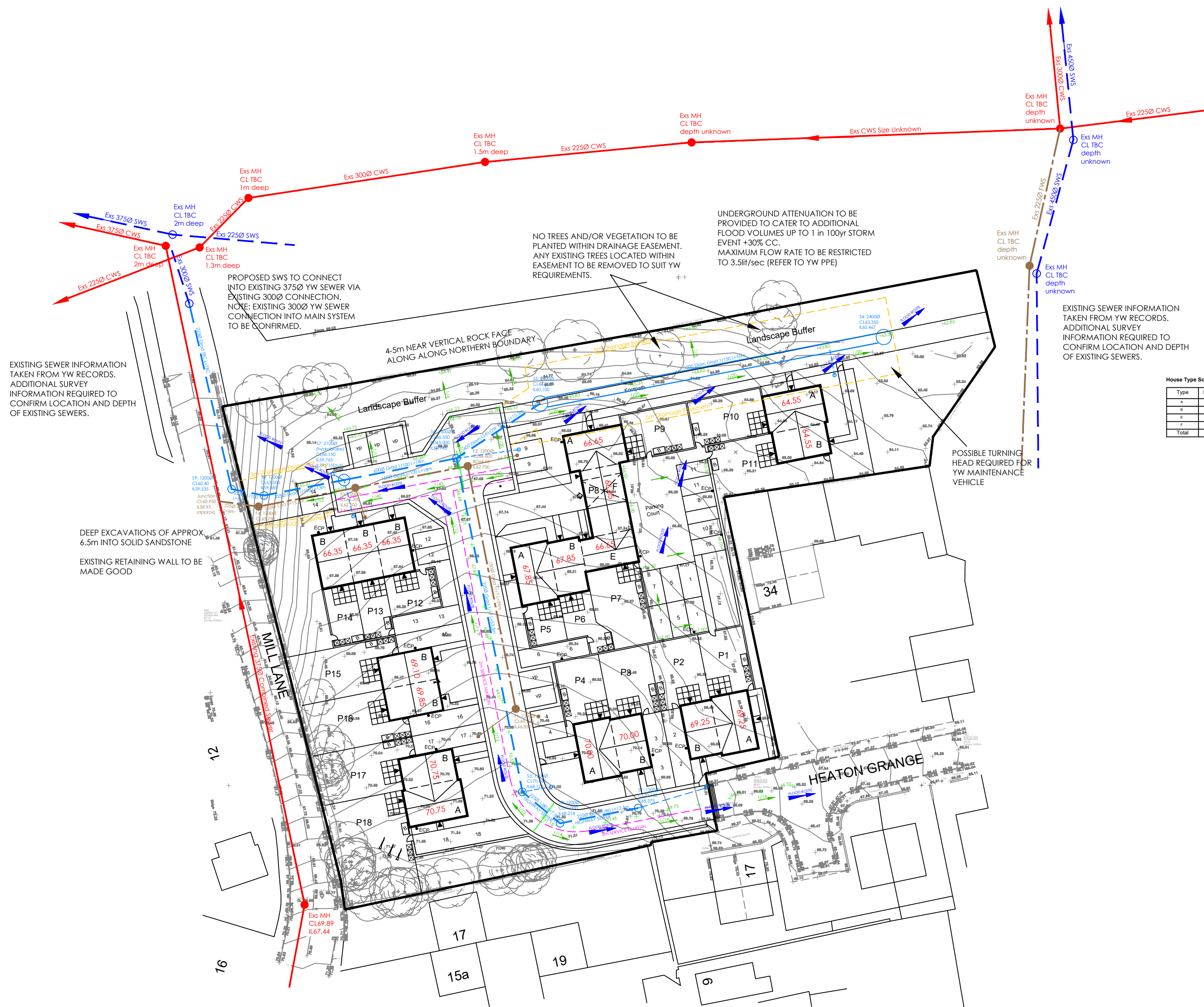
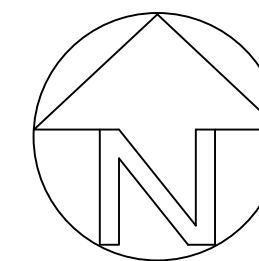
- Soak-away testing has been carried out and proved to have adequate infiltration results. However, the risk of re-emergence of surface water from the soakaways through the vertical rock face situated along the northern boundary is highly likely and will have an impact on the commercial units adjacent to the site. Therefore, the use of soak-aways has been discounted.
- The maximum allowable discharge rate proposed for the new development has been restricted to 3.5lit/sec as agreed with Yorkshire Water. Refer to the Pre Planning Enquiry attached.
- Underground attenuation has been provided to cater for additional flood volumes up to a 1 in 100yr storm event plus 30% increase for climate change.
- Vehicle access and turning area could be required along the footpath link for future maintenance to the attenuation. This will be confirmed by Yorkshire Water.
- The proposed surface water system is shown to connect into the existing 300mm diameter surface water public sewer located along Mill Lane approximately 20m north of the development. Kindly note, the attached Yorkshire Water records shows this existing sewer connects into the existing combined sewer -Additional survey works will be required to clarify the connection before final design stage.
- The proposed foul water system is to connect into the existing 375mm diameter combined public sewer located along Mill Lane. Again, the location and depth of this sewer has been taken from the Yorkshire Water records and will need further survey information.
- Deep excavations of approx. 6.5m into solid sandstone will be required where the proposed sewers are located along the northern boundary.
- Accommodation works to the existing retaining wall along the western boundary will be required due to the proposed sewer connections into Mill Lane.
- Existing service records along Mill Lane to be obtained to determine any potential clashes with the new sewer connections.

