

# SPECIFICATION

## 1. EXTERNAL FINISHES

External walls to be in buff/brown facing bricks to match as near as possible those on the existing building.  
B. Roof to be covered in Slate Grey concrete interlocking plain tiles to match as near as possible those on the existing building. The extended roof to the existing annex is to be covered in Slate Grey cement fibre tiles to match the existing adjoining roof.

## 2. FOUNDATIONS

Provide concrete strip footings where shown dotted on the plan in 874 mm 610mm x 450mm wide x 225mm thick. The foundations are to be taken down to a good bearing strata approximately 550mm deep unless shrinkable sub-soil is encountered then this is to be increased to 1.000m. Where walls are to be built off the site slab then this is to be thickened to 225mm x 450mm wide plus 45t better.

## 3. WALLS

270mm cavity external walls to comprise 105mm facing brick outer skin, 55mm cavity with 65mm Dritherm insulation baps to the full height of the wall commencing at the base of the floor slab. 100mm lightweight insulation block inner skin in Thermatec Turbo blocks or similar approved provided that they meet the same insulation value, 13mm dense or lightweight plasterwork internally to give 0.32W/m<sup>2</sup>K. Build in as the work proceeds twisted plastic wall tie to BS1243 spaced 900mm horizontally & 450mm vertically (max) with additional tie to all formed openings & vertical expansion joints. All below ground walls to be built in either class A concrete blocks, Newton insulation blocks or formed in F1 type brickwork. Back fill cavities below ground level in lean-mix concrete up to 15mm below ground. Close cavities at external openings & reveals & at every cavity closure provide vertical & horizontal D.P.C.'s as appropriate but the cavity is not to be closed at eaves level as the wall insulation is to join together with the roof insulation in order to give a complete thermal break. Build in as the work proceeds 'Carnic' or similar approved combined insulated lintels to all the external openings, including altered & newly formed openings in existing walls, sized & fixed strictly in accordance with the manufacturers recommendations. Provide & fix over the internal openings 'Carnic' or similar approved corrugated type lintels as manufacturers specification with the exception of the new opening formed in the present external wall of the existing structure where this links with the new extension to form the freezer room these lintels are to be 2No/CH6XC 'Carnic' box type load bearing lintels or similar approved similarly provide a CH6XA lintel to support the wall piers over the Circulation passageway adjacent to the freezer room. Close cavities around external openings with Thermatec or similar approved insulated cavity closers and the window frames are to be recessed in their opening to ensure a minimum 25mm overlap of the frame over the insulated cavity closer. The internal division walls are to be in 100mm & 200mm insulation blocks where shown. Provide continuous Pich Polymer or Lead Bitumen D.P.C.'s to all walls at floor level & mechanical fixings are to be provided at the abutment of all new walls to the existing structure, internally & externally. The mechanical fixings are to be used strictly in accordance with the manufacturers instructions.

## 4. SOLID FLOORS

The solid floors are to comprise of 65mm cement sand screed (1:3) on 100 oversize concrete (1:2:4) on 1200 gauge polythene D.P.M. which is to be lapped up the edges of the site slab all round and tucked into the horizontal D.P.C. 50mm (min). All to be laid on 100mm 'Polyslam Plus Floorboard 220' insulation board laid strictly in accordance with the manufacturers instructions including 25mm expansion strips around each room to give 0.22W/m<sup>2</sup>K insulation value, all on compacted soft sand blinding on 150mm thick mechanically compacted hardcore bed. NOTE:-The hardcore is to be compacted in not more than 150mm thick layers particularly where there is an abnormal difference in floor levels.

## 5. DOORS, FRAMES & WINDOW FRAMES

The door frames & window frames are to be in timber to match the style as illustrated & manufactured by a specialist manufacturer to comply fully with BS6375pt 1:1988 & pt2 1987. All windows are to be double glazed with 24mm DG units with low'E glass to the inner surface to give 2.0W/m<sup>2</sup>K insulation value & safety glass complying with BS6206 is to be used in doors, any glazing within 300mm of door edges & any glazing within 800mm of floor level. All windows to incorporate controllable trickle ventilators giving 8000mm<sup>2</sup> free air space to habitable rooms & 4000mm<sup>2</sup> to all other rooms & having fitted fly screens & in addition to have operable areas equivalent to 1/20th of the floor area of the room they serve. The frames are to be set back in the brickwork openings & must overlap the insulated cavity closers a minimum of 25mm.

