LONDON STONE CONSERVATION
www.londonstoneconservation.co.uk

Dismantling & Storage of the Shaftsbury Drinking Fountain, W1

Document ref: W1Fountain: 001 : 19_01_2021

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Index

1 Risk Assessment & Method Statement (RAMS) Review

Issue	Date	Author (Print Name)	Checked by (Print Name and Signature)	Approved by (Print Name and Signature)	Description of the amendment
001	19/ 01/ 2021	Florian Kirchertz			

2 Risk Assessment & Method Statement (RAMS) Approval

Date	Operative (Print Name)	Signature

3 Integrated Risk Assessment

3.1 Initial Risk Assessment

Risk Assessment									
Risk Assessment Ref.	LSC/RAMS/Camden-Shaftsbury Fountain - 001								
Contract Location: Intersection of Shaftsbury Ave and A40, Camden W1						**Issue date:** 19/ 01 / 2021			
What are the hazards:	**Who might be harmed and how?**	**Precautions already in place**	**Risk Rating**			**What further action is necessary?**	**Residual Risk Rating**		
			Probability	Severity	Risk		Probability	Severity	Risk
Falling from height / falling materials	Serious or even fatal injury could occur if an operator falls from height. Others working below also at risk from falling materials. .	Purpose built scaffold for the project. Only authorized personnel will erect, modify, or dismantle scaffolding including running beams and gantry. All scaffolding will be inspected on handover to or from other contractors. All Structures where a person or materials can fall must be protected with suitable and sufficient edge protection and must be inspected every seven (7) days. LSC employ competent trained operatives. Never overreach from a working platform, scaffold, or tower. Never overload a working platform, scaffold, or tower. Operatives to wear hard hats. Works to be carried out in accordance with method statement. Exclusion zones set up with adequate warning signage. Good	5	5	25	Include work at height in toolbox talk before beginning work on day one. Scaffolds shall be erected and checked regularly by competent persons to ensure the correct use and that unauthorized adaptations have not been made.	1	5	5

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		housekeeping when working from scaffolds or platforms. No unstable partially demolished structures to be left.							
Raising and lowing blocks of stone	LSC operatives and other contractors could be injured or killed due to improper lifting practice.	Only trained operatives are permitted to use lifting equipment. Lifting equipment to be fit for purpose, supplied with certifications. Suitable segregation of the area used for lifting and lowering to be established. Pre-planned lifting operations in place.	5	4	20	Daily inspection of lifting equipment- straps etc. Remind operatives to be clear of their roles and responsibilities before each lift. Daily safe start meetings.	1	4	4

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Manual handling	Operators risk injury, particularly to the back, from lifting and handling heavy or awkward objects, e.g., blocks of stone, rubble bags etc.	Operatives know and follow a safe system of work. Operatives are continuously trained in manual handling. A lifting beam is in place to assist in the dismantling of the granite fountain. Operatives will lift objects together when they need to be manually lifted. The lifting frame integrated in the scaffold will be employed for heavier objects. Operatives will avoid manual handling where possible, employing wheelbarrows, trollies, and skates to transport materials and goods. Transportation routes and walkways will always be kept clear. Good housekeeping to keep walkways and work areas clear to avoid slips, trips, and falls. Use of mechanical lifting methods where possible. Reduce carrying distances. Avoid repetitive handling. Divide the item into lighter/ smaller loads. Ensure SWL of manual handling aids is sufficient for load being carried / lifted.	5	4	20	Remind operatives of safe system of work at site induction. Provide familiarization with the lifting equipment. Toolbox talks and safe start meetings.	1	4	4

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Use of handheld tools.	Injury caused by damaged tools, misuse of tools, untrained in correct use can cause serious injury.	LSC employs skilled and experienced operatives. Correct PPE including hard hat, gloves, boots, and glasses as required. Use of correct tool for job. Keep tools well maintained. Trained competent operatives. Adhere to manufacturers guidelines. Electrical equipment must be PAT tested and 110V only. See also detailed “Manual Handling” risk assessment. Cutting edged kept sharp. Self-retracting knives to be used only. Tools to be checked to ensure no defects prior to each use. See also HAVS RA	5	4	20	Pre use checks to all tools. Weekly PUWER checks recorded.	1	4	4

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Transport and Deliveries. Access and Egress around site	Operatives risk serious or even fatal injuries from moving vehicles on site – particularly when reversing. Danger of entering hazardous areas if site transit routes and signage is not adhered to.	Deliveries will be scheduled in advance for the Soho site. Transport will be directed to a pit lane supervised by the competent site traffic marshal. Operatives will on/off load materials manually and transport these items using sack trucks and dollies, as necessary. Operatives will use the appropriate lanes of transit for this transport. Safe route to workplace and to welfare facilities, agreed with site manager based on site health and safety plan. Staff always wear a safety helmet, protective eyewear, protective gloves, safety footwear, high visibility clothing. Staff always carry hearing protection. Access and egress routes to be marked clearly. Good housekeeping. Safe secure access to work on different levels. Avoid use of ladders. Keep walkways clear. When accessing unknown areas trained operatives using extreme caution will be used. Corridors and walkways must not be obstructed unless clear concise signage is installed to direct persons to their destination.	5	5	25	Include in site induction before beginning work on day one. Induction to cover correct area for deliveries and hierarchy of team in delivery sequences.	1	5	5
Hazardous substances,	Operatives and nearby tradesmen at risk from dust	Operatives know the risks of dust and know to avoid excessive contact with eyes and skin.	3	3	9	At site induction, remind operatives of risks of dust,	1	3	3

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Stone, Brick & Mortar	and particulate which may irritate eyes or sensitive skin or cause short-term irritation of respiratory system.	Water supply nearby to wash off skin and eyes. Eye wash is kept nearby in operative kit. Operatives keep work area clean. Gloves and barrier creams to be available. Protective glasses are always worn. Face fitted dust masks are provided with fine particulate filters.				and to wear gloves, eye protection and dust masks when cutting stone, emptying rubble sacks and cleaning the works area.			
Dust Control	Operatives and nearby tradesmen are at risk from over exposure to fine dust particulate created in building works.	When cutting, operatives will use dust extraction systems to capture and reduce displacement of airborne dust. Where possible, use water dust suppressions systems. Operators to install temporary barriers to contain and manage dusty areas screening off the working exclusion zone from other occupied areas of the site. Site will be cleaned as work progresses. Use of handheld water sprayers. LSC employs trained competent operatives.	4	3	12	Daily check dust control measures. Clean machines at the end of each shift. Use of face fitted FFP3 RPE.	1	3	3
Noise	Operatives using noisy machinery and those in the vicinity are at risk of possible long-term hearing loss.	Operatives will wear ear defender during all noisy works and alert others in the near vicinity to protect themselves similarly during noisy works. Operatives to use noisy equipment or noisy works during approved Council hours. Acoustic barriers employed when noisy works cannot be avoided.	4	3	12	Ensure hearing protection is always available and used as required.	1	3	3

