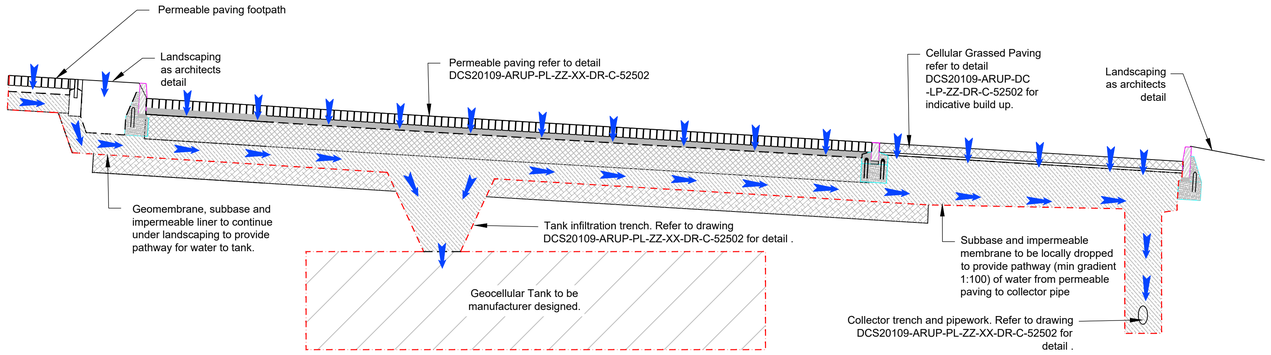
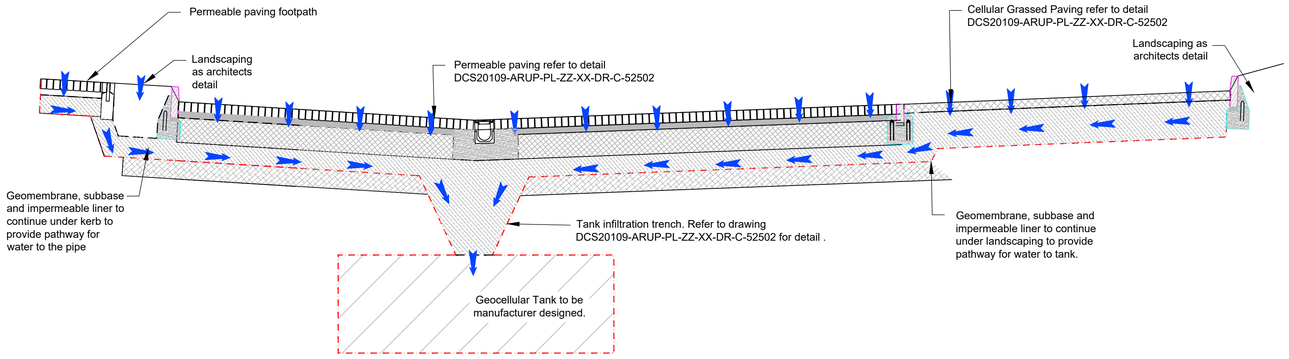
A1 - Do not scale



Section A-A



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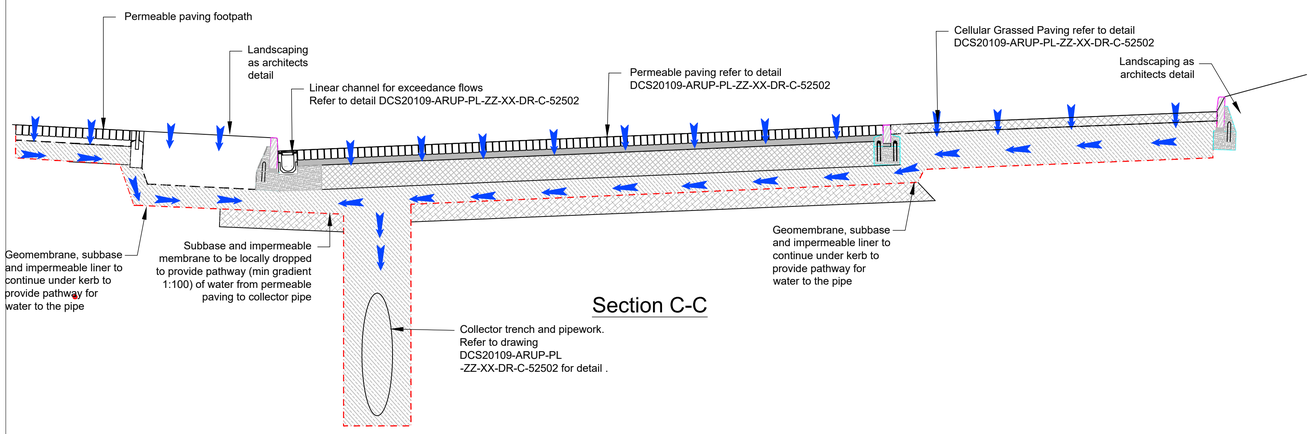