## 6. ROOF

Reinforced 'Cambrian' concrete interlocking slates or similar are to be used to the roofs to the main extensions with contrasting hip & ridge tiles and the extended roof to cover the Kitchen extension is to be covered with cement fibre slates to match the existing adjoining roof. All coverings are to be laid strictly in accordance with the respective manufacturers instructions on treated battens complying with BS4471 on Tyvek Supro-Plus breather underlay laid with 150mm laps & to be fully supported at eaves all round together with proprietary over fascia ventilation units giving equivalent free air space to a 10mm gap to roof perimeter & to be fitted with fly screens. Roof supporting structures are to be fabricated using 'Fink' type gable rafter roof trusses by a specialist manufacturer complying fully with BS5268 pt3, 1985 & fixed strictly in accordance with the manufacturers instructions & spaced at 600mm centres (max). Additional strengthening timbers are to be incorporated in the roof in accordance with the TRDA tech bulletin No1 comprising 2No 100 x 25mm ceiling binders, 100 x 25mm ridge binder, 100 x 25mm bracing on internal members & diagonal ceiling ties. 100 x 50mm continuous wall plate bedded in cement sand mortar (1:3) with 5mm M.S. anchor straps at 1.800m centres (max). Provide additional timbers to support any cold water feed tanks which may be situated in the roof in accordance with BS5268 pt3. All structural timbers are to be of SC3 grade timber. The roof space is to be insulated throughout with 100mm thick glassfibre insulation which is to be laid between the trusses with a 150mm overlay in the opposite direction which is to be well tucked into the eaves to join with the wall insulation & a baffle board is to be provided at eaves level in order to maintain a 25mm clear air space between the insulation & underside of the roofing (as). The roof 'U' value is to be 0.16W/m<sup>2</sup>K. Provide & fix 25mm treated deal fascia all round the perimeter of the building to match the existing with exterior ply soffit boards. Provide & fix all round the roof self coloured P.V.C. gutters & downpipes in the positions as indicated in a matching style to the existing. The ceilings throughout are to be formed in 13mm foil backed plasterboard which is to be fixed & supported on all edges with additional noggin as appropriate & finished with 'Arrex' compound or skim coat plaster as directed by the client. All timbers which are to be built in or concealed are to be pre treated against rot & infestation with an approved preservative by a specialist. The flat roofed area over part of the Circulation passageway is to be 'Warm Roof' construction to comprise 100mm/38mm joists at 400mm centres covered with 22mm exterior quality plywood or chipboard decking covered with Anderson or similar approved roofing materials vapourtec base layer, Rockwool Roofmat 120mm thick insulation board covered with HT Elastomeric mineral coated upper layer to give 0.29W/m<sup>2</sup>K. The valley gutters between the roofs are to be pre-formed glassfibre units fixed in accordance with the manufacturers instructions. The valley gutter is to be formed in code 5 lead laid on 25mm T&G jointed boarding and flashings, soffits & secret gutters at abutments are to be in code 4 lead.

## 7. VENTILATION

Provide mechanical ventilation to all internal rooms, toilets & bedrooms to give 3 air changes per hour, ducted to the outside and operated from the rooms lightswitch. The fans are to have a 3 min overrun and the doors giving access to the rooms are to have a 25mm clear air space between the bottom of the door & the floor covering. Provide mechanical ventilation to the other Toilets & Bedrooms to give 15 litres per sec' extraction rate & to the Laundry Room & Kitchen to give 30 litres per sec' extraction rate. Note the fan to the kitchen should be adjacent to the cooker if not then the extraction rate is to be increased to 60 litres per sec'.

## 8. DRAINS

All drain runs manholes & fittings to be in matching UPVC were complying fully with & installed in accordance with approved document H (2002) edition of the Building Regulations & laid to self cleansing falls min 1:80 max 1:40. Installation to comply fully with BS58301, drains passing beneath building to have 100mm concrete surround which is to be cast integral with the floor slab. Drains passing through walls are to be properly bridged over with concrete lintel supports & a 50mm clearance is to be allowed around the pipes filled with compressible material. All sanitary fittings are to have 38mm (1 1/2") dia waste pipe (min) & deep seal traps and all pipe runs are to have rodding eye access points at each change of direction. All above ground drains to comply BS5572. All drain runs, F.W. & S.W. not under a path and having less than 500mm cover are to have concrete slabs laid over as bridging on a 75mm pea gravel bed. Pipes below roadways having less than 900mm cover are to have reinforced concrete bridging over. Provide 100mm dia UPVC vent & waste pipe where shown to terminate in a balloon final 900mm above window/door heads (min). Surface water drains to be in 100mm dia UPVC ware with 150mm pea gravel surround to discharge to an existing surface water drain or soakways as shown. The four drains are to be connected into the existing foul drains which discharge to the public sewer. All drains (new & Existing) are to be pressure tested on completion.

