GENERAL All materials, fittings and workmanship must be to current British Standards and where applicable BBA Agreement Certificates and used in accordance with all relevant Code of | practice for fire safety. External fire protection is not in this situation required by The Building Practice and manufacturers instructions. All components/products are to be fitted in a manner | Regulations, but it may help with / be a requirement of the building insurance. and location for which they are intended by the manufacturer. All work must be to the This may therefore be a client choice item and the client may wish to omit this as a cost saving. satisfaction of the Building Control Officer and Supervising agent.

**AIR TIGHTNESS** The construction will generally follow guidance in the 'Robust Details' to ensure continuity of insulation at roof/wall/floor junctions. Flexible sealant will be applied externally and internally between wall and window/door frames. AIR TEST Fully seal the barn and air test once windows fitted prior to plastering to achieve less than 5 m3/h/m2@50Pa.

**EXISTING BRICKWORK** Existing brickwork is to be repaired with all broken & spalled bricks replaced to match existing and repointed using matching lime mortar.

STRUCTURAL DESIGN Structural design is to be in accordance with structural engineers calculations and drawings and to Building Control approval.

FOUNDATIONS to Structural Engineers details taken down to loadbearing strata all to Structural engineers and Building Control approval.

Concrete lintels over drainage/duct positions where sleeved through walls.

**DAMP PROOFING TO STEELWORK** Bitumen steel paint finish to be appied to all steelwork below floor finish level for protection. Adequately seal the DPM around all steel posts and all other penetrations using Visqueen DPM tape.

FIRE STOPPING Junctions and perimeters of fire resistant constructions to be fire stopped in accordance with requirements of Building Regulations Part B Fire safety, to approval of Building Inspector using e.g. incombustible mineral wool quilt or intumescent

#### CAVITY FIRE CLOSING: ANY CAVITIES / VOIDS OF 20m OR MORE IN LENGTH ARE REQUIRED TO INCLUDE A SUITABLE FIRE CAVITY BARRIER.

All cavities within the floors, walls and roof are to be

and pipework boxings, roof voids.

a). Closed around their perimeters, at junctions with each other, and around all openings within b) Be subdivided so that the maximum length of a cavity in any direction is no greater than 20m. This is to include cavities behind external and internal cladding, service cavities and ducts, SVPs

DPCS & CAVITY TRAYS High Performance DPC e.g. Visqueen Zedex (compatible with Damp Proof membrane) and cavity travs.

DPCs to be inserted 150mm min. above external ground level to all new external walls. To be fully lapped with DPM (see external wall section for detail) - taped and sealed in

accordance with manufacturers instructions and proprietary tape products.

Cavity trays over all openings and over periscopic air bricks.

Abutment of new walls or door/ window frame with existing wall: Vertical strip of DPC to be cut into existing wall and folded back under frame or new wall under wall starter. Sealant to external joint.

**WEEPHOLES** Rytweep proprietary weepholes at 450mm centres over all openings in cavity walls (at least 2 per opening) and over all cavity trays.

**THERMAL CAVITY CLOSERS** Thermabate or similar Part L approved themal cavity closers at perimeters of all new openings in cavity walls (including plinth cavity walls).

**TIMBER TREATMENT** MC to include for specialist to survey the existing building timbers for insect infestation, fungi and damp and carry out treatment as required.

BOXING IN OF SOIL / WASTE PIPES All soil stacks & waste pipes are to be boxed in using 2 layers of 15mm Soundbloc plasterboard and all spaces within boxings infilled fully with all gaps fire stopped in accordance with requirements of Building Regulations Part B Fire safety, Isowool acoustic quilt insulation. Where space allows, include 50mm of insulation around pipes. Boxings containing pipe with AAV (air admittance valve) require ventilated air gap to enable valve sealant. to operate, in accordance with manufacturers instructions. Boxings without AAV: Silcone seal gaps to maintain sound separation.

**LEADWORK** All leadwork to be strictly in accordance with current Lead Sheet Association details (www.leadsheet.co.uk). Apply patination oil in all locations where water run off from lead is likley to stain surface below (refer to LSA for guidance on materials requiring protection). Code 4 lead flashings and soakers. Flashings to extend up wall face 150mm min and be dressed into brickwork joint (or be secured to timber studs) strictly in accordance with current LSA recommendations. Bottom of boarding to overlap top of flashing. All existing leadwork is to be inspected and repaired / replaced as appropriate to its condition.

NEW INSULATED CONCRETE GROUND FLOOR THROUGHOUT

# - UVALUE 0.12 W/m2K

Contractor is to set out level of floor to suit thickness of floor finish. Floor finishes to clients requirements suitable for underfloor heating. 75mm thick sand cement screed with fibre reinforcement with Uponor underfloor heating pipes

installed in accordance with manufacturers instructions Movement joints at all door thresholds, along line of floor differentiation/abutment and between underfloor zones. Schluter Ditra decoupling membrane & suitable adhesives (for u/floor heating)

to receive tiled floor finish Tile movement joint to be installed along line of floor differentiation/abutment.

500 gauge polythene separating layer over the entire area of the floor insulation including upstand Code 4 lead flashing to top of plinth brickwork. between screed and perimeter insulation 150mm thick Recticel Eurothane GP insulation, with 50mm insulated perimeter. All joints foil

Min 2000 gauge polythene DPM fully taped and lapped to DPC (see detail, wrapped around block at external wall).

Structural concrete floor to structural engineers details and as agreed with Building Inspector.

WET ROOM SHOWER FLOORS SET TO FALLS MC to supply and install:- Bal WPI tanking kit with tiled finish, Dallmer wet room shower drain, Marmox Showerlay wet room tray cut to falls to drain effectively to outlet, Mapei Mapesil sealant to all edges and sealed to Aquapanel wall linings in accordance with manufacturers instructions.

#### **NEW FIRST FLOOR TO STORAGE LOFT OVER WC / COATS**

Fire rated 30 min, with all walls / floors fire sealed at all junctions. 22mm Weyroc Protect P5 flooring grade chipboard floor system glued with Weyroc D4 adhesive and fixed as Weyroc technical guidance . Screw fix at 300mm centres to floor structure. Floor structure: New timber floor structure all to structural engineers details. Insulation between joists: 100mm Isowool Acoustic roll APR 1200 (density 12kg/m3). <u>Ceiling to underside of joists</u>: I5mm thick Gypsum Soundbloc plasterboard & skim to ceiling below. Skim plaster.

Plasterboard layer provides required 30 min fire protection to the floor structure. Contractor to ensure all elements of structure are protected via the ceiling or plasterboard layers to provide fire protection. Ensure all recessed lights are fire rated units to maintain integrity of ceiling.

