

Sonia Pabla-Thomas
Space Architecture and Planning
Old Town Hall
Lapwing Lane
Manchester
M20 2NR

09/01/2020

Dear Sonia

RE: 20206336 Chorlton C of E Proposed Green School EYP

Thank you for your valued enquiry in relation to the above, I have reviewed the planning drawing provided in respect of the proposed new building.

From the drawings provided and from our discussions we understand that the proposed development will be situated with a root protection zone of the adjacent trees.

In this regard the foundations will need to protect the existing tree roots and minimise the proposed depth and extent of excavations required.

In this regard we would recommend that a shallow ground beam system be installed supported on small diameter piles.

These shallow ground beams would be reinforced concrete ground circa 300mm depth by 450mm wide. The ground beam could be installed within a shallow excavation or could be formed above ground level.

The ground beams would be supported on driven piles, we would advocate the use of 150mm or 200mm diameter mini-piles which would be spaced at 2 to 3m centres along the ground beams.

Based on our experience within the Chorlton Area we would expect the piles to be installed to around 5m depth.

The use of these small diameter piles allows the pile positions to be varied to accommodate roots as and when they are encountered on site and results in a flexible foundation solution.

We have used this type of foundation detail in the past to satisfy root protection requirements.

Please find attached a typical section through the proposed piles and ground beams to illustrate the proposal. Whilst the foundation would be subject to detailed design the detail is a reasonable illustration of the likely proposed foundations.

I trust the above and the attached detail is of assistance, if you require any further input at this stage please give the writer a call.

Yours Sincerely

Nick Forman IEng AMIStructE MICE

For BDI Structural Solutions Ltd