Whether specified or not all work/materials to be in accordance with British Standards Codes of Practice Statutory Authority recommendations, manufacturers written instructions and good building practice to the entire satisfaction of the local authority building inspector. Builder to obtain completion certificate from the local authority at the end of the contract.

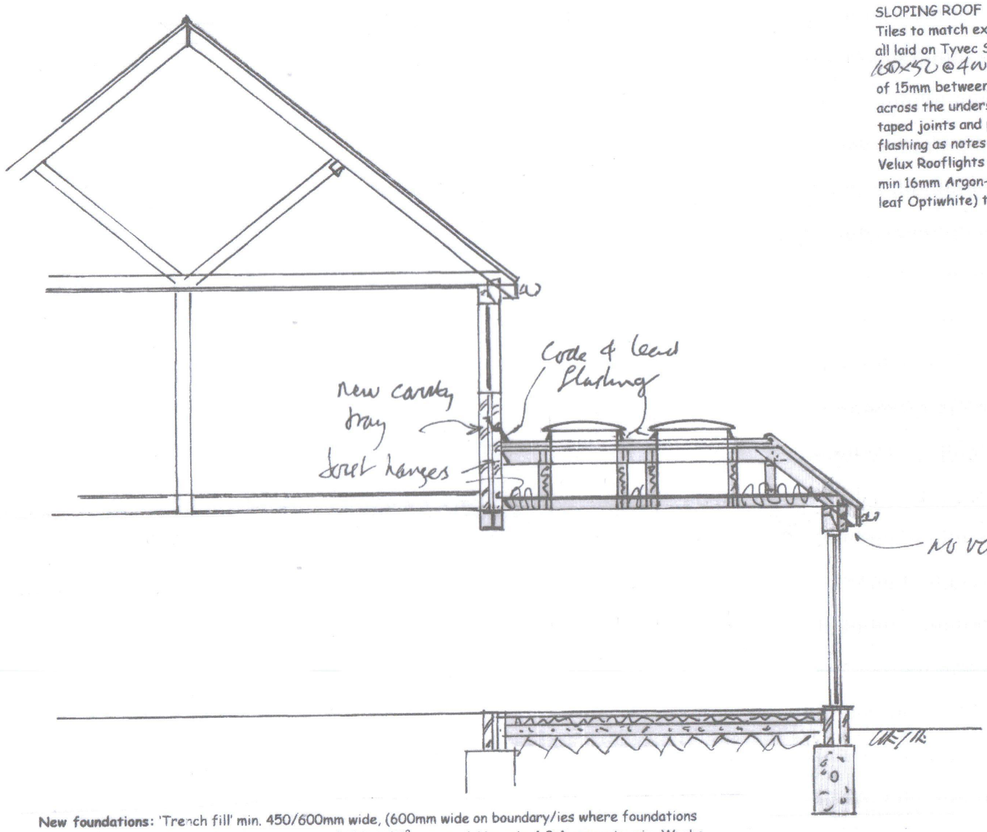
Flat roof: Warm deck construction, no ventilation to roof space. Seal eaves with fibreglass to prevent ventilation of roof space. 12.5mm spar chippings on Ruberoid superflex 350 slate finish & superbase 180 underlay, high performance membranes, (AA rated), fully bonded with hot bitumen to partially bonded base layer to BS 747 type 6, installed to BS 8217:1994, on 25mm Celotex double R TSI boards (tel: 0208 579 0811)m ('U' value 0.18W/m²K), fixed ply side uppermost in accordance with manufacturer's written recommendations, boards close butted with staggered end joints, all joints & edges taped and nogged, on firings to min 1:40 fall on 175 mm x 50 mm roof joists @400mm c/c 12.5 p/bd and skim soffit.

