

Ms Wing Lau  
London Borough of Southwark  
Development Control  
PO Box 64529  
London  
SE1P 5LX

**Our ref:** SL/2015/114734/01-L01  
**Your ref:** 15/AP/2721  
**Date:** 26 August 2015

Dear Ms Lau,

**Demolition of the existing garages and redevelopment of the site to erect a part 3, part 5 and part 7 storey building to create 27 no. affordable residential (class C3) units comprising a mix of 4 x one bed, 14 x two bed and 9 x three bedroom flats and associated landscaping works and provision of 3 no. car parking spaces.**

**Kipling estate garages, Weston Street, London, SE1 3RL**

Thank you for consulting the Environment Agency on the above planning application which we received on 06 August 2015.

We have reviewed the submitted information and respond as follows:

#### **Environment Agency position**

We have **no objection** to the planning application as submitted. However, we do have comments relating to Flood Risk Assessments and flooding information which are included within the **advice** below.

#### **Advice to applicant / Local Planning Authority**

We would like to offer the following advice with respect to flood risk, Flood Risk Assessments and flooding information, flood mitigation measures and groundwater and land contamination:

#### ***Flood risk***

We note that the site is located in Flood Zone 3 which is defined as having a 'high probability' of river and sea flooding by the ['flood risk and coastal change' section](#) of the national [Planning Practice Guidance](#) (PPG) ([Table 1: flood zones](#) of the [flood zone and flood risk tables](#) – Paragraph 065, Reference ID 7-065-20140306). We further note that the site is within an area benefiting from the River Thames tidal flood defences.

Environment Agency  
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Upon reviewing our updated tidal River Thames flood modelling, we note that the site lies within the currently modelled areas at risk of residual flooding, assuming a breach in, or overtopping of, the flood defences at given locations.

We further note that the London Borough of Southwark's [Strategic Flood Risk Assessment](#) (SFRA) indicates that, in the unlikely event of a breach in the defences, the rate of inundation to the site is defined as 'less than six hours' and the flood hazard rating for the site (based on depth and velocity of floodwaters) is designated as 'low' (Figure E).

We also note that the proposed development – namely, residential accommodation – would be classified as 'more vulnerable' by the 'flood risk and coastal change' section of the national PPG ([Table 2: flood risk vulnerability classification](#) of the flood zone and flood risk tables – Paragraph 066, Reference ID 7-066-20140306).

Please note that there may be other sources of flooding which affect this site – such as surface water, groundwater and sewer flooding – which are not within our direct remit, but nevertheless could be important considerations for managing flood risk for the proposed development. Indeed, consideration of other sources of flooding may be necessary to inform suitable mitigation measures to reduce the impact of any such flooding. Under the Flood & Water Management Act 2010, the Lead Local Flood Authority (LLFA) has the lead role in such flooding matters.

#### ***Flood Risk Assessments and flooding information***

A site-specific Flood Risk Assessment (FRA) is required for "all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3", according to the [National Planning Policy Framework](#) (NPPF) (Paragraph 103, Footnote 20).

We note that some of the flooding information referred to within the submitted FRA by Katherine Colby (dated 15 June 2015) – namely, the information obtained from the Environment Agency relating to modelled flood extents and levels (Sections 3.1.7 to 3.1.11 inclusive and Sections 3.1.18, 6.0.5 and 6.0.6) – has been superseded, because our tidal River Thames flood modelling has been updated – to take account of the [Thames Estuary 2100](#) (TE2100) project – since the information was obtained. Indeed, such an update has implications on the recommendations relating to finished floor levels and so on, as explored within the **advice** below.

We expect to review an up-to-date FRA for any planning application. However, on this occasion, we are adopting a pragmatic approach by not objecting to this planning application, as we believe that the production of an updated FRA would not materially alter our stance on the proposed development.

Nevertheless, we do not want to set a precedent for any future proposals that such an FRA is appropriate. Moreover, the Local Planning Authority may require, and thus request, an updated FRA in order to inform their decisions on the development

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proposals.

The Environment Agency can provide any flooding information which we have available – such as the aforementioned up-to-date, site-specific modelled flood levels – in order to inform the production of FRAs. Please note that there may be a charge for this information. Please contact our Customers & Engagement team on 01732 223224 or email [kslenquiries@environment-agency.gov.uk](mailto:kslenquiries@environment-agency.gov.uk) for further details.

### ***Flood mitigation measures***

We strongly recommend that ‘more vulnerable’ residential accommodation, particularly sleeping accommodation, is located at the first floor level and above or, if the former approach is absolutely not possible, at a minimum of 300mm above the 1 in 200 year flood level. Our recommendation is supported by the spatial planning and development control recommendations within the London Borough of Southwark’s SFRA (Section 6.4.4) which are themselves further embodied within the [Sustainable Design and Construction Supplementary Planning Document](#) (SPD) which states that:

- “it is preferable that ‘less vulnerable’ uses ... are located at ground floor level” within developments in areas at risk of flooding (Section 9.2);
- “no residential development is permitted at ground floor level” for the ‘less than six hours’ rate of inundation zone (Appendix 5);
- “sleeping areas should not be located below the predicted 1 in 200 year flood level” (Section 9.2).

We understand that ‘more vulnerable’ residential accommodation, including sleeping accommodation, will be located at the ground floor level and above within the proposed development. We note that the submitted FRA recommends that finished floor levels are set at a minimum of 3.33 metres above Ordnance Datum (mAOD), which is stated as being 300mm above the modelled 1 in 1000 year (upstream inundation) flood level (Sections 3.1.18 and 4.0.1). However, we have noted that such flooding information has been superseded, because our tidal River Thames flood modelling has been updated since said information was obtained. Indeed, we can advise that the maximum modelled 1 in 200 year flood level within the site boundary is now 3.40mAOD, which would indicate that inundation would occur in the case of such a flood event, if the aforementioned recommended finished floor level is implemented. Accordingly, we strongly recommend that finished floor levels are raised to 300mm above the updated modelled 1 in 200 year flood level, if at all possible.

We strongly recommend that flood resistant and resilient measures are incorporated in to the design and construction of the development proposals, where practical considerations allow, using guidance contained within the Department for Communities and Local Government (DCLG) document [‘Improving the flood performance of new buildings: flood resilient construction’](#), as referred to within the submitted FRA (Sections 3.1.21, 3.2.3 and 3.3.3).

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We advise that occupants of the proposed development register with our [Floodline Warnings Direct](#) service, in order that they may prepare themselves in the case of a flood event, as referred to within the submitted FRA (Sections 3.1.23 to 3.1.28 inclusive and Sections 4.0.2 to 4.0.5 inclusive and Section 6.0.7).

We recommend that a flood response plan (or flood warning and evacuation plan) is prepared and submitted to the Local Planning Authority for approval, as referred to within the submitted FRA (Sections 3.1.15, 3.1.22, 3.1.28, 4.0.6, 4.0.7 and 6.0.8). Ultimately, the Local Planning Authority's Emergency Planning department should be satisfied that any emergency procedures are appropriate and achievable.

### ***Groundwater and land contamination***

We note that the site is located over a Secondary Aquifer.

However, we do not consider these development proposals to be high risk, therefore, on this occasion, we will not be providing detailed site-specific comments with regards to contamination issues for this site.

Nevertheless, we would appreciate being informed if contamination is subsequently identified that poses a significant risk to controlled waters.

Moreover, if soil and/or groundwater contamination may exist at the site, the developer should address the associated risks to controlled waters by following the requirements of the:

- [National Planning Policy Framework](#) (NPPF);
- Environment Agency's '[guiding principles for land contamination](#)';
- risk management framework provided in the Environment Agency's document '[Model procedures for the management of land contamination \(CLR11\)](#)';
- Environment Agency's document '[Groundwater protection: principles and practice \(GP3\)](#)';
- national [land contamination: technical guidance](#).

Please note that all investigations of land potentially affected by contamination should be carried out by, or under the direction of, a suitably qualified competent person and in accordance with [British Standard \(BS\) 10175 \(2011\): code of practice for the investigation of potentially contaminated sites](#). We would normally expect the competent person to be a chartered member of an appropriate body – such as the Institution of Civil Engineers (ICE), Geological Society of London, Royal Institution of Chartered Surveyors (RICS), Institute of Environmental Management and Assessment (IEMA) and so on – and also have relevant experience of investigating contaminated sites. Furthermore, the [Specialist in Land Condition](#) (SiLC) qualification provides an accredited status for those responsible for signing off land condition records (LCRs).

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**Decision notice request**

The Environment Agency requires decision notice details for this planning application in order to report on our effectiveness in influencing the planning process. Please email [kslplanning@environment-agency.gov.uk](mailto:kslplanning@environment-agency.gov.uk) with any decision notice details.

We hope you find our response helpful. Please contact us if you have any questions.

Yours sincerely,

**Miss Kayleigh Wyatt**  
**Planning Advisor**

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