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Electricity	Operatives and others risk potentially fatal injuries if they receive a shock from faulty electrical equipment and/or installation.	Site to supply 110 v temporary supplies, with both 32 Amp and 16 Amp sockets via petrol generator. Staff know to check all cables, leads etc. of all powered tools/ equipment before use, and to report all faults to their supervisor. All power tools on site will be PAT tested, the operator will thoroughly check his/her machine before each use. Staff using power tools are competent and experienced in using and overseeing the use of cutters, grinders, drills etc. Correct PPE relevant to the tools being used will be worn always will always be worn. Presume all unknown services encountered to be live.	4	5	20	During site induction on day one, manager to reinforce rules on electrical safety.	1	5	5
Hand-Arm-Vibration	Long exposure to vibrating hand tools can cause permanent harm and injury to operatives	Operatives will attack vibration recording devices to their electrical to mitigate any chance of over exposure. Operatives will rotate power tools in and out of the process to mitigate prolonged exposure to vibrations. See enclosed HAVS appendix for exposure limit guidelines. Avoid use of vibratory equipment where possible.	5	3	15	Consult HAVS appendix, remind team of vibrations related diseases in toolbox talks.	1	5	5

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Slips and trips	All operatives, and tradesmen nearby, may suffer sprains, bruising or fractures if they trip over objects, such as work debris, or slip on spillages.	All operatives wear safety boots – 'no boots, no job' policy. Good housekeeping, e.g. debris such as mortar and bricks put in rubbish bags, brush available to use to keep work area clear. All trailing cables in work area hung up or otherwise kept out of harm's way. Safe route to job agreed with site manager based on site health and safety plan. Site always kept tidy. Clean as you work policy.	5	3	15	Manager to check on-site housekeeping during visits. Include in site induction before beginning work on day one.	1	3	3
Welfare	Good welfare facilities reduce risk of dermatitis, help good hygiene etc.	Site welfare facilities are provided by the LSC including toilet and hand washing facilities. A dust free environment for changing and consumption of food is provided. Staggered break times , see attached Covid site working procedures.	3	4	12	Tell staff about facilities at site induction on day one.	1	4	4
Abrasive Wheels	Operatives and local tradesmen are at risk of serious injury when abrasive wheel devices are used. Projectiles, dust, cuts, burns, hearing loss, and the threat of fire from sparks.	Operatives have been trained in the use of abrasive wheel tools. Operatives wear the appropriate PPE for using abrasive wheels. When working with abrasive wheels near other trades, signage will alert others of the hazards. Ear defenders, gloves, suitable clothing, and protective glasses will be employed.	3	4	12	Daily checks of machines and wheels.	1	4	4

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Asbestos	Operatives are at risk for long term fatal illness by inhaling asbestos.	Treat any unknown substance encountered as a suspect and dangerous substance. Halt works, alert LSC management and await further instructions at the site. Wear face fit protective dust mask always when participating in dusty works. LSC operatives are trained in yearly asbestos awareness courses.	3	4	12	Ensure all operatives undertaking intrusive works are trained in asbestos awareness.	1	4	4
Collapse of Structures	Operatives and local trades are at risk of serious injury and death during dismantling process.	Competent operatives are trained to erect and dismantle stone structures. Any partially dismantled structure to be made secure immediately using props. Site team to follow method statement procedures for dismantling.	3	4	12	Daily safe start meetings to discuss the shift's procedures and potential dangers.	1	4	4
Weil's disease	Operatives are at risk from rodent borne diseases. Rodent dropping and contaminated food are possible sources of exposure.	Do not store food on site, clean any static water on site. Always keep good hygiene regime and wash your hands and clothes. Keep a safe and tidy site, segregate, and place rubbish in the appropriate bins. Designated operative to sanitize and clean welfare facilities on a schedule and after breaks.	3	4	12	Good hygiene always. Operatives to observe Covid site procedures.	1	4	4

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Other Trades	Building site are vast operations with each trade concentrated on their own tasks which can result in misunderstandings and injuries.	Keep communications open to those around you when employing methods that can pose a risk to others. Safe Start morning meeting keep everyone informed of site wide works. Management will coordinate works through the schedule among site teams.	3	4	12	Daily safe start briefings.	1	4	4
Covid-19	Site operatives, greater public.	Please see Covid-19 site rules regulations and company policy. Seek alternate modes of travel to work other than public transport, travel out of peak hours, stagger break times, wear disposable mask, wash hands, stagger inductions, extra toilet capacity.	4	4	12	Daily briefings, social distancing, mask wearing.	2	3	8

Persons at Risk	**Probability**		**Severity**		**5**	**4**	**3**	**2**	**1**		
					L	Pr	Po	R	Im		**1-6 Acceptable**
P – Public	Likely (L)	5	5	C	**25**	**20**	**15**	**10**	**5**		
E – Employee	Probable (Pr)	4	4	Ma	**20**	**16**	**12**	**8**	**4**		
C – Contractor	Possible (Po)	3	3	R	**15**	**12**	**9**	**6**	**3**		**8-25 Not Acceptable**
V – Visitor	Remote (R)	2	2	S	**10**	**8**	**6**	**4**	**2**		
	Improbable (I)	1	1	Mi	**5**	**4**	**3**	**2**	**1**		

PROBABILITY = Likely (5) - Probable (4) - Possible (3) - Remote (2) - Improbable (1)

SEVERITY = Catastrophic (5) - Major (4) - Reportable (3) - Serious (2) - Minor (1) RISK = PROBABILITY x SEVERITY

* Residual risk is the level of risk that remains after suitable and sufficient control measures are introduced.

