

Sustainable Drainage Systems (SuDS) Capability Statement



Why SuDS?

SuDS should mimic as far as possible the current reaction of a site to rainfall after development has taken place site, to avoid any increase of flood risk to the site or to others. It can alleviate capacity issues with existing drainage networks. It can be applied to 'greenfield' sites and redevelopments.

There is a recognised hierarchy to address when considering the application of SuDS to a development. It aims to deal with surface water flows as close to the source as practicable. The first pathway considered under building regulations and planning guidance is Infiltration, then discharge to a watercourse and if both are unfeasible then discharge to a sewer can be considered.

We offer comprehensive solutions to SuDS and drainage issues to achieve the most cost effective outcome. We aim to identify the most appropriate scheme considering a balance of environmental limitations, land use, and cost.

Services

The LK Group (LK) offers a range of services, including guidance for developers, planning consultants, architects and local authorities. We provide independent advice on developments, with design services for all aspects of internal infrastructure layout.

- Commercial Planning Advice,
- Feasibility Studies,
- Residential / Commercial Infrastructure Design.

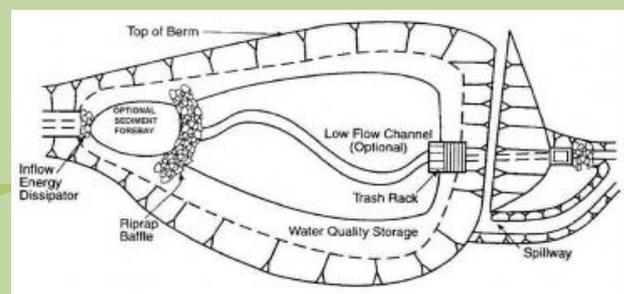
SuDS advice and outline drainage design are often provided with Flood Risk Assessments.



Outline Drainage and SuDS Design

The LK approach is to appraise each site to find the most appropriate and cost effective form of SuDS for the site whilst restricting limitations to the developable areas using technical expertise and, of course, common sense based on many years of experience.

For planning applications it is necessary to demonstrate how the flows from site can be attenuated to an acceptable agreed discharge rate; whether it be to a 'Greenfield' equivalent or other limitation. It needs to be shown that the sustainable drainage can be operated safely and the consequent effects of the development on others will be satisfactorily managed. LK will consult with the EA, the Lead Local Flood Authority, the Highway Authority, the Planning Authority, Drainage Undertaker(s), Internal Drainage Boards and others as necessary to obtain their requirements for the development of the site.



We are able to undertake permeability testing for soakaway or infiltration basin designs. With permeability results we are able to size any soakaways in accordance with BRE 365 or CIRIA Report 156. If required, we can assess and design storage requirements to attenuate flows from developments to either watercourses or sewers as appropriate. Our multidisciplinary Engineers use their extensive experience to provide design solutions that are cost effective and practical.

It is important to start the consultation process early in the site development programme so that this feedback can be included into site feasibility, master-planning and financial modelling to avoid unnecessary expenditure and delay.