



**GCV GREEN NETWORK PARTNERSHIP PROJECT BRIEF:**

**DEVELOPMENT OF SUDS OPPORTUNITIES WITHIN THE GREEN NETWORK**

**1. INTRODUCTION**

The Glasgow and Clyde Valley (GCV) Green Network Partnership is a catalyst for the creation of a transformational, high quality Green Network across the Glasgow metropolitan area. The role of the Partnership is to act strategically to stimulate and facilitate the planning, delivery and sustainable long term management of the Green Network.

The aim is to create a step change in the scale and quality of the Green Network to improve the region's competitiveness for investment, enhance quality of life, promote biodiversity and more sustainable use of natural resources, and encourage healthy lifestyles.

The GCV Green Network Partnership brings together the eight local authorities which comprise the Glasgow metropolitan region with five major government agencies that promote and deliver on the environmental, social, health and economic agendas throughout the GCV area, namely Scottish Government Housing and Regeneration Directorate, Scottish Enterprise, Glasgow Centre for Population Health, Forestry Commission Scotland and Scottish Natural Heritage.

**2. BACKGROUND**

The flooding event of 30<sup>th</sup> July 2002, in which the average monthly rainfall usually experienced by Glasgow fell in ten hours, highlighted the inability of the ageing and inadequate drainage system to cope with such events.

It was recognised that major investment, effort and co-ordination would be required, not only to address the inadequacies of the system as it stood in 2002 but, to create a system which could accommodate projected development across the metropolitan region.

To this end a multi-agency task force, the Metropolitan Glasgow Strategic Drainage Partnership (MGSDP), was created to evaluate the current system and develop innovative and sustainable solutions to identified problems. The MGSDP comprises Glasgow City Council (GCC), South Lanarkshire Council (SLC), Scottish Water, Scottish Environmental Protection Agency (SEPA) and Scottish Enterprise.

The MGSDP has undertaken a considerable amount of work to date to reduce the flood risk, however, it is recognised that it may take some twenty five years to create the drainage system required to enable envisaged future economic development.

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Historically, solutions have tended to be heavily engineered and consequently capital intensive. Increasingly, however, more environmentally sustainable solutions, based on natural systems for treating and storing water with a controlled release, are being utilised. These Sustainable Urban Drainage Systems (SUDS) can also deliver a range of other benefits including new habitat and increased biodiversity, enhanced amenity, recreation and education opportunities.

Computer modelling exists to demonstrate how rivers, sewers and watercourses work during a range of conditions. However, to date limited detailed analysis has been undertaken to assess the correlation between areas at risk of flooding, watercourses, major development sites (such as Community Growth Areas) and habitat creation and the opportunities which exist to draw these strands together into SUDS solutions which would deliver the widest possible range of benefits.

This project will seek to undertake that analysis and identify opportunities for high quality SUDS creation across the GCV.

### **3. LEGISLATIVE AND POLICY CONTEXT**

The Water Environment (Controlled Activities) (Scotland) Act 2005 generally requires that where new development takes place, and the surface runoff is to be drained to the water environment, that such runoff is routed through a SUD System, making SUDS a requirement for nearly all new developments draining to the water environment.

In addition the MGSDP and SUDS are supported and advocated through a range of national, regional and local policy. These include:

- National Planning Framework 2
- SPP 7, Planning and Flooding
- PAN 61, Planning and Sustainable Urban Drainage
- PAN 79, Water and Drainage
- GCV Structure Plan
- River Basin Management Plan
- Glasgow City Plan 2
- Local Development Plans

The practical implementation of policy is supported by the following technical guidance:

- Sewers for Scotland 2 (Scottish Water, 2007)
- The SUDS Manual (CIRIA, 2007)

Reference should also be made to the Glasgow City Council document “SUDS Integration in Urban Design – A Design Study for South Dalmarnock”

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## 4. PROJECT AIM

The dual aims of the project are to:

1. Identify opportunities, and specific locations, within the GCV region to promote and develop exemplar SUDS projects, both in new developments and as retro-fits to existing developments.
2. To develop Concept Plans/Feasibility Studies for those locations identified above.

These aims will be achieved by:

1. Undertaking a detailed GIS based analysis of a range of pertinent datasets which will identify geographical locations where synergies exist and the multi-benefits of well designed and maintained SUDS can be realised.
2. Developing the site specific hydrological, topographical, habitat and proposed development factors into a Concept Plan/Feasibility Study for each location identified.

## 5. SCOPE OF STUDY

The MGSDP seeks to include the six local authorities, over and above Glasgow City Council, which have the potential to impact on the Metropolitan Glasgow drainage system. These are: North and South Lanarkshire, East and West Dunbartonshire, East Renfrewshire and Renfrewshire.

The Glasgow and Clyde Valley area additionally includes Inverclyde Council and for the purposes of this study all eight authorities will be included in the analysis. The project will seek to identify at least one location within each authority for development of a Concept Plan/Feasibility Study.

