



The Metropolitan Glasgow Strategic Drainage Partnership

The Metropolitan Glasgow Strategic Drainage Partnership (MGSDP) is a collaborative venture between Glasgow City Council, the Scottish Environment Protection Agency (SEPA), Scottish Water, Scottish Enterprise, Clyde Gateway, Clydeplan, South Lanarkshire Council, Scottish Canals, Renfrewshire Council, East Dunbartonshire Council, North Lanarkshire Council and Network Rail. The MGSDP Vision is to transform how the city region thinks about and manages rainfall to end uncontrolled flooding and improve water quality. This vision will be realised through partnership working shaped by the MGSDP Guiding Principles.

First Two Green Infrastructure Fund Projects Announced

The Green Infrastructure Fund is a £8.25million fund to create or improve publicly accessible greenspaces. It is part of the European Regional Development Fund's Scottish programme for 2014-2020. Scottish Natural Heritage (SNH) is delivering the Fund on behalf of the Scottish Government. It will support the creation and improvement of green spaces in urban areas, benefiting communities across Scotland. With match funding from partners the total overall investment will be up to £20 million.

The Green Infrastructure Fund aims to transform some of Scotland's most deprived urban areas by developing and improving their green spaces. It targets areas where the population is greater than 10,000, and which fall within the 15% most deprived in Scotland, according to the recently updated Scottish Index of Multiple Deprivation. The Fund is a unique opportunity to create green infrastructure on an unprecedented scale across urban Scotland and provides an exciting chance to deliver noticeable benefits to areas where it is most needed.

Two projects have been awarded funding from Round 1 of the Green Infrastructure Fund. Both are in Glasgow, and are due to start construction in 2017:

1 - Canal & North Gateway – a project to enhance green space along the canal corridor between Firhill and Port Dundas, including creation of a local nature reserve and an innovative water management solution based around the Forth & Clyde Canal.

2 - Greater Easterhouse – large scale enhancement of green infrastructure which will give local people links to a wide network of green space including the Seven Lochs area. The project will also benefit a nationally important population of water voles and support surface water management.

The funding will enable these projects to seize an opportunity to create green infrastructure on an unusually wide scale and bring benefits to areas where it is most needed.

For more information visit the Green Infrastructure Fund website - <http://www.greeninfrastructurescotland.org.uk/news/first-two-green-infrastructure-projects-announced>



Sighthill Regeneration and the North Glasgow Integrated Water Management System

With links to the Canal and North Gateway project noted above, the regeneration of the Sighthill area of Glasgow is progressing well, with the announcement in October 2016 of the appointment of a contractor to undertake the £36.54million contract for infrastructure work. This contract will see construction works for roads, earthworks, utilities, drainage, landscaping and public realm carried out at Sighthill TRA, starting late 2016 with completion expected in early 2019.

For more information, visit the GCC Sighthill webpage - <https://www.glasgow.gov.uk/index.aspx?articleid=18395>
The Sighthill area will be the first development area to benefit from connection to the North Glasgow Integrated Water Management System (NGIWMS) – an innovative scheme to use live meteorological data to dynamically lower water levels in SuDS ponds and the Forth & Clyde Canal via remotely monitored sensors and linked outlet controls, in advance of a major rainfall event. In addition to managing flood risk and facilitating regeneration of the north Glasgow area, the new water management SuDS will safeguard water quality and improve habitat for wildlife. The NGIWMS concept was a finalist in the Innovation award category at the World Canals Conference (www.wccscotland.com) held in Inverness in September 2016.

Surface Water Management Plan Updates

MGSDP partners are continuing to advance a number of surface water management plan (SWMP) projects identified in the Clyde and Loch Lomond (CaLL) Local Flood Risk Management Plan (LFRMP).

Status updates for Glasgow City Council led SWMP projects, are noted below. The implementation of each of these projects will be enabled by Glasgow City Region City Deal funding:-

- Croftfoot SWMP - feasibility / concept design complete. Detailed design phase will commence early 2017;
- King's Park SWMP - feasibility / concept design complete. Detailed design phase will commence early 2017;
- Overwood Dr / Aikenhead Rd SWMP - feasibility / concept design complete. Detailed design phase will commence early 2017;
- Drumchapel SWMP - feasibility / concept design ongoing in partnership with Scottish Water and East Dunbartonshire Council. A local community engagement event was held 8th November;
- Eastern Springburn / Fullarton Avenue / High Knightswood SWMPs – feasibility / concept design commenced November 2016;
- Hillington / Cardonald SWMP - feasibility / concept design, in partnership with Renfrewshire Council, commenced November 2016;
- Darnley Mains SWMP - feasibility / concept design commenced November 2016;

- Cockenzie St / Cardowan and Greater Easterhouse Integrated Green Infrastructure – detailed design phase commenced December 2016.

