

## **APPENDIX FIVE**

### **Surface Water and Flood Risk**

- 1.1.1 A site specific FCA and conceptual surface water management plan is presented at Appendix F to this Planning Statement. The conceptual surface water design is also shown on drawing CS089635-CAP-HGN-00-DR-C-1017. Refer to Appendix F for the full FCA. The key conclusions of the FCA are presented below:
- 1.1.2 The FCA concludes that surface water generated from the assessable site area can be successfully directed to, and contained in, a proposed attenuation structure to appropriate surface water discharge rates. This will further mitigate potential for on- site and off-site surface water flooding affecting vulnerable receptors and further reduce the potential for surface water flooding within the vicinity of the proposed development.
- 1.1.3 The site is not considered to be at risk of flooding from sources such as fluvial waters, reservoir failure or tidal surge. Based on the available information, it is considered that the probability of the site flooding from surface water is generally low, but there are isolated locations of medium risk areas within the proposed development, in its existing condition and existing topographical conditions. The proposed development will not increase flood risk to the site or to surrounding properties providing that the suggested mitigation measures of raising finished floor levels above the maximum level of the Flood Zone B area on the western boundary and the provision of appropriately designed surface water drainage controls are implemented.
- 1.1.4 The available ground investigation data indicates that the site is underlain by clayey loamy material, which will preclude the use of shallow infiltration methods as a means of surface water disposal.
- 1.1.5 The indicative system designed can attenuate surface water run-off for all rainfall events up to the 1 in 100 year + 40% Climate Change to the rate of 5 L/s, which corresponds to the minimum permissible discharge rate from surface water systems as specified within the Flintshire County Council Supplementary Planning Guidance LPGN 29 - Management of Surface Water for New Development.