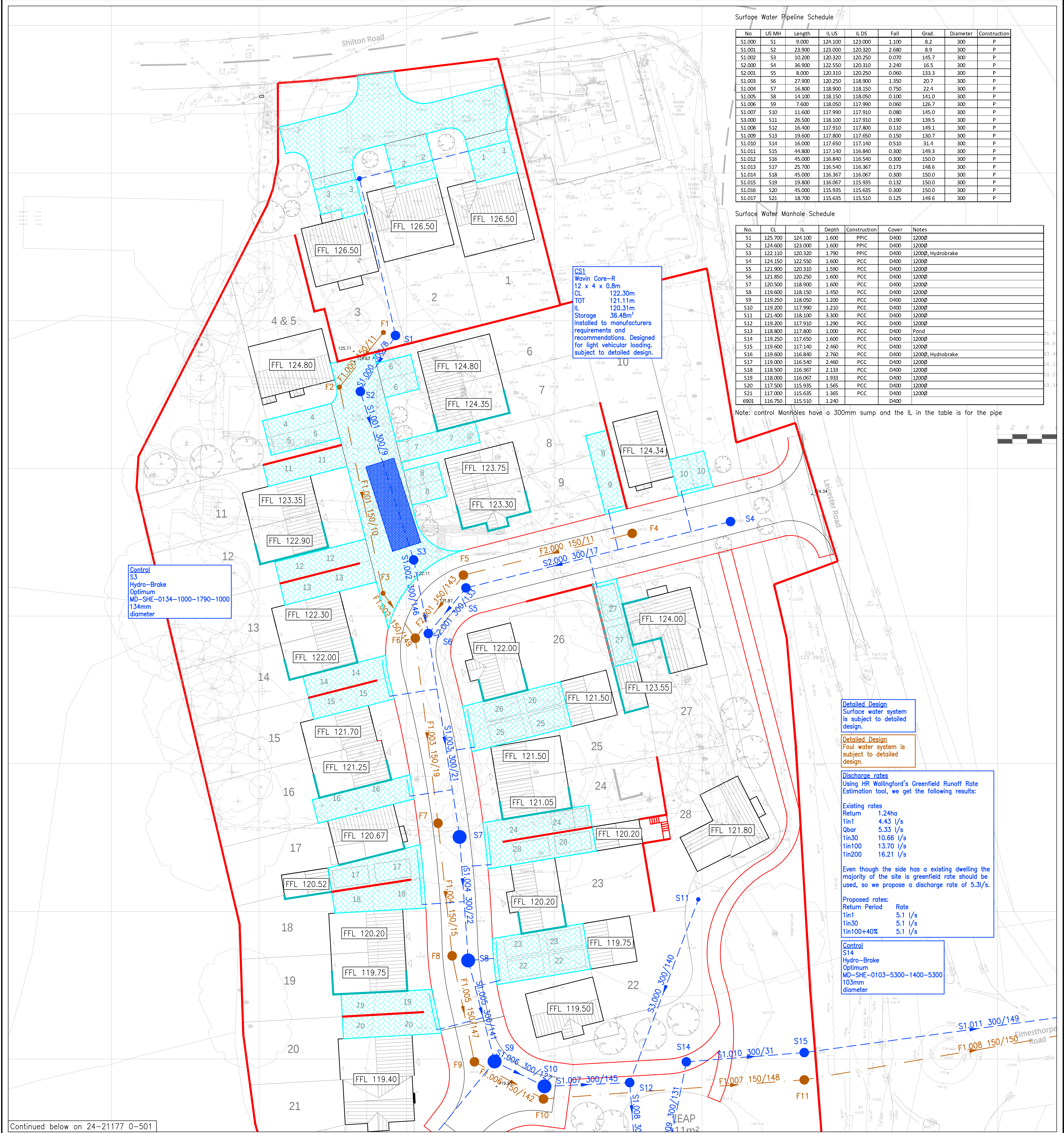




No	US MH	Length	IL US	IL DS	Fall	Grad.	Diameter	Construction
S1.000	S1	9.000	124.100	123.000	1.100	8.2	300	P
S1.001	S2	23.900	123.000	120.320	2.680	8.9	300	P
S1.002	S3	10.200	120.320	120.250	0.070	145.7	300	P
S2.000	S4	36.900	122.550	120.310	2.240	16.5	300	P
S2.001	S5	8.000	120.310	120.250	0.060	133.3	300	P
S1.003	S6	27.900	120.250	118.900	1.350	20.7	300	P
S1.004	S7	16.800	118.900	118.150	0.750	22.4	300	P
S1.005	S8	14.100	118.150	118.050	0.100	141.0	300	P
S1.006	S9	7.600	118.050	117.990	0.060	126.7	300	P
S1.007	S10	11.600	117.990	117.910	0.080	145.0	300	P
S3.000	S11	26.500	118.100	117.910	0.190	139.5	300	P
S1.008	S12	16.400	117.910	117.800	0.110	149.1	300	P
S1.009	S13	19.600	117.800	117.650	0.150	130.7	300	P
S1.010	S14	16.000	117.650	117.140	0.510	31.4	300	P
S1.011	S15	44.800	117.140	116.840	0.300	149.3	300	P
S1.012	S16	45.000	116.840	116.540	0.300	150.0	300	P
S1.013	S17	25.700	116.540	116.367	0.173	148.6	300	P
S1.014	S18	45.000	116.367	116.067	0.300	150.0	300	P
S1.015	S19	19.800	116.067	115.935	0.132	150.0	300	P
S1.016	S20	45.000	115.935	115.635	0.300	150.0	300	P
S1.017	S21	18.700	115.635	115.510	0.125	149.6	300	P

No.	CL	IL	Depth	Construction	Cover	Notes
S1	125.700	124.100	1.600	PPIC	D400	1200Ø
S2	124.600	123.000	1.600	PPIC	D400	1200Ø
S3	122.110	120.320	1.790	PPIC	D400	1200Ø, Hydrobrake