For more information on the Glasgow City Region City Deal, visit the website here -

www.glasgowcityregion.co.uk



Status updates for East Dunbartonshire Council led SWMP projects are noted below:-

- Bishopbriggs SWMP – procurement for feasibility / outline design phase commenced December 2016;
- Bishopbriggs SWMP – procurement for feasibility / outline design phase commenced December 2016;
- Bishopbriggs SWMP – procurement for feasibility / outline design phase commenced December 2016.

The CaLL LFRMP is available to download from the Glasgow City Council website here –

<http://www.glasgow.gov.uk/clydeandlochlomond>

The LFRMP should be read in conjunction with the Flood Risk Management Strategy that was published for the CaLL area by SEPA in December 2015, and available to download here - <http://apps.sepa.org.uk/FRMStrategies/>



Typical SWMP Conceptual Design Proposals



Croftfoot Park SuDS Basin Operational

A new SuDS basin constructed in Croftfoot Park to attenuate surface runoff from Croftfoot Park was completed in December 2016 to reduce the risk and impacts of flooding in Croftpark Avenue and areas further downstream.

The £200,000 project has been delivered by Glasgow City Council to, primarily, manage runoff from the former golf course area that now forms Croftfoot Park, which was contributing to frequent surface water flooding that was impacting a number of properties along Croftpark Avenue.

The basin has been constructed on the line of the Spittal Burn culvert from King's Park and is designed to hold back runoff from Croftfoot Park in a controlled manner using

a flow control device, to reduce the risk of local flooding occurring.

Attenuating flow in this manner will also provide benefit for properties further downstream along the line of Spittal Burn culvert. Grass seeding and other planting works will be undertaken in spring 2017 to complete the landscaping for the project. A launch event to mark the completion of the main SuDS basin is also planned for Spring 2017.

This project has been delivered as the first phase of proposed SWMP interventions in the Croftfoot area, with further works to be undertaken in the coming years to provide further reduction in flood risk.



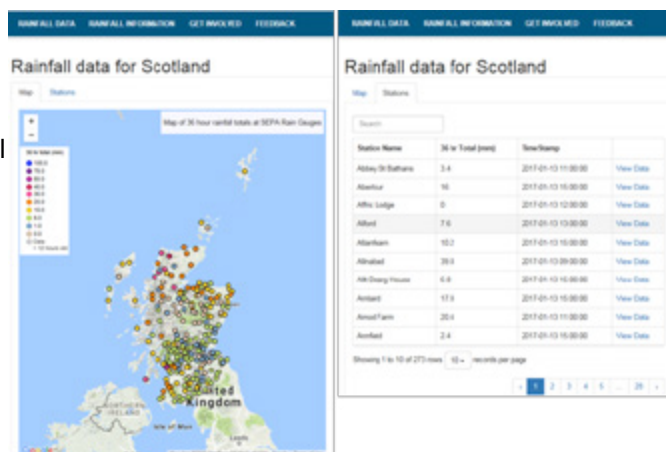
Croftfoot Park SuDS basin

Real-time Scottish Rainfall Data Now Available on SEPA's Website

Real-time rainfall information for over 270 locations across Scotland has now been made available on SEPA's website. This may be helpful for a wide range of uses such as flood forecasting, farming, angling and canoeing. Each gauge is represented by a dot on a map which can be clicked to reveal the gauge name and rainfall amounts in a range of hourly, daily, monthly and annual formats. There is also the ability to search by station name.

In addition to running these intensity gauges linked by telemetry, SEPA also manages a network of manually read storage gauges operated by public volunteers. The complete network captures the distribution of rainfall across Scotland and is essential for understanding trends and environmental change. The data is also submitted to the Met Office's national rainfall archive for which SEPA provides the majority of observation sites in Scotland. This archive of reliable long-term data is used by government bodies, industry and researchers to model and inform weather and flood forecasting, climate research, water resource management and the wellbeing of communities.

