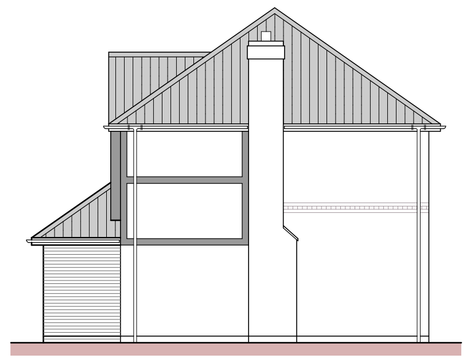
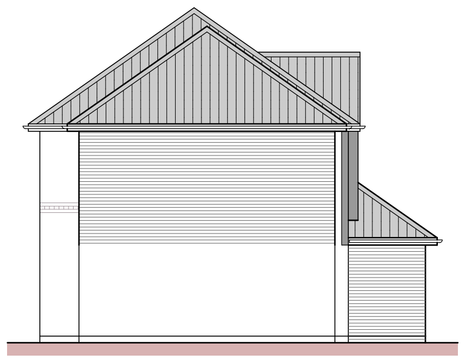
Front Elevation

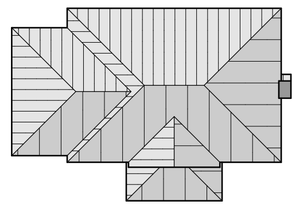


Side Elevation

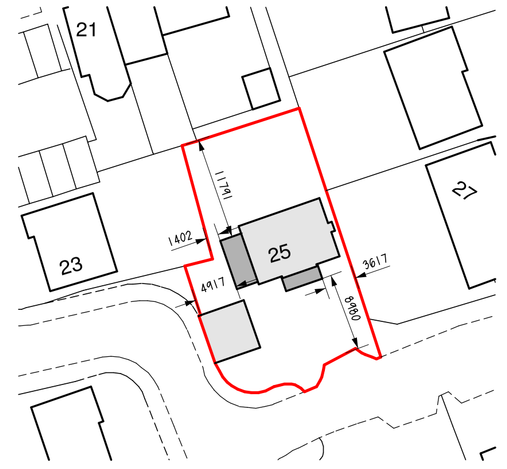
Rear Elevation



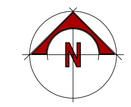
Side Elevation



Proposed Roof Plan
1 : 200



Proposed
Site Plan
1 : 500



PITCHED ROOF.
Plain roof tiles to match existing on min. 38 x 25mm treated battens on Roofshield breathable membrane draped over rafters to manufacturers specification on structure as specified.
Porch rafters against wall to be supported on and spiked to 50mm wide wall plate bolted to wall @ 650mm centres.

12.5mm foil-backed plasterboard with plaster skim finish to ceiling.
Ceiling to be sealed in accordance with BS5250 Control of Condensation in Buildings.
150mm fibreglass quilt insulation between ceiling joists with a further 150mm insulation laid across.
Roof void ventilated through continuous 25mm soffit vents backed with fly screen all round.
All valleys to be lined with code 5 lead.
Code 4 stepped lead flashings to be provided at junctions of roof & external walls.
A suitable cavity tray is to be inserted over the flashing where the roof abuts the external wall.
Lead sheet in the valley gutters and flashings to be limited to 1.500m in lengths between expansion joints/drips.
All lead work to be carried out in accordance with the Lead Development Association's recommendations.

115mm H.R. rainwater gutters, 63mm dia. downpipes connecting via new 100mm dia. 'OSMA' UPVC drains laid & bedded on pea-shingle to new soakaways min. 5.000m from buildings. Any existing soakaways found within 5.000m of new extension to be moved to 5.000m away.
Soakaways to be designed in accordance with BRE Digest 365 and sizes determined by percolation test on site.

ALL ROOF TIMBERS TO BE MIN. C24 GRADE AND TANALISED.

