

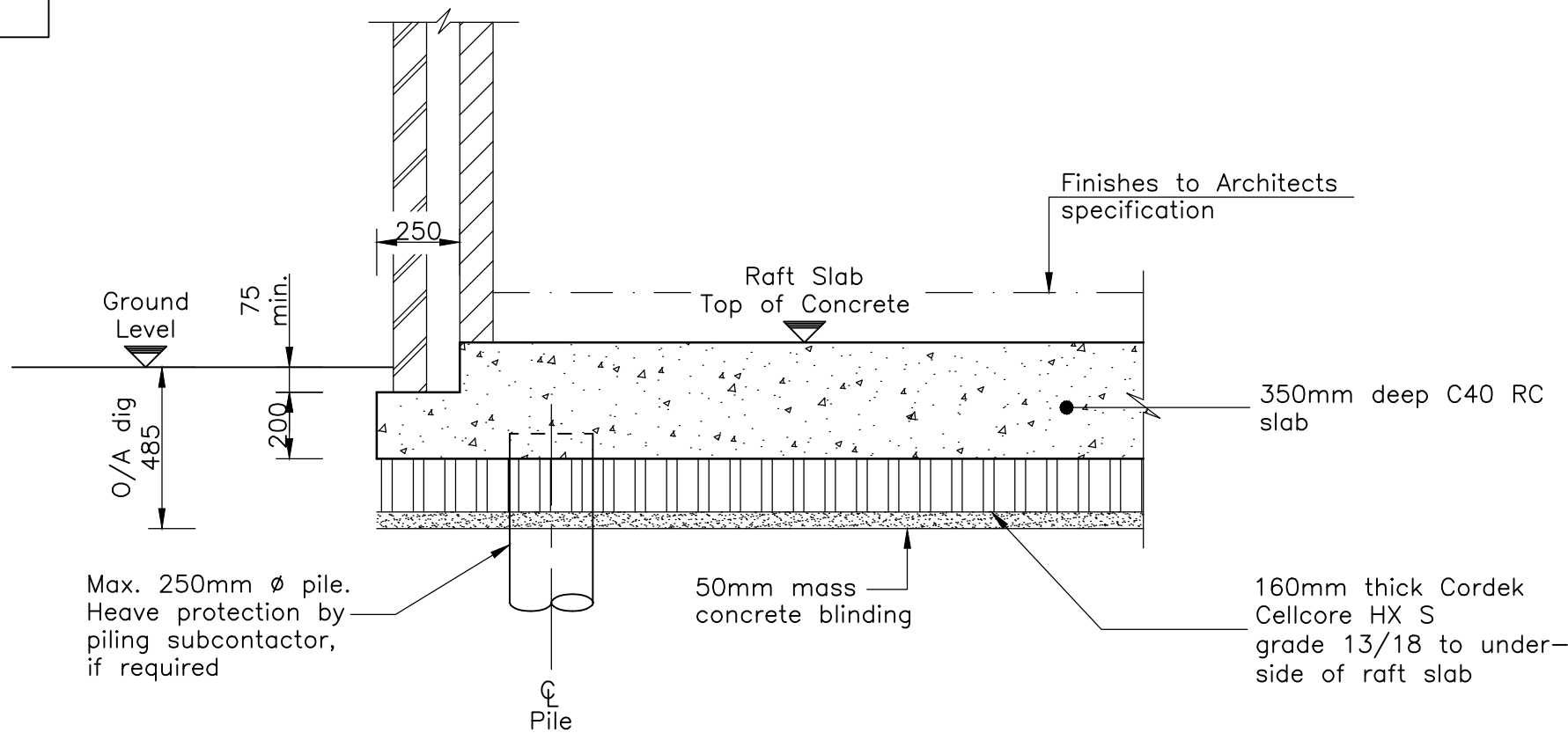
Piled Raft Layout

Legend

1
Indicates position of CFA pile, maximum 300mm Ø to specialist subcontractors design

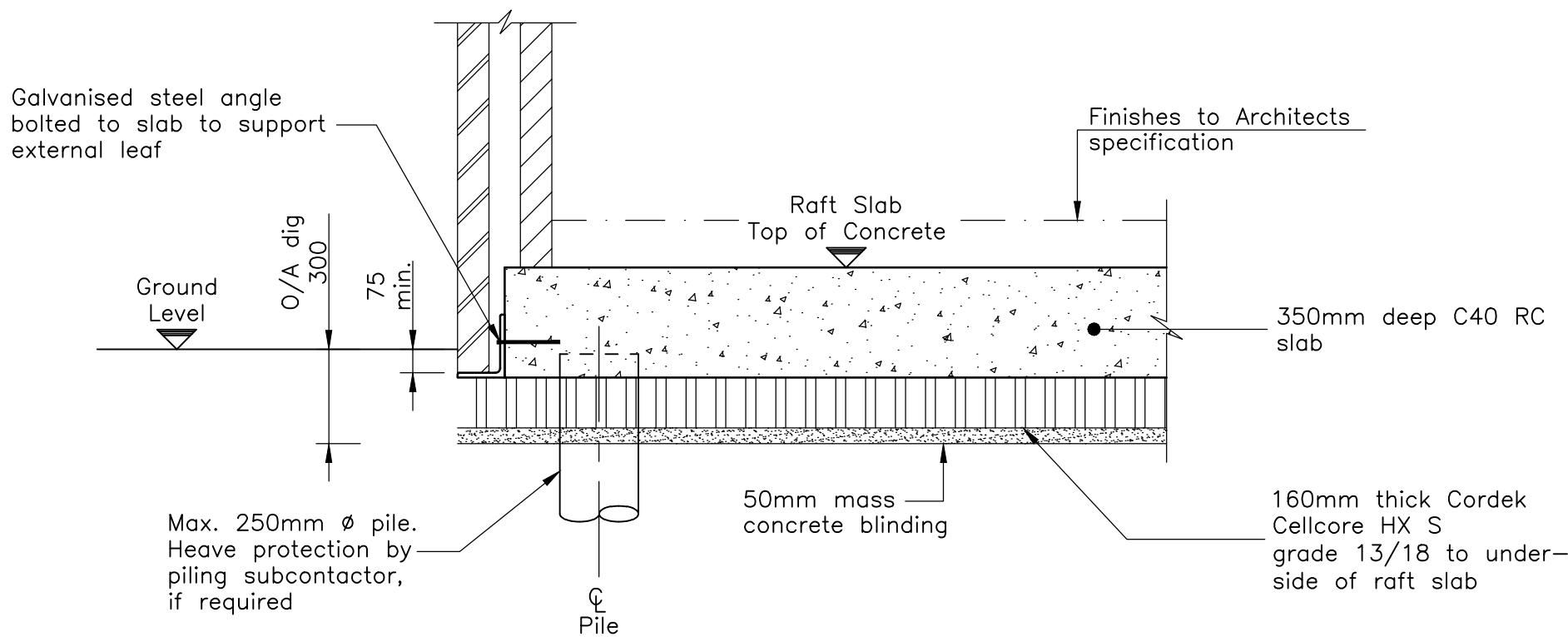
