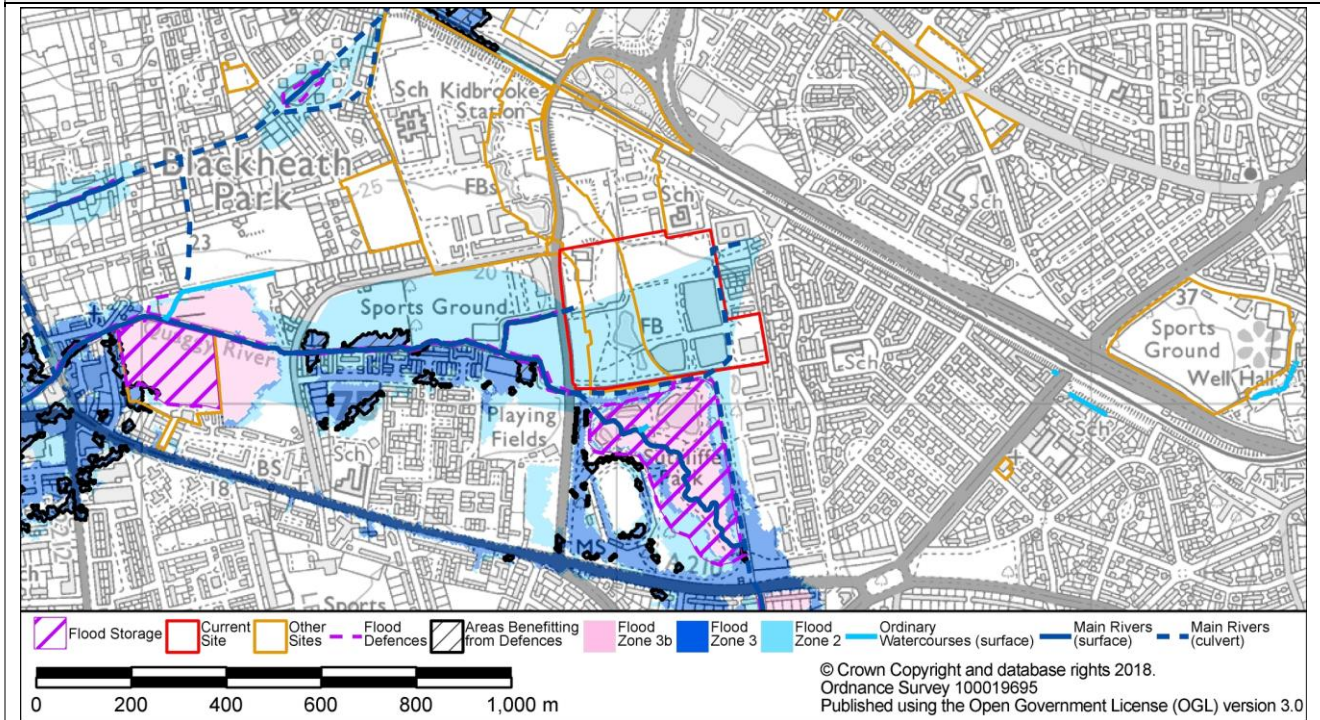


Site Name: Phases 4 and 5 Kidbrooke Village East					
Site ID:	K2	Site Address:	Kidbrooke	Area (ha):	10.79
Current Use:	Housing, open space, leisure	Proposed Use:	Predominantly housing, ancillary community services	Vulnerability Classification:	More Vulnerable

Fluvial Source:				
Flood Zone 1 (<0.1% AEP):	Flood Zone 2 (0.1% AEP):	Flood Zone 3 (1% AEP):	Flood Zone 3b (5%AEP):	Area Benefiting from Defences:
35%	65%	0%	0%	0%

