

# GREATER LONDON AUTHORITY

## REQUEST FOR DIRECTOR DECISION – DD2496

### Title: Climate Change Adaptation Delivery

#### Executive Summary:

London is vulnerable to flooding when heavy rainfall overwhelms the drainage system. The London Resilience Register identifies surface water flooding as one of the greatest climate risks facing London. To make the most effective use of our existing and planned drainage infrastructure and avoid increased flood risk, we need to implement sustainable drainage systems (SuDS) that mimic the ways that nature manages rainwater. The need for more SuDS is now widely recognised internationally and embedded in our national and local planning systems including in the London Plan and London Sustainable Drainage Action Plan (LSDAP).

London is also increasingly vulnerable to frequent and long lasting heat waves due to climate change and SuDS can help contribute towards cooling through managing water and greening of the public realm to help mitigate the urban heat island effect. Which is why climate change adaptation measures are considered a key pillar of the Green New Deal recovery mission.

This decision form sets out the programme of work and associated spend for this financial year (2020-21) whilst aligning its actions with those set out within the LSDAP and London Environment Strategy and complimenting those in the Mayors Transport Strategy (specifically Proposal 44).

This complements the work of the Drain London Programme which has had the following decisions since 2010 - MD2339, MD455, DD899, DD1250, DD1322 and DD2064.

#### Decision:

That the Executive Director of Good Growth approves:

1. Expenditure of £125,000 in 2020-21 to fund sustainable drainage projects, comprising:
  - £60,000 for hydraulic modelling to demonstrate the benefits and unlock future funding opportunities for dispersed SuDS;
  - £30,000 on improving industry's SuDS skills;
  - £20,000 on SuDS in cycling guidance;
  - £15,000 on research relating to SuDS and their additional climate change adaptation benefits; and
2. A related exemption from the GLA Contracts and Funding Code to seek technical input directly from the authors of related guidance on training materials.

#### AUTHORISING DIRECTOR

I have reviewed the request and am satisfied it is correct and consistent with the Mayor's plans and priorities.

It has my approval.

**Name:** Philip Graham

**Position:** Executive Director, Good Growth

**Signature:**

**Date:** 7 October 2020



## **PART I - NON-CONFIDENTIAL FACTS AND ADVICE**

### **Decision required – supporting report**

#### **1. Introduction and background**

- 1.1. London is outgrowing its drains and sewers. The combined sewer system originally built over 150 years ago by Joseph Bazalgette has served us well, but it was designed for a smaller city with more green surfaces. Rapid urbanisation and development across the capital has resulted in an increase in impermeable surfaces. In addition to this climate change means that London is likely to continue to experience wetter, warmer winters, and heavier summer showers, highlighted by the fact that in December 2018 the Mayor declared a climate emergency.
- 1.2. The combined challenges of London’s growing population, changing land uses and changing climate mean that if we continue to rely on our current drains and sewers, we face an increasing risk of flooding. This flooding can damage property, affect transport, impact the economy, pose a danger to health and wellbeing, and pollute the environment.
- 1.3. To make the most effective use of our existing and planned drainage infrastructure and avoid increased flood risk, we need to change how London’s drainage system operates. Rainwater should be managed as a valuable resource rather than a waste product. We need to roll back the tide of impermeable surfaces. They should be replaced with ‘sustainable drainage’ systems (SuDS). SuDS manage surface water runoff (the flow of rainwater across the surface) by capturing, using, absorbing, storing and transporting rainfall in a way that mimics nature. SuDS slow the flow and reduce the amount of rainfall that drains into sewers, streams and rivers which reduces the risk of flooding. They can also treat and reduce pollutants in runoff. The most beneficial SuDS manage rain close to where it falls, are on (or close to) the surface and often include vegetation.
- 1.4. SuDS are widely accepted as a better approach to managing rainfall than traditional drainage and are embedded in our national and local planning systems including in the Mayor’s London Plan. They create beautiful spaces and places for people and wildlife, as well as reduce the risk of waterlogging, local flooding and water pollution. SuDS will be fundamental in responding to the climate and ecological emergencies we’re facing as they are one of the few measures that provide a tangible approach to help London adapt to changes in climate as well as delivering improved resilience and biodiversity gain. The importance of retrofitting SuDS was highlighted within the London Assembly Environment Committee’s “The Climate Emergency: Extreme Weather and Emissions” (April 2020) report.
- 1.5. In 2010 the GLA established the Drain London programme in response to the need to better understand and manage surface water flood risk in London (MD455). The project was awarded a £3,200,000 grant from Department for Environment, Food and Rural Affairs (DEFRA). The first stages of the programme delivered surface water flood risk mapping and management plans for all 32 London boroughs and the City of London. The programme also delivered detailed studies into 28 areas of high surface water flood risk and a range of pilot demonstration projects showing how sustainable drainage measures can be retrofitted into the urban environment.
- 1.6. The Drain London programme demonstrated that the retrofitting of small-scale SuDS features across whole catchment areas was the only practical opportunity to reduce flood risk in urban areas due to the common constraint on space within the public realm to construct larger or strategic flood risk management schemes (e.g. flood storage areas).
- 1.7. In December 2016 the London Sustainable Drainage Action Plan (LSDAP) was produced. This plan promotes the retrofitting of SuDS to existing buildings, land and infrastructure and includes 40 actions identified at encouraging this across a wide variety of sectors, most of which have either now been delivered or are well underway. This proposal aims to build upon some of those actions identified within the LSDAP in order to help develop the evidence necessary to enable local authorities unlock further external funding towards the delivery of retrofit SuDS across London.

