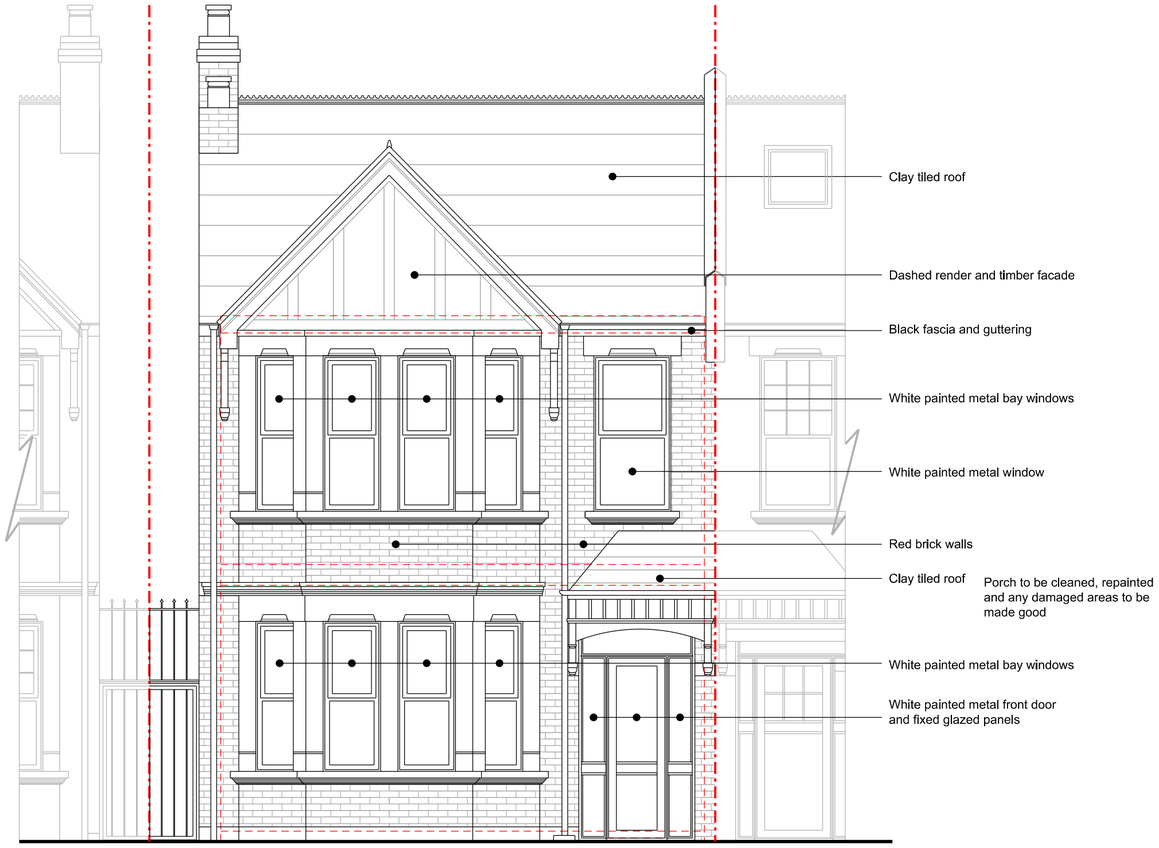
PRELIMINARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

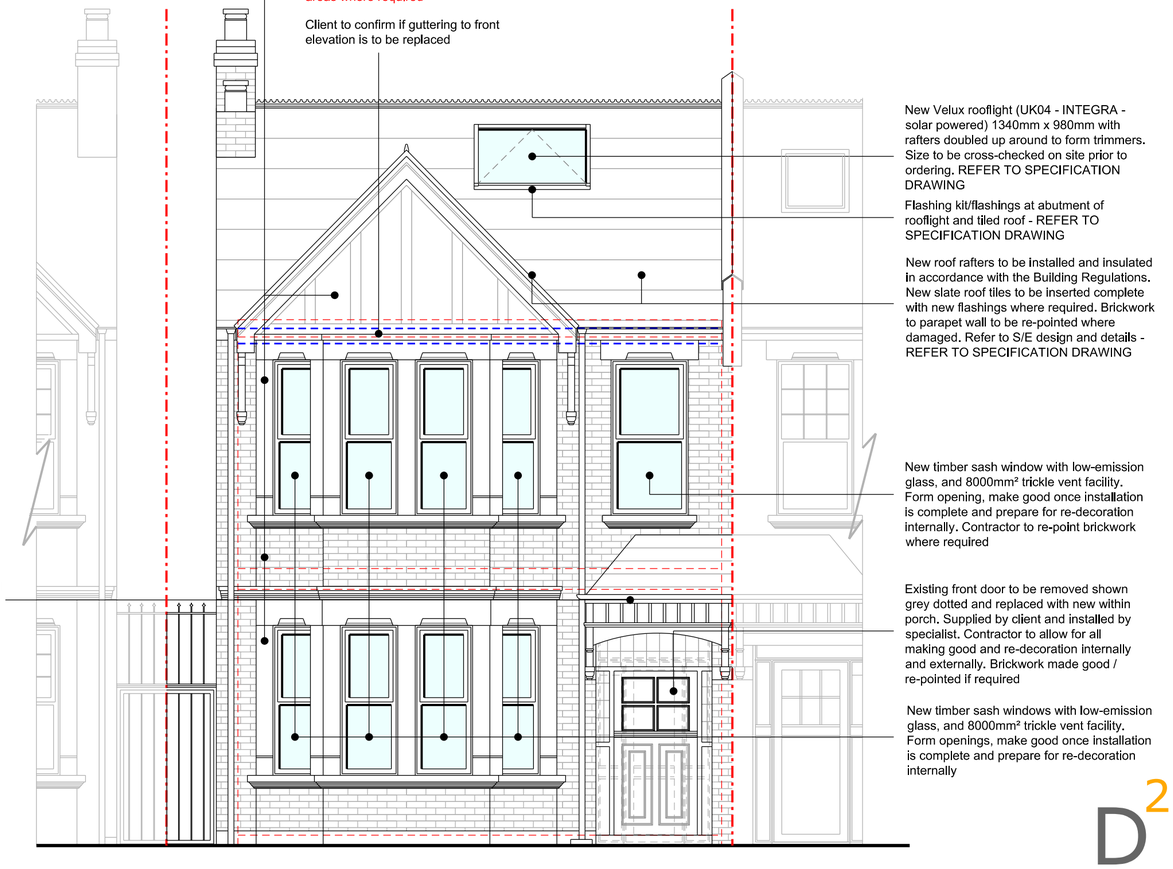
ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING



Existing Front Elevation



Proposed Front Elevation

D²

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m²K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m²K***
NOTE: ***Insulation specifications to be approved by BCO***

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

ELEVATIONS

Drawing Status

CONSTRUCTION PACKAGE

Drawn by Date Jan 16

RM

Checked by Date Jan 16

NS

Drawing Scale

1:50@A2

Drawing Number **546/1**

Revision **C**

PRELIMINARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

D²

Existing Rear Elevation

LEAD WORK AND FLASHINGS:

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles etc. All work to be undertaken in accordance with the Lead Development Association recommendations

White fascia and zinc guttering, new rainwater goods to be 160mm zinc half round gutters taken to and connected into 100mm dia zinc downpipe

New GRP (fibreglass) flat roofs to proposed dormers - REFER TO SPECIFICATION DRAWING

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally

Zew zinc rainwater goods to be 160mm half round gutters taken to and connected into 100mm dia zinc downpipe

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

Flue for wood burner to be stainless steel, flashed and made watertight

Fascia / piers to rear elevation to be dressed in zinc to match the new pitched roofs and side elevation

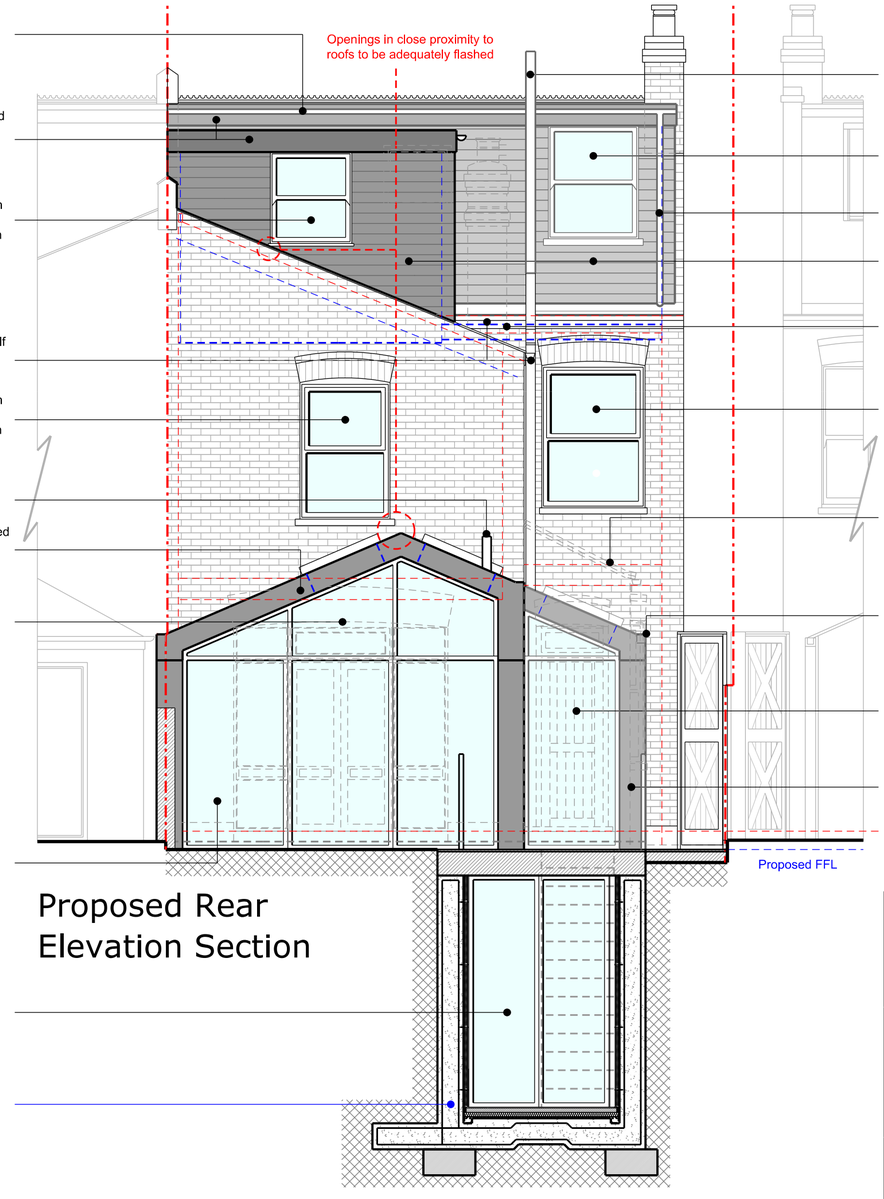
Aluminium fixed glazed panels to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

Aluminium bi-fold doors, to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

All floors to be ventilated where required

Aluminium double doors, to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

REFER TO S/E DESIGN AND DETAILS AND CONSTRUCTION DETAILS DRAWING FOR WALL/SLAB BUILD UP



Proposed Rear Elevation Section

SVP to be extended/relocated in accordance with the Building Regulations

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally

100mm dia zinc downpipe

Slate tiled façades. New dormer walls to be constructed to comply with the current Building Regulations Part 'B'. REFER TO SPECIFICATION DRAWING

Chimney shown grey dotted to be removed. Existing pitched roof to be made good where required, flashed and new roof tiles

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

Existing side return to be removed shown grey dotted. Contractor to allow for all making good where required. Damaged brickwork to be replaced and re-pointed

New box gutter with downpipe within cavity. Code 5 lead gutter to 1:120 fall with T-Pren extension joints @ 2 on BLDG paper on treated timber. All lead to LSA requirements. Lead flashings to fall to downpipe with adequate steps