Data from the SEPA's network of rain gauges is collected automatically but it can take an hour or two to process through the system before it appears on the website. Sometimes automatic collection is delayed for various reasons such as maintenance, system outages or failure of the public telemetry links. If data from a gauge is more than 12 hours old the dot on the map will show as grey. SEPA staff are made aware when data falls behind and will work to fix the problem as soon as possible. There is no need to contact SEPA if there are gauges showing as grey on the map. The beta test rainfall data website is available here - <http://beta.sepa.org.uk/rainfall>



Magenta Business District at Shawfield set to Create 12,000 New Jobs

Commercial property developer Highbridge Properties has launched what will be a new satellite business district for Glasgow and one of the UK's largest office parks, at the former Shawfield development in Clyde Gateway. The development, branded Magenta at Clyde Gateway, will comprise 1.2 million square feet of office space set on 27 acres next to the River Clyde and M74 motorway network and just ten minutes from Glasgow's city centre.

Magenta is the largest office development with planning consent in Scotland and will create a new national business district for the Central Belt. It is estimated that the development will bring at least 12,000 new jobs to the area. Clyde Gateway has invested £20m in public realm and infrastructure works to the site to ensure it is development-ready.

Magenta will provide a value for money addition to the Scottish economy – with Grade A office space that offers savings of 37 percent on similar new-build offices in city centre locations, and 28 percent on similar refurbished city centre offices. High density organisations, such as

shared services and customer contact centres can make even greater savings, as buildings can be designed to meet their exact requirements and achieve very efficient occupational densities.

Ian Manson, Chief Executive at Clyde Gateway said: "This is an extremely exciting time for the Clyde Gateway area and I am delighted to have appointed Highbridge as our commercial development partner – a company with a fantastic track record in delivering high quality business parks". "Magenta will give the local economy and employment market a phenomenal boost. It will also attract new inward investment to Scotland and stimulate economic growth."

It is expected that, as well as office space, Magenta will support a number of shops, cafes, a gym and business centre.

For further information, visit the Clyde Gateway website - www.clydegateway.com



Magenta Business District, Shawfield. Image credit Clyde Gateway

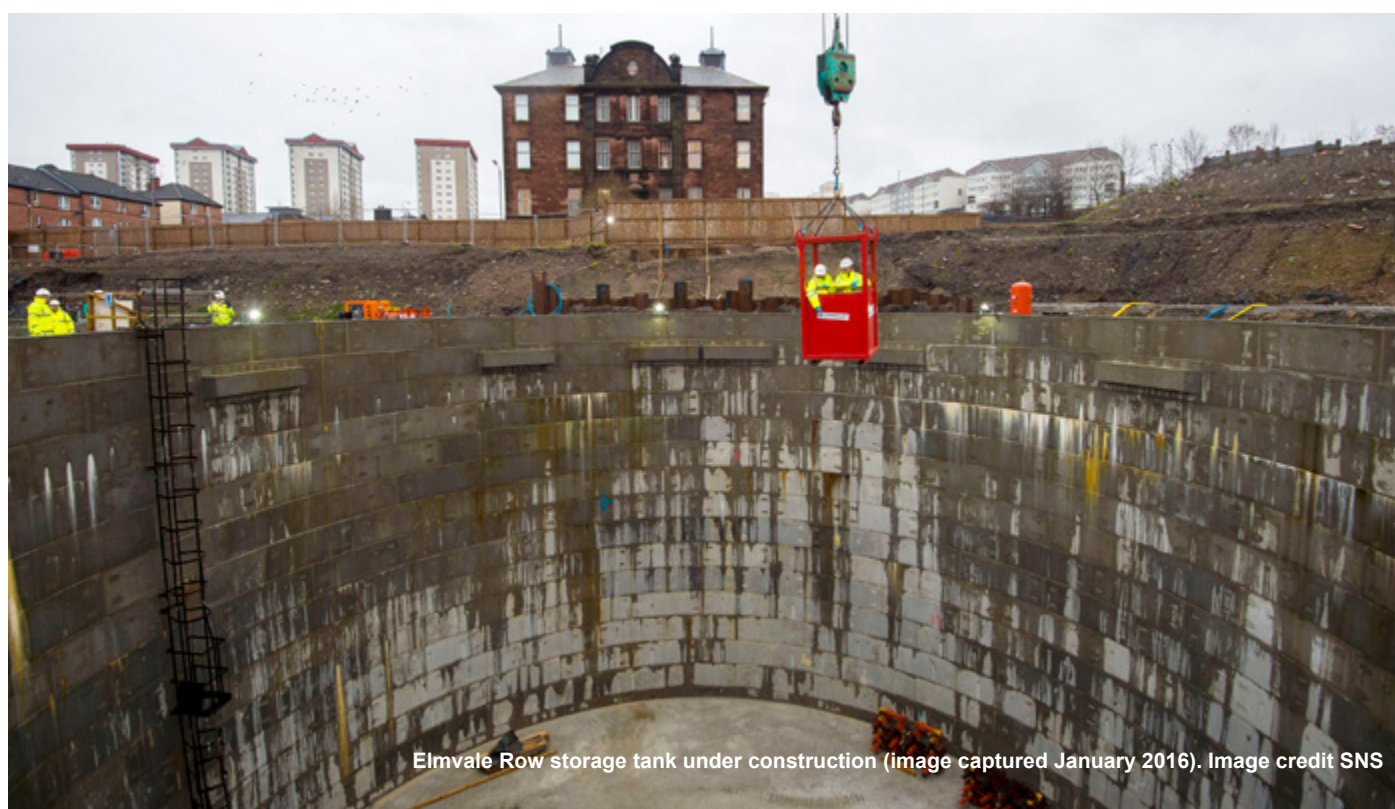
Major Flooding Project Completed in Springburn

