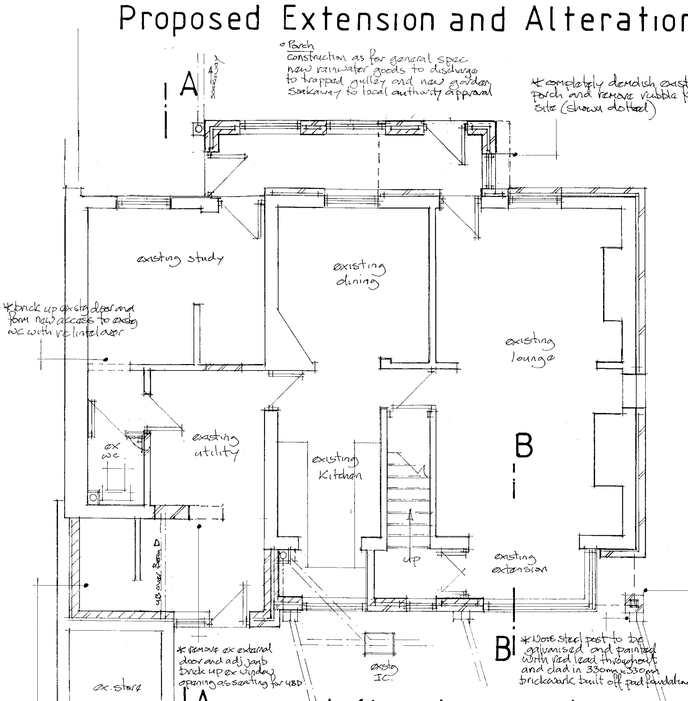
Proposed Extension and Alterations at 'Springbank Cottage', 273, Eaves Lane, Armshead, Staffs.

scale 1:50 + 1:100

*NOTE This drawing has been prepared for submission to Local Authority for statutory approvals. Main contractor to verify all dimensions scaled or otherwise and establish exact lines, access points and invert level of drains prior to commencement of site work

