STRUCTURAL NOTES

GENERAL
1. All dimensions are in millimetres (mm).
2. All levels are in metres (m).
3. Do not scale these drawings.
4. These drawings are to be read in conjunction with all relevant Architects, Engineers and specialist drawings.
5. All work is to comply with the relevant British Standards, Codes of Practice and the Building Regulations.
6. For wall setting out, beam levels and steelwork setting out refer to Architects Drawings.
7. For fire protection refer to Architects Drawings.
8. The Contractor is responsible for veifying all site and setting out dimensions including 'as built' positions of temporary works.
9. All plant and it's supports are to be adequately isolated from the structure (i.e. Anti-vibration mounts to be provided - refer to details by others).

CONSTRUCTION
1. The Contractor is responsible for all temporary works and their proposals must be submitted to the Structural Engineer sufficiently in advance of the works starting to allow for comment. Under no circumstances will any structural alterations be carried out prior to the Structural Engineer commenting on the contractors temporary works proposals.
2. If an independent check on the temporary works is deemed to be necessary by the Engineer, the Contractor shall supply such information as is required by the checker to obtain approval.
3. No construction methodology that causes a modification of the permanent works will be accepted.
4. The Contractor shall prepare his own proposals for sequence of construction for which he will remain entirely responsible. These proposals shall be submitted to the Contract Administrator prior to commencement of work on site. where a sequence or method of construction is noted on a drawing it should be adhered to without modification and ay variation to this should be agreed in advance with the Structural Engineer.
5. All specialist named materials and propietary products are to be used and fully installed in accordance with the manufacturers instructions. Alternative products to those named on the drawings are subject to approval by the engineer and must be proved to be suitable by the Contractor, if requested.
6. The Contractor shall ensure that the stability of the building and adjoining structure is maintained at all stages of the works.
7. All joints (where shown) have been designed for the range of movements of the completed structure. The Contractor must ensure that the construction methodology does not require alterations to these joints.
8. Service holes that are not shown on these drawings shall not be formed until the Structural Engineer has agreed the work.

STEELWORK NOTES
1. All steelwork to be grade S355JR to BS EN 10025 unless noted otherwise.
2. External steelwork with web/flange/plate thickness greater than 15mm to be grade S355**J0** to BS EN 10025 U.N.O.
3. All hollow sections to be Hot Rolled.
4. All internal steelwork to be prepared to SA 2 1/2 and primed with 75 microns DFT high build zinc phosphate primer (Intercure 200HS by International Paints or equivalent approved).
5. All steelwork within cavity wall construction to be prepared to SA 2 1/2 and have protective coating 175 microns DFT Intercure 200HS by International Paints or Equivalent approved, plus 2 coats of bitumastic paint to cavity side
6. All external steelwork to be prepared to SA 2 1/2 to be Hot Dip Galvanized to EN ISO 1461 "Hot dip galvanized coatings on iron and steel articles - specifications and test methods" unless noted otherwise.
7. Where referred to specifically on the drawings, other external steelwork to have protective coating of 75 microns DFT Interplus 356 with top coat 125 microns Interfine 979 in two coats all by International Paints or equivalent approved or as shown on the drawings.
8. All levels and dimensions to be confirmed by the contractor.
9. Beams are to have a minimum of 100mm bearing on to padstones unless noted otherwise.
10. All steelwork connections to comprise a minimum of 4 M16 (Grade 8.8) bolts, 10mm plates, 6mm fillet welds full profile unless noted otherwise.
11. Where a weld is called up as a full strength butt weld (FSBW) it is assumed that it will be full penetration.
12. The steelwork fabricator is to submit fabrication drawings to the engineer with ten day allowance for review. Any steelwork fabricated prior to commenting shall be at the contractors risk.
13. Grouting of base plates is to be carried out using Weber-SBD 5-Star non-shrink cementituous grout or similar approved.

TIMBER NOTES
1. All timber to comply with BS 5266 and to be tanalised or 'vac-vac' treated.
2. All timber to be grade C24 unless noted otherwise.
3. All cut ends are to be re-treated prior to fixing
4. Multiple timbers to be secured with 8mm diameter slef-drilling coach screws at 300mm horizontal crs or M12 bolts with 51 diameter double sided toothed plate connectors at 500mm staggered centres
5. Multiple floor joists to be doubled up under all parallel partitions. Provide joists at 200mm crs under baths & shower trays.
6. Solid noggings to be provided to floor joists as follows:
   Spans up to 2.5m: None
   Spans 2.5m-4.5m: 1 at mid-span
   Spans over 4.5m: 2 at one-third span positions
7. LRS - Denotes 30x5 glavanised mild steel straps at 1250mm crs max. (1050x150). Straps to span 3 No. joists. Provide solid blocking between joists at strap locations.
8. VRS - Denotes 30x2.5 galvanised mild steel straps at 1250mm crs max (1200x100). Straps provided to anchor wall plate or joist to inner leaf of wall.
9. R - Denotes 30x5 glavanised mild steel straps at rafter and ceiling tie levels at 1200mm crs max. Straps to be of sufficient length to span 3 No. trusses. Provide solid blocking at strap locations.

