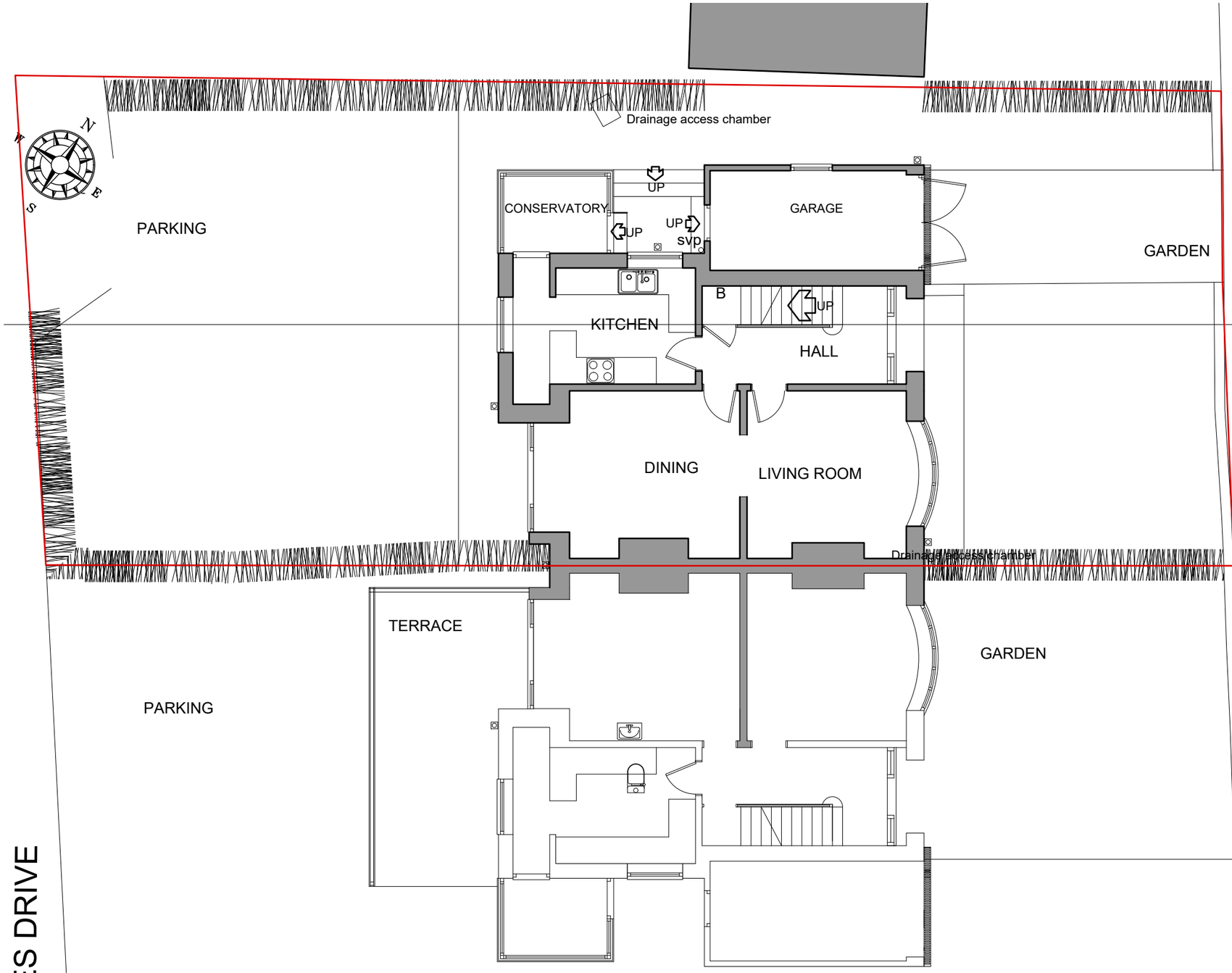

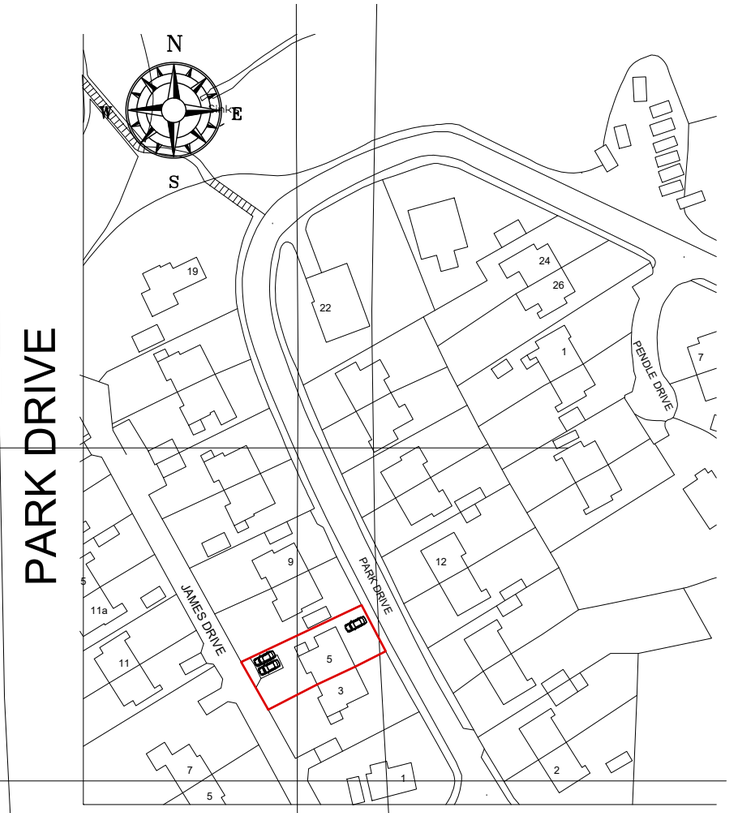

LOCATION PLAN 1/250 Scale

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	SURVEY EXISTING PLAN. GROUND FLOOR PLAN AND LOCATION PLAN	Scale: 1/100 @ A3 Date: JAN 2024 DWG No. 19/0397/01	REV Date

