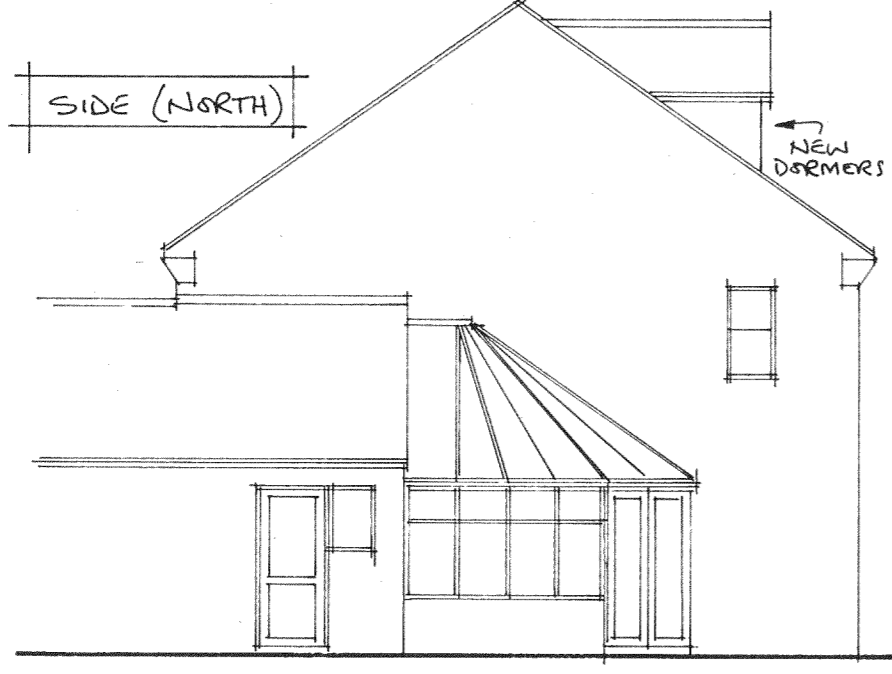
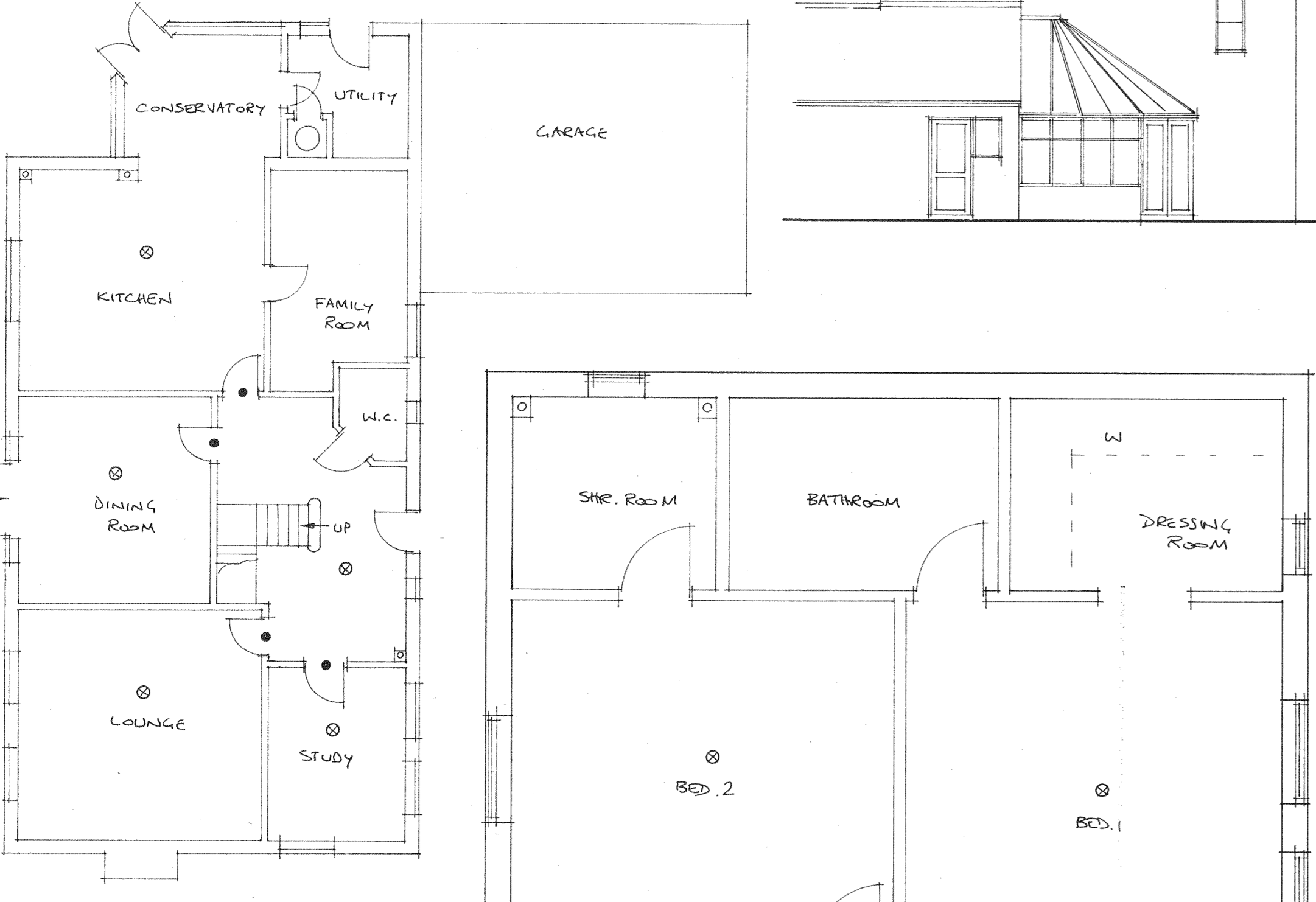