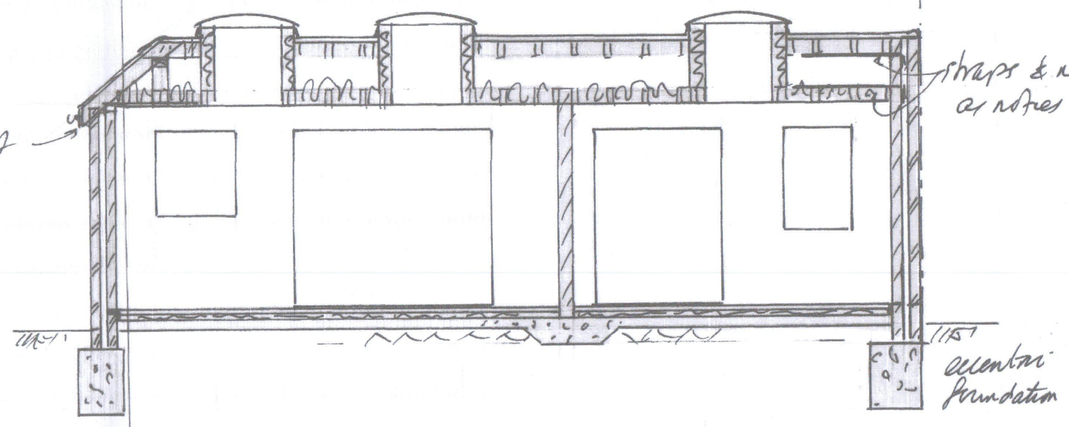
Ceiling Roof insulated with 100mm Crown/ Rockwool insulation laid between 200mm x 50mm @ 400 crs ceiling joists on 12.5mm foil backed p/bd & skim. 170mm Crown/ Rockwool insulation laid over ceiling joists, 'U' value 0.16 W/m²K. Ensure min. 50mm vent. Gap at eaves between top of insulation and underside of roof finish.

Joist strutting: Min 38mm thick full depth timber strutting to midspan of joists over 2500mm span. Over 4500mm span twice @ 1/3 span positions.

SLOPING ROOF
Tiles to match existing and to suit pitch on treated battens at a size and gauge to meet the tile specification all laid on Tyvec Supro or similar breather underlay with a maximum drape of 10mm on treated rafters 150x50 @ 400 crs C16 or better timber. Lay 70mm Celotex GA 4000 between rafters (leaving a min. gap of 15mm between insulation and underside of the underlay) and then fit a further 50mm Celotex GA4000 across the underside of the rafters finished at ceiling level with 12.5mm foil-backed Gyproc wallboard with taped joints and plater skim giving a min 'U' value of 0.18W/M²K. No ventilation at eaves. Code 4 lead flashing as notes elsewhere.
Velux Rooflights - standard size and fully openable with doubled-up rafters all around. Double glazed with min 16mm Argon-filled gap between panes to BS6266 and AA fire rated (inner leaf toughened K glass, outer leaf Optiwhite) to give a min 'U' Value of 1.6 W/M²K

Cavity walls: Outer leaf in 102mm facing brickwork to match existing with 60mm cavity filled above dpc with 60 mm Dritherm insulation. Inner skin of 100mm Celcon standard blockwork. 'U' value 0.27W/m²K Vertical twist type stainless steel wall ties @ 750mm horizontal and 450mm vertical. c/c, staggered, (double at reveals). Vertical dpc at jambs, with Thermabate, (tel: 01924 362081) or similar approved cavity closers, installed as per manufacturer's recommended written details. Fill cavity with lean mix concrete to 225mm below dpc & close at top with durable material. Lintels Catnic type CN14 min. 150mm end bearing, insulated to 'U' value of 1.2 W/m²K. soldier course cover openings.
External walls: Dpc to BS 743, min, 150mm above finished ground level lapped to existing dpcs. Reduce external ground levels, if and as required to give at least 150mm between dpc and external ground level. Bond new walls to existing with 'Furfix' stainless steel profiles, with vertical dpc sealed externally with polysulphide mastic. 13mm plaster and skim internally. Use brickwork below dpc.
Fascia boards: New fascias & gutters to be continuous with existing. White upvc with 10/25 mm vent. Gap at eaves, 25mm vent. Gap to sloping ceilings, protected with fly screen. External timber to be preservative treated to BS 4072.
Flashings: At junctions of flat/pitched roof & wall provide code 4 lead flashing, min 150mm upstand/stepped flashing & soakers, chased and wedged into wall. Fit new cavity trays to new and any existing cavity wall. Code 5 lead valley flashing on lay boards to valleys. Code 4 lead cloaks at any pipe penetrations through roof. All lead work to be BS 6915.
Guttering: 100mm black upvc to falls, to 63mm dia. RWP to existing surface water drainage. Refall existing gutters as required.
Straps: 30mm x 5mm ms straps @ 1200mm c/c to first floor, first floor ceiling and tops of gables screwed to min. 3no. joints/rafters with size 12 screws. Where walls run parallel to timbers; at strap points provide 50mm full height timber blocking between timbers and timber wedges between external wall & first timber. Wall plates to be strapped down @ 1200mm c/c using 30mm x 5mm straps plugged and screwed to walls min. 3 no. times using No. 12 x 50 screws.
Structural timbers: Redwood/Whitewood grade SC3 (C16) or better. Ends of timber to be treated. Multiple timber joists bolt thro'centre with 12mm bolts & double-sided tooth place connectors @ 450mm c/c and 50mm washers on external faces. Connect timber posts top and bottom with Trip-L-Grip connectors.
Steelwork: Provide all necessary means of careful and adequate temporary support of sound sub-base. Builder to pay particular note re. any needling required. Paint with intumescent paint in accordance with manufacturer's instructions. (Paint by Leighs, Nullifire etc. Provide certificate for paint use & as required by LA). Alternatively, encase in 2 no. 9.5mm p/bd, (inner layer of p/bd bound with 1.6mm wire binding @ 100mm pitch) and skim finish for ½ hour fire resistance. Ends of beams into party wall to be encased in concrete. If splices used in beams, calculations & details to be submitted to LA.
Multiple steel joists bolt together @ 450mm c/c centrally through webs with 16mm bolts & m s spacer tubes. RC denotes new opening with 'Bourncrete' or similar proprietary pre-cast lintels, min. 150mm end bearing, 150mm high X wall thickness, in load bearing wall.





