



Hardcore Crushing Ltd

Contract Name: HMS, Railway Hotel, Earlestown, Newton-le-Willows		Contract Ref: C2201	Date: 14 th October 2021
Activity: Demolition of The Railway Hotel (including slabs and foundations removal).		Location: The Railway Inn, Railway Street, Earlestown, Newton-le-Willows, WA12 9QY.	Prepared by: Sidney Shorten (Contracts Manager)
Start Date: Wk Comm.10 th January 2022	Contract Period: c. 3/4 Weeks	Site Manager: Lee Donnelly	First Issue: 22 nd October 2021
Revision Details:		Amended By:	Revision:

Safety Risk Assessment:

SEVERITY	Fatality	MEDIUM	HIGH	HIGH	VERY HIGH	VERY HIGH
	Major Injury	MEDIUM	MEDIUM	HIGH	HIGH	VERY HIGH
	Reportable Injury	LOW	MEDIUM	MEDIUM	HIGH	HIGH
	Lost Time Injury	LOW	LOW	MEDIUM	HIGH	HIGH
	Minor Injury	LOW	LOW	LOW	MEDIUM	HIGH
Risk Matrix (GUIDE)		Improbable	Remote	Possible	Probable	Likely
PROBABILITY						

Hazard	Person(s) at Risk	Risk Level	Control Measures	Residual Risk
Presence of Asbestos	Site Operatives	High	<p>A full 'Refurbishment & Demolition' asbestos survey has been carried out by Independent Asbestos Surveys (Report Ref: 7141RD dated 27/01/21) which has confirmed the presence asbestos containing materials in the form of Asbestos Insulation Board.</p> <p>All asbestos will be stripped and removed from site by a fully licenced asbestos contractor (Assist FM Ltd). Please refer to a separate risk assessment & method statement which will be produced by Assist FM in due course.</p> <p>Asbestos skips will be removed from site to a fully licenced landfill site under hazardous consignment notation. The landfill site to be used will be Bradley Park Landfill Site, Lower Quarry Road, Huddersfield. (Environmental Permit No: permit EPR/LP3434HA).</p> <p>All our site operatives have received UKATA Approved 'Category A Asbestos Awareness' training with further key operatives receiving 'Category B Non-Licensed Asbestos Work' training, and as the demolition progresses they will be alert to the potential presence of any additional asbestos, which may not have been identified by the Asbestos Surveys.</p> <p>At all times, we will observe and be bound by 'The Control of Asbestos Regulations 2012'</p>	Low
Fall from height	Site Operatives	High	<p>Working at height remains one of the biggest causes of fatalities and major injuries. 'Work at height' means work in any place where, if there were no precautions in place, a person could fall a distance liable to cause personal injury (for example a fall through a fragile roof, but also including the risk of falling from ground level down into a deep excavation).</p> <p>At all times, during the demolition works, we will avoid work at height where it's reasonably practicable to do so.</p> <p>The dismantling works will be undertaken using demolition specification excavators equipped with heavy-duty protection cages and specialist demolition attachments, which enable the removal of small sections of the structure section-by-section.</p>	Low

			<p>By using hydraulic excavators and specialist attachments we avoid the need for operatives to be on, or anywhere near the structures being dismantled, and thereby totally mitigate the risk of falls from height.</p> <p>The demolition plant operators be fully trained and experienced in this type of demolition and dismantling works and as a minimum they will have the relevant CPCS training certification.</p> <p>Prior to the main demolition works we propose to strip and salvage the slates from the roof structures. These works will be carried out by suitable skilled operatives working from the safety of a 'Mobile Elevated Work Platform' (MEWP) or from a tele-handler with a 'man basket'. Using a combination of a MEWP and the tele-handler will allow us to protect the edge below where the men are working and provide access to the slates and commissioning the services of professional roofers will ensure that the stripping works are completed by experienced operatives.</p> <p>Our operatives working at high level will wear harnesses which will be clipped to the edge protection (o the exposed main roof structure) via a lanyard, thereby mitigating the risk of working at height.</p> <p>Operators of mobile elevated work platforms (MEWPS) will have the relevant IPAF training and certification, and those erecting lightweight alloy tower scaffolds will have received the relevant PASMA training and certification.</p>	
Collapse of the structure, or elements of the structure.	Site Operatives; Site Visitors, and members of the public.	High	<p>The structure being demolished is located within a 'built-up' area close to the centre of Earlestown, and therefore any demolition and dismantling works will pose a potential risk to pedestrians and road users in the vicinity.</p> <p>As the property in question is a detached structure within its own boundary, the majority of the demolition and dismantling works will take place in a 'self-contained secure zone and away from the public domain, however, the South elevation of the building facing Railway Street is immediately adjacent to the public footpath and road (see image below), and this will be the area of most risk.</p>  <p>The client is organising for a footpath closure to be in place along this elevation, which immediately mitigates the majority of risk posed to persons in the public domain by the demolition of the structure, but in addition to this protection measure we will arrange for a full-length, full-height protection scaffolding, complete with debris netting to be erected along the South elevation and this will protect against any small elements of demolition debris spilling onto the pavement and road.</p>	Low