## 9. STRUCTURAL CALCULATIONS

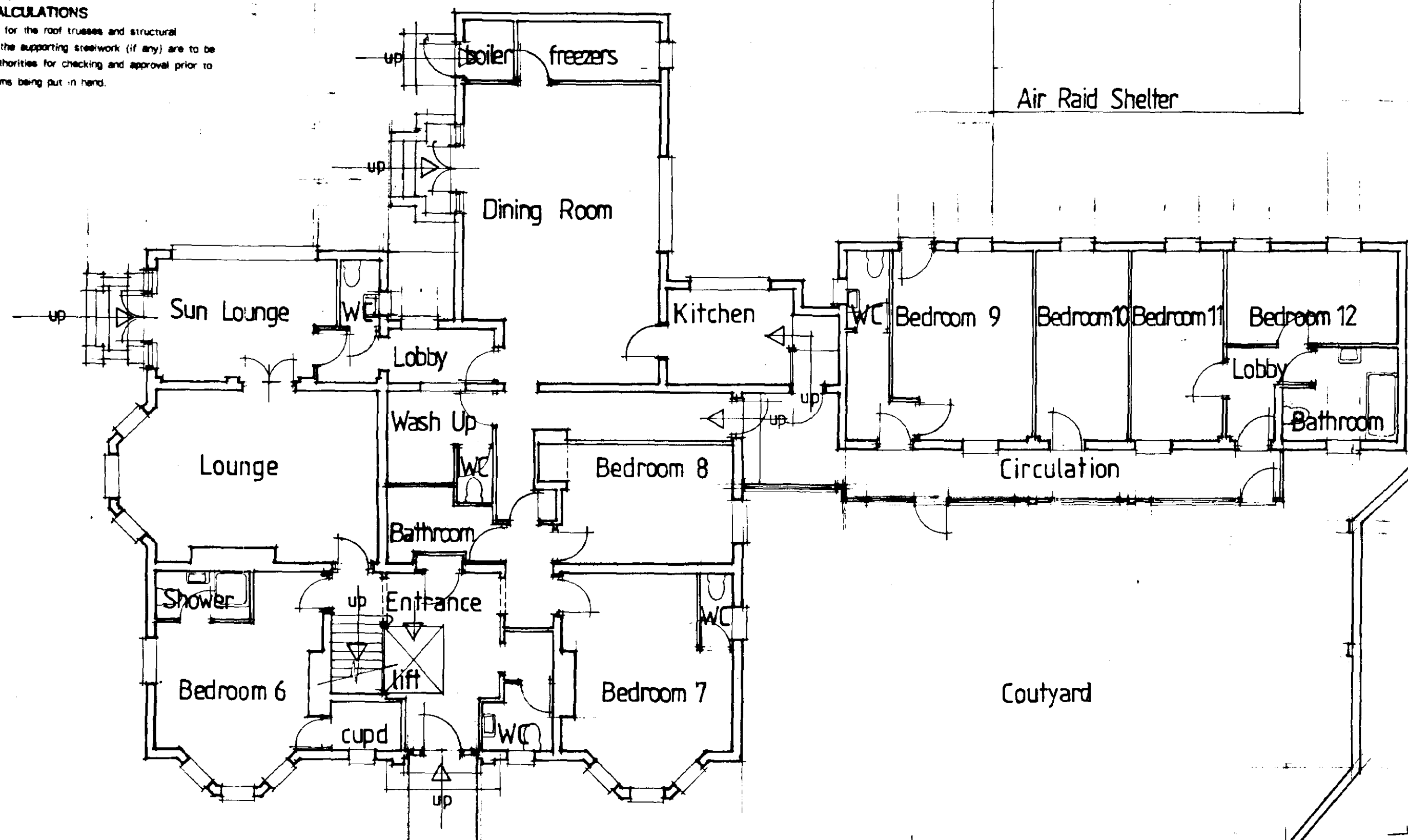
Manufacturers calculations for the roof trusses and structural engineers calculations for the supporting steelwork (if any) are to be submitted to the Local Authorities for checking and approval prior to work relating to these items being put in hand.

