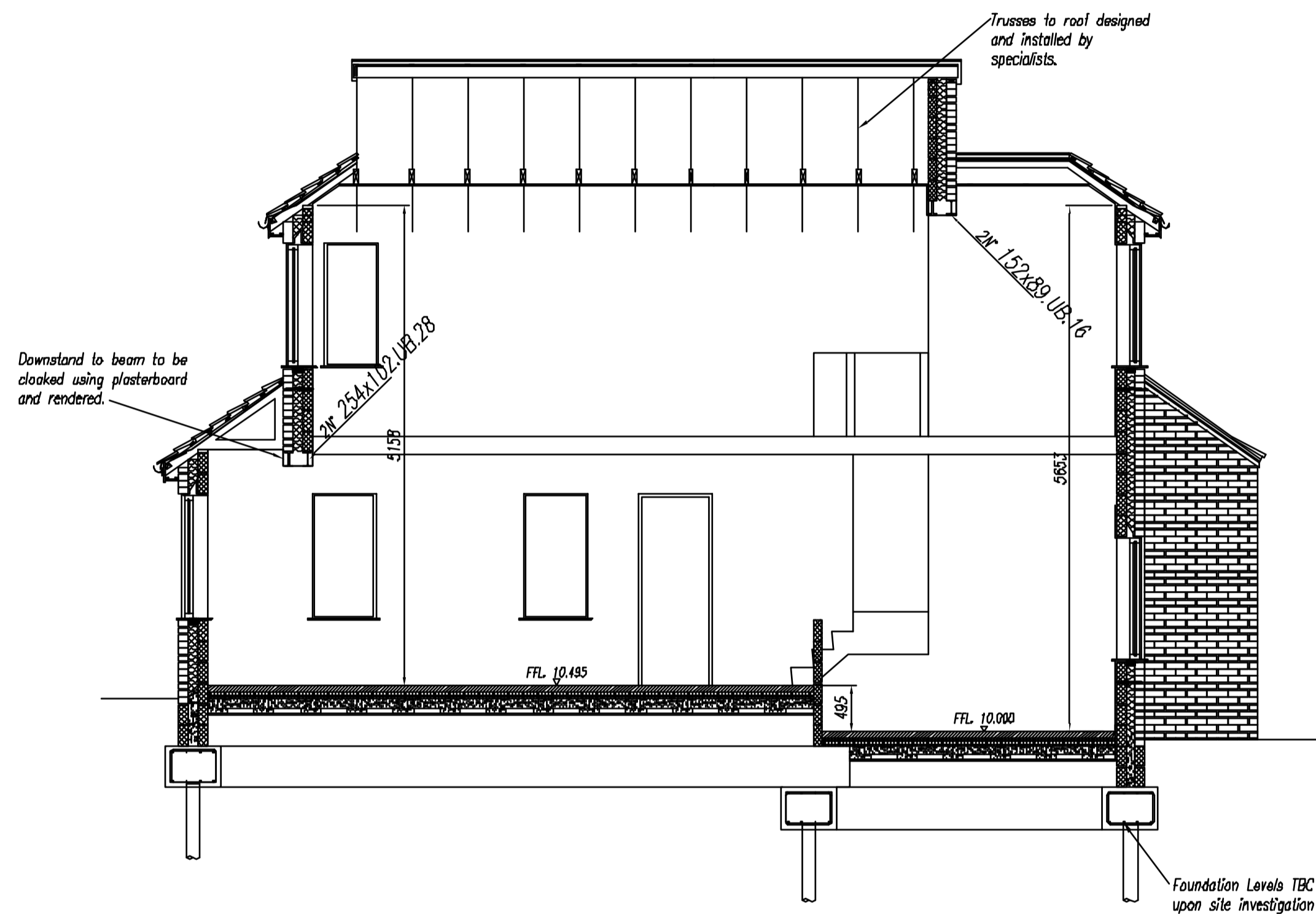


Roof construction

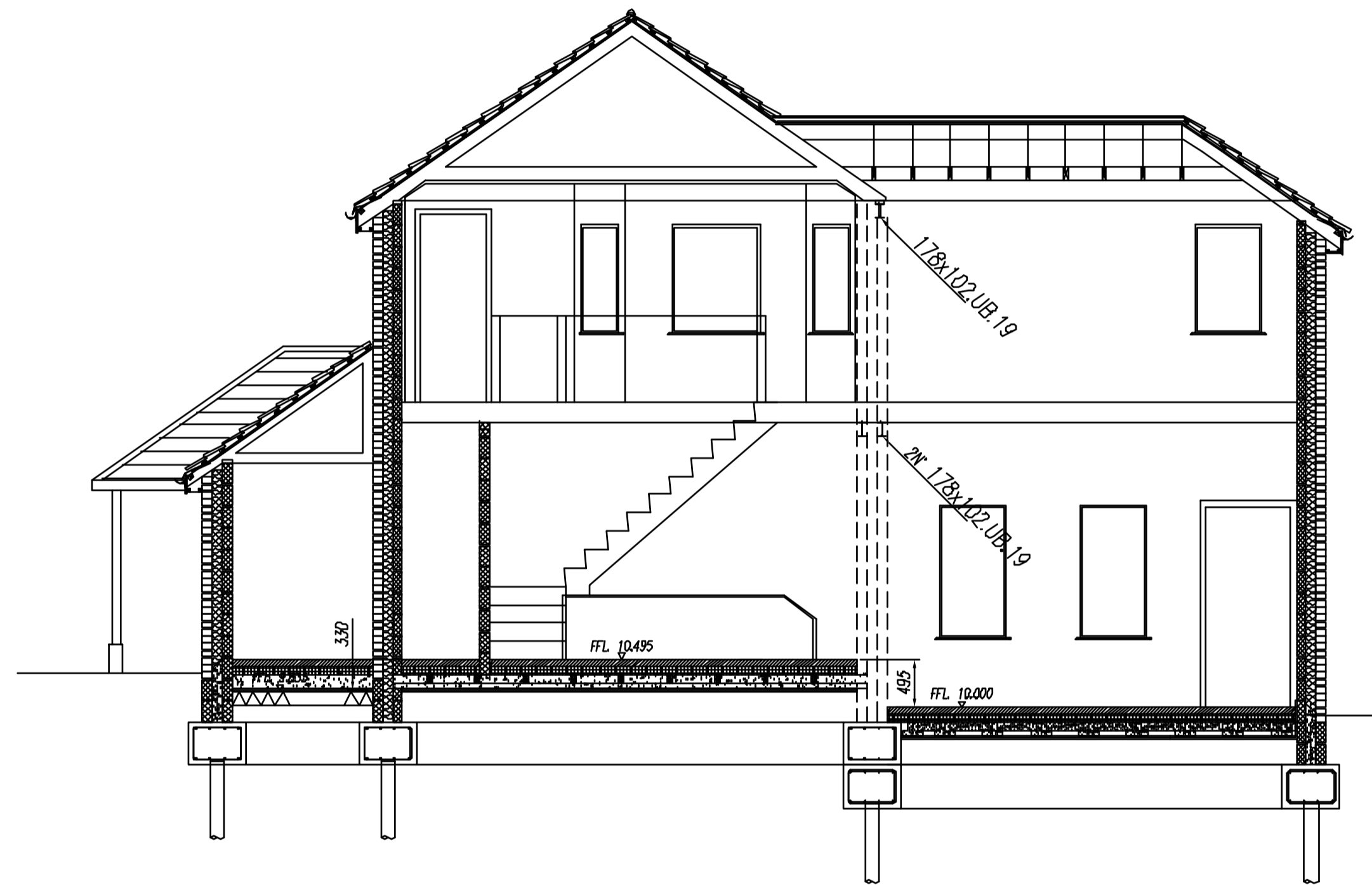
Provide tiles and battens on 'Tyvek' breather felt on steel beams above ceiling ties to structural engineers design/calculations. Thermal insulation to raked parts of roof provide 150mm thickness Rockwool RMA45 thermal insulation quilt in between rafters incorporating British Gypsum 'Thermal Board Super' of 30mm total plasterboard/banded rigid thermal insulation with integral vapour control barrier. The above construction achieves a U value of 0.18 W/m²K. 50x150mm C24 rafters at 450mm centres. Supported on wall plate, purlin and ridge (see drawing). Or alternatively Concrete ties on sarking felt with 50mm ventilated air space with Kingspan Thermapitch TP10 Zero ODP between rafters@400ccs 50mm thick with Kingspan Thermawall TW56 Zero ODP (55/12.5mm) to u/s Rafters to achieve 0.20W/M²K.

Roof space ventilation

Provide proprietary below-tilt ventilation system to BS5250:1989 and airbricks to gables to achieve equivalent of 25mm continuous opening at proprietary dry ridge vent system.



SECTION A - A 1:50



SECTION B - B 1:50

External windows and doors

UPVC or timber (client to confirm type), double-glazed sealed units min 20mm to incorporate:
a) Security glazing
b) Lockable fasteners
c) 10-year guarantee
d) To comply with BS 6375 Pt 1 1989 severe weather rate on window and installation
e) Opening vents to be min 1/20th of the floor area

Glazing

All glazing located in critical zones (approved Doc 'N' 1992) to conform to BS 6206 1981. Performance Requirement for Flat and Safety Glass for the Use in Buildings. Windows to have night vents equivalents to 8000mm².

Internal doors

Existing openings which require infill are to be blocked up using a lightweight celcon block, dry lined or plastered to each face flush with existing wall face

British Standards Building Regulations and Codes of practice, including adhesives, fixings, sealants, noggins, wiring and pipework for plumbing, water tanks, heating, flashings etc which relate to the

The contractor is deemed to have included all materials necessary to complete the dwelling to relevant

works but are not individually specified in the documents.

Wall finishes

Provide 13mm thick 2 No coat lightweight gypsum skim finish plaster, complete with Expanet angle beads to all external angles. Provide all necessary galvanised stop beads to form junctions and abutments

Ceilings

1 No layer 12.5mm thick 'V' jointed plasterboard with staggered and scrimmed joints and finished with neat 2mm thick sc'rim coat. Foil-backed plasterboard to kitchen/utility and shower/bathroom, en-suite areas. Plasterboard ends to be fixed to noggins. All sloping ceilings to be TW56 - Therna wall 56 by kingspan see roof spec.

Ventilation

Kitchen to have mechanical extract, capacity 60 l/s intermittent. Bathroom and en-suite to have all mechanical ventilation, minimum capacity 15 l/s intermittent. All other habitable rooms to have minimum 1/20th of floor area and minimum 8000mm² ventilation to night vents. Mechanical extract to utility room to achieve 30 l/s. Extracts to have a minimum 15 minutes overrun.

Electrical

All electrical installations to comply with IEE Regulations for electrical equipment. Electrical switches and sockets to be positioned in a zone 450mm above FFL and 1200mm above FFL.

External walls above DPC

102mm facing brickwork see dims 100mm cavity filled with Dritherm or similar approved cavity insulation, 100mm thick blockwork inner leaf and 13mm thick sand/cement render and skim. External wall 'U' value to achieve 0.35W/m²K. Wall to include wire cavity ties at 900mm centres horizontally and 450mm vertically staggered. Wire cavity ties to BS 1243 at 225mm centres vertically at jombs of openings. Cavities closed at openings by Thermabate or similar approved cavity closer. Damp proof course to be minimum of 150mm above ground level, brickwork bedded in 1:1.6 mortar. Feature corbelling to eaves to corbel maximum 25mm each course (i.e. 2ND courses maximum 50mm) and bedded on brick reinforcement in mortar joint to last 4 bed joints at eaves and gable.

Lintels

Lintels to be Catnic or similar approved, incorporating tray DPC where applicable, insulated. All lintels to extend 50mm beyond closer block. Lintels to external walls: Catnic CN3C & CN4C extra heavy duty lintels

Steel Work

1) All structural steel work is to be grade S275 to BS EN 10025, unless noted otherwise, fabricated and erected in accordance with BS 5950:2000.
2) Bolts to all structural connections to be Grade 8.8 unless noted otherwise.
3) All fire protection to steel work etc. to Architect's specification and details.
4) Steel work contractor/fabricator is to provide two copies of fabrication drawings for approval by Peter Cole Consultants, include any connection details and calculations prior to fabrication.
5) Steel work fabricator shall check the detailed arrangement of all structural members to ensure potential clashes are eliminated prior to fabrication. Any anomalies shall be brought to the attention of the Engineer.
6) Any exposed steelwork shall be galvanised to BS ISO 1461:1998.

Timber

1) All structural timber shall be stress graded to BS 5268 and shall be either C16 or C24 timber as noted on the drawings.
2) All fixings i.e. truss clips, framing anchors, etc. shall be galvanised/steralised.
3) All timbers shall be preservative treated.

Joinery

All softwood to be structural grade C16 and C24 and treated in copper naphenate or similar approved. Provide all joinery items as previously described and softwood torus skirtings and torus softwood architraves. Provide Sealmaster or similar proprietary threshold to front entrance with concrete/stone cill (1:40 gradient on cill). Approach to door to be 1:20 gradient.

All pipes passing through roof-space to be insulated with approved fibreglass insulation.

Roof access hatch to be draft-proofed and have rigid insulation bonded on top.

Install approved smoke detectors to ground-floor entrance hall, detectors to be wired back to mains fuse box with back-up batteries in the event of power failure. Alarm signal to be emitted from all units in the event of detection of any unit. All to be installed in accordance with BS 5446, Part 1. For location of smoke detectors see floor plans.

General Notes

1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
2) Do not scale from this or any other XXX drawing.
3) All dimensions to be checked on site prior to construction or fabrication.

Temporary Works

1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
3) All slope fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Excavations

Carry out excavations to receive foundations to a depth of 1m below finished ground levels to a width of 1000mm 775mm for external walls. Depths of excavation specified are provisional and will vary according to ground conditions. At all times a firm foundation base must be established to the satisfaction of the Local Authority Building Control Officer.

Foundations

Lay 21 M concrete strip foundations to ground floor walls as shown on the drawings.

Concrete Works

1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 330 kg/m³, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (U.N.O.), if cast within formwork. Cover shall be min. 75mm if cast against ground.

Masonry

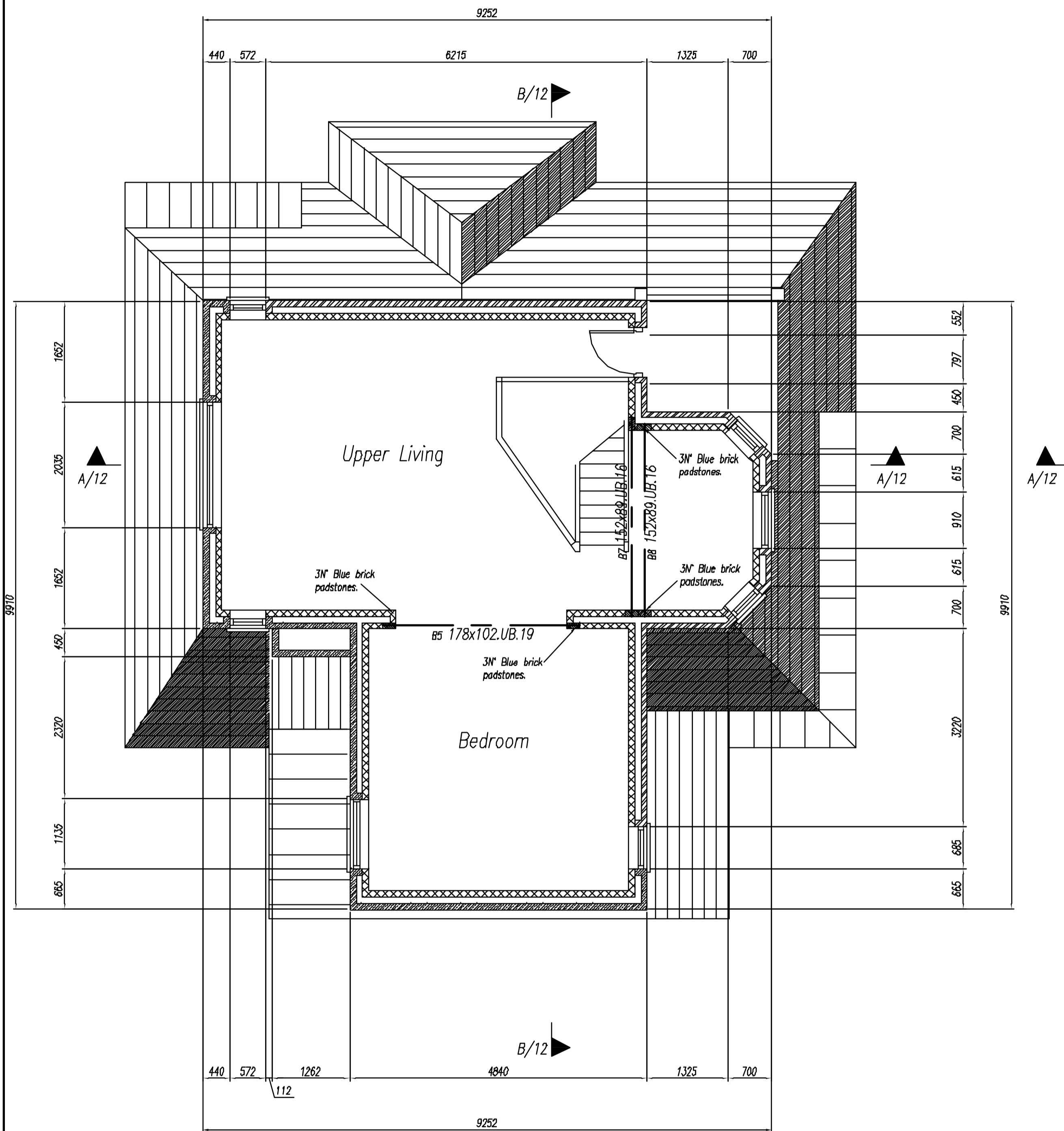
1) All block work below ground floor level shall be 7N/mm² block work in class 3 mortar (no lime).
2) All facing brickwork shall match existing and shall be broken up into panels using expansion joints every 12m for brickwork & 9m for blockwork.
3) All block work above ground floor level shall be 3.5N/mm².
4) Mortar for above ground works shall be class 3.
5) Wall ties shall be installed strictly in accordance with manufacturers recommendations. -See specification for external walls.

