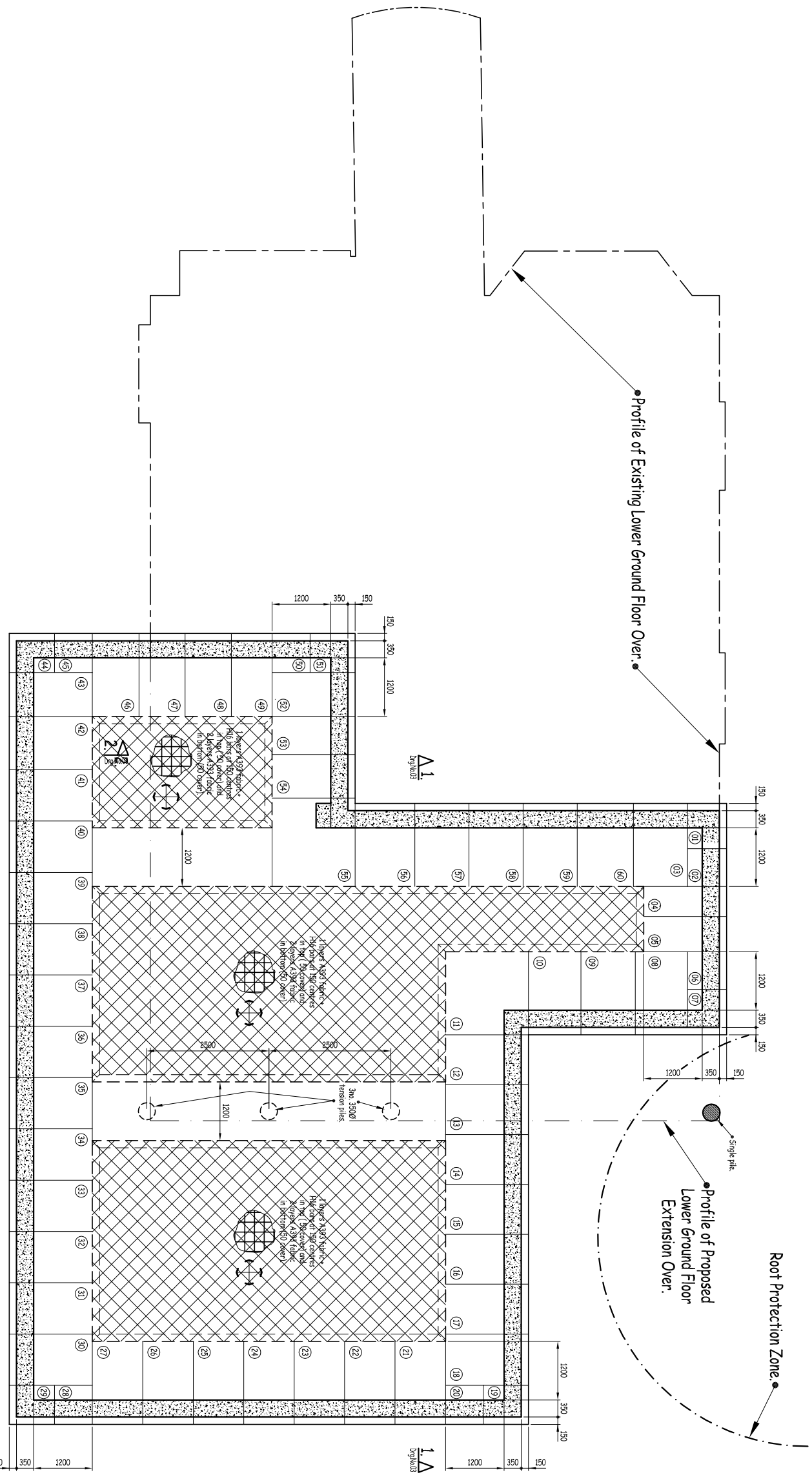


APPENDIX 2

STRUCTURAL DRAWINGS



Profile of Existing Lower Ground Floor Over

Profile of Proposed Lower Ground Floor Extension Over

Root Protection Zone

Single pile

2
500
1000

Proposed Underpinning Plan.

