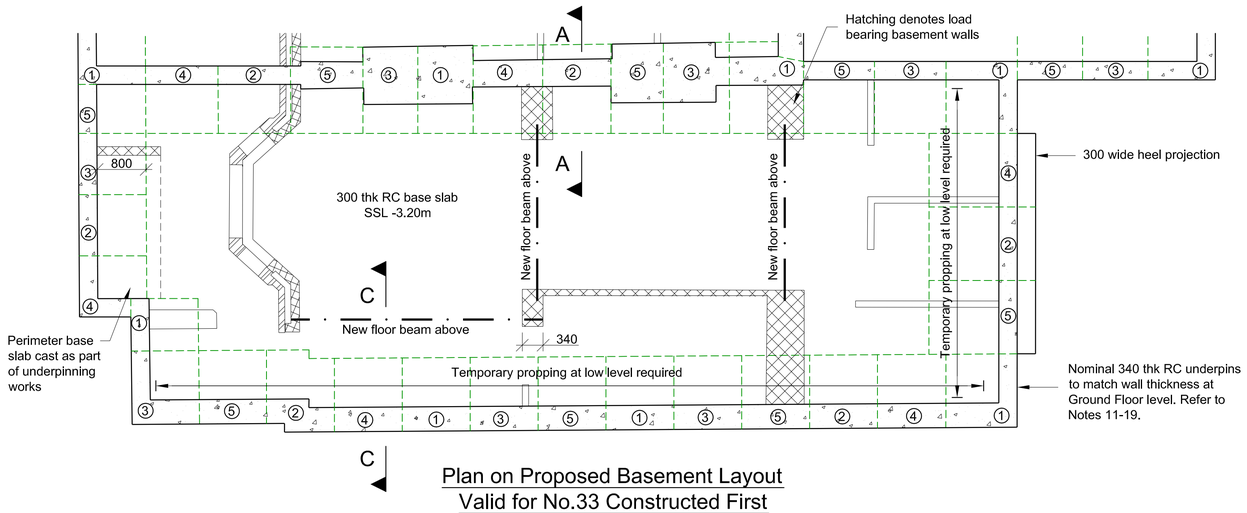
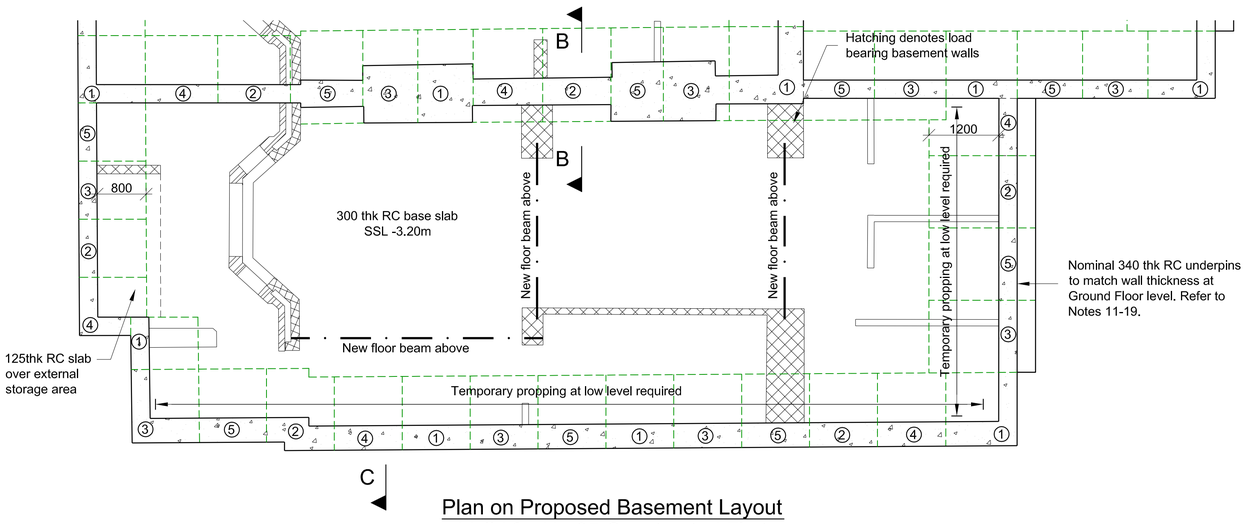


Plan on Proposed Basement Layout
Valid for No.33 Constructed First

Scale 1:50



Plan on Proposed Basement Layout
Valid for No.35 Constructed First

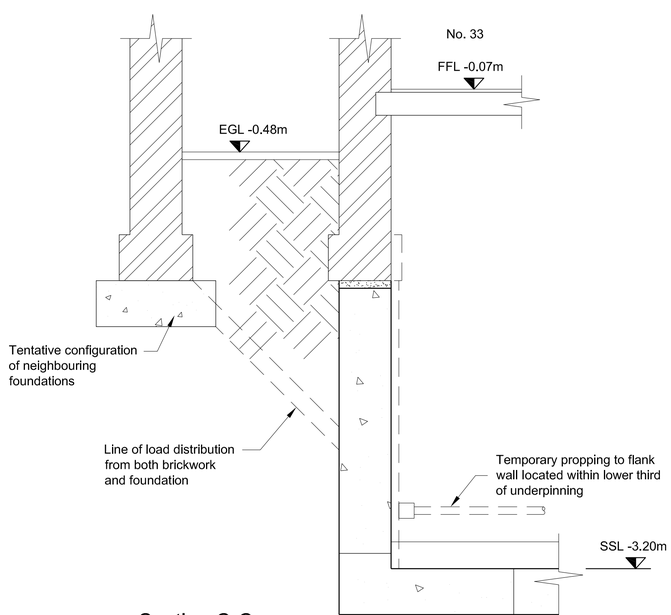
Scale 1:50

All existing outermost walls at Ground Floor FFL assumed to be 13½" think.

