

Site: ??the site address??

Risk Assessments & Method Statements

for

Installation of a Piled RC Raft

Principal Contractor: ??the principal contractor??

Safety Advisers:

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1. SCOPE OF WORK

Morcon Foundations Ltd have been contracted to install a piled RC raft to the ?? area?? due to subsidence at No ??the site address??, in accordance with the contract specification. The dwelling will remain occupied for the duration of the work, which is expected to last for 2 weeks approximately.

Incorporated with the works is the removal of the original concrete slab, the installation of driven piles and the casting of a new RC pad below ground level.

Once the work has been completed the area will be handed back to ??the principal contractor?? for the continuation of the development.

The site is located in a residential area, with existing highways, which are not prohibitive to material deliveries. All vehicles are to be parked in such a way that they will not affect or obstruct other road users. A banksman will be on hand to assist with traffic Management should it be required. Additionally, any public access routes are to be maintained free at all times for the duration of the project.

All materials and plant will be contained and secured within the dwellings as required.

The work is relatively straightforward and in itself not high risk in that the works will all be controlled and conducted within protected site working areas. All work will be controlled using this Method statement, Risk/COSHH Assessments as reference.

NOTE: The work is to be undertaken on behalf of ??the principal contractor??, who will remain Principal Contractor for the duration of the works.

2. RISK ASSESSMENTS

Site Specific Risk Assessments for the work are attached at Appendix 1. Additional, detailed Risk Assessments controlling work activities are attached at Appendix 5 with all site supervisors retaining copies of the Company Risk Assessment manual for use on site.

3. COSHH ASSESSMENTS

COSHH assessments relevant to the work to be undertaken can be found at Appendix 4.

4. SITE HEALTH & SAFETY INDUCTION AND TOOL BOX TALKS

In addition to the ??the principal contractor?? site induction, Morcon Foundations Ltd will induct all its site operatives and also conduct toolbox talks on site-specific matters as required.

Records of the site inductions and toolbox talks will be kept. Toolbox talk register is at Appendix 2.

5. CO-OPERATION WITH THE PRINCIPAL CONTRACTOR ??the principal contractor?? & OTHER CONTRACTORS

Morcon Foundations Ltd recognises that it is most important for it to co-operate with all contractors on site. It also recognises the importance of site rules and requirements as laid down in the Construction Phase Health and Safety Plan held by ??the principal contractor??, and the additional importance for ensuring all information is kept up-to-date and is forwarded to all parties as required. It is important that continual liaison with all parties is ongoing at all phases of the project.

6. METHOD STATEMENTS

The Method Statements are at Appendix 3. They should be copied with the relevant Risk Assessments to the operatives doing the work and also handed out to them by the Supervisor who should record that he has done so.

7. COMPANY VIBRATION MANAGEMENT STRATEGY

This is contained at Appendix 6.

APPENDIX 1 - SITE SPECIFIC RISK ASSESSMENTS

OPERATIONS: - Ground Piling Operations.

COMPANY:	Morcon Foundations Ltd	SITE ADDRESS:	Principal Contractor: ??the principal contractor??
			??the site address??

HAZARD	PERSONS AT RISK	HAZARD RATING	CONTROL MEASURES		RESIDUAL RISK
1.			1.	CAT scan of area prior to excavation.	
Underground	Employees and persons in	Н	2.	Permit to dig obtained for PC before excavating.	М
Services, Electrocution	the vicinity		3.	Hand dig above services.	
Burns, Gas			4.	All site personnel to be inducted and records kept.	
Explosions and severe and fatal			5.	Method Statement must be followed.	
burns. Damage to Services			6.	Follow additional RA No 18	

