# Risk Assessments For Piling Works



Contract Number: 200809





# Management of Health and Safety at Work Regulations 1999

#### **Legal Requirements**

Regulation 3 of the Management of Health and Safety at Work Regulations 1999 requires employers to make suitable and sufficient assessment of the risks to the health and safety of their workers or any other person who may be affected by their undertakings and to record the significant findings of the assessments. This requirement also relates to the self-employed.

#### Recording

The recorded assessment should be an effective Statement of hazards and risks, which then leads management to take the relevant action to ensure health and safety. It needs to be part of the employer's overall approach to health and safety.

#### **Contents**

- All relevant hazards and risks should be addressed
- Consider what normally happens in the workplace or during work activity
- Consider who might be affected
- Take into account existing precautionary measures
- Show what control measures are to be put in place to ensure a safe system of work

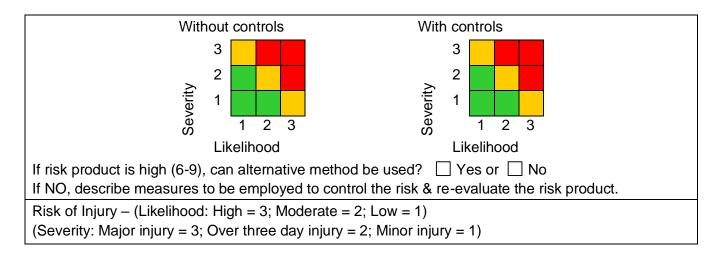
#### **Format**

The enclosed form has been designed to assist in meeting the above requirements. A number of construction operations have been identified, together with associated risks and hazards and recommended control measures in generic form. The format has been designed so that when completed, it will be regarded as 'Site Specific'.

The assessor is invited to select from those generic hazards suggested, to indicate whether they are applicable and to add others, identifying the persons at risk and the risk product.

#### **Quantative Evaluation**

This is obtained by expressing in number form the **likelihood** of injury occurring during the proposed work and then the possible **severity** of such injury. Mark the 'Without controls' risk matrix with horizontal and vertical lines for the severity and the likelihood, where the two lines cross is the overall risk product. The risk product is obtained by multiplying the two numbers together, in consequence the higher the number the more serious the matter.



# Risk Assessments For Piling Works



CONTRACT 200809 SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London NW1 9QB
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#### Note:

- HAZARD... is defined as "the potential to cause harm"
- RISK... is defined as "the likelihood that the harm will occur"

#### **Controls**

The Assessor is invited to select from the list of suggested controls those that he feels should be implemented. Space is also provided for the inclusion of other controls considered necessary to deal with any circumstances relating to a particular site. Re-evaluate the risk product using the 'With controls' risk matrix. The controls are a minimum standard, understanding of the task, the circumstances may well lead to additional controls becoming good practice for all operatives involved.

#### **Further Information**

Further information can be obtained by reference to CITB Construction Site Safety Manual (GE700). This publication, which is updated annually, provides easy to understand information on the way that construction activities should be undertaken. Some Risk Assessments have additional information suggested at the end of the assessment.

#### **Lone Working**

Under no circumstances will 'Lone Working' be permitted on any site unless specific permission has been granted by The Director Responsible for Safety.

#### **Method Statements**

These Risk Assessments are to be read in conjunction with a site specific Method Statement which will go into greater detail as to how the task is to be carried out.



Assessment No	Risk Assessment		Assessment No	Risk Assessment	Tick
<u>RA01</u>	Network Rail	✓	<u>RA20</u>	Site Electricity	<b>✓</b>
RA02	Concrete Pumping	✓	<u>RA21</u>	Working with Augers	✓
<u>RA03</u>	Placing of Concrete	✓	<u>RA22</u>	Pile Cases	✓
<u>RA04</u>	Piling Rig Operations	✓	<u>RA23</u>	Working Adjacent to Moving Plant	<b>✓</b>
<u>RA05</u>	CFA Piling	✓	<u>RA24</u>	Use of Abrasive Wheels	<b>√</b>
RA06	Steel fixing	✓	<u>RA25</u>	Services (Underground & Overhead)	✓
<u>RA07</u>	Lifting Operations	✓	<u>RA26</u>	Working Rigs in Confined Areas	✓
RA08	Mobilisation/De-mobilisation & Deliveries	✓	<u>RA27</u>	Piling Rig Working Over or Near Excavations	<b>✓</b>
<u>RA09</u>	Manual Handling	✓	<u>RA28</u>	Underpinning Needles	✓
<u>RA10</u>	Personal Protective Equipment	✓	<u>RA29</u>	Maintenance of plant on Site	✓
<u>RA11</u>	Mixing Operations	✓	<u>RA30</u>	Driving Motor Vehicles on Company Business	<b>✓</b>
<u>RA12</u>	Portable Power Tools	✓	<u>RA31</u>	Breaking Down Piles	<b>✓</b>
<u>RA13</u>	Use of Plant on Site	✓	<u>RA32</u>	Working over Water	<b>√</b>
<u>RA14</u>	Contaminated Ground	✓	<u>RA33</u>	Loading Pile Hammer	✓
<u>RA15</u>	Working at Height	✓	<u>RA34</u>	Housekeeping	<b>√</b>
RA16	Vibration	✓	<u>RA35</u>	Inserting Steel Cages to CFA Bored Piles	<b>√</b>
<u>RA17</u>	Excavations	✓	RA36	Cleaning CFA Concrete System	<b>√</b>
<u>RA18</u>	Ground Beams & Pecafil Formwork	✓	<u>RA37</u>	Clearing Blockages	<b>✓</b>
<u>RA19</u>	Welding	✓	<u>RA38</u>	Noise Control	<b>✓</b>
<u>RA39</u>	Installing Secondary Auger Cleaner	<b>√</b>	<u>RA40</u>	Coronavirus COVID-19	<b>✓</b>

**Risk Assessment:** 



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Risk of Injury Hazards identified Without **Controls** Controls Tick boxes as appropriate Rig Overturning 9 2  $\overline{\mathbf{A}}$ Falling spoil (augered) 2 6 Burst hoses/pipelines.  $\overline{\mathbf{Q}}$ 6 4  $\overline{\mathsf{V}}$ Failure of hose pipeline joints. 6 4 Reinforcement  $\mathbf{\Lambda}$ 6 2

Persons at risk:   ☑ Site persons	onnel   General public	☐ Client personnel	Other
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# **Controls Considered Necessary:**

☑ Piling Platform must be design by a competent temporary works engineer

RA 01 - Network Rail

- Piling platform must be installed by a competent ground worker ensuring any soft ground has been removed and the piling platform is installed as the piling platform design.
- ☑ Piling platform certificate must be signed by site management and piling platform checked daily for it condition.
- ☑ Piling must always be kept perpendicular to the railway line and all turning / spragging to be carried out at the rear of each piling platform.
- ☑ Main contractor to ensure that the piling platforms on each plot are wide enough for the rig to work in lines working away from the railway line and therefore reducing the length of time the rig spends on each plot. The rig must be able to straddle the perimeter piles.
- ☑ Ensure at all times the auger cleaner is in working order and that all brushes are in place. Should spoil pass the auger cleaner then drill back down to allow second pass of the auger cleaner.
- ☑ All flexible hose joints used on CFA rigs to be fitted with safety whipcheck device.
- ☑ Regular inspection of hoses and pipelines for wear or damage.
- ☑ Ensure all Concrete hanging pipes are all in good order and no more than 1 year old.
- ☑ Carry out daily checks to ensure all concrete hoses and connections are in good order.
- ☑ When moving reinforcement within 7m of the Network Rail fence it must always be moved in a horizontal position until at the pile position where the lift point will be adjusted to lift vertically and then lowered into the pile bore.
- ☑ This risk assessment is an addition to all other risk assessments within this package and all other risks are relevant when working in proximity of Network Rail property.



Risk Assessment:

**RA 02 – Concrete Pumping** 

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		Risk of Injury		
Haz	zards identified	Without Controls	With Controls	
Tic	k boxes as appropriate			
	Cement burns.	6	2	
$\square$	Burst hoses/pipelines.	6	4	
V	Failure of hose pipeline joints.	6	4	
Ø	Moving parts on concrete mixer drum.	6	2	
$\square$	Slips/trips.	4	2	
V	Crushing by reversing delivery vehicles.	9	2	
V	Noise from concrete pump during pumping operation.	6	2	