4 Task Briefing

To be developed for site supervisor and inserted at start of Project. These are pre-planned meetings between the site supervisor and the team to review the hazards and methods of a specific task. *(as separate attachment)*

4.1 LSC Task Briefing Sheet – A - Dismantling Process

4.3 LSC Task Briefing Sheet – B - Temporary Casing & Transport of the Dismantled Masonry Units

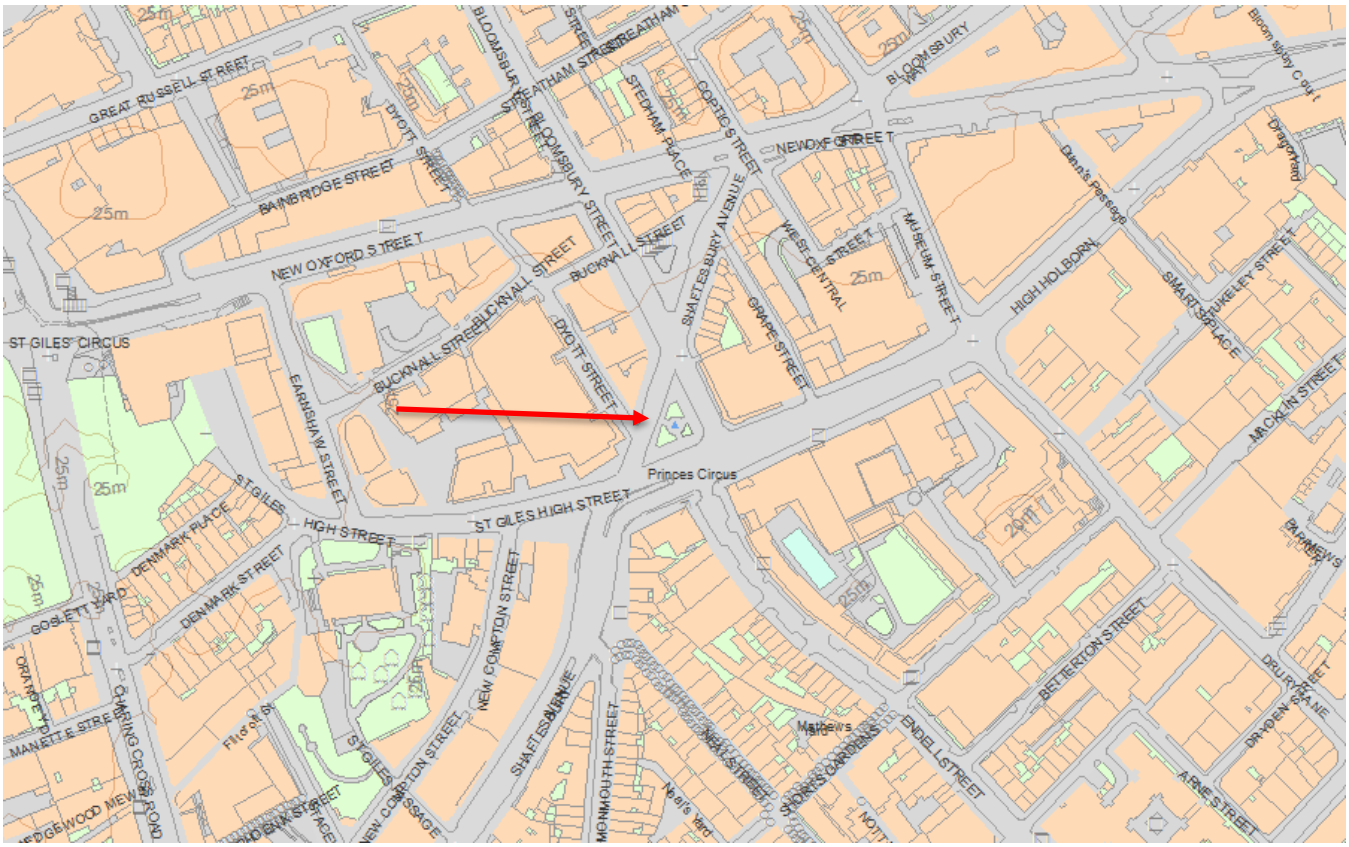
4.4 LSC Permit to Lift – *(to be updated)*

5 Method Statement

5.1 Scope of Works Summary.

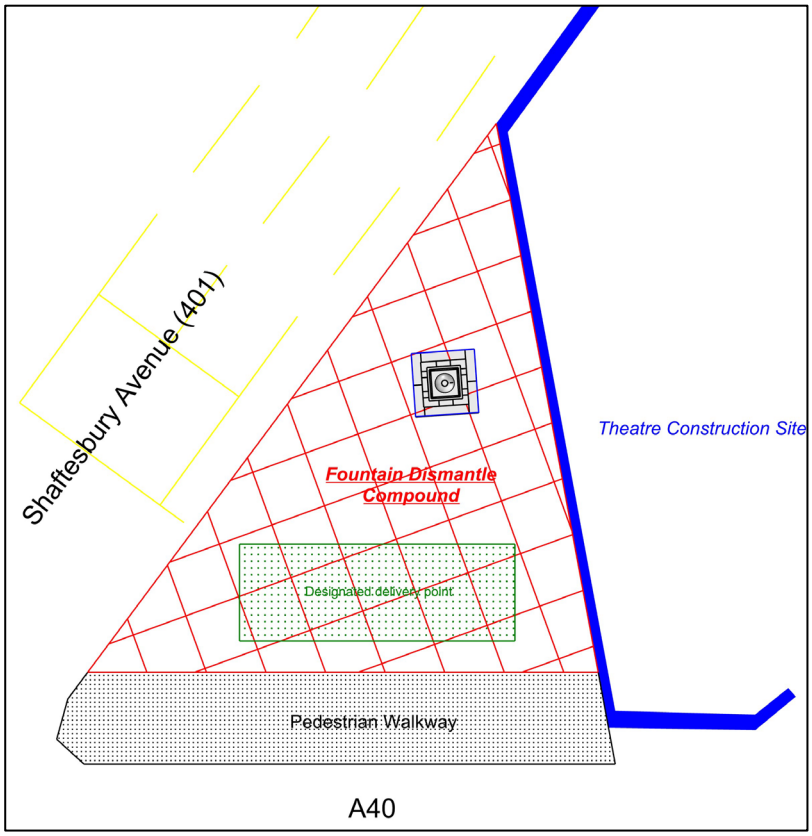
The works are to be carried out by London Stone Conservations and comprises of the careful dismantling, packing and transport of the Grade ll Listed Drinking Fountain, located at the junction with Shaftsbury Avenue and the A40. All works will be undertaken by skilled and specialist operatives who are experienced with the heritage monuments. The fountain is to be dismantled in a controlled and sequenced manner, releasing each block one at time, working from the top down. The blocks are to be packed in specialist casing and delivered to the medium-term storage facility divided between the London Stone Conservation workshop and the secure LSC storage facility both located on the Industrial estate at N15 4LU.

5.2 Location. Triangular parcel of land at the junction of Shaftsbury Avenue and A40 road in W1.



5.3 **Access**. Operative access will be through a gate on the East side of the Heras compound, adjacent a goods entrance. Purpose built scaffolding by a competent scaffold firm adjacent a certified aluminium lifting A-frame gantry (SWL 3000 kgs.).

Diagram of Site Footprint and concept of delivery point..



