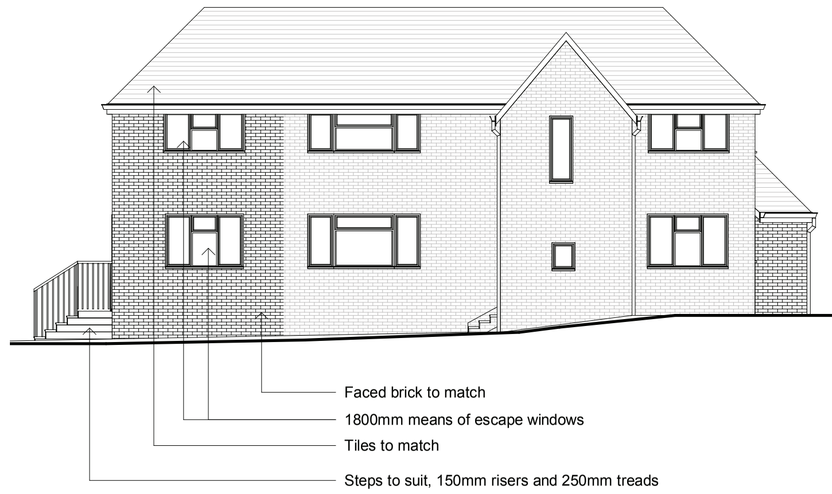
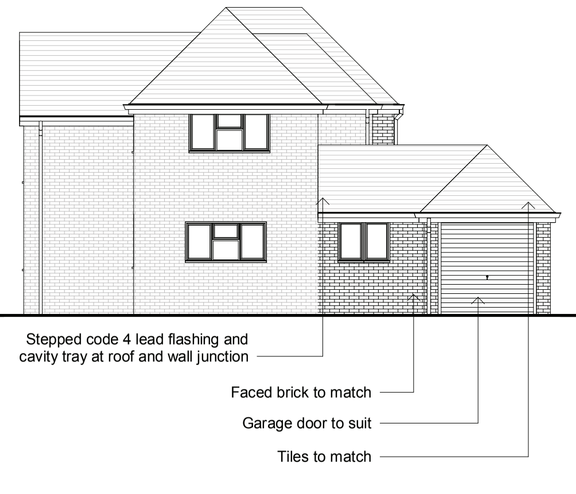
ARUN DISTRICT COUNCIL 26/08/2019/MA

