

10.3.0 EXCAVATIONS.

- 10.3.1 Mark out and saw cut through existing concrete floor slab for new 600mm wide concrete strip foundation to steel box frame. Excavate through hardcore and subsoil to an invert level of 900mm below external G.L. - To be approved on site by Building Control Officer (B.C.O.).
- 10.3.2 Provisional Item: Cut back existing concrete floor as required and excavate for new 900mm x 900mm concrete pad foundation with 900mm invert level below new internal blockwork pillar. To be agreed on site with B.C.O.
- 10.3.3 Excavate around existing rodding eye point to North side of dwelling to expose existing mixed drainage system and install new 350mm diameter mini inspection chamber and branch connections as per Drg No 272-4-B.

10.4.0 CONCRETE WORKS

- 10.4.1 Supply and lay new C30 grade concrete strip foundation 6.0M x 0.6M x 0.3M thick under line of new steel box frame. Provide concrete surround to base member of box frame with minimum 50mm cover. Note: Use vibrating poker to ensure steel work fully encapsulated.
- 10.4.2 Provisional Item Supply & lay new 900mm x 900mm x 300mm thick pad foundation below new internal pillar.
- 10.4.3 Make good to existing solid floor within kitchen / dining following installation of new box frame, pad foundation and removal of existing internal wall. Ensure existing DPM is continuous with any joints overlapped and taped prior to laying concrete.
- 10.4.4 Provisional Sum to prepare existing surfaces and lay new latex screed throughout kitchen / dining area to receive existing underlayment and level up existing solid floors previously damaged by internal wall. Prov Sum £ 500.00
- 10.4.5 Provide weak mix concrete pad / surround to new mini inspection chamber I.C.T & concrete surround to all new drainage runs with less than 300mm cover.

10.5.0 BRICK & BLOCK WORK

- 10.5.1 Provide new galvanised & insulated lintels for appropriate cavity width I.G. L.F.H.D 50 or similar approved with minimum 150mm bearing each end over existing window opening ew6, ew8 & ew9 all with PVC cavity trays to weep vents set at 450mm centres with perpendicular joints. Brush off existing brick / block work and dampen down, build up off existing 250mm thick cavity walls, new structural lintels and steel box frame to form new first floor internal walls of extension with 215mm Plaster / Fibreblock block work all as per Detailed Section A-A.
- Note: New block work to be tied to existing with 'Catic' Stainless Steel wall starter profiles.

EXTERNAL WALL INSULATION & RENDERING

- 10.9.11 Apply 60mm thick Kingspan Kooltherm K5 insulation boards all mechanically to external brickwork of front & side kitchen elevations, provide and fix all PVC trims and angle beads to reveals etc. and apply matching Johnson's high performance render system consisting of basecoat applied in 2 passes with a reinforcement mesh applied between giving a total thickness of 6mm and Silicone enhanced finish. EWI to achieve U Value of 0.28W/m²K.