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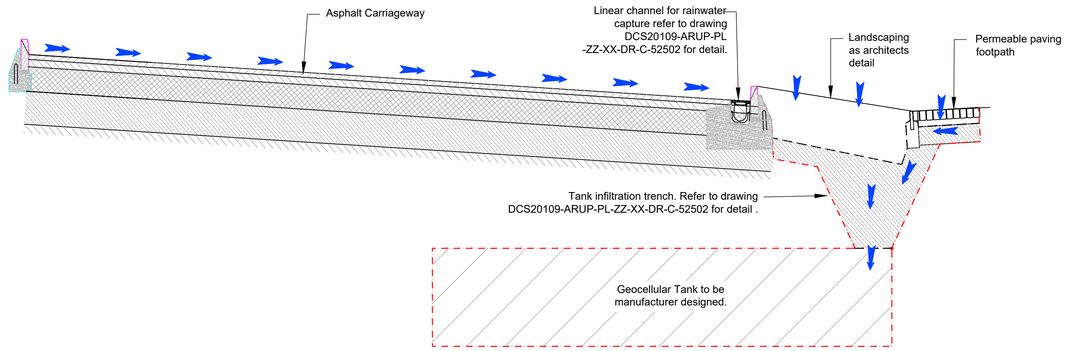
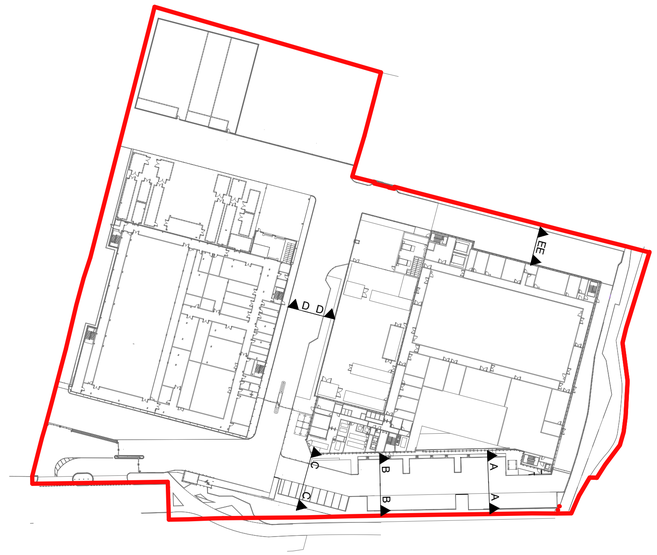
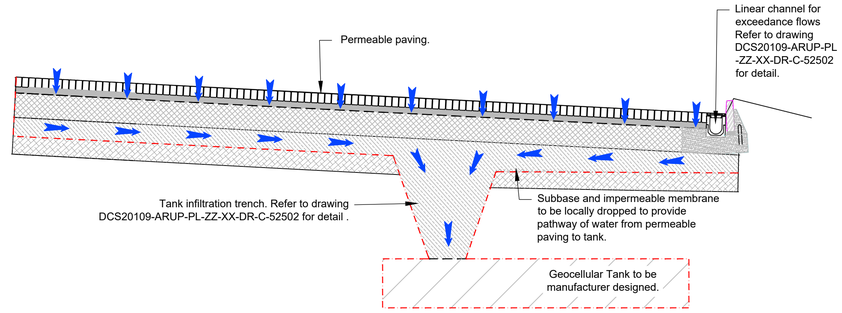


