

## **DUNDEE CITY COUNCIL SUSTAINABLE DRAINAGE SYSTEMS (SuDS) DESIGN**

### **CRITERIA GUIDANCE NOTE**

#### **1 INTRODUCTION**

- 1.1 The Applicant should note that this document is the current version (V2.0) of Dundee City Council's design criteria for sustainable drainage systems serving new developments, and is the subject of continual review.
- 1.2 The Applicants must ensure that all designs carried out are in accordance with the latest version.

#### **2 SUSTAINABLE DRAINAGE DESIGN PHILOSOPHY**

- 2.1 The Council's design criteria have been updated to take cognizance of the current Edition of Scottish Water's Sewers for Scotland document, together with the legislative planning and environmental protection requirements placed on the applicant by the Council as Planning Authority and the Scottish Environmental Protection Agency (SEPA).
- 2.2 Proposals for the application site shall comply with The Water Environment (Controlled Activities) (Scotland) Regulations 2011. 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.
- 2.3 Surface water drainage systems developed in line with the ideals of sustainable development are collectively referred to as sustainable drainage systems ("SuDS"). Dundee City 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; and
  - Address potential flood risks with regard to water quantity.

### **3 REFERENCE MATERIAL FOR DESIGNS**

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

- 3.1.1 Scottish Planning Policy (June 2014);
- 3.1.2 Planning Advice Note 51: Planning, Environmental Protection and Regulation;
- 3.1.3 Planning Advice Note 61: Planning and Sustainable Urban Drainage Systems;
- 3.1.4 Planning Advice Note 69: Planning and Building Standards Advice on Flooding; and
- 3.1.5 Planning Advice Note 79: Water and Drainage.

#### **3.2 Scottish Environmental Protection Agency Documents:**

- 3.2.1 Land Use Planning Systems SEPA Guidance Note 8;
- 3.2.2 Scottish Environmental Protection Agency Policy 41: Development at Risk of Flooding: Advice and Consultation;
- 3.2.3 Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (“the Controlled Activities Regulations”);
- 3.2.4 WAT – RM - 08 Treatment Level Guidance;
- 3.2.5 WAT – RM – 09 Modification to CAR Authorisations;
- 3.2.6 WAT – SG – 12 General Building Rules for Surface Water Drainage Systems;
- 3.2.7 WAT – SG – 08 Sustainable Urban Drainage Systems (SuDS or SuD Systems);
- 3.2.8 WAT – SG – 39 Point Source Regime Definitions and Scope; and
- 3.2.9 BRE.365 – Soakaway Design.

#### **3.3 SuDS Working Party Documents:**

- 3.3.1 Drainage Assessment: A Guide for Scotland; and
- 3.3.2 Sustainable Urban Drainage System for Roads.

#### **3.4 CIRIA Documents:**

- 3.4.1 CIRIA C753: The SuDS Manual 2015;
- 3.4.2 CIRIA C698: Site Handbook for the Construction of SuDS;
- 3.4.3 CIRIA C624: Development and Flood Risk – Guidance for the Construction Industry; and
- 3.4.4 CIRIA R168: Culvert Design Manual.

### **3.5 Scottish Water Documents:**

- 3.5.1 Sewers for Scotland current edition and to such other documents, statutory guidance and/or legislation as are in force at the date of the submission.

## **4 DEVELOPMENT DESIGNS**

All sustainable drainage designs serving application sites shall comprise of the following elements:

### **4.1 Drainage Assessment**

A drainage assessment in accordance with the principles of sustainable drainage and CIRIA C753: The SuDS Manual 2015, must be carried out for the application site. This should include an assessment of flood risk which considers any overland flow route during the 1-in-200 year return period event plus an allowance for climate change to demonstrate there is no detriment to properties on and off 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 eg fluvial, pluvial, local storage systems and high intensity storms (see part 4.2).

### **4.2 Flood Risk Assessment**

Where an application site is at risk of flooding or where a new/increased discharge is to be provided to a watercourse, a Flood Risk Assessment must be submitted with any Planning Application for review, acceptance and records. The Flood Risk Assessment must also be submitted to SEPA for agreement.

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 application sites within Dundee City shall be designed in accordance with Sewers for Scotland current edition (unless otherwise agreed with Dundee City Council as part of a Section 7 Agreement).

If there is a discharge of surface water proposed directly from any premises to a Scottish Water Public Sewer the proposals should be to Scottish Water's requirements and Scottish Water's written confirmation/approval of the connection is to be submitted to Dundee City Council by the applicant.

SEPA must be consulted with regard to the proposed SuDS serving the application site and any comment/approval provided by SEPA to the applicant is to be submitted to Dundee City Council.

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

The SuDS serving the application site shall provide the following:

**4.3.1 Water Quality (surface water treatment):**

The surface water drainage system serving the application site must provide the level of treatment recommended in CIRIA C753: The SuDS Manual 2015 and as required 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](http://www.sepa.org.uk).

**4.3.2 Water Quantity (surface water attenuation):**

Dundee City Council's current design criteria for flood prevention from surface water flows are as follows:

The post development critical 1-in-30 year return period event for the application site is to be attenuated within the surface water drainage system, normally to the equivalent of a 1-in-5 year return period event green-field release.

The difference between the post development critical 1-in-30 year and 1-in-200 year return period events (plus allowances for climate change) for the application site should be accommodated within the application site and must not increase the flood risk to properties within or outwith the application site<sup>1</sup>.

It should be noted that there is a presumption against development within a site where flooding occurs under the 1-in-200 year return period event (plus an allowance for climate change). This is in line with Dundee City Council's Local Development Plan 2013 Policy No 41 "Flood Risk Management".