5.4 **Enabling works.**

- Deliver initial perimeter marking materials required secure the site.
- Establish a safe working perimeter and exclusion using Heras Fencing (apply clear signage, establish safe pedestrian routes, establish goods routes)
- Deliver welfare units.
- Area surrounding Drinking Fountain to be cleared of all vegetation and obstacles, area to be level and compacted .
- Partition site into discrete working areas, temporary storage area for removed masonry units and tool storage.
- Create exclusion zone for deliveries on the site; lay spreader boards on soft ground as necessary. Divide site for storage, welfare, access, lifting.
- Oversee erection of specialist scaffold for access; ; employ spreader boards/ pads to spread loads of scaffold were necessary.
- Erect certified and tested aluminium lifting gantry SWL 3000 kgs.

5.5 **Recording and documentation.**

An Initial condition survey with photographic documentation and dimensional sketches be undertaken once the scaffold is completed and the masons can closely examine the structure. Defects, position, dimension, and weight will be accurately recorded. These recordings will *directly* inform the subsequent processes of dismantling and lifting. Additionally the team will employ a cover meter to assist in locating the position and depth of any metal fixings embedded in the structure. The cover meter readings will be initially recorded as hand drawn sketches / notes and transferred into digital images. During the dismantling process, the masons take further images, dimensions, and hand drawn sketches as each stone is landed to the ground. Additionally a reference number will be applied to the bedding plane of each stone, using crayon. Hand drawn sketches will record the dimensions and positions of each unit and any special characteristics or defects; these site notes will be recorded as images and compiled in CAD at a later date.

South elevation of the Soho Drinking Fountain

5.6 Site set up & Tools Delivery.

The LSC set-up team will have participated in an induction at the LSC workshop before arriving at site. They will have read the RAMS and have been fully explained the nature of the works and the program. The approved RAMS will be signed by all operatives and maintained at the site compound.

Once the team has been authorized to occupy the site by the Council, the team will begin to deliver the necessary materials for securing the site and performing enabling works. An LSC traffic marshal will be responsible for directing and coordinating all deliveries to and from the site. All deliveries to the site will be confirmed and booked in advance with the site supervisor. All deliveries will take place in the early morning out of rush hour in order to avoid any conflict with normal traffic. All delivery vehicles will be directed to a designated spot on the site under the traffic marshal's direction, where material will be manually offloaded. The team will set up visual barriers around the vehicle and monitor and marshal traffic and pedestrians for safety.

Clear signs will be hung describing the nature of the works and the dangers that are present to the public. The site team will segregate areas for waste storage, meeting point, material storage, welfare units, tool storage, and delivery routes. Once the site secured and organized, the site supervisor will accept delivery of welfare units, then schedule further individual inductions and complete the enabling works.

The site will always be kept tidy, operatives are expected to clean as work proceeds. All tools and equipment will be secured in site boxes at the works area when unattended ; no trailing cables will be tolerated. The site will be secured and locked when unattended ; all tools will be secured in locked boxes at the end of each shift or when unattended. A site register, RAMS, daily briefings, COSHH documents and current schedule will be maintained at the site.

5.7 Power and Water.

LSC will provide a petrol-powered generator if the team requires 110Vpower. No fuel other than what is in the generator's tank will be stored at site. Access to water via a standpipe from the nearest Thames Water hydrant, with prior agreement with the Council and / or Thames Water. If access to water mains is not possible, LSC will provide water in the form of bulk containers. Site manager to confirm with Council that all previous electrical / water supplies have been isolated. Any unknown services encountered should be treated as live.

.8 Working in a Listed Environment on Heritage Artifacts.

London Stone Conservation operatives are skilled and experienced working with heritage masonry and architectural objects. Before any works are executed operatives are asked to closely examine the as built environment and create an action plan considering both the safety of the operatives and the heritage environment. Operatives are to develop safe working practices around historic objects selecting tools and methods selected to do the least harm possible, aiming for zero damages with the operation. Plans and techniques are constantly reviewed within this scope. Operatives will take care to not to damage any historic materials encountered. Operatives will be proactive in placing local protections to objects during the working process. Operatives will systematically manage and contain the amount of mess and dust created in the listed space during the working process.

Current site setup January 2021.

Operatives will supply appropriate documentation of the historic fabric as well as appropriate protection during manual and mechanical lifts. All objects that are removed will be packaged according to the norms required in heritage settings. If by chance an object becomes damaged during the works or an accident occurs it will be documented, and the Council's contract manager will be duly notified. Any failures will be followed with a corrective action plan to be agreed with Council's contract manager. If there are any questions in scope of works these will be immediately address to Council's contract manager for clarification.

5.9 High Level Access.

The drinking fountain is roughly 4.4 m tall and 2.2 m square and weighs roughly 26 tonnes, with the heaviest object possibly up to 2.8 tonnes.The team requires a safe and robust platform to access the granite blocks and perform their duties. LSC will instruct and commission a competant scaffold firm to design and build scaffold structure around an aluminium lifing gantry that will straddle the fountain. The scaffold will provide access only to the operatives for cutting joints and strappring blocks. An aluminium A-frame lifting gantry will used to to safely lift and transport the blocks to the ground. An LSC manager will supervise the construction and dismantling of the scaffold, ensuring the safety of the fabric at all times.

