Millwood House Developments Ltd
Creating Connections in Construction
Structural Engineering Consultants

Our Ref : CS/42010
25th February 2019

LADY BEE ENTERPRISE CENTRE, SHOREHAM PORT, SOUTHWICK

CONTAMINATION VERIFICATION REPORT

Further to our Contamination Assessment report of 25th July 2018, a copy of which is attached to this report, we write to finalise the reporting on Contamination on this site by providing this Contamination Verification Report.

As set out in the Contamination Assessment, the full Geotechnical and Geo-Environmental site investigation, testing and reporting carried out by Leap Environmental, including extensive chemical testing, resulted in the following conclusions :-

- The contamination risk assessment has identified that the made ground soils are not significantly impacted with any of the most common contaminants; no determinants above the GAC for a commercial land use were identified;
- The identified contamination is considered to pose a low risk to human health and controlled water receptors;
- Following a pragmatic gas risk assessment the site has been classified as requiring gas protection measures assuming a Characteristic Situation 3;
- Remediation is not required; and
- A discovery strategy should be put in place for hitherto undetected contamination.

From the outset of the project, the induction of operatives from the Pilbeam site management team included instructions on reporting potential contamination as the groundwork progressed. Also, to use gloves and goggles in the event of such occurrences whilst maintaining standards of hygiene at all times by using the facilities provided on site. Importantly, this hygiene induction was also transmitted to the operatives of Edburton Contractors who were the selected Groundworks Subcontractor.

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Fortunately, no contamination discovery was made.
The following is a list of excavated items which were dealt with, on site, by the Pilbeam and Edburton Teams:-

- At the north end of Block 2, some original sheet steel piling was uncovered which would have intruded into the raft foundation of Block 2.
  It was decided to cut these piles down to well below the underside of the raft foundation so there was no interference between the two elements.
  The sections were cut down by Shoreham Port Authority technicians and the cut pieces were removed from site by Edburton.
  Edburton placed the pieces into the metal recycling skip in their Henfield yard, for which they have a licence.

- In several areas, old wharf timbers were uncovered at shallow depths. These were cut into manageable pieces and placed in the timber skip which was located on site.

- In two locations under Block 2, soft areas of fill material were found which would not have responded well to the compaction process required to give good support to the concrete raft foundation. These areas were excavated until firm ground was found. The soft arisings were sent to landfill. Please see two tip notes attached to this report.

Therefore, the findings of the extensive soil investigations across the site were proven correct. The soils on the site were not found to be contaminated above the GAC for a commercial site. This was verified by lack of discovery, despite intensive excavations over the whole site.

The potential for the moderate risk of ground gases was taken care of by providing the two levels of Protection Measures required by CS 3 of the CL:AIRE Research Bulletin RB 17. That is the reinforced concrete cast insitu floor slab plus a reinforced gas membrane with all joints and penetrations sealed. The gas membrane was 2000 gauge Visqueen Gas Barrier Membrane plus Visqueen VOC bloc heavy duty protection at vulnerable locations such as the raft toes and edges.

This report is confirming the verification of the requirements for dealing satisfactorily with contamination on a commercial building site.

Christopher Self C Eng FIStructE
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On behalf of Millwood House Developments Ltd.