#### **NEW INTERNAL STUD WALLS**

Non Loadbearing and where up to 2.4m height :-British Gypsum system reference A026012 (Achieves 41 Rw dB, exceeding requirement of Building Regulations Document E Table 0.2 for new internal walls within dwelling houses). British Gypsum system reference A026012 Achieves 41 Rw dB, exceeding requirement of Building Regulations Document E Table 0.2 for new internal walls within dwelling houses). 15mm British Gypsum Soundbloc plasterboard and One coat Gypsum Thistle skim finish plaster each side of sw studwork (stud size as below) with 100mm Isover Acoustic Partition Roll (APR 1200) in the cavity.

Stud size: Up to 2.4m height: 100 x 50mm sw studs at 400mm centres.

Higher than this:  $150 \times 50$ mm sw studs at 400mm centres. Noggins and Ply lining to stud walls where indicated by structural engineer and where required

for fixtures/fittings, i.e. bathrooms, wc, kitchens. Plasterboard to bathrooms and en suites to be as above but moisture resistant version.

Showers to be lined with aquapanel cement based boards. New studwork partitions to be built off concrete structural floor (on strip of DPC lapped with

DPM in floor, with perimeter insulation and separating membrane), extended up to underside of rafters and be 30 minutes fire stopped.

## **BIO ETHANOL STOVES**

2 No. 2 sided free standing stoves TO STUDY & LIVING 3 kW output. Electrical supply required.

To include fake flue internally pipe colour black up to underside of sloped ceiling. Bioethanol stove and all associated materials and components to form an operational installation are to be supplied and installed by the Contractor.

Bioethanol stoves require oxygen to burn, therefore the rooms in which they are installed should be supplied with a generous amount of background ventilation as provided by trickle ventilators in the windows & doors to ensure a comfortable enviroment.

Background (trickle) ventilation to the windows will comply with Building Control requirements (refer to drawings WD12 & WD13 Windows & Doors for details). Stoves to be installed on raised stone hearth.

Stove to Living to be housed in built in unit. Allow 150mm gap between side of multi fuel burner and side walls. Allow 150mm from front of stove to front edge of hearth.

\*EXTERNAL FIRE PROTECTION OF TIMBER CLAD EXTERNAL WALLS: We have specified external fire protection to the timber clad external walls as advisory good The external fire protection is comprised of \*Fire treatment to weatherboard cladding and cladding battens and \*Fire Board. Tenders to include all fire treatment as specified.

EXTERNAL TIMBER CLADDING AND BATTENS TO EXTERNAL WALLS \* Fire treatment to cladding, cladding battens (and counter battens where present): Prior to installation, all faces of timber including all cut edges are to receive Rawlins Paints Zeroflame Fire Retardant Treatment Reference ZFP400168 (achieves surface spread of flame EuroClass B), applied in strict accordance with manufacturers instructions, so as to achieve manufacturers certificate

Contractor is to liaise direct with supplier, obtain fire certification and issue to Architect & client. https://www.rawlinspaints.com/home/fire-retardant-paints/timber-plasterboard/128-zeroflame-fire -retardant-treatment.html

\*Fire treated External weatherboarded finish: New pressure treated softwood weatherboarding, traditional feather edge profile, size 175 x 24 / 6mm (cover 125mm). Fixed with 65 x 3.35mm stainless steel round head nails. Nails a third of distance up board in a neat single row. Painted finish using 2 coats Bedec Barn paint applied prior to installation and 1 coat of Bedec Barn paint applied post installation. Colour: Black

Note: Paint needs to be confirmed as compatible with the fire treatment by supplier/ manufacturer.

\* Fire treated Cladding battens: 50mm wide x 38mm thick pressure treated sw vertical battens (ventilation zone) at max 600mm horizontal centres fixed using heat treated steel Timberlock screws through breather membrane and fire board into counter battens.

Continuous black insect mesh & 10mm ventilation gap to bottom and head of ventilation battens. THERMAL UPGRADE TO EXISTING EXTERNAL TIMBER FRAMED WALLS

U value 0.14W/m2K External weatherboard cladding and battens as described above.\* See note above concerning

External Fire protection. Breather membrane: Proctors Frameshield 100 or similar approved to outside of insulation. Min 150mm laps.All joints taped. Installed in accordance with manufacturers instructions. \* Fire Board: 9mm Enviroboards Fire protection board installed over all exposed sides of the insulation board (vertical face, top & bottom edges) with joints fire sealed using external use intumescent sealant to manufacturers details. Fire board to be fixed as manufacturers details

using Timberlok screws through the insulation into the timber frame. External insulation: 150mm Recticel Eurothane GP insulation (thermal conductivity 0.022W/mK) continuous as wall sheathing with spray foam to all edges and foil tape to all joints. All joints to be closely abutted (no gaps). Mechanically fixed using stainless steel screws through service zone battens and plywood into timber frame.

Vapour control layer: 1000 gauge black polythene continuous as vapour barrier & air tightness membrane to outside of service zone battens. All fully lapped and double sided taped. Use Dafa vapour barrier tape or similar approved. Lap under sole plate and lap with vapour barrier at roof and tape.

Service battens: 38 x 50mm sw pressure treated battens fixed with 50 mm ss screws through plywood to existing studs beyond. This creates a service void for electric cables and pipe ducts as required

Sheathing board & plasterboard: 12mm WBP plywood / 11mm thick OSB board sheathing as structural engineers details overlaid and fixed through 12.5mm thick plasterboard (subject to structural engineers details) into existing timber framing, screwed to frame at 300mm centres generally and 150mm centres to perimeter as structural engineers details. Skim plaster between framing to inner face of plasterboard.

If structural engineer requires the sheathing board to be fixed direct to the timber frame, the plasterboard is to be installed between the timber framing, fixed to 38 x 38mm treated sw battens, with the battens screwed into the sides of the timber framing.

Existing structural timber frame retained (exposed internally), added to / altered as structural engineers details & where required for fixings. Inspect with CA & Structural Engineer and identify components needing replacement, and where additional components are required. Existing frame left unfinished / painted, as client choice.

NOTE: Plasterboard linings provide fire protection to the structural timber frame & rigid insulation from the inside, therefore all junctions and perimeters are to be adequately sealed and to approval of Building Inspector using e.g. incombustible mineral wool quilt or intumescent

THERMAL UPGRADE TO EXISTING PLINTH WALLS UVALUE 0. 14W/m2K Existing solid brickwork plinths to be converted to cavity plinth wall by addition of an insulated cavity and new outer brickwork skin.

Inner skin: Existing brickwork plinths generally retained as inner skin where sound, with brickwork carefully cleaned and repointed where required. Existing render / cement coatings to be removed. Structural Engineer is to inspect plinths and advise where rebuilding is required structurally. Defective brick / blockwork / concrete to be rebuilt in max Im lengths at a time by locally shoring up sole plate. Bricks: Michelmersh Hampshire Stock Downs Blend. Brickwork to remain exposed internally, or may be plastered using 2 coat gypsum plaster where required.

