











The institution of environmental sciences

16th March 2016

Baroness Williams of Trafford Parliamentary Under Secretary of State Department for Communities and Local Government Fry Building 2 Marsham Street London SW1P 4DF

Dear Minister,

CC. Baroness Parminter, Lord Krebs, Lord Kennedy, Baroness Young of Old Scone

Sustainable drainage in the Housing and Planning Bill 2015-16

CIWEM, ICE, RIBA, IES, Landscape Institute, CIEEM and the Environmental Policy Forum and represent over 150,000 Members across the environment, architecture, science, engineering and planning agendas. Together we believe that the Housing and Planning Bill could vastly improve the resilience and the amenity value of new developments by accelerating the uptake of sustainable drainage systems (SUDs).

We are writing to ask you to support the amendment in the name of Baroness Parminter, Lord Krebs, Lord Kennedy and Baroness Young of Old Scone during the Lords Committee Stage of the Housing and Planning Bill 2015-16. The amendment seeks to address surface water management and suggests the following to *Clause 192 (Commencement)*:

119 Page 100, line 34, at end insert ", subject to subsection (3A).

(3A) The Secretary of State may not make regulations appointing the days on which any provision of Part 1 or Part 6 of this Act comes into force unless he or she has first made provision bringing into force section 32 of the Flood and Water Management Act 2010 (sustainable drainage)."

This would include a powerful set of provisions to drive forward the inclusion and management of sustainable drainage systems in new developments, helping to increase resilience to flooding and drought. It would also create attractive places to live (improving health and wellbeing in urban areas), whilst also making improvements to air, water and biodiversity quality, **at the same or lesser cost** than conventionally engineered systems.

Implementing Schedule 3 of the Flood and Water Management Act 2010 would also provide developers with certainty and would resolve the issues around the management of SUDs, ensuring that their multiple benefits are maintained.

We hope that this information is of value to you and we would be pleased to discuss it further if you would like any more information.

Yours sincerely,

Terry Fuller Chief Executive, CIWEM

Andrew Crudgington, Director, External Affairs and Strategy, ICE

Clare Corbett Head of External Affairs, RIBA

Adam Donnan, Chief Executive, Institution of Environmental Sciences

Noel Farrer, President, Landscape Institute

Dr Stephanie Wray President, CIEEM

Professor William Pope, Chair, Environmental Policy Forum

CIWEM (The Chartered Institution of Water and Environmental Management) is the only independent, chartered professional body and registered charity with an integrated approach to environmental, social and cultural issues.

ICE has close to 90,000 members in more than 164 countries. Our members play a hugely important part in society: they shape our world and save millions of lives. We support civil engineers and technicians by awarding professional qualifications, ensuring they work to high standards, and helping them to develop their careers. Our work also includes many other activities, from inspiring school students about civil engineering to influencing government investment in infrastructure. The Royal Institute of British Architects champions better buildings, communities and the environment through architecture and our members. We provide the standards, training, support and recognition that put our members – in the UK and overseas – at the peak of their profession. With government, we work to improve the design quality of public buildings, new homes and new communities.

The Institution of Environmental Sciences (IES) is a membership organisation that represents professionals from fields as diverse as air quality, land contamination and education - wherever you find environmental work underpinned by science. A visionary organisation leading debate, dissemination and promotion of environmental science and sustainability, the IES promotes an evidence-based approach to decision and policy making.

The Landscape Institute is the Royal Chartered Institute for Landscape Architects and Landscape professionals, including landscape designers, landscape managers, landscape planners, landscape ecologists and urban designers. As a professional body and educational charity, we work to protect, conserve and enhance the natural and built environment for the public benefit.

The Chartered Institute of Ecology and Environmental Management (CIEEM) is the leading professional membership body representing and supporting 5,000 ecologists and environmental managers in the UK, Ireland and abroad. Our Vision is of a society which values the natural environment and recognises the contribution of professional ecologists and environmental managers to its conservation.

