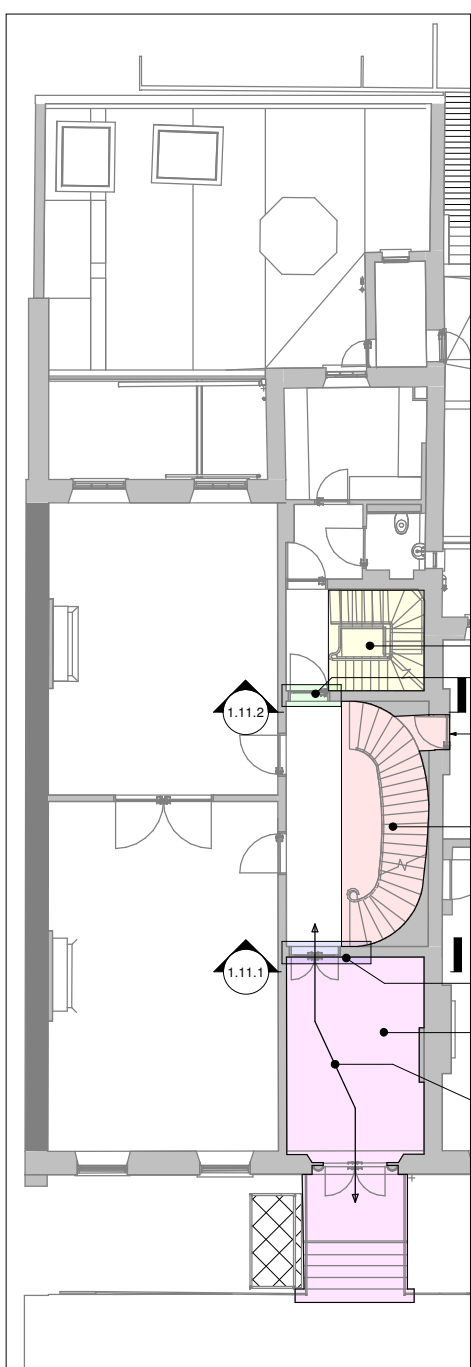


Zone 2

1 Basement Plan
1 : 100



Zone 2

Zone 4

Access to 27
Russell Square

Zone 1

Zone 5

Zone 6 - Contractors
zone for duration of
all works

Emergency fire exit
to be maintained for
duration of works

2 Ground Floor Plan
1 : 100

Code of Colours

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6

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Tender

Not for Construction

Issues / Revisions

P1 Issued for Comments 120218 WK
T1 Issued for Tender 210218 WK

General Notes

G.1 This drawing is to be read in conjunction with all relevant Engineer's drawings and specifications.

G.2 Do not scale from a paper or digital version of this drawing. Use written or stated dimensions only.

G.3 Structural elements of the building have been designed to support, or are capable of resisting the following imposed loads, in addition to environmental loads in accordance with BS EN 1991:

Imposed Loads (unfactored)		
Element Name	Uniformly distributed loads [kN/m2]	Concentrated loads [kN]
All floors, corridors, and staircases	2.5	2.7
All flat roof areas	0.75	0.9

Steelwork Notes

S.1 All RHS, SHS and CHS sections are to be Grade S355, all other steelwork is to be Grade S275 and all bolts are to be Grade 8.8 unless noted otherwise.

S.2 All bolts are to be hot dip galvanized to BS7371 part 6 unless noted otherwise.

S.3 All steelwork is to be painted off site as follows:

- Blast clean to Sa 2 1/2.
- Paint with 75 µm dft two pack epoxy zinc phosphate primer (Sherwin Williams Epigrip L653)
- Decorative coat to Architect's specification if required.

S.4 All steelwork to be cast into concrete is to be left unpainted

S.5 Where steelwork and associated plates are specified on the drawings as galvanized these are to be Hot Dip Galvanized to BS EN ISO 1461.

S.4 All steelwork and bolts below ground level to be painted with 2No coats of bituminous paint and wrapped in Denso tape in addition to the paint specification.

S.5 Fabrication drawings for all steelwork are to be prepared by the Contractor, in accordance with the Engineer's Specification for Steelwork, unless otherwise agreed.

S.6 Splicing of the steel members will not be permitted.

S.7 Notching or cutting holes, other than those shown on Engineers' drawings is not permitted. Should any such modifications be required, Barton Engineers are to be notified and a solution agreed before any works take place.

S.8 Unless noted otherwise, all columns are to be positioned on the centerlines of beams.

Timber Notes

T.1 All timber is to be Grade C24 to BS 5268, and is to have a maximum moisture content of 18% at the time of erection. After erection it is to be protected to maintain this moisture content.

T.2 All steel fixings used in association with structural timber are to be hot dip galvanized to BS729.

T.3 All joists and rafters to have continuous blocking at each end and at mid-span.