150mm cavity: Cavity insulation below DPC / Cavity tray: 140mm thick Recticel Eurowall + cavity Cavity wall ties: Ancon remedial Teplo or stainless steel wall ties to suit 100mm cavity. spaced

maximum 450mm c/c's vertically and 750mm c/c's horizontally. Refer to Structural Engineers details for whether base of cavity is required to be filled with concrete.Refer to Structural Engineers details for whether base of cavity is required to be filled with concrete.

New outer skin: 103mm facing brickwork. F2/S2 grade bricks to be used below DPC & to 2 courses below ground level. 100mm thick 7N/mm2 compressive strength blockwork suitable for use below DPC below this, as Thermalite Hi-Strength 7 or similar. Mortar mix below DPC to be 3:1 (Sand:Cement) class ii. Mortar mix above DPC to be 4.5:1

(sand:cement) class iii.All as NHBC table 6. Use Snowcrete white cement mortar for all walls, to imitate lime mortar.

Foundations Existing foundations extended to support new outer skin to structural engineers details.

EXISTING SOLID WALLS TO SNUG WITH EXTERNAL INSULATION AND TIMBER CLADDING U value 0.15W/m2K Existing solid brickwork walls, with insulation and timber cladding added externally.

DPC: Include for injected DPC 150mm above external ground level. External weatherboard cladding and battens as described above.\* See note above concerning

External Fire protection Cladding battens: 50mm wide x 38mm thick pressure treated sw vertical battens (ventilation zone) at max 600mm horizontal c/c fixed using heat treated steel Timberlock screws through

breather, fire board and outer insulation to the battens (min 50mm embedment). Black insect mesh continuous & 10mm gap to bottom and head of ventilation battens. Breather membrane: Proctors Frameshield 100 or similar approved to outside of insulation. Min 150mm laps. All joints taped. Installed in accordance with manufacturers instructions. Fire Board: 9mm Enviroboards Fire protection board installed over all exposed sides of the insulation board (vertical face, top & bottom edges) with joints fire sealed using external use

intumescent sealant to manufacturers details. Fire board fixed securely through the outer insulation layer into sw battens to manufacturers details. <u>2 layer External Insulation: Outer layer:</u> 100mm thick Recticel Eurothane GP insulation board with spray foam to all edges and foil tape to all joints. All joints to be closely abutted (no gaps),

mechanically fixed using proprietary thermally decoupled heavy duty insulation fixings (50mm min embedment) into sw battens. Under layer insulation between battens: 50mm thick Recticel Eurothane GP insulation board

installed to a tight fit between battens, with no gaps. 50mm wide x 100mm thick treated sw battens fixed to brickwork wall at spacings to suit insulation board (note: insulation board must be installed to a tight fit between the battens, with no gaps). Internal face of wall: Existing wall is painted brickwork

Galvanised steel expanded metal lath 9mm diamond pattern mesh to BS 1369 as Expamet or similar to be fixed to wall at 300mm centres to provide a background for plastering. Plaster: 13mm thick 2 coat plaster as British Gypsum Thistle Hardwall undercoat and Thistle Multifinish or equivalent, applied all as manufacturers instructions. Include also for dubbing out to achieve a level surface. Painted finish.

NEW BRICKWORK CAVITY WALLS WITH EXTERNAL TIMBER CLADDING **(EXTENSION WALLS)** U value 0.18W/m2K above dpc, 0.14W/m2K below dpc. External weatherboard cladding & battens as above.\* See note above re; External Fire protection. Outer Skin above DPC: 100mm thick 3.6N/mm2 compressive strength blockwork as Thermalite Shield or similar (thermal conductivity 0.15 W/mK).

Outer skin below DPC: 103mm thick facing brickwork. Bricks: Michelmersh Hampshire Stock Downs Blend. Stretcher bond. Bucket handle joints. Bricks: colour red to match existing main barn plinth brickwork, bricks to be agreed with CA / Client. F2/S2 grade bricks to be used below DPC & to 2 courses below ground level. 100mm thick 7N/mm2 compressive strength blockwork suitable for use below DPC below this, as Thermalite Hi-Strength 7 or similar. Mortar mix below DPC to be 3:1 (Sand:Cement) class ii. Mortar mix above DPC to be 4.5:1 (sand:cement) class iii. All as NHBC table 6. Use Snowcrete white cement mortar for all walls, to imitate lime mortar.

150mm cavity: Above dpc cavity fully filled with 150mm thick Knauf DriTherm 32 Ultimate cavity insulation (thermal conductivity 0.032 W/mK). Bottom of insulation supported on wall ties. Cavity insulation below DPC / Cavity tray: 140mm thick Recticel Eurowall + cavity insulation. Wall ties: Ancon Teplo or stainless steel wall ties to suit 150mm cavity, spaced maximum 450mm c/c's vertically and 750mm c/c's horizontally. Refer to Structural Engineers details for whether base of cavity is required to be filled with concrete.

Inner skin: 100mm thick 7N/mm2 compressive strength blockwork (thermal conductivity 0.18 W/mK) as Thermalite Hi-Strength 7 or similar.

Plaster: I3mm thick 2 coat plaster as British Gypsum Thistle Hardwall undercoat and Thistle Multifinish or equivalent, applied all as manufacturers instructions. Foundations to structural engineers details.

<sup>k</sup> See previous note concerning External Fire protection. instructions counter battens to manufacturers details.

(min 50mm embedment into studs).

depending on weight of fixtures). based boards to bathrooms / ensuites.

#### UPGRADE TO EXISTING DUO PITCHED ROOFS - PLAIN CLAY **TILE FINISH** U value 0.13W/m2K Insulation all above the roof structure. Pitch:

Roof pitch as existing. Headlap / gauge to comply with manufacturers instructions.

mechanically fixed and mortar bedded. Hips: Clay Bonnet hip tiles to match, mechanically fixed to comply with BS5534.

Boots (due to attached flat roof). eaves trays by 150mm and taped.

to Structural Engineers details.

rafters/trusses to ensure adequate fixing. All as per structural engineers requirements. Further bracing and fixing to roof structure all in accordance with engineers details. New eaves rafter sprockets 150 x 50mm x 1800mm long pressure treated C16 sw cut into insulation zone. Fix each sprocket in place using Headlock screws (top and bottom) to rafter below all to Structural Engineers details. Each sprocket to have cut end as shown, and 21mm depth removed from top face for last 300mm at eaves end to allow for 21 x 150mm pressure treated sw soffit boards to be nailed in place. Black polythene fitted over the top as inner roof boarding. Spray foam around each sprocket, cut back neatly and foil tape over the top. Exposed rafter sprocket ends to be painted to match fascias.

paint as manufacturers instructions 200mm underlap to breather membrane.

