1. GENERAL NOTES

All Structural Engineering drawings are to be read with the specification and with all relevant Architect's and Service Engineer's drawings and specifications.

Do not scale from any Structural Engineer's drawing. All dimensions are in millimetres and levels in metres.

All water and damp proofing works are to be to the Architects' details. Where the structural drawings show waterproof or damp proof membranes, they are simply intended to indicate their position in relation to the structure. The membranes have been designed, specified, and detailed by the Architect or the Manufacturer and are to be installed as shown on their drawings.

All fire protection works are to the Architects' details unless specifically noted otherwise.

All floor separation details and acoustic isolation details are to the Architect's details.

All external works, landscaping, paving etc. are to the Architects' details.

Typically, all non-loadbearing partitions are omitted for clarity. Refer to the Architects' drawings for details.

Abbreviations:-

CJ – Construction Joint
crs – Centres
c/c – Cross Centres
Dim – Dimension
DJ – Double Joist
FFL – Finished Floor Level
MC – Mass Concrete
MJ – Movement Joint
ms – Mild Steel
NTS – Not To Scale
PC – Precast Concrete
RC – Reinforced Concrete
SOP – Setting Out Point
ss – Stainless Steel
SSL – Structural Slab Level
ToC – Top of Concrete
ToS – Top of Steel
ToW – Top of Wall
Typ – Typical
TJ – Triple Joist
uno – Unless Noted Otherwise
U/S – Underside
ø – Diameter

The existing structural information shown on the Structural Engineering drawings is based on visual inspection of the building and upon limited opening up works. All details of the existing construction are subject to confirmation by the Contractor during the works on site. No materials are to be ordered until the relevant details and conditions are confirmed by the Contractor on site.

2. FOUNDATIONS

All existing foundations and underground obstructions within the foundation areas are to be removed to avoid hardspots developing under the new works. Live services are to be identified, protected, redirected or terminated as instructed by the CA.

Pad and strip foundations are to be founded in London Clay with an assumed safe bearing capacity of 100kN/m².

Foundation sizes and depths are based on interpretation of trial pit information and are subject to approval by the Local Authority Building Control Officer or Approved Inspector.

Should the ground conditions vary from those assumed the Contractor is to immediately notify the CA.

All trench / strip footing bottoms shall be horizontal with all loose material removed and kept free of water. Sides of excavations shall be, as near as possible, vertical.

If any part of a formation is allowed to be affected by rainwater, ground water or drying, it shall be re-bottomed to form a sound surface.

3. LOADING

Structural floors have been designed to carry the following uniformly distributed imposed loads in accordance with [BS 6399 / BS EN 1991].

FLOOR LEVEL	DEAD LOAD (kN/m²)	IMPOSED LOAD (kN/m²)
First Floor	Existing brick vaulted floor: 6.0 New timber floor 1.0	2.5

4. CONCRETE

IN SITU:

Concrete to is be in accordance with the specification, BS 8500 and BS EN 206.

USE	CONCRETE DESIGNATED MIX	CONSISTENCE CLASS	FINISH
Blinding / Cavity fill	GEN3	S3	XXXXX
Mass strip footings	GEN3	S3	XXXXX
Mass trench footings	GEN3	S4	XXXXX

Onsite testing procedures for quality control, including the preparation and testing of cubes is to comply with the specification and are to be agreed with the Engineer prior to concrete work commencing.

Concrete cubes shall be cured on site under water at 20°C from as soon as practically possible and stored safely until testing. Testing shall be carried out in accordance with BS EN 12390 and is to be undertaken by a UKAS approved laboratory.

Proof of testing with reports and certificates are to be issued to the Engineer for comment and are to be made available to NHBC, or other insurance scheme representatives, upon request.

Concrete tolerances are to be in accordance with the latest edition of the National Structural Concrete Specification or as necessary to ensure that the finished line level and juxtaposition of elements is such as to provide the finished product shown specified or otherwise inferred from the drawings.

Designated concrete is to be supplied from a ready-mix supplier operating under the Quality Scheme for Ready-Mixed Concrete (QSRMC) or equivalent BSI Kitemark scheme. Addition of water once the concrete has left the plant is NOT permitted.

Site mixed concrete shall be standardized prescribed concrete only.

5. STEELWORK

All steelwork to be grade S275 to BS EN 10025 and in accordance with the specification and the latest edition of the National Structural Steelwork Specification for Building Construction CE Marking Version.

The steel structure is Execution Class 2 (EXC2). It is highly recommended that the Steel Contractor(s) / Fabricator(s) appointed for the project are members of the BCSA. Otherwise, the Main Contractor or Client should complete all necessary due diligence to check that steelwork being delivered to site complies with the Construction Products Regulation (CPR) and is CE Marked.

The steelwork fabricator shall produce and submit two copies of dimensioned fabrication drawings to the Engineer for comment. The Engineer requires ten working days to return comment.

The fabricator is to complete the detailing of all connections not fully detailed on the drawings, using design connection forces shown on the structural drawings. For cold formed sections the fabricator is to complete the detailed design for those elements shown on the design drawings, and produce co-ordinated drawings showing all connection details etc.

All bolted connections are to include a minimum of 2No. M16 bolts per member unless specifically indicated otherwise on details.

All bolts are to be grade 8.8 sheradized to BS 4921, class 1. All bolts, nuts, and washers are to be to BS 5950. Washers are to be placed under the rotated item.