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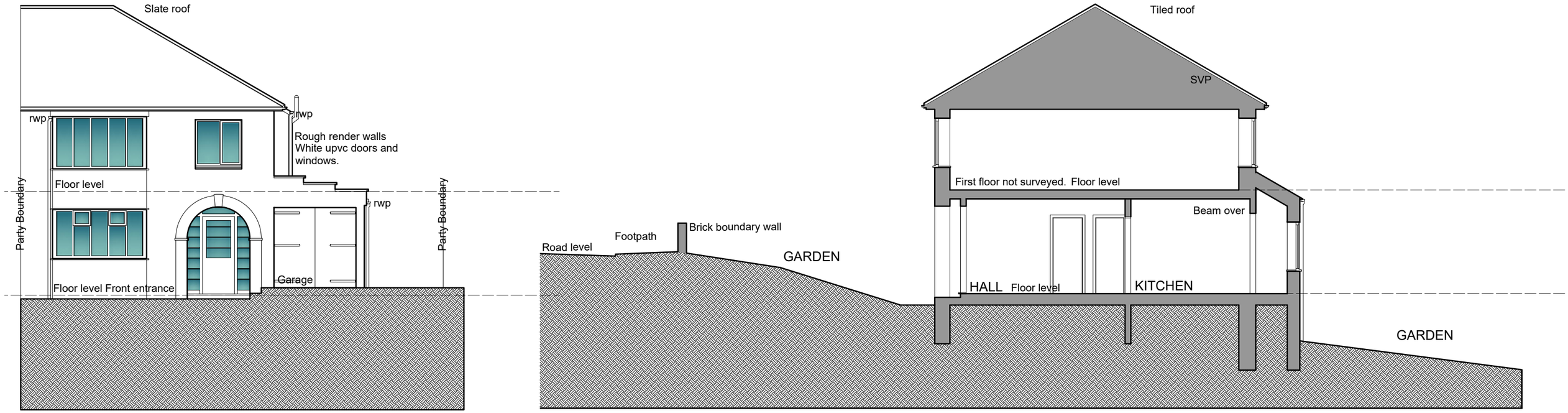
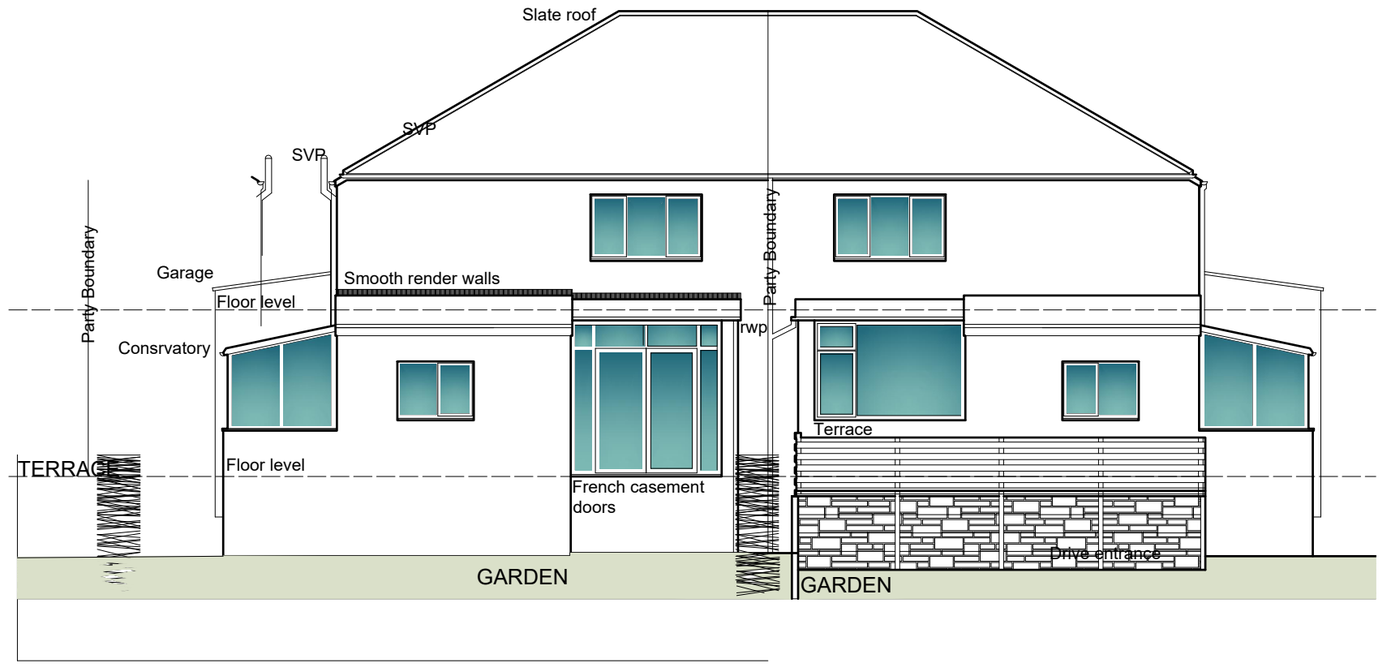
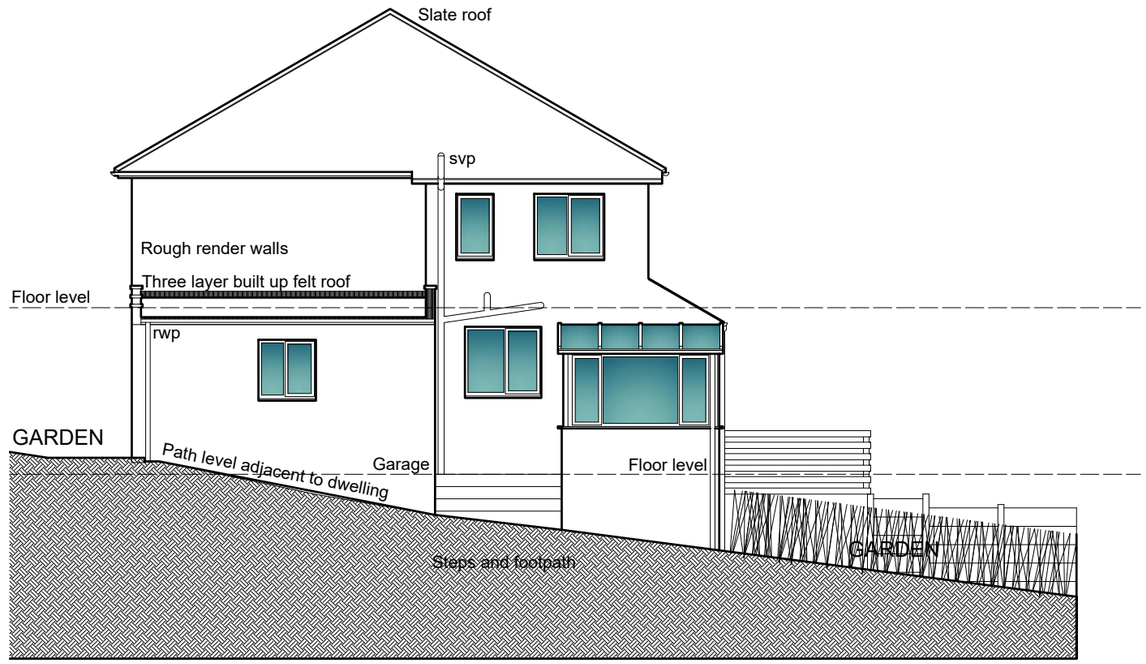


FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION (SECTION THROUGH ROAD)

