

SPECIFICATION

Roof construction:

Install interlocking tiles to match existing installed to manufacturers recommendations on 25x50 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on built up timber roof structures formed of:
Main roof:
50x100 rafters at 400mm max. cts.
47x147 ceiling joists at 400mm max. cts.
38x175 ridge beam
100x100 props installed where indicated to support hip rafters and purlins.
25x100 collars at ridge
50x200 hip rafters
50x100 wall plates
2 no.50x200 joists bolted together at max. 600mm cts. located below props where indicated.
Roof pitch to be approx. 30 degrees to match existing.

Rear extension roof:
47x125 rafters and ceiling joists at max. 400mm cts
50x200 hip rafters
Timbers supported on house wall by 38x100 timbers bolted to wall at 600mm cts. or timbers built into wall.
Roof pitch to be approx. 20 degrees.

Front lower roof:
47x100 rafters and ceiling joists at max. 400mm cts.
Install 2 no. 50x200 timbers bolted together at 600mm cts. to support roof structure over entrance and garage door.
Timbers supported on house wall by 38x100 timbers bolted to wall at 600mm cts. or timbers built into wall.
Roof pitch to be approx. 30 degrees to match existing.

Eaves to all new roofs to be constructed to be similar to existing including projection. No roof void vents required.

Install 30x5mm mild steel straps at average 1800mm cts. between roof structure and external walls. Straps to extend over 3 timbers where at right angles and to be supported by noggings.

Install code 4 lead stepped flashings between top of lower roofs and house wall.

All structural timber to be grade SC3 marked dry or kiln dry

Ceilings:

Formed of 12.5mm thick plasterboard generally and 12.5mm thick Gyproc Fireline board over garage all with either Arter or skim finish. Perimeter to be supported. Plasterboard to garage to be installed below lintel supporting front wall, see section.

Roof insulation:

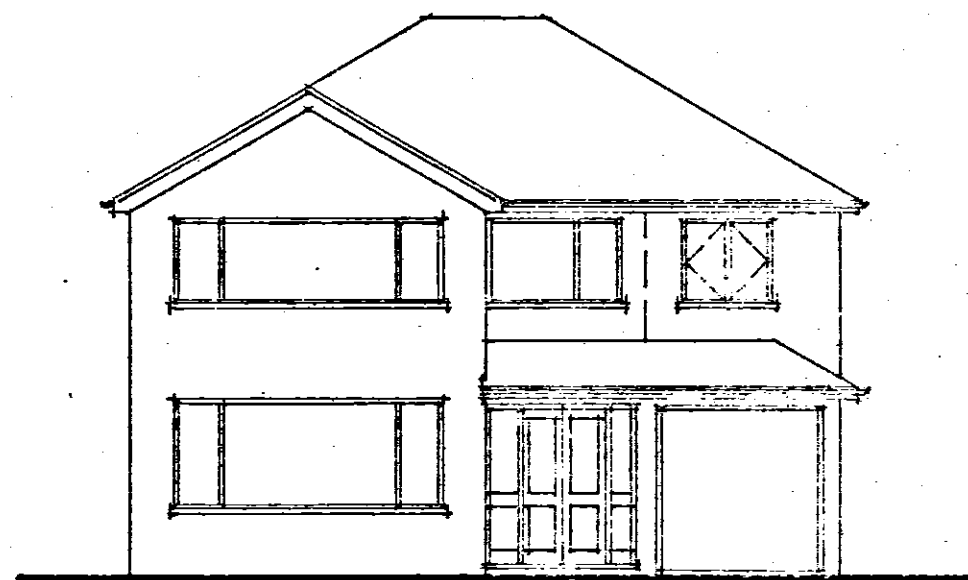
Install 100mm fibreglass quilt insulation between ceiling joists and 150mm thick quilt over joists.