FIRST FLOOR.
22mm chipboard (type P5 to BS EN 312) on min 175 x 50mm C24 grade joists @ 400mm centres.
15mm plasterboard (minimum mass 10kg/m²) & skimmed ceiling.
Herring bone strutting @ 1/3rd-span. Floor void to have 100mm sound deadening mineral wool laid between joists. (Minimum mass 10 kg/m3)
1st floor stud partitions built off double joists bolted together.
Double joists to be provided under bathroom areas.
Floor joists strapped to walls using 30 x 5mm m/s straps @ 1.800m centres to provide lateral restraint.
Solid noggins to be provided between 1st floor joists under all restraint straps where parallel to span.
Where joist hangers are used, restraint type hangers to BS5628:part 1 are to be incorporated @ max 2.000m centres

WALLS.
103mm facing bricks to match existing.
100mm cavity with 90mm Celotex Thermaclass Cavity wall insulation & 10mm residual cavity to manufacturers specification.
100mm Thermalite Turbo blocks with 12.5mm plasterboard on dabs.
NOTE: New walls built over or in line with existing walls where cavity width is maintained to have full fill Cavity slab 32 insulation,
100mm Thermalite Turbo blocks and be lined internally with 77.5mm Celotex PL4065 insulation backed plasterboard.

250mm long Ancon ST1 General purpose stainless steel wall ties @ 750mm horiz. & 450mm vert centres.
New walls bonded to existing & cavities maintained.
Hyload DPC min. 150mm above G.L. to lap with existing.
Vert & horiz 'Thermabate' DPC's & double wall ties provided to all reveals & cavity closures
NOTE : For walls exceeding 6.000m in length movement joints to be inserted into brick and block walls in accordance with NHBC Technical Guidance 6.1.1.28.

Catnic lintels with perforated base & filled with insulation all to manufacturers specification over new openings.
(min. 150mm end bearings & cavity trays over).
CG90/100 lintels over openings upto 2400mm
CX90/100 lintels over openings over 2400mm

Any existing lintels taking additional loads to be exposed for inspection &, if necessary, replaced with suitable lintels/beams.

Roof & 1st floor joists strapped to walls using 30 x 5mm m/s straps @ 1.800m centres to provide lateral restraint.

Internal walls to be in 100 x 50mm S.W. studwork infilled with Sound blocker quilt SBQ2 and faced with 10kg/m² sound insulating plasterboard & set coat both sides.

GROUND FLOOR.
65mm sand/cement screed reinforced with chicken wire on 500 gauge vapour control barrier on 100mm Celotex GA4000 floor slab insulation on 1200g polythene D.P.M. on 150mm concrete oversite reinforced with B.503 mesh on sand blinding on ground cleared of all vegetable matter.
Concrete to be RC35/ST5 Grade to BS8500-2. (min. 21N/mm @ 28 days).
Min. 40mm concrete cover to all reinforcement.
Floor slab supported on inner skin of external walls & pockets cut into existing wall providing min. 60% support.

Any existing airbricks serving existing house floor to be ducted through under new slab with telescopic airbricks on outer wall.

FOUNDATIONS.
600mm wide x 250mm deep concrete strip foundations to cavity walls. Concrete to be GEN1/ST2 grade to BS.8500-2.

Depth of foundations to be to suitable load-bearing strata to suit sub-soil conditions so as not to be affected by any tree roots or their removal, and to pass below any adjacent drain runs. Foundations into any form of clay sub-strata to be constructed in accordance with guidelines from BS8103-1:2011 and NHBC Technical Standards 4.2 and 4.4.

All existing foundations taking increased loadings to be exposed for inspection by Local Authority Building Inspector &, if necessary, underpinned to a suitable load-bearing strata.

DRAINAGE.
40mm Ø PVC waste to shower. 32mm Ø to WHB's.
All wastes to have 75mm deep seal anti-vacuum traps & rodding eyes to BS 5572:1978.
Wastes to connect to B.I.G. or S.V.P. as shown.
S.V.P. to terminate min. 900mm above any window head with durable cage fitted on top.
Drains below ground to be 100mm Ø 'Osma' UPVC pipes laid & surrounded in 150mm pea-shingle @ 1:40 falls to existing manhole.
Where passing through walls, drains to be protected with R.C. lintels over.
All shallow drain runs to be protected with 100mm concrete cover over.
New manholes to be built in 225mm semi-eng. brickwork on 150mm concrete base with suitable cover fitted.

VENTILATION.
All rooms to have min. 1/20th floor area of the room in ventilation openings & trickle vents in window frames with 8000mm² in controllable opening area per room.
En-suite to be fitted with mechanical extract fan capable of extracting at a rate of 15 l/sec.
All doors to have 10mm air gap at bottom.

