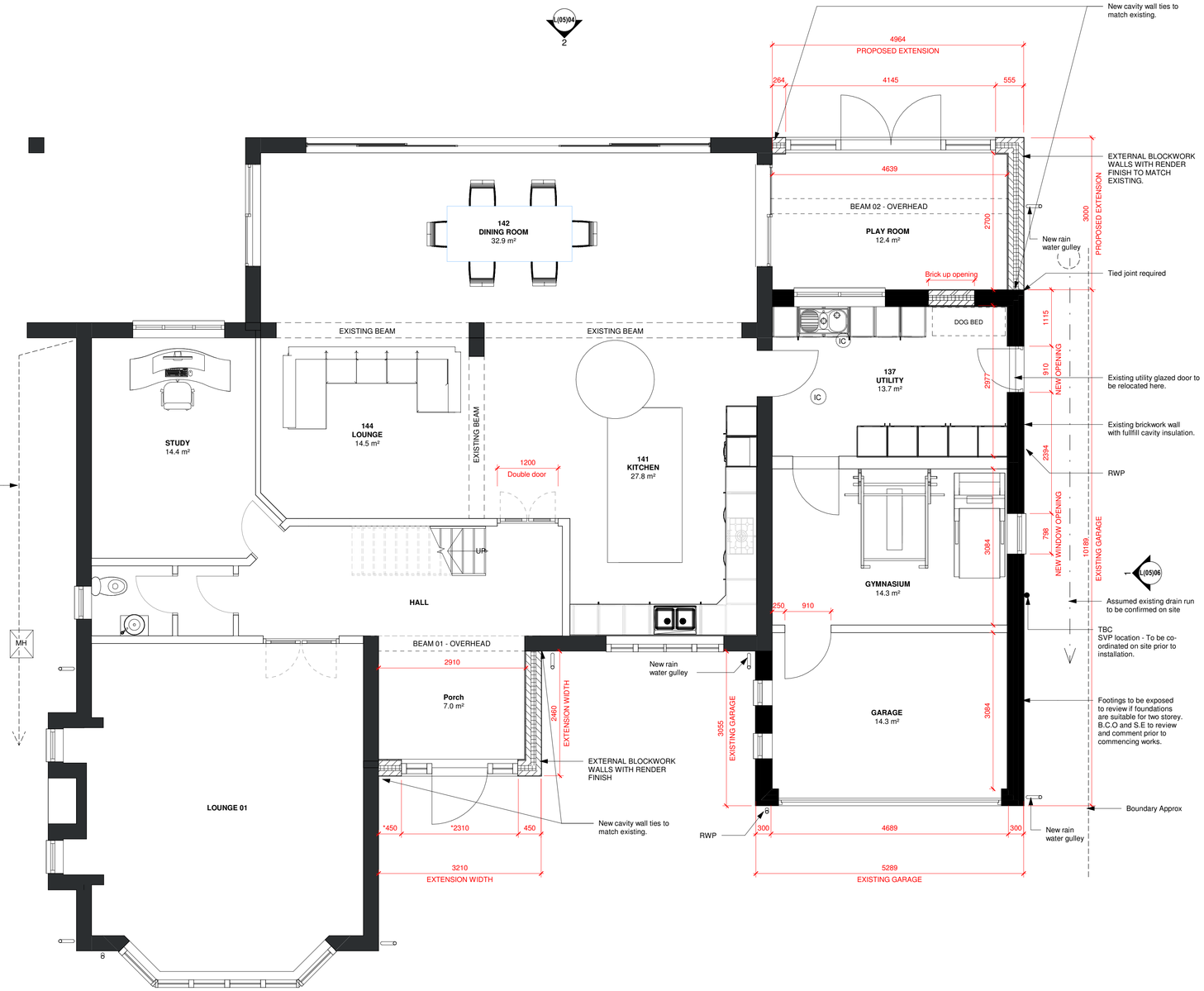

1 Level 00 - Proposed Plan

Scale: 1 : 50

1
L(05)04

Existing Foundations
Garage and utility footings to be exposed and inspected on site prior to any commencements of works to ensure foundations are to adequate depth to take on the new imposed loads. Structural engineers and building control office to review on site.

FOUNDATIONS :
Foundations are to be designed with no man made fill or rubble. Foundation mix to be C20 grade. Aggregates to
comply with BS882. Foundations to be excavated to a minimum depth of 1000mm. Ground strata to be inspected and confirmed as suitable by building control officer prior to concrete pour. Concrete depth to be a minimum of 200mm and to be 150mm wider than wall on both sides. Concrete to be fully tamped to remove air content and floated to a level finish.