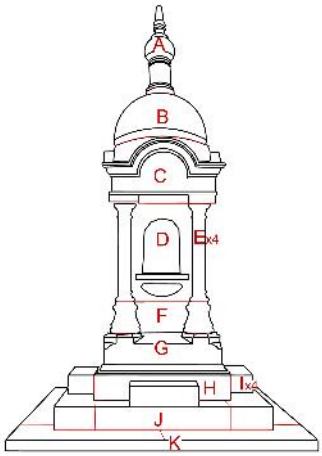


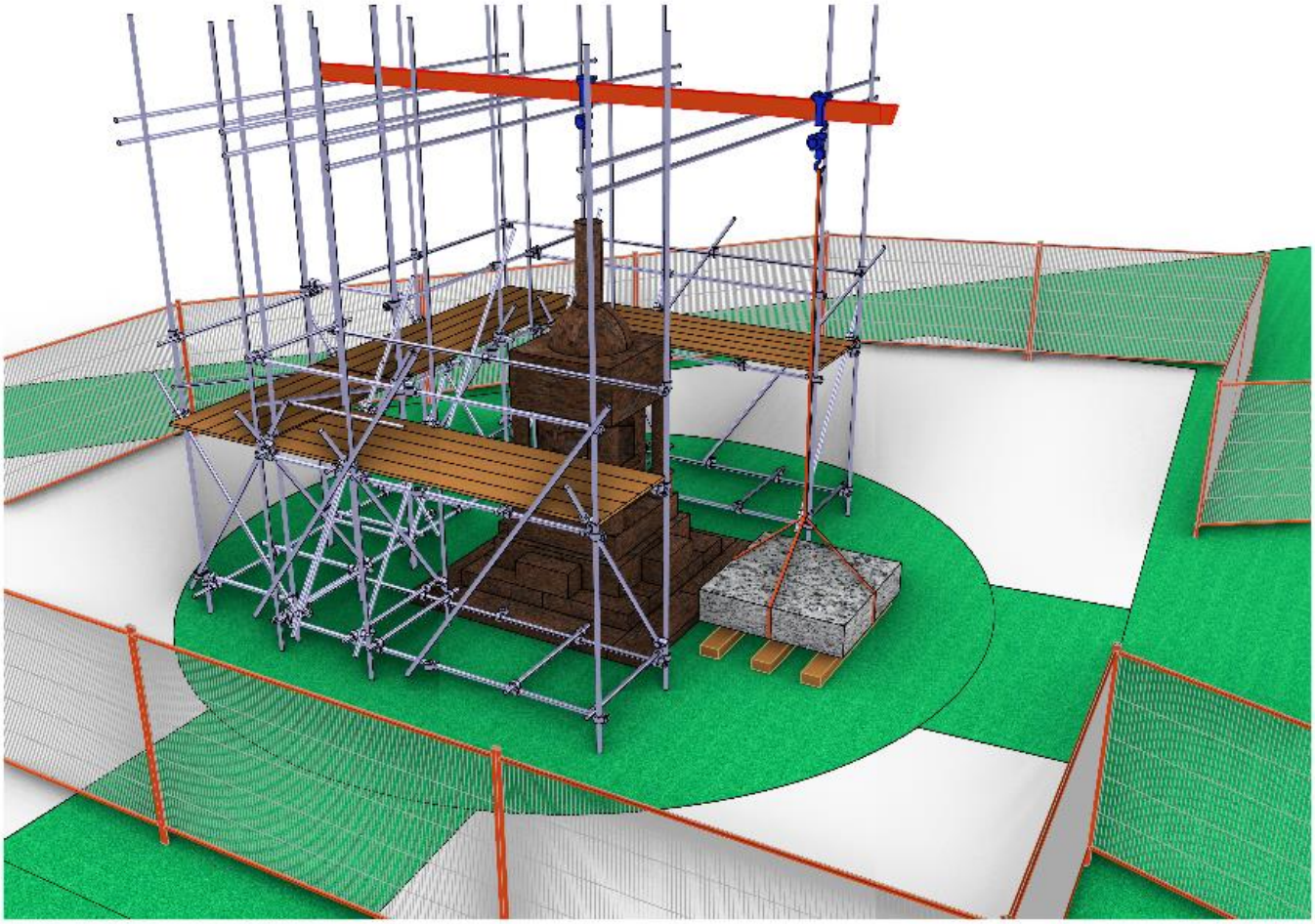
Diagram of Fountain describing masonry units with estimated dimensions and weights.

Shaftsbury Fountain Approximate measures and weights

item	description	units	length	breadth	height	kgs
A	Pinnacle	1	0.215	0.215	0.886	160
B	Dome	1	0.288	0.288	0.285	960
C	Tympanum	1	0.915	0.915	0.442	2800
D	Niche Block	1	1.273	1.273	0.646	1320
E	Column	4	0.870	0.870	0.646	600
F	Base block / Column	1	0.870	0.870	0.285	600
G	Moulded Base	1	1.413	1.413	0.294	1580
H	Block Base	1	1.627	1.627	0.364	2590
I	Block Step	4	0.680	0.275	0.293	590
J	Top Step	6	1.278	1.278	0.200	3200
K	Bottom Step	6	2.155	2.155	0.105	3653

5.10 Further assessment.

Concept design for scaffolding and lifting process.



Once the scaffold is completed offering close up access to the drinking fountain, LSC will proceed with the condition survey and cover meter analysis. The survey will inform the final approved LSC safety protocols and program, as well as any additional pre-existing damages to the fountain. If any deviations from the initial proposal are required, these changes will be discussed in advance with the Council and documented in an updated RAMS.

5.11 Initial clean.

The monument will be given a light clean with soft bristle brushes and de-ionised water to prevent slippage during handling. Additionally the clean will allow further analysis of the deteriorated granite surfaces prior to works, potentially identifying safety issues.

5.12 Dismantling methodology.

The final methodology for loosening and lifting the individual blocks is dependent on the results of condition survey and cover meter analysis .The final methodology will be confirmed with the Council before work proceeds.

Projected methodology. The fountain is to be dismantled in a controlled and sequenced manner, releasing each block working from the top down. Operatives will loosen the masonry blocks, one at a time at the (bed) joints. Operatives will only employ hand tools for this process, while applying fine misting water spray to gently wash away the abraded particles. A specialist diamond-encrusted wire and various types of hand saws will carefully abrade away the jointing mortar, leaving behind a void. As the work progresses , the masons will fill the void with shims and packers in order to maintain balance, support, and stability to the above masonry unit. In addition, operatives will rig the selected masonry unit with lifting slings to the overhead chain block for additional stability and support, mitigating any undue stresses on the stonework. Any ferrous fixings encountered in the bedding plane will be cut through with these methods. Once a stone has been released from the rest of the fountain structure, the team will proceed to the lifting phase of the operation.

Alternate dismantling methodology. Alternative methods to dismantle the stones may need to be considered if loosening the individual stones at the bed joints proves to be ineffective or the initial inspection indicates a change in program. These methods may be considered: dismantling by drilling to remove ferrous metal fixings, dismantling by the use of original Lewis pin holes, drilling new lifting holes in the base beds of the stone, using a 3 tonne SWL aluminium A-frame for lifting.

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5.13 Lifting Operations & Handling.

All lifting operations will be carried out by a pre-planned and approved LSC Lift Plan, which will be informed by accurate recording of weights and dimensions. The lifting and rigging / slinging process will be led by the senior mason who is an experienced, competent, and skilled operative. All the lifting gear employed will arrive tested and certified as per LOLER regulations. Our initial approach is that to supply the site with lifting equipment rated at 3000 kg. SWL which will provide an elevated safety factor ; the final choice will be based on the initial data gathering (estimates show some blocks may weigh up to 2800 kgs). The lifting equipment will consist of a 3000 kg. SWL chain block attached to a 5.5 m aluminium lifting gantry with a running beam. The gantry will be erected on the ground straddling the fountain. Stones to be lifted will be shacked to the chain block using soft nylon lifting straps of both 3 and 5 tonne capacity. All stone surfaces in contact with the lifting straps will be provided softening and edge protection during the handling and process rigging.

