

REFURBISHMENT OF BANKSIDE FARMHOUSE

DARNHALL, WINSFORD,

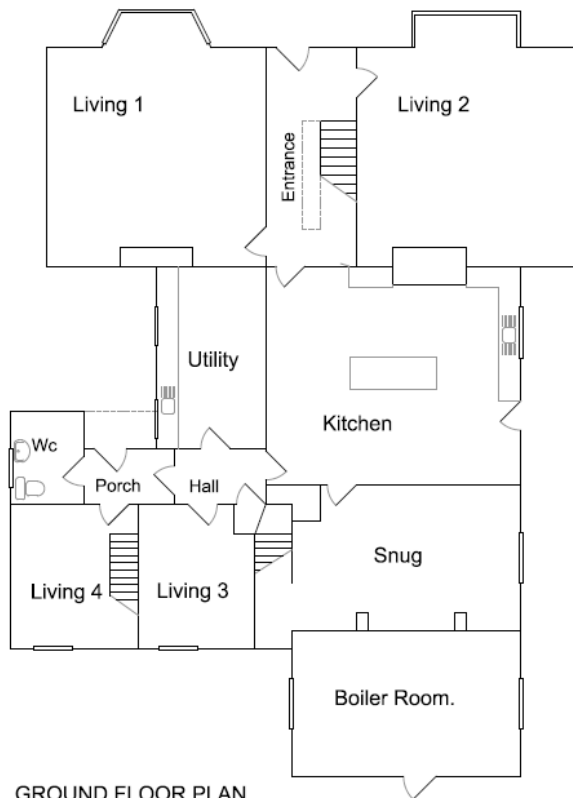
CHESHIRE CW7 4DG

05-09-2023

General Scope of Work

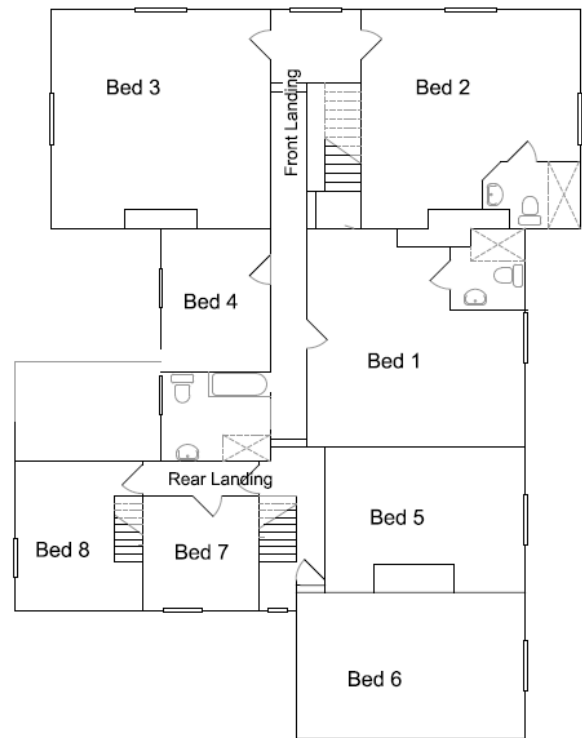
House

The building is to undergo a deep retrofit refurbishment with the requirement for it to gain an EPC rating of E or better. This is to include Insulation and ventilation of the roof space, internal insulation of the external walls, new doors and some new windows. There is an older section of house (snug, living 3 and living 4, beds 5, 7 & 8) that has elements of very old oak framing. These areas need new ground floors and dampproof courses but it is not thought to be prudent to insulate the walls. The house currently has an LPG heating system and it is thought that this will have to be replaced with an electric heat pump system to achieve the required EPC rating.



GROUND FLOOR PLAN

NOT TO SCALE



FIRST FLOOR PLAN

SPECIFICATION.

This specification is a guide to the minimum standard and provision required, any items that are not referred to but are clearly necessary for the proper completion of the full refurbishment of the property should be included for.

References to specific manufacturers or products are intended to set the standard required and requests to substitute equivalent alternatives will be accepted.

Some of the proposed works fall within the scope of the building regulations, the tenant is to ensure that all works comply with the regulations and that building regulation approval is obtained.

