

METHOD STATEMENT

Demolition of the Teaching Block

West Notts College, Chesterfield Road, Mansfield, NG19 7BE



Cawarden, Scotland Farm, Far Lane, Ockbrook, Derby, DE72 3RX



Method Statement Author: Daniel Johnson

CONTENTS

1.	PREAMBLE & GENERAL DESCRIPTION OF THE WORKS	3
	Work Introduction	3
	Sequence of Work	4
	Health & Safety Information, Instruction & Consultation	4
	Access & Egress	6
	Site Security & Public Protection	7
	Public Highways	7
	Services	8
	Asbestos Containing Materials	9
	Environmental Monitoring	.10
	Overall Project Schedule	.10
2.	INTERNAL STRIP OUT	.11
	Pre-requisites	.11
	Personnel Requirement	.11
	Equipment Required	.11
	Personal Protective Equipment	.11
	Method of Work	.12
3.	DISMANTLING STONE PORTICO FACADE	.14
	Pre-requisites	.14
	Personnel Requirement	.14
	Equipment Required	.15
	Personal Protective Equipment	.15
	Method of Work	.16
4.	ASBESTOS CEMENT ROOF SHEET REMOVAL	.16
	Pre-requisites	.16
	Personnel Requirement	.16
	Equipment Required	. 17
	Personal Protective Equipment	.17
	Method of Work	. 18
5.	STRUCTURAL DEMOLITION OF BUILDINGS	.19
	Equipment Required	.19
	Personal Protective Equipment	.19
	Pre-requisites	.20
	Demolition Sequencing Plan	.20
	Method of Work	.20
6.	SUBSTRUCTURE REMOVAL & CRUSHING	.24
	Pre-requisites	.24
	Personnel Requirement	.24
	Equipment Required	.24
	Personal Protective Equipment	. 25
	Method of Work – Removal of slab, foundation and footings	. 25
	Method of Work – Crushing	.26
7.	COMPLETION ARRANGEMENTS	. 27
8.	SITE-SPECIFIC ASSESSMENTS	. 28
9	AMENDMENT TO METHOD STATEMENT	.35

Г

Project Particulars				
Completed by Daniel Johnson (Demolition Engineer)				
Checked by	(Site Manager)			
Approved by	Sam Crooks (Contracts Director)			
Date Prepared	12 th Dec 2023			
Demolition Start Date	2 nd Jan 2024			
Client	Cleggs			
Contact Stuart Crofts				
	07712 671635			
	Stuart.crofts@clegggroup.co.uk			

Document Review				
Rev 0	Original document	12 th Dec 2023		

-

1. PREAMBLE & GENERAL DESCRIPTION OF THE WORKS

Work Introduction

This method statement generally includes: -

- Internal strip out
- Complete asbestos removal (most ACMs have been cleared previously)
- Carryout splits away from Ashfield House
- Demolish buildings
- Removal of slabs, foundations, and footings
- Site crushing



The Site Manager is tbc Contact Information: Email:

The Contracts Manager is Sam Crooks Contact information: 07973 320720 Email: <u>s.crooks@cawarden.com</u>

The HSEQ Manager is Andy Radford Contact information: Email: <u>a.radford@cawarden.com</u>

Sequence of Work

Refer to the tender stage work programme.

- 1. Complete strip out including bat inspection works with licensed bat worker
- 2. Demolish adjoining buildings to complete splits away from Ashfield House
- 3. Demolish main buildings including asbestos removal where applicable
- 4. Recover the stone façade to the portico entrance and hand back over to Cleggs
- 5. Remove slabs, foundations, footings
- 6. Crush the material arisings

Prior to starting any work, all demolition personnel are to read/be briefed in this method statement with supporting risk and COSHH assessments and sign onto the method statement acknowledgement page once all requirements have been fully understood and accepted. Should a particular area not be understood or accepted, speak to the Site Manager/Supervisor.

Site Managers/Supervisors are permitted to make amendments to the method statement document, once authorisation has been obtained from a member of senior management. Amendments are recorded to the rear of this method statement and must be countersigned by all Cawarden operatives partaking in the work.

Health & Safety Information, Instruction & Consultation

Induction: All personnel wanting access to site (including visitors) are to receive a sitespecific safety induction where all site rules, procedures and stipulations will be discussed. As Principal Contractor the induction will be provided by Cleggs project/site manager or his designated representative. Upon completion of the induction, all personnel must sign into the register confirming they understand and will follow all requirements. All visitors are to be escorted whilst on site.

Site Register: A site register will be maintained for all persons coming onto site. The site register will be held in the Cleggs site office/canteen. All persons will be expected to sign in upon arrival and sign out when leaving the site. Cawarden will maintain a sign in register for our own records.

Permits: All work activities will be controlled by use of a permit to work system. The permit to work will be generated by the Cleggs project/site manager and issued to the Cawarden site supervisor/manager before starting the task. The permit will detail all requirements and stipulations for the safe of the operation of the task and must be 'signed off' at the end of the day or upon completion of the task. The following permits will be needed:

-	Demolition handover permit/Isolation of services
-	Permit to dig

Daily Team Briefings: The Cawarden site supervisor/manager will issue daily work briefings to the entire team where tasks, work locations, associated risks and controls will be discussed. All operatives involved will be asked to sign onto the daily work briefing task sheet. This is in addition to any briefings issued by the Cleggs site management team.

Toolbox Talk: Toolbox talks will be provided to the work team by the Cawarden site supervisor/manager. They will be provided on at least a weekly basis and will cover a specific task/activity or issue relevant at the time.

Third Party Engagement: Cleggs will undertake all third-party engagement to the existing school, residents on Paulsons Drive, West Hill Avenue and Clifton Place. No site traffic will use Paulsons Drive at any time. Cleggs will pay particular attention to the West Hill Avenue neighbours as one of the buildings to be demolished directly abuts the gardens - party wall awards maybe required to include access into the gardens to facilitate the safe demolition of the structure. Cawarden will work with Cleggs (where required) and will programme the demolition of this building accordingly.

