Aquality Trading and Consulting Ltd comments

Page: Policy SI5 Water infrastructure

Section: SI5

C3. What are recycling measures? There should be specific mention of greywater recycling as means of achieving C1 as well as Rainwater Harvesting and stormwater reuse.

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Section: <u>9.5.2</u>

9.5.2 There is only fittings based approach and no mention of alternative water supply e.g. Rainwater harvesting and greywater recycling, that would assist in reducing the impact on existing infrastructure

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Section: 9.5.12

9.5.12 - What are Integrated Water Management Strategies? Our understanding is

Integrated Water Management is the sustainable *management* of *water* in all its forms – potable and non-potable *water*, storm & rain water, wastewater and source *water*

Page: Policy SI12 Flood risk management

Section: N/A

SI5 and S12, SI13 Should be consider together. Water efficiency, Flood Risk Management and, sustainable drainage should be considered together not separately other wise it becomes difficult to achieve an Integrated Water Management Strategy. Could they not be put together as a single policy rather than three?

Page: Policy SI13 Sustainable drainage

Section: SI13

B 1 – Should this not reflect the London Sustainable Drainage Action Plan – as this has a more logical hierarchy.

Rainwater re-use comes first and should not be confused with a Green or Blue roof. There is a need to understand the function of a green roof and a Blue Roof as its just not that simple. For example, intensive and extensive green roofs have different capacities to retain water and promote evapotranspiration etc. Our understanding is that the primary function of a green roof is not for flood mitigation (although it undoubtedly does help) but for reduction of heat island effect, air quality, amenity and biodiversity. Obviously Blue roofs attenuate runoff and allow a limited amount of irrigation (much like a combined passive attenuation systems) – so both should come below water re-use systems in the hierarchy.

It is also misleading to say 2. Should be Infiltration techniques **and** Green Roofs – they are not the same thing!

Our suggestion for a revised hierarchy is as follows:

Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible in line with the following drainage hierarchy:

- 1. Store water for later use (Rainwater Harvesting)
- 2. infiltration techniques e.g Porous surfaces
- 3. rainwater attenuation in open water features and green roofs for gradual release
- 4. rainwater attenuation in below ground or above ground structures (eg.blue roofs) for gradual release [136]
- 5. direct to a watercourse (unless not appropriate)
- 6. rainwater discharge to a surface water sewer or drain
- 7. rainwater discharge to a combined sewer.

136 – Above ground attenuation, except on the roof, is impractical in many cases The assumption that most attenuation systems require pumping in London needs questioning - there are many shallow attenuation systems e.g pervious pavements that permit gravity flow. It would however be fair to say that pumping should be avoid where possible.

D Drainage should be designed to and implemented in ways that address issues of water use efficiency – What is this? Do you mean water supply issues?

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Section: SI13

B. We agree with the concept in general but would ask that they lobby DEFRA to update the Building Regs H3 so that this hierarchy is adopted throughout the UK not just London. The document most local authorities and developers consult is H3 and it stands to reason this should be updated unless the London Plan carries more weight than The Building Regulations.

Page: Policy SI13 Sustainable drainage

Section: <u>9.13.2</u>

9.13.2 – There needs to be a definition of green and grey infrastructure

Green infrastructure is not always better for a host of reasons, and there is an assumption that such infrastructure works particularly when considering treatment of surface runoff. This point also needs to include Hybrid solutions i.e. those that are part green and part grey / proprietary, as these may offer the optimum solution in many cases. We would suggest that there is a cross check here with C753 The SuDS Manual (Chapters 26 and 14) and a strong reference to this guidance in this point.

Page: Policy SI13 Sustainable drainage

Section: <u>9.13.3</u>

9.13.3 What are 'suitable pollution prevention measures'? This a vague statement – We would suggest this makes reference to C753 The SuDS Manual (Chapter 26) to ensure an appropriate methodology is adopted in assessing risk and ultimately selecting the right pollution prevention measure