Section D-D

Section Plan





Section E-E

Notes

1. The following drawing provides an indicative cross section and water flow routes through the proposed permeable paving.
2. Refer to the following drawings and specifications for details of individual elements:
   - Drainage Layout DCS20109-ARUP-PL-ZZ-LP-DR-C-52200
   - Drainage Schedules DCS20109-ARUP-DC-ZZ-XX-DR-C-52700
   - Drainage Collector Details DCS20109-ARUP-PL-ZZ-XX-DR-C-52502
3. Drainage to be laid, bedded and backfilled in accordance with manufacturer's recommendations.
4. Surface water storage tanks to be procured by the contractor and designed by manufacturer including access and venting arrangements. Polystorm Xtra or similar approved. For standard details refer to the PSM series available on the Polystorm.com.

Key

Water flow route

Impermeable Membrane

Rev	Details	By / Chkd / App	Date
P01	Planning Submission Update	LD / CH / GM	06 / 06 / 22

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Architect

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Structural / Civil Engineer

Central Square, Forth Street Newcastle Upon Tyne NE1 3PL, United Kingdom www.arup.com

Fire Consultant

Primea House, Marina Court Maple Drive, Hinckley, Leicestershire LE10 3BF, United Kingdom www.salusbi.co.uk

Security Designer

Cottons Centre, Cottons Lane London, SE1 2QG, United Kingdom www.controlrisks.com

Project Title

London 4

Drawing Title

Underground Drainage
Permeable Paving Cross Section

Project Status

Planning

Discipline	Status Code
Civil - Drainage	**S4**

Project Number	Scale @ A1	Revision
281528	**NTS**	**P01**

Drawing Number

DCS20109-ARUP-PL-ZZ-XX-DR-C-52503

Project — Originator — Functional Breakdown — Spatial Breakdown — Level — Form — Discipline — Number