CARPENTRY & JOINERY

- 10.6.1 Build as in works progress new 220mm x 97mm James Jones timber joist posts at maximum 300mm centres spanning 5.34M between Timber hangers fully nailed to timber bearer within web of box frame and pockets within rear wall of dwelling, joists to be built in but not project into cavity and installed in accordance with manufacturers instructions complete with all noggins & Catic or similar approved 30mm x 5mm x 1.2M long stainless steel resairnt straps built into internal block work at maximum 2.0M c/s. Lay new 22mm Weyroc 'Protect' T & G chipboard flooring across and stuck to new joists allowing 15mm expansion to perimeter with all joints sealed with recommended adhesive. Allow for setting out new joists to match board centres were possible. Should end joints not meet over joists then allow for 100 x 50mm SC3 timber nogging to support joists as required. Note: Once structure is weather tight, excess adhesive is to be cleaned from joints and all boards are to be screw fixed to joists with 65mm gauge 10 screws. New floor height to be set 257mm below existing first floor level - See Sections A-A & B-B
- 10.6.2 Bed on new 100mm x 50mm SC3 treated wall plates to rear ground floor elevation and first floor side elevations. Allow for 30mm x 5mm x 1.2m long galvanised holding down straps at max 2M c/s
- 10.6.3 Supply & fix new 100mm x 50mm C16 treated timber bearer to blockwork with M12 Rawl anchors or resin bolts at maximum 750mm centres to support new mono-glazed rafters
- 10.6.4 Construct new warm deck roof consisting of GRP on 18mm OSB/boards laid over 120mm Kingspan Kooltherm K107 on vapour check of 6mm plywood all secured to firings / joists with 200mm fixings @ 300mm c/s. Provide new 100mm x 50mm C16 treated ceiling joists at 600mm centres secured to wall plate / rafters and galvanised timber to timber connectors fully nailed to 200mm x 50mm bearer bolted through wey of steel box frame.
- 10.6.5 Form new pitched roof / attic room to extension rear elevation with 150mm x 50mm C16 Vac-Vac treated rafters at maximum 600mm centres spanning maximum 2.6M @ 40 deg pitch between new wall plates, braced stothing walls and plumb cut to 200mm x 50mm ridge barge - See Section A-A. Allow for doubling up rafters on side of Velux roof windows RL4 & RL5 and provide double trimmers above and below opening to support intermediate rafters. All connections to be made with galvanised timber to timber connectors and be fully nailed. Provide 50mm treated & reg'd ceiling joists / ribs set 2.2M above new floor level. Construct timber ladders to rear elevation to create 150mm overhang with 150 x 50mm treated timbers and build into new gable blockwork.

New attic floor within extension to be formed with 200mm x 50mm C16 treated & reg'd joists at maximum 600mm centres spanning 3.45M between galvanised timber to timber connectors all fully nailed to 200 x 50mm treated timber bearers bolted through web of beams E & F - See Structural Engineers Details. Provide triple trimmer consisting of 3No joists bolted with 175mm long M10 bolts at maximum 600mm centres with Catic galvanised double soothed plate connector between each located to side of staircase opening with double trimmers supported with Catic timber to timber connectors to support intermediate floor joists. - See Section A-A & A-C Floor plan for setting out details.

Provide and fix 100 x 50mm treated & reg'd first floor ceiling joists at maximum 600mm centres spanning from timber to timber connectors all fully nailed to 200 x 50mm treated timber bearers bolted through web of beams E & F and 100 x 50mm timber bearers anchored to internal blockwork with M10 resin anchors at maximum 750mm centres.

Construct new bulkhead stud walls to attic room of 100 x 50mm treated & reg'd C16 timbers at maximum 600mm centres with double base plate bolted to top flange of Beams E & F and 100 x 50mm top member supporting new rafters at midspan.

Provide 100 x 50mm Tie members at 600mm centres bolted through vertical studs within bulkhead walls spanning over new wall plates and secured to rafters ends to prevent spread - See Section A-A.

10.6.6 Cut out rear hipped roof section including hip & diminishing rafters and cart to skip. Continue existing ridge line to meet new extension section of roof with 200 x 50mm treated & reg'd ridge board. Provide new 150mm x 50mm C16 treated & reg'd rafters at maximum 400mm centres to correspond with existing ceiling timbers plumb cut to ridge and birds mouthed over existing wall plate. Rafter's to be supported at midspan by bulkhead stud walls.

Extend depth of retained 100mm x 50mm rafters within new landing area with 50mm x 50mm treated & reg'd timber gully and screw fixed to underside of same to level rafters and new rafters and accommodate Kingspan insulation boards measured elsewhere.

Provide 100 x 50mm treated & reg'd ceiling joists / ties set 2090mm above landing floor level.

Trim out new & existing rafters to roof light openings RL1, RL2 & RL3 doubling up rafters each side of Velux roof windows and provide double trimmers above and below opening to support intermediate rafters. All connections to be made with galvanised timber to timber connectors and be fully nailed.

Form new attic floor to area of existing dwelling set 362mm above adjacent attic room to extension area (See Section Details) of 200 x 50mm treated & reg'd C16 joists at maximum 600mm centres packed up on 12mm plywood packers & spanning 5.73M between existing timber wall plates and suspended from new beams H & I with galvanised timber to timber connectors fully nailed to 200 x 50mm bearers bolted through web of beam. New floor joists to be suspended between existing 125mm x38mm ceiling joists at maximum 400mm centres with a maximum unsupported span of 2.5M and both connected to new / existing rafters at wall plate junction to prevent spread. Note: Prior to removal of first floor walls existing ceiling joists may need securing to new 200mm x 50mm floor joists via 100 x 50mm solid nogging.

