

## TN01 – Piling Method Statement

Project No.	Project Title:	Date Issued	Rev
SDS1431	Gondar Gardens	15/07/2022	00

### Piling Method Statement for Basement Construction

The below statement and outline methodology for pile installation relates to the construction of a single-storey basement at Gondar Gardens. This information is to be used by the contractor and specialist piling subcontractor to enable them to carry out the detailed design of the piles and the design of the temporary works and monitoring strategy.

The basement requires installation of a contiguous pile walls to act as temporary and permanent retaining walls. The contiguous pile wall is generally designed as a free-standing cantilever apart from where the basement is close to adjacent buildings. Temporary and permanent props are to be provided to the top of the wall to provide additional lateral support to the wall adjacent to existing buildings.

#### 1. Site Set-Up

- Erect hoarding to fully enclose the site along the boundary of the site to provide protection to general public
- Create and manage site entrance in line with CTMP
- A survey monitoring system is to be established by the Contractor, with regular monitoring of vertical and horizontal movements to be carried out by a third-party surveyor
- A condition survey of the nearest neighbouring buildings at Gondar House, South Mansions, and 1-3 Hillfield Road is to be carried out

#### 2. Enabling Works

- Remove the existing drainage where necessary
- Remove rubble and waste materials via tipper lorries loaded within the site. Removal of waste to adhere with the CDM regulations and requirements
- Site waste to be removed and recycled where applicable

#### 3. Install RC contiguous piled wall and capping beam around perimeter of proposed basement

- Before starting the work, the Contractor is to undertake a full underground utilities stat search and locate any services that could be damaged by the excavation works
- The contractor is to use rotary bored or CFA techniques to install the contiguous pile wall

4. Install piled foundation at the front of the building
  - Install piles with specialist mini piles foundation technique in root protection zone in accordance to recommendation from arboriculturist
  - Install piled foundations from ground level and trim during excavation
5. Excavate basement to required depth and temporary propping to be used to support ground where required
  - Trench protection and propping installed to ensure safe excavation. Contractor to design propping and submit for SD Structure approval
  - Excavate and remove earth to basement formation level, ensuring that any temporary horizontal props are fully installed to limit lateral deflection adjacent to existing buildings as the basement excavation commences
  - The removal of spoil is to follow the principles as set out in Construction Management Plan (prepared by the principal contractor)
6. Install pile caps at basement level
7. Construct permanent horizontal prop to the capping beam and contiguous piled wall is to be provided by concrete tie beam at ground floor level. The temporary props are to be subsequently removed when the permanent props are installed.

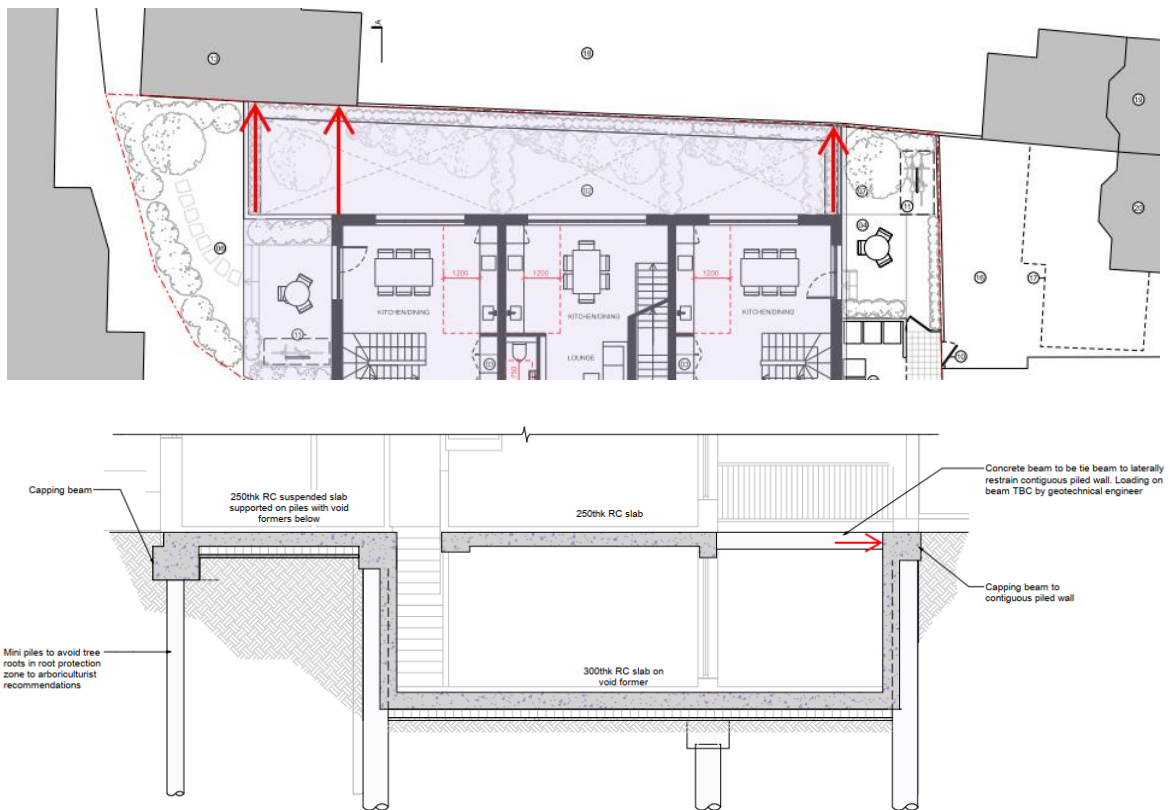


Figure 1 - Position of Permanent Horizontal Props to Capping Beam