Persons at risk:	☑ Site personnel	☐ General public	☐ Client personnel	☐ Other
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- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ High standard of personal hygiene.
- ☑ Regular inspection of hoses and pipelines for wear or damage.
- ☑ All steel pipeline couplings made safe with split pin or lock-off device.
- All flexible hose joints used on CFA rigs to be fitted with safety whipcheck device.
- ☑ Ensure that all safety guards are fitted and maintained.
- ☑ Visual check of drum contents is only to be made from the access ladder.
- ☑ All personnel will ensure, daily, that a clean/tidy working platform is maintained.
- ☑ Banksmen to control all reversing vehicles associated with the works.
- ☑ Drum of agitator MUST be stationary before premix trucks are allowed to reverse.
- ☑ Premix trucks MUST be reversed by the agitator operator who must remain in view of the driver while the truck is moving.
- ☑ The agitator operator is under no circumstances to get between the agitator and the premix truck while the truck is moving.
- ☑ The drum of the agitator must be stationary before any adjustments are made to the chute.
- ☑ Ear defenders must be worn.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 03 - Placing of Concrete **Risk Assessment:** Index **Risk of Injury** Hazards identified Without With **Controls Controls** Tick boxes as appropriate 2 Cement burns. 6  $\overline{\mathbf{A}}$ Eye damage from splashes. 2 6 Trapping by concrete lorries. 9 4 Use of wheelbarrows.  $\sqrt{}$ 6 4  $\sqrt{}$ Use of dumpers see separate RA12. 9 4 Unprotected holes for piles.  $\sqrt{}$ 6 2 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166. Refer to COSHH Assessment NFS.CA 05 when working with wet concrete.  $\overline{\mathbf{\Delta}}$  $\overline{\mathbf{A}}$ All reversing lorries to be controlled by a banksman.  $\square$ Lifting and pushing controls, slips, trips and falls.  $\overline{\mathbf{A}}$ Ensure clear route for wheelbarrows. Adherence to the controls for the safe use of site plant (RA12).  $\overline{\mathbf{A}}$ All pile openings to be clearly marked or covered.  $\sqrt{}$ 



Risk Assessment: RA 04 – Piling Rig Operations

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		Risk	of Injury	
Haz	zards identified		Without	With
			Controls	Controls
Tick	k boxes as appropriate			
$\overline{\checkmark}$	Rig overturning.		9	4
$\overline{\checkmark}$	Tail swing trapping.		9	4
$\overline{\checkmark}$	Falling spoil (augered		9	2
$\overline{\checkmark}$	Contact with undergro	ound services (see RA24).	9	4
$\overline{\checkmark}$	Arcing or contact with	overhead cables.	9	4
$\overline{\checkmark}$	Materials or equipmen	nt falling from piling rig.	9	2
$\overline{\checkmark}$	Falls from piling rig.		9	2
$\overline{\checkmark}$	Shackles and ropes b	reaking.	9	4
$\overline{\checkmark}$	Vibration damage to a		6	2
$\overline{\checkmark}$	Striking by hammer w		9	2
$\overline{\mathbf{Q}}$	Open hole causing tri		6	2
$\overline{\square}$	Entanglement with au		9	1
Per	sons at risk:	☑ Site personnel ☐ General public	☐ Client personnel	☐ Other

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat EN 397; Safety Footwear Steel toe capped boots; Hand Protection Suitable Gloves; High visibility Jacket or vest; Ear Protection as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ Construction, inspection and maintenance of working platform to be controlled.
- Banksmen to control work area.
- ☑ Adequate lighting in work area.
- ☑ Spoil not permitted to ride up auger.
- ☑ Only rig operatives permitted near the rig while it is working.
- A survey will be conducted of area to be piled to locate underground and overhead services, location of which will be marked, warning notices posted and necessary barriers erected.
- All hazards, which could affect stability of piling rig, will be identified, e.g. ground conditions, cellars etc. and necessary precautions taken.
- ☑ A method Statement will be prepared in writing, agreed and held on site.
- All operatives engaged in piling operations will be trained. Before commencement of work appropriate certificates of competence will be produced for inspection and retained on site.
- All lifting appliances and gear must have appropriate certificates of test and thorough examination, copies of which will be retained at site level. Inspections to be recorded in appropriate register.
- ☑ All operatives will wear head protection, safety footwear and use safety harness where necessary.
- ☑ Noise assessments should be carried out and if necessary ear protection provided for all affected persons.
- ☐ The work area should be defined and if necessary protected by barriers, signage, etc.
- ☑ Provide clear/unobstructed approach to area suitable for heavy plant.
- ☑ Check and inspection of all lifting equipment prior to use.
- Hammer to be secured to the mast in two locations when rig is tracking to new location or mast being raised.
- ☑ Protect all open holes with road pins and bunting or boards until concreted. Consider overnight situations.
- ✓ Spoil is only to be cleared as it falls out under the protection gate or with the gate open.



**For Piling Works** Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB Risk Assessment:** RA 05 - CFA Piling Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Placing auger bung. 9 4  $\overline{\mathbf{A}}$ Entrapment in moving auger. 9 1 Falling material.  $\overline{\mathbf{\Delta}}$ 9 2  $\sqrt{\phantom{a}}$ Freshly concreted, open bores. 9 2 Tripping/Impalement on reinforcement.  $\square$ 9 2 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166. Refer to COSHH Assessment NFS.CA 05 when working with wet concrete.  $\square$  $\overline{\mathbf{A}}$ Ensure rig is idle, brakes are on and no auger movement. Banksman to control work area.  $\overline{\mathbf{A}}$ Piling Rig to have safety gate fitted and working at all times, unless given written authority from S  $\overline{\mathbf{A}}$ Tapsell or N Miller. Clean auger mechanically wherever possible.  $\overline{\mathbf{A}}$ Carry out visual check on auger to ensure that it is clear of debris, particularly when within 5m of  $\overline{\mathbf{A}}$ the site boundary.

Cover new, open bores as soon as practicable. Fit rebar caps as soon as cages in position.



Risk Assessment: RA 06 – Steel fixing

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		Risk of Injury		
Ha	zards identified	Without	With	
		Controls	Controls	
Tic	k boxes as appropriate			
$\square$	Falling cages	9	4	
$\square$	Injury to feet	6	2	
$\square$	Injury from fixing wire	6	2	
$\square$	Handling	6	2	
	Lifting	6	2	
	Tripping	6	2	
	Plant vehicle movement	6	2	
$\square$	Injury from welding activity	6	2	

Persons at risk:	☑ Site personnel	☐ General public	☐ Client personnel	☐ Other
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- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels. Eye Protection should comply with BS EN 166 and EN 172 (if cutting).
- ☑ Welders to wear appropriate welding coveralls/gloves to EN ISO 11611 2007.
- ☑ Ensure designated compacted, level fixing area with barriers, separate from construction activity and moving plant.
- ☑ Use correct fixing stands, using extending "stability riggers" if necessary.
- ☑ Ensure that cages have enough ties and braces to allow safe slinging.
- ☑ Keep work area tidy and dispose of wire scraps into a container.
- ☑ Tails on ties to be bent over to reduce projection.
- Assistance/mechanical lifting aids: weights of individual items of rebar are to be provided by steel provider. Those weighing above 20kg are to be lifted by 2 operatives. Completed cages weighing up to 40kg can be lifted by 2 operatives, use mechanical means above this weight. Operatives to wear appropriate PPE, gloves, steel toe cap/midsole footwear, hard hats and hi-vis vest.
- ☑ Protective caps to be fitted to rebars.
- ☑ Good housekeeping.
- ☑ Steel fixers to be issued with and to wear class F eye protection. Flame retardant screens to be provided when welding in progress.
- ☑ Ensure any combustibles are removed from the area. Use coded welders only. Compliance with PC hot works permit.



**Risk Assessments** For Piling Works Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB Risk Assessment: RA 07 – Lifting Operations** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate  $\square$ Failure of lifting equipment. 6 2 2 6  $\overline{\mathbf{\Delta}}$ Handling errors. 2 6  $\overline{\mathbf{\Delta}}$ Slips, trips and falls. 2 6  $\sqrt{}$ Improper planning. 2 6  $\sqrt{}$ Trapping. 9 4  $\sqrt{\phantom{a}}$ Falls. 2 9  $\overline{\mathbf{A}}$ Crane overturn. 9 2  $\overline{\mathbf{A}}$ Tail swing entrapment. 4 9  $\overline{\mathbf{\Delta}}$ Falls of equipment. 4 9  $\overline{\mathbf{A}}$ Displaced/falling loads ☑ Site personnel ☐ General public ☐ Client personnel Persons at risk: ☐ Other **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear - Steel toe capped boots BS EN ISO 20345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.  $\overline{\mathbf{A}}$ Detailed planning and preparation is essential.  $\overline{\mathbf{\Delta}}$ The most suitable lifting equipment must be selected.  $\overline{\mathbf{A}}$ A safe system and method Statement must be implemented.  $\overline{\mathbf{A}}$ Erection and dismantling must only be undertaken by trained and competent crew.  $\overline{\mathbf{A}}$ Safety harnesses must be worn and clipped on for all work off the ground.  $\overline{\mathbf{A}}$ All lifting equipment must be fully certified, regularly checked by a competent person.  $\sqrt{\phantom{a}}$ All lifting equipment must be capable of safely lifting the load.  $\sqrt{\phantom{a}}$ All operatives must be fully trained and aware of the operations around them.  $\overline{\mathbf{A}}$ Qualified slinger/signaller to take overall control of the lift.  $\sqrt{\phantom{a}}$ Slinger/signaller to wear hi-visibility vest or jacket.  $\sqrt{\phantom{a}}$ All outriggers to be fully deployed in accordance with manufacturers recommendations.  $\overline{\mathbf{A}}$ Pressure pads to be used under jack legs.  $\square$ 600 mm clearances to be maintained.  $\overline{\mathbf{A}}$ Adequate lighting to be available in work area.  $\sqrt{}$ Large or unwieldy loads to be controlled by tag line.  $\overline{\mathbf{A}}$ All lifting equipment and accessories to comply with the Lifting Operations, Lifting Equipment  $\overline{\mathbf{A}}$ Regulations 1998 (LOLER).