Construct new bulkhead stud walls to landing area of 100 x 50mm treated & reg'd C16 timbers at maximum 600mm centres with double base plate bolted to top flange of Beams G & H & I and 100 x 50mm top member supporting new / existing rafters at midspan.

Construct full width step detail consisting of 2No equal risers with 22mm bull nosed mdf treads from rear attic floor level to 'raised landing' area over existing first floor bedrooms.

10.6.7 Supply and fix 5No Velux GGL C04 2070 Roof Windows 550mm wide x 980mm high complete with EDZ flashing kits to suit and combination flashing kit for windows RL1 & RL2 installation. Allow for working with roofing contractor for correct positioning of Velux windows to suit tile courses and for trimmers etc.

10.6.8 Plumb cut new rafters and provide & fix new 200mm deep PVC structural barge boards & soffit and fascia boards in graphite grey (RAL 7016) to all new elevations of extensions and existing dwelling complete with all jointing strips, corners and fixings etc.

10.6.9 Construct new internal partition to first floor to reconfigure bathroom and mid bedroom, form new cupboard, stairwell & En-suite and to attic floor to create bedroom / landing portion of 100 x 50mm C16 timbers at maximum 600mm centres between double soite plate and shaped head sections with nogging at maximum 1.2M vertical centres to suit plaster board sizes. Provide 18mm plywood diaphragms screw fixed to 25mm x 50mm timbers set within studwork to correspond with all fixing points for plumbing goods, radiator positions, Wardrobe fixings or TV brackets etc.

10.6.10 Supply & fix 3No new Ex. 125 x 38mm softwood internal door casings to new openings to first floor bathroom, bedroom cupboard & new En-suite.

10.6.11 Supply & Fix 3No new Ex 138 x 50mm softwood Fire check casings to new bedroom door ways.

10.6.12 Provide & fix 25mm pre-primed moisture resistant bullnosed MDF cill boards to new window openings W1, W2 & W5.

10.6.13 Form 3No access doors into new attic voids of Ex 100 x 25mm PSE with painted 50mm x 25mm rebates and hang new 18mm MDF doors with 100mm thick Kingspan insulation bonded to the reverse side. Approx 550mm wide x 750mm high.

10.6.14 Construct raised landing area at bottom of new attic staircase with 2No equal risers down to first floor level within new extension with 100 x50mm joists / studwork and 22mm bull nosed shaped treads to match new staircase.

Supply & install new bespoke staircase consisting of 11No equal risers not exceeding 220mm each with minimum going of 255mm and maximum 42 degree pitch line complete with half landings. Stairs to have vertical 35mm x 35mm stop chamfered spindles set so as to prevent a 100mm dia sphere from passing through forming balustrades with overall 900mm high to staircase (measured from pitch line) and to landing areas. Staircase to have 750mm clear width with 90mm x 90mm softwood new posts and wrap around bottom treads - See Stair Details. Risers & treads (non visible elements) to be constructed with MDF & plywood.

10.6.14 Construct raised landing area at bottom of new attic staircase with 2No equal risers down to first floor level within new extension with 100 x50mm joists / studwork and 22mm bull nosed shaped treads to match new staircase.

Supply & install new bespoke staircase consisting of 11No equal risers not exceeding 220mm each with minimum going of 255mm and maximum 42 degree pitch line complete with half landings. Stairs to have vertical 35mm x 35mm stop chamfered spindles set so as to prevent a 100mm dia sphere from passing through forming balustrades with overall 900mm high to staircase (measured from pitch line) and to landing areas. Staircase to have 750mm clear width with 90mm x 90mm softwood new posts and wrap around bottom treads - See Stair Details. Risers & treads (non visible elements) to be constructed with MDF & plywood.

10.6.10 Supply & fix 3No new Ex. 125 x 38mm softwood internal door casings to new openings to first floor bathroom, bedroom cupboard & new En-suite.