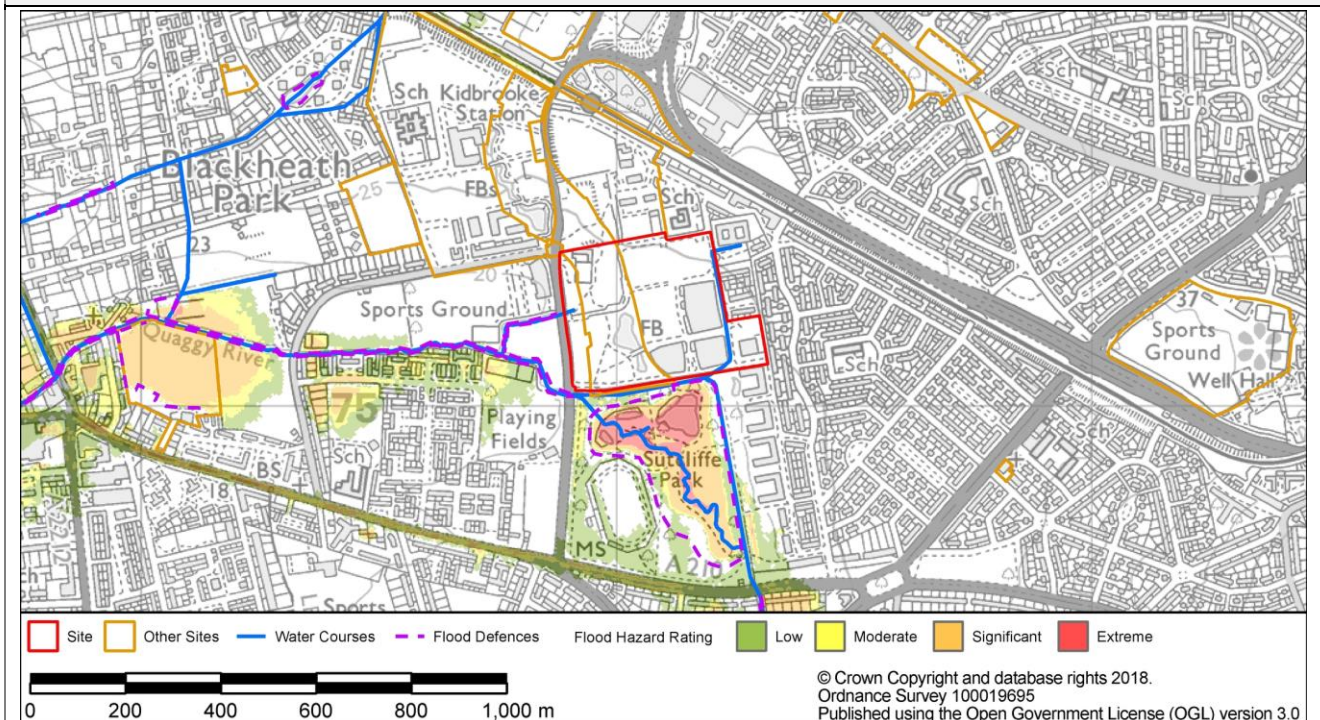
**Flood Zones and Flood Defences**



**Figure A - Flood Zones**

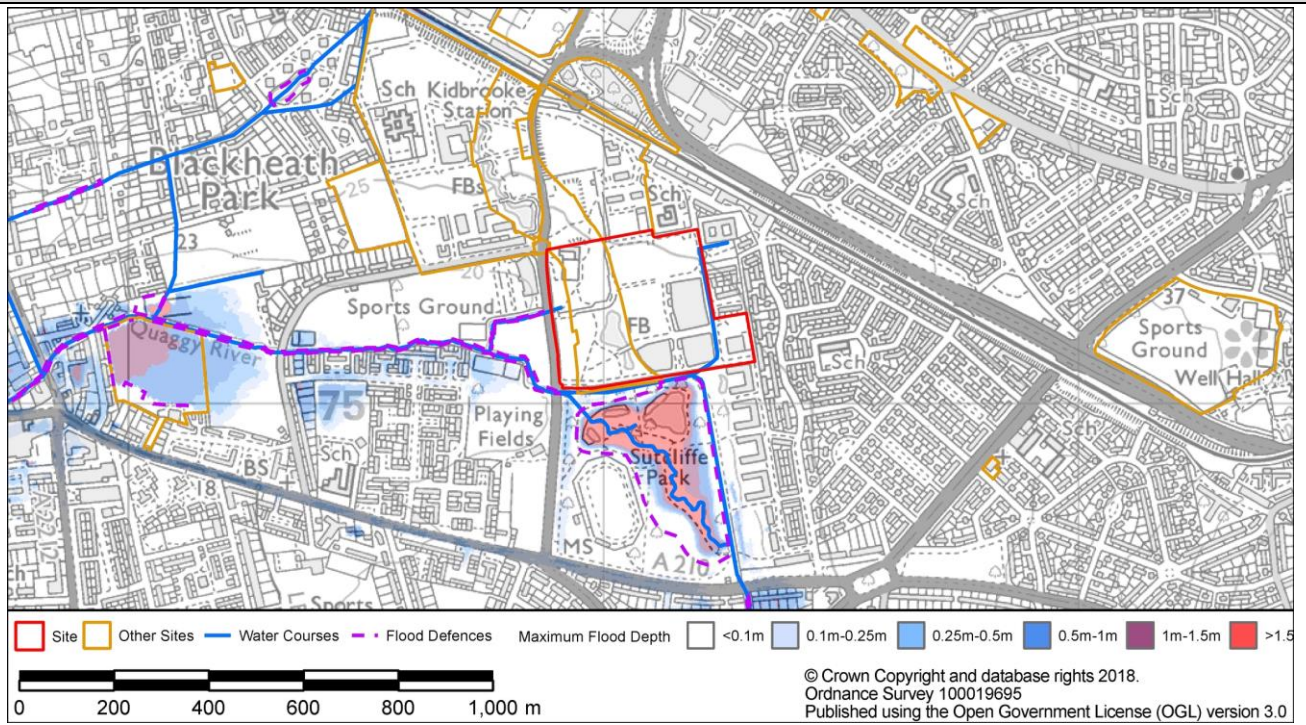
Flood Defence Type:	embankment	Standard of Protection:	70
Flood Warning Area	River Quaggy at Kidbrooke, Lee and Hither Green (65% Overlap)	Emergency Rest Centre	Holy Family Catholic Primary School