All external glazing to doors and windows to be double-glazed with 16mm air gap and low-E glass and be toughened safety glass clearly marked to BS6206.
Windows to achieve a maximum U-value of 1.4 W/m²k and doors a maximum U-value of 1.4 W/m²k.
Doors and window frames to be set back to overlap insulated cavity closer by a minimum of 30mm.
Any glazing to internal doors to be toughened safety glass to BS6206 Class B.

ELECTRICS.
All new electric points and lighting to be provided to client's specification.

All wiring and electrical work will be designed, installed, inspected and tested in accordance with the requirements of BS7671, the IEE 18th edition Wiring Guidance and Building Regulation Part P (electrical safety) by a competent person registered with an electrical self-certification scheme authorised by the Secretary of State.
AND
The competent person is to send to the local authority a self-certification certificate within 30 days of the electrical works' completion. The client must receive both a copy of the self-certification certificate and a BS7671 Electrical Installation Test Certificate.

FIRE PRECAUTIONS.
All rooms to have escape windows having a minimum clear opening of 750mm high and 450mm wide. The bottom of the window opening is to be between 800mm and 1100mm above the finished floor level.

Fully linked mains operated smoke alarms with battery back-up to be provided to ground floor Hall and First floor Landing areas, all in accordance with BS 5839-6:2019.

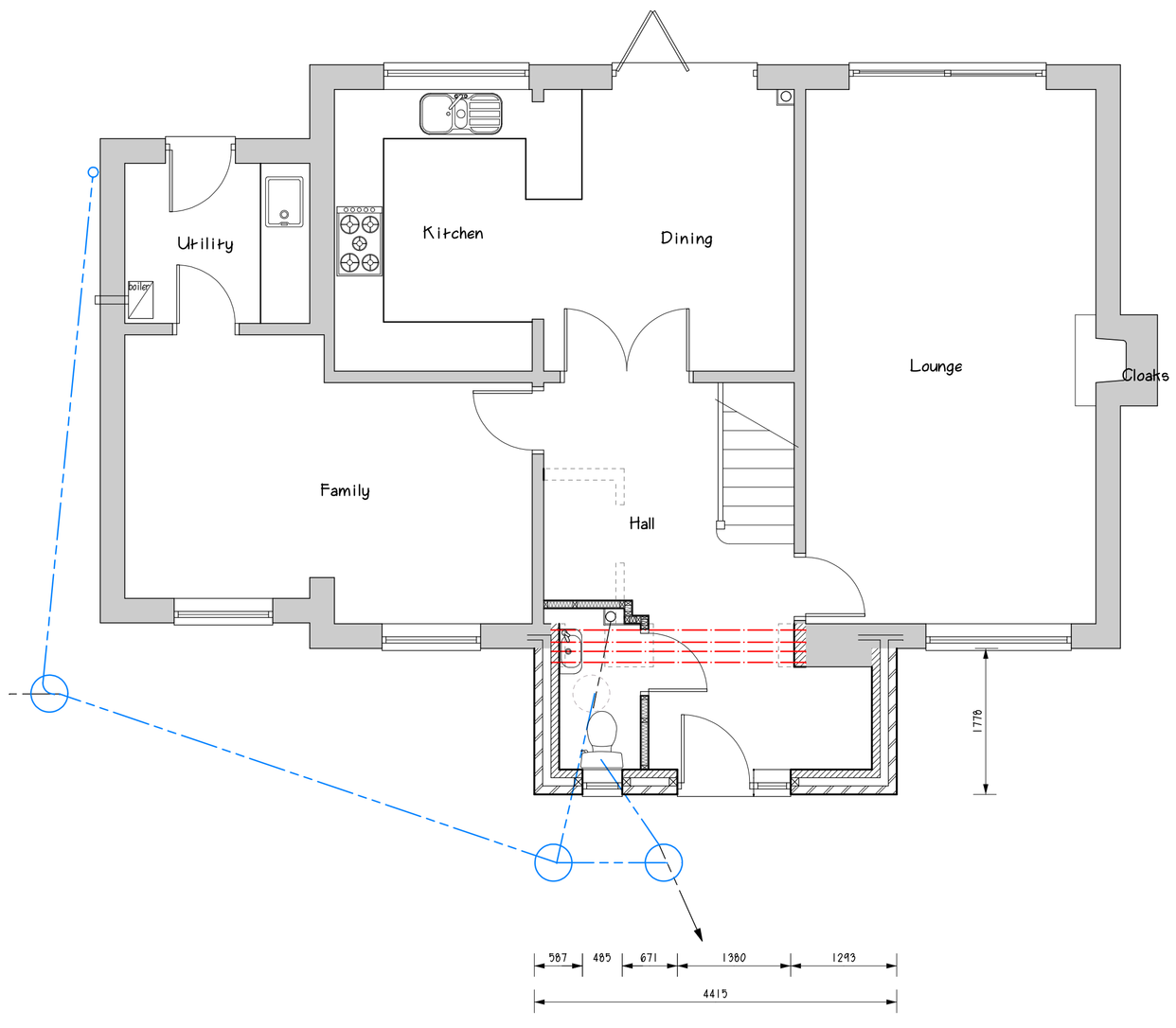
HEATING.
Provide underfloor heating or new radiators adequately sized for rooms to client's specification. All new radiators in property to have thermostatic radiator valves fitted & underfloor heating to be on separate thermostat zones.