First Aid at Work: See the following for First Aid at Work:

- Cawarden site management team is first aid at work trained
- Cawarden site office is the location of the first aid box and accident book
- All first aid events are to be entered into the site accident book & reporting procedures
- In event of an accident, incident or near miss contact the Cawarden site manager immediately.
- Cawarden site supervisor to notify the Cawarden HSEQ Manager / Demolition Director of all accidents, incidents and near misses who will instigate the investigation process.
- Call <u>999</u> in the event of an emergency.
- The nearest A&E is: Kings Mill Hospital, Mansfield Road, Sutton-in-Ashfield, NG17 4J



Access & Egress



Vehicles



Vehicle access onto site is via the existing West Notts College entrance off Chesterfield Road. Head in a South-North direction along Chesterfield Road before accessing the College entrance via a right-hand turn. Avoid entering the College in the opposite direction due to restricted entrance space and turning area into site.



Follow the existing West Notts College access road, through the barrier system and to the demolition site area that is located at the rear. Note that the existing College building will remain operational and in use throughout therefore Cawarden traffic will maintain safe speed limits and traffic rules (as per Cleggs traffic management plan).



Access through Paulsons Drive shall be avoided at all times. This is a no-go area **especially for HGVs.**

Pedestrians

Cleggs will set up the site compound and demolition area to include plant-pedestrian interface zones and crossing areas. Cawarden operatives to follow the existing safe havens and routes set up by Cleggs.

Welfare

Cleggs will set up Ashfield House as the welfare area. Cawarden will continue to use Ashfield House throughout the demolition. Respect all facilities that have been provided to you. Clear waste to bins and clean pots/cutlery as they are used.

Welfare compound to be the site muster point location. Fire point to be located adjacent to the welfare compound. Accident book & first aid medical kit to be located inside the site managers office. The gates into the site will be always locked.

Site Security & Public Protection

Cleggs will set up the perimeter CDM area using hoarding/fencing. Cawarden will place sign boards around the perimeter fencing:

- Danger Demolition Keep Out

Cawarden will set up internal Heras fence and barrier demarcations to set up individual work zones and provide clear lines of segregation away from other activities being carried out on the site:

	Activity	Comments
Green Zone	Welfare area	No PPE. No restrictions
		Established by Cleggs
Amber Zone	Strip out	Full PPE (in accordance with task
	Asbestos removal	RA), Heras fence/pedestrian barrier
	Slab removal	exclusion zones with controlled
	Crushing	access points
Red Zone	Demolition of buildings	Access to demolition plant operators
		only. Heras fence exclusion

Public Highways

A monitoring/inspection regime will be undertaken along the surrounding road network, making sure no dirt/debris has been transferred there from the site. An HGV inspection point

CAWARDEN METHOD STATEMENT

will be set up at the site exit where tyres/wheels and bodies will be inspected (and washed down where needed) prior to entry onto the highway. A road sweeper will be deployed where dirt/mud has been transferred onto the road.

Live drains will be protected using terram / plates / sandbags to prevent dirt / dust and debris from the demolition contaminating the drainage system.

Services

The following services have currently been identified onsite:



Cleggs site manager will ensure all services into Building have been disconnected outside the site boundary at safe points prior to commencement of demolition work and all assurances, certification and handover permits in place to substantiate this.

This will be controlled by way of hold points for the Cleggs site manager to sign. No further work to progress until services have been disconnected and **Hold Point** completed/signed. Hold points to be signed once:

- Physical disconnection of service supplies has been witnessed and/or
- Client / stats providers have confirmed by email or provided disconnection certificates to confirm disconnections and/or
- Independent specialist contractors and engineers have been brought in and confirmed disconnections have taken place

Hold Point (to sign) prior to start of the Demolition						
	Cleggs Site Manager to sign when isolated	Date	Comments			
Gas						
Electric						
Water						
BT/comms						
Drains						
Air-Con						

Asbestos Containing Materials

A pre-demolition asbestos survey has been completed by Acorn – confirm all areas have been inspected and there are no exclusions in the reports. All licensable asbestos materials have been removed previously by the Clients asbestos abatement team. Cawarden will require all 4-stage air clearances and certificates of reoccupation. Cleggs to identify and relay back to the Cawarden team the asbestos removal work scope as part of our works onsite – at this point assumed cement roof sheets and rope seal to windows.

Survey by	Report Reference	Da	ite
Acorn Analytical Services	B-36461s2 B-36545 B-36546 B-36548 B-36549	28 th June 20 7 th April 202 7 th April 202 8 th April 202 8 th April 202)22 2 2 2 2 2
Licensed Asbestos Has licensed asbestos been identified on si	Y	Ν	

All licensed ACMs removed previously – reoccupation certs required.

Job Name: Demolition of Teaching Block – West Notts College

Document Number: 3549

Non-Licensed Asbestos Has non-licensed asbestos been identified on site	Y	Ν			
Asbestos cement sheets to workshop roof Asbestos rope seal to roof window bars Cleggs to confirm any further ACMs remaining	Asbestos cement sheets to workshop roof Asbestos rope seal to roof window bars Cleggs to confirm any further ACMs remaining				
 Discovering Further ACMs Should further suspect asbestos materials over and above those is survey reports the following course of action will be taken: - Stop work immediately. Inform the Site Manager/Supervise Make the area safe; secure doors; place signs on doors. If asbestos has been disturbed externally; Don type 5/6 dis filtered half mask and use a polythene sheet to cover the d Weight down at the ends and corners. Site Manager/Supervisor to notify Senior Management Plan to have the material sampled and tested by trained performed to the area until remedial actions have taken place of Anyone exposed to asbestos will be decontaminated using Carefully remove contaminated clothing inside out and char where possible, bag up and dispose contaminated clothing Inform the HSEQ Manager for further advice & recording or supervisor is provided. 	dentified with or sposable cove listurbed asbe ersons. & area confirr g damp rags a inge into clea g as an asbes f the asbesto	in the eralls, p3 estos. med safe. and cloths. n clothes tos waste. s exposure.			

Environmental Monitoring

A scheme of ongoing Noise, Vibration and Dust monitoring is in place throughout the demolition operations.

Noise – Cawarden operatives to wear hearing protection when within 10m of operational plant. Hearing protection to be always worn when using handheld demolition breakers during manual demolition of walls and when operating stihl saws, recipe saws and mechanical hand tools.

Vibration – The use of mechanical hand tools (handheld demolition breakers during manual demolition of walls) will be subject to onsite HAVS assessment. Obtain maximum trigger time readings of the tools being used and ensure personal trigger time is recorded so that maximum trigger times are not exceeded. A job rotation system will be employed 15 mins on – 15 mins off. Lined gloves will be worn to keep hands warm and maintain circulation.