Should you have any further queries please do not hesitate to contact me direct.

Yours sincerely,

HELEN HOSSANEE

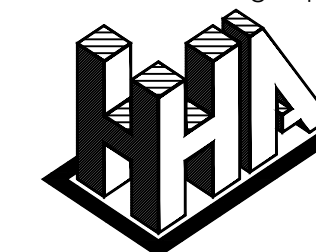
h.hossanee@haighhuddleston.co.uk



House Type Schedule		
Type	Beds	No.
A	3	6
B	2	10
E	3	1
F	2	1
Total	41	18

Rev A SWS design updated to suit drainage calculations

03.11.20 HH



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Client
WHARFDALE LTD

Project
HEATON GRANGE, HANGING HEATON

Detail
PRELIMINARY ENGINEERING FEASIBILITY (2)

Dwn HH	Chkd	Date Oct-20	Scale 1:500@A2	Dwg No. E20/7738/002A
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Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	75.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.350	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	4.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
1	0.017	4.00	70.100	1200	1.725
2	0.000		71.000	1200	2.782
3	0.072	4.00	70.465	1200	2.340
4	0.073	4.00	63.350	2400	2.883
5	0.035	4.00	66.100	2400	6.000
6	0.093	4.00	66.550	1500	6.605
7			66.150	2100	6.435
8			63.500	1200	3.915
9			60.400	1200	0.865

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	1	2	12.500	0.600	68.375	68.218	0.157	79.6	225	4.14	67.0
1.001	2	3	7.500	0.600	68.218	68.125	0.093	80.6	225	4.23	66.5
1.002	3	6	53.500	0.600	68.125	65.000	3.125	17.1	225	4.51	64.9
2.000	4	5	55.000	0.600	60.467	60.100	0.367	150.0	1500	4.26	66.3
2.001	5	6	15.500	0.600	60.100	59.945	0.155	100.0	600	4.37	65.7
1.003	6	7	18.000	0.600	59.945	59.765	0.180	100.0	600	4.63	64.2
1.004	7	8	13.000	0.600	59.715	59.585	0.130	100.0	225	4.80	63.3
1.005	8	9	5.000	0.600	59.585	59.535	0.050	100.0	225	4.86	63.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.466	58.3	3.1	1.500	2.557	0.017	0.0	35	0.779
1.001	1.457	57.9	3.1	2.557	2.115	0.017	0.0	35	0.774
1.002	3.177	126.3	15.7	2.115	1.325	0.089	0.0	53	2.180
2.000	3.500	6184.5	13.1	1.383	4.500	0.073	0.0	49	0.744
2.001	2.435	688.5	19.2	5.400	6.005	0.108	0.0	68	1.094
1.003	2.435	688.5	50.5	6.005	5.785	0.290	0.0	109	1.451
1.004	1.307	52.0	49.8	6.210	3.690	0.290	0.0	177	1.482
1.005	1.307	52.0	49.5	3.690	0.640	0.290	0.0	176	1.481