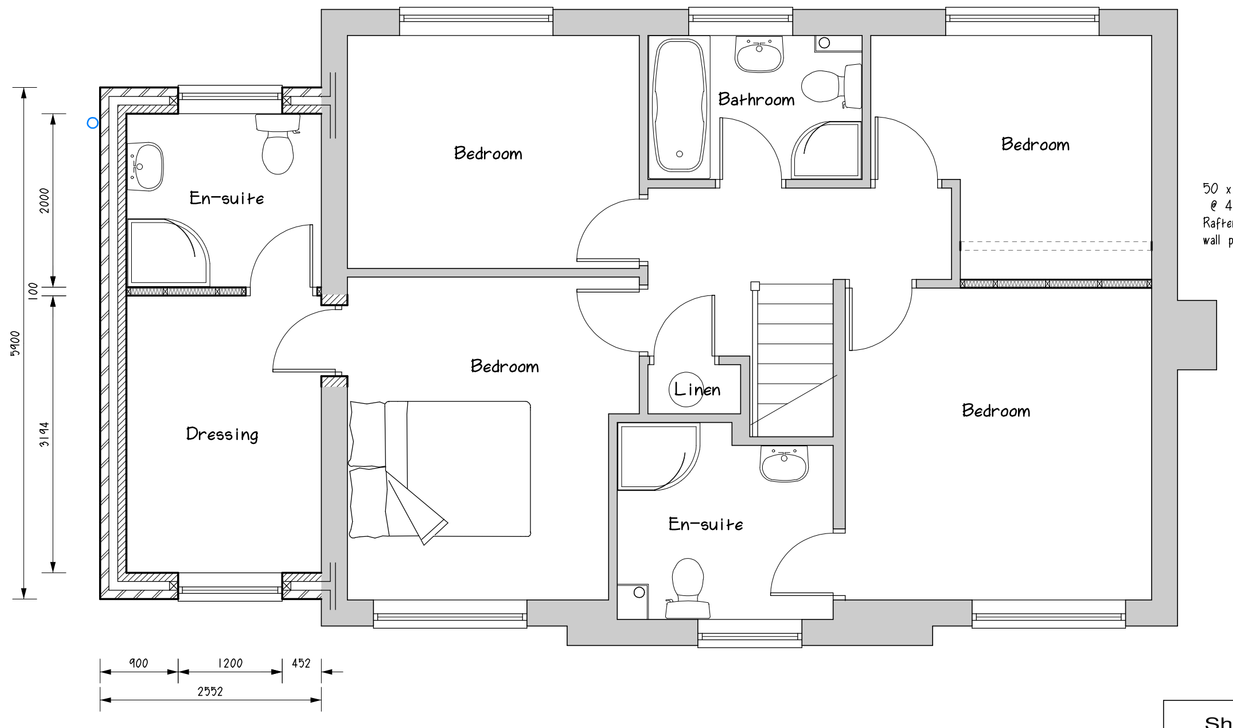
LIGHTING.
Provide all low energy light fittings capable of taking only lamps of luminous efficacy greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens.