- 1.8. The projects within the proposal directly contribute toward the delivery of a number of London Environment Strategy Objectives (5.1, 5.3 and 8.2). The London Environment Strategy also includes a commitment to switch 200 hectares of land from draining directly to conventional sewers or London’s watercourses to draining to SuDS by 2030, something this programme will help contribute towards meeting.
- 1.9. The projects will also contribute towards the Green New Deal as we look to double London’s green economy by 2030. Sustainable Urban Drainage systems are identified under the transport and public realm pillar of the mission. The measures identified here will contribute towards unlocking funding and increasing of skills which will help contribute towards increasing SuDS retrofitting towards the needed levels which could eventually see an estimated 700 jobs sustained and £280m of flooding and natural benefits delivered per year.
- 1.10. The projects identified below are further complemented by the physical works delivered through the Build Back Greener grants programme (MD 2665), with £125,000 of grants monies specifically allocated towards climate change adaptation measures, primarily SuDS.
- 1.11. Note that in addition to this DD is an ADD which is seeking approval at the same time to continue the work of the Drain London Programme in addressing surface water flood risk utilising remaining budget originating from external funding (DEFRA). Previous decisions related to the Drain London programme include MD2339, MD455, DD899, DD1250, DD1322 and DD2064.

## 2. Objectives and expected outcomes

- 2.1. The projects identified below have been developed following discussions with key stakeholders (including local authorities, TfL, Environment Agency, Thames Water and environmental NGOs) on how the GLA can best encourage greater SuDS (both from a quality and quantity perspective).

Project Name	Description	Budget
Modelling	<p><b>Aim</b> Quantifying the benefits derived from delivering small scale SuDS interventions through borough level modelling (maximum of three boroughs) to identify opportunities as well as secure further investment for delivery.</p> <p><b>Outcomes</b> There is currently no effective mechanism for attracting Flood and Coastal Erosion Risk Management (FCERM) Grant in Aid (GiA) or Thames Regional Flood and Coastal Committee (TRFCC) local levy funding for small scale SuDS interventions in London because individually these measures cannot deliver the necessary magnitude of impact. Therefore, it is proposed to investigate the catchment-scale benefit of wide-scale SuDS implementation, accounting for their potential to deliver a whole range of supplementary socio-environmental benefits to help justify and provide long-term collaborative funding opportunities. This will require the procurement of modelling services through the existing TfL framework Lot B5 (Hydraulics &amp; Drainage and Sustainable Urban Drainage) with 100% of the budget identified expected to be spent on the procurement and publishing of this modelling work. This modelling will provide the local authorities with a long-term programme of identified small scale dispersed SuDS opportunities with their benefits quantified. The modelling then enables boroughs to unlock</p>	£60,000

