

Appendix B

SuDS guidance

Table B.1 SuDS suitability and site characteristics

SuDS Group	Technique	Soils		Area draining to a single SuDS component		Minimum depth to water table		Site slope		Available head	
		Impermeable	Permeable	0 – 2 ha	> 2 ha	0 – 1 m	> 1 m	0 – 5%	> 5%	0-1 m	1 – 2 m
Retention	Retention pond	Y	Y ¹	Y	Y ⁵	Y ²	Y ²	Y	Y	Y	Y
	Subsurface storage	Y	Y	Y	Y ⁵	Y ²	Y ²	Y	Y	Y	Y
Wetland	Shallow wetland	Y ²	Y ⁴	Y ⁴	Y ⁶	Y ²	Y ²	Y	N	Y	Y
	Extended detention wetland	Y ²	Y ⁴	Y ⁴	Y ⁶	Y ²	Y ²	Y	N	Y	Y
	Pond/wetland	Y ²	Y ⁴	Y ⁴	Y ⁶	Y ²	Y ²	Y	N	Y	Y
	Pocket wetland	Y ²	Y ⁴	Y ⁴	N	Y ²	Y ²	Y	N	Y	Y
	Submerged gravel wetland	Y ²	Y ⁴	Y ⁴	Y ⁶	Y ²	Y ²	Y	N	Y	Y
	Wetland channel	Y ²	Y ⁴	Y ⁴	Y ⁶	Y ²	Y ²	Y	N	Y	Y
Infiltration	Infiltration trench	N	Y	Y	N	N	Y	Y	Y	Y	N
	Infiltration basin	N	Y	Y	Y ⁵	N	Y	Y	Y	Y	N
	Soakaway	N	Y	Y	N	N	Y	Y	Y	Y	N
Filtration	Surface sand filter	Y	Y	Y	Y ⁵	N	Y	Y	N	N	Y
	Sub-surface sand filter	Y	Y	Y	N	N	Y	Y	N	N	Y
	Perimeter sand filter	Y	Y	Y	N	N	Y	Y	N	Y	Y
	Bioretention/filter strips	Y	Y	Y	N	N	Y	Y	N	Y	Y
	Filter trench	Y	Y ¹	Y	N	N	Y	Y	N	Y	Y
Detention	Detention basin	Y	Y ¹	Y	Y ⁵	N	Y	Y	Y	N	Y

SuDS Group	Technique	Soils		Area draining to a single SuDS component		Minimum depth to water table		Site slope		Available head	
		Impermeable	Permeable	0 – 2 ha	> 2 ha	0 – 1 m	> 1 m	0 – 5%	> 5 %	0-1 m	1 – 2 m
Open channels	Conveyance swale	Y	Y	Y	N	N	Y	Y	N ³	Y	N
	Enhanced dry swale	Y	Y	Y	N	N	Y	Y	N ³	Y	N
	Enhanced wet swale	Y ²	Y ⁴	Y	N	Y	Y	Y	N ³	Y	N
Source control	Green roof	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
	Rainwater harvesting	Y	Y	Y	N	Y	Y	Y	Y	Y	
	Permeable pavement	Y	Y	Y	Y	N	Y	Y	N	Y	Y

Y = Yes

Y³ = Unless follows contours

N = No

Y⁴ = With liner and constant surface baseflow, or high ground water table

Y¹ = with liner

Y⁵ = possible, but not recommended (appropriate management train not in place)

Y² = with surface baseflow

Y⁶ = Where high flows are diverted around SuDS component

Additional policy and general guidance on SuDS and drainage include the following:

- ▶ National Planning Practice Guidance, 2016;
- ▶ Water Framework Directive (2000/60/EC);
- ▶ Highways Act, 1980;
- ▶ Town and Country Planning Act, 1990;
- ▶ Town and Country Planning Act, 1990 (amended) NB covers S106 Agreements;
- ▶ Town and Country Planning Act, 1991;
- ▶ Construction, Design and Management Regulations, 1994;
- ▶ Building Regulations Part C Approved Document H – Drainage and Waste Disposal of the Building Regulations 2002 Amendment;
- ▶ ODPM 2004. Planning Policy Statement 1: Delivering Sustainable Development;
- ▶ Communities and Local Government, 2006. Planning Policy Statement 25: Development and Flood Risk;

- ▶ Communities and Local Government, 2007. Development and Flood Risk: A practice guide companion to PPS25;
- ▶ BRE Digest 365 Soakaway Design BSE EN 752-4: 1998 Drain and Sewer Systems outside buildings, part 4;
- ▶ CIRIA. Sustainable Drainage Systems – Hydraulic, Structural and water quality advice (CIRIA 609);
- ▶ CIRIA. The SUDS Manual (CIRIA C753);
- ▶ CIRIA. Source control using constructed previous surfaces. Hydraulic, structural and water quality performance issues (CIRIA 582);
- ▶ CIRIA. Infiltration Drainage – manual of good practice (CIRIA R156);
- ▶ CIRIA. Review of the design and management of constructed wetlands (CIRIA R180);
- ▶ CIRIA. Control of pollution from highway drainage discharge (CIRIA R142);
- ▶ CIRIA. Design of flood storage reservoirs (CIRIA Book 14);
- ▶ CIRIA. Designing for exceedance in urban drainage systems – good practice (CIRIA C635);
- ▶ CIRIA. Rainwater and grey-water use in buildings (CIRIA C539);
- ▶ Defra, 2004. Making Space for Water – Developing a new Government strategy for flood and coastal erosion risk management in England: A Consultation Exercise;
- ▶ Defra, 2005. Making Space for Water – Taking forward a new Government strategy for flood and coastal erosion risk management in England: First Government response to the Autumn 2004;
- ▶ Defra, 2006. Urban Flood Risk and Integrated Drainage. Scoping report and pilot studies;
- ▶ Environment Agency, 2003. Harvesting rainwater for domestic uses: an information guide;
- ▶ HR Wallingford. Use of SUDS in high density development;
- ▶ National SUDS Working Group, 2006. Interim Code of Practice for SUDS; and
- ▶ WRc. Sewers for Adoption 6th Edition (SfA6) (published by Water UK).