

Cwmcarn High School
Cwmcarn
Wales
NP11 7NG



Asbestos Remediation Options Proposal

Proposal by:

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1. Introduction

- 1.1 Following the completion of the asbestos survey at Cwmcarn High School (CHS) which encompassed a full management inspection to the entirety of Building A, B and the Leisure Centre, including internal and external inspections, accessible service ducts, the boiler house and tank room, the options proposal has been devised to conclude the best way forward to remediate the asbestos containing materials (ACMs) discovered during the survey.
- 1.2 It must be noted that the survey did not include Building C, as this was a modern constructed building (post 2000) and therefore outside the remit of the inspection.
- 1.3 Previous survey inspections confirmed that large quantities of ACMs were utilised within the original construction of the school, and that this material had become damaged in some areas. The cause(s) of such damage were not always clear, however potential damage caused during historical and more recent asbestos removal projects were clearly established.
- 1.4 This further asbestos survey investigation aimed to, not only quantify the level of ACM throughout the school buildings inspected, but to also ascertain where possible how the damage had occurred. The full extent of the contamination within the void areas was to be established and to identify ACMs that remained in a safe and manageable condition. Finally it was to conclude the most practical remedial options available to both CHS and Caerphilly County Borough Council (CCBC) in order for the school to re-open.
- 1.5 During the survey inspection, air sampling was also undertaken to quantify the levels of asbestiform fibre within the air both during and at the completion of the inspection in line with the Lowest Quantifiable Limit (LOQ). Various analytical techniques were adopted to confirm if there were any apparent contamination issues throughout the school below ceiling height, as previous surveys had already concluded that asbestos debris was evident within a number of the schools ceiling voids.
- 1.6 The following summary refers only to the most significant survey findings. For full survey findings please consult the relevant asbestos management survey reports.

2. Summary of survey findings

2.1 *Single Storey Science Blocks (survey reference Building A – Part 3)*

- 2.1.1 Minor asbestos debris generated from broken asbestos insulating boards (AIB) was located within a few specific areas within the ceiling void. Cause of the debris could not be formally determined however it is suspected that the over cladding roof works to this area were likely to have caused the damage.
The debris was localised and therefore straight forward to remediate. Also noted within the ceiling void of the main corridor were sections of the original high level AIB infill panels that remained in a sound and undamaged condition and would not limit access to the ceiling void significantly.

2.1.2 As previously identified by others, lay in AIB ceiling tiles were apparent within the 3 toilets. Again the condition of these tiles was good, and fully encapsulated to the exposed side. Within the ceiling void the exposed surface was evident, and would require the restricted access management controls currently in place for maintenance purposes to be maintained.

2.1.3 As a reassurance contact tests were taken within the adjoining ceiling voids to the toilets in the corridor, where the AIB fillets were identified, and indicated negative results.

2.2 Double Storey Humanities Block (survey reference Building A – Part 2)

2.2.1 The presence of AIB within the ceiling tiles and ceiling voids throughout this section of the school had been known by all parties for a considerable amount of time and was managed by restricting access to these ceilings and voids.

2.2.2 On the first floor the volume of the AIB debris was extensive and included some within the hot air heater units, which it was understood CCBC worked within in the recent past. No void seals seem to have been erected in these areas and this, coupled with the standard of removal works to some of these areas (with the exception of a few rooms) and the settled aged nature of the debris deposits indicated that the major removals were pre 1990.

2.2.3 Full fixed asbestos ceiling tiles that were still in situ on this level along with the AIB panels below the external windows remained in a good, sound and encapsulated condition to the exposed face, with only very minor cracks and scuffs apparent. Within the ceiling voids the upper surface of the AIB tiles were not encapsulated, however the analytical air monitoring results indicated that the presence of the debris within the ceiling void and unsealed AIB upper tile surfaces were not having a detrimental effect on fibre levels below ceiling height, including around the hot air heaters.

