Dormers -

Roof

Main roof to be attic-type trussed rafters at max 600mm centres.
Lower roofs to be standard trussed rafters.
All trussed rafters to be designed, fabricated, erected and braced by specialists to BS5268 Part 3: Structural use of timber. Code of practice for trussed rafter roofs and The Trussed Rafter Association. Details of proprietary roof joists and calculations to be submitted before commencement on site.
Trussed rafters fixed to 75 x 100mm swd wallplates secured to walls using 30x5x1000mm long galvanized, mild steel straps at maximum 2000mm centres and fixed to blockwork with 6no wall plugs & screws per strap spaced evenly.End trusses strapped to gable wall with 30 x 2.5mm galvanised steel straps at 2m centres, strap to extend across 3no trusses and supported on swd noggings.
Allow for tank support in a location TBA once MEP design is complete.
Infill between valleys to be formed with diminishing valley frames or cut roof to truss rafter manufacturer's design.

Cut roof over garage at 45° pitch, roof structure including rafters, ridge, purlins, bracing and strapping to be designed by structural engineer / roof fabricator.

Overlay roof with BBA Approved and BRE Certificate tested breathable sarking membrane sagging between trusses, clay pantiles laid on tanalised battens size and spacing to tile manufacturer's specification, complete with proprietary dry fix ventilated ridge tiles (giving ventilation equivalent to continuous 5mm slot) on 38x50mm treated softwood tiling battens on a Glidevale Protect VP400 Plus LR breathable membrane or equal approved.

Insulation to warm roofs (main attic trusses) to be 150mm thick Xtratherm ECO360 (or equal) insulation between min 200mm depth rafters and 50mm Xtratherm ECO360 Thermal Liner (mech fix) sofft lining board beneath rafters. All insulation to be installed in strict accordance with manufacturer's recommendations including the complete filling, taping and sealing of joints to ensure VCL is not compromised. VCL not to be penetrated by any lights or ceiling mounted services. Overall U-Value of roof construction achieved to be no worse than 0.12 W/sqmK.

Insulation to cold roofs to be 2 layers of 200mm mineral wool insulation (Knauf Loft Roll 44 (k=0.044) or equal) over ceiling ties each layer in opposite directions.
Cavity wall and loft insulation to be abutted at intersection to knit together and form a continuous thermal bridge with a rating of 2.33m2 K/W in accordance with Accredited Details or alternatively to tightly butt a perimeter proprietary fire rated cavity closer.

Roof void to be ventilated via proprietary over fascia ventilators to full length of eaves fixed in strict accordance with manufacturer's recommendations. Ventilation requirement to be equivalent to a continuous 25mm strip (see above for ridge ventilation requirement). 50mm free ventilation route to be maintained between top surface of insulation and underside of roof membrane.

Tension straps to gable wall at rafter level to be 30x5x1500mm long galvanized mild steel restraint straps with 100mm turn-down to be fixed to blockwork and fastened to rafters of 3no. trussed rafters at gable walls at maximum 2000mm centres. 50 x 100mm softwood noggins to be securely fixed between trussed rafters in line of straps to provide secure fixing and backing.

30x5x1500mm long galvanized mild steel lateral restraint straps with 100mm turn-down to be fixed to blockwork and fastened to ceiling joists of 3no. trussed rafters at gable walls at maximum 2000mm centres. 50 x 100mm softwood noggins to be securely fixed between trussed rafters in line of straps to provide secure fixing and backing.