Generally RC underpins to comprise H16-200 EF vertically and H12-200 EF horizontally.Dowelled connections to comprise H20-400 placed centrally.

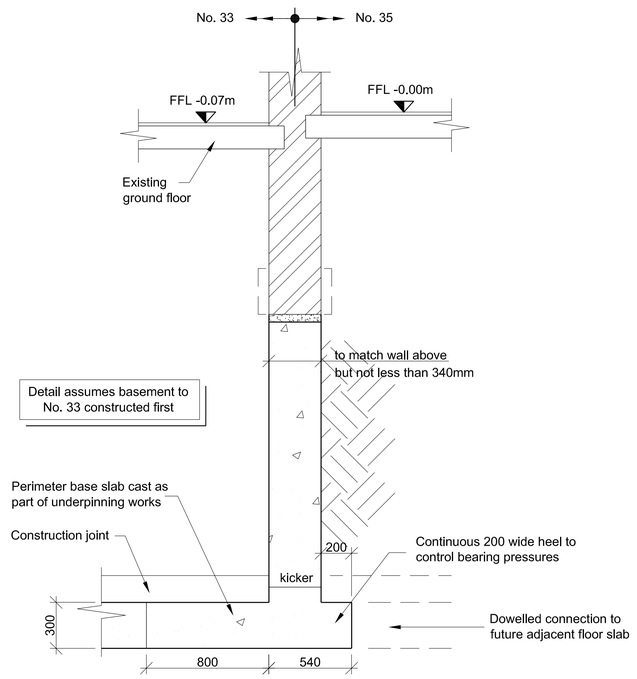
= Beam above
= Beam below
= Structure above
= Structure below

0m 0.5m 1.0m 2.0m 5.0m
Scale 1:50



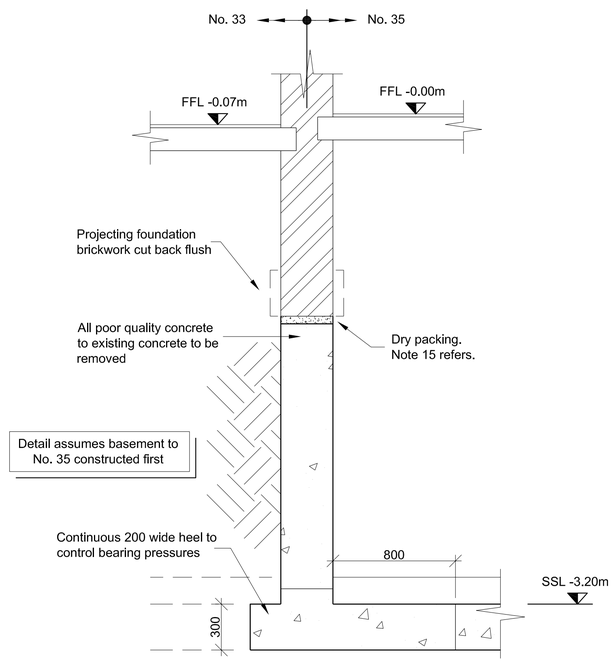
Section C-C

Scale 1:20



Section A-A

Scale 1:20



Section B-B

Scale 1:20

PLANNING

Notes

1. All dimensions in millimetres unless noted otherwise.
2. This drawing to be read in conjunction with the specification, Architects drawings & schedule of works.

Structure

3. Details of existing structure to be confirmed after opening up.
4. The contractor is to submit a detailed method statement for structural works before they commence.
5. All temporary works, shoring and propping to be designed by the Contractor. Where walls are to be removed or openings formed, the structure above must be needled and propped. 'Strong Boys' or similar products are not to be used, unless specifically approved.
6. Refer to BTA calculations for justification of structural members.

Structural Steelwork

7. Fabrication details of steelwork to be submitted prior to commencing fabrication.
8. All steel to be grade S275 unless noted. All bolts grade 8.8 unless noted. All welds 6mm CFW unless noted.
9. Unless noted steel is to be shotblasted post fabrication and primed with 75 microns epoxy zinc phosphate primer prior to delivery.
10. Steel beams that are supported on masonry walls to bear onto 1:4 concrete padstones of dimensions shown. Bottom flange of beam to be bolted to padstone with 1No. M10 resin bolt unless noted.

Underpinning

11. The contractor shall take measures to ensure the stability of excavations at all times
12. If the foundation brickwork is loose or unstable, allow to provide sacrificial steel props, to be cast into the RC wall.
13. Underpinning shall be carried out as soon as possible after exposing base of excavation. If finished base is left uncovered for more than 24 hours it shall be blinded with concrete.
14. The top surface of the underpinning shall be left 50 - 75mm below the soffit of the wall above, and shall be trowelled smooth and horizontal. The soffit of the wall above shall be cleaned of all mortar and soil debris.
15. 48 hours after concreting the 50 - 75mm gap shall be dry packed with 1:1 cement sand, earth dry, rammed fully home.
16. The sequence of underpinning shown may be varied subject to approval, and to the following criteria:
    - Adjacent pins must not be dug consecutively.
    - Min two pin lengths to separate areas being worked on simultaneously.
    - No more than 25% of a wall to be open pins at any one time.
    - At changes in level the deeper pad is to be constructed first.
    - Maximum pin length 1.2m.
17. Dowel bars to be provided between pins. Suitable measures must be taken to protect the workforce from projecting bars.
18. Concrete cover to underpin reinforcement is 40mm.
19. Reference Chelmer Site Investigations report 4047 dated 20th November 2013, underpins to be founded on stiff to very stiff London Clay. Alloawble bearng pressure taken as not less than 150kN/m².