Dust – Dust boss/atomiser unit to be used to suppress airborne dust during the mechanical demolition or man with hose sprayer directed at source of dust.

Overall Project Schedule

Work programme:

- Start date: 2nd Jan 2024
- Completion date: 23rd Feb 2023
- Duration: 8 weeks

Day Hours of work will be:

- Monday-Friday: 7.00am-5.00pm
- Saturday: No work unless agreed and authorised by senior management
- Sunday & Bank Holidays: No work
- Breaks to be confirmed on site by the Site Manager

CAWARDEN METHOD STATEMENT

2. INTERNAL STRIP OUT

Pre-requisites

- Floor duct covers have not been replaced following asbestos removal work. Board over and protect the floor openings prior to commencing the strip out.
- Make sure lighting levels inside the building is suitable set up additional lighting to illuminate the work area and access/egress routes
- Reoccupation certificates to be in place before starting the strip out.
- Services have been disconnected at safe points.
- An Amber exclusion zone will be set up during internal strip out works.

Personnel Requirement

The following personal resources will be used: -

- 1 x Demolition Site Manager/Supervisor (SMSTS/SSSTS or CCDO Black/Gold Card)
- Up to 6 x Demolition Operatives (CCDO/CSCS & Asbestos Awareness qualified)
- 1 x cherry picker operator
- 1 x licensed bat worker (Clegg appointed)

Copies of all training documents are to be kept within the site office for inspection. The training matrix will be kept on site and used to plan work activities.

Equipment Required

The following equipment will be used: -

- Mobile tower scaffold/podium
- Mobile elevating working platform cherry picker
- 110v Task lighting, generator and leads
- Barriers and signs and boards
- Hand tools (pry bars, hammers, brushes, shovels, spanners/socket sets)
- Mechanical hand tools
- Waste Skips

All tools, equipment and machinery to be used will have in date testing and this will be on site within the site managers office.

A daily pre use inspection will be carried out by the user of the tool, equipment and machinery and recorded on Cawarden inspection form.

Personal Protective Equipment

The following PPE will be used: -

Θ	Safety helmet at all times		When handling rockwool / insulation
	Hi visibility vest at all times	The second se	During bat inspection works with licensed bat worker

	Safety boots with steel toe cap and mid-sole protection (non rigger) at all times		During manual handling		
	When operating mechanical hand tools		Impact goggles when operating mechanical hand tools		
	When handling rockwool / insulation				
All PPE will be obtained from the site manager and recorded in the site PPE					
acknowledgement form. All operatives are to use and store PPE as instructed and trained.					

Method of Work

Temporary Lighting – Temporary task lighting will be established in the building where required. An assessment will be undertaken by the Cawarden supervisor when onsite. Access/egress points will be illuminated at all times.

M&E Equipment – Use bending methods to break up or (where needed) stihl saw/recipe saw to cut copper piping into small man-manageable lengths and take to transport for disposal. Operator to inspect the stihl saw and recipe saw daily before use. Hear defenders and eye protection to be worn whilst using these tools. Recipe saw is to be operated from a 110v power supply or battery powered. Windows and doors to be opened when using the stihl saw. Stihl saw refuelling point is to be at a safe point away from combustible materials. Follow all HAVS maximum trigger times stipulated on the stihl saw/recipe saw. Record all personal HAVS exposures on Cawarden forms.

Lighting Strips - Fluorescent tubing will be found in lighting products and will be removed by hand before any of the ceilings or fixing have been removed. Podium/tower scaffold and MEWP will be used as access up to the lighting strips. The tubes will then be passed down to ground and put into coffins or stockpiled at a safe designated point prior to disposal from site. If stockpiled, tape into tube bundles.

Suspended Ceilings - The ceilings will be taken down by an operative working from the safety of a podium. Any operative carrying out this task will wear a 'face fit' mask because there has been a significant build-up of dust located on ceiling materials. Ceiling tiles will be removed first with access from the podiums/tower scaffolds and taped into man-manageable stacks before removal into skip. Where rock wool insulation is present, bag up as works progress and take to skip. Once the ceiling tiles have been removed using croppers or snips the operatives will cut the steel framed ceiling down working from one side of the room to the next before taking to light iron skip for disposal.

Carpet & Carpet Tiles - Carpets will be cut into strips using safety knives to reduce manual handling, rolled up and tied before being taken to skip for disposal. Carpet tiles are to be prised up using pry bars & stacked in tidy piles ready for the operatives to load away into skips.

Stud Walls - Prising bars will be used to remove the stud wall plasterboard covering by prising away nail fixings from the timber/steel partitions. Remove the plasterboard in full panels, keeping breakages to a minimum and take to gypsum skip for disposal. Once the

plaster has been removed the steel or wooden frame will be knocked out by hammers. Knock the uprights out and manually pull away from the remainder of the frame. Flatten nails upon removal. Take the timber / steel to separate waste skip for disposal.

Doors and Frames - Use a prising bar to remove the door at the hinges or use screwdriver set to carefully remove the screws. A second operative will hold the door whilst it is being removed. Use team lift methods and take the door to skip for disposal. Use a sledgehammer at the base of the door frame to loosen & prising bar to remove the frame from the brick/block work fixings. Flatten the nails and take to skip for disposal.

Skirting Boards – Skirting boards will be removed by operatives using prising bars. Working along the skirting board, prise away nail fixings from the block/brick wall. Flatten any exposed nails and take the skirting board to skip for disposal.

Curtains & Blinds - Manually unclip curtains away from poles/rails using podium/tower scaffold for access. Use a pry bar to prise away timber poles, battens and blind rails from block/brick fixing points. Take to skip for disposal, keeping timber separate.

