1. No work to commence until building regulation and planning/lawful certificates (where applicable) approvals obtained in writing. Failure to do so may render the main contractor liable for complications that may arise. Risk assessments and method statements to be provided by main contractor before work commences.
2. Main contractor to ensure no undermining of adjacent property (where applicable) and ensure all relevant Party Wall notices are in place and agreements obtained before any work commences.
3. All dimensions and setting out to be checked by the main contractor and agreed with the client before any work commences. Discrepancies to be brought to the designers attention before works commence.
4. Drawings read in conjunction with all specialist contractors information as well as specification of performance and conditions.
5. Structural timber to BS5268 Grade C16 unless noted. External timber treated with culprinol or similar approved.
6. Structural steelwork to BS5950-1:2000 Grade 275 and coated for half hour fire rating 0.5mm thick S30W in tumescent paint by Nullifire to manufacturers specifications, or similar approved. Bolt beams to padstones via minimum one number 10mm diameter HD bolt. Steel beams bearing onto ms plates to be welded to those plates via 6mm full shop weld. 20mm clear gap between underside steel beams and existing joists where above at right angles, unless stated otherwise.
7. DPC to be hyload by ruberoid and finish minimum 150mm above FGL and stepped as necessary where the ground levels vary. Lap with existing and conform to BS743 Section 150. Continuous DPC's to reveals.
8. Window areas to be maximum 25% floor area to approved document L1. Habitable rooms to have minimum ventilation with one or more opening windows totalling 1/20th floor area and be double glazed with "Argon" fully filled sealed units with 16mm air gap and soft low E coating with timber or plastic frames with U value 1.5. Minimum glazing to habitable rooms 10% floor area and achieve 1.5 U value. At least one window per room to have frame mounted trickle vent of 8,000sq.mm and patios with night vent capacity 10,000sq.mm. Glass in critical areas (within 800mm FFL, in doors within 1500mm of FFL and within 300mm of all doors) to be approved document N and be laminated or toughened. All new windows and sky lights to be to BS6262 and be double glased.
9. Finishes, electrics, heating between client and contractor. Energy efficient light fittings to new rooms and external lighting (fixed to buildings, excluding garages/car ports) should automatically extinguish when there is enough daylight or when not needed with sockets for all that can be used with lamps having luminous efficiency greater than 40 lumens per circuit-watt. Lighting installed in accordance with section 1.54 of approved document L.1.
10. Wall/gables restained at joists/ceiling/rafter levels via 30 x 1200mm long ms galvanised straps at 1.5M c/c plug and screwed to walls and screwed to underside 3 number minimum joist/rafters.
11. Secure 50 x 100 wall plates with 30 x 2.5 x 1200mm long ms galvanised straps at 1.2M c/c screwed to walls.
12. Galvanised lintels insulated and to have 150mm minimum end bearings.
13. Use sulphate resisting cement below ground level and foundations designed assuming highly shrinkable clay soil with plasticity index greater than 40% due to the absence of a valid soil report, in accordance with current NHBC practice. Provide 2 R16mm bars to bottom of foundation with 75mm cover all round, in straight random lengths and 800mm minimum laps. Concrete Grade C25 design mix. Depths as stated and minimum 550mm below any visible root growth with final depth to local authority approval on site.
14. Drawings indicative of site and surrounding foliage at time of survey. See block plan.
15. Mechanical ventilation ducted to open air required to kitchens, baths, utilities and en suites. 60 litres/sec extract to kitchens, 30 to utilitics and 15 to baths and en suites with 20 min overrun and 3 air changes per hour minimum. 2,500sq.mm background ventilation to baths, kitchens and utilites with 5,000sq.mm elsewhere. Cooker hood extract 30 litres/sec.
16. Expose existing foundations (via trial pits) and lintels in vicinity of new works for local authority inspection before any work commences. This applies to adjacent properties also where undermining may be an issue.
17. Hardcore: clean broken brick or crushed concrete to pass maximum sieve size 75mm.
18. Rain water goods to discharge into 100mm dia uPVC gutter, down 100mm uPVC down pipe and into soak away or watercourse. Soak away 1.2M cubed unless stated otherwise and be at least 5M from any structure in accordance with BRE digest 365. All via roddable gullies and be backfilled in 75mm single size stone to above highest pipe and finished in compacted hardcore to within 225mm finished level. One layer 1000g polythene below topsoil. In absence of watercourse or soak away not working then discharge into existing system.
19. Mains operated smoke detectors required in all circulations areas (landings/halls) within 3M of doorways complying with B1 or B5 to conform to BS
20. TVR's to be installed and primary pipework be insulated. Wall mounted boiler gas fired to be 25mm from any combustible material with non-combustible sleeve enclosure. Hot and cold pipes within 1M of appliance together with unheated spaces (roof voids etc.) to be insulated. Areas with differing heating needs (separate sleeping and living areas) to have individual temperature controls by the use of room thermostats or individual radiator valves.
21. 20mm flexcel joints where new foundations meet existing with patented sealant.
22. Furfix movement joints required where new load bearing walls meet existing.
23. New stud walls filled with 100mm mineral based fibreglass quilt (unless it contains a door within it's length) and finished 12.5mm plasterboard and skim finish.
24. Wastes to CP304 with all traps 75mm deep seal with rodding access at all changes in direction. SVP's to extend at least 1M above nearest openable window where within 3M distance and be fitted with metal bird proof cage and be 100mm dia. Stub stacks fitted with durgo valves or similar approved when inside, and be 100mm dia. Ensure hot and cold water supplies to all wash basins. WC pipework should not allow light through. Bath, sink, basin, shower 38mm dia. Common wastes 50mm dia.