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	12.500	79.6	225	Circular_Default Sewer Type	70.100	68.375	1.500	71.000	68.218	2.557
1.001	7.500	80.6	225	Circular_Default Sewer Type	71.000	68.218	2.557	70.465	68.125	2.115
1.002	53.500	17.1	225	Circular_Default Sewer Type	70.465	68.125	2.115	66.550	65.000	1.325
2.000	55.000	150.0	1500	Circular_Default Sewer Type	63.350	60.467	1.383	66.100	60.100	4.500
2.001	15.500	100.0	600	Circular_Default Sewer Type	66.100	60.100	5.400	66.550	59.945	6.005
1.003	18.000	100.0	600	Circular_Default Sewer Type	66.550	59.945	6.005	66.150	59.765	5.785
1.004	13.000	100.0	225	Circular_Default Sewer Type	66.150	59.715	6.210	63.500	59.585	3.690
1.005	5.000	100.0	225	Circular_Default Sewer Type	63.500	59.585	3.690	60.400	59.535	0.640

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1200	Manhole	Adoptable	2	1200	Manhole	Adoptable
1.001	2	1200	Manhole	Adoptable	3	1200	Manhole	Adoptable
1.002	3	1200	Manhole	Adoptable	6	1500	Manhole	Adoptable
2.000	4	2400	Manhole	Adoptable	5	2400	Manhole	Adoptable
2.001	5	2400	Manhole	Adoptable	6	1500	Manhole	Adoptable
1.003	6	1500	Manhole	Adoptable	7	2100	Manhole	Adoptable
1.004	7	2100	Manhole	Adoptable	8	1200	Manhole	Adoptable
1.005	8	1200	Manhole	Adoptable	9	1200	Manhole	Adoptable

Simulation Settings

Rainfall Methodology	FSR	Drain Down Time (mins)	240
FSR Region	England and Wales	Additional Storage (m³/ha)	20.0
M5-60 (mm)	19.000	Check Discharge Rate(s)	✓
Ratio-R	0.350	1 year (l/s)	
Winter CV	0.840	30 year (l/s)	
Analysis Speed	Normal	100 year (l/s)	
Skip Steady State	x	Check Discharge Volume	x

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440 | 2160

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
30	0	0	0
100	0	0	0
100	30	0	0
100	40	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 years	1.95
Greenfield Method	IH124	Growth Factor 100 years	2.48
Positively Drained Area (ha)		Betterment (%)	0
SAAR (mm)		QBar	
Soil Index	1	Q 1 year (l/s)	
SPR	0.10	Q 30 year (l/s)	
Region	1	Q 100 year (l/s)	
Growth Factor 1 year	0.85		

Node 7 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	59.715	Product Number	CTL-SHE-0078-3500-1800-3500
Design Depth (m)	1.800	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	3.5	Min Node Diameter (mm)	1200