1.0	Roof	
1.1	Remove, clean and service or replace as necessary then re-fit all rainwater goods	
1.2	Chimney from bedroom three is showing signs of water ingress, either take down to roof level and make good to roof over or rebuild stack incorporating a damp proof membrane - include existing flue liners and pots and replicate existing engineering brick coping and cement haunching.	
1.3	Thoroughly rub down and redecorate all eaves and verge timbers. Include for primer, undercoat and two topcoats.	
1.4	Clear out existing roof void including all existing insulation and associated build up of dust and debris	
1.5	Allow for a thorough inspection of the roof structure and replace any rotten or unservicable timbers	
1.6	Treat all timbers against rot and insect infestation with a suitable proprietary insecticide / fungicide to kill off any existing worm infestation and guard against future infestations and rot.	
1.7	Install 450 mm of mineral quilt insulation in three 1500 mm layers, each laid perpendicular to the	
1.8	Install proprietary vents through the tiled roof at 1800 mm centres above the insulation line	
1.9	In those rooms with raked ceilings remove plasterwork from the rake and fit foil faced PIR insulation boards between rafters taken up to above the top of the loft insulation, maintaining a 50 mm ventilation gap over and under draw with insulated plasterboard and skim. Total thickness of the two layers of insulation to be 150 mm.	
2.0	Chemical Damp Proof Course.	
2.1	This applies to the Kitchen, Utility, Wc and rear porch.	
2.2	Carefully remove skirtings and architraves, hack off plaster upto one metre above ground floor level.	

- 2.3 Inject a proprietary chemical DPC with a 20 year insurance backed guarantee - fully in accordance with the manufacturers recommendations.
- 2.4 Replace plasterwork a sand and cement render ith a waterproofing additive. Apply a 3 mm plaster skim coat to internal walls (external walls to be insulated)
- 3.0 Walls.**
- 3.1 Rake out and repoint external faces of the kitchen, and front rooms at ground and first floor levels. Include for raking to a depth of 25 mm and repointing with a lime mortar.
- 3.2 Rub down and apply two coats of masonry paint to all stone and masonry cills and to to the wet dash render on the left hand side gable.
- External walls are generally to be internally insulated to the following specification, however the nature of the walls to the oldest parts of the building, (snug, living 3, living 4 and beds 5, 7 & 8) have some elements of a very old oak frame and may not be suitable for internal insulation. The full make up of these walls is to be fully established and specialist advice taken to agree how, if at all, to insulate these areas.
- 3.3 Carefully remove all skirting boards, architrave and kitchen and sanitary fittings from external walls, save for re-use.
- 3.4 Hack off any loose plaster and abrade remaining plaster to remove all paint.
- 3.5 Fix 50 x 50 mm tanalised battens vertically at 600 mm centres around walls, incorporate 100 mm dpc between batten and wall.
- 3.6 Tightly fit a layer of 50 mm foil faced PIR insulation boards between battens and another, similar, layer over the battens. Dress a 25 mm layer of foil faced PIR insulation board into the reveals of door and window openings.
- 3.7 Tape joints of boards and damage to the foil facing to create a continuous vapour barrier. Seal to window and door frames with proprietary airtightness and VCL tape.
- 3.8 Fix a layer of 12.5 mm pasterboard over insulation, screwed through to the battens. Apply 3mm plaster skim coat.
- 3.9 Refix skirtings and architraves.
- 4.0 Ventilation**
- 4.1 Install permantly open ventilation (air bricks through walls or trickle ventilators in the window heads) with a minimum of 8000 mm² of free area to each habitable room.
- 4.2 Supply and install intermittent extract fans with the following ratings:
Kitchen - 60 l/s
Utility rooms - 30 l/s
Bath and shower rooms - 15 l/s

Wc - 6 l/s

Kitchen and utility fans to be switched local to the fan, others to come on with the light fittings and have a 15 minute over run.

- 4.3 Ensure that all unused flues are ventilated at high and low levels with airbricks and pepper pot cappings as appropriate.

5.0 Works to ground floors of older timber framed part house, - Snug, Living 3 and Living 4.

The following is based on a number of assumptions and can be varied on professional advice following invasive detailed examination.

- 5.1 Remove skirtings and take up floors to Snug, Living 3 and Living 4, excavate to approx 300 mm below FFL (do not go below depth of existing wall footings)

- 5.2 Make up to formation level at 225 mm below finished floor level with well compacted sand blinded hardcore.

- 5.3 The base timbers of the frame sit on a sandstone dwarf wall and have a high moisture content, A physical damp course is needed to all walls. Allow for propping as necessary and replacing the top course of sandstone with engineering brickwork incorporating a proprietary plastic DPC at floor level. It is envisaged that this work be done in 1 metre stretches.

- 5.4 Build up floors with 1200 gauge visqueen DPM lapped with new DPC, 100 mm concrete slab with power floated finish, a 500 gauge separating membrane, 100 mm tightly butted foil faced PIR insulation board, another 500 gauge separating membrane and 18 mm t&g flooring grade chipboard floating floor with all joints glued together.

6.0 Wc, Bathroom, Kitchen and utility fittings.

- 6.1 Reinstall all sanitaryware following insulation of external walls . Reconnect plumbing and drainage systems ensuring that all water pipework is on the inside of the insulation.

- 6.2 Supply and fix a new range of fittings to the utility room incorporating a new worktop, single bowl single drainer sink and run of base units for the full length of the external wall, incorporating space and plumbing for a washing machine and tumble dryer.

