AMA Consulting Engineers 140 Highgate Road 18035



Response to comments on SuDS from Camden Planners in relation to Condition 13 18 November 2019

Regarding the SuDS Drainage Strategy in relation to comments on Condition 13

A. Use of rainwater butts.

During design development it became apparent that no downpipes would be located in the basement terrace and that the whole of these terraces would be paved, and therefore there is no opportunity to divert rainwater to rainwater butts. I regret that the line in the strategy suggested that they might be used here. I propose the reference to butts be removed from the sentence.

3. Application of the Hierarchy of Drainage Control & Treatment

3.1. Store rainwater for later use.

The scale of the development is not conducive to re-use *other than domestic* water butts.

B. During development of the drainage plan, the roof profiles were also subject to design developments. The end of terrace houses will have arched roofs and the terraced houses will have flat roofs.

The flat roofs over the terraced houses will be green roofs. At the time of writing an assessment of whether the flat roofs can be blue and the arched roofs can be green is being undertaken by others.

I propose to substitute

2 Constraints

2.9 The flat roofs will be green roofs. These can be considered to provide interception storage and reduce total water volume leaving site due to transpiration and evaporation. The end houses will have arched roofs and if practicable these may be green.

for the following, from the strategy.

2 Constraints

2.9 The roofs are green roofs. These can be considered to provide interception storage and reduce total water volume leaving site due to transpiration and evaporation.

Further to the comments, we agree green roofs do not provide storage during a high intensity event because they are likely to be saturated and we did not take the green roofs into account in calculation of attenuation storage volumes.

AMA Consulting Engineers

140 Highgate Road





Green roofs do help to meet the SuDS objectives by holding water during low intensity rainfall events (this is interception storage) and discharging it to the atmosphere by evaporation from the surface and transpiration (the process of water movement through a plant and its evaporation from aerial parts.) This reduces the gross flows into the system reducing the pressure on the waste water system.

x. 2