

SUDS Ownership / Maintenance Matrix for Wales (Ver. 1)

Organisation responsible for SUDS ownership / maintenance	SUDS Technique ¹					
	Above Ground			Below Ground		
	Pervious surfaces (e.g. car parks) and filter drains	Filter strips and swales	Basins, ponds and wetlands	Soakaways	Infiltration trenches	Pipes, inspection chambers and cellular structures
Local authority (with drainage, property, or open space interest)	<p>Yes for own development² or where land ownership is taken under a S106 Agreement³.</p> <p>May be 'adopted' under one of the proposed new SuDS model agreements but would require involvement with developer from a very early stage in the planning process to ensure that the design, construction, easements and arrangements for future maintenance and renewal are all approved and checked. Would require a commuted sum or a formal long-term maintenance agreement to be agreed with the developer. Although design guides, draft adoption agreements and guidance on life time costs of SuDS are all now available there will still be some L.A.'s that would not have the resources or the inclination to 'adopt' SuDS systems. It should also be noted that generally L.A.'s are not keen on the use of 'management companies' or the developer taking on maintenance of such systems (concerns over long term viability of these organisations) because eventually it would be the L.A.'s that could end up with the responsibility.</p>	<p>Yes for own development² or where land ownership is taken under a S106 Agreement³</p> <p>See pervious surfaces.</p> <p>There is a reluctance to consider swales in urban areas because of concerns about mis-use of them (parking on them, etc).</p>	<p>Yes for own development² or where land ownership is taken under a S106 Agreement³</p> <p>See pervious surfaces.</p> <p>Generally it may be easier (in the short term) to consider positive drainage systems taking flows directly to a central basin, pond or wetland. L.A.'s would find it simpler to have one distinct area of SuDS thus making adoption and maintenance easier. As more experience is gleaned from such arrangements the adoption of pervious areas, filter strips, soakaways, etc could, in the future, be taken on with more confidence.</p>	<p>Yes for own development² or using highway infrastructure, or by agreement</p> <p>See pervious surfaces.</p> <p>It is difficult to consider the adoption of individual soakaways in private gardens. More appropriate would be a system of 'communal' soakaways located in an area that is easy to access. Clearly the ground conditions would have to be proven to be suitable</p>	<p>Yes for own development² or using highway infrastructure, or by agreement</p> <p>See pervious surfaces and soakways.</p>	<p>Yes for own development² or using highway infrastructure, or by agreement</p> <p>See pervious surfaces.</p> <p>Traditional pipes, oversized pipes, and inspection chambers would probably be the easiest form of SuDS for the L.A.'s to adopt (particularly in the short term).</p>
Welsh Assembly Government ⁴ Motorways and Trunk Roads in Wales	<p>WAG do not generally own or have responsibility for car parks associated with highways but could be responsible for drainage of office car parks in WAG ownership. For the motorway and trunk road network in Wales, all parts of the drainage system, to the point of discharge to another system, e.g a watercourse, would be maintained by WAG</p>	<p>For the motorway and trunk road network in Wales, all parts of the drainage system, to the point of discharge to another system, e.g a watercourse, would be maintained by WAG. Swales are not recommended in highway verges due to the risk of errant vehicles traversing the verge and causing disruption to the flow of water and ponding.</p>	<p>For the motorway and trunk road network in Wales, all parts of the drainage system, to the point of discharge to another system, e.g a watercourse, would be maintained by WAG. Any wetlands that formed part of the drainage system or were part of the essential environmental mitigation for the road would also be maintained by WAG.</p>	<p>For the motorway and trunk road network in Wales, all parts of the drainage system, to the point of discharge to another system, e.g a watercourse, would be maintained by WAG. However soakaways are not generally considered as an acceptable means of drainage, other than in exceptional circumstances.</p>	<p>For the motorway and trunk road network in Wales, all parts of the drainage system, to the point of discharge to another system, e.g a watercourse, would be maintained by WAG</p>	<p>For the motorway and trunk road network in Wales, all parts of the drainage system, to the point of discharge to another system, e.g a watercourse, would be maintained by WAG</p>
Local authority (Highway) Other Roads ⁴	<p>Yes for adopted highways or land owned³</p> <p>May consider adoption of pervious pavements on residential estate roads. Would not adopt areas outside of the 'highway'</p>	<p>Yes for adopted highways or land owned³</p> <p>There is a reluctance to consider swales in urban areas because of concerns about mis-use of them (parking on them, etc).</p>	<p>Yes for adopted highways or land owned³</p> <p>Would only consider adoption if the SuDS was exclusively used for highway water. If the SuDS was shared usage Highways would only want highway water going to a system that was maintained by a 'responsible' body.</p>	<p>Yes for adopted highways or land owned³</p> <p>The soakaways would be used for draining highway water only and ideally be sited within the boundary of the highway itself for ease of access and maintenance.</p>	<p>Yes for adopted highways or land owned³</p> <p>Possible in certain circumstances within the boundary of the highway.</p>	<p>Yes for adopted highways or land owned³</p> <p>Pipes and inspection chambers are adopted by highway authorities.</p>

SUDS Ownership / Maintenance Matrix for Wales (Ver. 1)