All welds to be minimum 6mm leg length continuous fillet welds unless specifically noted otherwise. All full and partial penetration welds shall be ground down smooth.

All steel coatings to be as specification and below. Coatings to be provided by Sherwin Williams Protective & Marine Coatings or similar approved. All coatings to be light grey in colour; red oxide is NOT to be used.

LOCATION	CATEGORY	PAINT SYSTEM
Internal damp/cavities	C2 – low	C400V3 Epoxy Zinc Phosphate coating (125 microns DFT) – Functional
Internal dry	C1 – very low	C400V3 Epoxy Zinc Phosphate coating (75microns DFT) – Functional
External	C4 – high	Galvanized in accordance with BS EN ISO 1461 to achieve a minimum mean coating thickness of 140 microns.

6. TIMBER

All solid timber members are to be strength Class C24 to BS 5268 uno.

Structural softwood for internal use shall be dry graded to BS 4978 (incorporating BS EN 518) or BS EN 519 and marked 'DRY' or 'KD'.

Timber shall be pressure-impregnated with preservative and all cut surfaces given two liberal applications of a suitable colour tinted preservative, unless the cut surface is visible in the final works, in which case a clear preservative shall be adopted. It is the Contractor's responsibility to ensure that the applied preservative is compatible with the original treatment.

Mulitple solid timber joists or solid blocking is to be provided under all non-loadbearing partitions.

All doubled or tripled joists shall be bolted together at 600mm centres using M12 grade 8.8 bolts with round toothed connectors between joists.

All bolts into timber are to have 50sq. x 3mm thick mild steel washers below the nut.

Herringbone strutting or solid blocking is to be provided between all timber joists or rafters as follows:

- 2.5m to 4.5m span: mid-span and at each end support.
- spans greater than 4.5m: two rows equally spaced along span and at end supports. Outer joists or rafters to be blocked solidly to perimeter walls.

Joist hangers shall be galvanized mild steel by Expamet or similar and shall be installed in strict accordance with the manufacturer's requirements.

Wall plates for roofs are to be tied down using 1200mm long 30 x 2.5mm galvanised mild steel straps with 100mm bob end. Straps are to be at 1200mm centres and shall be nailed to the top plate and plugged and screwed to the internal face of the wall. Refer to typical details.

Lateral restraint straps for floors and roof trusses are to be minimum 900mm long 30 x 5mm galvanised mild steel straps with 150mm bob end. Straps are to be at 1200mm centres. Straps perpendicular to joists or trusses shall be nailed to the tops of three joists and solid blocking infill using 5No. 75mm long x 3.8ø nails. Straps parallel to joists or trusses are to be let-in to the top of the joists or trusses and nailed in place using 5No. 50m long x 3.8ø nails.

Trussed rafters shall be designed in accordance with BS 5268: part 3 and loading defined in BS 6399. The manufacturer shall produce and submit dimensioned layout drawings, sketches of trusses and calculations to the Engineer for checking and Building Regulations submission ten working days before fabrication. The working drawings shall detail all truss rafter bracing in accordance with appendix A of BS 5268: part 3. Refer to Architect's drawings and specification for details of finishes, slopes, eaves details etc.

7. BUILDER'S WORK NOTES

Holes less than 300mm square are generally not shown on the structural drawings. Refer to Services Engineer's / Contractor's drawings.

No builder's work openings are to be cut without first obtaining agreement to proceed from the CA.

Openings in beams and load bearing walls will generally not be allowed, unless approved by the Engineer.

Infilling of openings around services is to be to the Architect's or Service's Engineer's requirements. Where a load bearing infill is required this is to be designed by the Contractor. Details to be submitted to the CA for comment.

Concrete plinths are to be provided to act as bases for mechanical plant where required by the Services Engineer. Dimensions of plinths are to suit the mechanical plant used. Drawings are to be submitted to the Structural Engineer for checking of plant weights on floors.

8. TEMPORARY WORKS

The Contractor is responsible for the design, installation, and maintenance of all necessary temporary works to ensure the stability and structural integrity of the building and any adjoining buildings or structures throughout the course of the works and to ensure that the works can be executed in a safe manner.

Where temporary works and sequencing is shown on the structural drawings they are shown indicatively and only to communicate the construction sequence and temporary works assumed for the permanent works design.

All temporary works are to be designed and installed in accordance with BS 5975 and all other legislative documents relevant to the form and method of construction proposed.

The Contractor is to appoint a competent and experienced Temporary Works Co-ordinator, and where required a site based Temporary Works Supervisor, as defined in BS 5975.

The Contractor is to submit in advance of the works a construction stage method statement setting out details of the proposed temporary works and sequence of work for review by the Design Team. Any comments made (or not made) should not be taken as relieving the Contractor and his Temporary Works Designer of their sole responsibility for the adequacy of the design, installation and maintenance of the temporary works.

NOTES:

1. All structural engineering drawings are to be read with the specification and with all relevant Architect's and Service Engineer's drawings and specifications.
2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check drawing has been printed to intended scale this bar should be 50mm long @ A1 or 25mm long @ A3:
3. All dimensions are in millimetres and levels in metres.

Rev	Date	Issued	Amendment
–	26.01.17	GS	Planning Issue

Status: FOR PLANNING

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CAMDEN STABLES MARKET

GENERAL NOTES

Drawn G Sheard Scale N/A

Project No./Drawing No. 8767_001B

Rev –