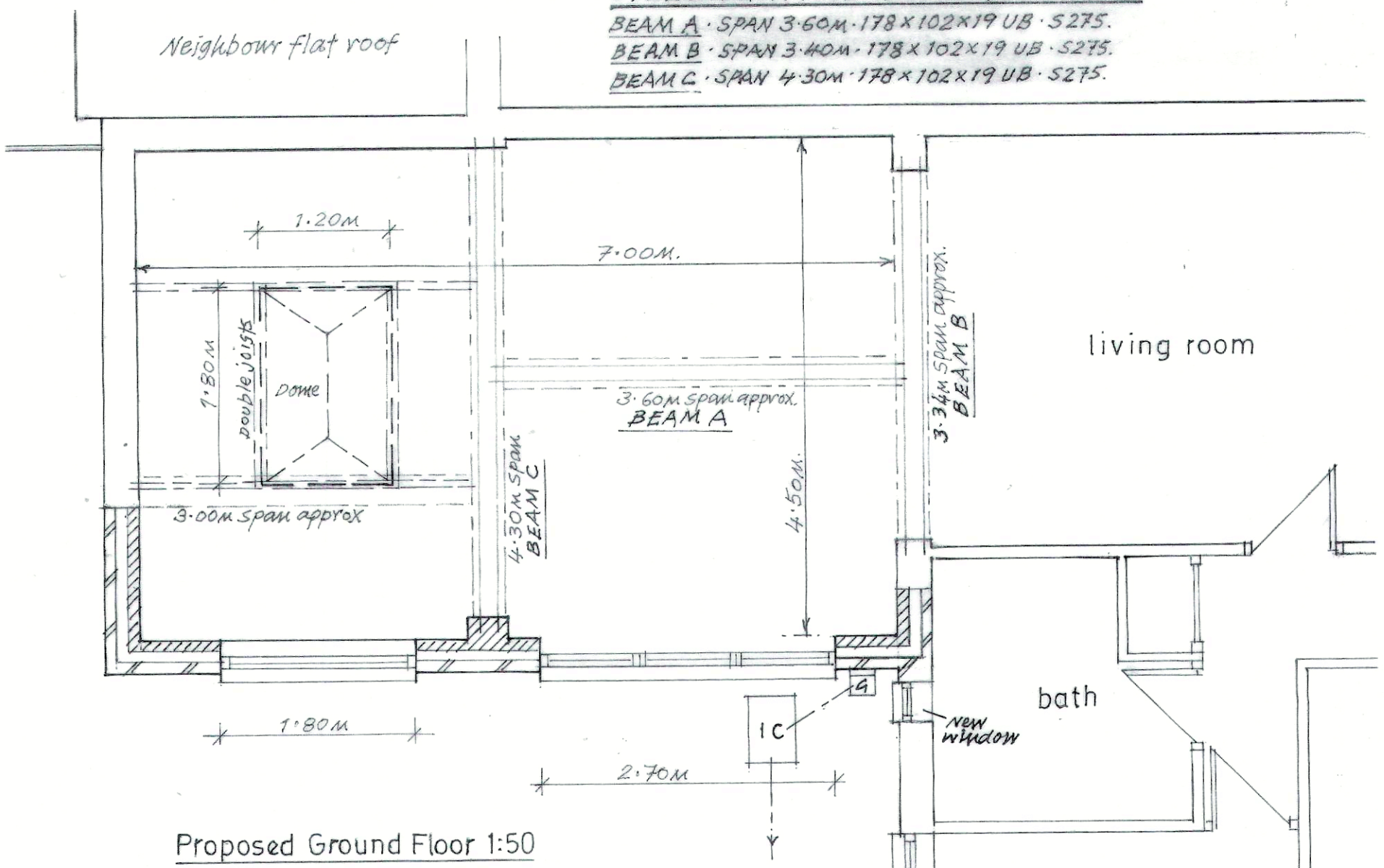
STEELWORK (SEE STRUCTURAL CALCS)

BEAM A · SPAN 3·60M · 178×102×19 UB · S275.
BEAM B · SPAN 3·40M · 178×102×19 UB · S275.
BEAM C · SPAN 4·30M · 178×102×19 UB · S275.