Aluminium fixed glazed panel to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

New zinc clad timber wall to be constructed as per S/E design and details. REFER TO SPECIFICATION DRAWING

Existing FFL

GL to be reduced to 150mm below DPC

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

ELEVATIONS & PART SECTION

Drawing Status

CONSTRUCTION PACKAGE

Drawn by Date Jan 16

RM

Checked by Date Jan 16

NS

Drawing Scale

1:50@A2

Drawing Number **546/2**

Revision **C**

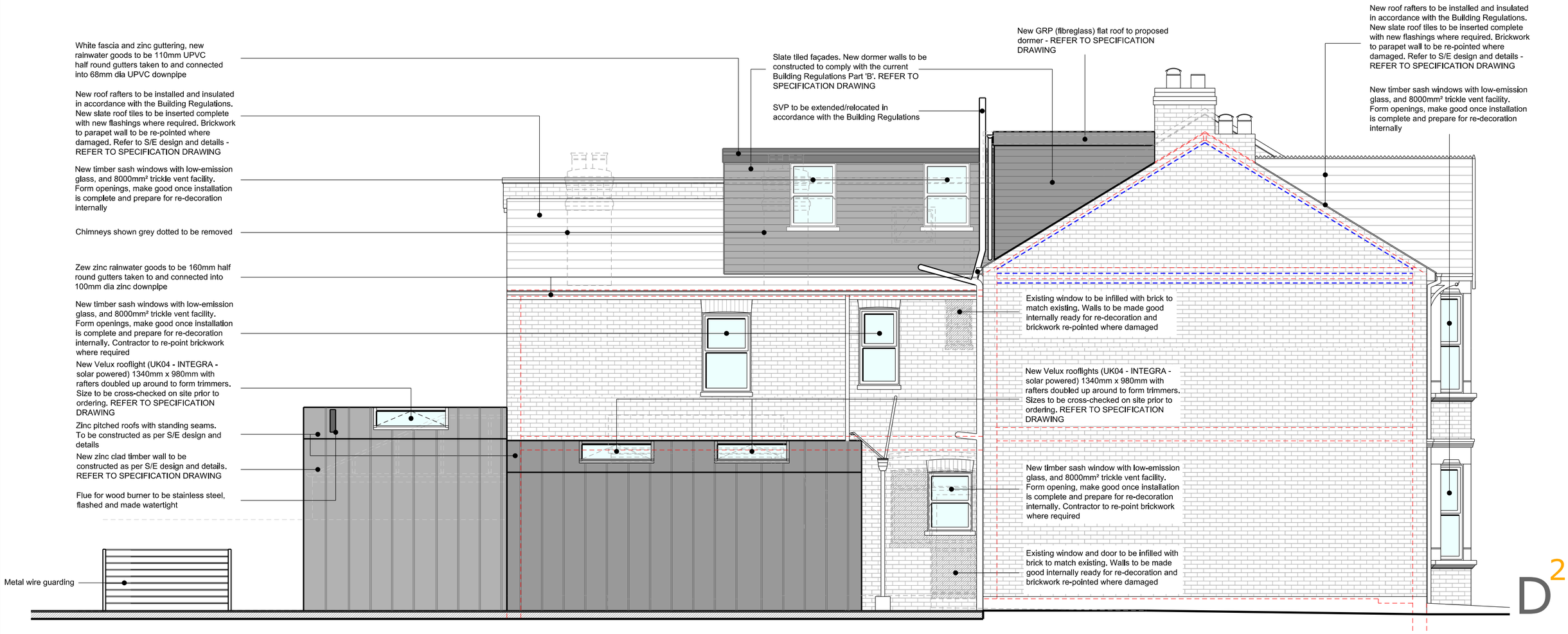
PRELIMINARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING



Proposed Side Elevation

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
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New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

ELEVATION

Drawing Status

CONSTRUCTION PACKAGE

Drawn by **RM** Date Jan 16

Checked by **NS** Date Jan 16

Drawing Scale

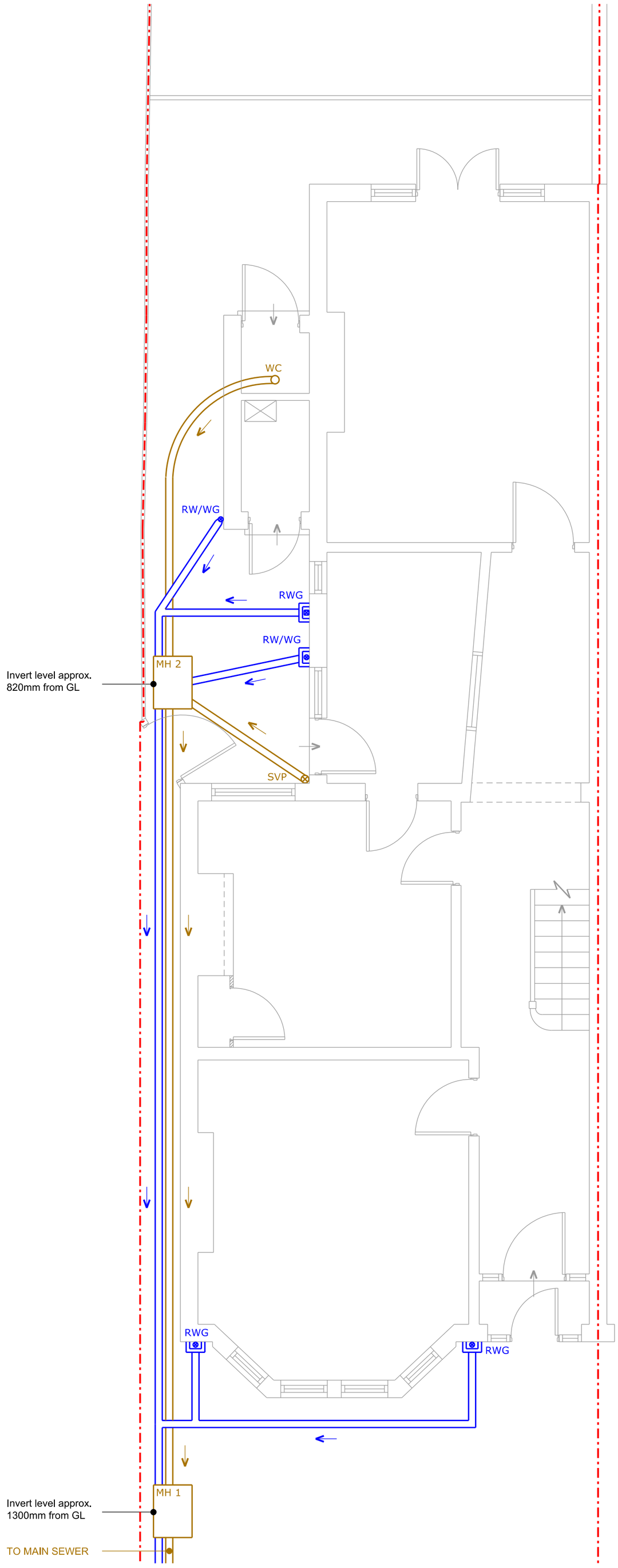
1:50@A2

Drawing Number **546/3** Revision **C**

TO BE READ IN CONJUNCTION WITH CCTV CAMERA SURVEY INFORMATION

ALL INVERT LEVELS TO BE ACCURATELY CHECKED ON SITE BY THE CONTRACTOR. LEVELS INDICATED APPROX. FROM EXISTING GL

DRAWINGS ARE INDICATIVE ONLY AND ON SITE INVESTIGATION WORKS REQUIRED TO DETERMINE FINAL DRAINAGE DESIGN. THIS SHOULD BE ASSESSED DURING EXCAVATION



Existing Sewer Plan

PRELIMINARY

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN^2 IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title
PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name
EXISTING SEWER PLAN

Drawing Status
CONSTRUCTION PACKAGE

Drawn by Date Jan 16
RM

Checked by Date Jan 16
NS

Drawing Scale
1:50@A2

Drawing Number **546/4** Revision **C**

DRAWINGS ARE INDICATIVE ONLY AND ON SITE INVESTIGATION WORKS REQUIRED TO DETERMINE FINAL DRAINAGE DESIGN. THIS SHOULD BE ASSESSED DURING EXCAVATION

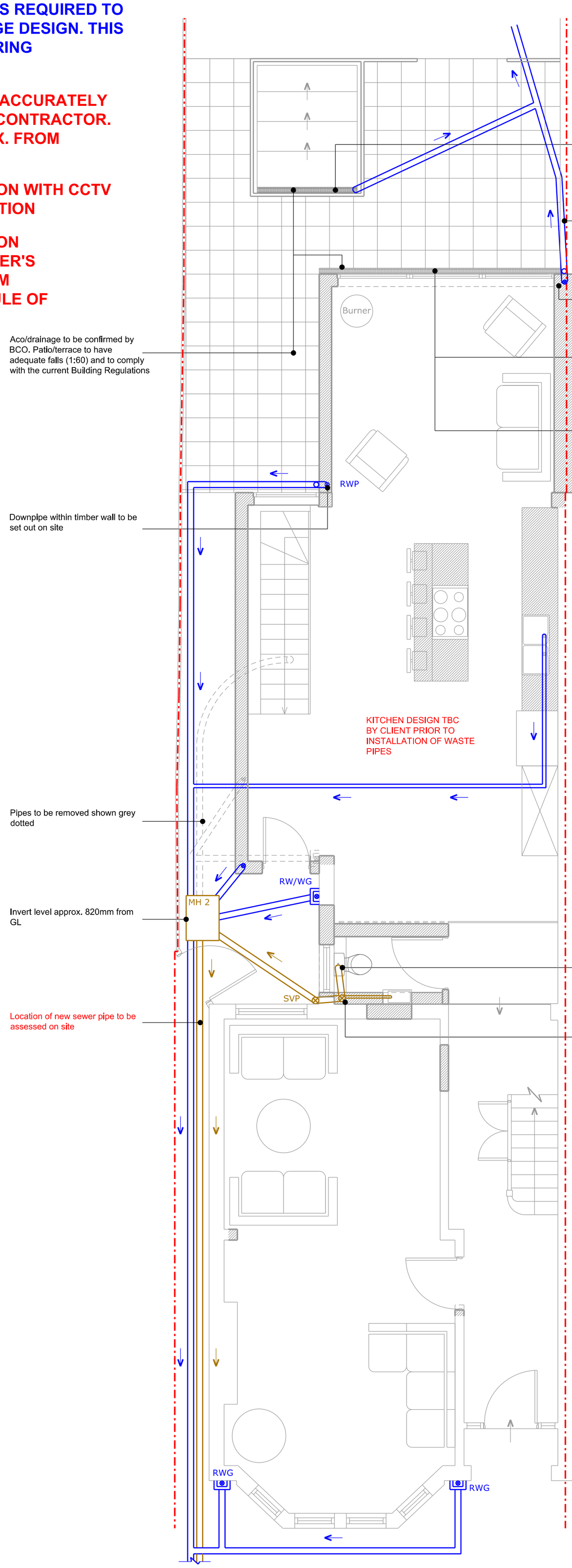
ALL INVERT LEVELS TO BE ACCURATELY CHECKED ON SITE BY THE CONTRACTOR. LEVELS INDICATED APPROX. FROM EXISTING GL

TO BE READ IN CONJUNCTION WITH CCTV CAMERA SURVEY INFORMATION

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

FALLS TO BE MIN 1:40

CONTRACTOR TO NOTE NEW OUTHOUSE TO GARDEN - ALLOW FOR ALL DRAINAGE/SERVICES



Proposed Sewer Plan

Key:

- Redundant pipes
- Existing sewer pipes
- Proposed sewer pipes
- Existing rainwater pipes
- Proposed rainwater pipes
- Lintels
- Foundations

PRELIMINARY

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title
PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name
PROPOSED SEWER PLAN

