

M&D FOUNDATIONS LTD

METHOD STATEMENT

Site:	T30295 Blue Hills Farm, Off Whitehall Road West, Birkenshaw, BD11 2DY	Revision: Revision Date:	Original 02/11/2023
Activity:	Construction of CFA (Continuous Flight Auger) Piles		
Scope of Works:	The installation of designed 600mm diameter CFA Piles. 80No x 600mm diameter CFA Retaining Wall Piles (Pile length – see schedule.)		
Principal Contractor:	Countryside Partnerships.		
Start Date:	TBC		
Duration:	TBC		
Site Manager:	TBC		
Construction Director:	Tim Rowse		
Tools / Equipment / Access:	110V electrical equipment Battery operated power tools Hand tools Soilmec SR-30 rig 55m ³ /hr Trailer Concrete Pump. Ancillary Piling Equipment Concrete hoses 125cmf Compressor Cherry Picker		
M&D Foundations Ltd contact is:			
<p>All site operatives will be given a health and safety site induction prior to any work commencing. Site safety rules, emergency arrangements and permits to dig to be issued during this time. The induction, in conjunction with the risk assessments and method statement, will highlight any hazards relevant to the site.</p> <p>An emergency plan shall be discussed and agreed with all staff on site. All site operatives are to familiarize themselves with this.</p> <p>Designated access routes to the work area are to be highlighted during the induction by the Principal Contractor and must be used and followed by all site workers.</p> <p>Operatives are to utilise the parking and access as designated by the Principal Contractor.</p> <p>The site working hours are 8.00AM – 5.00PM.</p> <p>Any deliveries / removals to and from site are to be made within an agreed timeframe. Where possible, there is to be an early delivery of the rig at around 6AM. (TBC) with site management.</p> <p>Ensure all safety documentation and procedures have been put in place by the Principal Contractor and that the CDM requirements are being met before starting any work including health and safety notices.</p>			

Inspections of apparatus should be carried out before any work starts, checking for any damage.
All operatives are to be fully trained and experienced as necessary for the works that they are subject to undertake, including the use of any special equipment or materials that will be involved.

Plant operators will be required to hold a recognised certificate of competency.

Operatives are to hand over copies of their relevant competency (CSCS/CPCS/IPAF and SSSTS for site foreman) when they undergo their site induction.

The Site Manager is to verify all competency records prior to the operatives starting work.

All site personnel will have a minimum of a CSCS card and, where applicable, a CPCS card.

The site team will consist of:

- Piling Supervisor / Rig Operator
- Banksman / Labourer
- Pumpman (when required)

110v power tools with 240v transformer to be used when mains powered. The preference to use battery operated tools is to be made where possible.

All equipment if left unattended for a period of time such as lunch and rest breaks, shall be left in safe condition, secured and locked if possible.

The working area must be cleared to allow for the specified operations to take place in a safe manner without endangering other personnel that are not directly involved with the work activity. All personnel not directly involved with the operations should keep out of the work areas. If necessary, the working area will be cordoned off or otherwise secured against unauthorised entry.

Designated, safe areas are to be established for the cutting of materials.

All M & D Foundations Ltd site operatives are to ensure that they have all the required PPE for the task and that it is in good condition before commencing works.

The location of the site welfare facilities will be confirmed by the site manager during the induction.

Requirements of Schedule 2 of CDM Regulations are to be met.

Schedule 2 of the regulations confirms that the minimum welfare facilities required includes:

- Sanitary conveniences
- Washing facilities
- Drinking water
- Changing rooms and lockers
- Facilities for rest

Emergency Procedures

In the event of an emergency work will stop immediately and all personnel will leave the danger area. In the event of a structural problem, the Site Manager must be contacted immediately. If the emergency involves an injury, first aid will be provided. A nominated person, trained in first aid, will be on site at all times along with a sufficiently stocked first aid box.

All accidents are to be entered into the M & D Foundations Ltd accident book. Near misses are to be reported to M & D Foundations Ltd, however trivial.

Where necessary, the accident / incident will be investigated to establish the root causes and to identify suitable actions that can be implemented to prevent a reoccurrence.

Requirement for any of the emergency services will be achieved by dialling 999.

All operatives will be informed as to where the nearest hospital/A&E is along with the quickest route they should take if necessary.

Reportable accidents will be reported to the HSE within the permitted times for doing so. M & D Foundations Ltd will investigate all accidents and may employ the services of C2 Safety to carry out an investigation.