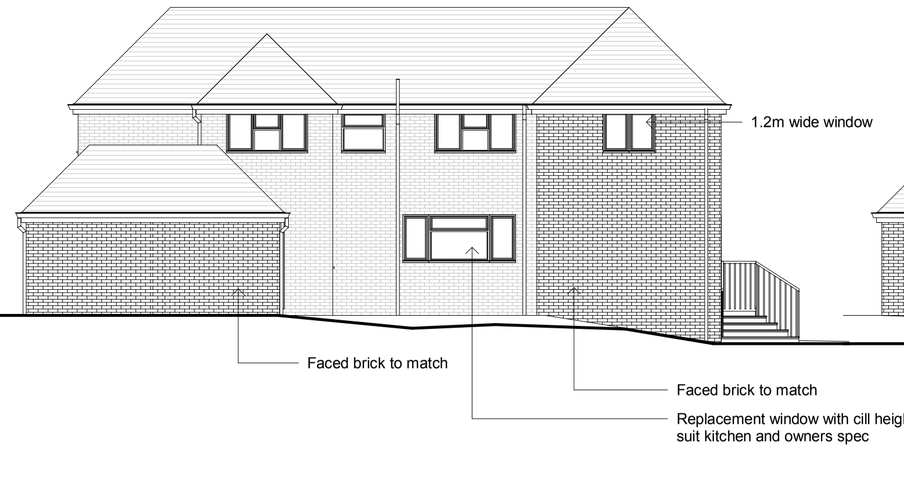
Front Elevation



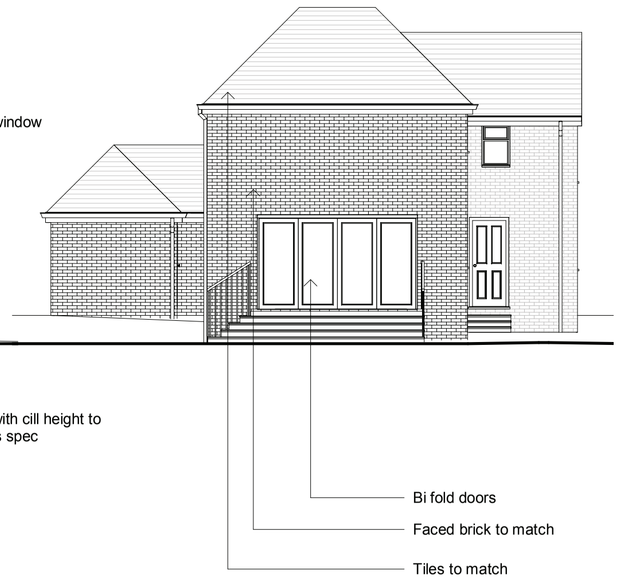
Side Elevation

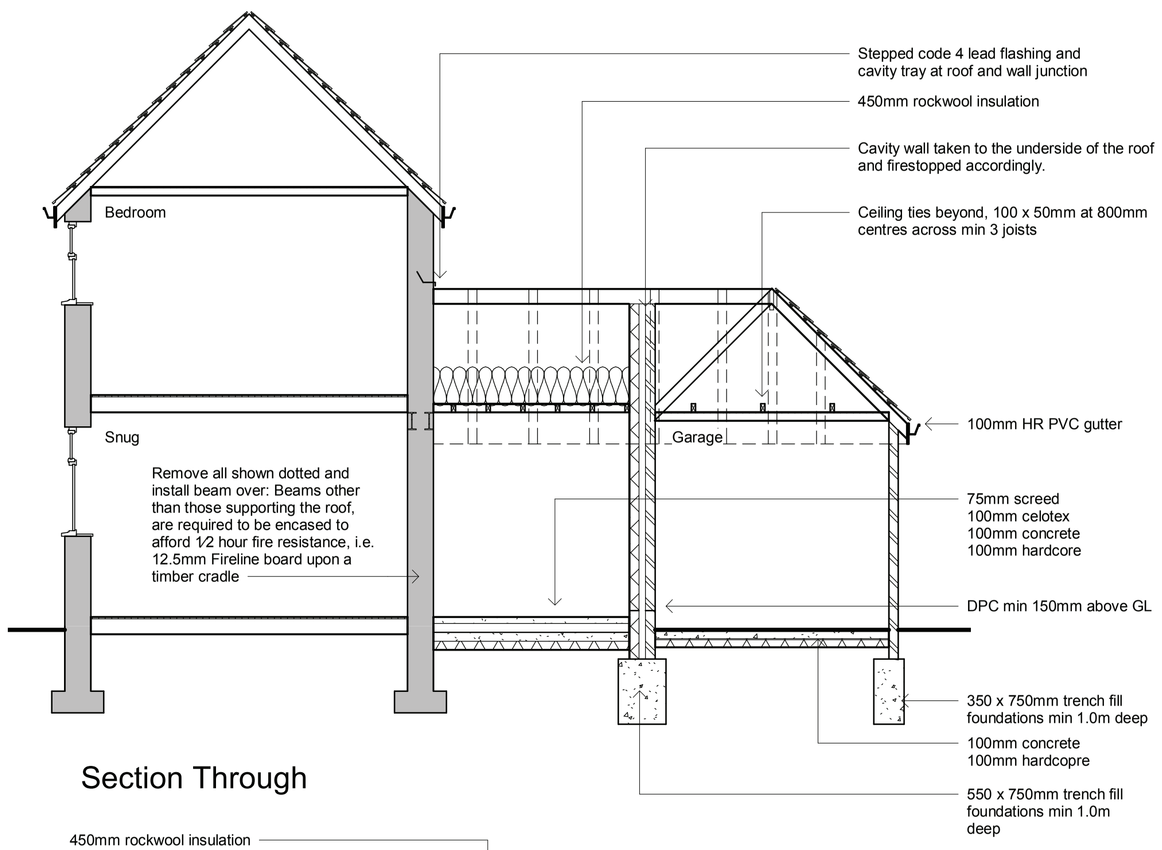


Rear Elevation

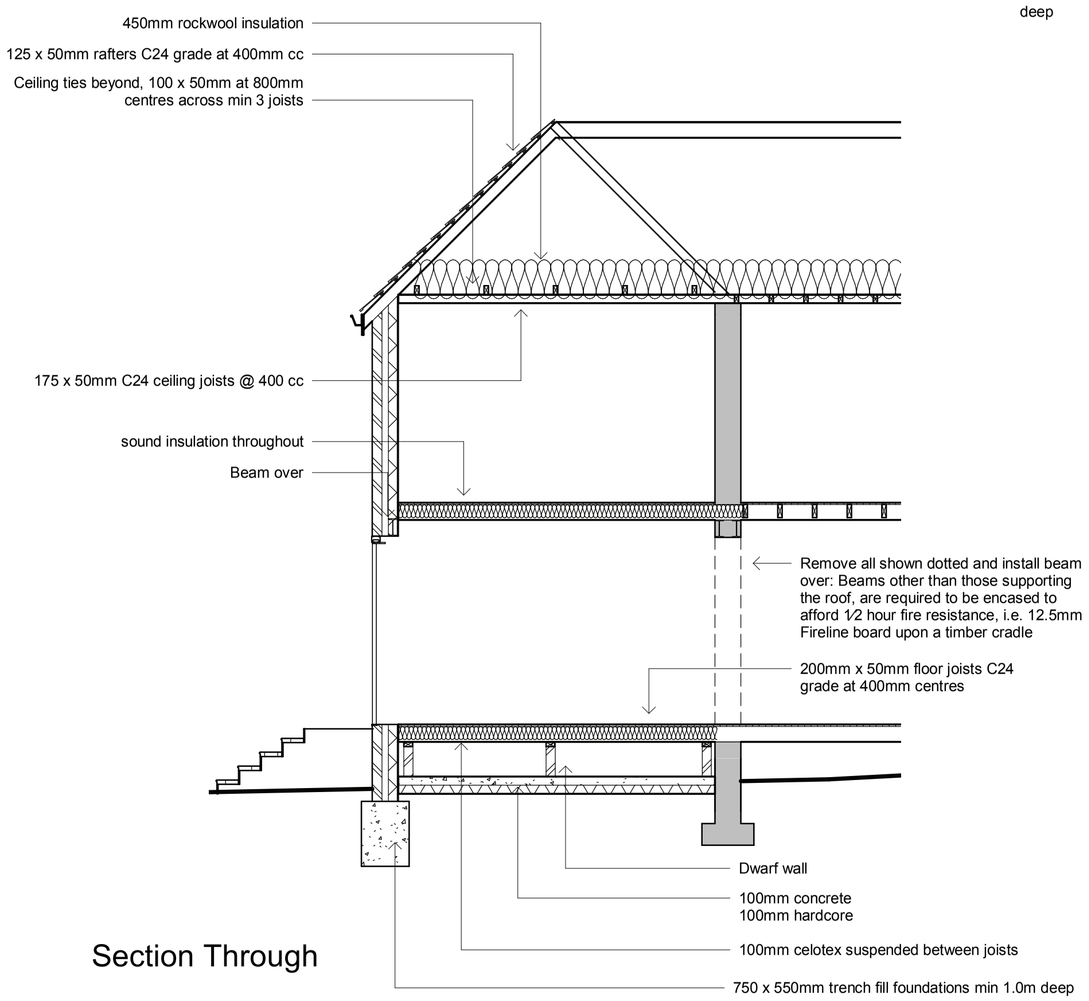


Side Elevation





Section Through



Section Through

Beam No	Beam Size	Bearing 1	Bearing 2	Comments
R1	125 x 50mm timbers at 400mm centres			Rafters to main roof
R2	100 x 50mm timbers at 400mm centres			Rafters to garage
CJ1	175 x 50mm timbers at 400mm centres			Ceiling Joists, C24 grade timbers
CJ2	150x 50mm timbers at 400mm centres			Ceiling Joists to garage
B1 if required	152 x 89 x 16 UB			
B2	Catnic CN5XA			First Floor Bedroom /Hall opening
B2 Alternative	127 x 76 x13 UB			
F1	200 x 50mm timbers at 400mm centres			Floor joists
B2, B3	200 x 90 x 30 PFC	450mm x 100mm x 20mm bearing plate	450mm x 100mm x 20mm bearing plate	Ground floor dining room/kitchen opening. Beams bolted together at 750mm centres with M16 bolts
B4	254 x 146 x 37 UB	Minimum 225mm bearing onto a 450mm x 100mm x 20mm bearing plate	Minimum 225mm bearing onto a 450mm x 100mm x 20mm bearing plate	Beam to be galvanised, with a 10mm thick steel plate stich welded to bottom flange. Provide 10mm triangular stiffeners at 900mm centres welded to beam and plate
B5, B6	178 x 102 x 19 UB	300mm x 100mm x 20mm bearing plate	300mm x 100mm x 20mm bearing plate	
Wall W1				Wall built in 7.3 MN/m2 blocks
Wall W2				Wall built in 7.3 MN/m2 blocks

Building Regulation Notes

All building work is to be carried out in accordance with all current Building Regulations and Codes of Practice in force at this time. Any parts of structure covered over or inaccessible have not been inspected and no responsibility is accepted for these areas including underground. These construction notes are for the purposes of Building Regulation approval only and do not represent a detailed specification. The property owner is reminded of the requirement to serve a Party Structure Notice on any adjoining owner should they need to do so under the requirements of the Party Wall Act l996.

