



Gerry Taylor  
C.R. Construction (U.K.) Company Limited  
39 Harrington Gardens  
London  
SW7 4JU

Our Ref: 70101534-12011  
15 September 2022  
CONFIDENTIAL

Dear Sir/Madam,

**Angel Meadows Plots 2 & 3, Manchester  
Letter Report on Remediation Activities**

## **INTRODUCTION**

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WSP is pleased to present below details of the remedial activities that are understood to have been carried out in connection with the development of Angel Meadows Plots 2 & 3, Manchester (the site). A site location plan is presented as Figure 1, appended.

It should be noted that WSP has not had a site presence during the remediation activities conducted, and as such this letter report includes information provided to WSP by C.R. Construction Ltd (formerly Westfields Construction Ltd). WSP presents this information in all good faith, but cannot accept responsibility for any errors, omissions or inaccuracies in the information or data provided, or our resultant interpretation of said information and data.

## **AIM**

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The aim of this report is to provide information on the remedial and mitigation works completed in relation to contamination, to support the redevelopment as residential apartments and enable the discharge of outstanding contaminated land planning conditions related to the development works (specifically Condition 13 on 124120/JO/2019).

## **BACKGROUND**

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The site was investigated by WSP in 2017, as described in WSP report “*Angel Meadows Plots 2&3 – Manchester, Ground Investigation Report, Report number 70020194\_20170418\_Angel Meadow Plot 2 GIR(2)*” dated August 2017. Referred to as ‘WSP GIR’.

The WSP GIR concluded that the following potentially complete pollution linkages were considered to be:

1. Inhalation of soil-bound contamination (asbestos) during redevelopment by construction workers and neighbouring land users.
2. Inhalation of soil-bound contamination (asbestos) by future site users and maintenance workers, following redevelopment.

### 3. Potential creation of preferential pathways to controlled waters receptors along piled foundations.

Based on the above, the following outline remediation strategy and potential mitigation measures were identified to address the potential risk associated with asbestos in Made Ground and to address the potential risk to controlled waters (WSP GIR Section 8.9 'Outline remediation strategy and potential mitigation measures'):

- *Areas of soft landscaping are due to include imported topsoil and subsoil over a no-dig layer (such as compact gravel). The depth of the soil will depend on the nature of the planting; tree planters will by necessity be deeper than those of shrubs and grassland.*
- *Adoption of best practice during construction and development (e.g. Construction Environmental Management Plan, provision of appropriate PPE). Ground operatives should be vigilant to the presence of possible asbestos containing materials (ACM) (e.g. asbestos) during excavations through Made Ground and seek advice if encountered.*
- *A foundation (piling) risk assessment will be required in order demonstrate that the proposed foundation solution does not present an increased risk to controlled waters receptors.*
- *Mitigation of the potential exposure associated with asbestos in soils will be required during the re-development process; the required level of mitigation should be determined through consultation with a suitably qualified consultant in line with the Control of Asbestos Regulations 2012.*

It should be noted WSP is not aware of a formal remediation strategy for the site; as such, this letter report only comments on whether the above outline guidance has been adequately demonstrated in the measures undertaken.

## INFORMATION PROVIDED TO WSP

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For verification purposes, the following information has been provided to WSP in August 2022 by CR Consulting:

- A plan showing areas of soft landscaping across the development, and a cross section schematic diagram showing proposed thickness of soil placement in tree planters (Appendix A)
- Chemical laboratory testing reports for imported topsoil (Envirolab, report reference 22/00443(1)) and subsoil (i2 analytical Ltd, report reference 21-10823) samples (Appendix B). Review of these records indicates that the topsoil and subsoil imported appears to be suitable for use. Both laboratories are UKAS and MCERTS certified.
- Photographic evidence of placement of imported soils in soft landscaping areas (Appendix C). Review of these records indicates that suitable placement of soils has been completed. No thickness of soils was specified in the WSP GIR, however it is considered from the available photographic evidence that thicknesses are suitable to mitigate against any contaminant linkage related to asbestos fibres within Made Ground.

- The site construction Environmental Plan (Westfields, 2018) and Asbestos Management Plan (Environmental Management Solutions, Asbestos Management Plan, Plots 2 & 3 Angel Meadow, Manchester, Westfields Construction Ltd, dated November 2018) (included in Appendix D). The asbestos management plan details control measures implemented during the redevelopment process to mitigate exposure to potential asbestos fibres within Made Ground.
- The Piling Method Statement has been provided to WSP. The method of piling used was continuous flight auger (CFA). It is considered that CFA pile construction does not create a permanent preferential pathway, therefore the risk of pollution of the principal aquifer from CFA piling is considered to be negligible.
- Confirmation in writing from the client that no leaks occurred, or any contaminated ground was created during the redevelopment works (email correspondence from Andrew Coote, Westfields Consulting on 30 August 2022, Included in Appendix E). Written confirmation also states that dust suppression measures including road sweeping / dampening down was carried out during the works.

## CONCLUSIONS

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WSP has been provided with evidence that indicates work has been completed in general accordance with remedial recommendations outlined in the WSP GIR, 2017.

On this basis therefore, it can be concluded that it is likely that the potential contaminant linkages identified in the WSP GIR are no longer valid for Plots 2 & 3. Based on the information provided, it is considered no further remedial works are required in relation to Plots 2 & 3.

We trust that you find the contents of this letter satisfactory for your current requirements, but please do not hesitate to contact the author should you require any further information.

Yours faithfully

Niall Richards  
Environmental Consultant

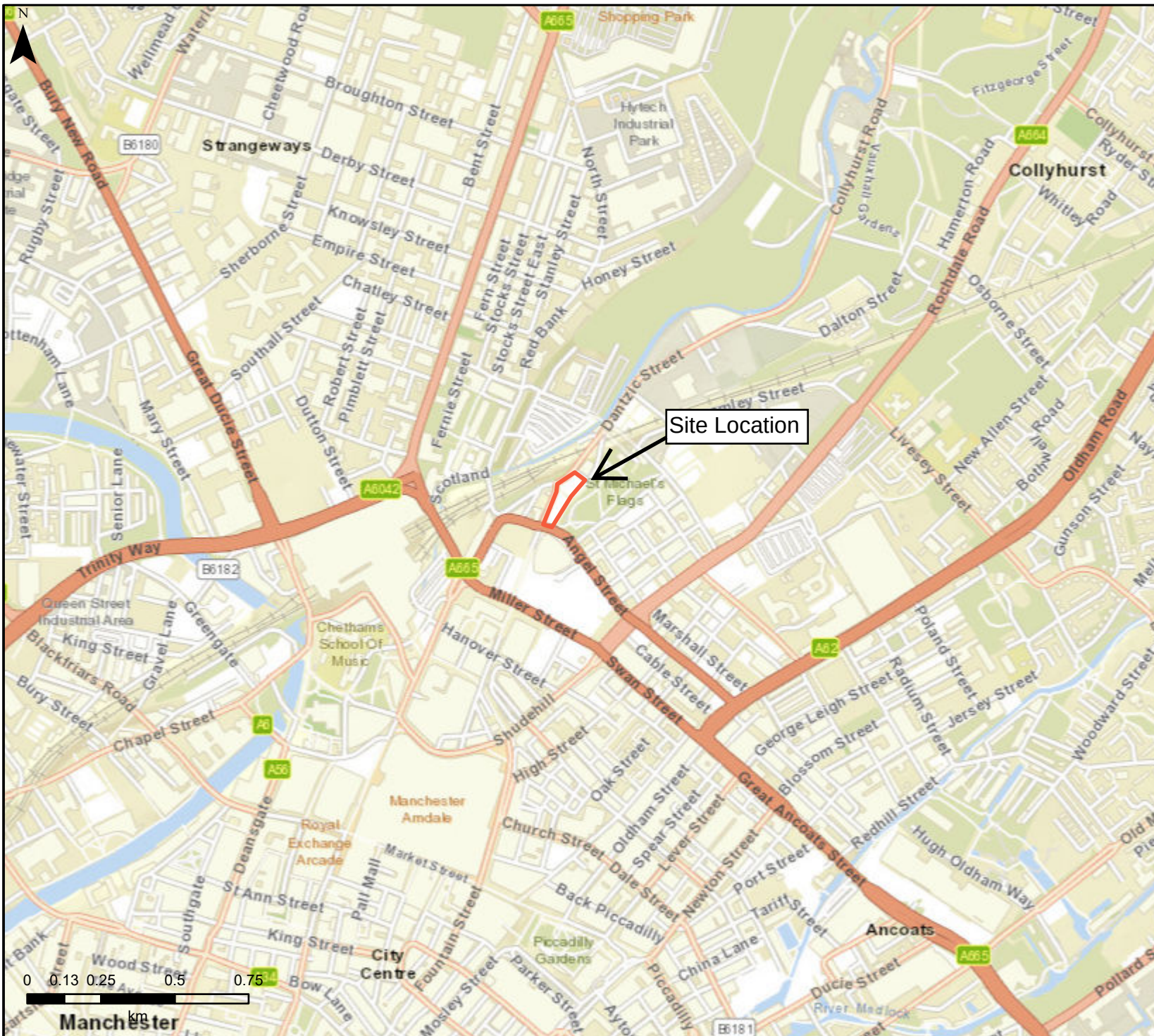
Richards,  
Niall  
(UKNAR005)

Digitally signed by Richards,  
Niall (UKNAR005)  
DN: cn=Richards, Niall  
(UKNAR005), ou=Active,  
email=Niall.Richards@wsp.com  
Date: 2022.09.15 17:14:22  
+01'00'

Appendix A – Figures  
Appendix B – Laboratory Reports  
Appendix C – Photographic record  
Appendix D – Asbestos Management Plan  
Appendix E – Email correspondence

# Appendix A

## Figures



DO NOT SCALE

Information Classification:

INTERNAL

Information that is only intended for internal distribution among WSP employees, independent consultants, contractors, sub-contractors, clients and authorised third parties.

Legend :

 Approximate Site Boundary

70101534

Angel Meadows Plots 2 & 3



© WSP UK Ltd

NOTE: Refer to relevant civil engineers drawings and information in conjunction with these drawings.  
Refer to highway engineers drawings for detailed proposals for works to adopted highways (s278 agreement).

- NOTES:
1. Do not scale from this drawing.
  2. Always work to noted dimensions.
  3. All dimensions are in millimetres unless otherwise stated.
  4. All setting out, levels and dimensions to be agreed on site.
  5. The dimensions of all materials must be checked on site before being laid out.
  6. This drawing must be read with the relevant specification clauses and detail drawings.
  7. Order of construction and setting out to be agreed on site.

KEY

SOFT LANDSCAPE SOIL DEPTHS/TYPES

- Raised Levels  
To have minimum 200mm depth topsoil, 150mm subsoil to specification clause Q21.4.17.1
- Shrub and hard landscape planting areas  
To have minimum 300mm depth topsoil, 150mm subsoil to specification clause Q21.4.17.1
- Tree Pit/Trenches  
To have minimum 300mm depth topsoil, 700mm subsoil to specification clause Q21.4.17.1  
Trees to ground level surfacing to have minimum 300mm depth topsoil, 600mm subsoil, 300mm drainage layer to Q21.4.17.1

|        |          |                                                            |     |    |
|--------|----------|------------------------------------------------------------|-----|----|
| S4-C01 | 11-05-21 | updated in line with edging realignment                    | TF  | MS |
| D2-P03 | 17-07-20 | general updates to layout in response to MCC/FOAM comments | RS  | MS |
| S3-P02 | 03-05-19 | Updates as clouded                                         | SAB | MS |
| S3-P01 | 18-03-19 | Review and comment                                         | SAB | MS |

| Revision | Date | Description | Drawn | Apprvd. |
|----------|------|-------------|-------|---------|
|----------|------|-------------|-------|---------|

**Planit I.E. Limited**  
E: info@planit-ie.com W: planit-ie.com  
**MANCHESTER**  
2 Back Grafton St, Altrincham, WA14 1DY  
T: 0161 928 9281  
**LONDON**  
Unit 6 Waterside, 44-48 Wharf Road, London, N1 7UX  
T: 0207 253 5678  
**LIVERPOOL**  
No. 8 Princes Parade, Princes Dock, Liverpool, L3 1DL  
T: 0151 705 6746