<u>Gable Verge</u>: Fibre cement board ss nailed to top of gable verge timbers. Verge tiles to overhang 25mm from bargeboard and to be both mortar bedded using 1:3 mortar mix, and mechanically fixed to comply with BS5534. Bargeboard: 225 x 32mm bargeboard with 10mm chamfer to bottom edge to form drip. To be stainless steel screwed (min 50mm embedment) to each gable ladder timber behind.

ladder / noggins as required for fixings.

Velux rooflights, external colour grey. painted finish internally.

Height to top = 4.1 m. Electrical operation: Integra electrically operated roof window and blind, with hand held control pad. Rain sensor. Hand held control pad for electrical operation of rooflight & blind.Velux Black Out Blind (electrically operated) to rooflight. Rooflight openings to be trimmed to Structural Engineers details & rooflights installed in strict accordance with manufacturers instructions. Splayed plasterboard reveals to inner openings, to maximise light.

recommended by Velux installation details. client before ordering).

NEW EXTERNAL TIMBER FRAMED WALL TO UPPER PART OF GABLE WALL ABOVE OPENING (EXTENSION) U value 0.17W/m2K External weatherboard cladding and battens as described above.

Breather membrane: Proctors Frameshield 100 or similar approved to outside of fire board. Min 150mm laps. All joints taped. Installed in accordance with manufacturers

\* <u>Fire Board</u>: 9mm Enviroboards Fire protection board installed over all exposed sides of the insulation board (vertical face, top & bottom edges) with joints fire sealed using external use intumescent sealant to manufacturers details. Fire board fixed to sw

Counter battens: 50mm wide x 50mm thick pressure treated sw horizontal battens at max 600mm centres mechanically fixed (through sheathing board) into timber frame

Sheathing board: 11 mm thick OSB sheathing board to structural engineers details fixed to outside of timber framing screwed to frame all as structural engineers details. <u>Timber frame structural wall</u> (140mm) in accordance with structural engineers design & fixing details. Sole & head plates all as structural engineers details. Sole plate installed

on (and fixed through) strip of DPC into blockwork all as structural engineers details. Insulation between studs: 140mm thick Knauf Earthwool 32 Frametherm roll insulation (thermal conductivity 0.032 W/mK) friction fitted to infill all spaces between between studs / timber framing with no gaps.

Internal insulation: 50mm thick Recticel Eurothane GP insulation as internal lining. Vapour control layer: Dupont Airguard reflective vapour control layer / airtight barrier to entire wall.All fully lapped and double sided taped. Lapped with and taped to with vapour barrier at roof and with separation layer at perimeter floor insulation upstand. Ensure continuity of airtight barrier by sealing at all junctions. Use Dafa tapes or similar approved. <u>Service battens</u>: 50mm wide x 25mm thick sw battens.

Plywood (where required for fixtures etc): 9mm WBP ply sheathing (or 12 /18mm thick Plasterboard : 12.5mm Gypsum wallboard and skim finish internally (continous with

lining to plinth wall below). Use moisture resistant plasterboard and aquapanel cement NOTE: Plasterboard linings provide fire protection to the structural timber frame &

rigid insulation from the inside, therefore all junctions and perimeters are to be adequately sealed and all gaps fire stopped in accordance with requirements of Building Regulations Part B Fire safety, to approval of Building Inspector using e.g. incombustible mineral wool quilt or intumescent sealant.

Tiles: New Marley Acme Double Camber Clay plain tiles, colour Smooth Brindle, fixed and installed in strict accordance with manufacturers instructions. Min headlap 100mm.

NOTE: Installation of all roof tiling is to be strictly in accordance with the current version of BS5534, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. All single lap tiles mechanically clipped or nailed (in

certain areas both clipped and nailed), and all ridge, hip, valley, perimeter and verge tiles Ridge: Clay half round ridge tiles to match, mechanically fixed to comply with BS5534.

Tile Vents: Matching tile vents for SVP outlets and extract fans. Tling battens: 50 x 25mm pressure treated sw tiling battens to comply with BS 5534, fixed with galvanized or stainless steel nails to rafters (min 50mm embedment).

Counter battens: Pressure treated sw counter battens fixed through the insulation, sheathing board and plasterboard into the roof structure using Timberlock screws (min 50mm embedment into structure). Counter batten size 50 x 25mm to roof of Bedroom wing and size 50 x 50mm to roof of south wing Kitchen Dining Living Utility

Breather Membrane: Proctors Roofshield or similar approved breather membrane installed as manufacturers instructions to entire roof. Min 150mm vertical laps and 300mm horizontal laps. To lap over ridge min 150mm over sheet other side. To lap

Insulation: 150mm thick Recticel Eurothane GP insulation installed to entire roof as roof sheathing, mechanically fixed through vcl, insulation, vcl, plywood and plasterboard into rafters. Spray foam installed along all edges when boards are butted together to ensure completely continuous insulation. All joints on face foil taped. Take particular

care at eaves and ridge to ensure no gaps are present anywhere in insulation. Vapour barrier: Min 1000 gauge black polythene vapour and air barrier continuous to entire roof with min. I 50mm laps and double sided black tape to ensure air tight construction. Lap and tape to wall vapour membrane.

Structural sheathing board: As Structural Engineers details. 9mm WBP plywood structural sheathing fixed through plasterboard into rafters all as structural engineers

Plasterboard: 12.5mm Gypsum wallboard (sloped ceiling) fixed to on top of rafters. Skim plaster to sloped ceiling between rafters.

<u>Roof structure</u>: Fully vaulted roof with roof structure exposed internally. Existing timber roof structure retained where structural sound and added to / altered all as structural engineers details. Rafter ends may require cutting short to suit upgrade works. New structure to be installed between existing structure, within existing roof structure zone. Inspect with CA & Structural Engineer and identify components needing replacement, and where additional components are required. Additional new wall plate required to be fixed to top of existing eaves beams to enable new rafter

sprockets to be birdsmouthed over new beams. New roof structure where required all Gable walls should be strapped to roofs as shown in Diagram 16(a) and (b) of Building Regulation Approved Document A with galvanised tension straps at no more than 2m centres. Noggins or packers should be provided between minimum 3 number

Fascias, soffit boards & gable verge bargeboards: Pressure treated softwood, fixed using stainless steel fixings and painted with Bedec Barn paint, 2 no. coats applied prior to installation. Fill all screw holes after installation and apply I no top coat of Bedec Barn

