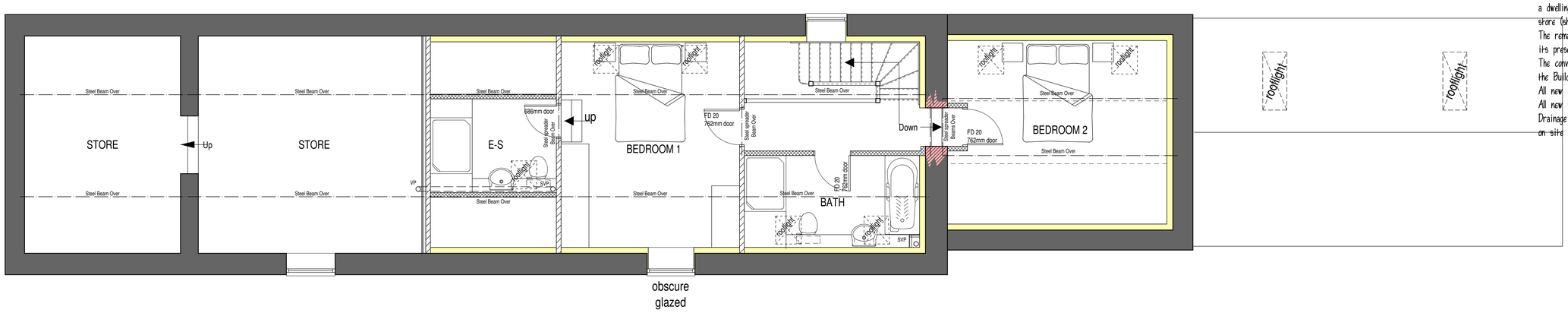
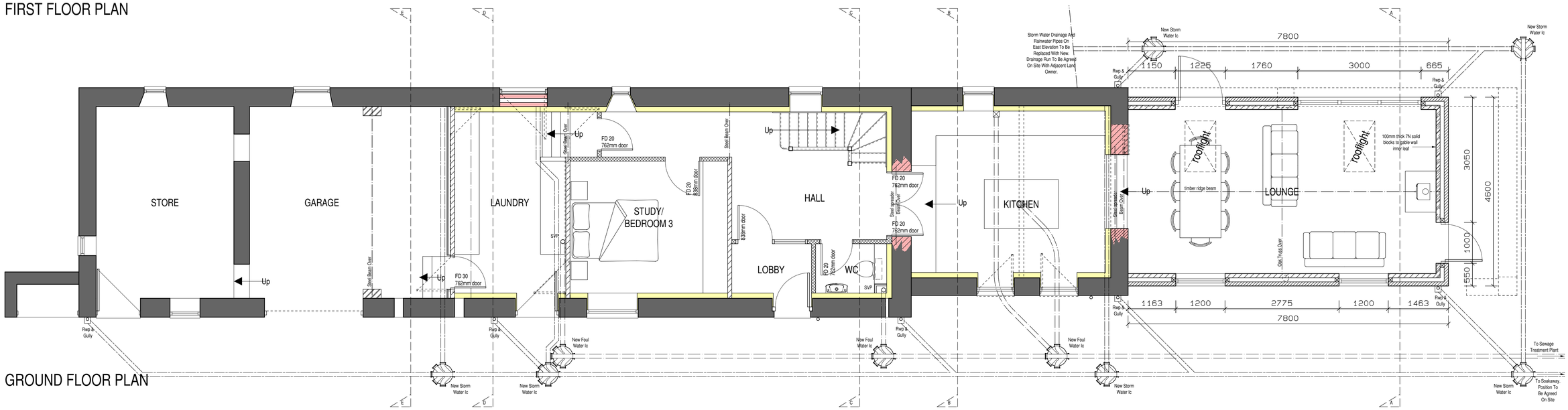
PROPOSAL SCHEME
It is proposed to convert part of the existing barn into a dwelling as shown here and replace the open fronted store (shown dotted) with a modest extension.
The remaining section of the existing barn will remain in its present condition.
The conversion will be undertaken in full compliance with the Building Regulations.
All new external materials shall match the existing building.
All new windows and doors shall be painted timber.
Drainage from the proposal is to connect into the extg on site system and soakaways.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