A safety lift will be carried out for each stone that will be removed. The process is as follows: The slinger will secure the stone with suitably rated nylon lifting slings as indicated by the approved Lift Plan. The rigger will place appropriate surface protection underneath the slings and to exposed edges. The slings will be latched to the chain hoist above. The strapped unit will then be lifted by the chain block just enough for the slings to take the weight of the stone. The safety lift will not move the stone more than 3mm from its bed. While the straps are under the tension of the stone's weight, the rigger will check the strap configuration, the balance of the object, and identify any potential risks that may be present with this configuration. If the lift is deemed unsafe, for any reason, the unit must be lowered to the bed and the strap configuration re-adjusted. Another test lift will be undertaken, and the process will continue until the lift is found to be safe. When the lift approved, the unit will be slowly lifted clear of the masonry below ; the lifted height will be minimal and appropriate only to clear the masonry below.

The rigger will then tranfer the unit along the I-beam, using the beam-trolley and come to a rest at the discharging area. At the discharging area, the stone will be carefully lowered to a padded pallet / timbers. When the unit is safely on the ground, the slings will be removed, and the masons will update the documentation. Then the unit will be protected with softening and removed to the temporary site storage area using a pallet truck and skates. At the storage area, the unit will be provided further softening / protection and boxing.

The lifting process will be repeated for each stone until the drinking fountain is completely dismantled. LSC will stow any tools and secure any exposed or partially dismantled masonry the end of each shift. Upon completion of the dismantle process, LSC will make safe any unsafe holes, structures, or exposed services, informing the Council manager of any potential dangers.

5.14 Recording.

Each masonry block will be assigned its unique reference number and labelled on an unseen face with indelible marker. All details, condition and photographic records will be compiled in the Database and drawing.

5.15 Specialist casing.

A combination of bespoke casing and standard pallet cases will be constructed for the purpose of safe transport and storage of the units. Some units, owing to their large size will be cased at the LSC workshop after it has been transported ; however during transport these units will be provided an appropriate level of padding and protection at all times. Each case will be designed for the specific dimensions and weights of the unit, using the following protective materials.

Tyvek – to be vapour permeable colourless or white, non - staining, synthetic (polyethylene) spun fibre fabric, which will not abrade surfaces or trap moisture.

Cushioning material of rigid or semi - rigid closed cell polyethylene foam blocks and sheets (medium to high density, white or black) ,Structural polystyrene

Fibre (synthetic or natural)- to tie cushioning in place

Tarpaulins – to cover in case of inclement weather / airborne contaminants

3000 kg ratchet straps - to secure the protected stone units to the modified pallet to the loading area

5.16 Transport and Deliveries.

Deliveries will be pre-planned according to the works schedule. Deliveries will be scheduled for the early morning in order to avoid disrupting traffic during high traffic congestion times. The longest delivery is estimated to take less than 40 minutes. All vehicles will be directed to a segregated area within the LSC site compound, under the direction of the site traffic marshal. During the delivery the traffic marshal will be joined by a second team member who will help identify any further potential hazards to pedestrians and cyclists, as the vehicle is directed into position. Any temporary alterations to the site perimeter will be restored immediately following the safe entrance/ exit of the vehicle. Similarly all exiting vehicles will be under the direct supervision of the site traffic marshal and his assistant.

LSC expects deliveries for: enabling works, welfare units, scaffolding, masonry removal, and the site set-up/strike. LSC anticipates that drinking fountain removal will require two different loads. Masonry units will be removed from site by a lorry with an integrated HIAB. As soon as there are sufficient dismantled units packaged at site the team will schedule a delivery, in order to maintain an orderly site.

The large masonry units will be removed from site by a coordinated effort between the masons and Hiab diver. Masons will shift the cased masonry blocks, one by one, to the lorry using skates and pallet trucks, along a prearranged path. The lorry driver will then take control to rig, lift and secure each crate to the bed of the truck. When the truck is full , the load will be transported directly to the LSC workshop in Tottenham (N15 4LU) where the units will be offloaded by the HIAB with assistance and under supervision of LSC management.

5.17 Storage.

Open air site storage surrounded by locked Herras fencing. Site storage will be provided for tools, temporary dismantled units, personal items, waste**.** Operatives are expected to keep storage locked at all times and store and secure ALL items when the site is unattended. A designated temporary storage area will be required during the dismantle process; the team will schedule a removal once there is sufficient material to fill a lorry. LSC projects that there will be 14 pallets of dismantled stone with an estimated combined weight of 26 tons*; these quantities may change following the detailed survey*. The removed and protected stone will be transported via lorry to the LSC workshop which is on an Industrial estate in Tottenham (N15 4LU). Here the cases / units will be stored for an agreed amount of time (length of time TBC with the Camden Team). The stored units will be stored at the LSC workshop premises which has CCTV and is attended daily. LSC will provide for a full inspection as per the Council CA requirements.

5.18 Materials Handling

1. All materials will be below the recommended guidance for manual handling lifting weight of 25kg.
2. Operatives will consult the lift plan to understand each unit's approximate weight. Wherever possible mechanical means like sack barrow or trolleys will be used to move stones from point A to point B. If stones require manual lifting this will be done between 4 operatives who have been trained in manual handling and know the correct procedures to follow.
3. Operatives must maintain storage is adequate and secure, removing dismantled units when there is enough material for a load for transport.
4. Mechanical lifting devices will be used to move heavy masonry units. Both block and tackle attached to a lifting beam will assist trained operatives raise and lower units.
5. Masonry units on the floor will be moved using trollies and pallet truck and skates, as necessary.

5.19 Condition monitoring.

The condition of the drinking fountain will be monitored throughout the dismantling process, casing, transportation, and medium-term storage.

5.20 Heritage Asset Record.

All documentation and notes created during the project will be made available to the client. There has been no request for an OM or conservation report.

5.21 COSHH.

A record of all chemicals stored on site will be filed with the RAMS and maintained on site. It is expected that there will only be petrol stored in the generator, should one be required.

5.22 PPE.

Five-point PPE to be worn at all times on site ; hard hat, safety boots, gloves, safety glasses, and hi-visibility. Appropriate hearing protection is required when using machines or during noisy works above 85DBs. RPE face fit tested Sundstrom Dust Masks w/ P3 Filters.

5.23 Welfare facilities.

A portable welfare unit encapsulating a changing room, personal storage, and toilet facilities will be delivered to site. An additional hand washing station and port-loo will be provided allowing for extra capacity due to COVID-19. Staggered breaks will be enforced at site.

5.24 COVID-19.

See attached LSC Site Specific RAMS in relation to Covid-19.

6 Project Managers

The following individuals will be involved in the organisation and delivery of the project.