Bat Inspection Works – An ecology report has been undertaken by Quants Environmental and the following recommendations provided:

Whilst no evidence of bat roosting activity was recorded during the survey with the building recorded to hold features suitable for roosting bats it would be recommended that works are completed in accordance with the following:

Ensure all construction personnel are aware of the findings and working practices detailed within this report (Quants ecology report dated Sept 2021 report reference 1592 issue 2).
Immediately before the commencement of works, the licensed bat ecologist (to be appointed through the main client/Cleggs) will provide a toolbox talk to the contractors explaining the potential presence of bats, their legal protection, roles and responsibilities, the proposed method of working and procedures should bats or evidence of bats be found.
The removal of any roof tiles or other features suitable for roosting bats, as shown in Figure 2, should follow a 'soft strip' approach with such works undertaken in a controlled manner by hand / hand tools under the supervision of a suitably qualified ecologist (holding a Natural England Class 2 Bat Survey Licence). Cawarden will undertake the controlled roof strip working from a cherry picker with careful instructions from the licensed bat worker. A single bat box should be installed in a tree on site prior to the commencement of

development works; this should be installed under the supervision of the ecologist.
In the unlikely eventuality of a bat or evidence of bats such as droppings being found during development works, the contractors should stop immediately and contact Quants Environmental Ltd. Should a bat be discovered during the construction works, all works would cease until Quants Environmental Ltd have liaised with Natural England on the subsequent development procedures and licencing requirements.

• Contractors must avoid handling a bat where possible, and should a bat be discovered during development works the bat should be allowed to disperse on its own accord, or wait for the licensed handler to collect the bat. If it is necessary to remove a bat to avoid it being harmed, gloves MUST be worn. It should be carefully placed in a cardboard box and kept in the dark in a quiet place until the licensed ecologist arrives on site.

• It would be recommended that 4no. artificial bat boxes/bricks be installed on the new building. These should be positioned on the south, west or eastern elevations of the building, > 4 m from ground level and away from artificial lighting and dense vegetation. The ecologist should confirm the exact locations for the bat bricks/boxes when the proposed elevations plans are available.

Figure 2. Showing the locations of the identified bat roost potential features. Red letters (A, B, C and D) show the surveyor locations during the dusk emergence survey (26/08/2021).



Work at Height – Where work at height is necessary during the internal strip out, a tower scaffold or podium will be used. Where tower scaffold is used, the person installing, inspecting and disassembling the tower will be PASMA trained.

A cherry picker will be used to access the roof to strip the tiles and roofing elements to inspect for bats as per the licensed bat worker instructions and guidance. The cherry picker will be located on firm, solid and compact ground and will be operated by IPAF trained persons only. All persons inside the MEWP basket will wear work restraint safety harness system that will be clipped back to a fixed anchor point in the MEWP. A ground man will be positioned at a safe point near the MEWP. The ground man will help lower the basket should the top controls fail using the auxiliary controls or notify the supplier should all controls fail.

3. DISMANTLING STONE PORTICO FACADE

Pre-requisites

- An Amber exclusion zone will be set up during internal strip out works.
- These works will be coordinated with other works being carried out at the same time to manage interface. Relay risks and mitigations during daily pre-start briefings.

Personnel Requirement

The following personal resources will be used: -

• 1 x Demolition Site Manager/Supervisor (SMSTS/SSSTS or CCDO Black/Gold Card)

CAWARDEN METHOD STATEMENT

• 3 x Demolition Operatives (CCDO/CSCS & IPAF MEWP & telehandler operator)

Copies of all training documents are to be kept within the site office for inspection. The training matrix will be kept on site and used to plan work activities.

Equipment Required

The following equipment will be used: -

- MEWP
- Telehandler
- Strops/lifting accessories.
- Barriers and signs and boards
- Hand tools (hammers, chisels, bars)
- Mechanical hand tools (grinder, recipe saw)
- Pallets and shrink wrap

All tools, equipment and machinery to be used will have in date testing and this will be on site within the site managers office.

A daily pre use inspection will be carried out by the user of the tool, equipment and machinery and recorded on Cawarden inspection form.

Personal Protective Equipment

The following PPE will be used: -

\mathbf{O}	Safety helmet at all times			
	Hi visibility vest at all times		When using cherry picker type MEWP	
	Safety boots with steel toe cap and mid-sole protection (non rigger) at all times		During manual handling	
	When operating mechanical hand tools		Impact goggles when operating mechanical hand tools	
	When exposed to silica dust			
All PPE will be obtained from the site manager and recorded in the site PPE acknowledgement form. All operatives are to use and store PPE as instructed and trained.				

Method of Work

- Access up to the work area will be by MEWP – all persons working inside the cherry picker basket are to wear work restraint harness clipped back to a safe anchor point inside the MEWP.
- Observe and follow all MEWP SWL limits.
- The loose (light weight) coping stones at the top will be removed manually and placed into the MEWP basket.
- Lower to ground and move to a storage area (as agreed with Cleggs)



- where coping stones will be palletised.
- Work down the stone façade row by row from top row down. Avoid damaging/chipping the stonework as it will be reused during the construction of the new College building.
- Use hammer and chisel to loosen and split any lime mortar between stone blocks to release the stone work.
- Larger blocks and stone column sections will be slung using 1-2t sling fixed back to the telehandler dedicated lifting point and all slack taken up prior to separation and lowering down to ground. Ensure the load is secure and the area surrounding the lift clear prior to lowering the stone section to ground.
- The telehandler legs will be extended and planted on the ground prior to setting up the slinging arrangements. Only raise the legs once the telehandler boom has been retracted fully.
- Use mechanical hand tools (grinder and recipe saw) to cut through any dowels any connections between stone blocks.
- Continue to move stone pieces to storage area and palletise. Shrink wrap the stone pallets to secure.

4. ASBESTOS CEMENT ROOF SHEET REMOVAL

Pre-requisites

- An Amber exclusion zone will be set up during internal strip out works.
- Set up a decontamination area to wipe/wash down on completion of the work as per asbestos essentials EM7/EM8.
- Don type 5/6 disposable coveralls and p3 filtered half mask decontaminate and remove at a safe designated area prior to breaks and end of the shift.
- Cawarden site manager to make sure asbestos removal operatives have CAT B training, face fit tested and clean shaven.

Personnel Requirement

The following personal resources will be used: -

CAWARDEN METHOD STATEMENT

Job Name: Demolition of Teaching Block – West Notts College

Document Number: 3549

- 1 x Demolition Site Manager/Supervisor (SMSTS/SSSTS or CCDO Black/Gold Card)
- 3 x Demolition Operatives (CCDO/CSCS, cat B asbestos removal, face fit test, telehandler operator)

Copies of all training documents are to be kept within the site office for inspection. The training matrix will be kept on site and used to plan work activities.