Concrete

20. Reinforced concrete to be grade RC35 unless noted; maximum aggregate size 20mm; Water content to be the minimum to achieve adequate workability. Suphate resisting cement to be used below ground unless shown to be unnecessary by site investigation.
21. Concrete materials and workmanship to comply in all respects with the requirements of BS 8110; Part 1; and all relevant codes of practice mentioned therein.
22. High yield reinforcement to comply with BS4449. Mesh fabric to comply with BS 4483. Reinforcement shall be firmly fixed in place. Approved concrete or plastic spacers shall be provided to maintain the specified cover.
23. All work to be carried out to Engineer's and Building inspectors approval. Notice to be given of concreting so that fixed reinforcement can be inspected.

Masonry

24. New blockwork walls comprise solid concrete blockwork, maximum density 1600kg/m³ with minimum 7N/mm² compressive strength in group (iii) mortar to BS5628-1:2005.

Rev	Date	Description
P1	Jan 2014	Issued for planning.

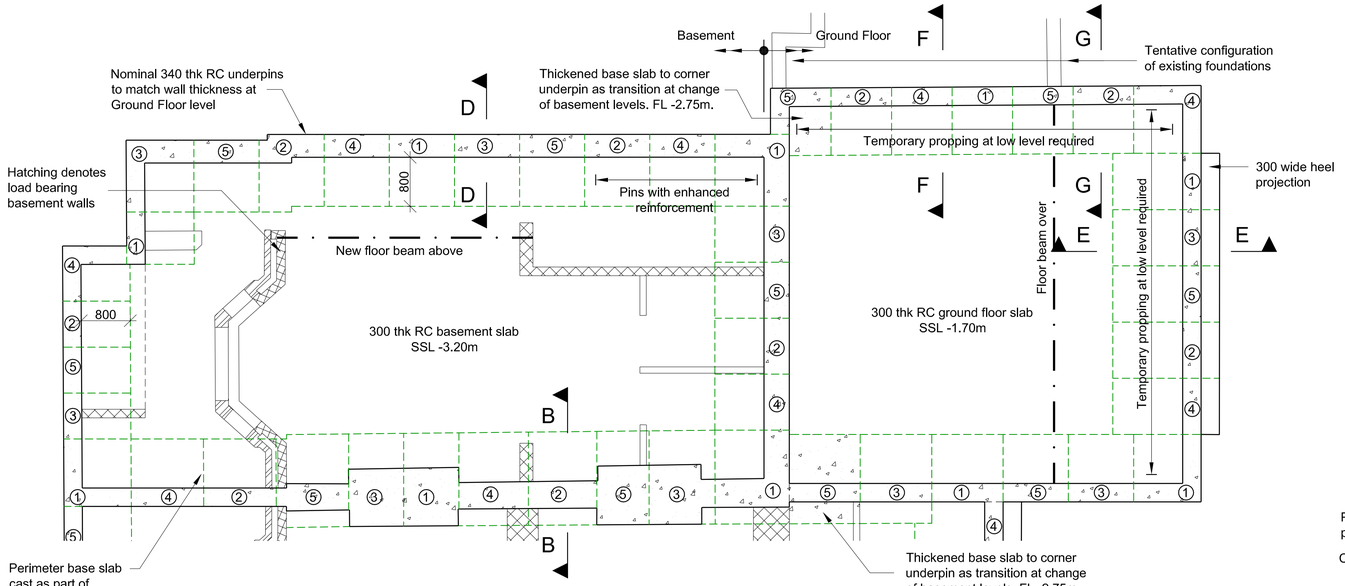
BTA Structural Design
Street Farmhouse, Shipton Moyne, Tetbury, Glos GL8 8PN
Tel: 01666 880532 Fax: 01666 880541
London Office Tel: 020 8995 0567 Website: www.bta.co.uk