## 10. HEATING

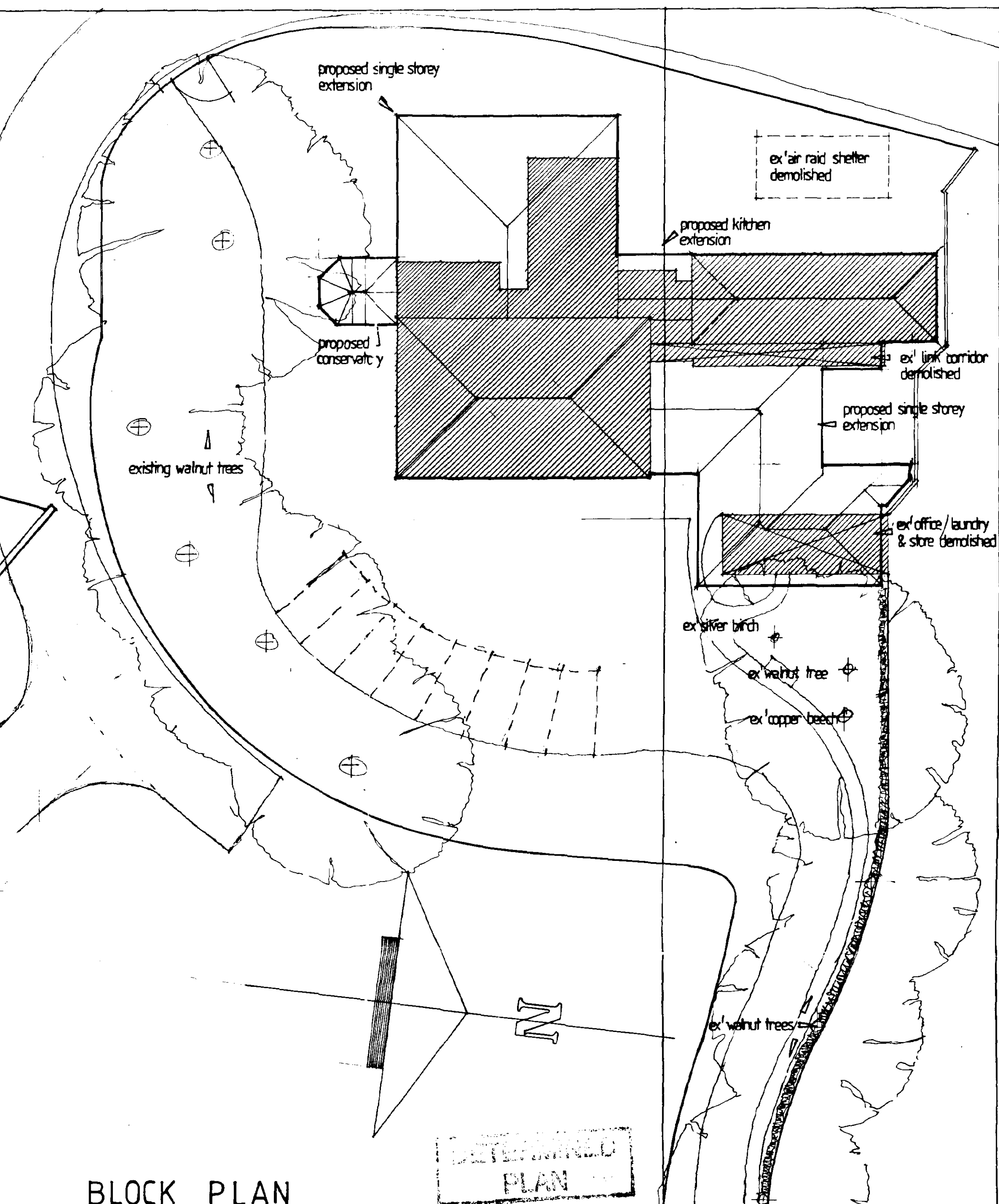
Heating to the extensions & the existing parts of the property is to be by a balanced flue gas fired boiler situated where shown and the new rooms & circulation areas, bedrooms, conservatory & laundry are to be heated by low emission radiators each having its own individual thermostatic control. All pipework within the roof space and in any unheated areas is to be insulated and the pipe insulation is to have a thermal rating of not less than 0.45W/m<sup>2</sup>K and a thickness equal to the outside diameter of the pipe up to a maximum thickness of 40mm.

## 11. DISABLED REQUIREMENTS

The extension is to be fully compliant with part M of the building regulations to cater for the disabled.