	<p>previously unobtainable government flood risk funding to ensure that opportunities aren't missed to incorporate SuDS alongside other works. The outputs will also be uploaded to the Infrastructure Mapping Application (IMA) to identify any potential overlaps with utility planned works to help unlock further funding for delivery. Borough selection will utilise the Climate Vulnerability mapping outputs being developed by GLA in conjunction with Bloomberg Associates, to identify the three boroughs of greatest need.</p> <p><b>Recovery Missions</b> Green New Deal High Streets for All</p>	
Training	<p><b>Aim</b> Upskilling greenspace and highways contractors on the design, construction and maintenance of SuDS</p> <p><b>Outcomes</b> Improving industry knowledge and skills around design, construction and maintenance of SuDS to ensure that good quality climate change adaptation interventions are delivered and continue to perform as originally designed. Delivered via a mixture of means including (but not limited to): the continuation of bespoke training sessions for highways authority officers developed in 2019/20 and delivered through Urban Design London in which we have trained over 200 highways officers to date; and translating the latest industry guidance around constructing SuDS into short accessible videos in a variety of languages spoken by London's diverse workforce. The latter will require external procurement of media services and professional consultancy. The procurement process for this will be undertaken via a competitive tender process for the media element in conjunction with sole sourcing of original authors of the guidance document to provide the technical overview.</p> <p><b>Recovery Missions</b> Green New Deal Helping Londoners into Good Work</p>	£30,000
Guidance	<p><b>Aim</b> Deliver guidance on why, where and how to incorporate SuDS within cycling infrastructure</p> <p><b>Outcomes</b> Creation of guidance materials for highways authorities, designers and local communities on the importance of draining cycle routes, why SuDS should be considered as a useful alternative to conventional methods and then how best to incorporate SuDS within cycling infrastructure. This will aim to provide useful information for both the community and for industry professionals with the inclusion of several case studies. This will require the procurement of services which will likely call off on the TfL Architecture Design and Urbanism Panel Framework Lot 3, with the full budget allocated towards the production of this guidance material.</p>	£20,000

	<b>Recovery Missions</b> Green New Deal Helping Londoners into Good Work	
Research	<b>Aim</b> Improve information/data around some of the wider benefits of SuDS that are most applicable to London and its recovery.	£15,000
	<b>Outcomes</b> Drive further research to identify how climate change adaptation measures can drive jobs and investment to aid London green recovery. All research project will aim to maximise partnership funding and permissions will be sought through appropriate decision-making channels once identified. Potential projects include: identifying/quantifying job creation numbers and skills requirements through increased delivery of sustainable drainage or quantifying the cooling benefits of optimised permeable paving and blue/green roofs designs.	
	<b>Recovery Missions</b> Green New Deal Helping Londoners into Good Work High Streets for All	

### 3. Equality comments

- 3.1. Under Section 149 of the Equality Act 2010, as a public authority, the Mayor of London must have 'due regard' of the need to eliminate unlawful discrimination, harassment and victimisation as well as to advance equality of opportunity and foster good relations between people who have a protected characteristic and those who do not.
- 3.2. The projects included within this DD form part of the policies and proposals in the London Environment Strategy which has been informed by a full Integrated Impact Assessment, including consideration of equalities.<sup>1</sup>
- 3.3. The projects listed in this DD look to maximise their positive impact on all Londoners including for example: reducing the risk of flooding, increasing access to green space, contributing to urban cooling, and reducing the health impact of air quality.
- 3.4. Projects within this DD that have location specific outputs (modelling) will aim to prioritise areas of London considered to be most vulnerable to the impacts of climate change, work being delivered in conjunction with Bloomberg Associates at present. This innovative mapping takes into consideration a number of different exposure and vulnerability metrics and will help to ensure that work is delivered for the areas of London with the greatest need.

### 4. Other considerations

- 4.1. The key risks and issues are set out in the table below.