Fascias: 200 x 32mm thick with 10mm chamfer to bottom edge to form drip. To be stainless steel screwed (60mm) to each rafter sprocket behind. Redland or similar approved black eaves tray fitted to top of fascias and dressed up roof with a min of

Gable Verge: At verge install 150 x 50mm and 1800mm long sw pressure treated C16 gable ladder sprockets cut into insulation zone. Fix each sprocket in place using Headlock screws (top and bottom) to roof structure below all to Structural Engineers

<u>Verge soffit boards</u>: 25mm thick boards stainless steel screwed to underside of gable

### **NEW PITCHED ROOFLIGHTS**

Recessed installation into plain tiled roof, with top of rooflight flush with tile surface . Glazing: Well being (--66). Triple glazed, toughened outer pane with easy to clean & anti dew coating, laminated inner pane, Whole unit u value = 1.0W/m2k. White

RLI (Corridor), RL2 & RL3 (Living) & RL4 (Kitchen): Centre pivot size FK06 660mm wide x 1180mm high. Height to top = 5m. RL05 (Entrance by Kitchen): Centre pivot size FK04 660mm wide x 980mm high.

All Rooflights to be supplied with & installed using conservation glazing bar(s), applicable Velux recessed flashing kit for use with plain tiles, Insulation collar, underfelt collar, vapour control collar, insulation blocks and lining kit, as

Supply telescopic rods for manually operated rooflights / blinds (check quantity with

Supply and install Velux Blinds to rooflights: Client to confirm which rooflights are to have blinds, and type, fabric/colour choice for blinds. Note: Blinds that are to be manually operated by telescopic pole require an adapter piece.

NEW DUO PITCHED ROOF TO EXTENSION - PLAIN CLAY TILE FINISH - UVALUE 0.17W/m2K Insulation between and under the rafters. Ventilated roof. Pitch: 37.5 degrees

<u>Tiles:</u> New Marley Acme Double Camber Clay plain tiles, colour Smooth Brindle, fixed and installed in strict accordance with manufacturers instructions. Min headlap 100mm. Headlap / gauge to comply with manufacturers instructions.

NOTE: Installation of all roof tiling is to be strictly in accordance with the current version of BS5534, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. All single lap tiles mechanically clipped or nailed (in certain areas both clipped and nailed), and all ridge, hip, valley, perimeter and verge tiles mechanically fixed and mortar bedded. <u>Ridge</u>: Clay half round ridge tiles to match, mechanically fixed to comply with BS5534. Hips: Clay Bonnet hip tiles to match, mechanically fixed to comply with BS5534. Ridge ventilation: Protect Membranes Fulmetal Rediroll grey aluminium dry ridge & hip system to

provide 5mm continuous strip ventilation at ridge. To be installed as manufacturers instructions. http://www.protectmembranes .com/fulmetal-rediroll-universal-ridgehip-roll-system/p/1

Tile Vents: Matching tile vents for SVP outlets and extract fans. Tling battens: 50 x 25mm pressure treated sw tiling battens to comply with BS 5534, fixed with galvanized or stainless steel nails to rafters (min 50mm embedment). Breather Membrane: Proctors Roofshield or similar approved breather membrane installed as manufacturers instructions to entire roof. Min 150mm vertical laps and 300mm horizontal laps. To

lap over ridge min 150mm over sheet other side. To lap eaves trays by 150mm and taped. 50mm clear ventilation zone to be maintained above insulation and below breather membrane. <u>Roof structure:</u> New timber pitched roof structure all in accordance with structural engineers details. Fully vaulted roof with raised oak ties exposed within room. Oak feature trusses in Master bedroom. Softwood roof structure where concealed.

RAFTER DEPTH SHOWN AS 200mm TO ACCOMMODATE INSULATION BETWEEN LOWER PART OF RAFTERS AND VENTILATION ZONE BETWEEN UPPER PART OF RAFTERS. Reafter feet reduced to 150mm deep at eaves.

Roof bracing if required structurally on top of rafters is to be METAL STRAPPING type (due to insulation located between rafters) all to Structural Engineers details. Alternatively, sheathing board may be fixed to the underside of the rafters. 3mm Galvanised holding down straps over wall plates @ max Im centres all in accordance with

structural engineers details. Gable walls should be strapped to roofs as shown in Diagram 16(a) and (b) of Building Regulation Approved Document A with galvanised tension straps at no more than 2m centres. Noggins or

packers should be provided between minimum 3 number rafters/trusses to ensure adequate fixing. All as per structural engineers requirements. Further bracing and fixing to roof structure all in accordance with structural engineers details. Gable ladder timbers to Structural Engineers details. Structural engineer to provide calculations for roof structure to building control and for CA approval.

Insulation between rafters: (Thickness subject to rafter depth) 150mm thick (2 layers of 75mm) Knauf Earthwool 32 Frametherm roll insulation (thermal conductivity 0.032 W/mK) glass mineral wool insulation friction fitted between rafters (with no gaps).

Insulation at underside of rafters: 50mm Recticel Eurothane GP insulation board to underline rafters. Insulation board must be sealed with foil tape as specified by manufacturer to form secondary continuous vapour barrier. Spray foam installed along all edges when boards are butted together to ensure completely continuous insulation. All joints on face foil taped. Take particular care at eaves, ridges and valleys to ensure no gaps are present anywhere in insulation. Vapour barrier: Min 1000 gauge polythene vapour barrier continuous below insulation layer, lapped min 100mm and taped to form principal VCL and to ensure air tight construction. Lap and tape to wall vapour membrane. Take particular care to achieve a completely airtight construction. Use Dafa or similar approved vapour barrier tapes. Any penetrations to membrane to be fitted with air tight collars and sealed.

Sloping ceiling: 12.5mm plasterboard fixed through insulation and vcl into roof structure, faced with skim plaster. Fascias, soffits & gable verge bargeboards: Pressure treated sw. Fixed to roof structure using

stainless steel fixings. Fixings to be evenly spaced in straight lines. Finish: Painted with Bedec Barn paint, 2 no. coats applied prior to installation. Fill all screw holes after installation and apply 1 no top coat of Bedec Barn paint as manufacturers instructions. Eaves Fascias & soffits: 150 x 32mm (contractor to check measurement on site) fascia with 10mm chamfer to bottom edge to form drip. To be stainless steel screwed (min 50mm embedment) to each rafter behind. 25mm thick soffit boards.