GROUND FLOOR PLAN



BLOCK PLAN

SITE LOCATION

1:1250

MR D. KESHWARA  
NUTTEN STOVEN  
RESIDENTIAL HOME  
81 BOSTON ROAD  
HOLBEACH Lincs  
ALTERATIONS & EXTENSIONS

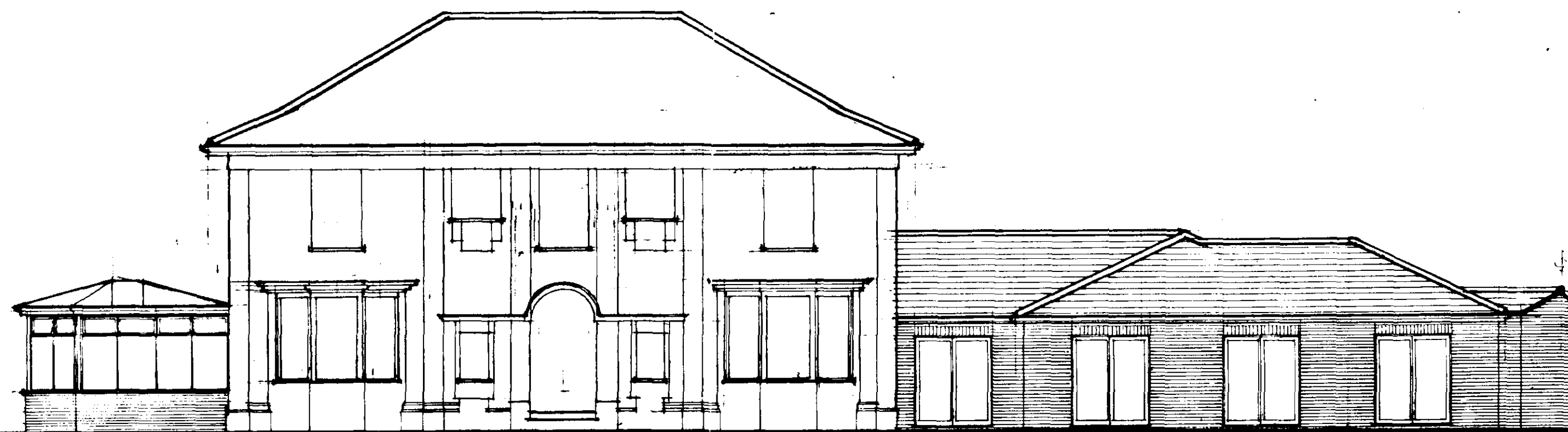
Note:- The Contractor is to be responsible for checking all dimensions on site prior to works being put in hand and will also be responsible for setting out the works and determining levels. This drawing is to be read in conjunction with drawing No 02:17:3

## PLANS AS EXISTING

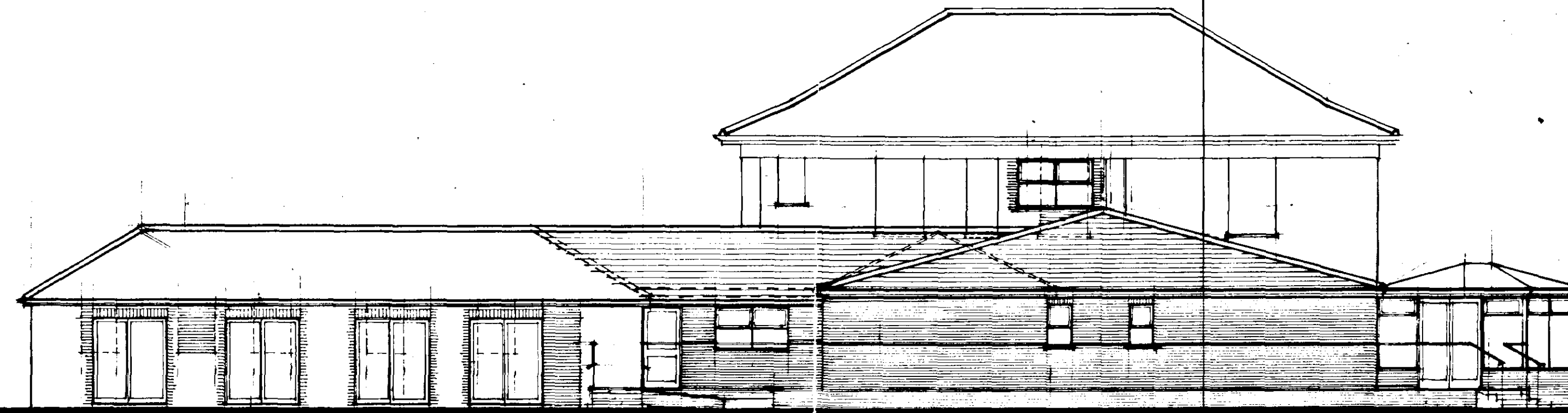
DRAWING NO 02:17:2 A  
DATE APRIL 2002  
SCALE 1:100 & 1:200  
AMENDMENTS 'A' amended after site inspection, original based on information supplied

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SHDC  
Planning & Development  
29 JUL 2002



EAST ELEVATION



WEST ELEVATION

**SPECIFICATION, FIRE REQ'S**

**1. SMOKE / HEAT DETECTORS**

Provide detectors as noted and in the positions indicated on the drawings. The detectors are to be mains operated and interconnected with their own dedicated supply and comply in all respects with BS5839 & be connected into the existing alarm system.

**2. DOORS & FRAMES**

Provide the fire stop doors of the type as indicated together with frames which are to be suitable for the type of door denoted. Meeting styles must be adequately rebated.

