# Sustainable drainage systems (SuDS) design criteria guidance note

## 1.0 Introduction

The Applicant should note that this document (reference number version 3.0 dated July 2012 – reflects departmental structure change and Scottish Planning Policy document) is the current version of the Council’s design criteria for sustainable drainage systems serving new developments, and is the subject of continual review. The Applicants must ensure that all designs carried out are in accordance with the latest version.

## 2.0 Sustainable drainage design philosophy

The Council’s design criteria have been updated to take cognizance of the Scottish Water document, Sewers for Scotland 2nd Edition, together with the legislative planning and environmental protection requirements placed on the applicant by the Council as planning authority and as flood authority and the Scottish Environmental Protection Agency (SEPA).

Proposals for developments shall comply with The Water Environment (Controlled Activities) (Scotland) Regulations 2005. General binding rule 10 of these regulations states that constructed sites must be served by a sustainable drainage system. Clarification should be sought from SEPA whether these apply to the proposed development.

Surface water drainage systems developed in line with the ideals of sustainable development are collectively referred to as sustainable drainage systems (“SuDS”). South Lanarkshire Council encourages innovative and creative SuDS which minimise the effects new developments have on the natural water cycle. SuDS systems must be developed to ensure they:-

- Protect or enhance the water quality
- Are sympathetic to the environment
- Provide a habitat for wildlife
- Encourage natural groundwater re-charge where appropriate.
- Address potential flood risks with regard to water quantity.

Over/
3.0 **Reference material for designs**

3.1 **When preparing a design, the applicant shall make reference to the following documents:**

<table>
<thead>
<tr>
<th>3.1.1</th>
<th>Scottish Planning Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.2</td>
<td>Planning Advice Note 51: Planning, Environmental Protection and Regulation</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Planning Advice Note 61: Planning and Sustainable Urban Drainage Systems</td>
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<td>3.1.4</td>
<td>Planning Advice Note 69: Planning and Building Standards Advice on Flooding</td>
</tr>
<tr>
<td>3.1.5</td>
<td>Planning Advice Note 79: Water and Drainage</td>
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</tbody>
</table>

3.2 **Scottish Environmental Protection Agency documents**

<table>
<thead>
<tr>
<th>3.2.1</th>
<th>Scottish Environmental Protection Agency Policy No 22: Flood Risk Assessment Strategy</th>
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<tbody>
<tr>
<td>3.2.2</td>
<td>Scottish Environmental Protection Agency Policy No 26: Policy on the Culverting of Watercourses</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Scottish Environmental Protection Agency Policy No 41: Development at Risk of Flooding: Advice and Consultation</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Water Environment (Controlled Activities) (Scotland) Regulations 2005 (As amended) (“the Controlled Activities Regulations”)</td>
</tr>
</tbody>
</table>

3.3 **Suds working party documents**

<table>
<thead>
<tr>
<th>3.3.1</th>
<th>Drainage Assessment: A Guide for Scotland</th>
</tr>
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<tbody>
<tr>
<td>3.3.2</td>
<td>Sustainable Urban Drainage System for Roads</td>
</tr>
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</table>

3.4 **CIRIA documents**

<table>
<thead>
<tr>
<th>3.4.1</th>
<th>CIRIA C697: The SuDS Manual</th>
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<tr>
<td>3.4.2</td>
<td>CIRIA C698: Site Handbook for the Construction of SuDS</td>
</tr>
<tr>
<td>3.4.3</td>
<td>CIRIA C624: Development and Flood Risk – Guidance for the Construction Industry</td>
</tr>
<tr>
<td>3.4.4</td>
<td>CIRIA R168 Culvert Design Manual</td>
</tr>
</tbody>
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3.5 **Scottish Water documents**

<table>
<thead>
<tr>
<th>3.5.1</th>
<th>Sewers for Scotland 2nd Edition and to such other documents, statutory guidance and/or legislation as are in force at the date of the submission.</th>
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<td>Over/</td>
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### 4.0 Development designs

All sustainable drainage designs serving new developments shall comprise of the following elements:

#### 4.1 Drainage assessment

A drainage assessment in accordance with the principles of sustainable drainage and CIRIA C697: The SuDS Manual must be carried out for the application site. This should include an assessment of flood risk including consideration of the flow route for 200 year return period flood events showing no detriment to properties within the site or outwith the site as a result of development of the site. This may form part of a separate flood risk assessment (FRA) and shall consider all types of flooding e.g. fluvial, pluvial, local storage systems and high intensity storms (See Part 4.2).

#### 4.2 Flood risk assessment

Flood risk assessments should be carried out with reference to CIRIA 624 and in accordance with the Reporting Requirements for Flood Risk Assessments issued by SEPA. Copies can be obtained from the SEPA website, [www.sepa.org.uk](http://www.sepa.org.uk).