CAVITY WALLS (Clear Cavity)
The construction noted below will achieve a U-value of 0.25W/m²K.
External skin of 100mm bed with of natural local stone laid in a style / bond to match the existing in approved mortar.
100mm cavity having wall ties to BS EN 1996 (Eurocode 6) and DD140-2 Type 4, 225mm long at minimum 5 N°/m², i.e. 450mm vertical + 750mm horizontal centres, increased around openings to 225mm vertical centres. If cavity is over 100mm ties will need to be upgraded.
Celotex CW4000 50mm thick PIR rigid insulation, fitted with special clips against inner leaf of 100mm blockwork as below-
3.5N block with a Lambda value of 0.15 W/mK or better for walls upto 2.7m unrestrained height (measured u/s floor to u/s floor).
Where height exceeds 2.7m use 7N blocks with a Lambda value of 0.19 W/mK or better.
Close cavity at eaves with Masterboard or similar product.
Use proprietary insulated cavity closers around openings.
Provide Hyload or similar approved dpc to BS 6515 to both skins at Ground Floor Level. Ensure finished ground is a minimum 150mm below dpc.
Use two skins of 7N solid blockwork below ground and fill cavity with fine concrete to within 200mm of dpc.
Dry line internally using 12.5mm plasterboard on dabs with 3mm skim.
NOTE: Ensure wall insulation is taken up at eaves to meet with the roof insulation, and to full height on gables.

PLASTER WORK
For plaster/plasterboard thickness and type, refer to the descriptions in each element of construction i.e. walls, roof, floors etc.
Dry lined walls, Plasterboard faced partitions and ceilings must have a suitable mastic sealant applied to perimeter junctions to prevent the passage of air and sound i.e. between floors and walls; walls and ceilings etc.

INTERNAL WALLS (between garage and dwelling)
Construction is to achieve a U-value of 0.28W/m²K or better. 100mm thick 3.5N blockwork well bonded to external walls.
To one side Fix Celotex GA4000 50mm thick PIR rigid insulation boards with a maximum Lambda value of 0.022 W/mK, and seal all joints with aluminium self adhesive tape and apply a mastic seal along the top and bottom of the insulation.
Fix 50 x 25mm softwood tanalised battens horizontally at the top and bottom of the wall. Add further vertical and horizontal battens at appropriate spacings to provide adequate fixings for future cupboards etc. Overlay with 12.5mm plasterboard finished with 3mm skim coat.

INTERNAL WALLS
Unless otherwise described use 100mm thick 3.5N solid blocks for walls up to 2.7m unrestrained height (measured u/s floor to u/s floor). Where height exceeds 2.7m use 7N blocks.
Bond blocks well to external walls.
To Clients specification either - wet plaster in two coats, or dry line internally using 12.5mm plasterboard on dabs with 3mm skim.

LINTELS
'Catnic' (Tel 029 2033 7900).or similar approved manufacturer, insulated to cavity type, and selected to suit wall construction, span and loading.
All shall have minimum 150mm end bearings and be installed in accordance with manufacturer's instructions.
Provide min 2No weepholes at maximum 450mm intervals over all lintels in cavity wall construction.
Also provide suitable manufacturer's stop ends.
The Principal Contractor is responsible for contacting manufacturer for a lintel specification schedule and providing a copy of this to the Local Authority Building Control prior to work commencing on site.
Small internal openings without point loads can be spanned by reinforced pre-cast concrete lintels which must be minimum 100mm wide and 75mm deep and have a minimum cube strength of 50N/mm².
Where natural stone lintels are used externally an additional cavity tray must be provided over the lintel.

STEEL BEAMS ETC.
The Client is responsible for obtaining all calculations which shall include padstones, bearings, masonry supports etc.
Works on site shall reflect Structural Engineers design and specification, which shall take precedence over any suggestion shown on this drawing. Encase all exposed steelwork in 2 N° layers 12.5mm staggered jointed plasterboard plus 3mm skim to achieve minimum 30 minutes fire rating.

WALLS (connect new to old)
For connecting new walls to old where block bonding is inappropriate. Use stainless steel, vertical wall connector system (i.e. Catnic Stronghold) with sealant strips and additional vertical dpc. Install to manufacturer's specification.

DEMOLITION
Items to be demolished are indicated by short broken lines.
Prior to site removal, check above to determine if loadbearing, if found to be so, refer back to Designer / Client's Structural Engineers, for design of appropriate construction.
Carefully remove wall below and make good around as required.

SLENDER MASONRY PILLARS
Where slender pillars are proposed i.e. 665mm and below, bed reinforcement shall be incorporated as recommended by Building Inspector and manufacturer.

WIND POST
Provide metal wind posts to later detail and specification by Clients Structural Engineer.
Design to include base fixings, wall ties and head detail.
Full details to be forwarded to the Approved Building Inspector prior to work commencing on site.

WASTE (removal of)
Remove all refuse and rubble from the premises accumulated during the course of the works and transfer to tip including all charges. All fixtures and fittings and structures disturbed during the course of the works to be made good and left in working order.

OPENINGS (existing to be built up)
Existing openings that are indicated to be built up shall be in a construction method to match the surrounding wall.
When installing masonry work check below floor to ensure a suitable bearing is achieved and tie work to the existing.
Make good around as required,
Ensure suitable insulation and dpc is incorporated where necessary.

