SCHEDULE OF REPAIRS

(REFURBISHMENT)

The Malthouse
Beauworth Road
Beauworth
Hampshire
SO24 0PA

REVISIONS

1. 2020.03.20 - Planning Application Submission

2. 2020.07.29 - 2nd Issue: General Amendments

3. 2020.10.05 - Amendments to address CO comments

4. 2021.01.12 - Thatch specification amended following input from thatcher; clean & smoke damage repair information added.

INTRODUCTION

This report is to accompany the recent Listed Building and Planning application for the repair and the rebuilding of the Malthouse Beauworth, following a fire. This report was compiled by Fowler Architecture and Planning following a site visit. This report should also be read in conjunction with the Structural and Heritage Reports and the Architectural Drawings.

1. GENERAL CONDITION

The fire caused significant damage to the roof elements, the first-floor partitioning, and the first-floor structure, along with water damage to the remaining structure. The methodology for the reinstatement of the building is to ensure that as much of the original fabric is retained and repaired in the most appropriate manor, where repair is not possible the materials will be replaced to match the original material.

2. EXTERNAL WALLS

Having conducted a survey of the external walls generally the condition is good although localised repairs will be necessary and are highlighted on the submitted drawings.
It is noted that the external walls to the west, north and east are timber frame and later brick infill and the southern bay is brick and block work additions to the west and east.

Within the Sitting Room occupying bays 1 and 2, the walls to the north and west are lined by blockwork which appears in good condition and can be retained.

The eastern Sitting Room wall is covered with a hard, cementitious render, which appears to represent the framing and brick infill. This render is preventing the wall from breathing and therefore needs to be removed. This will by done carefully with hand tools to prevent damage to the fabric behind the render. A new timber stud with plasterboard & skim finish can be placed in front, tying into the retained masonry inner leaf so air can circulate behind allowing the timber frame and brick panels to breathe effectively.

The southern gable to Bedroom 2 (see photo below) will need to be carefully taken down due to extensive fire damage to the wall to the existing floor. This will be rebuilt with a new brick outer leaf (painted finish), blockwork inner leaf and a plasterboard a skim finish internally.

The northern gable to Bedroom 4 is in fair condition, but will require the horizontal timber to be completely replaced and the brickwork below to be repointed where cracking has taken place. It is noted that the inner skin of this wall is constructed from concrete blocks. (refer to picture below) which require removal to first floor level and rebuilt in timber stud with suitable ties to the original structure to provide stability. Any debris in the cavities should be removed. The SE's report has indicated connections are needed between the first-floor joists and the external frame and the internal side of the external frame.

The western gable we required both the outer brick leaf and inner block leaf to be carefully removed down the existing external door head and re-built back up again.

3. INTERNAL WALLS

All internal walls to the first floor will need to be carefully taken down and replaced, the exception being the wall between bedrooms 3 and 4 (see below); the remaining existing walls surrounding Bedroom 1, Bedroom 2 and both bathrooms are plasterboard on stud and will be replaced like for like.

The wall between Bedroom 3 and 4 is an original framed partition with original wattle and daub infill. This frame will be retained and cleaned while the infill panels will be replaced as they are crumbling due to excessive moisture exposure. A lateral restraint at the head will give stability (refer to photo below and details in the SE's report). Although it was previously loading bearing this wall will be non-loadbearing in the re-built structure.

4. CHIMNEYS

The central chimney has been identified by the SE as being cracked and distorted and will need to be removed to the first-floor ceiling level and rebuilt.

5. CEILINGS

On the ground floor all ceilings have been damaged beyond repair by either fire or water and will need to be replaced throughout with new materials to match the existing.
The northern section of sitting room ceiling (bay 1) has a thin fibreboard overlying the joists with floorboards, set upon battens along the joists which are visible above where there has been damage to the fibreboard.
In bay 2 there is a lath and plaster ceiling which has had both major and localised failures (see photo on next page).
To the west of the spine beam the lime plaster has been skimmed with gypsum. Where exposed, the laths appear to be in a relatively fragile state due to age and, possibly, water damage.