10.6.11 Supply & Fix 3No new Ex 138 x 50mm softwood Fire check casings to new bedroom door ways.

10.6.12 Provide & fix 25mm pre-primed moisture resistant bullnosed MDF cill boards to new window openings W1, W2 & W5.

10.6.13 Form 3No access doors into new attic voids of Ex 100 x 25mm PSE with painted 50mm x 25mm rebates and hang new 18mm MDF doors with 100mm thick Kingspan insulation bonded to the reverse side. Approx 550mm wide x 750mm high.

10.6.14 Construct raised landing area at bottom of new attic staircase with 2No equal risers down to first floor level within new extension with 100 x50mm joists / studwork and 22mm bull nosed shaped treads to match new staircase.

Supply & install new bespoke staircase consisting of 11No equal risers not exceeding 220mm each with minimum going of 255mm and maximum 42 degree pitch line complete with half landings. Stairs to have vertical 35mm x 35mm stop chamfered spindles set so as to prevent a 100mm dia sphere from passing through forming balustrades with overall 900mm high to staircase (measured from pitch line) and to landing areas. Staircase to have 750mm clear width with 90mm x 90mm softwood new posts and wrap around bottom treads - See Stair Details. Risers & treads (non visible elements) to be constructed with MDF & plywood.

10.6.10 Supply & fix 3No new Ex. 125 x 38mm softwood internal door casings to new openings to first floor bathroom, bedroom cupboard & new En-suite.

10.6.11 Supply & Fix 3No new Ex 138 x 50mm softwood Fire check casings to new bedroom door ways.

10.6.12 Provide & fix 25mm pre-primed moisture resistant bullnosed MDF cill boards to new window openings W1, W2 & W5.

10.6.13 Form 3No access doors into new attic voids of Ex 100 x 25mm PSE with painted 50mm x 25mm rebates and hang new 18mm MDF doors with 100mm thick Kingspan insulation bonded to the reverse side. Approx 550mm wide x 750mm high.

10.6.14 Construct raised landing area at bottom of new attic staircase with 2No equal risers down to first floor level within new extension with 100 x50mm joists / studwork and 22mm bull nosed shaped treads to match new staircase.

Supply & install new bespoke staircase consisting of 11No equal risers not exceeding 220mm each with minimum going of 255mm and maximum 42 degree pitch line complete with half landings. Stairs to have vertical 35mm x 35mm stop chamfered spindles set so as to prevent a 100mm dia sphere from passing through forming balustrades with overall 900mm high to staircase (measured from pitch line) and to landing areas. Staircase to have 750mm clear width with 90mm x 90mm softwood new posts and wrap around bottom treads - See Stair Details. Risers & treads (non visible elements) to be constructed with MDF & plywood.

10.6.10 Supply & fix 3No new Ex. 125 x 38mm softwood internal door casings to new openings to first floor bathroom, bedroom cupboard & new En-suite.

10.6.11 Supply & Fix 3No new Ex 138 x 50mm softwood Fire check casings to new bedroom door ways.

10.6.12 Provide & fix 25mm pre-primed moisture resistant bullnosed MDF cill boards to new window openings W1, W2 & W5.

10.6.13 Form 3No access doors into new attic voids of Ex 100 x 25mm PSE with painted 50mm x 25mm rebates and hang new 18mm MDF doors with 100mm thick Kingspan insulation bonded to the reverse side. Approx 550mm wide x 750mm high.

10.6.14 Construct raised landing area at bottom of new attic staircase with 2No equal risers down to first floor level within new extension with 100 x50mm joists / studwork and 22mm bull nosed shaped treads to match new staircase.