Drawing Status
CONSTRUCTION PACKAGE

Drawn by **RM** Date Jan 16

Checked by **NS** Date Jan 16

Drawing Scale
1:50@A2

Drawing Number **546/5** Revision **C**

PRELIMINARY

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

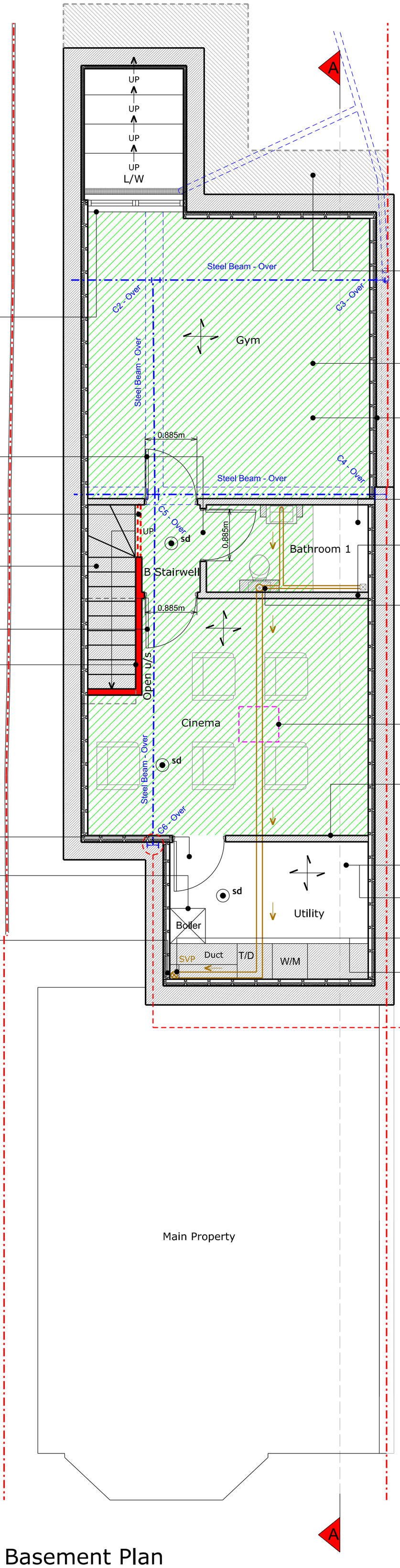
FOR EXAMPLE 'CLIENT TO SUPPLY'

ALL NEW SLATES TO BE SPANISH SLATE TILES

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY



Aluminium double doors, to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

Doors to follow standard dimensions (Opening - W885mm x H2005mm)

FIRE SPECIALIST AND BUILDING CONTROL TO CONFIRM IF FIRE CURTAIN IS REQUIRED. ALLOWANCE TO BE MADE FOR FIRE CURTAIN BY CONTRACTOR

New staircase to be inserted (discuss requirements with client). New stairs and enclosure to comply with Building Regulations (Handrail and balusters shown are indicative only). Allow for plasterboard finish to u/s of stairs. All to comply with current Building Regulations. REFER TO SPECIFICATION DRAWING

Door to follow standard dimensions (Opening - W885mm x H2005mm)

30 min fire resistant construction (shaded red). Stairs to be open under with adequate fire board proptection

ALL DRAINAGE LOCATIONS/ DUCTING DESIGN THROUGHOUT PROPERTY (FOR WATER, ELECTRICS, HEATING) TO BE CONFIRMED BY CLIENT PRIOR TO INSTALLATION

Door to follow standard dimensions (Opening - W885mm x H2005mm)

New boiler. Supplied by client and installed by contractor. Flue to be directed via duct and out to external wall in order to comply with the Building Regulations. Contractor to assess flue position on site. Mains gas and water to Utility Room

New drainage to be connected into existing. Contractor to allow for all associated drainage works - REFER TO PROPOSED SEWER PLAN

REFER TO S/E DESIGN AND DETAILS

Green hatched area identifies new reinforced concrete slab to be inserted, insulated, UFH (optional) inserted and prepared for finish. REFER TO S/E DESIGN AND DETAILS

REFER TO S/E DESIGN AND DETAILS AND CONSTRUCTION DETAILS DRAWING FOR WALL/SLAB BUILD UP

New sanitarware to Bathroom 1 connected into new drainage system

Mechanical extraction to Bathroom 1. Install mechanical fan as required by Building Control, flue through duct to external wall to be assessed

New internal metal stud walls to create Bathroom 1, Hall and Cinema. Lay 75mm thick Rockwool insulation quilt between joists - REFER TO SPECIFICATION DRAWING

Building Control to confirm if sewer backflow valve is required

Waste pipe to be made accessible for rodding

SMOKE DETECTION AND MEANS OF ESCAPE - REFER TO SPECIFICATION DRAWING AND FIRE RISK ASSESSMENT

Delta dual V3 sump pump required to pump waste and water from drainage chanels up to SVP and existing drainage system. DELTA TO ADVISE ON SPECIFICATION AND POSITION

New internal metal stud wall to create Cinema and Plant/Utility. Lay 75mm thick Rockwool insulation quilt between joists - REFER TO SPECIFICATION DRAWING

New appliances/sanitarware to Utility connected into new drainage system

Mechanical extraction to Utility Room. Install mechanical fan as required by Building Control, flue through duct to external wall

Delta dual V3 sump pump required to pump waste up to SVP and existing drainage system. DELTA TO ADVISE ON SPECIFICATION AND POSITION

REFER TO SVP SERVICE DETAIL

Contractor to ensure that the waterproof membrane is not penetrated

STRUCTURAL SCHEDULE:

Refer to S/E drawings and specification

BEAM SCHEDULE:

Beam 0B1 - 152X152X23 UKC (Encased)
Beam 0B2 - 203x203x46 UKC
Beam 0B3 - 203x203x86 UKC (Encased)
Beam 0B4 - 203x203x46 UKC (Encased)

Beam 1B1 - 203x203x46UKC
Beam 1B2 - 254x254x89 UKC
Beam 1B4 - 152x89x16 UKB (Cranked)
Beam 1B5 - 200x100x10 RHS with steel plate welded to bottom flange

Beam 2B1 - 203x203x46 UKC
Beam 2B3 - 152x152x30 UKC
Beam 2B4 - 152x152x23 UKC (Cranked)
Beam 2B5 - 152x152x23 UKC

Beam 3B1 - 152x152x30 UKC
Beam 3B2 - 152x89x16 UKB

COLUMN SCHEDULE:

Column C1 - 152x89x16 UKB
Column C2 - 152x89x16 UKB
Column C3 - 152x89x16 UKB
Column C4 - 203x203x46 UKC
Column C5 - 203x203x46 UKC
Column C6 - 203x102x23 UKB

PADSTONE SCHEDULE:

Padstone P1 - 250x100x10mm thick steel plate
Padstone P2 - 850mm long pre-stressed concrete lintel
Padstone P3 - 550mm long pre-stressed concrete lintel
Padstone P4 - 1300mm long 100x100x5 SHS
Padstone P5 - 200x100x10mm thick steel plate
Padstone P6 - 300x100x15mm thick steel plate
Padstone P8 - 550mm long pre-stressed concrete lintel
Padstone P9 - 550mm long pre-stressed concrete lintel
Padstone P11 - 450x100x225mm thick mass concrete

ALL STEELWORK TO HAVE 30 MIN. FIRE PROTECTION. PADSTONE CANNOT BE INSERTED WITHIN CHIMNEY'S

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***

Basement Plan

D²

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title
PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name
FLOOR PLAN

Drawing Status
CONSTRUCTION PACKAGE

Drawn by Date Jan 16
RM

Checked by Date Jan 16
NS

Drawing Scale
1:50@A2

Drawing Number **546/6** Revision **C**

PRELIMINARY

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

New metal wire balustrade to be min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180:2011. No openings in the balustrading should allow the passage of a 100mm sphere. Stair design options to be assessed on site prior to installation and setting out of floor plans

Aco/drainage to be confirmed by BCO. Patio/terrace to have adequate falls (1:60) and to comply with the current Building Regulations

Landscape design to be confirmed. Where required, excavate externally and prepare build up for new tiles. New finish to be on consistent level with internal finish (flush track). Levels to be assessed during excavation

ALL DRAINAGE LOCATIONS / DUCTING DESIGN THROUGHOUT PROPERTY (FOR WATER, ELECTRICS, HEATING) TO BE CONFIRMED BY CLIENT PRIOR TO INSTALLATION

New staircase to be inserted (discuss requirements with client). New stairs and enclosure to comply with Building Regulations (Handrail and balusters shown are indicative only). Allow for plasterboard finish to u/s of stairs. All to comply with current Building Regulations. REFER TO SPECIFICATION DRAWING

New metal wire balustrade to be min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180:2011. No openings in the balustrading should allow the passage of a 100mm sphere. Stair design options to be assessed on site prior to installation and setting out of floor plans

New zinc clad timber wall to be constructed as per S/E design and details. REFER TO SPECIFICATION DRAWING

Aluminium glazed door to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

2No. Condition A Beams (under). REFER TO S/E DESIGN AND DETAILS

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

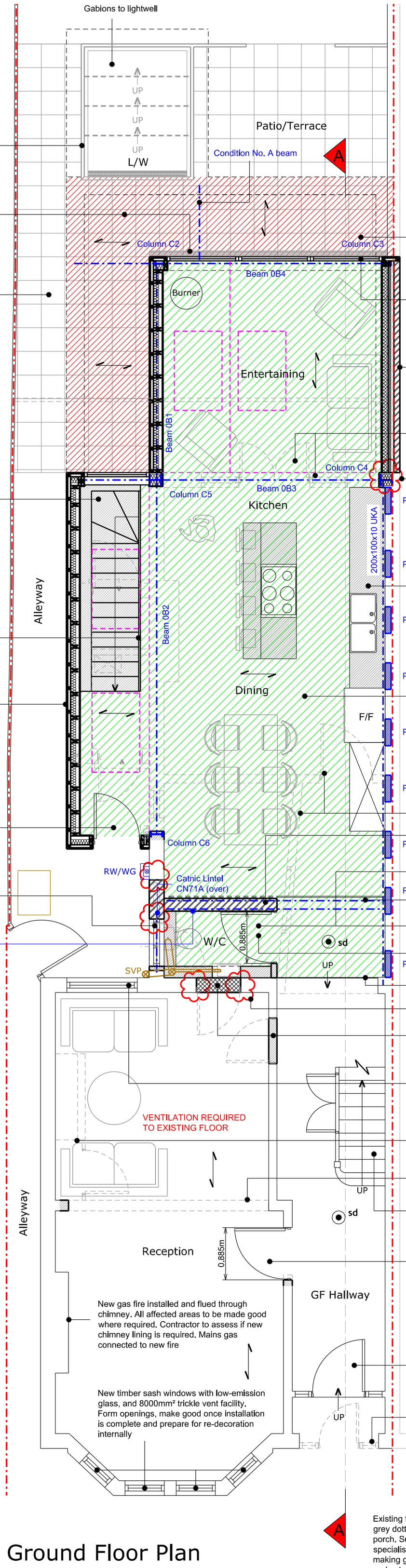
PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***



Red hatched area identifies new beam and block floor with external finish. REFER TO S/E DESIGN AND DETAILS

Aluminium bi-fold doors, to be supplied by client and installed by specialist. Form opening and make good after installation - REFER TO SPECIFICATION DRAWING. SYMMETRY TO BE CONSIDERED

New cavity wall to be constructed as per S/E design and details. REFER TO CONSTRUCTION DETAILS DRAWING

Existing walls and doors shown grey dotted to be removed

Fully bonded to existing wall using Ancon Strafix Universal Wall Starter Kit

P11

SMOKE DETECTION AND MEANS OF ESCAPE - REFER TO SPECIFICATION DRAWING AND FIRE RISK ASSESSMENT

P11

Extraction to Kitchen to be assessed on site. Cooker hood/extractor to be installed (preference for exhaust to external area)

P11

Green hatched area identifies existing ground floor to be removed and new beam and block floor to be inserted. Ground floor to be insulated, UFH (optional) inserted and prepared for finish. REFER TO CONSTRUCTION DETAILS DRAWINGS