S4	124.150	122.550	1.600	PCC	D400	1200Ø
S5	121.900	120.310	1.590	PCC	D400	1200Ø
S6	121.850	120.250	1.600	PCC	D400	1200Ø
S7	120.500	118.900	1.600	PCC	D400	1200Ø
S8	119.600	118.150	1.450	PCC	D400	1200Ø
S9	119.250	118.050	1.200	PCC	D400	1200Ø
S10	119.200	117.990	1.210	PCC	D400	1200Ø
S11	121.400	118.100	3.300	PCC	D400	1200Ø
S12	119.200	117.910	1.290	PCC	D400	1200Ø
S13	118.800	117.800	1.000	PCC	D400	Pond
S14	119.250	117.650	1.600	PCC	D400	1200Ø
S15	119.600	117.140	2.460	PCC	D400	1200Ø
S16	119.600	116.840	2.760	PCC	D400	1200Ø, Hydrobrake
S17	119.000	116.540	2.460	PCC	D400	1200Ø
S18	118.500	116.367	2.133	PCC	D400	1200Ø
S19	118.000	116.067	1.933	PCC	D400	1200Ø
S20	117.500	115.935	1.565	PCC	D400	1200Ø
S21	117.000	115.635	1.365	PCC	D400	1200Ø
6901	116.750	115.510	1.240		D400	

Note: control Manholes have a 300mm sump and the IL in the table is for the pipe

Detailed Design
Surface water system
is subject to detailed
design.

Detailed Design
Foul water system is
subject to detailed
design.

Discharge rates
Using HR Wallingford's Greenfield Runoff Rate
Estimation tool, we get the following results:

Existing rates
Return 1.24ha
1in1 4.43 l/s
Qbar 5.33 l/s
1in30 10.66 l/s
1in100 13.70 l/s
1in200 16.21 l/s

Even though the site has an existing dwelling the
majority of the site is greenfield rate should be
used, so we propose a discharge rate of 5.3l/s.

