Environment Director & Chief Executive:
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Date 30 January 2017

RE: **6/2016/2675/MAJ - Queenswood School, Shepherds Way, Brookmans Park, AL9 6NS**

Dear Mr Elmore,

Thank you for consulting us on the application above for the demolition of the existing Sports Hall and construction of a new enlarged facility including the re - cladding of existing roof and wall, following removal of existing mobile classrooms and increase parking provision from 85 to 102 approximately, at Queenswood School, Shepherds Way, Brookmans Park, AL9 6NS.

We understand this application seeks full planning permission for a major development, and we are happy to find Flood Risk Assessment And Surface Water Drainage/ SuDS Strategy prepared by Evans Rivers and Coastal Ltd with reference: 1731/RE/11-16/01 and dated November 2016 in support to this application. However this does not provide a suitable basis for assessment to be made of the flood risks arising from the proposed development.

We therefore object to the grant of planning permission and recommend refusal on this basis for the following reasons.

As a drainage assessment is required under the NPPF for all Major Planning Applications as amended within the NPPG from the 6 April 2015, in order for us to advise the Local Planning Authority that there is no flood risk from surface water, it should include as a minimum:

1. As the proposed discharge is into the ground, evidence of permeability, including infiltration tests undertaken to BRE Digest 365 standards, should be provided.
2. Full detailed drainage plan including the location of SuDS measures, pipe runs and discharge points, informal flooding (no flooding to occur below and including the 1 in 30 year rainfall return period).
3. Updated, detailed calculations of existing surface water storage volumes and flows.

4. Updated, detailed drainage calculations for all rainfall return periods up to and including the 1 in 100 year + climate change event including pre-development greenfield run-off rates (for brownfield sites we require pre- and post-development run-off rates and volumes).
5. Exceedance flow paths for surface water for events greater than the 1 in 100 year + climate change event.
6. Full details of any required mitigation/management measures of any identified source of flooding.
7. All strategy and drawings to be at the 'final stage' not 'preliminary' or 'draft'.

Overcoming our objection

1. We note that the surface water drainage scheme is proposed to infiltrate into the ground. However if soakaway will be added, infiltration tests should be carried to BRE Digest 365 standards to ensure the feasibility of the proposed scheme. As this is a full planning application we would expect full details in relation to surface water drainage.
2. Detailed layout of existing/proposed surface water storage drainage including the location of all SuDS features, pipe runs and existing surface water features overlain on the development layout along with all the corresponding detailed calculations. The drawing named SUDS Strategy produced by Evans Rivers and Coastal Ltd under the project number 1731/RE/11-16/01 does not provide suitable details.

3/4. As this is a full application we require detailed drainage calculations including surface water storage volumes. We would like to see the overall run-off rate and the required storage volume to ensure that the proposed drainage strategy can attenuate for all rainfall events up to and including the 1 in 100 year plus climate change event. Surface water calculations should take account of the whole site area not just impermeable areas.

No flooding should occur at and below the 1 in 30 year rainfall event. It should be demonstrated that any flooding above this can be managed within the site without increasing flood risk to the proposed development and the surrounding area. Both the 1 in 100 year and the 1 in 100 year + climate change extents, depths and volumes should be established.

5/6. We would like to remind the applicant that exceedance flow paths for surface water should be calculated for events greater than the 1 in 100 year plus 40% of climate change event. In addition any exceedance routes proposed for flood management on the site should be shown on a plan. The FRA should also include full detailed engineering drawings for flood mitigation and management measures.

7. As part of a detailed planning application we would expect to review final stage, detailed design and engineering drawings for the system and each component of SuDS scheme.

As the Lead Local Flood Authority, it is our responsibility to assess the acceptance of soakaway (included deep bore soakaway) as part of a SuDS scheme (suitability of infiltration discharge mechanism), however from a water resources and quality standpoint you should contact the Environment Agency.

In order for us to advise the Local Planning Authority of the suitability of the SuDS features we would require detailed engineering details of the design of the proposed soakaway in line with The SuDS Manual (CIRIA C-753).The maintenance of this kind of

structure must be appropriate to prevent the risk of failure or reduction of its capacity. Underground and any mechanical features are likely to carry a marginally higher risk as a result of poor maintenance.

The applicant will need to satisfy the LPA that the proposed drainage scheme can be adopted and maintained for its lifetime by providing a maintenance plan, detailing key operations (including replacement if required) and management.

For further advice on what we expect to be contained within the surface water drainage assessment, please refer to our Developers Guide and Checklist on our surface water drainage webpage

http://www.hertfordshire.gov.uk/services/envplan/water/floods/surfacewaterdrainage/

Informative to the LPA

We note there is an ordinary watercourse in the vicinity of the site. If there should be any works to the watercourse there is a requirement for consent from HCC under Section 23 of the Land Drainage Act 1991.

The applicant can overcome our objection by submitting a surface drainage assessment which covers the deficiencies highlighted above and demonstrates that the development will not increase risk elsewhere and where possible reduces flood risk overall, and gives priority to the use of sustainable drainage methods.

If this cannot be achieved we are likely to maintain our objection to the application. Production of a Flood Risk Assessment will not in itself result in the removal of an objection.

We ask to be re-consulted when the amended surface drainage assessment will be submitted. We will provide you with bespoke comments within 21 days of receiving formal reconsultation. Our objection will be maintained until an adequate FRA has been submitted.

Yours sincerely,

Julia Puton

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