P11

P11

Existing walls and door shown grey dotted to be removed

Feature brick wall to W/C and Kitchen

P11

Mechanical extraction to W/C to be assessed on site. Install mechanical fan as required by Building Control

P11

Glass sliding door

New sanitarware to W/C connected into drainage system

Install door for access to new W/C. Door to follow standard dimensions (Opening - W885mm x H2005mm)

P11

New step down to Kitchen area

Fully bonded to existing wall using Ancon Strafix Universal Wall Starter Kit

Door openings to be infilled. Walls, ceilings and floors to be made good where required

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

Existing chimney breast to be removed. All affected areas to be made good ready for re-decoration. REFER TO S/E DESIGN AND DETAILS

Existing wall shown grey dotted to be removed. REFER TO S/E DESIGN AND DETAIL FOR STRUCTURAL SUPPORT

Gas/water/electrical meters to remain under stairs in current location

Door to follow standard dimensions (Opening - W885mm x H2005mm)

Existing front door to be removed shown grey dotted and replaced with new within porch. Supplied by client and installed by specialist. Contractor to allow for all making good and re-decoration internally and externally. Brickwork made good / re-pointed if required

STRUCTURAL SCHEDULE:

Refer to S/E drawings and specification

BEAM SCHEDULE:

Beam 0B1 - 152X152X23 UKC (Encased)
Beam 0B2 - 203x203x46 UKC
Beam 0B3 - 203x203x86 UKC (Encased)
Beam 0B4 - 203x203x46 UKC (Encased)

Beam 1B1 - 203x203x46UKC
Beam 1B2 - 254x254x89 UKC
Beam 1B4 - 152x89x16 UKB (Cranked)
Beam 1B5 - 200x100x10 RHS with steel plate welded to bottom flange

Beam 2B1 - 203x203x46 UKC
Beam 2B3 - 152x152x30 UKC
Beam 2B4 - 152x152x23 UKC (Cranked)
Beam 2B5 - 152x152x23 UKC

Beam 3B1 - 152x152x30 UKC
Beam 3B2 - 152x89x16 UKB

COLUMN SCHEDULE:

Column C1 - 152x89x16 UKB
Column C2 - 152x89x16 UKB
Column C3 - 152x89x16 UKB
Column C4 - 203x203x46 UKC
Column C5 - 203x203x46 UKC
Column C6 - 203x102x23 UKB

PADSTONE SCHEDULE:

Padstone P1 - 250x100x10mm thick steel plate
Padstone P2 - 850mm long pre-stressed concrete lintel
Padstone P3 - 550mm long pre-stressed concrete lintel
Padstone P4 - 1300mm long 100x100x5 SHS
Padstone P5 - 200x100x10mm thick steel plate
Padstone P6 - 300x100x15mm thick steel plate
Padstone P8 - 550mm long pre-stressed concrete lintel
Padstone P9 - 550mm long pre-stressed concrete lintel
Padstone P11 - 450x100x225mm thick mass concrete

ALL STEELWORK TO HAVE 30 MIN. FIRE PROTECTION. PADSTONE CANNOT BE INSERTED WITHIN CHIMNEY'S

D²

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

FLOOR PLAN

Drawing Status

CONSTRUCTION PACKAGE

Drawn by **RM** Date Jan 16

Checked by **NS** Date Jan 16

Drawing Scale

1:50@A2

Drawing Number **546/7** Revision **C**

Ground Floor Plan

PRELIMINARY

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

ALL DRAINAGE LOCATIONS/ DUCTING DESIGN THROUGHOUT PROPERTY (FOR WATER, ELECTRICS, HEATING) TO BE CONFIRMED BY CLIENT PRIOR TO INSTALLATION

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

STRUCTURAL SCHEDULE:

Refer to S/E drawings and specification

BEAM SCHEDULE:

Beam 0B1 - 152X152X23 UKC (Encased)
Beam 0B2 - 203x203x46 UKC
Beam 0B3 - 203x203x86 UKC (Encased)
Beam 0B4 - 203x203x46 UKC (Encased)

Beam 1B1 - 203x203x46UKC
Beam 1B2 - 254x254x89 UKC
Beam 1B4 - 152x89x16 UKB (Cranked)
Beam 1B5 - 200x100x10 RHS with steel plate welded to bottom flange

Beam 2B1 - 203x203x46 UKC
Beam 2B3 - 152x152x30 UKC
Beam 2B4 - 152x152x23 UKC (Cranked)
Beam 2B5 - 152x152x23 UKC

Beam 3B1 - 152x152x30 UKC
Beam 3B2 - 152x89x16 UKB

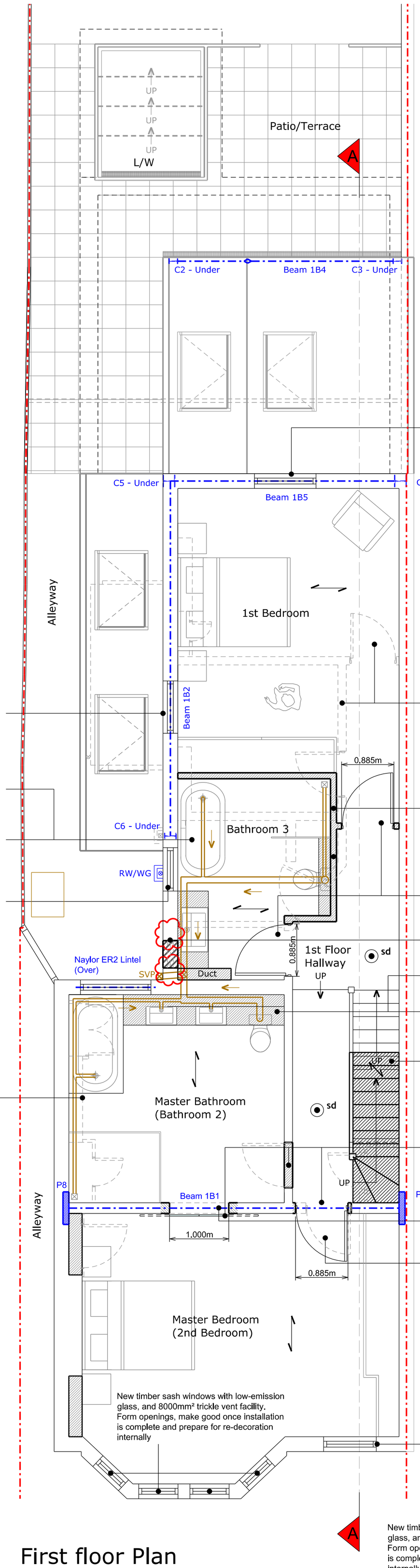
COLUMN SCHEDULE:

Column C1 - 152x89x16 UKB
Column C2 - 152x89x16 UKB
Column C3 - 152x89x16 UKB
Column C4 - 203x203x46 UKC
Column C5 - 203x203x46 UKC
Column C6 - 203x102x23 UKB

PADSTONE SCHEDULE:

Padstone P1 - 250x100x10mm thick steel plate
Padstone P2 - 850mm long pre-stressed concrete lintel
Padstone P3 - 550mm long pre-stressed concrete lintel
Padstone P4 - 1300mm long 100x100x5 SHS
Padstone P5 - 200x100x10mm thick steel plate
Padstone P6 - 300x100x15mm thick steel plate
Padstone P8 - 550mm long pre-stressed concrete lintel
Padstone P9 - 550mm long pre-stressed concrete lintel
Padstone P11 - 450x100x225mm thick mass concrete

ALL STEELWORK TO HAVE 30 MIN. FIRE PROTECTION. PADSTONE CANNOT BE INSERTED WITHIN CHIMNEY'S



New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

New sanitaryware to Bathroom and connected to drainage. Contractor/client to discuss bathroom design to minimise boxing in above floor level due to joist span direction

Mechanical extraction to Bathroom to be assessed on site. Install mechanical fan as required by Building Control

New timber sash windows with low-emission glass, and 8000mm² trickle vent facility. Form openings, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

Existing chimney breast to be removed. All affected areas to be made good ready for re-decoration. REFER TO S/E DESIGN AND DETAILS

Existing walls and door shown grey dotted to be removed

New internal metal stud walls and doors to create Bathroom, Hall and Bedroom. Lay 75mm thick Rockwool insulation quilt between joists - REFER TO SPECIFICATION DRAWING

Doors to follow standard dimensions (Opening - W885mm x H2005mm)

Existing window to be infilled with brick to match existing. Walls to be made good internally ready for re-decoration and brickwork re-pointed where damaged

New sanitaryware to Bathroom and connected to drainage

Mechanical extraction to Bathroom to be assessed on site. Install mechanical fan as required by Building Control

New staircase to be inserted (discuss requirements with client). New stairs and enclosure to comply with Building Regulations (Handrail and balusters shown are indicative only). Allow for plasterboard finish to u/s of stairs. All to comply with current Building Regulations. REFER TO SPECIFICATION DRAWING

New internal stud walls, door and glass sliding doors to create Bathroom, Bedroom and hall. Lay 75mm thick Rockwool insulation quilt between joists - REFER TO SPECIFICATION DRAWING

Opening to be formed within spine wall. REFER TO S/E DESIGN AND DETAILS

Door to follow standard dimensions (Opening - W885mm x H2005mm)

New timber sash windows with low-emission glass, and 8000mm² trickle vent facility. Form openings, make good once installation is complete and prepare for re-decoration internally

New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

First floor Plan

D²

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

FLOOR PLAN

Drawing Status

CONSTRUCTION PACKAGE

Drawn by Date Jan 16
RM

Checked by Date Jan 16
NS

Drawing Scale

1:50@A2

Drawing Number **546/8** Revision **C**

PRELIMINARY

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

STRUCTURAL SCHEDULE:

Refer to S/E drawings and specification

BEAM SCHEDULE:

Beam 0B1 - 152X152X23 UKC (Encased)
Beam 0B2 - 203x203x46 UKC
Beam 0B3 - 203x203x86 UKC (Encased)
Beam 0B4 - 203x203x46 UKC (Encased)

Beam 1B1 - 203x203x46UKC
Beam 1B2 - 254x254x89 UKC
Beam 1B4 - 152x89x16 UKB (Cranked)
Beam 1B5 - 200x100x10 RHS with steel plate welded to bottom flange

Beam 2B1 - 203x203x46 UKC
Beam 2B3 - 152x152x30 UKC
Beam 2B4 - 152x152x23 UKC (Cranked)
Beam 2B5 - 152x152x23 UKC

Beam 3B1 - 152x152x30 UKC
Beam 3B2 - 152x89x16 UKB

COLUMN SCHEDULE:

Column C1 - 152x89x16 UKB
Column C2 - 152x89x16 UKB
Column C3 - 152x89x16 UKB
Column C4 - 203x203x46 UKC
Column C5 - 203x203x46 UKC
Column C6 - 203x102x23 UKB

PADSTONE SCHEDULE:

Padstone P1 - 250x100x10mm thick steel plate
Padstone P2 - 850mm long pre-stressed concrete lintel
Padstone P3 - 550mm long pre-stressed concrete lintel
Padstone P4 - 1300mm long 100x100x5 SHS
Padstone P5 - 200x100x10mm thick steel plate
Padstone P6 - 300x100x15mm thick steel plate
Padstone P8 - 550mm long pre-stressed concrete lintel
Padstone P9 - 550mm long pre-stressed concrete lintel
Padstone P11 - 450x100x225mm thick mass concrete