Ventilated Eaves: Continuous over fascia ventilators to provide 25,000sqmm/m ventilation to roof ventilation zone (Glidevale FV250 or similar). 50mm ventilation zone to be maintained above the

Eaves tray: Redland or similar approved black eaves tray fitted to top of fascia ventilator and dressed up roof with a min of 200mm underlap to breather membrane. Gable Verge: Fibre cement board ss nailed to top of gable timbers. Verge tiles to overhang 25mm from bargeboard and to be both mortar bedded using 1:3 mortar mix, and mechanically fixed to

comply with BS5534. Bargeboard: 225 x 32mm bargeboard with 10mm chamfer to bottom edge to form drip. To be stainless steel screwed (min 50mm embedment) to each gable ladder timber behind. Verge soffit boards: 25mm thick boards stainless steel screwed to underside of gable ladder / noggins as required for fixings.

#### **UPGRADE TO EXISTING MONO PITCHED ROOFS - SLATE FINISH** - UVALUE 0 17W/m2K

Insulation between and under the rafters. Ventilated roof. Pitch: as existing Slate tiles: New Redland Cambrian interlocking slates. BBA certified recycled natural slate. <u>Colour</u>: Slate Grey Pre-Weathered. Fixed and installed in strict accordance with manufacturers instructions. Min headlap 75mm. Headlap / gauge to comply with manufacturers instructions to suit pitch. NOTE: Installation of all roof tiling is to be strictly in accordance with the current version of BS5534, and BS 8000: Part 6: the British Standard Code of practice for workmanship on building sites. All single lap tiles mechanically clipped or nailed (in certain areas both clipped and nailed), and all perimeter and verge tiles mechanically fixed and mortar bedded. <u>Tile Vents</u>: Matching tile vents for SVP outlets and extract fans.

Tiling battens: 50 x 25mm pressure treated sw tiling battens to comply with BS 5534, fixed with galvanized or stainless steel nails through counter battens to rafters (min 50mm embedment). Breather Membrane: Proctors Roofshield or similar approved breather membrane installed as manufacturers instructions to entire roof. Min 150mm vertical laps and 300mm horizontal laps. To lap over ridge min 150mm over sheet other side. To lap eaves travs by 150mm and taped <u>Counter battens</u>: 50 x 25mm pressure treated sw tiling battens to comply with BS 5534, fixed with galvanized or stainless steel nails to rafters (min 50mm embedment). = 50mm clear ventilation zone to be maintained above insulation and below breather membrane. Roof structure: Existing timber roof structure retained where structural sound and added to /

altered all as structural engineers details. Roof bracing if required structurally on top of rafters is to be METAL STRAPPING type (due to insulation located between rafters) all to Structural Engineers details. Alternatively, sheathing board may be fixed to the underside of the rafters. 3mm Galvanised holding down straps over wall plates @ max Im centres all in accordance with

structural engineers details. Gable walls should be strapped to roofs as shown in Diagram 16(a) and (b) of Building Regulation Approved Document A with galvanised tension straps at no more than 2m centres. Noggins or

packers should be provided between minimum 3 number rafters/trusses to ensure adequate fixing. All as per structural engineers requirements. Further bracing and fixing to roof structure all in accordance with structural engineers details. Gable ladder timbers to Structural Engineers details. Structural engineer to provide calculations for roof structure to building control and for CA approval.

Insulation between rafters: (Thickness subject to rafter depth) 150mm thick (2 layers of 75mm) Knauf Earthwool 32 Frametherm roll insulation (thermal conductivity 0.032 W/mK) glass mineral wool insulation friction fitted between rafters (with no gaps)

Insulation at underside of rafters: 50mm Recticel Eurothane GP insulation board to underline rafters. Insulation board must be sealed with foil tape as specified by manufacturer to form secondary continuous vapour barrier. Spray foam installed along all edges when boards are butted together to ensure completely continuous insulation. All joints on face foil taped. Take particular care at eaves, ridges and valleys to ensure no gaps are present anywhere in insulation. Vapour barrier: Min 1000 gauge polythene vapour barrier continuous below insulation layer, lapped min 100mm and taped to form principal VCL and to ensure air tight construction. Lap and tape to wall vapour membrane. Take particular care to achieve a completely airtight construction. Use Dafa or similar approved vapour barrier tapes. Any penetrations to membrane to be fitted with air tight collars and sealed.

Sloping ceiling: 12.5mm plasterboard fixed through insulation and vcl into roof structure, faced with skim plaster. Fascias, soffits & verge bargeboards: Pressure treated sw. Fixed to roof structure using stainless

steel fixings. Fixings to be evenly spaced in straight lines Finish: Painted with Bedec Barn paint, 2 no. coats applied prior to installation. Fill all screw holes after installation and apply 1 no top coat of Bedec Barn paint as manufacturers instructions. Eaves Fascias & soffits: 150 x 32mm (contractor to check measurement on site) fascia with 10mm chamfer to bottom edge to form drip. To be stainless steel screwed (min 50mm embedment) to

each rafter behind. 25mm thick soffit boards. Ventilated Eaves: Continuous over fascia ventilators to provide 25,000sqmm/m ventilation to roof ventilation zone (Glidevale FV250 or similar). 50mm ventilation zone to be maintained above the

Eaves tray: Redland or similar approved black eaves tray fitted to top of fascia ventilator and dressed up roof with a min of 200mm underlap to breather membrane. Gable Verge: Fibre cement board ss nailed to top of gable timbers. Verge tiles to overhang 25mm from bargeboard and to be both mortar bedded using 1:3 mortar mix, and mechanically fixed to

comply with BS5534. Bargeboard: 225 x 32mm bargeboard with 10mm chamfer to bottom edge to form drip. To be stainless steel screwed (min 50mm embedment) to each gable ladder timber behind. Verge soffit boards: 25mm thick boards stainless steel screwed to underside of gable ladder /

noggins as required for fixings.

Top Edge Ventilated Abutment with Redland Abutment Ventilation pack 10002838 to provide 25mm ventilation installed all as manufacturers details. Code 4 lead flashing dressed over ventilator and turned up wall face under cladding. Wall breather membrane lapeed down over top of lead.n

**DRAINAGE** The Contractor is to work out the exact routes, inverts & gradients for the proposed new drainage and is to obtain Building Inspector approval for the new drainage works. Foul drainage to be discharged to new sewage treatment unit supplied and installed by specialist installer, with treated outflow discharged to existing water course. Note: The water course must contain flowing water throughout the whole year, and must not seasonally dry up. If alternative solution is required (e.g. drainage field, this will need to be designed by drainage specialist). The Contractor is to check on site the location and status of watercourse to be discharged to and is to obtain Building Control approval. All to be agreed with Building Inspector. Sewage treatment unit to be located 7m away from all structures. Drainage specialist is to provide manufacturers information for submission & approval by Building Control. Note: New drainage is shown as provisional, and is to be reviewed on site by drainage contractor and is all to be agreed with the Building Inspector.

#### NEW BELOW GROUND DRAINAGE: New Foul drainage to comply with Doc H & Building Control approval. Design Standards: To BS EN 12056.