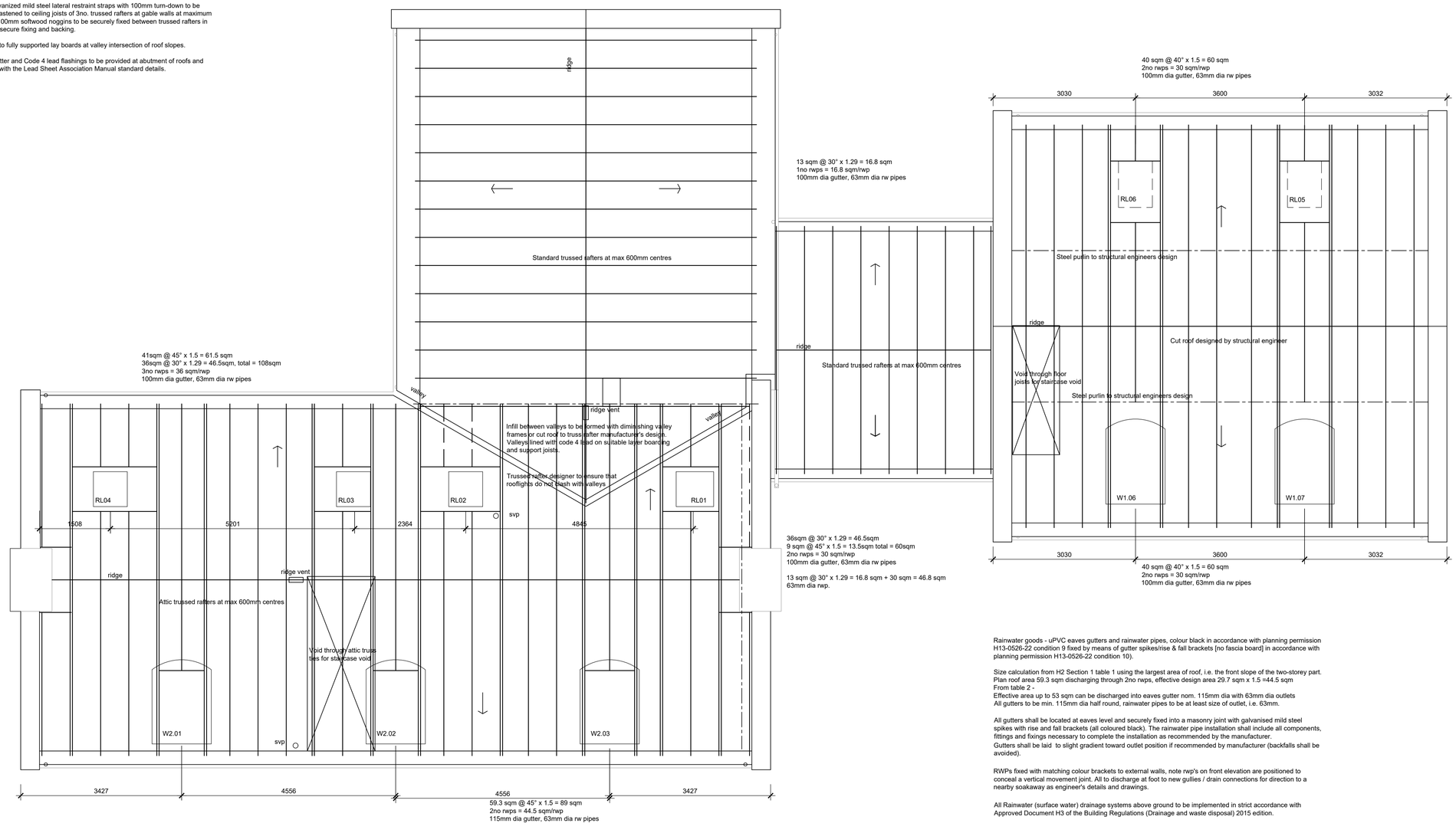
GRP valley gutter fixed to fully supported lay boards at valley intersection of roof slopes.

Stepped apron, back gutter and Code 4 lead flashings to be provided at abutment of roofs and chimney in accordance with the Lead Sheet Association Manual standard details.

Ceilings

All ceiling plasterboard should generally be of a min density of 10 kg/m3 to meet Part E requirements. Ceiling boards to be used in wet rooms should be MR rated accordingly.
All ceiling board edges at room edge perimeters shall be fully supported with noggings between the supporting members. All 12.5mm plasterboard edges should be supported with noggings when joists are set at 600mm centres. Additional noggings are not required for joists set at 400 or 450mm centres.
Second floor ceiling (flat and sloping) over protected stairway to achieve 30 minutes fire resistance.

Ceiling mounted loft hatch fully draught sealed ceiling hatch to roof space to be insulated with high performance 150mm Polyurethane insulation and will incorporate proprietary airtight seals and shall achieve a min U value of 0.15 W/m2 K. Product Example Manthorpe (GL250-015-PU). Opening Size = 715 x 545mm. (S/o = 726x526mm)



Roof Plan
Scale 1 : 50

SCALE 1 : 50
SCALE 1 : 1
0m 0.5m 1m 2m 3m 4m 5m
0m 10mm 20mm 40mm 60mm 80mm 100mm

Rainwater goods - uPVC eaves gutters and rainwater pipes, colour black in accordance with planning permission H13-0526-22 condition 9 fixed by means of gutter spikes/rise & fall brackets [no fascia board] in accordance with planning permission H13-0526-22 condition 10).