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
2 year 15 minute winter	90.186	36.365	100 year 480 minute winter	21.222	8.441
2 year 30 minute winter	59.656	24.055	100 year 600 minute winter	17.782	7.118
2 year 60 minute winter	38.595	15.352	100 year 720 minute winter	15.521	6.190
2 year 120 minute winter	24.151	9.607	100 year 960 minute winter	12.476	4.959
2 year 180 minute winter	18.357	7.267	100 year 1440 minute winter	9.084	3.622
2 year 240 minute winter	14.969	5.954	100 year 2160 minute winter	6.582	2.640
2 year 360 minute winter	11.316	4.480	100 year +30% CC 15 minute winter	287.012	115.731
2 year 480 minute winter	9.189	3.655	100 year +30% CC 30 minute winter	192.955	77.804
2 year 600 minute winter	7.796	3.121	100 year +30% CC 60 minute winter	125.542	49.937
2 year 720 minute winter	6.877	2.743	100 year +30% CC 120 minute winter	77.823	30.956
2 year 960 minute winter	5.627	2.237	100 year +30% CC 180 minute winter	58.245	23.058
2 year 1440 minute winter	4.209	1.678	100 year +30% CC 240 minute winter	46.702	18.577
2 year 2160 minute winter	3.139	1.259	100 year +30% CC 360 minute winter	34.495	13.656
30 year 15 minute winter	170.714	68.836	100 year +30% CC 480 minute winter	27.588	10.974
30 year 30 minute winter	113.654	45.828	100 year +30% CC 600 minute winter	23.116	9.254
30 year 60 minute winter	73.503	29.238	100 year +30% CC 720 minute winter	20.177	8.046
30 year 120 minute winter	45.534	18.112	100 year +30% CC 960 minute winter	16.219	6.447
30 year 180 minute winter	34.187	13.534	100 year +30% CC 1440 minute winter	11.809	4.709
30 year 240 minute winter	27.533	10.952	100 year +30% CC 2160 minute winter	8.557	3.432
30 year 360 minute winter	20.475	8.106	100 year +40% CC 15 minute winter	309.090	124.633
30 year 480 minute winter	16.451	6.544	100 year +40% CC 30 minute winter	207.797	83.789
30 year 600 minute winter	13.837	5.539	100 year +40% CC 60 minute winter	135.199	53.779
30 year 720 minute winter	12.116	4.832	100 year +40% CC 120 minute winter	83.809	33.337
30 year 960 minute winter	9.792	3.892	100 year +40% CC 180 minute winter	62.725	24.832
30 year 1440 minute winter	7.187	2.866	100 year +40% CC 240 minute winter	50.295	20.006
30 year 2160 minute winter	5.254	2.108	100 year +40% CC 360 minute winter	37.148	14.706
100 year 15 minute winter	220.779	89.024	100 year +40% CC 480 minute winter	29.710	11.818
100 year 30 minute winter	148.427	59.849	100 year +40% CC 600 minute winter	24.894	9.966
100 year 60 minute winter	96.571	38.413	100 year +40% CC 720 minute winter	21.729	8.665
100 year 120 minute winter	59.863	23.812	100 year +40% CC 960 minute winter	17.466	6.943
100 year 180 minute winter	44.804	17.737	100 year +40% CC 1440 minute winter	12.717	5.071
100 year 240 minute winter	35.925	14.290	100 year +40% CC 2160 minute winter	9.215	3.696
100 year 360 minute winter	26.534	10.505			