2.			1.	Only trained, qualified operatives to use equipment.	
Vibration	Employees	L	2.	Correct PPE to be issued and worn. (Gloves to be worn).	L
			3.	Operator's exposure limits to be identified to the equipment used.	
			4.	Regular breaks and rotation system to be introduced.	
			5.	Hands to be kept warm (use of gloves and breaks)	
			6.	Records to be kept of operators exposed to vibration.	
			7.	HAVS cards to be issued.	
			8.	Follow company vibration strategy, copy held by site supervisor.	
3. Traffic Congestion	Employees		1.	Stand by system to be in place, should situation occur, site entrance to be kept clear at all times.	
at site entrance -	Road users	└	2.	Trained, competent banksman to be available.	-
frustration to road users due to	11044 40010		3.	Restrictions to be kept to a minimum, as required.	
delays.			4.	Follow additional RA Sheet No.17	
4.			1.	Area of segregation allocated.	
Collision with Plant	Employees		2.	Pedestrian routes to be used by all site operatives.	L
	Staff	L	3.	TM system to be covered on induction.	
	Visitors		4.	Plant to be operated by trained competent operatives.	
			5.	Banksman to be in attendance when plant is moving.	
			6.	Hi visibility jackets to be worn by all in working area.	
			7.	Follow additional RA Sheet No.14	

5. Piling Operations	Operator Employees	M	1. 2.	Refer to drawing ??THE DRAWING NUMBER?? for specific locations of piles Only trained and authorised operators to use equipment.	L
			3. 4.	Any loose fitting clothing to be tided away. Ear defenders, gloves and hard hats to be issued and worn.	
6. Use of Wacker	Operator and those	M	1.	Wear ear protection, stout foot protection with steel toecaps and gloves.	L
Compactor	standing near (noise)		2.	Trained personnel only to operate the equipment.	
Vibration White Finger Noise			3.	Operators should share this task to minimise exposure to vibration and operators are to work to the specified times of usage, to avoid over exposure.	
Noise			4.	Only the lighter (50Kgs) type compactors to be used where reasonable practicable.	
7.			1.	Trained operators only to carry out this operation.	
Core drilling and breaking operations - broken wrists,	Operator of hydraulic & pneumatic equipment	L	2.	Only clutch operated hydraulic drills to be used which operate slowly which do not "snatch" to prevent wrist and hand injuries.	L
injuries to hands.			3.	Ear and eye protection to be worn by the operator and other persons working close to the operation.	
8.			1.	First aid kits to be available on site through the PC.	
Injuries on site to	Operators and other	L	2.	Emergency services called for major/fatal injuries.	L
operators and employees	employees		3.	Accident book entry to be completed. Relevant action taken for informing local authority i.e. F2508 action etc.	
			4.	Route to local hospital is to be covered on induction.	
			5.	A landline & mobile phone should be available on site at all times.	
			6.	Trained first aiders are to be available on site during working hours.	

9. Excavations	Operatives	L	All incomplete excavations are to be identified by hazard tape or similar material.	L
	operaee		2. As a rule all excavations 1.2 meters and over are to be correctly shuttered with details to be entered into the weekly register. Shuttering may be required at shallower depths, dependant on the ground stability; the site supervisor is to conduct this risk assessment.	-
			 Spoil is to be placed at a safe distance away from the excavation. 	
			4. Plant /traffic routes are to be directed away from the area.	
			 Operatives are to avoid getting into the trench, without first conducting a gas test/monitoring to ensure there is no build up of carbon dioxide, monitoring system to remain in place. 	
			6. Follow additional RA Sheet No.8	
10. COSHH - handling	All operatives	M	All operatives to wear wellingtons, gloves, eye protection and water proof trousers when conducting concreting operations.	I
cement and concrete.) All operatives		Dangers of cement and concrete to be covered in a toolbox talk.	_
Chemical burns			3. COSHH Sheet No. 1	
11. Manual Handling	Employees	М	All operatives to have received instruction on proper techniques to be used	ı
Including movement of spoil	9		Avoid manual handling were possible by providing lifting apparatus to assist were practicable.	_
and materials by wheelbarrow.			Separate risk assessment may have to be completed, specific to task.	
			4. Materials to be delivered to nearest point of work.	
			5. Route to and into skip to be kept free of obstructions.	
			6. Only skip ramps designed for this purpose to be used.	