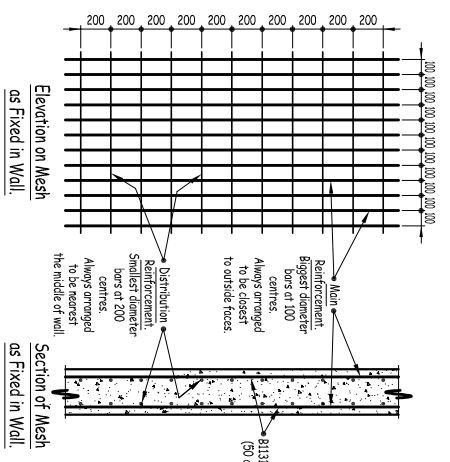
Scale 1:50 (of A1)

Underpinning Notes

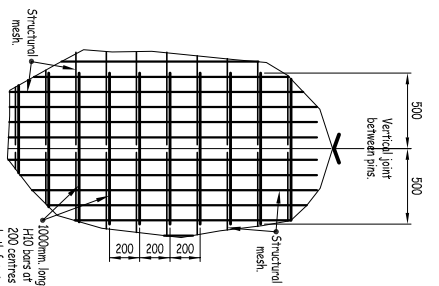
- U1. The underpin numbering for identification purposes only.
- U2. The sequence of underpinning is to be agreed on site with the Design Surveyor and should follow the fractional 1, 2, 5, 3 pattern.
- U3. But at all times the minimum requirements for the logs, between the construction of adjacent pins must be adhered to.
- U4. Underpinning to be a maximum length of 1000mm.
- U5. Provide corner bars in underpinning stems, to ensure mesh reinforcement is held in place, during concreting.
- U6. All reinforced concrete cast on the ground shall be placed on 50mm of concrete blinding in a nominal 1:3 mix unless otherwise stated.
- U7. Foundations have been designed to support a net bearing capacity of 150kN/m² (150kPa).
- U8. The bearing stress shall be approved by the Local Authority's Building Inspector, before laying, shoring, or casting foundations. Any additional excavation shall be replaced with a nominal 1:3 mix concrete. But in the event of extensive additional excavation being required, the Engineer must be immediately and fresh instructions obtained.
- U9. Concrete mix for foundations shall be a RC25/45 mix with a minimum sulphate resisting cement content of 320kg/m³, and a maximum water/cement ratio of 0.50. Concrete shall cure for at least 48 hours before dry packing.
- U10. Concrete cover to the reinforcement shall be as detailed on the drawings but never less than 35mm.
- U11. The minimum depth of the underpinning, measured from the underside of the existing footing, to the underside of the new) shall be 500mm, and shall be formed on a struts, capable of sustaining a permissible net ground pressure of 150kN/m² on London clay.
- U12. The underside of the existing wall or foundation shall be trimmed and cleaned of all mud and debris, before dry packing. The dry pack shall be 1:3 mix and well rammed in horizontal layers, not exceeding 75mm thick. Dry packing shall be left 24 hours before works are commenced on adjacent underpins.
- U13. The central area of excavation shall not be carried out until the perimeter underpinning has been completed.
- U14. If necessary backfilling behind retaining walls shall be a 1:20 mix, using Ordinary Portland Cement.

Reinforcement Note
Wall and Foundation reinforcement shall be continuous. If loose bars are used to provide continuity then the area of reinforcement specified. Laps shall be not less than 45 times the lesser bar diameter.

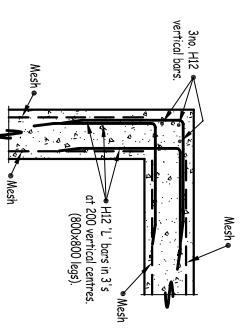
Tension Lap Lengths for Reinforcement
10mm, Ø = 450mm,
12mm, Ø = 540mm,
16mm, Ø = 720mm,
20mm, Ø = 950mm.



Important Note with Reference to the Fixing of Structural Mesh in Walls
i.e. Mesh Prefixed with the letter 'B' e.g. B1131 or B785 etc.



Part Elevation on Wall Showing Lacing Reinforcement Between Pins.