Within the Entrance Hall (bay 3) there is modern plasterboard fitted between the ceiling joists directly above which are the floorboards.

6.OAK FRAME

The external Oak frame up to and including the wall plate is generally in good condition with few elements to be replaced including the western wall plate adjacent to the corridor and Bedroom 3, refer to photo below:

It is unclear at this stage as to whether the timber frame at first floor level to the northern gable needs to be taken down and rebuilt. As is suggested by the Heritage Report the extent of this approach should be dealt with under condition. This will allow detailed inspections to take place along side the establishment of the overall detailed structural solution when all relevant areas are suitably exposed.

The junction between the eaves and the gable to the western and eastern side may need to be cut back with new oak of a similar size to the existing being added. Refer to photo below:

Internally the oak frame has been extensively damaged at first floor level, particularly around bedrooms 3 and 4. This frame is beyond repair and no longer capable of being load bearing. As such the purlin & wind braces on the east slope along with the principal rafters to the perimeter of the wattle & daub partition (mentioned above) will be removed and a new roof structure will be constructed (refer to photo below).

Within the ground floor zone, the timber frame is in better condition, and will not to need to be replaced. Any repairs to the frame will be purely cosmetic and to prevent the degradation of the timbers in the future. As such it is suggested that any cracks are cleaned out before being filled with a Mouldable Epoxy Putty coloured to match the timbers to prevent ingress of moisture and dirt.

Generally, all new work required to existing timber elements with be jointed using traditional framing techniques.

7. ROOFS

As already touched upon the purlin wind braces & wall plate on the east slope (Bay 1 & 2) along with the principal rafters to the perimeter of the wattle & daub partition (east & west) will be removed. All remaining roof timbers including wall plates (as identified on the floor plans & elevations) should be removed due to being beyond repair. The existing roof structure is no longer capable of being load bearing and it is proposed that new steel purlins are installed to support new timber rafters. These purlins will be supported by steel posts at the north end and bear onto the existing central chimney at the southern end of the timber framed element.

Rainwater Goods

Due to the introduction of tiled roof sections it is proposed that Alumasc Heritage gutters and downpipes are used. The gutter profile will be 113x75mm ‘beaded half round’ with 75mm diameter circular downpipes with a black factory finish.

Tiled Roof

The construction with consist of structural treated softwood (C16/C24) construction to pitched areas over first floor bedrooms, 1, 2, bathrooms and first floor landing and to dormers: stud and ladder frames, ridge and lay boards: exposed rafter feet: mild steel bolts and threaded bar, galvanised steel straps, connectors, clips, hangers, wall plate etc.
Tiles to be handmade Tudor tiles mix of antique and reds, with a 80 :20 mix.

Note: Double up rafters each side of dormers.

Leadwork to LSA Details: rake out joints of brickwork for turn –in of lead and point in cement mortar (1:3): one coat of patination oil to all exposed surfaces, edges and 50mm return to underside of all laps.

New Thatch

It is proposed to reinstate a traditionally constructed thatch roof to details as set out by the Thatch Advice Centre to match the ridge and eaves level of the previous roof as closely as possible. The Dorset Model will be followed to ensure compliance with building regulations to ensure prevention of external fire spread.

It is noted that the Thatch roof destroyed in the fire had a scalloped ridge however on review of photos taken back in 1928 a traditional flush ridge is visible. As part of the refurbishment of the cottage we are proposing to re-instate the flush ridge detail.

The Thatch roof construction will consist of structural treated softwood (C16/C24) construction to pitched areas over first floor bedrooms, 3, 4 and to dormers: stud and ladder frames, ridge and lay boards: Rafters to be at a 400mmm centres working around original timber to be retained. The up stand of the ridge board is normally 50mm with the top batten being located approximately 50mm from the ridge. Thereafter, battens should be spaced at centres between 230 and 300mm.