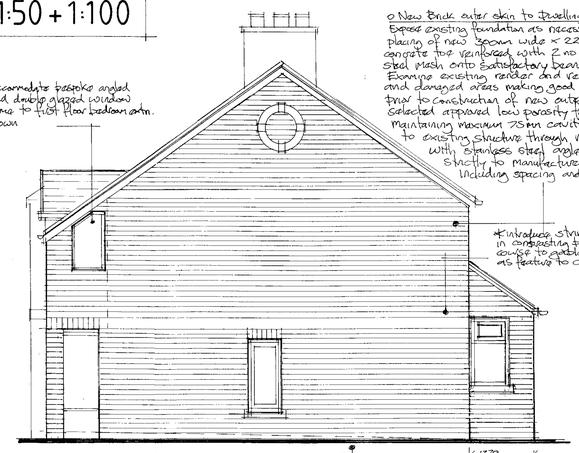
- Porch construction as for general spec new rainwater goods to discharge to trapped gullies and new garden soakaway to local authority approval
- completely demolish existing Porch and remove rubble from Site (shown dotted)
- remove existing guttering and strip back existing tiles to suitable to allow existing span feet to be extended to clear new brick leaf to ex. wall. Renew all defective timbers, and replace tile covering on new treated battens and reinforced breathable membrane. Renew eaves guttering as required
- brick up existing bedroom access and form new 215 solid brick partition faced with plasterboard on backing (100mm rockwool and new doorway formed with r.c. support lintels over
- Flat Roof over Utility Room suitable non-slip tile or textured surface to GRP external weatherproof finish by specialist installers, laid on suitably vapour control membrane over 21mm ext ply deck, laid to fall 1:60 across room s/w counter battens (to assist roof ventilation) on 190×47 s/w C16 joists at 450mm ctrs enclosing celotex XR3165 (165mm) insulating board to 12.5mm wood joists underdrawn with 12.5mm plasterboard incorporating vapour control membrane - all to achieve min 0.20 w/m²K U Value.
- Existing Roof Line and floor shown dotted
- brick up existing door and form new access to existing WC with re-linted door
- remove ex external door and adj jamb brick up ex window opening as searching for UBD
- 102mm steel post to be galvanised and painted with red lead throughout and clad in 330mm x 330mm brickwork built off pad foundation
- Corner Post and Lintel Install hollow section square steel post with welded base plate bolted into 600 x 600 x 225 mm concrete pad reinforced with 2 layers B503 steel mesh to satisfaction of local authority Surveyor. First floor to be supported off Catnic Corner Lintel to manufacturers design specification
- Guarding to balcony - install purpose made tempered toughened guarding to edge of flat roof, set 915 min. 1100mm above floor level. No openings to exceed 100mm Ø and made and secured to resist min 0.74 kn/m² thrust
- replace ex. soil pipe in vent and extend terminal through roof with lead flash weathering and carry to room internal spalling windows with PVC cage at terminal
- New Entrance Porch Roof spec generally as main extension but use 100×38 s/w C16 rafters at 450 ctrs and 100×75 wall plate support, 100×38 s/w ceiling joists at 480 ctrs spiked to spar feet, 100×50 s/w eave plates fixed bolted to ex. wall as support to ceiling and spar ends.
- Insulation to match general specification main roof
- Lintels Provide catnic or similar steel lintels with min 150mm end bearings throughout
- Pitched ceilings (Bedroom) Extend ex roof over loads 5/8 spars at 400 ctrs and vistafil Celotex Tuff-R-Gard 3500 board between spars and polyiso Tuff-R 3000 board beneath with foil tape joints and 12.5 plasterboard lining to give 0.20 w/m²K U value
- New Steelwork - to engineers design sheets - all encased in gypsic P/plate board to achieve 30 mins fire resistance and secured on reinforced concrete padstones
- Bedroom dormer and en-suite roof Roof spec as for porch roof with 260mm rockwool insulation to ceiling void. Vertical clay tile hanging to dormer face on battens on breathable membrane on 18mm ext ply on 100×50 s/w beams 150×50 s/w beam over windows
- 6mm lead gutter on 18mm ply over 150×38 lay boards at valleys
- NOTE This drawing has been prepared for submission to Local Authority for statutory approvals. Main contractor to verify all dimensions scaled or otherwise and establish exact lines, access points and invert level of drains prior to commencement of site work
- New Brick outer skin to dwelling Excavate existing foundation as necessary to allow placing of new 450mm wide × 225mm deep concrete trip reinforced with 2 no layers B503 steel mesh onto satisfactory bearing strata. Examine existing residual and remove all loose and damaged areas making good as necessary prior to construction of new outer layer of selected approved low porosity facing brickwork maintaining maximum 75mm cavity and tied to existing structure through render coats with stainless steel angle cramp ties strictly to manufacturers specification including spacing and mechanical fix
- Introduce string courses in contrasting brick or detail course to provide brickwork as feature to client spec.
- NB reduce ground levels adj to new gable wall to ensure min 150 clearance below new dpc. (Plan level)
- NOTE thoroughly examine existing previously constructed retaining wall to boundary to assess suitability to receive additional first floor load. Expose elements of existing structure as necessary to establish conclusion to full satisfaction of local authority surveyor
- Provide 150mm dpc cavity tray over ex wall provide lead cover flash to expose render line