GROUND FLOOR SLABS :
Insulated floor slabs to achieve a U-Value of 0.13w/m²K. Ground excavated and cleared of all vegetation and organic material. 150mm minimum compacted limestone hardcore sub-base with 25mm sand blinding covered with 1200g visqueen damp proof membrane. Damp proof membrane to be lapped by minimum 150mm at joins and taken up to and overlapped with damp proof course. 150mm minimum concrete base of C20 grade. Aggregates to comply with BS882. 100mm PIR insulation board laid over concrete. Finished floor slab to be no lower than damp proof course level. Finishes to solid ground floor to be either power floated smooth concrete, or minimum 75mm thick sand and cement screed. For solid floor slabs abutting to suspended timber floors 40mm dia. pvc pipes are to be installed in floor slab from new air bricks to existing air bricks to provide cross flow ventilation to existing floors.

EXTERNAL MASONRY WALLS :
External walls designed to achieve a minimum U-Value of 0.18W/m²K. Below damp proof course level 100mm dense concrete block and 100mm wide engineering brick to be used. Damp proof course level to be a minimum of 150mm above external ground level. External walls to be constructed from 102.5mm face brick to match existing. Brickwork interface with existing walls to be formed by stainless steel anchor ties. Existing cavity walls to be cut to form continuous cavity with new brickwork. Cavity trays to be installed over all wall interruptions including ducts, vents, etc... Cavity trays shall be stepped up a minimum of 150mm to inner leaf to provide suitable drainage fall. Cavity to be 100mm wide with full fill Dritherm insulation or similar approved. Insulation to be inserted on to top of wall ties and bent around corners. Insulation to be taken up to top of brickwork in all situations. Inner leaf to be constructed from 100mm Thermalite Arcrete Hi-Strength 10 block (or equivalent). Cavity walls to be restrained by approved wall ties complying with BS5626 : Pt 3 : 1985 and spaced at 6 courses vertically and 750mm horizontally. Additional wall ties are to be installed at all wall openings for stability. Lintels to have a minimum of 200mm end bearing. Expansion joints to be provided at 6m crs for brickwork / 8m crs for blockwork.

EXTERNAL BLOCKWORK WALLS :
External walls designed to achieve a minimum U-Value of 0.18W/m²K. Below damp proof course level 100mm dense concrete block and 100mm wide engineering brick to be used. Damp proof course level to be a minimum of 150mm above external ground level. External walls to be constructed from 100mm dense block with silicone render finish. Brickwork interface with existing walls to be formed by stainless steel anchor ties. Cavity trays to be installed over all wall interruptions including ducts, vents, etc... Cavity trays shall be stepped up a minimum of 150mm to inner leaf to provide suitable drainage fall. Cavity to be 100mm wide with full fill Dritherm insulation or similar approved. Insulation to be inserted on to top of wall ties and bent around corners. Insulation to be taken up to top of brickwork in all situations. Inner leaf to be constructed from 100mm Thermalite Arcrete Hi-Strength 10 block (or equivalent). Cavity walls to be restrained by approved wall ties complying with BS5626 : Pt 3 : 1985 and spaced at 6 courses vertically and 750mm horizontally. Additional wall ties are to be installed at all wall openings for stability. Lintels to have a minimum of 200mm end bearing. Expansion joints to be provided at 6m crs for brickwork / 8m crs for blockwork.

FLAT ROOF :
Flat roof membranes are to be epdm single ply membranes providing a waterproof seal to the finished roof deck. Membrane to be lapped up by 150mm at vertical abutments and fully sealed to vertical member to prevent water penetration. Soffit ventilation (25,000mm2) to be installed to projecting flat roof soffits.
Flat roof joists to be counter battened to provide cross flow ventilation. RAV-FL abutment ventilators to be provided to flat roof / vertical abutments to allow for cross flow ventilation.

PITCHED ROOF FINISHES :
All pitched roof work to be carried out in accordance with BS5534 : Part 1 : 1990.
Tiles to be secured to battens in accordance with manufacturer's instruction. All verge overhangs to be equal (minimum 50mm). Verge tiles to be finished with dry verge clip system to match tile colour.
Pitch roofs to match existing, approx 30 degrees. Marley Modern Interlocking Concrete Roof Tile Smooth Grey (or similar) on preservative treated softwood battens on Tyvek breathable membrane with minimum laps of 150mm. Breathable vapour barrier to be laid across roof rafters parallel to eaves and ridge and overlapped by a minimum of 150mm at all edges. Membrane to be fixed with galvanised clout head nails. At roof verges continue membrane across wall and below undercloak. Raft sizes TBC by structural engineer, C16 softwood members at 400mm centres and birdsmouthed over wallplates at a miniumum of one third of the rafter depth. Provide 100x50mm wall plates at eaves fixed to wall with 1000x30x5mm galvanised mild steel restraint straps at 2m centres, screw and fixed t blocks. Roof space to be insulated with 300mm thick Rockwool or similar approved to achieve 0.16w/m²K. Ceiling finish to be 12.5mm plasterboard and skim finish.