<sup>1</sup> See all the Integrated Impact Assessment documents: [www.london.gov.uk/what-we-do/environment/london-environment-strategy](http://www.london.gov.uk/what-we-do/environment/london-environment-strategy)

Risk	Likelihood	Impact	Mitigation	RAG rating
Second Covid-19 lockdown restrictions	Medium	High	<ul style="list-style-type: none"> <li>• Good communication will be developed to ensure frank discussions can take place around organisational capacity and delivery</li> <li>• Majority of projects can be undertaken remotely and therefore are likely to be less affected by further restrictions</li> <li>• In the event of a second lockdown project delivery reviews will agree new parameters with project partners</li> </ul>	
Lack of engagement from project partners (Modelling)	Low	Low	<ul style="list-style-type: none"> <li>• As part of the selection criteria for boroughs to model, which will mainly be informed by climate vulnerability, the local authority officers and relevant Environment Agency teams will be consulted to ensure that there is sufficient capacity to appropriately feed into the modelling work.</li> <li>• If it is evident that there is insufficient capacity or interest in the work proposed, then an alternative borough will be selected based on climate vulnerability data.</li> <li>• Work is underway to help further engage boroughs around this subject through London Council's Resilient and Green Working Groups.</li> </ul>	
Lack of responses to tender for works	Low	Low	<ul style="list-style-type: none"> <li>• Industry has been sounded out about these projects which has helped to inform the scope and proposed budgets, so as to minimise this risk</li> <li>• All procured works will first look to utilise the TfL frameworks however, if no suitable TfL framework exists then a minimum of three parties will be invited to tender based on their skill sets and experience</li> <li>• During the tender period contact will be made with all parties to ensure that the timeframes for submission are understood and to gauge interest in the work</li> <li>• If insufficient responses are received then contact will be made with the relevant parties to gain better understanding of reason for this, with the programme likely to need re-examining.</li> </ul>	

*Links to Mayoral strategies and priorities*

4.2. The projects included within this DD will contribute towards:

- meeting the London Environment Strategy proposal around implementing the actions of the London Sustainable Drainage Action Plan (Proposal 8.2.3b);

- meeting the London Environment Strategy proposal around providing a stronger evidence base for green infrastructure programmes (Proposal 5.3.1c);
- meeting the Mayor's Transport Strategy proposal around annual SuDS delivery (Proposal 44);
- meeting the London Health Inequalities Strategy objective for a greener city where all Londoners have access to good quality green spaces (Objective 3.3); and
- meeting the London Recovery Board high-level outcome to deliver a cleaner, greener London.

#### *Conflicts of interest*

- 4.3. GLA officers are not aware that anyone involved in the drafting or clearance of this DD has any conflicts of interest with the proposed projects.
- 4.4. If any conflicts of interest arise during the procurement process, they will be required to declare that interest and not take any part in procurement process for that particular project.

### **5. Financial comments**

- 5.1. Approval is being sought for the expenditure of up to £125,000 on sustainable drainage projects which improve London's sewage and drainage systems.
- 5.2. The breakdown of this expenditure is shown above in section 2 of this report.
- 5.3. All expenditure will be accounted for within the current financial year and funded from the 2020-21 Climate Change Adaptation Delivery budget held within the Environment Unit.

### **6. Legal comments**

- 6.1. The foregoing sections of this report indicate that:
  - (a) the decisions requested of the Director concern the exercise of the GLA's general powers, falling within the GLA's statutory powers to do such things considered to further or which are facilitative of, conducive or incidental to the promotion of economic development and wealth creation, social development or the promotion of the improvement of the environment in Greater London; and
  - (b) in formulating the proposals in respect of which a decision is sought officers have complied with the Authority's related statutory duties to:
    - pay due regard to the principle that there should be equality of opportunity for all people;
    - consider how the proposals will promote the improvement of health of persons, health inequalities between persons and to contribute towards the achievement of sustainable development in the United Kingdom; and
    - consult with appropriate bodies.
- 6.2. In taking the decisions requested, the Director must have due regard to the Public Sector Equality Duty; namely the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited by the Equality Act 2010, and to advance equality of opportunity and foster good relations between persons who share a relevant protected characteristic (race, disability, sex, age, sexual orientation, religion or belief, pregnancy and maternity and gender reassignment) and persons who do not share it (section 149 of the Equality Act 2010). To this end, the Director should have particular regard to section 3 of this report.
- 6.3. Officers have indicated in section 2 of this report that they intend to procure the services required for the projects via an appropriate framework, or, if no framework exists, a minimum of three parties will

be invited to tender in accordance with the GLA's Contracts and Funding Code. Officers must ensure that:

- (a) the framework under which it is proposed the services required are to be "called-off" was procured in accordance with the GLA's Contracts and Funding Code or can be used by the GLA by virtue of its procurement by an appropriate central purchasing body on behalf of the GLA in accordance with relevant procurement law;
- (b) the services required will be procured fully in accordance with the requirements of that framework; and
- (c) appropriate "call-off" documentation (or contract documentation if inviting three tenders) is put in place and executed by the successful bidder(s) and the GLA before the commencement of the services.

6.4. With regards to seeking technical input directly from the authors of the guidance on SuDS, Section 3 of the Contracts and Funding Code (the 'Code') requires the GLA to seek three or more written quotations in respect of the services required or call off the services required from an accessible framework or conduct an advertised tender for the services required. However, the director may approve an exemption from this requirement under section 5 of the Code upon certain specified grounds. One of those grounds is that the approval of the exemption is justified because it affords compatibility with an existing service. Officers have indicated in section 2 of this report that they intend to seek the authors' technical input directly because this is compatible with the authors having written the original reports which will be relied on to produce the training materials. On this basis the director may approve the proposed exemption if satisfied with the content of this report.

## 7. Planned delivery approach and next steps

7.1. The projects identified within this DD will require the procurement of external expertise to help in the delivery. An estimated timetable for each project is shown below.

### Modelling

Activity	Timeline
Procurement of contract	November 2020
Delivery Start Date	November 2020
Delivery End Date [for project proposals]	March 2021
Project Closure: [for project proposals]	April 2021

### Training

Activity	Timeline
Procurement of contract [for externally delivered projects]	October 2020
Delivery Start Date [for project proposals]	November 2020
Delivery End Date [for project proposals]	February 2021
Project Closure: [for project proposals]	March 2021

### Guidance

Activity	Timeline
Procurement of contract [for externally delivered projects]	November 2020
Delivery Start Date [for project proposals]	November 2020
Delivery End Date [for project proposals]	February 2021
Project Closure: [for project proposals]	March 2021



## Research

<b>Activity</b>	<b>Timeline</b>
Procurement of contract [for externally delivered projects]	December 2020
Delivery Start Date [for project proposals]	January 2021
Delivery End Date [for project proposals]	March 2021
Project Closure: [for project proposals]	April 2021

## Appendices and supporting papers:

None.

## Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FoIA) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will either be published within one working day after it has been approved or on the defer date.

## Part 1 - Deferral

### Is the publication of Part 1 of this approval to be deferred? YES

If YES, for what reason: The majority of the projects included within this DD are to be procured and therefore it is proposed to defer the publication of this document so as not to jeopardise a competitive procurement exercise.

Until what date: 1 February 2021

## Part 2 – Sensitive information

Only the facts or advice that would be exempt from disclosure under FoIA should be included in the separate Part 2 form, together with the legal rationale for non-publication.

### Is there a part 2 form – NO

## ORIGINATING OFFICER DECLARATION:

Drafting officer to confirm the following (✓)

### Drafting officer:

George Warren has drafted this report in accordance with GLA procedures and confirms the following:

✓

### Assistant Director/Head of Service:

Aram Wood has reviewed the documentation and is satisfied for it to be referred to the Sponsoring Director for approval.

✓

### Financial and Legal advice:

The Finance and Legal teams have commented on this proposal, and this decision reflects their comments.

✓

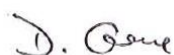
### Corporate Investment Board

This decision was agreed by the Corporate Investment Board on 5 October 2020.

## EXECUTIVE DIRECTOR, RESOURCES:

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

**Signature**



**Date**

6 October 2020