The Environmental Policy Forum (EPF) is a network of UK environmental professional bodies promoting environmental sustainability and resilience for the public benefit. The EPF's member bodies have a collective membership of around 40,000 environmental professionals, many of whom are individually chartered in environmental practice, science and engineering disciplines.

Supporting briefing by CIWEM, ICE, RIBA, IES, Landscape Institute, CIEEM and EPF on the Benefits of SUDs

The latest climate science suggests that future extreme rainfall may be higher than existing UK climate change allowances for rainfall intensity, at least in part because of summer convective storms such as those experienced in 2007 and 2012.

All new building potentially contributes to flood risk and traditional existing piped sewer systems cannot readily be adapted to deal with increased rainfall, particularly in densely urban areas. The Committee on Climate Change has found that half of the national sewer network is reported to be currently at or beyond capacity. Eighty per cent of people in the UK live in urban areas, and green space has decreased in many cities in recent decades, front gardens continue to be paved over and sales of permeable paving remain very low. If urban drainage systems are left as they are, communities will experience an increased frequency of sewer flooding in the coming decades because of climate effects, as well as from the impacts of new development. There is a pressing need for this inadequacy to be addressed.

SUDs is part of the answer, and allows flood resilience to "move up-stream" and impact earlier, at the minimal expense of the developer provided it is a "designed in" system, and not an "after-thought".

The Housing and Planning Bill 2015-16 therefore has an ideal opportunity to make a cost-neutral positive contribution as stormwater can be managed to delay or reduce its impact on underground storage networks by using green infrastructure such as SUDs. Soakaways, permeable paving, ponds and swales slow down and store water, to avoid sewer networks being overwhelmed during periods of heavy rainfall. They act to slow rainwater run-off or remove it from the sewer system altogether. SUDs also deliver a range of other benefits, such as improved water quality, amenity and biodiversity, and can help to reduce the urban heat island effect, air and noise pollution. Reed beds and filter drains can be specifically designed to remove pollutants.

Section 32 / Schedule 3 of the Flood and Water Management Act 2010

Following the devastating flooding in July 2007, the Pitt Review recommended introducing a consenting scheme for SUDs in new development and the removal of the automatic right to connect to public sewer systems. This was devised as a way to address the issue of drains and sewers being overwhelmed by excess surface water.

Schedule 3 of the FWMA 2010 proposed the establishment of a SUDs approving body (SAB) within each lead local flood authority (LLFA). The SAB would have the primary responsibility for approving SUDs related drainage systems prior to construction. However the Government announced in December 2014 that the SUDs provisions in the Act would not be introduced.

The revised approach, based on 'strengthening' the planning system (through the National Planning Policy Framework), to create an 'expectation' that major planning applications (i.e. those of ten dwellings or more) would include SUDs, is failing to deliver the rate of change that is required. This failure can be overcome by implementing Section 32/Schedule 3 of the FWMA 2010.

The cause is a failure to address the fundamental barriers to the uptake of SUDs highlighted by the Pitt Review:

- Developers retain their automatic right to connect new homes to the public sewerage system, with no regard given to their capacity.
- It leaves the biggest challenge for LLFAs in the responsibility for the ongoing maintenance of SUDs systems. If SUDs are not maintained they will fail to operate, pose a flood risk and their multiple benefits will be lost. Without the creation of SABs there is no agreement on who will pay for and perform maintenance on proposed SUDs.
- Had SABs been created they would have had to consult with a number of bodies, including the Environment Agency, any relevant internal drainage board and any relevant sewerage company when considering an application.
- Without statutory SUDs standards there is no hierarchy of acceptable discharge solutions. A traditional underground oversized pipe and tank solution would actually meet the National Standards for SUDs at present which do not tackle water quality or improve amenity.

Unless a SUDs system is integrated within a site masterplan from the beginning, it is likely to be much more costly to endeavour to include it at the detailed planning stage. This is the root cause of many of the assertions that SUDs take up valuable developable land, but is invariably a product of poor initial design and site planning that did not embrace dealing with water appropriately.

We believe intervention at the national scale is needed to increase the uptake of SUDs and resolve issues around their management.