100mm clay (or 110 dia uPVC) pipes with flexible joints on & surrounded by granular fill generally. Min depth of cover to be 300mm. Lintel to be provided where pipe passes through external walls and sleeved with flexible compressible material to Building Control approval. Where pipe passes under building & crown of pipe is less than 300mm below u/s slab, encase pipe in suitable material to Building Control approval.

PPIC inspection chambers installed in accordance with manufacturers instructions and to Building Control approval, with covers to be suitable for the location: AI5 Grade to paths / pedestrian areas, BI25 Grade to driveway. Locations of ICs to be as visually inconspicuous as possible.

ABOVE GROUND FOUL DRAINAGE Design Standards: To BS EN 12056. Foul Drainage to comply with Document H. All traps to be 75 mm deep. W.C traps 50 mm deep. Sink – 40 mm diameter waste UPVC 75mm deep seal anti-syphonic bottle trap and (maximum branch length Wash hand basin – 32 mm diameter UPVC trap and waste (maximum branch length 1.7m) or 40 mm

diameter UPVC trap waste (maximum branch length 3.0).Washbasin run in accordance with Diagram 3 of current Document H Building Regulations. If any of the above branch lengths are exceeded then a Hepworth HepvO waste valve is to be fitted replacing

the standard trap, in accordance with the manufacturers instructions. W.C - 110 mm diameter UPVC waste (UV proof). Where required, proprietary soil manifold system to be used for connecting branch pipes to s.v.p and stub stack.

Bath / shower waste pipe – 40mm (max 3m run) 50mm (max 4m run). Soil and vent pipe - 110 mm diameter UPVC with easy bend to base and terminated 900 mm minimum above head of highest opening (within 3.0 m). Provide an airtight access point above the spill over level of the highest connected appliance at upper floor level.

Note: Vent pipe is to reduce to 75 mm diameter above last connection, through to termination. Soil and vent pipe required at head of drain with above roof terminal (locations to be agreed with Building Inspector). Soil pipes may have air admittance valve (aav) where not head of drain (locations to be agreed with Building Inspector)

Floor drain waste pipe- 40mm (max 3m run) 50mm (max 4m run).

SURFACE WATER DRAINAGE: New SW drainage is to be discharged to client owned ditch. Drainage layout shown is provisional; exact details / location of ditch & routes must be agreed with Building Inspector. New SW drainage is to comply with Doc H & Building Control inspection, testing & approval prior to backfill. Pipes to be min dia. 100mm at 1:100 gradient, all RWPs to be discharged to drain or gully. All new gullies to rwps are to be Hepworth roddable back inlet gullies with min 200mm square black plastic grid cover. Drainage channels all discharged to sw drainage:-

Threshold drains: Aco Hexdrain Brickslot Threshold drains to level threshold doorways Inner courtyard Drainage channels: Aco RainDrain Brickslot B 125 drainage channel (with galvanised steel slot top style grating).

Yard gullies to patio areas: Trapped access yard gullies with stainless removeable steel grating, gulley type suitable for rodding <u>PPIC inspection chambers</u> installed in accordance with manufacturers instructions and to Building Control

approval, with covers to be suitable grade for the location: A15 Grade to paths & pedestrian only areas / BI25 Grade to car parking area / C250 Grade to driveway & stable yard.

STABLE BUILDING DRAINAGE 255 x 125 deep precast concrete channel (agricultural grade concrete if available) cast into concrete slab of stable building, set to falls to drain to yard gullies, discharged to underground SSAFO compliant slurry storage tank designed & installed by specialist. To be fully compliant with all current regulations as appropriate for the location and use.

### DRAINAGE KEY

SS & AAV - Soil Stack with air admittance valve RVVP - Rainwater pipe with back inlet gulley SVP - Soil Vent Pipe with In Line Tile roof terminal - Trapped shower gulley FA - Floor adapter FG - Floor gulley - Inspection chamber MH - Mini access chamber MA - Mini access chamber (SW)

RAINWATER GOODS TO BARN & GARAGE / WORKSHOP New rainwater goods throughout to Barn & Garage / Workshop:- Rainclear Systems galvanised steel Colour 9005M Matt Black finish, 115mm half round gutters and 80mm diameter round downpipes. https://www.rainclear.co.uk/guttering/galvanised-steel-gutters/guttering-fittings .html https://www.rainclear.co.uk/downpipes/galvanised-steel.html Refer to manufacturers instructions for details of installation and components. Complete with all joints, swans necks, running outlets, end caps, brackets, bracket fixings, pipe holders, shoes, drain connectors and all components required to form a complete installation. Positioning and fixing of gutter brackets all as manufacturers details. Each downpipe is to discharge to roddable back inlet gulley. Leaf gutter guard to all gutters.

#### EXTERNAL WORKS

**NEW GARDEN WALL TO COURTYARD** Height: 1688mm (5' 6") high above ground level (comprised of 21 courses + coping). Thickness: 215mm Bricks: Michelmersh Hampshire Red Stock Multi. F2/S2 Grade, type TBC. Bond: English bond. Joints: Bucket handle Structural design including foundations & pier spacing / position all to Structural Engineers details. Special bricks to piers: I.PL.10 lbstock Plinth stretcher & I.PL. 9 lbstock Plinth Header. <u>Movement joints</u> to Structural Engineers details. Max 6m centres, and max 3m from end of wall and max 3m from change of direction. Nom, 10mm Movement joint adj. pier to continue up through coping level and down to footing level. Wall ties with de-bonding sleeves installed to tie panels together. Compressible joint filler and low modulus silicone sealant to faces to match brick colour. Coping: Half round red clay brickwork to match, F2/S2 Grade. Mortar mix: 3:1 (Sand:Cement) class ii as NHBC table 6. Use Snowcrete white cement mortar, to imitate lime mortar. Foundations to Structural Engineers details.

## GATES all to clients choice, tbc

COURTYARD GATES (2 No.) GI & G2: 1100mm wide opening in 1688mm high brick wall. Single arched head timber gate & arched frame / posts.gate size 900mm wide x 2000mm high. Pressure treated planed softwood framed, ledged & braced solid boarded gate with capping rail, morticed & tennoned frame. Galvanised steel fittings;ring latch, adjustable hook and band hinge, padlockable bolt. Arched head frame posts 100 x 100mm set into 300 x 300mm concrete pads, posts set 600mm below ground level. **OUTER YARD GATES G3:** Pair of automated gates & gate posts. 4500mm wide (including posts) x 1800mm high. Jacksons Cathedral Courtyard Gates & galvanised steel gate posts to suit gates https://www.jacksons-fencing.co.uk/fencing/entrance-gates/courtyard Stable driveway Gates G4: Pair of automated field gates & gate posts. 4700mm wide (including posts) x 1270mm high. Pressure treated planed softwood, morticed and tenoned joints, cross braced, heavy duty chamfered top rail, stainless steel bolts. https://www.jacksons-fencing.co.uk/fencing/entrance-gates/traditional

FIRE ENGINE ACCESS BETWEEN THE HIGHWAY AND THE BARN NOTE: EXISTING DRIVEWAY IS A SHARED ACCESS, OWNED BY OTHERS. Fire vehicle access for a pumping appliance is required to within 45m of all points inside the barn. 3.7m minimum width access route is required with a minimum carrying capacity for hard standing for fire pumping/high reach appliances of 15/26 tonnes, with Fire engine hammerhead turning provided as shown. Minimum width of gateways = 3.1m. The access route should include a suitable turning circle, hammerhead or other point at which the fire vehicle can turn. Fire and rescue service vehicles should not have to reverse more than 20m from the end of an access road.