Project: 33 South Hill Park

Drawing: Basement Layout

Date	Scale	Dm by	Checked
Jan 2014	1:50 on A1 uno	SJS	

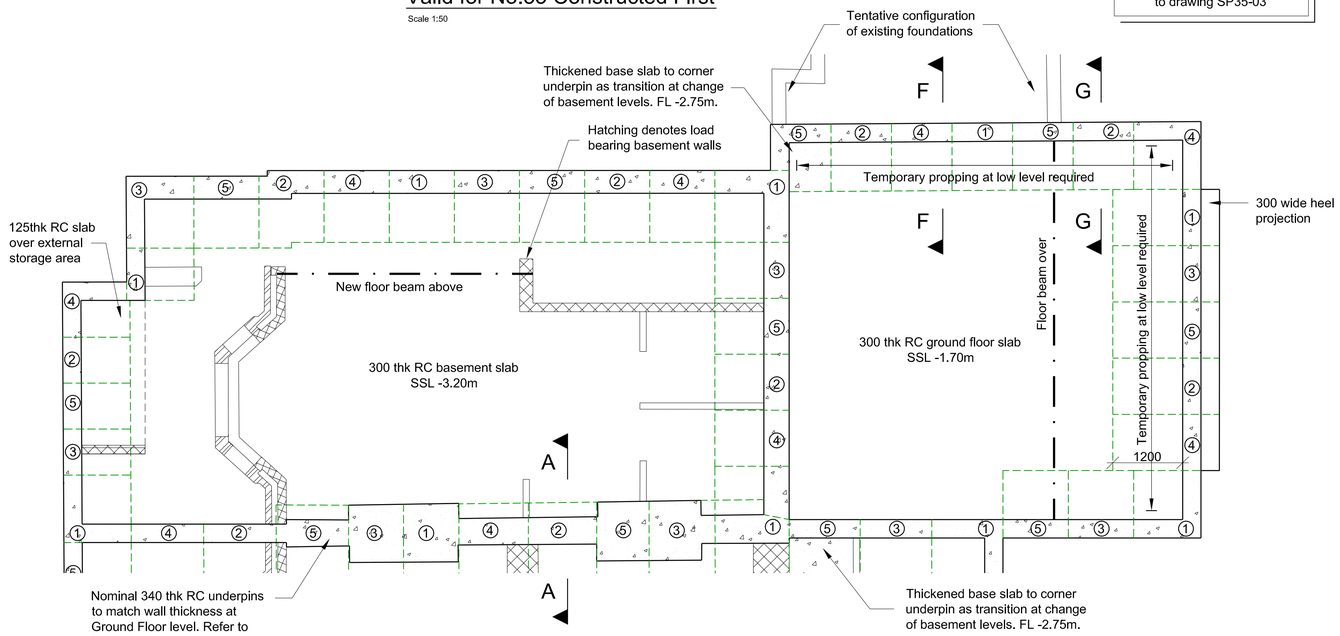
Job No	Drawing No	Rev.
940	SP33-01	P1



Plan on Proposed Basement Layout
Valid for No.35 Constructed First

Scale 1:50

For Sections F-F & G-G refer to drawing SP35-03



Plan on Proposed Basement Layout
Valid for No.33 Constructed First

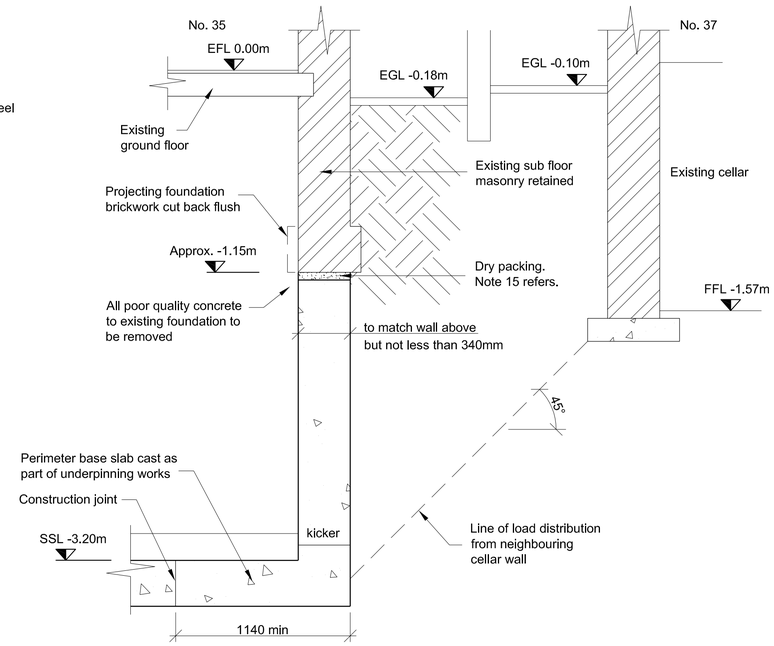
Scale 1:50

All existing outermost walls at Ground Floor FFL assumed to be 13½" think.

Generally RC underpins to comprise H16-200 EF vertically and H12-200 EF horizontally.Dowelled connections to comprise H20-400 placed centrally.

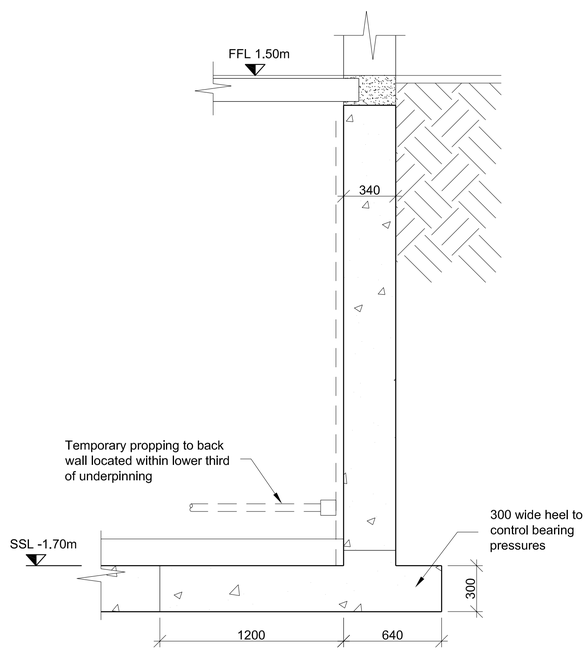
= Beam above
= Beam below
= Structure above
= Structure below

0m 0.5m 1.0m 2.0m 5.0m
Scale 1:50



Section D-D

Scale 1:20



Section E-E

Scale 1:20

Notes

1. All dimensions in millimetres unless noted otherwise.
2. This drawing to be read in conjunction with the specification, Architects drawings & schedule of works.

Structure

3. Details of existing structure to be confirmed after opening up.
4. The contractor is to submit a detailed method statement for structural works before they commence.
5. All temporary works, shoring and propping to be designed by the Contractor. Where walls are to be removed or openings formed, the structure above must be needled and propped. 'Strong Boys' or similar products are not to be used, unless specifically approved.
6. Refer to BTA calculations for justification of structural members.