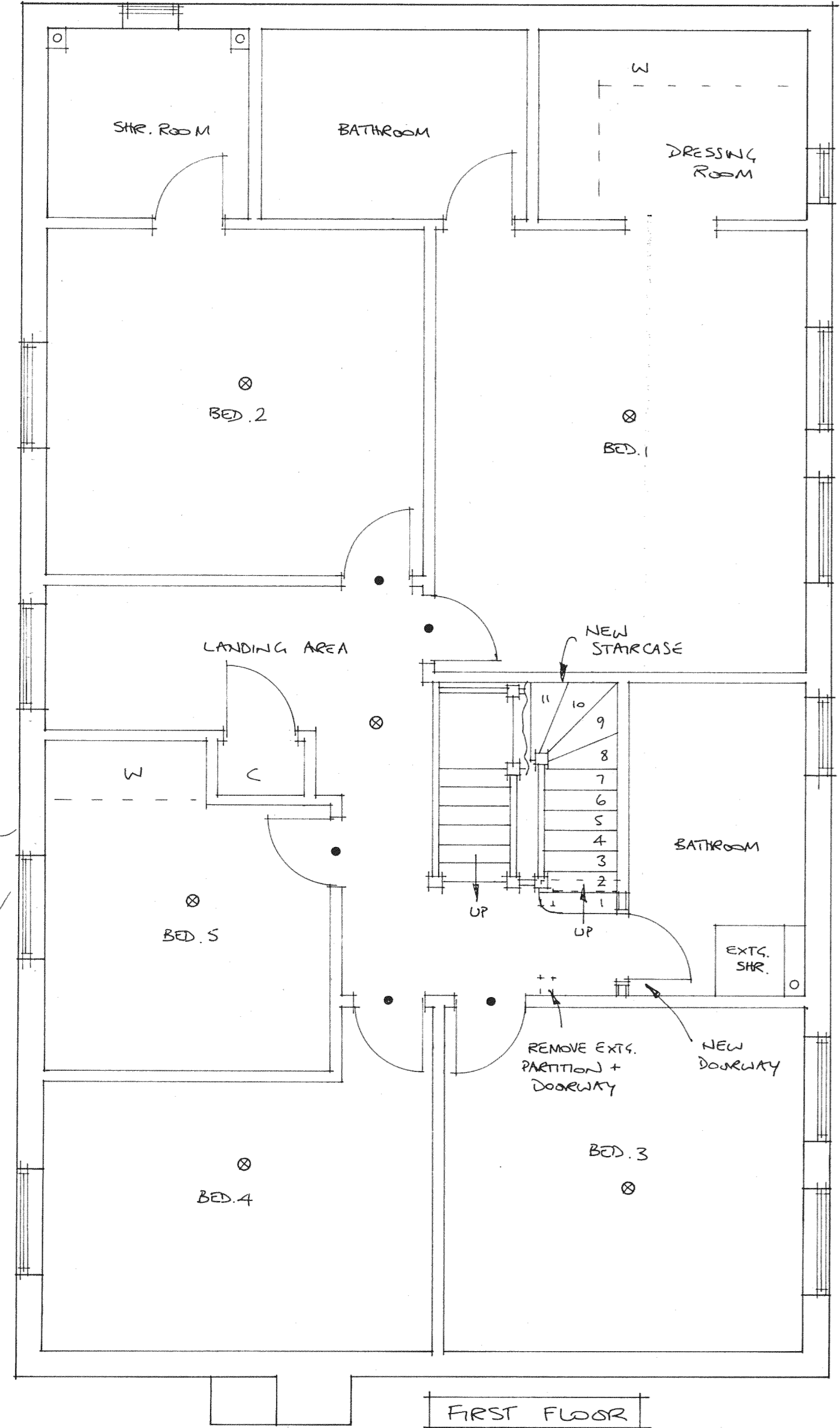
PROPOSED ELEVATIONS (1/100)



