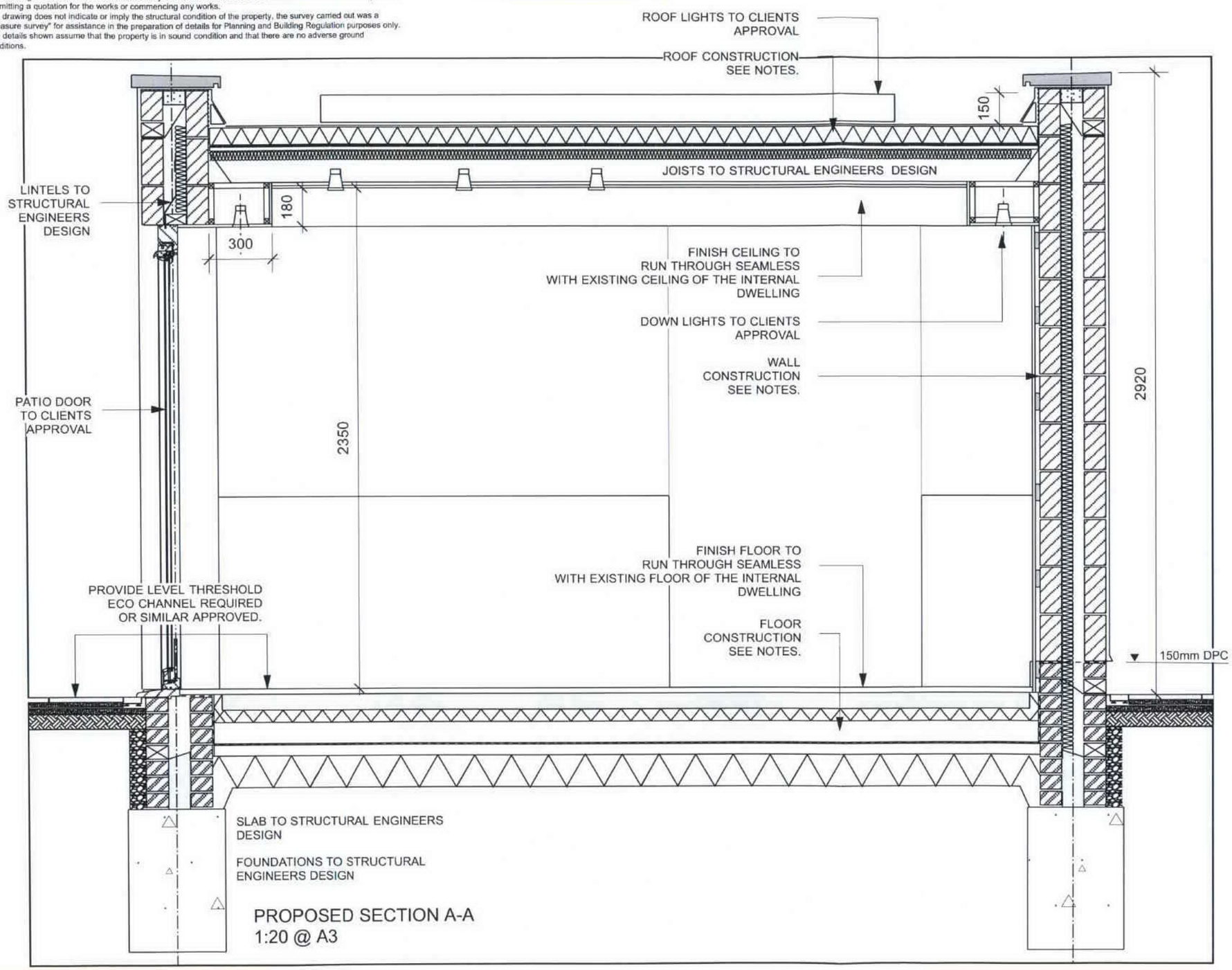
DO NOT SCALE FROM THIS DRAWING. Dimensions stated are for guidance only, contractor to verify all boundary positions and dimensions on site prior to commencing any works, making workshop drawings or obtaining any materials.
No site supervision is implied or undertaken unless otherwise separately arranged.
The drawing does not indicate the extent of any excavation works and the contractor is to determine this prior to submitting a quotation for the works or commencing any works.
The drawing does not indicate or imply the structural condition of the property, the survey carried out was a "measure survey" for assistance in the preparation of details for Planning and Building Regulation purposes only. The details shown assume that the property is in sound condition and that there are no adverse ground conditions.