Results for 2 year Critical Storm Duration. Lowest mass balance: 98.50%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	68.410	0.035	3.0	0.0471	0.0000	OK
15 minute winter	2	10	68.253	0.035	3.0	0.0394	0.0000	OK
15 minute winter	3	10	68.179	0.054	15.6	0.0938	0.0000	OK
120 minute winter	4	108	60.578	0.111	5.9	0.5573	0.0000	OK
120 minute winter	5	116	60.578	0.478	11.1	2.2177	0.0000	OK
120 minute winter	6	116	60.578	0.633	11.3	1.2971	0.0000	SURCHARGED
120 minute winter	7	116	60.578	0.863	12.6	2.9899	0.0000	SURCHARGED
15 minute winter	8	125	59.623	0.038	2.8	0.0425	0.0000	OK
30 minute winter	9	176	59.570	0.035	2.8	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	3.0	0.762	0.052	0.0493	
15 minute winter	2	1.001	3	3.0	0.544	0.052	0.0418	
15 minute winter	3	1.002	6	15.5	2.157	0.123	0.3847	
120 minute winter	4	2.000	5	4.1	0.362	0.001	14.8000	
120 minute winter	5	2.001	6	-5.1	0.359	-0.007	4.0481	
120 minute winter	6	1.003	7	12.6	0.562	0.018	5.0702	
120 minute winter	7	Hydro-Brake®	8	2.8				
15 minute winter	8	1.005	9	2.8	0.676	0.054	0.0208	22.1

Results for 30 year Critical Storm Duration. Lowest mass balance: 98.50%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	68.423	0.048	5.6	0.0644	0.0000	OK
15 minute winter	2	10	68.267	0.049	5.6	0.0552	0.0000	OK
15 minute winter	3	10	68.200	0.075	29.5	0.1309	0.0000	OK
180 minute winter	4	176	61.021	0.554	15.3	2.7887	0.0000	OK
180 minute winter	5	172	61.022	0.922	14.5	4.2769	0.0000	SURCHARGED
180 minute winter	6	172	61.022	1.077	14.5	2.2059	0.0000	SURCHARGED
180 minute winter	7	172	61.022	1.307	9.3	4.5261	0.0000	SURCHARGED
180 minute winter	8	172	59.624	0.039	3.0	0.0441	0.0000	OK
180 minute winter	9	172	59.572	0.037	3.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	5.6	0.891	0.096	0.0787	
15 minute winter	2	1.001	3	5.6	0.633	0.097	0.0671	
15 minute winter	3	1.002	6	29.4	2.580	0.233	0.6107	
180 minute winter	4	2.000	5	-10.0	0.321	-0.002	47.4580	
180 minute winter	5	2.001	6	-11.6	0.349	-0.017	4.3660	
180 minute winter	6	1.003	7	9.3	0.556	0.013	5.0702	
180 minute winter	7	Hydro-Brake®	8	3.0				
180 minute winter	8	1.005	9	3.0	0.690	0.058	0.0219	68.2

Results for 100 year Critical Storm Duration. Lowest mass balance: 98.50%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	68.431	0.056	7.3	0.0738	0.0000	OK
15 minute winter	2	10	68.275	0.057	7.3	0.0642	0.0000	OK
15 minute winter	3	10	68.211	0.086	38.1	0.1504	0.0000	OK
240 minute winter	4	228	61.329	0.862	16.2	4.3334	0.0000	OK
180 minute winter	5	176	61.329	1.229	20.7	5.7033	0.0000	SURCHARGED
180 minute winter	6	176	61.329	1.384	19.0	2.8367	0.0000	SURCHARGED
180 minute winter	7	176	61.330	1.615	13.0	5.5939	0.0000	SURCHARGED
180 minute winter	8	176	59.626	0.041	3.3	0.0464	0.0000	OK
180 minute winter	9	176	59.573	0.038	3.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	7.3	0.947	0.125	0.0966	
15 minute winter	2	1.001	3	7.3	0.676	0.126	0.0818	
15 minute winter	3	1.002	6	38.1	2.766	0.301	0.7362	
240 minute winter	4	2.000	5	-10.1	0.290	-0.002	71.1705	
180 minute winter	5	2.001	6	-15.4	0.364	-0.022	4.3660	
180 minute winter	6	1.003	7	13.0	0.518	0.019	5.0702	
180 minute winter	7	Hydro-Brake®	8	3.3				
180 minute winter	8	1.005	9	3.3	0.709	0.064	0.0235	74.4

Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 98.50%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	68.439	0.064	9.5	0.0848	0.0000	OK
15 minute winter	2	10	68.284	0.066	9.5	0.0746	0.0000	OK
15 minute winter	3	10	68.225	0.100	49.5	0.1744	0.0000	OK
240 minute winter	4	232	62.143	1.676	21.1	8.4284	0.0000	SURCHARGED
240 minute winter	5	232	62.143	2.043	20.0	9.4799	0.0000	SURCHARGED
240 minute winter	6	232	62.143	2.198	19.8	4.5030	0.0000	SURCHARGED
240 minute winter	7	232	62.143	2.428	12.2	8.4095	0.0000	SURCHARGED
240 minute winter	8	232	59.630	0.045	4.0	0.0511	0.0000	OK
240 minute winter	9	232	59.577	0.042	4.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	9.5	1.005	0.163	0.1183	
15 minute winter	2	1.001	3	9.5	0.717	0.164	0.1001	
15 minute winter	3	1.002	6	49.6	2.963	0.392	0.8951	
240 minute winter	4	2.000	5	-13.1	0.297	-0.002	96.8266	
240 minute winter	5	2.001	6	-16.2	0.357	-0.024	4.3660	
240 minute winter	6	1.003	7	12.2	0.513	0.018	5.0702	
240 minute winter	7	Hydro-Brake®	8	4.0				
240 minute winter	8	1.005	9	4.0	0.746	0.077	0.0270	94.2

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.50%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	10	68.441	0.066	10.2	0.0881	0.0000	OK
15 minute winter	2	10	68.287	0.069	10.2	0.0777	0.0000	OK
15 minute winter	3	10	68.229	0.104	53.4	0.1821	0.0000	OK
240 minute winter	4	232	62.876	2.409	22.8	12.1192	0.0000	SURCHARGED
240 minute winter	5	232	62.876	2.776	21.2	12.8852	0.0000	SURCHARGED
240 minute winter	6	232	62.876	2.931	21.3	6.0065	0.0000	SURCHARGED
240 minute winter	7	232	62.876	3.161	12.9	10.9512	0.0000	SURCHARGED
240 minute winter	8	232	59.633	0.048	4.6	0.0545	0.0000	OK
240 minute winter	9	232	59.580	0.045	4.6	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	10.2	1.021	0.175	0.1250	
15 minute winter	2	1.001	3	10.2	0.727	0.176	0.1058	
15 minute winter	3	1.002	6	53.4	3.019	0.422	0.9459	
240 minute winter	4	2.000	5	-14.5	0.307	-0.002	96.8266	
240 minute winter	5	2.001	6	-17.2	0.369	-0.025	4.3660	
240 minute winter	6	1.003	7	12.9	0.491	0.019	5.0702	
240 minute winter	7	Hydro-Brake®	8	4.6				
240 minute winter	8	1.005	9	4.6	0.771	0.088	0.0295	99.6



YorkshireWater

Mr C MacDonald
Haigh Huddleston & Associates Ltd
Firth Buildings
99-101 Leeds Road
Dewsbury
WF12 7BU
c.macdonald@haighhuddleston.co.uk

Yorkshire Water Services
Developer Services
Pre-Development Team
PO BOX 52
Bradford
BD3 7AY

Tel: 0345 120 8482
Fax:

Your Ref:
Our Ref: W012049

Email:
technical.sewerage@yorkshirewater.co.uk

For telephone enquiries ring:
Chris Roberts on 0345 120 8482

27th September 2020

Dear Mr MacDonald,

Heaton Grange, Hanging Heaton, Dewsbury, WF17 6EN - Pre-Planning Sewerage Enquiry for Residential T936860

Thank you for your recent enquiry and remittance. Our official VAT receipt has been sent to you under separate cover. Please find enclosed a complimentary extract from the Statutory Sewer Map which indicates the recorded position of the public sewers. Please note that as of October 2011 and the private to public sewer transfer, there are many uncharted Yorkshire Water assets currently not shown on our records.

