



Stockport Metropolitan Borough Council

Sustainable Drainage Pre-application Standing Advice

Sustainable Drainage and the Planning Process

From April 2015 planning applications relating to major development will ensure that Sustainable Urban Drainage systems (SuDs) for the management of run-off are put in place, unless demonstrated to be inappropriate for reasons of ground suitability, safety or viability.

Alongside the legislative changes to implement SuDs through the planning process, the Lead Local Flood Authorities (LLFAs) are now statutory consultees to Planning Authorities in the role of providing technical advice with regard to local flood risk.

The legislation is aimed at major developments to promote good practice for a SuDS approach to be considered on all development sites, whilst it is acknowledged that each site may present constraints and may limit the potential for a solution to achieve maximum benefits for all functions, it is important that it can be demonstrated that consideration has been given to the hierarchy of drainage techniques and run-off destinations in all instances and opportunities to incorporate SuDS measures into drainage schemes maximised.

To support the design and delivery of sustainable drainage the Government have published Non-Statutory Technical Standards¹ which should be used in conjunction with the National Planning Policy Framework (NPPF)², and the associated National Planning Practice Guidance (NPPG).

Major Developments

- A Residential Development consisting of 10 dwellings or more or residential development with a site area of 0.5 hectares or more where the number of dwellings is not yet known.
- A Non Residential Development with provision of a building or buildings where the total floor space to be created is 1000m² or more where the floor area is not yet known, a site area of 1 hectare or more.

Planning applications for major development should be accompanied by a site-specific drainage strategy or statement that demonstrates that the drainage scheme proposed is in compliance with the both the NPPF / NPPG and the Non-Statutory Technical Standards.

¹ The Non-Statutory Technical Standards provided by Government relate to the design, construction, operation and maintenance of sustainable drainage systems (SUDS) and have been published as guidance for those designing schemes.

² The NPPF (and associated PPG) related to Government policy on the provision and long term maintenance of sustainable drainage systems.



Minor Developments

- A residential development where the number of properties to be constructed is between 1 and 9 inclusive or where the number of properties to be constructed is not given in the application, a site area of less than 0.5 hectares.
- For all other uses, the floor space to be built is less than 1,000 square metres or where the site area is less than 1 hectare.

The density, topography and site history of a proposed development can impact on the types of SuDS features that would be applicable due to previous use and pressures on the area available, often set aside for other uses such as public open space and recreational activities. For this reason it is really important that early consideration and integrated design with respect to SuDS is given which can promote innovative, sustainable and cost effective schemes delivering multiple benefits.

The benefits of sustainable drainage systems (SuDS)

Development can harm water resources if a traditional approach to drainage is adopted. Removing water from site too quickly through piped systems can increase flood risk downstream and reduce infiltration impacting on ground water levels. Surface water run off can also contain contaminants such as oil, toxic metals etc. and can affect water quality in rivers and streams.

SuDS mimic natural drainage processes to reduce the effect on the quality and quantity of run-off from developments. This approach uses a range of techniques including swales, permeable paving and green roofs to mimic the natural drainage of a site. They increase infiltration of water where it lands and reduce the speed of run-off and in addition can provide amenity and biodiversity benefits. When specifying SuDS, early consideration of the potential multiple benefits and opportunities will help deliver the best results.

Hierarchy of drainage techniques

A prioritised order of methods for management of surface water, which is to be considered at all stages of design. Wherever possible the natural drainage of surface water from new developments into the ground will be preferred. Surface water runoff should be managed as close to its source as possible in line with the following drainage hierarchy

The hierarchy of techniques to be used is:

- Prevention of runoff by good site design and reduction of impermeable areas.
- Source control, dealing with water where and when it falls (e.g. infiltration techniques).
- Site control, management of water in the local area (e.g. swales, detention basins).
- Regional control, management of runoff from sites (e.g. balancing ponds, wetlands).

Developers should demonstrate how they have considered and used these techniques.



Runoff Destinations

Surface water runoff not collected for use must be discharged to one or more of the following in the order of priority shown:

- Ground (infiltration),
- Surface water body,
- Surface water sewer, highway drain or other drain,
- Combined sewer.

All SuDS feature design should be completed in accordance with the SuDS Manual (CIRIA C697) with consideration of CIRIA C609B, Sustainable drainage systems: hydraulic, structural and water quality advice.

Pre-application engagement

National Planning Practice Guidance stresses the importance of pre-application engagement with stakeholders to improve efficiency and effectiveness of the planning application system, the planning applications and likelihood of success. Drainage systems considered at the earliest stages of site selection and design are easier to integrate into developments influencing other aspects of the site (i.e. design, layout and function) and reducing impermeable areas wherever possible.

Evidence from case studies suggests that SuDS are cheaper to install and maintain for many new developments. Where SuDS are predominantly green landscaped SuDS measures such as swales and basins much of the maintenance forms part of the site landscaping and is at little or no extra cost.

Effective early engagement can also help deliver SuDS as part of a developments core green infrastructure e.g. in multi-functional spaces such as car parks, landscaped areas, communal spaces etc. and improve cost effectiveness and integration within the development.

Stockport Council encourages prospective developers to first contact the local planning authority as in doing so it can help to determine whether your development proposal is acceptable in principle and reduce the likelihood of submitting invalid applications.