The Applicant shall ensure that the application site can be accessed and egressed by emergency vehicle during a flood event. This is in accordance with Scottish Planning Policy.

**5 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 outwith 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

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<sup>1</sup>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 surface water has been considered when complying with the Council's design criteria

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 in perpetuity organisation.

- 5.2 A schedule detailing inspection and maintenance arrangements for the entire drainage system is required; this should include how the various elements are accessed for maintenance operations – as per the current Construction Design and Management Regulations. 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 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, Dundee City Council require the Applicant or their suitably qualified Agent to certify that the proposed SuDS serving the application site has been designed in accordance with CIRIA C753: The SuDS Manual 2015, and Sewers for Scotland current edition by providing:

- a Sustainable Drainage Design Compliance Certificate in accordance with the attached pro-forma in Appendix 1; and
- a Sustainable Drainage Design Independent Check Certificate in accordance with the attached pro-forma in Appendix 2.

- 6.2 In relation to the design of the proposed SuDS, evidence of suitable professional indemnity insurance must be provided to the Council's City Development Department, Planning Division, **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.

- 6.3 Where a Flood Risk Assessment is submitted, Dundee City Council require the applicant or their suitably qualified Agent to certify that the Flood Risk Assessment has been prepared in accordance with the Reporting Requirements for Flood Risk Assessments issued by SEPA by providing:

- a Flood Risk Assessment Compliance Certificate in accordance with the attached pro-forma in Appendix 3; and
- a Flood Risk Assessment Independent Check Certificate in accordance with the attached pro-forma, appendix 4.

## **7           CONDITION OF PLANNING CONSENT**

- 7.1           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 application site.

## **8           DISCLAIMER**

- 8.1           This document is for information purposes only and is a statement of Dundee City Council's requirements in relation SuDS. Applicants will be required to satisfy themselves as to the current statutory and/or legal requirements in relation SuDS.



**APPENDIX 1**

**DUNDEE CITY COUNCIL CITY DEVELOPMENT DEPARTMENT  
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 C753: The SuDS Manual 2015, current Edition of Sewers for Scotland and Dundee City Council – Sustainable Drainage Systems (SuDS) Design Criteria.

Name of Development: \_\_\_\_\_

Name of Developer: \_\_\_\_\_

Planning Application No: \_\_\_\_\_

Roads Construction Consent No: \_\_\_\_\_

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Position Held: \_\_\_\_\_

Name and Address of Organisation: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Engineering Qualifications<sup>2</sup>: \_\_\_\_\_

Date: \_\_\_\_\_

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<sup>2</sup> Minimum Qualification - IEng from an appropriate Chartered Engineering Institution

**APPENDIX 2**

**DUNDEE CITY COUNCIL CITY DEVELOPMENT DEPARTMENT**

**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 the below named development with a view to securing that:

- 1 It has been designed in accordance with CIRIA C753: The SuDS Manual 2015, current Edition of Sewers for Scotland and Dundee City Council – 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 No: \_\_\_\_\_

Roads Construction Consent No: \_\_\_\_\_

Signed: \_\_\_\_\_

Name<sup>3</sup>: \_\_\_\_\_

Position Held: \_\_\_\_\_

Name and Address of Organisation<sup>3</sup> : \_\_\_\_\_

Engineering Qualifications<sup>4</sup>: \_\_\_\_\_

Date: \_\_\_\_\_

<sup>3</sup> Independent Checker can be someone from within the same organisation which prepared the drainage design but must be independent of the Drainage Design Team

<sup>4</sup> Minimum Qualification - IEng from an appropriate Chartered Engineering Institution



**APPENDIX 3**

**DUNDEE CITY COUNCIL CITY DEVELOPMENT DEPARTMENT**

**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 No: \_\_\_\_\_

Roads Construction Consent No: \_\_\_\_\_

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Position Held: \_\_\_\_\_

Name and Address of Organisation: \_\_\_\_\_

\_\_\_\_\_

Engineering Qualifications<sup>5</sup>: \_\_\_\_\_

Date: \_\_\_\_\_

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<sup>5</sup> Minimum Qualification - IEng from an appropriate Chartered Engineering Institution



**APPENDIX 4**

**DUNDEE CITY COUNCIL CITY DEVELOPMENT DEPARTMENT**

**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 ensuring that it has been accurately translated into the flood risk assessment report.

Name of Development: \_\_\_\_\_

Name of Developer: \_\_\_\_\_

Planning Application No: \_\_\_\_\_

Roads Construction Consent No: \_\_\_\_\_

Signed: \_\_\_\_\_

Name<sup>6</sup>: \_\_\_\_\_

Position Held: \_\_\_\_\_

Name and Address of Organisation<sup>6</sup>: \_\_\_\_\_

\_\_\_\_\_

Engineering Qualifications<sup>7</sup>: \_\_\_\_\_

Date: \_\_\_\_\_

<sup>6</sup> Independent Checker can be someone from within the same organisation which prepared the Flood Risk Assessment but must be independent of the Team which prepared it

<sup>7</sup> Minimum Qualification - IEng from an appropriate Chartered Engineering Institution



**APPENDIX 5**

**DUNDEE CITY COUNCIL CITY DEVELOPMENT DEPARTMENT**

**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 No: \_\_\_\_\_

Roads Construction Consent No: \_\_\_\_\_

Name and address of maintenance organisation (including contact telephone number and e-mail address):

Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Details of sustainable drainage apparatus to be maintained:

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Position Held: \_\_\_\_\_

Name and Address of Organisation: \_\_\_\_\_

Date: \_\_\_\_\_