Equipment Required

The following equipment will be used: -

- Telehandler
- Mobile tower scaffold
- Barriers and signs
- Hand tools (bolt cutters)
- Mechanical hand tools (grinder)
- Asbestos waste skip

All tools, equipment and machinery to be used will have in date testing and this will be on site within the site managers office.

A daily pre use inspection will be carried out by the user of the tool, equipment and machinery and recorded on Cawarden inspection form.

Personal Protective Equipment

The following PPE will be used: -

Θ	Safety helmet at all times		Type 5/6 disposable coveralls	
	Safety boots with steel toe cap and mid-sole protection (non-rigger) at all times. Non lace ups		During manual handling	
	When operating mechanical hand tools		Impact goggles when operating mechanical hand tools	
	With ffp3 filter			
All PPE will be obtained from the site manager and recorded in the site PPE acknowledgement form. All operatives are to use and store PPE as instructed and trained.				

Job Name: Demolition of Teaching Block – West Notts College

Document Number: 3549

Method of Work

- These works will commence following the internal strip out to clear the floor area.
- Access up to the underside of the asbestos cement roof sheets will be by way of mobile tower scaffolding – PASMA trained person only to set up as per manufacturer instructions.
- Prior to removal of the asbestos cement sheets, remove any non-asbestos under boarding and move to general waste skip for disposal.
- The asbestos cement materials will be sprayed with fibre suppressant solution around its fixing points before being removed.
- Asbestos cement sheet removal work will commence from one side of the building at apex level. Works will commence from the side of the roof where the AC sheet overlaps (not underlaps) the next sheet.
- Using bolt cutter tool / 110v or battery grinder cut all 'J' bolts fixings to release the asbestos cement sheet.
- Push the sheet upward to release it from its fixing point on the roof and slide down onto the sheet below so to provide clear access to the asbestos cement ridge sheet above.
- Cut remaining bolts to the ridge sheet, remove from the roof and pass down to further operatives at ground level who will transport the ridge sheet outside to dedicated asbestos skip for disposal.
- Slide the loose asbestos cement top sheet from the roof and pass down to ground level where further operatives will handle and move the asbestos cement sheet and move outside to asbestos skip for disposal. Avoid breakages, remove the sheet whole.
- Use rope with hook attachment to safely lower the asbestos cement sheets to ground where needed.
- Repeat removing the asbestos ridge sheet & top sheet along the length of the roof until complete.
- Remove the remaining asbestos cement sheets one sheet at a time, and in a row-byrow sequence, working from one end of the roof to the opposite end, until all asbestos cement sheets have been removed.
- Once the first side of the roof is complete, repeat to the opposite side as described above.
- Avoid overloading the tower scaffold keep within the SWL limit indicated.
- Use the telehandler where possible to mitigate manual handling risks from lifting and moving the asbestos cement sheets to skip for disposal.
- The asbestos cement materials will be moved to skip regularly for disposal. Avoid stockpiling the asbestos cement material once removed from the roof.
- The asbestos cement sheets will be laid/stacked carefully into the skip whole (in full sheet) by opening the skip rear door.
- Upon completion, decontaminate and remove disposable coveralls before bagging up and disposing as asbestos waste. Wipe down all RPE.
- The asbestos cement skip will be removed off site under waste consignment note once full (or once all sheets have been removed and asbestos removal works completed). Take to licensed hazardous waste tipping facility for landfill disposal. Duty of care notes will be passed onto Cleggs.

5. STRUCTURAL DEMOLITION OF BUILDINGS

Personnel Requirement

The following personal resources will be used: -

- 1 x Demolition Site Manager/Supervisor (SMSTS/SSSTS or CCDO Black/Gold Card)
- 2 x Demolition Operatives (CCDO/CSCS & Asbestos Awareness qualified)
- 1 x Demolition Plant Operator (CPCS D90)

Copies of all training documents are to be kept within the site office for inspection. The training matrix will be kept on site and used to plan work activities.

Equipment Required

The following equipment will be used: -

- 8-10t demolition machine with concrete cracker/pulverisor tool
- Demolition machine with concrete cracker/pulverisor tool
- Mobile tower scaffold
- MEWP
- Telehandler
- Dust boss suppression unit/hose pipe with water sprayers
- Double bunded diesel fuel storage container
- Oil spill containment kits
- Mechanical hand tools (handheld demo breakers)
- Heras fencing / barriers / signs
- Waste skips

All tools, equipment and machinery to be used will have in date testing and this will be on site within the site managers office.

A daily pre use inspection will be carried out by the user of the tool, equipment and machinery and recorded on Cawarden inspection form.

Personal Protective Equipment

The following PPE will be used: -

Safety helmet at all times	
Hi visibility vest at all times	When using cherry picker type MEWP
Safety boots with steel toe cap and mid-sole protection (non rigger) at all times	During manual handling
When operating mechanical hand tools	Impact goggles when operating mechanical hand tools



All PPE will be obtained from the site manager and recorded in the site PPE acknowledgement form. All operatives are to use and store PPE as instructed and trained.

Pre-requisites

- Make sure all services have been isolated/disconnected at safe points outside the boundary.
- All prior engagements have been undertaken with our neighbours and a party wall surveys/award completed by the client to the South boundary (West Hill Avenue) where required.
- Cawarden machine driver and supervisor to walk through the main building and ascertain location of all below ground basements, holes and voids. Note the boiler house to the East side.
- Together with Cleggs, carryout an investigation to the Ashfield House connection points where the splits are needed to form a divorce away from the demolition areas. Ensure the splits can be completed without the need for temporary work/propping.
- Cleggs are to board up all openings from Ashfield House into the demolition areas.
- A Red exclusion zone will be set up during demolition works.



Demolition Sequencing Plan

Method of Work

	Mechanical Demolition
1	Use an 8-10t demolition machine with concrete cracker tool to form the divorce away
	from Ashfield House. Fragment the RC roof and demolish the walls away from
	Ashfield House to form a minimum 1-2m separation. Where walls are found to be tied

CAWARDEN METHOD STATEMENT

into Ashfield House, create the 1-2m separation using by hand methods (using handheld demo breaker) and working from a tower scaffold or MEWP.