**3. DOOR FITTINGS**

Hinges and other door fixings must be non-combustible with a melting temperature not less than 800°C. No locks or other fastenings should be fitted to doors on escape routes unless it is capable of being opened easily without the use of a key. Self closing devices must be capable of closing a door from any position, firmly against its frame overriding any catch. Some doors may need vision panels as indicated & these should be in fire resisting glazing to match the door designation. The direction of swing of the doors should generally be in the direction of travel for escape purposes (or in both directions). Where less than 50 people are involved, doors can open in either direction. Signs and notices may be required in some cases.

**4. VENTILATION GRILLS**

Where ventilation grills occur these should be protected by incombustible material or fire dampers. Where doors are required to resist the passage of smoke, additional measures must be taken to ensure that the opening is closed at any temperature in the presence of smoke.

**5. BATHROOMS & SANITARY ACCOMMODATION**

Doors giving access to these rooms are not required to be fire resisting unless there is an additional fire risk.

**6. EMERGENCY LIGHTING, AUDIBLE WARNING & FIRE BREAK POINTS**

Emergency lighting shall be provided to all circulation areas and to the internal rooms with no natural means of lighting in the positions indicated on the drawings. Fire break points shall be provided at all points of exit from the building and audible warning devices to be provided where indicated all linked in with the existing alarm system.

**7. FIRE EXIT SIGNS**

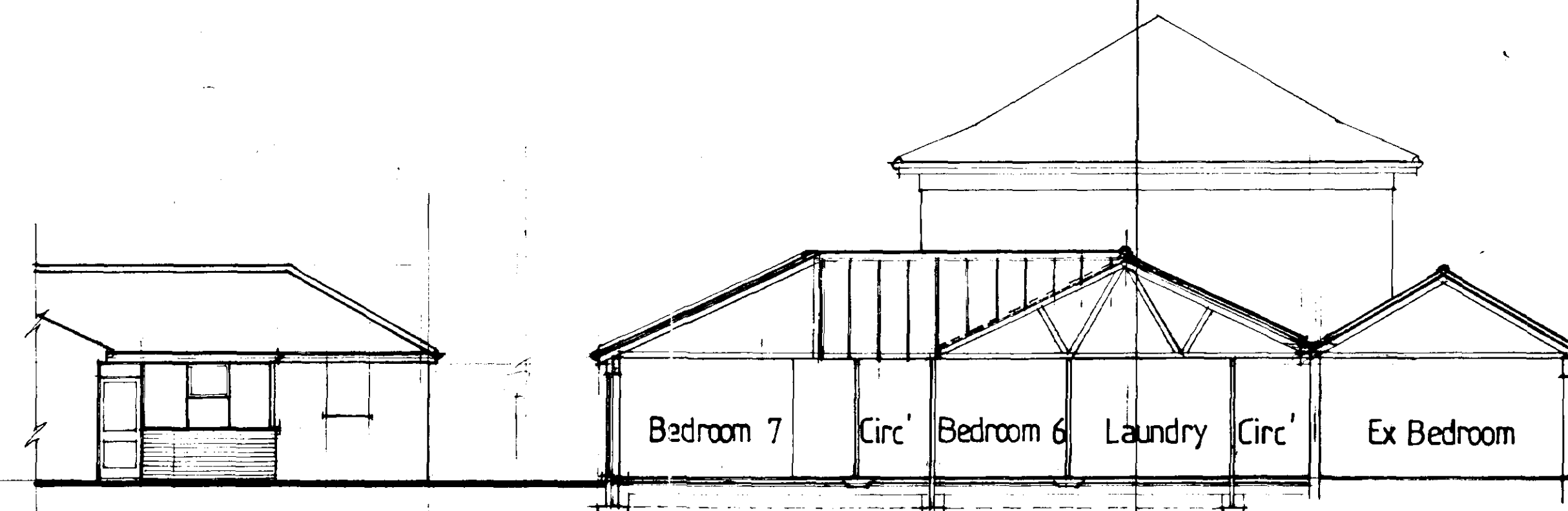
All escape routes shall be clearly marked with pictorial green 'Running Man' symbol signs of adequate size in accordance with BS 5499 - Pt. 1: 1990 plus graphic symbols.

**8. ESCAPE ROUTES**

All walls & ceilings forming protected escape routes shall have a minimum fire rating of 30 minutes. 'Push Bar to Open' signs and fittings for all final exit doors. The lighting of external fire routes shall be as indicated and be connected to a separate protected circuit wired with cable classified CWZ in accordance with BS 6387.