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	EXISTING ELEVATIONS		Scale: Date: DWG No.	1/100 @ A3 JAN 2024 19/0397/02	REV Date

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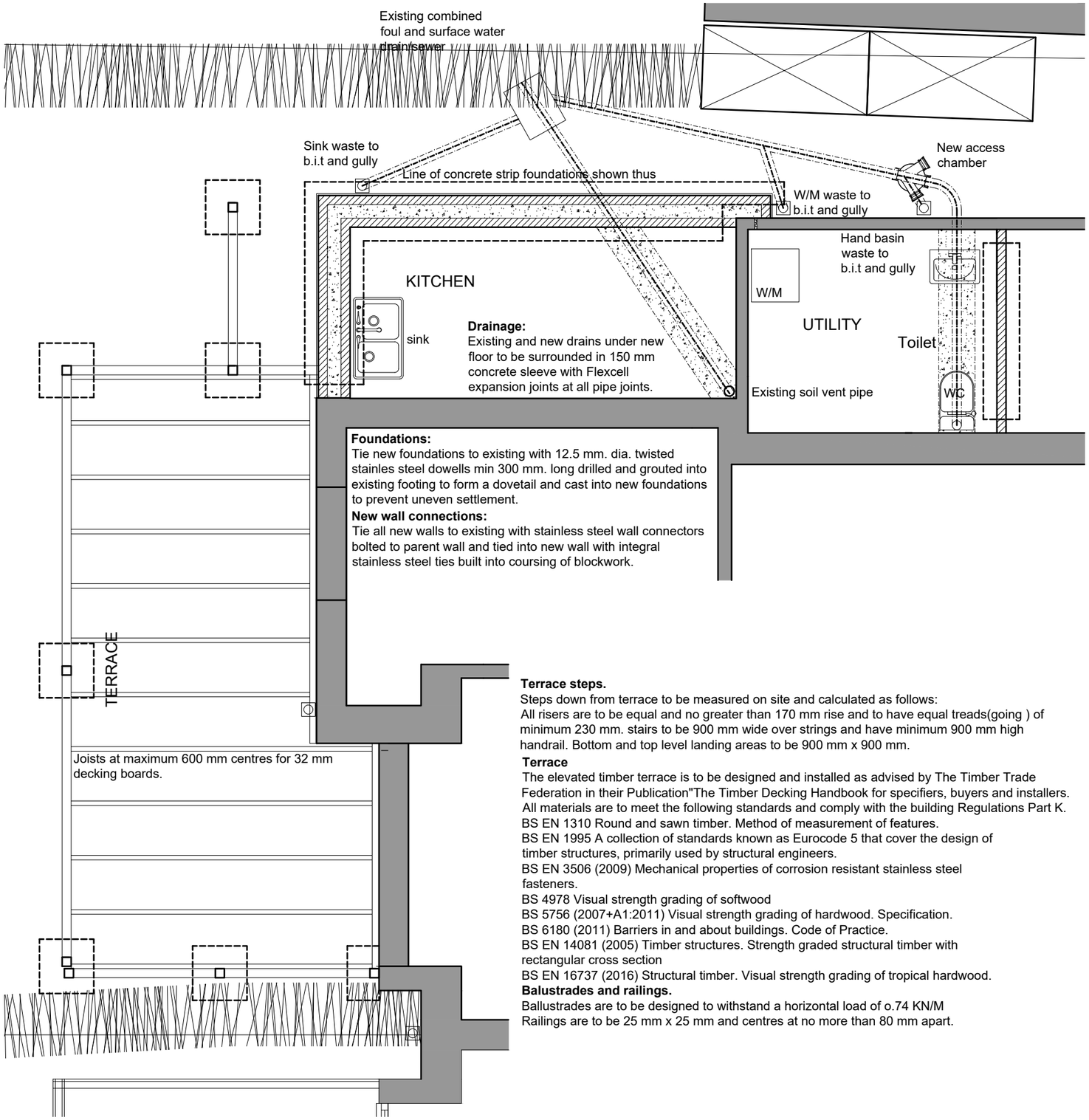

Terrace steps.
Steps down from terrace to be measured on site and calculated as follows:
All risers are to be equal and no greater than 170 mm rise and to have equal treads(going) of minimum 230 mm. stairs to be 900 mm wide over strings and have minimum 900 mm high handrail. Bottom and top level landing areas to be 900 mm x 900 mm.

Terrace
The elevated timber terrace is to be designed and installed as advised by The Timber Trade Federation in their Publication"The Timber Decking Handbook for specifiers, buyers and installers.
All materials are to meet the following standards and comply with the building Regulations Part K.
BS EN 1310 Round and sawn timber. Method of measurement of features.
BS EN 1995 A collection of standards known as Eurocode 5 that cover the design of timber structures, primarily used by structural engineers.
BS EN 3506 (2009) Mechanical properties of corrosion resistant stainless steel fasteners.
BS 4978 Visual strength grading of softwood
BS 5756 (2007+A1:2011) Visual strength grading of hardwood. Specification.
BS 6180 (2011) Barriers in and about buildings. Code of Practice.
BS EN 14081 (2005) Timber structures. Strength graded structural timber with rectangular cross section
BS EN 16737 (2016) Structural timber. Visual strength grading of tropical hardwood.

Balustrades and railings.
Ballustrades are to be designed to withstand a horizontal load of o.74 KN/M
Railings are to be 25 mm x 25 mm and centres at no more than 80 mm apart.

New cavity wall below DPC generally.
350 mm. thick cavity walls consisting of 100 mm. thick solid concrete block 150 mm cavity back filled with concrete to ground level max 225 mm below damp-proof course and 100 mm. solid concrete block inner leaf. Cavity wall ties to be Furfix stainless steel or similar specifically designed for 140/150 mm. cavities at 750 mm. horizontal centres and 450m vertical centres, offset 375 mm. horizontally to form a diamond pattern. Fix additional wall ties every course at all corners and jambs. Between ground level and floor level, fix bituthene Hyload DPCs to both inner and outer leaves of walls at min of 150 mm. above ground level. Lay facing bricks from one course below finished ground level dpc level in outer leaf to form plinth.

New ground floor to extension. Ground Floor U Value 0.18 W/M²K
Allow for flooring finish thickness on 150 mm concrete floor slab on 500 gauge Visqueen vapour barrier on 100 mm Celotex GA4000 floor insulation slabs on 1200 gauge damp proof membrane. All on 50 mm sharp sand blinding on minimum 150 mm thick sand blinded hard-core sub-base laid and consolidated in 150 mm layers no thicker than 600 mm. deep. Visqueen Damp Proof Membrane is to overlap D.P.C. in inner leaf of external walls to form a permanent damp proof barrier. All damp proof courses, and vapour barriers are to be overlapped and taped as recommended in the manufacture's specification for the location and purpose.
New ground floor to be level with existing ground floor. Cavity insulation is to extend 215 below the damp proof course.