Structural Steelwork

7. Fabrication details of steelwork to be submitted prior to commencing fabrication.
8. All steel to be grade S275 unless noted. All bolts grade 8.8 unless noted. All welds 6mm CFW unless noted.
9. Unless noted steel is to be shotblasted post fabrication and primed with 75 microns epoxy zinc phosphate primer prior to delivery.
10. Steel beams that are supported on masonry walls to bear onto 1:4 concrete padstones of dimensions shown. Bottom flange of beam to be bolted to padstone with 1No. M10 resin bolt unless noted.

Underpinning

11. The contractor shall take measures to ensure the stability of excavations at all times
12. If the foundation brickwork is loose or unstable, allow to provide sacrificial steel props, to be cast into the RC wall.
13. Underpinning shall be carried out as soon as possible after exposing base of excavation. If finished base is left uncovered for more than 24 hours it shall be blinded with concrete.
14. The top surface of the underpinning shall be left 50 - 75mm below the soffit of the wall above, and shall be trowelled smooth and horizontal. The soffit of the wall above shall be cleaned of all mortar and soil debris.
15. 48 hours after concreting the 50 - 75mm gap shall be dry packed with 1:1 cement sand, earth dry, rammed fully home.
16. The sequence of underpinning shown may be varied subject to approval, and to the following criteria:
    - Adjacent pins must not be dug consecutively.
    - Min two pin lengths to separate areas being worked on simultaneously.
    - No more than 25% of a wall to be open pins at any one time.
    - At changes in level the deeper pin is to be constructed first.
    - Maximum pin length 1.2m.
17. Dowel bars to be provided between pads. Suitable measures must be taken to protect the workforce from projecting bars.
18. Concrete cover to underpin reinforcement is 40mm.
19. Reference Chelmer Site Investigations report 4047 dated 20th November 2013, underpins to be founded on stiff to very stiff London Clay. Alloawble bearng pressure taken as not less than 150kN/m².

Concrete

20. Reinforced concrete to be grade RC35 unless noted; maximum aggregate size 20mm; Water content to be the minimum to achieve adequate workability. Suphate resisting cement to be used below ground unless shown to be unnecessary by site investigation.
21. Concrete materials and workmanship to comply in all respects with the requirements of BS 8110; Part 1; and all relevant codes of practice mentioned therein.
22. High yield reinforcement to comply with BS4449. Mesh fabric to comply with BS 4483. Reinforcement shall be firmly fixed in place. Approved concrete or plastic spacers shall be provided to maintain the specified cover.
23. All work to be carried out to Engineer's and Building inspectors approval. Notice to be given of concreting so that fixed reinforcement can be inspected.

Masonry

24. New blockwork walls comprise solid concrete blockwork, maximum density 1600kg/m³ with minimum 7N/mm² compressive strength in group (iii) mortar to BS5628-1:2005.

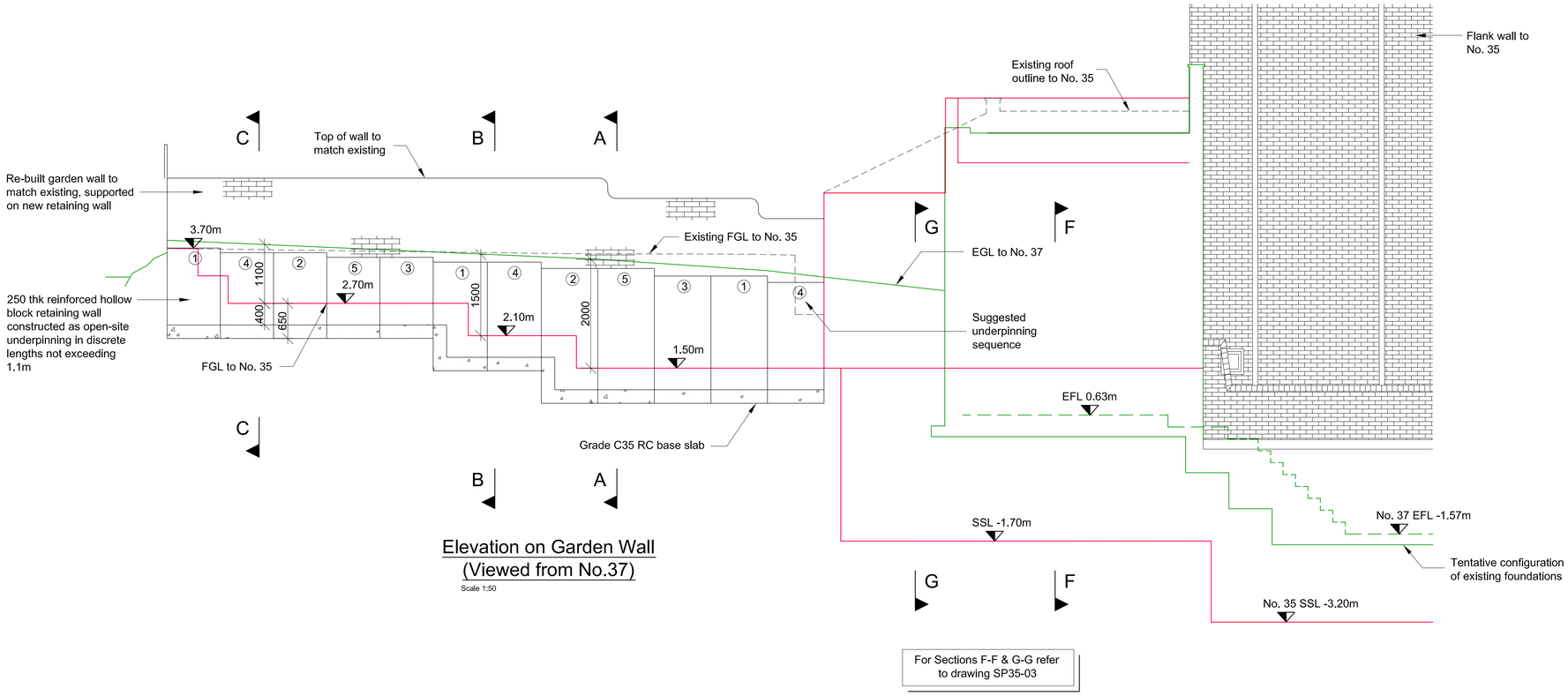
Rev	Date	Description
P3	Feb 2014	Sections F-F & G-G referenced.
P2	Feb 2014	French drain removed from Section E-E.
P1	Jan 2014	Issued for planning.