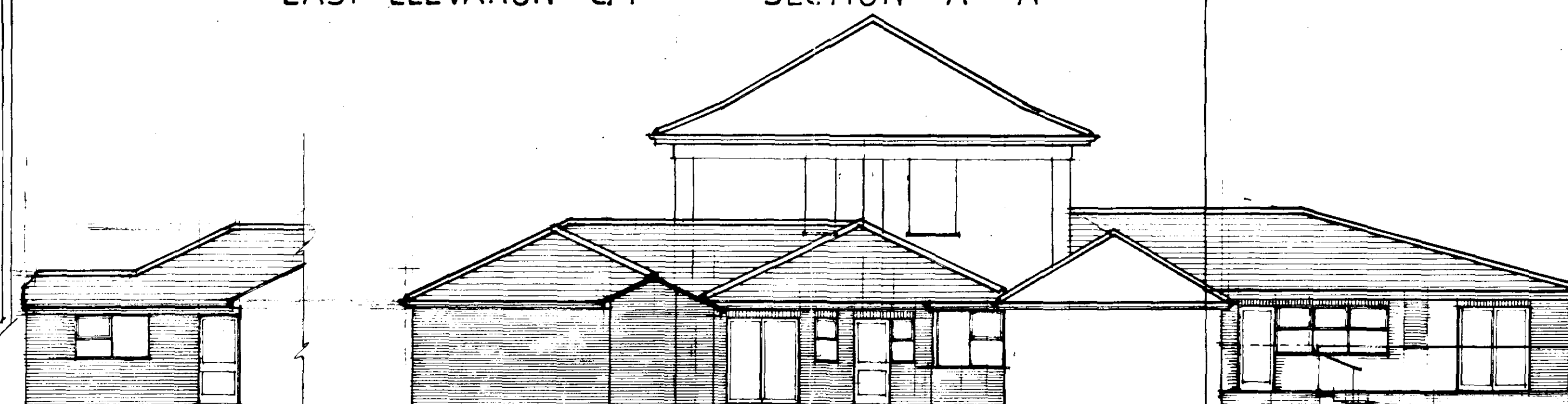
**9. FIRE FIGHTING EQUIPMENT**

Provide all necessary extinguishers, fire blankets as specified by the Local Fire Authority.

