# **Chord Environmental Ltd**

Juliet Fuller Geotechnical & Environmental Associated Widbury Barn Widbury Hill Ware Herts SG12 7QE

Your Ref: Our Ref: 74 Charlotte St 1109/LJE240315

For the attention of: Juliet Fuller

24 March 2015

74 Charlotte Street, Fitzrovia – 2015/0495/P – Condition 7

Dear Juliet,

Further to our discussions and the instruction to proceed on behalf your client (Heyne Tillett Steel) I have undertaken a review of the Basement Impact Assessment (BIA) prepared by Michael Barclay Partnership for the proposed basement development at 74 Charlotte Street.

I have reviewed the design of the proposed basement development, together with the information presented within the above documents, against the requirements of the Camden BIA guidance set out within DP27 and CPG4.

Chord Environmental specialise in the provision of hydrogeological services with extensive experience in the UK supporting both private and public sector clients. I am a geologist and hydrogeologist and have a BSc. in geology from the University of Bristol, a MSc. in hydrogeology from the University of East Anglia and am also a Chartered Geologist and fellow of the Geological Society. I am Managing Director at Chord Environmental and was previously a Technical Director with Paulex Environmental Consulting and Hyder Consulting (UK) Ltd's groundwater team.

I have been a hydrogeologist for 17 years. During that time I have advised on over 80 basement developments. Much of my career has been spent assessing the impact of development on the quality and quantity of groundwater resources. I have worked for both promoters and regulators of schemes and have acted as an expert witness for the Highways Agency and on BIA schemes.

47 Clifford Street, Chudleigh, Newton Abbot, Devon. TQ13 0LE Tel: +44 (0) 7595 023149 E-mail: info@chordenvironmental.co.uk

# **Development proposal**

I understand the proposed development comprises the demolition of the existing building, leaving the Charlotte Street façade intact, and the construction of a new five storey building. The existing building has a full length basement which is proposed to be lowered by approximately 250mm.

# **Planning Condition 7**

The London Borough of Camden set out several planning conditions associated with the planning permission for the proposed development. Condition 7 states:

"No development shall commence until such time as a suitably qualified chartered engineer has been appointed to inspect, approve and monitor the critical elements of both permanent and temporary basement construction works, and works to the retained façade, throughout their duration to ensure compliance with the design which has been checked and approved by a building control body. Details of the appointment and the appointee's responsibilities shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of development. Any subsequent change or reappointment shall be confirmed forthwith for the duration of the construction works."

I understand that with respect to the basement construction works, the Condition intended that a suitably qualified hydrogeologist in line with the requirements of CPG4 was required.

### **Environmental Site Setting**

The BIA screening assessment and site investigation interpretation has identified 74 Charlotte Street to be underlain by up 5.15m of Made Ground over the Eocene London Clay. The Lynch Hill Gravels shown to underlie the site on the British Geological Survey 1:50,000 scale map (Sheet 256 – North London) have been historically worked and removed.

Monitored groundwater levels within the Made Ground were noted to be between 0.8m and 1.4m beneath the existing basement.

### Subterranean (Groundwater) Flow Screening Assessment

The BIA screening assessment has followed the CPG4 guidance screening questions. The Lynch Hill Gravels are classified as a Secondary A Aquifer by the Environment Agency however these have been removed and replaced with Made Ground. Groundwater levels within the Made Ground are very likely to be in hydraulic continuity with the surrounding Lynch Hill Gravels.

The proposed basement development would only lower existing basement levels by up to 250mm and therefore not extend beneath monitored groundwater levels. The site is outside of the catchment for the Hampstead Heath chain of ponds and there are no watercourses within 100m.

### Conclusions

The BIA report has appropriately characterised 74 Charlotte Street with respect to its geological and groundwater site setting. The purpose of the Basement Impact subterranean or groundwater flow assessments is to identify the potential for the proposed development to cause groundwater impacts and subsequently identify areas which require further investigation. The proposed development would

be sited above a significant thickness of Made Ground over London Clay and the slight deepening of the existing basement would not extend beneath monitored groundwater levels. Therefore no potential adverse groundwater impacts have been established by the BIA.

Based on the above findings and with respect to Condition 7 of the planning consent, I confirm that, in my opinion, it will not be necessary for a chartered hydrogeologist to oversee the basement construction works.

Yours sincerely,

and . tohn!

John Evans BSc MSc CGeol. Director