Gutters and downpipes:

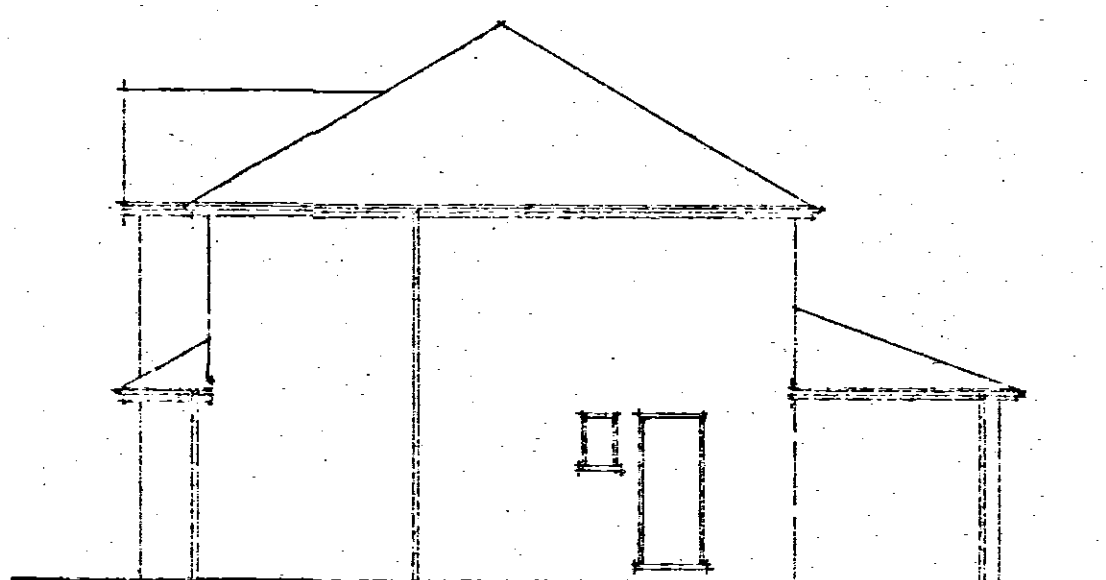
Install 112mm dia. h.r.upvc gutters and downpipes to match existing, new downpipes connected to 110mm dia. UPVC drains bedded on 100mm peagravel to fall to soakpits min. 1 metre cube at least 5 metres from building. (Refer to site plan).

Suspended floors:

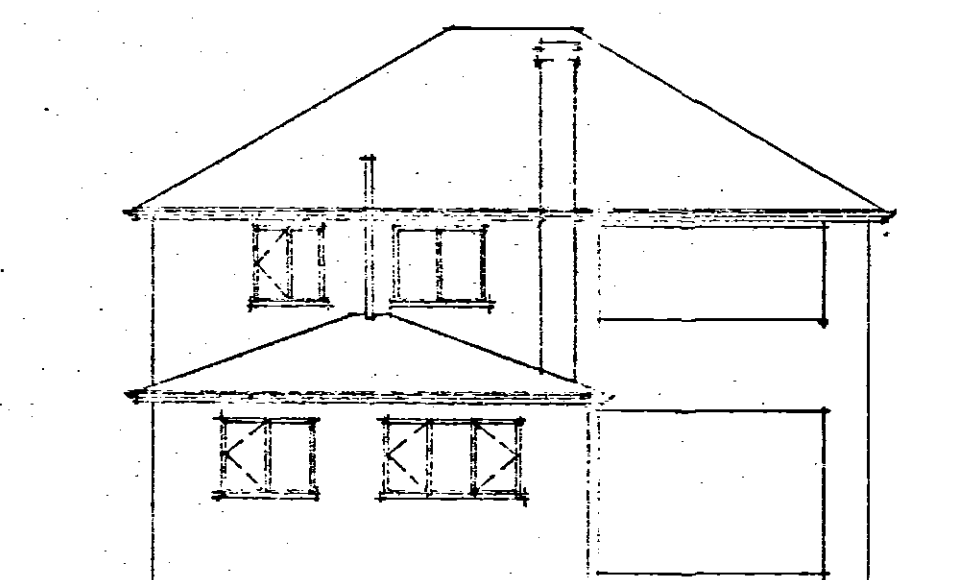
Formed of 18mm thick moisture resistant flooring grade chipboard on 47x195 joists at 400mm cts.
Install 1 row of solid or herringbone strutting at centre span
Install 30x5mm mild steel straps at average 1800mm cts. between floor joists and external walls. Straps at right angles to timbers to extend over 3 joists and to be supported by noggings.
Install 200mm thick fibreglass quilt insulation between joists over garage and 100mm thick quilt to remaining new floor.