			<p>In addition to the above, when removing the highest elements of the structure along the South side, we will have a banksman stood on the pavement area and he will have a 'line of sight' to the machine driver and will temporarily halt the machine activity as vehicles are passing, or if we are at a critical point he will temporarily stop any passing vehicle until the risk has gone. We would also aim to carry out any of the higher-level; higher-risk dismantling works during the quietest road periods, such as early in the working shift, or at a weekend (if allowed).</p> <p>Heras security fencing will be erected around the working area in order to create a well-defined 'demolition exclusion zone', which will be enforced by site operatives during the works to ensure that no members of the public can inadvertently stray into the working area.</p> <p>During the dismantling works we will utilise demolition specification excavators with specialist attachments. These attachments enable us to dismantle sections of the structure piece-by-piece in a 'top-down' manner, and the 'selector grab' attachment in particular gives us the ability to safely separate and lift a 'grab-full' of material and lower it to ground level.</p> <p>During the demolition process, the structure will be dismantled allowing small sections of the structure to fall to ground level within the confines of the outer walls, and within the secure demolition zone.</p> <p>All structural dismantling will take place within the protected cabs of hydraulic excavators; equipped to demolition specification with heavy-duty protection cages and specialist attachments, and no site operatives or personnel will be in the vicinity of any unstable structural elements at any time.</p> <p>All visitors requiring access to within the site area must report to the Site Manager and they will then be escorted by a member of the demolition team, to ensure that they remain clear of the demolition process, or any unsupported structures.</p> <p>At the end of each shift no unsupported structures will be left over-night, and all will be razed to a safe sound level and the tops of partially demolished walls will be cleared of any loose material, and therefore given all the above the likelihood of partially demolished structures presenting a risk will be low.</p>	
Injury caused by live services (Underground; Overhead & as part of the building fabric)	Site Operatives	High	<p>All statutory services within the work area will have been disconnected; isolated or diverted by others prior to the main structural demolition works taking place, therefore the structures to be demolished will be safe and clear of all gas; electric; water and telecom services.</p> <p>If there are any live services (within the structure; overhead; or below ground), which are likely to be affected by the works, then these will need to be identified to us by the Principal Contractor; HMS and noted within the Site Safety File so that they can be avoided throughout the demolition process.</p> <p>We are aware that there are Water & Electric services running in the pavement area along the South boundary of the site, and so in this location we will only demolish the outer building wall down to pavement level and no lower so that the sub-structure brickwork remains in place to support the pavement and the services therein.</p> <p>If any dismantling work is required close to any remaining live service lines or equipment, then these services will be clearly identified and any work in that area will be undertaken using appropriate techniques.</p>	Low
Injury caused by working plant	Site Operatives; Site Visitors, and members of the public.	High	<p>Access to the site for any plant, machinery and HGV wagons will be directly from Duke Street, which is an adopted highway (As shown on the Method Statement plan below).</p>	Low



			<p>The site is located in a 'built-up' area close to the centre of Earlestown. There is therefore high potential for pedestrians, and private vehicles to be present in the vicinity of the site. It will therefore be important for vehicles involved in the works and gaining access and egress to and from the site area to be exceedingly vigilant.</p> <p>The site itself is isolated from all other neighbouring activities with no 'Party Wall' issues, and an existing security fence is in place around much of the site boundary, which will be supplemented with additional Heras security fencing to ensure that we operate from within a fully enclosed; secure demolition zone. There will also be a full length scaffolding erected along the South elevation of the building, enclosed by Heras fencing and fully netted, which will further enclose the site.</p> <p>The demolition excavator operators are fully trained individuals who will have good visibility from the cabs of the machines and they also has the benefit of 3 external rear-view mirrors. More importantly our fleet of new demolition machines have the benefit of Advanced Around View Monitoring system (AAVM).</p> <p>The AAVM system is a 360° all-round virtual operating view, which displays on the cab's 8-inch cluster monitor, it also incorporates an Intelligent Moving Object Detection system (IMOD) that senses and warns the operator when objects come within working distance of the machine.</p> <p>The AAVM and IMOD systems have revolutionised machine operation, making it safer than ever, and ensuring that nobody can inadvertently wander into an excavator's area of operation without the machine operator being aware.</p> <p>All plant and machinery will have site operatives in attendance; plus, reverse horns and lights will be used on manoeuvring vehicles.</p> <p>All access for plant and equipment; wagons and skips will be directly off Duke Street and all loading/off-loading and material processing will take place within the confines of the secure demolition zone; segregated from all other site activities and away from the public domain.</p> <p>The excavator will operate strictly within the site area and will be well away from any potential pedestrians or traffic. All drivers and operatives will be fully trained in the use of all plant & equipment, and all such equipment will be certified, tested and in good working order.</p> <p>The main risk will be from HGV Wagons entering and leaving the site and therefore great care will be taken, and drivers will be extremely vigilant when entering and leaving site. The access/egress has good visibility splays providing good vision for safe access / egress.</p>	
Exposure to and risk from harmful and hazardous substances	Site Operatives	High	<p>Demolition schemes invariably involve the removal of waste materials, which arise from the dismantling of the structures, or which may be present within those structures and the surrounding site area. Such waste may include general chattels; debris and waste left by the previous occupiers, or waste which may have been 'fly-tipped' in and around the property by others. Exposure to discarded drug paraphernalia is also a risk to consider when dealing with waste in derelict buildings and structures.</p> <p>'Fly-tipped' waste can often present the biggest risk, but this risk can be mitigated by only handling any such material with machine and specialist selector grab attachment; particularly where the waste is external and easily accessible. If there are high levels of waste within the structures, then this can also be 'processed' and picked by machine as the structure is carefully dismantled.</p> <p>Wherever an operative is at risk of encountering waste materials, then appropriate PPE should be worn at all times, including work boots; overalls and gloves.</p> <p>Good hygiene is important when working amongst waste materials in order to avoid transfer of contamination from hand to mouth during food/cigarette breaks.</p>	Low