Additional controls considered necessary and further information:

Lifting operations must be carried out on a firm and level surface.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 08 - Mobilisation/De-mobilisation & Deliveries **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls** Controls Tick boxes as appropriate 2 Truck movements. 6 2  $\sqrt{}$ Falls. 6 Entrapment. 6 2  $\overline{\mathbf{\Delta}}$  $\sqrt{}$ Falls of equipment. 2 ☑ Site personnel ☐ General public ☐ Client personnel Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166.  $\overline{\mathbf{A}}$ Manoeuvre all vehicles using a trained banksman. Use mobile scaffold towers fitted with handrails, toeboards, outriggers and safety harness.  $\overline{\mathbf{A}}$ All site crew to be trained and competent.  $\overline{\mathbf{A}}$ Maintain minimum 600mm clearance from adjacent plant, machinery and fixed objects.  $\overline{\mathbf{\Delta}}$  $\overline{\mathbf{V}}$ The work to be controlled by one person (i.e. Foreman/Ganger). All lifting equipment and accessories to comply with the Lifting Operations, Lifting Equipment Regulations 1998 (LOLER). Large or unwieldy loads to be controlled by a securely fastened tag line. Follow rigging procedures detailed in relevant rig manual.  $\overline{\mathbf{A}}$ Observe site speed restrictions.



Risk Assessment:

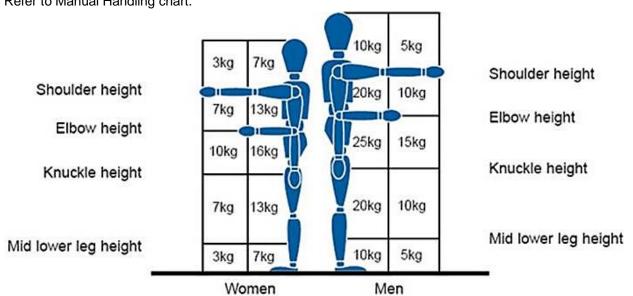
**RA 09 – Manual Handling** 

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		Risk of Injury		
Haz	ards identified	Without Controls	With Controls	
Tick	boxes as appropriate			
	Risk of fractures, sprains and strains, mainly of the back/upper part of the body.	6	2	
$\square$	Damage to the back from the initial lift.	6	4	
$\overline{\mathbf{A}}$	Damage to the back when manoeuvring, lowering.	6	4	
	Cuts from bars and tying wire.	6	2	
	Stability of load causing slips, trips and falls.	6	4	
$\overline{\mathbf{A}}$	Carrying of load to destination.	6	2	

Persons at risk: ☐ Site personnel ☐ General public ☐ Client personnel ☐ Other

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ Use mechanical means wherever possible.
- $\square$  Ask for assistance if the load is too heavy.
- ☑ Break the load down into manageable pieces.
- ☑ Adopt good handling techniques, use the legs rather than the back.
- ✓ Plan the lift, is help required.
- ☑ Ensure that the entire area is free from obstructions.
- ☑ Stand with the feet apart to give a balanced and stable base for lifting.
- ☑ Adopt a good posture, get a good grip on the load and keep the load close to the body.
- ☑ Work to be carried out on a firm and level surface.
- ☑ Refer to Manual Handling chart.





Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB RA 10 - PPE Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls** Controls Tick boxes as appropriate 2 Head injuries. 6  $\overline{\mathbf{A}}$ Eye injuries. 2 6 Hearing loss.  $\overline{\mathbf{\Delta}}$ 2 6  $\sqrt{}$ Foot injuries. 2 6  $\sqrt{}$ Hand injuries. 6 2 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Each operative should check the condition of their PPE prior to use.  $\overline{\mathbf{A}}$ All PPE should be carefully stored after use.  $\overline{\mathbf{A}}$  $\overline{\mathbf{A}}$ Safety helmets should be worn on site at all times, they must be replaced if cracked or damaged.  $\sqrt{\phantom{a}}$ Helmets should comply with BS EN 397. Eye protection must be worn when using power tools, concreting etc to protect from splashes, dust and sparks. Eye protection should comply with BS EN 166. Goggles to BS EN 166 B (For Abrasive Wheels  $\overline{\mathbf{V}}$ Work).  $\sqrt{\phantom{a}}$ Hearing protection to BS EN 352 must be worn when required.  $\sqrt{}$ Protective footwear to BS EN 345 or BS EN ISO 20345 must be worn on site.  $\overline{\mathbf{A}}$ Suitable gloves for the task should be worn to protect the hands from injury which conform to BS EN 388.  $\overline{\mathbf{A}}$ Barrier creams must be available and used.

- Overalls should be worn to protect against dirt, dust, grease and oils.  $\sqrt{}$
- Specialist overalls to protect against contamination (i.e. disposable) with appropriate changing  $\overline{\mathbf{A}}$ facilities.
- NB: All PPE must be selected so that it is compatible with all other items in use



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB RA 11 – Mixing Operations Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls** Controls Tick boxes as appropriate Dust inhalation. 6 2  $\overline{\mathbf{A}}$ Pressure build up in pipelines. 6 2 Eye damage from splashes. 2 6 Cement burns.  $\overline{\mathbf{V}}$ 6 2  $\mathbf{\Lambda}$ Wheelbarrows. 6 2 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.  $\overline{\mathsf{V}}$ Wear face masks.  $\overline{\mathbf{V}}$ Ensure all pipes joints have whipchecks. Ensure that route is clear of debris and unobstructed.  $\sqrt{}$ Refer to COSHH assessments NFS .CA .05 and 13 for safe use of cement dust and wet cement.  $\overline{\mathbf{A}}$ 



Risk Assessment: RA 12 – Portable Power Tools

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	Risk	Risk of Injury		
Hazards identified	Without Controls	With Controls		
Tick boxes as appropriate				
☑ Noise.	6	2		
☑ Vibration.	6	2		
☑ Compressors, hoses and connections.	6	2		
☑ Electric shock.	9	4		
☑ Hair or clothing becoming entangled in moving parts.	6	2		
☑ Eye injuries from dust, swarf or other fragments.	6	2		
<ul><li>✓ Wrist and hand injuries due to tool jamming or binding.</li></ul>	6	2		
☐ Hand/arm vibration syndrome (HAVS).	6	2		
✓ Air/hydraulic lines becoming detached or bursting due to	6	2		
damage.	6	2		
☑ Trip hazards.		_		

Persons at risk: 
☑ Site personnel ☐ General public ☐ Client personnel ☐ Other

# **Controls Considered Necessary:**

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ Suitable RPE to be worn where there is a foreseeable dust hazard.
- All power feeds, electrical, pneumatic or hydraulic, to comply with European or British Standards and maintained in good condition.
- ☑ Where practicable only 110v electrical tools will be used.
- ☑ Loose clothing and long hair to be kept clear of moving parts of power tools.
- ☑ Operatives shall be trained in the correct use of portable tools.
- ☑ Silencers/sound reducing shrouds to be used.
- ☑ Regular rest/change over periods.
- ✓ Inspect plant and hoses before use.
- ☑ Regular maintenance and inspection of plant by a competent person.
- ☑ Pressure relief valves must be fitted where required.
- ☑ Compressor hose clamps must be secure and joints fitted with whipchecks.
- ☑ Correct, undamaged blades to be used.
- ☑ Blades to be changed by trained operative.
- ☑ Guards must be in place and operable.
- ☑ Vibration see RA15.
- ☑ Keep extension cables tidy.
- ☑ Trainees must be closely supervised.

#### Additional controls considered necessary and further information:

- ☑ See risk assessment number RA 15 for further controls to prevent hand/arm vibration syndrome.
- ☑ Refer to The Provision and Use of Work Equipment Regulations 1998.
- ☑ Refer to the Operator Manual.



**Risk Assessments** Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 13 - Use of Plant on Site **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate 6 2 Trapping of personnel. 2 Collision with other plant or structures. 6  $\overline{\mathbf{\Delta}}$ 2 6  $\overline{\mathbf{A}}$ Falls of equipment 9 4  $\overline{\mathbf{A}}$ Collision with other vehicular traffic plant or pedestrians. 9 4  $\overline{\mathbf{\Delta}}$ Arcing or contact with power cables or other overhead obstruction. 9 2  $\overline{\mathbf{A}}$ Overturning. 6 Falls of materials from machine. ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear - Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 - as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166. Operators will be competent, trained, certificated and authorised to operate the plant and be responsible for daily checks and maintenance, reporting of defects and completion of registers. Plant must have evidence of a thorough examination, by a competent person, within the previous 12  $\overline{\mathsf{V}}$ months. This evidence is to be retained on site.  $\sqrt{}$ All lifting operations to be planned by a competent person and controlled by a qualified slinger/signaller.  $\sqrt{\phantom{a}}$ Loads being transported must be stable and securely held.  $\overline{\mathbf{A}}$ Large and unwieldy loads to be controlled by tag line.  $\overline{\mathbf{A}}$ Outriggers, when required, to be fully deployed in accordance with manufacturers recommendations. All lifting equipment and accessories to comply with the Lifting Operations, Lifting Equipment  $\overline{\mathbf{V}}$ Regulations 1998 (LOLER).  $\overline{\mathsf{V}}$ Consideration will be given to terrain, loading requirements etc., in selecting suitable plant for use.  $\overline{\mathsf{V}}$ All overhead obstructions including cables will be identified and if necessary fenced off, shrouded and protected in accordance with HSE Guidance Note GS 6. Operators will be in possession of information as to capabilities and restrictions placed on use of plant,  $\overline{\mathbf{Q}}$ 

- particularly the safe working load, and must ensure limits are not exceeded.
- $\overline{\mathbf{Q}}$ Access to all loading/off-loading points will be levelled, suitable and clear of obstruction.
- $\overline{\mathbf{A}}$ Provide safe route for movement of plant to avoid contact with other traffic, including pedestrians.
- $\overline{\mathbf{V}}$ Mirrors (including convex type) and/or other equipment (i.e. CCTV) must be in place to ensure maximum driver visibility.
- $\overline{\mathbf{A}}$ Dumpers to be equipped with hazard warning beacon.
- Provide a banksman to assist where visibility is restricted.
- $\sqrt{}$ Operators will be required to know the weight of materials to be raised before commencing a lift.
- $\overline{\mathbf{A}}$ Plant must be equipped with ROPS and driver seat restraint, which will be used.
- No passengers will be carried.