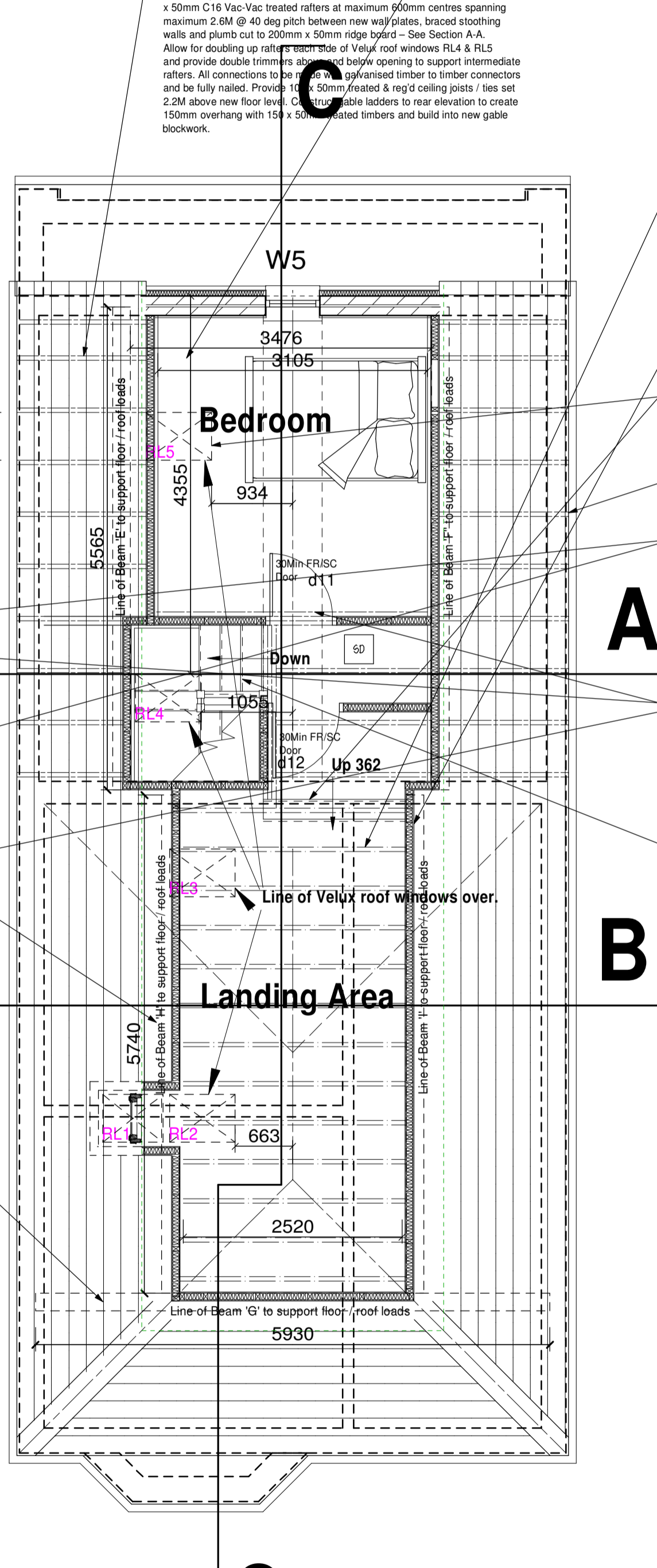
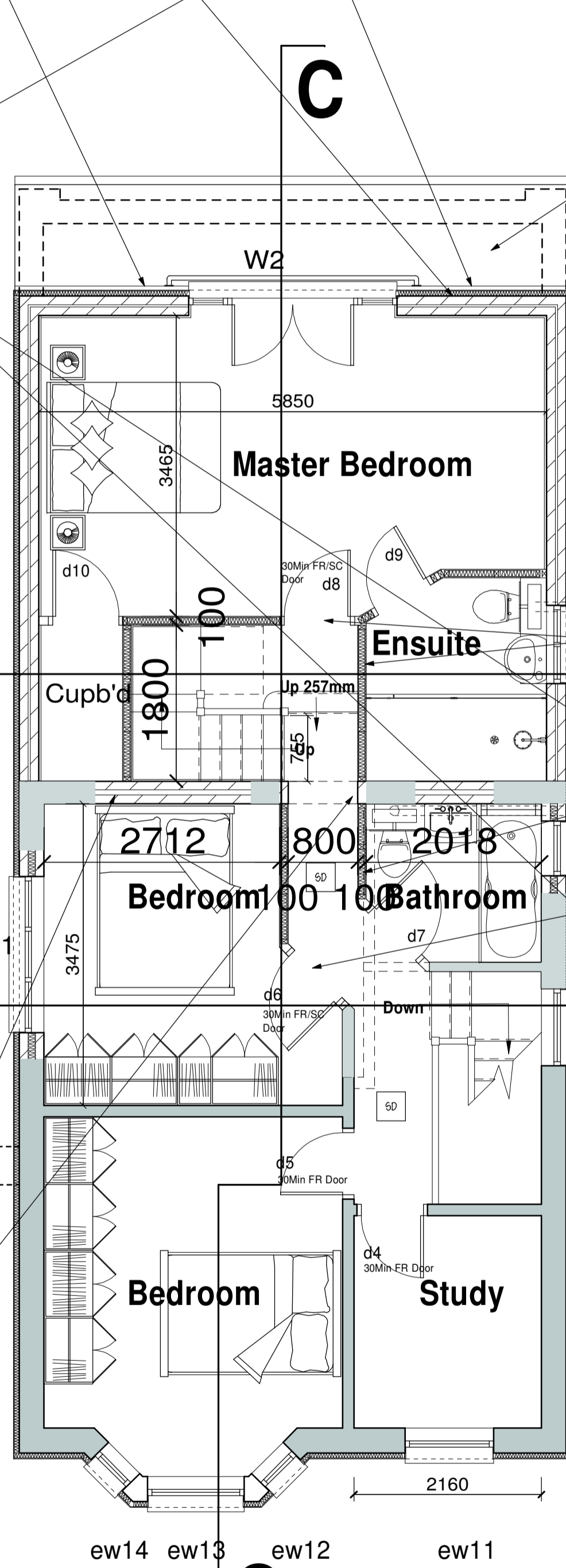
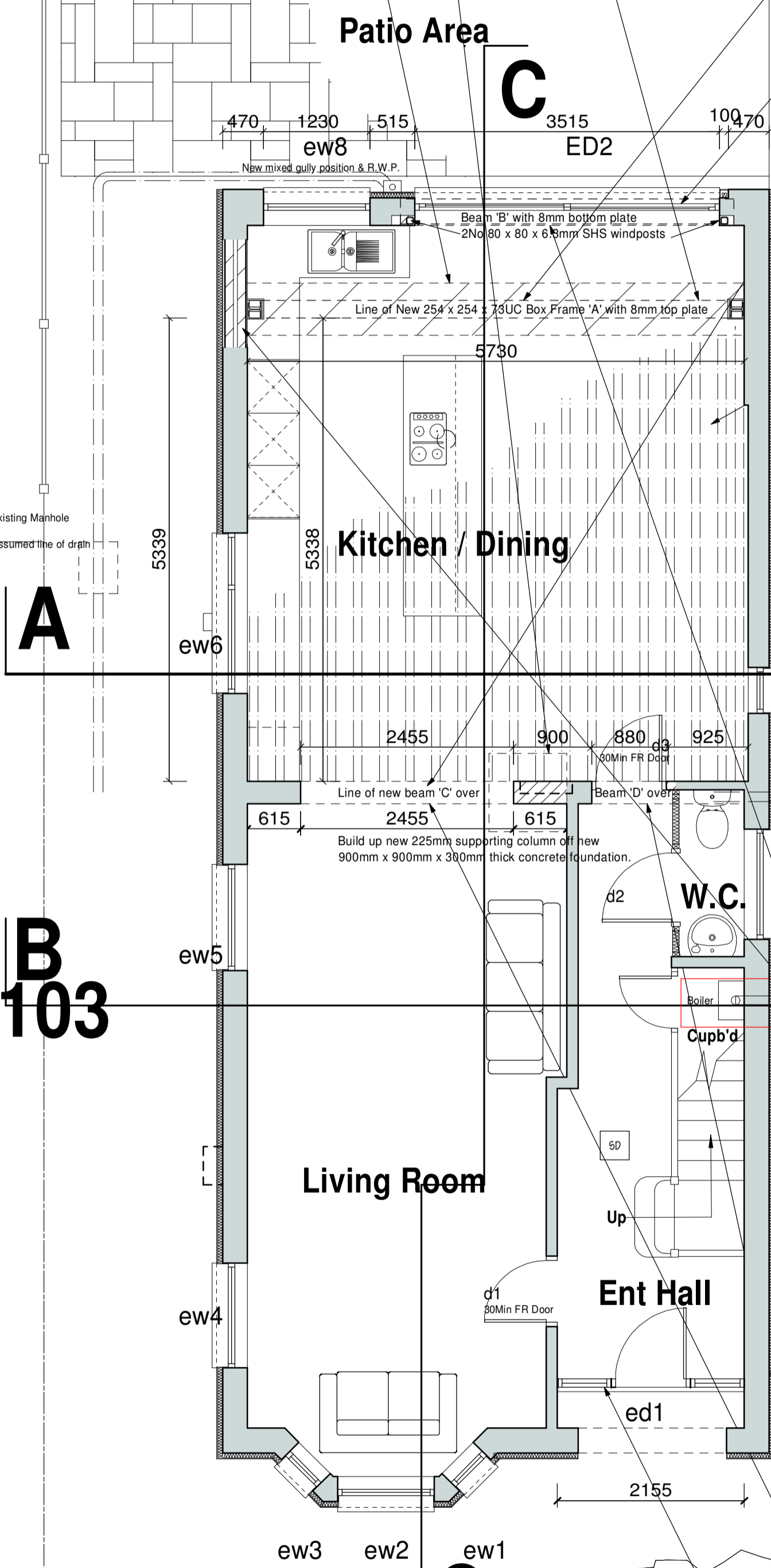
PROPOSED ALTERATIONS, EXTENSION & ATTIC CONVERSION AT 105 HARLAND WAY, COTTINGHAM, EAST RIDING OF YORKSHIRE, HU16 5PT FOR MR & MRS SLATER.