NEW OPENINGS
Form new openings as required and as indicated on the drawing. Firstly check wall for type of construction.
If loadbearing install Catnic (type to suit wall) or similar approved lintel over, agree on site with Local Authority Building Inspector. Carefully remove brickwork below and make good around as required.

PARTITION (timber framed to achieve 40Rw.dB or better)
Minimum 63mm x 38mm non-loadbearing timber studs at 600mm centres horizontal & approximately 900mm vertical centres. Secure on all edges.
Infill tightly with 65mm Isover APR 1200 in the cavity.
Screw fix 12.5mm Gypsum wallboard to each side and finish with 3mm skim.
In intermittently damp areas such as bath/shower rooms and laundries, use moisture resistant grade plasterboard.
Partitions are to be constructed to full storey height unless otherwise noted.

DAMP PROOF COURSE (electro osmosis)
To all solid ground floor walls install an approved electric damp course by specialist contractor whom upon completion will provide a 30 year insurance backed guarantee.
Wherever possible the existing ground levels are to be reduced to a level of 150mm below new dpc, however if this can't be achieved the walls shall be tanked as noted.

EXISTING EXTERNAL WALL (damp and waterproofing upgrade)
The existing external walls shall be checked by specialist damp proofing company who shall provide a report on the existing structure and the report must include a remediation scheme.
Due to the ground level been higher than floor level around the structure, structural waterproofing will be required.
The structural waterproofing system to be designed, installed & guaranteed (including insurance of that guaranteed) by a single company providing a single point of responsibility for the water-proofing.
Only approved installers supplying a 10 year insurance backed warranty to undertake the works.
System must be designed by a CSSW - Certified Surveyor in Structural Waterproofing qualification, and/or registered on the Property Care Association Register of Waterproofing Design Specialists would normally be acceptable, subject to appropiate design experience.

EXISTING EXTERNAL WALL (thermal upgrade)
The existing external walls shall be thermally upgraded to achieve a U-value of 0.30 W/m²K or better
British Gypsum's Gyplyner metal framed wall lining system (IWL) shall be installed fully in accordance with the manufacturers instructions.
IWL 48i50i stud system and infill inbetween the studs with Isover steel frame infill batts,
To the room side install 70mm thick Gyproc Thermaline Super thermal laminate with pre applied plasterboard.
3mm skim coat finish.
NOTE:- Use independent horizontal battens for heavy wall mounted components.

ENERGY PERFORMANCE CERTIFICATE
Upon completion of the works and within 7 days of the property been occupied by the Client a Energy Performance Certificate is to be provided by the Principle Contractor.
The Certificate is to be undertaken and issued by a suitably qualified Energy surveyor and a copy is to be handed over to the Local Authority Building Inspector.

CONSTRUCTION (design & management) REGULATIONS 2015
Under the Construction Design and Management Regulations 2015 (CDM), domestic clients have additional duties to supply information about the project and to ensure health and safety issues are considered during the design through the appointment of a Principal Designer. To help you comply, Sammons Architectural offer CDM services through our specialist construction safety partners, Moxon Associates. A fee is payable direct for these services. Please call for further details.

STRUCTURAL SURVEY
The existing structure shall be inspected by the Client's Structural Engineer to determine if the existing structure is suitable and capable of taking the new loadings from the proposal.
The engineer report is to include a specification of any remedial works required.
The structural engineer is to forward 3 copies of the report to this office for distribution to all necessary parties.

GENERAL NOTE 1.
All materials and workmanship to be in accordance with the current Building Regulations, BS8000 and all other relevant British Standards and Codes of Practice.
All materials must be installed in full accordance with manufacturers written instructions.

GENERAL NOTE 2.
If it is found on site that additional works are required then these are to be discussed and agreed between the Principle Contractor, Client and the L.A.B.I and confirmed in writing. Principle Contractor to advise Client in writing of any cost implications prior to undertaking the works.

IMPORTANT NOTE (technical compliance)
If the design, construction and / or materials are changed from the specification noted hereon, then it is possible that compliance with the Building Regulations and for any 'Architects Certificate' will not be met. Additional changes and revised calculations may then be required. The person(s) making the changes will be responsible for providing the technical support information where necessary.

scale bar @ 1:50

MRS J HEATH

PROPOSED BARN CONVERSION
IVY FARM,
BACK LANE,
HEATON,
RUGHTON SPENCER,
SK11 0SJ

WORKING DRAWING
SHEET 1

Date	Sheet	Scale
OCT 2017	A1	1:50
Drg No.	Rev.	Drawn
2015-2021-04	A	ASR

A - 24/05/2018 - TITLE SHEET AMENDED

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