



Dŵr Cymru  
Welsh Water

# Sustainable drainage on new developments in Wales

How you can manage surface water



## What do you need to know?

All new developments in Wales of more than one building or where the construction area covers 100m<sup>2</sup> of land or more need sustainable drainage systems (SuDS). SuDS must be approved by the SuDS Approving Body (SAB) before construction work begins.

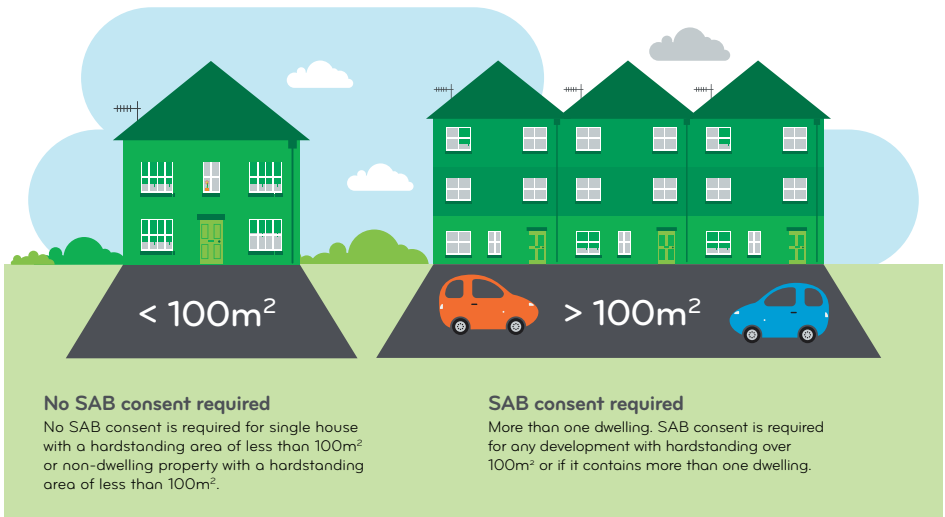
In most cases, your SAB will be your local authority, but they will consult with us on the SuDS being used in line with Schedule 3 of the Flood and Water Management Act 2010.

The SAB in most cases will also be the adopting and maintaining body for the new surface water network. This includes both the SuDS features and the connecting drainage networks which we traditionally adopted. It's important to note, you will still need consent from us before connecting to our public sewer network. For any SAB scheme where a connection to the public sewerage system is proposed, we therefore recommend submitting a pre-planning application with us.

## What if your development is exempt from SAB consent?

If your development does not require SAB consent, (for example, developments which satisfy the transition arrangements\*, single properties and existing sewer networks) we will continue to adopt your surface water sewer networks. In these scenarios, the mandatory sewer adoption arrangements for any sewers which are intended to connect to public sewers remain in place. If a single property is exempt from SAB and intends to connect surface water into the public sewer network, Welsh Water must adopt the section of drain outside the property boundary (lateral drain).

*\*Transitional arrangements are existing sites and developments with planning permission granted or deemed to be granted or where a valid application has been received by 7th January 2019, but is currently undetermined, will not be required to apply for SAB approval.*



## How should you design your SuDS?

We encourage designers and all key stakeholders to engage in early discussions with us ahead of the preparation of detailed designs. We'd also encourage designers to follow the Welsh Government 'Statutory Standards for Sustainable Drainage Systems (SuDS)' and the Ciria SuDS Manual, which is the default industry design guidance which provides detailed advice on the construction, operation, and future maintenance of surface water drainage systems.

### Building SuDS near our networks

It's important to note that SuDS need to be outside of the easement or protection zone of a public sewerage or watermain asset (often a minimum of 3 metres either side), to ensure we can access them at all times. We do recognise, however, that certain design solutions to this may be acceptable, such as service corridors. Whilst many SuDS features comprise of complex construction techniques, we also acknowledge there are design solutions which can help overcome concerns of access and reinstatement and using an appropriate mix of permeable and impermeable surfacing can provide structure to the overall design layout.

With this in mind, the guidance below is provided to designers for their SuDS schemes and SAB applications in terms of SuDS which can and cannot be located above or near our networks:



### SuDS features which can potentially be located over or crossing our networks

These features can't be installed to run along the length of the water main or sewer, however.

#### Attenuation (dry detention) Basins

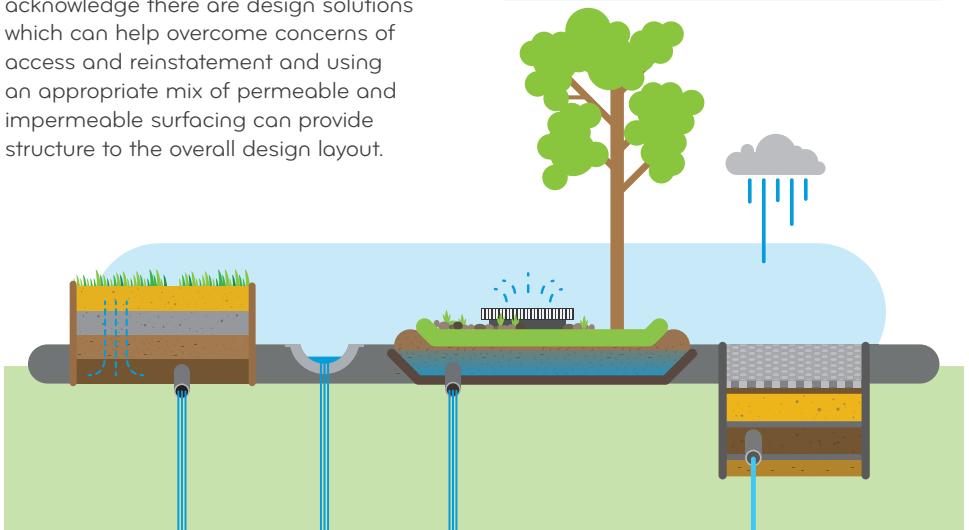
A depression in the ground that is designed to temporarily store surface water during heavy rainfall.

#### Swales

A shallow, vegetated channel designed to convey and retain water.

#### Rills

A small, shallow lined channel through which surface water can flow.





## SuDS features which can potentially be located near but not over our networks, with service corridors if applicable

### **Attenuation (infiltration) Basins**

A depression in the ground that is designed to temporarily store surface water during heavy rainfall.

### **Infiltration Trenches & Filter Drains**

A trench, filled with permeable granular material, to promote infiltration of surface water into the ground.

### **Permeable Pavements**

Surface water soaks through structural paving.

### **Soakaways**

A subsurface structure for the temporary storage of water before it goes into the ground.

### **Tanks**

An underground structure creating a void space for temporary storage of surface water.



## SuDS features which cannot be located above or near our networks

### **Bioretention Systems**

A shallow planted depression that allows runoff to pond temporarily on the surface, before filtering through vegetation and underlying soil prior to collection/infiltration. It can be a tree pit or rain garden.

### **Ponds & Wetlands**

Permanently wet depressions designed to temporarily store surface water runoff above the permanent pool.

## Further information

Further guidance from us can be found at [developers.dwrcymru.com](http://developers.dwrcymru.com)

Further guidance on Schedule 3 of the Flood and Water Management Act 2010 can be found on the Welsh Government website.

Further guidance on SuDS design can be found within the Welsh Government 'Statutory Standards for Sustainable Drainage Systems (SuDS)' and the Ciria SuDS Manual.