

APPENDIX S9 - Safe System of Work Form SHE 4

To be completed when tasks involve multiple or complex activities that are not covered in their entirety by risk assessments and/or key procedures.

Note: This form is only valid when sections K and L are completed and signed the manager responsible and all personnel involved.

Site/project name:	Station Hill – Reading – Phase 2 – Enabling Works	Project no.:	TBC
Address:	Garrard Street, Reading RG2 1 RN		
Area/location:	Phase 2 – Public Space Area		
Company:	JRL Group		
SSOW No.	SHR-02-001	Title:	Enabling Works of Station Hill Phase 2/Public Space Area
Senior Project manager:	Danny Kerry		
Prepared by:	Yarkin Bilgic	Date:	25.03.2020
Revision: 00	-	Revised by:	-
		Revision Date:	-

A: Brief description of work to be undertaken

Work location:	Station Hill – Reading – Phase 2 Temporary Event Space
Disconnection of the existing utilities, demolition / excavation of the 'temporary event space' to the north of the NCP car park in front of Reading Train Station, including part demolition of existing NCP retaining wall to the level identified on the Ramboll drawings.	
Start date:	As per agreed construction programme
Duration:	Refer to construction programme

B: Work equipment required for a safe working environment

Note: Include all equipment needed for a safe work environment, Do not include PPE – see section H.	
Tools • Hand tools - Hammer & podger bar etc. • Lifting accessories • Light pneumatic breaker • Cutting equipment • Petrol Saw • CAT scanner • Surveying equipment • Cartridge tool & form stops • Circular saw • Torque wrench and spanners	Plant & Equipment • 360° Excavator • Dumper • Compressor

Equipment - Hydraulic raking props - MGF 200 and 400 Series - Universal tripod, wing nut spanner, assembly bar Materials - Safety signage	Fuels, Oils & Substances - Petrol - Diesel - Hydraulic Oil - Spray Paint - COSHH Store & Spill Kit Documentation - Layout and construction drawings - HAV's Poster - HAV's register - Approved Temporary Works design & drawing: - Lifting plan
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C: Sequence of main job tasks (identifying the work equipment required for health and safety, method and associated safety controls)

Job task	Safety control (reference sections B, D-J below)
- All site operatives will receive an induction and adhere to site emergency procedures at all times whilst on site. - Manager/supervisor to complete a daily safe start before work commences. Also supervisors will carry out daily briefings with operatives on a daily basis. - A toolbox talk will be carried out site on regular basis for all operatives, with the topic being relevant to the work taking place on site. Operatives will sign off on the toolbox talk to indicate that they have received and understood the material. - Access/egress from the working site will be via designated walkways which will be highlighted using 'Yellow Matting'. Walkways that are not defined by yellow mat will be defined by either scaffold tube and fitting or crash barriers, with gate points at the entrance to the site itself. All work activities will be planned to maintain pedestrian routes across the site - JRL Group will provide a first aider for the duration for the project. This person/s will be displayed on the site health and safety notice board. - Site working hours will be 8:00 a.m. to 6:00 p.m. (Mon to Friday), 9:00 a.m. – 1:00 p.m. (Saturday). Quiet periods between the hours 12:00 noon – 1:00 p.m.	All safety control measures listed in sections B-J must be strictly adhered to at all times, any changes then works must stop immediately and your supervisor notified.

Isolation of Services

1. We will liaise with the utility and meter suppliers to arrange and carry out the service disconnection, meter removal and service isolation / protection back to the main service for the electricity, water and telecommunications services for the enabling works area.
2. **Investigation** – Prior to commencement we will investigate the site area to establish if any further services exist (services which may not be identified by the utilities company).
3. **Electrical supplies** - ARK LTD our in house specialist M&E contractor will be employed to isolate the remaining services back to the incoming heads.
4. **BT** - BT cables will be isolated back to the incomers and cut. BT will be contacted to remove the cables from this point.
5. **Water** - Water will be cut back to the boundary and a temporary supply installed to provide dust suppression throughout the works.
6. **Drainage** – Drainage services (incoming foul and outgoing surface water) will be disconnected to the perimeter of the excavation area.

Hoarding Erection

1. Currently there is an existing hoarding which is colored in red on the drawing named “**Station Hill - Phase 2 enabling works Close Up**”. Additional hoardings will be erected on the agreed boundary line, this hoarding is colored in yellow on the drawing which is mentioned above.
2. Prior to the demolition of the existing public space retaining wall / NCP the new hoarding will be erected along the service road,

Utility Disconnections

1. Prior to tree removal, all of the underground services need to be disconnected. Paul Saunders (Midgard Service Manager) on behalf of JRL Group, will make the necessary arrangements for the disconnections with the Electric supplier, BT and Local Authority for Foul Drainage and Surface Water Drainage.