Proposed Ground Floor 1:50

NEW CAVITY WALLS

100mm Red brickwork outer leaf to match the existing house brick. 100mm cavity filled with a high performance insulation boarding such as Unilim cavity therm board. 100mm concrete, insulation block-work inner leaf. 12·5mm plaster-board and skim internally. cavity insulation to be taken right to the top of the cavity. Close the cavities at the jambs with insul-ated cavity closer. Horizontal dpc, min. 150mm above 'finished' ground level. Horizontal and vertical dpc's to all openings. Stainless steel wall ties at 5No. per M², at 750mm vert-ically, 450mm horizontally. Walls to achieve a U-Value of 0·18w/m²K.

FOUNDATIONS (CAVITY WALLS)

Min. 600mm x 225mm concrete set 900mm below ground level. Founds reinforced with C283 mesh 40mm from the bottom.

FLOOR

20mm Weyroc (or other to Client's choice). 500g. Visqueen Vapour barrier. 100mm concrete powred onto 120mm Kingspan K3 insul-ation. 1200g. polythene dpM, 50mm sand blinding on 100mm well-consolidated hardcore. DPM to be lapped into the walls dpc. Floor to achieve a U-Value of 0·18w/M2K.

HEATING

Radiators to have thermostatic vents to control room temps. Any work to Gas-Burning appliances to be carried out by a GAS-SAFE Registered Engineer.

ROOF DOME

Double roof joists and trimmers around the dome with code 4 lead flash upstand to the sides.

WINDOWS/DOORS

windows to be one tenth of the floor area of the room. Opening windows to be one twentieth of the room area. windows and doors are to be either double-glazed uPVC or Alloy units with a max. U-Value of 1·6w/m²Kelvin. windows and doors to have 8,000mm² trickle vents. Safety glass to be fitted to windows and doors where within 800mm of the floor area of rooms. Provide Catnic Lintels, suitable for the spans over windows and doors (Heavy-Duty over doors). Lintels to be 150mm end-bearing and have the ends closed with dpc.

FLOOR (Alternative)

20mm Weyroc (or other to Client's choice). 150mm x 50mm S.W. floor joists at 400mm CC's, on honey-comb sleeper walls (dpc over) at Max. 2M CC's. (100mm Oversite concrete - concrete thickened up to 150mm under sleeper wall(s). 50mm sand-blind under over site, 100mm hardcore. 225mm x 75mm airbricks ducted through the cavity walls, dpc over. Provide 100mm Kingspan Floor insulation between the floor joists.

ROOF

GRP/FIBREGLASS TOP waterproof layer. 22 OSB. Approx. 70mm - 0mm S.W. firrings. 120mm Kingspan insul-ation with integral vapour barrier layer. 22mm OSB. 12·5mm plaster-board and skim to the ceiling. 175/200mm x 50mm S.W. roof joists at 400mm CC's. (Min. C16 grade) Roof U-Value to achieve 0·15 w/m²K.

STRUCTURAL STEEL/TIMBERS

several walls are to be removed at ground floor and structural support provided over to walls and new roofing. Structural Calculations to be provided to Building Control by a Qualified Structural Engineer for these steel or timber supports and their bearings etc. Any steel-work to be rendered to achieve one-hour of resistance. see proposed Ground Floor plan above.

DRAINAGE

Roof surface water to 100mm uPVC guttering, 62mm R.W. pipe to new back-inlet gulley, all to existing manhole. New drains to be 100mm diam. uPVC surrounded in 150mm pea gravel. All soil and surface water to dis-charge into the existing systems.