External walls below DPC

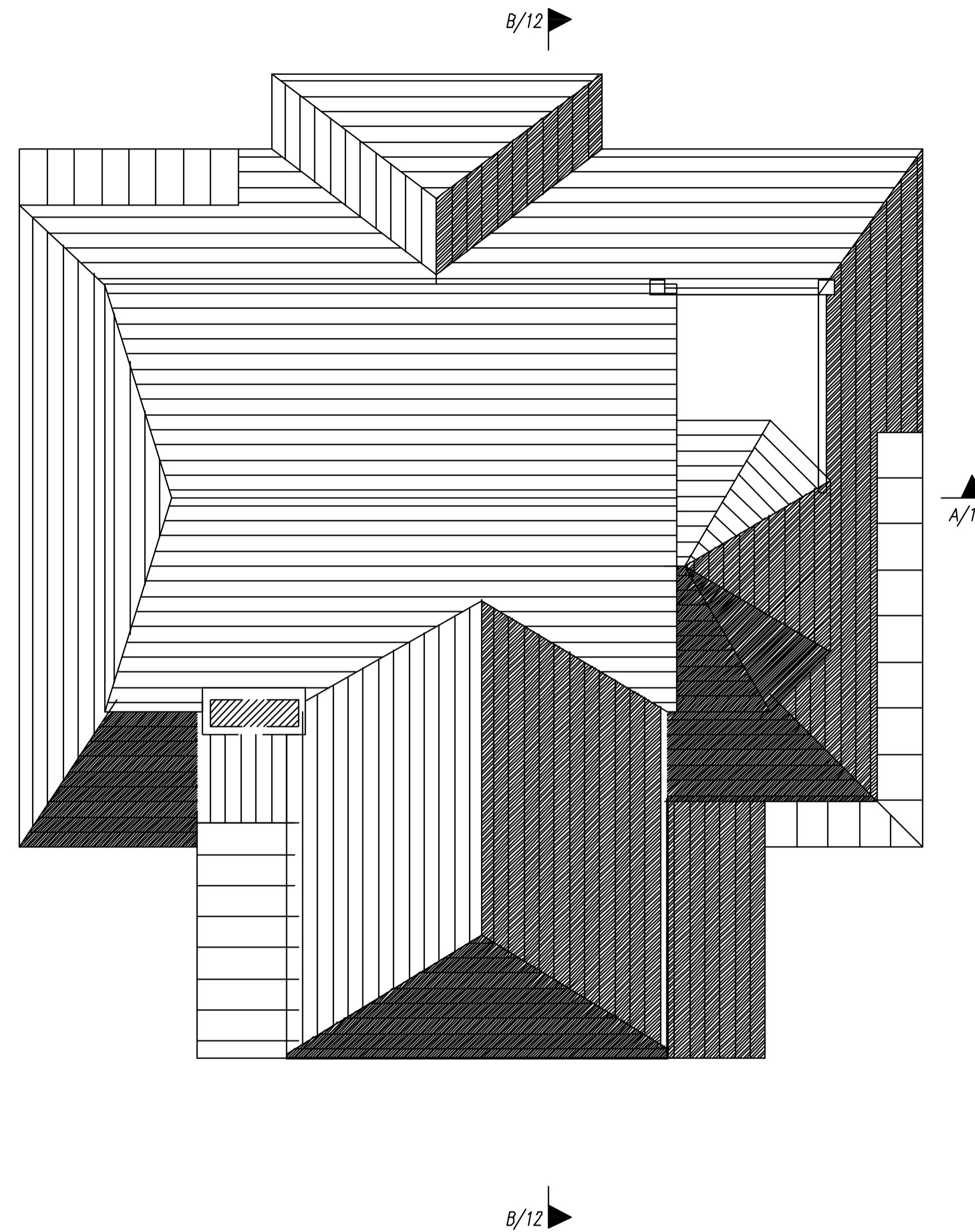
100mm solid concrete block internal skin with 100mm cavity with lean mix concrete slanting to outer face at ground level. blockwork used below ground level to be Class 'A' (approved below-ground quality). 102mm external facing brick of special quality as to resist frost (semi-engineering bricks or similar) to be laid to 3 No courses at ground level.

Ground floor slabs

Lay 75mm sand/cement screed (1:3), reinforced with mesh on, 75mm thickness Owens Corning 'Polyfoam Plus' or similar approved thermal insulation turned up at edges on, 150mm thickness concrete slab to BS 5328 Part 2 on, 300 micron polythene DPM taken up and lapped into DPC on, 25mm sand bedding on, 150mm clean stone consolidated and compacted hardcore. 'U' value of above floor construction achieves 0.23W/m²K



FIRST FLOOR 1:50



ROOF PLAN 1:50

Roof construction

Provide tiles and ballens on; Tyvek breather felt on; Steel beams above ceiling lies to structural engineers design/calculations. Thermal insulation to raked parts of roof provide 150mm thickness Rockwool RWA45 thermal insulation quilt in between rafters incorporating British Gypsum Thermal Board Super of 30mm total plasterboard/bonded rigid thermal insulation with integral vapour control barrier. The above construction achieves a 'U' value of 0.18 W/m²K. 50x150mm C24 rafters at 450mm centres, supported on wall plate, purlin and ridge (see drawing). Or alternatively Concrete tiles on sarking felt with 50mm ventilated air space with Kingspan ThermaPitc TP10 Zero ODP between rafters @ 400ccs 50mm thick with Kingspan ThermaWall TW56 Zero ODP (55/12.5mm) to u/s rafters to achieve 0.20W/m²K.

Roof space ventilation

Provide proprietary below-tilt ventilation system to BS250:1989 and airbricks to gables to achieve equivalent of 25mm continuous opening of proprietary dry ridge vent system.

Strutting

Strutting should be one of the following: herringbone type (timber 38mm x 38mm) solid blocking (38mm thick timber x depth of joist) proprietary steel strutting. 2.5 to 4.5 l (at centre of span) Strutting should be located as follows: Joint span [m] Rows of strutting Over 4.5 maximum 2.5m centres, spaced equally along the span Up to 2.5 none needed

Holding down metal strapping

holding down straps to prevent the roof being lifted off the supporting structure, they should be at a maximum of 1.2m centres. Where straps are fixed to masonry, hardened nails 8SWG x 75mm long or wood screws into plugs No 12 x 50mm long should be used. The number of fixings should be in accordance with design requirements and the lowest fixing within 150mm of the bottom of the vertical strap.

Flashings

All flashings to be code 4 lead or code 5 in accordance with the LDA recommendations. Valleys to be fibreglass troughs.

Chimney

Plot flaunching in 1:3 mortar. Flue liners to be Redbank or similar approved, laid socket up with a minimum internal diameter of 225mm. A hearth should be provided at least 125mm thick to project at least 500mm in front of the fire recess and at least 150mm either side of the fire recess. Hearth formed with terracotta tiles or similar. Any surrounding void between flue and chimney to be filled with lightweight insulating concrete. All joints Chimney to be constructed in accordance with BS 8303: 1986.

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Lintels

Lintels to be Catnic or similar approved, incorporating tray DPC where applicable, insulated. All lintels to extend 50mm beyond closer block. Lintels to external walls: Catnic CN3C & CN4C extra heavy duty lintels

Steel Work

- 1) All structural steel work is to be grade S275 to BS EN 10025, unless noted otherwise, fabricated and erected in accordance with BS 5950:2000.
- 2) Bolts to all structural connections to be Grade 8.8 unless noted otherwise.
- 3) All fire protection to steel work etc. to Architect's specification and details.
- 4) Steel work contractor/fabricator is to provide two copies of fabrication drawings for approval by XXX, include any connection details and calculations prior to fabrication.
- 5) Steel work fabricator shall check the detailed arrangement of all structural members to ensure potential clashes are eliminated prior to fabrication. Any anomalies shall be brought to the attention of the Engineer.
- 6) Any exposed steelwork shall be galvanised to BS ISO 1461:1998.

Timber

- 1) All structural timber shall be stress graded to BS 5268 and shall be either C16 or C24 timber as noted on the drawings.
- 2) All fixings i.e. truss clips, framing anchors, etc. shall be galvanised/theradized.
- 3) All timbers shall be preservative treated.

Joinery

All softwood to be structural grade C16 and C24 and treated in copper naphthalene or similar approved. Provide all joinery items as previously described and softwood torus skirtings and torus softwood architraves. Provide Sealmaster or similar proprietary threshold to front entrance with concrete/stone cill (1:40 gradient on cill). Approach to door to be 1:20 gradient.

All pipes passing through roof-space to be insulated with approved fibreglass insulation.

Roof access hatch to be draft-proofed and have rigid insulation bonded on top.

Install approved smoke detectors to ground-floor entrance hall, detectors to be wired back to mains fuse box with back-up batteries in the event of power failure. Alarm signal to be emitted from all units in the event of detection of any unit. All to be installed in accordance with BS 5446, Part 1. For location of smoke detectors see floor plans.

Wall finishes

Provide 13mm thick 2 No coat lightweight gypsum skim finish plaster, complete with Expanel angle beads to all external angles. Provide all necessary galvanised stop beads to form junctions and abutments

Ceilings

1 No layer 12.5mm thick Y jointed plasterboard with staggered and scrimmed joints and finished with neat 2mm thick scrim coat. Foil-backed plasterboard to kitchen/utility and shower/bathroom, en-suite areas. Plasterboard ends to be fixed to noggin. All sloping ceilings to be TW56-therma wall 55 by kingspan see roof spec.

Internal doors

Existing openings which require infill are to be blocked up using a lightweight calcon block, dry lined or plastered to each face flush with existing wall face

British Standards Building Regulations and Codes of practise, including adhesives, fixings, sealants, noggin, wiring and pipework for plumbing, water tanks, heating, flashings etc which relate to the

The contractor is deemed to have included all materials necessary to complete the dwelling to relevant

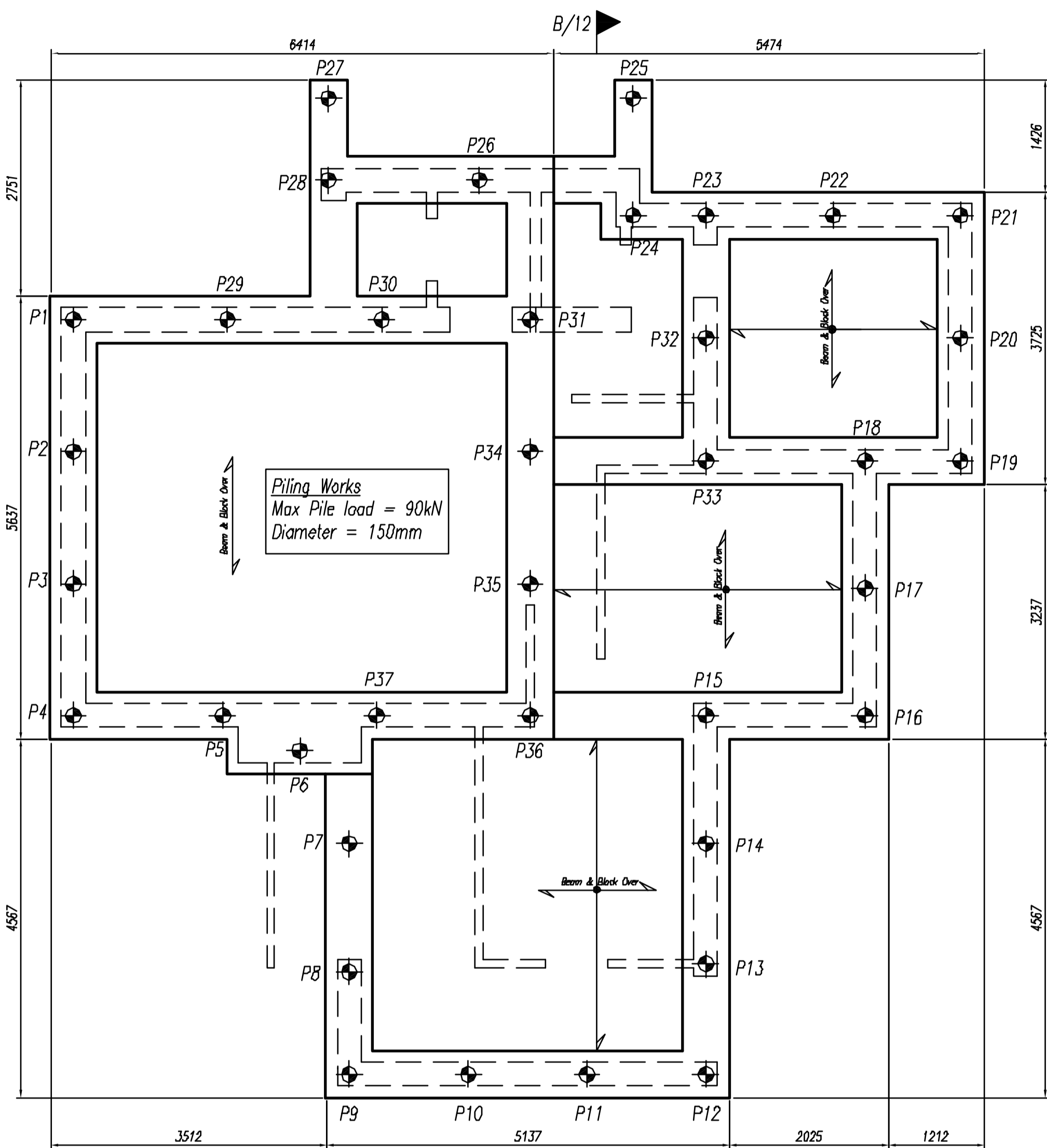
works but are not individually specified in the documents.

Electrical

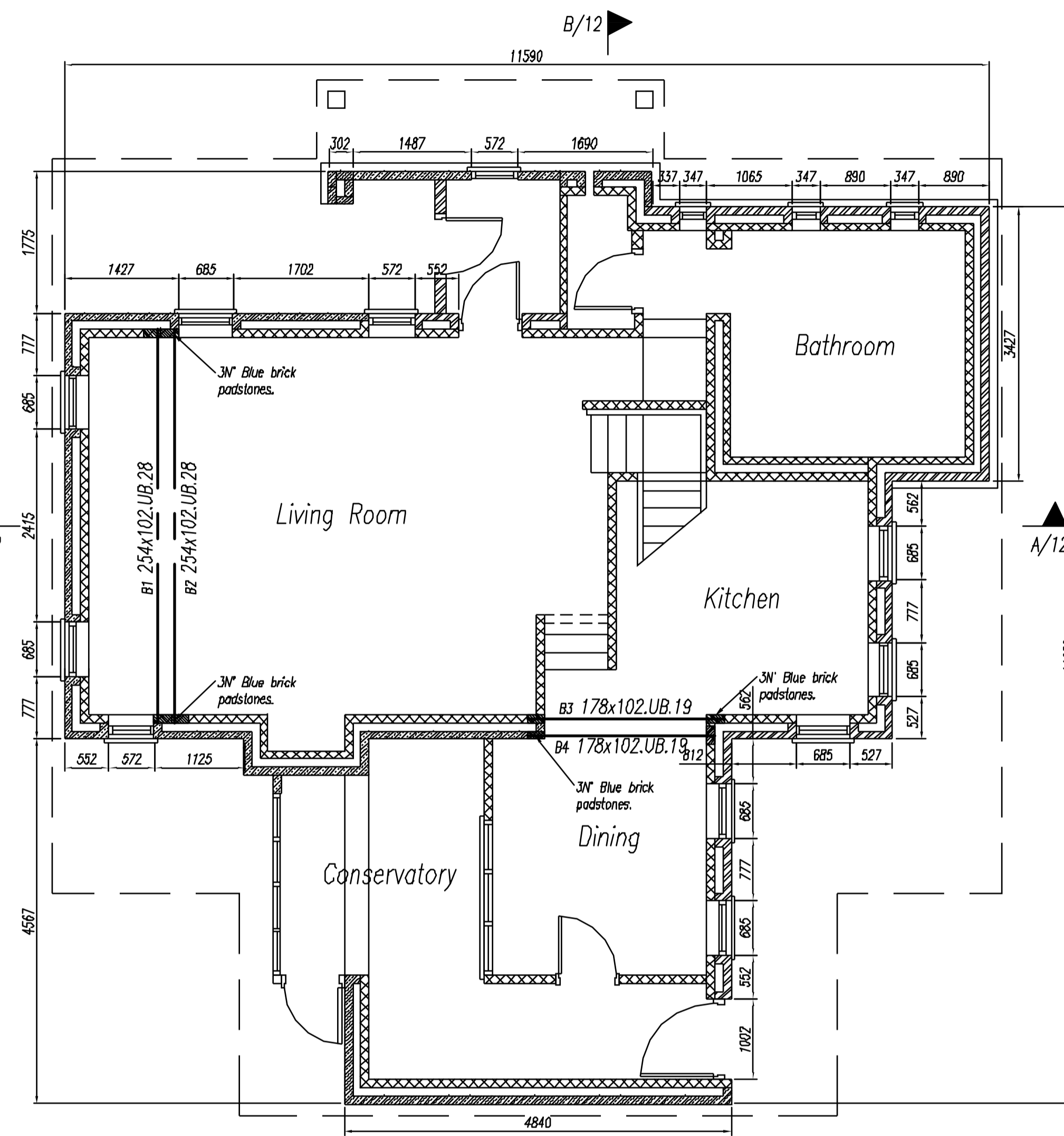
All electrical installations to comply with IEE Regulations for electrical equipment. Electrical Switches and sockets to be positioned in a zone 450mm above FFL and 1200mm above FFL.

Testing of drains

Upon completion of the building works the new drainage arrangement together with the existing should be fully tested to the satisfaction of the LBI & the clients.



SUBSTRUCTURE 1:50



GROUND FLOOR 1:50

External windows and doors

UPVC or timber (client to confirm type), double-glazed sealed units min 22mm to incorporate:

- a) Security glazing
- b) Lockable fasteners
- c) 10-year guarantee
- d) To comply with BS 6375 Pt 1 1989 severe whether rate on window and installation
- e) Opening vents to be min 1/20th of the floor area

Glazing

all glazing located in critical zones (approved Doc 'N' 1982) to conform to BS 6206 1981. Performance Requirement for Flat and Safety Glass for the Use in Buildings. Windows to have night vents equivalents to 8000mm².

Ceilings

1 No layer 12.5mm thick 'V' jointed plasterboard with staggered and scrimmed joints and finished with neat 2mm thick scrim coat. Foil-backed plasterboard to kitchen/utility and shower/bathroom, en-suite areas. Plasterboard ends to be fixed to noggin. All sloping ceilings to be TW36- Thermo wall 56 by kingspan see roof spec.

Ventilation

Kitchen to have mechanical extract, capacity 60 l/s intermittent. Bathroom and en-suite to have all mechanical ventilation, minimum capacity 15 l/s intermittent. All other habitable rooms to have minimum 1/20th of floor area and minimum 8000mm² ventilation to night vents. Mechanical extract to utility room to achieve 30 l/s. Extracts to have a minimum 15 minutes overrun.

Electrical

All electrical installations to comply with IEE Regulations for electrical equipment. Electrical switches and sockets to be positioned in a zone 450mm above FFL and 1200mm above FFL.

Ground floor slabs

Lay 75mm sand/cement screed (1:3), reinforced with mesh or 75mm thickness Owens Corning 'Polyfoam Plus' or similar approved thermal insulation lapped up at edges on; 150mm thickness concrete slab to BS 5328 Part 2 on; 300 micron polythene DPM taken up and lapped into DPC on; 25mm sand blinding on; 150mm clean stone consolidated and compacted hardcore. 'U' value of above floor construction achieves 0.23W/m²K

External walls above DPC

Stone faced externally only where noted. 102mm facing brickwork see drgs 100mm cavity filled with Dritherm or similar approved cavity insulation, 100mm thick blockwork inner leaf and 13mm thick sand/cement render and skim. External wall 'U' value to achieve 0.35W/m²K. Wall to include wire cavity ties at 900mm centres horizontally and 450mm vertically staggered. Wire cavity ties to BS 1243 at 225mm centres vertically at jambs of openings. Cavities closed at openings by Thermabale or similar approved cavity closer. Damp proof course to be minimum of 150mm above ground level, brickwork bedded in 1:1:6 mortar. Feature corbelling to eaves to corbel maximum 25mm each course (i.e. 2NO courses maximum 50mm) and bedded on brick reinforcement in mortar joint to last 4 bed joints at eaves and gable.

Lintels

Lintels to be Catnic or similar approved, incorporating tray DPC where applicable, insulated. All lintels to extend 50mm beyond closer block. Lintels to external walls: Catnic CMSC & CMC extra heavy duty lintels

Steel Work

- 1) All structural steel work is to be grade S275 to BS EN 10025, unless noted otherwise, fabricated and erected in accordance with BS 5950:2000.
- 2) Bolts to all structural connections to be Grade 8.8 unless noted otherwise.
- 3) All fire protection to steel work etc. to Architect's specification and details.
- 4) Steel work contractor/fabricator is to provide two copies of fabrication drawings for approval by Peter Cole Consultants, include any connection details and calculations prior to fabrication.
- 5) Steel work fabricator shall check the detailed arrangement of all structural members to ensure potential clashes are eliminated prior to fabrication. Any anomalies shall be brought to the attention of the Engineer.
- 6) Any exposed steelwork shall be galvanised to BS ISO 1461:1998.

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

British Standards Building Regulations and Codes of practice, including adhesives, fixings, sealants, noggin, wiring and pipework for plumbing, water tanks, heating, flashings etc which relate to the

The contractor is deemed to have included all materials necessary to complete the dwelling to relevant

works but are not individually specified in the documents.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

- 1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
- 2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
- 3) All stone fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Excavations

Carry out excavations to receive foundations to a depth of 1m below finished ground levels to a width of 1000mm, 775mm for external walls. Depths of excavation specified are provisional and will vary according to ground conditions. At all times a firm foundation base must be established to the satisfaction of the Local Authority Building Control Officer.