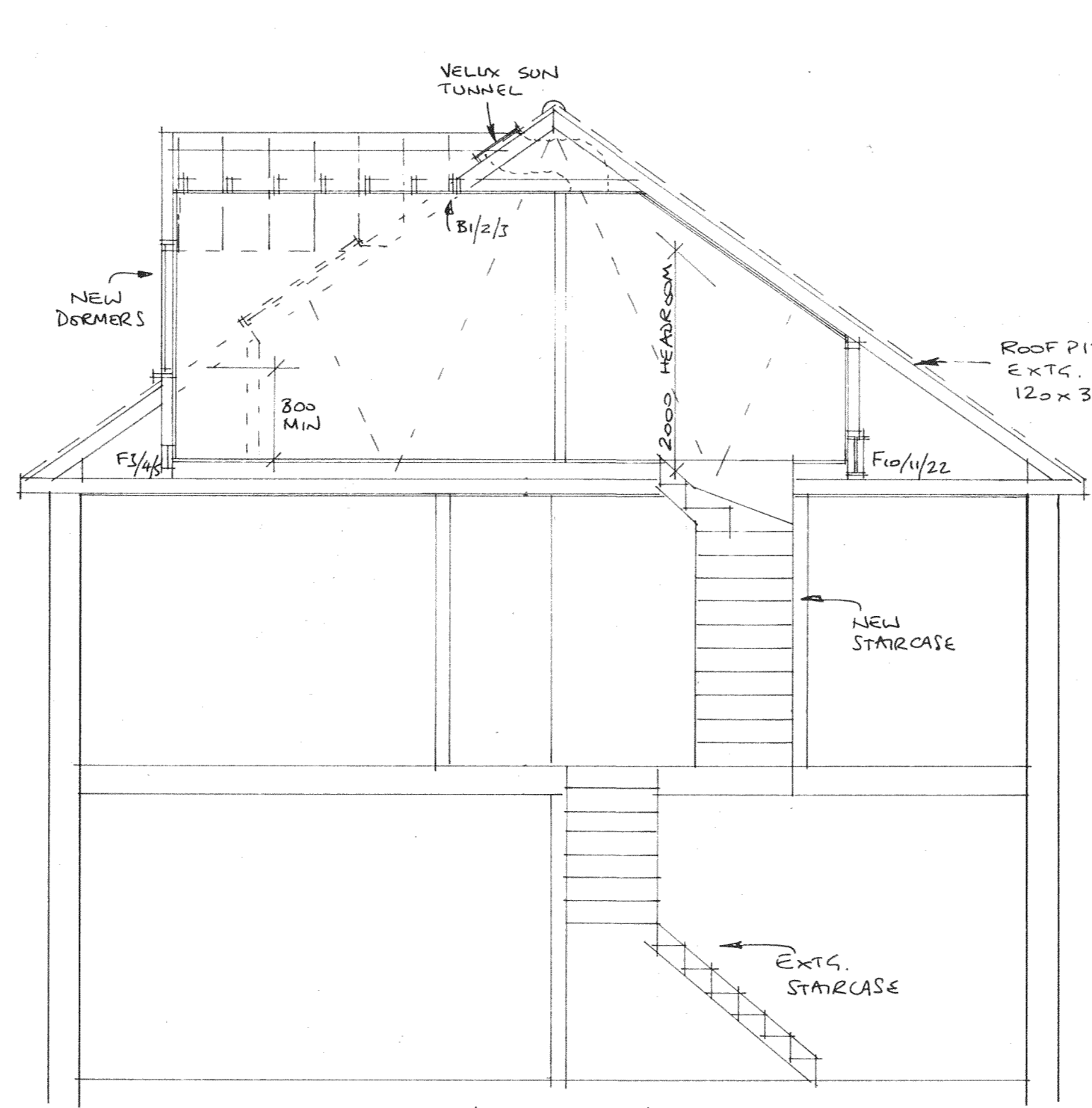
SIDE (NORTH)