PROPOSED FLOOR PLANS

SCALE: 1:50 @ A1; 1:100 @ A3	NOTES:
DATE: Feb 2020	REV 'A'-Jan 2021 - Projection of first floor not to exceed 5.59M.
DRG No: 272-4-D	Tender Issue 26-04-21
	Rev 'C' / JJ Floor joist centres amended
	EWI added to existing & proposed walls
	D12 added to landing 04-08-22
	Rev 'D' French doors & Juliet balcony added

Michael Bamforth BA Hons
Cherry Blossom Barn
 Harland Way
 Cottingham
 East Yorkshire
 HU16 5TA
 Tel: (01482) 332270

Architectural Design
 Land & Property Survey
 Project Management



STRUCTURAL STEEL WORK

- 10.5.2 Supply & install new steel box frame to Structural Engineers details of new concrete strip foundation - Approx 5.7M wide x 3.34M high. New frame to have plate connection details with M20 (grade 8.8) bolts 8mm thick S275 top plate to support cavity construction and 2No 280 x 60 x 10mm MS plates welded to back of columns pre-drilled slotted holes for Ancon M12 resin anchors to tie into existing external masonry.
- 10.5.3 Provide new bespoke Steel lintel to ED2 opening 3815mm long made up of 150 x 100 x 6mm SHS with 6mm plate welded to bottom to form boot style lintel. Provide 2No 80 x 80 x 6.3mm SHS wind posts anchored to solid floor walls and plumb cut to 200mm x 50mm ridge barge - See Section A-A. Allow for doubling up rafters on side of Velux roof windows RL4 & RL5 and provide double trimmers above and below opening to support intermediate rafters. All connections to be made with galvanised timber to timber connectors and be fully nailed. Provide 50mm treated & reg'd ceiling joists / ribs set 2.2M above new floor level. Construct timber ladders to rear elevation to create 150mm overhang with 150 x 50mm treated timbers and build into new gable blockwork.
- 10.5.4 Provide new Beams 'C' & 'D' to Structural Engineer design each with 8mm ply/lack welded to top flange to support existing masonry over.
- 10.5.5 Provide & install new Beams 'E' & 'F' approx 5.5M in length spanning between dense concrete padstones built into new / existing blockwork to support attic room to extension. See Engineers Calculations for section sizes & bearing details.
- 10.5.6 Provide & install Beam G spanning approx 5.73M between existing ceiling joists on to new dense concrete padstones and supporting beams 'H & I' spanning approx 5.4M over ceiling timbers to support new attic floor joists and existing roof structure. See Engineers Calculations for section sizes & bearing details.