1	Note there is an underground boiler house/basement to the East side. The slab will
0	need breaking out and backfilling using the site won demolition material to allow the
	progression of works. DO NOT track the machine over suspended stabs.
	PAULSON'S DRIVE
	West Nottinghamshire
	College of Further Education
	TOWN VIEW
	Approximate
	H H I I I I I I I I I I I I I I I I I I
	Dasement Dasement
	A LITTUNE TOTAL SAL
1	The stope partice feeded will need to be carefully dismonthed by hand during the
1	demolition works to avoid damage as it is to be rebuilt during the new build as part of
	the planning process (See section 3).
1	Following the removal of the portico stone facade, the remainder of the building can
2	be mechanically demolished – refer to sequence 5 on the demolition sequence plan
	above.
1	The 2-storey section opposite Ashfield House will be demolished (sequences 6 and
3	7) once the single storey classrooms behind have been cleared and splits have been
4	created to form a divorce away from Ashfield House.
1	The work to demolish the 2-storey building will be carried out in a North-South
4	direction. Remove the North brick wall to open the building and cut down and remove
	the root in manageable sections. Do not remove too much of the root in one go as it
1	The East and West side outer brick walls will be removed mechanically, working back
5	to the existing roof line, with the arc of the demolition machine always slewing away
•	from Ashfield House. Remove the walls down to first floor level. Full demolition red
	zone exclusions will be in place surrounding Ashfield House. Windows will be moved
	to skip as the side elevations are reduced.
1	The West side wall (opposite Ashfield House) shall be grabbed and lowered in
6	manageable layers using selector grab attachment for a fully controlled demolition
	method rather than pulling and folding the wall over to ground.
1	The material from the demolition will be processed continuously and not allowed to
7	over accumulate. Waste will be moved to skip and disposed. Brick and concrete will
4	be added to stockpile for later crushing.
0	The first-floor area will be processed in-situ and ground floor brick walls reduced into
0	works. Bricks and concrete will be moved to crushing stockpile
1	The demolition machine will move onto the footprint of the 2-storey building and the
9	progressive demolition will continue working back to the South side that will be
5	reduced into the footprint of the building.

2 0	The steel ducting & M&E that is fixed back to the Southwest corner elevation will be grabbed using selector grab and eased over into the demolition footprint. Process once at ground level and move to scrap skip for disposal.
2 1	The warehouse (sequence 8) will be demolished once all asbestos cement roof sheets have been removed.
2 2	The West elevation (opposite the existing College entrance) will be closed off and the students re-routed during these works. Cawarden/Cleggs to speak to the College in advance to arrange closures.
2 3	Remove the North gable end to expose the roof. The steel roof will be cut down in sections, lowered to ground and downsized for disposal into scrap metal skips. The side wall elevations will be reduced into the building footprint as the works progress North-South and stockpiled for later crushing.
2 4	The warehouse opposite the neighbouring gardens will be the final structure to be demolished (sequence 9) – this will give sufficient time for Cleggs to ascertain and obtain any party wall agreements and confirm full scope as it is currently unclear how much of the party wall to the South side is to be removed. Ensure the neighbours are fully aware prior to these works starting so that exclusions can be put in place.
2 5	The boiler house at the West side to include brick chimney will be cleared in the first instance. The arc of the demolition machine will slew away from the residential buildings to always work away from the structure. Grab hold of the brick chimney and remove in manageable layers using selector grab attachment for a fully controlled demolition.
2 6	Use MEWP to access the roof slates and use to strip the section of roof opposite the neighbouring gardens. Slates will be removed, placed into the MEWP basket and lowered to ground within the CDM area. Remove all slates so there is no chance of slates sliding into the gardens during demolition.
2 7	Remove the brick West gable end elevation to open the structure and expose the roof.
2 8	Cut down and remove the steel trusses and purlin framework in sections, lowering to ground onto the building footprint for further processing to downsize into skip sections before moving to skip for disposal.

2	Grab a hold and remove in manageable sections the timber boarded roof, slewing
9	away from the neighbouring property and moving to wood skip for disposal (slates
	removed previously).
3	Continue to clear the window bars containing asbestos rope and remove/dispose the
0	asbestos rope (as per point 8 above) progressively from a safe quarantine area.
3	Following clearance of the roof and building where opposite the gardens, complete
0	the remainder of the demolition without restriction. Cawarden banksman will be
	positioned on Clifton Place to make sure slates do not slide onto the grass verge.
3	The South side brick wall (opposite the gardens) will be left in-situ at this juncture until
1	Cleggs and their engineers confirm if it is to be removed or remain. Once the extent
	of South wall removal works have been confirmed to Cawarden, reduce the wall brick
	by brick, course by course and from top course down. Access the wall from inside the
	building footprint working off MEWPs and tower scaffolds, using bars/hammers and
	handheld demolition breakers.

6. SUBSTRUCTURE REMOVAL & CRUSHING

Pre-requisites

- Work to be carried out under permit to dig from Cleggs
- CAT/genny cable avoidance equipment will be used to scan the floor slab making sure there are no rogue live cables prior to digging
- Dust suppression during crushing operations
- An Amber exclusion zone will be set up during these works

Personnel Requirement

The following personal resources will be used: -

- 1 x Demolition Site Manager/Supervisor (SMSTS/SSSTS or CCDO Black/Gold Card)
- 2 x Demolition Operatives (CCDO/CSCS & Asbestos Awareness qualified)
- 2 x Demolition Plant Operators (CPCS card qualified)

Copies of all training documents are to be kept within the site office for inspection. The training matrix will be kept on site and used to plan work activities.

Equipment Required

The following equipment will be used: -

- 2 x Standard demolition machine/excavators with attachments
- 1 x Mobile crusher
- 1 x Wheeled loading shovel
- 1 x Motofog / dust boss unit
- Double bunded diesel fuel storage container
- Oil spill containment kits
- Crowd Barrier / heras fencing / Signage

All tools, equipment and machinery to be used will have in date testing and this will be on site within the site managers office. A daily pre use inspection will be carried out by the user of the tool, equipment and machinery and recorded on Cawarden inspection form.

Personal Protective Equipment

The following PPE will be used: -

0	Safety helmet at all times		
	Hi visibility vest at all times	- F	
	Safety boots with steel toe cap and mid-sole protection (non rigger) at all times		During manual handling
All PPE will be acknowledgem	obtained from the site manag	er and recorded use and store P	in the site PPE PE as instructed and trained.