Denotes centreline of piles

NOTE:
ALLOW FOR 46No. PILES WITH AN AVERAGE PILE LOAD OF 250kN (SUBJECT TO CHANGE AT DETAIL DESIGN)



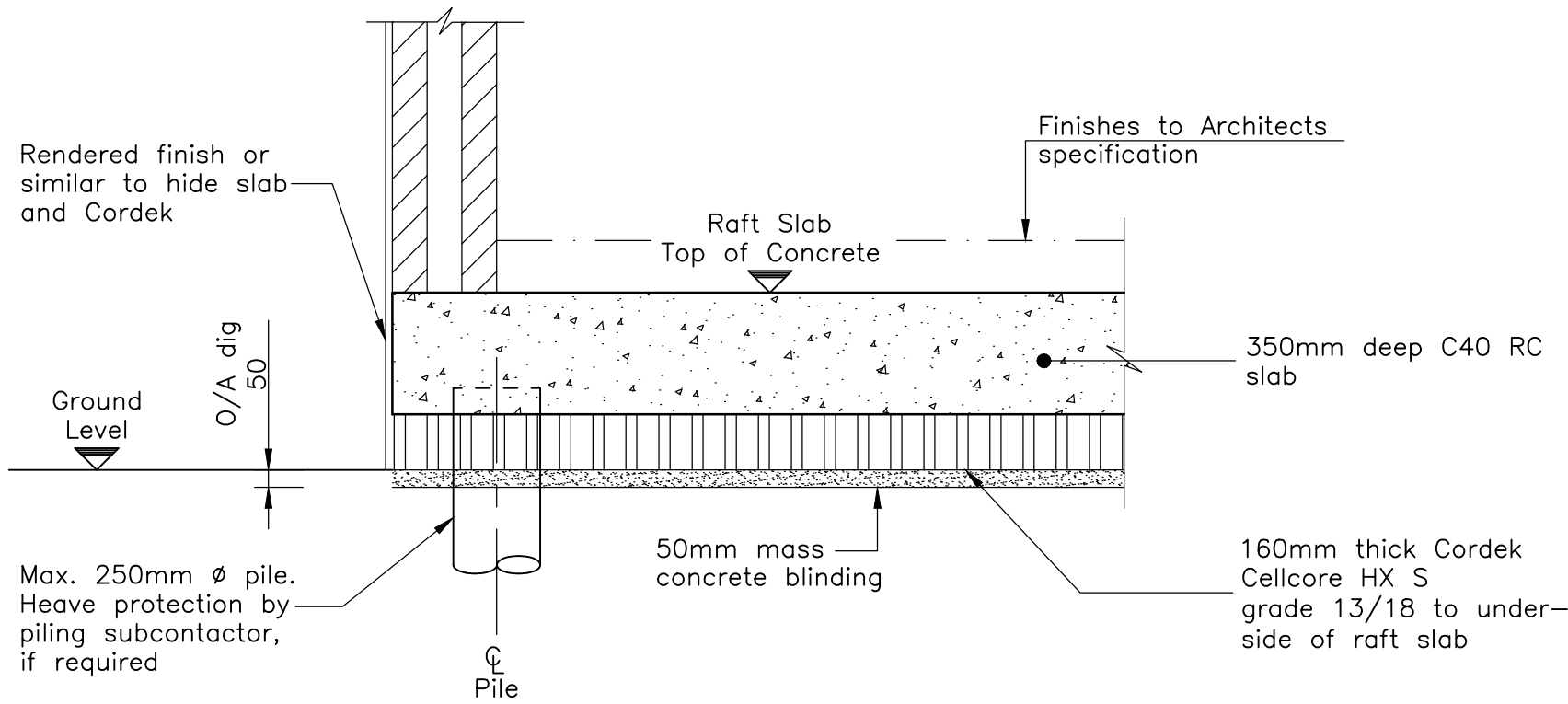
Typical Section Through Raft Slab – Option 1