Client FEC and The Co-op

Project Meadowside Plots 2&3  
Angel Meadow Manchester

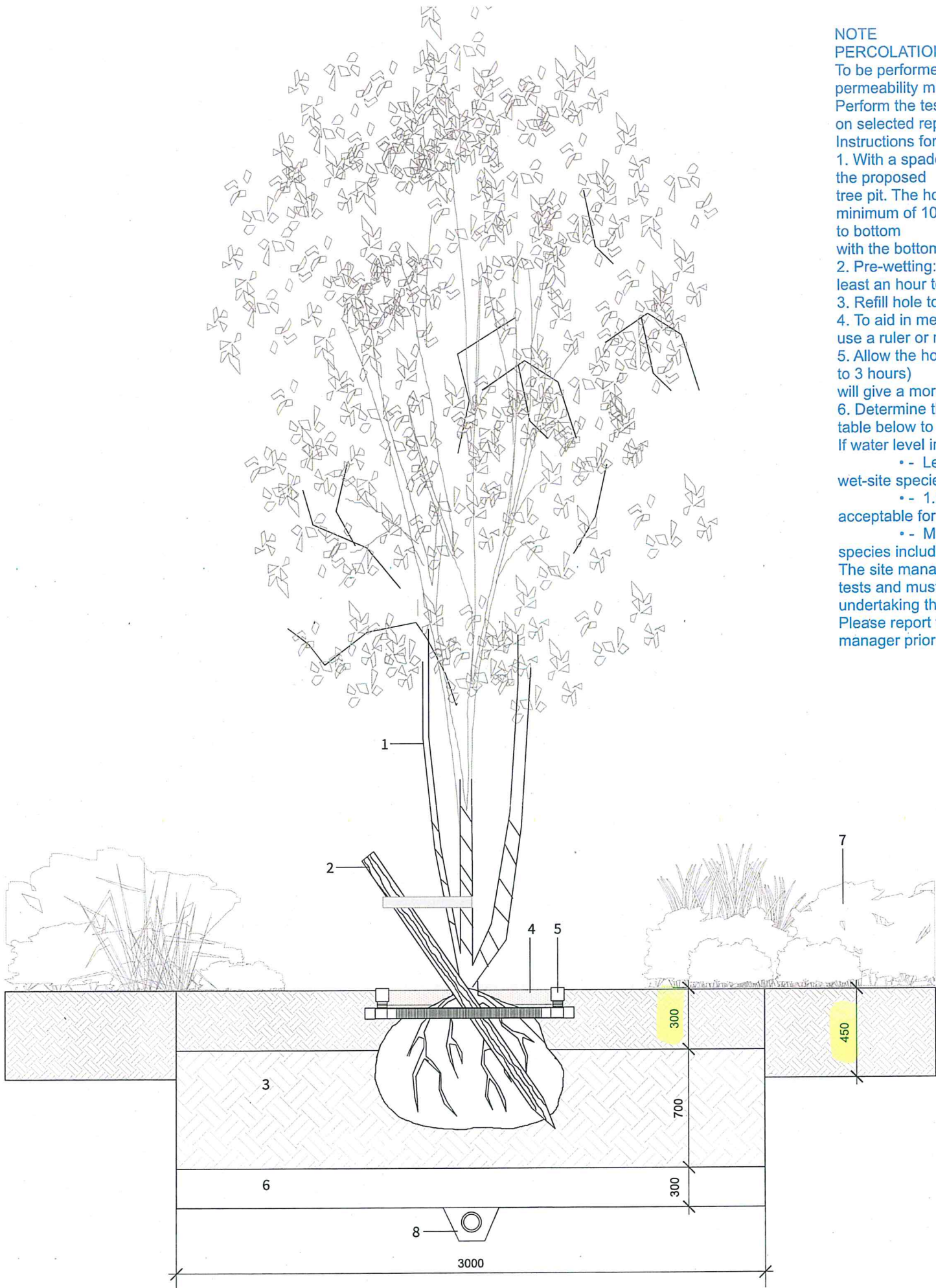
Drg Title Soils Plan

Created on 17.07.20 Created by RS Approved by MS

Scale 1:200 Size A1 Workstage Stage 5

Drg No. 1002-L-PLN-DRG-01-XX-0002 Suitability S4 Revision C01

Multistem Tree Planting  
Section - 1:25



**NOTE**  
**PERCOLATION TEST**  
To be performed on tree pits and planting areas where insufficient permeability might be an issue.  
Perform the test in every tree pit or agree with the landscape architect on selected representative locations.  
Instructions for performing a percolation test:  
1. With a spade or soil auger, dig a hole 45-60 cm deep at the bottom of the proposed tree pit. The hole diameter should be a minimum of 10 cm. The diameter of the hole should be uniform from top to bottom with the bottom being flat.  
2. Pre-wetting: Fill hole with water to the top and allow to stand for at least an hour to pre-wet the soil.  
3. Refill hole to within a 5 cm of the top. Don't overflow the hole.  
4. To aid in measurement, place a stick across the top of the hole and use a ruler or measuring tape to mark periodic drops in water level.  
5. Allow the hole to drain for at least one hour. A longer period of time (2 to 3 hours) will give a more accurate reading of average percolation rates.  
6. Determine the average drop in water level per hour and refer to the table below to interpret results.  
If water level in hole drops  
• - Less than 1.25 cm per hour: Poorly drained and suited to wet-site species  
• - 1.25-2.50 cm per hour: Moderately well drained and acceptable for many species including wet site species  
• - More than 2.5 cm per hour: Well drained and suitable for all species including sensitive species.  
The site manager of the main contractor/client must be informed of the tests and must be involved in the decision of the timing prior to undertaking the tests.  
Please report the results to the landscape architect and the site manager prior to filling the tree pit.

- NOTES:**
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1. Multistem Tree Planting - refer to Softworks Plan and schedule for details. To specification clauses Q31 (external planting).
2. 100mm diameter turned timber stake 750mm above ground level secured at 45% angle into prevailing wind, securing tree with flexible tree ties. Minimum length 1800mm. To specification clauses Q31 (external planting).
3. Imported topsoil to top 300mm. Subsoil 700mm to depth of tree pit / trench. Tree pits to be 9m2 (plan size). Base of pit to be broken up and percolation test to be performed on each tree pit to ensure tree pits are free draining prior to planting. To specification clauses Q28 and Q31.
4. 75mm depth bark mulch layer, 800mm diameter to each tree pit. To specification clauses Q31/485J.
5. Perforated pipe irrigation system. To specification clauses Q31/512J.
6. Drainage layer 200mm clean stone to base of tree pits.
7. Ornamental shrub / herbaceous planting beds. To have min 450mm depth of imported topsoil. Refer to softworks plan for details. To specification clauses Q31 (external planting).
8. All tree pits to be tested (percolation test) prior to planting to ensure ground conditions are suitable and pits are free draining. If any issues are identified (poor water percolation) the landscape architect must be notified and options for drainage to be explored.

**NOTE:**  
All trees to be selected and tagged by Landscape Architect. Samples of all growing medium to be provided for approval by Landscape Architect prior to order.

| S4 C01   | 18-05-21 | Construction Issue | TF    | MS      |
|----------|----------|--------------------|-------|---------|
| S3 P01   | 18-03-19 | Review and Comment | SAB   | MS      |
| Revision | Date     | Description        | Drawn | Apprvd. |

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E: info@planit-ie.com W: planit-ie.com  
**MANCHESTER**  
2 Back Grafton St, Altrincham, WA14 1DY  
T: 0161 928 9281  
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T: 0151 705 6746

Client FEC and The Co-op

Project Meadowside Plots 2&3  
Angel Meadows Manchester

Drg Title Tree Pit Multistem

Created on 18.03.19 Created by SAB Approved by MS

Scale 1:25 Size A3 Workstage Stage 5

Drg No. 1002-L-PLN-DRG-60-XX-0001 Suitability S4 Revision C01



# Appendix B

## Laboratory Reports

## Adam Blinkhorn

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**From:** Matt Stirton <ms@planit-ie.com>  
**Sent:** 10 February 2022 17:03  
**To:** Adam Blinkhorn  
**Cc:** Martin Coulthurst  
**Subject:** Re: Request for topsoil sample - vids of tress need sending to planet

Hi Adam,

Happy for you to proceed based on the sample of topsoil that I inspected on site earlier today.

Thanks,  
Matt



**Matt Stirton** | Principal Landscape Architect | DDI: +44 (0)161 924 3875

**Manchester Studio:** 2 Back Grafton St, Altrincham, Cheshire, WA14 1DY | t: 0161 928 9281

**Leeds Studio:** 1 Aire Street, Leeds Station, Leeds, LS1 4PR | t: 0113 824 6413

**Liverpool Studio:** Tempest 5.3, 12 Tithebarn Street, Liverpool, L2 2DY | t: 0151 363 1230

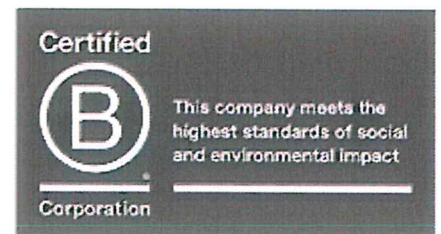
**London Studio:** Waterside, 44-48 Wharf Road, London, N1 7UX | t: 0207 253 5678

**Standish Studio:** Standish Gatehouse, Standish, Stonehouse, Gloucestershire, GL10 3BZ | t: 01453 607080

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After over two decades of transforming spaces into places for people, Planit-IE is now a Certified B Corporation, making a formal commitment to creating a more inclusive and sustainable economy through our work.

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**From:** Adam Blinkhorn <adam.blinkhorn@czhkwestfields.com>  
**Date:** Thursday, 10 February 2022 at 16:55  
**To:** Matt Stirton <ms@planit-ie.com>  
**Cc:** Martin Coulthurst <Martin.Coulthurst@czhkwestfields.com>  
**Subject:** FW: Request for topsoil sample - vids of tress need sending to planet

Good afternoon Matt,

Following today's site visit (inspection of top soil sample) along with attached certification & soil analysis can you confirm your approval via email response please.

Kind Regards,

DP SOIL

APPROVED 10/2/22 @ 17:03

VIA EMAIL - ATTACHED



## Certificate of Analysis

**Client:** STUART BALDWIN  
(T283) SED SERVICES LTD  
LANDGATE FARM  
LANDGATE LANE  
BRYN  
WIGAN WN4 0EJ

**Originator:** BRYN HALL SHEDS  
TOPSOIL

**Lab ID:** 81160 - 64062  
**Sample ID:** TOPSOIL  
**Sample Weight:** 870g

**Date Received:** 20/12/2021  
**Date Reported:** 03/02/2022

### BS 3882 : 2015 SPECIFICATION FOR TOPSOIL Multipurpose Grade

|                                        |                   |       |                    | Compliant with range (Y/N) |      |      |       |       |       |
|----------------------------------------|-------------------|-------|--------------------|----------------------------|------|------|-------|-------|-------|
|                                        |                   |       |                    | Multi-P                    | Acid | Calc | Low-F | Low-F | Low-F |
|                                        |                   |       |                    |                            |      |      |       | Acid  | Calc  |
| Texture:                               |                   | Unit  | Result             |                            |      |      |       |       |       |
|                                        | Clay              | % w/w | 9                  |                            |      |      |       |       |       |
|                                        | Silt              | % w/w | 9                  |                            |      |      |       |       |       |
|                                        | Sand              | % w/w | 82                 |                            |      |      |       |       |       |
|                                        | Textural Class    |       | Organic Loamy Sand | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Organic Matter:</b>                 |                   | % w/w | 11.0               | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Coarse</b>                          | >2 mm             | % w/w | 4.2                | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Fragment</b>                        | >20 mm            | % w/w | 0.0                | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Content:</b>                        | >50 mm            | % w/w | 0.0                | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Soil pH:</b>                        |                   |       | 8.2                | Y                          | N    | Y    | Y     | N     | Y     |
| <b>Carbonate:</b>                      |                   | % w/w | 2.5                |                            |      | Y    |       |       | Y     |
| <b>Available</b>                       | Nitrogen          | % w/w | 0.575              | Y                          | Y    | Y    |       |       |       |
| <b>Plant</b>                           | Phosphorus        | mg/l  | 82.0 (5)*          | Y                          | Y    | Y    | N     | N     | N     |
| <b>Nutrients:</b>                      | Potassium         | mg/l  | 1315.1 (6)*        | Y                          | N    | N    |       |       |       |
|                                        | Magnesium         | mg/l  | 203.2 (4)*         | Y                          | Y    | Y    |       |       |       |
| <b>Carbon:Nitrogen Ratio:</b>          |                   | :1    | 11.1               | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Exchangeable Sodium Percentage:</b> |                   | %     | 8.1                |                            |      |      |       |       |       |
| <b>Phytotoxic</b>                      | Total Zinc        | mg/kg | 90.4               | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Contaminants:</b>                   | Total Copper      | mg/kg | 28.7               | Y                          | Y    | Y    | Y     | Y     | Y     |
|                                        | Total Nickel      | mg/kg | 13.9               | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Visible</b>                         | > 2mm             | % w/w | 0.00               | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Contaminants:</b>                   | Plastics          | % w/w | 0.00               | Y                          | Y    | Y    | Y     | Y     | Y     |
|                                        | Number of Sharps  |       | 0                  | Y                          | Y    | Y    | Y     | Y     | Y     |
| <b>Additional</b>                      | Available Sodium  | mg/l  | 249.0              |                            |      |      |       |       |       |
| <b>Analysis:</b>                       | Available Calcium | mg/l  | 1145.0             |                            |      |      |       |       |       |
|                                        | Conductivity      | uS/cm | 1610               | Y                          |      |      |       |       |       |
| <b>Compliance:</b>                     |                   |       |                    | Y                          | N    | N    | N     | N     | N     |

Results are expressed on a dry matter basis.

\* Soil indices from RB209

**Released by:**

Joe Cherrie

**Date:** 03/02/2022

**DECLARATION:**

I certify that this sample has been analysed by NRM in accordance with BS 3882 Specification for Topsoil (2015).

NRM Coopers Bridge, Braziers Lane, Bracknell, Berkshire RG42 6NS

**Tel:** +44 (0) 1344 886338 **Fax:** +44 (0) 1344 890972 **Email:** enquiries@nrm.uk.com **www:** nrm.uk.com



## Analytical Report

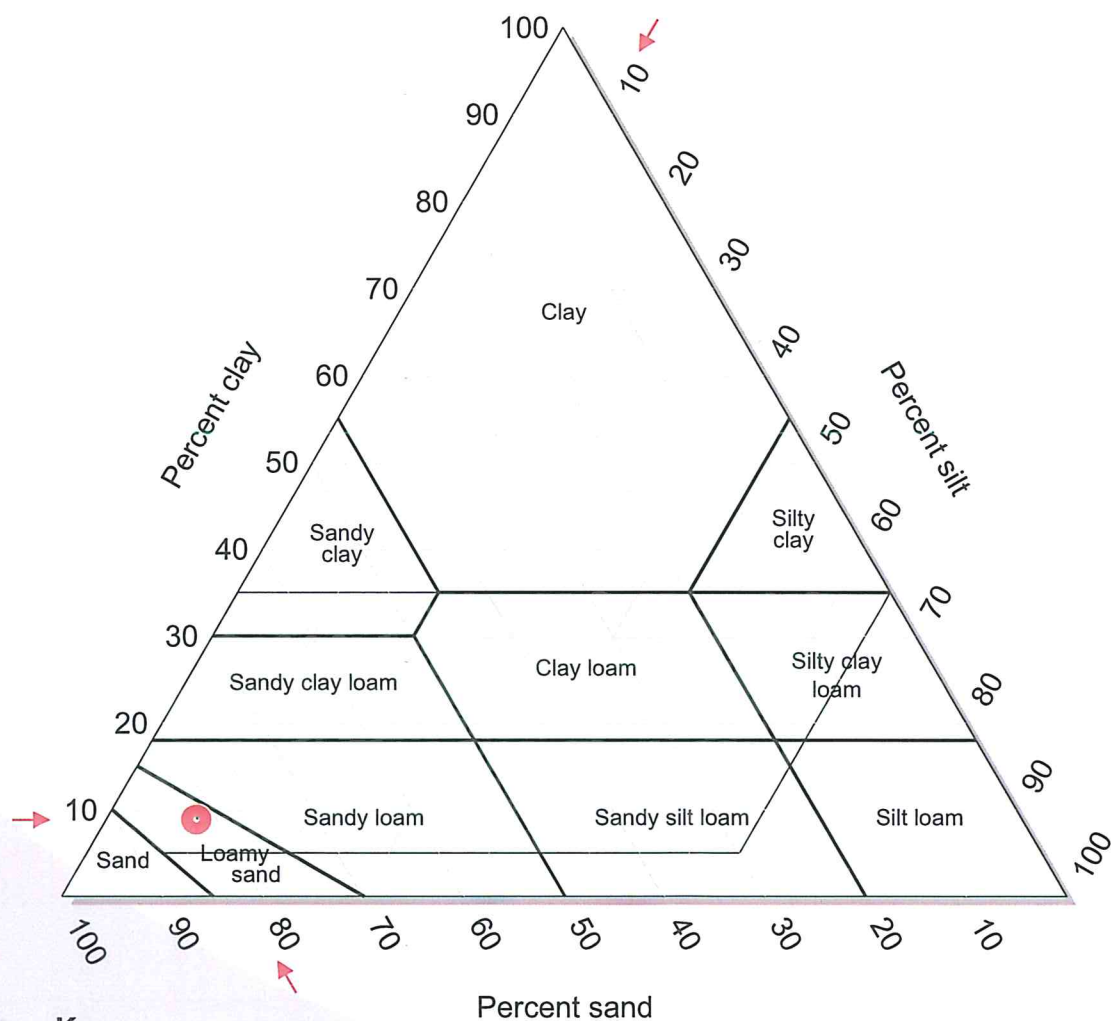
**Client:** STUART BALDWIN  
(T283) SED SERVICES LTD  
LANDGATE FARM  
LANDGATE LANE  
BRYN  
WIGAN WN4 0EJ

**Originator:** BRYN HALL SHEDS  
TOPSOIL

**Lab ID:** 81160 - 64062  
**Sample ID:** TOPSOIL  
**Sample Weight:** 870g

**Date Received:** 20/12/2021  
**Date Reported:** 03/02/2022

**Fig. 1. Textural Class: Organic Loamy Sand (compliant)**



### Key



Area within which texture of topsoil is required to fall.

