

Risk Assessment Method Statement COSSH Information Operative Briefed Register 2

Site: **SIM – Powerhall & Decarbonisation Works**

Task: **Trenches for M&E Services – Cobbled areas**

Start Date: **TBC**

Duration: **TBC**

Labour: **HH Smith**

Assessor: **Ollie Glasse**

Issued By: **Ollie Glasse**

Issue	Date	Comments
1	02/06/23	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



Site	SIM PH									
Date	02/06/2023			Review Date		02/06/2024		Assessor	Ollie Glasse	
Task	Excavate & install trenches for M&E – Cobbled areas									
Item	HAZARDS	WHO IS AT RISK	L	S	Risk	CONTROLS	Residual Risk			
							L	S	Risk	
1	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	
2	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 - Likelihood x Severity = 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

Excavate & install trenches for Services – Cobbled areas

Introduction

Trenches are to be formed to allow the installation of M&E services throughout the Powerhall. The pipe work will be used to distribute, power, data, steam, heating and ventilation to the required areas within the Powerhall. Cobbles are to be lifted and reinstalled following the installation of the M&E services

Brief Description:

A Risk Assessment (find attached) has been carried out in order to assess the risks to employees posed by installing trenches for M&E services.

The arrangements will take in account the required legislations.

Sequence of works:

Preparation

Prior to commencing the trenching works, a photographic survey of the cobbles which will need to be lifted will be completed in order to allow operatives to reinstall cobbles at a later.

On arrival at site operative to park in designated car park and report to the site office for a site induction immediately.

The next stage will be to confirm and agree routes with design team by scanning for underground services and completion of any trial holes needed.

Trial holes

Prior to commencing works complete full photographic survey of cobbles to be removed to allow for reinstallation in exact positions (noting spacing patterns and dimensions). Label photos and assign individual numbers for each cobble.

CAT scan trial hole locations and surrounding area for live services.

Carefully lift the cobbles using hand tools if possible. Where not possible use small hand-held breaker to break out mortar and loosen cobbles. As removing, mark each cobble with its reference number, photograph and store in safe location ready for reinstatement.

Once all cobbles are lifted use small hand-held breaker to break out concrete below and remove by

excavating by hand. Ensure surrounding cobbles are not disrupted.

Hand dig down to required level.

Should nothing unexpected be found along the trench route, it can be confirmed and trenching progressed as per the methodology below.

Replacing Cobbles if re-routing trench

Once required investigation is completed, reform sub base to existing level.

Mix mortar to match existing and relay cobbles to match the existing locations and pattern and as per the photographic survey and numbering (completed prior to removal).

If the route needs revising as a result of the scans and trial holes, the preparatory survey work by HH Smith would need to be reviewed to ensure the correct areas of the route are recorded accurately (for reinstatement / cobble matching purposes).

Trenches

Dimensions of the trench will vary in width between 450mm and 1000mm depending on the number of services required in trench at a given location.

Excavation areas must be barriered off from public at all times and kept shut at all times.

Surrounding cobbles will be protected using plywood as will any routes for moving materials.

No unauthorised person must be allowed with work area, only operatives involved with dig to be allow in fenced off area.

Engineer to set out route for excavation.

Proposed dig area to be scanned for services with a cat scan & genny BEFORE BREAKING ANY ground.

Issue Dig permit for each section/ run.

Use cat scan & genny as per the manufactured instructions.

A competent operative with the relevant qualification to use a genny & CAT scan to track any services/ pipes.

Connect the genie to service as required to determine the depth of the service.

Track service with the CAT scan.

Using the CAT scan with the genie connected to the service the depth of the services can be found.

If depth of cable cannot be detected with cat scan & genny it has to be presumed the cable could be at any depth (within tarmac, concrete base etc.) and isolate cable at source until service is exposed.

Record findings on a services survey.

Highlight/ mark any services detected or any know services around site.

Relay services survey to excavator operator & issue a dig permit & buried services permit, attached.

Removing Cobbles

Following on from the detailed site survey carried out under the preparation work stage (which recorded cobble types and the overall visual appearance of the cobbling in the Lower Yard), the confirmed route would be photographically recorded and spacing patterns and dimensions noted – 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 'batches' in a safe location in close proximity to the area they have been removed from - ready for reinstatement.

Once all cobbles are lifted use small hand-held breaker to break out concrete below and remove by excavating by hand. Ensure surrounding cobbles are not disrupted.

Excavate trench

If possible, operative who carried out cat scan/ services survey to work as banks man with excavator operator.

If services have been detected with the CAT scan operatives must hand dig the area to expose the service.

Soil around services should be hand dug & exposed.

Where there are no existing services hand dig will still be required due to the small size of the trenches.

Soil will be stored suitable distance away from excavation as soil will be used to back fill once completed.

Once trench has been dug to required depth and section, the duct/ service will be laid within excavation.

Suitable access step/ ramp into excavation.

Once duct/ service installed back fill excavation to structural engineers specification and continue as above method to next section.

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 as per the photographic survey and numbering (completed prior to removal).

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 area of the Yards. (Cobbles will be kept close to the trench when removed and cobbles will be sorted for reuse. Replacement cobbles sourced to match specific areas)
- Spacing and pattern of cobbles matched to specific area of the Yard. (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 and from the Upper Yard looking to the Lower) 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.

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;

- Hard Hat
- Hi visibility vest
- Safety footwear with steel mid sole & steel toe cap
- Trousers that cover legs (no shorts/ ¾ trousers)

Equipment / Machinery/ Materials needed (PPE required)

Equipment / Machinery/ Materials	PPE Requirements
Hand tools	Standard Site PPE, gloves
Cat scan	Standard Site PPE, gloves

Permit to work / Inspections

DIG permit.

Various permits required as per RA & MS.

Specific Training Arrangements for equipment/plant

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

Equipment / Machinery	Specific training
CAT scan	Use as per manufacture instruction & guidance. Cat scan course.
Manual handling	0.5 day awareness course.
Hand tools	Use as per manufacture instruction & guidance.

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 adhere to the emergency procedures at all times.

All Fire Escape/ break glass points/ alarms MUST be maintained at all times, 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
SHEQ Manager	HH Smith & Sons Co Ltd Rear of 95 Bury old Road Whitefield Manchester M45 7AY	Contact: Juan Crous Tel: 0787 295 2425 Email: jc@hhsmith.co.uk

H.H. Smith & Sons Co. Ltd.



Amendment to MS:

[illegible]

Amendments carried out by:

Name: _____ Signed: _____ Date: _____

H.H. SMITH
 & SONS CO LTD
 BUILDING YOUR HORIZONS

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]

I _____ as designated supervisor/manager can confirm that I have briefed the above operatives in all aspects of the method statement, risk assessments and the Site Health, Safety & Emergency Rules.

Signed: _____ Date: _____