

Asbestos Contaminated land

Local Authority Projects – Residential Part2A

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Introduction: Whitmore Reans - Wolverhampton

Part 2A project overview

- Investigation & remediation of properties for ACM contamination:
 - Working directly with LA's Environmental Health Officer as Client.
 - Must appease each resident as a client in their own right;
 - Spread over a large geographically area (Residential);
 - Contamination resulted from poor demolition or lack of regulation in 70's/80's;
 - ACM originally identified as part of a Local Authority funded remediation scheme for Carbon Disulphide;
 - Asbestos noted, but not specifically identified/assessed/quantified as not part of the standard testing suite;
- Combination a ACM types:
 - No segregation of ACM prior to reuse as backfill below 100-200mm growing medium;
 - 'Clearly identifiable' Notifiable ACM (Insulation, Coatings & AIB) present;
 - Example of 'Clearly identifiable': Insulation still adhered to pipework and metal work.
 - Any work must comply with CARSOILS™ & CAR2012

Focused Asbestos Site Investigations aims

- Identify current land condition through:
 - Updated SI to confirm SPOSH; and
 - Update the Desktop Study / Conceptual Site Model;
 - Determination of '**Site Specific Assessment Criteria**' based on residents exposure modelling and anticipated land use/disturbance; then
 - Assess each property in comparison to the site specific criteria;
 - Record of determination of 'at risk' properties
 - Restrictions place on purchase, sale, modification and even personal use of affected properties.



Site specific Criteria

Exposure modelling

- No GAC value applicable to asbestos;
- Additional investigation required to gain enough data to make a determination of risk to residents;
- Asbestos found in gardens tested at varied depths;
- Internal & External dust monitoring on several properties with highest level of contamination;
- Perceived Risk vs. Actual
- Lifetime cancer risk to residents & site users.
- Estimate garden usage/disturbance;
- Age of residents and probable occupancy durations.



Asbestos and Part 2A

Tendering and Design

- Lump Sum require, but how do you price works where you cannot visit each property individually?
- Difficulty accessing multiple private residencies and council owned properties;
- Price always important, but tendering focused on quality of tender submission and proving ability to keep residents safe, and the project out of the media spotlight;
- Draft MS & RA submitted at tender stage as proof of concept;
- Design needs to comply with CAR2012 & CARSOILS™, but need to be a practical solution without major disruption;



Asbestos and Part 2A

Control measures & Licensing

- Compliance with CAR-SOILS™ & CAR2012
 - Deciding Licensing Conditions (Joint Industry Working Group Work Category Decision Support Tool (www.claire.co.uk/asbestos-DST);
 - Asbestos building surveys vs. Asbestos soils surveys;
 - Exemplary general hygiene standards when working with soils;
 - Decontamination procedures (Primary Decon then DCU);
 - Tight controls on entry/exit to areas;
 - Information, Instruction & Training;
 - Control measures to reduce fibre liberation;
 - Air monitoring strategy (SEM? Indoor? Frequency?);
 - Overburdened material - Waste disposal.