# Additional controls considered necessary and further information:

Refer to the Operator Manual.



		•					
CONTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London NW1 9QB				
Risk Asses	sment:	RA 14 – Contan	ninated Ground		<u>Index</u>		
				Risk	of Injury		
Hazards ide	entified			Without Controls	With Controls		
Tick boxes a	as appropri	ate					
☑ Environ	mental haz	ard i.e. Leptospiro	osis	6	4		
	· · ·			6	2		
Persons at	risk:	☑ Site persor	nnel 🛚 General public	☐ Client pers	sonnel		
Controls C	onsidere	d Necessary:					
<ul> <li>☑ Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear – Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.</li> <li>☑ Appropriate PPE to be provided together with necessary washing facilities.</li> <li>☑ Environmental hazards - obtain details of precaution to be taken for Leptospirosis from the Safety</li> </ul>							
Advisor	Advisor.						
_							



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 15 - Working at Height **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Falls from height 9 6  $\overline{\mathbf{A}}$ Falls of material from height 9 6 Structural collapse 9 6  $\overline{\mathbf{\Delta}}$  $\sqrt{\phantom{a}}$ Lifting appliances overturning 9 4 Arcing, contact or damage to overhead and underground 9 4  $\overline{\mathsf{V}}$ services ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166. Survey of site to be conducted to determine: condition of ground and safe routes of access for  $\overline{\mathbf{A}}$ vehicular traffic; location of any overhead and underground services; proximity of other buildings and members of public; anticipated activities of other contractors; any suspected contamination and other known hazards.  $\sqrt{\phantom{a}}$ Method Statement to be checked and approved by senior management. Only trained operatives, who will be given instruction and information, will be permitted to work on the structure/equipment. Method Statement to be prepared in a logical planned sequence of action. The Statement to  $\sqrt{}$ include details of: - the company structure and person responsible for supervision; vehicular access to and from site; delivery sequence; storage of component parts; making safe power cables and services; details of lifting appliance and gear requirements; rig siting (plan) and preparation of hard standing for rig; detailed method of erection of rig to ensure stability; means of access to the workplace. Any other safety factors to be considered e.g. restricted areas, wearing of safety harness and head protection etc.

(See H S E Guidance Note).



Risk Assessment: RA 16 – Vibration Index

	Risk	Risk of Injury			
Hazards identified	Without	With			
	Controls	Controls			
Tick boxes as appropriate					
☑ Specify type of equipment/operation and m/s² rating here:	6	4			
☑ Hand/arm Vibration Syndrome (HAVS) - a general term	6	4			
embracing injuries such as:					
☑ Vibration white finger (Reportable disease under RIDDOR).	6	4			
☑ Carpel Tunnel Syndrome.	6	4			
☑ Permanent and painful numbness and tingling in the hands	6	4			
and arms.					
☑ Painful joints and muscle weakening.	6	4			
☑ Damage to bones in the hands and arms.	6	4			

Persons at risk: 
☐ Site personnel ☐ General public ☐ Client personnel ☐ Other

# **Controls Considered Necessary:**

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- Where hand-held or hand-guided tools are unavoidable, select power tool with lowest vibration level and which may also allow certain hand free operation, which is suitable for the work and conditions.
- ☑ Establish m/s² level and prevent users exceeding recommended time limits. (See Table 1 over).
- ☑ Specify maximum duration of exposure here:
- ☑ Job rotation or similar measures to prevent/reduce risk of injury.
- ☑ Keep tool properly maintained to sustain its best low vibration performance and the cutting bit sharp to avoid undue grip and pressure.
- ☑ Train and provide information for operatives on:
  - The safe and correct use and maintenance of the tool;
  - The nature and risk of HAVS, the signs and symptoms.
- ☑ Maintain good blood circulation by keeping warm and dry. (Operative should wear gloves to keep hands warm and to prevent contact with cold surfaces and avoid or reduce smoking).
- Any signs of vibration injury to be reported to site management for investigation.
- ☑ Operatives experiencing symptoms to be temporarily placed on other work, or have periods of vibration exposure reduced pending improvement and/or medical advice.
- A system of health surveillance to be established should vibration exposure regularly exceed the action level or where an operative has a history of such a condition.

Table 1 - HAV Exposure Limits

Vibration m/s <sup>2</sup>	2	2.8	3	4	5	6	7	8	9	10	11	12	13
Time in minutes	960	480	420	240	180	165	85	60	46	37	31	26	23
Vibration m/s <sup>2</sup>	14	15	16	17	18	19	20	21	22	23	24	25	26
Time in minutes	19	16	15	13	11	10	10	9	8	7	6	6	5

NOTE: Before starting any task operatives are to obtain the vibration value and record, daily, the time spent working on any vibrating tools (drills, breakers, sanders etc.)



Risk Assessment: RA 17 – Excavations Index

		Risk of Injury			
Haz	zards identified	Without	With		
		Controls	Controls		
Tic	k boxes as appropriate				
$\overline{\checkmark}$	Collapse of unsupported excavations.	9	6		
$\overline{\mathbf{V}}$	Falling into unfenced excavations.	9	6		
$\overline{\checkmark}$	Materials or plant falling into excavations.	9	4		
$\overline{\mathbf{A}}$	Contact with underground services i.e. electric, gas, water,	9	6		
	etc.				
$\overline{\mathbf{A}}$	Struck by excavator.	9	4		
$\overline{\mathbf{V}}$	Contaminated ground.	6	2		

Persons at risk:	☑ Site personnel	☐ General public	☐ Client personnel	☐ Other
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- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ Accurate location of underground services by operatives trained in the use of locating equipment.
- ☑ Planned provision and use of excavation support equipment by competent person.
- ☑ Warning signs, adequate fencing, or covering for excavations and excavations back filled as soon as practicable.
- ☑ Materials to be stock piled a suitable distance clear of the edge of the excavation.
- ☑ Wheel stops to be used to prevent plant and vehicles over running the edge.
- ☑ Proper ladder access with the ladder tied and extending 1.05m above the top of the excavation.
- ☑ Ladder access to be into the supported part of the excavation.
- ☑ Machines shall not be used within 500mm of underground services.
- ☑ Inspection at commencement of shift by a competent person and recorded.
- ☑ Head protection to be worn by all operatives working in the excavation or close to excavations.
- ☑ Only suitable and tested lifting equipment to be used.
- ☑ Excavators and other plant to be operated by trained certificated and authorised operators.
- ☑ Take appropriate action to avoid contact with overhead power lines.
- ☑ Batter excavations where practical/ lower adjacent ground.
- ☑ Excavations NOT to be entered unless protection is in place.
- ☑ Strut trenches to support.
- ☑ Suitable supervision to be on site at all times.
- ☑ Water ingress to be keep to a minimum.
- ☑ Open excavations to be protected, covered and barriers placed prior to works commencing.

 $\overline{\mathbf{A}}$ 



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB Risk Assessment:** RA 18 - Ground Beams and Pecafil Formwork Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Cement burns. 6 2  $\overline{\mathbf{A}}$ Eye damage from splashes. 9 2  $\sqrt{\phantom{a}}$ Trapping by concrete lorries. 9 4  $\overline{\mathbf{A}}$ Penetrating wounds from reinforcement. 6 2  $\sqrt{\phantom{a}}$ Cutting of Pecafil Formwork. 6 2  $\sqrt{}$ Placing steel hazards see RA05 9 4 Breaking down pile see RA30  $\overline{\mathbf{A}}$ 2 6 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166. Care when handling/placing formwork to avoid piercing injuries from sharp reinforcement wire, gloves to be worn when handling/placing.  $\overline{\mathbf{A}}$ All reversing lorries to be controlled by a banksman.

Refer to COSHH assessments NFS .CA .05 and 13 for safe use of cement dust and wet cement.