PARKING AREA Finish: Stamped concrete to clients choice, including anti cracking reinforcement and installed in bays with movement joints to prevent cracking. Levels graded away from buildings to enable surface water drainage run-off to adjacent soft areas. Pea shingle border where adjacent to building face before start of surfacing. Sub base: = Contractor to supply and install all sub-base build up as required. To parking area allow 300mm thick MOT type I in I50mm well compacted layers on geotextile membrane (see note below re: Part M parking / access). Sub base all to Structural Engineers details.

**NEW GRAVEL DRIVEWAY** Finish = 50mm thick, 20mm Cotswold chippings topping. Contractor to provide all sub-base build up as required. To driveway and parking areas allow 300mm thick MOT type I in 150mm well compacted layers on geotextile membrane.All to structural engineers details.

**NEW PAVED TERRACES AND PATHS** <u>Finish</u>: Stone tiles suitable for external use, to clients choice, installed as manufacturers details to suit paver type. Tiles, slabs or pavers to be 25mm thick fully mortar bedded, with all slabs fully pointed. Levels graded away from buildings to enable surface water drainage run-off to adjacent soft areas. Pea shingle border where adjacent to building face before start of slabs. Sub base: = Contractor to supply and install all sub-base build up as required. To terrace / paths allow 200mm thick MOT type I in 100mm well compacted layers on geotextile membrane. Sub base all to Structural Engineers details. **Edgings to paved areas** = Brick on edge, bricks to client choice. Bricks to be F2/S2 Grade. To be set into

concrete haunching and pointed with 1:3 mix sand / cement mortar.

PART M COMPLIANT PARKING SPACE AND PATH TO BARN MAIN ENTRANCE A parking space size  $6m \times 3.3m$ , connected to the main entrance of the barn by a 1200mm wide path all with Part M compliant surfacing is to be provided (paved / stamped concrete).

New grassed areas: MC to level new lawn areas using redistributed top soil from site dig ready for client to carry out grass seeding. **Planting areas:** Min 300mm treated & screened topsoil to planting areas as indicated on plan. All plants & planting to be by client.

Making good: Contractor to make good all surface areas disturbed by works activity, trenching, contractor access, storage area etc. including reinstating all affected surfaces to match existing including reinstating disturbed grass areas with a hardwearing general purpose lawn turf. ALL TOPSOIL FROM SITE STRIP TO REMAIN ON SITE UNLESS OTHERWISE AGREED WITH CLIENT.

<u>General Notes</u> I. This drawing is to be read in conjunction with other engineers, designers, subcontractors and specialists drawings and any associated specifications and details. Any discrepancies are to be reported to the CA/client or relevant project manager before proceeding with the works.

2. All workmanship and materials are to be carried out in accordance with current British Standards, Codes of Practice and good building practice.

3. All work to be to the satisfaction of the Building Control checking authority.

4. Do not scale this drawing. All dimensions to be as noted. Contractor to check all dimensions on site before carry out works.

5. Where existing elements are exposed or investigated during the building works and are found to be not as assumed then contractor to confirm and notify CA/design team/client as applicable before proceeding with works.

6. The contractor is responsible for site health & safety including taking all necessary precautions to ensure stability of both existing and proposed structures at all times during construction. Contractor to contact structural engineer immediately where any doubts arise on site.

7.All services/utilities are to be located and protected as necessary by the contractor prior to the commencement of the works.

8. This drawing is for the private and confidential use of the client for whom it was undertaken and it should not be reproduced in whole or in part or relied upon by third parties for any use without the express written authority of Beech Architects Limited.

#### RESIDUAL RISK TO HEALTH & SAFETY

undertaken by gualified and competent person

Whilst we have made every attempt to design out risk associated with our design some risks may remain. Significant residual risks relating to our design are detailed below with our assessment of how these may be managed. The contractor remains responsible for identifying and managing risk associated with construction processes and site safety and  $\angle$ these risks should be identified within the contractor's Construction Health & Safety Plan all operations carried out in accordance with HSE requirements, Current Code of Practice and compliance with CDM 2015 regulations.

Numbered triangles further highlight specific locations where residual risks remain: Access equipment for cleaning and maintenance will be required and works

The risks associated with working at height should be reduced by using appropriate scaffold, platforms, mobile elevating equipment, safety nets or fall arrest systems as deemed appropriate by the contractors review and assessment of the construction methodology & process.

- The locations of all existing services and utilities must be confirmed prior to commencement of the works

- The engineer must be contacted immediately where unsure or concern raised regarding the stability of any structure.

# NOTES:

# ALL DIMENSIONS TO BE CHECKED ON SITE.

SUBJECT TO AND TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEERS DETAILS

MC IS TO ENSURE THAT ALL DEMOLITIONS ARE CARRIED OUT IN STRICT COMPLIANCE WITH ALL CURRENT APPLICABLE HSE GUIDANCE **INCLUDING REFURBISHMENT / DEMOLITION** ASBESTOS SURVEY.

## 10 Aug 22 Rooflights: changed to triple glazed for improved u value. Brick type added. Storage loft floor details added

P2 4 Aug 22 External works: Wall height amended. Gates updated. I Aug 22 Preliminary Issue

Rev <sup>PI</sup> urch Farm Barn Beecr e Street norndon EGIS Suffolk IP23 7JR enquiries@beecharchitects.com www.beecharchitects.com 1379 678442 CLIENT Mr & Mrs Macklin PROJECT Peacocks Barn Farley Green Suffolk CB8 8PX DRAWING SECTIONS Sheet 2 SCALE CHECKED DATE DRAWN BY 1:20 @ A1 MAR 2021 DRAWING NUMBER | JOB NUMBER | STATUS REV Not For Construction | P3 564 WD10

This drawing is copyright and remains the property of Beech Architects Ltd. Original size A1. Scale shown will be incorrect if reproduced in any other format. All dimensions to be checked on site.

