

Discharge rates
Taken from JMS report (C020/129/05) approved at planning. The site a greenfield, using the IH 124 Method.

Existing rates
Return 0.464ha
1in1 2.8 l/s
Qbar 3.4 l/s
1in30 6.7 l/s
1in100 8.8 l/s

Greenfield should be used and this principle has been approved at planning.

Proposed rates:
Return Period Rate
1in1 2.9 l/s
1in30 2.9 l/s
1in100+40% 3.2 l/s

CS1
Wavin Plus-R
4.5 x 16 x 0.8m
CL 115.000m
TOT 114.180m
IL 113.380m
Storage 54.72m³
Minimum of 0.64m cover.
Suitable for vehicles up to 9 tonnes only. Installed to manufacturers requirements and recommendations.

Attenuation Tank
Pipes through attenuation tanks to be perforated in a gravel trench or to use a top hat connector and use built in channels in crates.

Rodding eye
Rodding eyes to be installed with a minimum depth 500mm.

RWPs
Rainwater downpipes to be confirmed by the architect.

Permissions
S106 permission will still be needed from Severn Trent.

Connection Point assumed
IL 111.875
Existing Lateral assumed
100mmØ 1:18

Properties ICs
The ICs that serve the individual properties should be installed to suit and the maximum gradient 1 in 12.

Underdrain Connection
The underdrain connection next to bays for plot 10 has very little fall and care is needed to make the connection to the receiving pipework. The receiving pipework has a shallow gradient as well. Both pipes must be a minimum of 150mmØ.

CS2
Wavin Core-R
3.5 x 4 x 0.4m
CL 114.550m
TOT 113.780m
IL 113.380m
Storage 5.32m³
Minimum of 0.64m cover.
Suitable for vehicles up to 9 tonnes only. Installed to manufacturers requirements and recommendations.

Surface Water Pipe Table					
Pipe Ref.	In. Dia. (mm)	Length (m)	Slope	IL Upstream	IL Downstream
S1.000	141	18.725	1:163	114.020	113.905
S1.001	198	51.302	1:114	113.830	113.380
S1.002	198	10.859	1:60	113.380	113.200
S1.003	198	10.167	1:51	113.200	113.000
S1.004	198	3.238	1:46	113.000	112.930
S2.000	198	22.399	1:97	113.610	113.380
S3.000	141	6.632	1:95	113.345	113.275
S3.001	141	16.614	1:111	113.275	113.125
S3.002	141	3.083	1:62	113.125	113.075
S4.000	141	31.518	1:371	113.360	113.275

Foul Water Pipe Table					
Pipe Ref.	In. Dia. (mm)	Length (m)	Slope	IL Upstream	IL Downstream
F1.000	150	37.782	1:80	113.700	113.225
F1.001	150	10.972	1:146	113.225	113.150
F1.002	150	32.963	1:150	113.150	112.930
F1.003	150	13.567	1:151	112.930	112.840
F2.000	150	23.955	1:80	113.550	113.250
F2.001	150	8.028	1:80	113.250	113.150
F3.000	150	23.144	1:80	113.220	112.930
F4.000	150	10.095	1:80	112.966	112.840

Foul Water Structure Table		
Structure Name	Structure Details	Diameter
F1	COVER = 114.780 SUMP = 113.700 F1.000 INV IN = 113.700	0.450
F2	COVER = 115.200 SUMP = 113.225 F1.000 INV IN = 113.225 F1.001 INV OUT = 113.225	0.450
F3	COVER = 114.550 SUMP = 113.550 F2.000 INV OUT = 113.550	0.450
F4	COVER = 114.900 SUMP = 113.250 F2.000 INV IN = 113.250 F2.001 INV OUT = 113.250	0.450
F5	COVER = 115.017 SUMP = 113.150 F1.001 INV IN = 113.150 F2.001 INV IN = 113.150 F1.002 INV OUT = 113.150	0.450
F6	COVER = 115.500 SUMP = 113.220 F3.000 INV OUT = 113.220	0.450
F7	COVER = 114.630 SUMP = 112.930 F1.002 INV IN = 112.930 F3.000 INV IN = 112.930 F1.003 INV OUT = 112.930	0.450
F8	COVER = 113.810 SUMP = 112.966 F4.000 INV OUT = 112.966	0.450
F9	COVER = 114.000 SUMP = 112.840 F1.003 INV IN = 112.840 F4.000 INV IN = 112.840	0.450

Surface Water Structure Table		
Structure Name	Structure Details	Diameter
S1	COVER = 114.857 SUMP = 113.830 S1.000 INV IN = 113.905 S1.001 INV OUT = 113.830	1.200
S2	COVER = 115.412 SUMP = 113.310 S2.000 INV OUT = 113.610	0.600
S3	COVER = 114.942 SUMP = 113.080 S1.001 INV IN = 113.380 S2.000 INV IN = 113.380 S1.002 INV OUT = 113.380	1.200
S4	COVER = 114.000 SUMP = 113.060 S4.000 INV OUT = 113.360	0.600
S5	COVER = 114.795 SUMP = 112.900 S4.000 INV IN = 113.275 S1.002 INV IN = 113.200 S1.003 INV OUT = 113.200	0.600
S6	COVER = 115.450 SUMP = 113.275 S3.000 INV IN = 113.275 S3.001 INV OUT = 113.275	0.450
S7	COVER = 114.600 SUMP = 113.125 S3.001 INV IN = 113.125 S3.002 INV OUT = 113.125	0.450
S8	COVER = 114.656 SUMP = 112.700 S3.002 INV IN = 113.075 S1.003 INV IN = 113.000 S1.004 INV OUT = 113.000	1.200

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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

SCALE BAR TEST
1:200 12m @ 1:200 1:200
All dimensions to be verified by accurate site measurement prior to commencing work or ordering materials.

KEY
Surface Water Pipe (Private)
Surface Water Chamber (Private)
Rodding Eye
Non-return valve
Linear Drain
Attenuation Tank
Permeable Paving
Fin Drain
Foul Water Pipe (Private)
Foul Water Chamber (Private)
Existing Foul Water Sewer
Site Boundary

P3 AT position & PP adjusted 21.03.24 LM
P2 Minor drainage updates 23.01.24 LM
P1 First issue 18.01.24 LM

Ref Revision Date By

Issue PRELIMINARY

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Project Title
SAPCOTE ROAD, BURBAGE

Drawn LM Engineer LM Checked BP
Scale at 1:200 @ A1 Date JAN 2024

Drawing Title
DRAINAGE LAYOUT

Project No. 23-20589 Drawing No. 0-500 Revision P3
BIM Code

DRAINAGE LAYOUT
Scale 1:200