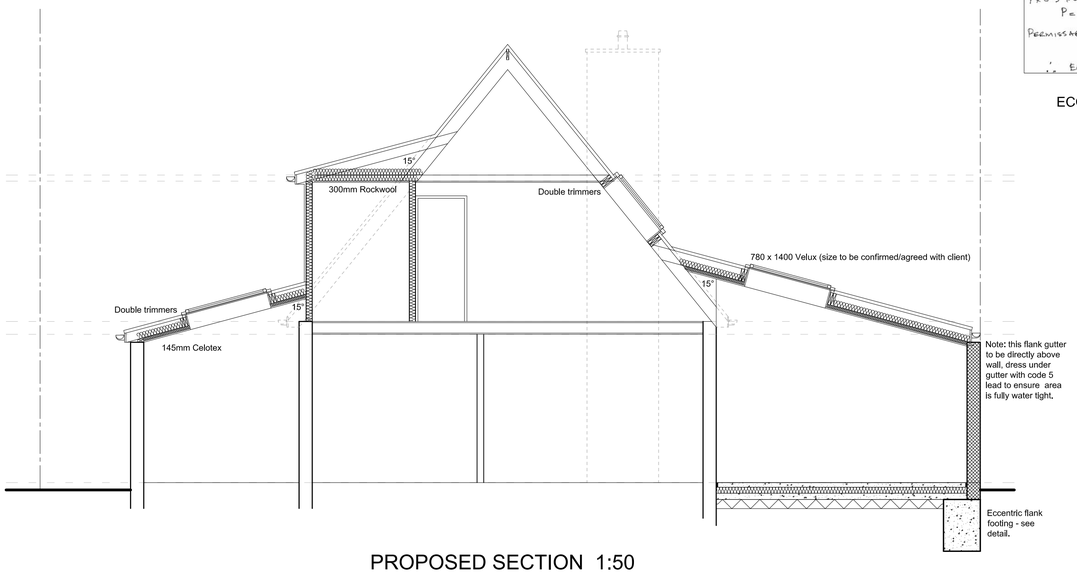
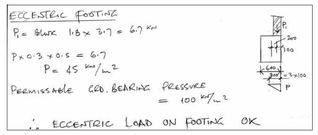
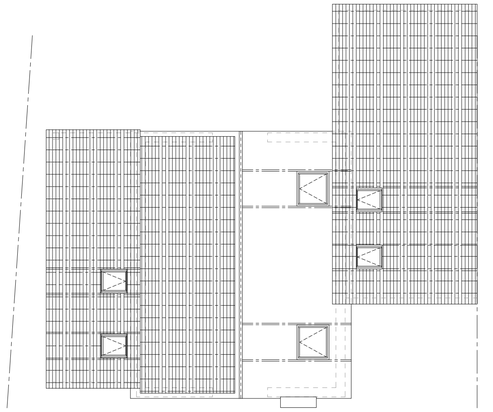


