

Proposed Sports Pavilion at Redbank Playing Fields, Radcliffe, Bury. M26 3RW

Remediation Report

Site Conditions – Ground Gas.

Following receipt of the 3rd round of gas monitoring results on the Redbank Playing Fields site it is noted that the results to date are proving fairly consistent. Carbon Dioxide levels have been recorded at between 2.4 – 8.8 % for the monitoring locations across the site. However the flow rate of gases has been below the limit of detection (lower than 0.1 l/hr). These results indicate a borderline CS-1/ CS-2 designation for the site. Peak methane concentrations have been very low (0.4%). The geotechnical engineers note that the last monitoring round was also undertaken during low atmospheric pressure (1000 mbar) so they will have picked up the worst case scenario conditions for the site. On this basis it is highly unlikely that the final site designation will exceed CS2 and will probably fall into a CS1 classification. However to allow the project to progress the use of a CS2 classification will be appropriate to mitigate the risk from ground gases.

Gas Vapour Protection Strategy

The adoption of a CS-2 designation for the site results in the use of an appropriate membrane below the floor slab, to protect against the passage of ground gasses into the building. Given this classification the use of a Visqueen Ultimate HC Block gas membrane would be appropriate. The membrane would have taped joints between each sheet to meet the certification standard. The CS-2 designation does not require the below slab ventilation strategies that higher designations do. The quality and effectiveness of the vapour barrier will be verified by using a qualified installer who will carry out appropriate testing to ensure compliance with the certification and provide the results along with a photographic record of the work. A copy of the relevant data sheet for the membrane is included with this document to provide full details of the product to be installed including the installation methodology. The specification is based on the site having potential hydrocarbon presence and is suitable for that location.

Water Supply Pipework

The site investigation testing has highlighted the presence of slightly raised levels of hydrocarbons in some of the boreholes. To protect against potential risk of contamination in the water supply pipework an enhanced specification will be used. The new supply pipework running from the site boundary to the pavilion will be installed in Protecta – line pipework. This multi layer pipe consists of a polyethylene core for carrying clean water, that's surrounded in an aluminium barrier layer with a final polyethylene outer layer, to provide protection to all known contaminants.

Site Operatives

All site staff involved in works in the ground are to wear full PPE including gloves.