12.			1.	Only trained, qualified operators to use equipment.	
Dust	Employees Staff	M	2.	All cutting equipment to be fitted with water hoses or dust extractors.	L
	Public		3.	Operators to use relevant dust masks appropriate to hazard as required.	
13.			1.	All operatives to be given Leptospirosis cards.	
Leptospirosis(Weils Disease)	All operatives	L	2.	All operatives to use protective gloves if handling articles, earth etc., especially near to water.	L
			3.	Operatives must wash their hands before handling food, smoking cigarettes etc. Good personal hygiene is essential.	
			4.	Welfare facilities to be available on site.	
14. Abrasive Wheels	Employees	М	1.	Only trained, appointed, competent operatives to use equipment.	
Abrasive Wileels	Public	IVI	2.	Equipment to be checked before use.	<u> </u>
	1 done		3.	Impact resistant eye protection, gloves and dust masks to be worn at all times.	
15. Slips / Trips and	Employees	М	1.	All access routes are to be kept clear and maintained at all times.	
Falle	Public		2.	All equipment and materials are to be kept within the site boundary.	_
			3.	Maintain lighting to acceptable standard throughout the work area, task lighting may be required.	
			4.	Cable distribution to be monitored by the site supervisor.	

16.			Conduct noise assessments to identify hazards.		
Noise	Employees Public	Н	Issue correct ear protection for equipment used, enter details into log.	details	
	T dollo		Ensure operators are wearing protection correctly, including other operatives in close proximity. (Training)	L	
			Deter from using equipment when public are near by.		
17. Electrocution	Operatives	Н	Safe digging practices to be followed, ref to HS (G) 47 & Method Statement		
Liodioddion	Employees		Identify all services and mark up accordingly.		
			Protect any exposed 110v cables from damage from work activities.		
			4. Only 110v systems or battery tools to be used on site.	L	
			5. Fit trip devices (RCDs) to be checked frequently.		
			6. All equipment to have been P.A.T		
			7. All electrical equipment to be checked by competent operator prior to use.		
18. Welding	Operatives	М	Area to be segregated and protected from other work activities.		
Wolding	Employees	IVI	Welding mask, fire resistant gloves and overalls to be worn during all welding operations.	L	

APPENDIX 2

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Site: ??the site address??

Tool Box Talks Library and Records

Principal Contractor: ??the principal contractor??

7. RECORD OF INDUCTIONS

INDUCTION GIVEN AND SITE RULES ISSUED

BADGE No.	NAME	COMPANY	SIGNATURE	DATE

APPENDIX 3

Site: ??the site address??

METHOD STATEMENTS – Ground Piling Operations.

1. General

- a) Before commencement of the works a survey is to be carried out to determine the location of any buried services gas, electric, water, telecom etc., with an appropriate scanning device. All areas are to be clearly marked with line paint.
- b) A permit to dig must be issued for areas of work determined to be of a high-risk nature.
- c) Trial holes to confirm services positions must be dug by hand.
- d) The traffic management system is to be set up prior to the commencement of work starting. Ensuring a safe pedestrian route is maintained through the site working area.
- e) All operatives are to be inducted through the ??the principal contractor?? and Morcon system and have the Method statements, Risk and COSHH Assessments conveyed to them, before starting work. This is to be documented and retained for the H&S File.
- f) Before work commences a competent person should survey and assess any chambers to determine whether or not they are to be classed as a confined spaces and if so to ensure compliance with the Confined Spaces Regulations 1997.
- g) All equipment is to be checked for serviceability by the relevant, qualified operator. All registers and thorough examination certificates are to be in place with the Principal Contractor (PC).
- h) All PPE required for the project is to be checked for serviceability and issued to individuals as required.
- i) All waste is classed as contaminated waste and as such is to be disposed of by licensed contractor to a designated tip. Transfer notes are to be provided and retained for the H&S File copies are to be provided for the PC.
- j) Welfare facilities are to be in place and checked for serviceability, hot water, soap, hand towels and cooking facilities.