			<p>For more information, refer to HSE Publication WASTE27 "Health and hazardous substances in waste and recycling".</p> <p>Operatives should be vigilant during the works when working within the derelict pub, which has been subject to much historical trespass.</p>	
Manual Handling	Site Operatives	Medium	<p>Musculoskeletal Disorders (MSDs) are the most common cause of occupational ill health in the Country, and it is therefore important for EVERYBODY to protect themselves when carrying out any manual handling or lifting operation.</p> <p>The vast majority; if not ALL of the demolition works will be carried out with mechanical plant and equipment and there is NEVER ANY NEED FOR OPERATIVES TO PHYSICALLY LIFT ITEMS THAT ARE TOO HEAVY...</p> <p>... if any operative is in doubt at all about his/her ability to move an object then they should leave it where it is and seek help; preferably mechanical.</p> <p>In assessing manual handling risks all operatives should:</p> <ul style="list-style-type: none"> • Avoid heavy and hazardous manual handling operations; so far as is reasonably practicable; • If manual handling operations cannot be avoided then assess the hazard and weight and seek, help if required; • Reduce the risk of injury as much as possible...get help; use equipment such as 'manual handlers'; trolleys and bogeys. <p>Everybody should know their own capability in relation to what they can and can't safely manage to lift – NEVER try and lift items beyond your capacity.</p> <p>Also, whilst carrying out manual handling operations ALWAYS ensure that you are wearing the correct PPE, especially gloves, which will help with your grip and guard against physical skin damage and potential dirt/oil contamination.</p> <p>For details regarding the correct way to lift objects, please refer to the HSE Publication INDG143 'Manual Handling at Work' document in Section 4 of the Site Health & Safety File.</p>	Low
Covid-19	Site Operatives, Visitors to site, Members of the public coming into contact with operatives.	Medium	<p>The potential for site operative to contract or transmit Covid-19 remains at 'pandemic' level and presents an ongoing risk to the UK population.</p> <p>As a Nation we are all very aware of this pandemic and should also be very aware of the measures to be adopted to control the risks, such as...</p> <ul style="list-style-type: none"> • Travel to work in separate vehicles and limit contact with other people • Wash your hands regularly and use hand sanitiser regularly and especially before eating, drinking or smoking. • If you have symptoms then arrange to get tested and do not return to work unless either the test is negative. • Self-isolate for 10 days at home if you or any person in your household tests positive for Coronavirus <p>Demolition tasks are generally to be carried out mechanically with one operator in one dedicated machine and all tasks which are ordinarily carried out manually will be switched to mechanical handling in order to maintain social distancing and avoid multiple person skin contact.</p> <p>PPE uses must never be shared and will be cleaned and maintained by the dedicated user.</p> <p>Face masks will be worn as a last resort where there are large groups of operatives and when unable to maintain social distancing.</p>	Low



Slips and Trips	Site Operatives	High	<p>Over a third of major injuries reported each year are due to slips and trips, which are the single most common cause of injuries at work. Slips and trips are also the cause of over half the reported injuries to members of the public.</p> <p>Demolition sites have a potential to become untidy due to the nature of the work, therefore it is important to keep all areas as clean and tidy as possible and to ensure that as a minimum there are clear pedestrian routes available throughout the working area in order to allow site operatives to safely move about the site, as required, and more importantly; to allow safe and speedy evacuation from the working areas in the event of an emergency.</p> <p>It is also important to recycle as much of the resulting material from the demolition in order to maximise the recovery of useful materials and minimise the waste costs, and if this is done in a methodical and tidy manner then the cleaner and safer the site will be. Remember – “A clean & tidy site is a safe site”</p>	Low
-----------------	-----------------	------	--	-----

Environmental Risk Assessment:

SEVERITY	Severe	HIGH/MEDIUM/LOW	HIGH/MEDIUM	HIGH	HIGH
	Moderate	MEDIUM/LOW	MEDIUM/LOW	MEDIUM	HIGH
	Mild	LOW	LOW	LOW	MEDIUM/LOW
	Negligible	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE
Risk Matrix		Negligible	Low	Medium	High
PROBABILITY					
Environmental Aspect	Environmental Impact	Risk level	Control Measures	Residual risk	
Construction noise throughout the operations	Disturbance of the occupants of neighbouring buildings, and residential properties in the wider vicinity.	High	<p>The site lies in a built-up area close to the centre of Earlestown and within a wider area of residential and commercial property, and particularly with some residential properties adjacent to the site only c.15m away.</p> <p>As the site is within a residential area then care should always be taken to minimise any additional noise caused during the demolition and dismantling activities.</p> <p>Working hours will be restricted to between 7:30am and 5:00pm Mon – Sat. No work will take place on Sundays, nor on Bank Holidays unless by prior arrangement, and the overall demolition; dismantling and site clearance works should last approximately 2/3 Weeks.</p> <p>During all stages of the dismantling works the best practicable means shall be employed to minimize noise and vibration produced by the operation and regard shall be had to the recommendations in the British Standards referred to in The Control of Noise (Codes of Practice for Construction and Open Sites) (England) Order 2002, and the 'Noise at Work Regulations 2005.</p> <p>All machines and vehicles will be fitted with the correct silencers, and all construction plant and equipment shall be maintained in good working order and sited away from sensitive properties, where possible.</p>	Low	
Construction dust and fumes created by dismantling process	Nuisance to the occupants of neighbouring buildings, and residential properties in the wider vicinity.	High	<p>No burning of any material arising from the dismantling works will be allowed at any time; anywhere on site.</p> <p>The stripping-out and dismantling process will be undertaken in a methodical manner; progressively from one common face, with materials being carefully sorted as the structures are being dismantled, and the dust created from approaching the demolition in this way will be significantly reduced. The outer walls of structure will be kept intact as long as possible in order to help secure and contain the works and maintaining this perimeter will also help mitigate any impact from noise and dust.</p> <p>All vehicles carrying demolition arisings shall be sheeted as required, unless the payload is deemed to be sufficiently dust free; or is wet.</p>	Low	



