ASBESTOS FIBRE RELEASE MANAGEMENT PLAN

Marsh Lane,
New Mills,
High Peak,
Derbyshire,
SK22 4PN,

April 2017

Prepared for:-

HT Forrest Ltd,

The Yard, Westhoughton,

Bolton, BL5 3NU.

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For Chandos Remediation Services Limited	April 2017

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1. INTRODUCTION

HT Forrest Ltd have received planning permission (High Peak Borough Council, Application No: HPK/2016/0476 Dated: 18/01/2016) for the demolition of existing workshop at the Old Vicarage Land to the rear of Marsh Lane, New Mills, Derbyshire and the development of 16 homes for affordable rent; 7 for low cost home ownership and 14 homes for open market sale (37 residential homes in total) with associated access, parking and landscaping.

Chandos Remediation Services Ltd has been engaged by HT Forrest Ltd to provide an Asbestos Fibre Release Management Plan to satisfy Condition 11 of the above planning permission which states "*Prior to the commencement of development a scheme shall be submitted to and approved in writing by the Local Planning Authority detailing the methods to be applied to prevent the release of asbestos fibres into the air. This scheme shall include air monitoring on the boundary of relevant works to verify that the methods are working. Thereafter the development shall proceed in accordance with the approved scheme".*

Several historical phases of site investigation have been undertaken and are detailed within the *Marsh Lane, New Mills Remediation Method Statement, BRM Development Solutions, Report Ref: P7434, Dated November 2016.*

1.1 REQUIRED REMEDIATION WORKS SUMMARY

The remediation strategy indicates the remediation and enabling works to comprise the breaking out of concrete slabs and relict foundations. The concrete will be processed to form an engineered fill. The Made Ground materials are considered to be potentially contaminated and may contain Asbestos Containing Materials (ACMs).

It is understood that site levels are to be raised by an average of 1m. A clean capping thickness of 750mm (150mm topsoil over 450mm Sub-soil over 150mm anti-dig layer) will be placed in gardens and 600mm clean capping to be placed in all other soft landscaped areas (150mm topsoil over 450mm Sub-soil) which should be sufficient for the protection to end-users and maintenance workers.

The capping is considered sufficient to protect end-users from underlying Made Ground that may contain ACMs. The same capping layer will help mitigate Asbestos fibre release during enabling works.

The Remediation Strategy does not require a capping layer below areas of hard standing, such as roads, drives and houses as the hard cover will break the pollutant linkage pathway.

1.1.1 Identified Asbestos Containing Material

The Remediation Strategy states: *Although asbestos containing materials (ACMs) have been identified onsite predominantly associated with the materials within the former landfill, evidence of free fibres present within the Made Ground is limited. Therefore, the risk from release of free fibres during the construction phase can be considered to be low with the correct management of asbestos (removal of visible fragments, dust suppression measures and reassurance air monitoring).*

A plan showing the extent of identified Asbestos contamination within the former landfill area is presented in the Remediation Strategy as Appendix D and also as figure 1 below. However the extent of the area identified as having "potential ACM Impact" cannot be accurately delineated, as a result the whole site area has been deemed as potentially contaminated with low level Asbestos. The guidance within this Management Plan should be followed during all works on site.

Note
As with the majority of brownfield sites ACMs can exits away from and between intrusive investigation locations. The remediation contractor should employ or train site managers in the identification of ACM and deploy the control measures detailed within this Management Plan should any ACMs be identified anywhere on site.

Figure 1 - Contamination Plan from Remediation Strategy showing area of potential ACM impact.

1.1.2 Potential Risks from Identified Asbestos

There is a potential for Asbestos fibres within the Made Ground soil to be released into the air following disturbance of the material as part of the enabling works. Once airborne, the fibres could theoretically impact upon construction workers or nearby residents. With this in mind, Chandos has prepared this Management Plan to manage and mitigate the risks arising from Asbestos fibre release during the remediation process.

2. MEASURES TO MITIGATE RELEASE OF AIRBORNE ASBESTOS

2.1 APPROACH

During the remediation works the remediation contractor should provide full time site supervision and have overall control of the soil management. Imported soils will have been sampled and tested at a laboratory to assess whether Asbestos is present. Soils re-used at the site must meet the criteria set out in the remediation strategy.

2.2 PRE-COMMENCEMENT

Prior to works commencing the following protocols will be adopted.

- Induction of all operatives that will be involved with the proposed works to include a brief outline of the remediation process and works within the site area;
- Tool box talks will be undertaken to highlight risk from ACMs and working methods will be designed to mitigate risks. Regular Toolbox talks will be undertaken to re-communicate the procedures to all operatives;
- All operatives involved with earth movement will have asbestos awareness training; and
- Assessment and recording of prevailing weather conditions including wind direction and rainfall.