PLANNING

BTA Structural Design
Street Farmhouse, Shipton Moyne, Tetbury, Glos GL8 8PN
Tel: 01666 880532 Fax: 01666 880541
London Office Tel: 020 8995 0567 Website: www.bta.co.uk

Project	35 South Hill Park
Drawing	Basement Layout

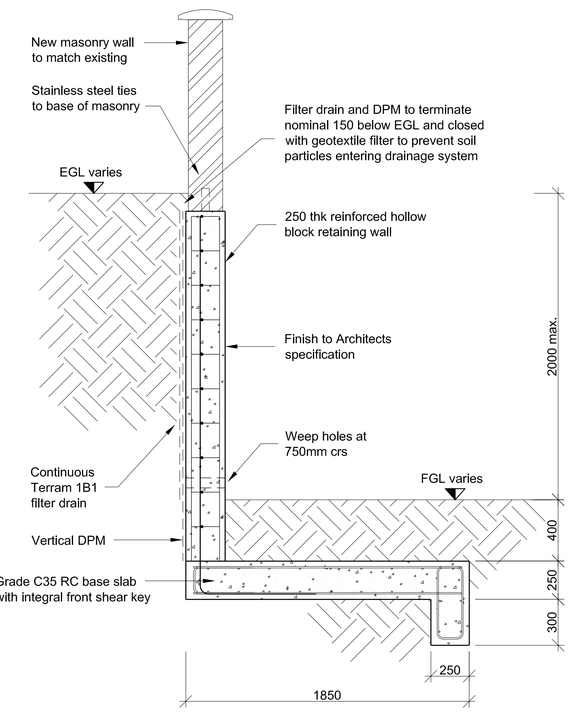
Date	Scale	Dm by	Checked
Jan 2014	1:50 on A1 uno	SJS	
Job No	**Drawing No**		**Rev.**
940	SP35-01		P3



Elevation on Garden Wall (Viewed from No.37)

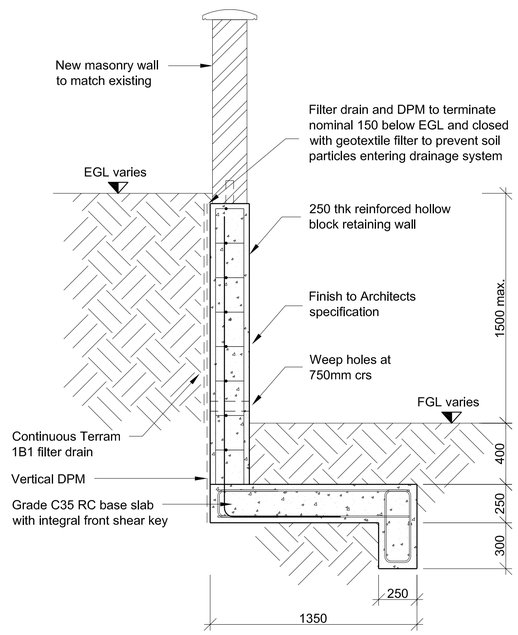
Scale 1:50

For Sections F-F & G-G refer to drawing SP35-03



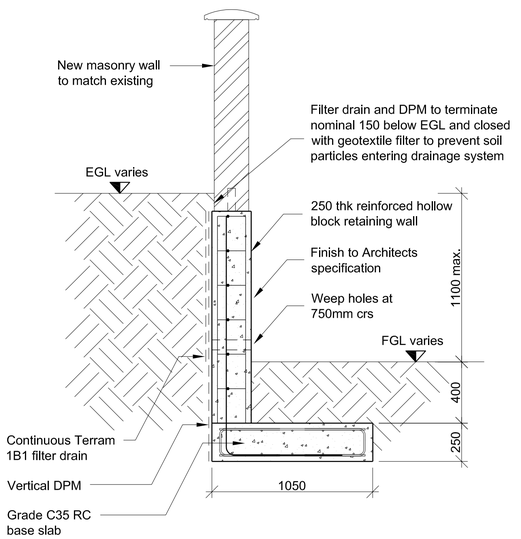
Section A-A

Scale 1:20



Section B-B

Scale 1:20



Section C-C

Scale 1:20

0m 0.2m 0.5m 1.0m 2.0m

Scale 1:20

Notes

1. All dimensions in millimetres unless noted otherwise.
2. This drawing to be read in conjunction with the specification, Architects drawings & schedule of works.

Structure

3. The contractor is to submit a detailed method statement for structural works before they commence.
4. All temporary works, shoring and propping to be designed by the Contractor.
5. Refer to BTA calculations for justification of structural members.