Organisation responsible for SUDS ownership / maintenance	SUDS Technique ¹					
	Above Ground			Below Ground		
	Pervious surfaces (e.g. car parks) and filter drains	Filter strips and swales	Basins, ponds and wetlands	Soakaways	Infiltration trenches	Pipes, inspection chambers and cellular structures
Statutory sewerage undertaker ⁵ (bcww)	DCWW do not adopt surface water runoff from Car-Parks. Any Pervious surfaces are considered part of the Highway. Restrictions to Discharge are generally covered by S106 Agreement of the Water Industry Act 2003.	See Infiltration Trenches	These structures are not adoptable. However DCWW will consider the pipe work to the Pond and the Head Wall. The controls to these structures would also be considered with easements. The discharge downstream of these structures would be expected to go to a watercourse. DCWW would prefer adoption of these structures by a recognised authority (e.g. Local Authority). DCWW will also need to consider the consent order of the maintaining authority.	DCWW would not consider these for adoption but are positive towards their use. They would like to see a maintenance agreement drawn up either by LA or individual householders (e.g. within the deeds of ownership). DCWW offer reductions in Water Rates for the removal of Surface Water from their Combined Sewers. Proper consideration will be made to design and construction	Trench Infiltration is considered as Land Drainage surface water. Water Companies are unable to adopt Land Drainage surface water. DCWW consider it to be a Local Authority responsibility.	Yes if adopted as an accessory to a public sewer ⁵
Major freeholder / developer, e.g. for motorway service area, supermarket	Yes for own development ² or where S106 maintenance arrangements are in place	Yes for own development ² or where S106 maintenance arrangements are in place	Yes for own development ² or where S106 maintenance arrangements are in place	Yes for own development ² or where S106 maintenance arrangements are in place	Yes for own development ² or where S106 maintenance arrangements are in place	Yes for own development ² or where S106 maintenance arrangements are in place
House owner ⁶	Yes on own property ⁶ – Drains areas within own cartilage / ownership. – Joint responsibility with any other properties being drained to be in place. – If ultimately connected to a public drainage system rights & obligations in respect of maintenance to be in place	Yes on own property ⁶ – Drains areas within own cartilage / ownership. – Joint responsibility with any other properties being drained to be in place	Yes on own property ⁶ – Generally not appropriate due to size and nature of these features.	Yes on own property ⁶ – Drains areas within own cartilage / ownership. – Joint responsibility with other properties being drained to be in place.	Yes on own property ⁶ – Drains areas within own cartilage / ownership. – Joint responsibility with any other properties being drained to be in place.	Yes on own property ⁶ – Drains areas within own cartilage / ownership. – Joint responsibility with any other properties being drained to be in place. – If ultimately connected to a public drainage system rights & obligations in respect of maintenance to be in place.
Management company ⁷	Yes as an alternative option where no other organisation maintains	Yes as an alternative option where no other organisation maintains	Yes as an alternative option where no other organisation maintains	Yes as an alternative option where no other organisation maintains	Yes as an alternative option where no other organisation maintains	Yes as an alternative option where no other organisation maintains
Environment Agency	Yes for own development ² Agency to provide advice on any development particularly as it may not be suitable in groundwater protection areas. Early contact with the Agency is encouraged.	Yes for own development ² Land Drainage Act specifically prevents Agency from adopting and maintaining these features. It may not be a suitable solution in groundwater protection areas and early contact with the Agency is encouraged.	Yes for own development ² The Agency are involved with flood retention ponds that are integral to the main river system and are owned and operated by EA.	Yes for own development ² May not be suitable in ground water protection areas and for Nitrate Vulnerable Zones. Early contact with the Agency is encouraged.	Yes for own development ² May not be suitable in ground water protection areas and for Nitrate Vulnerable Zones. Early contact with the Agency is encouraged.	Yes for own development ² Discharge Consenting issues may necessitate early contact with the Agency
Internal drainage board	Yes for own development ²	Yes for own development ²	Yes for own development ² The IDB/IDD are involved with flood retention ponds that are integral to the drainage system and are owned and operated by the IDB or (for IDD's) the EA.	Yes for own development ²	Yes for own development ²	Yes for own development ²
Wildlife group	Yes for own development ²	Yes for own development ²	Yes, where ownership for site of ecological value where no other organisation maintains	Yes for own development ²	Yes for own development ²	Yes for own development ²

Notes						
1	Ground conditions must be suitable for the specified SUDS technique.					
2	Own development is defined as a free standing development within its own infrastructure which is on land owned or controlled by the organisation in question, and which does not form part of a statutory requisition or adoption process.					
3	Local authorities and highway authorities will need to arrange to fund adoption and maintenance of SUDS. The developer would provide an appropriate dedicated sum, and the relevant organisation accepting maintenance responsibility would have the final say on design. Commuted payments are calculated for a 25 year period.					
4	The Welsh Assembly Government uses various SuDS techniques in the drainage of its highways but uses the Design Manual for Roads and Bridges (DMRB) Advice Note HA 103/01 Vegetative Treatment Systems, for design guidance and maintains its own systems through its agents.					
5	Responsibility will only extent to SUDS techniques that fall into the legal definition of a public sewer (see section 9.3).					
6	Assumes the SUDS technique is not adoptable and may or may not connect ultimately to the public sewerage system.					
7	Acting on behalf of the freehold owner through a S106 bond. The management company proposed must demonstrate compliance with the Criteria for Acceptability of Management Companies					
8	The purpose of this matrix is illustrative only and does not grant or imply the approval of any system. The stakeholders involved in the preparation of this matrix are supportive of the use of SuDS and encourage early dialogue from every party in the development process.					
9	This matrix should be read in conjunction with the SuDS Interim Code of Practice, CIRIA Documents 521,522,523 and 609. This matrix does not supersede any of the contents of these documents					
10	For furthe information please refer to the SuDS Wales web site www.sudswales.com					

This Matrix has been produced by the SuDS Working Party for Wales. It is intended only to provide an illustration of how adoption may be viewed.
The developer is advised to liaise with the relevant authority regarding the site specific adoption requirements