Piling Works

- 1. All piling works are to be designed and detailed by specialist piling contractor.
- 2. Piling testing regime and type of test to be agreed with piling contractor.
- 3. Due account should be taken of the possible effects of ground heave due to piling operations.
- 4. Due account shall be taken of negative skin friction in the design of piles.
- 5. Max Pile load = 90kN Diameter = 150mm

Concrete Works

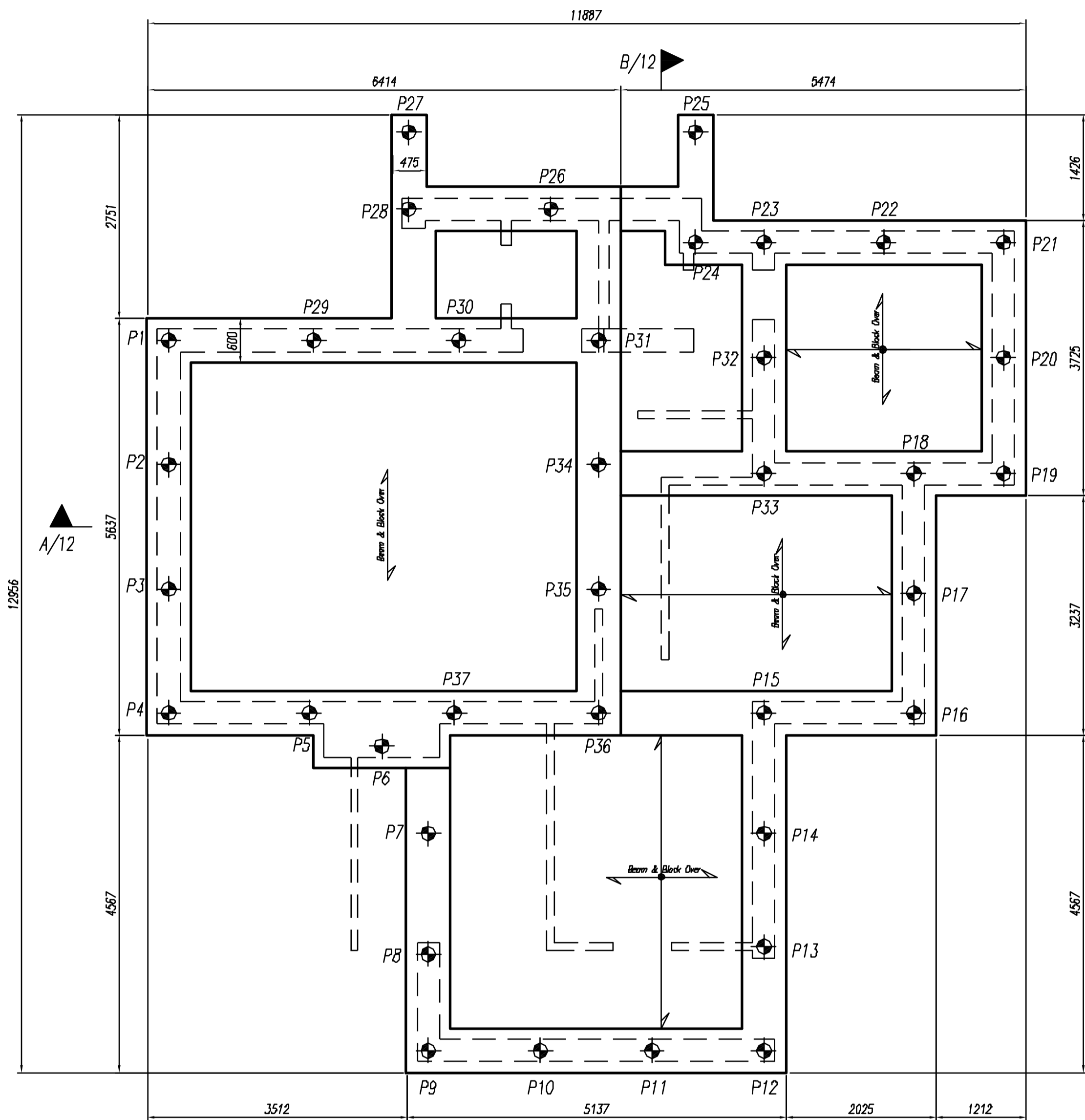
- 1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 330 kg/m³, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
- 2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
- 3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
- 4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
- 5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (U.N.O), if cast within formwork. Cover shall be min. 75mm if cast against ground.

Masonry

- 1) All block work below ground floor level shall be 7N/mm² block work in class 3 mortar (no lime).
- 2) All facing brickwork shall match existing and shall be broken up into panels using expansion joints every 12m for brickwork & 9m for blockwork.
- 3) All block work above ground floor level shall be 3.5N/mm².
- 4) Mortar for above ground works shall be class 3.
- 5) Wall ties shall be installed strictly in accordance with manufacturers recommendations. -See specification for external walls.

External walls below DPC

100mm solid concrete block internal skin with 100mm cavity with lean mix concrete stenting to outer face of ground level. blockwork used below ground level to be Class 'A' (approved below-ground quality) 102mm external facing brick of special quality as to resist frost (semi-engineering bricks or similar) to be laid to 3 No courses at ground level.

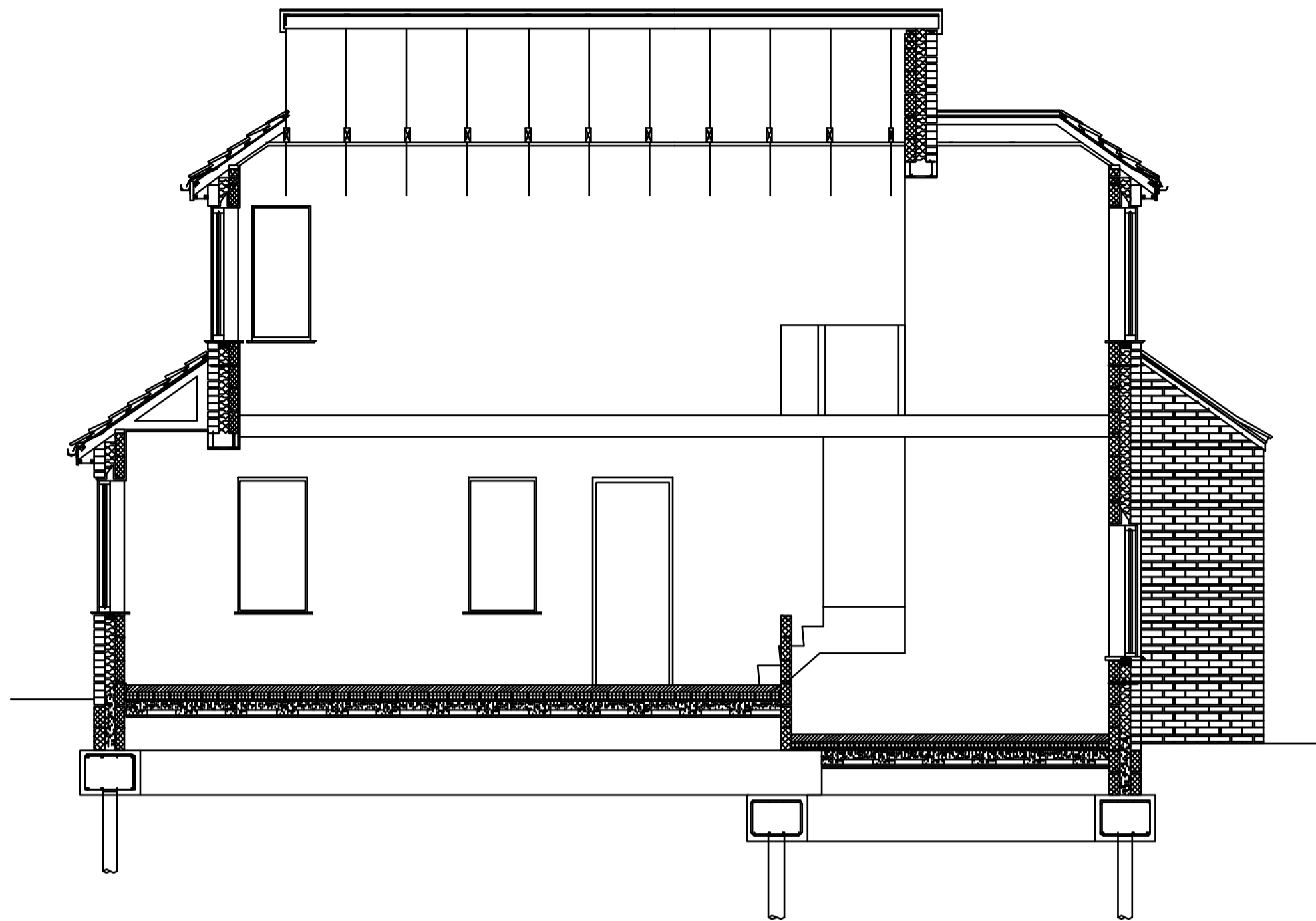


SUBSTRUCTURE 1:50

PILE SCHEDULE

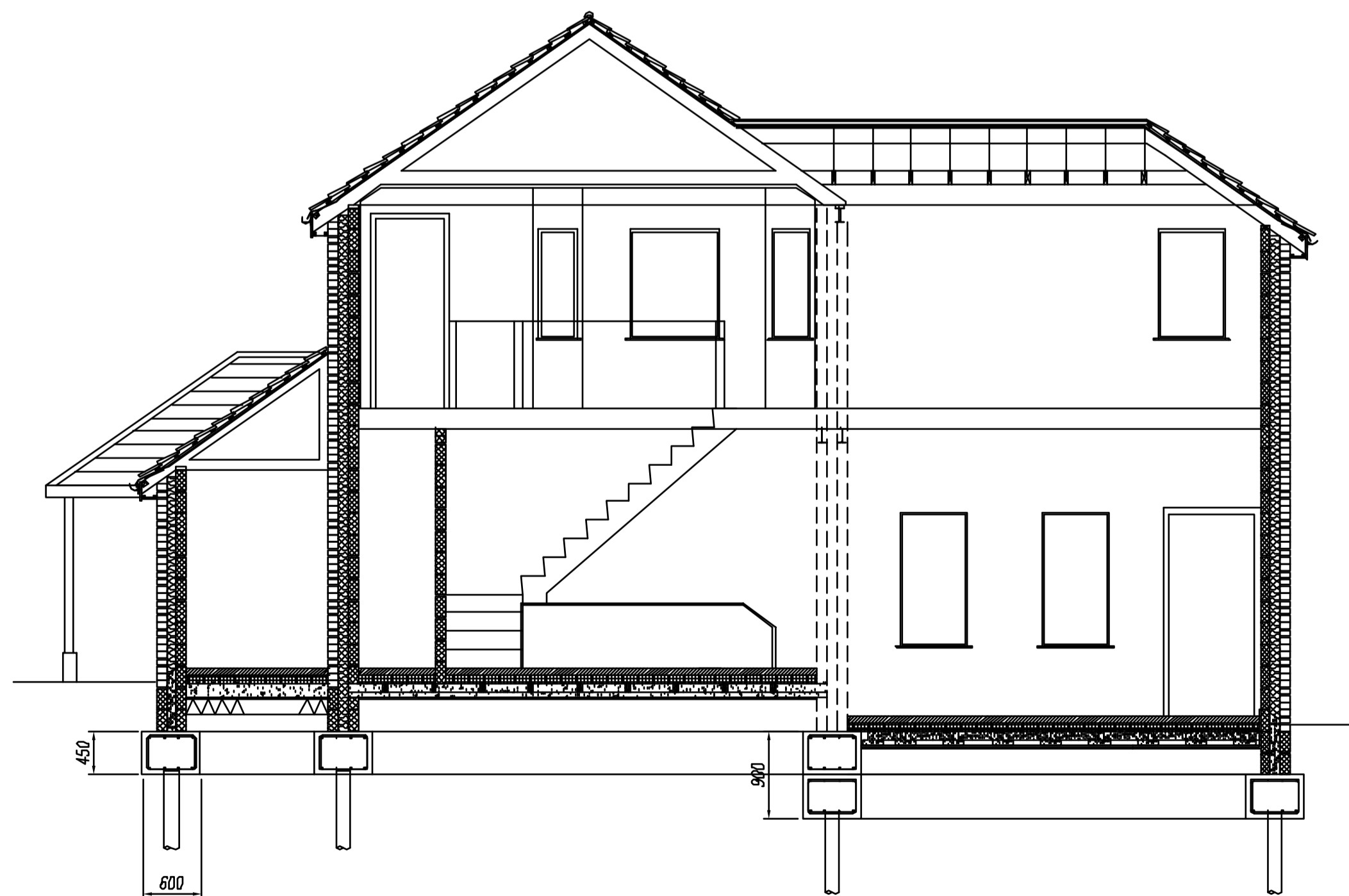
Ref.	Load	Cut off level	Ref.	Load	Cut off level	Ref.	Load	Cut off level
P1	150		P16	150		P31	150	
P2	150		P17	150		P32	150	
P3	150		P18	150		P33	150	
P4	150		P19	150		P34	150	
P5	150		P20	150		P35	150	
P6	150		P21	150		P36	150	
P7	150		P22	150		P37	150	
P8	150		P23	150				
P9	150		P24	150				
P10	150		P25	150				
P11	150		P26	150				
P12	150		P27	150				
P13	150		P28	150				
P14	150		P29	150				
P15	150		P30	150				

B/12



SECTION A - A 1:50

FOR COSTING PURPOSES ONLY



SECTION B - B 1:50

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

British Standards Building Regulations and Codes of practise, including adhesives, fixings, sealants, noggin, wiring and pipework for plumbing, water tanks, heating, flashings etc which relate to the

The contractor is deemed to have included all materials necessary to complete the dwelling to relevant works but are not individually specified in the documents.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

- 1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
- 2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
- 3) All stone fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Excavations

Carry out excavations to receive foundations to a depth of 1m below finished ground levels to a width of 1000mm, 775mm for external walls. Depths of excavation specified are provisional and will vary according to ground conditions. At all times a firm foundation base must be established to the satisfaction of the Local Authority Building Control Officer.

Piling Works

1. All piling works are to be designed and detailed by specialist piling contractor.
2. Piling testing regime and type of test to be agreed with piling contractor.
3. Due account should be taken of the possible effects of ground heave due to piling operations.
4. Due account shall be taken of negative skin friction in the design of piles.

Concrete Works

- 1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 330 kg/m³, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
- 2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
- 3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
- 4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
- 5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (U.N.O), if cast within formwork. Cover shall be min. 75mm if cast against ground.

PILING & GROUND BEAM LAYOUT 1:50

Foundations

Lay 21 N concrete strip foundations to ground floor walls as shown on the drawings. Structural engineer to verify ground bearing capacity for ground bearing slab construction.

Ground floor slabs

Lay 75mm sand/cement screed (1:3), reinforced with mesh on; 75mm thickness Owens Corning 'Polyfoam Plus' or similar approved thermal insulation turned up at edges on; 150mm thickness concrete slab to BS 5328 Part 2 Tables 5&6 on; 300 micron polythene DPM taken up and lapped into DPC on; 25mm sand blinding on; 150mm clean stone consolidated and compacted hardcore. 'U' value of above floor construction achieves 0.23W/m2K

Construction Notes

The complete site area to be stripped to a depth of 300mm minimum to remove of vegetable soil.

Excavations

Carry out excavations to receive foundations to a depth of 900mm below finished ground levels to a width of 700mm for external walls and 500mm for internal loadbearing walls. Depths of excavation specified are provisional and will vary according to ground conditions. At all times a firm foundation base must be established to the satisfaction of the Local Authority Building Control Officer.

Foundations

Lay 21 N concrete strip foundations to ground floor walls as shown on the drawings. Structural engineer to verify ground bearing capacity for ground bearing slab construction.

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

- 1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
- 2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
- 3) All stone fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Concrete Works

- 1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 130 kg/m³, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
- 2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
- 3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
- 4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
- 5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (UJN), if cast within formwork. Cover shall be min. 75mm if cast against ground.

Masonry

- 1) All block work below ground floor level shall be 7N/mm² block work in class 3 mortar (no tie).
- 2) All facing brickwork shall be to architect's specification and shall be broken up into panels using expansion joints as noted on the drawings.
- 3) All block work above ground floor level shall be 3.5N/mm².
- 4) Mortar for above ground works shall be class 3.
- 5) Wall ties shall be installed strictly in accordance with manufacturers recommendations.

Steel Work

- 1) All structural steel work is to be grade S275 to BS EN 10025, unless noted otherwise, fabricated and erected in accordance with BS 5950:2000.
- 2) Bolts to all structural connections to be Grade 8.8 unless noted otherwise.
- 3) All fire protection to steel work etc. to Architect's specification and details.
- 4) Steel work contractor/fabricator is to provide two copies of fabrication drawings for approval by XXX, include any connection details and calculations prior to fabrication.
- 5) Steel work fabricator shall check the detailed arrangement of all structural members to ensure potential clashes are eliminated prior to fabrication. Any anomalies shall be brought to the attention of the Engineer.
- 6) Any exposed steelwork shall be galvanised to BS 150 1461:1998.

Timber

- 1) All structural timber shall be stress graded to BS 5268 and shall be either C16 or C24 timber as noted on the drawings.
- 2) All fixings i.e. truss clips, framing anchors, etc. shall be galvanised/steradized.
- 3) All timbers shall be preservative treated.

Foundations

Lay 21 N concrete strip foundations to ground floor walls.

Ground floor slabs

Lay 75mm sand/cement screed (1:3), reinforced with mesh on; 75mm thickness Owens Corning 'Polyfoam Plus' or similar approved thermal insulation turned up at edges on; 150mm thickness concrete slab to BS 5328 Part 2 Tables 5&6 on; 300 micron polythene DPM taken up and lapped into DPC on; 25mm sand blinding on; 150mm clean stone consolidated and compacted hardcore. 'U' value of above floor construction achieves 0.23W/m2K

Foundations

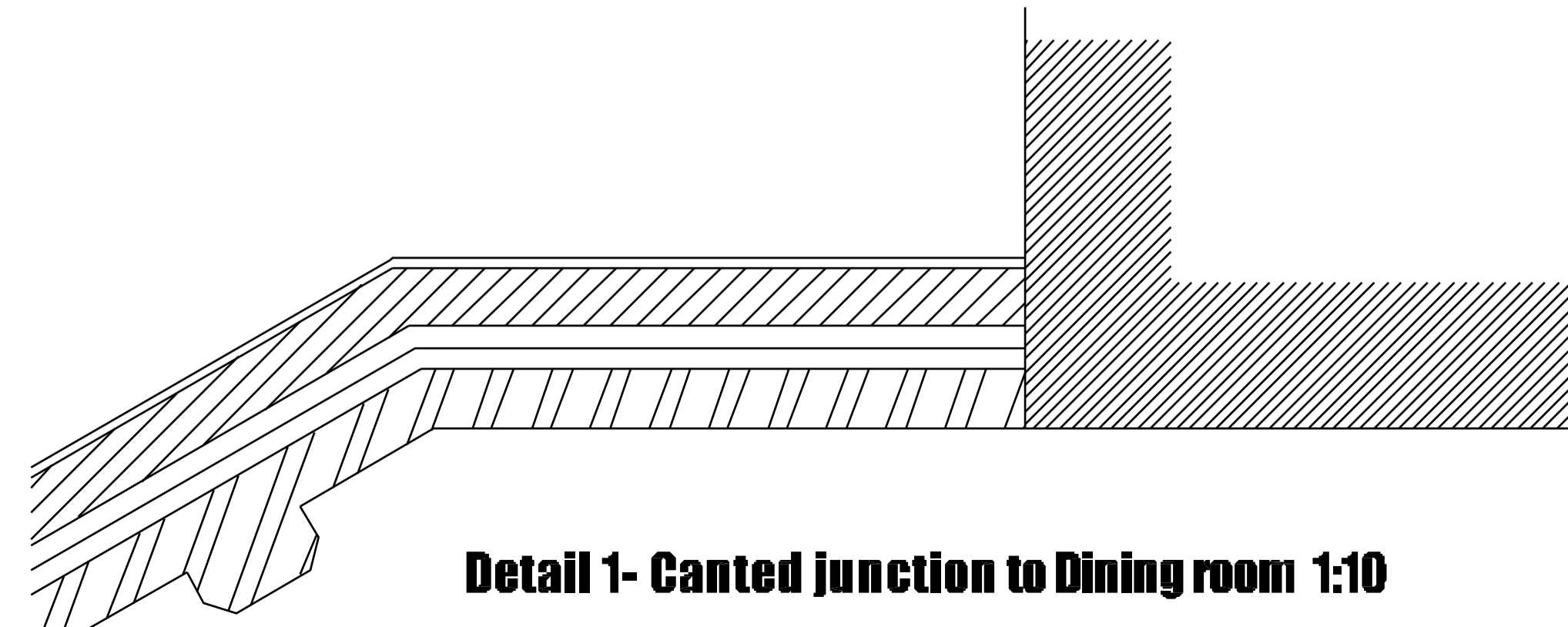
Lay 21 N concrete strip foundations to ground floor walls as shown on the drawings. Structural engineer to verify ground bearing capacity for ground bearing slab construction.