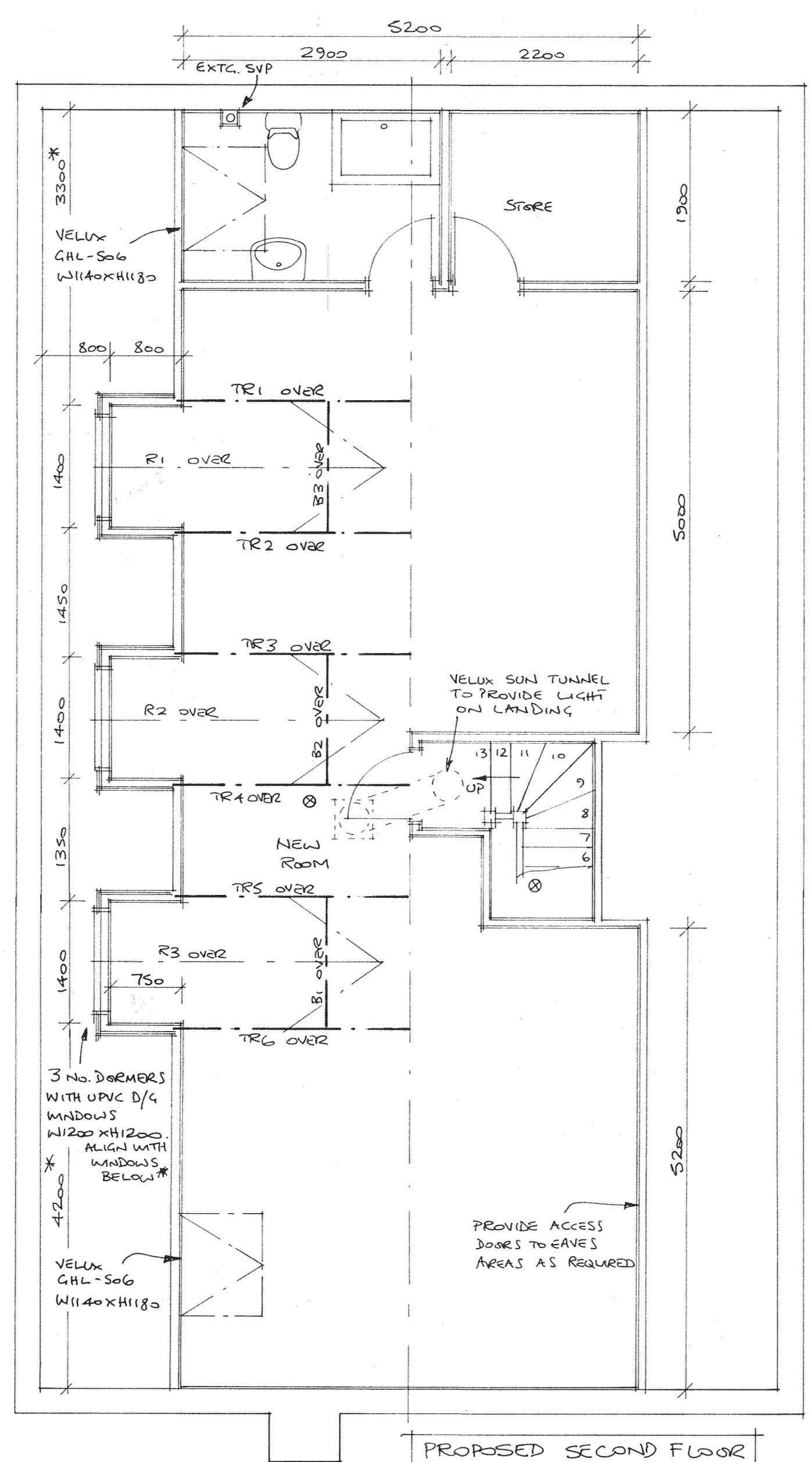
GROUND FLOOR (1/100)