			<p>If at any point during the dismantling process the dust becomes an issue, then the structure and 'arising' will be damped down as the work progresses in order to further limit the dust created. Any damping down will be achieved using sprays & hoses, which will be fed from a suitable supply point, and sprayed directly onto the area of demolition activity.</p> <p>If a sustained dry period results in the possibility of windblown surface dust the hose pipes will also be used to damp the demolition arisings generally.</p>	
Contamination of watercourses and surface water drainage systems.	Pollution of watercourses and damage to aquatic animals and vegetation	Medium	<p>There are no natural watercourses within the immediate vicinity of the and therefore the likelihood of contaminants entering any watercourse during demolition is extremely low. Nevertheless, care must be taken to ensure that no contaminants potentially created by the demolition and dismantling works are allowed to spill across site and enter the surface water drainage system.</p> <p>No burning of any material arising from the demolition will be allowed at any time; anywhere on site, and no waste will be stored on site for extended periods.</p> <p>All plant and equipment will be refuelled in a safe area, away from drains and watercourses, and special care will be taken during deliveries, and particularly when any fuels or oils are being handled. (See COSHH data appended to this RAMS document)</p> <p>In the event that the demolition activity creates any dirty or contaminated water 'run-off' (which may be exacerbated by heavy rainfall during the Winter period), then this will be prevented from entering the watercourse and any part of the surface water drainage system by creating strategically placed trenches and/or earth bunds in order to contain any contaminated or dirty 'run-off' water.</p> <p>Also, a 'spill kit' will be carried by each machine to control any contamination in the event of any minor fuel / oil spillage.</p>	Low

Method Statement:

1. Scope of Works

The works can be itemised as follows: -

- Establish welfare on site and create a 'demolition exclusion' zone around our compound with HERAS fence panels with appropriate signage.
- Removal of the 'asbestos containing materials', as identified by the asbestos demolition survey carried out by Independent Asbestos Surveys Ltd, Ref: 7141RD dated 27/01/2021.
- Soft-Stripping' and removal of any remaining internal fixtures; fittings; chattels; lightweight partitions; ceilings; floors and floor finishes; mechanical & electrical equipment cables; conduits and pipework, and all non-hazardous waste materials from throughout the building.
- Demolition of the former Railway Inn.
- 'Grubbing-Up' of the floor slab and foundations.
- Removal of all arising waste from the demolition process (excluding hard materials).
- Crush all remaining hard materials on site and backfill resulting void from the cellar in compacted layers. All surplus crush will be stockpiled on site ready for the permanent works.
- De-mobilise machines, welfare and fencing and leave a clean, tidy site ready for use of HMS.

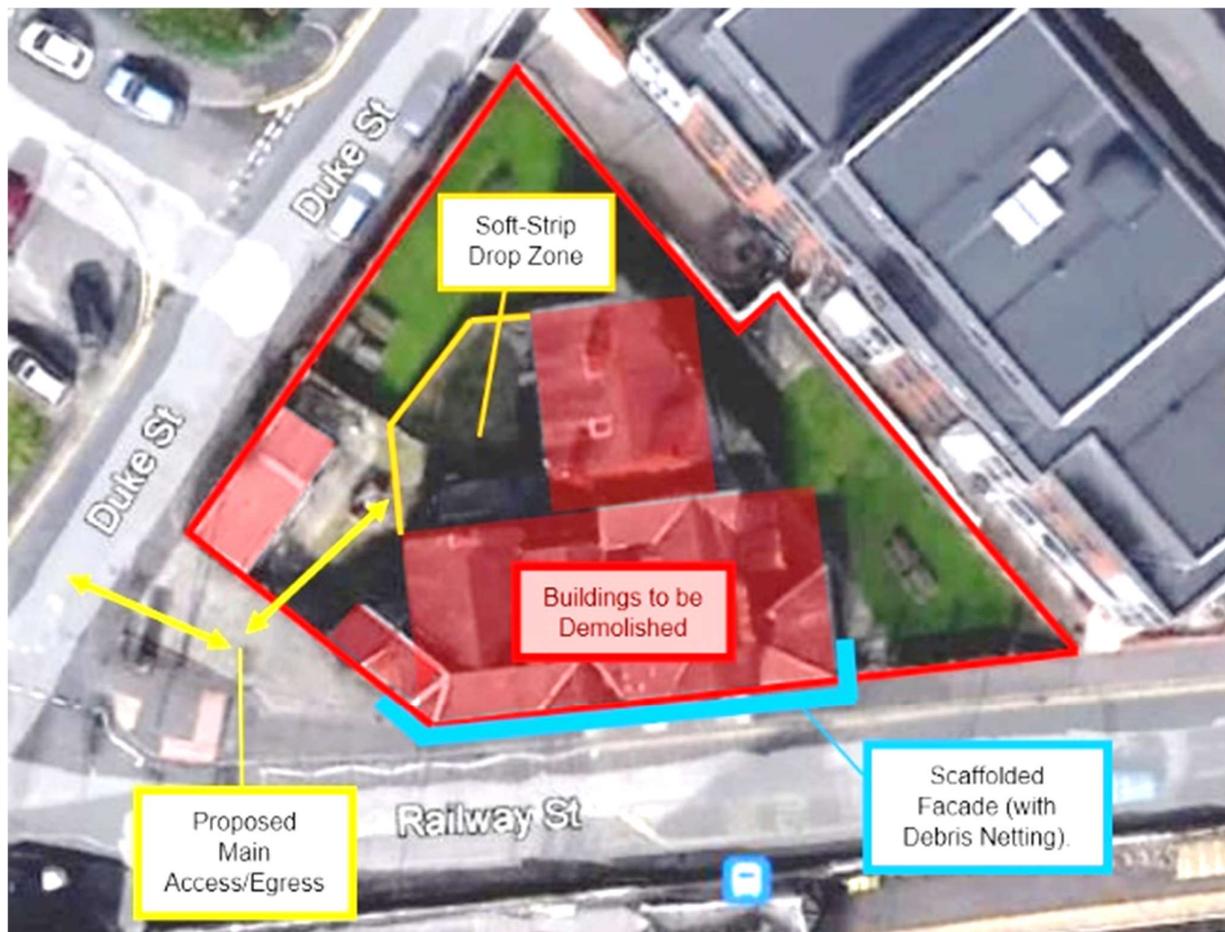
2. Method

The works will commence following the procedure below, and if at any point something changes which requires amendments to the procedure, then the risk assessment should be reviewed, and the methodology rewritten.