Storm Water Manhole Schedule

Manhole Name	Cover Level (m)	MH Depth to outgoing pipe invert (m)	Manhole Diam (mm)	Clear Opening (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipes In Backdrop (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Comments
S1	29.720	2.107	1200	600 x 600	SBCFS01	27.688	150		S1.000	27.613	225	Catchpit - additional 300mm sump
Tank 1	29.721	2.128			S1.000	27.593	225		S1.002	27.593	225	
					SBCB201	27.593	150					
					SBCB202	27.593	150					
					SBCFS02	27.593	150					
					Interceptor	28.215	150					
S2	29.707	2.122	1200	600 x 600	S1.001	27.585	225		S1.003	27.585	225	
					SBCFS03	27.585	150					
S3	29.695	2.157	1200	600 x 600	S1.003	27.538	225		S1.004	27.538	225	
					SBCSS01	27.538	225					
S4	29.690	2.205	1200	600 x 600	S1.004	27.485	225		S1.005	27.485	300	Catchpit - additional 300mm sump
					SBCB203	27.485	150					
Tank 2	29.669	2.209			S1.005	27.461	300		S1.006	27.460	300	
					SBCB204	27.461	150					
S5	29.625	2.192	1200	600 x 600	S1.006	27.433	300		S1.007	27.433	300	
					SBCSS02	27.433	150					
S6	29.072	1.485	1350	1200 x 675	FP102	27.587	150		S2.000	27.587	225	Catchpit - additional 300mm sump
Tank 3	29.132	1.615			S2.000	27.518	225		S2.001	27.517	300	
S7	29.123	1.615	1350	1200 x 675	S2.001	27.508	300		S2.002	27.508	300	Catchpit - additional 300mm sump
Tank 4	29.091	1.593			S2.002	27.499	300		S2.003	27.498	300	
S8	29.078	1.590	1350	1200 x 675	S2.003	27.488	300		S2.004	27.488	300	
S10	29.436	2.063	1200		S1.007	27.373	300		S1.008	27.373	375	Catchpit - additional 300mm sump
				600 x 600	S2.004	27.373	300					
Tank 5	29.485	2.156			S1.008	27.330	375		S1.009	27.330	375	
S11	29.353	2.033	1350	600 x 600	S1.009	27.320	375		S1.010	27.320	375	Catchpit - additional 300mm sump
					SBCB101	27.320	200					
					SBCB205	27.320	150					
Tank 6	29.332	2.029			S1.010	27.304	375		S1.011	27.303	375	
					SBCB102	27.423	250					
					SBCB206	27.304	150					
S12	29.318	2.060	1350	600 x 600	S1.011	27.258	375		S1.012	27.258	375	Catchpit - additional 300mm sump
					SBCB207	27.258	150					
Tank 7	29.308	2.066			S1.012	27.243	375		S1.013	27.242	375	
					SBCB103	27.418	250					
					SBCB208	27.243	150					
S13	29.736	1.425	1200	750 x 675					S3.000	28.311	150	Catchpit - additional 300mm sump
S14	29.699	2.195	1200	600 x 600	S3.000	27.579	150		S3.001	27.504	225	Catchpit - additional 300mm sump
					SBCB209	27.579	150					
Tank 8	29.699	2.220			S3.001	27.479	225		S3.001A	27.479	225	
					SBCB210	27.479	150					
S14A	29.723	2.258	1200	600 x 600	S3.001A	27.465	225		S3.002	27.465	225	Catchpit - additional 300mm sump
					SBCB211	27.465	150					
S15	29.726	2.338	1200	600 x 600	S3.002	27.388	225		S3.003	27.388	225	Catchpit - additional 300mm sump
					SBCB212	27.388	150					
S16	29.880	2.565	1200	600 x 600	S3.003	27.315	225		S3.004	27.315	300	Catchpit - additional 300mm sump
					FP206	27.315	150					
Tank 9	29.762	2.455			S3.004	27.308	300		S3.005	27.307	300	
					SBCB213	27.308	150					
S17	29.761	2.461	1200	600 x 600	S3.005	27.300	300		S3.005	27.300	300	Catchpit - additional 300mm sump
Tank 11	29.576	2.284			S3.006	27.293	300		S3.007	27.292	300	
					SBCB214	27.293	150					
					SBCGH1	27.293	150					
S18	29.457	2.181	1200	600 x 600	S3.007	27.263	300		S3.008	27.263	375	
S19	29.217	2.015	1500		S1.013	27.202	375		S1.014	27.202	500	Catchpit - additional 300mm sump
				600 x 600	S3.008	27.202	375					
S20	29.132	1.987	1500	1200 x 675	S1.014	27.145	500		S1.015	27.145	525	Catchpit - additional 300mm sump
Tank 12	29.075	1.971			S1.015	27.105	525		S1.016	27.104	525	
S21	29.006	1.912	1500	1200 x 675	S1.016	27.094	525		S1.017	27.094	525	
					SBCB104	27.094	375					
FPC1	28.645	1.420	1200	1200 x 675	FP101	27.225	150		S4.000	27.225	150	Catchpit - additional 300mm sump
FPC2	28.941	1.420	450	450 Dia	FP103	27.552	150		FP104	27.552	150	Inspection Chamber with Access Reducer
FPC3	28.671	1.364	450	450 Dia	FP104	27.307	150		S5.000	27.307	150	Inspection Chamber with Access Reducer
S22	28.842	1.697	1200	600 x 600	S5.000	27.145	150		S4.001	27.145	150	Catchpit - additional 300mm sump
					S4.000	27.145	150					
S23	28.927	1.887	1500	1200 x 675	S1.017	27.040	525		S1.018	27.040	525	
					S4.001	27.040	150					
S24	28.853	1.843	1500	1200 x 675	S1.018	27.010	525		S1.019	27.010	300	Hydrobrake and Overflow
Interceptor	28.906	1.963			S1.019	26.983	300		S1.020	26.943	300	
S25	28.944	2.061	1500	600 x 600	S1.020	26.883	300		S1.021	26.883	300	
Outfall	28.660				S1.021	26.860	300			OUTFALL		