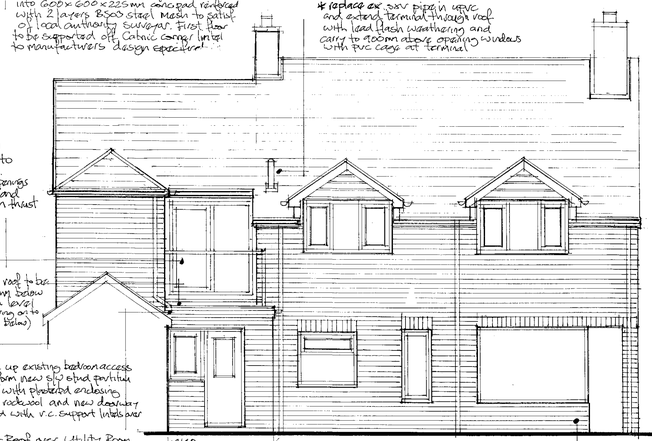
A ground floor layout plan



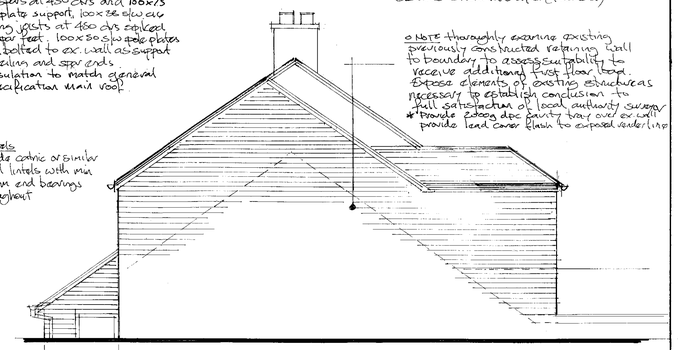
proposed front elevation



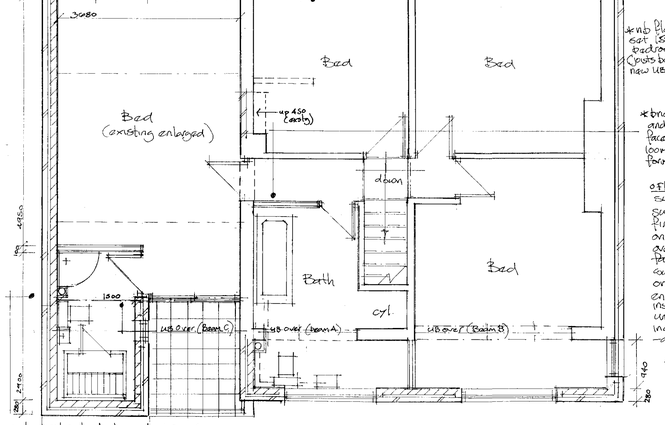
side elevation to drive



proposed rear elevation

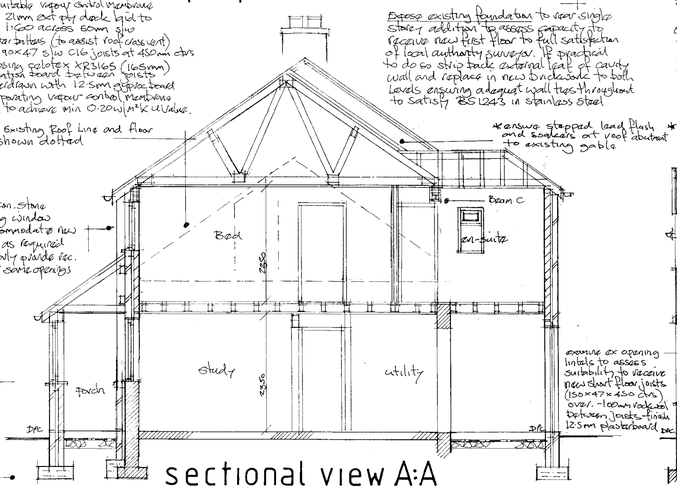


side elevation to boundary

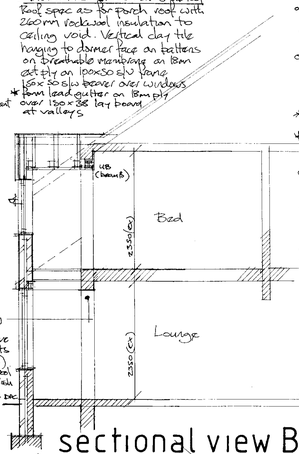


first floor layout plan

- widen existing window opening with new r.c lintel (or catnic) over, install new window unit with opening light capable of use in emergency escape (min 0.33m² - 450×450)
- Express existing foundation to rear single storey addition to assess capacity to receive new first floor to full satisfaction of local authority surveyor. If practical to do so strip back external leaf of cavity wall and replace in new brickwork to both. Levels ensuring adequate wall ties throughout to satisfy BS 1243 in stainless steel
- ensure stepped lead flash and soakers at roof abutment to existing gable
- Incorporate recon. stone cills at existing window positions to accommodate new brick outer leaf as required throughout. Similarly provide rec. stone lintels over some openings
- ensure ex opening lintels to assess suitability to receive new steel floor joists (150×47×450 ctrs) over. - 100mm rockwool between joists - finish 12.5mm plasterboard
- en-suite wastes to discharge to 100mm grey stack extended up from existing WC at grd floor terminate in approved Supo or similar air admittance valve set above flood level of WC. Trace drain to ground floor to ensure full rodding access from ex system