Before the work commences all operatives will be given a site induction which will brief them in respect of the specific site risks and hazards, and all mitigating actions and controls introduced to manage significant risks. Where hazardous materials are to be used, any relevant COSHH assessments will also be explained to those who are likely to be in contact with the material.

The work activity briefing is intended to be a two-way process and all operatives are encouraged to challenge the proposed approach, particularly if they feel that a safer and more practical work method can be adopted.

Access and egress to site for all vehicles will be directly from Duke Street, as indicated by the yellow arrows on the plan below:



At all times careful consideration will be given to the following key elements...

- General site security; maintenance of the existing secure boundary fencing and erection and maintenance of temporary demolition zone Heras fencing.
- Consideration of the location of the site and the likelihood of other site users; pedestrians and vehicular traffic in the vicinity.
- Avoidance of any above and below ground 'live' services
- Access & egress routes into site and the number and frequency of vehicle movements.



- Adequate on-site parking for contractors and visitor's vehicles, and for the delivery/removal of materials.
- Noise and dust created by the demolition works, and the presence of a watercourse close by.
- The overall 'sustainability' of the project and the need to recycle as much as possible.
- Risk of contracting and transmitting Covid-19. In particular, operatives should maintain social distancing of 2m from each other as well as others. Operatives to travel to site in separate vehicles and only operate their own allocated excavator.

SITE SETUP:

One of the first tasks will be to establish the welfare unit and to create a demolition exclusion zone around the full site, including the scaffolding along the South elevation. This boundary fence will be created using HERAS fencing and will segregate the works from other site users and members of the public. Health & Safety signage will be displayed around the perimeter of the site warning persons in the vicinity; such as pedestrians, and particularly children, that potentially dangerous demolition works are in progress and that all unauthorised persons should stay clear of the works and not enter the site. For those authorised to gain entry the signage will also display the requirements for PPE to be worn; namely Helmets; Safety Footwear and Hi-Vis attire.



ASBESTOS REMOVAL:

The only asbestos found in the building is 'Asbestos Insulation Board'. This asbestos will be stripped and removed from site by a fully licenced asbestos contractor (Assist FM Ltd). Please refer to a separate risk assessment & method statement produced by Assist FM in due course.

Asbestos skips will be removed from site to a fully licenced landfill site under hazardous consignment notation. The landfill site to be used will be Bradley Park Landfill Site, Lower Quarry Road, Huddersfield. (Environmental Permit No: permit EPR/LP3434HA).

All our site operatives have received UKATA Approved 'Category A Asbestos Awareness' training with further key operatives receiving 'Category B Non-Licensed Asbestos Work' training, and as the demolition progresses, they will be alert to the potential presence of any additional asbestos, which may not have been identified by the Asbestos Surveys.

At all times, we will observe and be bound by 'The Control of Asbestos Regulations 2012'

'SOFT STRIP':

Initially the buildings will be 'soft-stripped' internally, which will involve the removal of internal chattels; fixtures & fittings; lightweight partitions; linings; suspended ceilings; mechanical and electrical services; trunking; ducting; bracketry support, and general waste materials; ensuring that the buildings are cleared back to the main shell, so far as necessary, and ready for the structural demolition.

Using additional Heras security fencing we would create a safe demolition 'drop-zone' at the rear (North side) of the property (as shown on the aerial plan above). This would allow us to empty the waste out of the buildings into the rear drop-zone and then segregate the waste into the different waste streams before loading into 'roll-on roll-off' skips and removing from site.

Skips will be removed from site in a timely manner as soon as they are full, so that they aren't attracting attention from petty theft and vandalism and they will be positioned away from the buildings at the back of the drop-zone so that they don't present a fire-risk.

Potential access equipment used for the higher-level 'soft-stripping' works will comprise Mobile Elevated Work Platforms (MEWP), and also lightweight alloy tower scaffolds and podiums, thereby avoiding the need for operatives to work from any part of the structure and mitigate the risks of working at height.

DEMOLITION OF SUPER-STRUCTURES:

Following on from the soft-stripping and asbestos removal works, the structural demolition will be completed using a 22t demolition specification excavator, protected with full heavy-duty protection cages; ram & track guards, and 'side-skirts', and equipped with specialist attachments such as 'selector grab' attachments; steel shears; concrete processors, and hydraulic breakers, like the example photos below:



The structure will be 'broken into' with 'selector grab' attachments (mechanical hand), by carefully removing a section of the external wall and roof structure, and then systematically working our way into the footprint of the building, section by section and dismantling and segregating elements of the structure and stockpiling ready for removal from site.

Selector grab attachments allows us to de-constructed the buildings piece by piece in a 'top-down' method, rather than simply knocking things over, and therefore by approaching the dismantling in this way it minimises the 'freefall' collapse of structures; allowing only small elements of the structure to fall into the demolition drop zone.

We will generally work from within the footprint of the buildings; folding and dismantling the structure 'inwards'; as oppose to working from around the outside perimeter, and we aim to keep as much of the external wall intact for as long as possible to help contain any noise and dust.

