FOUNDATIONS
Nominal 600x225mm RC35 concrete strip foundations to cavity walls fabric mesh reinforcement at bottom. All foundations to be situated centrally under walls. Depth of to be agreed on site with Local authority Inspector. Minimum depth 1000mm in clay. Slab to be thickened beneath non-loadbearing walls and partitions.
Mix for concrete strip foundations to be GEN 3 (Non agressive soils or FND 2)
Details shown for foundations are provisional based upon an assumed ground bearing capacity of 55KN/sq.m.
Foundations to be checked in accordance with structural engineers details.

GROUND FLOOR
150mm concrete slab with a powerfloat finish with reinforcement mesh to the bottom on 75mm Kingspan Thermafloor TF70 insulation boards with 25mm upturned at edges on 1200 gauge damp proof membrane, linked to horizontal dpc all on minimum 150mm sand blinded and consolidated hardcore. Floor construction achieves 'U' value of 0.22W/sq.m.K

EXTERNAL WALLS
Webber through colour render on 100mm Medium blockwork external leaf, 50mm structural cavity with 50mm Kingspan K108 insulation or equivalent. 100mm Lightweight blockwork internal leaf, compressive strength 7N/mm2. Dry lined internally with 12.5mm Gyproc wallboard on Dabs to manufacturers recommendations / specification. Wall Construction to give a 'U'-Value of 0.28W/m2K.

All cavities are to be closed at eaves and verges.

Cavities to be closed at window and door reveals using blockwork returns and Damcor insulated vertical dpc to avoid cold bridging.

Wall ties at 450mm centres vertically and 900mm centres horizontally, staggered and at 225mm centres around openings.

Cavity trays to be provided above all openings in external walls including over meter boxes etc. with weepholes to alternate vertical brick joints. Cavity trays to be be fitted with proprietary stop-ends and weepholes to be formed using proprietary weep vents.

Cavity trays to project 75mm beyond end of lintels.

Movement/construction joints to be formed at with Furfix Cee Jay joint formers with twp part polysulphide based sealant at maximum 12.00m centres to brickwork and 6.00m centres to blockwork.

INTERNAL WALLS
50x100mm timber studs at 400mm centres with 15mm Gyproc Wallboard to achieve 10kg/m2 and a skim finish each side to first floor partitions. 100mm mineral fibre insulating quilt by Rockwool to be provided between timber studs. Moisture resistant boards to be used in wet areas on the walls and ceilings.

All timbers used in partitions to be preservative treated. Cut ends to be treated with site applied presevative.

15mm plasterboard with skim finish to all ceilings to achieve 10kg/m2.

FLAT ROOF
Flat roof construction comprising of Sarnafil single ply membrane on nom 130mm thick Kingspan Thermaroof TR27 insulation board on 18mm thick ply deck on timber firrings to falls on 47x195 C16 joist @ 450mm cc on 15mm plasterboard. Roof construction to achieve 0.18W/m2K
Single ply membrane to be taken up wall and trim dressed into brickwork joint and sealed as per manufacturers recommendations. All calculations of roof design to be submitted for approval prior to commencement on site.

75x100mm preservative treated softwood wall plates fastened to inner leaf with 30x5x1000mm long galvanised mild steel straps at maximum 2000mm centres, each with 6 No fixings into blockwork.

30x5x1500mm long galvanised mild steel lateral restraint straps with 100mm turn down fixed to blockwork and fastened to rafters and ceiling joists of 3 No trussed rafters at gable walls at maximum 2000mm centres with 50x100mm timber noggins beneath straps and between rafters and joists or alternatively fastened over binders.

10mm continuous air gap to eaves to be provided using proprietary ventilation units at eaves, all in accordance with manufacturers recommendations.

100mm Kingspan TP10 or similar between rafters with 57.5mm Kingspan Kooltherm K118 under rafters to give a minimum 'U' Value of 0.16W/sq.m.K. Insulation to have minimum 50mm clearance at eaves for ventilation.

PITCHED ROOF
Rooftiles to match existing on preservative treated softwood battens on Klober Ltd Permo roofing membrane. Rafters/ Attic truss design to specialist manufacturers design and details. All calculations of roof design to be submitted for approval prior to commencement on site.

75x100mm preservative treated softwood wall plates fastened to inner leaf with 30x5x1000mm long galvanised mild steel straps at maximum 2000mm centres, each with 6 No fixings into blockwork.

30x5x1500mm long galvanised mild steel lateral restraint straps with 100mm turn down fixed to blockwork and fastened to rafters and ceiling joists of 3 No trussed rafters at gable walls at maximum 2000mm centres with 50x100mm timber noggins beneath straps and between rafters and joists or alternatively fastened over binders.

10mm continuous air gap to eaves to be provided using proprietary ventilation units at eaves, all in accordance with manufacturers recommendations.

STEELWORK
Structural steelwork to comply with BS 449 AMD, BS 4360 and BS 5950. Calculations are to be submitted to and approved by the Local Authority prior to commencement on site.

Powder coated galvanised steel lintels to all openings in external walls by Catnic ref.CG70/100 or similar with min 150mm bearing each end and Lintel arch centres where required.

