

GENERAL NOTES

1.0 GENERAL

- 1.1 This drawing is to be read in conjunction with the architectural drawings and specifications.
- 1.2 All work to be in accordance with current good practice, the Building Regulations 2000, and subsequent amendments, relevant British Standards and Codes of Practice. Materials and components are to be suitable for their intended use.
- 1.3 The Contractor is to check all Site/building dimensions/conditions. Any discrepancies in the information given are to be reported to the contract Supervisor prior to commencement of the work.
- 1.4 The contractor is to provide any temporary support to the existing structure or adjacent properties which may be necessary to ensure stability during construction.
- 1.5 The existing structural information shown on these drawings is based on visual inspection of the building and limited opening up works. All details of the existing construction are subject to confirmation by the contractor during the work on the site.
- 1.6 All waterproofing to Architects details.

2.0 FOUNDATIONS

- 2.1 Foundation design is based on a nett allowable assumed ground bearing capacity of 100 kN/m². Actual conditions to be verified on site and to be to the satisfaction of the building inspector.
- 2.2 Existing Strip Footings to be tied to proposed using min 2 No. M16 Dowel Bars, 600mm long, 300mm Embedment.
- 2.3 If tree roots are found in excavations, the foundations are to be constructed 600mm below the lowest level of tree roots.
- 2.4 All excavations are to be inspected by the Building Control Officer.
- 2.5 Where foundations are to be founded at a depth greater than 1.5m, anti-heave 'Clayboard' or similar approved is to be provided to inner face of foundations, 75mm thick starting 500mm from bottom.
- 2.6 Depth of foundations to be at a maximum of 2.4m to reflect trees nearby.

3.0 CONCRETE

- 3.1 Padstones C20/20 min. O.P.C. content = 275kg/m³. Max Free Water/Cement ratio 0.6.
- 3.2 Foundations to be constructed using sulphate resisting concrete SRPC.
- 3.3 Concrete to be in accordance with BS5328 and as follows: –
- Blinging – C20
- Mass concrete – C35
- Reinforced concrete – C35

4.0 STRUCTURAL STEELWORK

- 4.1 Materials, fabrication and erection to be to BS5950: Part 2:2000.
- 4.2 Hot rolled sections Grade S275 uno.
- 4.3 Connections not detailed on the drawings are to be designed by the contractor to a current British Standard. Where design service load reactions in kilonewtons are indicated thus (), temporary load cases during construction may also need to be considered.
- 4.4 Welded connections to be shop made: 6mm full profile continuous fillet welds u.n.o.
- 4.5 Minimum number, size and grade of bolts in site connections to be 2 No. M16 Grade 8.8 in clearance holes u.n.o.
- 4.6 Minimum beam bearings on to Padstone to be 150mm u.n.o. and bolted using 2 No. M12 rawl-bolts for good practice.
- 4.7 All bolts are to be grade 8.8 sheradized to BS4921, Class 1. All bolts, nuts and washers are to be to BS5950: Part 2 Clause 2.2. Washers are to be placed beneath the rotated item.
- 4.8 All welds to be minimum 6mm leg length continuous fillet welds uno.
- 4.9 All steelwork except that cast into concrete is to be protected by painting with 2 coats of high quality Zinc Phosphate primer with touch up on site after erection.
- 4.10 All areas of primed steelwork with masonry walls are to be additionally protected with 2 coats of bitumastic paint. Min. DFT 200 microns which is compatible with the primer.
- 4.9 Galvanising of Steelwork:

All areas of galvanised steelwork with masonry cavity in contact with outer leaf are to be additionally protected with 2 coats bitumastic paint. Min. DFT 200 microns which is compatible with the galvanising.

5.0 TIMBER

- 5.1 All timber to be strength class C16 to BS5268: Part 2: 2000 u.n.o.
- 5.2 All timber structure to be suitably tied to the walls using galvanised mild steel straps in accordance with architectural specification.
- 5.3 All structural timber sourced shall be as specified in the member schedule and be stress graded and certified by mechanical testing to BS5268.
- 5.4 Floor balcony external timbers shall be of suitable natural durability (BS EN 350-2) or preservative treated durability (BS EN 350-2) to suit hazard/use class 3 (BS EN 335-1:2006) to ensure 30-year minimum life (refer to table-2 of BS8417:2003).
- 5.5 Internal floor, wall and roof framing timbers shall be treated to hazard class 2 to BS EN 355.
- 5.6 Austenitic grade 316 stainless steel shall be used where metallic preservative is used; galvanised mild steel fasteners shall be used with non metallic preservative.

Cut ends shall be brush treated.

External timbers shall be supplied at 16% moisture content.

- 5.7 Bolts to timber shall be 4.6 grade and have a minimum tensile strength of 400N/mm².
Stainless steel bolts shall be in accordance with BS EN 3506-1.
- Bolt holes should be drilled to diameters as close as practicable to the nominal bolt diameter, but in no case should they be more than 2mm larger than the bolt diameter. Washers with nominal diameter & thickness of at least 3 times and 0.25 times the bolt diameter respectively, should be fitted under the head of each bolt and under each nut. Minimum end distances, edge distances and spacings measured from the centre of bolts shall be 4 times the bolt diameter. If loading parallel to the grain is toward an end the minimum end distance shall be 7 times the bolt diameter.

6.0 MASONRY

- 6.1 Reconstructed Gable and Utility Walls.
Outer Leaf: 102mm – 20N Common Brickwork, 100mm Cavity
Inner Leaf: 100mm Blockwork (7N) with 13mm Plaster
To be set in 1:1:6 Mortar.
- 6.2 External Cavity Walls are to be suitably tied together using butterfly or fish tail ties or similar to Architects specification at 450mm vertical and 600mm horizontal Centres
- 6.3 Internal Partition Walls to be nominal 100mm 7.0N compressive strength Blockwork in mortar designation (iii) 1:1:6.
- 6.4 Wall ties to be stainless steel 'butterfly' type @ 600mm centres horizontally and 450mm centres vertically staggered. Insulation and 'U' value in accordance with Architect's specification.

7.0 RAFT/GROUND BEARING SLAB

- 7.1 Concrete to raft C35/20 min. Cement content 300kg/m³ max.
free water/cement ratio 0.6
- 7.2 Concrete to be mechanically vibrated.
- 7.3 Mesh reinforcement to be to BS4483 minimum laps 450mm.
- 7.4 Cover to reinforcement: mesh reinforcement 40 bottom & 35mm top.
- 7.5 Sub-base to be 150mm sand blinded hardcore to achieve a min. net bearing pressure of 30kN/m². Any soft spots or obstructions to be removed and replaced with well compacted hardcore.
- 7.6 Existing ground floor slabs to be tied to the proposed using M12 dowel bars at 400mm horizontal centres, 300mm long, 150mm embedment.
- 7.7 Ground bearing slab to bear onto 1200 gauge Visqueen DPM, 50mm grade C20 concrete blinding layer on 150mm thick D.O.T. type 1 hardcore material, well compacted and graded.

NOTES:-

. This drawing is to be read in conjunction with drawing No's 10116/02, 03 & 04.

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