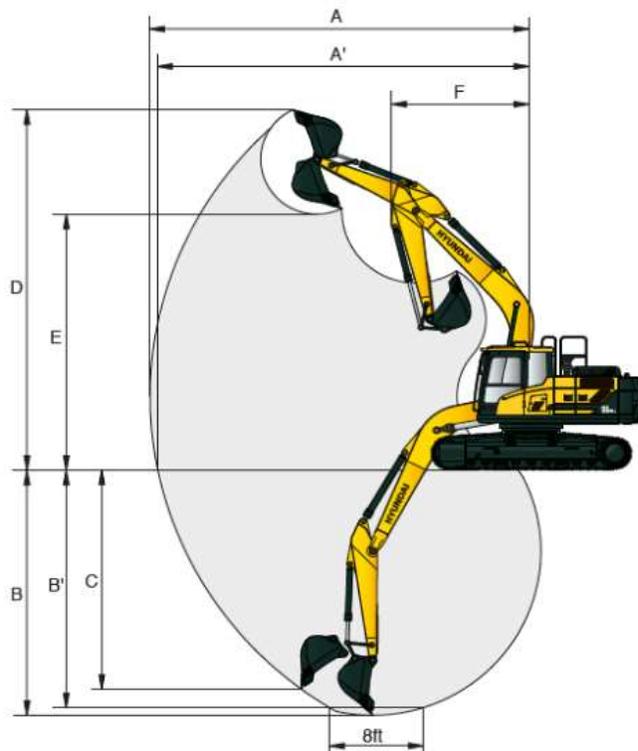
We generally have a good amount of working space around the West, North and East sides of the building and the South perimeter will be protected by the full height scaffolding. The small garage structure in the West corner of the site will likely be dismantled at the same time as the 'soft-stripping' works in order to create better access and more room for general manoeuvring of skip wagons etc., so we will work our way through the structure from North to South and bring everything down to ground level, whilst being careful not to track the machine over the cellar area at the South West corner of the structure, as shown below.





As we approach the South elevation we will be careful to avoid the cellar void in the SW corner and work our way East to West along the front elevation, and as described in the 'Risk Assessment' section of the RAMS above we will have a man on the pavement outside the perimeter as the machine works its way along the frontage.

Once at the SW end the 22t machine will have sufficient reach in height (see specification below) to dismantle the structure above the cellar without needing to encroach on the cellar footprint accepting of course that materials from the ground and first floor demolition will end up in the cellar area temporarily, and the machine will later have sufficient depth reach to grub out the cellar.



Boom length	5,680 (18' 8")
Arm length	2,000 (6' 7")
A Max. digging reach	9,140 (30' 0")
A' Max. digging reach on ground	8,960 (29' 5")
B Max. digging depth	5,820 (19' 1")
B' Max. digging depth (8' level)	5,580 (18' 4")
C Max. vertical wall digging depth	5,280 (17' 4")
D Max. digging height	9,140 (30' 0")
E Max. dumping height	6,330 (20' 9")
F Min. front swing radius	3,750 (12' 4")

During the demolition works, all areas below and surrounding the structural dismantling work will be strictly kept free of all personnel. The structures will be progressively worked from one common face, and care will be taken not to de-stabilize any main structural supports out of sequence. Elements of the structure; particularly large structural steelwork elements, will generally be lowered to ground level where possible, as oppose to allowing large sections to 'free-fall' in order to minimise impact noise; loose material ricochet, and dust.

We do not anticipate using any 'hot-works' but if 'hot-works' are required, then these will be strictly controlled in line with our 'Hot Works' Permit system.

All waste materials arising from the demolition activities will be segregated into the different waste streams and temporarily stockpiled before being placed into 'Roll On-Roll Off' skips and 'Tipper Wagons' and removed from site for recycling or sent to landfill...we always aim to recycle as much material as possible and the largest percentage of the material arising from the works will be recycled.

All 'hard waste' materials (brickwork; blockwork; rubble; concrete and tarmac) will be processed; crushed and stockpiled on site to provide recycled aggregate for use by the Client in the permanent works, and this specific crushing operation will be subject to a separate risk assessment and method statement in due course.

REMOVAL OF SUB-STRUCTURES: Including Floor Slab and Foundations.

Once the ground floor slabs have been cleared of the demolition debris arising from the main structural demolition, we will then break out and removed all ground floor slabs and foundations, including breaking out and excavating the cellar structure and the materials within it from the earlier demolition.



Our 22t excavator fitted with a hydraulic breaker will break the ground floor slabs and foundation structures, and once all have been 'broken-down' the machine will use a toothed-bucket to excavate all the sub-structure materials and stockpile everything adjacent to the footprint of the ground floor slab ready for crushing/recycling.

NOTE: If dust created from the 'grubbing up' process becomes an issue, we will use a water bowser and power hose attachment (or other suitable source) to suppress the dust. Our operatives will also dampen down the arising's prior to loading, this ensures that the most effective dust suppression is being achieved at the point at which it is being produced.

The resultant void created by the removal of the slab, foundations and cellar will then be backfilled with recycled 6F2 aggregate resulting from the demolition works.

CRUSHING OPERATIONS: Hard materials crushed to a 6F2 specification (as per the image below).

The crushing plant will be a diesel engine/electric hybrid machine with electric-powered feeders, jaw crusher and discharge conveyors, as per the image below.



Kleeman MC110R/MC100R Crusher.



6F2 Recycled Aggregate.

The crusher will be delivered to site towards the end of the demolition operation when we have more space available and when we have generated a stockpile of material ready to crush, and at that stage we will provide a separate mini-RAMS document for the crushing works and provide all necessary notification to Warrington Environmental Department.

All crushing works will be carried out within the controlled working-zone, protected by Heras fencing and clearly marked to prevent inadvertent access. At no point will the area be left unsafe whilst unattended and all machines will be isolated when not in use.

The hard material stockpiles will be 'processed' by our specialist hydraulic attachments such as the breaker or pulveriser in order to reduce the size of the broken material ready for loading into the jaw crusher. Dust controls will be in place to suppress both the stockpile and the crusher unit using a regulated fine water spray, and the quantity of water will be controlled to prevent any flooding. Operators will be in attendance to operate a controlled flow of water on the working area to suppress the release of dust. The crusher also has its own built in water suppression system to ensure suppression throughout the crushing process.

The excavator operative loading the crusher will ensure that any debris/waste material has been removed and that the concrete is suitable sized. The operative shall ensure that the stockpile is stable at all times and will use safe loading techniques. The excavator will consistently load the stockpiled material into the feeder/hopper of the crusher, avoiding overflow and this material is then fed through the grizzly-bars and into the crusher jaws where it is crushed to a 6F2 specification (125mm to dust). The crushed material will fall onto the discharge conveyors for stockpiling.