Base Slab

6. Reinforced concrete for base slab to be grade C35 unless noted; maximum aggregate size 20mm; Water content to be the minimum to achieve adequate workability.
7. Concrete materials and workmanship to comply in all respects with the requirements of BS 8110; Part 1; and all relevant codes of practice mentioned therein.
8. High yield reinforcement to comply with BS4449. Mesh fabric to comply with BS 4483. Reinforcement shall be firmly fixed in place. Approved concrete or plastic spacers shall be provided to maintain the specified cover.
9. All work to be carried out to Engineer's and Building inspectors approval. Notice to be given of concreting so that fixed reinforcement can be inspected.

Retaining Wall

10. Retaining wall to comprise proprietary reinforced hollow concrete blockwork, nominal 250mm thick
11. Infill concrete to be grade C35; maximum aggregate size 10mm; 150mm slump; minimum cement content 300kg/m³.
12. Reinforcement coupler to be used at all construction joints to facilitate stretcher bond coursing.
13. Concrete materials and workmanship to comply in all respects with the requirements of BS 8110; Part 1; and all relevant codes of practice mentioned therein.
14. High yield reinforcement to comply with BS4449. Mesh fabric to comply with BS 4483. Reinforcement shall be firmly fixed in place. Approved concrete or plastic spacers shall be provided to maintain the specified cover.
15. All work to be carried out to Engineer's and Building inspectors approval. Notice to be given of concreting so that fixed reinforcement can be inspected.
16. Finish to hollow block wall to be as Architects specification.

Open-Site Underpinning

17. The contractor shall take measures to ensure the stability of excavations at all times. Temporary propping of excavtion to be installed as necessary to prevent ravelling of topsoil/bedding from higher ground levels and to protect against possible fissures with the clay material.
18. Underpinning shall be carried out as soon as possible after exposing base of excavation. If finished base is left uncovered for more than 24 hours it shall be blinded with concrete.
19. The sequence of underpinning shown may be varied subject to approval, and to the following criteria:
    - Adjacent pads must not be dug consecutively.
    - Min two pad lengths to separate areas being worked on simultaneously.
    - At changes in level the deeper pad is to be constructed first.
    - Max pad length 1.1m.
20. Dowel bars to be provided between all pins and base slabs. Suitable measures must be taken to protect the workforce from projecting bars.
21. Temporary propping of completed pins to be installed as necessary until each concrete core has cured.

Filter Drain

22. Continuous filter drain with integral geotextile separator, type Terram 1B1 or other equal and approved, to be installed directly behind the hollow block retaining wall. Filter drain to be butt jointed at all construction joints.
23. All free edges and all joints of filter drain to be "sealed" with a geotextile separator to prevent soil fines entering the drainage system.
24. Vertical DPM to be installed between filter drain and retaining wall. DPM to be lapped 300mm at all construction joints. Filter drain to be subsequently linked through to all weep holes.

Rev	Date	Description
P3	Feb 2014	Notes revised. Construction technique of open-site underpinning added. Elevation revised and levels added.
P2	Feb 2014	Filter drain in lieu of French drain.
P1	Jan 2014	Issued for planning.

PLANNING

BTA Structural Design

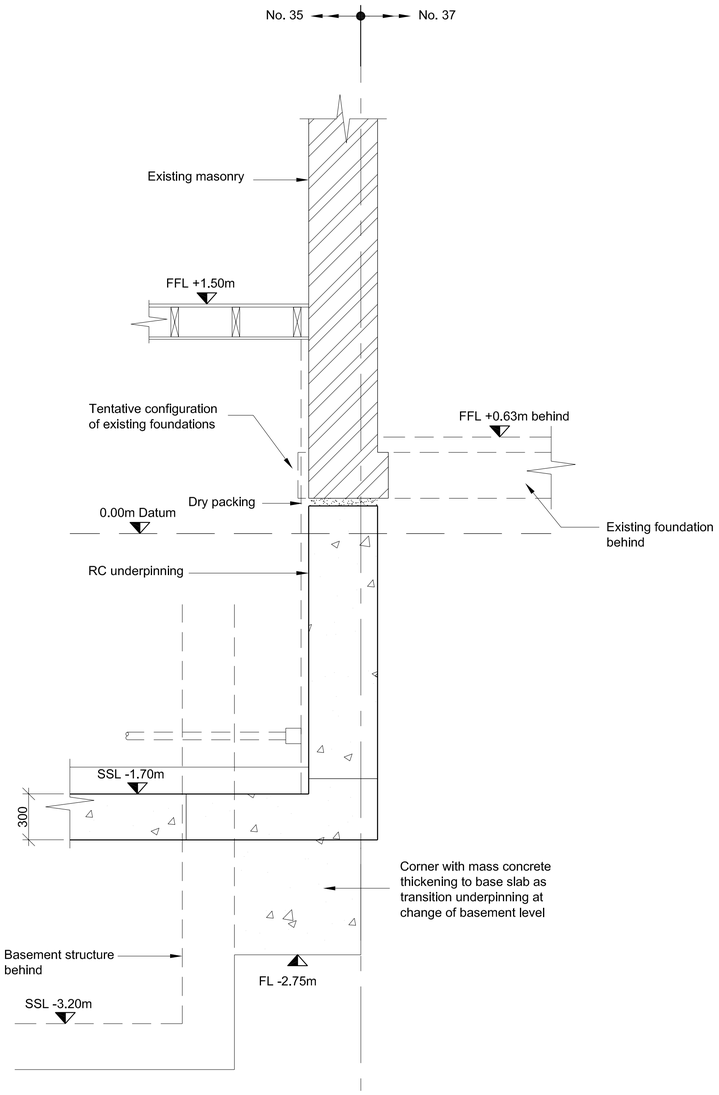
Street Farmhouse, Shipton Moyne, Tetbury, Glos GL8 8PN