Wall ties to be stainless steel by Ancon or similar.

DOORS AND WINDOWS
Door and window frames to be purpose made PVCu to give a minimum 'U' Value of 1.8W/sq.m.K.
All windows to be double glazed. (Low E argon filled with 16mm gap between panes).
Window and door frames to be set back to cloak the vertical insulation by 30mm.
All full height glazing is to comply with BS 6262.
All glazing is to comply with Part N1 of the Building Regulations.
All bedroom windows to have minimum 450x450mm (0.33m2) opening casement to provide means of escape in the event of a fire.

VENTILATION
Extractor fans in bathrooms ducted to external air. Fans to be contolled by light switch or humidistat with over-run to give a minimum of 3 air changes per hour.
Minimum 8000sq.mm background ventilation to habitable rooms and kitchen provided by controllable window ventilators.
Rapid ventilation to habitable rooms and sanitary accommodation to be provided by window opening being a minimum of $^{1}/_{20}$ of the floor area.
Rapid ventilation to kitchen to be provided by a cooker hood ducted to external air and extracting minimum 30 litres per second.

DRAINAGE
100mmØ PVCu pipes to BS EN 1401 with flexible joints laid to minimum 1:60 falls on minimum 150mm pea gravel bed.

Inspection chambers to be pre-formed polypropylene, 480mmØ to foul and surface water drains with screw down fixed removable covers.
Drains with less than 600mm cover generally to be protected with 100mm concrete.

Drains passing through wall to have 150mm pea gravel surround extending 900mm on each side of wall and concrete lintel over.

Rigid sheet material to mask 50mm clearnace around opening in wall with void filled with compressible sealant to prevent ingress of gas.

Soild plastic covers or metal gratings to be fitted to all access gullies.
Foul waste pipes from sinks etc and rainwater down pipes to discharge below grate of gullies.
32mmØ waste pipe to wash handbasins.
40mmØ waste pipe to sinks and baths.
40mmØ waste pipe to washing machine and dishwasher.
100mmØ waste pipe to wc's.
100mmØ PVCu soil vent and waste pipe with balloon grating at terminal. Bend at base of pipe to be 200mm radius with lowest connection being minimum 450mm from bend. Internal soil vent and waste pipes to vent to external air via tile or ridge vents.
Rodding points in soil vent and waste pipes to above the spillover level of appliances.
Vent pipes within 3.00m of opening windows and doors or air intakes to terminate 900mm above opening.
Rainwater to be collected in 125mmØ half round PVCu with 75mmØ rainwater downpipes, colour to be agreed.

FIRE SAFETY
Self contained automatic smoke detectors as indicated on layout plans are to be positioned on ceiling minimum 300mm from any light fitting etc and are to comply with BS 5446: Part 1: 1990.

Smoke detectors to be maximum 7.00m from kitchen and/or living room door and 3.00m from any bedroom door measured horizontally.

Smoke detectors are to be permanently wired to a separately fused circuit at the distribution board.

Smoke detectors are all to be interconnected.

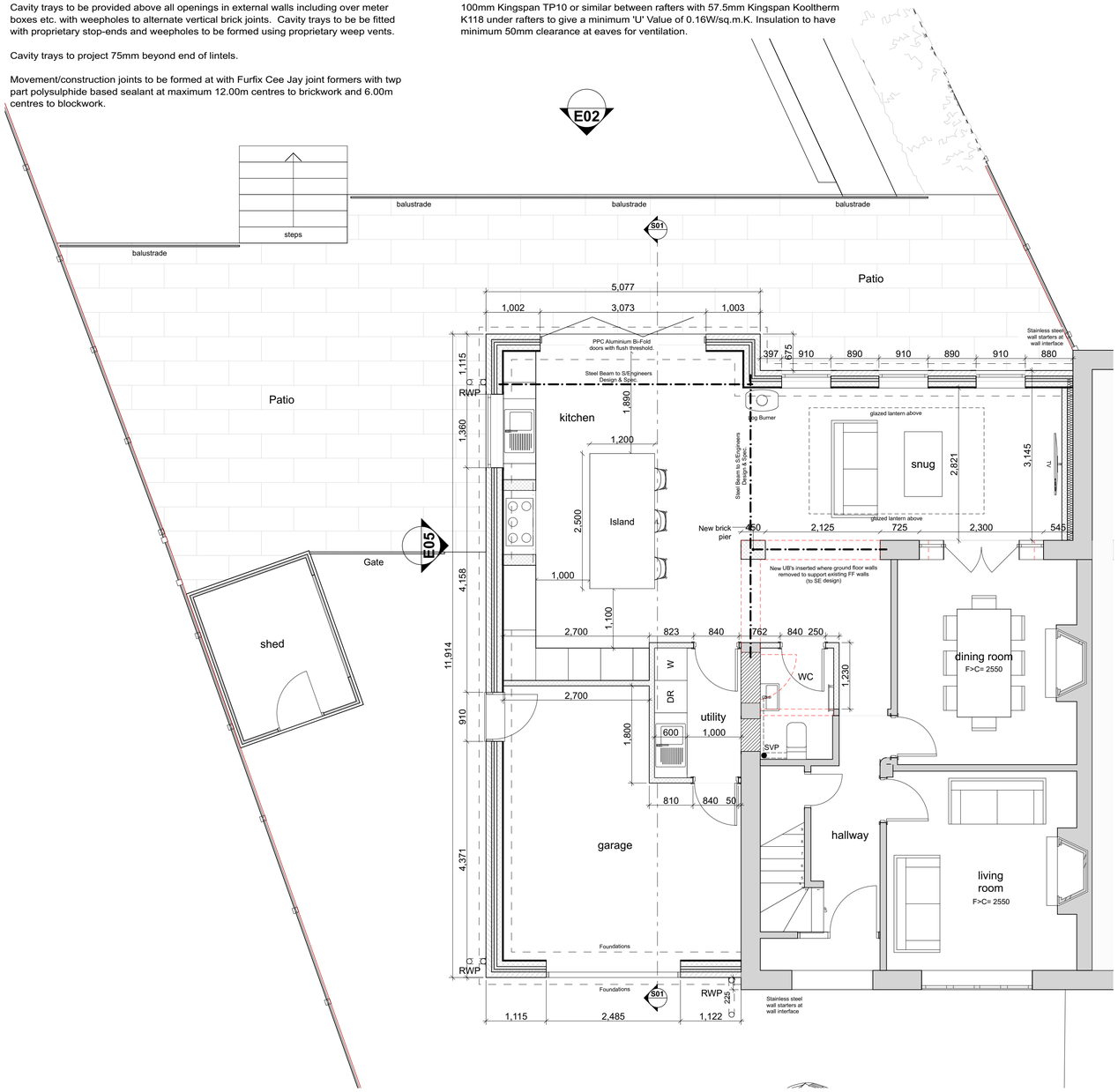
'FE' indicated on windows denotes requirement for opening sash to be minimum 0.33m2 and 450x450mm for means of escape in the event of a fire.