ALL STEELWORK TO HAVE 30 MIN. FIRE PROTECTION. PADSTONE CANNOT BE INSERTED WITHIN CHIMNEY'S

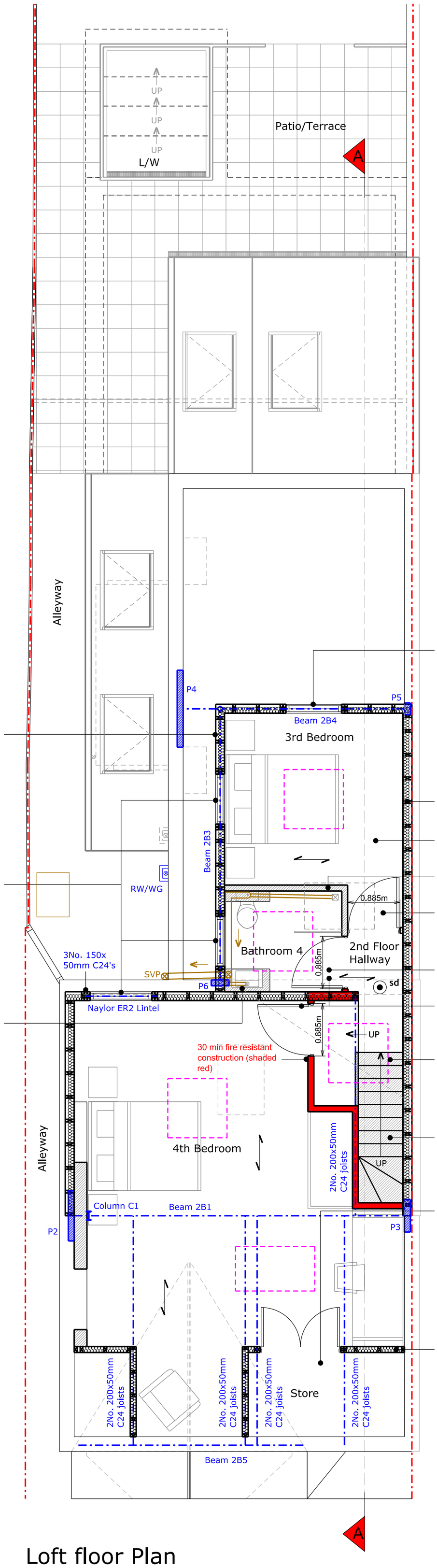
ALL DRAINAGE LOCATIONS/ DUCTING DESIGN THROUGHOUT PROPERTY (FOR WATER, ELECTRICS, HEATING) TO BE CONFIRMED BY CLIENT PRIOR TO INSTALLATION

Slate tiled façades. New dormer walls to be constructed to comply with the current Building Regulations Part 'B'. REFER TO SPECIFICATION DRAWING

New timber sash windows with low-emission glass, and 8000mm² trickle vent facility. Form openings, make good once installation is complete and prepare for re-decoration internally. Contractor to re-point brickwork where required

SMOKE DETECTION AND MEANS OF ESCAPE - REFER TO SPECIFICATION DRAWING

Mechanical extraction to Bathroom to be assessed on site. Install mechanical fan as required by Building Control



New timber sash window with low-emission glass, and 8000mm² trickle vent facility. Form opening, make good once installation is complete and prepare for re-decoration internally

DORMER WALLS TO BE CONSTRUCTED AS PER S/E DESIGN AND DETAILS. EXACT SETTING OUT AS AGREED WITH PW SURVEYOR

Floor to be constructed as per S/E design and details. REFER TO SPECIFICATION

New internal metal stud wall to create Landing, Bathroom and Bedroom. Lay 75mm thick Rockwool insulation quilt between joists - REFER TO SPECIFICATION DRAWING

Door to follow standard dimensions (Opening - W885mm x H2005mm)

New sanitaryware to Bathroom and connected to drainage. Contractor/client to discuss bathroom design to minimise boxing in above floor level due to joist span direction

Doors to follow standard dimensions (Opening - W885mm x H2005mm)

New staircase to be inserted (discuss requirements with client). New stairs and enclosure to comply with Building Regulations (Handrail and balusters shown are indicative only). Allow for plasterboard finish to u/s of stairs. All to comply with current Building Regulations. REFER TO SPECIFICATION DRAWING

New timber balustrade to be min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180:2011. No openings in the balustrading should allow the passage of a 100mm sphere. Stair design options to be assessed on site prior to installation and setting out of loft floor plans

Upgrade storage area to comply with the current Building Regulations and boarded out

Form loadbearing stud walls and opening for storage/new doors. Constructed with 100x50mm C24 timber studs @ 400mm c/c

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***

Loft floor Plan

D²

DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

FLOOR PLAN

Drawing Status

CONSTRUCTION PACKAGE

Drawn by Date Jan 16
RM

Checked by Date Jan 16
NS

Drawing Scale

1:50@A2

Drawing Number **546/9** Revision **C**

PRELIMINARY

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

New box gutter. Code 5 lead gutter to 1:120 fall with T-Pren extension joints @ 2 on BLDG paper on treated timber. All lead to LSA requirements. Lead flashings to fall to downpipe with adequate steps

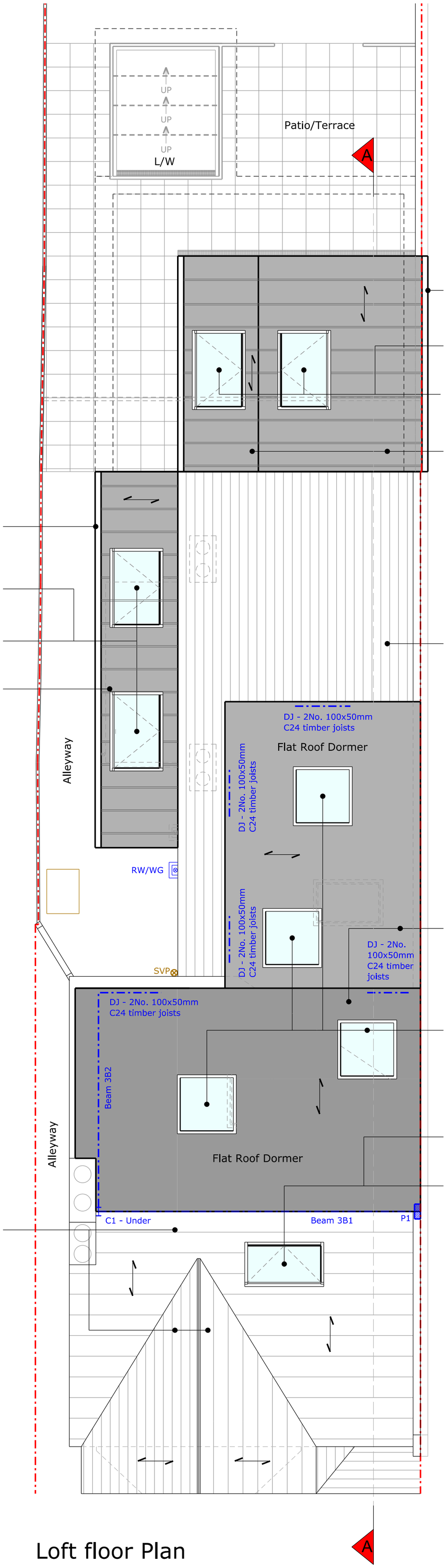
Flashing kit/flashings at abutment of rooflights and pitched roof - REFER TO SPECIFICATION DRAWING

New Velux rooflights (UK04 - INTEGRA - solar powered) 1340mm x 980mm with rafters doubled up around to form trimmers. Sizes to be cross-checked on site prior to ordering. REFER TO SPECIFICATION DRAWING

Zinc pitched roof with standing seams. To be constructed as per S/E design and details

New roof rafters to be installed and insulated in accordance with the Building Regulations. New slate roof tiles to be inserted complete with new flashings where required. Brickwork to parapet wall to be re-pointed where damaged. Refer to S/E design and details - REFER TO SPECIFICATION DRAWING

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***



Loft floor Plan

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

New box gutters. Code 5 lead gutter to 1:120 fall with T-Pren extension joints @ 2 on BLDG paper on treated timber. All lead to LSA requirements. Lead flashings to fall to downpipe with adequate steps

Flashing kit / flashings at abutment of rooflights and pitched roof - REFER TO SPECIFICATION DRAWING

New Velux rooflights (UK04 - INTEGRA - solar powered) 1340mm x 980mm with rafters doubled up around to form trimmers. Sizes to be cross-checked on site prior to ordering. REFER TO SPECIFICATION DRAWING

Zinc pitched roofs with standing seams. To be constructed as per S/E design and details

LEAD WORK AND FLASHINGS:

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles etc. All work to be undertaken in accordance with the Lead Development Association recommendations

New roof rafters to be installed and insulated in accordance with the Building Regulations. New slate roof tiles to be inserted complete with new flashings where required. Brickwork to parapet wall to be re-pointed where damaged. Refer to S/E design and details - REFER TO SPECIFICATION DRAWING

New GRP (fibreglass) flat roofs to proposed dormers - REFER TO SPECIFICATION DRAWING

4No. Velux flat roof windows (0800080 - INTEGRA - solar power) with rafters doubled up around to form trimmers. Upstands to be created and adequately flashed in accordance with the specialists recommendations. Form openings and make good all affected areas after installation. REFER TO SPECIFICATION DRAWING

Flashing kit/flashings at abutment of rooflight and tiled roof - REFER TO SPECIFICATION DRAWING

New Velux rooflight (UK04 - INTEGRA - solar powered) 1340mm x 980mm with rafters doubled up around to form trimmers. Size to be cross-checked on site prior to ordering. REFER TO SPECIFICATION DRAWING

STRUCTURAL SCHEDULE:

Refer to S/E drawings and specification

BEAM SCHEDULE:

Beam 0B1 - 152X152X23 UKC (Encased)
Beam 0B2 - 203x203x46 UKC
Beam 0B3 - 203x203x86 UKC (Encased)
Beam 0B4 - 203x203x46 UKC (Encased)

Beam 1B1 - 203x203x46UKC
Beam 1B2 - 254x254x89 UKC
Beam 1B4 - 152x89x16 UKB (Cranked)
Beam 1B5 - 200x100x10 RHS with steel plate welded to bottom flange

Beam 2B1 - 203x203x46 UKC
Beam 2B3 - 152x152x30 UKC
Beam 2B4 - 152x152x23 UKC (Cranked)
Beam 2B5 - 152x152x23 UKC

Beam 3B1 - 152x152x30 UKC
Beam 3B2 - 152x89x16 UKB

COLUMN SCHEDULE:

Column C1 - 152x89x16 UKB
Column C2 - 152x89x16 UKB
Column C3 - 152x89x16 UKB
Column C4 - 203x203x46 UKC
Column C5 - 203x203x46 UKC
Column C6 - 203x102x23 UKB

PADSTONE SCHEDULE:

Padstone P1 - 250x100x10mm thick steel plate
Padstone P2 - 850mm long pre-stressed concrete lintel
Padstone P3 - 550mm long pre-stressed concrete lintel
Padstone P4 - 1300mm long 100x100x5 SHS
Padstone P5 - 200x100x10mm thick steel plate
Padstone P6 - 300x100x15mm thick steel plate
Padstone P8 - 550mm long pre-stressed concrete lintel
Padstone P9 - 550mm long pre-stressed concrete lintel
Padstone P11 - 450x100x225mm thick mass concrete

ALL STEELWORK TO HAVE 30 MIN. FIRE PROTECTION. PADSTONE CANNOT BE INSERTED WITHIN CHIMNEY'S

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DO NOT SCALE FROM DRAWINGS, ANY DISCREPANCIES TO BE REPORTED TO DESIGN² IMMEDIATELY. ALL DIMENSIONS AND SETTING OUT TO BE CHECKED ON SITE BY CONTRACTOR

Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

ROOF PLAN

Drawing Status

CONSTRUCTION PACKAGE

Drawn by Date Jan 16
RM

Checked by Date Jan 16
NS

Drawing Scale

1:50@A2

Drawing Number **546/10** Revision **C**

PRELIMINARY

DIN NORMS TO BE FOLLOWED. ALL INTERNAL DOOR OPENINGS, GUTTERS/PIPES, ELECTRICAL MAINS, WATER/SEWAGE/HEATING FROM MAINS SUPPLY

ALL NEW SLATES TO BE SPANISH SLATE TILES

CONTRACTOR TO ALLOW FOR ALL NEW FLASHINGS TO BE INSERTED WHERE NECESSARY

Rainwater & foul design to be confirmed by Building Control. REFER TO SPECIFICATION DRAWING