The roof is to be covered by Water Reed (as was prior to the fire) at a thickness of 350mm with a flush ridge. Thatching shall be carried out as laid down in The Complete Thatch Guide published by the Thatching Advisory Service. Thatch shall be secured using stainless steel wires attached to stainless steel screws; battens shall be treated softwood secured at 225mm centres.

Materials & Workmanship

Underlay shall be Proctor Roof shield breather membrane manufactured by Proctor Group Ltd, The Haugh, Blairgowrie, Scotland PH10 7ER. Lay as directed in the Manufacturers User Guide with min 100mm laps, dressed well down into gutters and secured with tiling battens.

8. UPPER FLOORS AND STAIRCASES

The existing oak frame is retained as is with new softwood timber floorboards inserted above. The main timber beam in the hall and the beam in the southern hall need to be repaired. The existing timber floor joists above the front door into the entrance hall need to be replaced with new which will match the original joists in material, size, spacing and finish (see GF plan).

The floor joists and supporting beams above the kitchen are beyond repair and need to be replaced. All new beams and joists with match the original structure in material, size, spacing and finish.

The existing floor to Bay 5 is of a more modern construction and consists of ex195mm x 75mm C24 treated softwood joists at 400mm Centres. This will be replaced with new to match with solid bridging to perimeter and at mid span, 20mm tongued and grooved moisture resistant particle board surface screwed to joists at 150mm centres; 100mm Rockwool mineral quilt laid between joists. The underside will then receive 12.5mm plasterboard and a skim finish.

The original dogleg staircase will be measured up by a specialist joiner who will also record the profiles of the newels, balustrading & handrail to ensure the replacement staircase is an accurate reproduction.

9. WINDOWS

It is proposed that all windows are to be replaced with new timber framed casements to match the existing.

Purpose-made hw plain casements with hardwood cills; glazing bars and beads; draught stripping; fix/build in to openings and point all round externally with frame sealant.

10. DOORS

External Doors

It is proposed that all doors are to be replaced with new timber framed casements to match the existing.

Purpose-made wrought hardwood: 50mm doors rails with mortice and tenon joints 50 x 100mm rebated frames with flush sills incorporating stainless steel water bars: thin plant on glazing bars and beads fixed/build in to openings and point all round externally with frame sealant:

Internal Doors

All opening to be lined with 18mm sw prior to lining; allow for new sw framed ledge and braced 50mm hardwood doors to all openings.

11. FLOORING

All existing floorboards have been warped or shrunk due to a combination of extreme heat and then water or received extensive fire damage. It is therefore proposed to remove all existing floorboards and replace with new sw floor boards throughout the first floor.

12. MECHANICAL & ELECTRICAL

Allow for new Mechanical and Electrical installation, including the disconnection and making safe of all service connections. The service routes are to be that of the existing routes, with radiators located in the same location.

APPENDIX A
Methods of Cleaning & Smoke Damage Restoration

INTRODUCTION

The Following has been prepared to clarify the method for restoration of the existing timber elements that are to be retained as part of the works as approved under applications SDNP/20/01281/HOUS & SDNP/20/01282/LIS

A Timber schedule has also been prepared between Fowler Architecture & Planning and Kevin Palmer Structural Engineer, following an on-site assessment of each original structural timber. This Schedule should be read in conjunction with the information set out in this document.

CLEANING PROCESS

For the cleaning & restoration of existing timbers it is proposed to use a micro stripping process specially designed for use when carrying out gently restoration work and allows for an accurate & constant flow of stripping media.

It is proposed in this case that soda crystals are used as the media for the micro stripping process as it is non-damaging, non-harsh chemical and will remove smoke damage and act as a deodoriser at the same time.

This is a low-abrasive system which uses a very low pressure to apply sodium bicarbonate to the timber. Typical sandblasting methods would fire course media at high pressures of over 100psi which would leave an abrasive finish and remove original features. Where as micro stripping machines operate at under 20psi so will not remove original features such as carpenter marks and carvings.