



**Risk Assessment
Method Statement
COSSH Information
Operative Briefed Register
10b**

Site: **SIM, PH & D**
Task: **Builders work associated with 1830 Warehouse pipework installation**
Start Date: **TBC**
Duration: **2 weeks**
Labour: **HH Smith & Sons Co Ltd**
Assessor: **Gareth Roberts**
Issued By: **Gareth Roberts**

Issue	Date	Comments
1	23/04/21	Initial Issue

Below is the amendment record for minor or non-material revisions or amendments that do not warrant a full re-issue of the document. All such amendments are highlighted.

Amendment No	Date	Amendment	Page/s

H.H. Smith & Sons Co. Ltd.
Risk Assessment & Method statement



Site	SIM PH & D				
Date	08/03/2021	Review Date	08/03/2021	Assessor	Ollie Glasse
Task	Excavate & install trenches for pipework and form openings for pipework				

Item	HAZARDS	WHO IS AT RISK	L	S	Risk	CONTROLS	Residual Risk		
							L	S	Risk
1	Ground/ sides collapsing Risk entrapment, suffocation, DEATH	General Site Operatives	5	5	25	1. Excavation for service no more than 1 meter deep however if; 2. the ground level/ sides is above the operatives head when bent down/over the sides must be suitable battered back/ stepped backed. 3. Inspect excavations daily, to assess stability etc. 4. Use suitable access into excavation, ramp or steps. 5. Store soil dug out away from the trench edges.	1	5	5
2	Live underground services Electrical shock, gas explosion	Operative General Site Operatives	4	5	20	1. Check existing service drawings for area. If not available, a suitable site service survey to be done by a competent operative. 2. Cat scan dig area before breaking ground, see SSOW for cat scan. 3. Any live services identified must be hand dug & all runs exposed within the work area. 4. Live services exposed must be suitable protected/ highlighted. 5. Issue dig permit prior to excavations.	1	5	5
3	People falling into trench Falling from height	General Site Operatives Visitors/ Public	4	5	20	1. Excavation nor more than 1 meter deep. 600mm deep on average. 2. Excavation will ne barrier off using suitable chapter 8 barriers. 3. Excavations to remain barrier off at all times.	1	5	5
4	Debris/ tools Falling into Trench Struck by debris/ tools	General Site Operatives	2	5	10	1. Store soil away from the edges. 2. No materials or equipment should be stored near the footings edges.	1	5	5
5	Manual Handling	Operative	4	3	12	1. No workers will lift any object that he does not feel comfortable with lifting. 2. Use lifting equipment if needed.	2	3	6

Calculation of RISK LEVEL - <u>L</u> ikelihood x <u>S</u> everity = Risk (score)		
Likelihood is	1 could never happen, 2 very unlikely, 3 Possible, 4 likely, 5 very likely	
Severity is	1 very slight, 2 minor, 3 significant, 4 major, 5 fatal	
Score	1-9 = Low	10-18 Medium
		19-25= High

Trial Pit to investigate Proposed Pipework Location

Methodology for excavating and recording trial pits and trenches

The 1830's Warehouse is Grade I-listed and adjacent areas of the Lower Yard are curtilage listed.

1. All necessary approvals are to be obtained and all relevant areas are to be photographed before commencing any intrusive works on site.
2. The agreed methodology will be reviewed with the contractor to agree the proposed programme, site visits and hold points.
3. Sampling and testing of buried material for hazardous contaminants will be carried out before any trial pits or trenches are excavated. To ensure the health and safety of personnel at all times the excavation methodology will be adapted as required to account for the contamination survey results and will proceed in accordance with any further recommendations made by Manchester City Council Environmental Health Department.
4. To minimise the disturbance of any buried artefacts the trial pits will be formed by hand and where required their sides will be adequately supported with shoring as excavation progresses to enable personnel to enter safely for in situ excavation and inspection. The trenches / trial pits will be formed by hand.
5. A photographic record will be made during the course of all excavation and logs will be made to record any artefacts discovered.
6. Unless it is unavoidable artefacts will not be removed, disturbed or cut. In any case no alterations will be made unless all necessary approvals have been obtained.
7. Backfilling of excavations will be carried out as soon as practicable following inspection by the structural engineer and others, as required, with material replaced at a similar depth as that originally encountered. The backfilling will be completed in a manner that minimises any subsequent disturbance of artefacts that may be present and the backfilling shall be completed in a manner that minimises any subsequent depression of the ground surface with the surplus heaped proud. Where trial pits are required to be left open for a period of time the contractor will provide fencing together with all necessary lights and signage, taking all precautions necessary to protect the trial pits and their contents from the adverse effects of the weather.
8. All areas where the existing surface finishes are being temporarily removed will be made good in an appropriate manner in accordance with all approvals and conditions, unless stated otherwise.
9. Relevant photographs and logs of the trial pits and trenches will be collated into a report and deposited in the SMG archives and shared with MCC.

