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## **PROJECT REFERENCE: 19700 - HIEX BICESTER, OXFORD**

## PLANNING REFERENCE: 16/02586/OUT & 17/02557/REM

## **RE: CIVIL DESIGN STATEMENT – SURFACE FINISH MATERIAL**

## AUTHOR: PHILIP PENCO DATE: 11/06/2019

This statement has been prepared in support of a submission for a non-material amendment to the existing planning permission for the above referenced development. It is proposed to alter the approved external car parking and roads surface finish materials to provide a combination of permeable and impermeable macadam as indicated on the appended Turkington Martin Materials GA drawing TM336L03D. The purpose of this civil design statement is to confirm that this alteration to the surface finish materials will not impact the design approach considered to managing surface water for the development site.

The proposed surface water management strategy includes the on-site attenuation of surface water. The attenuation volume required is provided in the subbase beneath the surface finish material to the proposed roads and parking areas which will be lined with an impermeable tanking membrane.

The introduction of the permeable asphalt material 'Ultidrive' in place of the previously approved permeable block paving will have no impact on the site surface water drainage strategy, with both materials allowing adequate transmission of surface water through to the subbase storage layer beneath.

The introduction of some localised areas of impermeable asphalt 'UltiphaltHD' is necessary due to the unsuitable wearing properties of the porous product to the more heavily loaded, regularly tracked routes. These impermeable areas will drain towards the porous asphalt finish, or where this is not possible they will drain towards new channel drainage elements which discharge into the subbase or tree pits. The subbase beneath these impermeable areas will continue to act as storage for the surface water, maintaining the original drainage design strategy (i.e. the water permeates through the porous asphalt and can filter horizontally beneath the impermeable asphalt aisles).

The overall storage volumes provided, as well as the surface water management strategy for the site are therefore unimpeded by the proposed alterations.



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