Any COSHH spillage / escape will be reported to site office and logged using the appropriate site form. The event will be reported to M & D Foundations personnel who will record the incident and advise as appropriate.

Fire extinguishers are to be put in place by the Principal Contractor and discussion of muster points and fire procedures are to be explained and understood at the site induction.

In the event of emergency evacuation of the cherry picker, the secondary operator will take control of the machine using the controls on the base unit allowing the platform to be brought down in a safe controlled manner.

Method of Work

Pre-Start

- All site operatives will sign in to site and attend any site-specific briefings as required by the Principal Contractor on site.
- Safety barriers and signage will be erected to segregate the working area from the members of the public

Mobilisation On Site – CFA Piling Rig

- Confirm the extent of works to be carried out and precise locations.
- Unload all tools, materials and equipment into the work area.
- All existing services are to be clearly identified by the Principal Contractor prior to carrying out any work.
- The delivery of the rig and its auxiliary equipment will be done at an arranged and agreed time with the Principal Contractor.
- M & D Foundations Ltd site supervisor is to liaise with the site manager and agree on a suitable off-loading area for the piling rig and equipment.
- The weight of the piling rig is approx. tonnes. The weight of the low loader is approx. tonnes. These added together give a maximum gross vehicle weight of approx. tonnes.
- Low loader to drive onto site to a designated off load area. A competent banksman will be present at all times.
- Piling rig to manoeuvre itself off of the trailer and track over to an area with a firm and level platform this is suitable for rigging up by piling operatives. Tracking boards are to be used when required as protection (this will be provided by other contractors).
- The rig to be used is the Solimec SR30. This is a self-erecting machine. The Kelly bar cradle is removed and the mast is raised by controls within the cab. Augers are positioned by the machinery and pinned together by a competent person from the MEWP (Cherry Picker).
- Pile cages to be transported onto site via either a 40ft articulated lorry or 28ft flatbed rigid wagon.
- All equipment is to be off-loaded from the wagons and into an agreed compound area with the aid of an excavator on site.
- Concrete pumps and wagons to be set up as appropriate.

CFA Rigging Up

- Augers to be lifted into place using either machine in attendance or rig winch.

- The auger will be centralised below the rig head using the rig service winch.
- Rig head to be lowered into the auger and pinned into place.
- This process will be repeated for all augers in the string.

Construction of CFA Pile

- The area of work is to be segregated from all other works to ensure that other personnel not involved with the work are at a safe distance.
- Auger string will be centralised over the pile position and the mast to be vertically set. The Computer Instrument Panel will be programmed to identify the pile position and depth to be constructed.
- The hollow stem of the Auger, at the base of the digging hole, will be closed off with an expendable cap or hinged flap.
- Rig operator to bore down to the required depth observing both the rate of penetration of the auger string and the hydraulic demand of the drilling motor. The operator will ensure that the auger string remains in-line and the mast remains plumb to the boring.
- If it is not possible to progress the augers down to the required depth, then the auger string should be reverse screwed out of the pile bore, the shaft backfilled and further instruction sought.
- Before the first pile is installed, the concrete line is lubricated with an approved water based solutions.
- Upon achieving the required depth, the auger string is withdrawn and the concrete is pumped to allow the expendable cap to be blown clear of the digging head.
- Concrete is to be pumped through the hollow stem to the base of the auger.
- Pump to be slowly removed from auger at a controlled rate to construct pile.
- Auger will be cleaned with the aid of a mechanical auger cleaner.
- Open bores are not to be left over night, all piles will be concrete as the auger is removed.
- Arisings to be completely removed from around the pile with an excavator.
- The top of the concrete is to be carefully cleaned off to exposure the pile shaft. (Removal of spoil to be done by others.)
- Install reinforcement cage by lifting and plunging cage into the pile shaft with the aid of a strop from excavator.
- Cage to be centralised using appropriate spacers and secured.
- The daily report sheet and Pile logs will be recorded by the M & D Foundations Ltd rig operator.
- Should there be any variation to the above or any unforeseen circumstances, then work will cease immediately and operatives are to report back to their supervisor who will inform the site manager.

Hazards

- Dust
- Noise
- Overturn of lifting equipment
- Potential contact with live services
- Spills of / Contact with hazardous substances
- Defective tools and access equipment
- Manual handling injuries
- Hand and arm injuries
- Respiratory injuries

- Other contractors working in the building / nearby area.