Risk Assessment: RA 19 – Welding Index

		Risk of Injury			
Haz	zards identified	Without Controls	With Controls		
Tick	k boxes as appropriate				
	Fire and explosions.	9	6		
$\square$	Burns.	6	4		
$\overline{\checkmark}$	Eye injuries and 'Arc eye'.	6	2		
$\overline{\checkmark}$	Electric shock.	9	4		
$\overline{\mathbf{A}}$	Exposure to fumes and gases.	6	2		
$\overline{\mathbf{A}}$	Exposure to heat.	6	2		
$\overline{\mathbf{A}}$	Respiratory disease.	6	2		
$\overline{\mathbf{A}}$	Hearing damage.	6	2		
$\overline{\mathbf{A}}$	Plant or equipment damaged or destroyed.	6	2		
	Injury to persons.	9	4		
$\square$	Arson.	6	2		

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ✓ Suitable RPE to be worn.
- ☑ Only competent and authorised operatives shall carry out welding/burning processes.
- All cylinders used in welding processes should be kept and moved in trolleys or securely fastened in vertical position.
- ☑ Hoses must be in good order and cylinders protected with flashback arrestors.
- ☑ Naked flames must not be permitted to play on cylinders and never left unattended.
- All equipment will be used in accordance with manufacturer's instructions and must be inspected before use to ensure it is safe.
- ☑ Suitable and sufficient ventilation will be provided to remove harmful fumes and gases.
- ☑ Adequate ventilation shall be provided to prevent heat stress.
- ☑ Area of work will be screened as necessary to protect others from welding hazards.
- ☑ Suitable and sufficient portable fire-fighting equipment will be provided users shall be trained.
- ✓ All persons on site will receive fire awareness training at site induction.
- ☑ Display adequate emergency procedures notices and means of raising the alarm.
- ☑ Highly flammable liquids and LPG shall be stored in the open air and the necessary signs posted.
- Where necessary, hot-work and burning operations will be controlled by a *Hot-work permit*.
- Plant powered by internal combustion engines will only be used in well-ventilated areas.
- ☑ All mobile plant will carry a suitable fire extinguisher.
- ☑ Suitable and sufficient measures will be taken to prevent unauthorised access to the site.
- ☑ No Hot Works allowed within one hour of ceasing work.



**Risk Assessments** For Piling Works Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB Risk Assessment:** RA 20 - Site Electricity Index Risk of Injury Hazards identified With Without Controls **Controls** Tick boxes as appropriate Electrocution of operatives or other persons. 9 4 2 Damage or misuse of supply. 9 Arcing or contact with overhead cables by transport or 9 4  $\overline{\mathbf{\Delta}}$ 9 4 equipment.  $\overline{\mathbf{A}}$ Contact with underground electric cables.  $\overline{\mathbf{A}}$ Trip hazards. 6 2 ☑ Site personnel ☐ General public ☐ Client personnel Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear - Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.

- $\square$ Electrical installations will only be made by qualified and competent persons who will issue certificates on completion of work, which will be retained on site.
- $\overline{\mathbf{A}}$ Qualified persons will test all portable electrical equipment at regular intervals i.e. annually in offices, six monthly in workshops and three monthly on sites. Certificates of test will be retained.
- $\overline{\mathbf{A}}$ Electrical equipment will be permitted to be used only if it complies with the above.
- $\overline{\mathbf{A}}$ Electrical equipment or supplies will not be used in such a manner so as to cause danger or injury.
- $\sqrt{\phantom{a}}$ Electrical equipment will be suitable for the task and comply with the relevant standard.
- $\overline{\mathbf{A}}$ Electrical installations or equipment which may be exposed to mechanical damage, inclement weather or other harmful conditions will be constructed and protected, so as not to cause danger of injury to operatives or other persons (See HSE Guidance Notes).
- $\square$ 110-volt electrical equipment will be used, so far as is practicable, on construction or civil engineering projects; unless requirement to use further reduced voltage equipment is specified.
- $\overline{\mathbf{\Delta}}$ Where overhead power lines are likely to cause danger, the owners of the cable will be consulted and, if required, 'shrouds' fitted or suitable fencing and barriers erected, at least 6 m from power lines to prevent access, so as to comply with requirements HSE Guidance Note GS6.
- $\overline{\mathbf{A}}$ If required to work under or near overhead power lines a permit to work system should be implemented, if necessary.
- $\overline{\mathbf{A}}$ Routes of all underground electricity supplies will be traced, locations marked and notices posted.
- $\overline{\mathbf{Q}}$ Excavators and power tools will not be used within 500 mm of underground cables, unless a safe system of work is established. Use of permits to work may be necessary in some cases.
- $\overline{\mathbf{A}}$ A competent person will supervise all work adjacent to overhead or underground electrical supplies.
- $\overline{\mathbf{A}}$ All portable generators will be used in accordance with the manufacturer's instructions.
- $\overline{\mathbf{A}}$ All site operatives should be aware of how to isolate the site supply in the event of an emergency.
- $\sqrt{\phantom{a}}$ Cables to be routed overhead or around perimeter of working area.
- $\overline{\mathbf{A}}$ Fire extinguishers.
- $\overline{\mathbf{A}}$ If using existing supply ensure that it has been checked by a competent electrician and a certificate issued.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 21 - Working with Augers **Risk Assessment:** Index Risk of Injury Hazards identified With Without **Controls Controls** Tick boxes as appropriate Clothing entanglement with auger. 9 4  $\overline{\mathbf{A}}$ Falling into bored auger hole. 6 2  $\sqrt{\phantom{a}}$ Crushing by auger. 9 4 2  $\overline{\mathbf{A}}$ Falling material from auger. 6 2 Slip/trip on pile arising. 6  $\sqrt{}$  $\sqrt{\phantom{a}}$ Manual handling hazards. 6 2 Persons at risk: ☑ Site personnel ☐ General public ☐ Client personnel **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166.  $\overline{\mathbf{A}}$ Ensure that correct lifting technique is applied when moving augers use lifting devices wherever possible.  $\overline{\mathbf{\Delta}}$ Clear auger of all spoil as it is brought from the ground, but only while auger is stationary. Rig to be set up on flat surface, free of obstructions.  $\sqrt{}$ No loose clothing to be worn around auger.  $\sqrt{}$ Sufficient operatives to be available to operate auger safely.  $\overline{\mathbf{A}}$ 

All certification for rig to be valid, including chains, shackles and ropes.

Pile holes to be covered or concreted while extracting auger to prevent falling.

Spoil should not be allowed to build up around the working area or allowed to remain on the auger

above waist height.

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 $\overline{\mathbf{A}}$  $\overline{\mathbf{A}}$ 



	, works				piling continactors		
CONTRA	CT 200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London NW1 9QB				
Risk Ass	essment:	RA 22 – Pile Ca	ses		<u>Index</u>		
				Risk of Injury			
Hazards identified				Without Controls	With Controls		
Tick boxe	s as appropr	iate					
☑ Crus	ning.			9	4		
	ual handling.			6	2		
☑ Cuts				6	2		
Persons	Persons at risk:				onnel D Other		
Control	Considere	d Necessary:					
Stee EN 3 noise I Glov I Avoi	Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.  ☑ Gloves are to worn when lifting or handling pile casings.						
☑ Use	ifting equipm	ent wherever poss	sible to avoid lifting altogetl	her.			
☑ Ens	re correct lift	ng technique is us	ed when lifting.				
	☑ Use team lifting where the load is more than 25kg.						
			lear of obstructions.				
☑ Take	extra care w	hen working in we	t conditions.				



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 23 - Working Adjacent to Moving Plant **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Collision with moving plant. 6 2  $\overline{\mathbf{A}}$ Crushing. 9 4  $\sqrt{\phantom{a}}$ Impact with moving plant. 9 4  $\overline{\mathbf{A}}$ Plant falling over. 6 2 2  $\overline{\mathbf{A}}$ Noise. 6 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 - as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166. All plant to be certified and inspected as required.  $\checkmark$  $\overline{\mathbf{A}}$ Operators to be trained and certified.  $\sqrt{}$ Banksman to control moving plant.  $\overline{\mathbf{V}}$ Other operatives to be made aware of working conditions. Only essential operatives to work with piling rig.  $\overline{\mathbf{A}}$ Movement of the rig to be adequately supervised.  $\overline{\mathbf{A}}$  $\sqrt{}$ Level piling mat to be provided.

Speed restrictions to be in place and enforced.

One designated operative to control/coordinate all plant movements.

 $\sqrt{\phantom{a}}$ 

 $\overline{\mathbf{A}}$ 



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 24 - Use of Abrasive Wheels **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Burst wheel/disc. 9 6 Contact with wheel/disc. 6 6  $\overline{\mathbf{A}}$ Entanglement with moving parts. 6 6 6 4  $\sqrt{}$ Flying particles from fractured wheel/disc. 2 6 Flying particles from cutting or grinding operations.  $\overline{\mathbf{A}}$ 4 2  $\sqrt{\phantom{a}}$ Flying particles of dust. 2 4  $\overline{\mathbf{V}}$ Noise. 2 4  $\overline{\mathbf{V}}$ Vibration. ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166. Respiratory protection must be worn when required.  $\overline{\mathbf{Q}}$  $\overline{\mathbf{A}}$ Adequate numbers of operatives should be trained and appointed to mount abrasive wheels and discs.  $\overline{\mathbf{A}}$ Correct types of wheels/discs to be fitted for material being cut.  $\overline{\mathbf{A}}$ Discs to be inspected for damage before being fitted.  $\mathbf{\Lambda}$ Loose clothing should not be worn.