2.2.4 On the ground floor of this section the survey inspection concluded that the bulk debris found in this location was not as extensive as the floor above. What was identified, and was different to this area was the AIB debris being found to be more in the form of residue following historical removal projects rather than loose 'pieces' of AIB debris. Evidence of this was typified by the identification of asbestos residue to the old ceiling grid which had been left in situ in the stairwell sections, with the new ceiling grid now attached. Void seals had been installed on this floor, presumably to prevent the spread of asbestos fibre from the works area into adjacent voids above the AIB ceilings that remained and vice versa post works. However these seals were NOT of permanent construction and had failed in numerous locations due to their substandard construction, and temporary nature of the materials used to construct said void seals.

2.2.5 As with the first floor the fixed AIB ceiling tiles that were still in situ along with the AIB panels below the external windows remained in a good, sound and encapsulated condition to the exposed face, with only minor cracks and scuffs apparent to a few discrete locations.

2.2.6 What was of greater concern on this level was the identification of paper lined pipe insulation that had been removed from the pipes within the corridor sections. Substantial amounts, of the now loose insulation, were identified above the remaining AIB ceiling tiles in rooms adjacent to the recent corridor works, hidden behind the void seals. The pipes in these rooms were fully insulated with the same type of insulation leading to the sole conclusion that this material had been 'thrown 'onto these ceilings during the recent works. This would also suggest that the appropriate void seals to complete the enclosure

construction were not in place prior to the removal works commencing.

- 2.2.7 The ceiling voids above the office areas to the front of the building (156 office to 165 office) seemed to have been environmentally cleaned to a much improved standard, with no evidence of bulk asbestos debris or residue, however contact testing carried out within this section did identify the presence of asbestos fibre in non-visible quantities. This would not be unusual following removal works but, coupled with the evidence of poor removal practices identified above, does raise concerns regarding these most recent works.

2.3 *SEN (Former Music / Community centre and Assembly Hall Block (survey reference Building A – Part 1)*

2.3.1

This section of the school had clearly been subjected to a large amount of construction work throughout the years as the different building materials utilised were very evident. The original section of the building were consistent with the adjoining double storey block, with AIB wall panels still in situ to both the assembly hall and dining room. These panels remained in a generally good and full encapsulated condition.

2.3.2

Adjoining the assembly hall were 3 classrooms of a modern construction, although the materials used to construct this section were not identified as ACM's, AIB contamination within the wall voids was identified. This was presumed to have been caused during the construction of these classrooms and may well have been linked to the works that Rodens and their specialist sub-contractor conducted. Although evident, the AIB debris was concealed within the wall voids and would not be disturbed during any routine maintenance. Air testing again indicated fibre levels well below the LOQ within this area.

2.3.3

The SEN (former music classrooms / Community Centre) also appeared to be of a more modern construction, with new suspended ceilings throughout, however it was understood that this area was the former Community centre and originally had an AIB suspended ceiling. During the inspection within these voids, asbestos residue was identified from previous historical removal projects including old ceiling tracking with the original fixing screws still attached.

2.3.4

The high level ceiling voids to both the assembly hall and dining room were also found to contain small amounts of AIB debris.

2.3.5

In general the AIB panels located within the changing rooms, and dining rooms stores were in a good condition, although unsealed to the unexposed sides as viewed within ceiling voids, with only minor debris evident. There was however more evidence of previous removal within the switch room with AIB contamination identified in the void above the new ceiling recently replaced during electrical works managed by CCBC.

2.3.6

No licensed asbestos containing materials and/or debris were identified within the kitchen or associated store areas.

2.3.7

The tank room was located to the rear of the dining room which had previously been subjected to an encapsulation project by CCBC, fully sealing the floor and walls to primary ceiling height. No remedial works had been carried out to the high (secondary) level tank area despite the presence of badly damaged asbestos paper lined pipe insulation. Although the encapsulation was generally good, there was still evidence of asbestos insulation residue to the walls and to one of the pipe runs. This area had been subject to various surveys and removals which had resulted in a 'confused' picture of whether the area contained asbestos or not. The survey identified that the entire area still had evidence of ACMs being present.