Drainage. Connections and Discharges.
There are existing drainage connections for foul and surface water. These are to be surveyed recorded and investigated for suitable reuse with the approval of Building Control and the service provider (United Utilities). Where existing drains/sewers pass under the area of new construction, the drains should be excavated for inspection in the presence of Building Control to establish if they are fit for the purpose, should the drains be suitable, they are to be surrounded with a 150 mm diameter concrete sleeve with Flexcell expansion joints at every pipe junction. Where these drains are sewers under the control of the utility services provider (United Utilities Limited) the employer is to enter into a Building over agreement with the service provider and meet their specification for building over the sewer.

General Drainage Specification:
All new drains will be designed to comply with BS EN 752.
New soil and surface water drainage: Hepworth Supersleeve or similar spun clay 100/150/225 mm. diameter pipes with u.p.v.c. flexible sealed collars laid in clean square cut trenches at a gradient of not less than 1: 60 falls. Carefully back fill trenches with layered back fill strictly in accordance with the manufacturer's instructions. All fittings including manholes, inspection chambers, and back inlet gullies etc. to be from the same range and supplier. Set all preformed gullies and chambers on 150 mm. concrete bases and surround with 150 mm. sleeves. Fit gullies with plastic or galvanized grills. Fit manholes and inspection chambers with steel rims and covers, as supplied by the manufacturer set in mortar surrounds. Set manhole covers onto preformed r.c. covers where manholes internal size is greater than 450 mm. x 600 mm. which is the minimum acceptable internal dimension for a 900 mm. deep manhole.
Where new drains pass under the area of new construction the drains are to be surrounded to a minimum 150 mm concrete sleeve with Flexcell expansion joints at every pipe junction. Where drains are less than 1500 mm deep in traffic areas surround pipes in 150 mm concrete sleeve with Flexcell joints at each pipe joint or as otherwise recommended by the pipe manufacturers. All drain lines are diagrammatic, and the final layout should be agreed on site with the Building Control Department.

Foul Drainage
Shower room toilet shower and handbasin to modified foul drains new connections to back inlet trapped gullies to new access chambers to existing sewer.

Surface Water Drainage
Connect rainwater to existing drains/sewers.

Ground Conditions
No ground condition or survey has been carried out. The site will be reduced to formation level for full inspection of the existing terrain by Building Control to confirm the site conditions and designed foundations are suitable. Any changes to the approved details will be fully specified to Building Control prior to that part of the works being undertaken. There is a sewer/drain to the side of the dwelling which will remain live throughout the construction. The Main Contractor should make provision for this in the works proposal. Where works are carried out to the drain/sewer they should be a carried out to the specification of the service provider (United Utilities Limited) and approved by Building Control on UUL behalf.

Foundations
Excavations for foundations FOUNDATIONS MAY BE RECONSIDERED WITH BUILDING CONTROL DEPENDANT ON SITE SPECIFIC GROUND CONDITIONS.

Site Enablement
Reduce ground levels in area of works and set aside material excavated for reuse landscaping the garden and ramp.

New extension.
Foundation trenches to be excavated to suit dimensions indicated and taken down to virgin ground for inspection by Local Authority Building Control officer.
Depth may vary according to site conditions and site contours, but the top of concrete must be minimum 450 mm. below the finished ground level. Strip foundations to be generally 650 mm. wide x 225 mm. min. deep to external cavity walls and 450 mm. x 225 mm. min. for 100 mm. load bearing internal walls or with minimum 150 mm. toe where wall thickness may vary.
Form all steps in level of foundations in vertical increments of 225 mm. to suit block coursing, and with min 300 mm horizontal overlaps.

Retaining wall for Terrace
The 225 mm facing brick wall is to be on minimum footings as described above.

Concrete
Concrete to be premixed C20P as described in tables 1 and 2 of BS EN 206:2013 + A1:2016 maximum size aggregate to be 20 mm. All concrete shall be distributed and placed in position as quickly as practicable by a method which precludes contamination, segregation or loss of materials, compaction shall be complete before the initial set commences. Partial set concrete shall not be reworked or used. All concreting shall be continuous to completion or to an approved construction joint.During the first seven days the concrete shall be protected by whatever means to prevent over rapid drying. Steps in the foundations are overlap by twice the height of the step or by 300 mm. whichever is the greater and should not be of greater height than the thickness of the foundation. In general steps should be in increments of 225 mm. to suit block coursing.
Tie new foundation horizontally to existing foundations, by inserting 3 no. 9 mm. twisted mild steel bars in a dovetail pattern into the face of the existing strip foundations and install new concrete foundations to fully surround steel connections, to form a horizontal tie between the two foundations, to prevent uneven settlement.

Building Regulations Only. Named products.
Where products are named in the specification the developer can substitute similar products provided the specification of the products meets or exceeds the selected product specification.

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	FOUNDATION PLAN SUB STRUCTURE AND DRAINS		Scale: Date: DWG No.	1/50 @ A3 JAN 2024 19/0397/03	REV Date