The following points should be noted:

- Pre-application advice may be charged for.
- The Environment Agency will continue to provide pre-application advice for developments within Flood Zone 2 or 3; however this is chargeable and needs to be addressed separately.
- The likely drainage method should be identified as early as possible to ensure appropriate drainage can be delivered through sustainable development.



- The adopted Stockport Core Strategy contains planning policies pertaining to Flood Risk (SD-6 and SIE-3) which should be taken into account and identified at pre-application stage.

Contact Details

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Outline Planning Application

An application for outline planning permission allows for a decision on the general principles of how a site can be developed. Outline planning permission will be granted subject to conditions requiring subsequent approval of one or more reserved matters.

The applicant should include the following information as a minimum to enable the LLFA to provide an informed substantive response when advising applicants and when consulted by Local Planning Authorities on planning applications in their role as a statutory consultee.

Outline Planning Application
<i>Compulsory information required to validate the applications.</i>
Drainage statement which includes:
Outline Drainage Assessment to incorporate the following: <ul style="list-style-type: none">• Topography of the development site, showing existing surface water flow routes, drains, sewers and watercourses• Geological and soil types.• Initial scoping of flood risk issues to inform where applicable the flood risk assessment which may include any of the following:<ul style="list-style-type: none">• Flood risk from main river• Surface water• Groundwater flood risk
Indicative Site Drainage Strategy, including: <ul style="list-style-type: none">• Preliminary sustainable drainage proposals• Outfall locations• Discharge rates• On-site storage requirements



Further information that may be required to validate the application.

An appropriate/proportionate site-specific flood risk assessment where one is required. Guidance can be found on the GOV.UK website:

- [Flood Risk Assessment for Planning Applications](#)
- [Flood Risk Assessment: Standing Advice](#)
- [Flood Risk and Coastal Change: Site-Specific Flood Risk Assessment Checklist](#)

A flood risk assessment (FRA) will be needed for developments in:

- flood zone 2 or 3 including minor developments and change of use
- more than 1 hectare in flood zone 1
- less than 1 hectare in flood zone 1, including change of use in development type to a more vulnerable class (e.g. commercial to residential), where they could be affected by sources of flooding other than rivers (e.g. surface water, drains, reservoirs)
- in areas within flood zone 1 which has critical drainage problems as notified by the Environment Agency.

The information provided in the flood risk assessment should be credible and fit for purpose. Site-specific flood risk assessments should always be proportionate to the degree of flood risk and make optimum use of information already available, including information in a Strategic Flood Risk Assessment for the area, and the [interactive flood risk maps](#) available on the Environment Agency’s web site.

Full Planning Application, Reserved Matters, Discharge of Conditions

Full Planning Application, Reserved Matters
(in addition to the information required at Outline stage)

Site and Drainage Layout

Proposed site plan showing exceedance flow routes and identification of catchment area(s)

Drainage layout plan, to include:

- Sustainable drainage system
- Sewers
- Drains
- Watercourses

Site investigation report, including the results for each sustainable drainage system feature of:

- Boreholes or Trial Pits
- Infiltration (Permeability) Testing
- Factual Ground Investigation Report (GIR)
- Geotechnical Design Report (GDR)



Sustainable drainage system flow calculations (*PDF files showing the input and output data for flow calculations*) and storm simulation plan for:

- 1 in 1 year;
- 1 in 2 year;
- 1 in 30 year, and;
- 1 in 100 year + 30% climate change



Discharge of Conditions <i>(in addition to the information required at Full/Reserved Matters)</i>
Drawings and Calculations
Detailed design drawings, including: <ul style="list-style-type: none">• Details of inlets, outlets and flow controls• Long and cross section drawings of proposed drainage system(s), including design levels• Details of appropriate water quality treatments
Construction
<ul style="list-style-type: none">• Specification of materials• Phasing of development including Construction Management Plan• Construction phase Surface Water Management Plan• Construction details• Operational Maintenance Plan• Location plan and as built drawings to be provided (Flood Risk Asset Register – Flood and Water Management Act 2010).
Operation and maintenance plan for a full planning application.
<ul style="list-style-type: none">• Whole life cycle costing for the SuDS including replacement cost.• Details of funding arrangements for SuDS maintenance.• Details of the party / organisation responsible for, and maintenance of, each feature.• Specification for inspection and maintenance, including frequency of maintenance tasks required for each proposed SuDS, setting out a minimum standard to which the SuDS system must be maintained an estimate of the expected useful life of the suds provision before replacement required.• Details of additional cleansing, repair and maintenance following flooding events where SuDS features are located in a designated flood zone.• Where SuDS features are attached to private property, confirmation of any associated maintenance / adoption / ownership requirements should be provided. For example, if SuDS features are to be included in property deeds, or if householders are required to pay into a communal fund to fund ongoing maintenance.• Details of proposed contingency plans for failure of any part of the drainage system that could present a hazard to people.
Adoption
<ul style="list-style-type: none">• Proposed arrangements for adoption / ownership to secure the operation of the scheme throughout its lifetime, including physical access arrangements for maintenance and establishment of legal rights of access in perpetuity.



Safety and Access

Consideration should always be given to safety in design and appropriate consideration of access during the design of SuDS. CDM Regulations 2015 must also be considered and applied to the planning, design and construction and long term maintenance of SuDS systems.