Method of Work – Removal of slab, foundation and footings

- These works will be carried out from East to West, with slabs ripped out following the building demolition work.
- Excavator fitted with hydraulic breaker attachment will break out the floor slab working from one end of the area to the opposite end. Puncture the slab at approximate 1-meter intervals to pre-weaken.
- Excavator to change to bucket attachment and proceed to dig out the loose floor slab, casting over to stockpile ready for crushing. Use a water supply to dampen dust as is necessary.
- Excavator with pulveriser attachment to pre-process the concrete where needed. Concrete to be added to stockpile, re-bar to be loaded into scrap transport.
- Excavate the soil around foundations and footings and stockpile nearby. Continue until the footings have been fully exposed.
- Use breaker attachment to break up footings before reverting to bucket to dig out and casting over to crushing stockpile. Excavate down to 1m below existing ground level.
- The retaining wall between the 2-storey and single storey structures will be broken up and excavated out with the land battered back to provide a gentle slope.
- Dig out & remove old drains as works move through, casting over to material stockpile. Note the drains to Ashfield House are to remain in-situ. Identify, maintain, and always protect the existing drains.



- Revert to ripper tooth attachment and proof dig the footprint, making sure there are no further ground obstructions down to 1m depth.
- Use the stockpiled soil and site won tested 6f2 crushed demolition material to backfill the basement, holes and level off where needed, using the machine tracks to compact and flatten.

Method of Work – Crushing

- Trained operative to move the mobile crushing unit to the stockpile location and set up as per manufacturer instructions.
- Excavator to make a ramp and use it to access the stockpile.
- Trained crusher operator to start the crusher.
- Excavator operator to load the crusher hopper steadily and consistently with the demolition material from the stockpile.
- Do not overfeed as this will create blockages in the jaws.
- Any oversize concrete identified within the stockpile will be quarantined and reduced in size by excavator with breaker. DO NOT place oversized concrete into the crusher hopper as this could create blockages.
- Any foreign or tramp material identified within the stockpile will be removed and dispose of correctly. DO NOT place foreign or tramp material into the crusher hopper as this could create blockages and risk of projectiles.
- Excavator to remove re-bar from the magnet belt and load out into scrap metal skip progressively during the crushing.
- Trained operative only to reposition the crushing unit as the works progress.
- Excavator to re-grade the stockpile as crushing works progress so that it remains safe and suitable for the positioning of the excavator.
- Should there be a blockage, stop works immediately and contact senior management. A revised method statement will be needed to clear the blockage.
- Crushed material accumulated at the end of the product belt to be moved away from the area.

7. COMPLETION ARRANGEMENTS

- The site will be left in a flat, level, and tidy condition with all waste material removed off site and any holes/voids backfilled to make safe.
- The site won crushed material will be tested and certified to 6f2 grading size and stockpiled at an agreed point onsite to be used during the rebuild scheme.
- Upon completion the Cawarden site manager will meet with the client representatives for project sign off and handover. Any snagging's identified will be corrected prior to handover.
- Upon successful handover, Cawarden will remove all plant, equipment and machinery and demobilise.

8. SITE-SPECIFIC ASSESSMENTS

Number	Hazard	Harm	Who is at Harm	Likelihood	Severity	Risk Rating	Controls	End Risk Rating
1	Use of plant, equipment & machinery on site	Interface with demolition operatives resulting in major injuries & death	Operatives	3	4	12	 Trained plant operatives to be used Segregate work area using heras fencing & barriers Signage to be installed to heras fencing Banksman controlled areas 	4
2	Demolition works adjacent neighbouring buildings	Demolition debris falling into gardens, causing building damage and injuries to occupants	Pedestrians	4	5	20	 Cleggs to speak to neighbours, engineers and obtain all approvals and party wall notices Banksmen controlled movements Prior communication with our neighbours via letter drops and doorstop communications Controlled demolition to mitigate debris spread and chance of demolition material falling into the gardens 	5
3	Traffic movements onto site	Site traffic striking pedestrians causing major injuries	Pedestrians	3	3	9	 Follow the Cleggs TMP for the site Cawarden site manager to manage, coordinate all deliveries and organise timings HGV deliveries during most appropriate times as per college schedules – refer to Cleggs TMP and induction Banksmen controlled movements to and from site Maintain safe speed limits when moving through the existing college site 	3
4	Hand tools	Repetitive strain injuries	Operatives	3	2	6	 Job share/rotation Pre-use inspection and checks by operative Use mechanical tools where possible 	2

5	Use of mechanical hand tools – demo breakers, stihl saw, recipe saw	Noise and vibration related illnesses, manual handling	Operatives	3	3	9	 Ear plugs/defenders to be worn Area to be an ear protection zone Segregate access to the area HAVS trigger times to be managed in accordance with the tool specifications Job rotation 20mins on, 20 mins off Record all personal trigger time exposures on Cawarden forms Keep chisels and points well maintained for maximum efficiency Insulated gloves to maintain temperature 	3
6	Manual handling	Manual handling related injuries. Repetitive strain injuries	Operatives	2	2	4	 Trained operatives Use team lifting methods Break loads down into smaller loads Use mechanical plant to eliminate manual handling 	2
7	Slips, trips and falls	Bangs, knocks, cuts and bruises	Operatives	3	2	6	 Access/egress routes to work areas to be kept clear at all times Waste arisings to be moved to skip or designated stockpile point as soon as possible Assess lighting levels and make sure they are sufficient 	2
8	Telehandler operating on site	Crushing, trapping, coming into contact with pedestrians and collisions with other site traffic, toppling over due to unstable ground	Operatives	3	3	9	 Trained plant operator at all times 12 monthly LOLER certification Daily pre use inspection by the user Slow down around pinch points and blind corners Pip the horn when entering pinch points and blind corners Cawarden site manager to set up plant/pedestrian segregation where possible Banksman controlled telehandler movements 	3