All crushing operators are trained to operate the crusher and oversee the work being carried out. Any blockages that occur will be dealt with by the operatives in accordance with pages 12-14 of the NFDC "Guidance Notes on the Safe Use of Mobile Crushers in the Demolition Sector" and HSE Guidance Notes, which are contained within the site file. Specific risk assessments will be filled out on site for the removal of blockages, based on the nature of the blockage and the means to be used to unblock.

Any resultant steel, which may have been present in the concrete will also be collected by belt magnet as crushing progresses, all material arising will be removed and disposed of as per HCL Waste Strategy.



GENERAL HEALTH & SAFETY OVERVIEW:

The vast majority of the demolition and waste collection activities will be carried out from the safety of the machine's protected cabs, and from within the cabs of 'hook-loader' HGV's, with little involvement from operatives on the ground, and therefore the interface between machinery; plant and other site operatives is minimal. However, if at any stage machines, or wagons are operating close to areas where other site operatives are present, then we will consider using a 'Banksman' to safely control the movement of plant and machinery, and to ensure the safety of site operatives; particularly during instances where vehicles need to reverse.

Control of safety in and around the demolition zone is of paramount importance, and especially when heavy machinery is dismantling and processing large volumes of material. Our excavator operators are fully trained individuals who have good visibility from the cab of the machine and via 3 external rear-view mirrors... more importantly our fleet of new demolition machines have the benefit of Advanced Around View Monitoring system (AAVM).

The AAVM system is a 360° all-round virtual operating view, which displays on the cab's 8-inch cluster monitor, it also incorporates an **Intelligent Moving Object Detection system** (IMOD) that senses and warns the operator when objects come within working distance of the machine. This has revolutionised machine operation, making it safer than ever and ensuring that nobody can inadvertently wander into an excavator's area of operation without the machine operator being aware.

All our machine operators are suitably trained and as a minimum will have the relevant CPCS Competent Operator Certification. All site operatives will have CSCS Site Operative Certification as a minimum, and the majority of operatives and machine operators also have UKATA Category A 'Asbestos Awareness' training...those involved with the removal of asbestos containing products; also have UKATA 'Category B Non-Licensed Asbestos Work' training, and as the demolition progresses they will be alert to the potential presence of any additional asbestos, which may have been missed during the asbestos survey works.

If at any point any works are required to be carried out at high level, then this will be carried out by hand with operatives working out of Mobile Elevated Work Platforms (MEWPs), or from lightweight alloy tower scaffolds. Those operating MEWPs will have the relevant IPAF Training Certification, and those erecting alloy towers will have the relevant PASMA Certification.

During the demolition and dismantling activities, any materials arising from the works will be carefully picked and segregated into the following categories:

- Asbestos containing materials (Hazardous Landfill)
- General waste products (Sorted and picked via a local Recycling Centre)
- Metals –Ferrous & Non-Ferrous (Recycled via local Metal Recyclers)
- Timber, Glass and Plastics (Recycled via a local Recycling Centre)
- Stone & Slate (Recycled via our own Stone Yard in Accrington)
- Concrete; Blockwork; Brickwork & Macadam (Recycled to 6F2 grading specification and retained on site by the Client for use in the permanent works)
- Vegetation and Green Waste (Landfill site for composting, where possible – **None on this scheme**)

As the work progresses, at the end of each shift, inspections by either the Site Manager, or the Foreman in charge will determine what temporary measures, or protection, if any, will have to be implemented to make the works safe until the commencement of the next shift.

On completion of the works the site will be left in a clean and tidy state; ready for the permanent works to commence, by others.

“Exercise common sense and good housekeeping at all times”.

**WELFARE FACILITIES:**

There will be a maximum of 4-5 personnel on site at any one time and the works should last approximately 3-4 Weeks in total.

Welfare facilities will be set-up on site, which suitable for the number of personnel on site and will include WC, washing and messing facilities; fully compliant with the recommendations of The Construction (Design and Management) Regulations 2015 (Schedule 2).

On this scheme we propose to set up an 'Armadillo' towable welfare unit, which is a robust and secure mobile welfare comprising a 6-man canteen; private WC facilities and drying/ generator room; featuring LED lighting; hot and cold running water; microwave; kettle; table, and canteen seating for six operatives.

Whilst the threat of Covid-19 is somewhat reducing as more people are vaccinated and people's general awareness and personal hygiene measures are more closely attended to, there is still the possibility of transmission of Covid 19 virus, and as such the welfare facilities will be regularly cleaned using anti-viral sprays and disposable wipes. Cleaning will focus on high contact areas such as door handles, cupboard handles, kettle and microwave handles, work surfaces used to prepare food and drink, table areas used when eating and resting, regular emptying of waste bins and sink areas.

Personnel should stagger their mealtimes, if necessary to allow a more 'spaced-out' occupancy of the welfare facility. Personnel will wash or sanitise hands on first entering the welfare facility and to clear away cups, waste etc on completion of their break.

EMERGENCY PROCEDURES:

No burning of waste materials will be allowed on site under any circumstances.

On site fuel containment will be provided by means of a double banded purpose made fuel bowser, which will be sited in a safe location adjacent to the working area, and away from any surface water drains. The bowser will have a built-in pump and hose arrangement allowing fuel to be safely transferred from the bowser to the plant, and this equipment has in-built 'cut-off' valves to prevent spillage or 'over-run', and therefore the risk of spills will be exceedingly remote. (Please refer to the COSHH data sheets in Section 2 of the main Site Safety File)

Any fuel spillages will be immediately contained using suitable material, such as bespoke spill kit materials, or sand/fine grit, which can be used to soak up any diesel spillage and moved onto an impermeable surface such as visqueen sheeting, and then to be gathered up at the earliest opportunity and removed from site to licensed landfill as 'hazardous waste'.