Ground floor slabs

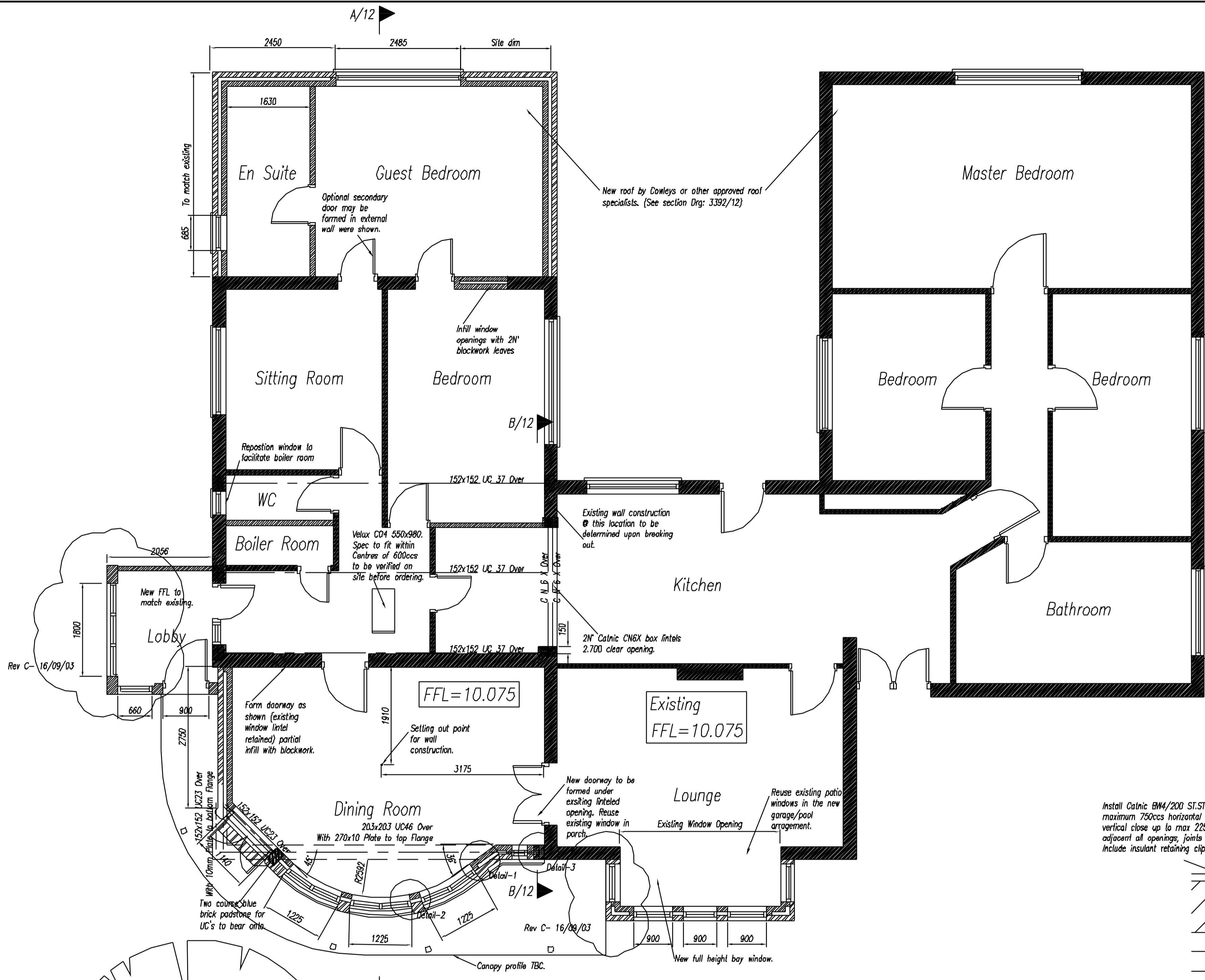
Lay 75mm sand/cement screed (1:3), reinforced with mesh on; 75mm thickness Owens Corning 'Polyfoam Plus' or similar approved thermal insulation turned up at edges on; 150mm thickness concrete slab to BS 5328 Part 2 Tables 5&6 on; 300 micron polythene DPM taken up and lapped into DPC on; 25mm sand blinding on; 150mm clean stone consolidated and compacted hardcore. 'U' value of above floor construction achieves 0.23W/m2K

External walls below DPC

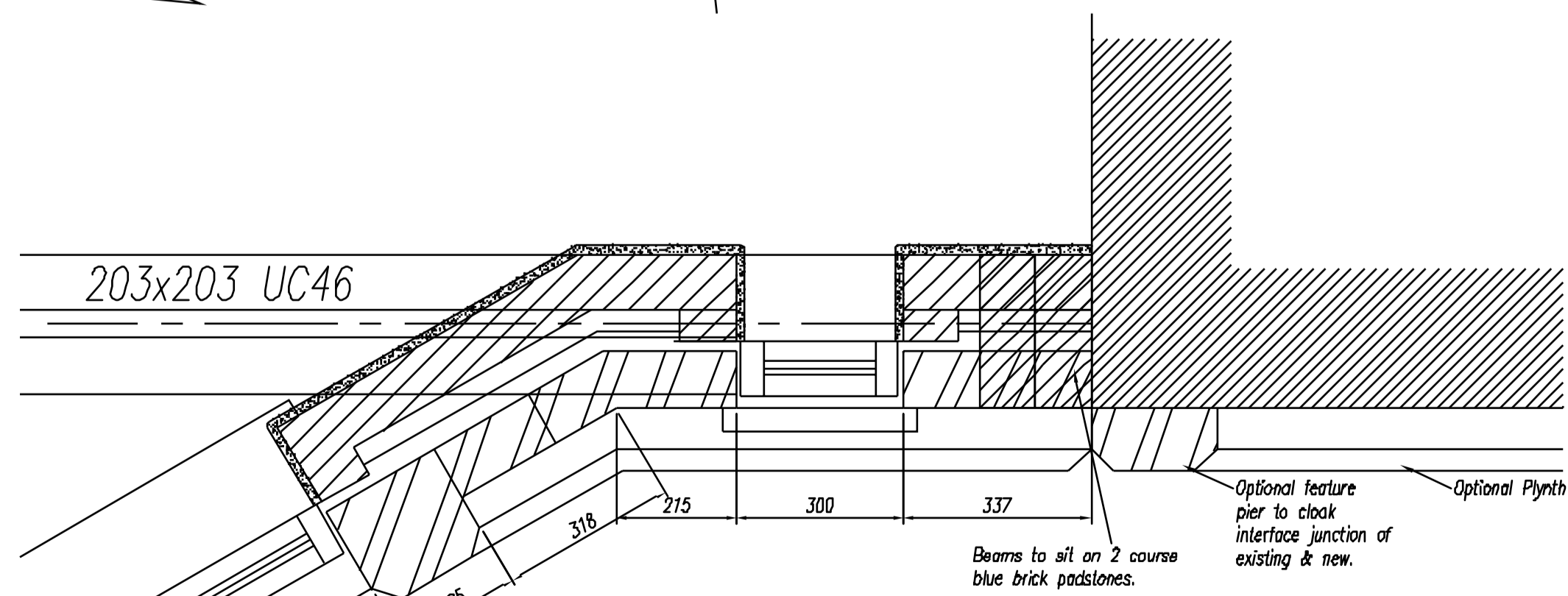
100mm solid concrete block internal skin. All leaf m/c concrete starting to outer face at ground level, blockwork used below ground level to be Class '4' (approved below-ground quality) 102mm external facing brick of special quality as to resist frost (semi-engineering bricks or similar) to be laid to 3 No courses at ground level.



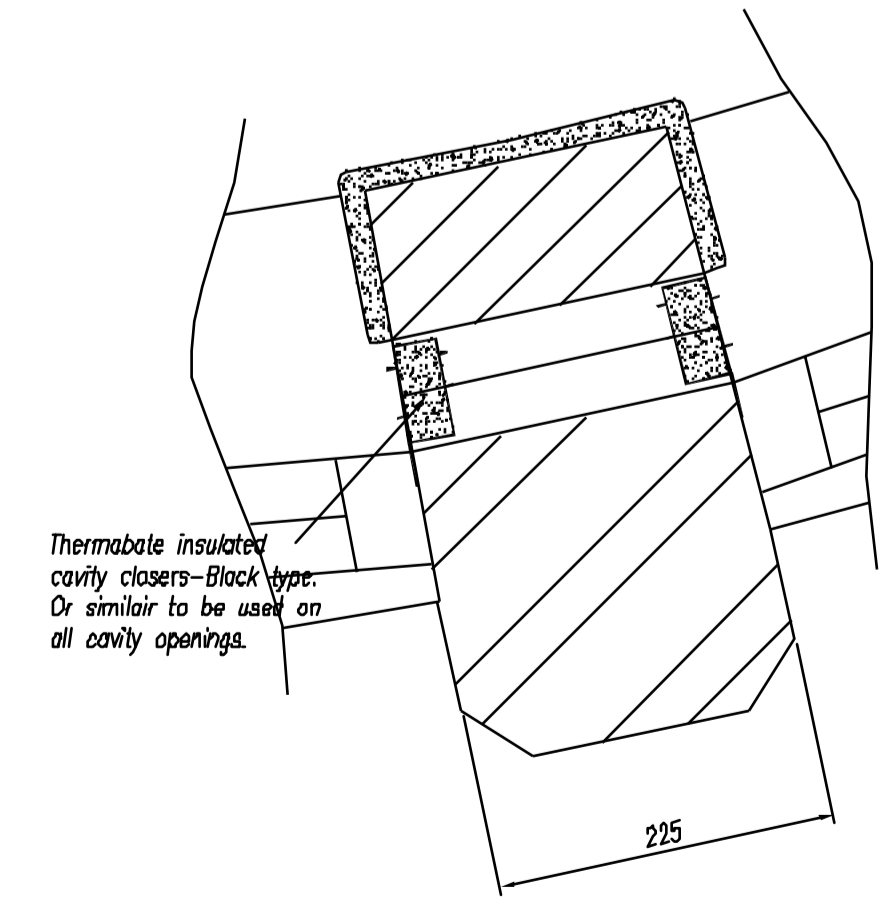
Ground Floor/ Substructure Plan to Dwelling 1:50



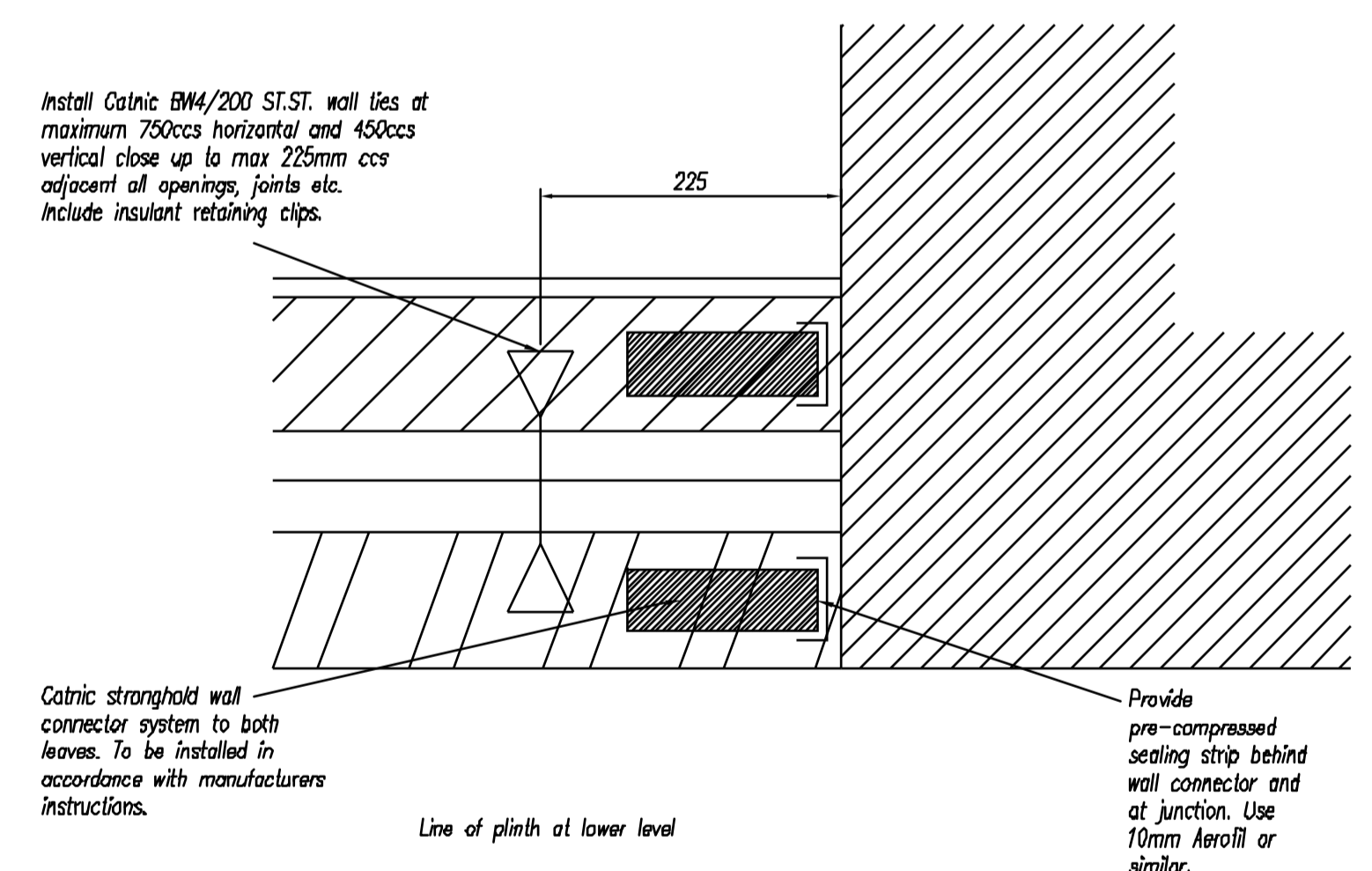
Ground Floor Plan to Dwelling 1:50



Detail 1- Canted junction to Dining room 1:10



Detail 2- Pier detail showing proprietary cavity closer to window 1:5



Detail 3- Typical junction between new/existing wall 1:5

Oil Storage

Refer to Pollution Prevention Guidelines publication PPC2-Above ground storage tanks for installation requirements and location guidelines

In General-oil is to be stored in a purpose designed tank with a design life of 20 years (with proper maintenance) A bunded tank (double skinned) should be used to provide secondary containment (110% Capacity of primary tank) should leakage occur. The tank should be positioned so that any impact risk is minimised. The tank should be labelled with information on how to respond to a leak and should provide the telephone no. of the environment agency's Emergency Hotline-

0800 80 70 60 Where separate oil tanks are used on the same site separate fill pipes should be used.

Typically, if the tank is within 1800mm of the Building the walls are to be impermeable, (excluding air bricks and other small openings) with at least 30 mins. fire resistance to internal fire and construct eaves within 1800mm of tanks and extending 300mm beyond each side of tanks with at least 30 mins of fire resistance to external fire with non combustible cladding or; provide a fire wall between the tank and any part of the building within 1800mm of the tank and construct the eaves as above. The fire wall should extend at least 300mm higher and wider than the affected parts of the tank. Less than 780mm from a boundary/boundary wall-then provide a fire wall between the tank and the boundary or boundary wall having at least 30 mins fire resistance to fire on either side. The fire wall or boundary wall should extend at least 300mm higher and wider than the top or sides of tank.

Any new Oil fired boiler or associated elements to be fitted in accordance with manufacturers instructions and all relevant British Standard requirements BS 799:Part 5 Code of practice for oil burning equipment

Pipework
All fixed Pipework should be properly supported and sited above ground for ease of inspection and any required maintenance. Pipework that is used for supplying oil to fixed appliances should comply with the requirements of BS 5410:Part 1 Pipes should be adequately insulated against frost damage and protected from corrosion

Mechanical & Electrical

- 1) All new lighting is to be in accordance with CIBSE publication CODE FOR INTERIOR LIGHTING 1994
- 2) All new switching to be in accordance with CIBSE publication CODE FOR INTERIOR LIGHTING 1994
- 3) All electrical work must comply with BS 7671:1992.
- 4) All New heating to conform with approved document L-2

External walls above DPC

102mm facing brickwork or natural coursed stone see drgs 75mm cavity filled with Ditherm or similar approved cavity insulation, 100mm thick blockwork inner leaf and 13mm thick sand/cement render and skim. External wall 'U' value to achieve 0.35W/m2K. Wall to include wire cavity ties at 900mm centres horizontally and 450mm vertically staggered. Wire cavity ties to BS 1243 at 225mm centres vertically at jambs of openings. Cavities closed at openings by Thermabate or similar approved cavity closer. Damp proof course to be minimum of 150mm above ground level, brickwork bedded in 1:1.5 mortar. Feature corbelling to eaves to corbel maximum 25mm each course (i.e. 2ND courses maximum 50mm) and bedded on brick reinforcement in mortar joint to last 4 bed joints at eaves and gable.

General roof construction

Concrete ties to match existing, filled in accordance with manufactures written instructions 25x50mm (to conform to BS 5534 part 1 1997) tanalised soft wood battens on approved reinforced roofing underlay, lapped minimum 150mm horizontally and vertically on trussed & loose rafters at maximum 600mm centres, wind braced and constructed in accordance with BS 5268 Part 3 1985, 100x75mm softwood wallplate secured with 30x5mm mild steel straps at maximum 2000mm centres turned down wall 1m thick and tucked in 75mm. At gables, fix 75x50mm softwood noggins in between 100x25mm softwood bracing from ridge to eaves at 450 c/s. spiked to trusses. 100x25mm softwood longitudinal binders at maximum 2000mm centres.

Roof insulation to be located between timber ceiling ties and comprise 250mm total thickness Rockwool RWA thermal insulation quilt to roof void achieving minimum 'U' value of 0.16 W/m2K. 12.5 plasterboard with skim finish to ceilings. All pipes passing through roof space to be insulated with approved glass fibre insulation as pipe thickness or maximum 50mm. Access hatches to be polypipe left hatch fully insulated & draught proof model LH2 or similar.

At all roof/external wall abutment junctions, provide proprietary cavity tray DPC units in stepped format complete with No.4 code lead stepped flashing dressed onto roof tile surface for 100mm minimum

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

- 1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
- 2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
- 3) All stone fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Concrete Works

- 1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 330 kg/m3, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
- 2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
- 3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
- 4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
- 5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (U.N.O.) if cast within formwork. Cover shall be min. 75mm if cast against ground.