## FINAL ANALYTICAL TEST REPORT

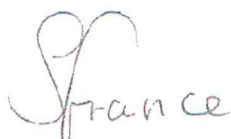
**Envirolab Job Number:** 22/00443  
**Issue Number:** 1

**Date:** 01 February, 2022

**Client:** S.E.D. Services Ltd  
Landgate Farm  
Landgate Lane  
Bryn  
Wigan  
UK  
WN4 0EJ

**Project Manager:** James Wright/Megan Baldwin  
**Project Name:** Soil/Sand Testing  
**Project Ref:** Not specified  
**Order No:** N/A  
**Date Samples Received:** 20/01/22  
**Date Instructions Received:** 20/01/22  
**Date Analysis Completed:** 01/02/22

**Approved by:**

A handwritten signature in purple ink that reads "France".

Sophie France  
Client Service Manager

Envirolab Job Number: 22/00443

Client Project Name: Sand Testing

Client Project Ref: Not specified

| Lab Sample ID                       | 22/00443/1   | 22/00443/2  | 22/00443/3    |  |  |  |  | Units | Limit of Detection | Method ref |
|-------------------------------------|--------------|-------------|---------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                    | BH - Jan '22 | HT - Jan'22 | BLS - Jan '22 |  |  |  |  |       |                    |            |
| Client Sample ID                    | BLS - 001    | BLS - 002   | Sample A      |  |  |  |  |       |                    |            |
| Depth to Top                        |              |             |               |  |  |  |  |       |                    |            |
| Depth To Bottom                     |              |             |               |  |  |  |  |       |                    |            |
| Date Sampled                        |              |             |               |  |  |  |  |       |                    |            |
| Sample Type                         | Soil         | Soil        | Soil          |  |  |  |  |       |                    |            |
| Sample Matrix Code                  | 4            | 4A          | 4AE           |  |  |  |  |       |                    |            |
| % Stones >10mm <sub>A</sub>         | 0.7          | 3.2         | <0.1          |  |  |  |  | % w/w | 0.1                | A-T-044    |
| pH <sub>M#</sub>                    | 7.76         | 8.22        | 8.19          |  |  |  |  | pH    | 0.01               | A-T-031s   |
| Arsenic <sub>O</sub> <sup>M#</sup>  | 8            | 4           | 3             |  |  |  |  | mg/kg | 1                  | A-T-024s   |
| Cadmium <sub>O</sub> <sup>M#</sup>  | <0.5         | <0.5        | 0.8           |  |  |  |  | mg/kg | 0.5                | A-T-024s   |
| Copper <sub>O</sub> <sup>M#</sup>   | <1           | 4           | 41            |  |  |  |  | mg/kg | 1                  | A-T-024s   |
| Chromium <sub>O</sub> <sup>M#</sup> | 5            | 7           | 14            |  |  |  |  | mg/kg | 1                  | A-T-024s   |
| Lead <sub>O</sub> <sup>M#</sup>     | 5            | 10          | 52            |  |  |  |  | mg/kg | 1                  | A-T-024s   |
| Mercury <sub>O</sub>                | <0.17        | <0.17       | <0.17         |  |  |  |  | mg/kg | 0.17               | A-T-024s   |
| Nickel <sub>O</sub> <sup>M#</sup>   | 4            | 5           | 12            |  |  |  |  | mg/kg | 1                  | A-T-024s   |
| Selenium <sub>O</sub> <sup>M#</sup> | <1           | <1          | <1            |  |  |  |  | mg/kg | 1                  | A-T-024s   |
| Sodium <sub>O</sub>                 | 134          | 59          | 119           |  |  |  |  | mg/kg | 50                 | A-T-024s   |
| Zinc <sub>O</sub> <sup>M#</sup>     | 14           | 17          | 78            |  |  |  |  | mg/kg | 5                  | A-T-024s   |

Envirolab Job Number: 22/00443

Client Project Name: Sand Testing

Client Project Ref: Not specified

| Lab Sample ID                                                   | 22/00443/1   | 22/00443/2  | 22/00443/3    |  |  |  |  | Units | Limit of Detection | Method ref |
|-----------------------------------------------------------------|--------------|-------------|---------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                                                | BH - Jan '22 | HT - Jan'22 | BLS - Jan '22 |  |  |  |  |       |                    |            |
| Client Sample ID                                                | BLS - 001    | BLS - 002   | Sample A      |  |  |  |  |       |                    |            |
| Depth to Top                                                    |              |             |               |  |  |  |  |       |                    |            |
| Depth To Bottom                                                 |              |             |               |  |  |  |  |       |                    |            |
| Date Sampled                                                    |              |             |               |  |  |  |  |       |                    |            |
| Sample Type                                                     | Soil         | Soil        | Soil          |  |  |  |  |       |                    |            |
| Sample Matrix Code                                              | 4            | 4A          | 4AE           |  |  |  |  |       |                    |            |
| Asbestos in Soil (inc. matrix) ^                                |              |             |               |  |  |  |  |       |                    |            |
| Asbestos in soil <sup>o</sup>                                   | NAD          | NAD         | NAD           |  |  |  |  |       |                    | A-T-045    |
| Asbestos Matrix (visual) <sup>o</sup>                           | -            | -           | -             |  |  |  |  |       |                    | A-T-045    |
| Asbestos Matrix (microscope) <sup>o</sup>                       | -            | -           | -             |  |  |  |  |       |                    | A-T-045    |
| Asbestos ACM - Suitable for Water Absorption Test? <sup>o</sup> | N/A          | N/A         | N/A           |  |  |  |  |       |                    | A-T-045    |

Envirolab Job Number: 22/00443

Client Project Name: Sand Testing

Client Project Ref: Not specified

| Lab Sample ID                                    | 22/00443/1   | 22/00443/2  | 22/00443/3    |  |  |  |  | Units | Limit of Detection | Method ref |
|--------------------------------------------------|--------------|-------------|---------------|--|--|--|--|-------|--------------------|------------|
| Client Sample No                                 | BH - Jan '22 | HT - Jan'22 | BLS - Jan '22 |  |  |  |  |       |                    |            |
| Client Sample ID                                 | BLS - 001    | BLS - 002   | Sample A      |  |  |  |  |       |                    |            |
| Depth to Top                                     |              |             |               |  |  |  |  |       |                    |            |
| Depth To Bottom                                  |              |             |               |  |  |  |  |       |                    |            |
| Date Sampled                                     |              |             |               |  |  |  |  |       |                    |            |
| Sample Type                                      | Soil         | Soil        | Soil          |  |  |  |  |       |                    |            |
| Sample Matrix Code                               | 4            | 4A          | 4AE           |  |  |  |  |       |                    |            |
| PAH-16MS                                         |              |             |               |  |  |  |  |       |                    |            |
| Acenaphthene <sub>A</sub> <sup>MS</sup>          | <0.01        | 0.03        | 0.08          |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Acenaphthylene <sub>A</sub> <sup>MS</sup>        | <0.01        | <0.01       | <0.01         |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Anthracene <sub>A</sub> <sup>MS</sup>            | <0.02        | 0.06        | 0.10          |  |  |  |  | mg/kg | 0.02               | A-T-019s   |
| Benzo(a)anthracene <sub>A</sub> <sup>MS</sup>    | <0.04        | 0.19        | 0.47          |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(a)pyrene <sub>A</sub> <sup>MS</sup>        | <0.04        | 0.25        | 0.50          |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Benzo(b)fluoranthene <sub>A</sub> <sup>MS</sup>  | <0.05        | 0.26        | 0.61          |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(ghi)perylene <sub>A</sub> <sup>MS</sup>    | <0.05        | 0.12        | 0.25          |  |  |  |  | mg/kg | 0.05               | A-T-019s   |
| Benzo(k)fluoranthene <sub>A</sub> <sup>MS</sup>  | <0.07        | 0.10        | 0.20          |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Chrysene <sub>A</sub> <sup>MS</sup>              | <0.06        | 0.28        | 0.62          |  |  |  |  | mg/kg | 0.06               | A-T-019s   |
| Dibenzo(ah)anthracene <sub>A</sub> <sup>MS</sup> | <0.04        | <0.04       | 0.05          |  |  |  |  | mg/kg | 0.04               | A-T-019s   |
| Fluoranthene <sub>A</sub> <sup>MS</sup>          | <0.08        | 0.45        | 1.02          |  |  |  |  | mg/kg | 0.08               | A-T-019s   |
| Fluorene <sub>A</sub> <sup>MS</sup>              | <0.01        | 0.03        | 0.05          |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
| Indeno(123-cd)pyrene <sub>A</sub> <sup>MS</sup>  | <0.03        | 0.13        | 0.28          |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Naphthalene <sub>A</sub> <sup>MS</sup>           | <0.03        | <0.03       | <0.03         |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Phenanthrene <sub>A</sub> <sup>MS</sup>          | <0.03        | 0.26        | 0.52          |  |  |  |  | mg/kg | 0.03               | A-T-019s   |
| Pyrene <sub>A</sub> <sup>MS</sup>                | <0.07        | 0.42        | 0.89          |  |  |  |  | mg/kg | 0.07               | A-T-019s   |
| Total PAH-16MS <sub>A</sub> <sup>MS</sup>        | <0.08        | 2.58        | 5.64          |  |  |  |  | mg/kg | 0.01               | A-T-019s   |
|                                                  |              |             |               |  |  |  |  |       |                    |            |
| TPH Banded 2                                     |              |             |               |  |  |  |  |       |                    |            |
| >C6-C10 <sub>A</sub> <sup>MS</sup>               | 6            | 5           | <5            |  |  |  |  | mg/kg | 5                  | A-T-007s   |
| >C10-C25 <sub>A</sub> <sup>MS</sup>              | <5           | 9           | 68            |  |  |  |  | mg/kg | 5                  | A-T-007s   |
| >C25-C40 <sub>A</sub> <sup>MS</sup>              | <5           | 28          | 111           |  |  |  |  | mg/kg | 5                  | A-T-007s   |
| Total TPH Banded 2 <sub>A</sub> <sup>MS</sup>    | 6            | 42          | 179           |  |  |  |  | mg/kg | 5                  | A-T-007s   |

## **REPORT NOTES**

### **General**

This report shall not be reproduced, except in full, without written approval from Envirolab.

The results reported herein relate only to the material supplied to the laboratory.

The residue of any samples contained within this report, and any received with the same delivery, will be disposed of six weeks after initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of six months after the initial Asbestos testing is completed.

Analytical results reflect the quality of the sample at the time of analysis only.

Opinions and interpretations expressed are outside the scope of our accreditation.

If results are in italic font they are associated with an AQC failure, these are not accredited and are unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.

The Client Sample No, Client Sample ID, Depth to Top, Depth to Bottom and Date Sampled were all provided by the client.

### **Soil chemical analysis:**

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

### **TPH analysis of water by method A-T-007:**

Free and visible oils are excluded from the sample used for analysis so that the reported result represents the dissolved phase only.

### **Electrical Conductivity of water by Method A-T-037:**

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

### **Asbestos:**

Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis.

Quantification of asbestos is a 3 stage process including visual identification, hand picking and weighing and fibre counting by sedimentation/phase contrast optical microscopy if required. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres) quantification by sedimentation is performed. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used.

### **Predominant Matrix Codes:**

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample, 9 = INCINERATOR ASH.

Samples with Matrix Code 7 & 8 are not predominantly a SAND/LOAM/CLAY mix and are not covered by our BSEN 17025 or MCERTS accreditations, with the exception of bulk asbestos which are BSEN 17025 accredited.

### **Secondary Matrix Codes:**

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal,

E = contains roots/twigs.

### **Key:**

IS indicates Insufficient Sample for analysis.

US indicates Unsuitable Sample for analysis.

NDP indicates No Determination Possible.

NAD indicates No Asbestos Detected.

N/A indicates Not Applicable.

Superscript # indicates method accredited to ISO 17025.

Superscript "M" indicates method accredited to MCERTS.

Subscript "A" indicates analysis performed on the sample as received.

Subscript "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve

TPH CWG \*C1 indicates results with humics mathematically subtracted through instrument calculation

TPH CWG \*C2 indicates results cleaned up with Silica during extraction

### **EPH CWG GCxGC ID from TPH CWG with Clean Up c1**

Where we have identified humic substances in any ID's from TPH CWG with Clean Up please note that the concentration of these humic substances is not included in the quantified results and are included in the ID for information.

Please contact us if you need any further information.

## Envirolab Deviating Samples Report

Units 7&8 Sandpits Business Park, Mottram Road, Hyde, SK14 3AR  
Tel. 0161 368 4921  
email. ask@envirolab.co.uk



**Client:** S.E.D. Services Ltd, Landgate Farm, Landgate Lane, Bryn, Wigan, UK, WN4      **Project No:** 22/00443  
0EJ      **Date Received:** 20/01/2022 (am)  
**Project:** Sand Testing      **Cool Box Temperatures (°C):** 3.6  
**Clients Project No:**

| Lab Sample ID          | 22/00443/1   | 22/00443/2  | 22/00443/3    |
|------------------------|--------------|-------------|---------------|
| Client Sample No       | BH - Jan '22 | HT - Jan'22 | BLS - Jan '22 |
| Client Sample ID/Depth | BLS - 001    | BLS - 002   | Sample A      |
| Date Sampled           |              |             |               |
| Deviation Code         |              |             |               |
| D (no glass)           | ✓            | ✓           | ✓             |
| E (no date)            | ✓            | ✓           | ✓             |

### Key

D (no glass)      Glass container not provided for extractable organics analysis  
E (no date)      No sampling date provided (all results affected if not provided)

*If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.*

## Envirolab Analysis Dates

| Lab Sample ID          | 22/00443/1   | 22/00443/2  | 22/00443/3    |
|------------------------|--------------|-------------|---------------|
| Client Sample No       | BH - Jan '22 | HT - Jan'22 | BLS - Jan '22 |
| Client Sample ID/Depth | BLS - 001    | BLS - 002   | Sample A      |
| Date Sampled           |              |             |               |
| A-T-007s               | 26/01/2022   | 26/01/2022  | 26/01/2022    |
| A-T-019s               | 25/01/2022   | 25/01/2022  | 25/01/2022    |
| A-T-024s               | 01/02/2022   | 01/02/2022  | 01/02/2022    |
| A-T-031s               | 28/01/2022   | 28/01/2022  | 28/01/2022    |
| A-T-044                | 25/01/2022   | 25/01/2022  | 25/01/2022    |
| A-T-045                | 21/01/2022   | 21/01/2022  | 21/01/2022    |

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

**i2 Analytical**  
7 Woodshots Meadow  
Croxley Green Business Park  
Watford, WD18 8YS

Telephone: 01923 225404  
Fax: 01923 237404  
email:reception@i2analytical.com

Report No:

21-10825

Location

Charcoal Lane

Lab Reference (Sample Number)

2015994

Sampling Date

16/09/2021

Sample ID

Sample

Depth (m)

Unit 3B, Thelwall Lane  
Warrington  
Cheshire  
WA4 1TB

Texture

Clay

Silt

Sand

Texture Class

unit

%w/w

%w/w

%w/w

Result

7.40

23.40

69.2

SANDY LOAM

Compliant with range (Y/N)