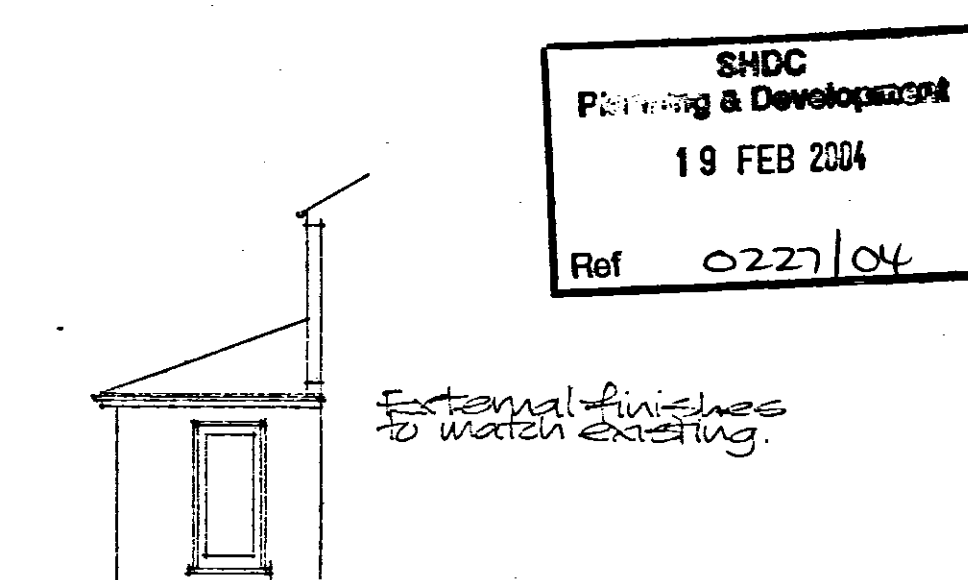
FRONT ELEVATION



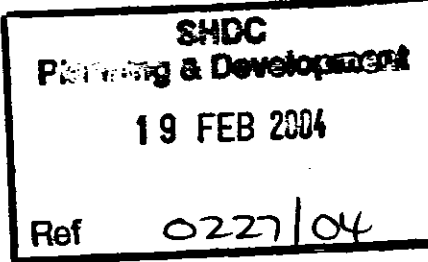
SIDE ELEVATION



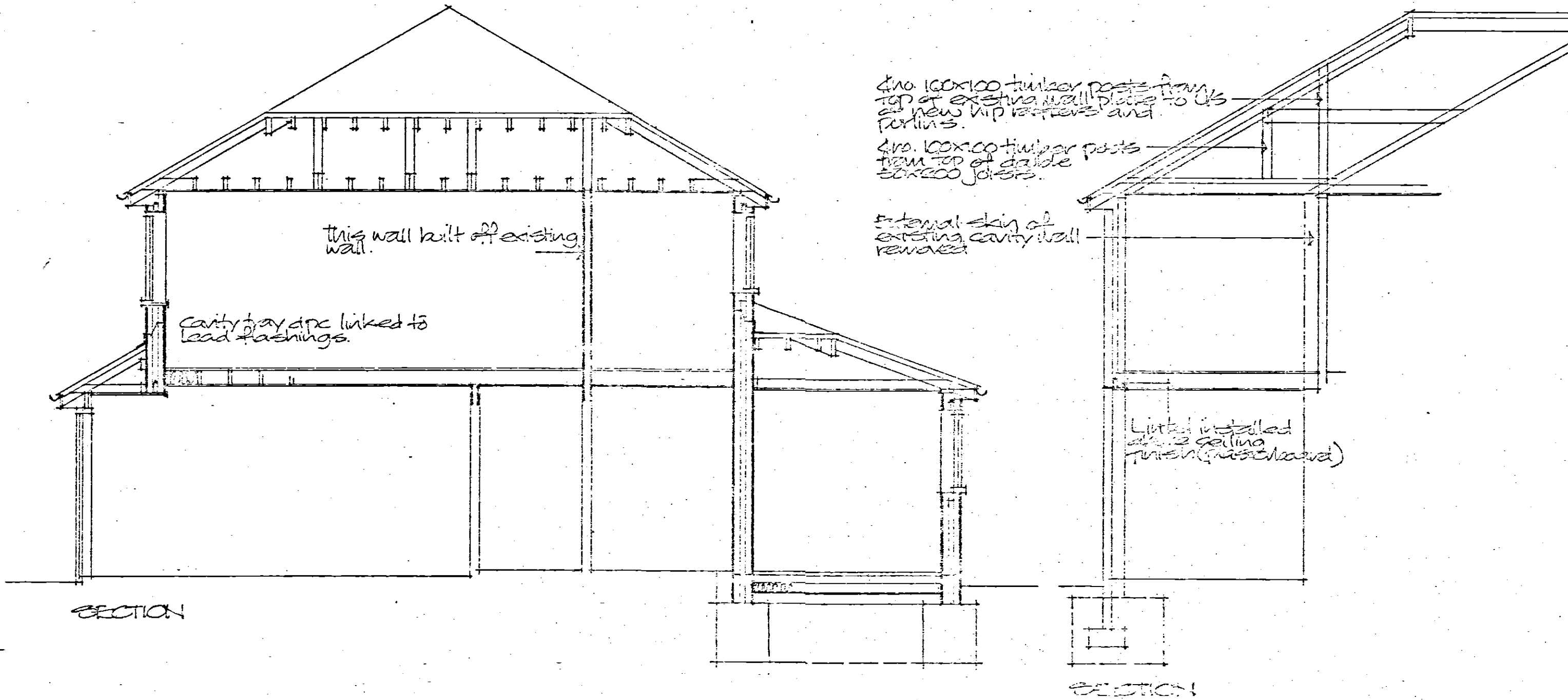
REAR ELEVATION



SIDE ELEVATION



External finishes to match existing.



Cavity walls:

Constructed of 103mm facing brick, 75mm cavity and 100mm Celcon or Thermalite standard blockwork with either dense plaster or 12.5mm plasterboard and skim on dabs internal finish. Install 75mm thick Dritherm cavity insulation batts to manufacturers recommendations.
Average "U" value = 0.33 W/M2K.
Install Dampcor insulated DPC to reveals with frames lapping by min. 15mm.
Install wall ties at 900mm cts. horizontally, 450mm cts. vertically and at 225mm cts. within 225mm of reveals.
Install Hyload DPC min 150mm above ground level with DPM lapping inner wall DPC.
Concrete blockwork used below DPC level to be class A.
Install concrete fill to base of cavity to within 225mm of DPC level unless trenchfill foundations used. New walls generally bonded to existing with Furrif wall extension profiles.

Lintels:

Install IG type L1/S75 steel lintels to 3 no. openings in rear extension and first floor en-suite and bedroom windows and type L1/ED75 above side of garage between piers and over garage supporting front first floor wall. Install IG box lintel 100 steel lintel above internal door opening from landing to new bedroom and IG type internal 100 lintel to door opening between bedroom and en-suite. Check existing lintels affected for suitability.

Ground floor construction (rear extension):

Approx. 50mm thick sand/cement screed on 100mm thick grade Gen 3 concrete slab with 25mm thick expanded polystyrene perimeter insulation on 100mm thick SD grade expanded polystyrene insulation on 1200 gauge polythene DPM lapped over wall DPC on minimum 150mm thick hardcore well consolidated and blinded.

Foundations:

Install 700mm wide x 225mm deep grade Gen3 concrete strip or 700mm wide trenchfill foundations min. 750mm deep (1.600m deep in shrinkable soil). Depth to be agreed on site with LA building inspector. Pad foundations to new piers in garage to be formed of grade Gen3 concrete with min. depth of 1.000 with top of concrete approx. 150mm below ground level. Foundations to be cast around existing foundations with openings formed through walls to allow concrete to merge together.