Masonry

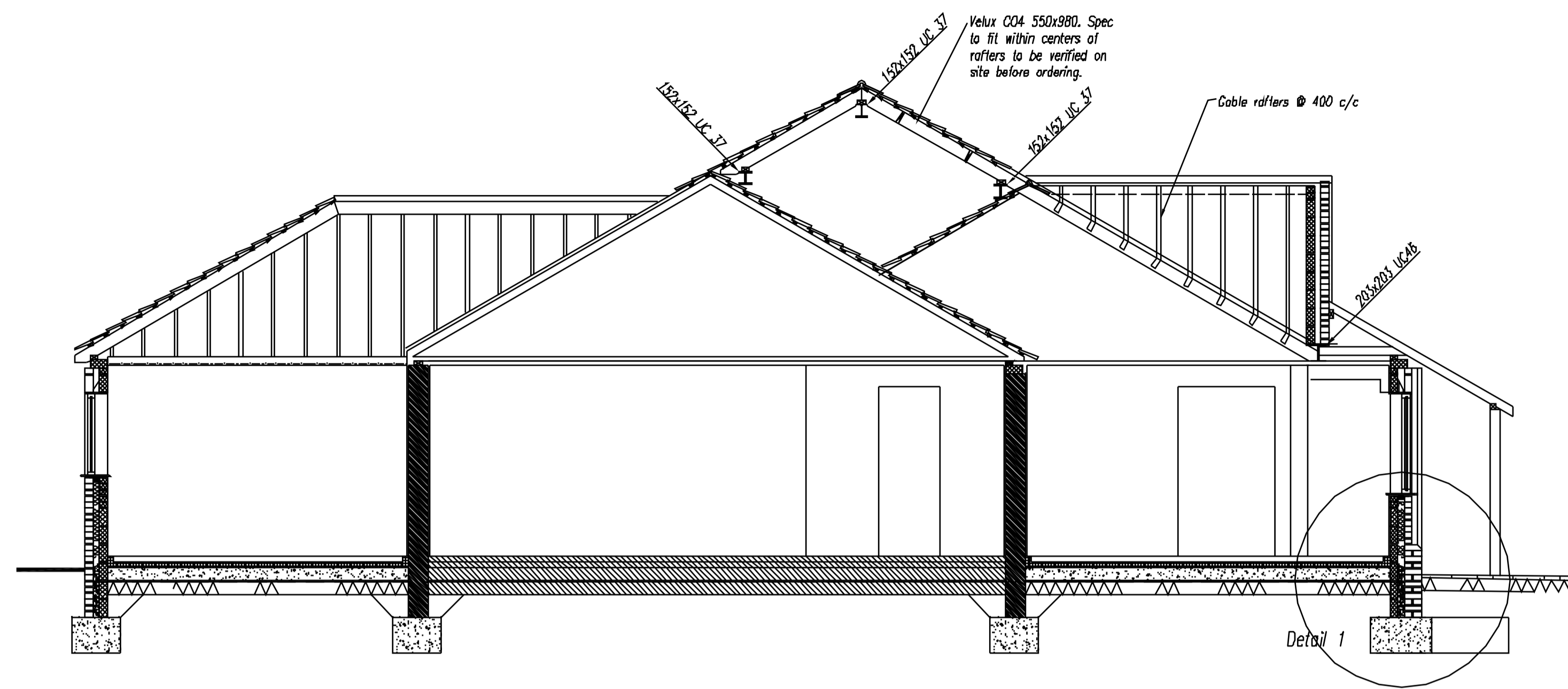
- 1) All block work below ground floor level shall be 7N/mm2 block work in class 3 mortar (no lime).
- 2) All facing brickwork shall be to architects specification and shall be broken up into panels using expansion joints as noted on the drawings.
- 3) All block work above ground floor level shall be 3.5N/mm2.
- 4) Mortar for above ground works shall be class 3.
- 5) Wall ties shall be installed strictly in accordance with manufacturers recommendations.

Steel Work

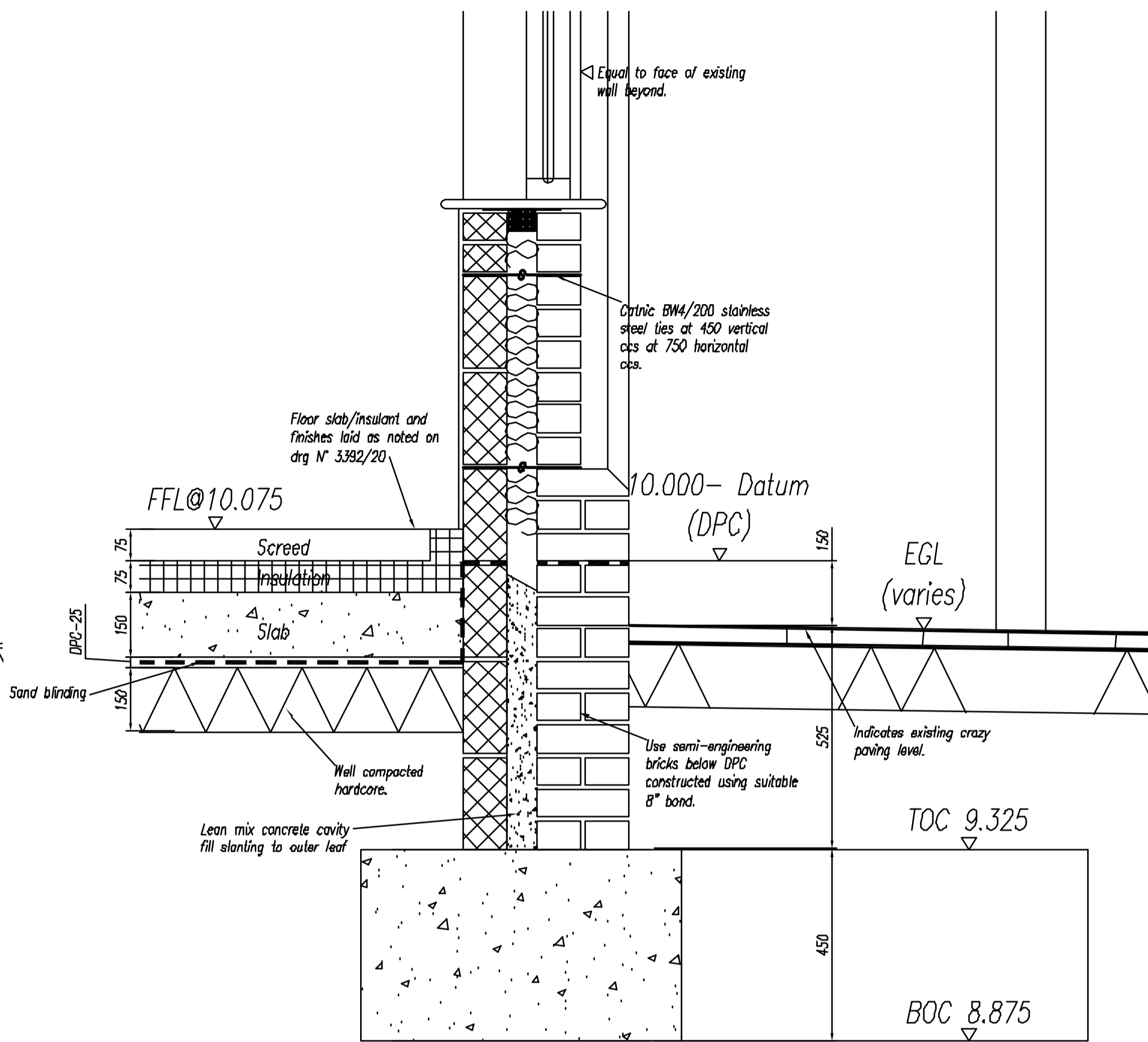
- 1) All structural steel work is to be grade S275 to BS EN 10025, unless noted otherwise, fabricated and erected in accordance with BS 5950:2000.
- 2) Bolts to all structural connections to be Grade B8 unless noted otherwise.
- 3) All fire protection to steel work etc. to Architect's specification and details.
- 4) Steel work contractor/fabricator is to provide two copies of fabrication drawings for approval by XXX, include any connection details and calculations prior to fabrication.
- 5) Steel work fabricator shall check the detailed arrangement of all structural members to ensure potential clashes are eliminated prior to fabrication. Any anomalies shall be brought to the attention of the Engineer.
- 6) Any exposed steelwork shall be galvanised to BS ISO 1461:1998.

Timber

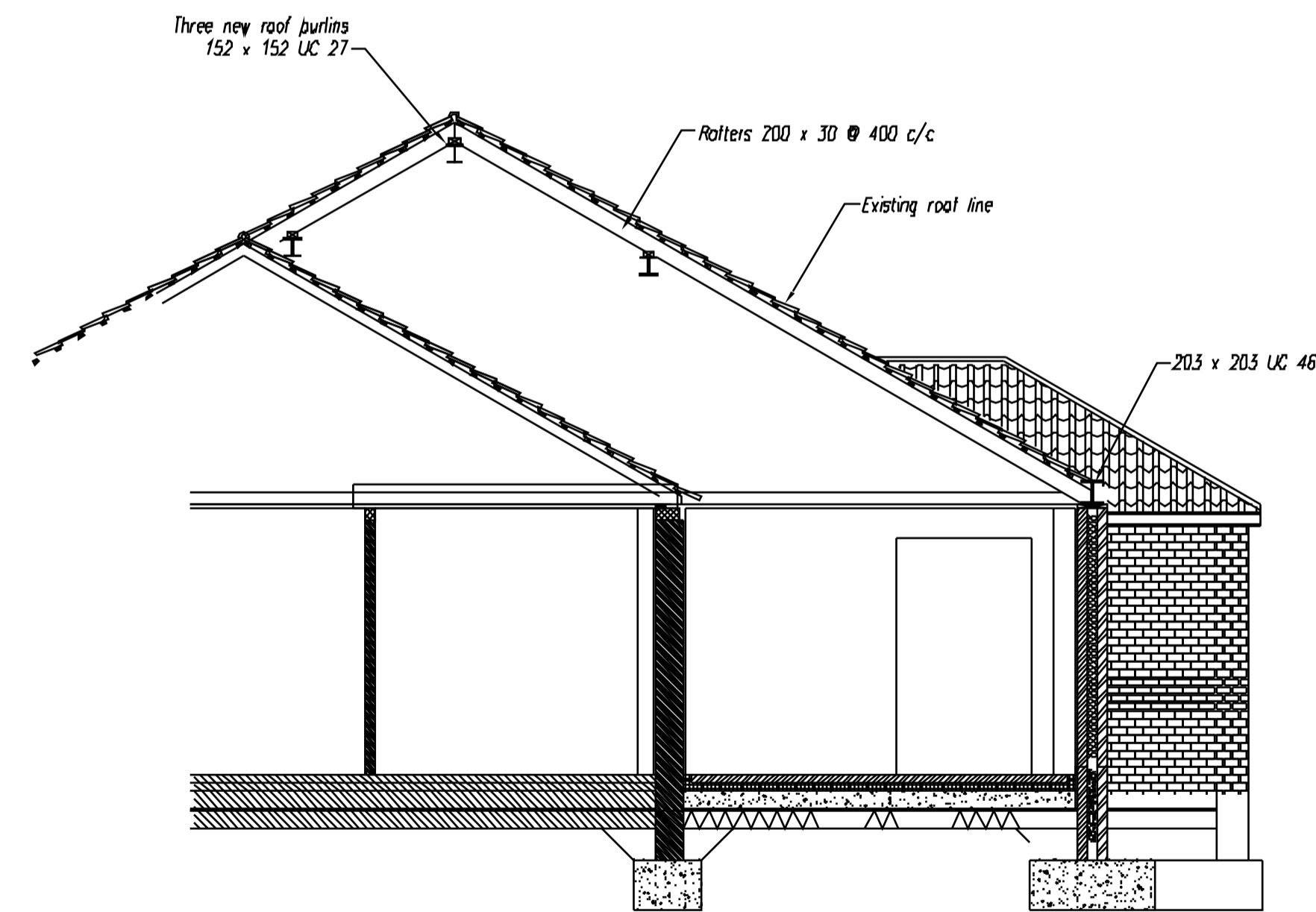
- 1) All structural timber shall be stress graded to BS 5268 and shall be either C16 or C24 timber as noted on the drawings.
- 2) All fixings i.e. truss clips, framing anchors, etc. shall be galvanised/theradized.
- 3) All timbers shall be preservative treated.



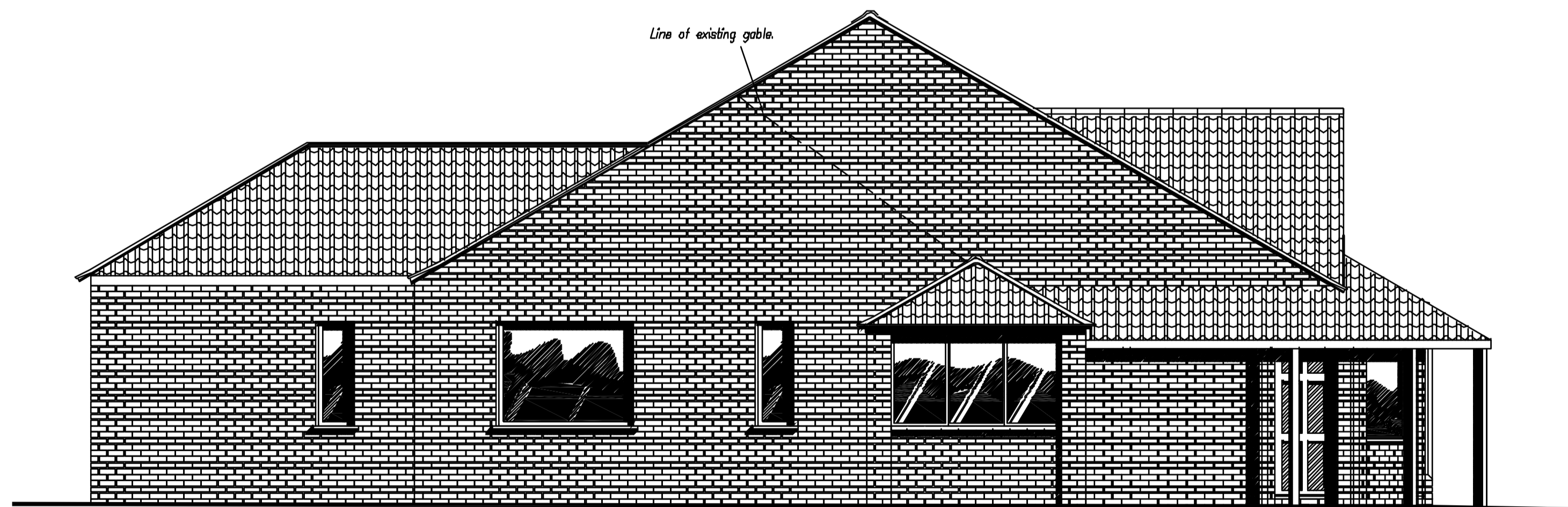
Section A-A 1:50



Detail 1 1:10



Section B-B 1:50



Side Elevation to Dwelling 1:50

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

- 1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
- 2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
- 3) All stone fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Concrete Works

- 1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 330 kg/m³, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
- 2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
- 3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
- 4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
- 5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (U.J.N.O.), if cast within formwork. Cover shall be min. 75mm if cast against ground.

Masonry

- 1) All block work below ground floor level shall be 7N/mm² block work in class 3 mortar (no time).
- 2) All facing brickwork shall be to architect's specification and shall be broken up into panels using expansion joints as noted on the drawings.
- 3) All block work above ground floor level shall be 3.5N/mm².
- 4) Mortar for above ground works shall be class 3.
- 5) Wall ties shall be installed strictly in accordance with manufacturers recommendations.

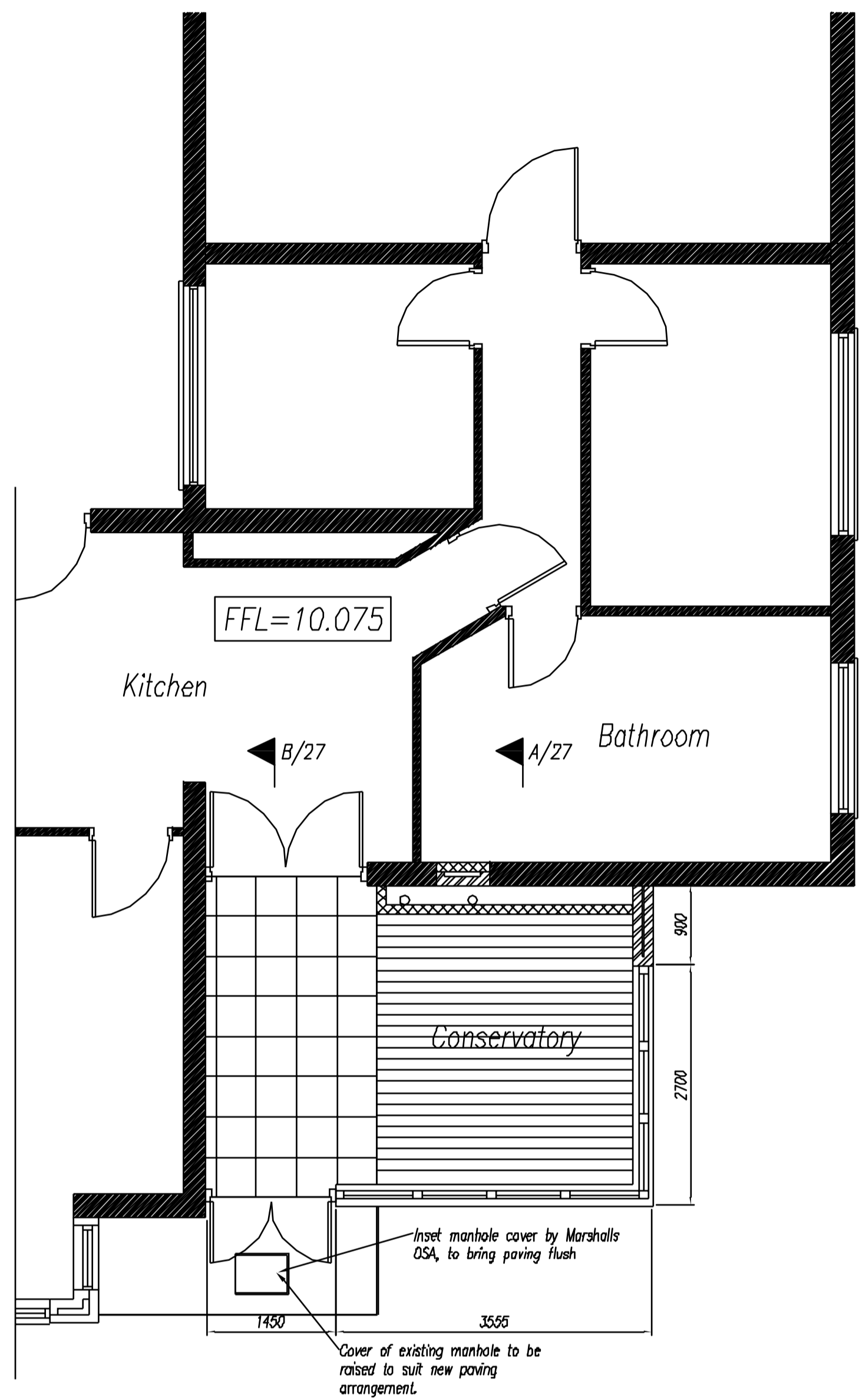
Steel Work

- 1) All structural steel work is to be grade S275 to BS EN 10025, unless noted otherwise, fabricated and erected in accordance with BS 5950:2000.
- 2) Bolts to all structural connections to be Grade 8.8 unless noted otherwise.
- 3) All fire protection to steel work etc. to Architect's specification and details.
- 4) Steel work contractor/fabricator is to provide two copies of fabrication drawings for approval by XXX, include any connection details and calculations prior to fabrication.
- 5) Steel work fabricator shall check the detailed arrangement of all structural members to ensure potential clashes are eliminated prior to fabrication. Any anomalies shall be brought to the attention of the Engineer.
- 6) Any exposed steelwork shall be galvanised to BS 150 1461:1998.