- 6.3 Reinstall the fitted kitchen where removed for the external wall insulation. Include for making new connections as necessary, ensure all water pipework is on the inside of the insulation.

- 6.4 nb. Alterations / replacement of the kitchen and bathroom fittings will be acceptable with the prior agreement of the landlord.

7.0

Electrical services

7.1

Replace the existing distribution board and include for RCD protection.
Strip out all existing circuits and fittings

7.2

Rewire throughout to incorporate as a minimum:

- 4no. double sockets per room
- Spur power points and sockets as reasonably required for the fitted kitchen and the installed equipment.
- Spur power points as required by the heating and hot water system
- Pendant light fittings and associated switches to all rooms and circulation areas – two-way switching as appropriate
- External bulkhead light fittings with switches and movement sensitive controls over all external doors
- One high level floodlight, fixed to house, to illuminate the parking area.
- Extract ventilation to the kitchen, utility, wc and bathrooms.

Socket and switch positions to comply with building regulations i.e. between 450mm and 1200mm above floor level. Wiring accessories (switches and sockets) to be from Schneider Electricals' 'Ultimate slimline' range or similar approved.

7.3

Design and Detailing of Electrical Installation to be in accordance with BS 7671.

Mains and Distribution: Cabling generally to be concealed. Exposed cabling or cables in concrete slabs to be in rigid conduit.

Arrangement of Power Circuits:

Separate circuits for kitchen, remainder of ground floor, first floor, cooker, heating system, external areas.

Arrangement of Lighting Circuits: Separate circuits for ground floor, first floor, external areas.

Provide two copies of an electrical installation certificate completed in accordance with BS 7671.

8.0

Decoration

8.1

New plasterwork: Apply one thinned down mist coat and two full coats of an acrylic eggshell emulsion.

8.2

Existing plasterwork to receive two full coats of acrylic eggshell emulsion

8.3

All retained woodwork to be stripped back to bare wood and holes filled, Retained and new woodwork to be sanded down and receive a solvent based wood primer, two coats of solvent based undercoat, one coat of satin finish gloss, roller applied. Lightly sanded between coats.

8.4

Retained external woodwork to be stripped back to bare wood, have a brush applied preservative and primer, two coats of solvent based undercoat and two coats of gloss. Lightly sand between coats.

8.5	Apply a proprietary clear breathable waterproofing agent to all exposed facing brickwork – in complete accordance manufacturer’s instructions.
9.0	Doors and windows
9.1	Provide and fix 3no. new composite external doors and frames to suit existing openings of an appearance similar to the existing doors (front door, kitchen door and back door– minimum overall installed U-value 1.2. W/m ² k Include for glazed side panels to the side door.
9.2	Replace all existing timber windows with new upvc windows having a similar glazing bar pattern to the existing windows and an installed overall U-value of 1.2 W/m ² k. Windows to incorporate opening lights to comply with the ‘means of escape’ and ventilation criteria prescribed in the Building Regulations.
10.0	External Boiler Room.
10.1	The bedroom floor over this room has joists that are undersized, leaving a very bouncy floor. Either introduce some supporting steelwork to a structural engineer’s specification or install new joists alongside the existing that comply with TRADA recommendations.
10.2	Strip off existing plasterboard from underside of joists, friction fit 200 mm of mineral fibre batts between joists and underdraw with 112.5 mm insulated plaster board, consisting of 12.5 mm plasterboard and 100 mm mineral fibre insulation. Apply second layer of 12.5 mm moisture resistant plasterboard, joints staggered and seal around the perimeter with intumescent foam.
11.0	Heating and plumbing services.
11.1	It is not thought to be possible to attain an EPC level E rating with the existing LPG gas heating system so include for designing, supplying and installing an electric heat pump system. Radiators and/or distribution pipework will need to be sized accordingly to allow for the most efficient operation of the heat pump. The system is to be designed in complete accordance with the NHBC Technical Guidance Note - 8.2/01 Heatpump design and specification (January 2023)
11.2	Plumb in all bathroom, kitchen and utility fittings, allow for the installation of a washing machine to the utility.
11.3	All heating and domestic water pipework to be insulated and sited on the inside of the external wall insulation.
12.0	Foul drainage
12.1	Ammend and extend existing drainage system to suit new layout
12.2	Clean out existing septic tank and commission a report on it’s condition from a specialist approved by the landlord. Instigate any recommended

repairs.

12.3 Clean out all gullies and associated pipework, ensure pipes are in good order and free from blockages

13.0 External Works

13.1 Form a 300 mm x 300 mm channel around the base of the external walls, line with a non-woven geotextile and fill with clean pea gravel.

14.0 Storm drainage

14.1 Clean out all gullies and associated pipework, ensure pipes are in good order and free from blockages