PROPOSED SECTION 1:50



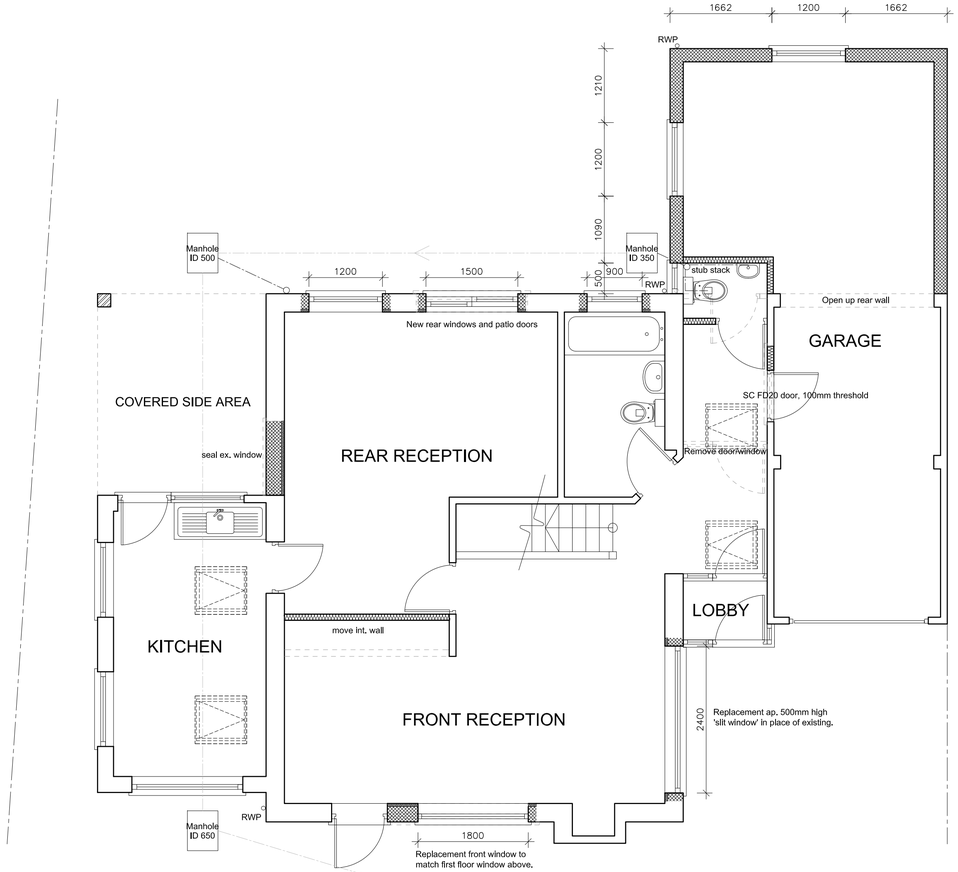
ECCENTRIC FOOTING DETAIL (NTS)



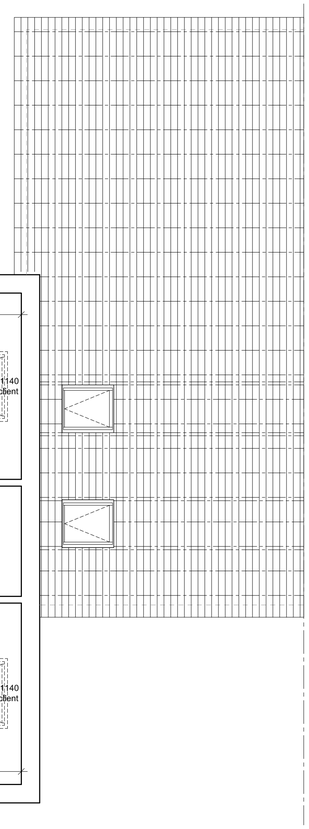
PROPOSED ROOF PLAN 1:100

SCALE = 1 TO 100.
(Roof plan)
0m 2m 4m 6m

SCALE = 1 TO 50.
(Floor plans & section)
0m 1m 2m 3m



PROPOSED GROUND FLOOR PLAN 1:50



PROPOSED FIRST FLOOR PLAN 1:50

1. **NOTE:** This drawing has been prepared for submission to the local authority for approval under the Planning Act and Building Regulations. Assumptions may have been made and all relevant facts and dimensions must be taken by the builder when the drawing is used for construction purposes. All figured dimensions are wall face to wall face, excluding plaster thickness. This drawing should not be scaled, except for LA Planning Dept. purposes only. All work must comply with the 1996 Party Wall Act (notices served if applicable), current BS codes of practice and Building Regulations to the Building Inspector's satisfaction. Confirm with Thames Water prior to commencement whether permission is required for any work to (or which affects) the drains. This drawing to be read together with drawing 14521 and structural engineer's calculations.

2. **FOUNDATIONS:** To be to local authority/BI requirements, min. 1000 deep x 450 wide where single storey and 1000 deep x 550 wide where two storey, below the level of any drains in the immediate area and to take into account all relevant site conditions e.g. type of soil and presence of any tree roots (if applicable). Any existing foundations subject to additional loads are to be exposed and checked for adequacy. Any foundations to be excavated close to neighbour's walls are to be dug in bays to avoid undermining existing foundations. Foundations hard on flank boundary is to be eccentric, 600mm wide, so no encroachment of neighbour's property – see detail.