2.4 Leisure Centre

- 2.4.1 During the inspection only a small amount of AIB was identified within the changing room section. These AIB panels were labelled in a good and fully sealed condition and posed no risk whilst being suitably managed and remaining in good condition.

3. Considered Remediation Options

- 3.1 Potentially there were numerous options available for the remediation of the ACMs located at the school depending on the plans for the school and proposed further refurbishment/upgrade statutory required works required to be undertaken post asbestos remediation.
- 3.1.1 However in Ensafe's opinion, the following remedial works option was the most appropriate in order to create a safe site for re-occupation and on-going use which would allow for all necessary statutory works to be conducted and essential maintenance patch repair works to the roof (or even replacement). All other upgrade works could be suitably designed, managed and implemented without impacting any of the ACMs deemed suitable to remain in-situ as part of the following remedial option.
- 3.1.2 Whilst determining the most appropriate remedial option the following significant issues were fully considered, this is not an exhaustive list of the matters considered but demonstrates the principal thought process leading to the remedial option proposed.
- 3.1.3 Although at the time of, and at the completion of, the survey all of the remaining AIB ceilings were still in a good and fully sealed condition. It was considered that although these AIB tiles in theory could remain in situ and be managed accordingly, by not including them within a full removal strategy, problems would remain with the on-going maintenance of the school. Access to the ceiling voids would need to remain controlled by a permit to work system and permanent void seals would need to be installed. The survey identified those previous attempts to install such void seals was not a straight forward process. A remedial strategy which incorporated the full removal of both the asbestos and non-asbestos (contaminated) ceiling tiles would enable the ceiling voids to be fully environmentally cleaned throughout. This would include the removal of all asbestos debris and residue left over from previous removal projects throughout (including all suspended ceiling tracking) and would also enable the paper lined insulation both fixed and loose to be removed. This would then allow full and largely unfettered maintenance access into all ceiling voids.
- 3.1.4 It was considered that this remedial option would also encompass the full removal of the heating cabinets, inclusive of the heaters. Although not all proven to be contaminated with AIB debris internally, the heater units were old and less efficient than other heaters installed to this floor, and were also found to contain woven asbestos insulation to the electrical components. The installation of new heating units within these classrooms would be straight forward, as there was an existing radiator system to other rooms on this floor, therefore there was no benefit of leaving the ACMs sealed within these units.

- 3.1.5 Evidence of water leaks were also noted throughout the school and particularly within the two storey block area concluding that essential patch repairs to the roof or maintenance works within ceiling voids were likely to be required. Based on this fact it was considered the remedial option should factor in whether these repairs could therefore be undertaken at either the reinstatement stage (following the removal works) or on an on-going basis once all the ceiling voids had been fully decontaminated. Failure to remove all the asbestos ceiling tiles at this point, with a potentially dilapidating roof above, could potentially increase the future cost of roof repairs and added to the conclusion that full removal of all the ceilings in the two storey block was essential.
- 3.1.6 The full removal of the asbestos ceilings would also enable the installation of essential firebreaks within all the voids.
- 3.1.7 Removal of the asbestos wall panelling was not considered to be essential as these remained in a good well sealed condition with only minor isolated scuffs and scrapes evident. It was considered that these items were not impacted by any routine maintenance issues and the risk of further minor impact damage could be lessened further and easily maintained by installing physical protection to the AIB panels as part of the remedial option.
- 3.1.8 Potential future upgrade works, which may impact these AIB wall panels, which were considered included window removal and replacement and/or installation of curtain walling. The impact of any such works could be suitably managed and reduced at the design stage of any such proposed upgrade works to avoid or at least minimise any impact and therefore these works were not considered essential for inclusion in the remedial option.
- 3.1.9 No ACMs were located within the kitchen potentially enabling the school to fully utilise this area to produce school meals. Although asbestos had been located within the adjoining canteen hall and the adjoining music block and gym. It was considered that careful programming of the remediation options would not require sealing these areas during the main phase of remediation works. This would be straight forward option and would therefore reduce the need for a mobile catering facility.
- 3.1.10 Works within the tank room should be scheduled towards the end of the remediation project. Although not deemed as an immediate risk to health due to the current asbestos material conditions and limited occupation of the area, previous removal works have been insufficient and not successfully removed the entire asbestos residue and left damaged asbestos paper lined insulation at high level.