In the event of a fire or other emergency our site personnel will immediately call the emergency services, as detailed in the Emergency Contacts appended to this document and held in Section 5 of the Site Safety File. If necessary, we will also inform personnel working in adjacent buildings.

A first aid kit will be carried by the gang, for use as required although the preference; in the event of any accident or incident, would always be for the operatives to seek professional medical attention at the nearest A&E Department; details of which are also appended to this document and held in Section 5 of the Site Safety File.

REPORTING OF ACCIDENTS:

Please refer to the Company's Health & Safety Policy, a copy of which can be found in Section 2 of the 'Site Safety File'.

All accidents and incidents, no matter how trivial, **must be reported to your immediate site supervisor**, (refer to the 'Site Manager' section at the head of this document). The site supervisor will then; if required; complete a RIDDOR report and will also thereafter carry out an 'incident investigation' along with his Contracts Manager, and Director.

Only 'responsible persons' including employers, the self-employed and people in control of work premises should submit reports under RIDDOR, and this can be done online at:

<https://www.hse.gov.uk/riddor/report.htm>

PERSONAL PROTECTION EQUIPMENT:

(Please refer to the Personal Protective Equipment Regulations 2002 and the Personal Protective Equipment at Work Regulations 1992, which give the main requirements.)



Despite all the controls and safe systems of work have been applied, as above; some hazards might remain, and these could potentially cause injuries to: -

- lungs, e.g. from breathing in dust or contaminated air; fumes/vapours
- head and feet, e.g. from falling materials
- eyes, e.g. dust/debris from working with hand tools, or from ricocheting debris or splashes of hazardous substances
- skin, e.g. from contact with corrosive materials, or general dust; dirt or rough/sharp materials
- body, e.g. from extremes of heat or cold and currently from Coronavirus infection

All personnel will wear safety helmets, high-viz jackets / waistcoats, and safety footwear at all times within the working areas.

Operatives involved in the removal of asbestos cement products and other low risk 'non-notifiable' ACM will wear disposable overalls; gloves, and FFP3 RPE masks.

Those involved in the use of flame cutting equipment or straight sided cutting wheels must wear eye protection.

Those involved in the use of or working in close proximity to noisy plant or equipment, such as pneumatic hammers, breakers, drills and cutting wheels, must wear hearing protection.

Any 'Stripping-Out; dismantling; demolition and 'grubbing-up' operations can produce uncomfortable levels of nuisance dust, and if so then personnel involved in breaking out and removal of rubble may need to wear dust masks; rated as a minimum to FFP1 standard. In situations where the exposure to dust is considered to be high or prolonged then a face mask manufactured to a minimum of FFP2 standards is recommended.

In addition to the above, the following PPE items will be made available for use, if and as required:

- Gloves
- Foam Ear Plugs / Muffs
- Light Eye Protection and/or High Impact Goggles
- Disposable Overalls
- Disposable face masks if used for the prevention of Covid-19 transmission where social distancing is not possible between operatives.

PPE must be properly looked after and stored when not in use, and if it is reusable it must be cleaned and kept in good condition. Any reusable PPE should only be used by the same operative and not shared to prevent the possible transmission of Covid-19 virus.

Employees must make proper use of PPE and report its loss or destruction or any fault in it.

3. Labour		
Job Title / Designation	Number	Typical Training & Competence
Contracts Manager	Visiting	Site Managers Safety Training Scheme (SMSTS) 5-Day Course / CSCS 'Black' Site Manager Card.
Site Manager / Foreman	1	SSSTS / CSCS Labourer / CPCS Blue Card / 'Category A Asbestos Awareness' / First Aid Training
General Operatives	2/3	CSCS Labourer Card / UKATA Approved 'Category A Asbestos Awareness' and 'Category B Non-Licensed Asbestos Work' / First Aid Training
Machine Driver	1	CPCS Blue Card - Excavator 360 >10 tonne tracked / 'Category A Asbestos Awareness'
Wagon Driver	(As required)	HGV 1



4. Plant / Equipment / Tools

* The level at which employers must provide hearing protection and hearing protection zones is now **85 decibels**, and workers must not be exposed to level above 87 decibels (taking account of any reduction in exposure provided by hearing protection)

Item	Used for...	Noise		Vibration	
		Noise output, dB(A)	Hearing protection (Y/N)	Weighted Acceleration	Exposure time (mins)
Cut Off Saw (Stihl Saw)	General cutting of concrete masonry and steel	c. 98	Y	Front Handle 1.9; Rear Handle 2.6	c. 3.5 Hours
Hydraulic Excavator	Dismantling & Loading works.	c.72 (Internal) / c.103 (External)	If outside and close to the Machine then YES	N/A	N/A
Wagons	Removal of materials	c. 74	N	N/A	N/A
Tracked Jaw Crusher	Crushing of materials to produce recycled aggregates.	85 - 98	If outside and close to the machine, then YES	N/A	N/A

5. Hazardous Substances

The following substances may be encountered during this activity. Detailed COSHH assessments are held in the site safety file and where operatives are not familiar with the content of these assessments they will be briefed out prior to work commencing.

Hazardous Substance	COSHH Assessment Ref	Precautions / Risk Controls
Gas Oil / Red Diesel	HCL/COSHH/001a	See COSHH Assessment
ISO46 Hydraulic Oil	HCL/COSHH/002a	See COSHH Assessment
Petrol / Gasoline	HCL/COSHH/003a	See COSHH Assessment

6. Confirmation of Site Induction and understanding of this RAMS document

I acknowledge the contents of this risk assessment & method statement and understand the measures proposed to mitigate the risks and help ensure safe completion of the works. In particular I have understood the specific measures required to protect against the risk of Covid-19 transmission and that if at any time I develop the symptoms of Covid-19 I will inform the site manager, self-isolate at home for 10-days unless a test result is negative.

Name	Date	Signature