FLASHINGS, VALLEYS, BOX GUTTERS AND CAVITY TRAYS
All flashings and soakers are to be in a code 4 lead at all abutments. Cover flashings to bhe wedged at 300mm cenrtes using lead wedges and pointed in sand/cement mortar. Lenth of cover flashings are not to exceed 1800mm for each sheet with 150mm minimum overlap. Pre-formed soil pipe flashing unit to be used where soil vent pipe penetrates roof finish. All valleys are to be code 5 laid on suitable preservative treated lay boards. Length of lead valley sheets are not to exceed 1500mm with 150mm minimum overlap. Box gutter to be Code 5 lead, laid to 1:80 falls, with 55mm drips provided at every 2000mm in length. Girth of tapered gutter to be no less than 150mm. Proprietry cavity trays are to be provided at all roof abutments, installed above cover flashings, with weephole at 900mm maximum centres.

INTERNAL PARITIONS :
Timber framed partitions 75x50 studs at maximum 600mm centres, faced to both sides with 12.5mm plasterboard and skim. All partitions between bathrooms , not containing doors to be internal wall type B to Building regulations, Approved Document E to provide 40 RwDB sound reduction.

INTERNAL WALL FINISHES :
All walls and ceilings to be finished with 12.5mm plasterboard and smooth skim. Plasterboard to be secured to masonry with dry wall adhesive dabs.
Plasterboards to Bathrooms, Utility Rooms, Kitchens etc.. to be moisture resistant grade.
Plasterboards fixed to timber members (ceilings, studwork, etc...) to be secured with 50mm dry wall screws at 200mm centres. All plasterboard joints to be staggered and have joint tape applied. Plasterboards to all steel beams and columns to be two layers thick, smooth skim finished and achieve a minimum of ½ hour fire resistance.

WATERPROOFING :
Approved flashings, soakers and aprons to be applied to external abutments to prevent water entering the building. Lead flashings to have a minimum of 150mm vertical upstand. Guttering and downpipes to be PVC. Gutters to be 'deep flow' type and all downpipes to discharge to approved surface water drain gulley in accordance with building control officers recommendation.

DRAINAGE :
Drainage system to be verified on site post excavation in conjunction with B.C.O. prior to new connections being made. For separate systems foul drainage only to be connected to existing foul drainage.
All new drains to be hepsleeve or similar flexible P.V.C. pipe with 150mm pea gravel beds and surround laid in accordance with manufacturer's instructions. 100mm diameter drains to be laid to a minimum fall of 1:40, 150mm drains to be laid to a minimum fall of 1:100. All gullies to have rodding access and have trap system to prevent release of drainage gas. Soil vent pipes to be a maximum of 6m away from W.C's and discharge to atmosphere at least 900mm above highest opening window or 3m away horizontally. Cages to prevent vermin / bird access to be fixed to soil vent pipe heads.
Where drains pass through sub-structure walls pre-stressed concrete lintels to span over drainage pipe and allow a minimum of 50mm clearance to the top of pipe. Inspection chambers and rodding points to be provided at all pipework junctions and at the head of drain runs.

SANITARY PIPEWORK :
All new internal sanitary pipework to be 'push fit' type. Bottle traps to be provided to wash hand basins, bath, showers, and sink outlets. Pipework to be installed to provide a minimum of 1:40 fall to external gullies / drainage outlet points. All new pipework to be tested and approved by building control officer prior to handover. Soil and vent pipes are to be 100mm diameter UPVC, fitted with a suitable cage and terminated at a minimum of 900mm above any ventilation opening into the building within 3.0 metres. All appliances are to be fitted with 40mm dia. 75mm deep seal traps.

ELECTRICAL WORK :
All electrical work to comply in all aspects with current NIC / EIC regulations and be installed and commissioned by an approved Part P of the building regulations qualified contractor.
Power outlets to be no lower than 450mm from finished floor level. Wall located light switches to be no higher than 1200mm above finished floor level.

TIMBER JOISTS :
All new timber joists (ceilings, roofs, etc...) to be from timber grade C24. Joists to be hung from galvanised carbon steel hangers to BS1678 : Part 1.
Provide mid span strutting of the same section size as the joist. Service holes (cables, pipes, etc...) to be sited in the centre of the joist and to be no larger than 1/5 joist depth.