4. Recommendations

4.1 Asbestos Remediation Task

At the completion of the survey review and taking into consideration the options that Ensafe deem most suitable for both CHS and CCBC the following tasks have been listed in order of managerial preference:

- 4.1.1 Task 1 – Install up to 10x double deck temporary classrooms to the lower car park to facilitate all essential items required by the school to be fully functional and operational.

Task 2 – A licensed asbestos contractor should then immediately seal off the two storey A Block and the leisure centre from all adjoining buildings on the CHS site. The sealing points should be located within 073 circ, 186 circ and within the changing rooms 026 and 030, and should be constructed from both polythene sheeting and timber hoarding.

Task 3 – Remediate the asbestos within the Science Blocks followed by the subsequent reinstatement works to allow these areas to be immediately returned to normal usage with the pre-existing management controls for the known ACM maintained and adhered to.

Task 4 – Remediate the asbestos within the SEN (former music block / Community Centre), assembly hall and dining room, to allow reoccupation once the subsequent reinstatement works have been completed. By completing the dining room section first would enable the school to fully utilise the canteen, thus removing the requirement for mobile catering facilities. Any remaining ACM's should then be managed utilising the pre-existing management controls.

Task 5– Remediate the asbestos within the double storey humanities block followed by the subsequent reinstatement works to enable these areas of the school should to returned to normal usage with the pre-existing management controls for the known ACM locations maintained.

Task 6 – Remediate the asbestos within the tank room and reinstate the insulation to all levels.

Task 7 – Additional options that are available in line with the proposed further refurbishment/statutory upgrade works required need to be scheduled in accordingly following the completion of the asbestos remediation, but should be scheduled in with the reinstatement project.

4.2 Reinstatement

- 4.2.1 Reinstatement works will be carried out following the asbestos removal programme to replace all materials removed as part this project. This is to include the reinstatement of all suspended ceilings including lighting. The replacement of wiring is also to be included if further assessments indicate that the present wiring does not meet the required standards.

- 4.2.2 At the stage an assessment of the fire alarm system can also be carried out, however observations made during the survey inspection indicated that this system had been installed recently. Budget cost quotations are inclusive of these tests and upgrades.

- 4.2.3 Options for the removal of the AIB panels beneath the external windows have not been considered as these panels remain in a stable condition. The application of over boarding to these panels would create a satisfactory protection barrier to reduce the risk of impact damage and to fully seal the asbestos in situ.

- 4.2.3 Further proposals have also been considered for the installation of curtain walling to the buildings external and to full replace the entire roof, which have been included within the optional extras section of the budget costs. The replacement of all asbestos flooring coverings and to undertake legionella testing to the water systems throughout the school have been included within the reinstatement budget costs.

5. Timescales and costs

5.1 The budget costs quotations were obtained from 6 contractors (3 asbestos removal contractor and 3 reinstatement contractors) based on the following draft specification:

Building A Part 3 (Science Block) – Asbestos remediation

Area	Works
082 Circ & 081 M WC	Removal of AIB ceiling tiles including the present ceiling grid and lighting. Environmental clean of the ceiling void to include the removal of any contaminated pipe insulation. The wall voids are to be cleaned as far as reasonably practicable and then sealed.
084 Circ & 085 F WC	
086 B WC	
129 G WC & 180 Circ	
083 Circ	Removal of AIB debris within the ceiling void of the corridor that extends into the adjoining lobby 073 circ by another 2m ² . Environmental clean of the ceiling void to a total of 10m ² , including the removal of the ceiling grid and lights, contaminated pipe insulation. The wall voids are to be cleaned as far as reasonably practicable and then sealed.
083a Circ	Removal of AIB infill panels within the ceiling void of the corridor, including the adjoining 104 circ. The removal is to include the ceiling tiles, grid, lighting and pipe insulation within the immediate vicinity (10m ²) and to environmental clean the ceiling void. The wall voids are to be cleaned as far as reasonably practicable and then sealed.
125 Circ	Removal of AIB debris within the ceiling void of the corridor. Environmental clean of the ceiling void including the removal of the ceiling grid and lights, contaminated pipe insulation. The wall voids are to be cleaned as far as reasonably practicable and then sealed.
113 Teaching Store	Removal of AIB panel to oven tables
129 G WC, 085 F WC & 081 M WC	Re-encapsulate and label asbestos cement window cills
148 Lab & 145 Store	Removal of asbestos cement and re-encapsulate of asbestos cement flue to remain in situ

Building A Part 1 SEN (Former Music Block / Community Centre and Hall section) – Asbestos remediation

Area	Works
026 G Chg & 030 B Chg	Erect a polythene seal to the entry door leading from the changing rooms 026 and 030 into the adjoining leisure centre changing rooms
026 G Chg & 030 B Chg	Erect a ply board hoarding in front of the polythene seal which must be fully hinged
167 classroom	Removal of AIB debris within the wall void to the adjoining hall. The voids are to be cleaned as far as reasonably practicable including the fibreglass insulation, and then sealed. In order to access the voids a section of the ceiling and grid must be removed.
168 circ	
170 classroom	
171 music	Removal of AIB debris and residue within the ceiling void including the removal of the ceiling grid and lights, contaminated pipe insulation and the tops of the wall partitions to ensure all contaminants are removed followed by a complete environmental clean of the ceiling void. The wall voids are to be cleaned as far as reasonably practicable and then sealed.
172 music	
173 kitchen & 174 store	
001 Music	
005 circ	
002 M WC	
003 F WC	
004 Music	
006 Office	
005a circ	Removal of the paper lining to the pipe work within the subfloor duct.
007 Dining	Removal of AIB debris and residue within the ceiling void including the removal of the ceiling grid and lights, contaminated pipe insulation. Where the wall panels continue into the ceiling void and are unsealed, these must be encapsulated, and the full void environmentally cleaned. The wall voids are to be cleaned as far as reasonably practicable and then sealed. AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'grip fill'.
166 Assembly	
020 store	Removal of AIB panels to ceiling boxing including the removal of the ceiling grid, paper lined pipe insulation and lighting. Environmental clean of the ceiling boxing to include the tops of the wall partitions to ensure all contaminants are removed.
021 store	
022 store	

	The wall voids are to be cleaned as far as reasonably practicable and then sealed.
023 switch	Removal of AIB debris and residue within the ceiling void including the removal of the ceiling grid and lights. The wall voids are to be cleaned as far as reasonably practicable and then sealed. AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'grip fill'.
018 store (tank)	Full environmental clean of the tank room to include the removal of the residue to the walls and the insulation to the 1no. Pipe. All other insulated pipes within the tank room should also be stripped to ensure any minor residual residue beneath the non-asbestos insulation is also removed. Removal of the high level paper lined insulation should also be carried out.