Restrictions on vibration exposure to be followed.

Unauthorised persons to be kept away from cutting/grinding operations.

All cutting discs are to be removed from cutting equipment while in vehicles.

 $\overline{\mathbf{A}}$ 

 $\sqrt{\phantom{a}}$ 

 $\overline{\mathbf{A}}$ 

Ventilation.



Risk Assessment: RA 25 – Services (Underground and Overhead)

Index

		Risk	Risk of Injury			
Haz	zards identified	Without	With			
		Controls	Controls			
Tici	k boxes as appropriate					
$\overline{\checkmark}$	Contact with underground power cables.	9	6			
$\overline{\checkmark}$	Electrocution.	9	6			
$\overline{\checkmark}$	Explosion.	9	6			
$\overline{\checkmark}$	Rupturing of gas pipes leading to leaks, fire or explosion.	9	6			
$\overline{\checkmark}$	Rupturing of water pipes causing flooding and damage.	6	4			
$\overline{\checkmark}$	Cutting of underground telecommunications and interrupting	6	2			
	services.					
$\overline{\mathbf{A}}$	Rupturing of drains, sewers, culverts etc., and causing health	6	2			
	hazards.					
$\overline{\checkmark}$	Collapse of manholes.	6	2			
$\overline{\mathbf{A}}$	Arcing, contact or damage to overhead services	9	4			

Persons at risk: ☑ Site personnel ☑ General public ☑ Client personnel ☑ Other

# **Controls Considered Necessary:**

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ Check with Management prior to any excavation, driving or boring.
- Ensure that all services within the ground have been uncovered, disconnected or marked out clearly.
- If a gas pipe is ruptured, persons in the area should be evacuated and steps taken to prevent ignition of gas.
- ☑ Once a smell of gas/sewage stop work and seek advice.
- If an electricity cable is struck everyone should be kept clear of the area until made safe. No person should touch any plant or equipment involved. If the operator is within the plant they must jump clear and NOT step down from the machine.
- Any damage to buried services must be reported to the appropriate utility immediately.
- ☑ Do not attempt to fix or touch damaged services.
- ☑ Ensure that manhole covers are clearly visible and in good condition before and after operations.
- Prior to commencement of excavation, all public and local utilities will be requested to provide information of services in the ground of the proposed work area, consult safety file if applicable.
- ☑ Where services are believed to be present, steps will be taken to establish exact positions and routes (i.e. use cable locating equipment), which will be identified and marked with warning signs.
- ☑ The depth at which the services are situated will be established by hand digging trial holes.
- ☑ Excavators and power tools should not be used within 500mm of a known buried service.
- ☑ Height restrictions to be in place, barriers/warnings to be erected around affected areas.
- ☑ Establish communications with Utility Company before work commences.

## Additional controls considered necessary and further information:

Refer to HSG (SIA8 rev2)



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 26 - Working Rig in Confined Areas **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Crushing of operatives. 9 4  $\overline{\mathbf{A}}$ Asphyxiation. 9 4  $\overline{\mathbf{V}}$ Dust. 6 4  $\overline{\mathbf{A}}$ Noise. 6 4 ☑ Site personnel ☐ General public ☐ Client personnel Persons at risk: ☐ Other **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166. Where dust is a possible problem the area will be damped down to control dust levels and masks must be worn. Hearing protection will be worn while machines are running.  $\overline{\mathbf{\Delta}}$ 600mm minimum clearance to be provided between rig and any fixed object.  $\overline{\mathbf{A}}$ Engines not to be run in confined spaces unless there is no alternative, if so exhaust extraction  $\overline{\mathbf{A}}$ must be used.  $\sqrt{}$ Redesign to suit conditions.  $\overline{\mathbf{A}}$ Air monitoring to take place.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 27 - Rig Working Over or Near Excavations **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Collapse of excavations. 9 4  $\overline{\mathbf{A}}$ Asphyxiation of others in excavation. 9 4 9  $\sqrt{\phantom{a}}$ Overturning of rig. 4  $\overline{\mathbf{A}}$ Falls of operatives into excavations. 6 ☑ Site personnel ☐ General public ☐ Client personnel Persons at risk: ☐ Other **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166. The rig is not to be positioned closer than 1.5 times the depth of the excavation without the excavations being shored to the engineer's requirements or backfilled to prevent collapse. Operatives are not to be allowed to work in any nearby excavation while piling operations are  $\overline{\mathbf{\Delta}}$ being carried out. Where excavations are shored to prevent collapse, barriers are to be erected to prevent anyone  $\overline{\mathbf{Q}}$ from falling in.  $\overline{\mathbf{A}}$ Materials are to be stored well away from the edge of the excavation. Rigs should not be set up over trenches.  $\overline{\mathbf{A}}$ 



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB RA 28 - Construction of Underpinning Needles Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Collapse of structure. 9 4  $\overline{\mathbf{A}}$ Noise. 6 2  $\sqrt{}$ Dust. 2 6  $\overline{\mathbf{A}}$ Fumes. 6 2 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166. Hearing protection to be worn.  $\sqrt{\phantom{a}}$  $\overline{\mathbf{A}}$ Eye protection to be worn.  $\overline{\mathbf{A}}$ Proposed system of work to be approved by engineer.  $\overline{\mathbf{A}}$ Damping down to be carried out. Machines to be sited in open air.  $\sqrt{}$  $\sqrt{\phantom{a}}$ Propping of existing structure to be on firm ground.  $\sqrt{\phantom{a}}$ Seek guidance on the extent and sequence of areas to be worked on.



**Risk Assessments** Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB Risk Assessment:** RA 29 - Maintenance of Plant on Site Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Uncontrolled movement of the plant when under repair. 9 4 9 4  $\sqrt{}$ Uncontrolled movement of hydraulics. 6 2 Uncontrolled release of hot or pressurised liquids.  $\overline{\mathbf{\Delta}}$ 9 2  $\overline{\mathbf{A}}$ Collapse of jacking equipment. 2 6  $\overline{\mathbf{V}}$ Tyre explosion or fuel fire. 2 6  $\overline{\mathbf{A}}$ Hair or clothing caught in moving parts. ☐ General public ☐ Client personnel ☐ Other Persons at risk: ✓ Site personnel **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear - Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.  $\overline{\mathbf{A}}$ Plant and equipment must be maintained in accordance with guidance contained in manufacturers / suppliers manuals or instruction leaflets.  $\overline{\mathbf{A}}$ Competent persons only will carry out maintenance work. Mobile plant and equipment to be worked on will have the wheels chocked and hydraulically operated lifting arms at rest, before work commences on the braking system, hydraulics or wheels.  $\overline{\mathbf{V}}$ Where hydraulically operated equipment has to be elevated for work to be carried out it must be supported by rigid means, i.e. props or ram locks.  $\overline{\mathbf{A}}$ Where work involves engine-cooling systems, hydraulic systems and compressed air, arrangements must be made to depressurise them under controlled conditions.  $\overline{\mathbf{\Delta}}$ When jacking is used to raise the equipment in order to facilitate access under the machine, the jacking must take place on firm level ground and packing placed under strong points, to prevent the collapse of the machine in the event of a jack failure.  $\overline{\mathbf{A}}$ Raised bodies will be propped. No hot work to take place on wheels or fuel tanks unless the tyres are removed from the wheels and  $\overline{\mathbf{\Delta}}$ the fuel tanks drained, purged and filled with water.  $\sqrt{\phantom{a}}$ Where work is to be carried out near moving parts, long hair and clothing must be kept clear.  $\overline{\mathbf{A}}$ All guards to power shafts, fans, fan belts and other moving parts to be replaced when work is complete.  $\overline{\mathbf{A}}$ COSHH assessments will be required in respect of any hazardous liquid/substance.

#### $\overline{\mathbf{A}}$ Assessments will be made as to the level of personal protective equipment to be used.

- $\sqrt{}$ Plant should be examined by a competent person prior to use.
- $\sqrt{}$ Results of weekly inspections will be entered in an approved register.
- $\overline{\mathbf{A}}$ Spill kits must be available to mop up all spills.

#### Additional controls considered necessary and further information:

Refer to the Operator Manual.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 30 - Driving Motor Vehicles on Company Business **Risk Assessment:** Index Risk of Injury Hazards identified Without With **Controls Controls** Tick boxes as appropriate Driving on motorways A, B and unclassified roads. 9 2 2  $\overline{\mathbf{A}}$ Driving off road. 9 Manoeuvring and reversing. 2  $\overline{\mathbf{A}}$ 6 Driving in reduced visibility and at night.  $\overline{\mathbf{A}}$ 9 4  $\overline{\mathbf{V}}$ Loading of vehicles and carriage of passengers. 2 6  $\overline{\mathbf{A}}$ 6 2 Towing. ☑ Site personnel ☑ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** All drivers will hold a full driving licence for the vehicle to be driven and will be at least 21 years of  $\overline{\mathbf{A}}$  $\sqrt{}$ Adequate rest periods will be provided where passengers are carried at the commencement and end of the working day. Training will be provided where a need is identified.  $\overline{\mathbf{A}}$ A system of recording accidents will be established to identify where training is required.