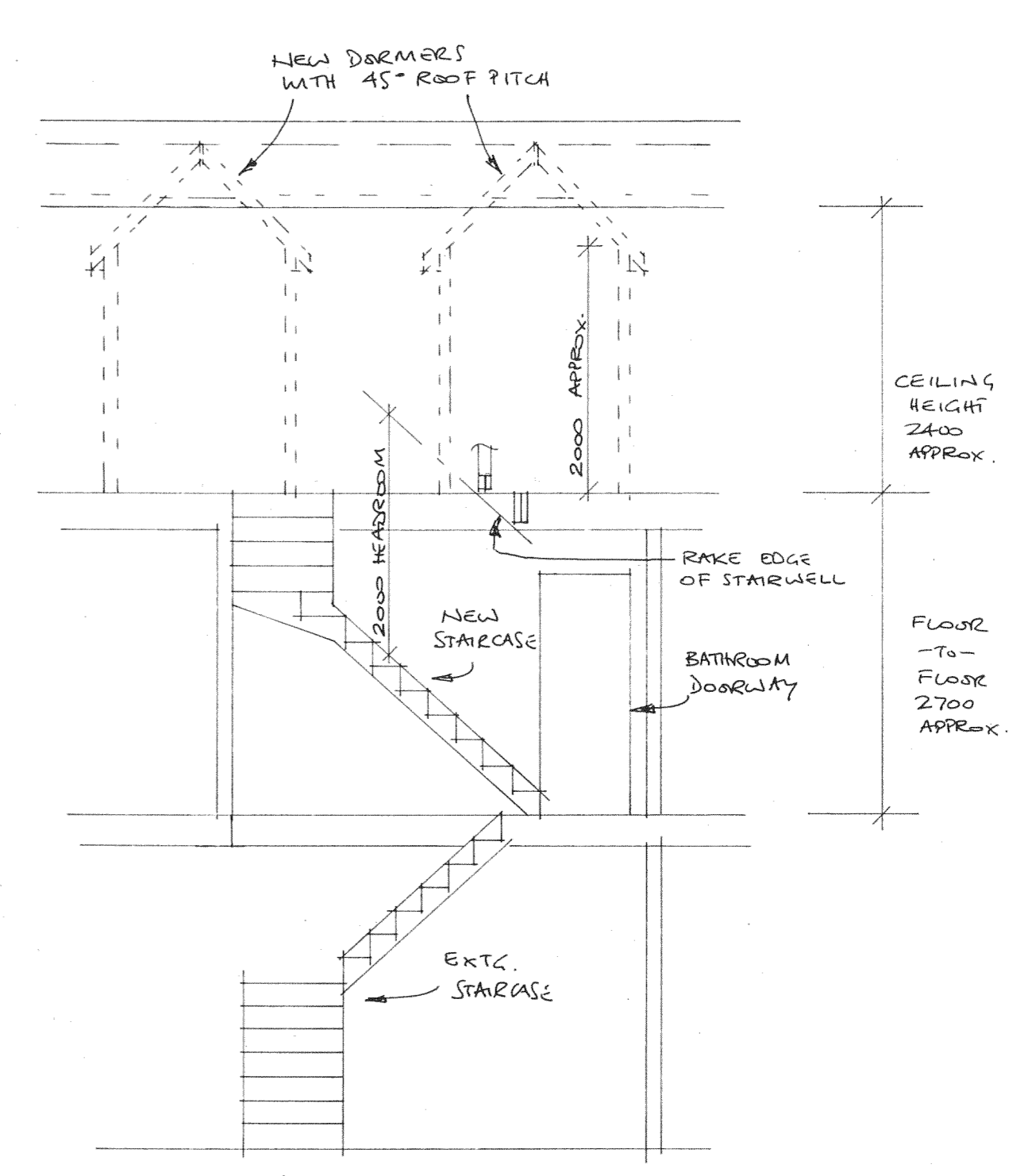
FIRST FLOOR



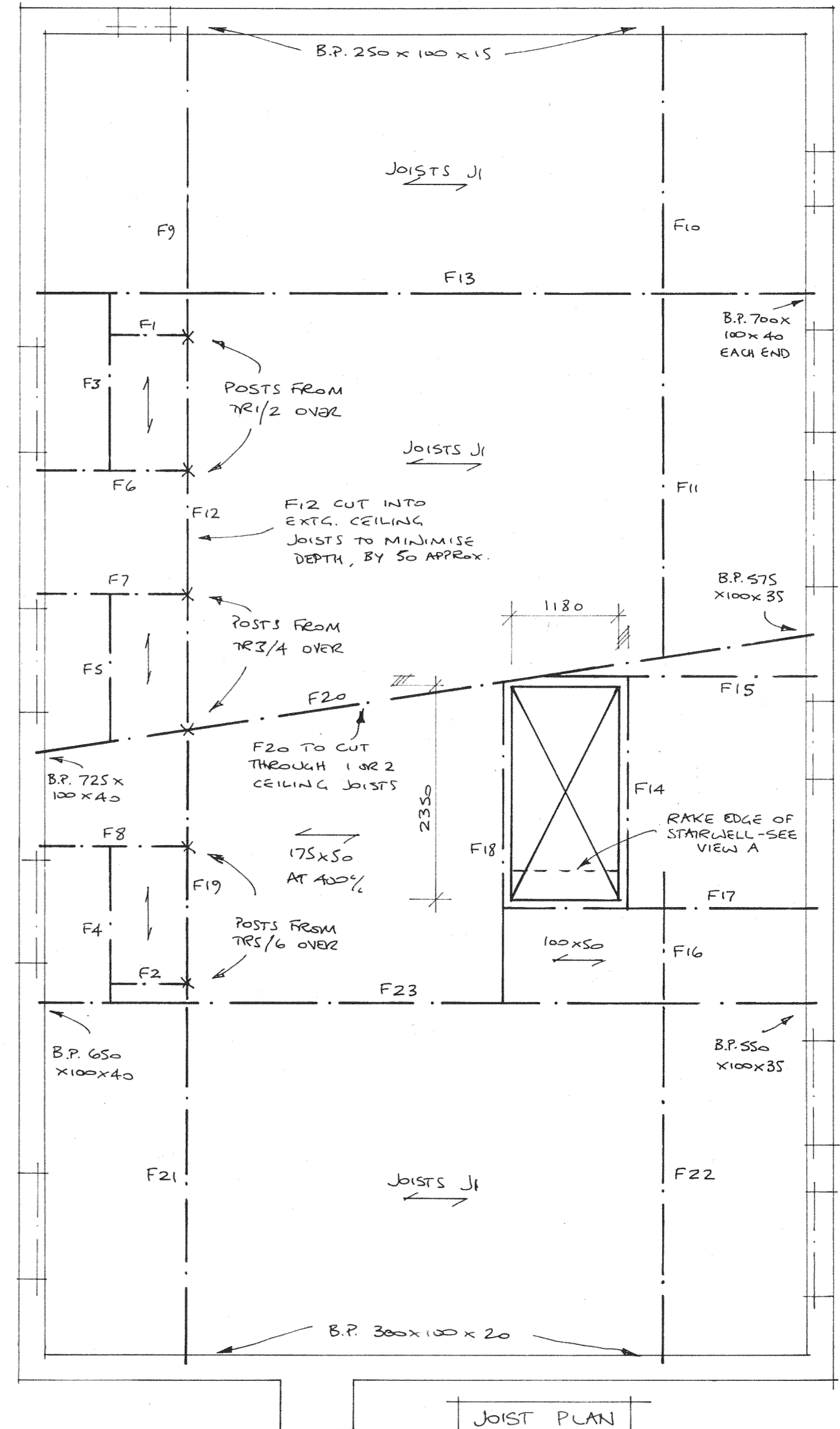
SECTION



PROPOSED SECOND FLOOR



VIEW A



JOIST PLAN

SPECIFICATIONS

GENERAL

Ventilation: Provide equivalent to 5mm continuous ventilation strip at ridge. Ensure/provide 25 ventilation strip (or equivalent) to ensure cross flow. Provide trickle ventilator to give 8000mm² background ventilation to loft rooms. Provide 25 ventilation strip above Velux roof windows to ensure continuous flow over sloping ceiling areas.

Structural: Double rafters to trim all round Velux window apertures. NOTE: existing structure bearing additional load to be exposed and checked for adequacy.

Conservation of fuel and power: Glazing to have U value 1.8 W/m² K. Install 3 energy-efficient light fittings. New radiator(s) to be fitted with TRV's.

