

Taylor Wimpey

**BUILD PHASE DEVELOPMENT
REMEDiation STRATEGY**

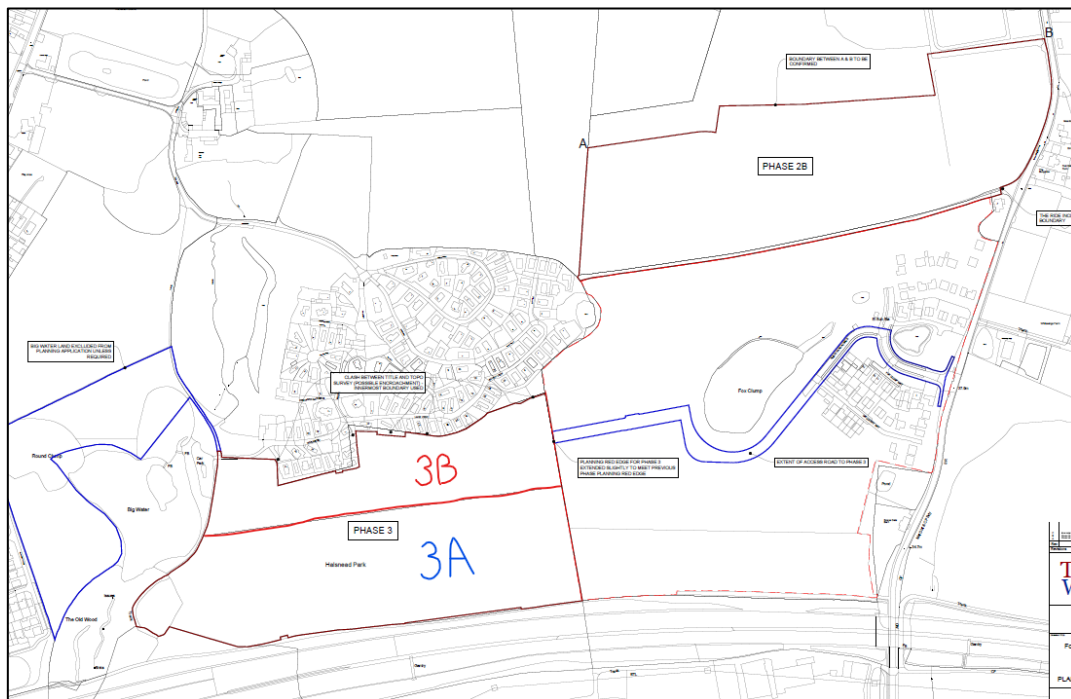
Phases 3A & 3B, Whiston

REPORT No: 24TAY072/RS

1. INTRODUCTION

Betts Geo Environmental (Betts) have been commissioned by Taylor Wimpey to prepare a Remediation Strategy for the remediation and preparatory works required at Phases 3A & 3B, Whiston, Merseyside.

These areas are shown on the extract below:



Betts Geo undertook a site investigation on the phase 3B area in January/February 2025 (detailed within Ground Investigation Report for Phase 3, Whiston Ref; 24TAY072/GI, Dated; March 2025, By; Betts Geo, For; Taylor Wimpey (UK) Ltd) which comprised of the following:

- Twenty (20 No.) trial pits to a maximum depth of 3.40mbgl (TP18).
- Five (5 No) window sample boreholes drilled to a maximum depth of 3.0mbgl.
- Nine (9 No.) rotary open hole boreholes drilled to a maximum depth of 30.0mbgl.
- Chemical analysis (Metals, PAH's, TPH's) of nineteen (19 No) samples.
- Plasticity testing on eight (8 No.) samples.

The Phase 3A area was previously investigated by Betts Geo in October 2019 (detailed within Ground Investigation Report for Fox's Bank, Halshead Garden Village Ref; 19TAY055/GI, Dated; May 2020, By; Betts Geo, For; Taylor Wimpey (UK) Ltd) and comprised of the following:

- Twenty five (25 No.) trial pits to a maximum depth of 3.10mbgl (TP8).
- Five (5 No) window sample boreholes drilled to a maximum depth of 4.0mbgl.
- Sixteen (16 No.) rotary open hole boreholes drilled to a maximum depth of 30.0mbgl.
- Chemical analysis (Metals, PAH's, TPH's) of twenty five (25 No) samples.
- Plasticity testing on six (6 No.) samples.