Tree Removal

1. The 7 existing trees will be removed in line with the specification provided by Watermans, 2nr will be positioned adjacent to the Biscuit Tin as indicated on the layout drawings.
2. The remaining 5 trees will be stored as directed by the Client for future use.

Demolition of the Retaining Wall

1. The Retaining wall will be demolished at an early stage.
2. There is a concrete frame within the wall (beams and columns that support the existing wall) this structure will be demolished concurrently with the site strip / excavation works.

Site Strip, Slab and Foundation Removal

1. A trained operative shall first scan the area with a CAT scan device insuring to the best of his knowledge there are no live hidden services.
2. The site strip, slab and foundation removal will commence from the North West end of the site to allow for the early exposure of the pile caps and existing piles.
3. The slab shall then be broken using a hydraulic breaker. Where possible the slab is to be pulled up using the excavator bucket. This will help to reduce the noise created from the

Hydraulic breaker. - The foundations throughout the footprint of the site will be removed. - The area will be examined for signs of oil contamination and if necessary sampling of the contamination arranged. - Material will be excavated and loaded onto tippers for removal from the site. The reduced level dig will be carried out in such a way as to minimise the spread of debris onto surrounding roads.
Breaking Out Existing Pile Caps and Cutting Piles 11 No pile caps which are located on the North West corner of the site will be broke down. - After the pile caps removal the piles will be cut down to the requested level. - There are 2nr pile caps that are depicted partly on the site and these will also be removed.
Loading Away Arisings - We will have a water supply at hand for dust suppression to ensure that dust impact on the environment is reduced to a minimum. - Material will be loaded away as work proceeds in order to maintain a clean and unobstructed work environment - A road sweeper will be on call at all times to ensure the public highway is kept clean. In addition vehicles will have their wheels washed as they exit the site should this be necessary. - All soft strip and hazardous materials will be removed off site in a timely fashion to minimise the risk of fire and contamination.
Import and Place Fill Material - The formation levels will be achieved in line with the levels indicated on the drawings. - Crushed material will be retained on site for the Clients future use.
Water Management - Gullies that are within the demolition zone will be sealed to prevent the ingress of debris to the sewer system. This will be by use of a gully guard or similar system. - A temporary water supply installed to provide dust suppression throughout the works.
Noise, Vibration and Dust Management - Noise will be monitored on a regular basis and a limit of 80dB LAq 2hr. Noise will be monitored on a real-time basis. Compliance reporting will be carried out and included in the Progress Reports - All machinery will be modern and in good repair to minimise noise. Where a silenced option exists it will be used as a preference to non-silenced machinery. - Vibration monitoring will be carried out where required. Given the location of the surrounding buildings it is unlikely that large amounts of vibration will be transferred, However should monitoring be required the trigger level for this will be set at Yellow 75%-89% of the benchmark vibration level. The red trigger level will be set at 90% of this value. - Dust will be measured on a continuous real time dust meter in locations agreed by the Specialist dust consultant. Should the dust levels exceed the stated limit then a red trigger will be generated.

5. Midgard will cease dusty operations on receipt of this trigger until measures are put in place to bring the dust below the Red Trigger Level.
6. Dust Suppression equipment will be installed to prevent any migration of dust beyond the site boundary
7. Minimising dust is the best way to avoid any issues arising and this can be done by simply employing a vigorous housekeeping regime that uses an absorbent sweeping compound such as Dusmo.
8. The use of water, wet vacs equipment fitted with direct dust suppression attachments (for e.g. cut off saw) mechanical sweepers and Hoovers may also be used as an effective way of keeping dust to a minimum.
9. Carefully select equipment and construction methods to reduce noise and vibration
10. Use of gas powered generators rather than diesel if possible (these are also quieter)
11. Ensuring that all plant and vehicles are well maintained so that exhaust emissions do not breach statutory emission limits;
12. Locate plant as far as reasonably practicable from receptor;
13. Switching off of all plant when not in use;

Safe system of work form SHE 4 (cont'd)

D: Key health and safety procedures (HSP) required (see SHE2 for guidance) and associated documentation

Note: Each relevant HSP to be briefed to site team.