9	Working at Height - MEWP	Falls from height, MEWP toppling over, exceeding SWL, breakdowns	Operatives	2	4	8	 IPAF MEWP trained operator or equivalent In date 6-monthly LOLER certs for MEWP. Daily pre- use operator inspections carried out DO NOT use if the MEWP is defective. Notify the supervisor immediately Work restraint safety harness clipped back to a fixed anchor point in the MEWP when cherry picker used Make sure ground is stable, level and compact Groundman to be stationed opposite MEWP and will use auxiliary controls in case of breakdown. Should all controls fail contact the supplier and arrange for an engineer to attend site 	4
10	Working at Height – Mobile Tower Scaffold	Falls from height, incorrect set up of tower scaffold or inspection	Operatives	2	3	6	 PASMA trained operative to set up, alter and inspect Set up as per the manufacturer instructions Lock all wheels. Do not move the tower scaffold whilst being used. Internal ladder access system. Scaff tag system on all tower scaffolds showing last inspection Inspection following first installation, following alterations, after adverse weather events or minimum once every 7 days 	3
11	Demolition machine operating on site	Crushing, trapping, coming into contact with pedestrians and collisions with other site traffic, toppling over due to unstable ground	Operatives	3	4	12	 Trained demolition machine operator at all times Demolition machine to be fitted with protective front steel cage Localised barriers/heras fencing to segregate working machine Banksman control Demolition machine to have in date 12 monthly inspection and be inspected daily prior to first use by the operator Demolition machine to be kept well maintained 	4

12	Flying concrete, bricks, debris arising from demolition operations	Concrete, bricks, debris striking persons nearby causing major impact, crush injuries. Dust from demolition work	Operatives, pedestrians, and workers	3	3	9	 Maintain a safe exclusion zone around demolition work Hand demolition to the elevation opposite the gardens Fence, barrier and sign peripheral areas Banks person positioned at suitable vantage points Water supply to suppress airborne dust 	3
13	Unstable / premature collapse of structure	Parts of structure collapsing in an uncontrolled manner onto plant and pedestrians nearby causing death and major damage	Operatives	3	4	12	 Demolition work to be carried out following an approved safe sequence of work By hand demolition methods to Neighbour side elevation Trained & experienced demolition machine operator Maintain a safe exclusion zone around demolition work Ensure the demolition area is left safe prior to leaving each night 	4
13	Asbestos Removal	Inhalation of asbestos fibres resulting in mesothelioma, asbestosis, lung cancer	Operatives	3	3	9	 Obtain all certificates of reoccupation for all licensed asbestos works from Clegg before starting demolition. CAT B operatives to remove non-licensed ACMs remaining in the building Type 5/6 disposable coveralls and ffp3 half Masks to be used. Set up a decontamination area following asbestos essentials EM7/EM8 Cleggs to confirm full list of asbestos materials remaining following the licensed asbestos removal works Waste to be disposed into hazardous waste receptacles and removed off site under waste consignment note 	3
14	Working on a college site with existing contractors, staff, students	Interface with demolition operations	Operatives, Cleggs and their contractors. College staff and students	4	5	20	 Follow all Cleggs site rules and procedures as PC Follow all Cleggs TMP for vehicle deliveries Follow all Cleggs engagements and briefings to coordinate the work Cleggs to liaise with all stakeholders and relay back to the Cawarden team – Cawarden site supervisor to speak with Cleggs regularly 	5

15	Hot Work	Fires, explosions, burns, foreign materials entering the eyes, blinding	Operatives	3	3	9	 Trained persons to carryout hot work All hot work to be carried out under Cawarden HW permit Flame retardant coveralls, visor, gauntlet, half mask with gas filter to be worn Oxy propane bottles to be stored upright on a secure cage – used bottles to be removed from site Establish a signed gas/oxygen compound area for bottles not in use Flash back arrestor and regulators on all bottles in use Remove all combustible materials away from the area prior to hot work commencing Pre use inspection of all oxy fuel cut equipment – ensure equipment is safe, without leaks and in general good order 	3
16	Site services – gas, electric, water, telecoms	Coming into contact with live services resulting in fire, explosion, electrocution, property damage and disruption	Operatives	2	5	10	 Client to complete electrical; isolations Cawarden to complete gas and water disconnections Client to provide all confirmations and handover permits Secondary checks and validations from Cawarden Cawarden to sign HOLD POINTS in demolition RAMS once fully satisfied that all services are isolated permitting demolition to commence 	5
17	COVID 19	Contracting or passing on the virus	All on site	2	3	6	 Maintain social distancing Maintain hand sanitisation and person hygiene Minimise contact with others – do not share pens, cutlery, cups Daily temperature testing prior to start– 37.8degrees Remain vigilant for symptoms – high temp (37.8degrees), loss of taste/smell, continuous new cough 	3

18	Crushing operations	Noise, dust, vibration, entanglement. Entrapment, falling into crusher jaws, projectiles and blockages	Crusher operator, other persons on site	3	4	12	 Trained crusher operator only to stay with plant at all times while operating – do not stand on crusher platform while operating Isolate the crusher and remove keys when not in use Safe system of work to be followed for material processing and loading to prevent blockages and projectiles Crusher operator to wear p3 mask & hearing protection Daily pre-use checks and inspections to make sure emergency stops etc are in good order Keep away from sensitive receptors and site boundaries Direct water connection and keep stockpiles damp 	4
19	Loading shovel operating on site	Crushing, trapping, coming into contact with pedestrians and collisions with other site traffic, toppling over due to unstable ground	Operatives	3	4	12	 Clear exclusion areas and work zones established for plant and pedestrian segregation Morning briefings to cover areas of operation and any interface Trained machine operator at all times Loading shovel to have in date LOLER certificate Operator to inspect daily prior to first use Ensure the loading shovel is in good working order – audible reversing bleepers, flashing beacons/lights working and mirrors/reversing cameras in good order 	4

MAKE SURE YOU SIGN!!!



All operatives are to sign to confirm they have read and understand this Method Statement and accompanying Risk Assessment. Any operatives who are unsure of any items should seek further explanation or guidance from management.

All operatives to sign this form after reading and understanding the Method Statement and Risk Assessments attached.

PRINT NAME CLEARLY	SIGNATURE	DATE

9. AMENDMENT TO METHOD STATEMENT

Amendment Reference Number:	Details of Amendment:		
1			
Name of pers	on completing amendment:	Position:	Date:
Amendment a	authorised by:	Position:	Date:
	SIGNED	SIGNED	SIGNED

Amendment	Details of Amendment		
Reference	Details of Americanent.		
Number:			
Number.			
2			
2			
Name of person completing amendment:		Position:	Date:
Amendment authorised by:		Position:	Date:
	SIGNED	SIGNED	SIGNED



Daniel Johnson Demolition Engineer MIDE TechIOSH

www.cawarden.com

Cawarden, Scotland Farm, Far Lane, Ockbrook, Derby, DE72 3RX | T: 01332 820 488