Proposed rates:
Return Period Rate
1in1 5.1 l/s
1in30 5.1 l/s
1in100+40% 5.1 l/s

Control
S14
Hydro-Brake
Optimum
MD-SHE-0103-5300-1400-5300
103mm
diameter

No	US MH	Length	IL US	IL DS	Fall	Grad.	Diameter	Construction
F1.000	F1	9.490	123.500	122.700	0.800	11.9	150	P
F1.001	F2	28.540	122.700	120.005	2.695	10.6	150	P
F1.002	F3	7.480	120.005	119.950	0.055	136.0	150	P
F2.000	F4	23.550	122.100	120.025	2.075	11.3	150	P
F2.001	F5	10.740	120.025	119.950	0.075	143.2	150	P
F1.003	F6	25.240	119.950	118.620	1.330	19.0	150	P
F1.004	F7	18.070	118.620	117.425	1.195	15.1	150	P
F1.005	F8	14.670	117.425	117.325	0.100	146.7	150	P
F1.006	F9	10.610	117.325	117.250	0.075	141.5	150	P
F1.007	F10	35.410	117.250	117.010	0.240	147.5	150	P
F1.008	F11	45.000	117.010	116.710	0.300	150.0	150	P
F1.009	F12	43.830	116.710	116.415	0.295	148.6	150	P
F1.010	F13	24.760	116.415	116.250	0.165	150.1	150	P
F1.011	F14	45.000	116.250	115.950	0.300	150.0	150	P
F1.012	F15	22.500	115.950	115.800	0.150	150.0	150	P
F1.013	F16	45.000	115.800	115.500	0.300	150.0	150	P
F1.014	F17	21.120	115.500	115.350	0.150	140.8	150	P

No.	CL	IL	Depth	Construction	Cover	Notes
F1	125.700	123.500	2.200	PPIC	D400	450Ø
F2	124.600	122.700	1.900	PPIC	D400	1200Ø
F3	122.110	120.005	2.105	PPIC	D400	1200Ø
F4	124.000	122.100	1.900	PPIC	D400	1200Ø
F5	121.900	120.025	1.875	PPIC	D400	1200Ø
F6	121.850	119.950	1.900	PPIC	D400	1200Ø
F7	120.520	118.620	1.900	PPIC	D400	1200Ø
F8	119.600	117.425	2.175	PPIC	D400	1200Ø
F9	119.250	117.325	1.925	PPIC	D400	1200Ø
F10	119.200	117.250	1.950	PPIC	D400	1200Ø
F11	119.600	117.010	2.590	PPIC	D400	1200Ø
F12	119.600	116.710	2.890	PPIC	D400	1200Ø
F13	119.000	116.415	2.585	PPIC	D400	1200Ø
F14	118.500	116.250	2.250	PPIC	D400	1200Ø
F15	118.000	115.950	2.050	PPIC	D400	1200Ø
F16	117.500	115.800	1.700	PPIC	D400	1200Ø
F17	117.000	115.500	1.500	PPIC	D400	1200Ø
6902	116.800	115.350	1.450	Brick		

SCALE BAR TEST
1:250 15m @ 1:250 1:250
All dimensions to be verified by accurate site measurement prior to commencing work or ordering materials.

DO NOT SCALE
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NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DWS DRAWINGS, CALCULATIONS, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE) AND, ALL OTHER RELEVANT ENGINEERS, ARCHITECTS & SPECIALIST DESIGN DETAILS.
2. STANDARD NOTES & DETAILS:
Refer to drawing number 0-170 onwards for standard notes - CIVIL
Refer to drawing number 0-180 onwards for standard details - CIVIL

KEY
Surface Water Pipe (Private)
Surface Water Chamber (Private)
Permeable Paving
Attenuation Tank
Fin Drain
Foul Water Pipe (Private)
Foul Water Chamber (Private)
Existing Surface Water Sewer
Existing Foul Water Sewer
Site Boundary
Retaining Structure
Exposed Brickwork
Finished Floor Level

DRAINAGE LAYOUT - MAIN SITE
Scale 1:250

NOT FOR CONSTRUCTION

P3 LLFA comments addressed 09.07.25 LM
P2 Updated architectural layout 20.02.25 LM
P1 First issue 13.01.25 LM
Ref Revision Date By

PRELIMINARY

DWS
Consulting Engineers

Diamond Wood & Shaw Limited
The Old School • Blaby Road • Enderby • Leicester • LE19 4AR
Tel 0116 284 9999 • Email mail@dwsd.co.uk

Project Title
LEICESTER ROAD
BARWELL

Issue

Drawn LM
Scale 1:250 @ A1
Drawing Title DRAINAGE LAYOUT - MAIN SITE

Engineer LM
Checked BP
Date JAN 2025

Project No. 24-21177
Drawing No. 0-500
Revision P3

BIM Code