PROPOSED SECTION A-A
1:20 @ A3

BUILDING NOTES:

CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015: THE ROLE OF THE CLIENT
If the works detailed within these drawings, together with any other works to be undertaken at the same time, are to last longer than 30 days or are to involve more than four people the client has a duty to comply with the above CDM Regulations and should obtain information and advice from his local Health & Safety Executive (HSE). A principle designer MUST be appointed refer too http://www.hse.gov.uk/construction/cdm/2015/responsibilities.htm

REFERENCES
This drawing is to be read in conjunction with:
1. The planning approval documentation and any conditions of approval.
2. The building regulations approval documentation and any conditions of approval.
3. The structural engineers details prepared by others.

DEMOLITION WORKS
Locate and make safe all services. Disconnect, seal and remove all redundant pipes, cables, conduits etc. Provide protection to all remaining services throughout contract. Remove all walls, fixture and fittings as shown, providing temporary support and bracing as required.

EXISTING STRUCTURE
All existing structure to be exposed where supporting new walls, floors, beams etc to determine suitability prior to commencement of works.

JOINTS WITH EXISTING
Joint between existing and new walls to be formed using Catnic or similar proprietary wall connectors allowing vertical movement only, bolted to existing walls fully in accordance with supplier's instructions. Mastic seal externally and plaster beads either side of joint internally.

LINTELS
Galvanised prefabricated steel lintels to BS 5977:Part 2. by IG Lintels Ltd or similar approved, with integral insulation.
Min 150mm bearing each end. Lintel sizing subject to manufacturers confirmation and Structural Engineers design.

FOUNDATIONS - SEE STRUCTURAL ENGINEERS NOTES.
The Structural Engineer is to prepare the necessary foundation design and calculations, at the clients expense, and submit to the Local Authority for their approval prior to installation on site.

Where trees are in close proximity of the new foundations their depths are to be designed in accordance with the structural engineers calculations. It is important that the structural engineer visits site to identify tree locations and does not work from a desk top study as trees do have have an impact on the foundation and structural design.

All architectural drawings are to be read in conjunction with the structural drawings and instructions. Any descrepancies in any dimensions or locations of the structural information in conjuction with the architectural drawings MUST be reported before any works on site takes place.

ALL works are to be checked on site by the building inspector appointed.

GROUND FLOOR CONSTRUCTION
150mm well consolidated hardcore, 50mm sand binding, 1200 gauge polythene dpm to be laid on top of sand blinding and lapped and sealed with wall dpc. concrete slab (refer to SE instructions and guide levels).
50mm kore therm kingspan insulation laid to manufatures instructions with 25mm thick vertical upstands around perimeter to overlap with rockwool vertical insulation(leave nichiha ply below skirting) to provide max. u value of 0.22 w/m2per deg. k. 75mm thick 3:1 sand / cement screed reinforced with A98 mesh centrally placed on building paper grade bf to S.S. floor finish to Clients approval.

CAVITY WALL - RENDER FINISH - 0.27W/m2K
300mm cavity wall construction to BS 5628 to comprise of 2 x100mm thick Celcon Standard blockwork or similar approved, 100mm cavity insulated with 50mm KINGSPAN cavity insulation and 12mm plasterboard dry lining and plaster skim finish internally including all reveals to openings, etc. Provide 20mm two coat waterproof render to current BS externally. Tie together with stainless steel twisted ties at 450mm centres vertically and 900mm centres horizontally set (staggered) and increase to 225mm centres around reveals, fixed in full accordance with the manufacturer's instructions. Install expansion joints as directed by the block manufacturer. Insulation to be installed in full accordance with the manufacturer's instructions, giving a maximum "U" value of 0.27W/m2K.

