

14092/RJH

18 October 2023

Lovell Partnerships Ltd
Greenmeadow Business Park
Unit 5
Cae Gwyrdd
Cardiff
CF15 7AB

For the attention of Mr Neil Thomas

Dear Sirs,

Former Whiteheads Steelworks, Mendalgief Road, Newport, NP20 2HY
NHBC Outstanding Land Quality Conditions, Ref: 216335 LQ conditions LQ5 & LQ6.
Planning Permission Number RM1-18/1039, RM2-18/1142 and RM3-21/0464
Validation of Imported Clean Cover to Plots 348 to 350 and 361 to 368.

Intégral Géotechnique were appointed by the Lovell Partnerships Limited to carry out the clean cover validation inspections to soft landscaped and garden areas within the above development as the site build program progresses. We can report the clean cover soil validation works within the above development site as follows.

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This information is submitted in support of the discharge of conditions of the following consents and/or warranties.

Regulator	Reference
Local Authority Planning Permission Number	RM1-18/1039, RM2-18/1142 and RM3-21/0464
NHBC outstanding Land Quality Conditions Ref	216335 LQ conditions LQ5 & LQ6

The required remedial measures regarding the requirement to mitigate land contamination risks at the above site comprise the placement of a clean 600mm capping layer to be incorporated within the soft landscaped and garden areas of the new development. This capping layer is to be underlain by a hi-visibility geotextile membrane.

Remedial Strategy Requirements (Clean Capping Layer)

1. The upper 600 mm of fill used in the clean capping layer in all garden and soft finished areas are to be chemically tested and UKAS accredited laboratory analysis certificates supplied. The capping system is to comprise of imported clean inert materials conforming to the Requirements for the Chemical Testing of Imported Materials for Various End Uses and Validation of Cover Systems prepared by Welsh Land Contamination Working Group and to satisfy appropriate soil guideline values for residential developments with gardens. Samples of the topsoil and subsoil will be taken for laboratory analysis, at a frequency of 1 in every 4 gardens.
2. Topsoil brought to the site will require a laboratory analysis certificate confirming its suitability for use and sampling prior to placement to confirm its chemical suitability (minimum of three samples per source).
3. Subsoil will require a laboratory analysis certificate confirming its suitability for use and sampling prior to placement to confirm its chemical suitability (minimum of three samples per source).
4. Following placement of the imported topsoil and subsoil within garden areas, a validation trial pit excavation depth check will be undertaken at a frequency of 1 in 4 plots, so as to confirm the sufficient depth of the clean capping layer, along with observation of a hi-visibility geotextile membrane placed at the base of the capping soils.

An additional sample of topsoil and subsoil will also be taken from each trial pit excavated to further confirm the chemical quality of the topsoil and subsoil on an ongoing basis.

Validation of Clean Capping Layer to Plots 348 to 350 and 361 to 368

An engineer from Intégral Géotechnique attended site on 2nd October 2023 and 6th October 2023 and observed hand/machine dug trial pits for validation purposes at 3No. trial pits within the above garden areas of plots 348 to 350 and 361 to 368. The topsoil resembled a cohesive dry silty clay strata and was underlain by a subsoil material found to be a granular material comprising a medium dense becoming dense orangish brown and brown very sandy clayey gravel with medium cobble content.

The trial pits were found to exhibit the required total of a minimum 600mm of clean cover soil material placed in the garden areas along with observation of the hi-visibility geotextile membrane placed at the base of the capping soils.

Various photographs of capping depths and infilled constructed gardens are shown in Figures.

Representative samples of the 'as placed' topsoil and subsoil soil materials in the above garden areas inspected have been further, sampled and sent to the accredited laboratories of i2 Analytical for chemical analysis.

In-situ chemical soil test reports are attached in Appendix A.

The results of the topsoil and subsoil sampled from within plots 349, 363 and 366 above have been summarised and compared to the appropriate screening criteria for a residential end use. The results have been compared to appropriate Suitable 4 Use Levels (S4ULs) derived by LQM, in the first instance. In their absence, the results will have been compared to the Category 4 Screening Levels (C4SL) and the Soil Guideline Values (SGVs) and Soil Screening Values (SSVs) derived by Atkins ATRISKsoil for residential with the consumption of home grown produce end use, to assess the potential risk to human health.

Summary of the in-situ chemical testing results are attached in Appendix B.

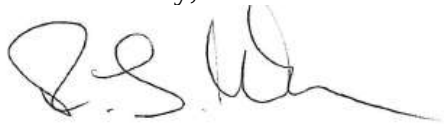
Conclusion

This report based on the above information, therefore confirms that the final remediation works regarding the 600mm capping layer, hi-visibility geotextile membrane and chemical analysis required for plots 348 to 350 and 361 to 368.

Provision of clean cover to the remaining plots at site and at the required inspection frequency will be provided in due course.

We trust that the above is to your satisfaction. However, if you have any queries or require any further information, please do not hesitate to contact us.

Yours faithfully,



Roger J Hawkins
For
Intégral Géotechnique (Wales) Limited

Figures.