**Food Hazard, Depth and Velocity**

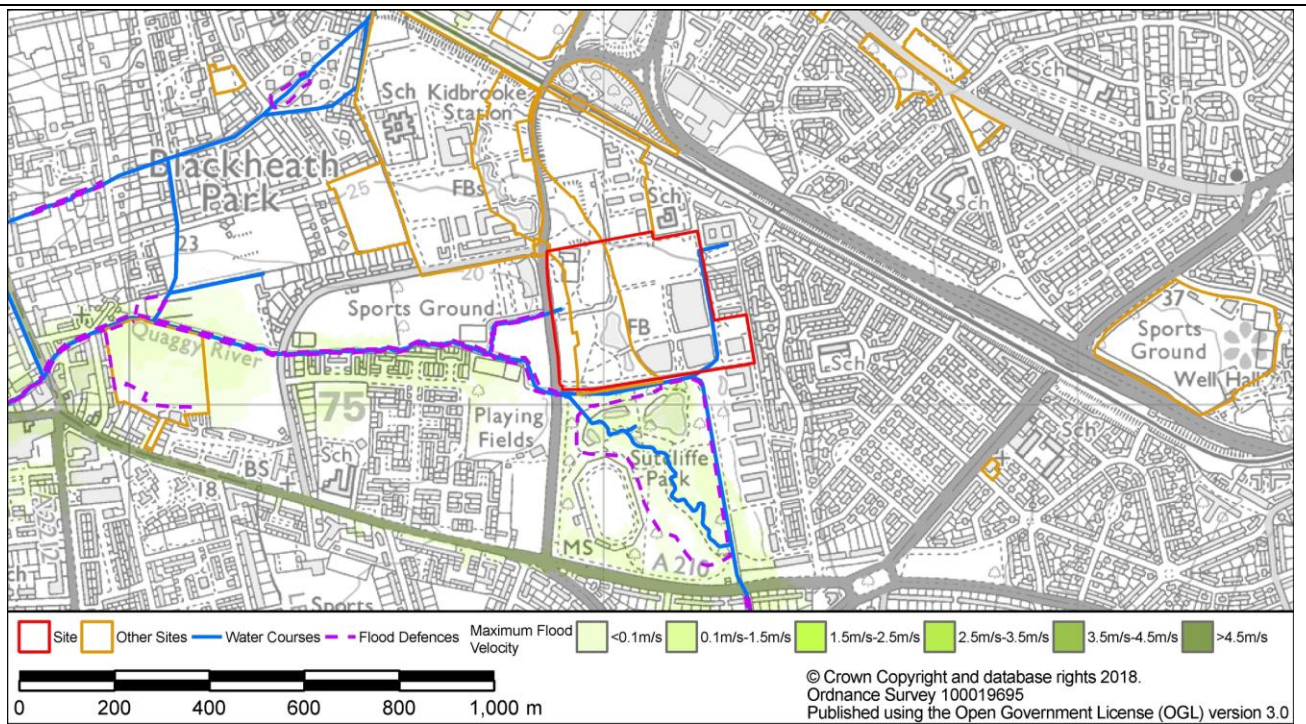


**Figure B - Flood Hazard Rating**

**Site Name: Phases 4 and 5 Kidbrooke Village East**



**Figure C – Maximum Flood Depth**



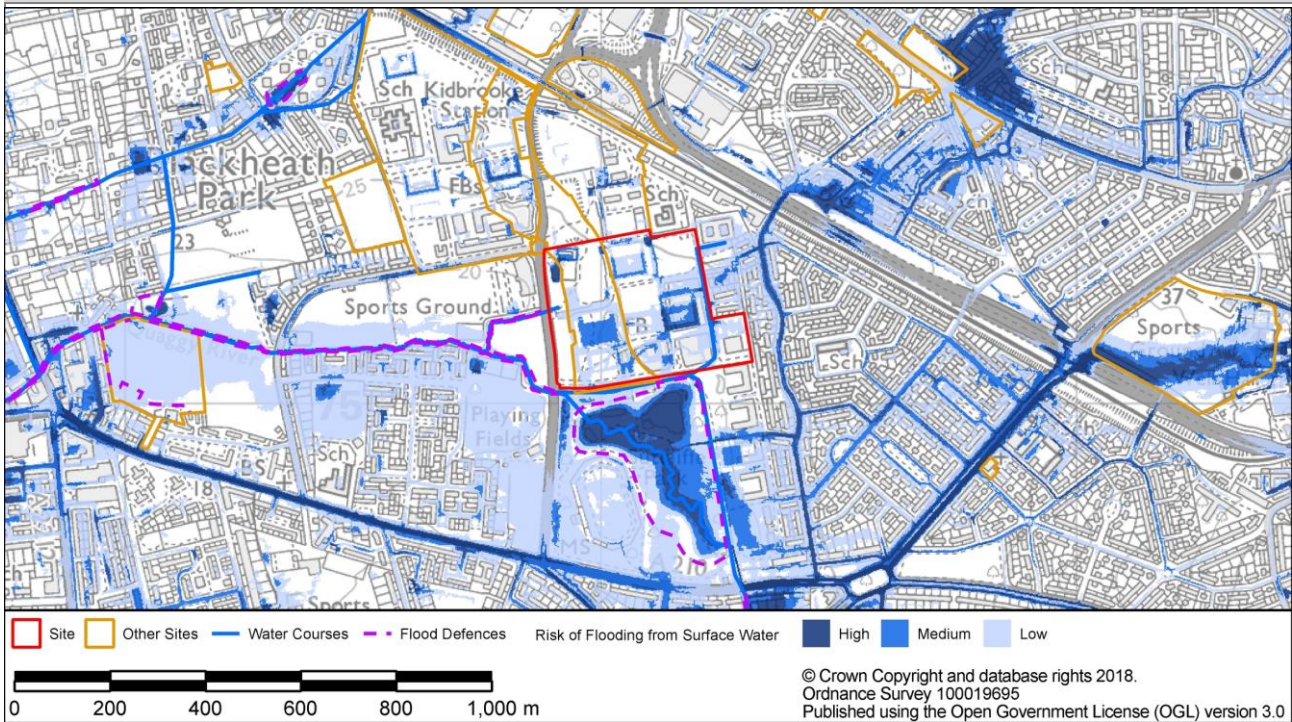
**Figure D – Maximum Flood Velocity**

**Surface Water Source**

**Risk of Flooding from Surface Water (RoFSW)**

High

**Site Name: Phases 4 and 5 Kidbrooke Village East**



**Figure E Risk of Flooding from Surface Water (RoFSW)**

<b>Critical Drainage Area</b>	Group6_017 (99% Overlap)		
<b>Groundwater Source</b>			
<b>Bedrock Geology</b>	London Clay Formation	<b>Superficial Geology</b>	Kempton Park Gravel Formation
<b>Bedrock Aquifer Designation</b>	Unproductive (100% Overlap)	<b>Superficial Aquifer Designation</b>	Secondary A (40% Overlap)
<b>Potential Groundwater Flooding Zone</b>	N/A		
<b>Other Sources</b>			
<b>Sewer Flooding (within 4 digit postcode)</b>	Internal Flood Incidents: NoData	External Flood Incidents: NoData	
<b>Artificial sources</b>			