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2. Enabling Works

- a) Confirm all services; Gas, Water and Electricity have been isolated.
- b) Remove all fixtures and fittings.
- c) Prepare and protect driveway, footpaths and entrance to prevent any damage through delivery and work activities.
- d) Coordinate and establish delivery of materials, equipment and storage areas.
- e) Establish protection barriers (heras fencing) and signage around site skips and working areas as required.
- f) Inform suppliers of any restrictions on deliveries to be made to site and of the route the drivers must take to and from the site and from which direction they must approach the site entrance to minimise risk to the road users. A banksman must be used to control the movement of all vehicles, especially when reversing.
- g) The site supervisor will monitor the condition of the wagons leaving site and the condition of the public highway. If mud and muck is being carried onto the road, he will arrange local cleaning or the use of a road-sweeping vehicle.

3. Trial holes, Hand Augers, Excavations and Underpinning by Hand Dig

- a) All information regarding services that has been provided to the Contractor by ??the principal contractor??, the homeowner or any other source, must be verified on site by the Contractor.
- b) Before work commences, enquiries must also be made by the site supervisor to the PC and the homeowner regarding the whereabouts of any other possible incoming service points. The enquiries must also include any services which the homeowner may know about and which have been disconnected or are no longer in use.
- c) No manual excavations may commence until the site of the excavation has been checked for services by a services detector (CAT).
- d) All excavation work is to be carried out carefully by hand with operatives wearing rubber soled footgear and insulating gloves.
- e) Any obstruction is to be subject to a further CAT check and careful exposure by digging around.
- f) Where a hand auger or hand tool encounters an obstruction, no hammering to break through the obstruction is to be permitted until and unless it is <u>fully</u> exposed and identified as being harmless e.g. brick or concrete which is not protection to any underlying service.

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- g) Any live services encountered on the site of proposed excavations are to be isolated or trial hole/boreholes relocated by agreement with ??the principal contractor??. No live services are to be left in close proximity to the works nor exposed where they could constitute a danger to any other party.
- h) Regular sweeps of the ground in open excavations by a service detector are to be made at maximum 300mm depth intervals.

4. Installation of Piles by Drop Hammer rig and Excavations by Machine

- a) Morcon will ensure **ALL** services are identified and marked prior to the commencement of work, this will include positions and depths and especially any mains which may have been laid under wayleave across the site. Reference to the PC Construction Phase Health and Safety Plan is to be made along with any additional information provided by the PC.
- b) The design of piled schemes must ensure that services are marked on site and avoided. Boreholes and piles which clash with services are to be relocated or arrangements made for their safe rerouting, with the PC being informed of any changes to the original plan. Other excavations are to avoid services wherever possible or proposals submitted for safe hand excavation around.
- c) The notes relating to Trial Holes, Hand Augers, Excavations and Underpinning by Hand Dig also apply as appropriate.
- d) Drop Hammer rig to be set up at locations as shown on Morcon drawing no??THE DRAWING NUMBER??. 150mm steel cased piles are to be 1.5m long and welded to form a continuous casing.
- e) Piles are to be driven to refusal, and receive reinforcement as per Morcon Foundations design. Piles are to be cast insitu. Concrete is to be a strong hand mix.

5. Installation of New R.C Slab

After final trim to formation, steel to be fixed to Morcon Foundations designs, tied at
the correct centres, with the correct lap and allowance for cover, to form a rigid cage.
Concrete to be placed by hand, poured continuously and be well vibrated. Mixer to be
positioned as to cause the least possible disruption to the local environment.

6. Reinstatement & Site Clearance

a) Reinstatement/superstructure repairs will be carried out by other contractors under the supervision of the PC. Site will be left clean and tidy upon completion of the works with all excess materials and waste being removed from site.