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PILING METHOD STATEMENT

807 HIGH ROAD TOTTENHAM
N17 8ER LONDON

807HR-SYM-XX-XX-SP-S-0001





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REVISION HISTORY

Revision	Description	Date	By	Checked
S0	Preliminary Issue	28/10/2022	DB	AB

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1.0 Introduction

The purpose of this document is to provide a preliminary Piling Method Statement for purposes of Discharge of Conditions relating to planning application HGY/2021/0441. The proposed property is located at 807 High Road, Tottenham, N17 8ER London.

Symmetrys Limited have been appointed as Structural & Civil Engineers for the above project.

2.0 Proposed works

Due to the site constraints, ground conditions, and proximity of the neighbouring properties, a piling solution has been adopted for foundations. To limit the vibration effects on the neighbouring properties, the CFA – Continuous flight auger piling system is proposed to be adopted.

Continuous flight auger piles are drilled and concreted in one continuous operation enabling much faster installation time than for bored piles. Reinforcement is placed into the wet concrete after casting, enabling the pile to resist the full range of structural loading.

CFA piles are constructed by rotating a hollow stem continuous flight auger into the soil to a designed depth. Concrete or grout is pumped through the hollow stem, maintaining static head pressure, to fill the cylindrical cavity created as the auger is slowly removed. The reinforcement cage is placed through the freshly placed concrete. Typically, CFA piles are reinforced with a rigid six-meter-long cage as a minimum, but it's possible to install much longer cages as and when required by the design or specification. If required, a specially developed vibrator unit can help accurately locate the reinforcement cages.

This method of piling characterizes low noise levels and minimum to no vibration during erection. Compared to other piling systems is also quicker which further helps in minimizing the disturbance to surrounding premises.

3.0 Key plant, tools, materials

Type of piling rig – TBC by Piling Contractor
Concrete pump – TBC by Piling Contractor
Concrete agitator – TBC by Piling Contractor
Compressor – TBC by Piling Contractor
Materials – Readymix Concrete & Reinforcement (pending further design development)

4.0 Sequence of operations

All operations and sequencing are to be finalized and specified by the Piling Contractor

4.1 Start of shift

4.1.1 Concrete pump and pumping line should be checked and lubricated

4.2 Set up and boring

4.2.1 Drawings and design should be checked.

4.2.2 The auger is set up over the pile pin position and reference pins are set up in two directions at right angles using the spacing bar.

4.2.3 The concrete discharge flap at the auger tip is closed.

4.2.4 Auguring should commence with the gates kept closed. Once the auger has advanced into the natural ground or a minimum of 3m depth the gates can be opened using the offset markers to check the pile position.

4.2.5 Personnel other than those involved in the operation should be kept clear throughout



4.3 Concreting

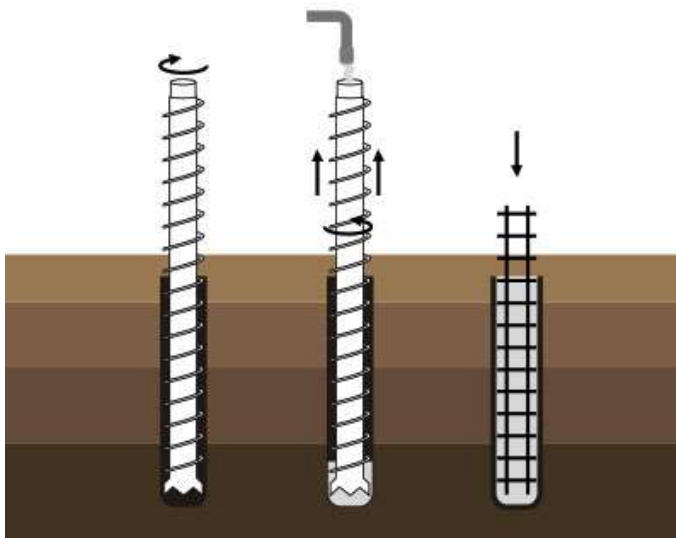
4.3.1 At the target depth, the auger is rotated to allow spoil to rise and the auger is lifted a maximum of 150mm to allow concrete to exit

4.3.2 The concrete pump is operated to supply concrete through the delivery hoses and down the auger central stem to form the pile as the auger is withdrawn. Once over-pressure is noted, the auger is lifted, slowly at first

4.3.3 The concrete pressure, flow rate, and overbreak percentage should be monitored throughout the pile construction operation.

4.3.4 During withdrawal the auger should be cleaned either using the mechanical auger cleaner or manually if required, to prevent spoil from going above head height.

4.3.5 As the auger reaches the surface pumping will cease.



4.4 Placement of reinforcement cages

4.4.1 The spoil and concrete slurry should be cleared from the pile position to a stockpile for disposal

4.4.2 The pile head will be located and a small amount of concrete dug out to define the pile position. The reinforcement cage is then either manually lifted into position, or lowered by the excavator or the rig service line into the wet concrete and pushed down by stepping on the helical binder. Should the reinforcement cage not enter the concrete by this means, the excavator will be used to press it into the wet concrete.

4.4.3 Any reinforcing bars that project above the piling platform are to have yellow plastic protective caps fitted to protect against stab, puncture, and trip hazards

4.4.4 The piling rig then sets up in a new position and the process is repeated

5.0 Duration of works

The commencement date is to be confirmed



6.0 General Notes

- 6.1 No piling works can commence unless asset location searches have been carried out and all services have been identified. The contractor shall refer to available surveys and reports, the contractor shall carry out any additional surveys as required
- Fast-track Utility Search by Groundsure Report REF: GRS12380/fast_TW-8886303
 - Preliminary UXO Risk Assessment by 1st Line Defence Limited REF: PA16038-00
 - CCTV Survey by The Drainage Lab REF: 807 High Road – CCTV Survey Report: 13/09/22
- 6.2 No piling works can commence unless soil contamination tests have been carried out to confirm the presence of any contaminants in the underlying strata
(Contractor to refer to the Phase II Site Investigation Report by Ground & Water REF: GWPR4898/SIR/September 2022)

7.0 Further Surveys

- 7.1 Phase III of the Site Investigation will be carried out and a 20m borehole will be dug located in the Percival Court (within the site boundaries). A site-specific investigation will be compiled by Geotechnical Engineer (Geofirma), prior to works commencing on site.

CONTINUE THE CONVERSATION

**TO DISCUSS YOUR PROJECT WITH US
PLEASE GET IN TOUCH ON 020 8340 4041
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