Storm Water Manhole Schedule

Pipe Number	US/MH Name	Pipe Length (m)	Fall (m)	Slope (1:X)	US/IL (m)	DS/IL (m)	US/CL (m)	Pipe DIA (mm)	US D.Depth (m)
S1.000	S1	3.912	0.020	195.6	27.613	27.593	29.720	150	1.957
S1.001	Tank 1	1.762	0.008	220.3	27.593	27.585	29.721	225	1.903
S1.003	S2	8.778	0.047	186.8	27.585	27.538	29.707	225	1.897
S1.004	S3	10.374	0.053	195.7	27.538	27.485	29.695	225	1.932
S1.005	S4	4.812	0.024	200.5	27.485	27.461	29.690	300	1.905
S1.006	Tank 2	5.283	0.027	195.7	27.460	27.433	29.669	300	1.909
S1.007	S5	5.094	0.060	84.9	27.433	27.373	29.625	300	1.892
FP102	Rodding Eye	21.322	0.106	201.2	27.693	27.587	29.059	150	1.216
S2.000	S6	13.793	0.069	200	27.587	27.518	29.072	225	1.260
S2.001	Tank 3	1.750	0.009	194.4	27.517	27.508	29.132	300	1.315
S2.002	S7	1.746	0.009	194.0	27.508	27.499	29.123	300	1.315
S2.003	Tank 4	1.981	0.010	198.1	27.498	27.488	29.091	300	1.293
S2.004	S8	20.026	0.115	174.1	27.488	27.373	29.078	300	1.290
S1.008	S10	11.003	0.043	255.9	27.373	27.330	29.436	375	1.688
S1.009	Tank 5	2.450	0.010	245.0	27.330	27.320	29.485	375	1.780
S1.010	S11	3.142	0.016	196.4	27.320	27.304	29.353	375	1.658
S1.011	Tank 6	9.041	0.045	200.9	27.303	27.258	29.332	375	1.654
S1.012	S12	2.936	0.015	195.7	27.258	27.243	29.318	375	1.685
S1.013	Tank 7	5.413	0.040	135.3	27.242	27.202	29.308	375	1.691
S3.000	S13	29.097	0.732	39.8	28.311	27.579	29.736	150	1.275
S3.001	S14	4.892	0.025	195.7	27.504	27.479	29.699	225	1.970
S3.001A	Tank 8	2.640	0.014	188.6	27.479	27.465	29.699	225	1.995
S3.002	S14A	15.256	0.077	198.1	27.465	27.388	29.723	225	2.033
S3.003	S15	14.605	0.073	200.1	27.388	27.315	29.726	225	2.113
FP205	Rodding Eye	19.529	0.195	100.1	28.427	28.232	29.777	150	1.2
FP206	Junction	10.102	0.917	11.0	28.232	27.315	29.777	150	1.395
S3.004	S16	1.379	0.007	197.0	27.315	27.308	29.880	300	2.265
S3.005	Tank 9	1.464	0.007	209.2	27.307	27.300	29.762	300	2.155
S3.006	S17	1.506	0.007	215.2	27.300	27.293	29.761	300	2.161
S3.007	Tank 11	5.576	0.029	198.4	27.292	27.263	29.576	300	1.984
S3.008	S18	11.222	0.061	183.8	27.263	27.202	29.457	300	1.881
S1.014	S19	10.805	0.057	188.5	27.202	27.145	29.217	500	1.515
S1.015	S20	8.001	0.040	200.0	27.145	27.105	29.132	525	1.462
S1.016	Tank 12	1.738	0.010	173.8	27.104	27.094	29.075	525	1.446
S1.017	S21	10.287	0.054	190.5	27.094	27.040	29.006	525	1.387
FP101	Rodding Eye	27.063	0.310	87.3	27.535	27.225	28.899	150	1.214
S4.000	FCP1	6.209	0.080	77.6	27.225	27.145	28.645	150	1.270
FP103	Rodding Eye	17.392	0.166	104.8	27.718	27.552	29.082	150	1.214
FP104	FPC2	24.510	0.245	100.0	27.552	27.307	28.941	150	1.239
S5.000	FPC3	6.390	0.162	39.4	27.307	27.145	28.671	150	1.214
S4.001	S22	8.028	0.105	76.5	27.145	27.040	28.842	150	1.547
S1.018	S23	2.937	0.030	97.9	27.040	27.010	28.927	525	1.362
S1.019	S24	5.045	0.027	186.8	27.010	26.983	28.853	300	1.543
S1.020	Interceptor	5.061	0.060	84.3	26.943	26.883	28.906	300	1.663
S1.021	S25	4.397	0.023	191.2	26.883	26.860	28.944	300	1.761