New foundations: 'Trench fill' min. 450/600mm wide, (600mm wide on boundary/ies where foundations eccentrically loaded). Max. bearing pressure of 100kN/M² assumed. Use min. 1:2:4 concrete mix. Works below dpc to be in sulphate resisting cement to BS4027. Foundations to be constructed to a min. depth of;
a) 1 metre unless noted
b) to invert level of existing/ proposed drains
c) 600mm below any tree root activity
d) 150mm beyond fill or any unsuitable material
e) to the same depths of any adjacent foundations.
Foundation trenches to be taken down to a depth in accordance with the recommendations of NHBC chapter 4.2, 'building near trees'.
Where deeper foundations required owing to adjacent trees, line inside face of foundation above base 500mm, with 75mm Cloymaster. Builder to dig trial hole at commencement of adjacent existing construction to confirm existing foundation type and depth. Final details are dependent on subsoil conditions on excavation & are to be agreed on site with LA.
Builder to provide all necessary means of temporary support & protection to trenches, (pay particular attention to works on boundar/ies).
Builder to allow for constructing foundations in 1-metre lengths in underpinning sequence adjacent existing buildings.

Solid floors: Min 75mm sand/cement screed reinforced with galv. Wire mesh 500 gauge Visqueen dpm on min 75 mm Celotex insulation, laid with joints close butted and taped, (omit insulation below internal partitions), with 25mm perimeter insulation between slab & wall on 1200 gauge Visqueen dpm lapped to new & existing dpcs, on 100mm oversite concrete, (1:2:4), at or above ground level, on sand blinding on 150mm consolidated suplphate-free hardcore. ('U' value 0.22 W.m²K). Existing ventilation to enclosed timber floors to be maintained via 100mm 'Hepsleve' ducts set in floor to external 225mm X 150mm terracotta airbricks. Existing floors solid construction.

Electrical works New electrical works are to meet the requirements of Part P (Electrical Safety) and must be designed, installed, inspected and tested by an electrician competent to do so. For the purposes of the building regulations, a competent electrician is one who is registered with a recognised trade body such as NICEIC, ECA or NAPIT. A copy of the appropriate BS7671 electrical design, installation and test certificate is to be provided to Building Control before a complete certificate can be issued. Agree locations of sockets etc prior to commencement.

N.H.D.C.
11 MAY 2018

1 2 3 4 5
SCALE AT 1.50

scale bar on A2 drawing size

PROJECT: SINGLE STOREY REAR EXTENSION
LOCATION: 22 MILLARD WAY HITCHIN HERTS SG4 0QE
DRAWING TITLE: SECTIONS & DETAILS
SCALES: 1:50 | DRG No: 1809/04 | REV.
CLIENT: C. WOODTHORPE | DATE: APRIL 2018

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