Additional rotary boreholes were undertaken in the Phase 3 area in January 2026 and comprised eight (8 No) additional rotary open boreholes to better assess the risk to site by shallow coal. No evidence of mining related disturbance was identified and as such no precautions for shallow unrecorded workings are deemed necessary.

2. REMEDIAL RECOMMENDATIONS WITHIN SI REPORTS

Phase 3A Area

The site was assessed as 'CS2' protection within the vicinity of WS2 with the remainder of the site classed as 'CS1'.

No contamination was identified across the Phase 3A area, therefore there was only a requirement for a 300mm growing medium as per NHBC guidance.

Since the issue of the SI report, a further letter report was produced by Betts Geo (19TAY055 dated 6th November 2020 – Cherry Tree Farm, Foxes Bank Lane, Whiston by Betts Geo) stating that the areas surrounding WS2 (requiring CS2 protection) is to be dug out as SUDs attenuation ponds and footpaths, and as a result, the biogenic source of ground gas removed, removing the need for any ground gas protection in the area. As such, the full site can be classed as CS1.

Phase 3B Area

The site was assessed as 'CS1' across site, however it was noted that a ventilated void should be provided due to coal geology. As the geology of the Phase 3A area is similar to that of the Phase 3B area, the ventilated void recommendation should also be applied to plots within Phase 3A.

It was also mentioned that additional assessment may be required post additional coal probing works. This works was undertaken in January 2026 (detailed in Section 1 above), and as no evidence of mining related disturbance was identified, no additional assessment is required.

No contamination was identified across the Phase 3B area, therefore there was only a requirement for a 300mm growing medium as per NHBC guidance.

3. GARDEN GROWING MEDIUM

A minimum thickness of 300mm of debris free soil is required across the site to provide a growing medium, as per NHBC guidance.

Based on the results of the SI, site won soils are deemed chemically suitable for reuse across site.

Imported soil being brought to site should be tested for contamination to ensure it is suitable for the proposed use. It is generally advisable to test a minimum of three samples, or one sample per 150m³ (greenfield source-topsoil) and 250m³ (greenfield source- subsoil) so that a representative mean value can be calculated. Proposed testing should be in line the Local Authority's testing specification.

4. GROUND GAS PROTECTION MEASURES

Based on the findings of the Betts Geo SI to date, and the information presented in Section 3 above, no ground gas protection measures were deemed required across the site other than a ventilated void within plots.

5. CONSTRUCTION.MAINTENANCE WORKERS

In order to reduce potential risks encountered on site, the following recommendations should be adhered to during site works:

- Any proposed imported soils should be tested for contamination to ensure that they are suitable for the proposed end use as per Section 3 above.
- Site workers should wear gloves, boots and overalls and wash their hands before eating, drinking and smoking. Excessive dust generation should be avoided. The site manager will inspect the risk assessments of the contractors on site/inspect on a regular basis to make sure this is upheld as per HSE / CDM guidance.
- Asbestos was not encountered on site however vigilance should be adhered, and any suspected asbestos should be notified and a suitably qualified.
- It is recommended that during all excavations adequate ventilation should be maintained. If man entry is required, gas monitoring should be carried out as a precaution.
- Despite the findings of the SI to date, it would be prudent to maintain vigilance during site clearance and construction, in case any areas of suspected contamination are encountered.
- If areas of suspected contamination are found then a suitably qualified person should undertake appropriate sampling, testing and further risk assessment.

6. SOIL STOCKPILE MANAGEMENT PRACTICES

Should there be sufficient space on site for stockpiling and segregation of imported materials (if required); providing care is taken not to cross contaminate stockpiles, testing from stockpiles may prove easier than post placement.

It is imperative that the stockpiles are well managed to avoid inadvertent mixing or depositing of surplus or deleterious materials that would compromise the continued use. We would recommend that the site management reviews the context of the stockpile at commencement and places either fencing or warning signs to ensure compliance.

Stockpiles, when not in use, should be fenced off. The sign below should be positioned in several locations around each tested stockpile of topsoil and subsoil. Stockpiles should be covered with a geotextile membrane to prevent accidental cross-mixing.