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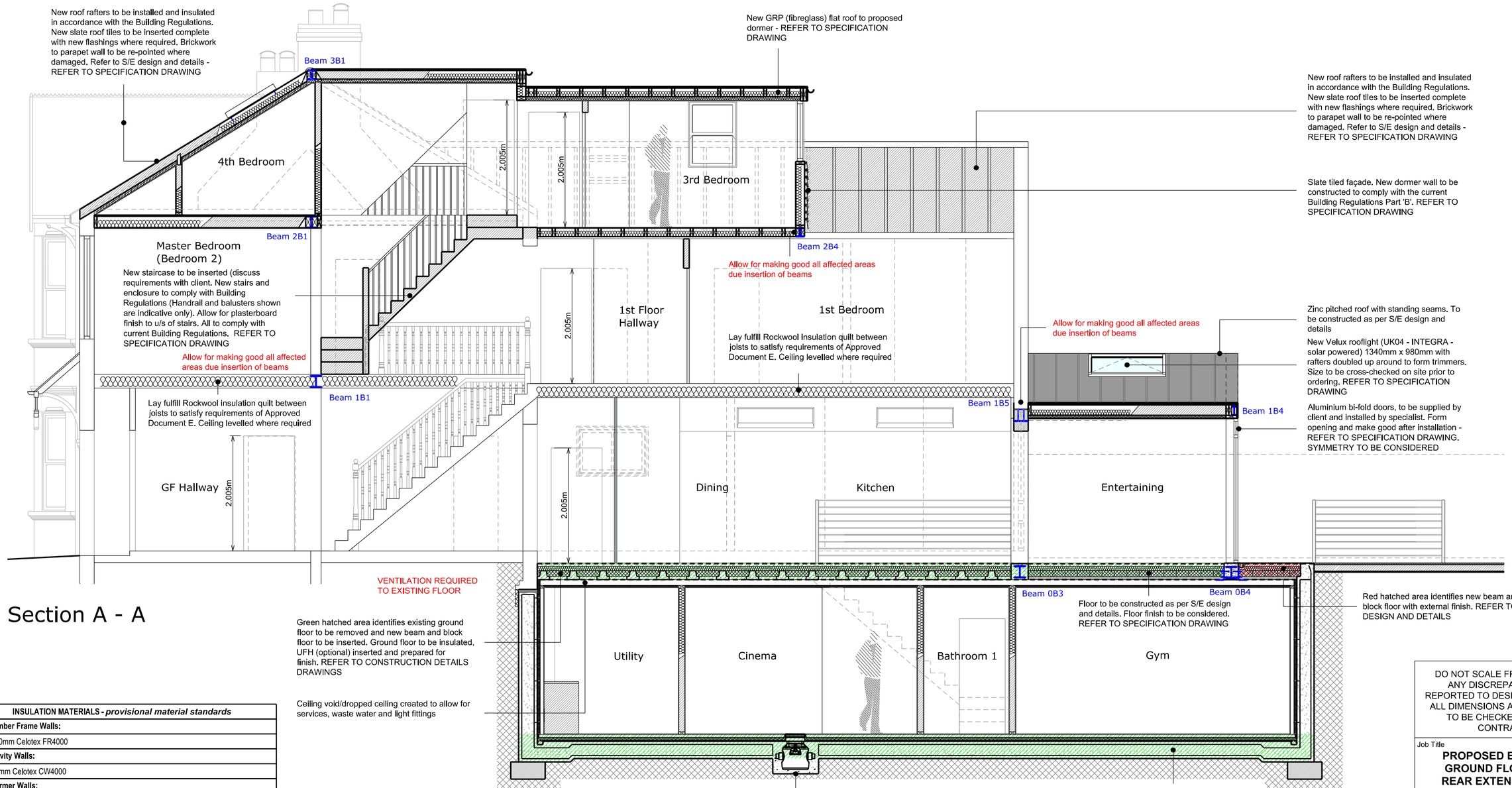

Section A - A

INSULATION MATERIALS - *provisional material standards*
Timber Frame Walls:
100mm Celotex FR4000
Cavity Walls:
40mm Celotex CW4000
Dormer Walls:
100mm Celotex FR4000 between studs
Loft Timber Floor:
Rockwool ProRox SL930 or equivalent between joists
First Floor Timber Joists (Over all rooms):
Rockwool ProRox SL930 or equivalent between joists
Beam and Block Floor:
75mm Celotex GA4000
New Pitched Roofs:
100mm Celotex GA4000 between joists and 52mm Celotex PL4000 under joists
New Flat Roofs (Cold Deck):
90mm Celotex GA4000 between joists and 62.5mm Celotex PL4000 under joists
Basement Slab / Walls:
50mm Celotex GA4000 / 30mm Celotex PL4000
DOORS: ***glazing in new openings to achieve 1.80W/m² K***
WINDOWS: ***glazing in new openings to achieve 1.60W/m² K***
NOTE: ***Insulation specifications to be approved by BCO***

LINE STYLES KEY

Boundary line

EXTERNAL WALLS

Zinc cladding to be vertically hung on 50 x 50mm preservative-treated battens, 150 x 50mm timber studs, 13mm two coat plasterwork

New 300 cavity wall, 103mm new reclaimed London stock brick. 100mm cavity with insulation and stainless steel wall ties. 100mm dense concrete 3.5-7-N/mm2 blockwork, 13mm two coat plasterwork

External quality plywood sheathing and breather membrane 100mm insulation between 150mm timber frame 12.5mm Knauf wallboard and finished with 3mm plaster skim

REFER TO S/E DESIGN AND DETAILS FOR BASEMENT WALLS

PARTITIONS

Metal stud partition - 2 layers of plasterboard with dry wall screws at 300mm centres. Gyframe 92 S 50 "C" studs (or similar approved) at 600mm centres. Rockwool (or similar approved) insulation within studs

FOUNDATION WALLS

300 cavity wall, FOUNDATIONS. Engineering bricks or F2 designation to be used below DPC. NB wall insulation to extend 150mm below that in floor slab

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS AS IDENTIFIED ON ALL DRAWINGS UNLESS STATED OTHERWISE.

FOR EXAMPLE 'CLIENT TO SUPPLY'

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Job Title

PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name

SECTION A - A

Drawing Status

CONSTRUCTION PACKAGE

Drawn by Date Jan 16

RM

Checked by Date Jan 16

NS

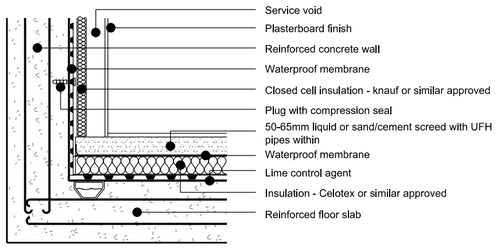
Drawing Scale

1:50@A2

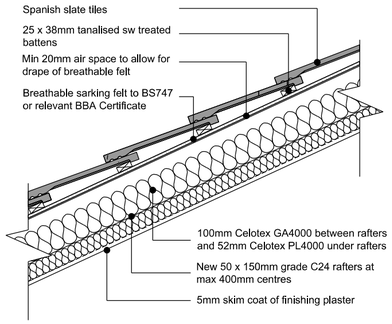
Drawing Number **546/11** Revision **C**

CONSTRUCTION DETAILS

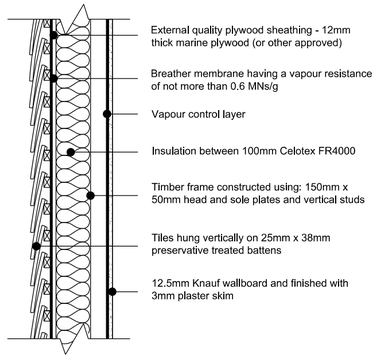
Basement floor / wall build up detail



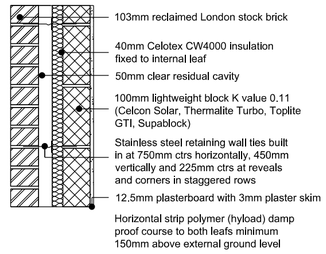
New Pitched Roofs



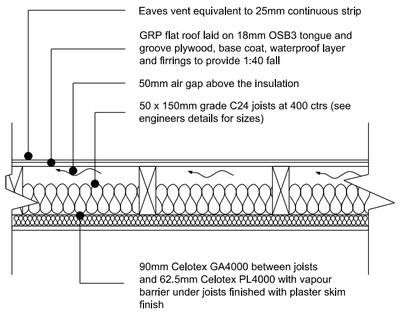
Dormer Wall Detail



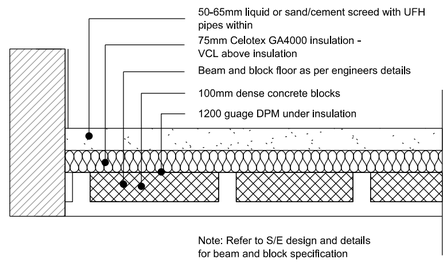
Partial Fill Cavity Wall Detail (London stock brick finish)



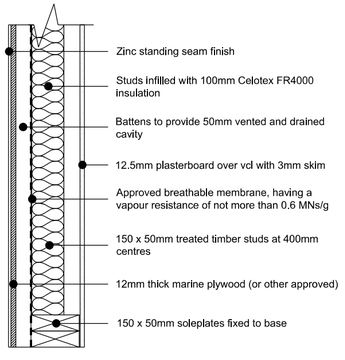
Cold Deck Flat Roof Detail



New Beam and Block Floor



Timber Frame Wall Detail



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Job Title
PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

Drawing Name
CONSTRUCTION DETAILS

Drawing Status
CONSTRUCTION PACKAGE

Drawn by Date Jan 16
RM

Checked by Date Jan 16
NS

Drawing Scale
1:50@A2

Drawing Number **546/12** Revision **C**

BUILDING REGULATIONS NOTES

CDM REGULATIONS

The client must abide by the Construction Design and Management Regulations 2015 which relate to any building works which:

(a) lasts longer than 30 working days and has more than 20 workers working simultaneously at any point in the project.
LINTELS

REFER TO S/E DESIGN AND DETAILS

STRAPPING FOR PITCHED ROOF

Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to roof rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BSEN 845-1 built into walls at max 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid noggins between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 1000mm galvanized metal straps or other approved to BSEN 845-1 at maximum 2m centres.

STRAPPING OF FLOORS

Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum of 3 joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid noggins between joists at strap positions.

FLAT ROOF RESTRAINT

100m x 50mm C16 grade timber wall plates to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps at maximum 2.0m centres fixed to internal wall faces.

FOUNDATIONS

REFER TO S/E DESIGN AND DETAILS.

PARTY WALL ACT

The owner, should they need to do so under the requirements of the Party Wall Act 1996, has a duty to serve a Party Structure Notice on any adjoining owner if building work on, to or near an existing Party Wall involves any of the following:

• Support of beam
• Insertion of DPC through wall
• Raising a wall or cutting off projections
• Demolition and rebuilding
• Underpinning
• Insertion of lead flashings
• Excavations within 3 metres of an existing structure where the new foundations will go deeper than adjoining foundations, or within 6 metres of an existing structure where the new foundations are within a 45 degree line of the adjoining foundations.
A Party Wall Agreement is to be in place prior to start of works on site.

THERMAL BRIDGING

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

MATERIALS AND WORKMANSHIP

All works are to be carried out in a workmanlike manner, All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Marks) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

BASIC RADON PROTECTION

Provide a 1200g (300 um) radon membrane under floor slab lapped 300mm double welted and taped with gas proof tape at joints and service entry points. Carry membrane over cavity and provide suitable cavity tray and weep holes.

SITE PREPARATION

Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

SUSPENDED BLOCK AND BEAM FLOOR

Remove top soil and vegetation, apply weed killer –
The underside of beams not less than 150mm above the top of the ground. PCC beams to be supplied and fixed to beam manufacturer's plan, layout and details (details and calculations to be sent to Building Control and approved before works commence). Minimum bearing 100mm onto DPC and load bearing walls. Provide concrete blocks to BS6073 pt.1, wet and grout all joints with 1:4 cement/sand mix. Provide double beams below non-load bearing partitions. Lay 1200g DPM/radon barrier, with 300mm laps double welted and taped at joints and service entry points using radon gas proof tape, over beam and block floor. Lay floor insulation over DPM, 75mm Celotex GA4000 applied as a rigid material.