#### 4.3 Sustainable drainage system design

All sustainable drainage systems for new developments within South Lanarkshire shall be designed in accordance with Sewers for Scotland 2nd Edition. **Written confirmation of this will be required from Scottish Water.**

SEPA must be consulted with regard to the proposed SuDS serving the application site if there is a discharge of surface water planned directly from the premises to be constructed to a Scottish Water foul or surface drain the proposals should be to Scottish Water’s requirements. **Written confirmation of this will be required from SEPA / Scottish Water.**

The Developer may also be required to obtain a license from SEPA as part of the Controlled Activities Regulations.

**The SuDS serving the proposed development shall provide the following:**

#### 4.3.1 Water quality (storm water treatment)

The surface water drainage system serving the proposed development must provide the level of treatment recommended in CIRIA C697: The SuDS Manual and by SEPA.

The Applicant should also note that the presence of existing drains in the vicinity of the application site increase the risks of pollution occurring. The Applicant should therefore follow the guidance provided in SEPA's Pollution Prevention Guidance Notes which are available on their website [www.sepa.org.uk/guidance](http://www.sepa.org.uk/guidance)

Over/
### 4.3.2 Water quantity (storm water attenuation)

South Lanarkshire Council’s current design criteria for flood risk management from surface water flows are as follows:

- The 1 in 30 year post development critical storm for the application site* is to be attenuated within the underground drainage system to the equivalent of a 1 in 2 year green-field release.

- The difference between the 1 in 30 year and the 1 in 200 year (plus 20% uplift for the predicted effects of climate change) post development critical storms for the application site is to be accommodated within the application site without detriment to properties, within or out with the application site*.

*On sites where surface water run-off is received from adjacent higher ground, it will also be necessary for applicants to demonstrate that this additional volume of storm water has been considered when complying with the Council’s design criteria.

It should be noted that if flooding is to occur within the application site under the 1 in 200 year (plus 20% uplift for the predicted effects of climate change) post development critical storm condition then the finished floor level of dwellings adjacent to the flooded area(s) must be a minimum of 0.6m above the high water level or 1.0 m above high water level when the application site is adjacent to a watercourse.

The Applicant shall ensure that the development can be accessed and egressed by emergency vehicle during a flood event. This is in accordance with paragraph 37 of Scottish Planning Policy 7: Planning and Flooding.

### 5.0 Drainage outwith the statutory maintenance responsibilities of Scottish Water (future adoption for maintenance purposes of sustainable drainage systems)

#### 5.1

The Applicant should note the following:

- There may be elements of the proposed SuDS serving the application site that Scottish Water will be unwilling to adopt. (Land drainage from adjacent higher ground is an example).

- Scottish Water has no statutory duty to drain roads, footpaths/footways out with the curtilage of premises; groundwater or accept land drainage connections.

- In order to ensure that the proposed SuDS serving the application site operates at its optimum efficiency, it is essential that regular maintenance is carried out. The Applicant should ensure that the proposed SuDS serving the application site is designed and constructed to enable adoption for future maintenance by Scottish Water or some other suitable organisation.
5.2 A schedule detailing inspection and maintenance arrangements for the entire drainage system are required; this should include how the various elements are accessed for maintenance operations - as per CDM 2007. A coloured-up plan showing which body/bodies is responsible for every aspect of the surface water drainage system is to be provided confirming inspection and maintenance details.

The key/legend on this plan should have contact particulars of the parties involved.

Written confirmation is required in the attached pro-forma Appendix 5, from the body/bodies, cross referenced to the coloured up maintenance plan, regarding the future maintenance of every aspect of the surface water drainage system.

6.0 Compliance Certificate Requirements

6.1 In addition to providing confirmation that the proposed SuDS serving the application site is to the satisfaction of both Scottish Water and SEPA, South Lanarkshire Council require the Applicant or their suitably qualified Agent to certify that the proposed SuDS serving the development site has been designed in accordance with CIRIA C697: The SuDS Manual, and Sewers for Scotland 2nd Edition by providing (1) a design compliance certificate and (2) an independent design check certificate in terms of the attached pro-forma, Appendices 1 and 2.

South Lanarkshire Council also require the Applicant or their suitably qualified Agent to certify that the flood risk assessment has been carried out and the flood risk assessment report prepared for the development in accordance with the Reporting Requirements for Flood Risk Assessments issued by SEPA by providing (1) a flood risk assessment compliance certificate and (2) an independent flood risk assessment check certificate in terms of the attached pro-forma, appendices 3 and 4.

A copy of the flood risk assessment report must be submitted to the Council’s Roads and Transportation Services, Flood Risk Management for their records.

6.2 In relation to the design of the proposed SuDS evidence of suitable professional indemnity insurance must be provided to the Council’s Roads and Transportation Services, Flood Risk Management prior to formal approval being granted by the Council.

The Council require that professional indemnity insurance is maintained at the level of £5 million pounds for each and every claim. Evidence will take the form of a copy of the insurance policy, certificate of insurance and evidence that all premiums are paid up to date.

