DAYES KENYON ASSOCIATES LIMITED
STRUCTURAL ENGINEERING CONSULTANTS

James Hopkinson
Blake Hopkinson Architects
22a Union Quay
North Shields
NE30 1HJ

Dated Thursday 1st October

PROPOSED EXTENSION TO MICHAELFORD BOLDON
INDICATIVE FOUNDATION PROPOSALS

Dear James,

Following on from our recent meetings and discussions I confirm the following with regard to possible foundation solution relating to the proposed extension to Michaelford in Boldon.

Having reviewed the findings of the arboricultural report, it is clear that any foundations relating to extensions or new areas of structure to Michaelford would have to involve a no dig/non excavated system of sub structure.

Furthermore any substructure must not have a negative impact on the existing trees and planting or their root systems.

With this is mind, a piled foundation solution would appear to be the most appropriate.

Steel or concrete piles would be installed on an approximate grid/approximate spacing's of 3m under lines of load bearing walls.

The piling system would be supplier designed by specialist contractor and would include necessary precautions to account for possible future heave due to root system(s).

A reinforced concrete ground beam would be cast insitu above existing ground level, which would support the superstructure above and span between the piles.

The ground beam would have to be cast onto a flexible board/clay heave protection board, this would serve to protect the underlying ground and root system as well as reduce any possible future heave on the underside of the ground beam.

The new ground floor would have to include a suspended ground floor system spanning between load bearing walls/ground beams, to avoid any additional loading or pressure on the existing ground.

An indicative detail of the possible foundation solution is attached for your use and information.

The detail attached is indicative only at this stage, in order that a more detailed design could be provided it would be necessary to carry out a ground investigation survey, produce detailed drawings of the proposals/extension as well as carry out a load analysis of the proposed building.

Once we have the above information it would be possible to approach a suitable specialist piling contractor/installer to obtain further advice and quotes regarding the piling system.

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I trust that you will find the above and attached straight forward, should you have any questions or require any further information in the mean time, please feel free to contact me using the details listed at the bottom of the page.

Kind regards,

Lee Dayes
Director

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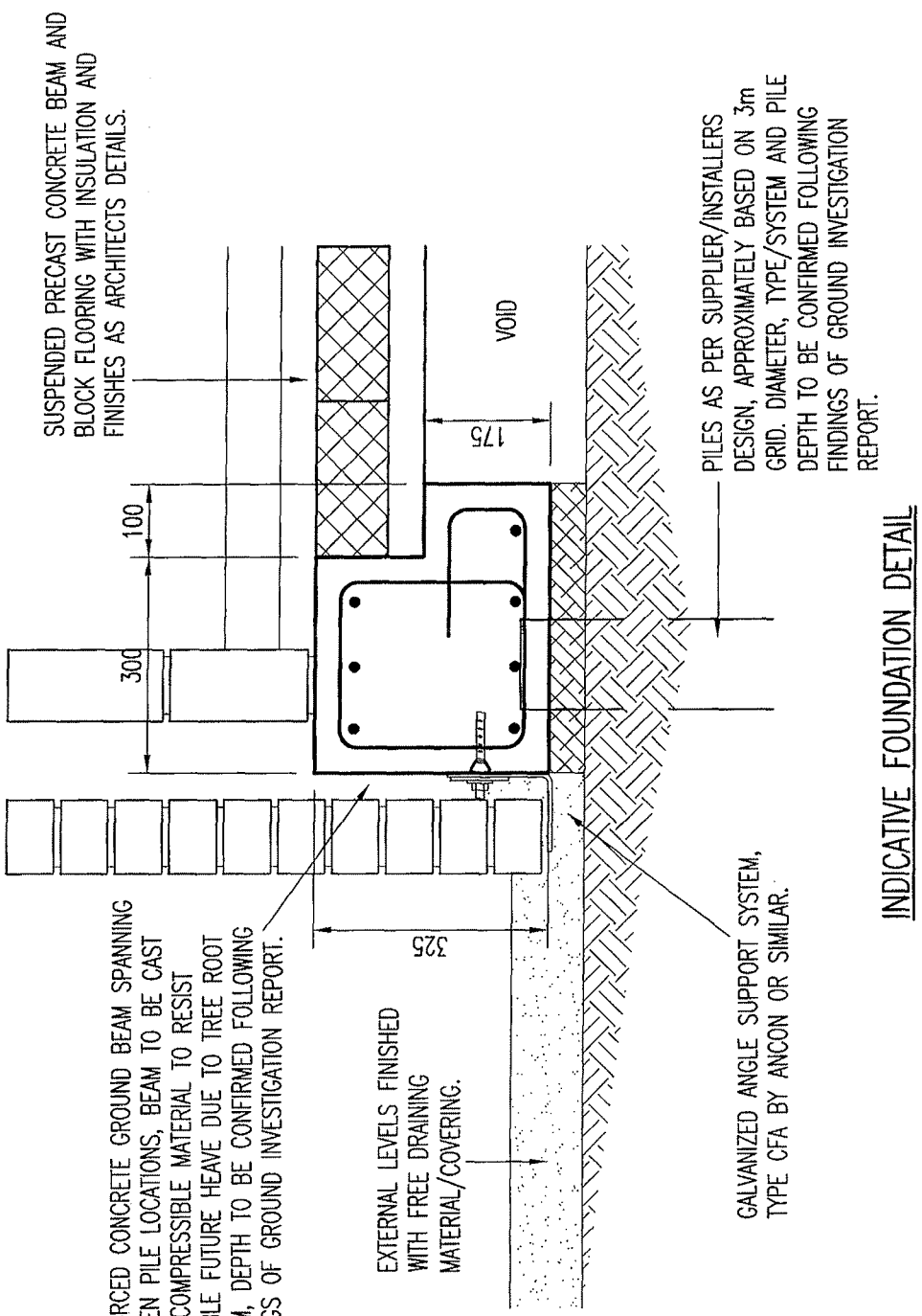
Project	PROPOSED EXTENSION TO MICHAELFORD BOLDON	Sheet



INDICATIVE FOUNDATION DETAIL
SCALE 1=10

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