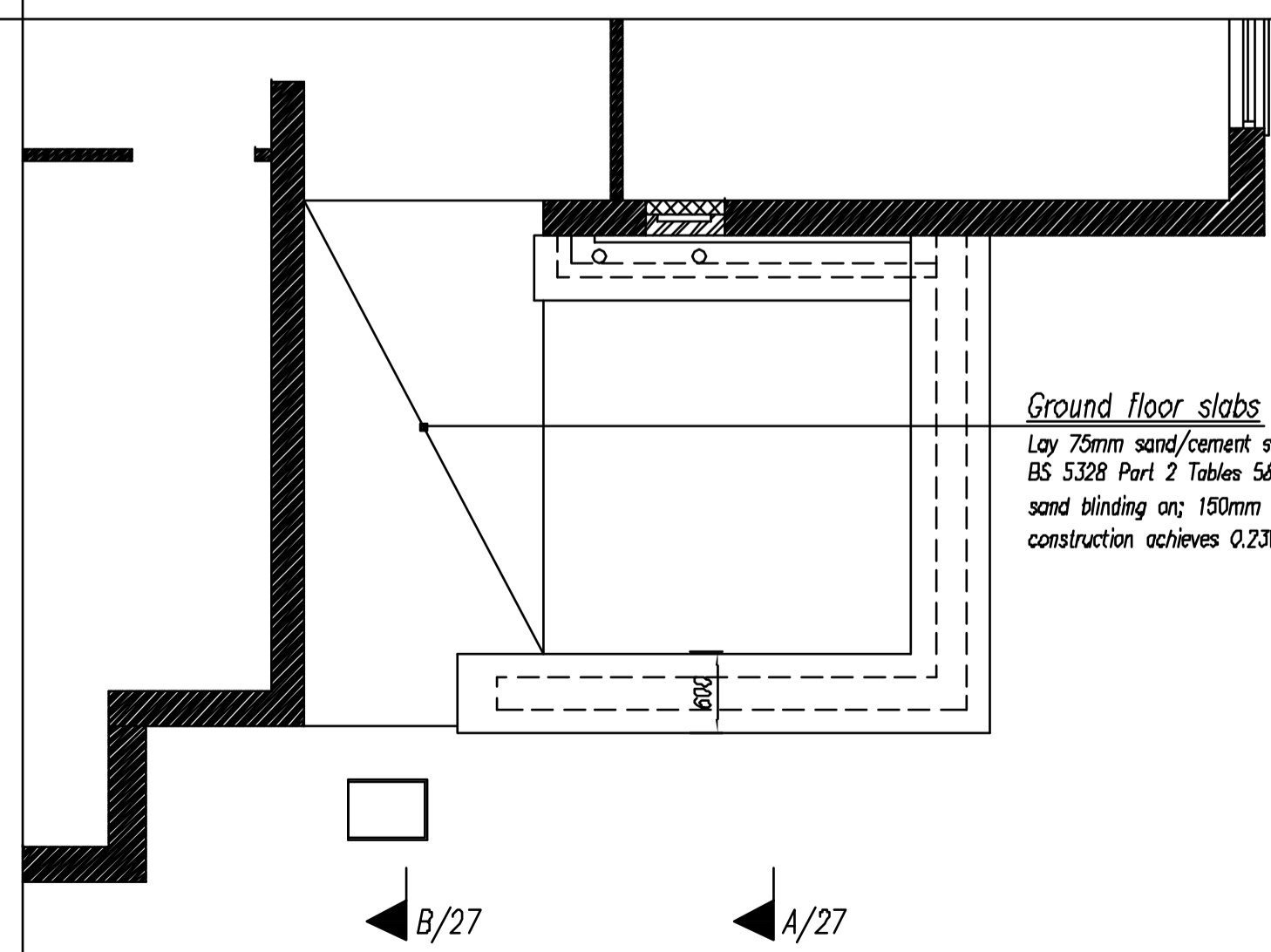
Timber

- 1) All structural timber shall be stress graded to BS 5268 and shall be either C16 or C24 timber as noted on the drawings.
- 2) All fixings i.e. truss clips, framing anchors, etc. shall be galvanised/sterilized.
- 3) All timbers shall be preservative treated.

GROUND FLOOR PLAN 1:50



SUBSTRUCTURE PLAN 1:50

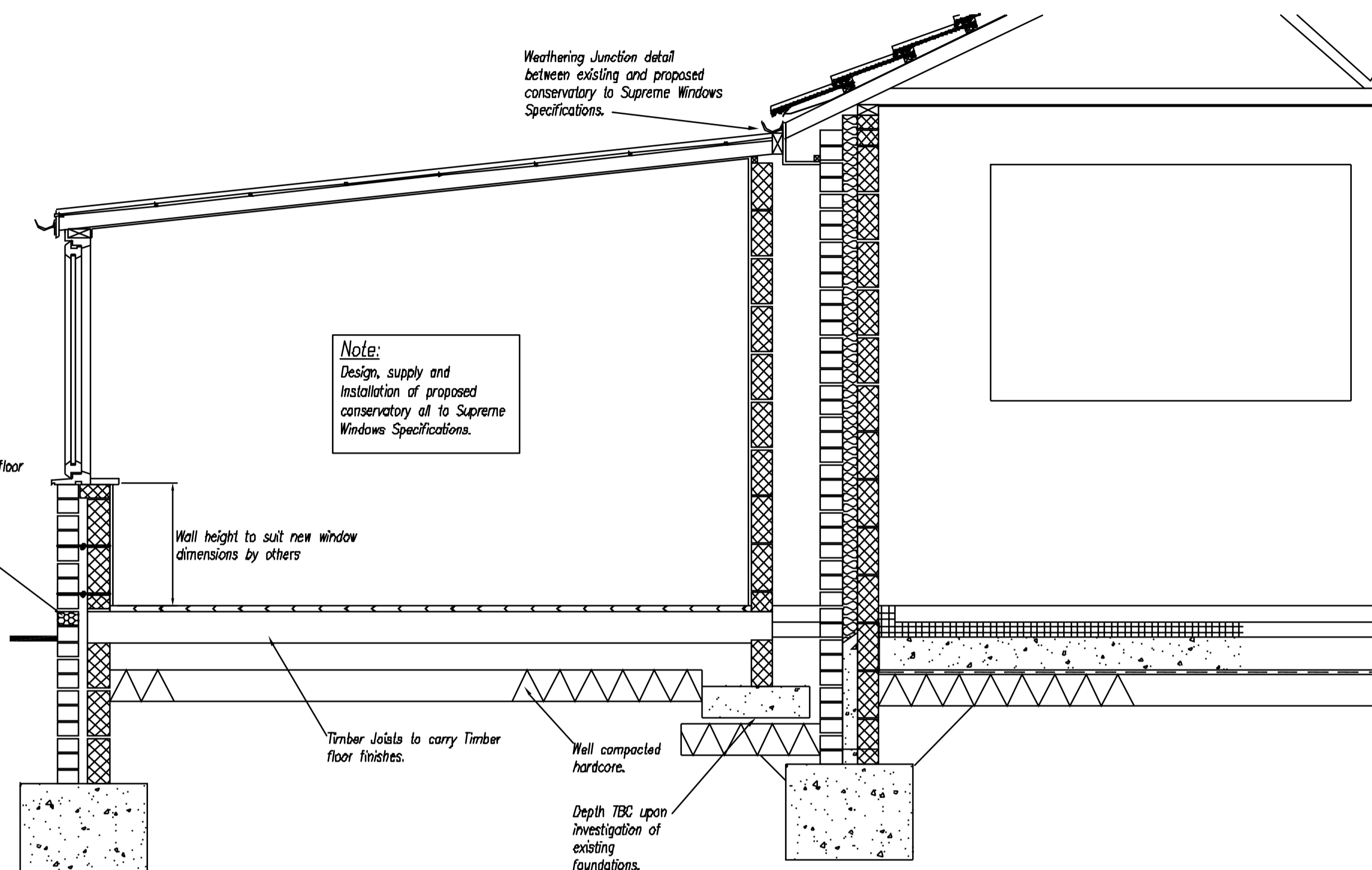


Ground floor slabs

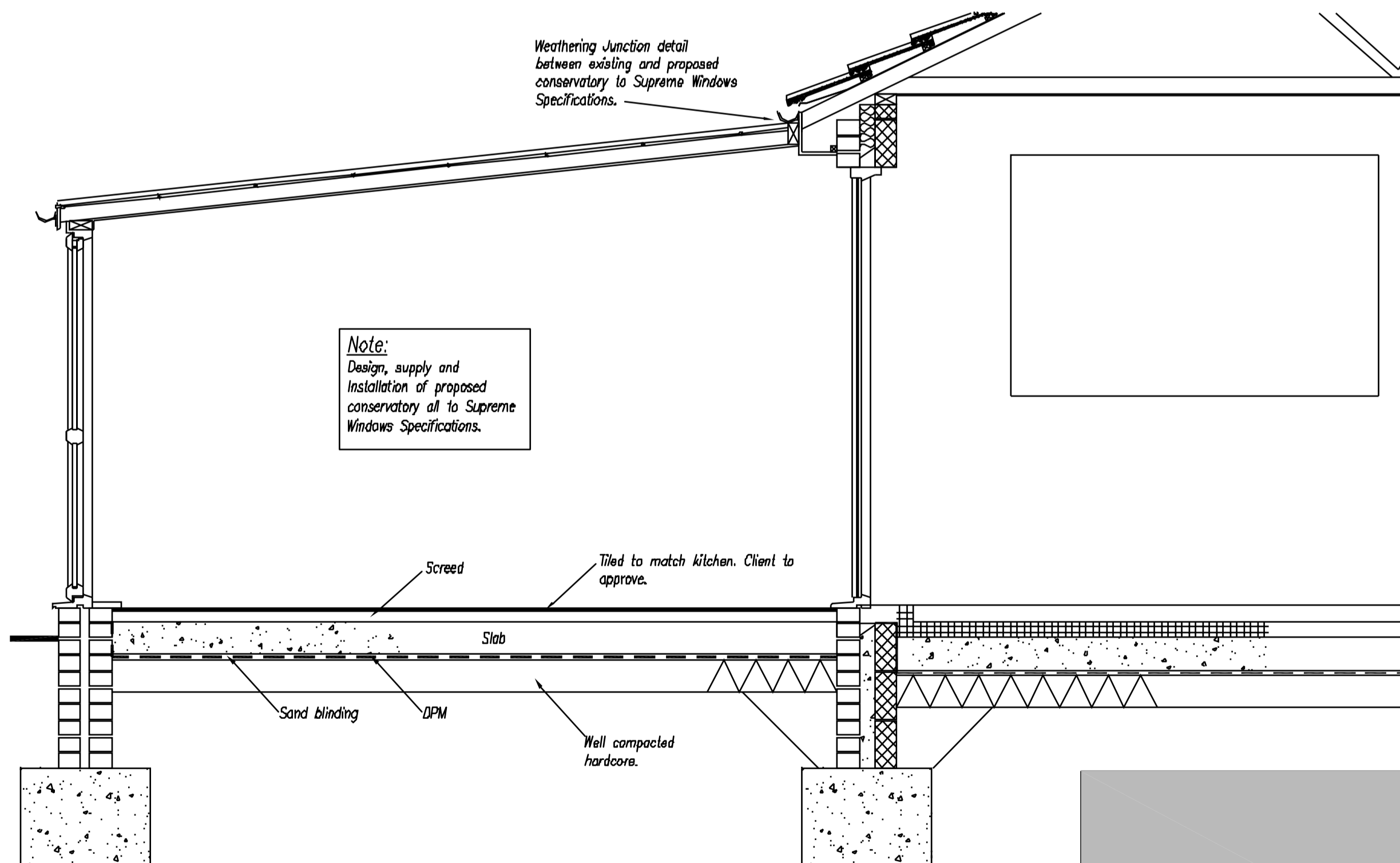
Lay 75mm sand/cement screed (1:3), reinforced with mesh on; 150mm thickness concrete slab to BS 5328 Part 2 Tables 5d6 on; 300 micron polythene DPM taken up and lapped into DPC on; 25mm sand blinding on; 150mm clean stone consolidated and compacted hardcore. U' value of above floor construction achieves 0.23W/m2K

External walls below DPC

100mm solid concrete block internal skin. All lean mix concrete stanching to outer face at ground level. Blockwork used below ground level to be Class 'A' (approved below-ground quality) 102mm external facing brick of special quality as to resist frost (semi-engineering bricks or similar) to be laid to 3 No courses at ground level.



SECTION A - A 1:20



SECTION B - B 1:20

General Notes

- 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
- 2) Do not scale from this or any other XXX drawing.
- 3) All dimensions to be checked on site prior to construction or fabrication.

Temporary Works

- 1) The main contractor will be responsible for all temporary works. A specialist subcontractor should be appointed to design and install all temporary works to adequately support all applied loads.
- 2) The contractor shall take all appropriate measures to avoid causing instability or damage to existing structures, surface finishes etc.

Excavations and Filling

- 1) All trenches and pits excavated for the construction of drainage and foundations must be adequately supported at all times to safeguard the stability of adjacent structures and plant and the safety and welfare of site operatives.
- 2) All work in open excavations and confined spaces shall be carried out in accordance with current health & safety regulations.
- 3) All stone fill shall be clean, well graded, crushed stone, 50mm down and shall be laid and compacted in layers not exceeding 150mm in thickness.

Concrete Works

- 1) All reinforced concrete shall be grade FND2 with a minimum OPC content of 330 kg/m³, max free water cement ratio of 0.50 and maximum nominal aggregate size of 20 mm.
- 2) All concrete shall be placed and compacted in accordance with BS 8110:1985.
- 3) All bar reinforcement shall be to BS 4449:1985. All fabric reinforcement shall be to BS 4483:1985 and minimum lap length shall be 450 mm.
- 4) All reinforcement shall be sufficiently supported, positioned and restrained using proprietary chairs and spacers to achieve the required cover.
- 5) The concrete cover requirements shall be minimum 40 mm to all reinforcement (U.N.D.), if cast within formwork. Cover shall be min. 75mm if cast against ground.

Masonry

- 1) All block work below ground floor level shall be 7N/mm² block work in class 3 mortar (no lime).
- 2) All facing brickwork shall be to architects specification and shall be broken up into panels using expansion joints as noted on the drawings.
- 3) All block work above ground floor level shall be 3.5N/mm².
- 4) Mortar for above ground works shall be class 3.
- 5) Wall ties shall be installed strictly in accordance with manufacturers recommendations.

Timber

- 1) All structural timber shall be stress graded to BS 5268 and shall be either C16 or C24 timber as noted on the drawings.
- 2) All fixings i.e. truss clips, framing anchors, etc. shall be galvanised/theradized.
- 3) All timbers shall be preservative treated.

Construction Notes

The complete site area to be stripped to a depth of 300mm minimum to remove all vegetable soil.

Excavations

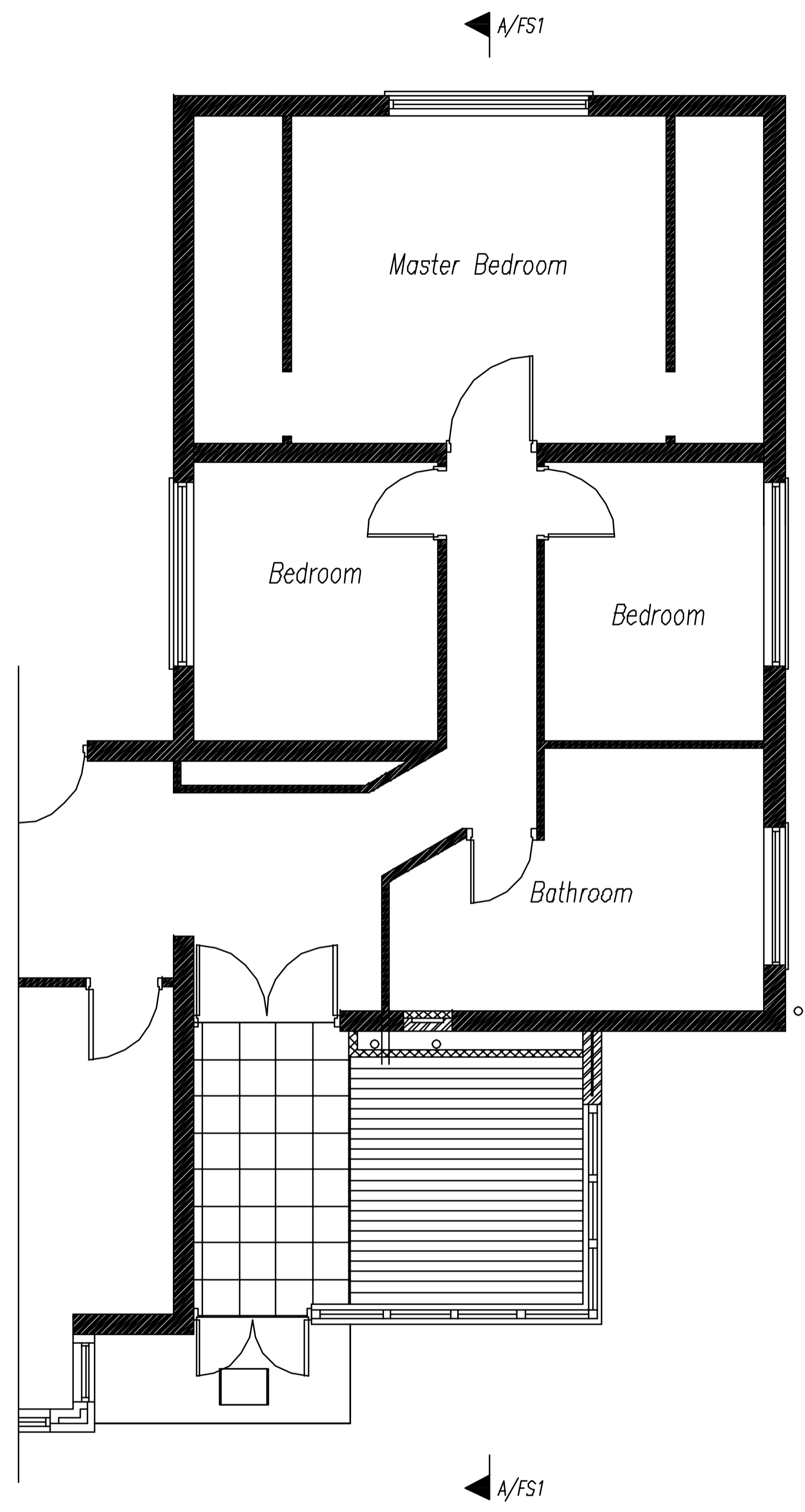
Carry out excavations to receive foundations to a depth of 900mm below finished ground levels to a width of 700mm for external walls and 500mm for internal loadbearing walls. Depths of excavation specified are provisional and will vary according to ground conditions. At all times a firm foundation base must be established to the satisfaction of the Local Authority Building Control Officer.