- $\overline{\mathbf{A}}$ Driving licences will be checked annually.
- $\overline{\mathbf{V}}$ All employees will be required to report any driving convictions or points on their licence.
- $\overline{\mathbf{V}}$ All employees who use their own vehicles on company business will be required to provide insurance to cover that use.
- Vehicles and trailers will be examined daily and weekly to ensure compliance with road traffic  $\square$ legislation and maintenance schedules.
- All vehicle defects will be reported immediately.  $\overline{\mathbf{A}}$
- No vehicle or trailer will be used in an unroadworthy condition.  $\overline{\mathsf{V}}$
- $\sqrt{}$ Obey speed controls on site.
- Smoking is NOT permitted in any Company vehicle.  $\overline{\mathbf{A}}$
- $\sqrt{\phantom{a}}$ Mobile phones are not to be used while driving.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB** RA 31 - Breaking Down Piles **Risk Assessment:** Index Risk of Injury Hazards identified With Without **Controls Controls** Tick boxes as appropriate Noise. 6 2  $\overline{\mathbf{\Delta}}$ 2  $\overline{\mathbf{A}}$ Vibration. 6 2  $\sqrt{\phantom{a}}$ Flying particles. 6 2  $\overline{\mathbf{A}}$ Dust. 6  $\sqrt{}$ 2 Manual handling. 6 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear -Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection - Should comply with BS EN 166. Noise will be reduced to lowest possible level and where action levels are likely to be reached,  $\overline{\mathbf{A}}$ assessments will be conducted, information given to all persons likely to be affected, ear protection provided, which must be worn when required. A tool producing high levels of vibration to have anti-vibration handles to reduce the risks  $\overline{\mathbf{\Delta}}$ hand/arm vibration syndrome (HAVS).  $\sqrt{\phantom{a}}$ Minimise the time individuals use the equipment i.e. job rotation. A separate COSHH assessment will be carried out where dust is likely to be a hazard to health, and suitable personal protective equipment (PPE) will be provided and worn. See also Risk Assessment RA15.  $\overline{\mathbf{A}}$ Ensure that time spent using vibrating tools is recorded.  $\overline{\mathbf{A}}$ Additional controls considered necessary and further information: See risk assessment number RA 15 for further controls to prevent hand/arm vibration syndrome.  $\sqrt{}$  $\sqrt{\phantom{a}}$ Refer to HSE guidance HS(G) 17 – Safety in the use of abrasive wheels.  $\sqrt{\phantom{a}}$ Refer to the Operator Manual.

# Risk Assessments For Piling Works



CONTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London NW1 9QB			
Risk Assessment: RA 32 – Working over Water					<u>Index</u>	
			Risk of Injury			
Hazards identified			Without	With		
				Controls	Controls	
Tick boxes as	s appropria	ate				
✓ Drowning	g.			9	4	
☑ Weils dis	sease.			6	2	
Persons at risk: ☑ Site personnel ☐ General public ☐ Client personnel ☐ Oth				onnel D Other		
Controls Considered Necessary:						
✓ Procedu	☑ Procedures for working over water to be discussed on site and appropriate equipment and					
training t	o be provi	ded.				



COI	NTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London NW1 9QB				
Risk Assessment: RA 33 – Loading Pile Hammer					<u>Index</u>			
					Risk of Injury			
Hazards identified				Without	With			
					Controls	Controls		
Tick boxes as appropriate								
$\overline{\mathbf{A}}$	Musculo	-skeletal ir	njuries (back injuri	es).	6	2		
$\overline{\mathbf{V}}$	Crushing			,	9	4		
$\overline{\mathbf{A}}$	Entrapm	ent.			9	4		
Per	sons at	risk:	☑ Site persor	nnel General public	☐ Client perso	onnel		
Coi	ntrols Co	onsidere	d Necessary:					
$\overline{\mathbf{Q}}$	Correct u	use of PPE	(as applicable):	Head Protection - Hard Ha	at BS EN 397; Sa	ıfety Footwear –		
	Steel toe	capped b	oots BS EN ISO 2	20345 or BS EN 345; Hand	d Protection - Su	itable Gloves BS		
	EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the							
	noise lev	els see C	OSHH Assessmer	nt; Eye Protection – Should	d comply with BS	EN 166.		
$\overline{\mathbf{V}}$	Use med	hanical ai	ds to lift heavy eq	uipment.				
	Secure h	ammer du	ıring lifting operati	ons				
$\square$	Ensure t	hat hamm	er is secured in tw	o places to the mast while	tracking and rais	sing mast.		

Persons at risk:



CONTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, Lon NW1 9QB	don

		Risk of Injury			
Ha	zards identified	Without Controls	With Controls		
Tic	k boxes as appropriate				
	Trailing cables.	6	2		
$\overline{\checkmark}$	Polythene/pallets.	6	2		
$\overline{\mathbf{V}}$	Obstructions on escape routes.	9	2		
$\overline{\mathbf{V}}$	Poor/lack of illumination.	6	2		
	Accumulated rubbish causing fire risk.	9	4		

# **Controls Considered Necessary:**

☑ Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear – Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.

☑ Site personnel ☑ General public ☑ Client personnel ☐ Other

- ☑ Avoid trip hazards, cables, boxes in alleyways, etc.
- ☑ Store materials in one area away from pedestrian routes.
- ☑ Keep empty pallets together, away from offices etc, ready for collection.
- ☑ Clean up spillages immediately.
- ☑ Take care when the weather is inclement, use grit or salt when appropriate.
- ☑ All combustible materials to be placed in a skip.
- 'Domestic' rubbish (such as food) to be placed in a lidded skip on site or removed from site and disposed of appropriately.
- ☑ Ensure adequate lighting for the task as well as compound areas when required.
- ☑ Highlight changes in level.
- ☑ Carry out regular inspections of the workplace.



Risk Assessment: RA 35 - Inserting Steel Cages to CFA Bored Piles Index

	Risk	Risk of Injury			
Hazards identified	Without	With			
T'al-language and an addition	Controls	Controls			
Tick boxes as appropriate	_				
✓ Manual Handling.	4	2			
☑ Concrete burns – from exposure to alkali.	4	2			
☐ Collision with moving plant.	9	2			
☑ Cuts from steel and tie wire.	3	1			
☑ Operative struck by the jib or bucket of the excavator during	9	2			
insertion operation.					
☑ Falls into the bored pile or concrete.	3	1			
☑ Steel cage falls from excavator causing injury.	6	2			
☑ Hand Arm Vibration injuries.	1	1			
☑ Noise.	2	1			
☑ Other site workers or visitors come into the work area unaware of	2	1			
the risks.					
☑ Bucket or debris falling from excavator.	6	2			
☑ Cage springing or collapsing under load or tension.	4	1			
☑ Entrapment or shearing force under load or compression from excavator.	4	1			
	1	1			

#### **Controls Considered Necessary:**

Persons at risk:

☑ Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear – Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection – Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 – as relevant to the noise levels see COSHH Assessment; Eye Protection – Should comply with BS EN 166.

☑ Site personnel ☐ General public ☑ Client personnel ☐ Other

- ☑ Operatives to wear gloves with high cut resistance.
- Steel cages to be lifted and carried across the site using an excavator machine, drop chain, and shackle fitted to the lifting eye.
- Operatives directing the excavator and working with the steel cages must be fully clothed (no shorts), wear gloves and be informed of the hazards of concrete burns.
- ☑ Plant drivers to be competent and hold CPCS qualification.
- Operatives must stand well clear of the steel cage when the excavator is used to drive the cage into the bored concrete pile.
- Lifting equipment to have current thorough examination certificate and be inspected before each days use. (recorded weekly).
- ☑ Signage Danger deep holes; Danger Deep excavation; Danger Hole below to be displayed.
- ☑ When using a running cage vibrator operatives not to handle the cage.
- ☑ Operatives wear hearing protection at 85dB (mandatory). Issued to all operatives at and above 80dB.
- ☑ Bucket should always be removed when installing cages until the cages requires a final push from a low level.
- ☑ Operatives should always stay at a safe distance when either pulling or pushing cages in, Min 3m clear distance.
- ✓ No Operative should use feet on the helical to assist cage installation in case of sudden slumping.
- ☑ No other persons within the working area (within 3m).

#### Additional controls considered necessary and further information:

- ☑ Where applicable COSHH sheets to be reviewed with operatives (concrete).
- Operatives briefed regarding the NFS Revised Method Statement for Steel Cage Insertion to Concrete Piles. (21-01-2015).
- ☑ Operatives to be briefed regarding control measures.