Electrical Work: All electrical work required to meet the 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 must be satisfied that an appropriate electrical installation certificate has been issued for the work, and it has been signed by a person competent to do so.

STAIRCASE

Rise = 207 Going = 230 No. equal risers = 13

Overall width = 830 Maximum pitch 42°

Floor/pitch line to top of handrail 900. Spindles at 100 centres. Tapered treads to have min 50 going and same going as straight treads at mid-point.

CEILINGS & SKELLINGS

New ceiling joists (collars) with 120 Celotex insulation. Existing/new rafters to achieve 50 ventilation gap behind 50 Celotex insulation between rafters; 50 Celotex insulation across rafters with 12 foil-backed plasterboard + 5 plaster skins; or 50 Celotex insulation between rafters plus Tri-iso Super 10 stapled to rafters with 75mm overlaps + aluminium tape to seal, 25 x 50 cross battens at 400%, then 9.5 plasterboard (non foil backed) + plaster skim.

WALLS

100 X 50 studwork at 400 centres infilled with 90 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skin each side (internal walls) or one side (perimeter walls). Internal walls to have sound insulation (25 Rockwool).

DORMER ROOF - FLAT

Bitumen bedded limestone chippings on three layers bitumen roofing felt to BS 747, on 18 exterior plywood decking on 50 x 50 cross battens at 400 centres, on firing pieces (at 1:40) on x 50 flat roof joists at centres, infilled with 140 Celotex insulation and 12 foil-backed plasterboard + 5 plaster skin internally. Provide 25 ventilation gap around perimeter of flat roof. 112 half-round gutter to perimeter of roof; discharge onto existing roof via 68 # downpipe.