T.4 All studwork (new and existing) to have noggins at 900 mm vertical c/c. T.5 No penetrations, notches or holes for services are allowed in the timber joists or wall studs, unless agreed with Barton Engineers prior to any cutting taking place.

T.6 All timber connectors (brackets/hangers) are to be fixed to timber using 3.75 x 30mm long square twisted sheradised nails through all available holes, unless noted otherwise in manufacturer's recommendations or in Barton Engineers' details. All nails are to conform to BS 1202-1 and have a minimum ultimate tensile strength of 600 N/mm2. All available holes in the connecting elements are to be used. All screws are to conform to BS 1202.

T.7 Bolt holes should be no more than 2 mm larger diameter than the bolts. Washers should be used under all bolt heads and nuts and have a minimum thickness of 0.25 x bolt diameter and a minimum width of 3 x bolt diameter. At least one complete thread is to project beyond the nut when the bolts are tightened.

T.8 Double timber trimmers to be formed using a pair of joists bolted together using M12 bolts at 600 mm c/c, installed at mid-depth of the beam section.

T.9 19mm thick plywood sheets are to be used to form floor and roof decks. Plywood sheets are to be fixed directly to joists using 3.75 mm x 50 mm long round wire nails at 150mm c/c on the edge joists and at 300mm c/c on the intermediate joists.

Masonry and Render Notes

M.1 All bricks are to be a fired clay and have a minimum compressive strength of 22 N/mm2 unless noted otherwise.

M.2 Mortar for Brickwork; all brickwork repairs to chimneys and other areas are to be constructed using NHL5 type natural hydraulic lime and sand mortar, with a 1:2.5 NHL to sand mix ratio.

M.3 All wall ties and brickwork support components are to be of stainless steel unless otherwise noted.

M.4 All structural masonry walls are to have fully bonded returns unless movement joints are specified.

M.5 Dry Pack Mortar for Stone Joint Repair, where specified, is to comprise a 1:2.5 NHL 5 and sand mix, with only enough water added to form a hand mouldable paste. The Dry Pack mortar is to be rammed into the void between the stone elements using steel tools, and is to fill the entire void between the two elements and along the full length of the supporting element. Grout shall not be substituted for Dry Pack Mortar without the approval of the Engineer.

M.6 Render Mortar; where required to replace existing cement render shall comprise 3 number layers: an initial "Render Coat" applied to brickwork, then a "Floating Coat", and lastly a "Finish Coat". All coats are to comprise; one part NHL 2 to two parts well graded sand to 5 Kgs/m3 of hair in first coat, 3 Kg/m3 of hair in second coat, and no hair in top coat. Each layer should be protected with damp hessian or similar, and be kept damp throughout the curing period. When each coat is firm but can be marked with a finger nail, the next coat shall be applied. The second coat should have an "open texture" to ensure good keying. The final coat will need protection for up to three weeks. No more than 20mm shall be applied as a single coat, and the overall thickness should be 30mm. An additional 20mm gradual flare should be added at the bottom edge over flashings, and incorporate a half round recessed drip to the underside.

Temporary works notes:

TW1 The temporary works drawings are to be read in conjunction with Barton Engineers' Temporary Works Specification document.

TW2 All scaffold tubes are to be Type 4 tubes in accordance with BS EN 39:2001.

TW3. All scaffold boards are to be 225 mm wide x 38 mm thick boards conforming with BS 2482:2009.

TW4. All connections between scaffold tubes are to be made with couplers and fittings conforming with requirements of BS EN 74-1 and BS EN 74-2

Contractor Design Elements

The following elements are to be designed by the Contractor:

- All temporary works, including temporary supports to staircases

The detailed design for all the Contractor Design Elements is to be prepared by the Contractor. All Contractor design elements are to be designed to resist imposed and environmental loads in accordance with BS 6399 or BS EN 1991 and to satisfy other performance requirements specified on Barton Engineers' drawings. Details of all Contractor design elements are to be submitted to the Engineer for checking and the Contract Administrator's approval prior to any related works being carried out on site or commencement of any fabrication. Submissions are to include details of all connections with the primary structure shown on Barton Engineers' drawings, schedule of loads applied by the Contractor Design Elements onto the primary structure, and full design calculations and drawings, submitted as a single, complete document.

The Contractor is to produce method statements for all structural works, and submit the information listed in the structural Specification documents (concrete mix certificates, steelwork fabrication drawings, etc), prior to the works taking place. Note the submission approval periods stated in the specifications.

Barton Engineers

Studio 121, Westbourne Studios
242 Acklam Road, London W10 5JJ
telephone +44(0)20 7631 0348
mail@bartonengineers.co.uk
http://www.bartonengineers.co.uk

Project
28 Russell Square

Title
Basement and Ground Floor Plan

Scales

1:100@A1

Designed by

Bob Barton

Drawn by

Catherine Hide

Drawing number

17/059/1.1

Checked by

Bob Barton

Rev

T1