Foundations

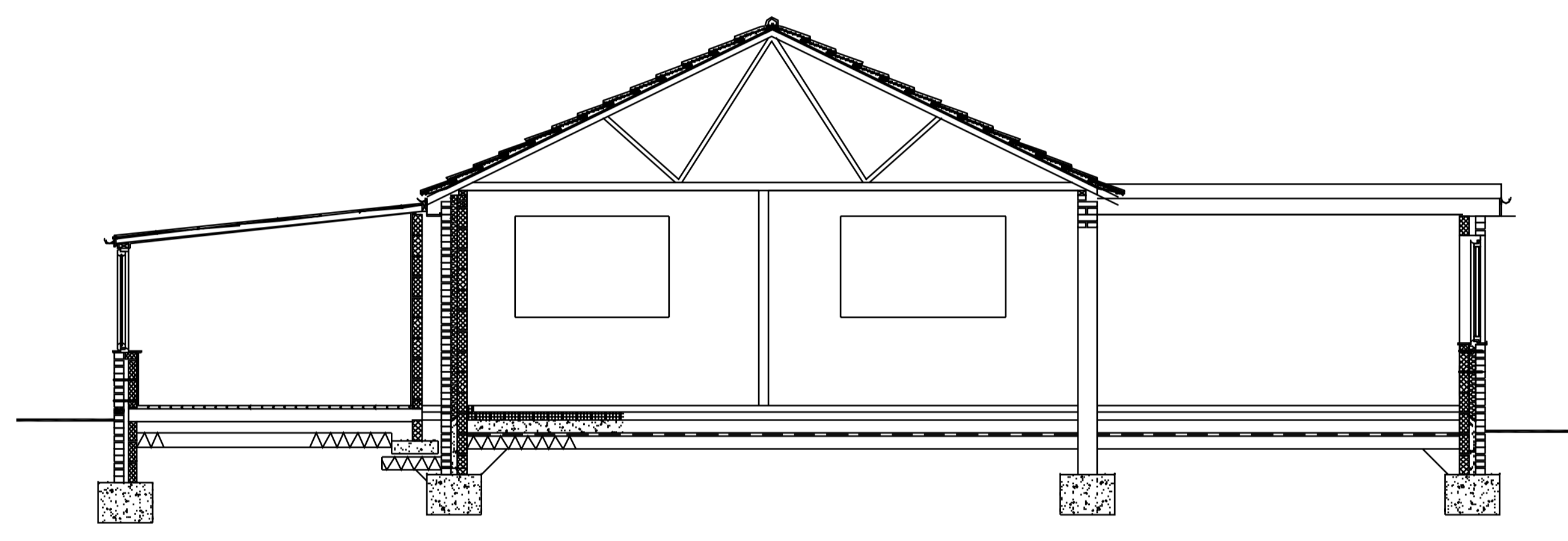
Lay 21 N concrete strip foundations to ground floor walls as shown on the drawings. Structural engineer to verify ground bearing capacity for ground bearing slab construction.

GENERAL ARRANGEMENT - CONSERVATORY

General Notes
1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
2) Do not scale from this or any other XXX drawing.
3) All dimensions to be checked on site prior to construction or fabrication.

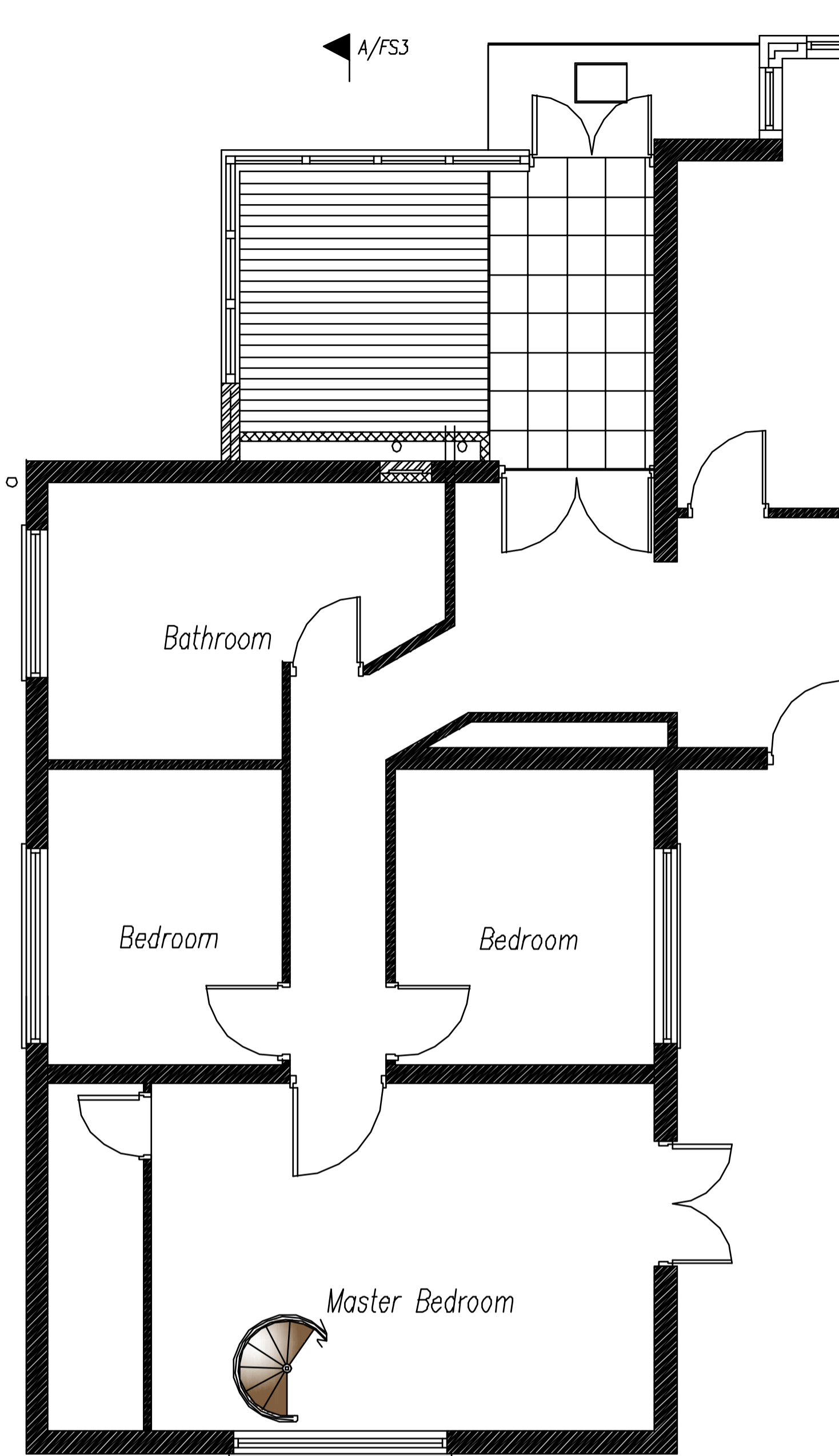


PARTIAL-GROUND FLOOR PLAN

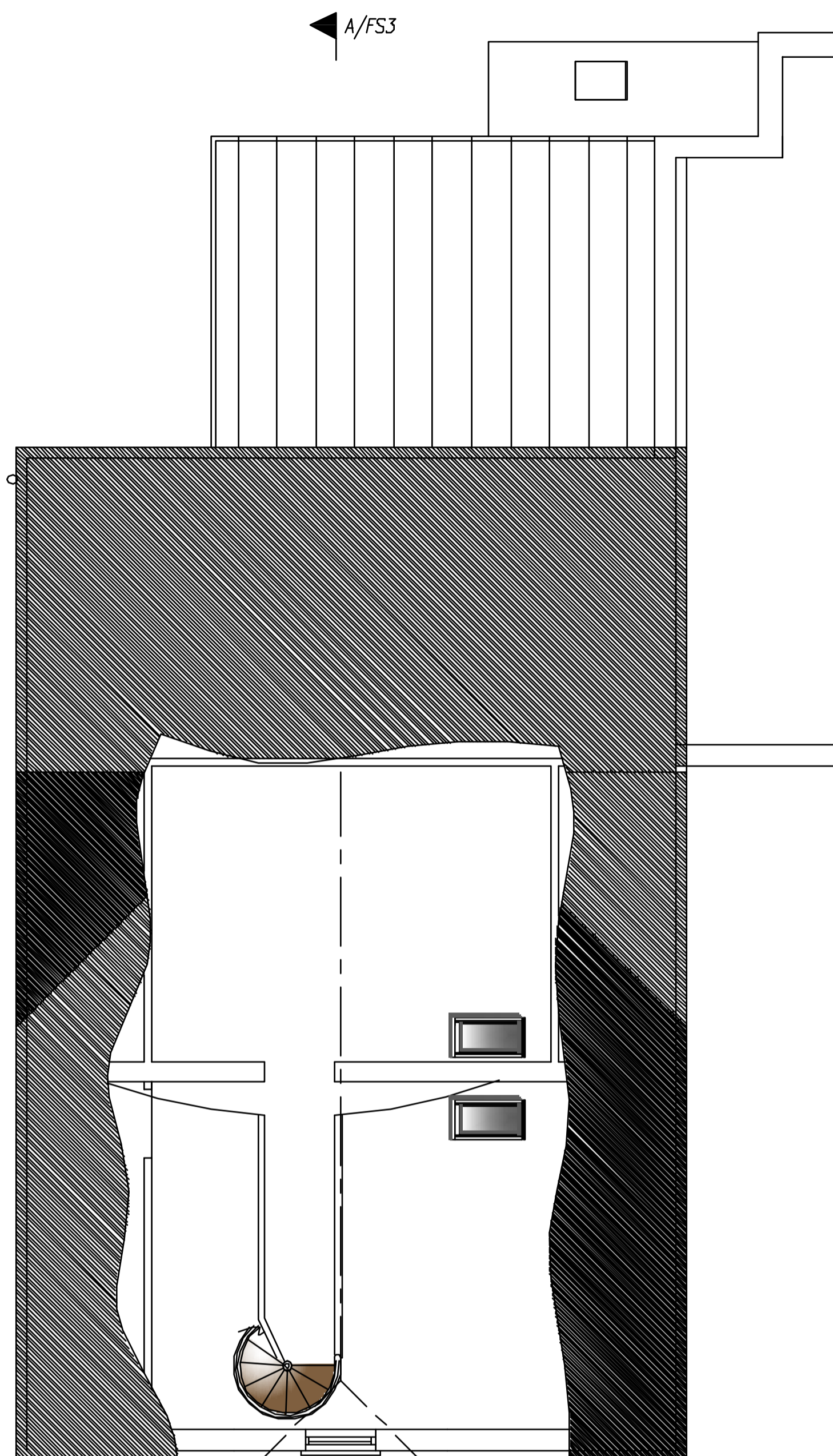


SECTION A-A

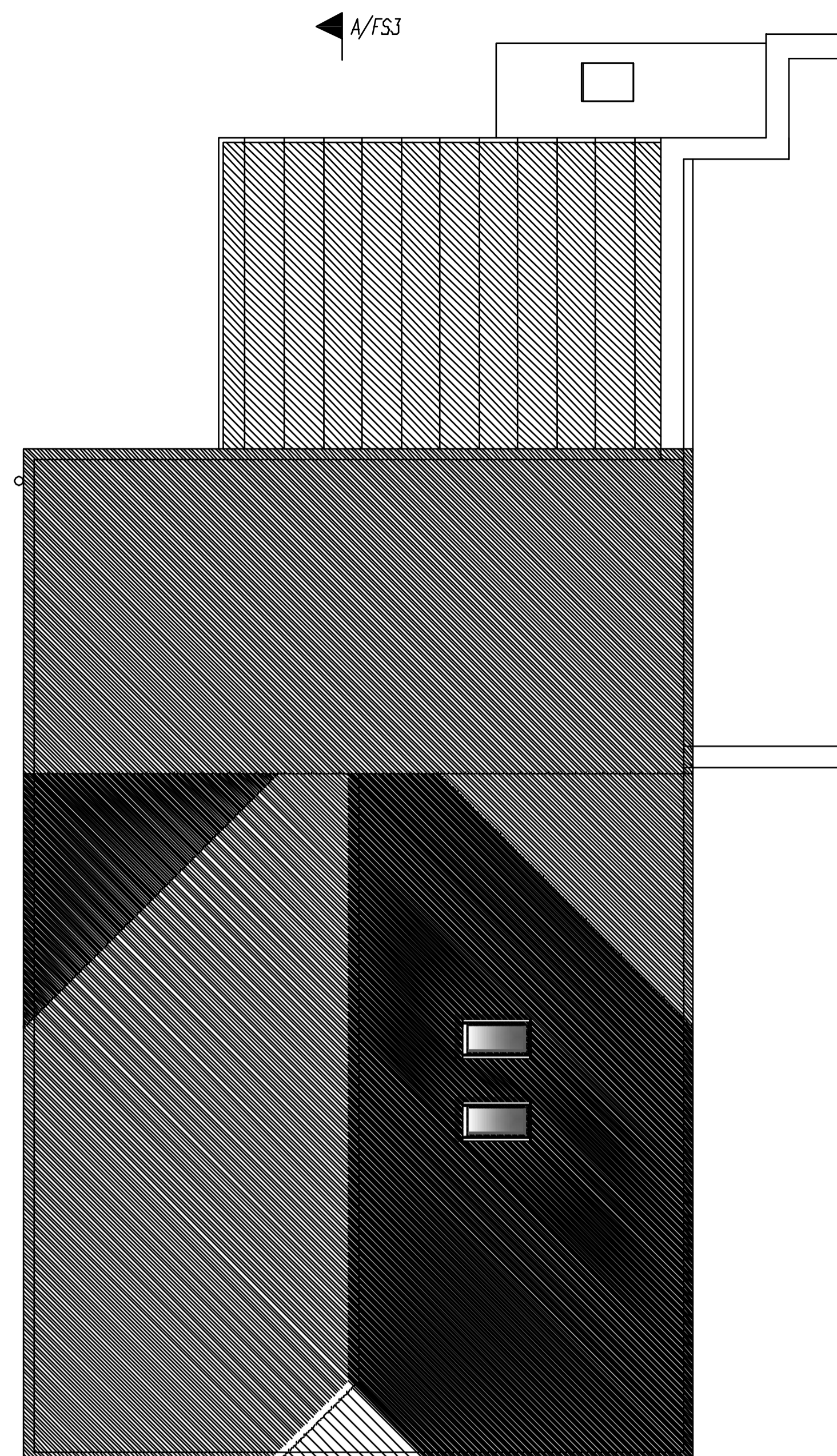




PARTIAL-GROUND FLOOR PLAN

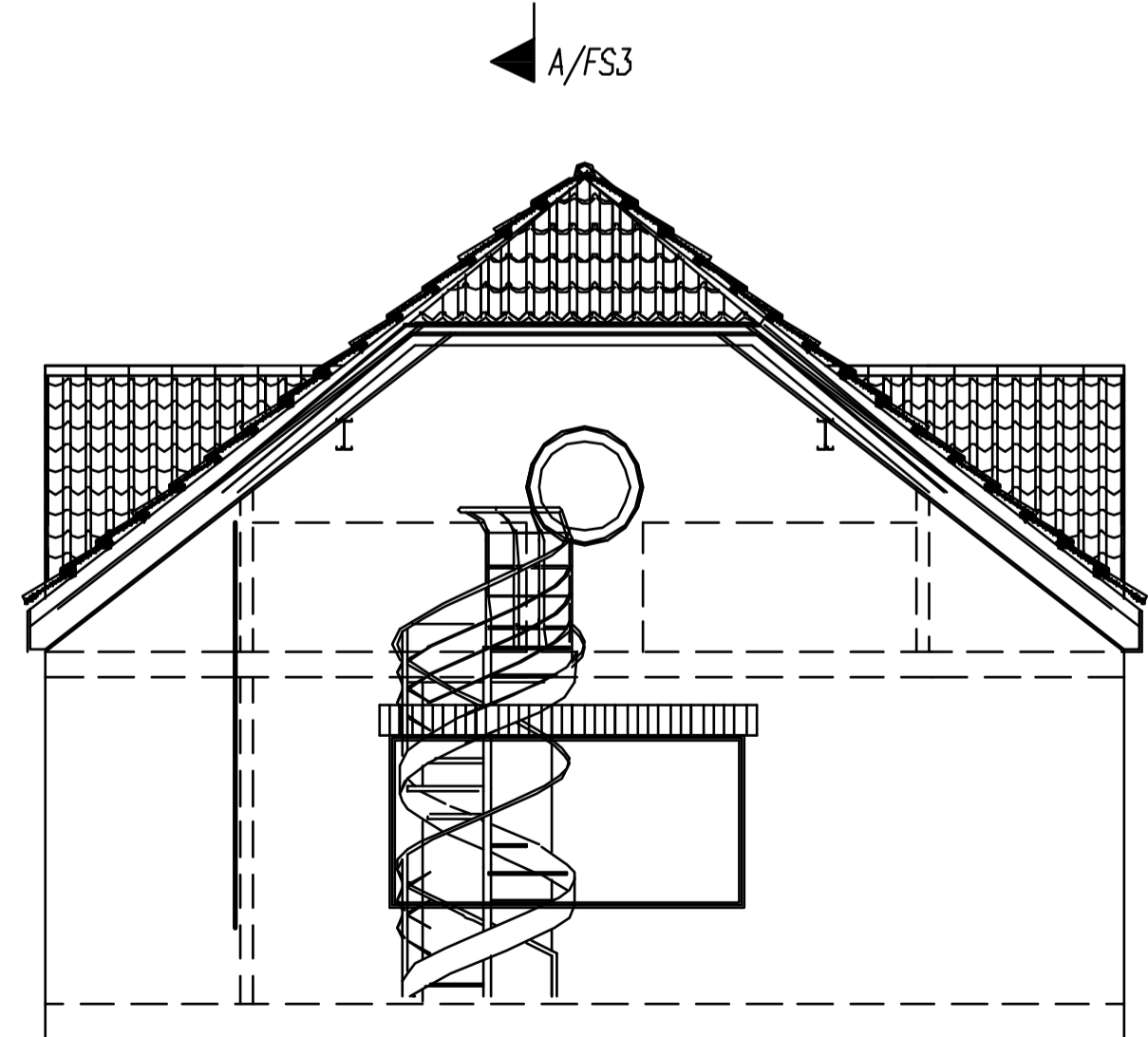


PARTIAL-GROUND FLOOR PLAN

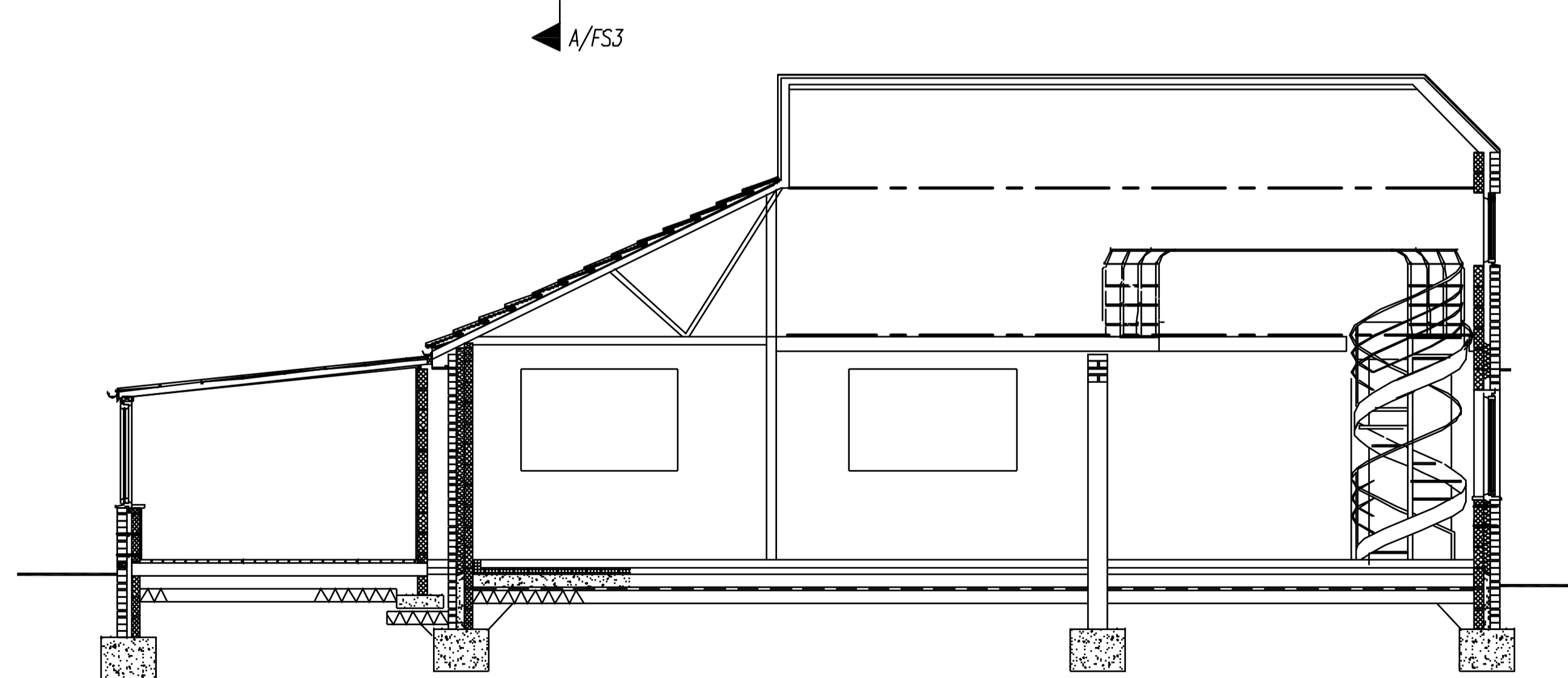


PARTIAL-GROUND FLOOR PLAN

General Notes
 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
 2) Do not scale from this or any other XXX drawing.
 3) All dimensions to be checked on site prior to construction or fabrication.