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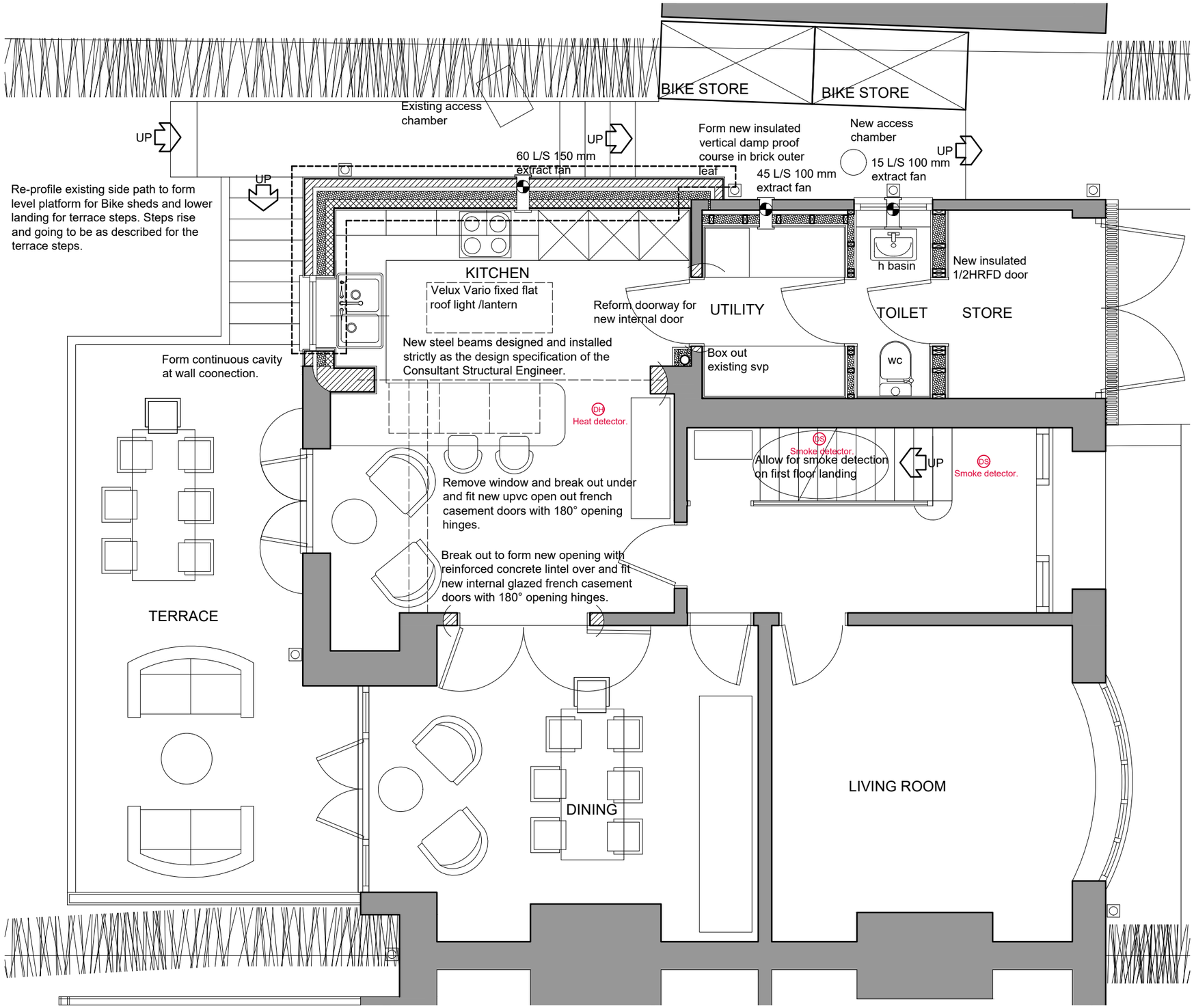

Cavity wall above dpc, U Value 0.17 W/M²K
350 mm. thick cavity walls consisting of rendered 100 mm thick dense concrete block external leaf 50 mm. clear cavity with 100 mm Kingspan Kooltherm K108 insulation or similar and 100 mm. thick Celcon Standard Insulation high strength 7.3 N/mm² block inner leaf. Render to be smooth self-coloured to appear similar to existing render. All walls are to be built in a manner to ensure the building would pass a pressure test to achieve 5.5 M³ / (h.M²) at 50PA or better. Walls are to be dry lined internally with minimum 15 mm. high density humidity resistant plasterboard on dabs or patent glue spot fixing. Fix insulated cavity closers (150 mm Kingspan Kooltherm or similar) at all jambs and cills to doors and windows and fix tray under cills and lintels to heads of openings. Insulate internal returns to window and door jambs with minimum 27.5 mm combination 20 mm insulation and 12.5 mm plaster and 3 mm plaster skim. Cavity wall ties to be Ancon ST1 Type 1 Tie to PD 6697 (Masonry Heavy Duty) with ferrules to support insulation or similar specifically designed for 150 mm to 175 mm cavities at 750 mm. horizontal centres and 450m vertical centres, offset 375 mm. horizontally to form a diamond pattern or as otherwise recommended by the wall insulation manufacturer. Where expansion joints are required (10 to 12 metre centres in blockwork) Use compressible brick joint roll, Fillcrete or similar and Ancon 225 mm PPS movement joint slip ties with debonding sleeves, or similar, and weather seal with Sika Waterbar® or similar. Fix additional wall ties every course at all corners expansion joints and jambs. Seal heads of cavities with inert fire-proof material 6mm thick Masonite or similar bedded in mortar and fixed between toes of spars. Fix Catnic Cougar or IG type stainless steel or galvanised lintels or similar designed for 150 mm. cavities. Lintels to have insulated voids and integral cavity trays and minimum bearing of 150 mm. Fix additional bitumen or pvc trays in severe weather areas.
Fix perpend joint weep holes in outer leaf at 600 mm. centres above all cavity trays. And over concrete lintels in outer leaf. Lintel schedule to be supplied to Building Control by the selected manufacturer 21 days prior to installation.

Existing external parent wall becoming internal wall.
Strip off any external render in area of extension abutment and dry line parent wall with 12.5 mm plasterboards and 3 mm skim on patent adhesive fixing.Form vertical insulated dpc to outer leaf of parent cavity wall at abutment with new extension cavity walls.

Internal wall alterations
Form new openings in internal walls with steel beams over or over new or re-positioned doors with150 mm x 100 mm reinforced concrete lintels over. Reinforced concrete lintels to be manufactured in accordance with BS5977 and designed to BS8110 1997. **All steel beams to be installed strictly as designed by the Consultant Structural Engineer.**

Non-Structural stud partitions:
Fix new stud partitions to layout shown. Partitions to be 69 mm x 47 mm. timber studs at 400 mm. centres built off 100 mm x 75 mm. sole plates with solid bracing at maximum 900 mm. vertical centres. Fix 10kg/m² 15 mm thick high density humidity resistant plasterboard and skim both sides. Fully insulate between studs with Rockwool insulation to reduce the passage of airborne sound. Bolt vertical studs to adjacent walls to provide lateral restraint to walls and studs to form rigid grid.
Structural stud partitions:
Lateral support to cavity walls.
Fix stud partitions to layout shown. Partitions to be 1 PAR Canadian rationalised 140 mm x 47 mm. timber studs at 400 mm. centres built off 140 mm x 75 mm. sole plates with solid bracing at maximum 900 mm. vertical centres. Fix minimum one layer of 11 mm OSB Boards glued and screwed to both sides of studs. Fix 10kg/m² 15 mm thick plasterboard and skim both sides. Fully insulate between studs with Rockwool sound and thermal insulation to reduce the passage of airborne sound. Bolt vertical studs to adjacent walls to provide lateral restraint to walls and studs to form rigid grid. Where partitions form a buttress to the garage walls any specification from the Consultant Structural Engineer is to supersede the general performance specification.

Building Regulations Only. Named products.
Where products are named in the specification the developer can substitute similar products provided the specification of the products meets or exceeds the selected product specification.