25. Boilers. Condensing wall mounted boiler to external wall with balanced flue and wire mesh guard if less than 2M above ground level with minimum SEDBUK value 90%. Owner to be provided with operating instructions for the heating and hot water systems. Boiler to be minimum 300mm from any opening and 25mm from any combustible material. All heating and hot water vessels to be fully commissioned to ensure they are operating at maximum efficiency and all controls work as intended. Person carrying out the commissioning must provide a certificate confirming it has been carried out properly to both the client and local authority approval.
26. Electrical work to meet 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 S7671 electrical installation certificate to be issued for the work by a person competent to do so (defined as a member of an approved self certification scheme).

29. Timber floor. Joists as noted to galv joists hangers secured to walls. 22mm T&G flooring grade chipboard to joists. Joints filled with PVA adhesive with 10mm perimeter expansion joint. 100mm oversite concrete slab in C25 design mix on 1200g visqueen DPM lapped with DPC on 100mm minimum sand blinded hardcore. Oversite sited at ground level and ensure min 150mm clear air void (unless noted) below. 120mm celotex between joists off chicken wire stapled to joists. 225 x 150 deep air grills at 1.8M c/c to perimeter.

31. Pitch roof: pitch and tiles as existing (unless noted) to 45 x 25 tanalised battens to reinforced tyvcck breathable roof felt to BS747 lapped 450mm down slope. Dress felt to gutters with uPVC facias and soffits. Rafters spiked to and notched over 50 x 100 wall plates raw bolted to existing house walls, ceiling joists to hangers. 100mm insulation between joists with 170mm across. Sloping roofs to have 100mm Xtrtherm XT/PR between rafters with 50mm XT/TL-MF below with 12.5mm plasterboard and skim finish. 25mm continuous eaves vents with fly proof screens.
32. Cavity walls: 102 face brickwork to be agreed with client and 85 cavity with 40mm Xtratherm XT/CW T&G extending, commencing 150mm below the top of the ground floor perimeter. 100mm durox blockwork inner leaf and 13mm plaster finish. Stainless steel wall ties at 450mm c/c vertically and 750mm c/c horizontally staggered to alternate courses and at least 300mm c/c around door and window openings. Close cavity head with insulating block or the roof insulation should meet with the wall insulation. 2 leafs fletton brickwork below DPC level with cavity filled with concrete to ground level. Insulation installed to manufacturers specification and taken down below DPC level finishing at the same level as the underside of the floor slab insulation. Cavity wall insulation to be taken up the full extent of the gable walls where applicable. Use insulated cavity closers.

35. Limiting air leakage. Great care must be taken to prevent air leakage including: keeping joints between adjacent materials,components or service penetrations as narrow as possible. Closing vertical ducts at top and bottom. Sealing joints between adjacent materials, components and service penetrations using an appropriate sealer/gap filler for the size of gap and degree of movement expected. Install drylinings with a continuous ribbon of adhesive at perimeters of external walls,openings and service penetrations. Support floor joists on galvanied steel hangers on external walls. Seal between skirting boards and floor boarding or screeds.
36. Walls/gables restrained at all levels via 50x5x1200mm long galv ms straps at 1.5M centres plug and screwed to walls and screwed to underside of at least 3 joists/rafters and secured via nogging pieces.
37. 150mm code 4 lead to all roof and wall abutments

42. Internal walls to be 50x100mm studs and 12.5mm plasterboard and skim finish unless sated otherwise.
43. High level roof ventilation required in the equivelant form of a continuous 5mm air strip at ridge.

45. Areas with differing needs (separate sleeping and living areas) to have individual temperature controls by the use of a room thermostat or individual radiator valves.

47. Maintain minimum 40mm gap between any chimney breast and any combustable material.
48. Multiple beams bolted together via 16mm diameter ms bolts at 450mm centres and 50mm dia double sided toothed plate connectors.

CLIENT: MR. MR. YOUNG MAN.

PROJECT: 27. HILLSIDE ROAD. RAYLEIGH. ESSEX.

DRAWING NO. 3. **REV.**

SCALES ——— **DATE.** JUL 15

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