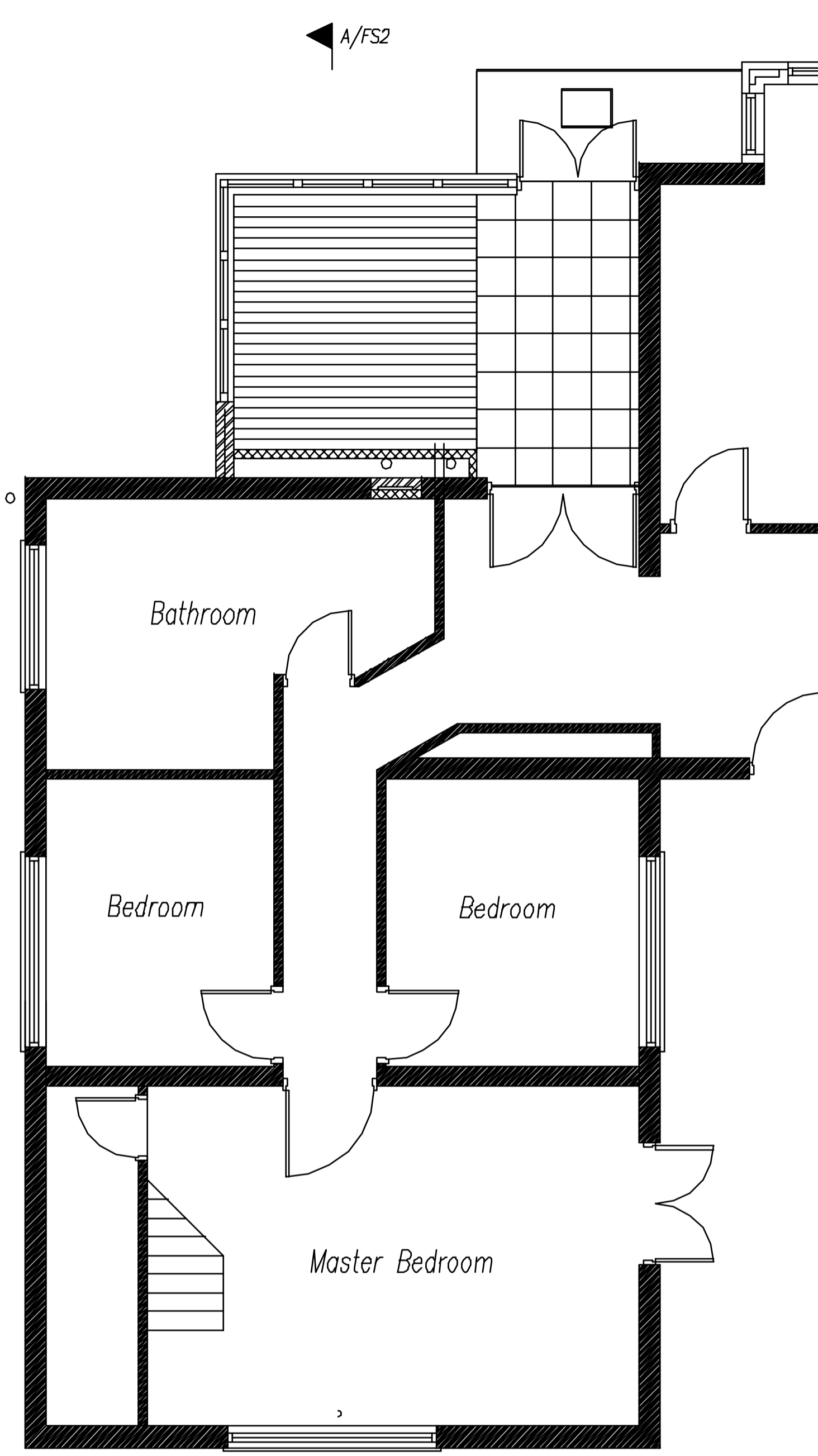
REAR ELEVATION



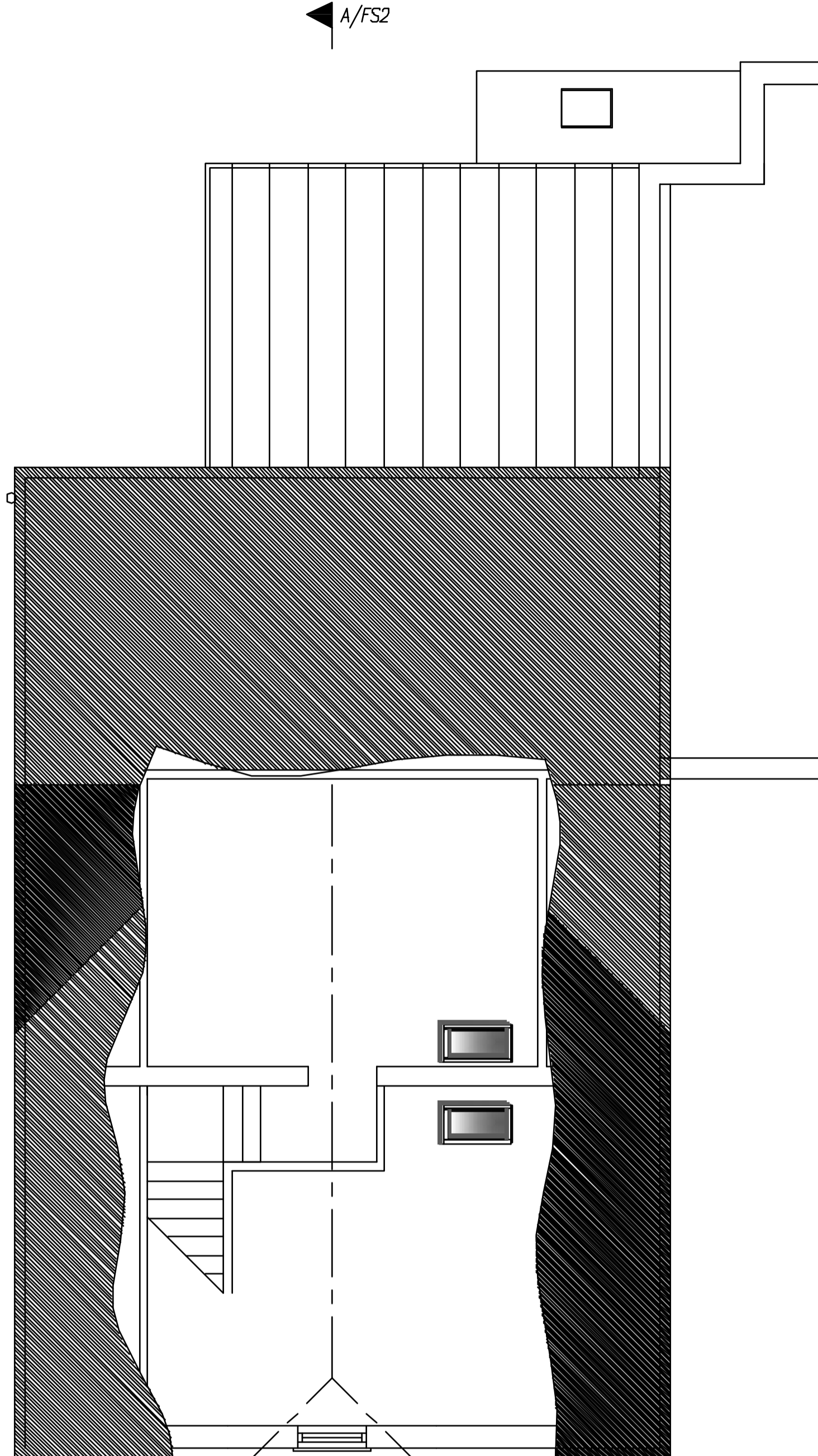
SECTION A-A

Note:
 For Roof and other specifications refer to
 Dwg N° 3392/21

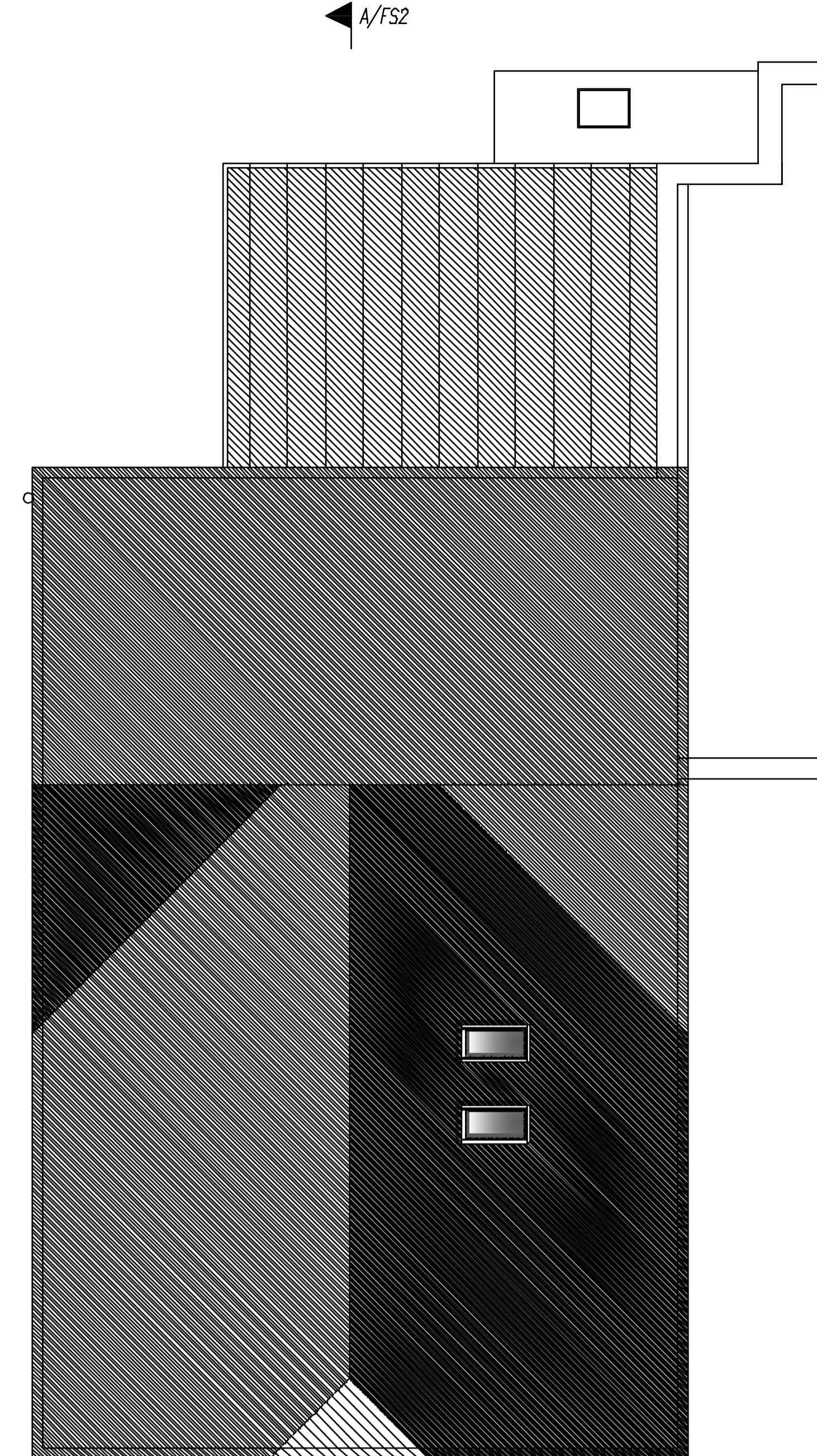
MASTER BEDROOM - PROPOSED ARRANGEMENT - OPTION 2 1:50



PARTIAL-GROUND FLOOR PLAN

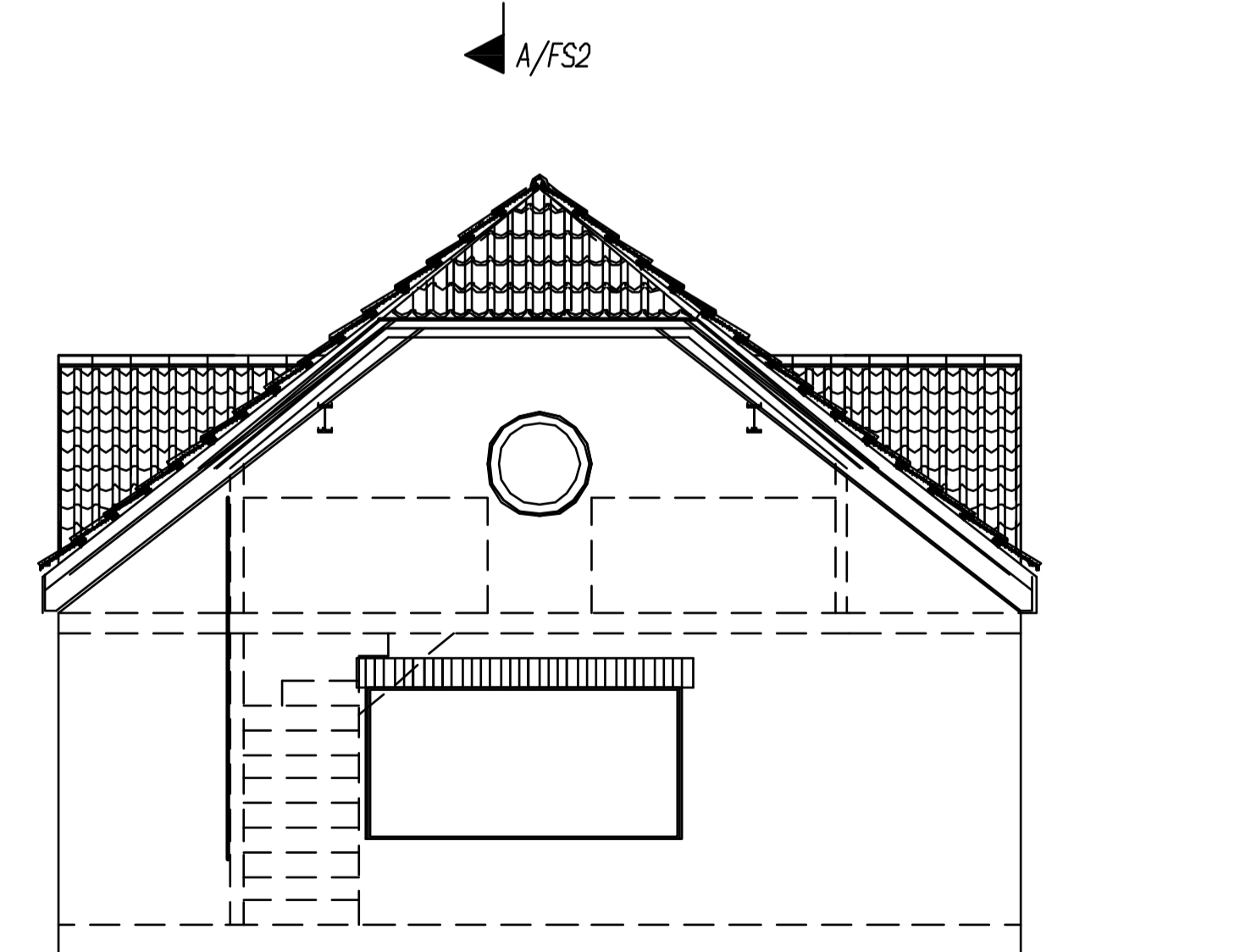


PARTIAL-GROUND FLOOR PLAN

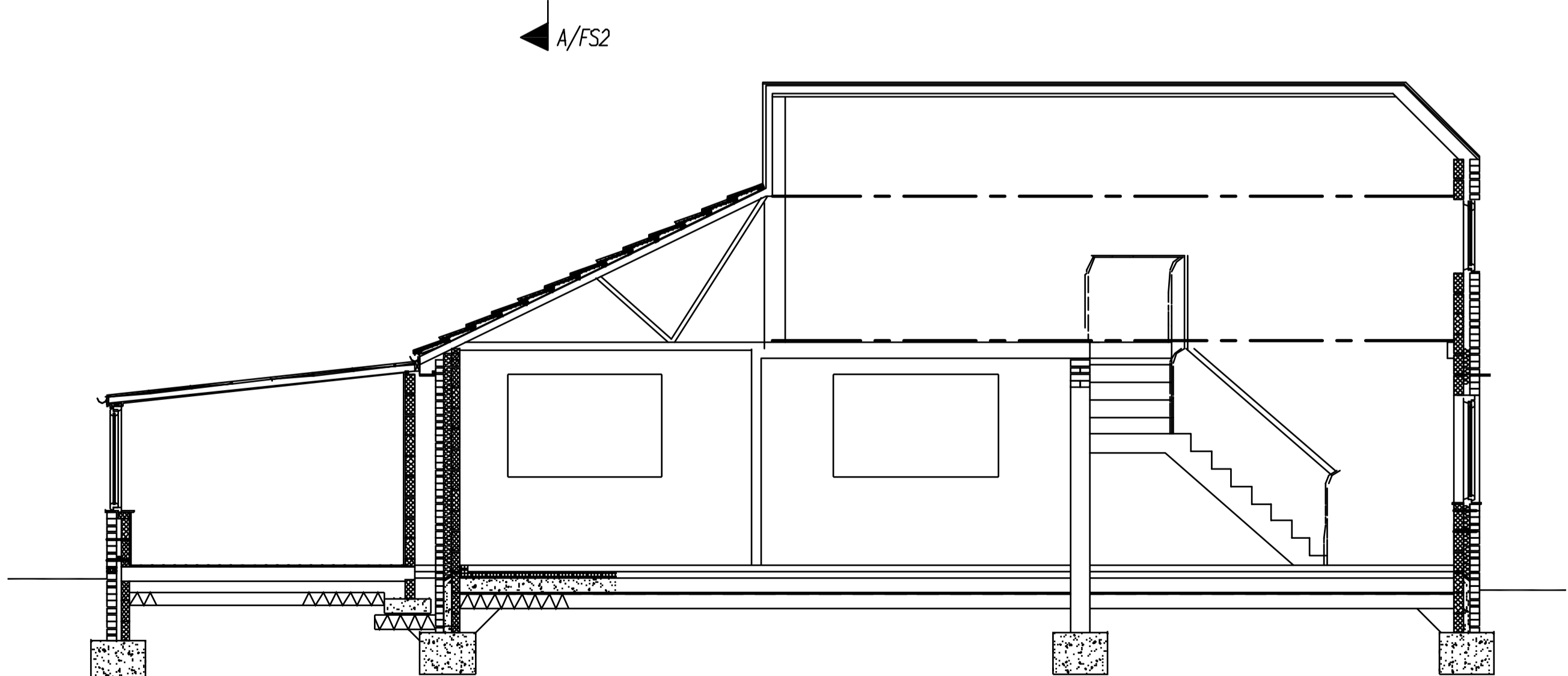


PARTIAL-GROUND FLOOR PLAN

General Notes
 1) This drawing is to be read in conjunction with all relevant Architect's and specialists' drawings.
 2) Do not scale from this or any other XXX drawing.
 3) All dimensions to be checked on site prior to construction or fabrication.



REAR ELEVATION



SECTION A-A

Note:
 For Roof and other specifications refer to
 Dwg N° XXXX/21

MASTER BEDROOM - PROPOSED ARRANGEMENT - OPTION 1 1:50