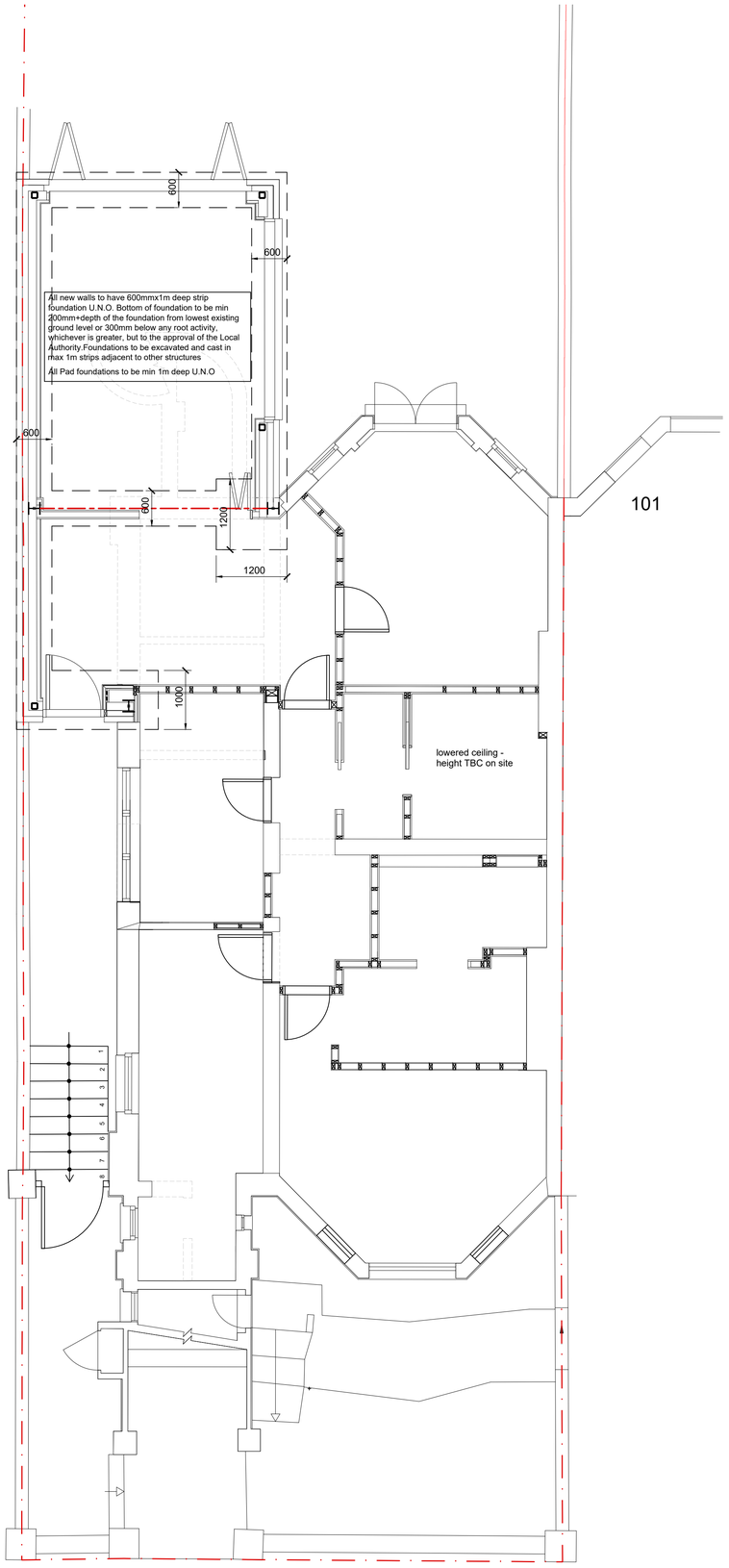
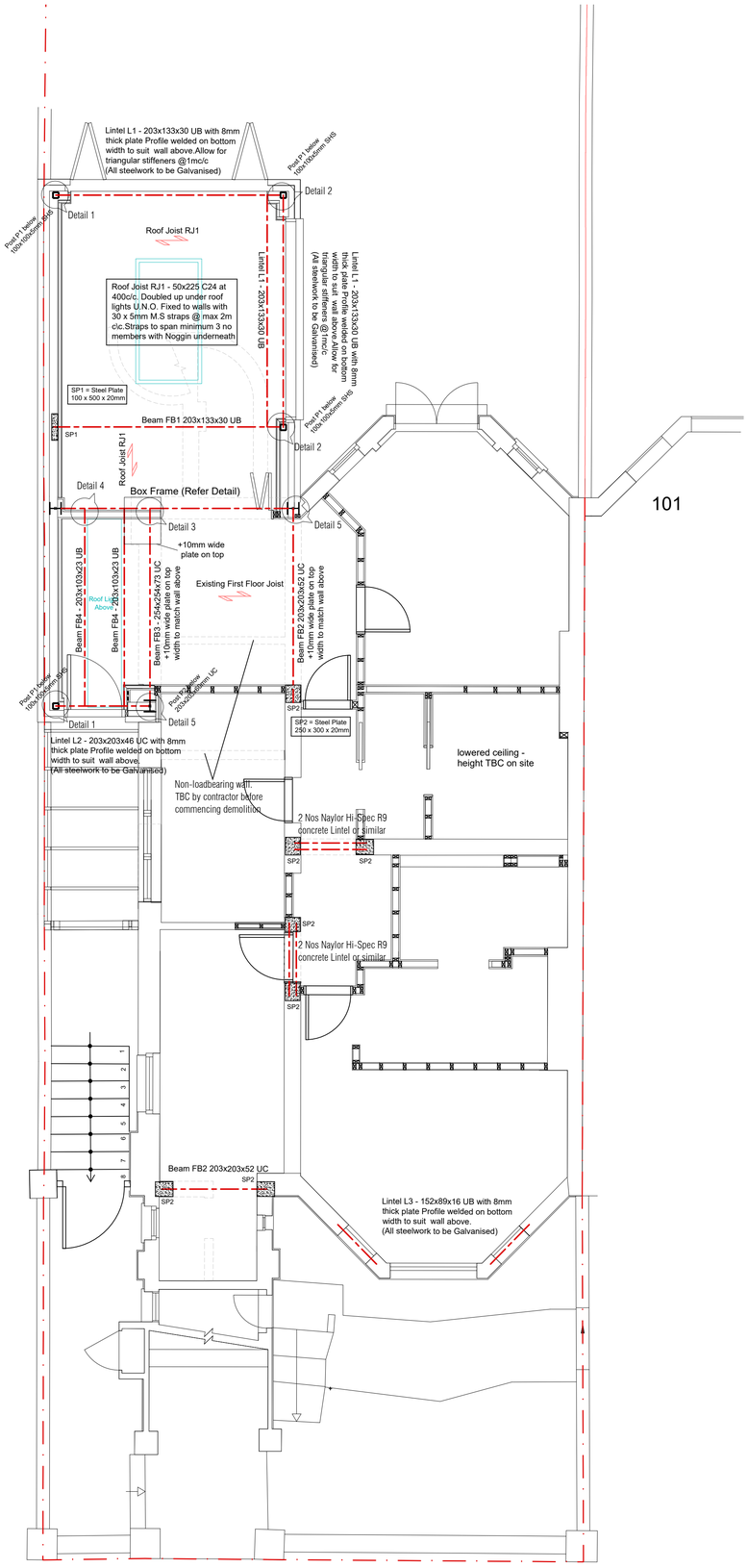