3. **GROUND FLOOR:** To be level with existing. Break up ex. concrete & use as hardcore for new floor, elsewhere remove all vegetable soil, min. 150mm. Lay well compacted hardcore to make up height as necessary, sand blinding, 1200g polythene DPM, continuous with DPC. 100mm concrete, 90mm 'Celotex GA4000', or equivalent rigid PIR insulation, 25mm perimeter insulation, 500g polythene separating layer, 75mm screed, reinforced with chicken wire mesh. Max. 'U' value: 0.22 W/m2K. Maintain under floor ventilation if applicable with 100mm pipes in floor connecting to ex. air bricks. Provide channels or similar in solid floor so radiator pipes do not need to be above floor level. Alternative suspended timber floor construction, if preferred: break up any existing concrete. Lay min. 100mm oversite concrete, laid to fall to drainage outlet to prevent sub-floor water. Ensure min. 150 gap is maintained between concrete and suspended timber. Floor joists to be 47 x 147 at 400c/c, supported on GI joist hangers and on intermediate sleeper wall, max. permitted span 3060, 21mm flooring grade moisture-resistant T&G chip-board finish. Provide solid or herringbone strutting at mid span. Maintain existing and new under floor ventilation equivalent to 3000mm2/metre with air bricks. Fit 125mm 'Celotex GA4000', or equivalent rigid PIR insulation between joists, supported on battens or galvanized nails to manufacturer's instructions.

4. **WALLS:** New ground floor external walls are to be rendered block construction, comprising 215mm Thermalite Turbo, 20mm two coat waterproof external render (painted white or pebbledashed to match existing) 50mm Gyproc ThermaLine Super on dabs internally, skim finish. External wall maximum 'U' value 0.28 W/m2K. All existing brick ground floor external walls are to be rendered to match the extension walls, existing external walls above ground floor level are to be timber clad to client's requirements. Provide horizontal DPC, min. 150mm above ground level, continuous with DPM and with ex. house DPC, not bridged by render, to BS 5262:1976 with stainless steel or similar bell drip for rendered walls. Incorporate expansion joints at maximum 6000c/c, first joints to be max. 3000 from corners. Use 'Furfix Expansion Profiles' at junctions of new & existing walls. Internal partitions are to be 100 x 50 softwood studs at 400c/c, 100mm 'Rockwool Acoustic' sound ins. quilt fill, 12.5mm plasterboard & skim finish (with double floor joists under if suspended timber floor). Note: partitions enclosing bedrooms and/or bathrooms are to have additional sound insulation to comply with the 2003 Regs (part E) use proprietary sound-resisting wall-board and acoustic fill, tape edges to avoid flanking transmission. A suitable vapour barrier is to be fitted to the inner face of partitions to all 'wet rooms'.

5. **FIRST FLOOR:** To be level with existing. Lay 21mm flooring grade T&G chipboard (moisture-resistant in bathroom areas) on 47 x 195 joists at 400c/c, supported on GI joist hangers, max. permissible span 4040, line underside with 12.5mm plasterboard and skim. Provide 30 x 5 galv. MS restraint straps at max. 2000c/c and solid or herringbone strutting at mid-span. Provide double joists under partitions and feet of bath. New floor is to comply with 2003 Sound Regs, with resilient layer (e.g. 25mm mineral wool) above joists / below floor finish to reduce impact sound & fill between joists with min. 150mm 'Rockwool Acoustic' quilt.

6. **EXTENSION ROOFS:** To match main roof as closely as possible. Use concrete interlocking tiles suitable to be laid at 15° and to match existing main roof tiles as closely as possible. Tiles are to be laid to manufacturer's instructions. Lay tiles on preservative treated battens, on reinforced roofing felt to BS 747. New rafters are to be 47 x 150 at 400c/c over kitchen and 47 x 200 at 400c/c over garage, bolted to existing main roof rafters. Ceiling joists (if prefered by client) are to be 47 x 195, side to side at 400c/c, fixed to wall plates & rafters and provide double 47 x 195 trimmers at change in direction of roof and in opposite direction of rafters where required to prevent spread. (Note: timber sizes are provisional – see structural engineer's calculations and if there is any discrepancy, then calculation sizes take precedence over sizes stated here. Join all timbers using 12mm diameter bolts and dog tooth connectors. Line underside of joists with 12.5mm foil backed plasterboard, skim coat finish. See below for insulation details. Provide a 10mm continuous ventilation gap to all eaves and 5mm abutment ventilation at high level, to ensure full cross ventilation, or (preferably) use a proprietary breathable membrane in place of standard roofing felt. Strap roof to walls at perimeter using vertical 30 x 5 galvanized mild steel straps at max. 2000c/c, with additional lateral restraint straps where joists run parallel to walls. Provide code 5 lead at any roof–wall junctions.