Storm Water Control Schedule

Manhole	Type		Diameter (mm)	Depth Above Pipe (m)	Control Invert (m AOD)
S24	Hydro-Brake	MD-SHE-0120-7500-1500-7500	128	0.000	27.010
S24	Orifice		90	0.905	27.915

Interceptor Schedule

DS Manhole	Interceptor	Inlet Invert Level (m OAD)	Inlet Outfall Level (m OAD)	Pipe Diameter (mm)
Tank 1	SPEL Puraceptor P010 1C/SC	28.335	28.295	150
S25	SPEL Puraceptor P030 2C/SC	26.983	26.943	300

Storm Water Tanks

Tank	Height (m)	Area (m2)	Tank Volume (m3)	Tank Storage Volume (m3) Assume 95% Voids	Upstream Invert Level (m AOD)	Min Cover Level (m AOD)	Min Cover Depth (m)
Tank 1	0.84	123.5	103.7	98.6	27.593	29.658	1.23
Tank 2	1.05	66	69.3	65.8	27.461	29.632	1.12
Tank 3	0.42	115	48.3	45.9	27.518	29.076	1.14
Tank 4	0.42	110	46.2	43.9	27.499	29.053	1.13
Tank 5	0.84	200	168.0	159.6	27.33	29.263	1.09
Tank 6	0.84	165	138.6	131.7	27.304	29.340	1.20
Tank 7	1.05	157.5	165.4	157.1	27.243	29.270	0.98
Tank 8	1.05	73.5	77.2	73.3	27.479	29.684	1.16
Tank 9	1.26	115.5	145.5	138.3	27.308	29.739	1.17
Tank 10	1.26	244.5	308.1	292.7	27.313	29.815	1.24
Tank 11	1.26	176	221.8	210.7	27.293	29.589	1.04
Tank 12	0.84	286.5	240.7	228.6	27.104	28.960	1.02

Foul Water Manhole Schedule

Manhole Name	Cover Level (m)	MH Depth (m)	Manhole Diam (mm)	Clear Opening (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Pipes In Backdrop (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Comments
F1	29.526	2.095	1200	600 x 600	FBCB201	27.431	150		F1.000	27.431	150	
F2	29.509	2.554	1200	600 x 600	F1.000	27.005	150		F1.001	26.955	150	
					FBCB101	26.955	150					
F3	29.769	1.915	1200	600 x 600	FBCB202	27.854	100		F2.000	27.854	100	
F4	29.730	2.430	1200	600 x 600	F2.000	27.350	100		F2.001	27.300	150	
					FBCB203	27.300	150					
F5	29.403	2.628	1200	600 x 600	F1.001	26.775	150		F1.002	26.775	150	
					F2.001	26.775	150					
Outfall	29.374				F1.002	26.667	150					

Foul Water Pipe Schedule

Pipe Number	US/MH Name	Pipe Length (m)	Fall (m)	Slope (1:X)	US/IL (m)	DS/IL (m)	US/CL (m)	Pipe DIA (mm)	US D.Depth (m)
F1.000	F1	18.946	0.476	39.8	27.431	26.955	29.526	100	1.995
F1.001	F2	26.987	0.180	149.9	26.955	26.775	29.509	150	2.404
F2.000	F3	18.553	0.504	36.8	27.854	27.350	29.769	150	1.765
F2.001	F4	41.634	0.525	79.3	27.300	26.775	29.730	150	2.28
F1.002	F5	16.019	0.108	148.3	26.775	26.667	29.403	150	2.478