2.3 MANAGEMENT OF WORKS WITHIN ACM AREA

During the remediation earthworks it will be necessary to re-engineer site won soils. Some of these soils have the potential to contain ACMs. The works will be conducted in order to minimise disturbance; this means no unnecessary excavation into potentially impacted soil.

Hot, dry windy conditions are more likely to give rise to an increase in airborne asbestos. Prior to works commencing the prevailing wind direction and weather conditions would be assessed in order to plan the most appropriate mitigation measures.

The works will be undertaken in a way that minimises the time period soils containing asbestos are exposed to the air. In practical terms this might mean breaking out concrete but not removing the concrete until the next sequence of works was ready to be undertaken. This would avoid soils impacted with ACM being unnecessarily exposed and would reduce the potential for exposure.

Where is necessary to work with ACM impacted soils, the soils will be assessed for moisture content. This will be a visual assessment. If soils are drying they will be damped down.

Clean cover soils will be placed over the impacted Made Ground as soon as practically possible.

Any excess potentially ACM impacted soil generated as a result of the designed cut levels will be transported to a dedicated stockpile zone and marked for reference and future works. The dedicated impacted stockpile zone will be located away from the boundary lines, placed on an impermeable membrane and covered.

Throughout the cut and fill process, site won soil testing will be undertaken at the finished levels to ensure the specification in the remediation strategy has been met.

Throughout this process the areas of potentially impacted ACM soils will be managed to prevent cross contamination of clean soils.

2.3.1 Air Monitoring

Air monitoring will be undertaken in advance of any works on site to establish background levels. Boundary point monitoring locations will be established as indicated in figure 5 during the earthworks and when work is being undertaken with soils identified as having potential ACM impact.

Independent air monitoring will be undertaken by a licenced company specialising in Asbestos Air Monitoring. For these works we propose to use REC:

REC Resource and Environmental Consultants Ltd
Osprey House
Pacific Quay
Broadway
Manchester
M50 2UE
Tel 0161 868 1300

2.3.2 Frequency of Air Monitoring

Air monitoring will start with a background check prior to works commencing. Subsequent monitoring visits will occur an average of 1 per week thereafter subject to weather and ground conditions, for instance if there is a wet spell of weather and the soils are damp the risk of airborne fibres is reduced. A dry spell of weather where the ground has become dry will require a more regular monitoring regime.

2.3.3 Method of Air Monitoring

Static air monitoring pumps will be positioned around the perimeter of the site as indicated in figure 2 below, on operatives and within site accommodation.

The pumps will run at a rate to ensure 480ltrs of air is pumped through each machine in a 1hr period.

Figure 2 - Static Air Pump

Figure 3 - Personnel Monitoring Pump

If the pumps detect more than 0.01 fibres / cm3 are being generated by the ongoing operations work will cease and the method of work revised to reduce fibre release. The Environmental Health Section of High Peak Borough Council shall be informed without delay, with details of the method of fibre release control to be adopted. Contact details:

Matthew Rhodes c/o
EnvHealth@highpeak.gcsx.gov.uk
0345 129 7777

Personnel monitoring will also take place to assess personnel working in machinery or on the ground.

Each pump filter is analysed on-site and results are issued immediately after the monitoring is complete.

2.3.4 General Dust Control Measures

During the earthworks of ACM impacted soils the following will be adopted:

- Vehicle speeds will be kept to a minimum 5mph to minimise dust generation;
- When necessary, dampening down of work areas, temporary roads etc., will take place. This will be supervised to prevent uncontrolled water run-off;
- All stockpiles will be maintained and sealed by compacting of surfaces; and
- Dedicated plant and operative teams detailed to carry out ACM works.

2.3.5 Methods of dampening down

Dampening down will be undertaken using dedicated water bowsers towed across the area of the site and the use of water cannon will also be considered.

A good water supply would be required ideally stand pipe apparatus would be located within or near the site boundary. At the end of each day the water bowsers will be refilled to ensure there is dampening down available for the next day.

Should other site operations render the stand pipe unavailable then additional water storage tanks will be delivered and filled from an outside water source.



Figure 4 - Examples of Dust Mitigation Techniques

Figure 5- Proposed boundary monitoring locations

2.3.6 Emergency Procedures

The following procedure will be adopted should an unknown quantity or type of Asbestos be discovered on site which is not detailed in the SI report or the asbestos location plan.

- All work will cease in the location;
- Operatives to report the find to the site manager;
- The affected area will be wetted down if required under instruction and covered if required;
- The area will also be fenced off and clearly signed for no entry;
- The affected area may only be entered once a competent and qualified person has undertaken an appropriate risk assessment for the control and handling of the material; and
- The location of the asbestos will be logged on the as built drawing.