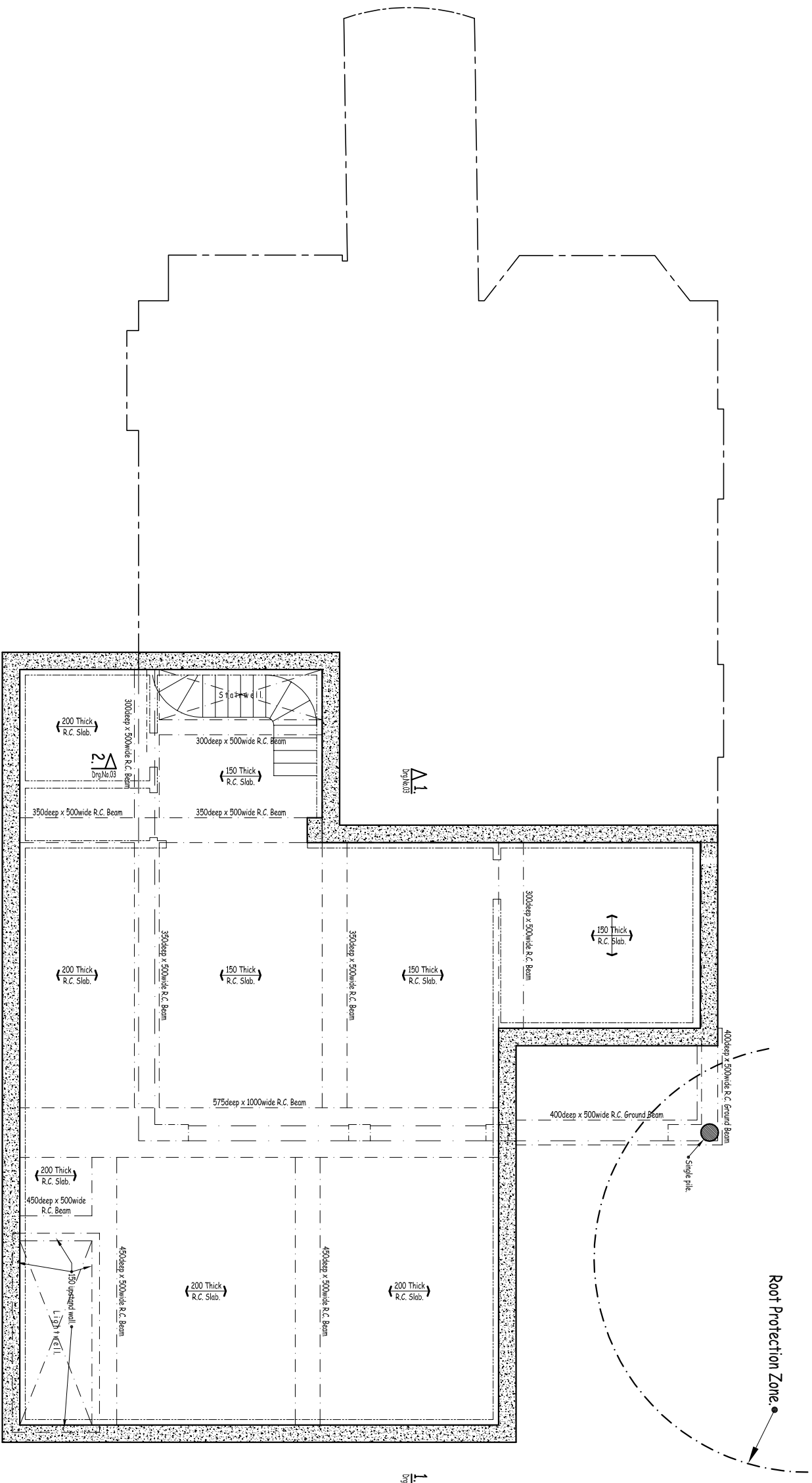


Plan Section on Typical Corner Showing Typical Reinforcement.

Notes

1. This drawing remains the copyright of Vincent and Rymill and is not to be copied, altered or changed without permission.
2. All dimensions are in millimetres unless otherwise noted.
3. Do not scale off this drawing.
4. All temporary works shall be the responsibility of the main contractor. But should advice be given by the Engineer. No responsibility will be accepted, unless the advice is confirmed in writing, by the Contractor, prior to the works being carried out.
5. The Contractor shall be responsible for the stability of the existing structure and earthworks on the site, as well as the adjoining sites. The Contractor must take all necessary precautions to safeguard this.
6. Adequate shoring shall be installed during the works, to ensure the stability of the structure. Such shoring is to be adequately founded.
7. Any deviation from the details shown, must be notified to the Engineer, by the Contractor, in writing, before being carried out.
8. The Local Authority's Building Inspector and the Engineer are to be informed, by the Contractor, in writing, at least 48 hours prior to the works starting, on site. Their agreement must be, obtained, before work, can commence.

Rev	Details	Date	12.09.16
Issued for Perming			
Consulting Civil & Structural Engineers Lakeside Country Club, Whatford Road, Fimley Green, Camberley, Surrey, GU16 6PT Telephone: 01252 834 242 Fax: 01252 839 889 Email: info@vincentrymill.co.uk			
28 Maresfield Gardens London NW3 5SX			
Proposed Underpinning Plan			
Scale at A1	Date	Job No	Draw No
1:50 1:25	Sept 2016	16H02	01
			Rev
			A



Proposed Basement Plan Showing Roof Structure Over Basement.
Scale 1:50 (of A1)

Notes

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5. The Contractor shall be responsible for the stability of the existing structure on the site, as well as the adjoining sites. The Contractor must take all necessary precautions to safeguard this.
6. Adequate shoring shall be installed during the works, to ensure the stability of the structure. Such shoring is to be adequately
7. Any deviation from the details shown, must be notified to the Engineer, by the Contractor, in writing, before being carried out.
7. All concrete shall be RC35/45 with sulphate resisting cement.

Rev	Details	Date
A	Issued for Perming	12.09.16

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Proposed Basement Plan Showing Roof Over Basement			
Scale of A1	Date	Job No	Draw No
1:50	Sept 2016	16H02	02
			Rev
			A