Control Measures

Ensure the safe segregation of work.
Allow for safe access and egress to the site and work area at all times.
Provide appropriate information to personnel not involved with the operation.
Training certificates and/or cards to be provided.
Access equipment must only be used by a competent operative.
All operatives will hold a minimum of a CSCS card and where required a CPCS card. This competency will be provided to the Principal Contractor.
Authorised personnel only to enter to work area.
Ensure that any live services will be identified and marked out. These will then be isolated and proven dead.
Appropriate levels of security are to be provided.
Correct tools and equipment should be available, in good condition and well maintained.
Authorised persons only to use power tools.
Use rechargeable portable tools in preference to those connected to mains or generators.
Avoid misuse of tools and equipment.
Do not continue to work during times of adverse weather.
There should be absolutely no horseplay on site.
Shield noisy areas wherever practicable.
Fuel storage will be in accordance with site rules.
Hazardous substances only to be handled by competent and authorised persons.
Use correct handling techniques during manual handling tasks. Use team lifting where required.
All staff not to exceed personal capability of lifting loads.
Mechanical aids are to be used in preference of manual handling.
Operatives to be competent and physically fit.
Wear all required PPE as instructed.
Ensure fall protection is in place when working at height.
Maintenance records to be kept up to date.
Do not allow waste to accumulate.
Take care to reduce debris to a minimum.
Clear away any debris safely as to avoid injuries.

Manual Handling

All materials stored on site will be as per the designated site material storage areas/plans.
All operatives to be competent in manual handling.
Manual handling of larger objects will be carried out by mechanical handling equipment.
Where this is unavailable, two man/team lifting will take place dependent on the overall weight of the material. Manual handling will be assessed using TILE.
TASK – lifting, lowering, carrying, pushing or pulling.
INDIVIDUAL – person who will be carrying out the manual handling activity.
LOAD – the object that is being moved.
ENVIRONMENT – area in which the load is being moved.

Work at Height

All work at height is to be done in a safe manner in conjunction with the correct selection of working platforms and access equipment that will be erected and inspected by a qualified person.
Working at height, where required, will be completed using appropriate access equipment that will be erected by suitably trained personnel.
All working at height activities are to be briefed to all operatives that may be affected.
Fall protection is to be put in place where working at height activities are to be carried out.

Work Equipment

All power tools are subjected to frequent PAT testing at 3-month intervals.
Work equipment must be visually inspected for damage before every use, do not use if it is defective.
A cherry picker is to be used for rigging up the CFA augers and any other general maintenance tasks where required.
Piling rig certification will be held on site within the cab for distribution as required.

Manoeuvring Rigs

A firm, dry, level all weather standing shall be provided as a stable working platform for the piling rig to work off of. The maximum gradient of the working platform must not exceed 1 in 20. Any ramps to access the platform must not exceed 1 in 10.
NOTE: No ramps are anticipated to be necessary on this project.

Environment

Any waste accumulated is to be disposed of into the skips provided by the Principal Contractor or into designated disposal areas. Extra effort will be made to recycle anything possible.
A spill kit will be kept on site at all times to allow for an immediate clean up of any spills or leaks.
Where activities that generate dust are carried out, water shall be applied to the area or materials to dampen down. This shall be repeated as frequently as required.
Any plant shall be turned off when not in use to reduce the amount of noise that is generated. Where any noisy activity is to be undertaken for a significant length of time, then extra auditory measures will be put in place.

PPE Requirements (Tick where required)

Safety Footwear (EN20345-SB)	✓	Safety Goggles (EN166F)	✓	Face Mask (FFP3)	✓
High Visibility Jacket / Vest	✓	Hand/Arm Protection (EN388)	✓	Safety Helmet (EN 397)	✓
Hearing Protection (EN 352)	✓				
Notes:	<ul style="list-style-type: none">- All PPE will be replaced as required during the contract.- All personnel are to wash their hands prior to eating, drinking and smoking & after using the welfare facilities.				

Compilation of Safety Documents – By M&D Foundations Ltd			
Complied By:	Tim Rowse	Position:	Contracts Manager
Date:	02/11/2023		
Authorisation, Date & Review			
Prepared By:	K Hutson – C2 Safety	Date:	30.10.2023
Signature:			
Review Date:	30.10.2024	Or before if there is a significant change to activity, legal requirement, organisation or following an accident meaning that the method statement will no longer be valid.	