

Principles of adoption

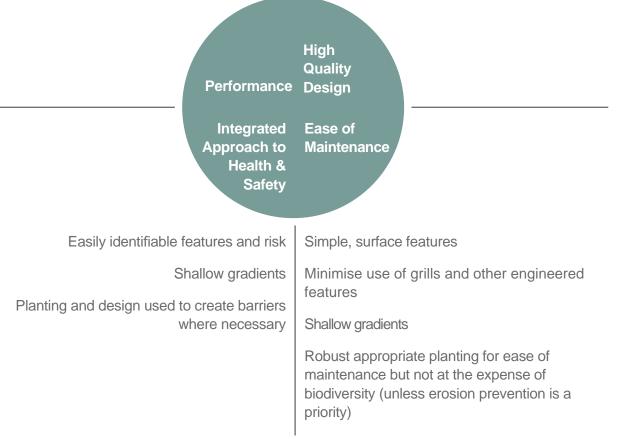
Principles

Where Cambridge City Council adopts SUDS, the design philosophy should embody the four key high level principles that the Council wishes to see as set out below. Specific guidance on how to achieve these principles is provided in each individual section. This is to ensure that SUDS for adoption provide a robust engineering solution, are of sufficiently high quality and can be easily maintained so the Council is not burdened by excessive costs or liabilities in the future. Following these principles will provide multiple benefits to the residents of Cambridge in the form of reduced flood risk, increased biodiversity and more attractive spaces.

These four key principles are:

Reduce flood risk
Improve water quality
Delivering biodiversity benefits
Provide amenity for residents

Micro managed bespoke design Integration with wider landscape setting Use of robust, low impact materials Designed to be attractive all year round



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SUDS integrated into urban design provide a high quality urban environment, Malmo, Sweden



High Quality Design integrated into an urban environment

The more successful SUDS schemes are integrated within the form of the development and because the drainage will be predominantly an above ground system rather than an underground one it is part of the urban and landscape design of the development. The successful scheme will be well integrated and sympathetic to the type and form of the development.

Well designed SUDS are valued by residents and are often used for other purposes (e.g. as an educational resource).

The concepts in the document can be used to provide larger areas of ponds and wetlands on a strategic scale. This does not mean that large ponds and wetlands are required. The principles would remain the same to provide a mosaic of features over a wider area.

This approach will lead to a more robust system that reduces the consequences if any one part of the system fails. They are also easier to maintain and this approach follows the concepts of natural drainage systems and gives greater opportunities for amenity and ecological betterment than large bodies of deep open water.

Other important considerations in the design of SUDS are:

- Use of the SUDS management train
- Use of source control
- Consideration of drainage exceedance

A checklist of adoption requirements is provided in Appendix D.

Specific Adoption requirements for each SUDS feature are found within Section 13 of this document.