Windows and doors:

Windows to be white UPVC glazed with sealed units with min. 16mm gaps and incorporating Low E coating to give min. "U" value of 2.0 W/M2K. Any glass to doors, sidelights and windows attached to doors and any other glass within 800mm of floor to be safety glass to BS6206. All openings to be draught sealed. Install trickle vents to provide min. 8000mm2 background ventilation to bedroom and 4000mm2 to kitchen, utility, and en-suite, bedroom window to provide min. 3% openings related to floor area. Fire escape type window to be installed to bedroom with min. clear opening width of 450mm and a min. opening area of 0.25m2.
Window sizes shown on drawing to be confirmed on site.

Heating and hot water:

Install new gas fired wall mounted balanced flue boiler with min. efficiency of 78%(SEDBUK). Boiler flue outlet to be at least 300mm from opening into building (door). Boiler to be fitted with timing controls and boiler control interlock. Boiler to be installed by Corgi registered installer who is to issue a commissioning certificate on completion. Thermostatic valves to be fitted to all new radiators. New heating and hot water pipes to be insulated with Armaflex or similar insulation of thickness to match pipe outside diameter. Instructions for use of heating system to be displayed adjacent to boiler.

Drains above ground:

To comply with BS 5572 with 40mm dia. polypropylene wastes from kitchen sink, dishwasher, washing machine and shower tray and 32mm dia. from wash basins with 50mm dia. combined wastes. Install 75mm deep seal traps to all fittings except shower tray, which is to have 50mm deep cleanable trap. Kitchen wastes to connect to new back inlet gully and en-suite and existing bathroom to connect to adapted soil and vent stack within duct with rodding point at base, top of stack to terminate at least 900mm above first floor window head.

Below ground drainage:

Formed of 110mm dia. UPVC drain bedded and surrounded in 100mm peagravel to fall at min. 1 in 60 to connect from new back inlet gully to existing inspection chamber and foul sewer. Drains passing through walls to be protected by prestressed concrete slab lintels with min. 50mm clearance around pipes with protection from vermin entry and gas sealed. Drains within 600mm of ground level to be protected by reinforced concrete slab laid above compressible layer above peagravel surround.

Mechanical ventilation:

Install extract fan to kitchen mounted in cooker hood to extract at a rate of 30 litres per second. Install extract fan to utility to extract at a rate of 30 litres per second. Install extract fan to en-suite to extract at a rate of 15 litres per second.

Stud partitions:

Formed of 50x75 studs at 400mm cts. with 50x75 sole and head plates and noggings at 1.250 max. cts. with fibreglass quilt packing between studs and 12.5mm plasterboard and skim cladding to both sides.

Lighting:

Install in at least 1 room, compact fluorescent or fluorescent tube type low energy light fittings.

