

Our Ref: C96080-JNP-XX-XX-CO-C-1004

Chkd: DRS

Reading Borough Council
Via email: plgadmin@reading.gov.uk

For the attention of Planning Department,

Date: 9/12/2020

Dear Sir / Madam

Re: Dukesbridge House, Reading

We understand that there is pre-commencement condition on the Prior Approval Permission (ref. 201043) requiring a detailed land gas site investigation and subsequence mitigation if required.

To date, the risk of land gas has been identified in the Phase I Geo-environmental Desk Study (ref. C86080-JNP-XX-XX-RP-C-1001-S2 P02). Due to the location being founded on Alluvium, which can contain peat and generate land gas, and the potential for Made Ground on site (which could contain putrescible material), from past uses of the site a risk of ground gas was identified. There were no filled areas or waste sites near the site which are also typically sources of land gas.

JNP Group understands that the redevelopment comprises the conversion of the existing building to residential units and it is proposed to install a gas membrane (Visqueen Gas Barrier or similar) on top of the lower ground floor slab lapped up the walls to above external ground level. The membrane will be extended through the walls to the outside leaf.

Whilst a ground investigation with gas monitoring has not been undertaken on site, given the proposed development is a conversion, and the progress of the development, a traditional site investigation and assessment is not considered wholly appropriate.

In the assessment of the above proposals and taking into account the development stage, JNP Group have considered BS8485 :2015, 'Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings'. From this JNP Group understand that the basement floor and walls will conform to BS 8102:2009, Grade 3 waterproofing, providing 2.5 points and the gas membrane will provide an addition 2 points, a total of 4.5 which is sufficient to mitigate a CS3 situation for a type A or B building. Whilst there is no specific site measured data, given the likely sources of ground gas identified within the desk study it is likely that any gas risk to the site would result in a CS2 classification.

The membrane will need to be heat welded and installation validated on completion.

Given the above, it is considered that the proposed gas protective measures are likely to be suitable for the development. Please could you confirm if this approach is acceptable and therefore parts (a) and (b) of the condition can be discharged. Part (c) can only be discharge once the validation report (waterproofing and gas membrane) has been completed.

Yours sincerely



Sarah Longstaff
Principal Hydrogeologist