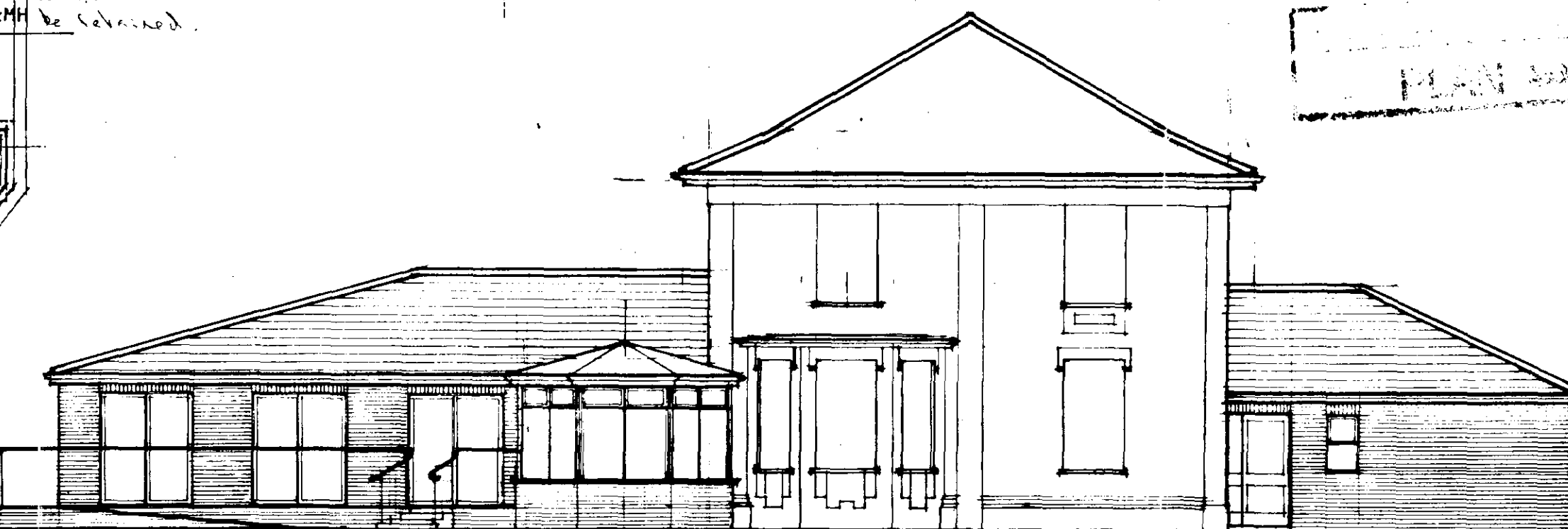


EAST ELEVATION C/Y

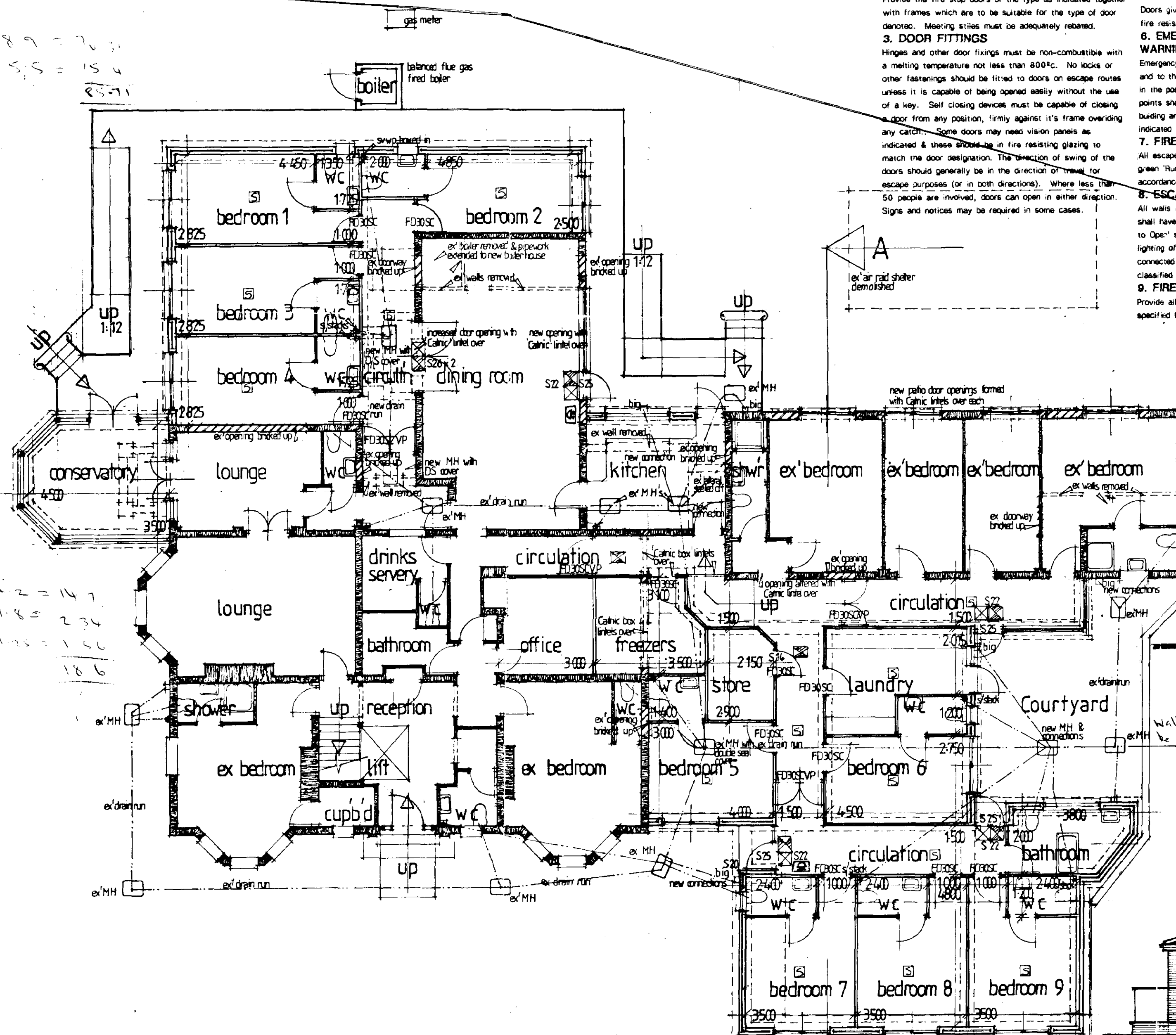
SECTION A - A



WEST ELEVATION C/Y NORTH ELEVATION



SOUTH ELEVATION



GROUND FLOOR PLAN

MR D KESHWARA  
NUTTEN STOVEN  
RESIDENTIAL HOME  
81 BOSTON ROAD  
HOLBEACH Lincs  
ALTERATIONS & EXTENSIONS

Note:- The Contractor is to be responsible for checking all dimensions on site prior to works being put in hand and will also be responsible for setting out the works and determining levels. This drawing is to be read in conjunction with drawing No 02:17:2A

**WORKING DRAWING**

DRAWING NO 02:17:3  
DATE JUNE 02  
SCALE 1:100  
AMENDMENTS

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