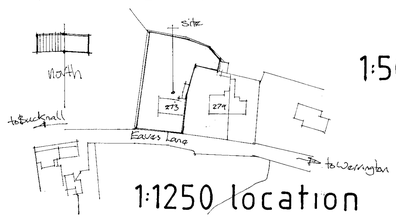


sectional view A:A



sectional view B:B

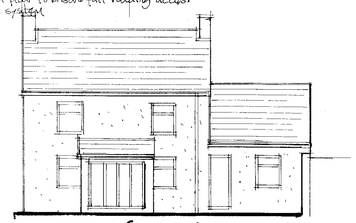
- Foundations (New) Lay 600×225 concrete strip at depth to suitable bearing strata (Nig 1000 in Shrinkable Clay) and reinforce throughout with B503 steel mesh (2 layers) all to full satisfaction of local authority
- Foundations (existing) Expose existing foundations and elements of structure as necessary to ascertain suitability to receive new first floor loadings. This is to be carried out in close liaison with local Authority Surveyor



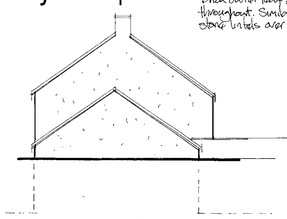
1:1250 location

1:500 site

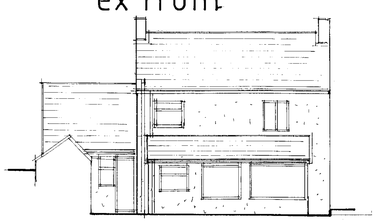




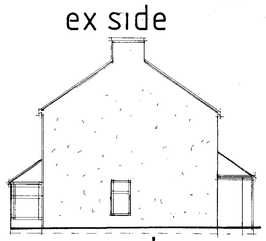
ex front



ex side



ex rear



ex side

- General Specification
- Main Roof Plain clay double lap tiles to match existing on battened breathable membrane over prefabricated trussed rafter units designed and manufactured by specialist supplier to satisfy BS 5268, adhere to manufacturer spec for all wind bracing, restraint strapping, handling and fixings throughout. Truss units secured by purpose made truss clips to 100×75 s/w wallplate anchored to wall by galv. M.S. sheets at 1350 mm centres
- ceiling to be underdrawn with gypsic plasterboard (12.5mm) incorporating vapour control membrane and enclosing 100mm rockwool insulation between joists and additional 150 mm layer rolled across - all to achieve min 0.16 w/m²K U Value.
- walls Selected fletton brick to satisfaction of local Planning Authority min 75mm cavity enclosing crown Britherm or similar insulation batt with internal leaf of 100mm Durox Superblock or similar with plaster finish to achieve min 0.30 w/m²K U Value
- provide 200mm clear cavity tray continuous above existing ground floor ceilings bridging new insulating layer.
- All new ties to be effectively bonded to existing throughout wall ties to satisfy BS 1243 (stainless steel) and insulation installed strictly to manufacturer specification.
- New First Floor Carefully strip out existing dormer roof floor finish and lower floor level to be flush with existing first floor. Lay 21mm tongued and grooved flooring grade chipboard on floor joists 190×47 s/w C16 joists at 450 ctrs underdrawn with gypsic plasterboard incorporating vapour control membrane enclosing 200mm rockwool insulation between joists
- New Ground floor (Porch/utility) approved finish on 65mm sc screed or power float finish to 100mm concrete slab on 1200g. dpm over 80mm celotex floor grade insulation on further dpm on wall blinded 150mm min natural stone substrate free hardcore well compacted in max 150mm layer (dpc turn up insulation to external face perimeter) - all to achieve min 0.25 w/m²K U Value
- Fenestration selected double glazed argon units fitted with Low E K glass and min 16mm air gap - all to achieve min 0.18 w/m²K U Value.
- NOTE: door glazing and large panes of glass to be fitted with laminated or toughened glass to satisfy requirements of current Building Regulations Part N
- opening windows in general to represent min 1/20 gross floor areas as ventilation. In addition head of frames to incorporate min 10000 mm² trickle vent.
- Ventilation Natural ventilation as above plus install mechanical extract fans to kitchen (set at 60 litres/sec extract) En-suite (set at 15 litres/sec) utility - 30 litres/sec and wc. 6 litres/sec
- Electrical work all notifiable electrical work to be undertaken by a qualified competent contractor registered with an approved national body and a relevant Certificate of workmanship supplied in accordance with Part P current Building Regulations
- Drainage (Foul) lay new 100mm upvc pipework on granular bed at 1:40 falls to connect to existing foul drains on site. New waste pipe to satisfy requirements of BS 5572 with 75mm diagonal traps as required. Ensure full protection to all drains from/to under new work
- Rainwater - New upvc r/w goods channelled to existing system throughout. New downpipes and trapped gullies shown to discharge to approved garden soakaway chambers as required