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	FLOOR PLAN GENERAL ARRANGEMENT		Scale: Date: DWG No.	1/50 @ A3 JAN 2024 19/0397/04	REV Date

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PROPOSED FRONT ELEVATION

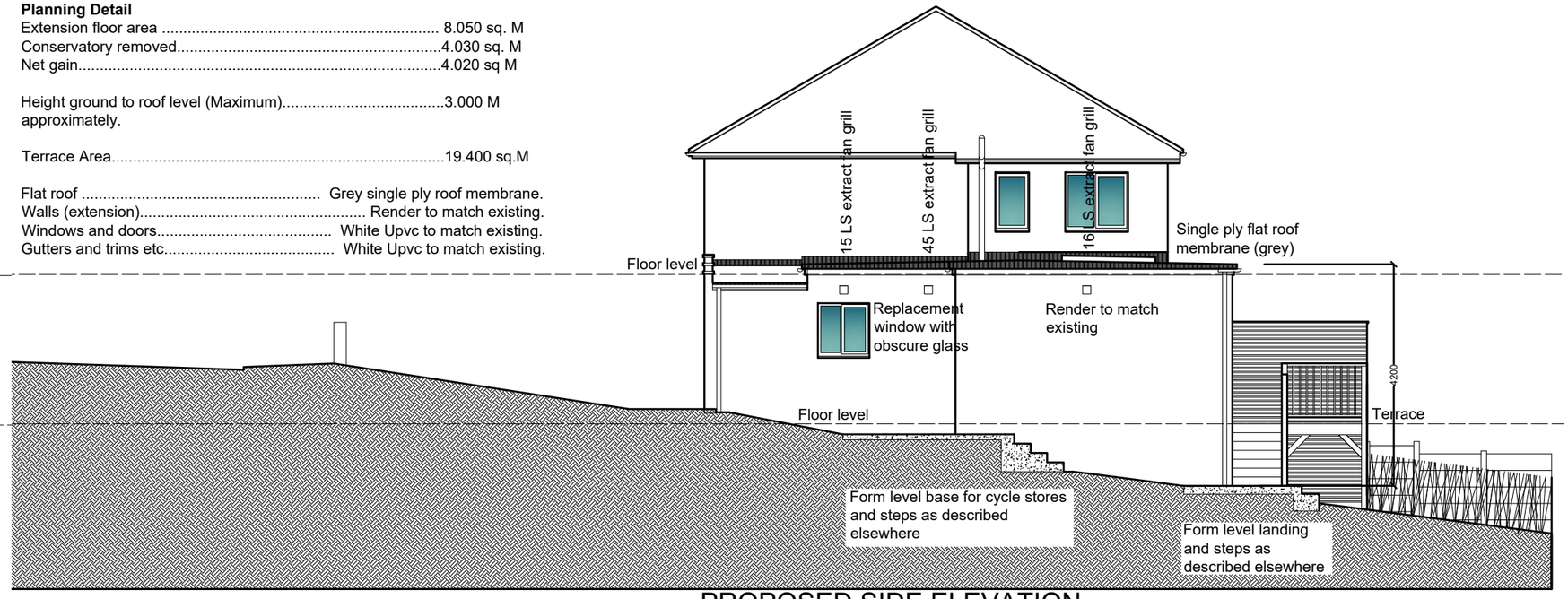
Planning Detail

Extension floor area ..... 8.050 sq. M
Conservatory removed.....4.030 sq. M
Net gain.....4.020 sq M

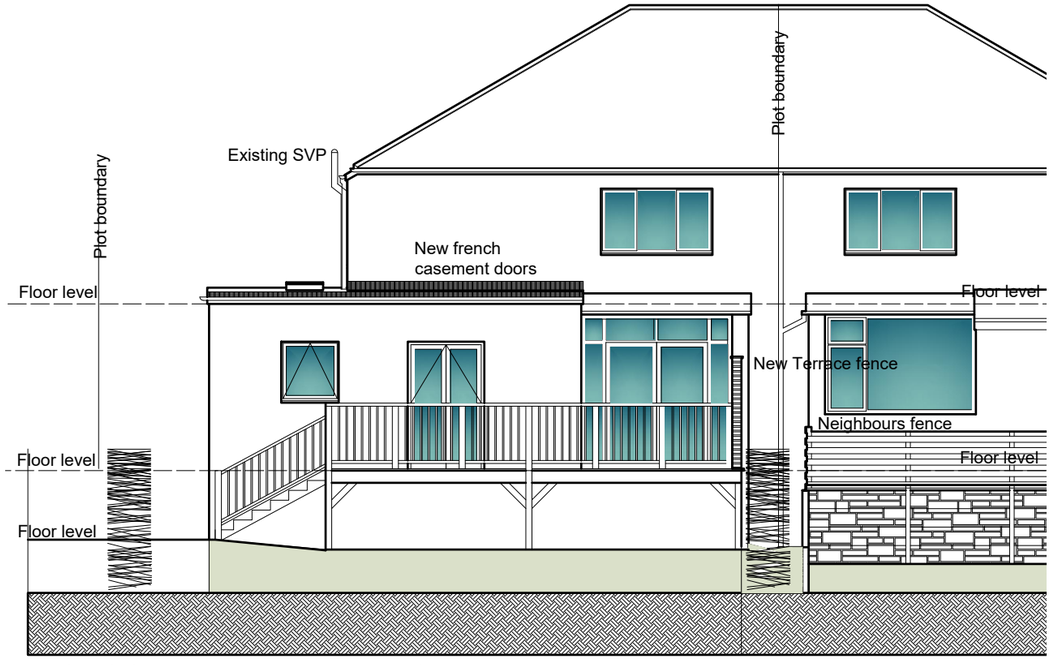
Height ground to roof level (Maximum).....3.000 M approximately.

Terrace Area.....19.400 sq.M

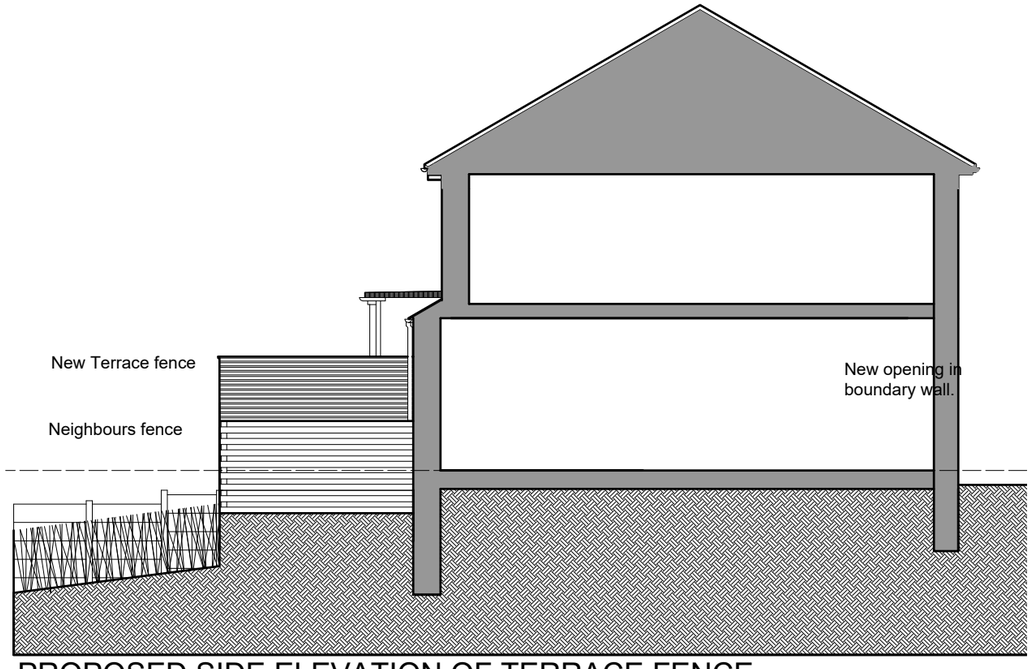
Flat roof ..... Grey single ply roof membrane.
Walls (extension)..... Render to match existing.
Windows and doors..... White Upvc to match existing.
Gutters and trims etc..... White Upvc to match existing.