Asbestos and Part 2A

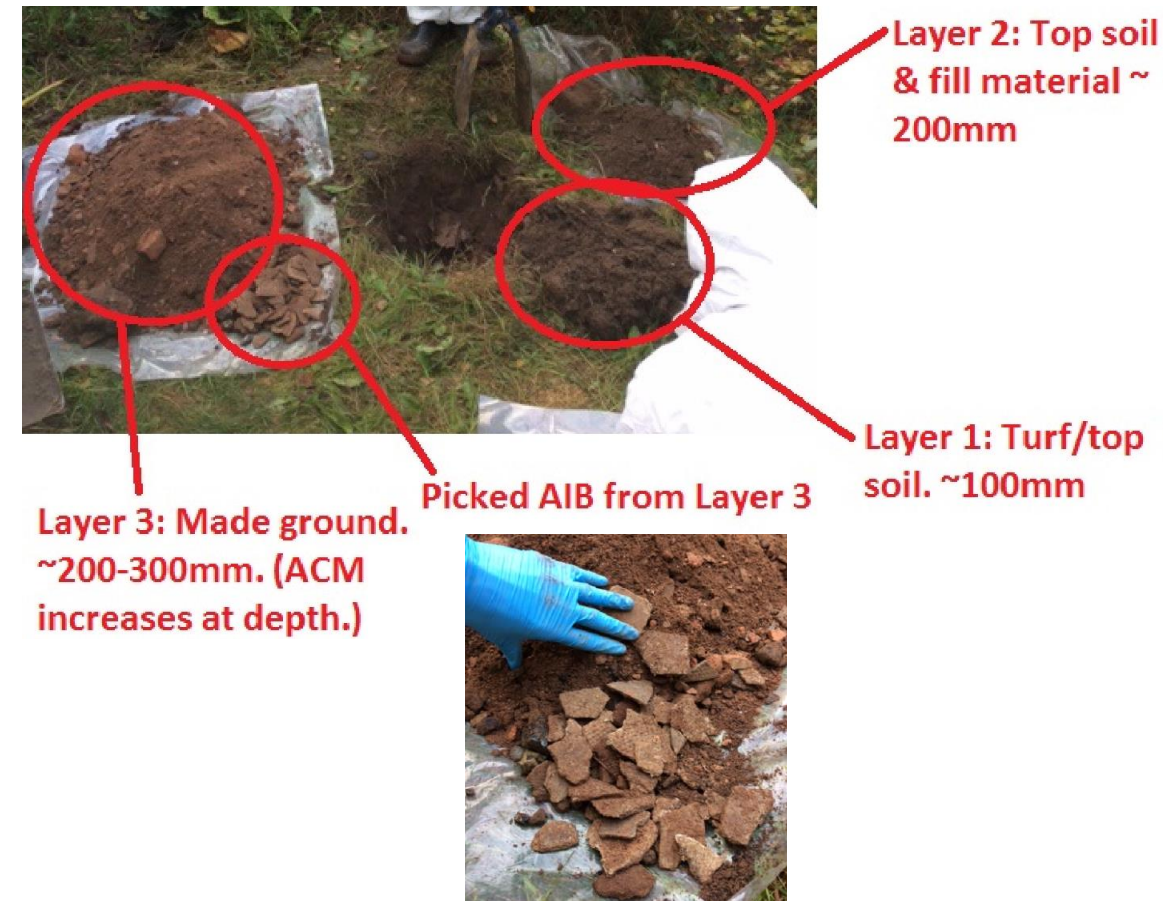
Client & HSE Liaison

- Local authority liaison throughout the process;
- Prior engagement with the HSE and a face to face meeting with the Local Inspector;
- Consultant and Analytical teams experience key and a history of working together towards a common goal;
- Discussions on method, zoning and safe guards;
- Updates to local HSE inspector;
- HSE flexibility & reaction to problems;
- HSE site visits!!



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Example of site Investigation results



- Preliminary investigation in a range of properties to categorise waste first hand;
- Used as line of evidence for defining future control measures;
- First time with direct contact with residents;

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Remediation Works

- Asbestos Remediation is not just about complying with CAR2012/CARSOIL™;
 - CDM, WM3, CDG Regs & ADRegs and many others;
 - Other contaminants (E.g. Hydrocarbons, Lead, Mercury);
 - Traffic Management, closure of footpaths/roads;
 - Service Avoidance
- Correct blended of disciplines;
- Management over a large, segregated geographical area;
- Plant training and competency;
- Changing circumstances and situations;



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Remediation Works

- Additional properties and HSE Contact;
 - Surveys, As-Built, Asbestos Register;
 - Analytical support;
 - Independent clearance by a UKAS analyst post works
 - Record keeping and Signoff;
 - Requires sufficient information to remove property from the Part 2A frame work and allow housing to be returned to general stock;
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- Validation – Staged validation package



Asbestos and Part 2A

Reinstatement



Asbestos and Part 2A

Conclusions

- Asbestos in Part 2A work may well be on the increase as EHO's begin to understand the implications of Asbestos Containing Soils and lab testing for asbestos advances;
- Extensive site investigation data is required to fully model potential exposure and requires a unique assessment in the absence of a GAC value.
- Timeframe from SI to Remediation can be extensive to allow time for assessment, funding, consultation and legal agreements.
- Direct discussions with HSE is key to a smooth project and will make discussion of any changes easier.
- Asbestos Part 2A work can be some of the most challenging within remediation, but assisting local residents to clear an area of blight is extremely rewarding.





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