The following comments reflect our view, with regard to the public sewer network only, based on a 'desk top' study of the site and are valid for a maximum period of twelve months:

Development of the site should take place with separate systems for foul and surface water drainage. The separate systems should extend to the points of discharge to be agreed.

Foul Water

Foul water domestic waste can discharge to the 375 mm diameter public combined sewer recorded in Mill Lane, at a point to the north west of the site.

Surface Water

The developer's attention is drawn to Requirement H3 of the Building Regulations 2000. This establishes a preferred hierarchy for surface water disposal. Consideration should firstly be given to discharge to soakaway, infiltration system and watercourse in that priority order.

Sustainable Drainage Systems (SuDS), for example the use of soakaways and/or permeable hardstanding etc, may be a suitable solution for surface water disposal appropriate in this situation. You are advised to seek comments on the suitability of SuDS in this instance from the appropriate authorities.

As a last resort and subject to providing satisfactory evidence as to why the other methods of surface water disposal have been discounted, curtilage surface water may discharge to the 300 mm diameter public surface water sewer recorded in Mill Lane., at a point to the north west of the site.

The surface water discharge from the site to be restricted to not greater than 3.5 (three point five) litres/second. This permission is not an acceptance in respect to any planning conditions imposed under the Grant of Planning Permission.



YorkshireWater

Please note further restrictions on surface water disposal from the site may be imposed by other parties. You are strongly advised to seek advice/comments from the Environment Agency/Land Drainage Authority/Internal Drainage Board, with regard to surface water disposal from the site.

Other Observations

Any new connection to an existing public sewer will require the prior approval of Yorkshire Water. You may apply on line or obtain an application form from our website (www.yorkshirewater.com) or by telephoning 0345 120 84 82.

An off-site foul and surface water sewer may be required which may be provided by the developer and considered for adoption under Section 104 of the Water Industry Act 1991. Please telephone 0345 120 84 82 for advice on sewer adoptions. Alternatively, the developer may in certain circumstances be able to requisition off-site sewers under Section 98 of the Water Industry Act 1991 for which an application must be made in writing. For further information, please telephone 0345 120 84 82.