Notes

1. All dimensions are in millimeters (mm) and all levels are in meters (m) Above Ordnance Datum (AOD) unless otherwise stated.
2. Cover and invert levels of existing manholes and pipes to be confirmed prior to commencement of construction.
3. All drainage <300mm to be HDPE. All drainage ≥300mm to be concrete.
4. All pipes and manholes to have Nitrile Seals
5. All covers within trafficked areas to be Grade D400. All other covers to be Grade B125.
6. Drainage to be laid, bedded and backfilled in accordance with manufacturer's recommendations.
7. Pipes with less than 900mm cover in areas not subjected to vehicular loading to be concrete protected. Pipes with less than 1200mm cover in areas subjected to vehicular loading to be concrete protected.
8. Tanks to be procured by the contractor and designed by manufacturer including access and venting arrangements. Polystorm Xtra or similar approved. For standard details refer to PSM series available on Polystorm.com.
9. Interceptors to be Class 1 Full Retention separators with high level alarm, SPEL Puraceptor or similar approved. For standard details refer to spelproducts.co.uk.
10. This drawing is to be read in conjunction with:
    - 10.1. Drainage Layout DCS20109-ARUP-PL-ZZ-LP-DR-C-52200
    - 10.2. Drainage Details DCS20109-ARUP-PL-ZZ-XX-DR-C-52500 to 52503

Rev	Details	By / Chkd / App	Date
P02	Planning Submission Update	LD / CH / GM	06 / 06 / 22
P01	Planning Submission	JT / CH / GM	15 / 10 / 21

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Fire Consultant

salus
Building Compliance without Complexity
Primea House, Marina Court
Maple Drive, Hinckley, Leicestershire
LE10 3BF, United Kingdom
www.salusai.co.uk

Security Designer

Control Risks
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www.controlrisks.com

Project Title
London 4, Hayes

Drawing Title
Underground Drainage Schedule

Project Status
Planning

Discipline: **Civil - Drainage** | Status Code: **S4**

Project Number: 281528 | Scale @ A1: **1:500** | Revision: **P02**

Drawing Number
DCS20109-ARUP-PL-ZZ-XX-DR-C-52700
Project — Originator — Functional Breakdown — Spatial Breakdown — Level — Form — Discipline — Number

Appendix H

MicroDrainage

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm 26-05-22 Planning

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	1	PIMP (%)	100
M5-60 (mm)	20.000	Add Flow / Climate Change (%)	0
Ratio R	0.400	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	0.75
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	200

Designed with Level Inverts

Network Design Table for Storm 26-05-22 Planning

- Indicates pipe length does not match coordinates
« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	3.912	0.020	195.6	0.086	5.00	0.0	0.600	o	225	Pipe/Conduit	
S1.001	19.000	0.000	0.0	0.064	0.00	0.0	0.600	T1	-1	Pipe/Conduit	
S1.002	1.762#	0.008	220.3	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.003	8.778	0.047	186.8	0.054	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.004	10.374	0.053	195.7	0.076	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.005	4.812	0.024	200.5	0.068	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.006	12.000	0.001	12000.4	0.000	0.00	0.0	0.600	T2	-2	Pipe/Conduit	
S1.007	5.283	0.027	195.7	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.008	5.094	0.060	84.9	0.120	0.00	0.0	0.600	o	300	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	50.00	5.07	27.613	0.086	0.0	0.0	0.0	0.93	37.0	11.7
S1.001	50.00	5.83	27.593	0.151	0.0	0.0	0.0	0.42	2047.5	20.4
S1.002	50.00	5.87	27.593	0.151	0.0	0.0	0.0	0.88	34.9	20.4
S1.003	50.00	6.02	27.585	0.205	0.0	0.0	0.0	0.95	37.9	27.7
S1.004	49.57	6.21	27.538	0.281	0.0	0.0	0.0	0.93	37.0«	37.7
S1.005	49.29	6.28	27.485	0.349	0.0	0.0	0.0	1.11	78.2	46.7
S1.006	47.56	6.76	27.461	0.349	0.0	0.0	0.0	0.42	2171.9	46.7
S1.007	47.29	6.84	27.460	0.349	0.0	0.0	0.0	1.12	79.2	46.7
S1.008	47.12	6.89	27.433	0.469	0.0	0.0	0.0	1.71	120.7	59.9