PROPOSED SIDE ELEVATION



PROPOSED REAR ELEVATION



PROPOSED SIDE ELEVATION OF TERRACE FENCE

Windows and doors

All new windows and doors are to be upvc framed double glazed to match existing. Fit safety glass to all new windows within 800 mm. of floor level and doors and side panels to comply with Building Regulations. All windows are to be suitable energy saving glazing to achieve the stated U value requirement. For instance,16 mm. 4-8-4 double glazed with Pilkington "K" glass double glazing units and gas filled to give a minimum overall U value for the window and frame of 1.1 Wm²K. Fit all new windows with draught proof seals to all opening casements and seal around heads jambs and cills with air tight mastic sealant. All sashes are to be draught sealed and all frames fully sealed to structure with mastic joints to prevent heat loss directly to the external air. Fit windows with trickle ventilation at a ratio of 500 sq mm. of vent per metre of floor space throughout habitable rooms.

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	PROPOSED ELEVATIONS	Scale: Date: DWG No.	1/00 @ A3 JAN 2024 19/0397/05	REV Date

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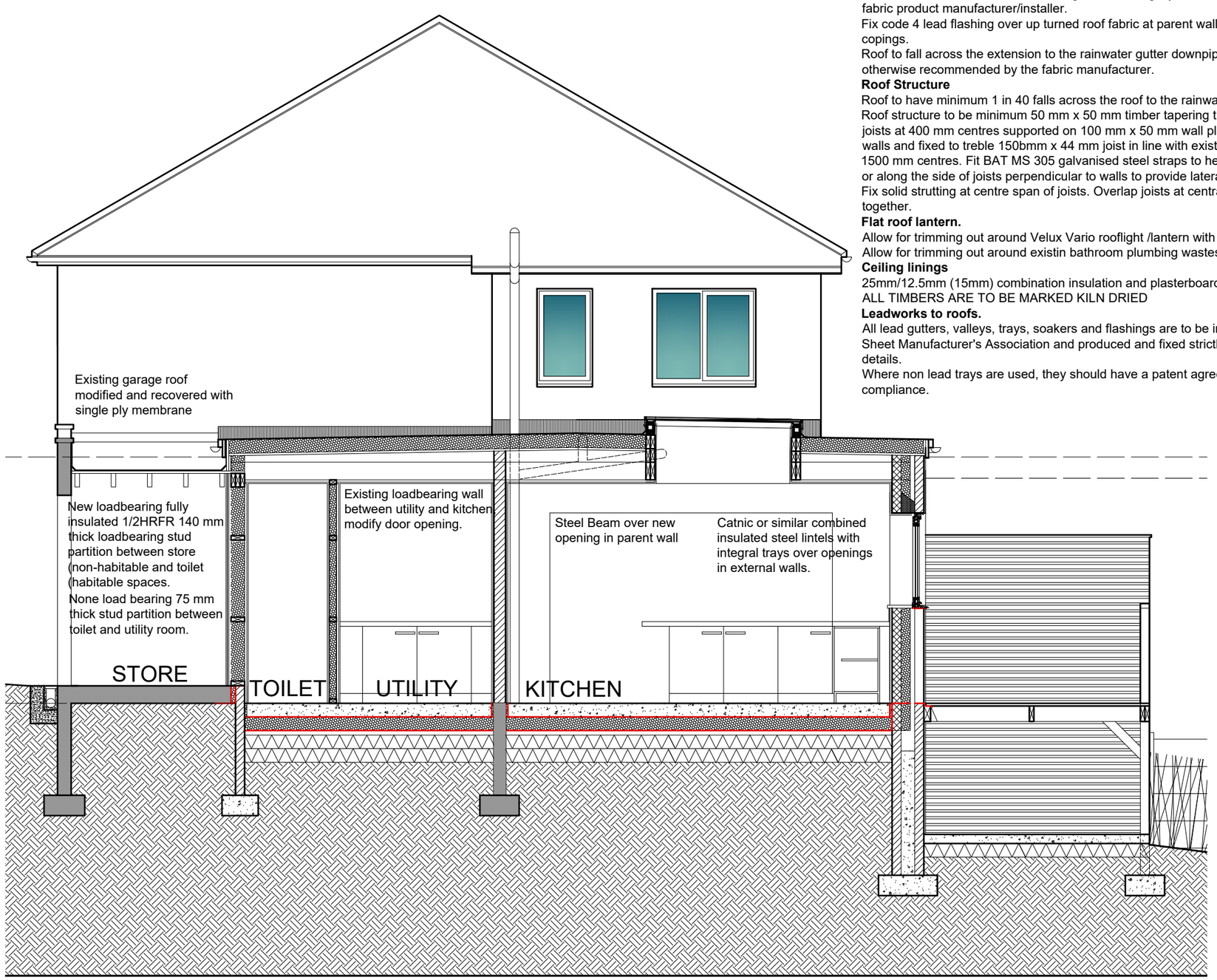

New Roof Structures

Roof Construction Fabric.

The roof type will be a warm roof with insulation over the roof decking.
Single ply fibre backed roofing membrane, Sanafil or similar, fixed by a manufacturer recommended and approved installer on 140 mm Celotex XR400 or similar adhered to 500 gauge vapour barrier adhered to 25 mm thick external quality plywood roof decking.
All roof fabric details fixtures and fittings roof outlet gully etc. are to be strictly as recommended and detailed by the roof fabric product manufacturer/installer.
Fix code 4 lead flashing over up turned roof fabric at parent wall abutments to form weather sealed abutments and copings.
Roof to fall across the extension to the rainwater gutter downpipe and yard gully at minimum gradient of 1in 40 fall or as otherwise recommended by the fabric manufacturer.