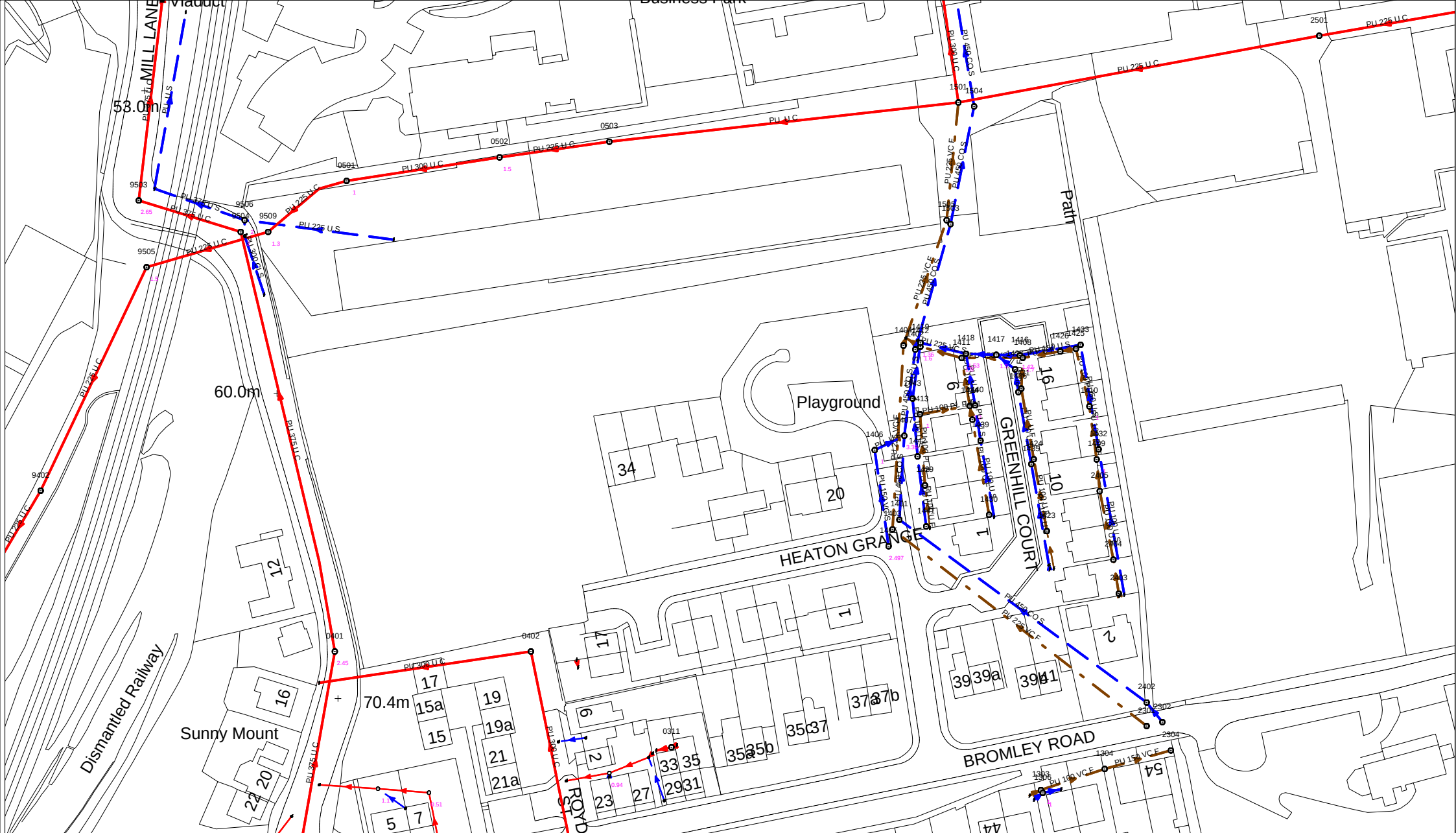
Prospectively adoptable sewers and pumping stations must be designed and constructed in accordance with the WRc publication "Sewers for Adoption - a design and construction guide for developers" 6th Edition as supplemented by Yorkshire Water's requirements, pursuant to an agreement under Section 104 of the Water Industry Act 1991. An application to enter into a Section 104 agreement must be made in writing prior to any works commencing on site. Please contact our Developer Services Team (telephone 0345 120 84 82) for further information.

All the above comments are based upon the information and records available at the present time and is subject to formal planning approval agreement. The information contained in this letter together with that shown on any extract from the Statutory Sewer Map that may be enclosed is believed to be correct and is supplied in good faith. Please note that capacity in the public sewer network is not reserved for specific future development. It is used up on a 'first come, first served' basis. You should visit the site and establish the line and level of any public sewers affecting your proposals before the commencement of any design work.

Kind Regards



Chris Roberts
Pre-Development Technician
Developer Services
Tel: 0345 1 20 84 82



425006 : 423420  YorkshireWater	Map Name : SE2423SE Yorkshire Water, PO Box 500, Halifax Road, Bradford BD6 2LZ Contact Name : YorMap Advisor C ROBERTS Contact Tel : 87 2582	Title Notes (Ody) COPYRIGHT STATEMENTS: Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown copyright and database 2014. All rights reserved Ordnance Survey Licence number 100022432	Partial Key Foul Sewer = F Combined Sewer = C Surface Water Sewer = SW Trade Sewer = TD Partially Separate = PS Date Req : 27/09/2020, 11:29:25 Source : Sewer Network Enquiry	This plan is furnished as a general guide only and no warranty as to its correctness is given or implied. This plan must not be relied upon in the event of excavations or other works made in the vicinity of public sewers. No house or property connections are shown. Date Gen : 27/09/2020, 11:30:56
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