FLITCH BEAM NOTES
1. Flitch beams to be bolted together @ max 400mm horizontal crs, 50mm stagger above & below centre line.
2. Flitch beam bolts to be M12 Grade 4.6 with toothed plate washers.
3. Provide 2 flitch bolts at all supports, 100mm vertical spacing, on centre of bearing.

CONCRETE FOUNDATION NOTES
1. All foundations concrete to be in accordance with BS EN 206-1 and BS8500-2.
2. MASS concrete foundations to be Designated Concrete grade C30 / 37 FND2
3. All concrete to satisfy design sulphate class DS-4 and ACEC CLASS AC3s to BRE SPECIAL DIGEST 1 with a recommended BASIC DESIGN CHEMICAL CLASS DC-3.
4. 50mm GEN1 blinding concrete to be placed under all reinforced concrete foundations unless noted otherwise.
5. Concrete foundation design is based on founding at least 300mm into the required stratum with a minimum allowable bearing pressure of 125kPa.
6. All foundation depths are to be as noted but are subject to final inspection on site. If active root growth is apparent at founding level then the foundation must be deepened to extend 300mm below any active roots.
7. Foundation excavations are to be inspected for any organic, soft, loose or otherwise unsuitable materials. Depth of foundation to be increased to found in undisturbed soils minimum of 300mm below such materials.
8. Any existing foundations & slabs within the footprint of new foundations to be broken out & new foundations to be taken minimum 300mm below any disturbed ground.
9. Where foundations are constructed on differing bearing strata, B785 mesh reinforcement is to be placed top and bottom in the foundation (75mm cover). The mesh is to extend 2.0m on each side of the soil transition zone.
10. All foundations designed in accordance with NHBC standard 4.2 (guidance for building near trees).
11. Where a foundation passes close to a sewer, drain trench or trial pit the foundation is to be such that it's underside is below a line projected up at 45 degrees from the nearest bottom corner of the drain trench, sewer or trial pit.

REINFORCED CONCRETE NOTES
1. Reinforced concrete to be in accordance with BS EN 206-1 and BS 8500-2. Designated concrete RC32/40, exposure class XC2. Maximum chloride content Class 0,40. Maximum nominal size of aggregate 20mm. Consistency class to be S3.
2. For concrete finishes refer to the drawings.
3. For concrete cover to reinforcement refer to the RC drawings.

REINFORCEMENT NOTES
1. All reinforcement to be grade 500B unless noted otherwise
2. H denotes high yield bars to BS 4449-2005.
3. Concrete cover to reinforcement to be maintained by the use of concrete or plastic spacers, pre-welded chairs, stools, etc. Broken bricks or tiles, etc must NOT be used.
4. Minimum laps to be as follows (mm):
   H10 - 400
   H12 - 450
   H16 - 600
   H20 - 700
   H25 - 900
   H32 - 1150
5. Where bars of different diameter lap, the lap is to be for the smaller bar.

PADSTONES NOTES
1. Mass concrete padstones to be grade C25
2. Where shown individual 215x100x65 padstones may be class B (50N) Engineering Brick
3. Padstones can either be cast-in-situ or precast concrete set on 1:3 mortar.

MASONRY NOTES
1. Loadbearing blockwork to have minimum characteristic compressive strength of 7.3N/mm2 to BS 5628 Part 1 unless noted otherwise.
2. Engineering bricks to be 'Class B' to have a minimum characteristic compressive strength of 50N/mm2 to BS 5628 Part 1 unless noted otherwise.
3. Mortar in load bearing walls to be type M4 (1:1:6) to BS 5628 unless noted otherwise.
4. Masonry below DPC level to be Class B engineering bricks or 7.3N/mm2 blockwork in type M12 (1:3) mortar to BS 5628 unless noted otherwise.
5. All embedded items (wall ties, etc) shall be stainless steel grade 318 for external walls.
6. All returns to be fully bonded
7. Drypack to be 1:3 cement:sharp sand with a moisture content sufficient only to bind the material only under hand pressure. The drypack should be well rammed into place.
8. For load transfer beams drive steel shims / slate wedges between steel and masonry at load transfer beams to pre-deflect prior to drypacking.

CDM REGULATIONS 2007 RESIDUAL HAZARDS

RESIDUAL HAZARDS IDENTIFIED ⚠

1. NONE IDENTIFIED.

THIS REGISTER IS A NON-EXHAUSTIVE LIST OF RESIDUAL HAZARDS RELATING TO THE WORKS SHOWN ON THIS DRAWING THAT HAVE BEEN IDENTIFIED DURING THE DESIGN STAGE.

Mark	Date	By	Chkd.	Revision notes
-	10.07.14	DJE	AB	DESIGN SULPHATE CLASS CHANGE & BEARING PRESSURE
-	10.07.14	DJE	AB	CONSTRUCTION ISSUE

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Job Title
4No NEW RESIDENTIAL UNITS
465-467 FINCHLEY ROAD
NW3 6HS

Drawing Title
GENERAL NOTES
STRUCTURAL

Client
A.GOVANI

Scale at A1:	Drawn:	Checked:
N/A	DJE	AB
	Date: 10.07.2014	Date: 10.07.2014

Drawing No.:	Revision:
AB1115_GEN.01	A

CONSTRUCTION ISSUE