2.4 HSE GUIDANCE

The HSE have produced the below guidance to help with the decision making when Asbestos Containing Materials are encountered:

HSE

Health and Safety Executive

Decision flow chart

Use this simple flow chart to help you decide who needs to do the work:

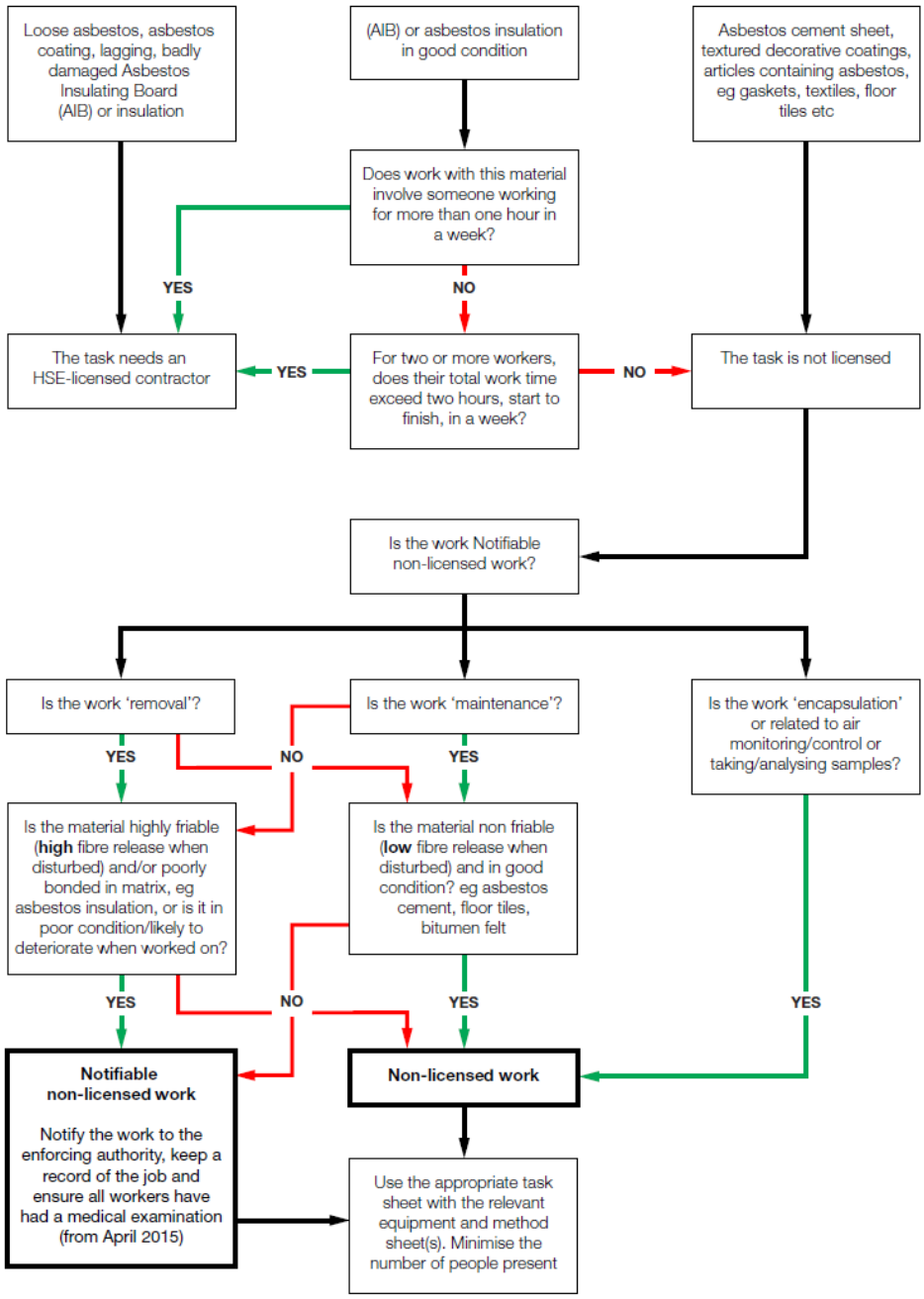

Figure 6 - HSE Asbestos Decision Flow Chart

2.5 LEGISLATION, REGULATIONS AND APPROVED CODES OF PRACTICE

Should significant Asbestos Containing Materials be identified during site works all works will be carried out under the following regulations:

- The Control of Asbestos Regulations 2012 ;
- Health and Safety at Work Act 1974;
- Environmental Protection Act 1990;
- Duty of Care Regulations 1991;
- Management of Health and Safety at Work Regulations 1999;
- The Hazardous Waste (England and Wales) Regulations 2005;
- The Carriage of Dangerous Goods by Road Regulations 1996;
- The Control of Asbestos Regulations ACOP December 2103 ;
- Construction Design Management Regulations 2007; and
- Control of Hazardous waste Regulations 2009.

Although the works are likely to be non-licensed, under the 2012 regulations, any non-licensed Asbestos remediation that is likely to cause disturbance and therefore potential release of Asbestos fibres must be notified. This includes disturbance of Asbestos contaminated soils by means of an excavator or handpicking.

Should notification be required the HSE will be notified of the works via their online ASBNNLW1 form.