Trial Pit

1. The trial pit at the 1830 Warehouse should measure approximately 400mm x 400mm in plan and should be taken to sufficient depth to expose the face of the wall where the pipework will enter the building to advise of any obstructions.
2. The trial pit is to be excavated by hand and adequately supported to enable personnel to enter safely to permit in situ examination. The contractor shall ensure that the stability of all excavations and adjoining



premises is maintained at all times with shoring provided as appropriate, and is to design, install and maintain all necessary temporary work and programme the works accordingly.

3. Buried services are not expected to exist at the trial pit location, however enquiries have not necessarily been exhaustive and the contractor shall make their own enquiries and satisfy themselves as to the exact location and extent of any existing services that may be present. Where the presence of buried services is suspected exploratory holes shall be formed by means of a hand-excavated inspection pit. Repairs to any damaged services shall be the responsibility of the contractor.
4. No survey of buried contamination or asbestos has yet been carried out at this particular part of the site. The works are to proceed in accordance with the appropriate methodology agreed with Manchester City Council Environmental Health Department.
5. Backfilling of the trial pits shall be carried out as soon as practicable following inspection by the structural engineer with material replaced at a similar depth as encountered. The backfilling shall be completed in accordance with the methodology above.
6. The trial hole area will be made good according to the reinstatement methodology below, on completion of the pipework installation.

Core Drill opening and excavate for pipes

Location of works:

SIM, PH & D project

Brief Description:

A Risk Assessment (find attached) has been carried out in order to assess the risks to employees posed by removing brickwork masonry to create an opening for services to enter the 1830 Warehouse, which is Grade I-listed. To be read in conjunction with the document entitled: *SSOW 10d Lower Yard Trial Holes and Trenches: Historic Surfaces*.

The arrangements will take in account the required legislations.

Sequence of Works:

A refurbishment & demolition asbestos survey has been carried out & issued to HH Smith.

A copy of the survey is available on site from the site manager.

No asbestos Containing materials have been identified within the proposed work areas.

All services affected by the proposed works have been isolated by competent contractors
Access into the rooms of proposed works will be restricted for operatives only involved in works.

Historic brickwork – both walls and floors and cobbled surfaces will be protected appropriately in advance of these works.

1. External Trench



2. Create openings for pipework.
3. Pipework installation and trench reinstatement
4. Reinstatement

External Trench

The trench will be excavated according to '**Methodology for excavating and recording trial pits and trenches**', set out above.

Removing external cobbles

Following on from the detailed site survey carried out under the preparation work stage set out within the *SSOW 10d Lower Yard Trial Holes and Trenches: Historic Surfaces* (which recorded cobble types and the overall visual appearance of the cobbling in the Upper and Lower Yards), the confirmed route would be photographically recorded and spacing patterns and dimensions noted. The junction with the 1830 Warehouse would also be carefully surveyed prior to works - to allow the cobbles to be reinstated to match the existing following the trenching works.

Carefully lift the cobbles using hand tools if possible. Where not possible use small hand-held breaker to break put mortar and loosen cobbles. As removing, mark each cobble with its reference number, photograph and store in a safe location in close proximity to the area they have been removed from - ready for reinstatement.

Excavate trench

The trench will be excavated by hand for the section close to the masonry brickwork of the 1830 Warehouse. The trench will be 1650mm wide x 1120mm deep in this location.

Core drill through walls for services

1. Location of walls to be cored will be marked and agreed with design team.
2. External wall and the internal wall to viaduct are brick walls. There is an internal breezeblock wall between P01 and LG02.
3. Protection to any brickwork, floor and surrounding objects to be installed.
4. Tower scaffold constructed to allow a safe working platform for the operative carrying out the works.
5. Working area to be segregated from other working areas and any power cables are kept clear of any water.
6. Drill pilot hole to confirm where exit point will be and to avoid being close to walls, electrical fittings, lighting fixtures.
7. Use HEPA vacs at drill location and at location of exit point of pilot hole to collect silica containing dust.
8. Set up drill according to the manufacturer's directions. Size of drill to be used to match diameter of pipe required.
9. Drill hole with water supply attached an operative collecting water using a wet vac.

Pipework installation and trench reinstatement

Install Pipework and ductwork through opening. Once trench installation is completed reform sub base to existing level, as per '**Methodology for excavating and recording trial pits and trenches**'.

Reinstatement

Cobbles

Once trench installation is completed, reform sub base to existing level.

Mix mortar to match existing and relay cobbles to match the existing pattern and as per the photographic survey and numbering (completed prior to removal). Refer to *SSOW 10d Lower Yard Trial Holes and Trenches: Historic Surfaces*.

The reinstatement process will use the information gathered as part of the site surveys and photographic records and will take the following into consideration:

- Types of cobbles to the specific to this area of the Yard. (Cobbles will be kept close to the trench when removed and cobbles will be sorted for reuse. Replacement cobbles sourced to match)
- Spacing, pattern of cobbles and junction with 1830 Warehouse matched. (Refer to photographic survey and measurements taken prior to removal. Check against surrounding area of cobbles)
- Undulations across the lower yard. (Periodically check during reinstatement process from a variety of viewing points (including from across the Yard) to ensure that the new cobbles follow the existing undulations. Also check back to photographic survey.)
- Carry out a test section of reinstatement, to be reviewed by Donald Insall and MCC.
- Each section will be reviewed by Donald Insall, to avoid scarring of the Yards as far as possible. This will be completed via regular site visits throughout the reinstatement process.