Lay 500g separating layer over insulation and provide 75mm sand/cement screed over and prepare for floor finishes as required. The top surface of the ground cover under the building shall be above the finished level of the adjoining ground.

Ventilation - Provide cross-ventilation of the under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm² per metre run of perimeter wall or 500mm² per square metre of floor area, whichever is the greater. Sleeper walls shall be of honeycombed construction or have provision for distribution of ventilation.

TIMBER FRAME WALL

To achieve minimum U Value of 0.28W/m²K.

Zinc standing seam finish to be fixed to 18mm marine plywood on vertical 50 x 50mm preservative-treated battens to provide vented and drained cavity, battens fixed vertically to breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) and 12mm thick WBP external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using 150mm x 50mm head & sole plates and vertical studs (with noggins) at 400mm ctrs or to s/engineer's details & calculations. Insulation to be 100mm Celotex FR4000 between studs. Provide 12.5mm plasterboard with VCL over studs. Finish with 3mm coat of finishing plaster. All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. (An additional 15mm pur insulation to be provided over studs to prevent thermal bridging if required)

VENTILATED FLAT ROOF

(imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)

To achieve U value of 0.18 W/m²K

Flat roof to be single ply membrane roofing with aa fire rating as specialist specification, with a current BBA or WIMLAS Certificate on 22mm exterior grade plywood, laid on firrings to give a 1:40 fall on 50 x 150mm grade C24 timber joists at 400 ctrs max span 3.22m (see engineer's details for sizes). Cross-ventilation to be provided on opposing sides by a proprietary eaves ventilation strip to give 25mm continuous ventilation, with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a continuous 50mm air gap above the insulation for ventilation. Insulation to be Celotex GA4000 90mm between and 62.5mm Celotex PL4000 insulated plasterboard under joists placed over vapour barrier with skim plaster finish. Provide cavity tray where pitched roof meets existing wall. Provide restraint to flat roof by fixing using of 30 x 5 x 1000mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall. Workmanship to comply to BS 8000:4.

INTERNAL STUD PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid intermediate horizontal noggins at 1/3 height or 450mm. Provide min 10kg/m³ density acoustic soundproof quilt tightly packed (eg. 100mm Rockwool or Isowool mineral fibre sound insulation) in all voids the full depth of the stud. Partitions built off doubled up joists where partitions run parallel or provide noggins where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.

INTERMEDIATE FLOORS

Intermediate floor to be 25mm t&g flooring grade chipboard or floorboards laid on C24 joists at 400mm ctrs (see engineer's calculation for sizes and details). Lay 100mm Rockwool mineral fibre quilt insulation min 10kg/m³ or equivalent between floor joists. Ceiling to be 12.5 FireLine plasterboard with skim plaster set and finish. Joist spans over 2.5m to be strutted at mid span using 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). In areas such as kitchens, utility rooms and bathrooms, flooring to be moisture resistant grade in accordance with BS EN 312:2010. Identification marking must be laid upper most to allow easy identification. Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid noggins between joists at strap positions.

STAIRS

Dimensions to be checked and measured on site prior to fabrication of stairs. Timber stairs to comply with BS585 and with Part K of the Building Regulations. Max rise 220mm, min going 220mm. Two risers plus one going should be between 550 and 700mm. Tapered treads to have going in centre of tread at least the same as the going on the straight. Min 50mm going of tapered treads measured at narrow end. Pitch not to exceed 42 degrees. The width and length of every landing should be at least as great as the smallest width of the flight. Doors which swing across a landing at the bottom of a flight should leave a clear space of at least 400mm across the full width of the flight. Min 2.0m headroom measured vertically above pitch line of stairs and landings. Handrail on staircase to be 900mm above the pitchline, handrail to be at least one side if stairs are less than 1m wide and on both sides if they are wider. Ensure a clear width between handrails of minimum 600mm. Balustrading designed to be unclimbable and should contain no space through which a 100mm sphere could pass. Allow for all structure as designed by a Structural Engineer.

INTERNAL LIGHTING

Install low energy light fittings that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens. Not less than three energy efficient light fittings per four of all the light fittings in the main dwelling spaces to comply with Part L of the current Building Regulations and the Domestic Building Services Compliance Guide.

HEATING

Extend all heating and hot water services from existing and provide new TVRs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

NEW GAS BOILER

Heating and hot water will be supplied via a wall mounted condensing vertical balanced flue pressurised boiler with a min SEDBUK rating of 90%. No combustible materials within 50mm of the flue. System to be fitted with thermostatic radiator valves and all necessary zone controls and boiler control interlocks. The system will be installed, commissioned and tested by a "competent person" and a certificate issued that the installation complies with the requirements of PART L. All work to be in accordance with the Local Water Authorities bye laws, the Gas Safety (Installation and Use) Regulations 1998 and IEE Regulations.

SMOKE DETECTION

Mains operated linked smoke alarm detection system to BS EN 14604 and BS5839-6:2004 to at least a Grade D category LD3 standard and to be mains powered with battery back up. Smoke alarms should be sited so that there is a smoke alarm in the circulation space on all levels/ storeys and within 7.5m of the door to every habitable room. If ceiling mounted they should be 300mm from the walls and light fittings. Where the kitchen area is not separated from the stairway or circulation space by a door, there should be an interlinked heat detector in the kitchen.

ESCAPE WINDOWS

Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area of 450mm high x 450mm wide, minimum 0.33m sq. The bottom of the openable area should be not more than 1100mm above the floor. The window should enable the person to reach a place free from danger from fire.

DPC

Provide horizontal strip polymer (hyload) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES

All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm ctrs at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 5628-6.1: 1996 and BS EN 845-1: 2003

CAVITIES

Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

EXISTING TO NEW WALL

Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

CAVITY BARRIERS

30 minute fire resistant cavity barriers to be provided at at tops of walls, gable end walls and vertically at junctions with separating walls & horizontally at separating walls with cavity tray over installed according to manufacturers details.

UNVENTED PITCHED ROOF

Pitch 22-45° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)

To achieve U-value 0.18 W/m²K

Timber roof structures to be designed by an Engineer in accordance with NHBC Technical Requirement R5 Structural Design. Calculations to be based on BS EN 1995-1-1. Roofing tiles to match existing on 25 x 38mm tanalised sw treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 47 x 150mm grade C24 rafters at max 400mm centres max span 3.47m. Rafters supported on 100 x 50mm treated sw wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 100mm Celotex GA4000 between rafters and 52mm Celotex PL4000 under rafters. Provide 5mm skim coat of finishing plaster to the underside of all ceiling.

Restraint strapping - Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.

LEAD WORK AND FLASHINGS

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

ROOF LIGHTS

Min U-value of 1.6 W/m²K.

Roof-lights to be double glazed with16mm argon gap and soft low-E glass. Window Energy Rating to be Band C or better. Roof lights to be fitted in accordance with manufacturer's instructions with rafters doubled up to sides and suitable flashings etc.

SAFETY GLAZING

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

NEW AND REPLACEMENT WINDOWS

New and replacement windows to be double glazed with 16mm argon gap and soft coat low-E glass. Window Energy Rating to be Band C or better and to achieve U-value of 1.6 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension.

NEW AND REPLACEMENT DOORS

New and replacement doors to achieve a U-Value of 1.80W/m²K. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1:2011 and Part K (Part N in Wales) of the current Building Regulations.

BACKGROUND AND PURGE VENTILATION

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm²; and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm².

Purge ventilation - New Windows/rooflights to have openable area in excess of 1/20th of their floor area, if the window opens more than 30° or 1/10th of their floor area if the window opens less than 30°.

Internal doors should be provided with a 10mm gap below the door to aid air circulation.
Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

EXTRACT FOR SHOWER ROOM

Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 litres per second. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

EXTRACT TO W/C

W/C to have mechanical ventilation ducted to external air with an extract rating of 15l/s operated via the light switch. Vent to have a 15min overun if no window in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

EXTRACT TO KITCHEN

Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic Ventilation Compliance Guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

PITCHED ROOF VENTILATION

Maintain a 50mm air gap above insulation in the roof pitch to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation.

FLAT ROOF VENTILATION

Cross-ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a 50mm air gap above the insulation for ventilation.

EXISTING TO NEW WALL

Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

UNVENTED PITCHED ROOF

Pitch 22-45° (imposed load max 0.75 kN/m² - dead load max 0.75 kN/m²)

To achieve U-value 0.18 W/m²K

Timber roof structures to be designed by an Engineer in accordance with NHBC Technical Requirement R5 Structural Design. Calculations to be based on BS EN 1995-1-1. Roofing tiles to match existing on 25 x 38mm tanalised sw treated battens on breathable sarking felt to relevant BBA Certificate. Supported on 47 x 150mm grade C24 rafters at max 400mm centres max span 3.47m. Rafters supported on 100 x 50mm treated sw wall plates. Allow min 20mm air space to allow for drape of breathable felt. Insulation to be 100mm Celotex GA4000 between rafters and 52mm Celotex PL4000 under rafters. Provide 5mm skim coat of finishing plaster to the underside of all ceiling.

Restraint strapping - Ceiling joists tied to rafters (if raised collar roof consult structural engineer). 100mm x 50mm wall plate strapped down to walls. Ceiling joists and rafters to be strapped to walls and gable walls, straps built into cavity, across at least 3 timbers with noggins. All straps to be 1000 x 30 x 5mm galvanized straps or other approved to BSEN 845-1 at 2m centres.

LEAD WORK AND FLASHINGS

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

UNDERGROUND FOUL DRAINAGE

Underground drainage to consist of 100mm diameter UPVC proprietary pipe work to give a 1:40 fall. Surround pipes in 100mm pea shingle. Provide 600mm suitable cover (900mm under drives). Shallow pipes to be covered with 100mm reinforced concrete slab over compressible material. Provide rodding access at all changes of direction and junctions. All below ground drainage to comply with BS EN 1401-1: 2009.

INSPECTION CHAMBERS

Underground quality proprietary UPVC 450mm diameter inspection chambers to be provided at all changes of level, direction, connections and every 45m in straight runs. Inspection chambers to have bolt down double sealed covers in buildings and be adequate for vehicle loads in driveways.

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS, ROOM DATA SHEETS AND SCHEDULE OF WORKS

D²

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Job Title
PROPOSED BASEMENT, GROUND FLOOR SIDE / REAR EXTENSIONS AND LOFT CONVERSION AT 11 ALWYN AVENUE, LONDON

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ABOVE GROUND DRAINAGE

All new above ground drainage and plumbing to comply with BS EN 12056-2:2000 for sanitary pipework. All drainage to be in accordance with Part H of the Building Regulations. Wastes to have 75mm deep anti vac bottle traps and rodding eyes to be provided at changes of direction.

Size of wastes pipes and max length of branch connections (if max length is exceeded then anti vacuum traps to be used)

Wash basin - 1.7m for 32mm pipe 4m for 40mm pipe
Bath/shower - 3m for 40mm pipe 4m for 50mm pipe
W/c - 6m for 100mm pipe for single WC

All branch pipes to connect to 110mm soil and vent pipe terminating min 900mm above any openings within 3m.

Or to 110mm upvc soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting.
Waste pipes not to connect on to SVP within 200mm of the WC connection.
Supply hot and cold water to all fittings as appropriate.

SOIL AND VENT PIPE

Svp to be extended up in 110mm dia UPVC and to terminate min 900mm above any openings within 3m. Provide a long radius bend at foot of SVP.

AUTOMATIC AIR VALVE

Ground floor fittings from WC to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

TRADITIONAL BALUSTRADES

Provide balustrades to balcony min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180:2011. No openings in any balustrading should allow the passage of a 100mm sphere and children should not readily be able to climb the guarding.

FIXED EXTERNAL LIGHTING

External light fittings to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide.