DAMP PROOF COURSES
Hyload 2 DPC min 150mm above ground level. 110mm wide unless indicated otherwise, all joints lapped min 100mm and lapped with DPM. Hyload 2 cavity tray DPC to all lintels and at abutments with lead flashing externally. Ends of tray DPC to have water slops formed by folding cavity tray. Trimtex plastic perpen weepholes at 900mm centres horizontally, min 2 to any stepped DPC run. Catnic Trays Ltd, type J cavity closers incorporating damp proofing to be used at all jambs.

VENTILATION - EXTRACTORS
All extract fans to be of the reversible type 'Vent Axia' or similar approved and suitaby weatherproofed. Allow for all necessary ceiling grilles, ductwork, external terminals, flashings, upstands, etc.
All internal rooms to have mechanical ventilation as follows; Toilets: 15 litres per minute with 15 minute over-run; Kitchen 30ltrs when adjacent to hob or 60ltr elsewhere. Utility: 30ltrs.
NOTE: All internal doors to be provided with a 10mm gap beneath.

ELECTRICAL - GENERAL:
1. All electrical works to be carried out by an approved Part P installer or checked by an approved Part P installer and certification issued to Building Control upon completion.
2. Electrical Contractor to allow for 'efficient lighting' to all new locations; (Fixed lighting only capable of taking lamps with a luminous efficacy greater than 40 lumens per circuit-watt).

FIRE ALARM
Smoke detectors to be provided in locations indicated ('SD'). Smoke detectors to be interconnected and mains operated with a battery back-up. System to conform to BS5839: Pt.6 and be installed by a qualified engineer.

PLUMBING CONTRACTOR
1. All pipework is to be insulated in accordance with the recommendations of BS5422: 2001 by the Plumbing Contractor.
2. All new radiators to be fitted with TRV's.
3. New Proposed boiler location to be agreed by Client.
NOTE: All water fittings are to comply with the Water Supply (Water Fittings) Regulations 1999.

FLASHING DETAILS
Provide code 4 lead flasing upstand, min 150mm, with cavity tray flashing installed to external wall construction.

STEEL - 1 HOUR FIRE PROTECTION
All new steelwork which supports walls, floors and other elements of structure (not roofs), to be coated with 'Nullifire' or similar intumescent coating BS 8202: Part 2 to give 1 hour fire resistance. Coating to be applied fully in accordance with manufacturer's recommendations onto clean, prepared and primed surfaces.

SAFETY GLAZING / LOW E GLASS
Glazing in critical locations to be laminated or toughened glass to BS 6206:1981. Critical locations include all doors, windows and glazed panels within 300mm of opening doors and within 1.5m of floor, and any glazing within 800mm of floor. Where panes are smaller than 250mm in one direction, and have an area of less than 0.5sqm, then 6mm annealed glass is to be used with glazing beads.

EXTERNAL DOORS AND WINDOWS - 1.6W/m2K
UPVC external doors and windows to match existing style with sealed unit double glazed units throughout to achieve 1.6W/m2K. Trickle vents to be provided to all windows providing a minimum of 8,000mm2 of background ventilation. Opening lights to min. 1/20th of floor area in habitable rooms and kitchen. Frames fixed in openings with galvanised mild steel cramps at 450mm vertical centres, and proprietary insulated cavity closers at jambs and cill. Proprietary draught seals to all opening lights. Windows marked 'Escape Window' to have provision for emergency egress with an unobstructed openable area at least 0.33 sq.m and at least 450mm high and 450mm wide (provide removable mullion where required). The bottom of the openable area should be no more than 1100mm above the floor and not less than 800mm.

CONTINUITY OF INSULATION AND AIRTIGHTNESS
The construction details provided show continuous insulation, together with air barriers enclosing the whole building, but might not cover every conceivable junction and/or construction situation. The main contractor must therefore ensure that the insulation and air barrier is continuous, with no cold bridging elements or through fixings other than as shown in the construction details. Further design information will be provided on request, if required.

RAINWATER GOODS
PVC-U rainwater gutters and downpipes (to match existing) installed to manufacturer's recommendations. Access plates fitted to all downpipes 200mm above ground level and pipe to connect direct to drain via sealed adaptor, unless noted that pipe discharges above open gully.