Multipurpose subsoil

Specific purpose subsoil

Acidic

Calcareous

Y

Y

Y

Y

Mass Loss on Ignition

%

1.02

Y

Y

Coarse fragment content

>2mm

>20mm

>75mm

%w/w

%w/w

%w/w

1.30

0.00

0.00

Y

Y

Y

Soil pH

pH

7.80

Y

N

Carbonate

%

1.40

-

-

Y

Y

Exchangable Sodium Percentage

%

2.10

Y

Y

Phytotoxic contaminants

Total Zinc

Total Copper

Total Nickel

mg/kg

mg/kg

mg/kg

32.00

17.00

14.00

Y

Y

Y

Visible contaminants

>2mm

Plastics

Sharps

%w/w

%w/w

%w/w

0.00

0.00

0.00

Y

Y

Y

Available plant nutrients

Phosphorus

Potassium

Magnesium

mg/l

mg/l

mg/l

16.00

87.60

88.00

Y

Y

Y

Additional analysis

Available Sodium

Available Calcium

Conductivity

Conductivity CaSO4 Adj.

mg/l

mg/l

uS/cm

uS/cm

38.00

1300.00

1900.00

< 10

Y

Y

Y

Y

Compliance

Pass

Fail

Pass

Pass

Pass BS 8601

Results are expressed on a dry weight basis, after correction for moisture content where applicable  
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

\*= UKAS accredited

\*\* = MCERTS accredited

OKS SOIL ✓  
Approved 9/2/22 @ 12:41 VIA EMAIL - ATTACHED.

i2 Analytical Ltd.  
7 Woodshots Meadow,  
Croxley Green  
Business Park,  
Watford,  
Herts,  
WD18 8YS  
t: 01923 225404  
f: 01923 237404  
e: reception@i2analytical.com

## **Analytical Report Number : 21-10823**

|                             |               |                                                        |            |
|-----------------------------|---------------|--------------------------------------------------------|------------|
| <b>Project / Site name:</b> | Charcoal Lane | <b>Samples received on:</b>                            | 17/09/2021 |
| <b>Your job number:</b>     | DUNHAM        | <b>Samples instructed on/<br/>Analysis started on:</b> | 17/09/2021 |
| <b>Your order number:</b>   |               | <b>Analysis completed by:</b>                          | 24/09/2021 |
| <b>Report Issue Number:</b> | 1             | <b>Report issued on:</b>                               | 24/09/2021 |
| <b>Samples Analysed:</b>    | 1 soil sample |                                                        |            |

**Signed:** Karolina Marek

Karolina Marek  
PL Head of Reporting Team  
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

|           |                           |
|-----------|---------------------------|
| soils     | - 4 weeks from reporting  |
| leachates | - 2 weeks from reporting  |
| waters    | - 2 weeks from reporting  |
| asbestos  | - 6 months from reporting |

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.  
Application of uncertainty of measurement would provide a range within which the true result lies.  
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 21-10823  
Project / Site name: Charcoal Lane

| Lab Sample Number                       |       |                    |                         |       | 2015977       |
|-----------------------------------------|-------|--------------------|-------------------------|-------|---------------|
| Sample Reference                        |       |                    |                         |       | Sample        |
| Sample Number                           |       |                    |                         |       | None Supplied |
| Depth (m)                               |       |                    |                         |       | None Supplied |
| Date Sampled                            |       |                    |                         |       | 16/09/2021    |
| Time Taken                              |       |                    |                         |       | 1700          |
| Analytical Parameter<br>(Soil Analysis) | Units | Limit of detection | Accreditation<br>Status |       |               |
| Stone Content                           | %     | 0.1                | NONE                    | < 0.1 |               |
| Moisture Content                        | %     | 0.01               | NONE                    | 12    |               |
| Total mass of sample received           | kg    | 0.001              | NONE                    | 2.0   |               |

|                  |      |     |           |              |
|------------------|------|-----|-----------|--------------|
| Asbestos in Soil | Type | N/A | ISO 17025 | Not-detected |
|------------------|------|-----|-----------|--------------|

#### General Inorganics

|                            |          |     |        |     |
|----------------------------|----------|-----|--------|-----|
| pH - Automated             | pH Units | N/A | MCERTS | 7.5 |
| Organic Matter (automated) | %        | 0.1 | MCERTS | 0.4 |

#### Speciated PAHs

|                        |       |      |        |        |
|------------------------|-------|------|--------|--------|
| Naphthalene            | mg/kg | 0.05 | MCERTS | < 0.05 |
| Acenaphthylene         | mg/kg | 0.05 | MCERTS | < 0.05 |
| Acenaphthene           | mg/kg | 0.05 | MCERTS | < 0.05 |
| Fluorene               | mg/kg | 0.05 | MCERTS | < 0.05 |
| Phenanthrene           | mg/kg | 0.05 | MCERTS | < 0.05 |
| Anthracene             | mg/kg | 0.05 | MCERTS | < 0.05 |
| Fluoranthene           | mg/kg | 0.05 | MCERTS | < 0.05 |
| Pyrene                 | mg/kg | 0.05 | MCERTS | < 0.05 |
| Benzo(a)anthracene     | mg/kg | 0.05 | MCERTS | < 0.05 |
| Chrysene               | mg/kg | 0.05 | MCERTS | < 0.05 |
| Benzo(b)fluoranthene   | mg/kg | 0.05 | MCERTS | < 0.05 |
| Benzo(k)fluoranthene   | mg/kg | 0.05 | MCERTS | < 0.05 |
| Benzo(a)pyrene         | mg/kg | 0.05 | MCERTS | < 0.05 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.05 | MCERTS | < 0.05 |
| Dibenz(a,h)anthracene  | mg/kg | 0.05 | MCERTS | < 0.05 |
| Benzo(ghi)perylene     | mg/kg | 0.05 | MCERTS | < 0.05 |

#### Total PAH

|                             |       |     |        |        |
|-----------------------------|-------|-----|--------|--------|
| Speciated Total EPA-16 PAHs | mg/kg | 0.8 | MCERTS | < 0.80 |
|-----------------------------|-------|-----|--------|--------|

#### Heavy Metals / Metalloids

|                                    |       |      |        |       |
|------------------------------------|-------|------|--------|-------|
| Arsenic (aqua regia extractable)   | mg/kg | 1    | MCERTS | 7.6   |
| Beryllium (aqua regia extractable) | mg/kg | 0.06 | MCERTS | 0.52  |
| Boron (water soluble)              | mg/kg | 0.2  | MCERTS | < 0.2 |
| Cadmium (aqua regia extractable)   | mg/kg | 0.2  | MCERTS | < 0.2 |
| Chromium (hexavalent)              | mg/kg | 4    | MCERTS | < 4.0 |
| Chromium (III)                     | mg/kg | 1    | NONE   | 18    |
| Chromium (aqua regia extractable)  | mg/kg | 1    | MCERTS | 19    |
| Copper (aqua regia extractable)    | mg/kg | 1    | MCERTS | 15    |
| Lead (aqua regia extractable)      | mg/kg | 1    | MCERTS | 7.8   |
| Mercury (aqua regia extractable)   | mg/kg | 0.3  | MCERTS | < 0.3 |
| Nickel (aqua regia extractable)    | mg/kg | 1    | MCERTS | 16    |
| Selenium (aqua regia extractable)  | mg/kg | 1    | MCERTS | < 1.0 |
| Vanadium (aqua regia extractable)  | mg/kg | 1    | MCERTS | 18    |
| Zinc (aqua regia extractable)      | mg/kg | 1    | MCERTS | 33    |

Analytical Report Number: 21-10823  
Project / Site name: Charcoal Lane

|                                         |               |                    |                         |  |
|-----------------------------------------|---------------|--------------------|-------------------------|--|
| Lab Sample Number                       | 2015977       |                    |                         |  |
| Sample Reference                        | Sample        |                    |                         |  |
| Sample Number                           | None Supplied |                    |                         |  |
| Depth (m)                               | None Supplied |                    |                         |  |
| Date Sampled                            | 16/09/2021    |                    |                         |  |
| Time Taken                              | 1700          |                    |                         |  |
| Analytical Parameter<br>(Soil Analysis) | Units         | Limit of detection | Accreditation<br>Status |  |

#### Monoaromatics & Oxygenates

|                                    |       |   |        |       |
|------------------------------------|-------|---|--------|-------|
| Benzene                            | µg/kg | 1 | MCERTS | < 1.0 |
| Toluene                            | µg/kg | 1 | MCERTS | < 1.0 |
| Ethylbenzene                       | µg/kg | 1 | MCERTS | < 1.0 |
| p & m-xylene                       | µg/kg | 1 | MCERTS | < 1.0 |
| o-xylene                           | µg/kg | 1 | MCERTS | < 1.0 |
| MTBE (Methyl Tertiary Butyl Ether) | µg/kg | 1 | MCERTS | < 1.0 |

#### Petroleum Hydrocarbons

|                                  |       |       |        |         |
|----------------------------------|-------|-------|--------|---------|
| TPH-CWG - Aliphatic >EC5 - EC6   | mg/kg | 0.001 | MCERTS | < 0.001 |
| TPH-CWG - Aliphatic >EC6 - EC8   | mg/kg | 0.001 | MCERTS | < 0.001 |
| TPH-CWG - Aliphatic >EC8 - EC10  | mg/kg | 0.001 | MCERTS | < 0.001 |
| TPH-CWG - Aliphatic >EC10 - EC12 | mg/kg | 1     | MCERTS | < 1.0   |
| TPH-CWG - Aliphatic >EC12 - EC16 | mg/kg | 2     | MCERTS | < 2.0   |
| TPH-CWG - Aliphatic >EC16 - EC21 | mg/kg | 8     | MCERTS | < 8.0   |
| TPH-CWG - Aliphatic >EC21 - EC35 | mg/kg | 8     | MCERTS | < 8.0   |
| TPH-CWG - Aliphatic (EC5 - EC35) | mg/kg | 10    | MCERTS | < 10    |

|                                 |       |       |        |         |
|---------------------------------|-------|-------|--------|---------|
| TPH-CWG - Aromatic >EC5 - EC7   | mg/kg | 0.001 | MCERTS | < 0.001 |
| TPH-CWG - Aromatic >EC7 - EC8   | mg/kg | 0.001 | MCERTS | < 0.001 |
| TPH-CWG - Aromatic >EC8 - EC10  | mg/kg | 0.001 | MCERTS | < 0.001 |
| TPH-CWG - Aromatic >EC10 - EC12 | mg/kg | 1     | MCERTS | < 1.0   |
| TPH-CWG - Aromatic >EC12 - EC16 | mg/kg | 2     | MCERTS | < 2.0   |
| TPH-CWG - Aromatic >EC16 - EC21 | mg/kg | 10    | MCERTS | < 10    |
| TPH-CWG - Aromatic >EC21 - EC35 | mg/kg | 10    | MCERTS | < 10    |
| TPH-CWG - Aromatic (EC5 - EC35) | mg/kg | 10    | MCERTS | < 10    |

U/S = Unsuitable Sample    I/S = Insufficient Sample



Analytical Report Number : 21-10823  
Project / Site name: Charcoal Lane

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

| Lab Sample Number | Sample Reference | Sample Number | Depth (m)     | Sample Description *                            |
|-------------------|------------------|---------------|---------------|-------------------------------------------------|
| 2015977           | Sample           | None Supplied | None Supplied | Brown clay and loam with gravel and vegetation. |

Analytical Report Number : 21-10823  
Project / Site name: Charcoal Lane

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

| Analytical Test Name                  | Analytical Method Description                                                                                                                          | Analytical Method Reference                                                          | Method number | Wet / Dry Analysis | Accreditation Status |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------|--------------------|----------------------|
| Metals in soil by ICP-OES             | Determination of metals in soil by aqua-regia digestion followed by ICP-OES.                                                                           | In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil. | L038-PL       | D                  | MCERTS               |
| Asbestos identification in soil       | Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.                                  | In house method based on HSG 248                                                     | A001-PL       | D                  | ISO 17025            |
| Boron, water soluble, in soil         | Determination of water soluble boron in soil by hot water extract followed by ICP-OES.                                                                 | In-house method based on Second Site Properties version 3                            | L038-PL       | D                  | MCERTS               |
| Hexavalent chromium in soil           | Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 dphenylcarbazine followed by colorimetry.   | In-house method                                                                      | L080-PL       | W                  | MCERTS               |
| Moisture Content                      | Moisture content, determined gravimetrically. (30 oC)                                                                                                  | In house method.                                                                     | L019-UK/PL    | W                  | NONE                 |
| Speciated EPA-16 PAHs in soil         | Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. | In-house method based on USEPA 8270                                                  | L064-PL       | D                  | MCERTS               |
| pH in soil (automated)                | Determination of pH in soil by addition of water followed by automated electrometric measurement.                                                      | In house method.                                                                     | L099-PL       | D                  | MCERTS               |
| Stones content of soil                | Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.                            | In-house method based on British Standard Methods and MCERTS requirements.           | L019-UK/PL    | D                  | NONE                 |
| BTEX and MTBE in soil (Monoaromatics) | Determination of BTEX in soil by headspace GC-MS.                                                                                                      | In-house method based on USEPA8260                                                   | L073B-PL      | W                  | MCERTS               |
| Cr (III) in soil                      | In-house method by calculation from total Cr and Cr VI.                                                                                                | In-house method by calculation                                                       | L080-PL       | W                  | NONE                 |
| TPHCWG (Soil)                         | Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.                                                                              | In-house method with silica gel split/clean up.                                      | L088/76-PL    | W                  | MCERTS               |
| Organic matter (Automated) in soil    | Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.                          | In house method.                                                                     | L009-PL       | D                  | MCERTS               |

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

# TEST CERTIFICATE

## Specification for Subsoil

i2 Analytical Ltd  
7 Woodshots Meadow  
Croxley Green Business Park  
Watford Herts WD18 8YS



Tested in Accordance with: BS 8601: 2013

Unit 3B, Thelwall Lane, Warrington,  
Cheshire, WA4 1TB

Client Reference: DUNHAM  
Job Number: 21-10825  
Date Sampled: 16/09/2021  
Date Received: 17/09/2021  
Date Tested: 21/09/2021  
Sampled By: Not Given