Foundations

To all cavity walls, provide 750mm x 550mm trench fill foundations (1:2:4 concrete mix). All foundations to be minimum 1.0m below ground level to suit ground conditions and at least to the depth of all adjacent drain inverts with the exact depth to suit site conditions. Provide 750mm x 350mm trench fill foundations (1:2:4 concrete mix) to garage walls.

External Walls

Cavity walls comprising faced brick with 100mm cavity with 100mm Dritherm cavity batts, inner leaf 100mm Thermalite Turbo or equal and approved blockwork min 3.5 N/mm². All walls constructed using 1:1:6 mortars or 1:5 masonry cement mortars. Finished with 13mm lightweight plaster internally. Horizontal strip polymer (hyload) damp proof course and cavity trays in new walls min 150mm above adjacent ground level in external leaf. DPC to be lapped with existing wall DPC and with floor DPM and tanking. Vertical DPC to be installed at all reveals where cavity is closed. Blockwork below ground level to be Class A dense concrete or alternatively semi engineering brickwork. Cavities below ground level to be filled with lean mix concrete up to ground level and min 225mm below damp proof course. Where drains pass through external walls provide 65mm deep x thickness of wall pre-stressed concrete lintel over in each leaf of wall. Minimum cover over drains to be 50mm clear. Mask opening with sheet material to prevent entry of fill or vermin. Ensure that at all openings no cold bridging occurs by using a proprietary system such as Thermabate Closers, or similar approved. All walls constructed with stainless steel wall ties built in at 450mm centres vertically and 750mm centres horizontally in staggered rows. Doubled up at corners and reveals. All external walls running parallel to floor and roof to be restrained at upper floor and roof levels using 1000 x 30 x 5mm galvanised mild steel horizontal restraint straps built into walls at max 1200 centres and screw fixed to joists. Weep holes to be provided adjacent to ground level and over openings/cavity trays etc every third perpendicular. All making good to match existing and dissimilar backgrounds reinforced to obviate cracking. The new cavity wall construction is to be fixed back to the existing structure with stainless steel wall connectors with the vertical joint perpend between the existing and new weather sealed with a pre-compressed sealing strip or polymer based sealant. All cavities are to be continuous. External garage walls to be 100mm faced brickwork to match existing with 225 x 225mm piers at corners and at maximum 3m centres.

Ground Floor

Topsoil and vegetable matter to be cleared from site and floor to be in filled with minimum 150mm/maximum 600mm clean sand blinded compacted hardcore. Any airbricks covered to be ducted through the oversite to external air via 100mm dia ducts. A 300um (1200g) continuous polythene DPM is to be lapped & sealed at all joints, laid over sand blinded hardcore & linked to DPC's in walls. Provide an insulated-up stand to the perimeter of the floor. On a minimum 100mm thick concrete floor slab with a trowel smooth surface. Install a 500guage polythene vapour control layer between the concrete slab and 100mm Celotex insulation. All finished with a minimum 75mm screed. Garage floor to be 100mm over site concrete on 100mm clean, well compacted broken hardcore.

Upper Floors

Floor to be sound resistant, 22mm flooring grade chipboard (t & g) of at least 15kg/m² (moisture resistant to bathrooms) on new floor joists as indicated on plan at 400mm centres. Ceiling lined with 12.5mm Soundbloc plasterboard with set finish; 150mm Rockwool general-purpose insulation roll in the floor void for sound insulation. Floor joists to be restrained with 1000 x 30 x 5mm mild steel straps at 1.2m centres screw fixed securely. All joists to have 38mmx38mm SW herringbone strutting at mid span for spans between 2.5 and 4.5m and also at 0.33/0.66m-x span for spans over 4.5m.

Pitched Roof

Tiles to match existing, on 25 x 38mm treated battens on type 1F breathable sarking felt to BS747 on roof trusses at 600mm centres. Fascia and sofit to match existing with continuous 25mm vent and fly-proof screen. Pitch and detailing to match existing. 12.5mm soundbloc ceiling lined with 1000-gauge polythene vapour barrier over 450mm rockwall insulation in between joists in two layers. Provide ridge ventilators to assist cross ventilation. 100mm x 50mm wall plate strapped to walls at 2000mm centres using 30 x 5mm mild steel straps. An eaves protection sheet (carrier) will be installed over the fascia board overlapping the roofing felt by 150mm.