PARTITIONS - BLOCKWORK
(60 minutes fire resistance) tarmac topblock 'hemelite' standard aggregate block 100 x 440 x 215 (7.3nl/mm2) c/w single layer 12.5mm thk gyproc wallboard both sides, skim & coated ; refer structural engineer specification

PLASTERBOARD AND SKIM CEILING
15mm plasterboard to BS 1230:Part 1 with filled and taped joints, with 3mm plaster skim finish. 50x50mm noggins provided to all joints and against perimeter walls.

WALLPLATES
100x75mm SW wallplate bedded level in mortar with half lapped joints and tied to walls with 30x2.5x900mm Catnic or similar galvanised metal restraint straps @ max 1200mm c/c.

FLAT ROOF CONSTRUCTION - 0.16W/m2K
Construct new flat roof with Single Ply Membrane by sarnafil or similar approved manufacturer and fitted fully in accordance with manufacturers instructions and recommendations, on 80mm Celotex EL3000 fully bonded on VCL to BS6229:2003 (fitted fully in accordance with Celotex instructions and recommendations) on 18mm WBP on softwood firrings to fall min. 1 in 40 on new C16 grade flat roof joists at 400mm centres (size of joists as noted on the drawing), supported by mild steel hangers both ends or as otherwise stated on the drawing. Line underside with 12mm foil backed plasterboard & plaster skim finish. All to achieve a U value of max 0.16 W/m2K. Provide lateral restraint straps fixed to joists and taken down internal face of blockwork and screwed at max. 1.6m c/c with 1200x32x6mm mild steel straps.

LATERAL RESTRAINTS
Joists parallel to external wall restrained with 30x5mm galvanised steel straps at max 2.0m centres, nailed to joists with 75x50mm noggins between timbers and packing next to wall. Straps turned down min 100mm into cavity, tight against face of inner blockwork to Structural engineers design.

DRAINS - INSPECTION CHAMBERS - Max 1000mm deep 450mm Dia circular 'Hepworth' or 'Terrain' polypropylene access chambers, bedded and surrounded with selected backfill. Encase with min 150mm concrete within 300mm of ground level (allowing for ground finishes) to paved areas.
Standard ductile iron cover to be used in pedestrian areas only. Cast iron cover and frame, with min 225x225 concrete support collar provided for traffic loads. All installed fully in accordance with manufacturer's recommendations.

DRAINS - BELOW GROUND
'Hepworth PlastiDrain' pipes with flexible joints fitted fully in accordance with manufacturers instructions ad recommendations. Generally bedded and surrounded with selected excavated material, but Class F granular bedding of 10mm nominal sized pea shingle required under roads and paving or when selected material is not suitable, and Class Z concrete surround required under buildings and when pipe is within 300mm of finished ground level. 100mmØ drains laid to fall 1 in 40 or as specified elsewhere on drawing. Rocker pipe arrangements to be made where drains are built into structures.

PLUMBING - SOIL VENT PIPES
Osma 100mmØ PVC-U soil vent pipes, including stub stacks with access plates at all junctions, changes in direction and 150mm above finished ground floor level. SVPs to terminate at ridge vents where possible. Provide full weatherproofing of external terminals with all necessary flashings, etc. Automatic air admittance valves (AAV's), where specified, fitted with manufacturer's insulating cover to ensure operation in freezing conditions. Encase SVPs in 12.5mm Gyproc plasterboard on 50x50mm SW framing & wrap with gyproc 1000 mineral fibre quilt, with 12mm plywood access panels for all cleaning access points. All SVP's to terminate a minimum of 900mm above any opening within 3m.

PLUMBING - WASTE PIPES
All plumbing to BS5572: 1978 and BS5481: 1977. All fittings to connect to washes via. 75mm deep seal anti-syphon traps.
Waste sizes to be-
W.C.'s - 100mmØ, Sinks/WHB's - 32mmØ, Washing machine/Dishwasher - 38mmØ low level tundish.
All waste connections to SVP's to be min 215mm from WC branch connections.
Rodding access to be provided at all bends, with appropriate access hatches in any surrounding boxing.

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DRAWN BY	SCALE	DRAWING TITLE	PROJECT TITLE	DRAWING NUMBER	
DDP	1:20 @A3	PROPOSED SECTION A-A	48 WALTHAM ROAD RAYLEIGH SS6 9BB	MA081-05	
CHECKED BY				DRAWING DATE	REV
				MARCH 2017	A

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