BELOW GROUND DRAINAGE

- 10.13.1 Install new 350mm diameter polypropylene inspection chamber with branch connections to new gully position and long lead - rest bed sited below new external S&V.P. all in 110mm diameter PVC Underground drainage by Polypipe or similar approved with Flexible coupling / connection to existing cast glazed pipes.
- Drainage to be back filled with selected material and compacted in maximum 150mm layers. Make good to existing level to kerb / edging kerbs & paving to match existing. All new / amended drainage runs and connections to be inspected and approved on site with LA building inspector.

NOTE: ELEMENTS OF EXISTING STRUCTURE INCLUDING FOUNDATIONS, BEAMS, WALLS & LINTELS THAT ARE SUBJECT TO INCREASED LOADING ARE TO BE EXPOSED & INSPECTED PRIOR TO COMMENCEMENT OF THE WORK.

10.2.0 ALTERATIONS TO EXISTING

- 10.2.1 Remove existing PVCu window frame ew7 including any lintel, sill board etc. remove existing plaster finishes from reveals, brush off bricks and cart debris to skip. Build up opening in cavity construction with Fibreblock blockwork tied into existing reveals with s/s screw fix ties at maximum 450mm vertical centres and fill fill Drytherm cavity wall insulation.
- 10.2.2 Remove PVC external door frames ed3 & ed3 and internal door / casing ed3 and cart to skip. Carefully demolish existing 1 brick thick internal 'spine' wall from rear main wall of dwelling to rear elevation of single storey addition including 1/2 brick section and masonry pillar between former opening ed2 & side of roof height down to 225mm below F.F.L. and cart away all debris to skip. Allow for removing existing lintels and build in new 415 x 215 x 100mm dense concrete pad stones both sides to receive new steel lintel over - See Steel work & Structural engineers calculations.
- 10.2.3 Remove existing first floor window ew15 including any timber lintels, sill board etc. remove existing plaster finishes from reveals, brush off bricks and build up opening in 225mm / cavity construction to match existing with Fibreblock blockwork tied into existing reveals with s/s screw fix ties at maximum 450mm vertical centres.
- 10.2.4 Remove existing first floor window ew16 including any timber lintels, sill board etc. remove existing plaster finishes from reveals, brush off bricks and cart away all debris to skip. Provide temporary support as required to existing brick / blockwork over and roof leads, form new 600mm wide opening and partially build up former window opening in 225mm / cavity construction to match existing with Fibreblock blockwork tied into existing reveal with s/s screw fix ties at maximum 450mm vertical centres. Make good new reveals and install 2No I.G box lintel 100's over openings with minimum 150mm bearing end. Demolish part existing half brick / block dividing partition between rear bedroom & bathroom from ceiling height down to first floor level and cart away all debris to skip.
- 10.2.5 Provide temporary support as required to existing timber wall plate over and form new 1800mm wide x 1350mm high window opening W1 in side elevation complete with new I.G galvanised & insulated cavity wall lintel with minimum 150mm bearing each end. Make good brick work to reveals and provide 'Dacalite' or similar insulated cavity closers and build up off new lintel to underside of existing wall plate incorporating brick soldier course externally. Note: Brickwork to be set 15mm proud to finish flush with render.
- 10.2.6 Remove existing internal double doors ed2 & casing from opening and set aside for possible re-use. Provide temporary support at maximum 900mm centres to masonry over- and increase opening size to 2455mm wide to centralise opening within rear lounge wall. Allow for removing existing section of half brick wall and build up new 225mm x 615mm blockwork to new reveal incorporating 415 x 215 x 100mm dense concrete pad stones both sides to receive new steel lintel over - See Steel work & Structural engineers calculations. Note: Existing internal Soil & Vent pipe to be removed and drain removed back to external connection point.
- 10.2.7 Provide temporary support at maximum 900mm centres to masonry over and form new internal door opening 875mm wide. Allow for removing existing lintel to internal lead of wall within former shower room and build in new 415 x 215 x 100mm dense concrete pad stones both sides to receive new steel lintel over - See Steel work & Structural engineers calculations.
- 10.2.8 Remove existing aluminium entrance door ed1 & side lights and cart to skip. Plumb cut existing brickwork from sill height of side lights down to F.F.L. and remove brick / blockwork. Ensure brickwork below sill height and reveals are found and provide new 'Hyload' D.P.C below new entrance door frame - See Section Details.