CONTRACT	200900	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London
CONTRACT	200003	SITE ADDRESS	NW1 9QB

Risk Assessment: RA 36 Cleaning CFA Concrete System Index

		Risk of Injury		
Haz	zards identified	Without Controls	With Controls	
Tic	k boxes as appropriate			
$\overline{\mathbf{V}}$	Air entrapment in the delivery line.	9	4	
$\overline{\checkmark}$	Blockages.	6	2	
V	Bursting of pipelines under pressure.	6	2	
	Cleaning and dismantling the pipeline.	6	2	
$\overline{\mathbf{V}}$	Contact with moving parts.	6	2	

Persons at risk: 
☑ Site personnel ☑ General public ☑ Client personnel ☑ Other

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ All pipe joints must be fitted with safety pins at all times.
- ☑ Ball catcher to be in place and secured before cleaning operation commences.
- ☑ Pipes must not be disconnected unless the ball has been recovered.
- ☑ Ensure that the delivery hose has no kinks.
- ☑ Only the pump operator is to release pipe clips.
- ☑ Regular inspection of the hoses for condition to ensure that they are replaced when showing signs of wear or damage.
- ☑ Ensure that flexible hoses are in manageable sections before trying to move them or use mechanical means.
- ☑ Steel pipe sections that are full of concrete will require at least two operatives to lift them.
- ☑ Only those operatives directly involved with the operation are to be allowed within 6m of the pump or pipelines.
- ☑ Please refer to detailed NFS Working Procedure document "Cleaning Concrete Pumps".



CONTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London NW1 9QB
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Risk Assessment: RA 37 Clearing Blockages Index

	Risk of Injury		
Hazards identified	Without Controls	With Controls	
Tick boxes as appropriate			
☑ Violent ejection of concrete from hose at moment of delivery.	9	4	
☑ Delivery pipe joint failure.	9	4	
Contact with wet concrete causing burns, allergy and dermatitis.	6	4	
☑ Air in pipeline causing hose to whip.	9	4	

Persons at risk: ☑ Site personnel ☑ General public ☑ Client personnel ☑ Other

- ☑ Correct use of PPE (as applicable): Head Protection Hard Hat BS EN 397; Safety Footwear Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 as relevant to the noise levels see COSHH Assessment; Eye Protection Should comply with BS EN 166.
- ☑ Eye protection to be worn at all times.
- ☑ Give warning prior to recommencing the pour.
- Check hoses for damage before commencing pour each day.
- ☑ Check concrete mix against specification.
- ☑ Be aware for potential for blowback in the line.
- ☑ Ensure connecting pipes adequately secured.
- ☑ Ensure that hopper remains full when discharging concrete.
- ☑ Only essential personnel to be within 20m of the pump or hose when dealing with a blockage.
- ☑ Ensure accurate reading from pressure gauge.
- ☑ Establish location of the blockage before attempting to clear it.
- ☑ Keep hands well clear of hopper while engine running.
- ☑ Turn off power before disconnecting hoses.
- ☑ Ensure that the pipes operating pressure is appropriate for the diameter of the pipe.
- ☑ Do not use and set aside any suspected damaged pipes for inspection by a competent person.
- ☐ Ensure joints are in good condition before use and fitted with safety pins and whip checks.
- Provide support to pipes where required.
- ☑ Ensure water supply to flush eyes.
- Release pressure in line before attempting to separate hoses, revers the pump to reduce the pressure.
- ✓ Never use compressed air to clear a blockage.
- ☑ Secure the open end of the hose and stand clear (behind significant structure or at least 20m away) while attempting to clear blockages.
- ☑ Please refer to detailed NFS Working Procedure document "Cleaning Concrete Pumps".



CONTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London
			NW1 9QB

Risk Assessment: RA 38 Noise Controls Index

		Risk of Injury		
Ha	zards identified	Without Controls	With Controls	
Tic	k boxes as appropriate			
$\overline{\mathbf{V}}$	Damage to hearing	8	5	
$\overline{\mathbf{V}}$	In ability to hear instructions or warnings	8	5	
V	Nuisance to other workers and neighbours	8	5	

Persons at risk: ☑ Site personnel ☑ General public ☑ Client personnel ☑ Other

# **Controls Considered Necessary:**

- ☑ Use of modern machinery, well serviced and maintained.
- ☑ Turn engines off when not in use.
- ☑ Use silencers where possible.
- ☑ Place noisy plant far away from working area or neighbours.
- ☑ Use sound protection barriers if necessary.
- ☑ Use of PPE Ear Protection BS EN 352.

- ☑ Operatives to be briefed regarding control measures and noise exposure action levels.
- ☑ 80dB(A) employees can request ear protection and it must be provided.
- ☑ 85dB(A) Employees must wear ear protection, establish ear protection zones.
- ☑ PPE Ear Protection BS EN 352.



Euro-City Eastern, 152-156 Kentish Town Road, London CONTRACT 200809 SITE ADDRESS **NW1 9QB RA 39 Installing Secondary Auger Cleaner Risk Assessment:** Index Risk of Injury Hazards identified With Without **Controls Controls** Tick boxes as appropriate  $\overline{\mathbf{\Delta}}$ **Trapped Fingers** 9 4 Injury to feet 6 2 Injury from wire Brushes 2  $\overline{\mathbf{A}}$ 6 Handling 2  $\overline{\mathbf{A}}$ 6 Lifting 2  $\overline{\mathbf{A}}$ 6 ☑ Site personnel ☐ General public ☐ Client personnel ☐ Other Persons at risk: **Controls Considered Necessary:** Correct use of PPE (as applicable): Head Protection - Hard Hat BS EN 397; Safety Footwear - $\overline{\mathbf{A}}$ Steel toe capped boots BS EN ISO 20345 or BS EN 345; Hand Protection - Suitable Gloves BS EN 388; High visibility Jacket or vest BS EN 20471; Ear Protection BS EN 352 - as relevant to the noise levels; Eye Protection – Should comply with BS EN 166 and EN 172 (if cutting).  $\overline{\mathbf{Q}}$ Only Certified lifting equipment to be used. When lifting into position a drop chain must be used off the winch line. Only install the cleaner wheel using the spare line on the rig and not using the attendant  $\overline{\mathbf{A}}$ excavator. This is to ensure it hangs straight and locates easier. When attaching the chain take care of the brush wires, when lowering from the vertical to  $\sqrt{}$ horizontal then care must be taken and clear room given to allow it to lower gentle to the ground.  $\overline{\mathbf{A}}$ Care must be taken when lowering into the socket on the cleaner arm that hands are above the stop ring and the cleaner is positioned directly above the socket before starting to lower the cleaner into position.



CONTRACT	200809	SITE ADDRESS	Euro-City Eastern, 152-156 Kentish Town Road, London
			NW1 9QB

COVID 19 is a virus which can cause serious illness and death for which at the moment there is no vaccination or cure. We need to follow government guidelines to ensure the safety of the workforce and the public.

Symptoms can include high temperature, loss of smell and taste, and a persistent cough.

Risk Assessment: RA 40 Coronavirus COVID-19					<u>Index</u>
			Risk		
Haz	ards identified	Without With		/ith	
		Controls	Con	itrols	
	boxes as appropriate				
	Fitness to Work		9		3
Image: second content of the content	Travelling to and from	n Site	9		2
	Signing In		9 9		3 3
Image: second color and c	Site Meetings Welfare Facilities		9		3
	Close Contact Worki	na	9		3
		<u> </u>	По:: .		
Per	sons at risk:	☑ Site personnel ☐ General public	LI Client pers	onnel L	Other
Co	ntrols Considered	d Necessary:			
V	Office Staff to work from	m home if possible, if not possible perhaps part office	/part home.		
V	If staff cannot work from	m home stagger working patterns in the office.			
V	Maintain personal hygi	ene. Washing hands regularly using hand sanitisers.			
V	Stagger work breaks, a	arrival and leave times.			
V	All Staff are to follow th	e site specific Coronavirus site rules.			
$\overline{\mathbf{A}}$		on site if fit and well, anyone showing symptoms of 0 ontact with any others on site other than telling someon			
$\overline{\mathbf{V}}$	Do not come to work if	someone in your household or bubble tests positive	or shows signs of syr	nptoms.	
V		ed guidelines for self isolation and these should be for Shold has the symptoms	llowed if showing the	symptoms	or anyone
		pt to a minimum, NSF staff should endeavour to trave lo one should travel at breaktimes outside the site to		vehicles unl	ess living in
	Try to avoid public tran	sport if possible.			
	Vehicles should be kept clean at all times and rubbish emptied daily.				
V	On arrival to site for the first time make yourself known to site management but try to avoid walking into site offices. Site inductions where possible should be carried out outside or if inside with limited numbers in a well ventilated room.				
☑	Try to avoid using fingerprint sensors and turnstiles. If these have to be used them ensure hands are well cleaned after, keep your own pens for signing in and avoid using shared pens.				
Ø	Site meetings to be kept to a minimum and ideally always outside while following the social distancing rules of 2m. in the event of bad weather try to rearrange the meeting or use a well ventilated room and keep numbers to minimum.				
Ø	Site will have their own procedures for welfare facilities. Where possible try to avoid. Always follow the site policy and if and when using facilities on site ensure we stagger the times we use them and keep all areas clean and tidy.				
$\overline{\mathbf{V}}$	Ideally take breaks outside or if the weather is bad use you own van to sit in.				
	Do not sit around in groups during breaks, always follow the 2m social distancing rule				
Ø	At all times try to avoid close contact work, if heavy items need lifting then use mechanical aids if possible. Use the attendant excavator to lift concrete hoses when connecting to avoid 2 people standing close together.				
☑		m / breakdown and 2 people need to work close togould be carried out if no other options are available	ether then a face mas	sk should be	e used.
Ø	PPE should always be kept in good order and everyone should only use their own PPE. Any disposable should be disposed of as soon as it is finished with.				