(Scale 1:20)



Typical Section Through Raft Slab – Option 2

(Scale 1:20)



Typical Section Through Raft Slab – Option 3

(Scale 1:20)

GENERAL NOTES

- Do not scale this drawing.
- This drawing to be read in conjunction with all relevant Engineers, Architects and specialist Contractor's drawings, specifications, instructions etc. The Site Investigation report must also be read in conjunction with this drawing.
- The Contractor is to check and confirm all the dimensions & details shown on this drawing prior to construction.
- Any discrepancies found on this or any other drawing relating to this scheme are to be reported to & resolved by Krystal Engineering before the commencement of any work relevant to the discrepancy or ordering of materials.
- Internal support walls to ground floor beams to be 100mm brickwork or blockwork.
- If ground water is encountered during excavation of the foundations, the Contractor should allow for pumping of excavations.
- All workmanship and materials are to be to current british & european standards.
- The contractor is responsible for and must take all necessary precautions to ensure the stability of the works, including excavations, at all times during construction.
- All existing services are to be located and protected as necessary by the contractor prior to the commencement of the works.
- For locations of new service pipes, cables etc. passing through walls, floors and foundations, refer to services layout by architect.

PILED FOUNDATIONS

- Piled foundations shall be designed in accordance with the borehole logs available.
- Piled foundations shall be designed and installed by a specialist subcontractor in accordance with the above and the layout and loadings indicated in the foundation drawings and in strict accordance with The Specification for Piling and Embedded Retaining Walls published by the ICE.
- Underground obstructions, such as old foundations, brickwork etc may be encountered during excavation. These are to be removed from foundation and service run positions before commencement of these parts of the Works.
- Integrity testing, load testing and material testing requirements to the satisfaction of the relevant regulating bodies (Building Control, NHBC etc). All test results are to be submitted to the Engineer for comment.
- Where in the opinion of the Engineer there is any doubt that a pile is not capable of sustaining its design load with an acceptable factor of safety and without unacceptable settlement the Contractor shall be required to justify such piles either by calculation or testing to the satisfaction of the Engineer.
- The Contractor is responsible for designing and installing piling in a manner suitable and safe for the given ground conditions and location of adjacent property. Method statements are to be submitted to the Engineer for comment, prior to commencement of the Works.
- Concrete cover to reinf't. shall be noted on detail drawings with a min. of 50mm to all reinf't. on permanently exposed concrete surfaces – (75mm on concrete cast against soil faces in accordance with NHBC guidance). NOTE: Ground beams shall be widened from the widths indicated on the drawings to achieve this additional cover as necessary.

REINFORCED CONCRETE

- All concrete to be quality controlled design mixes and in accordance with the specification. In addition to all this all buried concrete shall be designed in accordance with the requirements of BRE Digest SD 1:2005.
(a). Reinforced Concrete in Foundations and Below Ground Concrete (Excluding Piles)
Min. cube strength of 40N/mm² @ 28 days
Max. aggregate size:- 20mm
Design Sulphate Class:- DS-3
ACEC Class:- AC-28
Design Chemical Class:- DC-2
Recommended Cement & Combination Group:- D, E, F or A, C or B or C