HSP 3 - Working at height
 HSP 4 – Key requirements for selection and use of safe work equipment
 HSP 7 - Controlling mobile plant on site
 HSP 9 – Managing risks from noise and vibrations
 HSP 11 – Permits to work
 HSP 12 - Use of harnesses and inertia reels and attachments
 HSP 14 – Statutory inspection of plant and equipment
 HSP 17- Oil and pollution control

E: Relevant risk assessment guidelines (RAG) (see section 3 of the manual and JRL HSE Website for list of risk assessment guidelines)

Note: Each relevant RAG to be in place, associated toolbox talk completed and section L of this form completed.

RAG 003 – Fire prevention hot work operations
RAG 008 - Manual handling of portable plant and equipment.
RAG 003 - Fire prevention – hot work operations
RAG 016 – Assessment for podium steps
RAG 022 – Driving and operating mobile plant equipment
RAG 023 – Portable power tools – safe use on site
RAG 024 - Oxy-propane welding
RAG 026 – Working in noisy areas with powered tools
RAG 032 – Using mobile or portable petrol or diesel plant and equipment
RAG 035 - Avoiding danger from underground services
RAG 037 – Lifting operations using excavators
RAG 040 – Vehicle and pedestrian access to and on sites
RAG 043 – Safety of Vibrating Tools
RAG 064 – Setting up exclusion zones

RAG JR005 – Erecting\ Striking of hydraulic struts

Safe system of work form SHE 4 (cont'd)

F: Additional resources, specialised skills & competencies

Note: This may include other specialist trades/skills, in-house or external

Competent Site Manager/Supervisor – SMSTS/SSSTS
 Competent Engineer - CSCS
 Competent 360° Excavator Operator – CPCS
 Competent Dumper Driver - CPCS
 Competent Banks-man – CSCS
 Competent Slinger/Signaler – CPCS

Additional Training

Service Avoidance training

G: Details of work permits or authorisations required (tick ✓ and attach permits or other forms are required for the work activity)

Permit to work (general)		Permit to work (excavate)	✓	Permit to work (hot work)	✓	Permit to work (confined spaces)	
Permit to work (electrical)		Permit to work (working platform certificate)		Permit to work (mobile crane authorisation)		Permit to work (other)	✓

If Other, please describe:

- Permit to access platforms

Safe system of work form SHE 4 (cont'd)

H: Personal protective equipment required

Description of PPE	Required Yes/No? (tick ✓)	Type of PPE (In accordance with PPE regulation or international standards)
Head protection Safety Helmet	Yes ✓	EN 397:2012+A1:2012
Foot protection - Boots - Wellington	Yes ✓ -	BS EN ISO 20345:2011
High visibility clothing - Vest, - Jackets - Trousers	Yes ✓ - -	EN 471
Hand protection - General - Chemical - Mechanical - Thermal	Yes ✓ - - -	EN 420 EN 374 EN 388 EN 407
Eye protection - Glasses - Goggles - Visor	Yes ✓ - ✓	EN 166
Hearing protection - Earmuff - Earplugs - Helmet Earmuff	Yes ✓ - -	EN 352 – 1 EN 352 – 2 EN 352 – 3
Clothing - Waterproof/foul weather - Chemical resistant - Heat and flame	No - - -	EN 343 EN 465 EN 533
Respiratory protection - Filtering face-piece - Half face mask - Full face mask	No - - -	EN 149 FFP3 EN 140 EN 136
Fall arrest protection - Full body harness - Fall arrest system - Fall restraint system	Yes ✓ - -	EN361 EN362 EN353
Other PPE required	-	

Safe system of work form SHE 4 (cont'd)

I: Are other contractors involved in the activity? (If so state name, address and key contact details). **Other site health and safety information.**

J: Details of contacts, site management etc., or special emergency arrangements

JRL Group (Key Staff Members)

Operations Director
Peter Corbett

Senior Project Manager
Danny Kerry

Site Manager Civils
TBC

Site Manager Demolition
TBC

Site Engineer
TBC

Health & Safety Manager
Stuart Harvey

K: Name of person responsible for implementation of safe system of work
(communications and monitoring compliance)

Name (please print): Danny Kerry

Position: Senior Project Manager

Contact no: +44 7879 027 238

1. Check all sections and confirm correct.

Signature: To be completed on site

Date: To be completed on site

2. Issue document to site team and ensure briefing.

Signature: To be completed on site

Date: To be completed on site

Safe system of work form SHE 4 (cont'd)

L: Details of personnel involved and confirmation that information and instructions in this document have been satisfactorily communicated.

I/We the undersigned have been instructed and made aware of the contents of this 'Safe System of Work and Risk Assessment/s' and agree to comply with its requirements. If we are unable to carry out the work safely we agree that we must immediately stop work and inform our manager/supervisor.

[illegible]