7. **DORMER:** Pitched roof as above. Roof to be pitched at 15 degrees to match ground floor roofs, but may be pitched at 17.5°, if preferred. Tiles are to match ground floor roofs. Flank wall is to be built up off existing wall plate or support beam to engineer's specification – check calculations, flank walls are to be built up off doubled up rafters and to comprise 100 x 50 studs at 400c/c with diagonal bracing, 18mm ply sheathing and 90mm Celotex insulation between the dormer studs with 20mm Celotex across the face, vertical tile cladding externally to match ex. roof. Dormer cheeks are to incorporate an internal vapour barrier. Provide 100 x 100 corner posts. Strap roof to walls at perimeter using vertical 30 x 5 galv. mild steel straps at max. 2000c/c, with additional lateral restraint straps where joists run parallel to walls. Provide code 5 lead flashing and soakers at dormer–main roof junction. Where 'breathable' roof membranes are used a minimum 25x38mm tile batten must be used in accordance with the manufacturers installation details. Cold pitched roof and warm roof are to be thermally separated in accordance with manufacturer's recommendations. Ensure there is no cold bridge at the junction of the two roofs.

8. **SMOKE ALARM:** An approved mains wired interlinked smoke detector is to be provided in hallways at all levels (ground first and second floors) complying with building regulations Part B1, 2000. A copy of the 'Installation and Commissioning' certificate for the alarm system is to be deposited with Building Control in accordance with Approved Document (AD) B1 Section 1.23.

9. **STEELWORK:** Any indicated beam sizes and positions are based on assumption only and are not to be taken as definitive. This drawing must be read with structural engineer's calculation sheets for details of new beam sizes, positions & bearings. Beams to be min. ½ hr. fire resisting: encase in 12.5mm 'Gyproc Fireline' plasterboard & skim (min. 15mm plaster overall).

10. **VENTILATION:** Habitable rooms to have trickle vent background ventilation, min. 8000mm2, and kitchen, utility and WC/bathrooms to have similar, but 4000mm2 and extractor fans, direct to open air, capable of extracting min. 15 litres/sec. (WC/ bathroom), 30 litres/sec. (utility) and 60 litres/sec in kitchen (30 lit/sec in a cooker hood), capable of intermittent operation. Any rooms without opening windows are to have fans linked to light switch with a minimum 15 minute overrun and a 10mm air gap under the door. Ducts or vents passing through floor or walls are to be fire stopped with proprietary collar, access panels at branches and base to BS 476. Ventilation systems should be installed & commissioned in accordance with the guidance given in the 2010 edition of the Domestic Ventilation Compliance Guide. Sufficient information about the ventilation system should be given to the building owner upon completion of the building work, so that the ventilation system can be operated to provide adequate air flow.

11. **DRAINAGE:** To comply with BS 8301 and 5572. Surface water is to fall to rainwater gutters to match existing, discharging into ex./new RWP's connecting below ground to ex. surface water system, assuming this to be available and separate from foul water. If not possible then surface water to run to new hollow brick honeycomb construction soakaway(s), min. 5000 from any building, designed to BRE Digest 365. Note substantial roof area: size of soakaway to be agreed with BI. WC's to have 100mm pipe & 50mm seal, basins: 32 pipe & 75 seal (max. 1700 pipe run – increase to 40mm pipe if over 1700), bath/shower/sink: 40mm pipe & 75mm seal. Kitchen and utility wastes are to discharge into sealed trapped gullies, 100mm uPVC below ground pipe connecting to existing manhole and foul water system. New bathroom and cloakroom wastes are to discharge into 100mm stub stacks with air admittance valves above the flood level with 100mm connecting pipes to existing FW man hole as above. S&VP is to be extended to min. 900mm above top of any nearby opening windows. Existing man hole invert depth is as indicated – any manhole found to be falling inside new extension should be moved outside or fitted with double seal bolt down cover if it is not possible to relocate it. Invert depth of drains discovered on excavation are to be checked and if appropriate, drainage proposals modified on opening up site, subject to agreement with building inspector. Provide rodding eyes at drainage junctions. Bridge soil pipes passing under new walls with concrete lintels. Drains to have a minimum fall of 1 in 40 and are to be surrounded in pea shingle. Note: water temperature control valves are to be fitted to the hot taps of all new sinks, baths and basins, limiting the temperature to max. 60° for sinks and max. 48° for baths and basins. Note: all new drainage will be required to be tested (witnessed by BI) prior to being signed off. A suitable supply of 'wholesome' water is to be provided to all new washing and food preparation areas, in accordance with Approved Document G1–G3.