In late 2016 Scottish Water completed a £12.5m, two-year, project to tackle sewer flooding in Elmvale Row, Springburn, where 34 properties have experienced recurring problems with flooding for a number of years.

To alleviate sewer surcharging and flooding, amey Black & Veatch (aBV), Scottish Water's delivery partners, have constructed 13,500 cubic metres of storm water storage into the sewer network via two large (25m diameter and 18m deep) circular, below-ground, tanks. Pumps have been installed in the tanks to return stored storm water back into the sewer once storm conditions have abated.

The project is part of Scottish Water's 2015 - 2021 Business Plan commitment to remove all customers from the internal sewer flooding register (those with a 10% or greater chance of flooding occurring per annum) as quickly as possible and typically within four years.

For further information on this project, visit the Scottish Water website - <http://www.scottishwater.co.uk/investment-and-communities/your-community/glasgow-investment/environmental-improvements/elmvale-row>



Major Flooding Project Completed in North Glasgow

In addition to the Elmvale Row project, in November 2016 Scottish Water completed a £4m project on Avonspark Street and Edgefauld Road to tackle sewer flooding in the Avonspark Street, where 12 properties have experienced recurring problems with flooding for a number of years.

To alleviate sewer surcharging and flooding, aBV has constructed a 20m diameter circular, below-ground, storage tank to a depth of 16m.

The project is also part of Scottish Water's 2015 - 2021 Business Plan commitment to remove all customers from the internal sewer flooding register (those with a 10% or greater chance of flooding occurring per annum) as quickly as possible and typically within four years.



Below ground storage tank under construction

For further information on this project, visit the Scottish Water's website - <http://www.scottishwater.co.uk/investment-and-communities/your-community/glasgow-investment/environmental-improvements/avonspark-street>

Climate Ready Clyde – The Next Phase

Climate Ready Clyde is a cross-sector partnership initiative supporting the development of a shared understanding of climate change risks and opportunities across the Glasgow City Region.

The Climate Ready Clyde project is helping partners become 'climate ready' through three work streams:

1. Providing a strategic framework for action through a regional risk assessment and action plan - providing a co-ordinated approach to building resilience against climatic hazards;
2. Providing and promoting climate leadership – creating the conditions for decision makers to effect positive change with regards to climate change issues;
3. Providing support, training and capacity building – equipping partners in the region with the evidence and skills to develop and implement practical adaptation actions.

The project has received £100,000 of seed funding from the Scottish Government, to support partners in the region to establish a formal City-region initiative through collectively pooling their resources.

For further information, visit the website:

<http://www.sniffer.org.uk/knowledge-hubs/sustainable-places/climate-ready-clyde/>

For more information on our work to deliver the MGSDP Vision, visit our website at www.mgsdp.org



www.glasgow.gov.uk



www.scottishwater.co.uk



www.sepa.org.uk



www.clydegateway.com



www.clydeplan-sdpa.gov.uk



www.scottishcanals.co.uk



www.southlanarkshire.gov.uk



www.renfrewshire.gov.uk



www.northlanarkshire.gov.uk



www.networkrail.co.uk



www.eastdunbarton.gov.uk

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