

NFC Homes

Via email only: bnam@nfhomes.co.uk

12th March 2021

Our Ref.: 19160/RMS/LR

Thomas Telford House, Sun Valley Business Park
Winnall Close
Winchester
SO23 0LB

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Dear Bho

Re: Land adjacent to 1 St Helen Close, Cowley, Hillingdon UB8 3RS

Following further comments from the regulator (Application Ref: 56865/APP/2020/459) in relation to the above site and investigations to date undertaken by Soils Limited (ref: 18255/PIR and 18255/MIR and to which reference and reliance is assumed), Soils Limited was commissioned to undertake an options appraisal with the Client and their advisors to confirm the remediation strategy to be adopted in this case for presentation to the regulator for agreement.

Background

Following on from investigations at the site undertaken by Soils Limited, the Client has requested presentation of an appraisal and strategy to resolve the potential issues to human health identified in the reports in relation to a singular Lead exceedance in a proposed garden area. The report (Soils Limited 18255/MIR dated December 2020) detailed several options that could be explored to resolve this issue and the conclusions of the appraisal undertaken between the Client and their advisors are detailed below.

Copies of the site Location Plan / Aerial Photograph with sample locations are enclosed for reference:



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Appraisal

Various options were presented for discussion in the Soils Limited Report as noted, and following presentation of that report and consideration of the options therein, a decision on the optimal remediation methodology was agreed. It was determined by the Client and their advisors on appraisal that the following issues and goals were of most significance in concluding their strategy.

Sustainability, Compliance with current guidance and regulations and Cost Effectiveness were determined as the main goals of the appraisal process and the following items were considered the key determinants in reaching their decision:

1. Lack of significant systematic risk (shallow depth 400mm single marginal exceedance in one sample – Lead 231mg/kg)
2. Potential “Hotspots” of Lead and other deleterious materials may still be present in Made Ground
3. Site relatively small and garden/green areas limited
4. Site clearance, levelling and foundation groundworks will require removal of materials as wastes as part of the site MMP
5. The material to be removed is not defined hazardous as waste and could be re-used or recycled on other sites
6. The extant material on site is probably not suitable as garden or growing material and would not comply with UK Topsoil Standards or be in compliance with NHBC guidance for garden areas
7. Garden soils should comprise 450mm of clean suitable and fit for purpose verified, certified and validated material to ensure compliance
8. As some materials will remain below hard standing but not present a significant risk – no pathway to human health very low leachability – and materials are to be removed as groundworks, no additional testing of final levels is considered necessary
9. In light of the shallow depth, planned removal and replacement and low levels noted, no barrier is required (BRE guidance on cover system suggests < 300mm actually required if subsoil remains)
10. The works will be subject to appropriate validation and verification on completion or during the works as appropriate subject to compliance with appropriate remediation guidance
11. A Discovery Strategy will be emplaced during the works

Remediation Strategy Methodology

On the basis of the above considerations and appraisal, a strategy has been determined which should achieve the noted goals. In summary, the proposed “remedial” works are to comprise:

- Removal of all materials in garden space and open areas (see Appendix A Garden and open Space Locations) to a level of at least 450mm below the final ground level on completion
- Materials below proposed hard standing and buildings will be removed as required during groundworks to allow the development to proceed and levels retained
- A discovery strategy will be in place throughout the process and enacted where appropriate
- Services will be appropriately protected in agreement with the appropriate regulator
- Suitable certified materials will be emplaced in all garden and open space areas to return the site to level and be of (at least) 450mm in thickness/depth

As required by current guidance, the above shall be subject to validation and verification to confirm compliance. This will include but not necessarily be limited to:

- Imported materials in garden areas to be proven sufficient thickness, suitable and fit for purpose by Client, regulator or third part as appropriate
- Certification to be acquired for all imported soil materials prior to importation to confirm suitability
- Provision of summary and details of materials removed from and imported onto site (required by MMP)
- Confirmation of any net changes in site levels as a result of development
- Confirm Discovery Strategy in place – if not acted upon a statement to this effect will be required from the groundworker and/or developer or Client
- Presentation of a validation report to the regulator confirming all works undertaken as agreed with appropriate evidence of compliance – photographs, documents, tickets, plans, statements, certificates, etc.

The precise details regarding practical application of the above strategy and validation are not and cannot be confirmed in terms of precise volumes to be removed and/or imported onto site, dates on which these actions could occur, details regarding sources of or locations for disposal of materials, number of validation samples to be taken, etc. As with all development works, this will vary depending on any further specific material findings during groundworks, site plans, instructions and any noted regulatory or guidance requirements.

However, these considerations will be recorded, detailed and discussed as part of the validation and verification process in line with current guidance and in consultation with any and all appropriate parties and regulators.

For imported materials as a guide, analysis should be once per 250m³ if the materials are well known (i.e. pre-certified) and one for each separate source with a minimum of 3 samples. Analysis should be for a general screening suite including typical contaminants as per the previous investigations i.e. asbestos, metals, semi-metals and hydrocarbons. Materials shall be considered suitable and fit for purpose by default if they do not exceed agreed screening values as appropriate to the end use and as required by the regulator. Example screening values may include the soil guideline values for residential with plant uptake as noted in the Soils Limited MIR report 18255/MIR Appendix C.3.

If you have any further questions or comments regarding the above, please contact the undersigned.

Yours sincerely



Christopher Swainston BSc (Hons), PGCE, FGS, CGeol, CLAIR QP.

Principal Environmental Engineer

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For and on behalf of Soils Limited

Appendix A: Garden and Open Space Locations