CENTRAL HEATING
Radiators to all rooms.

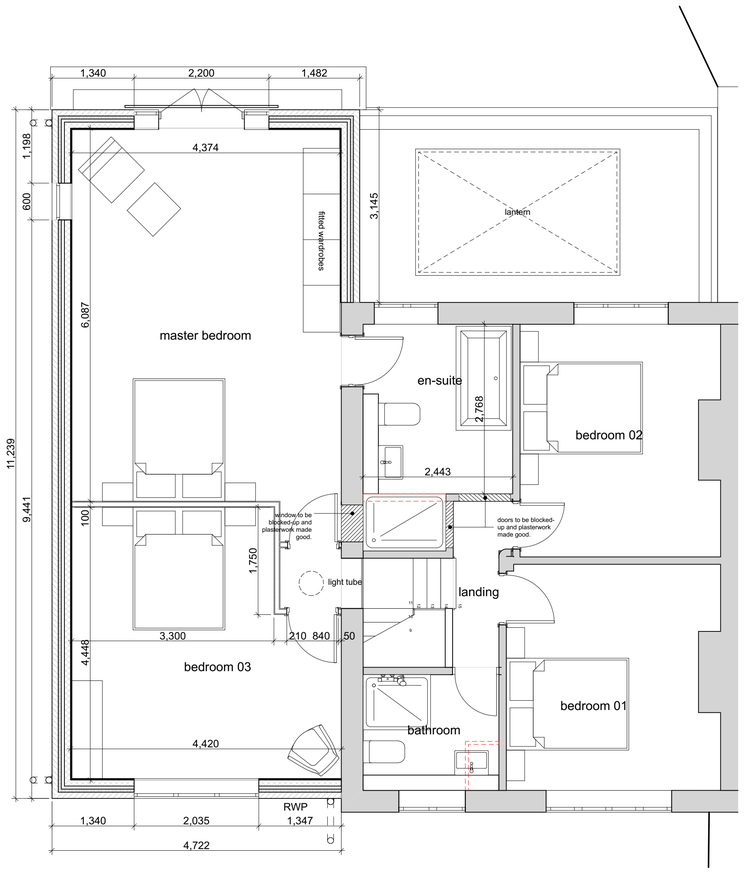
ELECTRICS
Hall, lounge and kitchen to be illuminated by fixed lighting that only takes lamps having a luminous efficacy greater than 40 lumens per circuit-watt.

Power sockets and switches to be sited between 450mm and 1200mm above floor level in accordance with Part M2 of the Building Regulations.

All electrical work required to meet the requirements of Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Council should be satisfied that Part P has been complied with. This will require an appropriate BS 7671 Electrical installation certificate to be issued for the work by a person competent to do so.



Ground Floor Plan
1:50



First Floor Plan
1:50

PLANNING

client
Mr J.Bestwick
117 Sleetmoor Lane
Swanwick
Somercotes
DE55 1RE

drawing name
PROPOSED GA PLANS

drawn by
IC

drawing scale
SEE DRAWING
SCALED AT A1

drawing reference
SLE001

project

Date
JULY 2019