Building A Part 2 Ground Floor (2 storey Block) – Asbestos remediation

Area	Works
073 Circ	Erect a polythene seal to the entry door leading from 073 and into the corridor 071 of the 2 storey block
073 Circ	Erect a ply board hoarding in front of the polythene seal which must be fully hinged
034 Classroom	Removal of AIB ceiling tiles including the present ceiling grid and lighting. Environmental clean of the ceiling void to include the removal the paper lined pipe insulation and the tops of the wall partitions to ensure all contaminants are removed. The wall voids are to be cleaned as far as reasonably practicable and then sealed. AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'gripfill'.
038 G WC & 037 store	
041 B WC, 040 Store & 042 store	
064 Classroom	
066 classroom	
072 classroom	
033 Circ	Removal of AIB debris and residue within the ceiling void of the corridor including the removal of the ceiling grid and lights, paper lined and contaminated pipe insulation and the tops of the wall partitions to ensure all contaminants are removed followed by a complete environmental clean of the ceiling void. The wall voids are to be cleaned as far as reasonably practicable and then sealed. Where AIB panels are present within the void these are to be encapsulated. AIB wall panels and infill to columns are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'gripfill'.
156 office, 157 store & 158 Wc	Removal of AIB debris and residue within the ceiling void including the removal of the ceiling grid and lights, paper lined pipe insulation and the tops of the wall partitions to ensure all contaminants are removed followed by a complete environmental clean of the ceiling void. The wall voids are to be cleaned as far as reasonably practicable and then sealed. AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'gripfill'.
159 office	
161 F WC	
161 M WC	
162 office	
163 SEN	
164 Repro	
165 Office	
071 circ	
065 Circ	
035 circ & 068 office	
043 circ	
044 circ	
045 classroom	
046 classroom & 047 office	
048 classroom	
049 classroom	

Building A Part 2 First Floor (2 storey Block) – Asbestos remediation

Area	Works
186 Circ	Erect a polythene seal to the entry door leading from 186 circ the link bridge into the newly constructed block
186 Circ	Erect a ply board hoarding in front of the polythene seal which must be fully hinged
176 Classroom	Removal of AIB ceiling tiles including the present ceiling grid and lighting. Environmental clean of the ceiling void to include the removal the paper lined pipe insulation and the tops of the wall partitions to ensure all contaminants are removed.
209 store	
208 store	
206 store	The wall voids are to be cleaned as far as reasonably practicable and then sealed.
205 store	
177 circ	Heater cupboard are to be removed in their entirety within 182, 184, 179, 201, 203, 178, 175 and 211
180 store	
181 circ, 200a & 200	
200	

182 classroom	AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'gripfill'.
183 store	
184 ICT	
185 Library	
210 classroom	<p>Removal of AIB debris and residue within the ceiling void including the removal of the ceiling grid and lights, paper lined pipe insulation and the tops of the wall partitions to ensure all contaminants are removed followed by a complete environmental clean of the ceiling void.</p> <p>The wall voids are to be cleaned as far as reasonably practicable and then sealed.</p> <p>Heater cupboard are to be removed in their entirety</p> <p>AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'gripfill'.</p>

Building A Part 3 (Science Block) – Reinstatement

Area	Works
082 Circ & 081 M WC	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified, specifically to 086 and 129. Checks also to be carried out on internal gutters and drainage pipes.
084 Circ & 085 F WC	
086 B WC	
129 G WC & 180 Circ	
083 Circ	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. If the new ceiling cannot be fixed to the remaining old ceiling, the full corridor ceiling must be reinstated (62m2). Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes.
083a Circ	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. If the new ceiling cannot be fixed to the remaining old ceiling, the full corridor ceiling must be reinstated (62m2). Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes.
125 Circ	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes.

Building A Part 1 SEN (Former Music Block / Community Centre and Hall section) – Reinstatement

Area	Works
026 G Chg & 030 B Chg	Erect a timber hoarding to the sealed off section within the changing rooms 026 and which must be hinged and bolted
167 classroom	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. If the new ceiling cannot be fixed to the remaining old ceiling, the full ceilings must be reinstated (102m2). Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes.
168 circ	
170 classroom	
171 music	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes.
172 music	
173 kitchen & 174 store	
001 Music	
005 circ	
002 M WC	
003 F WC	
004 Music	
006 Office	
007 Dining	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes. AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'grip fill'.
166 Assembly	
020 store	Reinstate new ceiling boxing to enclose the pipe runs, including new grid, lights, pipe insulation and wiring where required. Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. Checks also to be carried out on internal gutters and drainage pipes.
021 store	
022 store	

