

Environment Director & Chief Executive:  
John Wood



Mark Peacock  
Welwyn Hatfield Borough Council  
The Campus  
Welwyn Garden City  
Herts  
AL8 6AE

**Lead Local Flood Authority**  
**Post Point CHN 215**  
**Hertfordshire County Council**  
**County Hall, Pegs Lane**  
**HERTFORD SG13 8DN**

Contact Ana Neves  
Tel 01992 556348  
Email [FRMConsultations@hertfordshire.gov.uk](mailto:FRMConsultations@hertfordshire.gov.uk)

Date 10 October 2016

**RE: 6/2016/1677/MAJ - Blue Moon Paddock, Woodfield Lane, Brookmans Park**

Dear Mark,

Thank you for consulting us on the above outline application for erection of a single dwelling, together with associated tree planting scheme, landscaping and car parking following of existing structures.

It is stated in the Flood Risk Assessment dated 30 June 2015, produced by ARK Environmental Consultancy Ltd, that the total area of the planning application is approximately 1.3 hectares. It is also stated that the impermeable area is going to be increased 0.5% corresponding to a total impermeable area of 267m<sup>2</sup> (considering demolition works of existing outbuildings and the subsequent construction works of a new dwelling).

We also noted that the calculations presented in the Surface water storage requirements for sites (Appendix B), presented by HR Wallingford, dated of 30 June 2015, considered greenfield runoff rates of 5l/s and an overestimated impermeable area of 500m<sup>2</sup> (0,05 ha). According to the calculations the estimated storage volume necessity is approximately 33m<sup>3</sup>. However the applicant proposes a swale with a volume of 36m<sup>3</sup>. Even considering that the proposed swale is oversized and can store a bigger volume of water than the calculations determine, it is a fact that the drainage strategy is based upon attenuation and does not consider any discharge point or any other solution downstream of the swale. Also in the calculations, the criteria design must consider the updated climate change allowance factor of 40%.

The FRA also states the swale will be connected from the roof area of the proposed dwelling. However it does not explain how this connection is going to be made. The Proposed Site Plan, drawing No. P/302/A, dated of 19 Feb 2015 presents the location of the dwelling that is going to be erected. However it does not highlight the car parking location and the impermeable areas.

We therefore recommend the following conditions to the LPA should planning permission be granted.

### **LLFA Position**

We acknowledge that although it is the erection of a single dwelling, the total area is superior to one hectare which makes this a major project. Therefore, the proposed development will be acceptable if a planning condition is included requiring the following drainage details.

### **Condition**

No development shall take place until a surface water drainage scheme for the site, based on sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the local planning authority. The drainage strategy should demonstrate the surface water run-off generated up to and including the 1 in 100 year + 40% for climate change critical storm will not exceed the run-off from the undeveloped site following the corresponding rainfall event. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

The scheme shall also include:

- Updated site characteristics and detailed calculations of proposed surface water storage volumes and flows with initial post development calculations/ modelling in relation to surface water are to be carried out for all rainfall events up to and including the 1 in 100 year including a 40% allowance for climate change.
- Final drawing with the total impermeable area, showing the location of the different impermeable areas including the car parking.
- Final drawing showing the drainage scheme including the point of the discharge of the surface water and location of other proposed SuDS.
- If infiltration is proposed, infiltration test carried in accordance with BRE Digest 365 to ensure the feasibility of the scheme must be provided.

### **Reason**

To prevent the increased risk of flooding, both on and off site.

### **Informative to the LPA**

For further advice on what we expect to be contained within the FRA to support an outline planning application, please refer to our Developers Guide and Checklist on our surface water drainage webpage

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

Please note if the LPA decide to grant planning permission we wished to be notified for our records should there be any subsequent surface water flooding that we may be required to investigate as a result of the new development.

Yours sincerely,

Ana Neves

Hertfordshire County Council

01992 556348

[FRMConsultations@hertfordshire.gov.uk](mailto:FRMConsultations@hertfordshire.gov.uk)