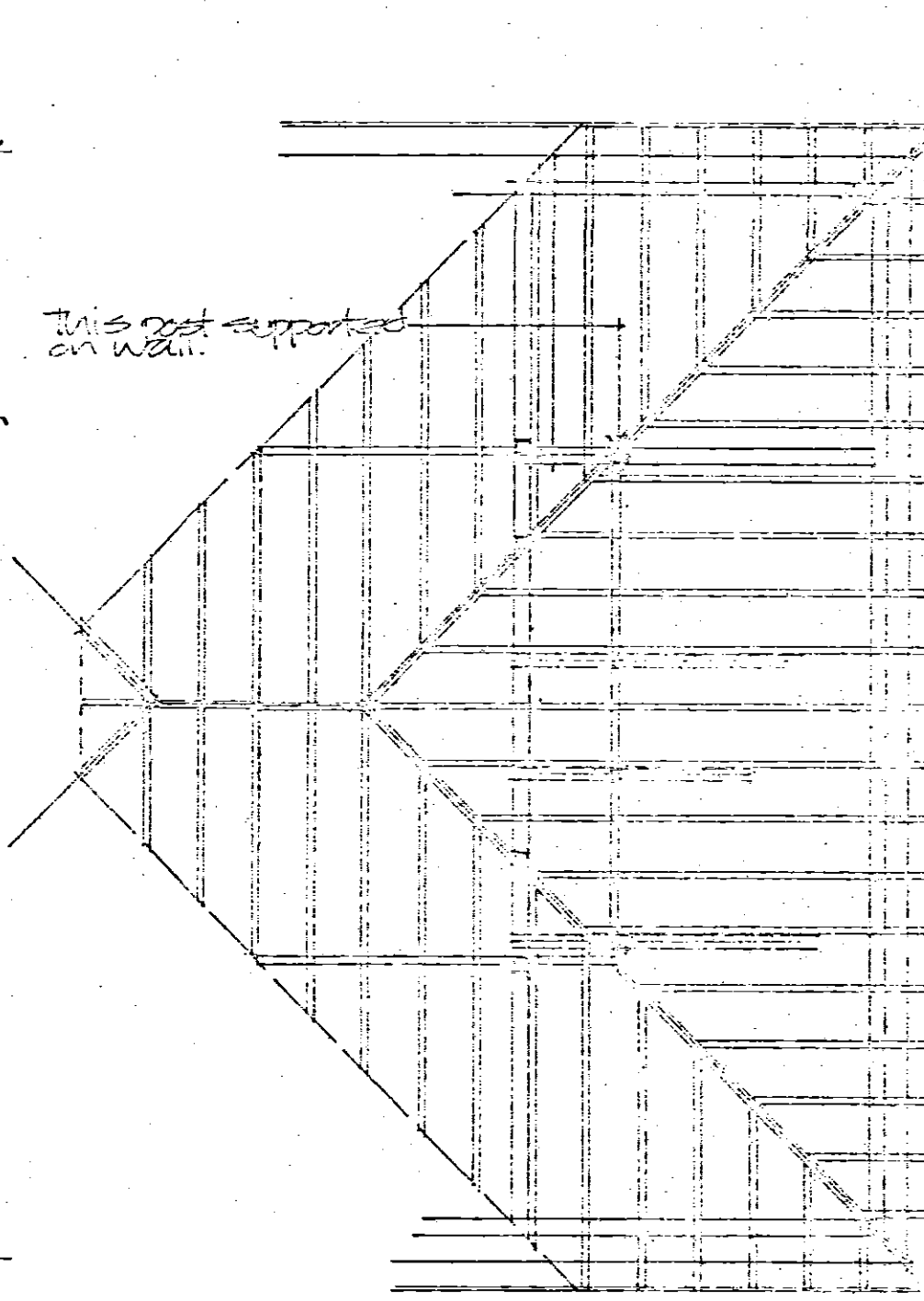
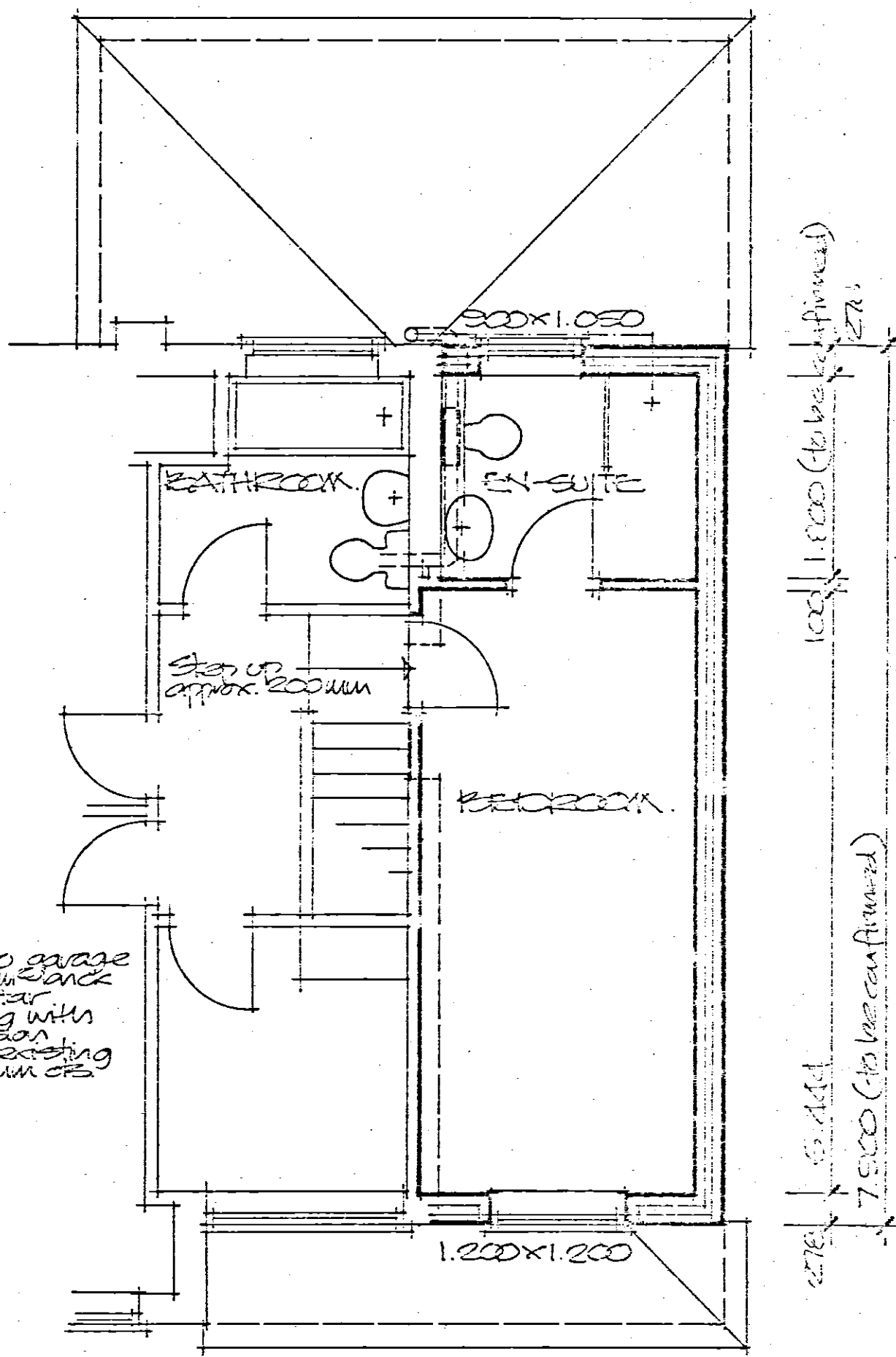