Install pipework below floor joists

Install pipework below floor joists

Install protection to floor along agreed route for pipework and the surrounding areas.

Construct access tower with edge protection.

Drill wire hangers into the floor joists as per the manufacturer's instructions.

Install sections of pipework and attached to wire hangers.

Join up pipework as per manufacturers instructions.

Install pipework lagging.

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Remove access tower and protection.

PPE requirements

The following PPE is a standard minimum requirement on site & must be worn at all times. Further PPE may be required as identified within task specific RA requirements.

HH Smith work areas;

- a. Hard Hat
- b. Hi visibility vest
- c. Safety footwear with steel mid sole & steel toe cap
- d. Trousers that cover legs (no shorts/ $\frac{3}{4}$ trousers)

Permit to work / Inspections

Various permits required as per RA & MS.

Task/ equipment

Temporary Support

Permit/ inspections required

PF054.3 Design Check, Load & unload Permit
PF054.4 Temporary Works Weekly Inspections form.

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Any type of hot work including, welding, flame cutting, abrasive wheel creating sparks or excess heat, soldering etc.

Hot work permit

Tower scaffold

Tower Scaff tag

Breaker

HAV register trigger times.

Genie lift

Valid LOLER certificate/ inspect daily.

Specific Training Arrangements for equipment/plant

HH Smith Operatives to report to the site office for a site induction.

Equipment / Machinery

Specific training

Manual handling

0.5-day awareness course.

Breaker

Use as per manufacture instruction & guidance.
HAV guidance & trigger times in an 8-hour period.

Hand tools

Use as per manufacture instruction & guidance.

Masonry prop

Use as per manufacture instruction & guidance.

Tower scaffold

PASMA

Use as per manufacture instruction & guidance.

Genie Lift

Use as per manufacture instruction & guidance.

Equipment / Machinery PPE required & HAV Info

Equipment / Machinery	PPE Requirements	HAV info (See specific HAVE guidance for more info)
Hand tools	Standard Site PPE, Gloves, eye protection & ear protection	N/A
Genie Lift	Standard Site PPE, Gloves	N/A
Masonry prop	Standard Site PPE, Gloves	N/A
Breaker	Standard Site PPE, Gloves, Eye protection, ear protection & respiratory protection.	See below on options;

ELECTRIC BREAKERS	MAX USAGE MINS IN 8 HRS PERIOD
Light Duty Demo Hammer 5kg 10m/s ²)	HIGH 10.0 30 mins in 8 Hours
Med Duty Demo Hammer 10kg (AV) 6.5m/s ²)	MEDIUM 6.5 71 mins in 8 Hours
Heavy Duty Breaker 29kg 7m/s ²)	MEDIUM 7.0 61 mins in 8 Hours
TE 700 10m/s ²)	HIGH 10.0 30 mins in 8 Hours

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Med Duty Demo Hammer 11kg (AV) 8m/s2)

MEDIUM 8.0

47 mins in 8 Hours

Housekeeping

Operatives will be briefed on the site waste management arrangements at the site induction.

All waste (packaging, off cuts, rubble etc.) created by work tasks should be kept in one place within works area ready for collection & disposal.

Waste should be collected in suitable containers & disposed of in skips.

Operatives must clear/ clean work area and surrounding areas from any unwanted materials & rubbish after every work shift or on completion of a task.

Do not store any materials or equipment on access routes or emergency escape routes.

Keep extension cables & trailing leads to corners of building at high level.

COSHH Info

- e. See dust COSHH assessment.

First Aid Arrangements

Operatives will be briefed on the first aid arrangements & first aider on site at the site induction.

HH Smith Site manager & various others on site have attended a 3-day first aid at work course.

The details of the first aider & directions to nearest A&E will be displayed within the site office & canteen notice boards.

Welfare Arrangements

Operatives will be briefed on welfare arrangements at the site induction.

Operatives can use the existing welfare on site.

The W/C facilities must be kept clean, maintained and left as previously found!!

Emergency Procedures

Operatives will be briefed on emergency arrangements at the site induction.

Operatives must always adhere to the emergency procedures.



All Fire Escape/ break glass points/ alarms MUST always be maintained, do not store any materials or equipment in front of escape doors or on emergency escape routes.

Contact details

Role/ Responsible	Company Details	Contact information
Managing Director	HH Smith & Sons Co Ltd Rear of 95 Bury old Road Whitefield Manchester M45 7AY	Contact: Dave Smith Mob: 0161 280 3509 Email: info@hhsmith.co.uk

[illegible]

Amendments carried out by:

Name: _____

Signed: _____

Date: _____



RA, MS & COSHH Assessment Register

In signing this form I the undersigned confirm that I have been briefed on all aspects of the forthcoming work and fully understand the method of work and associated risk and that I have been briefed on all Site requirements and relevant PPE relating to the task.

[illegible]

CONTINUE ON SEPARATE PAGE IF REQUIRED