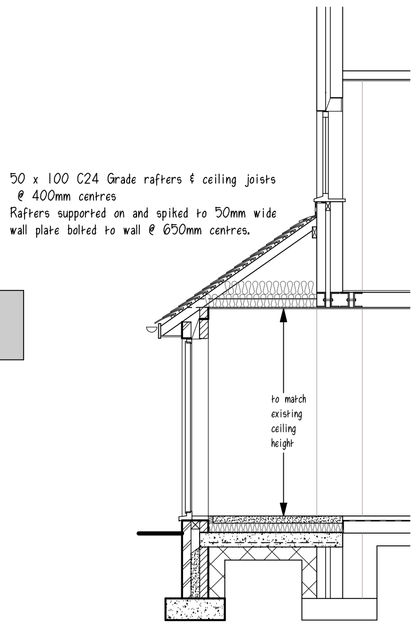
All downlighters to be used in new work to be FLAMEGUARD Fire and Acoustic Rated LED Downlighters.
When used with insulation around, downlighters to have insulation support box over.

STEELWORK.
As per plan & calcs, painted with 2 coats red oxide paint & protected with wire binding @ 100mm pitch, 2 layers plasterboard & set coat to give 1/2 hour fire resistance.
If not possible to encase steel beams then they are to coated with intumescent paint to give 1/2 hour fire resistance.

All pairs of beams to be bolted together using 12mm diameter bolts with spacer tubes at 650mm centres.







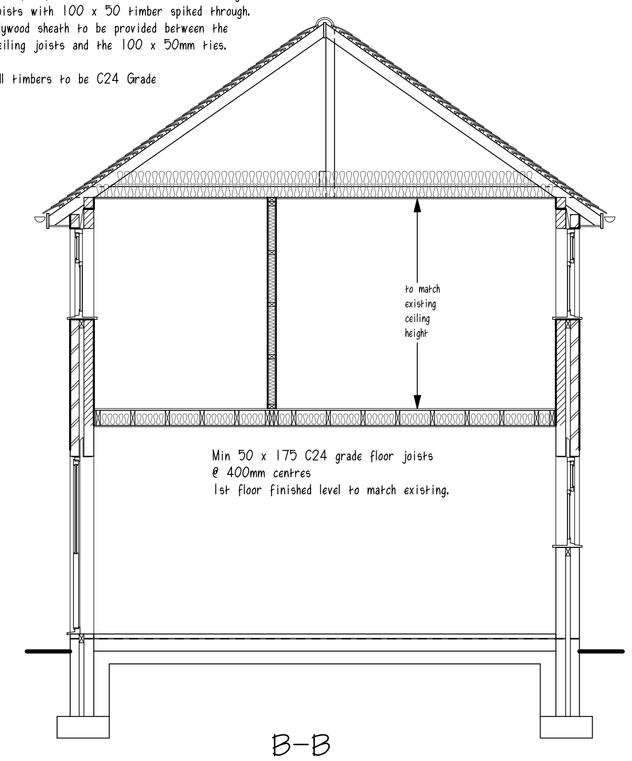
50 x 100 C24 Grade rafters & ceiling joists @ 400mm centres
Rafters supported on and spiked to 50mm wide wall plate bolted to wall @ 650mm centres.

A-A

25 x 175mm Ridge board
50 x 125mm rafters @ 400mm centres
50 x 150mm ceiling joists @ 400mm centres
63 x 175mm binder at mid-span with 100 x 50mm hangers @ 2.000m centres

To prevent spread of roof at hipped ends, end of rafters tied back across 3No ceiling joists with 100 x 50 timber spiked through. Plywood sheath to be provided between the ceiling joists and the 100 x 50mm ties.

All timbers to be C24 Grade



B-B

Sheet size A1

Scale Bar 1:50
0 1m 2m 3m

Scale Bar 1:100
0 2m 4m 6m

Scale Bar 1:500
0 10m 20m 30m

Scale Bar 1:1250
0 25m 50m

Milburn Designs
Clive Milburn MRICS MCABE
5 Helston Close
Frimley
Camberley
Surrey
GU16 9FL
Tel : 01252 835607
Email : milburndesigns@btinternet.com

CONTRACT: Proposed Extension at 25 Alsford Close Lightwater GU18 5LF

CLIENT: Mr & Mrs A Keenan

SCALE: 1:50 1:100

DRAWING: PROPOSED PLANS

DRG No.: 23/24 / 037 / 2

REV: B