Network Design Table for Storm 26-05-22 Planning

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S2.000	13.620	0.069	197.4	0.082	5.00	0.0	0.600	o	225	Pipe/Conduit	
S2.001	23.045	0.000	0.0	0.000	0.00	0.0	0.600	T3	-3	Pipe/Conduit	
S2.002	1.750	0.009	194.4	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S2.003	1.746	0.009	194.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S2.004	14.975	0.001	14974.8	0.000	0.00	0.0	0.600	T4	-4	Pipe/Conduit	
S2.005	17.025	0.000	0.0	0.000	0.00	0.0	0.600	T4D	-5	Pipe/Conduit	
S2.006	1.981	0.010	198.1	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S2.007	20.026	0.115	174.1	0.050	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.009	11.003	0.043	255.9	0.036	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.010	20.009	0.001	20009.3	0.000	0.00	0.0	0.600	T5	-6	Pipe/Conduit	
S1.011	2.450#	0.010	245.0	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.012	3.142	0.016	196.4	0.267	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.013	22.000	0.001	22000.0	0.000	0.00	0.0	0.600	T6	-7	Pipe/Conduit	
S1.014	9.041	0.045	200.9	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.015	2.936	0.015	195.7	0.169	0.00	0.0	0.600	o	375	Pipe/Conduit	
S1.016	15.000	0.001	15000.0	0.000	0.00	0.0	0.600	T7	-8	Pipe/Conduit	
S1.017	5.429	0.040	135.7	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
S3.000	29.097	0.732	39.8	0.016	5.00	0.0	0.600	o	150	Pipe/Conduit	
S3.001	4.892	0.025	195.7	0.122	0.00	0.0	0.600	o	225	Pipe/Conduit	
S3.002	14.002	0.000	0.0	0.000	0.00	0.0	0.600	T8	-9	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S2.000	50.00	5.24	27.587	0.082	0.0	0.0	0.0	0.93	36.9	11.1
S2.001	47.98	6.64	27.518	0.082	0.0	0.0	0.0	0.28	521.8	11.1
S2.002	47.89	6.66	27.517	0.082	0.0	0.0	0.0	1.12	79.5	11.1
S2.003	47.79	6.69	27.508	0.082	0.0	0.0	0.0	1.13	79.5	11.1
S2.004	44.17	7.82	27.499	0.082	0.0	0.0	0.0	0.22	376.7	11.1
S2.005	41.24	8.91	27.498	0.082	0.0	0.0	0.0	0.26	244.0	11.1
S2.006	41.17	8.94	27.498	0.082	0.0	0.0	0.0	1.11	78.7	11.1
S2.007	40.53	9.22	27.488	0.132	0.0	0.0	0.0	1.19	84.0	14.5
S1.009	40.16	9.38	27.373	0.637	0.0	0.0	0.0	1.13	124.6	69.3
S1.010	37.84	10.50	27.330	0.637	0.0	0.0	0.0	0.30	2256.0	69.3
S1.011	37.78	10.54	27.330	0.637	0.0	0.0	0.0	1.15	127.4	69.3
S1.012	37.70	10.58	27.320	0.904	0.0	0.0	0.0	1.29	142.4	92.3
S1.013	35.36	11.89	27.304	0.904	0.0	0.0	0.0	0.28	1578.4	92.3
S1.014	35.17	12.01	27.303	0.904	0.0	0.0	0.0	1.27	140.8	92.3
S1.015	35.11	12.05	27.258	1.073	0.0	0.0	0.0	1.29	142.7	102.0
S1.016	34.11	12.69	27.243	1.073	0.0	0.0	0.0	0.39	3909.0	102.0
S1.017	34.03	12.75	27.242	1.073	0.0	0.0	0.0	1.56	171.8	102.0
S3.000	50.00	5.30	28.311	0.016	0.0	0.0	0.0	1.60	28.3	2.2
S3.001	50.00	5.39	27.504	0.138	0.0	0.0	0.0	0.93	37.0	18.6
S3.002	50.00	5.94	27.479	0.138	0.0	0.0	0.0	0.42	1203.2	18.6