Tel: 01666 880532 Fax: 01666 880541

London Office Tel: 020 8995 0567 Website: www.bta.co.uk

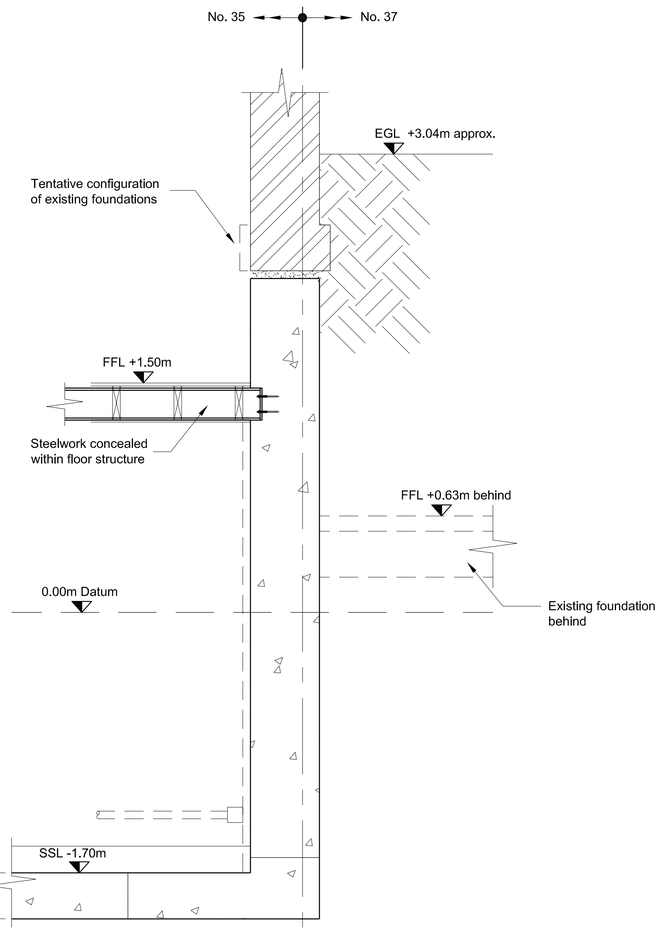
Project	35 South Hill Park
Drawing	External Works

Date	Scale	Dm by	Checked
Jan 2014	1:50 & 1:20 on A1	SJS	
Job No	**Drawing No**		**Rev.**
940	SP35-02		P3



Section F-F

Scale 1:20



Section G-G

Scale 1:20

0m 0.2m 0.5m 1.0m 2.0m

Scale 1:20

Notes

1. All dimensions in millimetres unless noted otherwise.
2. This drawing to be read in conjunction with the specification, Architects drawings & schedule of works.

Structure

3. Details of existing structure to be confirmed after opening up.
4. The contractor is to submit a detailed method statement for structural works before they commence.
5. All temporary works, shoring and propping to be designed by the Contractor. Where walls are to be removed or openings formed, the structure above must be needled and propped. 'Strong Boys' or similar products are not to be used, unless specifically approved.
6. Refer to BTA calculations for justification of structural members.

Underpinning

7. The contractor shall take measures to ensure the stability of excavations at all times
8. If the foundation brickwork is loose or unstable, allow to provide sacrificial steel props, to be cast into the RC wall.
9. Underpinning shall be carried out as soon as possible after exposing base of excavation. If finished base is left uncovered for more than 24 hours it shall be blinded with concrete.
10. The top surface of the underpinning shall be left 50 - 75mm below the soffit of the wall above, and shall be trowelled smooth and horizontal. The soffit of the wall above shall be cleaned of all mortar and soil debris.
11. 48 hours after concreting the 50 - 75mm gap shall be dry packed with 1:1 cement sand, earth dry, rammed fully home.
12. The sequence of underpinning may be varied subject to approval, and to the following criteria:
    - Adjacent pins must not be dug consecutively.
    - Min two pin lengths to separate areas being worked on simultaneously.
    - No more than 25% of a wall to be open pins at any one time.
    - At changes in level the deeper pin is to be constructed first.
    - Maximum pin length 1.2m.
13. Dowel bars to be provided between pads. Suitable measures must be taken to protect the workforce from projecting bars.
14. Concrete cover to underpin reinforcement is 40mm.
15. Reference Chelmer Site Investigations report 4047 dated 20th November 2013, underpins to be founded on stiff to very stiff London Clay. Alloawble bearng pressure taken as not less than 150kN/m².

Concrete

16. Reinforced concrete to be grade RC35 unless noted; maximum aggregate size 20mm; Water content to be the minimum to achieve adequate workability. Suphate resisting cement to be used below ground unless shown to be unnecessary by site investigation.
17. Concrete materials and workmanship to comply in all respects with the requirements of BS 8110; Part 1; and all relevant codes of practice mentioned therein.
18. High yield reinforcement to comply with BS4449. Mesh fabric to comply with BS 4483. Reinforcement shall be firmly fixed in place. Approved concrete or plastic spacers shall be provided to maintain the specified cover.
19. All work to be be carried out to Engineer's and Building inspectors approval. Notice to be given of concreting so that fixed reinforcement can be inspected.

Rev	Date	Description
P1	Feb 2014	Issued for planning.

PLANNING

BTA Structural Design
Street Farmhouse, Shipton Moyne, Tetbury, Glos GL8 8PN
Tel: 01666 880532 Fax: 01666 880541
London Office Tel: 020 8995 0567 Website: www.bta.co.uk

Project: 35 South Hill Park

Drawing: Sections

Date	Scale	Dm by	Checked
Feb 2014	1:20 on A1	SJS	

Job No	Drawing No	Rev.
940	SP35-03	P1