Ground Floor Plan Showing Foundation

Scale 1:50



Ground Floor Plan Showing Structure Above

Scale 1:50

No dimensions are to be scaled from this drawings. all dimensions stated must be verified on site. the consultant must be advised on any discrepancies prior to any item of work being put in hand.This drawings must be read together with the specification, bill of quantities and all other related drawings and schedules.

General Notes and Specification:

1. Existing structure including walls, beams, piers, foundations etc. are to be checked on site by building contractor to ensure assumptions stated on drawings/calculations are correct. Discrepancies should be reported to the engineer immediately to ensure design is valid.
2. To be read in conjunction with Architects drawings, any inconsistencies between the drawings should be reported. If any site conditions or existing details are found that may effect the structural design, Structural Engineer is to be notified immediately.
3. For details of fire protection to steelwork, insulation, finishes refer to relevant Architects drawings.

Temporary Works

1. Design of Temporary works necessary for new structural supports including beams and columns is contractors responsibility. Where a new beam supports the existing construction, adequate pre-load is to be applied and suitable packs such as steel wedges,driven dry-slate introduced, then pointed up with 1:3 mortar with expanding agent.

CDM Regulations

The Construction (Design and Management) Regulation 2015 would apply to this type of construction, the designer has an obligation to foresee risks and bring to the attention of the builder such risks.

1. The project requires the introduction of heavy structural elements such as steel beams or concrete lintels. In consequence, the builder is to take into consideration the placement of all structural elements, ensuring that the method of lifting and placement is safely carried out. Splice details for long-span beams can often be accommodated if required. Responsibility for this element lies with the Contractor.
2. As the existing walls need to be propped in order to introduce some of the lintels, this should also be considered in relationship to the risk assessment of the Contractor. Safe working procedures must be adopted. Responsibility for this element lies with the Contractor.
3. Proposed works involve extensive working at height. Main Contractor to provide safe working platform for site operatives to carry out building works. All scaffolding erection and safety to comply with HSE guidelines. Erection of scaffolding on adjacent lands may require separate legal agreements / bayleaves. Client to seek separate legal counsel to advise / confirm.