Roof Structure

Roof to have minimum 1 in 40 falls across the roof to the rainwater gutter.
Roof structure to be minimum 50 mm x 50 mm timber tapering timber firrings on 195 mm x 44 mm C16 timber flat roof joists at 400 mm centres supported on 100 mm x 50 mm wall plate on mortar bed and fixed to head of inner leaf of cavity walls and fixed to treble 150bmm x 44 mm joist in line with existing flat roof profile. Fix wall plates with BAT Metal straps at 1500 mm centres. Fit BAT MS 305 galvanised steel straps to head of all new walls and across minimum 3 no. joist parallel or along the side of joists perpendicular to walls to provide lateral supports to the structure.
Fix solid strutting at centre span of joists. Overlap joists at central load bearing wall support and securely fix joist ends together.

Flat roof lantern.

Allow for trimming out around Velux Vario rooflight /lantern with double joists or as otherwise recommended by the CSE
Allow for trimming out around existin bathroom plumbing wastes.

Ceiling linings

25mm/12.5mm (15mm) combination insulation and plasterboard and skim ceiling with 3 mm plaster skim finish.
ALL TIMBERS ARE TO BE MARKED KILN DRIED

Leadworks to roofs.

All lead gutters, valleys, trays, soakers and flashings are to be in the correct code thickness as recommended by the Lead Sheet Manufacturer's Association and produced and fixed strictly in accordance with their published recommended details.
Where non lead trays are used, they should have a patent agreement certificate confirming Building Regulations compliance.

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	PROPOSED SECTIONAL ELEVATION		Scale: Date: DWG No.	1/50 @ A3 JAN 2024 19/0397/06	REV Date

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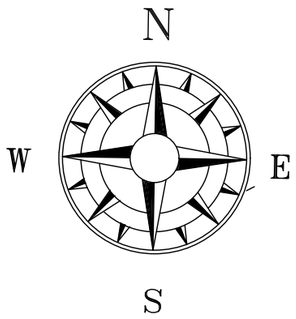
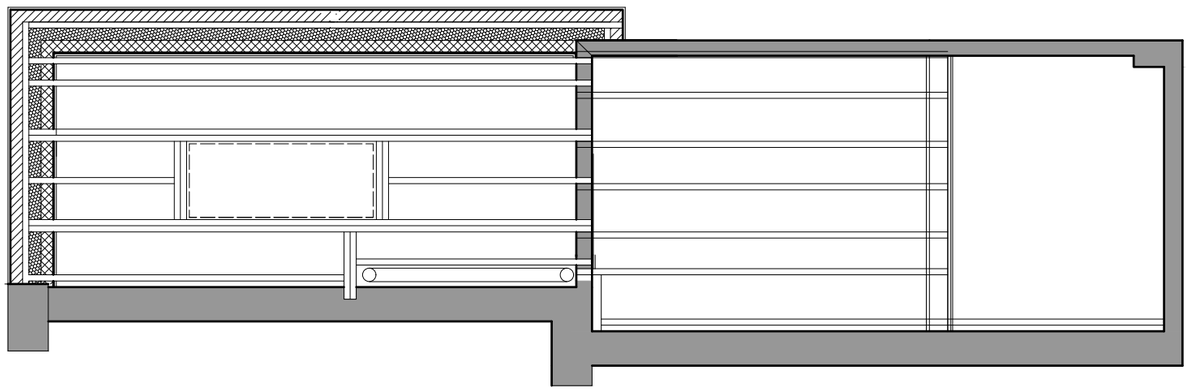
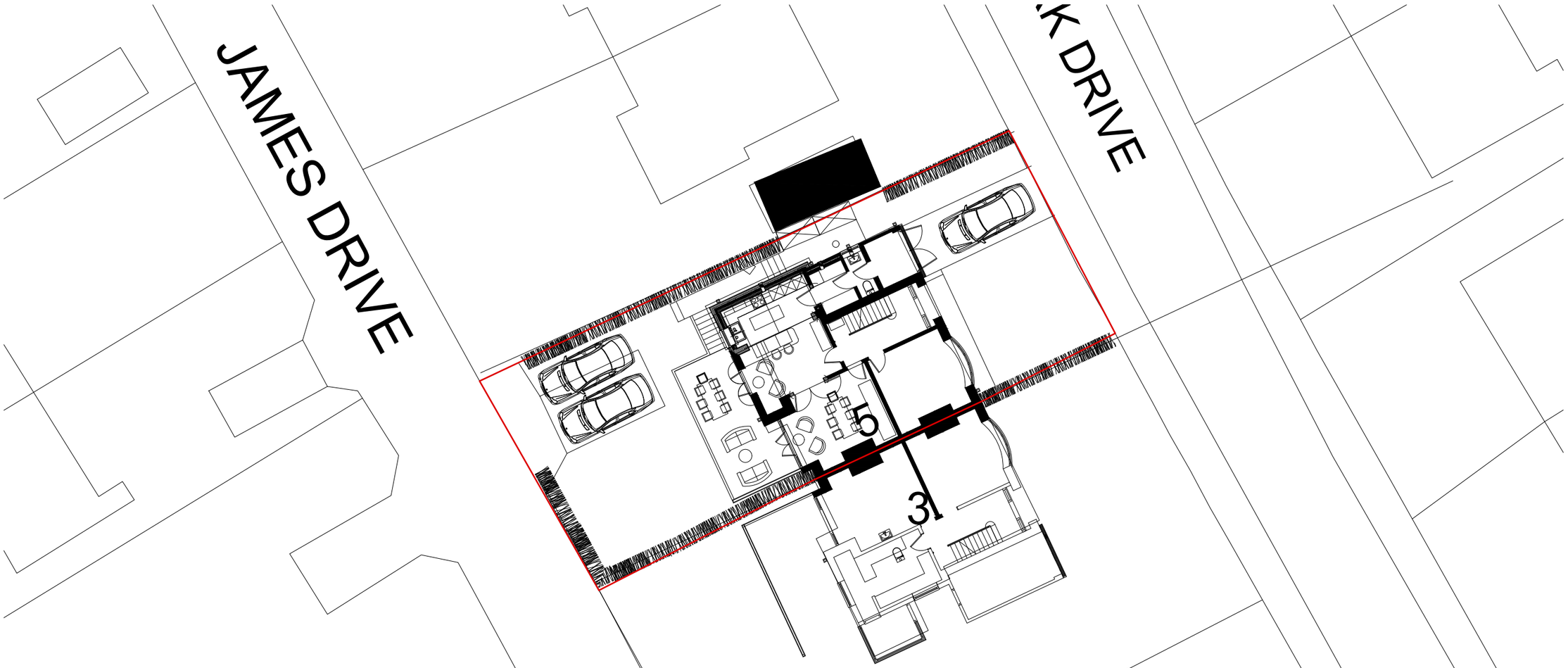




PROPOSED ROOF JOIST LAYOUT



PROPOSED BLOCK PLAN

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

5 PARK DRIVE WHITEHAVEN CUMBRIA CA28 7RT FOR MR AND MRS JAMES BERTRAM	BLOCK PLAN		Scale: Date: DWG No.	1/200 @ A3 JAN 2024 19/0397/07	REV Date

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