Dear Sir/Madam,

Town and County Planning (Development Management Procedure) (England) Order 2015

APPEAL: Outline planning application with the details of appearance, landscaping, layout and scale reserved for later determination, with the exception of Phase 1 for which details of all matters in relation to the 23 dwellings within that Phase are provided. Development to comprise: up to 170 dwellings (Use Class C3), and a community/sports pavilion (Class D1 and D2 use), a Country park, formal and/or informal outdoor sports provision, access, and other earthworks and engineering works. All development, works and operations to be in accordance with the Development Parameters Schedule and Plans at Land East of Memorial Hall, Brundall, Norfolk.

We have been notified that an appeal to the decision on the above application has been made. We understand that this will be decided via written representations. Whilst flooding and surface water drainage was not a reason for refusal of this application we would like to take the opportunity to update the suggested conditions we proposed in our letter dated 20th June 2018 (ref: FWP/18/5/6529).

If you are minded to up-hold the appeal and approve the development, we request that appropriate surface water drainage conditions are attached. We recognise that the Planning Inspectorate is the determining Authority, however to assist, we attach the following suggested conditions, updating them from our previous letter by a) to update the terminology to Annual Probability exceedance (AEP) over a stated return period in line with national guidance b) requiring due consideration to be given to surface water flood risk by any phases of the development and c) by updating the version reference to the CIRIA SuDS Manual.

Continued…/
Condition:
Prior to commencement of development, in accordance with the submitted FRA (Rossi Long Consulting Ref 161068 dated July 2016), detailed designs of a surface water drainage scheme incorporating the following measures shall be submitted to and agreed with the Local Planning Authority. The approved scheme will be implemented prior to the first occupation of the development. The scheme shall address the following matters

I. Detailed ground investigation should be undertaken including infiltration testing in accordance with BRE Digest 365 along the length of the proposed soakaways / infiltration basins, as stated within section 7.6 of the FRA / Drainage Strategy. The investigation should also establish the seasonally high groundwater level.

II. If infiltration is proven to be unfavourable then connection to a watercourse is proposed. In this event, the Greenfield runoff rate for the 17.25 Ha site will be $Q_{bar} (2.84 \text{ l/s/ha})$, excluding large areas of open space. These post development runoff rates will be attenuated to the equivalent Greenfield rate for all rainfall events up to and including the 1% Annual Exceedance Probability. The discharge location for surface water runoff will be confirmed to connect with the wider watercourse network.

III. Detailed designs, modelling calculations and plans of the of the drainage conveyance network in the:
- 3.33% annual probability critical rainfall event to show no above ground flooding on any part of the site.
- 1% annual probability critical rainfall plus climate change event to show, if any, the depth, volume and storage location of any above ground flooding from the drainage network ensuring that flooding does not occur in any part of a building or any utility plant susceptible to water (e.g. pumping station or electricity substation) within the development.

IV. Provision of surface water attenuation storage, sized and designed to accommodate the volume of water generated in all rainfall events up to and including the critical storm duration for the 1% Annual Exceedance Probability rainfall event including appropriate allowances for climate change.

V. The design of any infiltration basin will show that its base will be 1.2m above the seasonally high groundwater level, any attenuation basin will incorporate an emergency spillway and any drainage structures include appropriate freeboard allowances.

VI. Finished ground floor levels of properties should be not less that 300mm above any sources of flooding (including fluvial flooding associated with the ordinary watercourse and the proposed drainage scheme) and not less that 150mm above surrounding ground levels.

VII. Information needs to be provided to demonstrate that any subsequent application for different phases of development considers how sustainable drainage relates to the surface water drainage strategy for the whole site. In particular, highlighting
where different phases rely on each other for the disposal of surface water, how this will be implemented during construction and operation of the development.

VIII. Details of how all surface water management features to be designed in accordance with The SuDS Manual (CIRIA C753, 2015), including appropriate treatment stages for water quality prior to discharge.

**Reason:**
To prevent flooding in accordance with National Planning Policy Framework paragraph 103 and 109 by ensuring the satisfactory management of local sources of flooding surface water flow paths, storage and disposal of surface water from the site in a range of rainfall events and ensuring the surface water drainage system operates as designed for the lifetime of the development.

Yours faithfully,

Dean Shelton
Senior Flood Risk Officer

Lead Local Flood Authority

**Disclaimer**
We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue.