

Our Ref: 70025363 – Fisher Street Holborn

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CONFIDENTIAL

Chris Brake  
GL Hearn Limited  
280 High Holborn  
London  
WC1V 7EE

Mountbatten House  
Basing View  
Basingstoke  
RG21 4HJ

Tel: +44 (0) 1256 318 800

[www.wspgroup.com](http://www.wspgroup.com)  
[www.pbworld.com](http://www.pbworld.com)

Dear Chris,

**Subject: Fisher Street Holborn – EIA Scoping Opinion**

We refer to Following on from an email sent by yourself on the 9 February 2017, following Camden Councils scoping response and the Environment Agency's (EA) (issued 11 January 2017) concerns raised about the potential developments potential to create pathways for the transfer of pollutants to groundwater, we are pleased to submit this letter report to address the issues raised.

The letter issued by the EA on the 11 January 2017 raised concerns that the proposed development has the potential to create pathways due to the Crossrail works resulting in potential degradation of groundwater within the underlying superficial Secondary A aquifer (River Terrace Deposits).

WSP | Parsons Brinckerhoff has reviewed reports provided by Crossrail with regards to previous investigations carried out for the main shaft. A review of information reveals that no significant historical potentially contaminative sources were identified during the desk study. No significant contamination was identified during the ground investigations.

Prior to the development of the shaft the site had a thickness of made ground which was found to contain concentrations of metals and other organic and inorganic contaminants but not at concentrations exceeding the relevant generic assessment criteria (GAC) used for the site. No free phase product was observed during any investigations. No significant contamination was analysed or observed in the underlying natural strata's of the Alluvium or the River Terrace Deposits.

The previous generic quality risk assessment (GQRA) summarised the risks to the superficial and bedrock groundwater to be 'Very Low'.

It is expected that the majority of the made ground was removed during the construction works of the Crossrail shaft removing the majority of any potential contaminative materials present on site.

WSP | Parsons Brinckerhoff desk top study (dated February 2017) identified no historical or current on-site or nearby off-site uses that may significantly impact the underlying groundwater on the site.

It is understood that a robust concrete capping method will be used to cover the Crossrail shaft in order to construct the proposed development. As such this should will to provide a significant capping to prevent the possible pollutants from impacting groundwater and remove any possible pollutant linkages.

The proposed piles to be inserted for the new development are to be designed to a similar depth to the Crossrail Pile Toe (92 m TD), which would place the base of the piles within the Lambeth Group – Upper Mottled Beds. A review of the previous investigations reveals the bedrock consists of London Clay and the Lambeth Group. These units comprise high percentages of clay and as such are

unproductive strata and will provide a significant aquatard to the vertical migration of contamination into the Thanet Sands and Chalk below. As such there are no pollutant linkages to the deeper bedrock groundwater with the current design scheme.

WSP | Parsons Brinckerhoff considers that the proposed development does not present any significant pollutant linkage risks to the superficial or bedrock groundwater beneath the site due to the absence of contaminants at the source and a lack of tangible pollutant linkages.

Yours sincerely,

Alex Jeffery  
Senior Environmental Consultant