**Site Specific Recommendations**

The majority of the site is located within Flood Zone 2 and a small part to the north of the site is located in Flood Zone 1. The site is not protected by the presence of defences. More Vulnerable developments should be preferably situated in Flood Zone 1. If it is not possible to locate More Vulnerable elements of the development (residential properties) in areas of lower hazard, More Vulnerable uses must be located on the first floor or above, with Less Vulnerable uses at ground level. The ROFSW map shows that site and surrounding area may be at high risk of surface water flooding. An assessment of the local surface water flow paths should be made during the development of the site design, to encourage the location of buildings and more vulnerable aspects of the development away from those areas at risk of surface water ponding. The culverted section of the River Quaggy is located along the southern and eastern edge of the site. The unculverted section of the River Quaggy is located to the west and south of the site. The flood storage area associated with this watercourse is also located to the south of the site. Permission is required from the Environment Agency for work activity within 8m of a culvert or main river.

Finished floor levels should be a minimum of 300mm above ground level in order to reduce the risk of flooding. A number of flood resistance and resilience measures can be implemented into new developments to mitigate potential flooding. Guidance on resilience measures can be found in the document 'Improving the Flood Performance of New Buildings, Flood Resilient Construction' published by The Department for Communities and Local Government (CLG).

Potential overland flow paths from fluvial and surface water should be determined and appropriate solutions proposed to minimise the impact of the development, whilst ensuring that flows are not diverted towards other properties elsewhere. Developers should consider using design for exceedance approaches by using urban areas and infrastructure to help manage local flooding. Flow paths should be assessed to inform the strategic location of SuDS and techniques to route flows around the edge of buildings. Careful consideration should be given to the use of fences and landscaping walls so as to prevent causing obstruction to flow routes.

A Flood Warning and Evacuation Plan (FWEP) must be prepared for the site, detailing how flood warning will be provided how the safety of occupants and access to/from the development. The local area is covered by the 'River Quaggy at Kidbrooke, Lee and Hither Green' Environment Agency Flood Warning Area.

Reference to the SWMP Appendix D Figure D6 identifies that (prior to the completion of a site investigation to determine precise local conditions) infiltration of surface water into the ground is uncertain for the site. Site investigations will be required prior to the development of a Drainage Strategy for the site. Development should utilise sustainable urban drainage systems (SUDS) unless there are practical reasons for not doing so. The site is located within the Group6\_017 Critical Drainage Area. The potential development must not increase flood risk to other areas within the CDA. A number of flood resistance and resilience measures can also be implemented into new developments to mitigate potential flooding. Guidance on resilience measures can be found in the 'Improving the Flood Performance of New Buildings, Flood Resilient Construction' published by The Department for Communities and Local

**Site Name: Phases 4 and 5 Kidbrooke Village East**

Government (CLG). Where an increased risk exists, developers need to provide a Drainage Strategy to demonstrate how they intend to address this, by what methods, over what timeframe and how maintenance of such works would be funded over its lifetime. This should include a consideration of SuDS in line with the London Plan 5.13 and Local Plan Policies. Surface water run-off should be managed in line with Royal Greenwich's surface water management requirements, as set out in Chapter 4 of the Developer Guidance.

**Summary**

In accordance with the NPPF, More Vulnerable development is considered compatible within Flood Zone 2 and does not require the application of the Exception Test. However, given the risk of fluvial and surface water flooding to the area surrounding the site, the principles of the Exception Test should still be considered when developing on this site. The site is within Flood Zone 2 and is at high surface water flood risk. More Vulnerable residential development must be raising finished floor levels and/or locating all sleeping accommodation at first floor level or above. It is recommended that effective surface water management measures are implemented, including careful site and building layout and the incorporation of SuDS, in order to reduce flooding both on the site and routing of flood water to other areas. Due to the extent of flood risk on the site, a flood warning and evacuation plan should be implemented to ensure access to and from the site.