Light fitting to be either:

a. lamp capacity not greater than 100 lamp-watts per light fitting and provided with automatic movement detecting devices (PIR) and automatic daylight sensors ensuring lights shut off automatically when not required.

Or

b. lamp efficacy greater than 45 lumens per circuit-watt; fitted with manual controls and automatic day light cut-off sensors so that lights switch off when daylight is sufficient.

DORMER CONSTRUCTION

To achieve minimum U Value of 0.28W/m²K

Structure to engineer's details and calculations. Tiles hung vertically on 25 x 38mm preservative treated battens (vertical counter battens to be provided to ensure vented and drained cavity if required) fixed to breathable membrane (having a vapour resistance of not more than 0.6 MNs/g) and 12mm thick W.B.P external quality plywood sheathing (or other approved). Ply fixed to treated timber frame studs constructed using: 150mm x 50mm head and sole plates and vertical studs (with noggins) at 400mm centres or to structural engineer's details and calculations. Insulation between studs only to be 100mm Celotex FR4000, provide a VCL and 12.5mm Knauf wall board over the studs. Finish with 3mm skim coat of finishing plaster.

All junctions to have water tight construction, seal all perimeter joints with tape internally and with silicon sealant externally. Dormer walls built off existing masonry walls to have galvanised mild steel straps placed at 900 centres. Dormer cheeks within 1m of the boundary to be lined externally with 12.5mm Supalux and 12.5mm Gyproc FIreLIne board Internally to achieve 1/2 hour fire resistance from both sides. (Provide an additional 15mm pur insulation over studs to prevent cold bridging if required)

UPGRADE OF SOLID EXTERNAL WALL (BCO TO CONFIRM IF REQUIRED)

To achieve min U-value 0.28W/m²K

Existing wall to be exposed and checked for its suitability. Insulate existing wall on the inside using 50mm Celotex GA4000 insulation board fixed to 25 x 50mm battens at 600mm centres to provide a nominal 25mm cavity between the masonry and insulation.

Fix a vapour control layer on the warm side of the insulation. Finish with 12.5 plasterboard and a plaster skim. All work in accordance with BS 8212: 1995 (Code of practice for dry lining).

UPGRADING SOLID PARTY WALL (cold adjoining space) (BCO TO CONFIRM IF REQUIRED)

The existing walls must be checked for stability and be free from defects as required by the Building Control Officer. Provide a scratch coat render to existing wall. Insulate wall on the warm side using 62.5mm Ecotherm Eco-liner fix dry-lining board.

Batten out to provide a nominal 25mm cavity between the masonry and insulation. Provide a vapour control layer under the insulation. All work in accordance with BS 8212: 1995 (Code of practice for dry lining).

SOIL AND VENT PIPE

Svp to be extended up in 110mm dia UPVC and to terminate min 900mm above any openings within 3m. Provide a long radius bend at foot of SVP.

AUTOMATIC AIR VALVE

Ground floor fittings from WC to be connected to new 110mm UPVC soil pipe with accessible internal air admittance valve complying with BS EN 12380, placed at a height so that the outlet is above the trap of the highest fitting and connected to underground quality drainage encased with pea gravel to a depth of 150mm.

TRADITIONAL BALUSTRADES

Provide balustrades to balcony min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180:2011. No openings in any balustrading should allow the passage of a 100mm sphere and children should not readily be able to climb the guarding.

UPGRADING PARTY WALL (warm adjoining space) (BCO TO CONFIRM IF REQUIRED)

The existing walls must be checked for stability and be free from defects as required by the Building Control Officer. Provide a scratch coat render to existing wall. Apply plasterboard with mass of 10kg/m2 or greater to the exposed face of the wall to ensure adequate sound insulation in accordance with Approved Document E.

UPGRADE OF EXISTING FLOORS

Ensure first floor achieves modified half-hour fire resistance.

New first floor – Joists to be 50mm minimum from chimney breasts. (joist size to structural engineer's details and calculations) Provide min 20mm t and g chipboard or timber board flooring. In areas such as kitchens, utility rooms and bathrooms flooring to be moisture resistant grade in accordance with BS EN 312:2010). Identification marking must be laid upper most to allow easy identification. To upgrade to half hour fire resistance and provide adequate sound insulation lay minimum 150mm Rockwool insulating material or equivalent on chicken wire between joists and extended to eaves.

Chicken wire to be fixed to the joists with nails or staples these should penetrate the joists side to a minimum depth of 20mm, in accordance with BRE-Digest 208 1988.

Joists spans over 2.5m to be strutted at mid span use 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). Provide lateral restraint where joists run parallel to walls. Floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid noggins between joists at strap positions.

HEATING

Extend all heating and hot water services from existing and provide new TVRs to radiators. Heating system to be designed, installed, tested and fully certified by a GAS SAFE registered specialist. All work to be in accordance with the Local Water Authorities by laws, Gas safety requirements and IEEE regulations.

MEANS OF ESCAPE - Fire doors

Form a protected escape stairway by providing half hour fire resistance to all partitions as well as floors and ceilings above and below rooms. Stairway to be protected at all levels - from the loft room/rooms then leading directly to an external door at ground level (no inner rooms allowed). All doors on to the stairway must be FD20 rated fire doors to BS 476-22:1987 or the European equivalent BS EN 1634 (fitted with intumescent strips rebated around sides & top of door or frame if required by BCO). Where applicable, any glazing in fire doors to be half hour fire resisting and glazing in the walls forming the escape route enclosure to have 30 minutes fire resistance and be at least 1.1m above the floor level or stair pitch line.

MEANS OF ESCAPE - 2 exits at ground floor

The first and second storeys should be served by a protected stairway, the structure forming this enclosure must have 30 minute fire resistance including floors and ceilings above and below rooms. The doors must be FD20 rated fire doors to BS 476-22:1987 (fitted with intumescent strips rebated around sides & top of door or frame if required by BCO). The enclosure should lead to at least two alternative escape routes at ground level, which should be separated from each other by fire-resisting construction and fire doors. Where applicable, any glazing in walls or doors enclosing the protected stairs is to have 30 minutes fire resistance. (no inner rooms allowed).

FIXED EXTERNAL LIGHTING

External light fittings to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide.

Light fitting to be either:

a. lamp capacity not greater than 100 lamp-watts per light fitting and provided with automatic movement detecting devices (PIR) and automatic daylight sensors ensuring lights shut off automatically when not required.

Or

b. lamp efficacy greater than 45 lumens per circuit-watt; fitted with manual controls and automatic day light cut-off sensors so that lights switch off when daylight is sufficient.

PARTIAL FILL CAVITY WALL

To achieve minimum U Value of 0.28W/m²K.

Provide 103mm facing brick (London stock brick) to match existing construction. Ensure a 50mm clear residual cavity and provide 40mm Celotex CW4000 insulation fixed to 100mm lightweight blockwork, K value 0.11 (Celcon solar, Thermalite turbo, Toplite GTI, Supablock). Internal finish to be 12.5mm plasterboard on dabs with a plaster skim. Walls to be built with 1:1:6 cement mortar.

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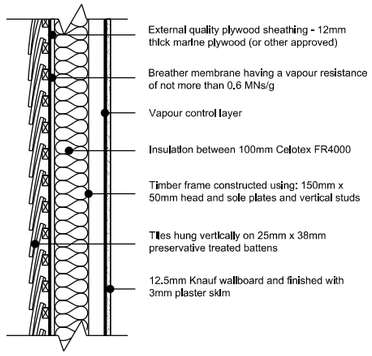
PARTY WALL DETAILS

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS

Dormer Wall Detail



External quality plywood sheathing - 12mm thick marine plywood (or other approved)

Breather membrane having a vapour resistance of not more than 0,6 MNs/g

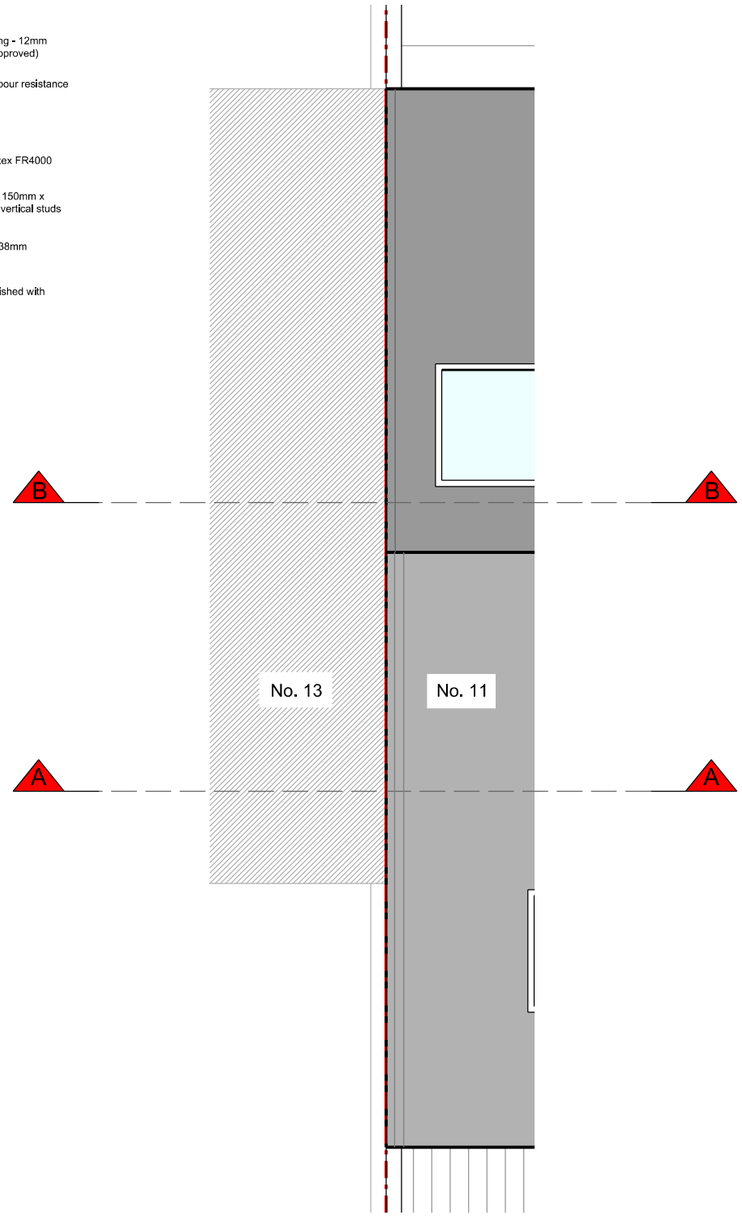
Vapour control layer

Insulation between 100mm Celotex FR4000

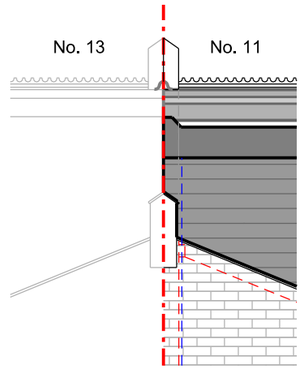
Timber frame constructed using; 150mm x 50mm head and sole plates and vertical studs

Tiles hung vertically on 25mm x 38mm preservative treated battens

12.5mm Knauf wallboard and finished with 3mm plaster skim



Roof Plan Extract



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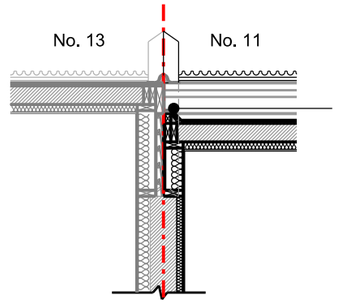
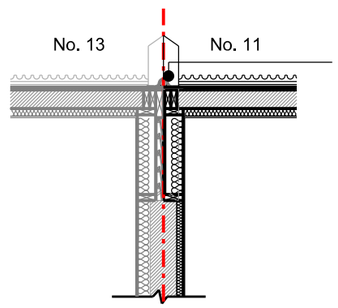


Upstand to allow adequate flashing and water run off on to flat roof

Section Extract A - A



Roll to allow flat roof abutments to be adequately flashed and water to run off

Section Extract B - B

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