Internal Walls

First floor walls to be timber stud partition walls to be constructed of minimum 100 x 50mm studding at 400mm centres with sw base and head plates and cross noggings at maximum 1200mm centres. Insulated with 100mm quilt for sound insulation, faced both sides with 12.5mm Soundbloc plasterboard finished with set.

Ventilation

New windows to provide open able ventilation area of not less than 1/20th of the floor area of the rooms, which they serve, all fitted with a minimum 8000mm² trickle ventilator. All glazing in those critical locations to be of toughened or laminated safety glass in accordance with clause 5.3, BS6206. Bathrooms to be provided with an extract fan capable of extracting not less than 15 litres per second operated intermittently and ducted to external air and a minimum 4000mm² trickle ventilators. All new windows to be double-glazed PVC with 16mm argon gas filled cavity and a soft coat low-E glass. To achieve a U value of 1.40 W/M2K, External doors to achieve a U value of 1.6 W/M2K All bedrooms shall have a window at least 750mm high and 450mm wide when open located to allow means of escape access with a cill height of between 0.8m and 1.1m above floor level.

Smoke Detectors

At least one number mains operated self-contained smoke alarm to BS 5446: Part 1 with battery backup to be installed in the circulation space of each storey. All smoke alarms within each dwelling to be inter-connected, be permanently wired to a separate fused circuit at the distribution boards in accordance with IEE Regulations. They may operate at a low voltage via a mains transformer. Smoke alarms must be installed within 7m of the living room and kitchen door, within 3m of all bedroom doors and within 15m of each other in corridors or landings. If ceiling mounted, smoke alarms should not be installed within 300mm of a light fitting. If wall mounted, smoke alarm should not be over radiator and should be fixed elsewhere within 150 and 300mm of the ceiling. Provide a heat detector within the kitchen.

Electrics

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 may require an appropriate BS 7671 electrical installation certificate to be issued for the work by a person competent to do so.

At least 75% of new light fittings will be low energy lighting.

Foul Water Drainage

Direction of drains to be confirmed upon commencement, manhole cannot be lifted.

Bathroom and all to discharge into existing soil and vent pipe. Kitchen waste to discharge into new gully and drain. All fittings to be provided with trapped waste pipes as follows: Sink, shower & baths 40mm diameter Wash hand basin - 32mm diameter WC - 100mm diameter Common waste pipes to be 50mm diameter. All traps to be 75mm deep seal & all waste pipes are to be fitted with rodding access on tight bends. Common wastes or runs in excess of 1.7m long are to be fitted with anti-syphonic traps. Soil and vent pipe or stub stack within the building to be fitted with a "Durgo" air admittance valve. This valve to be situated above the overflow of the highest appliance. Soil and vent pipes to terminate 900mm above any opening windows within 3.0m including a PVC cage. All drains to be 100mm dia UPVC pipes laid and surrounded in 150mm of pea beach to fall 1 in 40, provide concrete cover where invert is less than 450mm.

Surface Water Drainage

Rainwater to 100m half round PVC gutter laid to falls to new 65mm down pipes to discharge to new soak away. New soak away min 5m away from any building to be 2.0m³ below invert of drain, filled with hardcore and covered with 50mm lean mix concrete on 1000-gauge polythene. Drain to be 100mm diameter UPVC laid to min fall of 1 in 40, bedded and surrounded in pea beach.

Revisions

0.5 0 0.5 1 1.5 2 2.5
SCALE 1: 50 m

0.5 0 0.5 1 1.5 2 2.5
SCALE 1: 50 m

A - June 2019

Structural info added

B - June 2019

Revisions to satisfy the conditions:

1: Ensure the windows either side of the french doors accord with BS 6180 glazed barriers

2: Heating: Any radiators to be installed into new rooms are to be fitted with TVR's

3: July 2019

Clients revisions

Materials

Drawing Number	2019/73	Sheet	2 of 2
Size	A1	Scale	1:50, 1:100

Project

Proposed details
May 2019

Job Title

25 Stewards Rise
Arundel
West Sussex
BN18 9ER

Do Not scale from this drawing except for planning as photocopies will be subject to distortion
Drawings to be read in conjunction with all other Designers and structural engineers contract drawings and specifications:
Any discrepancies must be brought to the attention of the Designer immediatialy.
The contractor must verify all dimensions by site measurement before ordering materials or manufacturing components
Substitute materials and products to those named will be acceptable if proven to be of equal or higher performance and not in conflict with other elements

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