The Council will give consideration to a lower limit on professional indemnity insurance on the following basis:-

1. Professional indemnity insurance of £1 million pounds

Will be considered for a development site of no greater than 5 dwelling houses where there are no watercourses within or immediately adjacent
<table>
<thead>
<tr>
<th><strong>Over/ to the site and/or any SuDS ponds or basins are deemed to be at no flood risk to any properties within or outwith the development.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Development value should also be less than £1 million pounds.</td>
</tr>
<tr>
<td>2. Professional Indemnity Insurance of a minimum of £3 million pounds</td>
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<tr>
<td>Will be considered for a development site of no greater than 5 dwelling houses where there is a watercourses within or immediately adjacent to the site and /or any SuDS ponds or basins are deemed to be at no flood risk to any properties within or outwith the development.</td>
</tr>
<tr>
<td>Site development value should be less than £3 million pounds</td>
</tr>
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</table>

### 7.0 Condition of Planning Consent

It should be noted that compliance with Scottish Water’s standards/criteria and any measures required by SEPA regarding SuDS and compliance with the requirements of this guidance note including submission of design and check certification together with an approved inspection and maintenance regime will be made a condition of any planning consent issued for the development.

### 8.0 Disclaimer

This document is for information purposes only and is a statement of South Lanarkshire Council’s requirements in relation to SuDS. Applicants will be required to satisfy themselves as to the current statutory and/or legal requirements in relation to SuDS.
Appendix 1

Community and Enterprise Resources

Sustainable drainage design compliance certificate

I certify that all the reasonable skill, care and attention to be expected of a qualified and competent professional in this field has been exercised in designing the sustainable drainage system for the below named development in accordance with CIRIA C697: The SUDS Manual, Sewers for Scotland 2nd Edition – A design and construction guide for developers in Scotland and SLC – Sustainable Drainage Systems (SUDS) Design Criteria.

Name of development .................................................................

Name of developer .................................................................

Planning application number ...................................................

Roads construction consent number ...........................................

Signed .................................................................

Name .................................................................

Position Held .................................................................

Name and address of organisation .............................................

Engineering qualifications ......................................................1

Date .................................................................

Notes: 1. CEng from an appropriate Chartered Engineering Institution
Sustainable drainage design – independent check certificate

I certify that all the reasonable skill, care and attention to be expected of a qualified and competent professional in this field has been exercised in checking the below named development, with a view to securing that:

(1) It has been designed in accordance with CIRIA C697: The SuDS Manual, Sewers for Scotland 2nd edition – A design and construction guide for developers in Scotland and SLC – Sustainable Drainage Systems (SuDS) Design Criteria and

(2) It has been accurately translated into construction drawings and schedules. The unique numbers of these drawings and schedules are as listed on attached sheet.

Name of development .................................................................

Name of developer .................................................................

Planning application number .....................................................

Roads construction consent number ...........................................

Signed ................................................................. 1

Name .................................................................

Position Held .................................................................

Name and address of organisation ................................................ 2

Engineering qualifications ........................................................ 1

Date .................................................................

Notes: 1. CEng from an appropriate Chartered Engineering Institution
        2. Organisation to be totally independent of original designer/design organisation
Flood risk assessment compliance certificate

I certify that all the reasonable skill, care and attention to be expected of a qualified and competent professional in this field has been exercised in carrying out the flood risk assessments and preparing the flood risk assessment report for the below named development in accordance with the Reporting Requirements for Flood Risk Assessments issued by SEPA.

Name of development .................................................................

Name of developer ........................................................................

Planning application number ..........................................................

Rocks construction consent number ..................................................

Signed .........................................................................................

Name ..........................................................................................

Position Held ............................................................................... 

Name and address of organisation ..................................................

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Engineering qualifications ..........................................................

Date .............................................................................................

Notes: 1. CEng from an appropriate Chartered Engineering Institution
Flood risk assessment – independent check certificate

I certify that all the reasonable skill, care and attention to be expected of a qualified and competent professional in this field has been exercised in checking the flood risk assessments for the below named development, with a view to securing that it has been accurately translated into the flood risk assessment report.

Name of development .................................................................

Name of developer .................................................................

Planning application number ....................................................

Roads construction consent number ...........................................

Signed ................................................................. 1

Name .................................................................

Position Held .................................................................

Name and address of organisation ............................................... 2

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.................................................................

Engineering qualifications ................................................................. 1

Date .................................................................

Notes: 1. CEng from an appropriate Chartered Engineering Institution

2. Organisation to be totally independent of original designer/design organisation
Confirmation of future maintenance of sustainable drainage apparatus

I hereby confirm that the future maintenance of the sustainable drainage apparatus as detailed below and on the approved construction drawing numbered ………………… will be carried out in accordance with the attached maintenance schedule, by the undernoted organisation

Name of development …………………………………………………………
Name of developer …………………………………………………………
Planning application number …………………………………………………………
Roads construction consent number. …………………………………………………………
Name and address of maintenance organisation (including contact telephone number and e-mail address)
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Details of sustainable drainage apparatus to be maintained:-
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…………………………………………………………
…………………………………………………………
Signed …………………………………………………………
Name …………………………………………………………
Position Held …………………………………………………………
Name of organisation …………………………………………………………
Date …………………………………………………………

Updated July 2012