Steelwork

1. All steel work to be grade S275 unless stated otherwise.
2. All steelwork to be mechanically wire brushed and painted two coats of red oxide. Steelwork located in the cavity or below DPC to be suitably protected with 2 coats of bituminous paint.
3. All External Steelwork to be hot dip galvanized.
4. All steelwork connections to use grade 8.8 bolts unless stated otherwise. These are to be spanner tightened using the appropriate podger spanner (min length 460mm) or suitable power tools in accordance with BS2583. If a torque wrench is used the torque applied should be around 90Nm for M16 bolts, 110Nm for M20 & 130Nm for M24.

Timber

1. All timber to be grade C24 (SC4), unless stated otherwise. Preservative treated to Architects details.
2. All doubled/tripled up timbers to be bolted with M12 bolts at 500c/c U.N.O

Masonry

1. All blockwork to be 7.3 N/mm2 in class III mortar below DPC in accordance with BS 5628 : Part 3 : 2005 or suitable 7.0 N/mm2 foundation quality blocks in class II mortar in accordance with the manufacturers instructions.in accordance whitin pointed up with mortar. be accommodated if required. be contacted accordingly. All brickwork below DPC to be Engineering Bricks DPC in accordance with BS 5628 : Part 3 : 2005.
2. External Wall to have 16mm wide vertical movement joint located at max 12m for clay bricks, 10mm wide joint at max 7.5m for concrete brick/dense blocks and 10mm wide joint at max 6m centres for lighweight blocks. Joint to have Ancon PPS or similar wall tie with de-bonding sleeve on one end at 450 vertical centres . Ancon Staiffix RT2 or similar wall ties are to be installed at 150mm either side of centre of movement joint in cavity walls at 225mm vertical centres. Joint near corner of the wall is to be located min 550mm and max 3m away from corner. All joints to be sealed with compressible material in accordance with Architects detail.
3. Internal masonry walls longer than 6m to have vertical joint in accordance with block manufacturers recommendation.

Foundation

1. All foundations to be C35 concrete minimum cement granulated blast furnace slag between 70% and 90% content 300kg/m comprising portland cement (OPC) and class 2 ground sulphate protection to bre digest 363. Max water cement ratio to be 0.55
2. Foundation depths shown are provisional and are subject to agreement with party wall surveyor and inspection by building control. Further investigations like soils investigation, tree survey, depth of existing may be required. Heave protection maybe required contact Engineer when Soil data is available.
3. Joints in footings are not to be located less than 1500mm from any return/corner and dowelled with 4no H20 - 1200 long bars.
4. Existing below ground services is responsibility of the Client/Builder.Survey of existing services is to be carried out prior to start of work and obtain any necessary agreements in order to progress the works.

Piled Foundation Notes:

1. Concrete shall be Designated Concrete RC35 produced in accordance with BS EN 206-1 / BS 8500-2
2. Piling contractor is to carry out all necessary site investigation for pile design
3. It is piling contractors responsibility to allow for any site restrictions including limited access.
2. Piles are to be designed by piling contractor for loads provided and for heave forces that may exist.
3. All loads provided are SLS. The final design of the piles shall account for negative skin friction and for a notional load of 5kN at the head of the pile in addition to loads provided.
4. Piles are to be designed for a factor of safety of 3
5. All piles are to be integrity tested.
6. Pile cut off level shall be 75mm above the bottom of ground beams locally.
7. Total settlements under working loads shall NOT exceed 10mm for an individual pile.
8. Piles are to have a maximum diameter of 300mm

Reinforced Concrete:

1. All reinforced concrete shall be placed in accordance with the current edition of BS8110. Additives shall not be used without prior approval of the Engineers.
2. The minimum grade of concrete shall be C35
3. The contractor shall be responsible for obtaining any special mix designs from their appointed Ready Mix Suppliers, together with the appropriate test Certificates etc. (to suit method of construction).
4. All reinforced concrete profile shall be formed using timber shutters, which shall be removed when the concrete has achieved at least 50% of its design strength. A suitable debonding agent shall be placed on internal faces of the all concrete shall be mechanically vibrated.
5. Reinforcement shall be held in position with the aid of concrete or plastic spacers.
6. The concrete cover to all reinforcement shall be not less than 50mm U.N.O. Refer to relevant drawings.
7. Reinforcement shall accord with BS 4466 and shall be free from oil,grease, dirt and other deleterious materials prior to placement of concrete.

Revision	Date	Description
A	14/07/2024	Architect Comments

Paper Size	Scale	1:50	Structural Layout
A1	Revision	1st	Drawing Number KHR99A-SE01A
	Jul-24		
	Drawn By	Checked By	Status / Site Address
	AG		Construction Issue / 99A King Henry's Rd London NW3 3QX

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