Size calculation from H2 Section 1 table 1 using the largest area of roof, i.e. the front slope of the two-storey part.
Plan roof area 59.3 sqm discharging through 2no rwps, effective design area 29.7 sqm x 1.5 =44.5 sqm
From table 2 -
Effective area up to 53 sqm can be discharged into eaves gutter nom. 115mm dia with 63mm dia outlets
All gutters to be min. 115mm dia half round, rainwater pipes to be at least size of outlet, i.e. 63mm.

All gutters shall be located at eaves level and securely fixed into a masonry joint with galvanised mild steel spikes with rise and fall brackets (all coloured black). The rainwater pipe installation shall include all components, fittings and fixings necessary to complete the installation as recommended by the manufacturer.
Gutters shall be laid to slight gradient toward outlet position if recommended by manufacturer (backfalls shall be avoided).

RWPs fixed with matching colour brackets to external walls, note rwp's on front elevation are positioned to conceal a vertical movement joint. All to discharge at foot to new gullies / drain connections for direction to a nearby soakaway as engineer's details and drawings.

All Rainwater (surface water) drainage systems above ground to be implemented in strict accordance with Approved Document H3 of the Building Regulations (Drainage and waste disposal) 2015 edition.

DO NOT SCALE THIS DRAWING. THE CONTRACTOR IS DEEMED TO HAVE CHECKED ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO OGLESBY & LIMB LTD.
THE CONTENTS OF THIS DRAWING ARE COVERED BY COPYRIGHT AND REMAIN THE PROPERTY OF OGLESBY & LIMB LTD. WRITTEN APPROVAL MUST BE OBTAINED FROM OGLESBY & LIMB LTD PRIOR TO DUPLICATION OR REPRODUCTION OF THIS DRAWING OR ITS CONTENTS.
ANY DIMENSIONS NOT SHOWN ARE TO BE CHECKED AND AGREED WITH OGLESBY & LIMB LTD.

THIS DRAWING MUST BE READ IN ACCORDANCE WITH ALL OTHER PROJECT DRAWINGS, SPECIFICATIONS AND STRUCTURAL ENGINEER'S DRAWINGS AND DETAILS - SHIELDS WILSON PROJECT NO 22-217

ALL DETAILS MUST BE CONSTRUCTED IN ACCORDANCE WITH ACCREDITED CONSTRUCTION DETAILS FOR PART L (www.planningportal.gov.uk)
References to Accredited Details are indicated at typical locations on plans and sections but apply to all circumstances in which they occur.

All dimensions indicated are structural, i.e. block to block or block to stud unless stated otherwise.

The purpose group for this building is Residential 1 (b) – A Dwellinghouse that contains a habitable storey with a floor level a minimum of 4.5m above ground level.
The height of the top floor is 5.9m, the period of fire resistance for dwelling houses with a top floor between 5m and 18m high is 30 minutes.

Materials to comply with appropriate British Standards or Agrément Certificates. Alternatively, the materials should be marked, stamped, independently certified or otherwise justified by test or calculation to show their suitability.
Materials should generally be in accordance with BS8000 series of documents and other accepted good practice (eg. Quality assured to ISO 9000).
Test certificates for materials and equipment such as emergency lighting, fire alarms and concrete test cubes will be required to be submitted prior to the issue of a Final Certificate.

Ref.	Date	Description	Initial
BR2	31.03.23	Revisions to windows and rooflights, omit canopies	AP
BR1	01.12.22	Building Regulations application	AP

Oglesby & Limb Ltd
Chartered Architect
Suite 1 Market Chambers
12 Market Place, Spalding, Lincs
PE11 1SL
Tel: 01775 761196
e-mail: design@o-l-ltd.co.uk

Client:
Mr W. Ravell

Project:
Proposed new dwelling
Eaugate Road, Moulton Chapel
Spalding, PE12 0XJ

Drawing Title:
Roof plan as proposed

BUILDING REGULATIONS

Date:	Scale:
Jun 22	as shown @ A1
Drawn by: AP	Checked by: AJO

Drawing Number:	Rev:
A1490-14	BR2