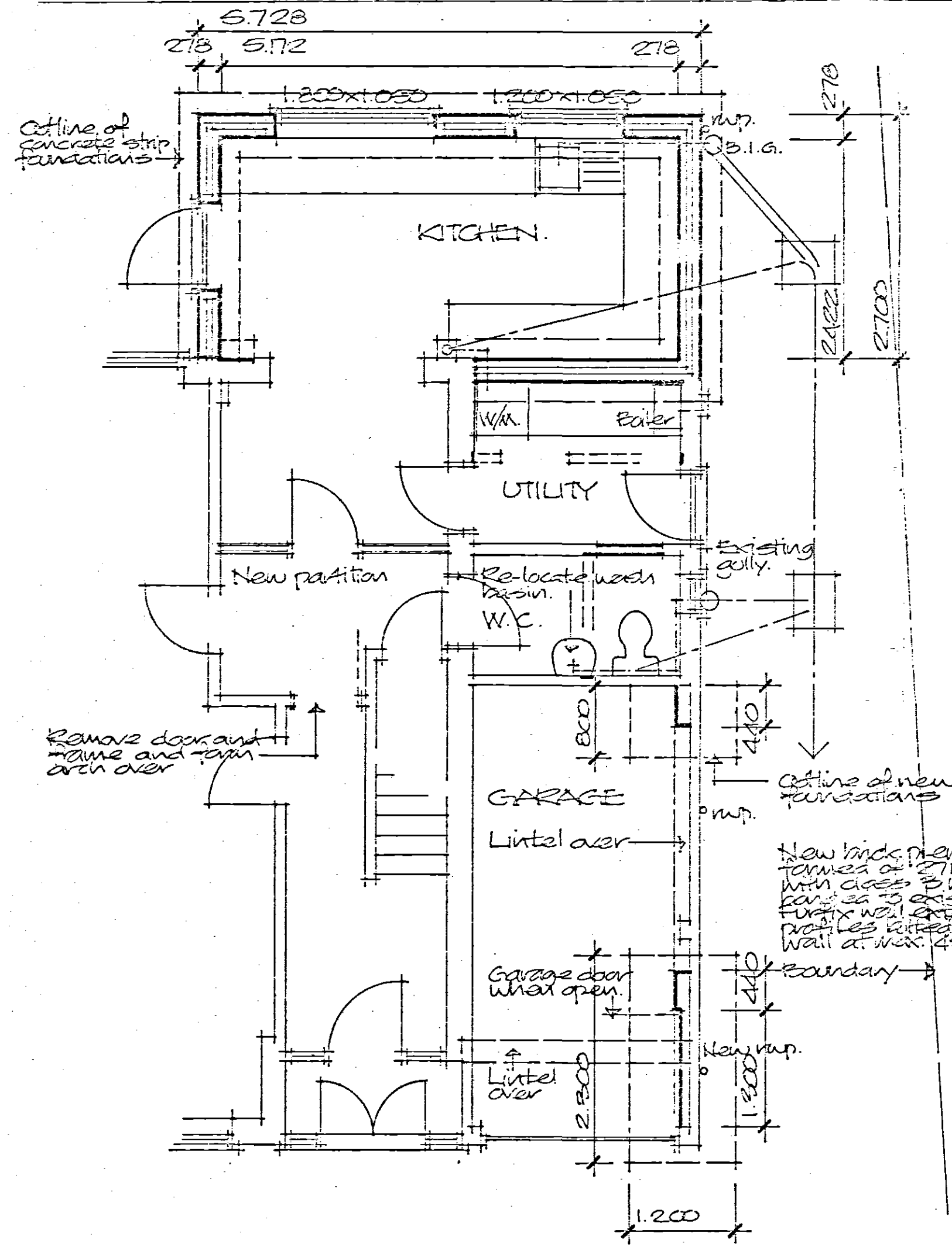
PROPOSED EXTENSIONS TO HOUSE
1 CLEY HALL GARDENS, SPALDING.
MR & MRS R CARTER