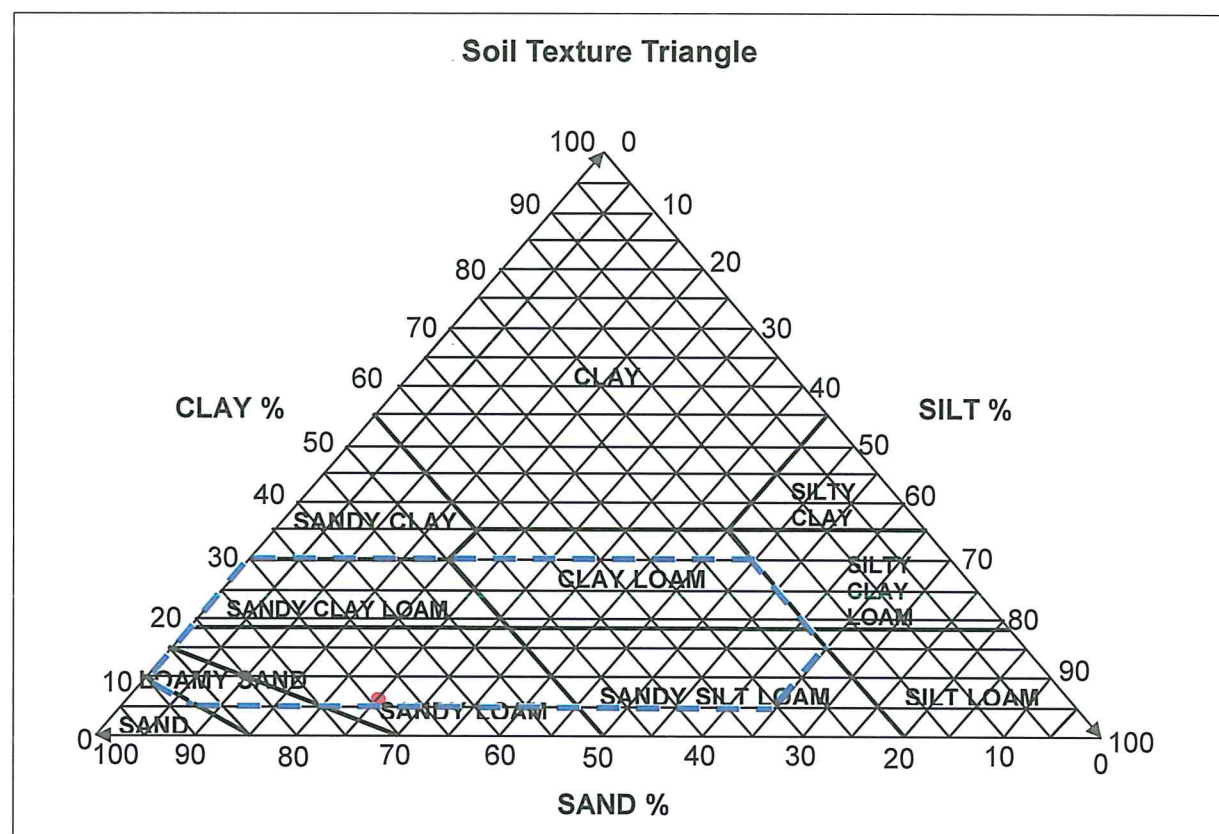
Contact: Charcoal Lane  
Site Address:

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

### Test Results:

Laboratory Reference: 2015994  
Hole No.: Sample  
Sample Reference: Not Given  
Sample Description: SANDY LOAM

Depth Top [m]: 0.00  
Depth Base [m]: Not Given  
Sample Type: D



| Sample Proportion | % dry mass |
|-------------------|------------|
| Sand              | 69.2       |
| Silt              | 23.4       |
| Clay              | 7.4        |

Remarks:

Signed:

Anna Wieczorek  
Deputy Head of Geo Office Section  
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

## Adam Blinkhorn

---

**From:** Matt Stirton <ms@planit-ie.com>  
**Sent:** 09 February 2022 12:41  
**To:** Adam Blinkhorn  
**Cc:** Martin Coulthurst; Kristoffer Yau; Tim Foxford  
**Subject:** Re: Request for topsoil sample - vids of tress need sending to planet

Hi Adam,

Thanks for sending this through. As discussed it looks good from the video you sent but I'll come out tomorrow morning at 8:30 to review and confirm approval.

Regarding the subsoil sample, we're happy to approve based on the sample we reviewed on site yesterday.

Regards,  
Matt



Matt Stirton | Principal Landscape Architect | DDI: +44 (0)161 924 3875

Manchester Studio: 2 Back Grafton St, Altrincham, Cheshire, WA14 1DY | t: 0161 928 9281

Leeds Studio: 1 Aire Street, Leeds Station, Leeds, LS1 4PR | t: 0113 824 6413

Liverpool Studio: Tempest 5.3, 12 Tithebarn Street, Liverpool, L2 2DY | t: 0151 363 1230

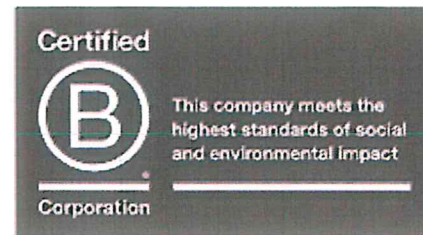
London Studio: Waterside, 44-48 Wharf Road, London, N1 7UX | t: 0207 253 5678

Standish Studio: Standish Gatehouse, Standish, Stonehouse, Gloucestershire, GL10 3BZ | t: 01453 607080

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---

**From:** Adam Blinkhorn <adam.blinkhorn@czhkwestfields.com>  
**Date:** Tuesday, 8 February 2022 at 16:55  
**To:** Matt Stirton <ms@planit-ie.com>  
**Cc:** Martin Coulthurst <Martin.Coulthurst@czhkwestfields.com>, Kristoffer Yau <kristoffer.yau@czhkwestfields.com>  
**Subject:** FW: Request for topsoil sample - vids of tress need sending to planet

Afternoon Matt,

See attached certs & top soil analysis issued for 1T sample that will land on site tomorrow morning. I will confirm once it lands.

Kind Regards,

# Appendix C

## Photographic record















# Appendix D

## Asbestos Management Plan

# Environmental Plan

## Document Title

Document No.

Allocated by Document Control

### 1. Document Submittal History

| Revision | Date     | Prepared by  | Checked by | Approved by | Reason for Issue |
|----------|----------|--------------|------------|-------------|------------------|
| P00      | 02/11/18 | M Coulthurst |            |             |                  |
|          |          |              |            |             |                  |
|          |          |              |            |             |                  |

### 2a. Stakeholder Review Required? YES ☐ NO ☐

Stakeholder submission required: Council ☐ Purpose of submission: ☐ For Acceptance ☐ For Information  
Utility Company ☐ For Acceptance ☐ For Information  
Other ☐ For Acceptance ☐ For Information

This document has been reviewed by the following individual for coordination, compliance, integration and acceptance and is acceptable for transmission to the above stakeholder for the stated purpose.

Sign: \_\_\_\_\_ Name: \_\_\_\_\_ Role: \_\_\_\_\_ Date: \_\_\_\_\_

Sign: \_\_\_\_\_ Name: \_\_\_\_\_ Role: \_\_\_\_\_ Date: \_\_\_\_\_

### 2b. Review by Stakeholder (if required):

| Stakeholder Organisation | Job Title | Name | Signature | Date | Acceptance |
|--------------------------|-----------|------|-----------|------|------------|
|                          |           |      |           |      | C          |
|                          |           |      |           |      | C          |

### 3. Endorsement by Principal Contractor

- ☐ 1. Accepted. Work may proceed
- ☐ 2. Accepted. Work may proceed subject to incorporation of changes indicated
- ☐ 3. Not Accepted. Revise and resubmit. Work may not proceed
- ☐ 4. Received for information only. Receipt is confirmed.

Signature

Print Name

Date

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## 1. Introduction

This document defines the procedures for achieving the objectives set out in the Company Environmental Policies and any identified environmental performance targets for the project.

It sets out the approach to environmental management throughout the demolition and construction phases with the primary aim of reducing adverse impacts from construction on the environment and improving the overall environmental performance of Westfields.

Key actions discussed throughout this environment section are shown in the table below. Associated documents are located on the shared drive and a management system will be kept within the site office for all logs and paperwork associated with the environmental elements of the project

## 2. Site Environmental Risks and Opportunities

It is a requirement to identify environmental risks and assess their significance. A site specific risk assessment has been produced for the works and can be found in the appendix.

## 3. Arrangements for controlling significant site risks

Significant site risks and the management arrangements for their control have been identified below:

| Significant Environmental Risks          | Control Measures.                                                                                                                                                                                                                                                                                             |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emissions to Air, Ground, Water courses. | Dust and emissions will be managed at the site boundary to ensure they don't exceed acceptable limits. If limits are exceeded then works are to stop and review is to be conducted.                                                                                                                           |
| Noise                                    | All works are to be undertaken in accordance with the section 61                                                                                                                                                                                                                                              |
| Vibration                                | N/A                                                                                                                                                                                                                                                                                                           |
| Pollution and Environmental Damage       | Emergency response team will be established and contingency plans should take account of the location of the local drainage system; requirement to engage with the emergency services, location and contents of spill kits, notification process and emergency contacts list in the event of an incident etc. |
| High Groundwater Table                   | Dewatering required during excavation. Management processes in place to restrict contamination by pollutants of the ground water table.                                                                                                                                                                       |
| Effluent Discharge                       | There will be a requirement to discharge trade effluent into the main sewer system. A discharge licence with United Utilities will be applied for and adhered to. A meter is to be installed on the outfall.                                                                                                  |
| Generation of waste                      | Follow the waste hierarchy. Where possible renewable                                                                                                                                                                                                                                                          |

|                             |                                                                                                                                                                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | packaging to be utilised and or products to be recycled. All waste to be diverted from land fill where possible. Hazardous wastes are to be identified and disposed of in the correct maner                                                            |
| Use of fuel and oil on site | All sources of fuel and oil to have a bund and or plant nappy underneath. Spill kits to be located in key locations and a spill response team to be established to respond to issues. Refuelling to be only conducted in designated areas of the site. |
| Use of timber products      | All timber for temporary or permanent works to be FSC certified and/or recycled.                                                                                                                                                                       |
| Ready Mix Concrete          | All concrete activities to be conducted away from drains and other surface water features.. Wash out to be conducted in a lined skip or impermeable designated space on site.                                                                          |
| Asbestos in the Ground      | Asbestos found in the ground to a local area. Consult a specialist Asbestos Management company to develop a management plan for working around and removing                                                                                            |

#### 4. Noise and Vibration Procedures

The company [Environmental Policy](#) should be adhered to. Westfields shall review all suppliers proposed methods for noise and vibration control and mitigation.

A plan detailing the locations of all monitoring devises is located on Conject.

A Section 61 agreement has been agreed with Manchester City Council All subcontractors must ensure compliance with this agreement.

Permitted hours for site work are the following:

- 08:00 - 18:00 hours (Monday to Friday);
- 08:00 - 13:00 hours (Saturday); and
- no working is permitted on Sundays or Bank Holidays.

It is recognised that there may be circumstances where the restriction on hours of work cannot be adhered to, for example, the concreting of the larger diameter piles, which cannot be completed within the hours of a single working day, but that also cannot be carried over to the following day. The team should endeavour to minimise the frequency and duration of such works. However, where unavoidable, the project team will be required to fully justify any proposed deviation from these operating periods, provide written justification to the Local Authority, and notify neighbours before works outside normal hours commence.

Should monitoring identify any exceedance of the noise or vibration action levels, or should any complaints regarding noise and vibration be received, additional sample noise and vibration monitoring should be undertaken by the Contractor.

Where the results of the monitoring exercises indicate that the Action Levels have been exceeded, the following actions should be undertaken:

- The activity or activities causing the Action Levels to be exceeded will be identified through discussions with the Contractor;
- Investigations will be made to determine whether the activities could be easily changed or other simple actions taken to substantially reduce noise or vibration levels;
- If simple and effective remedial measures are not identified, consideration will be given to the implementation of alternative techniques and/or additional mitigation measures; and

In all cases where Action Levels are likely to be exceeded, neighbourhood liaison will be carried out to the degree that is appropriate for the levels likely to be reached and their estimated duration.

## 5. Control of Emissions to Air

Dust nuisance occurs more readily during prolonged periods of dry weather and especially in strong winds. Consequently, good site management would include the ability to respond quickly to such conditions by employing such techniques as damping down (i.e. using a spray hose to deliver a fine spray) of stockpiles and sheeting of lorries.

The Site Managers will monitor the dust and air quality during regular site inspections to assess the likelihood of causing damage. If an activity is deemed to be causing a detrimental affect to air quality the following will be undertaken

- identify the activity or activities causing significant dust;
- investigate whether the activities could be easily changed or other simple actions taken to substantially reduce dust levels;
- if simple and effective remedial measures are not identified, adopt alternative techniques and/or additional mitigation measures, until the problem is rectified; and
- in cases where the above cannot be controlled the local neighbours and Manchester Council are to be notified and review alternatives or agree to the lapse in air quality.

Non Road Mobile Machinery (NRMM) requirements will be met to Stage IIIB of the Directive as a minimum. Records will be retained on the [Register of Plant and Equipment](#).

## 6. Noise Monitoring

The project will be working the following hours:

Monday – Friday 08.00 – 18.00

Saturday 08.00 – 13.00

It is intended that no works that will be audible at the site boundary will be undertaken on Sundays or Bank Holidays or outside the hours stipulated above. In the event of a material change to working practices, a section 61 variation shall be submitted to the Council for approval prior to the works taking place.

If noisy work unexpectedly has to be carried out after 18.00, the Site will telephone the Environmental Health Officer as soon as possible with the following details:

- Contact on site
- Works to be undertaken
- Mitigation measures
- Predicted time of finish

Over runs of noisy activities will only be approved on the basis that for Health and Safety or safe engineering reasons, the works cannot be practically completed in the normal working day and/or the out of hours activities applied for would have acceptable minor noise impacts. The reason for an over run will need to be fully explained on this basis.

The Site Managers will be provided with mobile noise monitoring equipment to monitor and periodically record the noise levels during regular site inspections and conduct spot checks on noisy site activities.

At site boundary the noise trigger level is to be 75dB LA<sub>eq</sub> 1hr

If this noise level is exceeded then the following actions are to be undertaken.

- identify the activity or activities causing significant noise;

- investigate whether the activities could be easily changed or other simple actions taken to substantially reduce noise levels;
- if simple and effective remedial measures are not identified, adopt alternative techniques and/or additional mitigation measures, until the problem is rectified or stop works entirely; and
- in cases where the above cannot be controlled the local neighbours and Manchester Council are to be notified and review alternatives or agree to short term relaxation of the noise control requirements

## 7. Waste Minimisation and Management

Westfields are committed to reducing the volume of waste produced through the application of the waste hierarchy in all its activities.

All Suppliers with responsibility for their own waste streams must provide the following documents:-

- Resource Management Plan;
- Non-Hazardous or Hazardous Waste Carriers Licence issued by the Environment Agency for all companies removing waste;
- Environmental Permits (Waste Management Licence) for all facilities where all the hazardous and non-hazardous waste streams are transported to;

Transfer notes for controlled waste and consignment notes for hazardous waste must comply with regulatory requirements. Sufficient information must be provided to ensure that the waste disposal operator is aware of the potential hazards of the substance.

All Suppliers responsible for removal of their own wastes must report waste quantities (as tonnage) for each waste stream. Supporting Waste Transfer Notes must be made available to the Westfields immediately on request.

Waste storage must comply with both pollution prevention legislation (PPG6) and waste permitting legislation. Should the site require any permitting for items such as waste water, crush material etc. they must contact their Sustainability Manager in advance to ensure full compliance.

## 8. Responsible Sourcing

Prior to commencement on site confirmation of validated chain of custody certification or responsible sourcing certification shall be provided by the supplier.

Suppliers will provide copies of delivery notes confirming the date of delivery, delivery location, type and quantity of materials.

When delivering timber to site delivery tickets must comply with the EU timber regulations.

## 9. Biodiversity requirements

No known ecological requirements or risks identified for the project.

In the event of any unanticipated discoveries, work will halt in the area and Westfields will be informed.