Name	Position	Email	Telephone
Florian Kirchertz	Director	florian@londonstoneconservation.co.uk	0208 8885 04 00 07876 685 470
Nicholas Hague	Technical Director	nick@londonstoneconservation.co.uk	7906 774

7 Predictable Behaviours

Top 3	Predictable Behaviour	Where has, this behaviour been addressed in the RAMS.
1.	Deviating from RAMS and/or Lifting Plan	5.12 Dismantling methodology.
2.	Not wearing correct PPE	5.22 PPE.
3.	Not using correct pedestrian access routes	5.6 Site set up & Tools Delivery.

8 Programme of works & potential interface with others

The following activities & documents may have an impact on the works:

Site Programme and allotted time. The current predicted date for commencement of the works **is April / 2021. TBC**

Enabling works. Works listed above in **5.4** need to be completed before works can commence on site.

Vulnerable material. It is imperative that the work proceeds in a careful and considered manner, with time for consultation and documentation at every stage.

Activity isolation (barriers, notices). Signage to exclude all unrelated staff and operatives from the working area surrounding the Shaftsbury Fountain.

Operations which may affect others. Site setup, scaffolding erection, Loading, and unloading will require additional exclusion zones that may affect access and traffic routes. If an alternate method of dismantling is adopted, then drilling and/or cutting of the granite (at the bed joints) with power tools may be required to insert the lifting straps. Dust suppression will be used in the form of damping down with water and extraction at source in addition to the use of portable LEVS. The operations may also create noise that may affect others working in the vicinity. Noise levels will be monitored with the correct signage in place, and any noisy works will be carried out in short intervals, at the approved council time slots

Inductions and task briefing. All project team including managers, operatives, and site visitors will undertake an LSC site induction before being allowed on site. All Task briefings , led by the shift supervisor, will take place at different stages of the process in order to remind the team of the work hazards and approved methods of working. A 'safe start' meeting will be led by the supervisor at the start of each shift.

Location. The works are to take place in the open at a busy intersection of Shaftsbury Avenue and the A40 in W1.

Potentially disruptive activities. The Listed Drinking Fountain is next to the A40, in the middle of a busy tourist district of Central London.

9 Working environment considerations

Below is a list of potential considerations for the site, surrounding environment and working conditions.

Ground conditions. Ground surrounding monument has been disrupted and now repaved. In order to move the heavy units using skates and trollies, consideration needs to be given to laying spreading boards of ply and scaffold boards that can support the weight of the units in transport.

Existing services overhead. There are no overhead services.

Adjacent structures including buildings, roads, railways, and waterways. The small site is located on a busy intersection next to the Theatre construction site. Deliveries must be held out of busy hours and kept to a minimum to avoid disruptions to the flow of traffic.

Inclement weather. The masons can temporarily cover the scaffolded structure during a shift if weather becomes an impediment to progress ; any temporary cover must not interfere with the safety of the operations and must be struck at the end of the shift.

Housekeeping. Working perimeter to be maintained throughout with all tools and equipment to be kept within exclusion zone at all times. No tools are to be left out when the site is unattended. All tools and equipment to be put away at end of the working day. Lifting gear will be struck every evening, lifting straps are to be stored separately and kept clean and dry. Any exposed or potentially unstable masonry units will be secured and made safe immediately. Operatives will continue to operate under Covid-site rules as

expressed by the government (see additional Covid safety measures). No trailing cables are permitted on site. Any waste generated will be stored in lockable compound and collected at source while the team proceeds, keeping a tidy site always.

Designated Storage. Storage areas will be segregated by use (operative tools, waste, dismantled masonry). Lockable steel site boxes to be maintained within the tool storage area for hand tools and equipment. Waste will be secured and contained within the waste bins. The dismantled masonry units will be maintained secure on the ground in their temporary storage area.

Exclusion zones and site security. The site footprint will be maintained by erecting a Heras fencing barrier with one entrance, w clear signage describing the dangers of the works, and contact numbers for the site supervisor. During deliveries, the site footprint may need to be modified with additional Heras fencing to reach the curb side delivery point with additional signage and temporary exclusion cones and barriers for enhanced safety. The site will be locked secure when unattended. A site register will be maintained by the site supervisor. Any non-essential persons will not be admitted on site. Site visits will be scheduled in advance at minimum 24 hours in advance and confirmed with the site supervisor and LSC management.

Noise, vibration, and dust. The amount of dust is dependent on dismantling method employed. It is unlikely that any significant levels or noise, vibration or dust will be produced using hand tools. LSC expects to use hand tools to cut ferrous metal fixings and bed joints. There is an outside chance to use of 5" angle grinder and percussion drill for the dismantle. LSC will employ a battery hand drill and jigsaw / skill saw for fabrication of transport boxes. Any dust created will be collected at source using a portable LEV and misting water suppression. Operatives are provided face fit RPE and ear defenders and trained in their proper use. If noisy works cannot be avoided, the team will execute this work according to approved Council times although noise levels from electrical tools are not expected to exceed the surrounding traffic noise.

Waste arrangements. Waste will be collected at the source as works proceed and will be secured at the designated waste bins. Waste will be taken away to the site waste disposal area using trollies and wheelbarrows, as necessary. Debris will be removed from site as soon as practicable possible. LSC has a licence to carry waste on our vehicles and disposes of waste from the Tottenham warehouse address in line with all local laws regarding disposal.

Environmental Considerations

Site environmental considerations issued by London Stone Conservation Ltd must always be adhered to as this is a sensitive area the site rules and conditions must be maintained at all times.

1. London Stone Conservation Ltd will supply spill kits for chemicals used at site.

2. All insulation and package materials must be kept from entering drainage systems.

3. General waste, timber, waste plastics and cardboard etc. and special waste, will be separated for disposal.

4. Noise will be kept to a minimum whilst on site.

5. Foul and abuse language will not be tolerated, operatives found using such language or gestures will be removed from site immediately.

6. Transistor radios will not be permitted on site.

7. Mobile phones must not be used on site.

8. Clean as you go policy enforced at site ; rubbish to be removed and stored in lockable bins at the designated site disposal area.

9. LSC holds a license to transport refuse from site for disposal ; rubbish will be removed to the LSC workshop where we dispose of materials in accordance with the local laws.

10. Chemical waste and stone / cement slurries are to be collected and segregated in containers for disposal ; they are always to be kept out of the drain system.

11. Site to be swept clean each day ; all operatives responsible for clean site.

12. Any dust to be captured at source using a portable LEV and by using dust suppression techniques (water misting).

Protection of the Public. Site traffic must be kept to a minimum and local traffic around the perimeter of the site must be treated with care. Road safety is paramount. Clear signage to be implemented around the works area with appropriate contact numbers ;

scaffold alarm to be implemented with no climb signage. Use of traffic marshal to coordinate deliveries and coordinate team to assist deliveries and direct public.