BROADGATE BUILDERS LTD

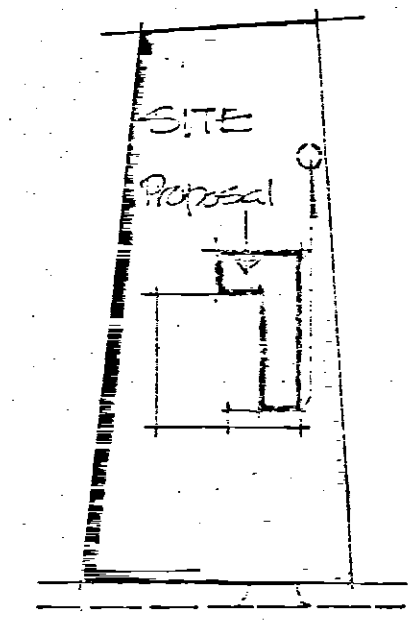
DETERMINED
PLAN

The Race Ground
Spalding
Lincolnshire
PE11 3AP

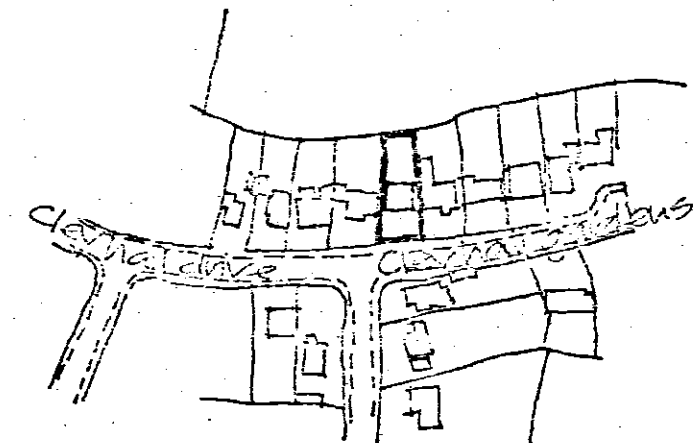
Scales 1:50 & 1:100
Feb 04



ROOF STRUCTURE LAYOUT



BLOCK PLAN
Scale 1:500



LOCATION PLAN Scale 1:2500