# **Asbestos Management Plan**

## **Plots 2 & 3 Angel Meadow Manchester**

### **For**

## **Westfields Construction Ltd**

**November 2018**

# Asbestos Management Plan Plots 2 & 3 Angel Meadow, Manchester Westfields Construction Ltd

Authors:

Jamie Perkins-Best (EMS)

Martin Coulthurst (Westfield)

## Report Issue and Amendment Record

This report has been issued and amended as follows:

| Issue | Revision | Description<br>(Including amendments) | Date     | Signed |
|-------|----------|---------------------------------------|----------|--------|
| 1     | 0        | AMP – First Issue                     | 15/11/18 |        |
|       |          |                                       |          |        |
|       |          |                                       |          |        |

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- A Company Organogram**
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# 1 Introduction

## 1.1 Introduction

The following document and associated procedures outline the commitment of Westfields Construction to the Control of Asbestos Regulations 2012 (CAR), particularly with regard to handling asbestos impacted soils.

Environmental Management Solutions Ltd (EMS) have been commissioned by Westfields to assist in the production of this Asbestos Management Plan (AMP). The plan is to cover all construction activities on site that will be undertaken by Westfields.

## 1.2 Background

Westfields have been provided with a Geotechnical investigation undertaken by WSP (Project No. 70020194 Issue 3). The report identified asbestos contamination within '*shallow made ground*'.

The report identified asbestos in one location (out of 14 samples tested) that is associated with the area to be developed by the contractor and the levels were shown to be <0.001% w/w of Amosite.

The recommendation of the report is that an asbestos management plan for the site is produced to reduce the risk of exposure to operatives and neighbouring site users during the site works.

## 1.3 Legislation & Guidance

The following legislation and clauses are considered relevant for this project –

### 1.3.1 Control of Asbestos Regulations

Control of Asbestos Regulations 2012 are applicable to all works where asbestos may be encountered, This document will particularly consider -

Regulation 6 - Assessment of works which exposes employees to asbestos

*This regulation requires employers to carry out a risk assessment to identify the risks of exposure to asbestos. It sets out the requirement to record any significant findings and put in place steps to prevent, or reduce, exposure to employees.*

## Regulation 7 - Plans of Work

*This regulation requires employers to prepare a written plan before work on asbestos is carried out, including details of the work, and the appropriate actions to control risk and prevent harm.*

## Regulation 10 – Information, Instruction & Training

*This regulation requires employers to make sure that anyone liable to disturb asbestos during their work, or who supervises such employees, receives the correct level of information, instruction and training to enable them to carry out their work safely and competently and without risk to themselves or others.*

### 1.3.2 CAR-Soil

JiWG Guidance – ‘Interpretation for Managing and Working With Asbestos in Soil and Construction and Demolition Materials’

*Industry Guidance.*

### 1.3.3 Additional Legislation

- a) Health & Safety at Work Act 1974 – *a single comprehensive system of regulatory law covering occupational health and safety in Great Britain. HSWA 1974 imposes various general duties upon both employers and employees and its three primary objectives are to:*
  - i) *secure the health, safety and welfare of persons at work;*
  - ii) *protect persons other than persons at work against risks to health or safety arising out of, or in connection with, the activities of persons at work;*
- b) Management of Health & Safety at Work Regulations 1999 – *This regulation requires all employers and self-employed people to assess the risks to workers and any others who may be affected by their work or business.*
- c) Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR) – *This legislation requires the reporting of certain work-related accidents, injuries and dangerous incidents/occurrences including uncontrolled release of hazardous materials.*



- d) Construction, Design and Management Regulations 2015 (CDM) – *CDM applies to all construction work. The regulations mean the client must manage the projects, ensure the principle designer and principal contractor carryout their duties, including their responsibilities to Health, Safety & Welfare.*

## 2 Project Structure

### 2.1 Key Roles

Client - Angel Meadows (FEC) Ltd  
Ground Floor, 12 Stanhope Gate, London, W1K 1AW

Principal Contractor - Westfields Construction Ltd and China Zhejaing  
Construction Group (H.K.) Limited Joint Venture  
1-3 Old Mill Road, Hunton Bridge, Hertfordshire WD4 8RD

Principle Designer - Chapman Taylor  
Bass Warehouse, 4 Castle St, Manchester, M3 4LZ

### 2.2 Westfields Construction Ltd.

This document was commissioned by Westfields to address their site works and therefore only Westfields employees, subcontractors and others they may be affected by their work will be considered. This document does not absolve others of their statutory responsibilities.

Westfields company structure can be found in Appendix A of this document.

### 2.3 Roles and responsibilities

All employees and contractors have a duty to comply with all elements of CAR2012 and the relevant clauses of the company's Asbestos Management Plan. All employees and contractors have a legal duty to co-operate with the Duty Holder, at all times. As part of the Asbestos Management Plan key roles have been identified and specific responsibilities

The key elements shall include -

- All staff shall be made aware of the presence of asbestos on the site.
- A copy of the AMP will be available onsite, all relevant staff shall familiarise themselves with the plan.
- All site staff will have 'Asbestos Awareness Training' as a minimum requirement.
- Disseminate information regarding asbestos to all relevant people as required by the procedures in this policy. This may include other staff and contractors.

- Record and report any visible ACMs that are identified. If necessary reevaluate this risk assessment.
- In the event of an emergency the procedure within the document should be followed. The site manager or project manager should be contacted immediately.

### **2.3.1 Client.**

The Client shall make suitable arrangements for managing a project, including making sure, other duty holders are appointed as appropriate and that sufficient time and resources are allocated.

The Client shall also ensure relevant information is prepared and provided to other duty holders and that the principal designer and principal contractor carry out their duties.

### **2.3.2 Principle Designer**

The Principle Designer (PD) shall plan, manage, monitor and coordinate health and safety in the pre-construction phase of a project. This includes identifying, eliminating or controlling foreseeable risks, including asbestos. The PD shall ensure designers carry out their duties and prepare and provide relevant information to other dutyholders.

Liaise with the principal contractor to help in the planning, management, monitoring and coordination of the construction phase.

In regards this AMP the PD shall ensure:-

- The contractor's Asbestos Management Plan is compliant with all current UK Legislation and that the Contractors remain compliant.
- That the contractor is competent to undertake the works required in relation to asbestos management.
- That the contractor follows the guidance laid out in this asbestos management plan and that they are aware of their roles and responsibilities and that they are competent to carry them out.
- Ensure appropriate resources and expertise is in place for asbestos management in accordance with this AMP.
- Attend the yearly AMP review meetings with senior managers as laid out in the AMP. Report outcomes to the Client.

### 2.3.3 Principle Contractor – Westfields

The Principle Contractor (The contractor) should plan, manage, monitor and coordinate health and safety in the construction phase of a project. This includes producing an AMP when required.

The contractor shall liaise with the client and principal designer, prepare a construction phase plan and organising cooperation between contractors.

Under this AMP the PC shall make sure, suitable training and site inductions are provided to all site operatives, reasonable steps are taken to prevent unauthorised access to the site, ensure workers are consulted and engaged in securing their health and safety and the PC shall provide welfare facilities.

Under this plan the PC has the following duties =

- Provide all relevant project information to Project Designer, H&S Consultant and Asbestos Consultant.
- Producing a suitable asbestos management plan for the project, in conjunction with the asbestos consultant.
- Disseminate information to all relevant people involved with the project.
- Ensure time and budget are available for appropriate training to undertaken with all employees involved in the project.
- To record and document any additional ACMs that maybe encountered during the works.
- To provide a detailed record of the location of suspected ACMs that remain on completion of the project.
- To ensure provision is made for suitable RPE & PPE to be made available for all operatives onsite as required.
- Assessing and ensuring competence of any contractors (asbestos & non-asbestos) appointed to work on behalf of Westfields.
- Reviewed the site AMP on an annual basis as a minimum. If conditions onsite change or if the project (in context to potentially disturbing ACMs) exceeds 12mths the plan should be checked for relevance.
- Ensure any waste is classified correctly and the waste contractor meets the necessary requirements and that the waste is dispatched to a suitable facility.

- Comply with the procedures in this document when instructing contractors including supplying all relevant asbestos related documentation to appointed contractors prior to commencement of works

The minimum requirements for persons holding this position shall include recent Asbestos Awareness Training (or refresher). It is essential they can demonstrate an understanding of all elements of this plan and a wider knowledge of CAR2012.

### **Site Manager**

The site manager will control day to day activities on site and the performance of operatives and sub-contractors.

Responsibilities shall include:

- Ensuring that the operatives meet their responsibilities under the AMP.
- Ensuring the site operatives have the relevant qualifications, understanding and competency to undertake their duties under this plan.
- Reporting any suspected asbestos materials (previously not sampled) or any reported damage to the asbestos containing materials to the Project Manager. All findings should be documented.
- Update the asbestos register if suspected ACMs are removed from site.
- Conduct a relevant site induction, which should include information regarding asbestos in soils and the potential for undiscovered ACMs.
- Supply any updated asbestos information to the Asbestos Manager.
- Attend the annual AMP review meetings

The minimum requirements for persons holding this position shall include recent Asbestos Awareness Training (or refresher). It is essential they can demonstrate an understanding of all elements of this plan and a wider knowledge of CAR2012.

### **Asbestos Consultant**

The appointed consultant will undertake the following tasks in conjunction with Westfields –

- Assist in the production of the site Asbestos Management Plan based on information supplied by the contractor.
- When requested the consultant will provide advice on legislation, guidance and industry 'good practise'.
- In conjunction with the Asbestos Manager, the consultant will undertake an annual review of AMP.
- The consultant will satisfy these minimum requirements - P405 Qualification + Relevant Asbestos Experience of writing AMP's or hold S301/W504 Certification

#### **2.3.4 Site Operatives (All Contractors (non-asbestos))**

All operatives working on the site have responsibilities under this AMP. The responsibilities are as follows -

- All operatives shall read and sign the site risk assessments and be made aware of the contents of this AMP.
- All operatives shall comply with this AMP and any additional instructions issued by the Site Manager.
- Operatives should stop work immediately and report to the site manager if visible ACM is identified. The contractor shall comply with the Emergency Procedure as set out by this document.
- All construction related contractors or those that may encounter asbestos materials in the course of their works, should have a current Asbestos Awareness Training Certificate. Annual refresher training should be undertaken and it is recommended the full course is resat on a three yearly cycle.

## 3 Asbestos Management

### 3.1 Introduction

Westfields are committed to complying with all relevant legislation and guidance covering the management of asbestos. The following section will outline the central procedure for the control of asbestos containing material (made ground) as identified on the Angel Meadow site and report by WSP.

### 3.2 Site Specific Detail

WSP report identified Amosite bundles in BH204 @ 0.25m bgl. The amount is recorded as <0.001% w/w.

The description of the material in this location is 'Made Ground' is a sandy clay soil with some gravel and brick content. No visible asbestos fragments were identified.

Within the report supplied further asbestos has been identified in other Bore Holes, Westfield have confirmed these locations are not on the site to be developed as part of Westfields work. **APPEND PLAN SHOWING SITE BOUNDARIES?**

### 3.3 Asbestos Management Procedures

CAR-Soil and HSG248 state that when an asbestos amount is only 'one or two fibres' or <0.001% the amount is regarded as 'Trace' and that CAR2012 may not apply.

Based on the evidence within the WSP Site investigation report, the quantification for the borehole on the Westfield site is <0.001% w/w although the test certificate does not comment on the number of fibres.

This result would indicate that the soils in this area do not need to be regarded as asbestos containing and no specialist procedures are required.

However as part of Westfields commitment to eliminate risk the following procedures shall be implemented: -

- 1) All site staff will have received 'Asbestos Awareness Training' or a refresher within the last 12months.

- 2) Site specific inductions shall be undertaken with all operatives to include an explanation of the potential of asbestos onsite and the procedures contained within this AMP.
- 3) Boot wash facilities will be supplied to prevent the potential transfer of asbestos containing soils into vehicles and off site.
- 4) Type 5 coveralls shall be worn as appropriate to prevent the transfer of potentially asbestos containing soils into vehicles and off site.
- 5) A suitably trained banks person shall be used to observe all excavations and should be aware of the potential of asbestos fragments. If asbestos is observed work will be stopped immediately.
- 6) FFP3 disposable dust masks should be made available to all operatives. Each operative shall be face fitted to ensure the masks are suitable. The wearing of the dusts masks is not a requirement based on the current information but operatives may choose to wear them. If isolated fragments are identified or conditions are particularly dusty then the site manager may enforce FFP3 masks.
- 7) If the contaminated area is dusty during excavation light dust suppression with a fine water mist should be considered.
- 8) As the test results currently only show the one area at trace level, there is no requirement for suits, masks or dust suppression but these should be used as appropriate to demonstrate good practise.
- 9) Operatives shall carry out personal decontamination procedures as set out in EM9 and appended in this document.
- 10) If fragments of suspect asbestos containing materials are identified, work will stop immediately and the emergency procedure in the AMP followed.
- 11) There is no requirement for air monitoring on a site with the levels of asbestos fibres identified. However, reassurance or background air monitoring should be considered to provide clear data on what the airborne fibre levels are during the time of work.

This can provide reassurance and confidence to the operatives but also to any persons who maybe working or passing locally to the site as its being developed. The results can provide evidence that the control

limits were not exceeded. In the event of the limits being exceeded control measures can be introduced to address the raised levels.

### 3.4 Emergency Procedures

In the event of an ACM or suspect ACM being uncovered or disturbed the HSE procedure included as Appendix D of this policy should be followed, in addition the following procedures should be implemented -

If an ACM is uncovered or disturbed during refurbishment or maintenance.

Work should cease immediately.

Steps should be taken to ensure personnel are protected and the area is made safe. Action should be taken to minimise the potential spread of fibres and the area designated to prevent further accidental access or disturbance.

Any affected personnel should be decontaminated as appropriate.

Once the area and personnel are safe the Site Manager and/or Project Manager should be contacted immediately. The contact details are as follows-

Martin Coulthurst – Project Manager  
07521402052

Mark Sinclair – Site Manager  
07488300896

These details can be used both within and out of normal working hours.

As current information shows that there should not be any visible asbestos fragments on the site an identification on the material should be undertaken this should include product type and asbestos type.

If suspect ACMs are identified (particularly if it is more than a single occurrence) further investigation may be initiated to classify and delimit the materials extent.

Once the full extent of the asbestos is known the necessary reassessment of the site work can be undertaken, including a review of this AMP and the necessary measures can be implemented to continue with the work.

## 4 Glossary of Terms

### 4.1 General

#### 4.1.1 The Contractor

Refers to Westfields Construction Limited

#### 4.1.2 HSE

The Health and Safety Executive (HSE) is the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare, and for research into occupational risks in Great Britain. It is a non-departmental public body of the United Kingdom

#### 4.1.3 CAR2012

The Control of Asbestos Regulations 2012 (the Regulations) set minimum standards for the protection of employees from risks related to exposure to asbestos, these are legal duties. Employers should also take account of people not directly employed by them but who could be affected by the work being done on asbestos (including employees of other employers, people occupying buildings, members of the public etc).

#### 4.1.4 ACM

Asbestos Containing Material

#### 4.1.5 Asbestos Consultant

A company or person with suitable experience and qualifications to deliver advice on all asbestos issues and undertake asbestos surveys.

#### 4.1.6 Asbestos Contractor

A company with suitable qualifications and experience to undertake asbestos removal, usually with a license issued by the HSE.

#### 4.1.7 LARC

Licensed Asbestos Removal Contractor

### 4.2 Legislation & Guidance

#### 4.2.1 Management Asbestos Survey

A Management Asbestos Survey is the minimum level survey and is usually undertaken to comply with CAR2012 Regulation 4 'Duty to Manage'. The purpose of which is to determine the nature and extent of any asbestos containing materials (ACM) within a building. An assessment of the condition

and potential risk of fibre release from any ACM identified is made. Remedial actions which may be applicable are detailed if required.