10 Plant, equipment, materials & welfare

Details of plant, materials, and equipment

Item	No.	Details/Comments
3000 kgs SWL aluminium gantry with trolley	1	Dimensions TBC ; 5.5 m length ; 300 kgs SWL
Block & tackle	1	TBC 3000kg SWL, 6-meter H.O.L. hand chain block., supplied, fully certified, and tested
Lifting straps	16	TBC 8 @3000 kg SWL round slings (4 pairs 1m, 2m, 3m, 4 m lengths); 8 @3000 kg SWL flat webbing slings (4 pairs 1m, 2m, 3m, 4 m lengths)
Alloy bow shackle	3	TBC 6.5-ton SWL screw pin, fully certified and tested
Webbing / round sling belt hook	2	TBC -3000kg SWL, fully certified and tested
Angle grinder	2	125 mm. variable speed, Makita GA5040C, 110V
Jigsaw	1	Makita 110V
Reciprocating Saw, Skills saw	2	Makita 110 V
Hand drill	1	Hilti TE30 110V
Battery Drill & Battery Impact Driver	2	*DeWalt 18V lithium, 3.0AH*
Pallets/timber/protective materials	Various	12 no. reinforced Euro pallets, timber various, closed cell foam various
Retaining ratchet straps	40	3000 kg ratchet straps
Hand tools	Various	Hand saws, hammers, rubber hammers chisels, drill bits, drill drivers, brushes, sponges

11 Personnel

The following personnel will be involved in the delivery of the works package. All members will undergo an Induction prior to commencement of the project.

Name	Position	Qualifications & *Experience*	Specific Competence
Florian Kirchertz	Director	GCGI NVQ Level 5 Stonemasonry & Architectural Stone carving	IOSH, CSCS, PASMA, First Aid at work, Manual Handling
Louis Russell	Project Manager	BA Hons Art History & Italian, NVQ5 Dip Architectural Stone carving	CSCS, PASMA, First Aid at work, Manual Handling
Nicholas Hague	Technical Director	Dip Architectural Stone carving, Banker Mason, Mason Fixer, Heritage Skills	CSCS, PASMA, First Aid at work, Manual Handling
Joseph Ward	Conservator	BA Conservation, Site Supervisor	CSCS, PASMA, First Aid at work, Manual Handling, SSSTS
Mirek Sanzcyk	Senior Stonemason	Stonemasonry & Granite Memorial Masonry	CSCS, PASMA, First Aid at work, Manual Handling
Robert Zyuvagus	Stonemason	Stonemasonry & Granite Memorial Masonry	CSCS, PASMA, First Aid at work, Manual Handling
Ambrose Blatchford	Stonemason	Diploma NVQ Level 2 Stonemasonry, Diploma NVQ Level 2 Banker Masonry, Diploma NVQ Level 2 Banker Masonry, Advanced Banker Mason, Degree BA Architecture	CSCS, PASMA, First Aid at work, Manual Handling, SSSTS
Ugis Zyuvagus	Labourer	Trainee mason, skilled labour	CSCS, PASMA, First Aid at work, Manual

12 Deliveries & transport of materials

Unloading and transport of all goods will be overseen by the Site Foreman and a competent traffic marshal. All deliveries will be programmed into the works schedule and known in advance and scheduled for the early hours in order to avoid disrupting traffic in Central London. Barriers and cones will be erected around the vehicle and an extra operative will engaged in traffic duties the time of offloading for enhanced safety. LSC Tools, equipment, and materials to be delivered to and from site using the LSC Nissan E-NV200 electric cargo van (750 kg. payload capacity, registration: LF64ooW) and Citroen Drop side van (2,500 kg). The palletised monument will be removed from the site using an 11-ton HIAB lorry ; expected in two loads. The scaffolders will deliver their goods by a flatbed lorry. The welfare unit may be delivered as a towable container.

13 Emergency procedures & first aid arrangements

Emergency arrangements.

- Emergency procedures
- Evacuation plan
- First aid
- Location of nearest A&E
- Location of fire extinguishers and alarms
- Emergency exits
- Meeting points

First aid. All LSC operatives are trained in First Aid at Work to administer first aid treatment for minor injuries. All accidents will be reported and logged in the accident book.

Locations of First Aid and A&E

Location	Type

On site with Team	First Aid Kit, Eye Wash Kit
A&E Hospital	**TBC** UCL Hospital

14 Amendments to the safe systems of work

Identify changes in Process, Plant Material etc if and when amendments or changes are made to the method statement. This should be a brief summary of changes and when the changes were made. Within this section please identify and reference person(s) responsible for signing off/approving amendments to the safe system of work. All amendments should be signed for and dated, see below for example

Amendment/Revision *1* – *(detail latest revisions in order)*

Amendment completed by –

Amendment approved by –

Date Amendments made –

15 COVID_19 Site Rules

LONDON STONE CONSERVATION
www.londonstoneconservation.co.uk

COVID Site Rules

In addition to the procedures otherwise highlighted in site specific risk assessments and method statements the following additional site rules are to be adhered to by all site operatives. Where necessary these rules will be further explained throughout site induction and within the construction phase health & safety plan:

All site personnel have a crucial role to play in containing the spread of the corona virus and we ask you to obey, without question, the following additional site and office rules with immediate effect:

- Public transport to be avoided to attend site. Where possible operatives are to drive solo unless living with work colleagues.
- Wear appropriate COVID face mask in public spaces carry a hand sanitizer and use it.
- Regularly wash hands using soap and water for at least 20 seconds using facilities provided when:
- When you arrive at work.
- When you get home from work.
- When you blow your nose or sneeze.
- Before you eat or handle food.

- Operatives to maintain 2m distance between adjacent operatives during all works and during breaks.
- No handshakes allowed.
- No sitting in canteens, only to be used for food / drink preparation and hand washing.
- When possible operatives to sit in their vans during breaks.
- Site meetings and discussions to be conducted by phone or video where possible.
- No sitting / meetings in site managers office.
- Recommend Operatives to bring their own toilet paper and hand sanitiser to site to reduce touch points.
- Cleaning regimes to be increased with regular wiping down of all door handles and "hot spots" with disinfectant.
- Please adhere to the latest government rules when not at work.
- If you have any underlying health conditions you must notify the site manager during induction. In Case Of Emergency (I.C.E.) tags to be displayed on helmets.
- If you must work within an enclosed space or 2m of another operative inside or outside, a suitable face mask must be worn.
- Do not come to work and self-isolate at home for 14days if you are showing or have been with anyone who has the following symptoms: Consistent Cough, Fever, Shortness of breath, loss of smell and taste.

If you feel unwell, please advise the site manager. If you suspect a breach of these rules by any operatives, please report it to the site manager.

Given the situation is changing daily, we will update these additional site / office rules when necessary. Assuring you of our best intentions always.

Florian Kirchertz, Director
01 / 05 / 2020