12. **OPENINGS/SUPPLEMENTARY NOTES:** Expose and check any existing lintels subject to additional loads for adequacy. Internal walls subject to additional loads are to be checked for adequacy and proved by calculation or foundations exposed if required by BI. Glazing less than 800mm above finished floor level in walls/partitions, or 1500mm in doors/adjacent side panels, to be toughened or laminated glass to BS 6206:1981. New escape windows (i.e. all new windows to habitable rooms) should have an unobstructed openable area of at least 0.33m2, with neither width nor height less than 450mm, bottom of opening sections to be min. 800mm/max. 1100 above floor level and max. 1700 from eaves. All beams/lintels are to have a minimum end bearing of 150mm. Any existing lintels subject to additional loads are to be exposed and checked for adequacy. New external lintels are to be insulated 'Catnic CN7'. New openings in load–bearing walls up to 1500 wide to have precast concrete lintels over. Any openings over 1500 wide to have 'Catnic' lintels or universal beam(s) over, encased in 12.5mm 'Gyproc fireline' plasterboard for half hour fire resistance. Underside of stairs are to be lined with e.g. 12.5mm Fireline board & skim for half hour fire resistance. All new glazing is to be 'Pilkington K', or equivalent low E glass, max. 'U' value 1.6 W/m2K - e.g. double glazed, low–E, ε_n = 0.1, argon filled, 16mm gap if uPVC frames or triple glazed, low–E, ε_n = 0.1, argon filled, 16mm gap if metal frames. New windows to be similar style and to line through as much as possible with existing. All existing internal doors at all levels (except to sanitary accommodation) are to be replaced with FD20 fire doors. All fire doors are to have intumescent strips and are to be hung with 3No. steel hinges. Any existing glazing within the protected access route is to be removed or upgraded to 30min. fire– resisting. New door to loft room is to be FD20 fire door. 'Velux' rooflights are to be fitted to manufacturer's instructions, with code 5 lead and double trimmers all round, note: roof pitches lower than than 15° will require an upstand kit. Light well walls are to be insulated with 90mm Celotex or similar. New rooflights are to achieve a Class 1 or AA fire rating. Manufacturers details are to be supplied to the Building Inspector to show compliance. Low energy lighting is to be provided to three out of four fixed light fittings, in the areas affected by the building work (cupboards & wardrobes are excluded). Low energy light fittings should have lamps with a luminous efficacy greater than 45 lumens per circuit–Watt and a total output greater than 400 lamp lumens; more information can be found in the Domestic Building Services Compliance Guide 2010, to comply with Regulation L1B. Provide coving, skirting and all joinery to match existing. Electrical installation is to be in accordance with IEE standards and Approved Document P - to be designed and installed in accordance with that document; inspection and testing of works to be undertaken by a competent person (i.e. a registered electrical engineer) and an appropriate BS 7671 electrical installation certificate is to be issued prior to completion of works. All new and extended rooms are to have additional radiators to match existing fitted with thermostatic rad valves, connected to existing gas central heating system, check position and capacity of existing central heating boiler and if required replace with new 'condensing' balanced flue boiler installed by an approved/GasSAFE registered plumber (SEDBUK rating to be better than 90%), suitably ventilated and positioned on external wall (note: extract duct to be min. 300mm from external doors or windows). If the boiler is replaced, appropriate controls must be provided for the particular type of appliance and heat distribution system. Any fixed building service provided, replaced or extended should follow the guidance in the Domestic Building Services Compliance Guide.

5, Eddeys Lane, Headley, Bordon, GU35 8HU

Proposed ground/first floor extensions & alterations.

Scale: 1 to 50 & 1 to 100 | *Date: 10th March 2016*

Andrew Kenfield Associates
28, High View, Cheam, Surrey, SM2 7DY. Tel/Fax: 020 8286-1064

amendments:

drawing number:
14522
(A1)