DORMER ROOF - PITCHED

Concrete roof tiles on treated battens on felt on 100 x 50 rafters at 400 centres, notched over 100 x 50 sole plate. Ceiling ties 100 x 50 at 400 centres. Internal specification as per Ceilings. Provide 25 ventilation around perimeter of pitched roof and equivalent to 5 continuous ventilation strip at ridge. 112 half-round gutter to perimeter of roof; discharge onto existing roof via 68 # downpipe. SEE INSULATION BELOW

DORMER WALLS

Vertical tile hanging on treated battens on breather paper on 12 ply bracing on 100 x 50 framing at 400 centres, infilled with 90 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skin internally. 100 x 100 corner and reveal posts. Cheeks within 1000 of boundary to have 90 battens over ply to achieve half-hour fire resistance from both sides. Cheeks built off existing masonry to have GMS straps at 900 centres. Dormer fully weathered in Code 4 lead flashing. SEE INSULATION BELOW

NEW FLOOR

Main beams on load bearing walls supporting new and existing structure. Supporting wall under rafters to have sole plate bolted to top flange of RSJ via M6 bolts at 600 centres. Timber packing bolted through RSJ web via M12 bolts at 600 centres, carrying GMS joisthangers with tails taken over stud wall sole plate. New joists to be 50 minimum from chimney breasts. Existing ceiling joists strapped up to new floor beams where binders/truss members removed. Steelwork to have 50 x 50 framing at 600 centres and encased in 12 fireline board for half-hour fire protection. New flooring to be 18 tongued and grooved flooring grade chipboard.

ALTERNATIVE INSULATION SPECIFICATION

Tri-iso Super 10 (25mm thick uncompressed) applied to all areas, stapled to inside of rafters/joists/studs, 75mm overlaps with aluminium tape to seal. 25 x 50 cross battens over insulation at 400%; then 9.5 plasterboard (non foil backed/Duplex) & plaster skim finish. (Effective U value 0.2 W/m² K or better, to all applications)

ALL OTHER AREAS TO HAVE 30 CELOTEX BETWEEN STUDS/ JOISTS ALSO (OR 90 CELOTEX ALONE)

Existing ceilings: 12.5 PBD + SKIM.

NEW LOFT FLOOR TO BE FULL HALF-HOUR FIRE RESISTANT. Lay 100 Rockwool over chickenwire over existing ceiling joists prior to laying new floor joists. Ensure first floor achieves modified half-hour fire resistance. Doors marked with fire door symbol to be replaced with fire-resisting glass. SOUND + WELL FITTING, MIN 32mm THICK, INS EXTC GLAZING.

⊗ Mains powered interlinked smoke alarms to BS 5446.

REF.	DESCRIPTION	BEAM SIZES
F1/2	FLOOR BEAM	2/100 x 50
F3/4	"	2/150 x 50
F5	"	2/150 x 50
F6/7/8	"	2/175 x 50
F9/10	"	178 x 102 UB19
F11	"	203 x 133 UB30
F12	"	203 x 203 UC46
F13	"	254 x 254 UC89
F14	"	2/175 x 50 + 6 FLITCH PLATE
F15	"	3/225 x 50
F16	"	2/150 x 50
F17	"	2/225 x 50 + 8 FLITCH PLATE
F18	"	152 x 152 UC23
F19	"	152 x 152 UC23
F20	"	254 x 254 UC107
F21/22	"	203 x 133 UB30
F23	"	254 x 254 UC89
J1	JOISTS	225 x 50 C24 AT 300%
TR-6	TRIMMER RAFTER	2/125 x 50 + 8 FLITCH PLATE ABUT AGAINST DOUBLE RAFTER AT PERIM.
BI-3	BINDER	2/150 x 50
RI-3	RIDGE BEAM	2/200 x 50
	EXTC. RAFTERS	ADD 125 x 50 TO RAFTERS

DIMENSIONS IN MILLIMETRES

JULIAN ADAMS BSc (HONS)
Loft Conversion Design
01234 314143

CONTRACTOR/AGENT

PROJECT

SCALE	DATE
1/50 + 1/100	1.8.8
DRG. No.	REVISIONS
CH/01	A 21.8.8 BEAM SIZES ADDED.