The purpose of the survey is:

- To determine the nature and extent of any identified ACM during the site investigation
- To provide an assessment of the condition of ACM present and risk of fibre release from the material
- To provide an assessment of the need for and scope of remedial works to reduce risk to site operatives due to the actual presence of ACM

A Management Asbestos Survey is to allow everyday occupation and use of a building and to allow minor foreseeable maintenance to be undertaken; therefore any intrusive maintenance, refurbishment or demolition will require a more intrusive asbestos survey.

#### 4.2.2 Refurbishment Survey

A refurbishment survey is needed before any refurbishment work is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place. The survey will be fully intrusive and involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A refurbishment survey may also be required in other circumstances, eg when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling.

The survey information should be used to help in the tendering process for removal of ACMs from the building before work starts. The survey report should be supplied by the client to designers and contractors who may be bidding for the work, so that the asbestos risks can be addressed. In this type of survey, where the asbestos is identified so that it can be removed (rather than to 'manage' it), the survey does not normally assess the condition of the asbestos, other than to indicate areas of damage or where additional asbestos debris may be present. However, where the asbestos removal may not take place for some time, the ACMs' condition will need to be assessed and the materials managed.

Refurbishment surveys are intended to locate all the asbestos in the building, within the defined scope, as far as reasonably practicable. It is a disruptive and fully intrusive survey which may need to penetrate all parts of the building structure. Aggressive inspection techniques will be needed to lift carpets and tiles, break through walls, ceilings, cladding and partitions, and open up floors. In these situations, controls should be put in place to prevent the spread of debris, which may include asbestos. Refurbishment surveys should only be conducted in unoccupied areas to minimise risks to the public or employees on the premises. Ideally, the building should not be in service and all furnishings removed. For

minor refurbishment, this would only apply to the room involved or even part of the room where the work is small and the room large. In these situations, there should be effective isolation of the survey area (eg full floor to ceiling partition), and furnishings should be removed as far as possible or protected using sheeting. The 'surveyed' area must be shown to be fit for reoccupation before people move back in. This will require a thorough visual inspection and, if appropriate (eg where there has been significant destruction), reassurance air sampling with disturbance. Under no circumstances should staff remain in rooms or areas of buildings when intrusive sampling is performed.

#### 4.2.3 Demolition Survey

A demolition survey is needed before any demolition work is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the whole building if demolition is planned. The survey will be fully intrusive and involve destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A demolition survey may also be required in other circumstances, eg when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling.

There is a specific requirement in CAR 2012 (regulation 7) for all ACMs to be removed as far as reasonably practicable before major refurbishment or final demolition.

The survey report should be supplied by the client to designers and contractors who may be bidding for the work, so that the asbestos risks can be addressed. In this type of survey, where the asbestos is identified so that it can be removed (rather than to 'manage' it), the survey does not normally assess the condition of the asbestos, other than to indicate areas of damage or where additional asbestos debris may be present. However, where the asbestos removal may not take place for some time, the ACMs' condition will need to be assessed and the materials managed.

Demolition surveys are intended to locate all the asbestos in the building, as far as reasonably practicable. It is a disruptive and fully intrusive survey which may need to penetrate all parts of the building structure. Aggressive inspection techniques will be needed to lift carpets and tiles, break through walls, ceilings, cladding and partitions, and open up floors. In these situations, controls should be put in place to prevent the spread of debris, which may include asbestos. Demolition surveys should only be conducted in unoccupied areas to minimise risks to the public or employees on the premises. Ideally, the building should not be in service and all furnishings removed.

- 4.2.4 UKAS  
United Kingdom Accreditation Service
- 4.2.5 HSG264 - Asbestos: The Survey Guide  
The HSE guidance document for asbestos surveyors
- 4.2.6 HSG268 – Asbestos: The Analyst Guide  
The HSE guidance document for air sampling for asbestos, bulk analysis of asbestos and the conduct of 4 stage clearances.
- 4.2.7 HSG247 – Asbestos – The Licensed Contractor Guide  
The HSE guidance document for licensed contractors and licensed asbestos removal.
- 4.3 Report Interpretation**
- 4.3.1 Amosite  
Commonly known as Brown Asbestos and is part of the Amphibole group of minerals. An asbestine variety of anthophyllite, rich in iron, formerly used as a heat-resistant material.
- 4.3.2 Chrysotile  
Commonly known as White Asbestos, it is a fibrous variety of serpentine; asbestos.
- 4.3.3 Crocidolite  
Commonly known as Blue Asbestos, it is a bluish, asbestine variety of riebeckite. Also part of the Amphibole group of minerals.
- 4.3.4 Areas not accessed  
In accordance with the Health and Safety (HSE) Guidance HSG264 Asbestos: The survey guide, areas which cannot be accessed or inspected at the time of the survey must be presumed to contain asbestos, unless there is strong evidence to prove otherwise. The areas highlighted are only those that should be accessed on the level of survey being undertaken, therefore the definition of 'No Access' in a management survey but does not include those areas that would only be accessed by intrusive investigation.
- 4.3.5 Presumed materials  
In areas where sampling was not possible or practical, materials are either presumed or strongly presumed in accordance with EMS in house procedures which are based upon the guidelines within the Health and Safety (HSE)

Guidance HSG264 Asbestos: The survey guide. Circumstances where presumptions are made include where access is difficult or sampling would leave the materials integrity compromised, for example disturbing a painted surface or damaging a flue.

As defined by the HSE, materials that are strongly presumed look as if they may contain asbestos, upon visual inspection by an experienced, trained surveyor. Materials that are presumed to contain asbestos where there is insufficient evidence to confirm that it is asbestos free, or where a duty holder/surveyor decides that it is easier under planned management arrangements to presume certain materials to contain asbestos.

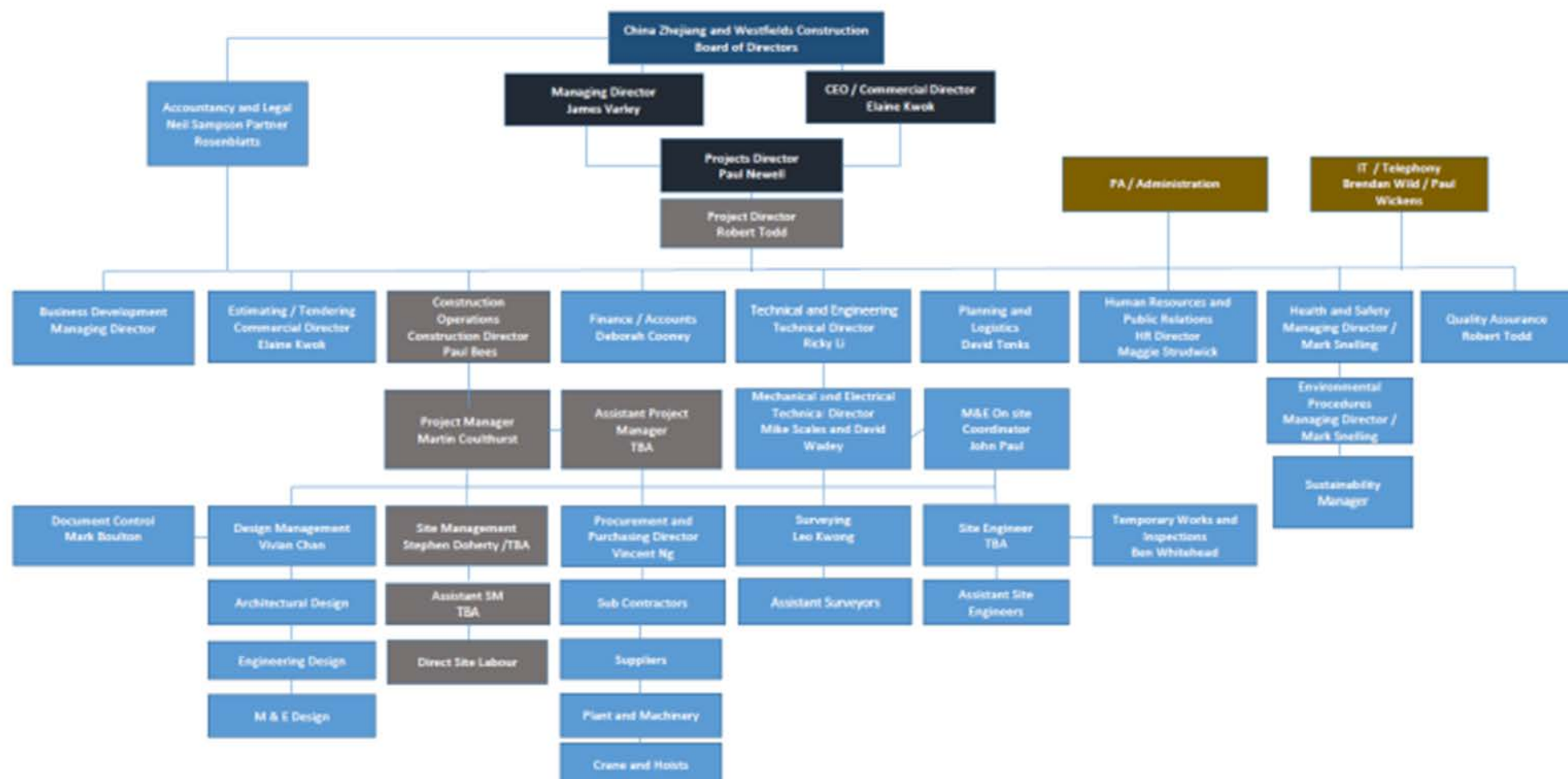
Presumed materials should be treated as asbestos containing materials until proven otherwise and therefore are included in the asbestos register within this report.

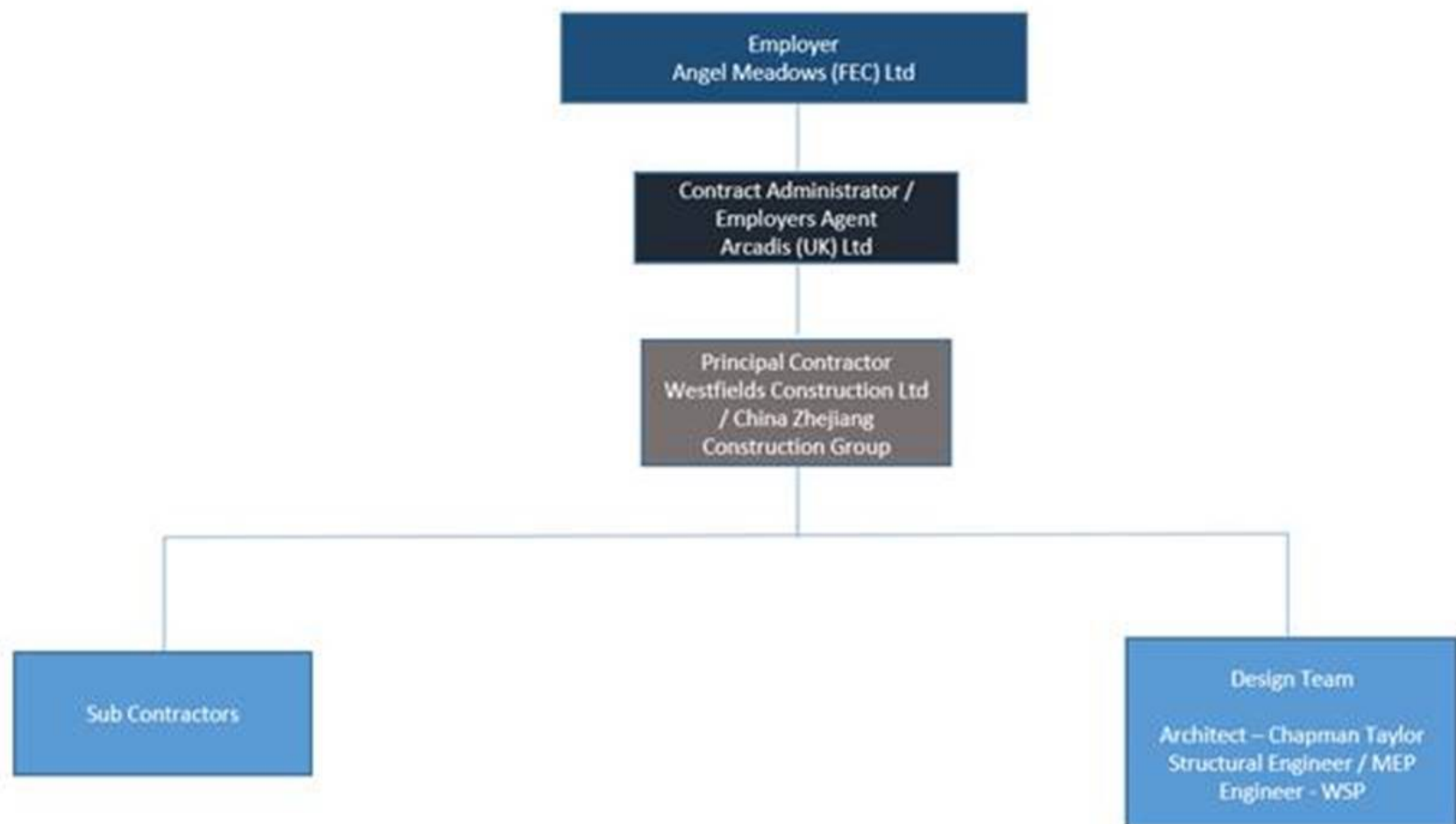
#### 4.3.6 Material Risk Assessment

Each ACM is risk assessed in accordance with the algorithm within HSG264 Asbestos: The survey guide. The Material Risk Assessment (MRA) score identifies the risk level of the materials, that is, the risk that the material will release airborne fibres if disturbed. Presumed materials are scored as asbestos if they were asbestos containing.

Materials with assessment scores of 10 or more are regarded as having a high potential to release fibres, if disturbed. Scores of between 7 and 9 are regarded as having a medium potential, and between 5 and 6 a low potential. Scores of 4 or less have a very low potential to release fibres. Non-asbestos materials are not scored.

For presumed materials the asbestos type must be calculated as Crocidolite until proved otherwise. In most cases it is unlikely that Crocidolite has been used; but unless the material risk assessment highlights a medium or high potential for fibre release it is acceptable to manage the presumed materials on the presumption of Crocidolite. Further investigation may be required before major maintenance or demolition.





**em8**

asbestos  
essentials

# Personal decontamination

## Equipment and method sheet

### Non-licensed tasks

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out work if you are properly trained and have the right equipment.

#### Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.

### What this sheet covers

This sheet describes how to decontaminate yourself after work with asbestos materials.

Personal decontamination is easier when you wear the correct personal protective equipment (PPE).

You need to decontaminate yourself properly, otherwise you may take asbestos fibres home on your clothing and expose your family and friends.

### Procedures

#### Removing and decontaminating PPE

- Clean your boots with damp rags – see sheet em7.
- Where available, clean your overalls with the brush attachment on a Class H vacuum cleaner. Vacuum off the brush.
- Otherwise, use damp rags in a gentle 'patting' action. Rubbing can disturb fibres.
- Where there are two workers, they can help to clean each other.
- Peel off disposable overalls. They should be inside out when they have been removed. Put them in a suitable asbestos waste bag.
- Bag up reusable overalls for a specialist laundry.
- Finally, remove your respiratory protective equipment (RPE) in accordance with em6.
- Tape the bag closed.