JOINERY ITEMS :
All doors, door handles, door hinges, door architraves, skirting boards, stairs parts, picture rails, dado rails and window boards are to match that of the existing property unless altered at the specific request of the client.

CAVITY CLOSERS :
Approved cavity closers (Thermabate or similar) to be provided at all door and window openings to prevent damp ingress and thermal bridging.

WINDOWS AND DOORS :
All windows and doors to be composed of low emissivity glazed units and to achieve a minimum u-value of 1.4w/m²K. Toughened safety glass in accordance with BS6206 to be provided to all areas below 1500mm above finished floor level. Fire escape opening window to have a cill level between 800mm-1100mm above finished internal floor level. Opening to be unobstructed to an area of 0.33m2 with a minimum width/height of 450mm.
Windows to be double glazed or similar with trickle ventilation. (min 8000mm² for habitable rooms, 8000mm² for other with extractor fan).Window vents & doors to be min 1/20th of room floor area.

VENTILATION TO HABITABLE ROOMS :
Habitable rooms (kitchens, lounges, bedrooms, studies, etc...) to have opening windows with ventilation apertures of not less than 1/20 of the room floor area. In addition they shall be provided with controllable background ventilation of 8000mm² minimum and sited at least 1.75m above finished floor level.

MECHANICAL VENTILATION :
Kitchens to be provided with mechanical extract ventilation of 60 litre per second extract capacity

14.PLUMBING & DRAINAGE
Confirm bathroom, kitchen & w.c. layouts with client & agree pipework routes/ boxing
in. Whb to have 32mm dia deep seal bottle trap & waste pipe (up to 1700mm, 40mm dia for up to 3000mm). Sink to have 40mm dia deep seal tubular trap & waste pipe
(up to 3000mm, 50mm dia for up to 4000mm).For general standards & required falls, refer to BS EN 12056-2.
Drains: choice of bedding is dependent upon depth, size and strength of pipes. Refer to Building Regulations Part H. 2.41.
Drain trenches lower than the foundations must be in accordance with building regulations Part H, diagram 8 except for conditions A & B of Part H Clause 2.25.
Final details on site are to be agreed between the Building Inspector and the Contractor.

0m 2m 4m 6m 8m A1

VISUAL SCALE 1:100 @ A1

Notes

Figured dimensions are to be used in all case.
Dimensions should not be scaled from drawing
All existing dimensions should be checked on site before commencement of the work.
Any discrepancies in dimensions should be clarified with the Architect prior to commencement of the work.
No deviation from this drawing will be permitted without the prior written consent of the Architect.
This drawing is to be read in conjunction with all the relevant Mechanical and Electrical drawings.
This drawing is to be read in conjunction with the relevant Structural Engineer's drawings, structural calculations and recommendations.
This drawing is to be read in conjunction with the relevant Fire Safety Strategy drawings.

Client / contractor to ensure all agreements relating to 'the party wall etc... act 1996' are in place prior to commencement of works.

Health and Safety :

Falls from height:
Make sure ladders are in good condition, at a 1:4 angle and tied or footed. Prevent people and materials falling from roofs, gable ends, working platforms and open edges using guardrails, mid rails and
toe boards. Make sure fragile roof surfaces are covered, or secure working platforms with guard rails are used on or below the roof.

Collapse of excavations:
Shore excavations; cover or barrier excavations to prevent people or vehicles from falling in.

Collapse of structures:
Support structures (such as walls, beams, chimney breasts and roofs) with props; ensure props are installed by a competent person.

Exposure to building dusts:
Prevent dust by using wet cutting and vacuum extraction on tools; use a vacuum cleaner rather than sweeping; use a suitable, well-fitting mask.

Exposure to asbestos:
Do not start work if it is suspected that asbestos may be present until a demolition/refurbishment survey has been carried out.

Electricity:
Turn the electricity supply and other services off before drilling intowalls. Do not use excavators or power tools near suspected burieds services.

Protect members of the public, the client, and others:
Secure the site; net scaffolds and use rubbish chutes.

All structural steel to be calculated by client appointed structural engineer

Rev.	Revision description	Drawn	Checked	Date
P01	Issued for planning and building control approval	SJ	SJ	23.07.21

Tel 07858821060
e-mail: sjdesigns021@gmail.com
SJ Designs

Project
Issued for permitted development purposes
43 BARTON HEY DRIVE, Caldy, Wirral, CH481PZ

Title
Proposed Ground Floor Plan

LMA Project	Drawing number	Rev.
0000	XXX-BCA-A-L(04)02	P01

C:\Users\ste.jones\OneDrive - Kier\Desktop\Private work\43 BARN HEY DRIVE - GEORGES\43 Barton Hey Drive - Proposed house option 1.rvt