	The wall voids are to be cleaned as far as reasonably practicable and then sealed.
023 switch	Reinstate new ceiling tiles including new grid, lights, pipe insulation and wiring where required. Re-decorate where necessary. Patch repairs to be carried out to roof where leaks have been previously identified. The wall voids are to be cleaned as far as reasonably practicable and then sealed. Checks also to be carried out on internal gutters and drainage pipes. AIB wall panels are to remain in situ, however these are to be over boarded post removal works and are to be fixed with 'grip fill'.
018 store (tank)	Re-instate insulation to all pipes. Re-decorate where necessary to ensure the entire tank room is encapsulated and visually similar

Building A Part 2 Ground Floor (2 storey Block) – Reinstatement

Area	Works
073 Circ	Erect a timber hoarding to the sealed off section which must be hinged and bolted
034 Classroom	Reinstate new ceiling tiles to all areas including new grid, lights, pipe insulation and wiring where required.
038 G WC & 037 store	
041 B WC, 040 Store & 042 store	Re-decorate where necessary.
064 Classroom	Patch repairs to be carried out to internal gutters drainage pipes and roof.
066 classroom	
072 classroom	
033 Circ	
156 office, 157 store & 158 Wc	
159 office	
161 F WC	
161 M WC	
162 office	
163 SEN	
164 Repro	
165 Office	
071 circ	
065 Circ	
035 circ & 068 office	
043 circ	
044 circ	
045 classroom	
046 classroom & 047 office	
048 classroom	
049 classroom	

Building A Part 2 First Floor (2 storey Block) – Reinstatement

Area	Works
186 Circ	Erect a timber hoarding to the sealed off section which must be hinged and bolted
176 Classroom	Reinstate new ceiling tiles to all areas including new grid, lights, pipe insulation and wiring where required.
209 store	
208 store	Re-instate a new heating system following the removal of the hot air heaters 182, 184, 179, 201, 203, 178, 175 and 211. It may be possible to contact with the existing radiator heating system
206 store	
205 store	
177 circ	
180 store	Re-decorate where necessary.
181 circ, 200a & 200	
182 classroom	Patch repairs to be carried out to roof where leaks have been previously identified.
183 store	
184 ICT	Checks also to be carried out on internal gutters and drainage pipes.
185 Library	
210 classroom	
211 office	
175 classroom	
207 classroom	
203 classroom	
201 classroom	
202 circ	
178 office	
179 classroom	
186 circ	

5.2 The following budget costs were based on the average of the 3no. estimates received:

Phase 1 Timescales: <i>(Asbestos remediation to the SEN (former music / Community Centre and hall building and science blocks)</i>	28 days
Phase 2 Timescales: <i>(Asbestos remediation to the Double Storey block and tank room)</i>	45 days
Removal Costs: <i>(Inclusive of all management fees)</i>	£383,800.00
Reinstatement Costs:	£281,350.00
Porta Cabin Hire Costs:	£297,225.08
<u>TOTAL</u>	<u>£962,375.08</u>

Optional Extras

Budget cost quotations were also obtained for curtain walling and the installation of a new roof.

Curtain Walling Costs:	£325,350.00
Replacement Roof Costs:	£297,225.08

5.3 The following budget costs were based on the highest estimate received:

Phase 1 Timescales: <i>(Asbestos remediation to the SEN (former music / Community Centre and hall building and science blocks)</i>	40 days
Phase 2 Timescales: <i>(Asbestos remediation to the Double Storey block and tank room)</i>	70 days
Removal Costs: <i>(Inclusive of all management fees)</i>	£432,192.00
Reinstatement Costs:	£317,843.00
Porta Cabin Hire Costs:	£297,225.08
<u>TOTAL</u>	<u>£1,047,944.08</u>

Optional Extras

Budget cost quotations were also obtained for curtain walling and the installation of a new roof.

Curtain Walling Costs:	£325,350.00
Replacement Roof Costs:	£297,225.08

There is a possibility to reduce the budget quotations as the porta cabin hire is inclusive of numerous optional extras that can be potentially reduced once a final project scope has been agreed.