## 6. SUGGESTED METHODOLOGY

**6.1** The consultant will undertake a GIS based analysis of the following core datasets:

- Predicted Flooding Areas
- River Basin Management Water Pressures
- Large Scale Development Proposals (e.g. CGAs, Growth Corridors, Masterplanning areas, Local Development Strategies)
- Integrated Habitat Network Modelling

Through consultation and investigation, the consultant will include additional datasets which will inform the study.

The analysis will identify areas of correlation between the datasets where the potential exists to deliver not only sustainable drainage solutions within major developments, but also a range of additional benefits including biodiversity, recreation, amenity and education.

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All areas where significant correlation between the datasets occurs should be identified. Through stakeholder consultation, these will then be prioritised to propose at least one location within each of the seven local authorities which constitute the wider metropolitan area, and two for Glasgow City Council, supported by the rationale for the prioritisation. The final list for development to Concept Plans should include a range of situations including residential, business, roads and large scale utility (e.g. hospitals, schools etc) development. New development and the potential to retro-fit SUDS should also be considered.

Consideration should also be given to the proximity of each site in relation to the other Green Network and water management sites and opportunities for connectivity identified where possible.

**6.2** Concept Plans, which take cognisance of all relevant policy and guidance, will then be produced for each of the locations identified through the analysis and will include the following elements:

- Water management (including source and site control)
- Urban design
- Non-drainage benefits including;
  - Health benefits
  - Social benefits
  - Education benefits
  - Biodiversity
  - Business
- Sustainable management
- Financial comparison of SUDS against traditional engineering solutions
- Roles and responsibilities of organisations in SUDS development and long-term management
- Location specific concept

## 7. PROJECT OUTPUTS

The consultant will deliver the following outputs:

- ESRI compatible GIS layer demonstrating the correlation between the datasets included in the analysis.
- Report detailing the analysis and the rationale for the locations identified.
- Concept Plans (number to be confirmed through analysis but at least nine)

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The structure and format, including the front cover, of all reports must be agreed with the Steering Group prior to production and should include the GNP logo.

The consultants are required to provide eight bound copies of the final report. In addition, an electronic version of the document (including a web-ready PDF), together with any accompanying maps, appendices and diagrams should be provided on CD.

**Note:** Diagrams should be available in a vector based format to allow conversion to Freehand or Illustrator for use in Mac-based graphics packages. This will allow diagrams to be easily incorporated into project promotional material.

## **8. PROJECT MANAGEMENT**

### **Lead officer**

The lead contact for the project will be:

Neil MacLean  
SUDS Co-ordinator  
Central Advisory Unit  
Scottish Environment Protection Agency  
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Supported by:

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Email: Alastair.corbett@gcvgreennetwork.gov.uk

### **Steering Group**

A Steering Group will oversee delivery of the project and will comprise:

- SEPA (Chair)
- GCV Green Network Partnership
- Glasgow City Council
- South Lanarkshire Council
- Renfrewshire Council

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- Scottish Water
- Scottish Enterprise
- GCV Strategic Development Planning Authority

### Working Group

The Steering Group will be supported by a project working group comprising:

- Glasgow City Council, DRS (Chair) and LES
- Representatives from the remaining 7 GCV local authorities
- Glasgow Centre For Population Health
- Forestry Commission Scotland
- SEPA
- Green Network Partnership
- GCV Strategic Development Planning Authority

## 9. TIMESCALE

Board Approval	November 2008
Tenders Returned	xxxxx
Assessment / interview	
Consultants appointed	
Induction meeting	
Study Reports/Steering Group meetings	
Draft Final Report	
Final Report	31 <sup>st</sup> March 2009

## 10. BUDGET

A budget has been set for the study of £150,000 exclusive of VAT. The budget includes provision for both fees and expenses.

Consultants must also include the following within their budget:

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- attendance at  Steering Group meetings;
- a presentation at an event yet to be determined to launch the guidance.

Consultants are invited to propose an appropriate set of staged payments linked to the production of identified outputs.

### 11. RESPONDING TO BRIEF

Consultants seeking to carry out the work should supply the following:

- detailed, justified proposals for meeting the aims for the study;
- details of proposed personnel, their relevant skills and experience, details of any similar work the contractor has undertaken and evidence of innovative solutions;
- a work programme identifying the timescale and completion date for each phase of the work;
- detailed costings for carrying out the work detailed in the Brief which are clearly itemised and indicate day rates and number of days allocated for individual personnel, travel, subsistence, overheads, project management, presentation costs and any other anticipated costs. VAT should be shown separately (please indicate your VAT status); and
- contractors should also include costs for attendance at three project meetings to be held in Glasgow.

GCV Green Network reserves the right to accept a tender other than the lowest or not to accept any tender at all and will not be held liable for any costs incurred in the preparation of the tenders.

**Note:** All outputs and data generated through the project will be owned by the project partners and as such permission will be required by the consultant to reproduce or use any such material.