'Buddy' cleaning using a Class H vacuum cleaner



Make sure you restrict access



Cleaning with damp rag using patting action

## Personal decontamination

- A suitable location for personal decontamination should be considered as part of the planning before the job commences.
- Can you use site washing facilities? If so, they must be for your use only.
- Keep other people out during personal decontamination, and until you have cleaned the facilities.
- Wash every time you leave the work area.
- Use damp rags to clean the washing facilities at the end of the job.
- Clean the facilities daily if the job lasts more than one day.
- Inspect the facilities visually once the job is finished.
- Clearance air sampling is not normally needed for washing facilities.
- See sheet em9 for disposal of asbestos waste.

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**em6**asbestos  
essentials

# Personal protective equipment (including RPE)

## Equipment and method sheet

### Non-licensed tasks

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out work if you are properly trained and have the right equipment.

#### Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Check what you're working on before you start.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.

### Caution

Never use laced boots; these are very difficult to clean properly.

Never take used overalls home.

Never leave the respirator lying around where it can collect dust.

Never dangle the respirator around your neck.

Make sure the correct filter is fitted.

### What this sheet covers

This sheet describes what personal protective equipment (PPE) you need.

It also describes respiratory protective equipment (RPE).

**PPE and RPE are your last lines of defence against asbestos fibres. Follow the methods in the task guidance sheets to avoid fibres being released into the air.**

### Overalls

- Disposable overalls – Type 5 (BS EN ISO 13982-1+A1) are suitable.
- You may need waterproof overalls for outdoor work.
- Wear one size too big to help to prevent ripping at the seams.
- If the cuffs are loose, seal them with tape.
- Avoid wearing a long-sleeved shirt – these are difficult to cover properly.
- Wear the overall legs over footwear. Tucking them in lets dust into footwear.
- Wear the hood over RPE straps.
- Dispose of used overalls as asbestos waste.

### Gloves

- If you wear protective gloves, use single-use disposable gloves. If you must use latex gloves, use only 'low-protein powder-free' gloves.
- Dispose of used gloves as asbestos waste.

### Footwear

- Boots are preferable to disposable overshoes which can cause a slipping risk.
- Choose boots without laces as these are easier to clean.



A 'dust mask' doubled up for more protection is useless. You need a respirator



Disposable RPE worn correctly



Disposable RPE worn correctly



Disposable RPE worn incorrectly



For some tasks, non-disposable RPE is needed

## Respiratory protective equipment

- Use suitable RPE with a UK-assigned protection factor (APF) of 20 or more.
- Suitable types of RPE:
  - disposable respirator to standards EN 149 (type FFP3) or EN 1827 (type FMP3);
  - half-mask respirator (to standard EN 140) with P3 filter;
  - semi-disposable respirator (to EN 405) with P3 filter.
- This equipment should be suitable for most short-duration non-licensed work. Workers should select a make and size that fits them.
- This equipment is not suitable for people with beards or stubble – hooded respirators are required for these situations.
- The equipment is also unsuitable for long periods of continuous use; you need power-assisted equipment for such situations.

## Planning and preparation

- Plan for and practise emergency procedures such as failure or damage to RPE.
- Workers need to be fit tested to make sure that the RPE fits them properly.
- Arrange fit testing and training on use and inspection of RPE before the work starts. Ask the supplier for help or contact [fit2fit.org](http://fit2fit.org) for details of accredited fit test providers. See More help on sheet a0.
- Workers must be medically fit to wear RPE – seek medical advice if you are not sure.

## Training

- Make sure that RPE users know:
  - how to check their equipment is working properly before they put it on;
  - how to check that it fits;
  - how to identify and replace worn or defective parts;
  - about the limitations of the RPE they are using.
- Instruct users to throw away disposable RPE/PPE as asbestos waste after one use.
- Tell workers to stop work and leave the area if they think their RPE is not working properly.

## Using RPE

- All types of RPE restrict what the wearer can do. It is uncomfortable to wear for long periods, but it is important that you protect yourself.
- RPE has to be worn all the time and until the worker is away from the contaminated air.

- Put on and wear the respirator in accordance with your training and the manufacturer's instructions.
- Carry out a fit check in accordance with your training and the manufacturer's instructions.
- If the worker wears spectacles, they should ensure they do not create a gap between the mask and face.
- Put the overall hood over the straps.
- At the end of the shift, take off RPE last and, if it is disposable, put it in the asbestos waste.
- For non-disposable RPE, clean after use and store in a safe place away from contamination.
- With half-mask respirators, change filters regularly – your supplier may be able to advise you how often. Dispose of used filters as asbestos waste.

### **Maintenance of non-disposable equipment**

- Keep RPE clean and in good working order – follow the manufacturer's instructions.
- Inspect and check RPE for damage every time. Carry out thorough checks monthly (or every three months if used infrequently). Inspect all parts including valves and seals. Replace the respirator as appropriate.

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# em1

## asbestos essentials

# What to do if you discover or accidentally disturb asbestos during your work

## Equipment and method sheet

### Non-licensed tasks

This information will help employers and the self-employed to comply with the Control of Asbestos Regulations 2012.

It is also useful for trade union and employee safety representatives.

Only carry out work if you are properly trained and have the right equipment.

#### Remember:

- Asbestos fibres can cause fatal lung disease and lung cancer.
- Read the safety checklist and sheet a0.
- You must be trained to work safely with asbestos materials.
- Asbestos isn't always obvious. Would you spot an asbestos gasket on an old engine, asbestos cement pipes or an asbestos-containing fuse board? If you're not sure, the premises owner needs to get it checked out!
- There are three 'colours' of asbestos, but you can't tell just by the colour what you have found; it could be mixed with other materials which change its appearance.

### What this sheet covers

This sheet tells you what you need to do if you discover or accidentally disturb and release asbestos during your work.

### Unexpected discovery of asbestos

If during your work you discover materials which you believe to be asbestos stop work immediately. Put up a warning sign and ensure nobody enters the area. Report the problem to whoever is in charge and arrange to have a sample of the material analysed. If it does not contain asbestos then work can continue. If the material does contain asbestos then follow the flow chart to decide if the work needs a licensed contractor.

Alternatively, you could presume that the material contains the worst type of asbestos and apply the appropriate controls, using a licensed contractor if required.

If you are employed in-house, remember to tell your manager to update the asbestos management plan; otherwise report it to the customer.

### Accidental release of asbestos

If you accidentally disturb and release asbestos during your work, it must be dealt with quickly and appropriately.

The clean-up of lower risk asbestos materials where the fibres are firmly bound in a matrix but are essentially in good condition (ie mostly intact), such as asbestos cement (AC), bitumen products, papers, textiles, small-scale release of asbestos insulating board (AIB) etc will generally not require a licensed contractor.

**Caution**

Check what you're working on before you start:

- Avoid using a sweeping brush as this can spread asbestos.
- Make sure no unauthorised personnel enter the area.
- The clean-up of any accidental release of higher risk materials, eg asbestos lagging, loose fill, asbestos coatings (not textured coatings) or large-scale releases of AIB, must be done by a licensed contractor.

**Emergency procedures**

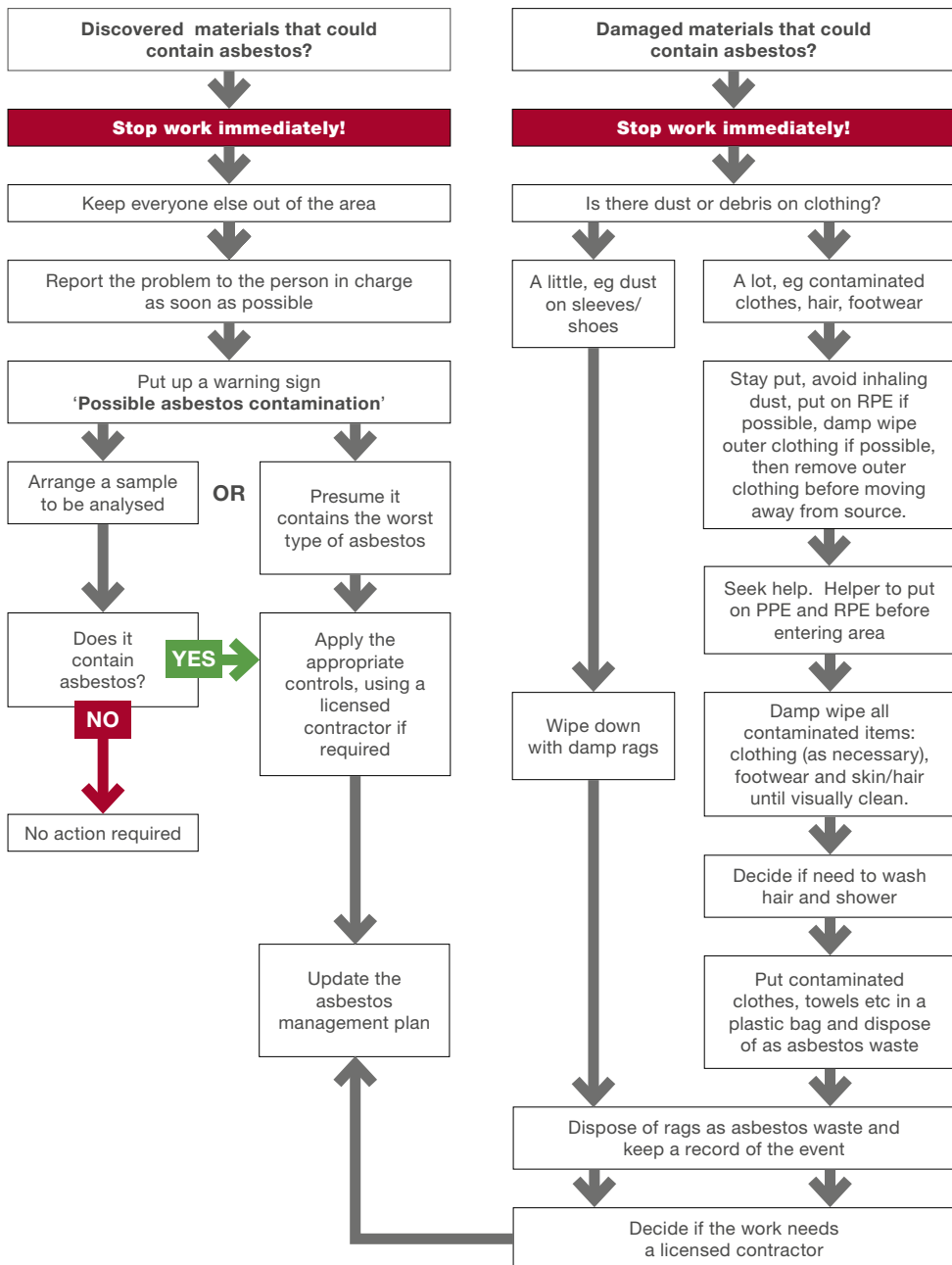
Your emergency procedures should include managing an uncontrolled release of asbestos materials into the workplace. Steps should be taken to:

- warn anybody who may be affected;
- exclude from the area anyone not needed to deal with the release;
- identify the cause of the uncontrolled release;
- regain adequate control as soon as possible;
- make sure anyone in the work area affected who is not wearing personal protective equipment (PPE), including respiratory protective equipment (RPE), leaves the affected area immediately. Minimise the spread of asbestos by ensuring they are suitably decontaminated;
- clean up dust and debris (see em7);
- decontaminate anyone who is contaminated with dust and debris;
- ensure rags, clothing or PPE is decontaminated or disposed of as contaminated waste;
- consider lone and/or remote workers to ensure they can alert someone if necessary.



Top row: An asbestos gasket, asbestos cement pipes and an asbestos-containing fuse board

Bottom row: The asbestos cement pipes are labelled, so are the tiles, but you might not know until you start to lift them. There could be sprayed limpet under the AC sheeting

**Flow chart**



AIB fire surround



Don't assume there will always be warning signs. There could be undiscovered asbestos in buildings you work on

## **More information**

For information about health and safety visit <https://books.hse.gov.uk> or <http://www.hse.gov.uk>. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops. To report inconsistencies or inaccuracies in this guidance email: [commissioning@wilt.com](mailto:commissioning@wilt.com). British Standards can be obtained in PDF or hard copy formats from BSI: <http://shop.bsigroup.com> or by contacting BSI Customer Services for hard copies only Tel: 0846 086 9001 email: [cservices@bsigroup.com](mailto:cservices@bsigroup.com). The Stationery Office publications are available from The Stationery Office, PO Box 29, Norwich NR3 1GN Tel: 0333 202 5070 Fax: 0333 202 5080. E-mail: [customer.services@tso.co.uk](mailto:customer.services@tso.co.uk) Website: [www.tso.co.uk](http://www.tso.co.uk). They are also available from bookshops. Statutory Instruments can be viewed free of charge at [www.legislation.gov.uk](http://www.legislation.gov.uk) where you can also search for changes to legislation.

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# Appendix E

## Email Correspondence

T+ (0)161 886 2527  
M+ (0)7825 843 542

---

From: Andrew Coote <[andrew.coote@czhkwestfields.com](mailto:andrew.coote@czhkwestfields.com)>  
Sent: 01 September 2022 16:57  
To: Gallagher, Paula <[Paula.Gallagher@wsp.com](mailto:Paula.Gallagher@wsp.com)>  
Cc: [gerrytaylor@crukconstruction.co.uk](mailto:gerrytaylor@crukconstruction.co.uk); Chris Smith <[chrissmith@crukconstruction.co.uk](mailto:chrissmith@crukconstruction.co.uk)>; Nick Whitehouse <[nick.whitehouse@fecil.uk](mailto:nick.whitehouse@fecil.uk)>  
Subject: RE: [External E-Mail] RE: Angel Meadow Plots 2&3\_URGENT\_Outstanding Conditions

Afternoon Paula,

How are you getting on with the covering letter? Just after an update so I can keep Nick @ FEC up to date.

Thanks



Westfields Construction Limited  
in Joint Venture with  
China Zhejiang Construction (H.K.) Limited

**Andrew Coote**

Project Manager  
**Mobile:** 07540 728689

**address:** Manchester Office | 142 Dantzic Street/ Little Nelson Street. Manchester M4 4DN

London Office | 39 Harrington Gardens | London | SW7 4JU

---

From: Andrew Coote  
Sent: 30 August 2022 16:34  
To: Gallagher, Paula <[Paula.Gallagher@wsp.com](mailto:Paula.Gallagher@wsp.com)>  
Cc: [gerrytaylor@crukconstruction.co.uk](mailto:gerrytaylor@crukconstruction.co.uk); Chris Smith <[chrissmith@crukconstruction.co.uk](mailto:chrissmith@crukconstruction.co.uk)>  
Subject: RE: [External E-Mail] RE: Angel Meadow Plots 2&3\_URGENT\_Outstanding Conditions

Hi Paula

I have sent you the following information on a we transfer-

- Sub soil, top soil analysis reports,
- Top soil location plan
- Environmental plan
- Asbestos report
- Piling work plan/ risk assessment

I can confirm through the site records I have seen we have not had and leaks or created any contaminated ground during the build.

During the build we have used road sweeps and we dampened as needed, sadly I don't have any photos of this but may be able to find a record/invoices of road sweeps coming to site.

Many thanks